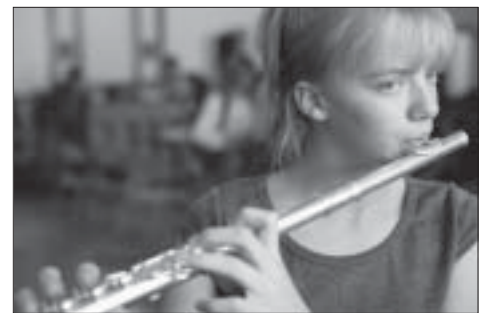


# Healthy Youth Development

Highlights from the 2003  
Adolescent Health Survey III



The McCreary Centre Society

**The McCreary Centre Society**

3552 East Hastings St. Vancouver, B.C. V5K 2A7  
[www.mcs.bc.ca](http://www.mcs.bc.ca)

# Healthy Youth Development

Highlights from the 2003 Adolescent Health Survey

© The McCreary Centre Society, 2004  
ISBN: 1-895438-55-1

3552 East Hastings Street  
Vancouver, B.C. V5K 2A7  
Tel: (604) 291-1996  
Fax: (604) 291-7308  
E-mail: [mccreary@mcs.bc.ca](mailto:mccreary@mcs.bc.ca)  
[www.mcs.bc.ca](http://www.mcs.bc.ca)

The Adolescent Health Survey is a project of The McCreary Centre Society, a non-government, non-profit organization committed to improving the health of B.C. youth through research, education and community-based projects. Founded in 1977, the Society sponsors and promotes a wide range of activities and research to address unmet health needs of young people. Areas of interest include:

- Health risk behaviours
- Disease prevention and health promotion
- Youth participation and leadership skills development

The McCreary Centre Society acknowledges the support of the Province of British Columbia, Ministry for Children and Family Development, Ministry of Health Services, Inter-Ministry Advisory Committee, AHS Project Advisory Committee, staff of participating school districts, and B.C.'s public health nurses.

Thank you to the youth of British Columbia who responded to the Adolescent Health Survey. Your amazing levels of participation and attention to completing the survey are greatly appreciated.

The views expressed in this report do not necessarily represent the official policy of the Province of British Columbia.

### **Project team:**

**Roger S. Tonkin**

Board Chair

**Aileen Murphy**

Managing Director

**Minda Chittenden**

Research Associate

**Philippa Jackson**

Research Assistant

**Jesse Dostal**

Research/Administrative Assistant

**Alison Liebel**

Communications Coordinator

**Rita Green**

Survey Consultant

**Lisa May**

Communications Consultant

*Healthy Youth Development* was written by Lisa May, with assistance from Dodie Katzenstein, and designed by Alison Liebel. Additional assistance was provided by Elizabeth Saewyc and Carol Skay.

# Inside this report

Introduction	4
Key Findings	5
About the Survey	8
Family Background	11
Smoking	13
Substance Use	15
Sexual Behaviour	18
Physical Health	20
Injuries	22
Emotional Health	24
Violence & Safety	26
Healthy Youth Development	28
Challenges & Opportunities	33
New Questions	37
Making a Difference	40
References	42
Project Team	43

# Introduction

## The Adolescent Health Survey builds evidence for youth policies and programs

This is the third and most successful province-wide, confidential survey of grades seven to twelve students in our province. Once again, it has been undertaken by the McCreary Centre Society and has enjoyed wide support and participation by students, families, schools, and school districts across B.C.

This project would not have been possible without the strong support of our provincial government and the dedicated work of the public health and nursing professionals in the participating communities. This support has been financial, in-kind and advisory and has extended over more than a decade. The contribution of these surveys to our knowledge will be further reflected in a subsequent trends report based on comparisons of AHS I, II, III results.

We at McCreary are proud of our accomplishments on behalf of the youth of British Columbia. We believe that this unique provincial undertaking by the dedicated staff of a small non-profit represents a scientifically credible, current, practical, and cost effective

approach to building the evidence base for policy and programs on behalf of our youth.

We believe that, for the most part, the results of this latest survey give us reasons to be proud of our youth and to be encouraged by the prospects for future improvements in their health. We look forward to a future that includes using these results as we work with communities toward setting a positive youth development agenda for our province and to the opportunity to further build upon this exciting multidisciplinary and community focused model of governmental-non-governmental research partnership.



Roger S. Tonkin  
Chair  
The McCreary Centre Society

March 2004

# Key findings

## Youth who feel connected and safe at home, at school and in the community have better health

The third Adolescent Health Survey conducted by the McCreary Centre Society shows that the health of B.C.'s youth has gradually improved over the past decade. In many respects, young people in the province are in better health and taking fewer risks than youth five or ten years ago. These trends are especially encouraging among early adolescents. All three surveys show most young people are healthy, exercise regularly, feel close to their families, enjoy school, and have aspirations for the future. The majority of students appear to be coping well with the transition through adolescence.

### Family and school connections count

A new section on healthy youth development in this report reviews protective factors that encourage youth to develop competence and personal strengths (pages 28-32). Recent research shows strategies that build on young people's strengths and resilience promote healthy development and successful learning more effectively than focusing on problems and deficits. By fostering connections, competence, coping skills, and responsible behaviours, parents and educators can prevent problems from developing and enable youth to face challenges creatively.

The 2003 survey confirms that protective factors promote healthy youth development. The value of strong connections with family and school was first assessed among B.C. students in 1998. AHS III results show that youth who feel connected and safe at home, at school and in the community have consistently better health, take fewer risks, and have higher educational aspirations.

The good news is most B.C. students feel connected to their families, have an opportunity to be with parents at important times of the day, and can talk to someone at home if problems arise. The majority also enjoys school, feels comfortable asking school staff and other professionals for help, and participates in extracurricular and volunteer activities.

### Dramatic decrease in smoking

The most dramatic news out of the 2003 Adolescent Health Survey was an 18% drop in smoking among B.C. youth since 1998, a very positive development since smoking is linked to serious health risks. Seventy-three percent of youth were non-smokers in 2003, compared to 55% in 1998, and smoking declined significantly in all age groups.

## Most B.C. students cope well with the transition through adolescence

### Top marks

#### *Most youth have good health*

Almost nine out of ten B.C. teenagers report having good or excellent physical health, consistent with the survey results from five years ago, and the majority of students participate in physical exercise.

#### *Youth are waiting longer to have sex*

Many youth are waiting longer to have sex, especially girls. Another positive development is a gradual decline in early sexual activity among younger adolescents over the past decade, as sexual intercourse can be physically and emotionally harmful for young teens. Among sexually active youth, more are practising safe sex.

#### *Substance use has decreased*

Substance use among youth declined slightly in the past five years for alcohol, marijuana, and harder drugs. Youth are waiting longer to try alcohol, especially young teens. A slight decrease in marijuana use since 1998 is good news, but it is still significantly higher than in 1992. As well, fewer youth are using crystal meth and ecstasy, despite media reports suggesting these drugs are increasingly popular among young people.

#### *Fewer injuries*

Injuries from motor vehicle accidents have declined in the past five years, and some injury prevention behaviours have improved. For example, drinking and driving has decreased significantly among licensed drivers, reflecting the success of the graduated licensing program for new drivers. But a third of youth were still injured seriously enough in the past year to need medical

attention, and seatbelt use has decreased slightly in the last ten years. Research has shown that most injuries are preventable, so additional injury prevention efforts could help further reduce injuries.

#### *Abuse has declined*

Physical and sexual abuse of youth has declined over the past decade, especially the number of girls reporting sexual abuse. This is an encouraging trend because a history of abuse is associated with a range of negative outcomes for youth.

### Room for improvement

Some of the survey results show certain youth are more vulnerable to risks, and indicate areas that need improvement. The section *Challenges and Opportunities* (pages 33-36) highlights a few risk factors that make youth more vulnerable. The 2003 survey also includes 29 new questions on both protective factors and emerging youth issues, many of which are covered throughout this report. Others are highlighted in the *New Questions* section (pages 37-39). Some of the key challenges facing youth, their families, educators and communities in B.C. include:

- Less than half of students always feel safe at school.
- More youth are overweight and obese than a decade ago.
- Internet safety is an emerging issue, especially for girls. Almost one in four girls has been in contact with a stranger on the Internet who made her feel unsafe.
- More than half of youth gambled in the past year.



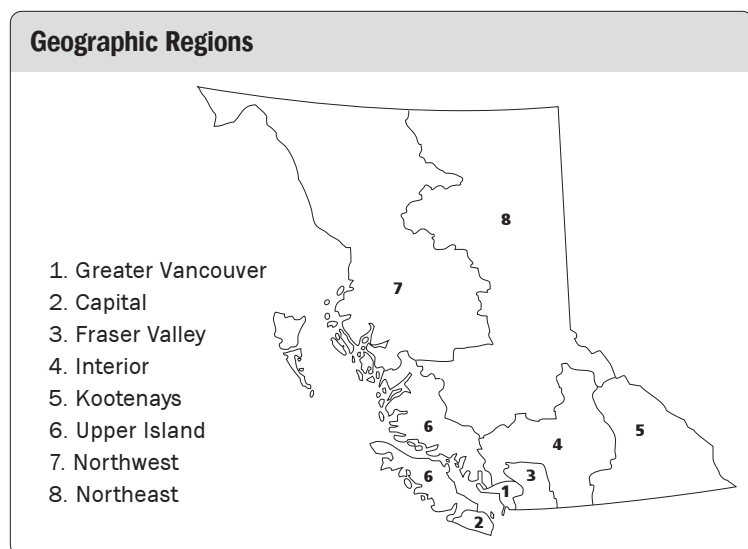
## Some youth are more vulnerable to risks

- Almost one in ten youth ran away from home in the past year, and are at danger for virtually every risk: abuse, poor health, suicide, pregnancy, and alcohol and drug use.
- Youth with a health condition or disability, and those who look older than their age are at higher risk.
- Youth who moved three or more times in the past year feel less connected to their families and school, and are more likely to run away from home.
- Many girls who are a healthy weight think they are overweight, and about half are trying to lose weight.
- While physical and sexual abuse of youth has declined in the past decade, a positive development, too many youth still face abuse.
- The number of youth who consider or attempt suicide has not declined in the last ten years.
- Many students continue to face harassment and discrimination.
- The proportion of youth who use alcohol and marijuana frequently has not decreased over the past decade, and the percentage of boys who are heavy marijuana users has continued to increase.

These issues identify risk areas where preventative education and health promotion efforts can be targeted to help youth develop resilience and overcome these challenges.

### Location matters

Behaviours vary among youth in different areas of the province. Over the past decade, Greater Vancouver has had lower rates of smoking, alcohol use, sexual activity, suicide attempts, and overall injuries, but has the highest incidence of sports injuries and racial discrimination, just as it did in 1998. Cigarette smoking in the Northwest—which had the highest rate in 1998—dropped significantly by 2003, and the Kootenays and Interior now have the highest smoking rates among youth. The Kootenays area still has the highest rates of alcohol use, injuries and sexually active teens. Drinking rates are also fairly high in the Interior, Upper Island, Northeast and Northwest. In addition, the Northwest region has relatively high rates of injuries, racial discrimination and suicide attempts. Racial discrimination is also high in the Northeast, as are suicide attempts in the Kootenays region.



# About the survey

**More than 30,500 B.C. students  
completed the 2003 survey**

## **What is the Adolescent Health Survey?**

The Adolescent Health Survey (AHS) is the most extensive study of the physical and emotional health of B.C. youth, and of factors that can influence health during adolescence and throughout life. Government agencies, health professionals, schools and community organizations use the survey information in planning programs, policies and services for youth.

The McCreary Centre Society, a non-profit, non-government research organization, conducted the first Adolescent Health Survey (AHS I) in 1992, the second (AHS II) in 1998, and the most recent (AHS III) in 2003. More than 30,500 students in grades seven to twelve filled out the 2003 questionnaire. In total, over 72,400 students have completed surveys over the past decade, providing important information about trends among B.C.'s youth.

Similar surveys have been conducted in other countries including the United States and in Europe, but the Adolescent Health Survey is the largest survey of its kind in Canada. AHS is designed to track trends showing how B.C. students have changed over the last five to ten years, and to identify important new issues facing young people today.

## **What does the survey ask?**

The 2003 survey included 140 questions on health status, health-promoting practices and risky behaviours. AHS III followed up on most items covered in the previous two surveys, with new questions added to provide insight into emerging risks facing today's youth and protective factors that promote youth health and well-being. The questions were designed to identify factors that influence present and future health, as adolescence is the period when young people often establish lifelong attitudes and habits with smoking, diet, exercise and other behaviours.

The survey assesses how the broader determinants of health affect youth. This definition recognizes that good health encompasses more than physical well-being, and is determined by more than access to health care services. While characteristics such as gender, cultural background and genetics are predetermined, progressive government policies, educational initiatives and community involvement can improve other factors such as community and school safety, income, social status, opportunities for education, employment and recreation, personal health practices, coping skills, and support networks. Both the 2003 and 1998 surveys looked at students' family background, feelings of connectedness with family and school, and their involvement in the

community to assess how these broader determinants of health affect youth. Research in the past decade has shown these factors protect youth from risk and provide the stability youth need to develop skills, tackle challenges, and achieve their full potential.

**Who was involved?**

Not every student in B.C. was asked to participate in the survey. Public school classes were randomly selected to provide a representative sample of all regions in the province. Public health nurses and trained administrators conducted the survey in more than 1,500 grade seven to twelve classrooms. Students took about 45 minutes

to complete the anonymous questionnaire, and were given contact information if they had any concerns or questions about the survey. Participation was voluntary, and parents’ consent was arranged through each school district. In all, 45 of B.C.’s 59 school districts agreed to take part in the survey. School districts that chose not to participate for various reasons unfortunately will not have current, accurate data about the health status of their youth.

**Family and school connections protect youth from risk and provide stability**

Several quotes from B.C. youth are included throughout this report, and come from the general comments section at the end of the AHS questionnaire.

Staff from the McCreary Centre Society coordinated the project, with advice from an inter-ministry committee with representatives from six provincial ministries, and an expert advisory committee representing the medical community, universities, government, education and organizations serving youth.

