

# **Cree Health Survey 2003**

## **Canadian Community Health Survey** *Cycle 2.1*

### **Iiyiyiu Aschii**



## *Demographic and social characteristics of the population living in Iiyiyiu Aschii*

*June 2008*



Conseil CrI de la santé et des services sociaux de la Baie James  
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Cree Board of Health and Social Services of James Bay

**Institut national  
de santé publique**

**Québec** 

**Canadian Community Health Survey, Cycle 2.1  
Iiyiyiu Aschii, 2003**

*Demographic and social characteristics  
of the population living in Iiyiyiu Aschii*

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## TABLE OF CONTENTS

<b>FOREWORD .....</b>	<b>2</b>
<b>METHODOLOGY OF THE CANADIAN COMMUNITY HEALTH SURVEY (CCHS), CYCLE 2.1, IYIYIU ASCHII, 2003 ..</b>	<b>2</b>
<b>INTRODUCTION .....</b>	<b>3</b>
<b>METHODOLOGICAL ASPECTS .....</b>	<b>3</b>
<b>RESULTS.....</b>	<b>4</b>
Makeup of the population .....	4
Living arrangements .....	4
Language.....	5
Education .....	6
Employment and source of income.....	6
Spirituality and religion .....	7
Community belonging and perceived problems in communities .....	8
<b>DISCUSSION AND IMPLICATIONS FOR HEALTH AND SOCIAL SERVICES .....</b>	<b>9</b>
<b>KEY ISSUES.....</b>	<b>10</b>
<b>REFERENCES .....</b>	<b>10</b>
<b>APPENDIX.....</b>	<b>12</b>

## FOREWORD

This publication presents the findings of a health survey carried out in 2003 among households of Iiyiyiu Aschii<sup>1</sup>. A similar survey had been undertaken in the region by Santé Québec in 1991 (Santé Québec, 1994). Ten years later, the Public Health Department of the Cree Board of Health and Social Services of James Bay (CBHSSJB) urgently required a new picture of its population's state of health. The purpose of the 2003 survey was to gather up-to-date information on the region's main health problems and related factors in order to improve the planning, administration, and evaluation of various social and health programs.

According to the 2001 Public Health Act (*Loi sur la santé publique*), Quebec's public health departments must periodically assess the health of their respective populations. Since 2000-2001, the province's socio-sanitary regions – with the exception of Iiyiyiu Aschii and Nunavik – have participated in the Canadian Community Health Survey (CCHS) conducted by Statistics Canada.

In 2003 the Public Health Department of Iiyiyiu Aschii decided to take part in this vast project, which was already under way across Canada, and initiated a CCHS-type survey on its own territory (Statistics Canada, 2003). Because the CBHSSJB Public Health Department is connected to the network of Quebec's Department of Health and Social Services (*Ministère de la santé et des services sociaux*, MSSS), it was able to enlist the expert assistance of the *Institut national de santé publique du Québec* (INSPQ) in coordinating the analysis of the results. Professionals drawn from Quebec's health care community and the Public Health Department of Iiyiyiu Aschii, as well as academic experts in the field, were given the task of drafting the publications. The analyses include results on various aspects of health affecting residents of Iiyiyiu Aschii and they also provide comparisons with 1991 data from the region and 2003 data from the rest of Quebec (Santé Québec, 1994; Statistics Canada, 2003). These analyses are relevant for everyone concerned with the health of Iiyiyiu Aschii residents (professionals, administrators, planners, and researchers).

Ten publications were produced as part of this survey:

- *Demographic and social characteristics of the population living in Iiyiyiu Aschii*
- *Food habits, physical activity and body weight*

<sup>1</sup> Please note that the socio-sanitary region for the James Bay Cree Territory is referred to by its Cree name, Iiyiyiu Aschii, throughout this text.

- *Cigarette consumption*
- *Lifestyles related to alcohol consumption, drugs and gambling*
- *Preventive practices and changes for improving health*
- *Health status, life expectancy and limitation of activities*
- *Injuries and transportation safety*
- *Mental health*
- *Use and perceptions of health services*
- *Survey methods*

A final publication, *Survey highlights*, offers a rapid overall view of the health study's results.

Many people contributed to this study at every stage in its progress. Particularly deserving of mention are the roles played by Jill Elaine Torrie, Director of Specialized Services, and Yv Bonnier-Viger, Director of Public Health of the Cree Board, throughout the planning phase and during operations on the field. Above all, we wish to thank the Cree population for its remarkable level of collaboration.

## METHODOLOGY OF THE CANADIAN COMMUNITY HEALTH SURVEY (CCHS), CYCLE 2.1, IYIYIU ASCHII, 2003

The survey was conducted during the summer of 2003 using a representative sample of residents aged 12 and older from the nine communities in Iiyiyiu Aschii: Chisasibi, Eastmain, Mistissini, Nemaska, Oujé-Bougoumou, Waskaganish, Waswanipi, Wemindji, and Whapmagoostui.

The original 1,000-person sample was randomly selected from residents of private households in the region. The final sample thus included both Aboriginal and non-Aboriginal residents. Most interviews (85%) were conducted in person during the summer of 2003 using computer-assisted interview software. Individuals who were absent during the first data collection period were interviewed by telephone at the end of autumn 2003.

