

***First Nations Regional Longitudinal  
Health Survey (RHS) 2002/03***

***Report on First Nations' Housing***

Prepared by the First Nations Centre at NAHO, on behalf of the  
First Nations Information Governance Committee

June 2006



## Introduction

This report provides a national, statistical portrait of the housing situation in First Nations communities. Following a brief overview of socioeconomic conditions, statistics are presented related to: housing repair needs, crowding, household amenities, water quality and the presence of smoke, mold and mildew. These results are further broken down by individual (e.g. income, education) and community (size and remoteness) characteristics.

Results are derived from personal interviews with 10,962 First Nations adults (18 years and older) living in 238 First Nations communities across Canada. The questionnaires were completed as part of the 2002-03 First Nations Regional Longitudinal Health Survey (RHS).<sup>1</sup> Additional RHS housing results with more detailed background information is available in the *First Nations Regional Longitudinal Health Survey (RHS) 2002/03: Results for Adults, Youth and Children living in First Nations Communities*.<sup>2</sup>

## Socioeconomic status and community types

The socio-economic status of residents in different types of communities can be an important consideration in the development and implementation of housing policy. Tables 1 and 2 below, provide some general indicators by community size and remoteness. Although there is variation, most differences are not statistically significant.<sup>3</sup>

As shown in Table 1, people living in isolated communities were more likely to live in band homes. Those in isolated and semi-isolated communities were more likely not to have completed high school. Those in non-isolated communities were more likely to report employment income in the year before the survey.

**Table 1. Socioeconomic indicators by degree of community remoteness<sup>4</sup>**

	Isolated	Semi-isolated	Non-isolated	Total
Live in band owned homes	<b>73.5%</b>	63.0%	58.2%	61.3%
Working for pay currently (ns)	46.9%	45.4%	50.3%	49.4%
Employment income previous year	48.6%	50.6%	<b>59.5%</b>	57.0%
Personal income \$50,000+/yr (ns)	5.8%	4.3%	5.0%	5.1%
Household income \$50,000+/yr (ns)	23.7%	25.4%	24.4%	24.3%
Personal income under \$20,000/yr (ns)	60.2%	67.3%	58.7%	59.5%
Household income under \$20,000/yr (ns)	25.2%	38.1%	31.1%	30.5%
Less than high school education	<b>65.6</b>	<b>59.3</b>	47.8	51.7%
Have university degree	5.3%	-. <sup>5</sup>	5.5%	5.3%

\*isolated: fly-in, no roads, semi-isolated: >90 km by road to MD, non-isolated: < 90 km by road to MD

As shown in Table 2, those in medium sized communities were more likely than those in small communities to be living in band owned homes. (The difference between medium and large communities was not significant). University degrees were more common among those in large communities.

There appears to be a general tendency towards lower rates of employment and employment income (previous year) but higher personal and household incomes in the large communities. The pattern is difficult to interpret, though, because the differences are not significant.

<sup>1</sup> Additional information about the survey and other reports are available at [www.naho.ca/fnc/rhs](http://www.naho.ca/fnc/rhs).

<sup>2</sup> See chapter 3 "Housing" of the *First Nations Regional Longitudinal Health Survey: Report for Adults, Youth and Children Living in First Nations Communities* ([http://www.naho.ca/firstnations/english/documents/RHS2002-03TechnicalReport\\_001.pdf](http://www.naho.ca/firstnations/english/documents/RHS2002-03TechnicalReport_001.pdf))

<sup>3</sup> Differences between groups are considered statistically significant if their 95% confidence intervals do not overlap. All percentages are weighted to the First Nations on-reserve population. Definitions, methods and other related information is available in reports at [www.naho.ca/fnc/rhs](http://www.naho.ca/fnc/rhs).

<sup>4</sup> Within each row of the table, Figures in **bold** are statistically higher than those not in bold.

<sup>5</sup> Statistics based on cells containing fewer than 30 individuals are suppressed.