**Participating School Districts**

05 Southeast Kootenay	54 Bulkley Valley
06 Rocky Mountain	57 Prince George
08 Kootenay Lake	58 Nicola-Similkameen
10 Arrow Lakes	61 Greater Victoria
19 Revelstoke	62 Sooke
20 Kootenay-Columbia	63 Saanich
22 Vernon	64 Gulf Islands
23 Central Okanagan	67 Okanagan Skaha
27 Cariboo-Chilcotin	68 Nanaimo-Ladysmith
28 Quesnel	69 Qualicum
35 Langley	70 Alberni
38 Richmond	72 Campbell River
39 Vancouver	73 Kamloops/Thompson
40 New Westminster	74 Gold Trail
41 Burnaby	75 Mission
42 Maple Ridge-Pitt Meadows	79 Cowichan Valley
44 North Vancouver	82 Coast Mountains
45 West Vancouver	83 North Okanagan-Shuswap
46 Sunshine Coast	84 Vancouver Island West
47 Powell River	85 Vancouver Island North
48 Howe Sound	91 Nechako Lakes
51 Boundary	
52 Prince Rupert	
53 Okanagan Similkameen	

**Non-Participating School Districts**

33 Chilliwack	59 Peace River South
34 Abbotsford	60 Peace River North
36 Surrey	71 Comox Valley
37 Delta	78 Fraser-Cascade
43 Coquitlam	81 Fort Nelson
49 Central Coast	87 Stikine
50 Haida Gwaii/Queen Charlotte	92 Nisga'a

### **Are the results accurate?**

To ensure the survey results are accurate, the McCreary Centre Society paid careful attention to:

- *Sample size:* A large number of students participated in the survey.
- *Selection:* Classrooms were randomly selected to represent all grade seven to twelve students in the province.
- *Confidentiality:* Students were assured their participation was voluntary and anonymous.
- *Administration:* Public health nurses and other trained administrators conducted the survey following consistent guidelines.
- *Validity:* Checks were in place to identify frivolous or contradictory answers, and only about 1% of questionnaires were eliminated for this reason, or for failure to complete more than 50% of the questions.
- *Analysis:* Current statistical techniques were used to analyze the survey data to ensure the results accurately reflect the characteristics of all B.C. students in grades seven to twelve.

AHS III provides information only about youth who are in school, about 90% of B.C. youth in the study age group. McCreary has conducted additional studies to collect data on the health status of street youth and other young people who, for whatever reason, are not enrolled or regularly attending school.

A *Methodology Fact Sheet* for the Adolescent Health Survey is available on the McCreary website at [www.mcs.bc.ca](http://www.mcs.bc.ca).

### **What happens to the information?**

The McCreary Centre Society shares the survey results with organizations and individuals working to improve the status of youth health in British Columbia. The society has designed a *Next Step* workshop that gives students an opportunity to respond to the AHS data. McCreary is careful to protect students' confidentiality and privacy; only aggregated results are shared, so individual students or schools are not identified.

This report provides highlights for the entire province, and includes comparative results from the 1992, 1998 and 2003 surveys where available. Additional information on specific population groups and topics will also be released, as more detailed analysis of the data is completed.

All three AHS surveys used eight geographic areas to assess regional differences in youth health: Greater Vancouver, Capital, Fraser Valley, Interior, Kootenays, Upper Island, Northwest and Northeast. Due to low school district participation in the Fraser Valley, no 2003 results are available for this area. Separate regional reports from AHS III will be produced later in spring 2004.

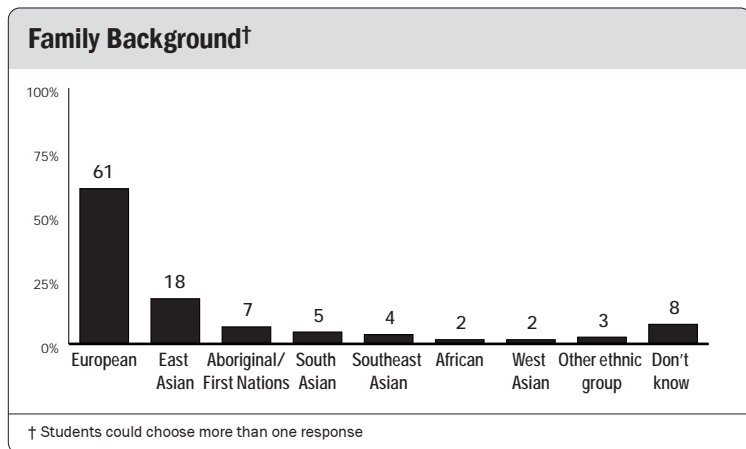
Many of these documents will be available on the McCreary Centre Society website at [www.mcs.bc.ca](http://www.mcs.bc.ca).

# Family background



Young people in B.C. come from diverse ethnic and cultural backgrounds. The majority of students (61%) say their background is European, which includes English, French, Scottish, Irish, German, Ukrainian, etc. Eighteen percent are of East Asian background (Chinese, Japanese, Korean, etc.), 7% are Aboriginal, and 5% are South Asian (East Indian, Pakistani, Sri Lankan, etc.). About 8% say they don't know their background.

New questions in 2003 asked Aboriginal students about living on reserve. Fifteen percent said they currently live on a reserve, and a quarter has ever lived on a reserve. First Nations youth learn about Aboriginal culture and heritage from their families (70%), at school (74%) and in the community (52%). Among youth who have lived on a reserve for most or all of their lives, 97% learn about their culture from their families and 93% from the community, compared to 63% and 43% who have never lived on a reserve.



## Sample question on family background

*How often do you speak a language other than English at home (such as Cantonese, Punjabi, French, etc.)?*

## 20% of BC students were not born in Canada

More than half of students always speak English at home (57%), while 43% speak another language at home, and 16% do most of the time. Not surprisingly, Greater Vancouver has the highest proportion of youth who speak another language at home most of the time (29%)—since this area has the most ethnically diverse population in the province—compared to only 2% in the Kootenays and 4-7% in other regions.

About 20% of students were not born in Canada, and 9% have lived here for five years or less. Of those youth not born in Canada, 59% speak another language at home most of the time. One-third of Greater

Vancouver students were not born in Canada (35%), compared to 3-10% in other regions. Consequently, the Greater Vancouver school system faces different education challenges, as these youth may need extra support learning English and adjusting to cultural differences. AHS III likely under represents young people who are very new to Canada and may not have been able to fill out the survey because of a language difference.

The majority of students in B.C. live with two parents (68%), including stepmothers and fathers, and a quarter (25%) lives with one parent. About 3% of youth live with other related or unrelated adults, and 1% of students live without adults, on their own or with other youth. Two percent of youth were in government care in the past year.

### Speak a Language Other than English at Home

Never	57%
Sometimes	27%
Most of the time	16%

### Live With Most of the Time

Two parents	68%
One parent	25%
Related adult (not parents)	2%
Non related adult	1%
No adults	1%
Other	2%

# Smoking

## The most dramatic change among B.C. youth is an 18% drop in smoking



The most dramatic development revealed by the 2003 survey is an 18% decrease in smoking among youth overall since the 1998 survey. This is a very positive change, since smoking is highly addictive and increases risk for cancer, heart disease, chronic lung disease and other health problems. Seventy-three percent of youth were non-smokers in 2003, compared to 55% in 1998. Smoking has also declined significantly in all age groups.

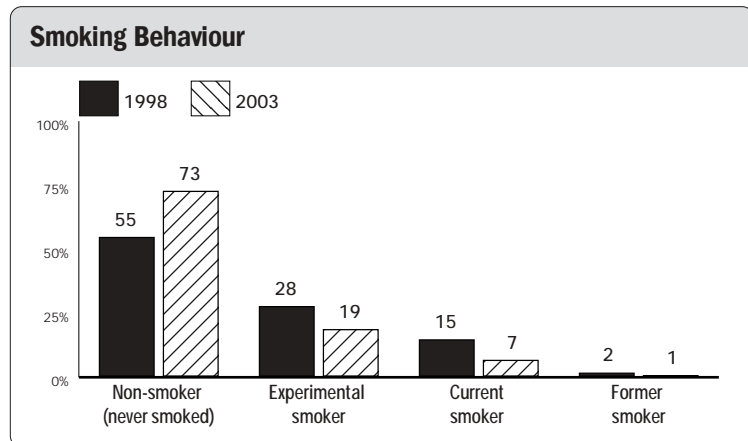
Fewer youth are experimenting with smoking as well: 19% of youth in 2003, down from 28% five years ago (defined as having smoked fewer than 100 cigarettes). Although rates have decreased for both genders, girls are still more likely to smoke than boys—76% of boys are non-smokers versus 71% of girls.

And in 2003, 13% of youth smoked one or more cigarettes in the past month, compared to 25% in both 1998 and 1992.

Seven percent of students are current smokers (daily and non-daily) and these youth are generally at higher risk. For example, almost three-quarters (72%) also use alcohol and marijuana, 18% smoke and use alcohol, 4% smoke and use marijuana, and 6% only

### Sample question on tobacco use

*Have you ever tried cigarette smoking, even one or two puffs?*



smoke. Among 17 and 18-year-olds, 55% of non-smokers did not use alcohol and marijuana in the past month, versus only 6% of smokers. Marijuana use among smokers has not declined, but smoking among marijuana users has, from 48% in 1998 to 24% in 2003.

Greater Vancouver youth continue to have the lowest smoking rates (6% are current smokers, down from 12% in 1998), while the Kootenays (10%) and the Interior (9%) have the highest rates. In 1998, the Northwest part of the province had the highest rate of youth smokers at 23%, which had dropped to 8% by 2003.

Second hand smoke also has negative health effects such as asthma and respiratory infections. Almost a third of youth are exposed to tobacco smoke at home, including their own. Thirteen percent are exposed to environmental smoke almost every day.

#### Non-Smokers by Age

13 years	89%
15 years	74%
17 years	59%

#### Why has smoking declined among youth?

According to the World Health Organization, most regular adult smokers begin smoking before age 18. Adolescents who smoke regularly are most at risk for long-term health problems as a result. Youth may be influenced to try smoking by media images and peer pressure. Although the survey did not ask why students chose not to smoke or to quit, government funded prevention and cessation programs may be having an impact in overcoming these influences. Rising prices, a ban on smoking in public places and most worksites, and increasing enforcement of penalties for selling to minors may also have an impact.

In addition, Statistics Canada reports that smoking rates in B.C. are lower than anywhere else in Canada. Twenty percent of British Columbians smoke, compared with 25% nation-wide. The decrease in youth smoking may reflect the overall population rate, as research in the U.S. and Canada shows youth are less likely to smoke if their parents don't.

*“I would really like to quit smoking. I think there should be more programs available for youth to kick the habit.”*  
B.C. Youth



# Substance use



## Alcohol use among youth has decreased in recent years

The 2003 survey shows substance use among youth has declined in the past five years for alcohol, marijuana, and harder drugs. Despite recent publicity about the popularity of crystal meth and ecstasy among young people, and the significant health risks these drugs pose, the survey results do not show an increase in use of these drugs and most youth have never tried them.

### Youth are waiting longer to try alcohol

Alcohol use among youth has decreased 6% overall in recent years, even though there was little change between 1998 and 1992. In 2003, 57% of students had ever tried alcohol, down from 63% in 1998 and 65% in 1992.

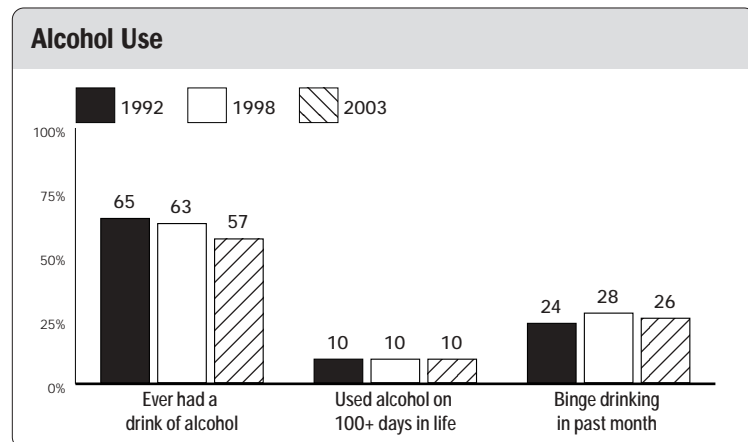
Youth of all ages are waiting longer to try alcohol, especially young teens. The number of 13-year-olds who've ever had a drink has decreased 16% over the past decade, to 33% in 2003, from 44% in 1998 and 49% in 1992. Sixty-three percent of 15-year-olds responding to the 2003 survey had tried alcohol, down from 72% in 1998 and 71% in 1992. Of youth aged 17, about 78% had tried alcohol in 2003, compared to 81% in 1998 and 82% in 1992. As these results show, the percentage of youth who try alcohol increases with age. The rate of use is

### Sample question on alcohol

*During your life, on how many days have you had at least one drink of alcohol? (A drink of alcohol is equal to one bottle/can of beer, four ounces of wine or one ounce of hard liquor.)*

almost identical among girls and boys, with about 58% of each gender ever consuming a drink.

Students in Greater Vancouver are still less likely to drink alcohol than youth in other areas of B.C. About 49% of students participating in the survey in Greater Vancouver said they've ever had a drink, compared to



## Almost twice as many boys are frequent marijuana users as girls

56% in 1998. Alcohol use varies across the province, with 63% of students in the Capital region reporting on the 2003 survey ever drinking alcohol, to the Kootenays, where 71% of students have ever had a drink. This figure is down from 77% in 1998, but the Kootenays area continues to have the fewest students who refrain from drinking alcohol. Drinking rates are similar in the Interior, Upper Island, Northeast and Northwest, between 65% and 69%.

Of youth who've had alcohol, about two-thirds drank in the past month in 2003: 31% on one or two days, 29% on three to

nine days, and 7% on ten or more days. These results are very similar to 1998.