There was a high participation rate. Of the 646 households selected, 581 agreed to participate in the survey (90%). Within these households, 920 of the 1,074 eligible individuals (86%) agreed to answer the questionnaire, for a combined response rate of 78%. The survey results were then adjusted based on the number of people aged 12 and older from Iiyiyiu Aschii living in private households, excluding residents of institutions such as seniors' homes. This survey does not include

children under the age of 12. All data presented in this document have been weighted to allow inferences to be made for the population as a whole.

However, it must be noted that the data are from a sample and are therefore subject to a sampling error, which must be taken into account. A coefficient of variation (CV) was used to quantify how precise the estimates were, and Statistics Canada's cut-off points were used to describe the precision of these estimates. An asterisk (\*) next to an estimate indicates high sampling variability (CV between 16.6% and 33.3%). Estimates with unacceptable precision rates (CV > 33.3%) or based on fewer than ten respondents have been suppressed and replaced by the letter "U."

Statistical analyses of comparisons among the sexes, age groups and sub-regions were conducted at a threshold of  $\alpha = 0.05$ . Comparisons with the rest of Quebec were standardized to take into account the differences in age structure between the population of Iiyiyiu Aschii and that of the rest of Quebec, and were conducted at a threshold of  $\alpha = 0.01$  (Statistics Canada, 2003).

When the questions asked were similar, the results were compared to those of a 1991 survey carried out in the region (Santé Québec, 1994). In light of differences in the samples between the two surveys, these comparisons are only made among Cree aged 15 and older and have been standardized to compensate for changes in the population's age structure. Only unadjusted rates are presented in the text in order to avoid possible confusion with the standardized rates.

More details on data processing are given in the above-mentioned *Survey methods* report.

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## INTRODUCTION

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This booklet focuses on the demographic and social factors that play an important role in influencing the health of any population. A population's age and sex composition, people's living arrangements, their language, and their education, employment and income levels can all have a major impact on the risk for various diseases, on beliefs about health, and on health-related behaviours. In addition, factors such as religious beliefs, spirituality, and a sense of community belonging may be related to both physical and mental health. In short, while the other booklets in this series focus on specific topics such as injury or mental health, this one describes the broad context that shapes the overall health patterns observed in Iiyiyiu Aschii.

Iiyiyiu Aschii differs substantially from the rest of Quebec in its demographic and social characteristics, with a population that is over 90% Cree and has a high proportion of children and youth. This booklet begins with the age and sex distribution in the region, and goes on to consider people's living arrangements (household size, family composition, and marital status) and their language, education, employment, and income. From there, it moves into consideration of some of the social aspects of life in the territory: the importance that people place on spirituality, their religious affiliations, their sense of community belonging, and their views of social problems in the communities.

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## METHODOLOGICAL ASPECTS

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Most of the data shown in this booklet are for all residents of Iiyiyiu Aschii. However, Cree-specific data are presented for certain variables where the differences between the Cree and other residents are wide: language, education, opinions on spirituality, degree of religiosity, and religious denomination. As well, all comparisons to the 1991 Santé Québec Health Survey of the James Bay Cree are for Cree residents only. The question used for ethnic origin was the same as in the census, and employed Statistics Canada's response categories. These may differ slightly from the legal definitions embodied in the James Bay and Northern Quebec Agreement.

Readers should note that there are some variations in the age group covered. The survey included all residents age 12 and over, but some questions clearly would not apply to children age 12 to 15. Thus, results for highest level of education and sources of income are shown for the population age 15 and over, while data on employment status apply to the population age 15 to 74. Data on marital status are for the population 18 and over. All

comparisons to 1991 data are for the Cree population age 15 and over, because this was the age group covered in the 1991 Santé Québec survey. Readers may notice that the numbers shown change slightly from table to table, depending on which age group is being used.

The education categories had to be adapted to enable valid comparisons over time. Both the 1991 Santé Québec survey and the present one asked adults about their highest level of education, but the 2003 survey offered more detailed response categories. The groupings used to describe education in 2003 are:

- High school or less (high school attendance up to and including graduation, but with no mention of any postsecondary education);
- Postsecondary education other than university (any amount of postsecondary education, up to and including a diploma from a CEGEP or trade school);
- University (university certification below the bachelor's level, a bachelor's degree, and any certificate or diploma above bachelor level).

However, for comparisons to 1991 data, the groupings used are: less than high school, high school graduation, postsecondary diploma (other than university), and university diploma.

Finally, a few cautions are needed about the data on household or personal income. Iiyiyiu Aschii benefits from an Income Support Program for hunters and trappers that subsidizes people who choose to live on the land for part or all of the year and make their living in the traditional way. As of 2001-2002, about a fifth of the Cree population was receiving some income from this program (Torrie et al., 2005). However, it is not clear how people who make part or all of their living from the land should describe their employment status, nor whether their earnings should be categorized as income from self-employment or as transfer payments. Further, the people living on the land are inevitably those who are most likely to be missed during community surveys. This affects the validity of figures on employment and income. A further complication is that the Cree benefit from various tax exemptions that can substantially increase their disposable income, while, conversely, the cost of food and other basic goods is far higher in the north. Finally, the non-response rates for the income questions were high (37% for household income and 35% for personal income). The result of all these factors acting together is that the survey results for amounts of income had to be suppressed as unreliable. The figures on the primary source of household income appear to be

reasonable, based on comparisons to other sources, and have been included here (although the non-response rate is 15% for this variable).