**Table 2. Socioeconomic indicators by community size<sup>6</sup>**

	Small	Medium	Large	Total
Live in band owned homes	54.1%	<b>65.6%</b>	57.9%	61.9%
Working for pay (ns)	51.0%	49.9%	46.4%	48.8%
Employment income previous year	63.0%	58.0%	52.4%	56.6%
Personal income \$50,000+/yr (ns)	3.5%	4.5%	6.1%	4.9%
Household income \$50,000+/yr (ns)	22.3%	23.1%	27.0%	24.2%
Personal income under \$20,000/yr (ns)	61.0%	60.5%	58.5%	59.9%
Household income under \$20,000/yr (ns)	38.0%	31.8%	26.0%	30.7%
Less than high school education (ns)	51.7%	54.4%	49.2%	52.4%
Have university degree	2.7%	4.2%	<b>7.4%</b>	5.1%

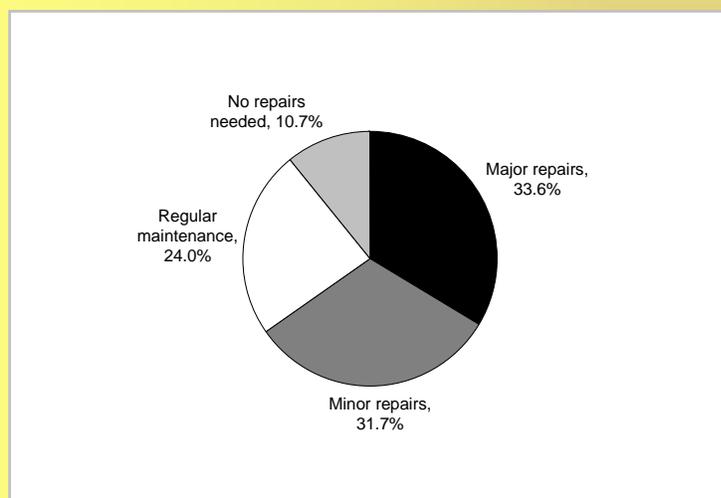
\*small community: under 300 people living on-reserve, medium: 300-1,499, large: 1500 or more

## Condition of homes

According to a CMHC report<sup>7</sup> based on results from the 1991 Aboriginal Peoples Survey, half (50%) of on-reserve Aboriginal households did not meet “adequacy” standards (full bathroom facilities and no need for major repairs). About a third (31%) did not meet “suitability standards” (enough bedrooms for the household composition) and, among those renting or owning their homes about one-seventh (14%) did not meet the affordability standard. The comparable figures for non-Aboriginal households, off-reserve were 18% (adequacy standards), 17% (suitability standards), and 26% (affordability standards).

Overall, nearly two-thirds (65%) of on-reserve Aboriginal households failed to meet one or more of the standards compared with 49% of Aboriginal households off-reserve and 32% of non-Aboriginal households.

The 2002-03 RHS asked what, if any, repairs were required to survey respondents' homes. About one-third (33.6%) indicated, “major repairs” and almost as many (31.7%) indicated, “minor repairs” (Figure 1.) Those with household incomes below \$20,000 per year were more likely to live in house requiring major repairs than those with higher household incomes (38.2% vs. 26.2%). Major repairs were more likely to be needed in the homes of those with less than high school education, those with disabilities, those with one or more health conditions and those in band owned homes. Remoteness and community size were not associated.

**Figure 1. Type of repairs required to respondents' homes**

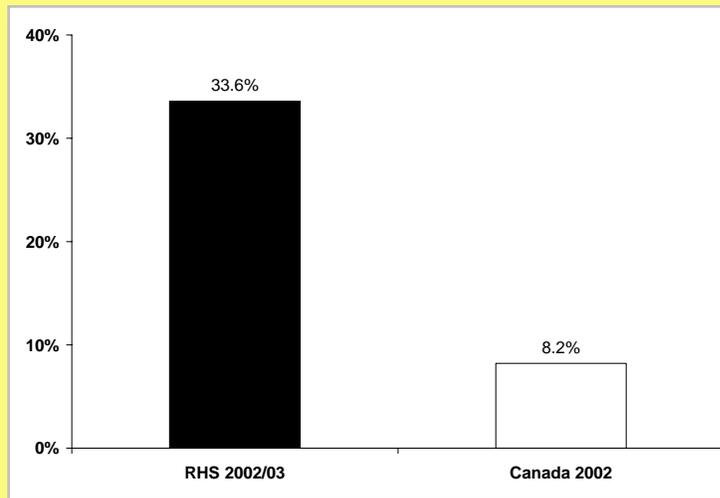
Note. Major repairs include: defective plumbing or electrical wiring, structural repairs to walls, floors, ceilings etc. Minor repairs include: missing or loose floor tiles, bricks, shingles, defective step, railing, siding, etc.