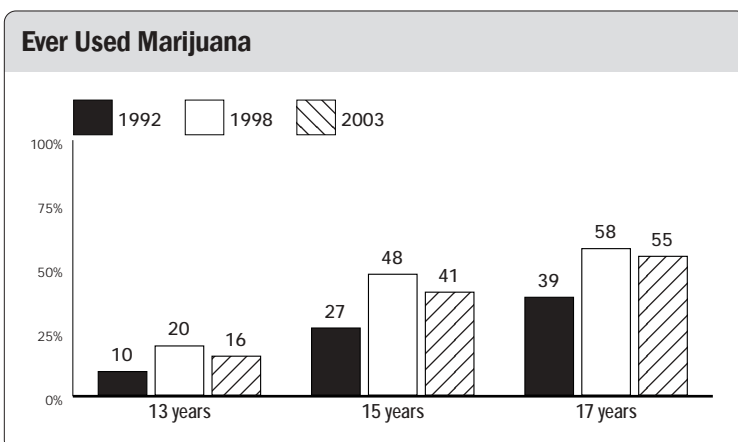
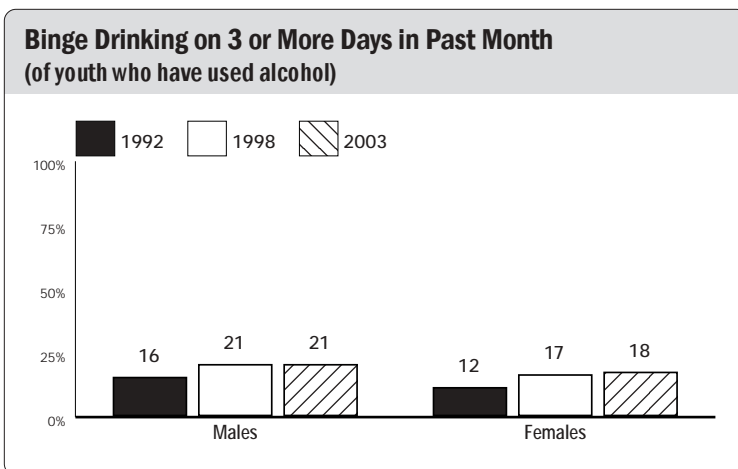
About 46% of male and 43% of female students who have tried alcohol engaged in binge drinking in the past month in 2003, numbers that have not changed since 1998. Binge drinking is defined as having five or more alcoholic drinks within a couple of hours, and is a serious concern, because it is associated with higher injury rates, unprotected sex and other substance use.

### Drug use down slightly among youth

Marijuana use among all age groups has decreased slightly since the 1998 survey, to 37% from 40%, but is still considerably higher than in 1992 (25%). The dramatic increase in marijuana use was a major finding in 1998, so any decrease since then is positive. Overall use is similar for boys and girls.

However, among youth who have ever used marijuana, almost twice as many boys are frequent users as girls. In 2003, 31% of boys say they used marijuana 100 or more times in their life, compared to 17% of girls. And these figures have increased: in 1998, 24% of males used marijuana 100 or more times, compared to 16% of girls, and in 1992, the number was 20% of boys, compared to 11% of girls.

In addition, 18% of boys who have ever used marijuana said they used it 20 or more times in the past month in 2003, compared to 8% of girls. In 1998, 13% of boys used marijuana over 20 times, compared to 6% of girls, and in 1992, the number was 9% of boys versus 4% of girls.



Overall use of most other illegal drugs is down slightly since 1998. Five percent of students on the 2003 survey report ever using cocaine, compared to 7% in 1998. Seven percent tried hallucinogens, including ecstasy and LSD, down from 11% in 1998, and 13% tried mushrooms, compared to 16% five years earlier. Four percent of students tried amphetamines such as crystal meth and speed in 2003, compared to 5% in 1998, and 1% reported ever using heroin or steroids, compared to 2% in 1998. The number of youth using inhalants such as glue and aerosols decreased slightly to 4% in 2003, compared to 6% in 1998.

About 82% of students have never used harder drugs—cocaine, hallucinogens, mushrooms, amphetamines, inhalants or heroin—up from 75% in 1998. And harder drug use declined for both males and females: 9% of boys and 7% of girls used these drugs three or more times in 2003, versus 13% of boys and 11% of girls in 1998.

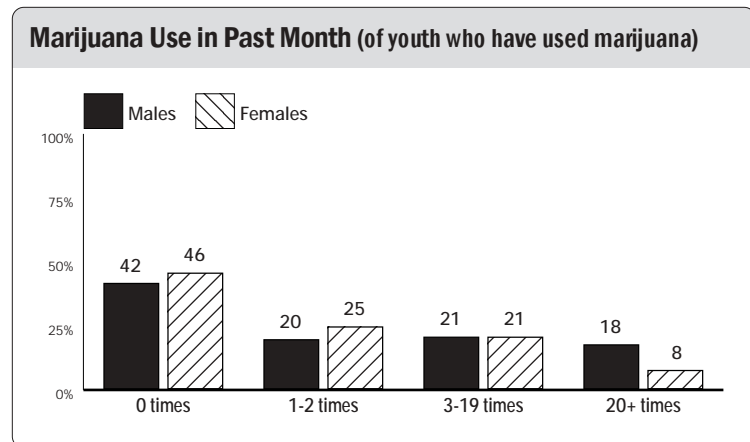
### Marijuana use is linked to health issues

Even though marijuana use decreased slightly in the past five years, it is still 12% higher than in 1992. Marijuana may be easier for minors to obtain than alcohol, and proposed legislation to decriminalize possession of small amounts may be liberalizing attitudes towards marijuana use. However, many research studies in the U.S. and Canada show regular marijuana use causes respiratory problems, interferes with memory, ability to learn and academic performance, and increases the risk of injury.

Evaluation of youth programs indicate that helping youth connect with family and school, training youth to develop coping

*“I used to smoke and do drugs but stopped. The best thing you can do is educate kids so they’ll know the long and short term effects.”*  
B.C. Youth

and problem-solving skills, involving parents in prevention activities, paying attention to risk factors, focusing on competencies, and implementing intervention programs at school are the best measures to prevent substance use.



**Ever Used Illegal Drugs**

	1998	2003
Mushrooms	16%	13%
Hallucinogens	11%	7%
Prescription pills without a doctor's consent	10%	9%
Cocaine	7%	5%
Inhalants	6%	4%
Amphetamines	5%	4%
Heroin	2%	1%
Steroids	2%	1%
Injected an illegal drug	1%	1%

# Sexual behaviour

“I think that Canada should help teens by giving them protection (like condoms) and more knowledge at a younger age (such as grade seven or eight).”  
B.C. Youth

## Many youth are waiting longer to have sex

The survey instructs youth who have not had sex to skip all questions about sexual behaviour. Of those who answered, the results reveal a number of positive, health promoting developments related to sexual activity. Among youth who have sexual intercourse, more are practising safe sex. And while the overall percentage of youth who have sex has not changed in the past five years, many youth are waiting longer to have sex, especially girls.

### Youth are delaying sexual activity

In the 2003 survey, three-quarters (76%) of youth in grades seven to twelve had never had sexual intercourse, the same as in 1998, but up overall from 70% in 1992. Rates were similar among males (23% have had sex) and females (24% have had sex) in

2003, as they were in 1998. Sexual activity increases with age, as it did in 1998 and 1992: from 7% of 13-year-olds, to 21% of 15-year-olds, and 43% of 17-year-olds in 2003.

While regional variations exist, the numbers are virtually unchanged since 1998. Greater Vancouver still has the lowest rate of sexually active youth at 18%, the same number as in 1998, while percentages range between 27% in the Capital region, to 31% in the Kootenays.

A particularly encouraging development is a gradual decline in early sexual activity—associated with sexually transmitted diseases (STDs) and unwanted pregnancy—over the past decade. Early sexual intercourse can be physically and emotionally harmful to young adolescents. The number of 13-year-olds who say they've ever had sex has decreased from 14% in 1992, to 9% in 1998, and only 7% by 2003.

Of sexually active youth, fewer teens are reporting having first had sex at a very early age. The percentage of sexually active girls who first had sex before age 14 has dropped by half in ten years, to 16% in 2003, from 23% in 1998, and 30% in 1992. And 24% of sexually active boys first had sex before age 14 in 2003, down from 33% in 1998, and 40% in 1992.

Ever Had Sexual Intercourse	
1992	30%
1998	24%
2003	24%

First Had Sexual Intercourse Before Age 14 (of youth who have had sex)	
1992	35%
1998	28%
2003	20%

## Condom use has increased 11% in five years

### STD risk is declining

More sexually active youth are protecting themselves against STDs. Condom use increased 10% overall in five years, from 58% in 1998, to 68% in 2003, although a third of youth still do not protect themselves, and condom use declines with age. The figure is highest among sexually active 14-year-olds (81%), but drops to 61% of 18-year-olds.

Having multiple sex partners also increases the risk of STDs. In the 2003 survey, about a third of sexually active youth reported having sex with three or more partners in their life, the same number as in 1998. However, almost half of sexually active youth have had just one partner. In 2003, 4% of sexually active youth said they've ever had a sexually transmitted disease, down slightly from 6% in 1998, and 5% in 1992.

Almost a third (29%) of sexually active students said they used alcohol or drugs before having intercourse the last time, a slight drop from 33% in 1998.

The 2003 survey asked whether youth have ever been forced to have intercourse by an adult or another youth. Five percent of girls and 2% of boys say they were sexually coerced by another youth, while less than 1% of boys and 1% of girls say an adult coerced them to have intercourse.

### Birth control use is rising

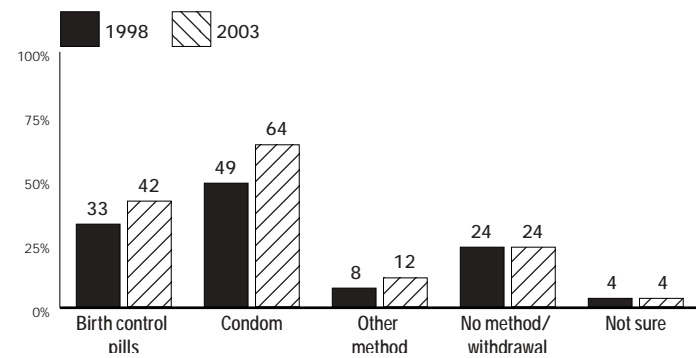
More sexually active youth are using both birth control pills and condoms to prevent unwanted pregnancy. In 2003, 64% of sexually active youth reported using condoms to prevent pregnancy, compared to 51% in 1998, and 42% used the pill, compared to 33% in 1998. (In responding to the survey questions, students may select more than one type of birth control method.) Younger

teens having sex tend to use condoms more, while older teens tend to use the birth control pill more. About 20% of sexually active 13-year-old students used the pill, compared to 37% of 15-year-olds, and 50% of 17-year-olds.

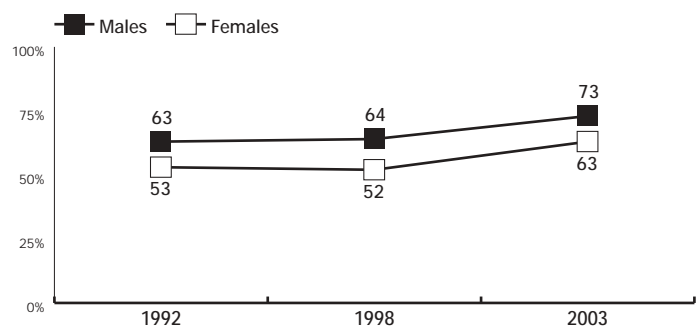
Almost a quarter of sexually active youth still used either no birth control or withdrawal, an unreliable method of contraception, in 2003 (24%), the same as in 1998.

The rate of pregnancy has also declined in the past decade: from 8% of sexually active students who have ever been pregnant or caused a pregnancy in 1992, and in 1998, to 6% in 2003.

**Birth Control Methods Used Last Time Had Sex (of youth who have had sex)**



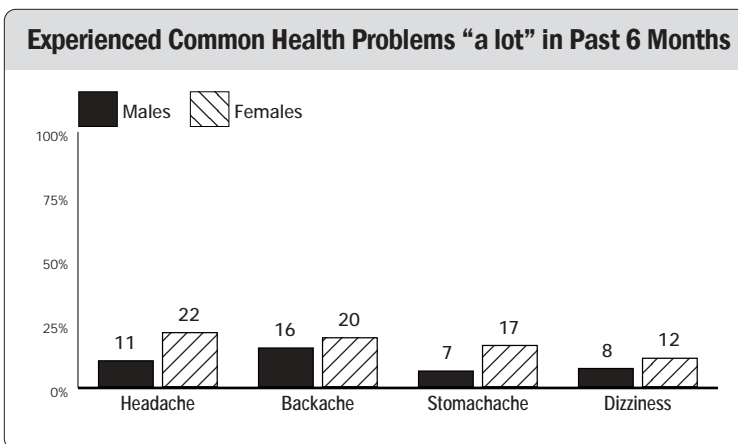
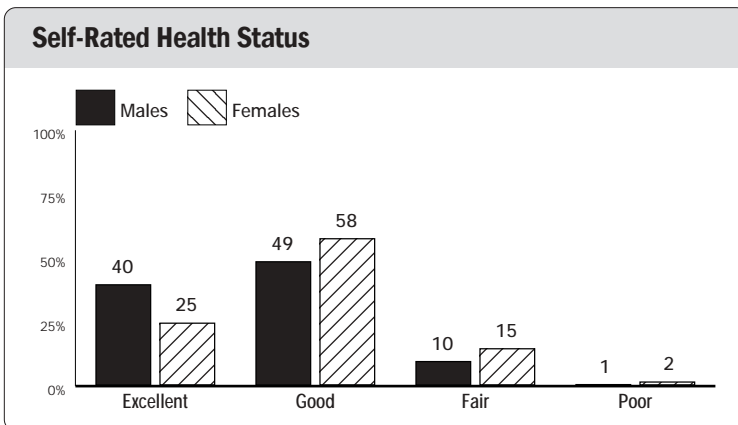
**Condom Used Last Time Had Sex (of youth who have had sex)**



# Physical health

## Most youth report their health as good or excellent

Most youth continued to report their health status as good or excellent in 2003: 86%, consistent with 87% in 1998 and 86% in 1992. More boys than girls gave their health a higher rating in all three surveys, with 40% of boys and 25% of girls saying they have excellent health in 2003. But these numbers are down slightly for both genders, from 44% for boys and 28% for girls in 1998.