## RESULTS

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### MAKEUP OF THE POPULATION

The population of the Iiyiyiu Aschii region is largely Cree, and predominantly young. Fully 91% of people age 12 and over are of Aboriginal ancestry - mainly Cree, although there are a few Inuit in the region<sup>2</sup>. Fewer than 2% of adults described themselves as being of "mixed origin" (mainly Aboriginal and other), and only 7% said they were of non-Aboriginal origin. Many of these are likely to be people who have moved into the region in order to take up specific jobs (data not shown).

The birthrate in the region is known to be high, although this particular survey focused only on the population age 12 and over. Even in the figures for adults, however, it is clear that the population has large proportions of young people: fully 19% fall into the 12-19-year old category, while only 6% are over 64<sup>3</sup> (Table A1, Appendix). In contrast, in the rest of Quebec, 12% of people are between the ages of 12 and 19, while 15% are over age 64.

### LIVING ARRANGEMENTS

Households in the region are larger than elsewhere in Quebec: 74% of households have four or more residents, and this holds true for both the coastal and inland communities<sup>4</sup>. More than a third (37%) of households in Iiyiyiu Aschii contain six or more people, while the comparable proportion for Quebec as a whole in 2003 was just 4%. Conversely, the region has fewer households consisting of just one or two people than the rest of the province (Figure 1).

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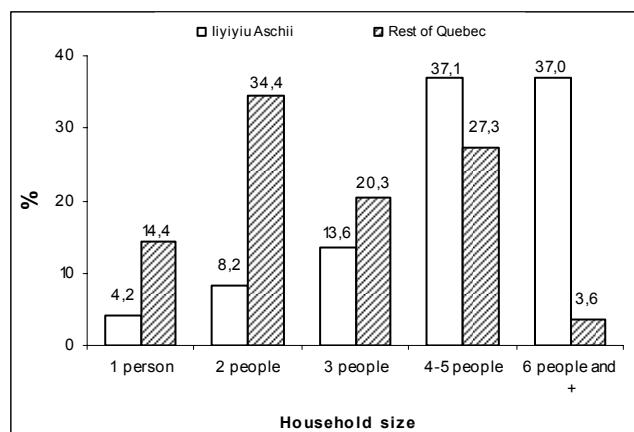
<sup>2</sup> There are a few Inuit living in Chisasibi and in Whapmagoostui. According to the 2001 Census, Inuit make up 0.6% of the population in the region as a whole.

<sup>3</sup> Note that the sampling scheme was based on Census figures for the area.

<sup>4</sup> The region of Iiyiyiu Aschii has been divided in two sub-regions for comparison. The coastal region includes the villages of Chisasibi, Wemindji, Eastmain, Waskaganish and Whapmagoostui while the inland region includes Nemiscau, Mistissini, Oujé-Bougoumou and Waswanipi.



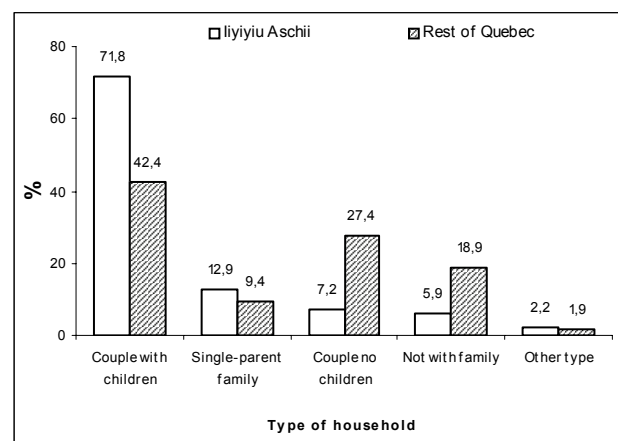
**Figure 1**  
 Household size (%), population age 12 and over, Iiyiyiu Aschii compared to the rest of Quebec, 2003



Source: CCHS 2.1 – Iiyiyiu Aschii and rest of Quebec, 2003.

Almost two thirds (62%) of respondents over the age of 18 said that they were married or living common law, while 30% declared themselves single, and 8% widowed, separated or divorced. These proportions are similar to those seen among other First Nations people living on-reserve throughout Canada. According to the 2002-2003 Regional Health Survey, 56% of First Nations over the age of 18 were either married or living common-law (First Nations Regional Health Survey, 2005). Regardless of their marital status, however, it is clear that the vast majority of people in the territory are living in households with other family members – most often built around a couple and their children (whether the children are young or grown-up), and sometimes including other people (Figure 2). Only 6% of people age 12 and over are living in a household that does not contain other family members.

**Figure 2**  
 Household composition (%), population age 12 and over, Iiyiyiu Aschii and rest of Quebec, 2003



**Couple with children:** couple with children living at home (grown-up or not); household may also include other people.

**Single parent:** single parent living with children of any age (grown-up or not); household may also include other people.

**Couple no children:** couple with no dependent children; household may or may not include others.

**Not with family:** person living alone or with others who are not related to him/her.

Source: CCHS 2.1 – Iiyiyiu Aschii and rest of Quebec, 2003.