<sup>6</sup> See previous note.

<sup>7</sup> Canada Mortgage and Housing Corporation. (1996) “The Housing Conditions of Aboriginal People in Canada.” *Research and Development Highlights*. Issue 27 <http://www.cmhc-schl.gc.ca/publications/en/rh-pr/socio/socio027.pdf>

The proportion living in homes that required major repairs was about 4 times the Canadian average (33.6% vs. 8.2%<sup>8</sup>) as shown in Figure 2.

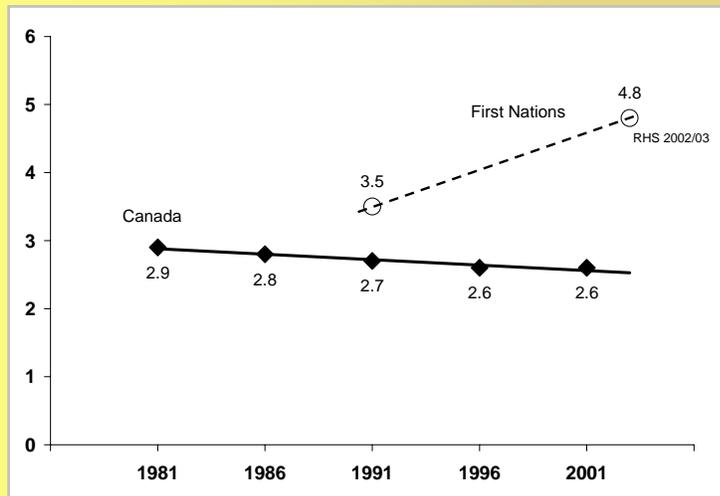
**Figure 2. Proportion reporting that their homes require “major repairs” compared**



## Crowding

Overall 17.2% of First Nations adults reported living in crowded homes.<sup>9</sup> Figure 3 shows the average occupant density (persons per household) trend over time compared with Canada overall. While occupant density has slowly decreased in Canada, the First Nations appear to have increased in the last 10 years.<sup>10</sup>

**Figure 3. Average occupant density (persons per household) compared over time**



As shown in Table 3, certain groups were more likely to be living in crowded homes. Crowding was more common among those in isolated and semi-isolated communities, those with low household incomes, those not working for pay, those who had not graduated from high school and those under 55 years. Crowding was also more common in band owned homes and in homes requiring major repairs. Overall, there appears to be a link between crowding and low socioeconomic status.

<sup>8</sup> Ottawa. Selected dwelling characteristics and household equipment. Statistics Canada, Income Statistics Division. 9 August 2004.

<http://www.statcan.ca/english/Pgdb/famil09a.htm>

<sup>9</sup> Defined as more than one person per room including kitchens, bedrooms, living rooms and finished basement rooms but excluding bathrooms, halls, laundry rooms and attached sheds

<sup>10</sup> See chapter 3 “Housing” of the *First Nations Regional Longitudinal Health Survey: Report for Adults, Youth and Children Living in First Nations Communities* ([http://www.naho.ca/firstnations/english/documents/RHS2002-03TechnicalReport\\_001.pdf](http://www.naho.ca/firstnations/english/documents/RHS2002-03TechnicalReport_001.pdf))