Overall, only 7% of students said they never experienced physical problems such as a backache, headache, stomachache, or dizziness in the past six months. More males than females are free of physical complaints: 10% of boys and 4% of girls report none of these conditions. But a small number of youth do experience physical problems: 21% say they experience one condition a lot, 9% have two conditions a lot, 4% have three a lot, and 2% have all four a lot.

In addition, 11% of students have a health condition or disability that limits their activities, down slightly from 13% in 1998. Of these youth, 36% say their condition is never visible to others, while 7% say people can always perceive their condition. About a quarter (22%) miss school because of their condition, and 26% take daily medication.

## Youth care about appearance and weight

Physical appearance and body shape continue to be very important to most teens. Many are unsatisfied with their weight and how they look, especially girls. Fewer than half of female students (43%) are satisfied with their appearance, compared to 57% of boys. And satisfaction decreases with age among girls, from 50% who are satisfied at age 13, to 41% at 15 and 17.

The survey asked youth to report their height and weight, which allowed Body Mass Index (BMI) to be calculated, a standard measure for assessing healthy weight, overweight and obesity. Seventy-nine percent of B.C. youth have a BMI that indicates a healthy weight for their age and gender. Information about youth who are overweight is included in the *Challenges and Opportunities* section on page 33.

## Fewer than half of female students are satisfied with their appearance

Of youth who are a healthy weight, almost three quarters (74%) think of their bodies as the right weight. Still, 22% of healthy weight girls and 6% of boys think they are overweight. About 19% of healthy weight males think they're underweight, and about a third (33%) are trying to gain weight. Thirteen percent of healthy weight males are trying to lose weight, and over half of females (52%), reflecting the enormous pressure on girls to conform to a thin norm presented in popular culture and media.

A new question in 2003 asked how many youth dieted to lose weight in the past year. Not surprisingly, more girls (49%) than boys (14%) say they have dieted. About 7% of girls report they are always dieting, and the number increases as girls get older.

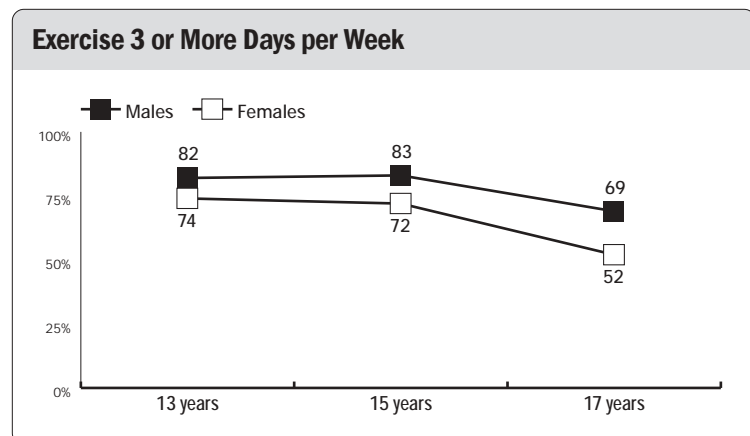
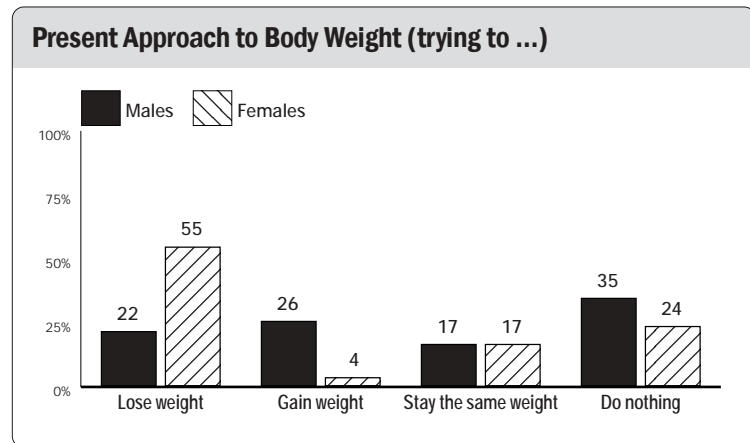
Despite youth concern about weight, the survey results suggest a slight decrease in eating disorder behaviours among adolescents. Seven percent of girls and 3% of boys reported vomiting on purpose in 2003, compared to 9% of girls and 5% of boys in 1998. About 3% of girls do so more than once a month.

### Most youth exercise

The majority of students participate in physical activities that promote fitness and good health. Overall, 71% exercised three or more days a week in 2003, a figure that has remained stable since 1998, and 18% of these students exercise seven days a week. Boys are still more likely to exercise than girls, but the level of exercise for both genders seems to decline with age. About 82% of 13-year-old boys and 74% of girls exercised three or more days a week in 2003. By the age of 17, the numbers dropped significantly to 69% of boys and 52% of girls.

In B.C., Physical Education (PE) is not mandatory in grades 11 and 12. Extending required PE through the high school years and encouraging more frequent and consistent activity could prevent the decline in physical activity among older adolescents.

Half of students said they always eat breakfast on school days in 2003, the same number as 1998, while 18% always skip breakfast. Younger students are still more likely to eat breakfast: 55% of 13-year-olds always do, compared to 50% of 15-year-olds, and 43% of 17-year-olds. This trend is consistent with 1998, when the percentage of youth who ate breakfast also declined as teens got older.



# Injuries



*“I have had a ton of injuries from soccer and snowboarding.”*  
*B.C. Youth*

## Injuries among youth have declined

Injuries among male and female youth have declined. About a third of youth (34%) reported injuries requiring medical attention in 2003, down from 39% in 1998. But boys are more likely to be injured than girls.

Sports activities are still the leading cause of youth injuries. Similar to 1998, over half of youths' injuries were sports related. Another 14% of youth injured themselves cycling, roller blading or skateboarding in 2003, up from 10% in 1998. Injuries from motor vehicle accidents went down to 5% in 2003, from 8% in 1998. A third of youth say their injuries occurred at a sports facility, more than any other single location. About 17% of injuries occurred at school, 16% at home, and 9% in the street.

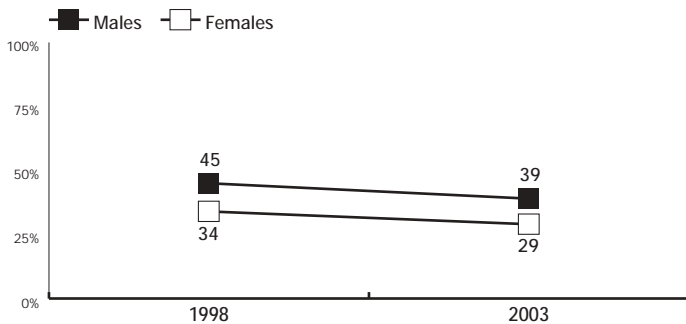
The Kootenays has the highest incidence of injury among youth, as it did in 1998, followed closely by the Interior, Northeast and Northwest regions. Greater Vancouver youth reported the lowest number of injuries again in 2003.

### Trends in injury prevention

Injuries continue to pose a health risk to youth, even though most injuries are preventable. B.C. youth appear to be more careful about following some preventative behaviours than others.

For example, in the 2003 survey three-quarters of licensed drivers said they never drink and drive (74%), a significant improvement over 64% in 1998, and 67%

**Had an Injury that Required Medical Attention in Past Year**



**How Youth Were Injured (of youth injured in past year)**

	1998	2003
Sports or recreational activities	53%	55%
Bicycle riding, roller-blading or skateboarding	10%	14%
Motor vehicle	8%	5%
Fighting	5%	5%
Other	23%	21%



## Three-quarters of licensed drivers never drink and drive

### Injury Prevention Behaviour

	1992	1998	2003
Always use bike helmet <sup>†</sup>	6%	30%	25%
Always wear seatbelt	58%	55%	54%
Never drink and drive <sup>††</sup>	67%	64%	74%

<sup>†</sup> of youth who rode a bike in past year

<sup>††</sup> of licensed drivers

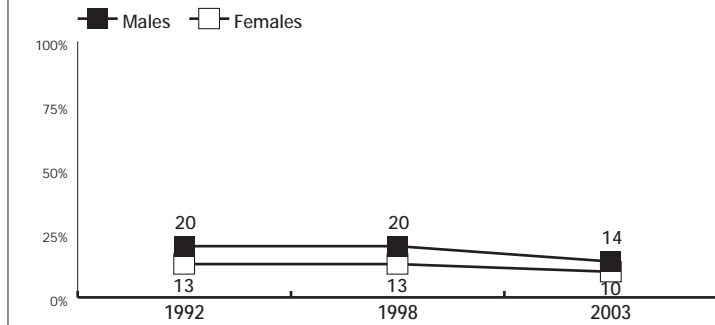
in 1992. Drinking and driving has decreased among male and female licensed drivers, especially boys. However, males are still more likely to drink or use drugs and drive than females. (Graduated licensing was introduced between 1998 and 2003. The “learner” and “novice” stages are restricted to zero blood-alcohol content. The survey defined licensed drivers as youth with learner, novice or full licenses.)

The Vancouver area has the fewest youth who ever drink and drive, at 22%, but rates have dropped everywhere in B.C. as well, including the Kootenays, which has the highest drinking and driving rate at 37%. Still, this number is down significantly from 44% in 1998.

Of youth with learner licenses, 11% acknowledge ever driving after drinking, 36% of those with novice licenses have, and more than half (55%) of youth with full licenses have. Youth drivers seem to become less, rather than more, cautious about drinking and driving, as they gain experience. Twenty percent of youth said they rode in a car with a drinking driver in the past month in 2003, similar to 1998 and 1992.

Seatbelt use has not improved since 1998. While 83% of youth say they wear a seat belt most of the time, only 54% always wore a seatbelt in 2003, compared to 55% in 1998, and 58% in 1992.

### Driving After Using Alcohol in Past Month (of licensed drivers)



### Ever Driven after Alcohol or Drug Use by Region (of licensed drivers)

	1992	1998	2003
Greater Vancouver	23%	29%	22%
Capital	35%	39%	26%
Interior	38%	43%	33%
Kootenays	38%	44%	37%
Upper Island	32%	42%	31%
Northeast	45%	39%	24%
Northwest	34%	41%	30%

About 25% of youth in 2003 said they always wore a bike helmet when cycling, down from 30% in 1998. At that time the rate had increased from only 6% in 1992, following the introduction of legislation requiring the use of bike helmets. Helmet use declines as teens get older: 42% of youth 12 and younger always wear a helmet, 33% of 13-year-olds do, 20% of 15-year-olds, and 18% of 17-year-olds.

# Emotional health

## Sample question on emotional health

*During the past 30 days, have you felt so sad, discouraged, hopeless or had so many problems that you wondered if anything was worthwhile?*

Some people perceive adolescence as the best years of life, while others think of this period as a difficult emotional time for youth. Adolescence can be either, depending on individual circumstances. The 2003 survey shows the majority of students in B.C. seem resilient and cope well with the challenges and stress of growing up and developing greater independence.

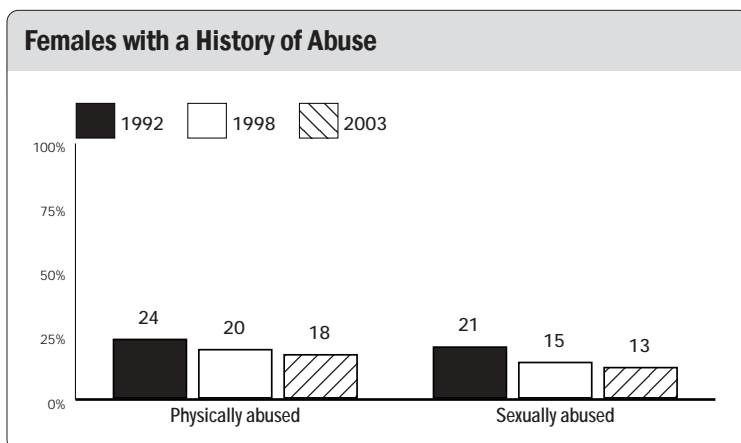
Some good news is that physical and sexual abuse has declined slightly in the past five years. However, too many young people still experience abuse, which is linked to risky behaviours among youth. More girls than boys report both abuse and emotional distress. In addition, the number of youth who consider or attempt suicide as a response to stressful or distressing circumstances has not declined since the last survey, suggesting a need for increased suicide prevention education among students.

## Some youth experience emotional distress

Five survey questions ask about emotional health, and a response of “all the time” to two or more questions is seen as an indicator of serious emotional distress.

A small percentage of youth experience serious emotional distress, just as in the previous two surveys, and distress continues to be higher among youth with a health condition or disability and those who have been abused.

In 2003, about 8% of students said they felt seriously emotionally distressed in the previous month, similar to 1998 (7%) and 1992 (6%). Girls (10%) are more likely to feel distressed than boys (6%). These results have been relatively stable over the past decade (9% of girls in 1998, and 8% in 1992, compared to 5% of boys in 1998 and 4% in 1992). Older students are still more likely to experience distress: 9% of 17-year-olds, versus 4% of 12-year-olds.



## Physical and sexual abuse has declined slightly

Physical and sexual abuse of youth has declined in the past decade, particularly for females, although girls still report higher rates of abuse than boys. In 2003, 18% of girls reported ever being physically abused, down from 20% in 1998, and 24% in 1992. Twelve percent of boys were physically abused in 2003, compared to 13% in 1998, and 15% in 1992.

## Too many young people still experience abuse

*“I think that more teenagers should be able to get help for emotional and mental issues.”*  
B.C. Youth

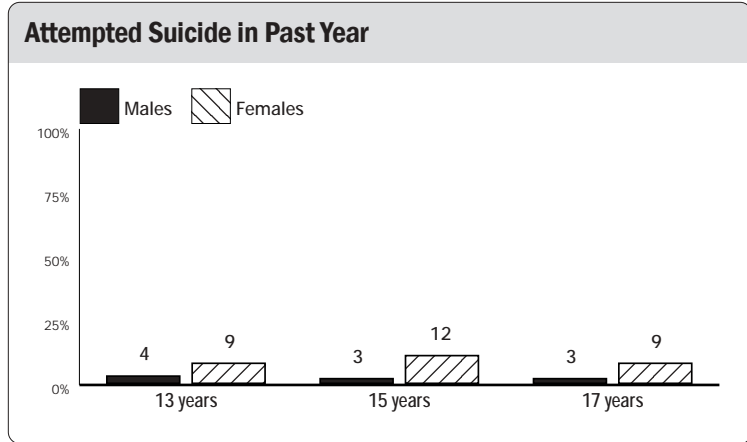
The number of girls who report being sexually abused also decreased to 13% in 2003, from 15% in 1998, and 21% in 1992, while 2% of boys reported being sexually abused in 2003, compared to 3% in 1998 and 4% ten years earlier.