## LANGUAGE

The Cree language remains – by far – the one most often spoken in the home. Among Cree residents of the territory, 89% said that they spoke mostly Cree at home, while 7% said they usually spoke English and only a few spoke French. This pattern held true among both men and women, and across all age groups. The main difference was that people living in the inland communities were slightly less likely to speak Cree at home (88% vs. 90%), and slightly more likely to speak English (10% vs. 6%).

Although most Cree residents speak Cree in the home, a majority are able to converse in both Cree and English, while some also speak French. Over all, 97% of Cree are able to carry on a conversation in Cree, 88% can do so in English, and 26% can do so in French. The proportions able to speak either English or French tend to be somewhat higher in the inland communities than in the coastal ones (Table A2, Appendix).

Interestingly, women are slightly more likely than men to say that they can converse in English, while men are somewhat more likely to report being able to speak French (Table A2, Appendix). This may reflect differences in the types of occupations open to men and women. There are also distinct age differences in the ability to converse in a language other than Cree, with



people over the age of 45 less likely than others to be able to speak either English or – especially – French. The 20-29 year age group stands out as the one in which the highest proportions of people can speak both French and English – higher even than the 12-19-year group. This age pattern suggests that many people may be acquiring their ability to speak languages on the job or in daily living, rather than at school (Table A2, Appendix). The fact that ability to speak French is concentrated in the younger age groups also suggests that the routine use of French is a relatively recent trend in the territory.

## EDUCATION

Of the Cree age 15 and over, 67% have a high school education or less, 28% have some postsecondary education, and 5%\* have attended university. There are no statistically significant differences in education between the sexes, except that Cree women are more likely than men to have a university education (7% vs. 4%)<sup>5</sup>. Education levels are similar throughout the territory: they do not differ significantly according to the sub-region (coastal or inland) or the size of the communities<sup>6</sup>.

Education levels are significantly lower among the Cree than among other residents of Quebec – a fact that may be at least partly attributable to differences in access to postsecondary institutions. As compared to the rest of the province, Cree people age 15 and over are far more likely to have stopped upon completing high school or before, and far less likely to have a university education (5% vs. 19% in the rest of Quebec). The gap is somewhat less pronounced for people who have postsecondary education other than university, such as a technical college or trades course.

As compared to other First Nation communities in Canada, the Cree education figures are average: they closely resemble those recorded for First Nations throughout Canada in 2002-2003, and some of the small differences that do appear may be due to the fact that the Cree data start at age 15, while those for other First Nation communities are for ages 18 and over (Table A3, Appendix).

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\* The asterisk (\*) indicates a rough estimate (CV between 16.6% and 33.3%); these data are to be interpreted with caution.

<sup>5</sup> In this respect, the region differs from other First Nation groups in Canada, where there is a definite tendency for women to have more education than men.

<sup>6</sup> Four groups of communities were defined on the basis of each village's population at the time of the survey: (1) Chisasibi (more than 3,000 inhabitants); (2) Mistissini (2,000 to 3,000 inhabitants); (3) medium-sized communities (1,000 to 2,000 inhabitants), i.e. Waswanipi, Waskaganish, and Wemindji; (4) smaller communities (fewer than 1,000 inhabitants), i.e. Whapmagoostui, Eastmain, Nemiscau and Oujé-Bougoumou.

Education levels among the Cree have risen substantially over time. Comparisons to 1991 show that the proportion of Cree without a high school degree has fallen appreciably, while the proportions continuing to postsecondary education are more than five times higher than before. Some of the biggest changes have taken place in the 25-44 year cohort, rather than in the youngest one (data not shown). Interestingly, there has been little change since 1991 in the proportion of students who stop after completing high school – it seems that the difference is in the numbers of people who choose to continue to postsecondary courses.

## EMPLOYMENT AND SOURCE OF INCOME

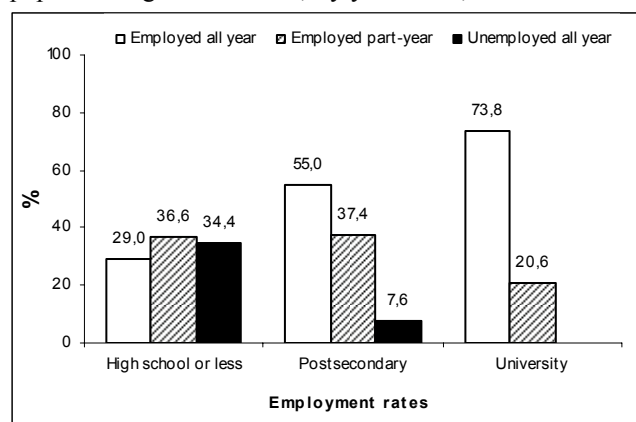
Employment figures in the region have to be treated with some caution, because the existence of the Hunters and Trappers Income Support Program complicates the picture. Over all, the survey found that 41% of the labour force was employed all year, and another 35% employed for part of the year (possibly reflecting the presence of seasonal jobs such as construction or forestry in the region). There are noticeable variations by sub-region, with the unemployment rate being significantly higher in the coastal communities than the inland ones (28% vs. 17%). Similarly, unemployment is appreciably higher in Chisasibi (33%) than in the region's other large community, Mistissini (19%), which is located further inland; the numbers suggest that this is due to differences in the availability of seasonal employment in the two communities (data not shown).