**Table 3. Proportion living in crowded homes by various characteristics<sup>11</sup>**

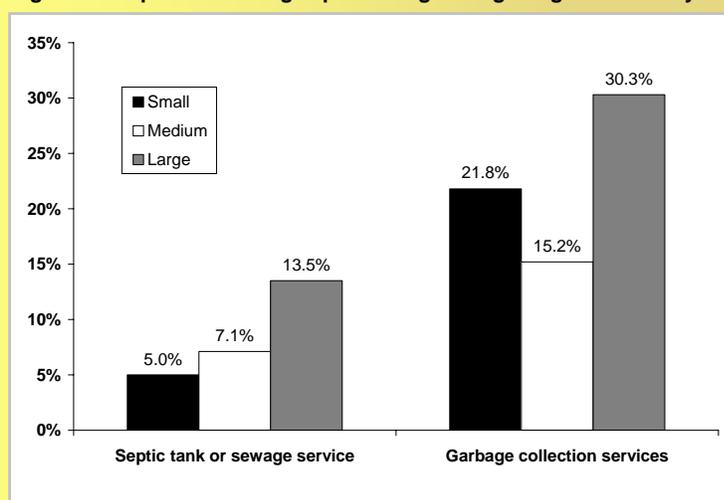
	Crowded		Crowded
<i>Remoteness</i>		<i>Highest education</i>	
Isolated	<b>28.4%</b>	Bachelors or graduate degree	8.6%
Semi-isolated	<b>24.0%</b>	Didn't graduate high school	<b>21.1%</b>
Non-isolated	13.6%		
<i>Community size</i>		<i>Age group</i>	
Small	12.6%	Under 55 years	<b>19.2%</b>
Medium	15.5%	55 years and up	6.8%
Large	21.4%		
<i>Household income</i>		<i>In band housing</i>	
Under \$20,000/yr	<b>18.5%</b>	Yes	<b>20.8%</b>
\$20,000/yr and up	12.9%	No	10.7%
<i>Working for pay</i>		<i>Household repairs needed</i>	
Yes	14.0%	Major	<b>23.5%</b>
No	<b>20.4%</b>	Minor	15.6%
		Regular maintenance only	10.4%
		No repairs needed	12.9%

## Household amenities

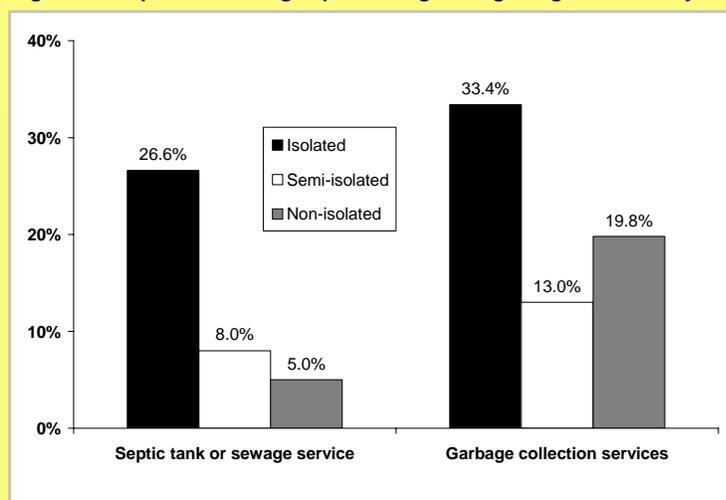
The survey asked about the presence or availability of a number of basic household services and amenities, often taken for granted in urban centres. About one in 30 people were lacking each of the following: cold running water (3.5%), hot running water (3.7%) and flush toilets (3.5%). In 2002-03, First Nations were 17 times more likely to be lacking flush toilets than Canadians overall in 1997 (0.2%).

Overall, about one in eleven (9.1%) respondents reported that their homes had neither a septic tank nor sewage service. More than one in five (21.0%) reported that they had no garbage collection service. They were least available in large and in isolated communities (see Figures 4 and 5.)

**Figure 4. Proportion lacking septic/sewage and garbage services by community size**



<sup>11</sup> Within each row of the table, values in **bold** are statistically higher than those not in bold.

**Figure 5. Proportion lacking septic/sewage and garbage services by remoteness**

The survey also found fire safety equipment to be widely lacking. Overall 22.7% of respondents had no smoke detector while 81.8% lacked carbon monoxide detectors and 52.5% were missing fire extinguishers. Compared with small communities, fire extinguishers were less common in medium sized communities and even less common in large communities (Figure 6.) Homes in isolated communities were less likely to have carbon monoxide detectors and smoke detectors than those in non-isolated communities (Figure 7.)