### Suicide rates stable over past decade

Overall, 16% of students reported seriously thinking about suicide in the past year in 2003, up slightly from 14% in 1998, but the same number as 1992. In 2003, about 11% planned a suicide in the past year, the same as 1998, but down from 14% in 1992. Seven percent of young people said they attempted suicide in the past year in all three surveys. Twice as many girls (10%) as boys (4%) attempt suicide, virtually the same as five and ten years earlier, but boys are more likely to actually die of suicide than girls.

Fourteen percent of students have a family member who has attempted or committed suicide. Four percent had a family member attempt or commit suicide in the past year. These teens are much more likely to consider suicide themselves: 47% considered and 35% attempted suicide in the past year, versus 13% of youth who consider and 4% who attempt suicide with no family history of suicide.

The percentage of youth who considered suicide ranges from 14% in the Upper Island area, to 15% in Greater Vancouver and the Capital region, and 19% in the Northwest and Kootenays. The number who attempted suicide ranges from 5% in the Capital, 6% in Greater Vancouver and the Upper Island, to 9% in the Kootenays.



**Discriminated Against in Past Year Because of ...**

	Males	Females
<b>Race or skin colour</b>		
1998	11%	8%
2003	14%	11%
<b>Sexual orientation</b>		
1998	3%	4%
2003	4%	3%
<b>Physical appearance</b>		
1998	22%	28%
2003	18%	22%

### Discrimination varies among youth

More youth said they were discriminated against because of their race or skin colour in 2003 than in 1998. Conversely, discrimination due to physical appearance decreased for both genders. About the same number of students reported discrimination because of their sexual orientation in both surveys. Overall 29% of adolescents experienced some kind of discrimination in 2003.

Discrimination due to race or skin colour tends to increase with age, and is highest in Greater Vancouver (15%), the Northeast (12%), and the Northwest (11%).

# Violence & safety



Although media reports sometimes portray youth violence as a growing issue, physical violence among B.C. students has actually declined in the last decade, particularly among males. Still, more than a third of male students and almost one in five females were in one or more fights in the previous year. Too many students also feel unsafe at school and experience some type of harassment or aggression. These findings suggest

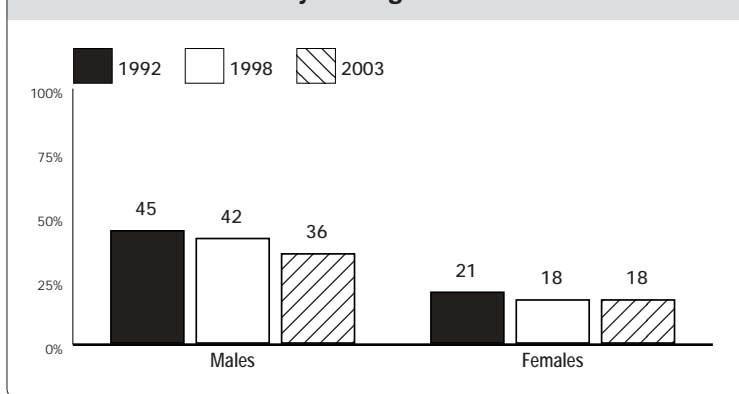
an opportunity exists for families, schools and communities to educate youth about violence prevention, constructive approaches to conflict resolution, and communication skills.

## Physical fights are decreasing

Fights among male students have dropped 9% in the past decade, from 45% who fought in the previous year in 1992, to 36% in 2003. Fewer females get in fights than males, but the number has not changed as much, from 21% in 1992, to 18% in 1998 and 2003. Fighting decreases as students get older: 31% of 13-year-olds got in one or more fights, compared to 22% of 17-year-olds. However, a small number of youth (4%) had four or more fights in the past year.

Eight percent of students carried a weapon to school in the previous month, most commonly a knife or razor, down slightly from 9% in 1998. Of these students, less than 1% carried a gun, the same as in 1998. Although the percentage of youth carrying weapons to school is similar in B.C. and the U.S., homicide is the third leading cause of

### Involved in 1 or More Physical Fights in Past Year



### Sample question on violence

*During the past 12 months, how many times were you in a physical fight?*

## Violence among B.C. students has declined in the last decade

non-disease related youth death in the U.S., before suicide, while homicide is extremely low in B.C. and suicide is the number two cause of youth death, after motor vehicle accidents. This difference is likely due to stricter gun control laws in Canada.

### Some students face harassment

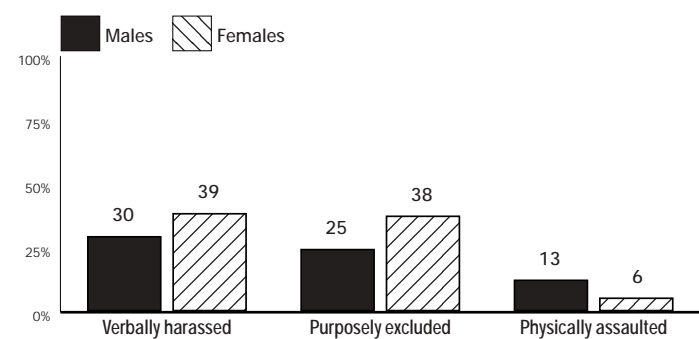
Students also face other types of aggression at school. Thirty-nine percent of girls and 30% of boys reported verbal harassment at school by peers in 2003. In 1998, students were asked whether they had been verbally harassed by “someone” rather than peers, and 63% of girls and 49% of males said yes, at that time. In 2003, 13% of boys and 6% of girls were physically assaulted at school in the previous year, and 31% of students say they were purposely excluded at least once.

More than half of girls (53%) also experienced verbal sexual harassment in the previous year at school and elsewhere, compared to 36% of boys, similar results to 1998.

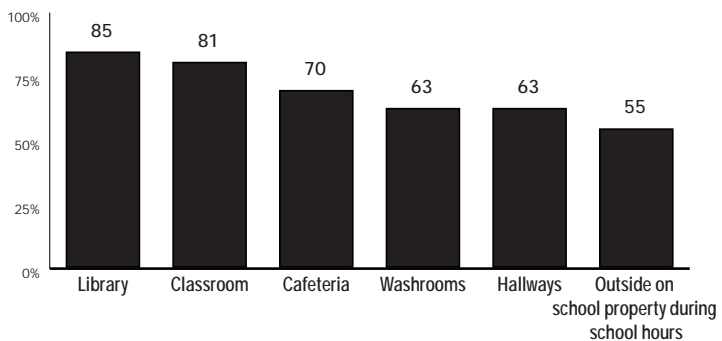
### Feeling safe at school

Less than half of students say they always feel safe at school: 41% of males and 39% of females. Feelings of safety are highest among grade 12 students (53% always feel safe) and grade seven (43%), and lowest in grades eight (30%) and nine (33%), the first years of secondary school in many school districts. These numbers have decreased since 1998, when 39% of grade eight and 58% of grade 12 students always felt safe. Students generally feel safer in supervised locations at school such as classrooms and the library, and less safe outside on school property, in the hallways or washrooms.

**Harassment, Exclusion and Assault by Another Youth at School in Past Year**



**Always or Usually Feel Safe at School in ...**



# Healthy youth development



## Youth need caring adults in their lives

### Sample introduction from questionnaire

*The next few questions are about your parents. By mother and father we mean whoever you consider your parents. They could be biological parents, adoptive parents, stepparents, same sex parents or foster parents.*

Research in the last decade shows that supporting youth in building strengths and capacities enables them to develop the self-esteem and skills needed to overcome obstacles and thrive in adult life. Promoting healthy youth development is an important change in the way social services, government and the medical profession approach youth health. Previously, most programs and funding focused on fixing problem or risk behaviours, rather than opportunities to promote positive growth and development.

Several protective factors promote healthy youth development: Youth need caring adults in their lives and strong adult-youth relationships. Adults need to create safe environments for youth, have high, positive expectations for them, and provide opportunities where they can develop and demonstrate competencies and participate in school and community life. Youth need to

learn life skills as well as prevention skills, and to feel a sense of optimism, hope and belonging.

The 2003 survey asked students about their connections to family, school and the community to assess the impact of these environments on youth well-being, risk taking, and academic performance and expectations. The 2003 results confirm the value of strong connections first assessed among B.C. students in 1998: Youth who feel connected and safe at home, at school and in the community have better health, are less likely to engage in risky behaviours, and have higher educational aspirations.

### Family connections count

The survey asked several questions about youth relationships with parents and family. These questions were combined to give a relative score of high, medium, or low connectedness. Strong family connections reduce risk. For example, 14% of students who have a high level of connectedness have had sex, compared to 23% of youth with a medium level of connectedness, and 35% of those with the lowest level of family connection. Students with a strong family connec-

## Risks are reduced when parents are present at critical times of the day

tion are also more likely to rate their health as good or excellent, and less likely to smoke cigarettes or marijuana, get into fights, drink alcohol, experience emotional distress or consider suicide.

Family connectedness decreases with age: 32% of 13-year-old students are highly connected to their families, compared to 25% at age 15, and 22% at age 17. Overall, boys (28%) feel more connected than girls (25%).

A new question in the 2003 survey asked students if they have an adult in their family they can talk to if serious problems arise. About 78% of students said yes, and these youth tend to be physically and emotionally healthier than students with no one to talk to. For example, 19% of youth without an adult family member to talk to experienced severe emotional distress in the previous month, compared to 5% of those who have someone to talk to. Early adolescents in particular (12 to 14-year-olds) are less likely to take risks when they have a family member to talk to.

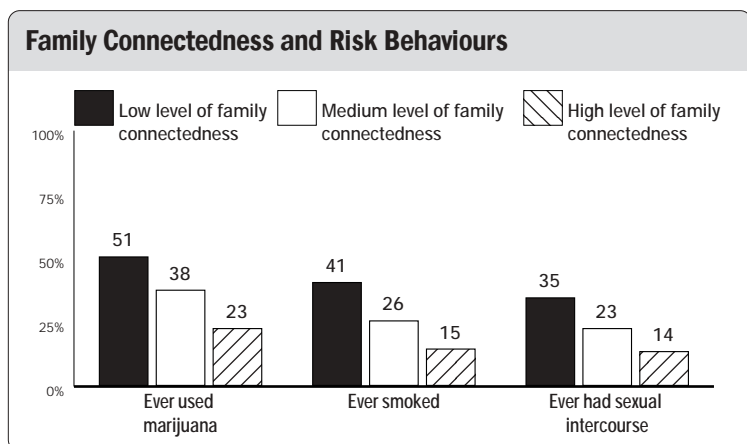
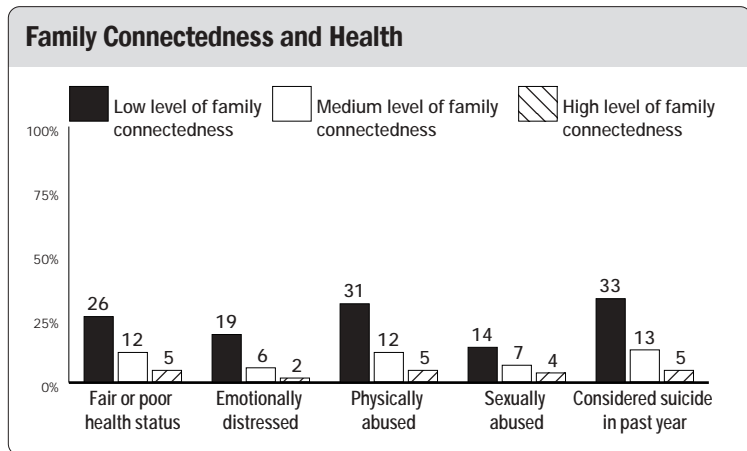
Another new section asked students how often at least one parent was home at critical times of the day. Parental monitoring is generally associated with fewer problem behaviours and higher levels of psychosocial adjustment, especially among early adolescents.

The survey results show that about 88% of youth had someone at home three or more days a week when they woke up in the morning, 66% when they came home from school, 82% when they ate their evening meal, and 95% when they went to bed. Youth report better physical and emotional health the more often parents are present at these times, and are less likely to try cigarettes, marijuana, alcohol or sex. Eighteen

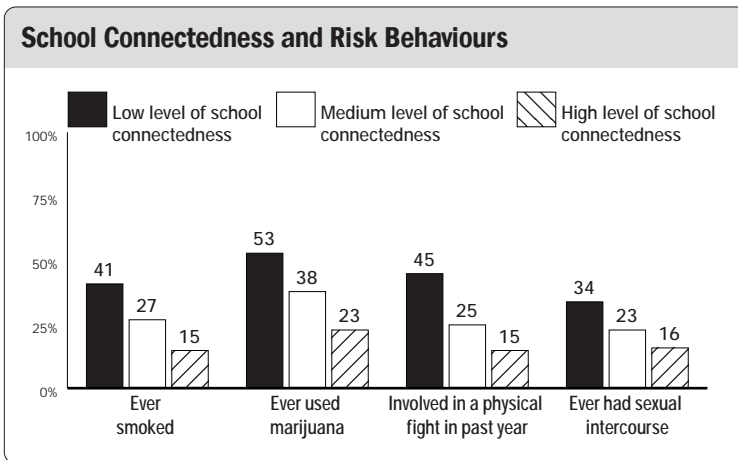
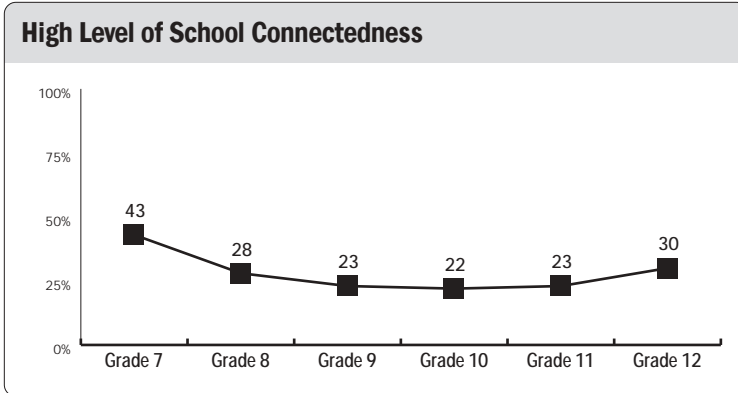
### Sample questions on family connectedness

*How much do you feel that people in your family understand you?  
That your family pays attention to you? That you and your family  
have fun together?*

percent of youth ate dinner with their parents 0-2 days a week, and 57% on all five school days. The opportunity for communication between adults and adolescents during meals may help confirm a youth's importance in the family, and the structured lifestyle may carry over into other behaviours.