Women were more likely than men to report having been employed throughout the previous year (80% vs. 73%) (Table A4, Appendix). There were also variations by age group, with unemployment rates being significantly higher in the youngest (15-24 year) and oldest (45-74 year) age groups as compared to the middle (25-34, 35-44 year) ones (Table A4, Appendix). Seasonal or part-year employment was most common in youth.

As is the case for other First Nation communities in Canada, there is an obvious relationship between employment and education (Regional Health Survey, 2005). People with some postsecondary education were more likely than those with a high school degree or less to be employed throughout the year (55% vs. 29%), while 74% of university graduates had year-round employment. However, education levels seemed to have less impact on seasonal or part-year employment (Figure 3 and Table A4, Appendix).

**Figure 3**

Employment rates by level of education (%), Cree population age 15 and over, Iiyiyiu Aschii, 2003



Source: CCHS 2.1 – Iiyiyiu Aschii, 2003.

The unemployment rate in Iiyiyiu Aschii is considerably higher than in the rest of Quebec, but much of this difference seems to be due to the different age structures of the two populations. That is, the Iiyiyiu Aschii territory has a larger proportion of young adults, in whom unemployment rates tend to be high. Age-standardized figures suggest little difference in employment rates, with the exception that men in Iiyiyiu Aschii are more likely than those elsewhere in the province to be employed for just *part* of the year.<sup>7</sup>

Consistent with the employment picture in the region, wages constitute the primary source of income for most households. More than 80% of adults live in a household where wages are the main source of income, and very low proportions report that transfer payments are the main source of household income (Table A5, Appendix). This is consistent with information from other sources suggesting that wages made up 73% of individual income in 2001 (Torrie et al., 2005).

### SPIRITUALITY AND RELIGION

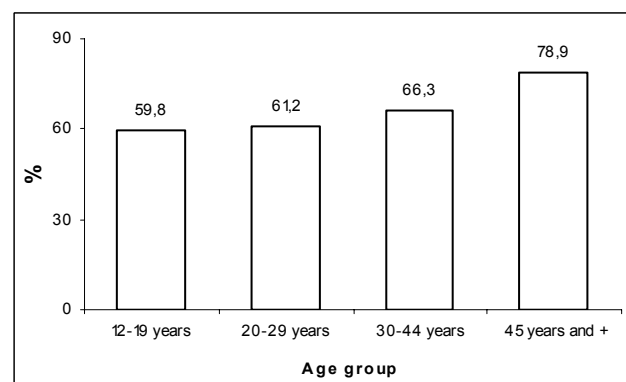
Spirituality, community ties, and religion can be associated with benefits such as a feeling of belonging, strong social support networks, and better mental health (Kirmayer et al., 2003; Van Uchelen et al., 1997; Boothroyd, 1998). The survey asked respondents about the importance of spirituality in their lives, how religious they considered themselves, and what denomination they belonged to. Unfortunately, the survey did not ask about traditional Cree spirituality, so we cannot tell how many people follow traditional practices or combine traditional

and Christian ways. Thus, the people who say that spiritual values play an important role in their lives may be referring to traditional spirituality, to Christian beliefs, or to some combination of the two.

Overall, some two thirds (68%) of Cree declare that spiritual values play an important role in their lives. Women are significantly more likely than men to say that spirituality is important to them (72% vs. 64%). Belief in the importance of spiritual values also increases across age groups (from 60% to 79%), and is significantly higher among people age 45 or over (Figure 4). It is not clear if these differences between age groups reflect changes over time in the perceived importance of spirituality, changes in values as people age, or a combination of the two. However, the same pattern is observed when people with a church affiliation are asked about their degree of religiosity: those over 45 are significantly more likely than others to describe themselves as “very religious”.

**Figure 4**

Proportion of individuals reporting that spiritual values play an important role in their lives, by age group (%), Cree population only, age 12 and over, Iiyiyiu Aschii, 2003



Source: CCHS 2.1 – Iiyiyiu Aschii, 2003.

Belief in the importance of spiritual values seems to be associated with a sense of community belonging, and with a person’s religious affiliation. Among people with a strong feeling of community membership, 70% declare spiritual values important, while this holds true for only 60% of those with weaker ties to their community. Spiritual values are also associated with church membership, and to some extent with the particular denomination to which the person belongs. Thus, a high proportion (85%) of Pentecostal adherents declare spiritual values important, while this is true of somewhat lower proportions of Anglicans (67%) and fewer than half the people with no formal religion. However, spirituality and church affiliation are not always related:

<sup>7</sup> The comparison is based on age-sex standardized figures for Iiyiyiu Aschii and the rest of Quebec, as reported by people interviewed during August-September 2003.

27%\* of the people with no religion nonetheless say that spiritual values are important to them (Table 1).