Smoke detectors and fire extinguishers were both more common in homes of those who had a university degree (compared with those with less than high school graduation.) Smoke detectors, carbon monoxide detectors and fire extinguishers were all more common among those with household incomes \$20,000 per year or higher.

Reflecting what is sometimes referred to as “the digital divide”, telephones, computers and Internet service were less common in First Nations than in Canadian homes in general (Figure 8). Of First Nations adults surveyed, more than half (59.2%) did not have a computer in the home, compared with approximately a third of Canadian homes (36.1%) in 2002<sup>12</sup> Internet service was lacking in 7 out of 10 (70.7%) RHS respondents’ homes compared with less than half for Canadians in general (48.6%)<sup>13</sup> in the same year. The difference was most pronounced for telephones: First Nations were six times as likely to be without telephone service (18.3% vs. 3.0%).

Computers and Internet service were less common in isolated and semi-isolated communities but the difference for telephones is not statistically significant (see Figure 8). The “digital divide” did not vary significantly according to community size (see Figure 9).

The availability of three other basic household amenities were asked in the survey. A small proportion of First Nations living on reserve live without electricity (0.5%), cooking stoves (0.7%) and refrigerators (1.3%). Amongst Canadians overall, only 0.2% have no refrigerator.<sup>14</sup>

Generally speaking, socioeconomic status—especially household income— was associated with the presence or absence of household amenities. Those with household incomes below \$20,000 per year were less likely to have: cold running water, electricity, cooking stoves, refrigerators, smoke detectors, carbon monoxide detectors, fire extinguishers, computers, Internet and phone service.

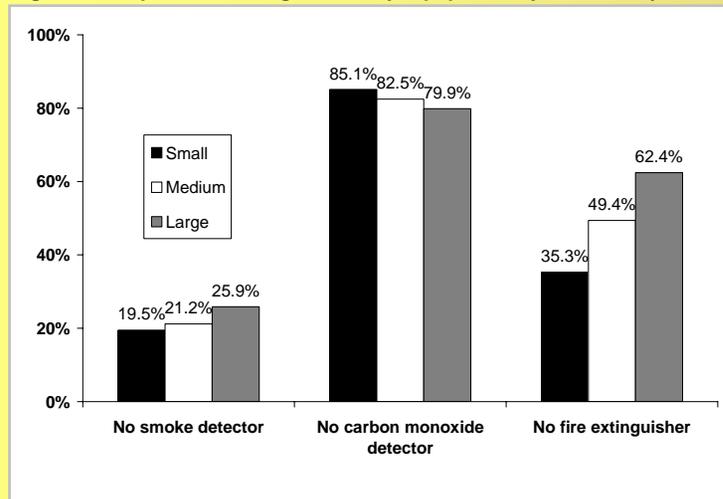
<sup>12</sup> Ottawa. Selected dwelling characteristics and household equipment. Statistics Canada, Income Statistics Division. 9 August 2004.

<http://www.statcan.ca/english/Pgdb/famil09a.htm>

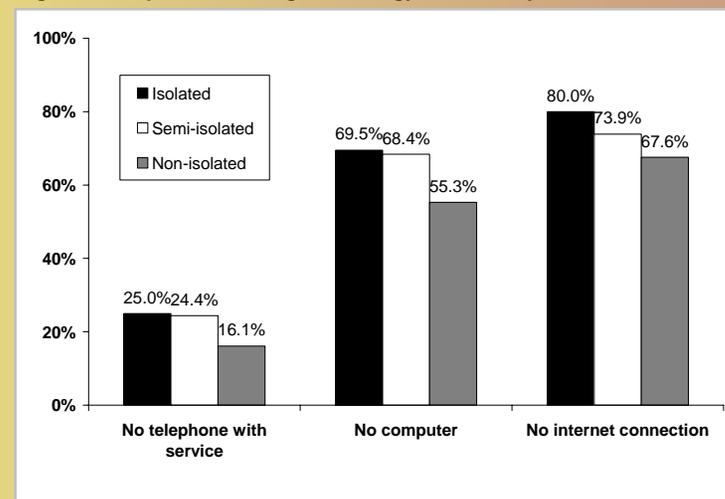
<sup>13</sup> <http://www40.statcan.ca/101/cst01/comm13a.htm?sdi=internet%20access>