## Youth who feel connected to school report better health



### Feeling Safe at School and Risk Factors

	Rarely or never feel safe	Always feel safe
Fair or poor health status	28%	9%
Emotionally distressed	23%	5%
Physically abused	27%	11%
Sexually abused	14%	6%
Considered suicide in past year	36%	9%
Involved in a physical fight in past year	47%	21%
Carried weapon to school in past month	23%	5%
Had sex before 16 years of age	28%	15%

### School connections enhance performance

Some survey questions asked about relationships with teachers and peers and students' sense of belonging at school. Based on their answers, youth were categorized as having high, medium, or low levels of school connectedness. More girls (31%) than boys (25%) have high connections to school. Youth who are highly connected report better health and engage in fewer risky activities compared to those who have medium or low levels of connectedness. Feeling safe at school is another protective factor strongly linked to better physical and emotional health, and reduces risk taking, especially among younger students.

Similarly, academic performance is associated with health: students who take fewer risks have better health and get better grades. Twenty-eight percent of youth report mostly A's, 43% get mostly B's, 27% mostly C's, and 3% mostly D's and F's. Girls (33%) are more likely than boys (22%) to get mostly A's. Students with A's experience less emotional distress, and are much less likely to smoke tobacco or marijuana, drink alcohol, have sex, or be involved in fights than those who receive C's, D's or F's.

Youth who have post-secondary educational aspirations are also less likely to take risks. In B.C., 72% of students expect to graduate from a post-secondary institution such as a community college, technical institute or university, while 7% expect to finish their education either before or when they graduate from high school. Sixteen percent don't know when they will finish their education. Despite students' intentions, only 49% of



## 84% of youth consider themselves to be really good at some activity

people 25 and older in B.C. have some kind of post-secondary certificate. Consequently, the educational system faces the challenge of ensuring capacity exists to accommodate students' aspirations.

### Community participation protects youth

About 72% of youth take part in extracurricular activities each week, 76% of girls and 68% of boys. These activities do appear to be protective, as youth who participate report slightly better health and take somewhat fewer risks than those who don't.

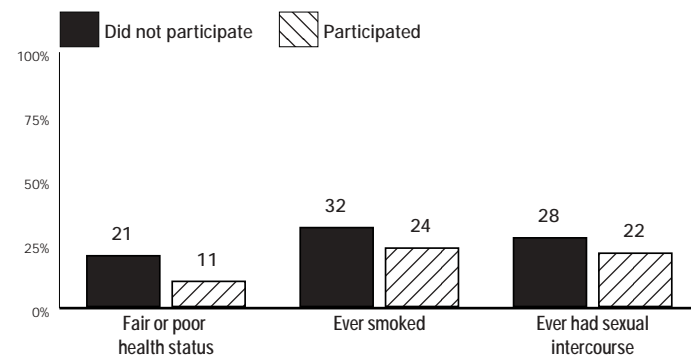
In addition, as volunteer activities increase, risk behaviours generally decrease. Girls (87%) are more likely to volunteer than boys (74%). Of various volunteer activities, 48% of youth fundraised for a charity or school trips, 35% supported a cause such as the food bank or an environmental group, 33% volunteered for school activities such as the yearbook, school patrol or student council, and 31% helped in the community.

Another new question on the survey asked students if they could name things they are really good at. Eighty-four percent of youth consider themselves to be quite good at a range of activities, from every kind of sport to music, drama, computers, school subjects, supporting friends and listening. These youth report better health and take fewer risks than students who could not identify activities they're good at.

### Participation in Extracurricular Activities in Past Year

	Ever participated	Participated 4+ times per week
Sports with a coach	66%	27%
Dance or aerobic classes	31%	7%
Art, drama or music lessons	37%	9%
Community or religious groups	26%	4%

### Weekly Participation in Extracurricular Activities in Past Year

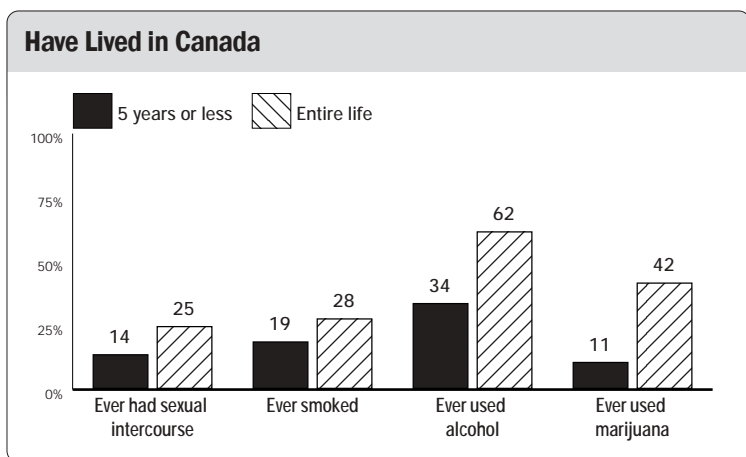


### Sample question on community involvement

*In the past 12 months, did you help others without pay?*

“I have had a kidney transplant, volunteer in the community a lot and get straight A’s. Teens are good people!”  
*B.C. Youth*

As well, students who think of themselves as religious or spiritual are less likely to have sex or try cigarettes, marijuana or alcohol. Thirteen percent of students say they are very religious or spiritual, 44% somewhat, and 44% not at all.



### New Canadians do well at school

Nine percent of youth have lived in Canada less than five years, and 66% of these students speak a language other than English at home most of the time. Even so, this group of youth is getting better grades than other students: 33% get mostly A’s, compared to 26% of youth who have always lived in Canada. New Canadians also feel slightly more connected to family and school, and have slightly higher post-secondary aspirations, with 77% planning to continue their education, compared to 71% of students who have lived here all their lives, which may reflect higher family expectations for immigrant youth. Youth who are new to Canada take fewer risks, and are less likely to smoke, drink, use marijuana or have sex. New Canadians are more likely to experience discrimination because of their skin colour or race, but report the same level of severe psychological distress as youth who have always lived in Canada.

### New Canadians get better grades than students who have always lived here

# Challenges & opportunities

## Resources can be targeted to promote resilience



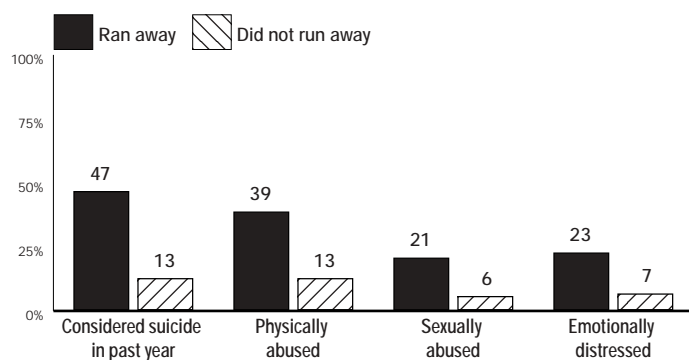
The 2003 AHS shows most B.C. youth lead stable lives, are healthy, do well at school, and participate in their communities, similar to the 1998 survey results. But a smaller number of youth are more vulnerable and at greater risk. This section highlights a few risk factors including: youth who run away from home, are obese, have a health condition or disability, move frequently, or lack a feeling of optimism about their future are more likely to experience poor health and take risks.

By identifying the risk factors, resources, education and prevention efforts can be targeted to address issues and promote resilience and healthy development among these youth.

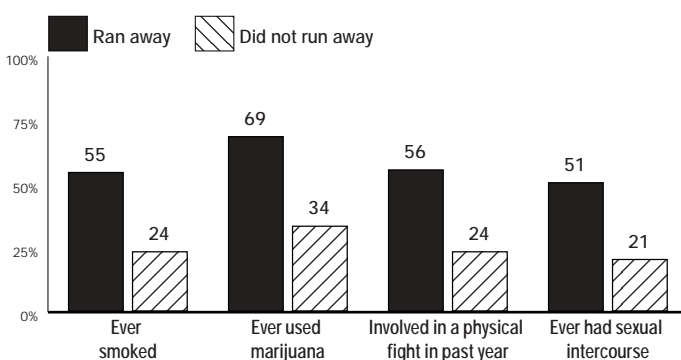
### Running away from home heightens most risks

Nine percent of students ran away from home one or more times in the previous year, 10% of girls and 7% of boys. Running away from home increases virtually every risk: abuse, poor health, getting in fights, suicide, early sex, pregnancy, and alcohol and drug use. An astounding 47% of these at-risk youth have considered suicide and 23% report severe psychological distress, compared to 13% and 7% of students who did not run away. Students who run away

**Ran Away From Home in Past Year and Emotional Health**



**Ran Away From Home in Past Year and Risk Behaviours**



## Physical activity and healthy nutrition prevent obesity

feel less connected to their families, share fewer meals with parents, feel less safe and connected at school, and get poorer grades than youth who do not run away.

Youth who have run away are more likely to ask for help from a school counsellor, religious leader, health professional or social worker than those who have not run away. However, running away, even briefly, is often the first step to living on the street. Another research study by the McCreary Centre Society found that more than two-thirds of street youth had run away from home at least once, most more than once. The data also raises serious concerns about

youth who have run away and dropped out of school, as those who filled in the survey were at least still in school.

### Obesity has health risks

Using the Body Mass Index (BMI), 14% of youth in the 2003 survey were overweight and 3% obese. BMI uses the ratio between height and weight to measure whether people are underweight, normal weight, overweight or obese. Body composition, or the ratio of fat versus lean weight, is not part of the calculation, so the BMI system may not accurately predict the level of risk faced by highly muscular individuals and certain racial and ethnic groups. Still, BMI is the international standard for assessing weight.

Even though more girls than boys seem concerned about losing weight, the surveys show more boys than girls are overweight (18% of males and 10% of females) and obese (5% of males and 2% of females). As well, the findings show an increase in both overweight and obesity among boys over the past decade, with little change among girls. B.C. youth seem to be on a par with national averages for youth recently released by Statistics Canada.

Overweight youth exercise as much as normal weight youth, but obese teens tend to exercise slightly less. Both overweight and obese adolescents spend more time in front of the computer and TV. Overweight and obese youth have poorer health, are less satisfied with their weight, get lower grades, and are more likely to experience discrimination because of physical appearance. But despite these findings, overweight and obese youth do not differ in their emotional health from normal weight youth. Overweight and obese youth are more likely to engage in

Overweight and Obese		
	Males	Females
<b>Overweight</b>		
1992	15%	9%
2003	18%	10%
National average†	17%	10%
<b>Obese</b>		
1992	2%	1%
2003	5%	2%
National average†	6%	3%

†Parent and child factors associated with youth obesity. Carrière G. Health Reports - Statistics Canada (2003).

Body Weight and Risk Factors			
	Normal weight	Overweight	Obese
Fair or poor health status	11%	18%	35%
Discriminated against because of physical appearance in past year	17%	28%	46%
Think of your body as right weight	74%	51%	21%
Trying to lose weight	33%	60%	71%
Marks at school are C's, D's, and F's	27%	36%	40%

*“I have Tourettes Syndrome, and it makes it hard to sleep, wake up, and focus in school. I often fall asleep in class.”*  
*B.C. Youth*

binge eating, but otherwise are very similar to normal weight youth for other risks. (Underweight youth, however, tend to be lower risk takers.)

Obesity increases risk for many health problems such as diabetes, high blood pressure, heart disease and stroke. Physical activity and healthy nutrition are key to preventing obesity in children and adolescents. Families and schools play the most important role in teaching young people healthy behaviours. Parents can provide youth with healthy meals and snacks, encourage an active lifestyle and limit TV and computer time. Schools can promote physical activities, provide education on healthy nutrition, and ensure nutritious meals are available in school cafeterias.

**Having a health condition or disability increases risk**

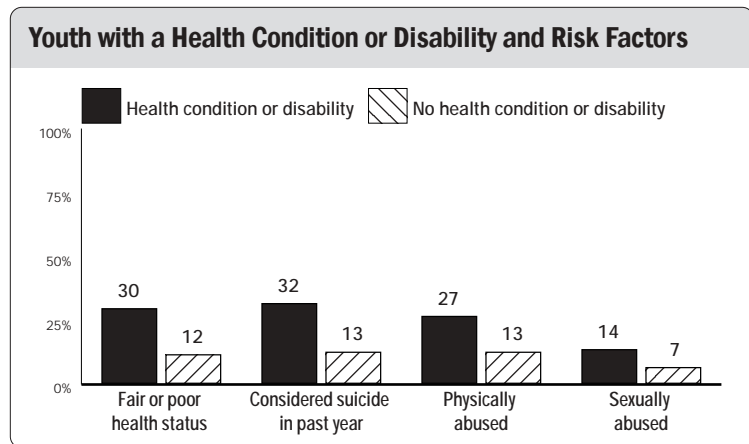
Thirteen percent of females and 9% of males said they have a health condition or disability that limits activities. Both the 1998 and 2003 surveys found this group to be at higher risk for poor health, emotional distress, suicide, abuse, getting in fights, smoking and substance use than youth without disabilities or chronic health conditions.