**Table 1**

Proportion of individuals reporting that spiritual values play an important role in their lives, by gender, sub-region, and religious denomination, Cree population only, age 12 and over, Iiyiyiu Aschii, 2003

	% for whom spiritual values play an important role
All residents of Iiyiyiu Aschii	67.5
<b>Gender</b>	
Men	63.6
Women	71.8
<b>Sub-region</b>	
Coastal	62.3
Inland	75.1
<b>Religious domination</b>	
Anglican	67.4
Pentecostal	85.1
Catholic	69.1
Other religions	80.1
No religion	27.1*

\* Imprecise estimate. Interpret with caution (CV between 16.6% and 33.3%).

Source: CCHS 2.1 – Iiyiyiu Aschii, 2003.

The majority of Cree in the territory (89%) report having some church affiliation. The most common denomination among Cree in the region is Anglican (54%), followed by Pentecostal (26%). Only tiny proportions declare any other religion, while 11% say that they have no religion. Men are more likely than women to say that they have no religion (15% vs. 8%\*), while higher proportions of women than men report being Pentecostal (29% vs. 22%) (Table A6, Appendix). There are also differences between the coastal and inland communities: Cree residents of the inland communities are far more likely to be Pentecostal (46% vs. 11%), and far less likely to be Anglican (28% vs. 72%). Interestingly, the inland communities also have higher proportions of people with no formal religion (Table A6, Appendix).

There are notable variations in religious denomination among the different age groups, which may reflect the period at which the different churches entered the region. The proportion of Cree who say they are Anglican tends to increase with age, and is significantly higher among people age 45 and over than among those 12-19 years old (60% vs. 39%). This may reflect the role of the Anglican Church in running schools in the region in earlier years. In contrast, the proportion who say they are Pentecostal is more constant across age groups. In general, however, there seems to have been some decrease since 1991 in the

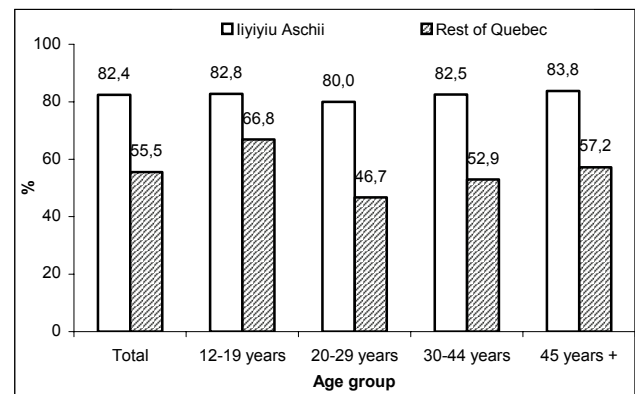
proportion of Cree — particularly youth — who have a religious affiliation. Young people are significantly more likely than any of the older groups to say that they have no religion: 22% of youth 12-19 report no religion, compared to just 12% of people in the middle age ranges, and no one over age 45.

**COMMUNITY BELONGING AND PERCEIVED PROBLEMS IN COMMUNITIES**

The sense of community belonging is much stronger in Iiyiyiu Aschii than elsewhere in Quebec: 82% of the territory’s residents, compared to just 56% of other Quebecers, describe their sense of belonging to their local community as “somewhat” or “very” strong. And this pattern holds true across all age groups – it is just as strong among youth (12-19) as it is in older people (Figure 5).

**Figure 5**

Strong feeling of community belonging, by age group (%), all residents age 12 and over, Iiyiyiu Aschii and rest of Quebec, 2003



Source: CCHS 2.1 – Iiyiyiu Aschii and rest of Quebec, 2003.

When residents age 15 and over were asked about the gravity of a list of problems in their community, the problems that the highest proportions of people identified as “serious” were:

- Alcohol abuse (91%);
- Young people getting into trouble with the law because of vandalism or theft (87%);
- Use of illegal drugs (86%);
- Child neglect (80%).

There seemed to be considerable consensus among different types of people on this list of problems, although as a general rule, women were more likely than men to judge that *all* the problems offered in the list were serious. Most age groups agreed on the same problems – except that youth were less likely than people over age 45 to describe some of the problems of childhood and youth (such as child neglect, sexual abuse of children, youth suicide, or drug abuse) as “serious” (Table A7, Appendix). People in the coastal and inland communities had similar perceptions of most problems, with the sole exception that higher proportions of people in the inland communities cited sexual abuse as a concern (80% vs. 67%). Many of the problems cited have been the top concerns for a long time. In most cases, the proportions of Cree describing various problems as “serious” are similar to those found by the 1991 Santé Québec survey, which asked about many of the same issues. The item on respect for elders was the exception to this pattern: people were significantly less likely to describe this as a serious problem in 2003 than in 1991.

## **DISCUSSION AND IMPLICATIONS FOR HEALTH AND SOCIAL SERVICES**

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The demographic patterns in Iiyiyiu Aschii resemble those of other First Nation communities, with a population that is predominantly young. A majority of adults (62%) are married, but marital status probably has less impact on people’s living arrangements than elsewhere in Quebec, since the pattern in Iiyiyiu Aschii is for several generations to live together; very few people live alone. Households are much larger than elsewhere in Quebec, not only because the birthrate is high, but also because elderly people are far more likely to be living with their families, rather than alone or in an elders’ residence (Torrie et al., 2005). As well, housing shortages in the region contribute to a pattern in which young adults – sometimes with children of their own – continue to live in their parents’ home.