<sup>14</sup> <http://www40.statcan.ca/101/cst01/famil09b.htm>

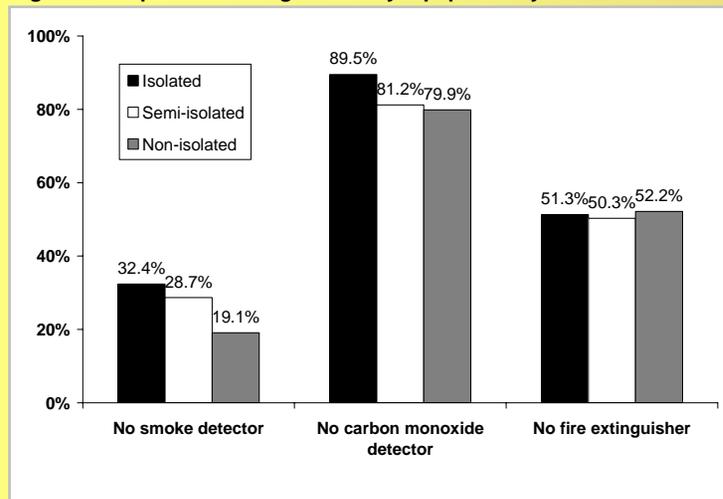
**Figure 6. Proportion lacking fire safety equipment by community size**



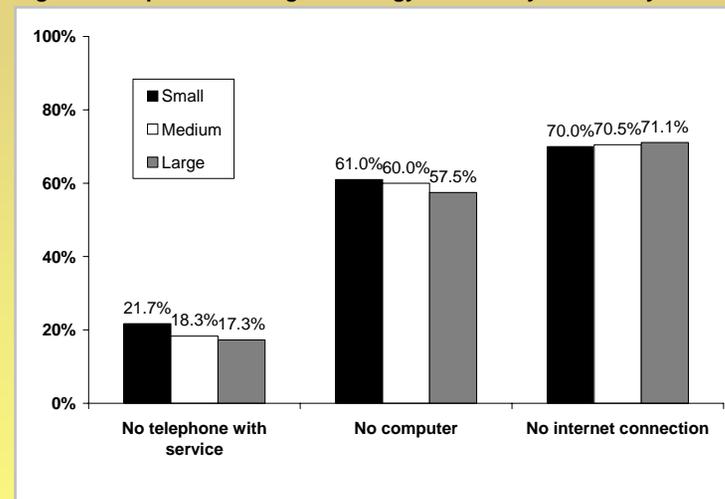
**Figure 8. Proportion lacking technology/services by remoteness**



**Figure 7. Proportion lacking fire safety equipment by remoteness**



**Figure 9. Proportion lacking technology/services by community size**



## Water Quality

The survey inquired about the main source of water used by the household, whether respondents felt that the supply was safe for drinking and whether they had alternate sources of drinking water.

As shown in Table 4, 63.2% of RHS respondents had piped water as their primary source compared to 99.8% of Canadians overall.<sup>15</sup> For First Nations, trucked and well water were also common— each reported by about one in six people. Taken together, about one in thirty people (3.4%) reported that they personally collected their main supply from either rivers/lakes/ponds (0.9%), the local water plant (1.8%) or a neighbour's home (0.7%)

Overall, nearly one third of respondents (32.3%) considered their main water supply not to be safe for drinking. Of the common sources, trucked water inspired the least confidence with 41.0% considering it unsafe to drink.