Services that address these unique transitional issues through adolescence can promote resilience. In addition, some educational requirements for youth with health problems differ from other students. For example, drug and alcohol education should cover the impact of medications and health conditions.

This group is likely under represented on the survey, as only students well enough to be in school would have been able to participate.

**Internet safety is a new issue**

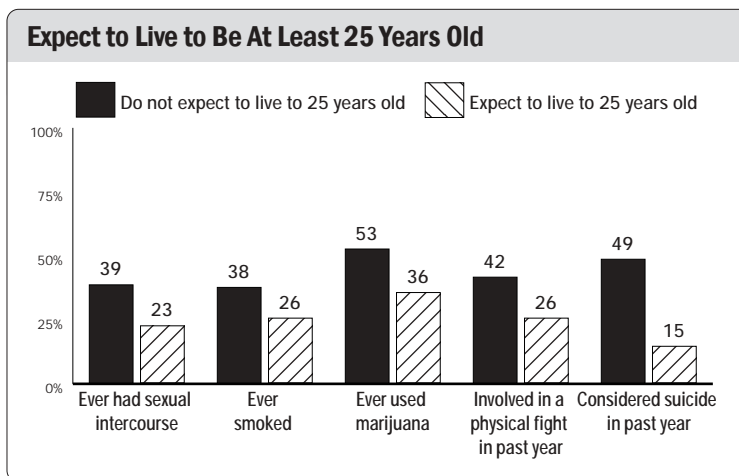
A new question in 2003 asked students about Internet use and feeling safe because online safety is an emerging issue. About 15% of students said they had been in contact with a stranger on the Internet who made them feel unsafe. Girls (23%) are much more likely than boys (7%) to have this type of encounter. These girls feel less connected to their families and school, and are more likely to experience abuse: 28% report being physically abused and 22% sexually abused, compared to 15% and 10%



**Females in Contact with a Stranger on the Internet Who Made Them Feel Unsafe**

	Been in contact with unsafe stranger	Not been in contact with unsafe stranger
High family connectedness	16%	27%
High school connectedness	21%	33%
Always feel safe at school	27%	42%
Emotionally distressed	16%	9%

## A stable home life protects youth from risk and promotes connectedness



of girls who have not met an unsafe stranger on the Internet. They are also more likely to smoke tobacco and marijuana and drink alcohol.

Not surprisingly, the proportion of youth reporting unsafe Internet encounters increases with the amount of time spent on the computer. These results suggest a need for parents to communicate with their children about potential risks, set guidelines for Internet use, and monitor online activity, as predators typically pursue young people who are vulnerable.

### Moving frequently creates chaotic lives

About 17% of youth moved once in the past year, 6% moved two times and 7% three or more times. Youth who move three or more times a year tend to lead more chaotic lives. These students feel less connected to their families and school, and are more likely to

run away from home (19%) than youth who have not moved (7%). They are less likely to do well in school: 42% received C's, D's and F's, compared to 27% of students who did not move. They are also more likely to have experienced abuse and to engage in risky behaviours such as smoking marijuana and fighting.

Youth who move a lot are more likely to live with one parent or a stepparent than two parents, and are much more likely to worry about their family having enough food and money, suggesting these families have fewer resources to maintain a stable home. Other research in Greater Vancouver links frequent moving with an increased risk of homelessness.

The survey results for moving and running away show how important a stable home life is to protect youth from risk, promote connectedness, and support them to do well at school.

### Loss of optimism puts youth at risk

A new question in 2003 asked students if they expect to live to be at least 25 years of age. The good news is that the vast majority of students (97%) do, and this type of optimism is associated with healthy youth development. However, the small percentage of youth (3%) who do not expect to live to at least 25 are at very high risk. They report poorer health (33%) than other students (13%), experience more physical abuse (28% compared to 15%), and are much more likely to consider suicide (49% compared to 15% of students who expect to live to 25). This group also smokes cigarettes and marijuana and drinks alcohol more than other students.

# New questions

## New questions look at emerging issues among youth



About 20% of the 2003 Adolescent Health Survey questions were new, covering topics from how Aboriginal youth learn about their culture, to whether youth have run away, if parents were home at important times of the day, and whether students feel safe at school. Some new questions were intended to gather information about protective factors in young peoples' lives, and some to obtain information on issues of emerging concern in B.C. such as homelessness, youth gambling and school safety. Many of these questions have been covered in other parts of this report. This section includes highlights of new questions not covered elsewhere.

### Gambling

Youth were asked how often they gambled for money at playing cards, bingo, sports pools, gambling machines and casinos, or bought lottery tickets in the past year. About 51% of youth said they gambled, 60% of males and 43% of females. Gambling increases with age, from 47% of 13-year-olds, to 53% of 15-year-olds, and 56% of 17-year-olds. The most popular types of gambling are playing cards for money (33%), buying lottery tickets (26%) and betting money on sports pools (23%).

The majority of youth who gamble say they have only done it a few times. But 12% of youth gamble about once a month, and 6% gamble once a week or more. Boys are more likely to gamble (17% once a month) than girls (8%).

Gambling is illegal for minors, yet more than half of students gamble and a quarter were able to buy lottery tickets. Several Canadian studies note a dramatic increase in legal gambling since the 1990s. As a result, adolescents are being raised in an environment of government-sanctioned gambling for the first time. Canadian research has also found that adolescents who are frequent gamblers are at risk for substance use and other risk behaviours, emotional health problems and poor school performance.

#### Gambling in Past Year

Played cards	33%
Bought lottery tickets	26%
Bet on sports pools	23%
Bet on gambling machines	7%
Played bingo	7%
Bet at a casino in BC	2%

## About half of youth talked to school staff and other professionals about problems

### Seeking help from professionals

Another question asked youth if they approached school staff, health professionals, social or youth workers, religious leaders, or other sources for help with a personal problem in the past year. About half of youth (49%) asked a professional for help, 45% of boys and 54% of girls, which shows a willingness among youth to approach professionals. (Most youth also said they had an adult who is not in their family who they could talk to about problems.) It is encouraging that most students found their encounters with professionals to be helpful, and that these sources are accessible to youth seeking assistance.

Youth were most likely to seek help from school staff for help with a personal problem, compared to other professionals. Consequently, school staff have an opportunity to make a positive impact on students' feelings of stability and ability to cope. The percentage of youth asking school staff for help increases with age, from 28% of 13-year-olds, to 33% of 15-year-olds, and 42% of 17-year-olds.

Older students are more likely to approach a health professional than younger students: 37% at 17, compared to 26% at 13.

### Worries about family

Students were asked if they worry about their home life: having enough food or money, a parent dying, drinking or drug use by someone at home, violence at home, and not having someone to take care of them. About one in four youth (25%) worry about one or more of these issues a lot, and 10% worry a lot about two or more issues. More youth worry a lot about a parent dying (13%), and about their family having

### Professionals Who Were Helpful with a Personal Problem in Past Year (of youth who asked for help)

School staff	77%
Health professional	86%
Social worker, youth worker or counsellor	68%
Religious leader	77%

enough food or money (12%) than the other categories. Studies show that young people with an ill parent often worry about death, which can undermine their sense of stability and inhibit the establishment of other trusting relationships. Other research shows that it is not unusual for adolescents to worry about academic performance, social relationships, global and societal problems and death.

Fewer students in two parent families worry about family income a lot (9%), compared to 17% of youth living with one parent, 14% of youth living with related adults, 20% with non-related adults, and 22% who live with no adults. Girls and younger students tend to worry slightly more.

### Consequences of substance use

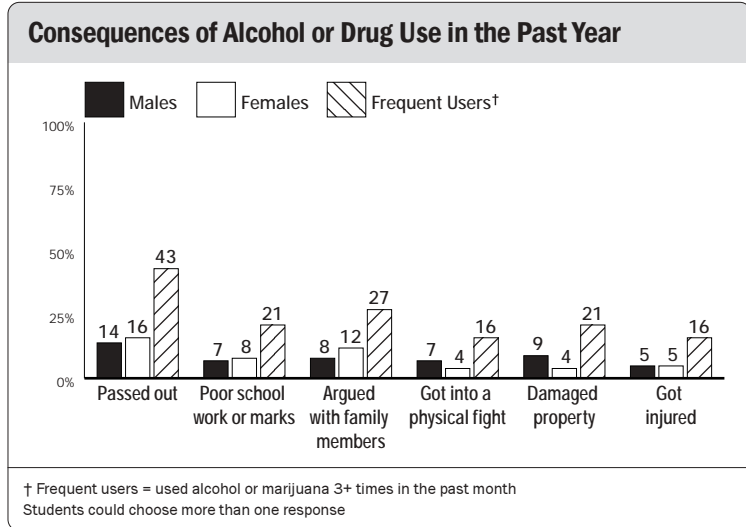
Youth were asked if they experienced any negative consequences in the past year from drinking alcohol or using drugs, such as family arguments, poor school marks, and trouble with the police. Close to half of students (49%) said they did not drink or use drugs in the past year. Of those who did, the majority (72%) reported negative consequences.

Girls were more likely than boys to pass out after drinking or argue with family members, while boys were more likely to get into physical fights, get in trouble with police, or



## Peer values can influence behaviour

damage property. Early adolescents are less likely to use alcohol or drugs than older students, and for this reason, older youth report more negative consequences. Frequent users (those who used alcohol or marijuana three or more times in the last month) had much higher rates for almost all negative consequences. Education on prevention and consequences, school intervention programs, enhancing youth connections with family and school, and increasing opportunities for meaningful participation can help reduce substance use and build resilience among youth.



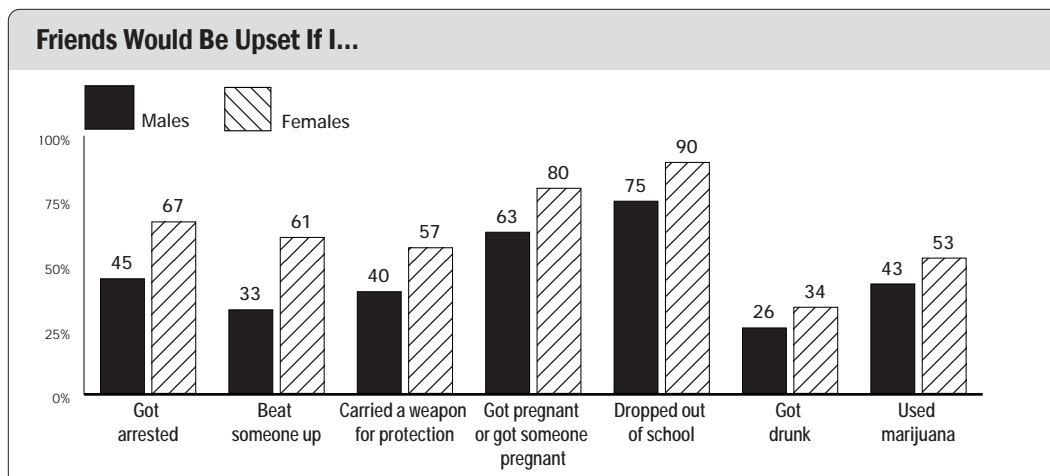
### Peer pressure

This set of questions asked youth if their friends would be upset with them for getting arrested, beating someone up, carrying a weapon, getting pregnant or getting someone else pregnant, dropping out of school, getting drunk, and using marijuana. Most youth think their friends would be upset if they dropped out of school (82%), followed by getting pregnant or getting someone else pregnant (72%).

Differences between age groups vary among the behaviours. For example, older students

think friends are less likely to be upset if they get drunk or arrested than young students. But older students think friends are more likely to be upset if they drop out of school than younger students.

Other studies confirm that peer group values do make a difference with risk behaviours. Youth are less likely to take risks if their friends will be upset with them for doing so. Research also shows that parents' involvement and values can have an impact on peer influences.



# Making a difference

*“The surveys provide an indispensable look at attitudes, behaviours and health determinants for children and youth in B.C. As the only ongoing source of such data, the Adolescent Health Survey provides critical information for policy makers at all levels.”*

*Dr. Perry Kendall,  
Provincial Health Officer,  
Ministry of  
Health Planning*

Previous Adolescent Health Surveys have contributed to improvements in the lives of B.C. youth, and the 2003 survey is no exception. Schools, communities, government agencies, health professionals and young people use the survey results in planning youth programs and services. Here are some highlights of how the results are used:

## **Guiding government action**

Survey results are used by the federal and provincial governments as evidence-based data for policy and program decisions on youth issues. For example, the B.C. Ministry of Children and Family Development uses AHS data to monitor its success in meeting specific objectives, and to track progress in reducing substance use by children and youth. AHS III provides additional evidence to evaluate the impact of prevention and treatment services on adolescent drug and alcohol use.

In addition to giving decision-makers information on youth problems, the survey identifies protective factors used to design health promotion strategies for youth.

## **Academic and research partnerships**

Researchers from Simon Fraser University, the University of BC and the University of Minnesota have used the AHS to explore topics such as risk and resilience among bisexual youth, Aboriginal youth and school

drop-out, peer victimization, and bullying among incarcerated youth. In addition, the Children’s and Women’s Health Centre of BC used AHS data to study the transition to adulthood in late adolescence of those born at extremely low birth weight.

## **Fact sheets**

Fact sheets will be produced with more detail on topics of interest to specific groups, such as:

- Substance Use Update
- Sexual and Reproductive Health in the New Millennium
- Self-Rated Health Status: A Useful Predictor?

Other topics may update fact sheets prepared using AHS II data on suicide, tobacco, weight issues, physical activity and other topics.

## **Regional reports**

Reports with regional population-based results from AHS II were popular among professionals concerned with youth health at regional and local levels, as most population-based reports produce only provincial or national data. AHS III regional reports will be produced for most of the health service delivery areas (HSDA) in B.C., with data collected from 13 of the 16 HSDAs. These reports will include data from all the survey questions.

“Not only do these surveys help B.C. understand the emerging health issues for its youth, they contribute to the picture of health behaviours of adolescents worldwide. This work has been on the cutting edge of adolescent health research in Canada, the U.S. and Europe.”