Since the population is predominantly young and family-oriented, there is a continuing need for services directed to young families: maternal and child health services, preventive health programs, and social services for children and youth (such as family social services, help for children to complete school, or recreational facilities). The tendency for households to be large and multi-generational may actually reduce the need for services such as home care or child care, although it also has implications for the transmission of communicable diseases and respiratory infections. The fact that most seniors live with their families may reflect cultural and family preferences, or may simply point to a need for more seniors’ residences in the region.

Levels of formal education are lower in Iiyiyiu Aschii than elsewhere, with 67% of Cree having a high school education or less, and very few having a university education. However, education levels have risen substantially since 1991, with more people than before continuing to postsecondary studies. Much of the gain seems to be among adults age 25-44. This suggests that people may be interrupting their studies and then returning to school at a later age – a pattern that has been observed in First Nation adults throughout Canada (Hull, 2005), and has also been documented among teenage mothers, who may return to school once their children are past infancy<sup>8</sup>.

The low levels of formal education point to the probability that, unless there are fundamental changes in the way that health services are structured, many professional jobs will continue to be filled by people from outside the region. Along with the figures showing that Cree continues to be the language of household use for a majority of people, the education data suggest a continuing need to provide information to patients in ways that they can easily understand – such as oral communications, plain-language leaflets, pictures, and other methods that do not require high levels of literacy in English or French. Finally, the pattern of adults returning to school at later ages has implications for the educational system in the territory. One possibility is that schools in the region need to place greater emphasis on ways to retain students. An alternative is to accept the current reality and concentrate on adaptations such as offering courses for adults, flexible scheduling, evening courses, and childcare.

The high proportion of people who are employed during only part of the year has implications for both job-creation programs and income support arrangements. Some 41% of the labour force in Iiyiyiu Aschii was employed throughout the year in 2002, with another 35% employed for part of the year. Predictably, there is a strong relationship between employment and education levels, especially for year-round employment. Unemployment rates are higher in the coastal communities, and this seems to be at least partly because of differences in the amount of seasonal or part-year work available.

Two thirds of Cree – especially women and older people – say that spiritual values play an important role in their lives, and feelings of community belonging are strong among residents of all ages. Both of these factors are

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<sup>8</sup> See for example the literature review on teenage pregnancy included in Torrie, J.E., Petawabano, B.M. (eds). *Problem pregnancies in Eeyou Istchee*. Chisasibi, Quebec: Cree Board of Health and Social Services of James Bay. (2006) Forthcoming.

likely to play a positive role in promoting and sustaining good mental health. In addition, 89% of the population has some church affiliation. Most people in the region belong to either the Anglican or Pentecostal churches, with higher proportions of Anglicans in the coastal communities, and more Pentecostal adherents in the inland areas. Religious affiliation may affect the types of messages about sexual health and contraception that are acceptable to people in the communities. It is also likely to influence attitudes about alcohol use, which is in any case among the top concerns cited by people throughout the territory.

Over three quarters of the population – in both coastal and inland communities – is concerned about alcohol abuse and other problems such as youth theft/vandalism, child neglect, family violence, and public fights or disturbances. Many of these issues were similarly felt to be the leading problems in 1991, which suggests a continuing need for community action in these areas.

## KEY ISSUES

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- The population of Iiyiyiu Aschii is primarily young: only 6% are over age 65, compared to 15% in the rest of Quebec. Fully 91% of residents are of Aboriginal ancestry.
  - More than a third (37%) of households in the region contain six or more people, while the majority (74%) have at least four.
  - Most Cree residents speak Cree in the home (89%), and an even larger proportion is able to carry on a conversation in Cree (97%). In addition, 88% can converse in English, and 26% in French.
  - Education levels have risen substantially since 1991. Nonetheless, 67% of the Cree population still has a high school degree or less, while only 5%\* have a university education.
  - Wages provide the major source of income in most households, but seasonal or intermittent employment is common: 35% of the labour force was employed for only part of the year preceding the survey, while 41% were employed all year. Seasonal employment is less common in the coastal communities than the inland ones, and this translates into a higher unemployment rate in the coastal area.
- Two thirds (68%) of Cree say that spiritual values play an important role in their lives, and 89% have some religious affiliation, most often Anglican or Pentecostal. Some people may also draw strength from traditional spiritual beliefs.
  - 82% of people in Iiyiyiu Aschii have a strong sense of belonging to their community, compared to just 56% of other Quebecers.
  - When asked about a list of community problems, high proportions of people agree that alcohol abuse, youth theft/vandalism, illegal drug use and child neglect are issues in their community.

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**APPENDIX**

**Table A1**  
 Study population by age group and gender (%), population age 12 and over, Iiyiyiu Aschii, 2003

Age group	Total	Men	Women
12-19 years	18.7	18.6	18.9
20-29 years	20.5	20.0	21.1
30-44 years	30.4	30.7	30.0
45-64 years	24.4	24.7	24.0
65 years and over	6.0	6.0	6.1

Source: CCHS 2.1 – Iiyiyiu Aschii, 2003.