**Table 4. Main source of household water and perceived safety (for drinking)**

	Main water supply	Consider that supply unsafe
Piped (local supply)	63.2%	28.6%
Trucked	15.9%	41.0%
Well (individual or shared)	16.5%	36.6%
I collect from river/lake/pond	0.9%	-
I collect from water plant	1.8%	34.4%
From neighbour's house	0.7%	-
Other source	1.1%	63.4%
<b>All sources</b>	<b>100.0%</b>	<b>32.3%</b>

Figures 10 and 11 show how the main water supply varied by remoteness and community size. Statistically, trucked water is more common in large communities than in small communities. Those in non-isolated communities were more likely to get their water from wells. Meanwhile, in isolated communities, water is more frequently obtained from “other” sources (12.4%); the most common of which were personally collecting water either from the local water plant (5.7%) or from a river/lake/pond (3.8%).

Figures 12 and 13 show the proportion of respondents who considered their main water supply unsafe for drinking according to community size and remoteness. Although there appears to be variation, the differences are not significant.

The vast majority of respondents (70.8%) had at least one other source of drinking water (in addition to their main source). The survey, though, did not ask how often they used the alternate source nor did it ask whether they also drank water from their main supply.

Not surprisingly, those who considered their main water source safe were less likely to resort to alternate drinking water sources than those who didn't consider the source safe (59.7% vs. 92.9%). By far the most common alternate source was bottled water, mentioned by 61.7% of respondents.

<sup>15</sup> Based on 1997 data compiled in the United Nations Human Settlements Statistical Database version 4 (HSDB4-99). Accessed May 3, 2006 at [http://www.unchs.org/programmes/guo/guo\\_databases.asp](http://www.unchs.org/programmes/guo/guo_databases.asp)