Dr. Elizabeth Saewyc,  
Centre for Adolescent Nursing/Centre for Child and Family Health Promotion Research,  
University of Minnesota

### Special surveys and reports

The broad range of topics in the Adolescent Health Survey allows the relationship between behaviours to be explored, using data from three periods over the past decade on various issues and risk behaviours. Special topic reports provide more in-depth analysis of specific topics such as early adolescence, abuse, violence, girls' health, sex and ethnicity, First Nations youth, Chinese youth, tobacco and weight issues.

Special surveys look at populations of youth who are not in school, or may not be fully covered in the school-based AHS, such as gay and lesbian youth. The school-based AHS is modified for these surveys, keeping core questions and adding new questions tailored to a particular population. For example, following AHS II, surveys of gay youth, sexually exploited youth in four communities, youth in custody centres, and street involved youth in urban, suburban and smaller urban centres were conducted.

“Coast Garibaldi Public Health nurses have been very involved with the Adolescent Health Survey, in partnership with our three school districts. The information from the survey and Next Step process has been very valuable in making our programs more responsive to youth. We use the data to set new youth health goals and tailor services at the local level.”

Margaret Antolovich, Manager, Community and Family Health,  
Coast Garibaldi, Vancouver Coastal Health Authority

### Next Step

The McCreary Centre Society developed the *Next Step* workshop following the first two Adolescent Health Surveys to involve youth in:

- Responding to the AHS results
- Identifying priority youth issues in their community
- Making recommendations for addressing these issues

About 1,000 youth and 200 adults have participated in workshops in communities across B.C., and the kit was modified for use in First Nations communities, where two Aboriginal youth facilitated workshops in 11 communities. The *Next Step* kit and process will be updated for AHS III.

### Website updates

Copies of Adolescent Health Survey documents will be available on the McCreary Centre Society website at [www.mcs.bc.ca](http://www.mcs.bc.ca):

- This provincial highlights report, *Healthy Youth Development: Highlights from the Adolescent Health Survey III*
- AHS Fact Sheets (AHS III fact sheets will be posted as they are produced; AHS II fact sheets are online now)
- Regional reports (AHS III as produced; available now for AHS II)
- Special surveys and reports (AHS III as produced; available now for AHS II)

# References

## Provincial Report for AHS II

*Healthy Connections: Listening to BC Youth* (1999)

## Regional Reports for AHS II

*Kootenays Region; Okanagan Region; Thompson/Cariboo Region; Upper Fraser Valley Region; South Fraser Region; Simon Fraser/Burnaby Region; Coast Garibaldi/North Shore Region; Central/Upper Island Region; North Region; Vancouver/Richmond Region; Capital Region; East Kootenay Region; Kootenay Boundary Region, North Okanagan Region; Okanagan Similkameen Region; Thompson Region; Cariboo Region; Coast Garibaldi Region; Central Vancouver Island Region; Upper Island/Central Coast Region; North West Region; Peace Liard Region*

## Reports for AHS I

*Adolescent Health Survey: Province of British Columbia* (1993). Prepared by Larry Peters and Aileen Murphy  
Investigators: Roger Tonkin, David Cox and Ruth Milner

*Adolescent Health Survey: Regional Reports for: Greater Vancouver Region; Fraser Valley Region; Interior Region; Kootenay Region; Northeast Region; Northwest Region; Upper Island Region; and Capital Region* (1993)

## Special Group Surveys and Topic Reports for AHS II

*Healthy Youth Development: The Opportunity of Early Adolescence* (2003)

*Accenting the Positive: A developmental framework for reducing risk and promoting positive outcomes among BC youth* (2002)

*Violated Boundaries: A health profile of adolescents who have been abused* (2002)

*Violence in adolescence: injury, suicide, and criminal violence in the lives of BC youth* (2002)

*Between the Cracks: homeless youth in Vancouver* (2002)

*Homeless youth: an annotated bibliography* (2002)

*Time Out: a profile of BC youth in custody* (2001)

*The Girls' Report: The Health of Girls in BC* (2001)

*No Place to Call Home: A Profile of Street Youth in British Columbia* (2001)

*Making Choices: Sex, Ethnicity, and BC Youth* (2000) Prepared by Natalie Franz and Colleen Poon

*Raven's Children: Aboriginal Youth Health in BC* (2000)

*Lighting Up: Tobacco use among BC youth* (2000)

*Silk Road to Health: A Journey to Understanding Chinese Youth in BC* (2000). Prepared by Colleen Poon and Natalie Franz

*Mirror Images: Weight Issues Among BC Youth* (2000)

*Being Out-Lesbian, Gay, Bisexual & Transgender Youth in BC: An Adolescent Health Survey* (1999)

*Our Kids Too-Sexually Exploited Youth in British Columbia: An Adolescent Health Survey* (1999)

## AHS II Fact Sheets

Safe & Sound: Injury Issues Among BC Youth

Keeping Fit: Physical Activity Among BC Youth

Marijuana: Use Among BC Youth

Healthy Connections: Connectedness and BC Youth

Mirror Images: Weight Issues Among BC Youth

Silk Road: Health of Chinese Youth in BC

Lighting Up: Tobacco Use Among BC Youth

## Next Step Reports

*The Aboriginal Next Step: Results from Community Youth Health Workshops* (2001)

*Our Communities – Our Health: Young People Discuss Solutions To Their Health Issues. The Next Step Report* (2001)

*Adolescent Health Survey: Next Step - Community Health Action By Youth. Results from 1994 Youth Health Seminars in British Columbia* (1995)

## Sources of Survey Questions

*Adolescent Health Survey*, Adolescent Health Program, University of Minnesota, Minneapolis

*Health Behaviour in School-Aged Children*, World Health Organization (WHO) Cross-National Survey, Coordinated by the Research Center for Health Promotion, University of Bergen, Norway

*National Longitudinal Survey of Children and Youth* (NLSCY); Human Resources Development Canada and Statistics Canada

*The National Longitudinal Study of Adolescent Health* (Add Health); Carolina Population Centre, University of North Carolina at Chapel Hill

*Ontario Student Drug Use Survey*, Centre for Addiction and Mental Health

*Tobacco Use in British Columbia*, Angus Reid Group and British Columbia Ministry of Health

*Urban Indian Youth Health Survey*, School of Nursing, University of Minnesota, Minneapolis

*Youth Risk Behaviour Survey*, Division of Adolescent and School Health, U.S. Centers for Disease Control and Prevention, Atlanta, Georgia

## Other Sources

References for other research cited in this report are available upon request.

# AHS III project team

## AHS III Inter-ministry Committee

**Barry Anderson**  
Director of the Information  
Department  
Ministry of Education

**Jenni Bard/Sheri Landles**  
Community Programs Division  
Ministry of Public Safety and  
Solicitor General

**Jayne Barker**  
Mental Health and Youth Programs  
Ministry of Children & Family  
Development

**Mark Creighton**  
Director of Legislation & Inter-  
agency Branch  
Ministry of Human Resources

**Les Foster (Chair)**  
Assistant Deputy Minister  
Research & Knowledge Transfer  
Ministry of Children & Family  
Development

**Anne Kent**  
Manager, Child & Youth Health  
Children's, Women's & Seniors  
Health Branch  
Population & Health Wellness  
Division  
Ministry of Health Services

**Alex Mann**  
Policy and Research Analyst  
Ministry of Education

**Wayne Mitic**  
Program Manager  
Office for Children and Youth

**Marilyn Shinto (Chair)**  
Senior Manager  
Accountability & Performance  
Improvement Branch  
Ministry of Children & Family  
Development

**Wayne Wei**  
Performance Management Analyst  
Accountability & Performance  
Improvement Branch  
Ministry of Children & Family  
Development

**Elise Wickson**  
Director  
Women's & Seniors Branch  
Ministry of Community, Aboriginal  
and Women's Services

## AHS III Advisory Committee

**Moyra Baxter**  
BC School Trustees' Association

**Linda Bearinger**  
Professor & Director  
School of Nursing  
Centre for Adolescent Nursing  
University of Minnesota (Twin Cities)

**Faye Bebb**  
Manager  
Children & Women's Health Centre  
of BC

**David Cox**  
Associate Professor  
Department of Psychology  
Simon Fraser University

**Nancy Galambos**  
Department of Psychology  
University of Victoria

**Cathy Hull**  
Office of the Provincial Health  
Officer

**Catherine Jeffery**  
Coordinator  
Sexual Health Resource Centre  
Sunny Hill Health Centre for Children

**Nadine Johnson**  
Public Health Nursing Managers  
Council

**Nadine Loewen**  
Health Officers Council

**Chris Lovato**  
Associate Professor  
Dept. of Health Care & Epidemiology  
University of British Columbia

**Colin Mangham**  
Director  
Prevention Source BC

**Pat Mauch**  
Public Health Nurse  
Vancouver Coastal Health Authority

**Heather Middleton**  
Industry Liaison  
Prevention Division  
Workers Compensation Board

**Mary Paone**  
Clinical Nurse Specialist  
Youth Health Program  
Children's & Women's Health Centre  
of BC

**Michael Resnick**  
Professor of Pediatrics & Director of  
Research  
National Teen Pregnancy Prevention  
Division of General Pediatrics  
University of Minnesota

**MaryLynn Rimer**  
Children's Commission

**Irving Rootman**  
Professor  
Faculty of Human and Social  
Development  
University of Victoria

**John Woudzia**  
BC School Superintendents' Assn.

# Regional Coordinators & Administrators

## **Northwest**

Kathy MacDonald  
Colleen Austin  
Nadina Spankie  
Mary Swendsen

## **Northern Interior**

Kathy MacDonald  
Angela Boutilier  
Robbin Johnston  
Carol Mankowski  
Basha Rahn  
Jasreen Randhawa  
Bruce Self  
Cheryl Work

## **Thompson Cariboo**

Donna Helgeson  
Cathy Shether  
Maryanne Domarchuk  
Donna Dube  
Laura Housden  
Vivian Mitchell  
Marsha Wilson  
Pam Zuhjniak

## **Okanagan**

Nadine Johnson  
Kim Bartel  
Janice Craig  
Nancy Delgado  
Maryanne Domarchuk  
Nancy Gunn  
Loretta Van Haarlem

## **Kootenay-Boundary**

Barb Douglas  
Julie Damore  
Linda Nero  
Valerie Pitman  
Pauline Riley

## **East-Kootenay**

Joanne Weins  
Catherine Blake  
Diane Cameron  
Bettilou Carson  
Terri Fergus  
Lois Halko  
Carolyn Hawes  
Eileen Hughes  
Alison Masters  
Heather Ney  
Lynne Oberik  
Clare Pinette  
Ruth Ratzlaff  
Mary Jean Searle  
Carolyn Shepherd  
Pam Smith

Sonja Sommerfeld  
Donna Willcock  
Ann Younger

## **North Vancouver Island**

Sandra Waarne  
Moiria Havelka  
Alison Huck-Skrepneck  
Rebecca Olesen  
Jaime Simmons  
Margaret Scullion  
Faye Thompson

## **Central Vancouver Island**

Esther Pace  
Anne Aylard  
Joel Bailey  
Tracy Beaton  
Gail Blackburn  
Connie Chan  
Chris Crabtree  
Francesca Chiste  
Kelly Dowling  
Liz Gehl  
Dianne Glassen  
Connie Lapadat  
Diana Olson  
Karen Phillips  
Adriane Pickavance  
Joy Stott  
Faith Thomson  
Cathy Whitehead

## **South Vancouver Island**

Cheryl Martin  
Dianne Hart  
Kirsten Hull  
Pamela MacKenzie  
Shelagh Machin  
Marilyn Plummer

## **North Shore / Coast Garibaldi**

Margaret Antolovich  
Franca Bertoncin  
Leah Belliveau  
Chris Blackman  
Linda Buchanan  
Nathalie Collett  
Tara Deeth  
Jayna DeRoos  
Patti Diplock  
Carol Downton  
Jeanie Fraser  
Kristine Good

Tanja Hanson  
Lori Hayward  
Amy Jolicoeur  
Sue King  
Ling Lai  
Jennifer Leigh  
Bronwyn Lorimer  
Marilyn McIvor  
Daphne McKellar  
Geraldine Meade  
Colleen Moberg  
Caprii Mohammed  
Rosemary Moran  
Karen Peel  
Annelies Ravensbergen  
Betty Lynn Rose  
Johanna Rzepa  
Eleanor Weston  
Julie Whitman  
Grant Wilson

## **Vancouver**

Anne Carten  
Tamsin Morgana  
Pat Mauch  
Pat Ward  
Joanne Ricci  
Gail Allison  
Heather Pattullo  
Gail Blackburn  
Tanya Chohan  
Rosa Corrado  
Jen Duff  
Cathy Ebbely  
Connie Fernandes  
Paul Franco  
Melisa Gregario  
Lori Hobbs  
Irene Isaacs  
Stephanie Kemp  
Vickie Lau  
Liz Lonsdale  
Tara Lum  
Melissa Magtang  
Jodie McFarlane  
Christina Mitchell  
Melissa Pang  
Kim Patterson  
Jennifer Scarr  
Pam Smith  
Susan Smyth  
Terry Stanway  
Amandip Uppal  
Bev Valkenier  
Tara Walsh  
Julie Woods  
Iku Yeh  
Lalena Zavitz

## **Richmond**

Cathy Houldson  
Margie Basaraba-Luciuk  
Debbie Brow  
Betty Charnaw  
Judy Dale  
Jennifer Hill  
Linda Ireland  
Anne Lacey  
Chris Salgado  
Karen Stephen  
Susanna Suen

## **Simon Fraser**

Lydia Drasic  
Penny Robertson  
Wendy Hampe  
Carol Jones  
Amy Maio  
Amelia McDonald  
Sharon MacRae  
Susan Norton  
Bonnie Ogilvie  
Jan Olson  
Lisa Pires  
Lynne Proctor  
Tina Revai  
Sonja Simonsen  
Margaret Shaw  
Jill Stromnes  
Cheryl Teters  
Janet Thomson  
Paula Turner  
Valentina  
Lesley Vervaet  
Cathie Wright

## **South Fraser**

Elaine Klassen  
Crystal James  
Phung Lam  
Lana Meredith  
Linda Peterson  
Moya Tiefenbacher  
Alison Wood

## **Fraser Valley**

Patricia Whitehead  
Laura Eeg  
Barbara Metcalf  
Yvette Sabo