**Table A2**  
 Proportion of individuals who can carry on a conversation in various languages, by gender, age group, and sub-region (%), Cree population only, age 12 and over, Iiyiyiu Aschii, 2003

	Cree	English	French
<b>Total</b>	<b>96.5</b>	<b>88.4</b>	<b>26.1</b>
<b>Gender</b>			
Men	97.0	85.9	30.1
Women	96.1	91.0	21.8
<b>Age group</b>			
12-19 years	96.2	92.6	25.0
20-29 years	98.3	97.6	40.3
30-44 years	95.2	95.8	30.0
45 years and over	96.9	70.4	11.8*
<b>Sub-region</b>			
Coastal	95.5	87.0	21.3
Inland	98.1	90.5	33.4

\* Imprecise estimate. Interpret with caution (CV between 16.6% and 33.3%).

Source: CCHS 2.1 – Iiyiyiu Aschii, 2003.



**Table A3**

Highest level of education (%), Iiyiyiu Aschii population compared to First Nations elsewhere in Canada

<b>Education</b>	<b>Cree in Iiyiyiu Aschii (2003)</b> Age 15 and over	<b>First Nations living on-reserve<sup>a</sup> (2002-2003)</b> Age 18 and over	<b>First Nations living off-reserve (2001)</b> Age 15 and over
High school or less	66.9	72.0	69.1
Any post-secondary (non-univ.)	28.0	22.9	25.4
Any university	5.1*	5.1	5.5

<sup>a</sup> Note that the figures shown for First Nations on-reserve exclude the Cree in Iiyiyiu Aschii.

\* Imprecise estimate. Interpret with caution (CV between 16.6% and 33.3%).

Sources: CCHS 2.1 – Iiyiyiu Aschii, 2003; Regional Health Survey (2005) and 2001 Census (as cited in the report of the First Nations Regional Health Survey, 2005).

**Table A4**

Employment status by gender, age group, level of education and sub-region (%), population age 15 to 74, Iiyiyiu Aschii, 2003

	<b>Employed all year</b>	<b>Employed part-year</b>	<b>Unemployed all year</b>
<b>Total</b>	<b>41.2</b>	<b>35.1</b>	<b>23.6</b>
<b>Gender</b>			
Men	42.5	37.3	20.2
Women	39.9	32.8	27.2
<b>Age group</b>			
15-24 years	19.1	51.7	29.1
25-34 years	40.8	44.4	14.8*
35-44 years	56.1	35.7	8.2*
45-74 years	48.3	15.6	36.1
<b>Education</b>			
High school or less	29.0	36.6	34.4
Post-secondary (non-univ.)	55.0	37.4	7.6*
University	73.8	20.6*	U
<b>Sub-region</b>			
Coastal	39.2	32.7	28.1
Inland	44.4	38.9	16.7

\* Imprecise estimate. Interpret with caution (CV between 16.6% and 33.3%).

U Unpublished data (CV > 33.3% or fewer than 10 respondents).

Source: CCHS 2.1 – Iiyiyiu Aschii., 2003.

**Table A5**  
 Main source of household income<sup>a</sup> (%), population age 12 and over, Iiyiyiu Aschii, 2003

Source of income	%
Wages	81.8
Social assistance	5.6*
Old Age Security	4.4*
Self-employment	3.1*
Employment insurance	2.0*
Other sources	1.9

<sup>a</sup> Note: Non-response rate of 15% for this question.

\* Imprecise estimate. Interpret with caution (CV between 16.6% and 33.3%).

Source: CCHS 2.1 – Iiyiyiu Aschii, 2003.

**Table A6**  
 Religious denomination of individuals, by gender and sub-region (%), Cree population only, age 12 and over, Iiyiyiu Aschii, 2003

	Anglican	Pentecostal	Catholic	Other	No religion
<b>Total</b>	<b>53.9</b>	<b>25.5</b>	<b>3.0*</b>	<b>6.4</b>	<b>11.3</b>
<b>Gender</b>					
Men	53.0	22.2	3.6*	6.6*	14.6
Women	54.8	29.0	2.3*	6.2*	7.8*
<b>Sub-region</b>					
Coastal	71.8	11.2	2.8*	7.4*	6.8
Inland	27.9	46.1	3.2*	5.0*	17.8

\* Imprecise estimate. Interpret with caution (CV between 16.6% and 33.3%).

Source: CCHS 2.1 – Iiyiyiu Aschii, 2003.

**Table A7**

Proportion of individuals who think various problems are serious, by age group (%),  
 population age 15 and over, Iiyiyiu Aschii, 2003

<b>Problem</b>	<b>Total</b>	<b>15-24 years</b>	<b>25-34 years</b>	<b>35-44 years</b>	<b>45 years and +</b>
Alcohol abuse	90.8	90.7	88.7	91.2	92.3
Young people in trouble with the law because of vandalism or theft	87.2	81.1	88.4	89.6	88.8
Illegal drug use	86.3	83.2	82.3	86.9	91.4
Neglect of children by their parents	79.8	76.0	76.1	80.0	84.8
Physical/verbal violence between spouses	77.1	70.1	79.1	78.3	79.4
Public fights and disturbances	76.2	70.7	76.6	76.2	79.7
Sexual abuse of children	72.2	63.7	68.0	73.2	80.2
Suicide among young people	71.0	61.2	68.0	72.8	79.3
Loss of respect by young for elders	68.2	68.7	58.9	68.7	74.6

Source: CCHS 2.1 – Iiyiyiu Aschii, 2003.