Figure 10. Main source of household water by community size

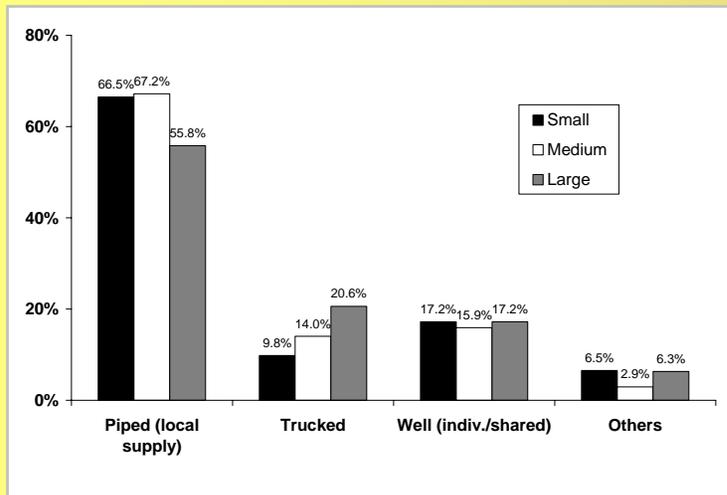


Figure 12. Consider main water supply unsafe for drinking by community size

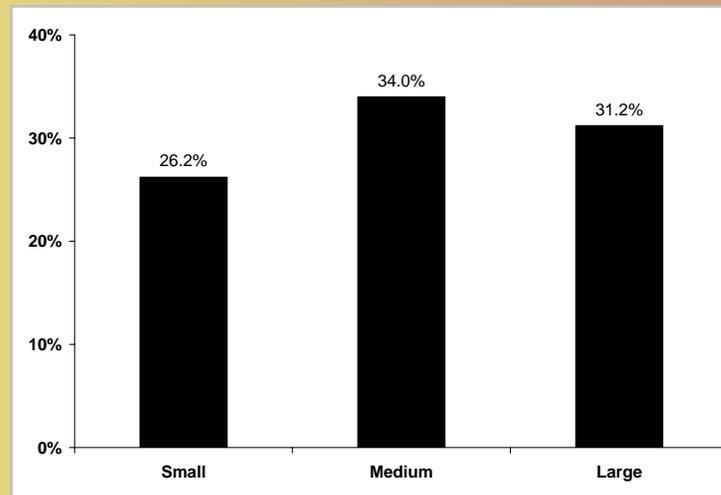


Figure 11. Main source of household water by remoteness

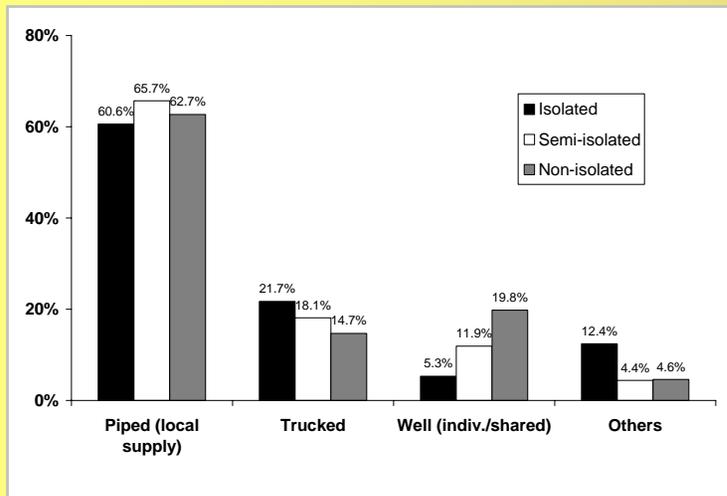
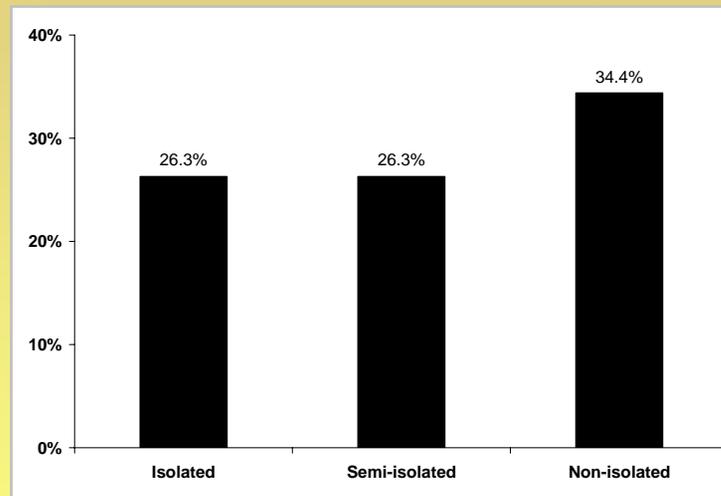


Figure 13. Consider main water supply unsafe for drinking by remoteness



## Presence of smoke, mold and mildew

Most adults (52.4%) reported that their homes were smoke-free (i.e. no one smoked inside the home). Smoke-free status was more likely to be reported by respondents living with at least one child, those who were 55 years of age or older, those with university degrees, those with household incomes over \$20,000 per year, and non-smokers. Community size and degree of remoteness were not associated.

More than 4 in 10 (44.0%) reported mold or mildew in their homes in the 12 months prior to the survey. The presence, extent and toxicity of the mold were not independently assessed or validated. Mold was more often reported by those who didn't have any children at home, those under 55 years of age, those who had not graduated high school (compared to those with a university degree), those with household incomes below \$20,000 per year and those with disabilities. Again, community size and degree of remoteness were not associated.

## Summary

- Socioeconomic status varied to some extent by community size and remoteness;
- First Nations homes on-reserve were four times more likely to need major repairs than Canadian homes;
- The level of crowding in First Nations homes was much higher than for Canada overall and the situation appears to be getting worse;
- Household crowding was worst in large or isolated First Nations communities;
- Household crowding was more prevalent among First Nations with lower socio-economic status;
- About one in thirty First Nations households lack running water (hot and cold) or flush toilets;
- One in eleven (9.1%) First Nations reported that their homes lacked either a septic tank or sewage service;
- More than one in five (21.0%) First Nations reported that they had no garbage collection services;
- Compared to Canadian averages, First Nations were more likely to lack basic technologies: Internet access (70.7% vs. 48.6% without), computers at home (59.2% vs. 36.1% without) and telephones with service (18.3% vs. 3.0% without);
- Over half (52.4%) of all First Nations households are smoke free.
- Almost half (44.4%) of all households reported having mold and mildew in the previous year.