Report of the
National Survey of Nursing Practice
in Rural and Remote Canada

The National Survey

Background
In Canada there has been considerable recent interest in health human resources and practice; however, most of the research to date has focused on urban workplaces. The National Survey of Nursing Practice in Rural and Remote Canada sought to describe: (1) who practises nursing in rural and remote Canada, (2) what is the nature of nursing practice in these communities, (3) how satisfied are these nurses with their jobs, workplaces and communities, and (4) what are the career plans of RNs in rural and remote settings. The survey is part of a larger multi-method project that aims to inform policy on rural and remote nursing practice and resources for Canada.

This report provides mainly descriptive statistical information on Canadian rural and remote nurses. In the sidebars on the pages of the report, we have also included verbatim comments from rural and remote nurses in response to open-ended questions about their nursing position experiences. More details on the survey findings and the larger multi-method study are available at http://ruralnursing.unbc.ca/

Selecting and contacting participants
A mail survey was used to collect the data in late 2001 and 2002. Where possible, personalization and persistent follow-up techniques were used. The questionnaires were initially sent to: (1) a target sample of nurses who resided in rural areas of each Canadian province (with the sample size for each province proportionate to the estimated number of nurses registered in that province who resided in rural areas), and (2) all nurses who worked in outpost settings and/or were registered with the nursing associations in the Yukon, Northwest Territories and Nunavut.

We received 3,933 completed questionnaires from nurses who worked in rural areas of Canada, in outpost settings, or in the territories. The overall response rate for the survey was very good at an estimated 68%, with some variation among provinces and territories.

Representativeness
Comparison of the demographic characteristics (e.g., age, gender, education, etc.) of the survey respondents to similar data on rural and remote nurses derived from the Registered Nurses Data Base (RNDB) 2000 indicates that the survey respondents are generally representative of all rural and remote nurses in Canada.

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May 2005
Region of residence

Figure 1 shows the proportion of survey respondents residing in each of the five regions of Canada. The specific sample percentage of respondents living in each province and territory were as follows: Yukon (4%), Northwest Territories (5%), Nunavut (2%), British Columbia (9%), Alberta (11%), Saskatchewan (11%), Manitoba (10%), Ontario (9%), Quebec (10%), New Brunswick (7%), Nova Scotia (9%) Prince Edward Island (4%), and Newfoundland (9%).

Age and gender

The majority of nurses surveyed were female, 95%; 5% were male. The average age of respondents was 44 years. Figure 2 (opposite page) indicates that 67% of all respondents were between 35 and 54 years of age. Fifteen percent of nurses were 55 years of age or over.

On average, male RNs were younger (42.0 years) than female RNs (44.7 years). Seventeen percent of female nurses versus 25% of male nurses were under 35 years of age, while 16% of female nurses versus 9% of male nurses were over 54 years of age (data not shown in Figure).

Marital status and dependent child(ren)/relative(s)

Respondents were more likely to be married or living with a partner (81%) than single (9%), divorced (8%), or widowed (2%). Slightly more than half of the respondents (58%) were living with one or more dependent child or relative. Of this group, 72% had one or two children, and 28% had three or more children.

Aboriginal ancestry

Just over five percent of respondents indicated they were of First Nations or Metis ancestry.

Size of childhood community

Seven in ten respondents grew up in communities with populations of 10,000 or fewer. The majority (58%) reported growing up in communities of 201–10,000 people. Only 13% were raised in communities of 200 or fewer, 13% in communities of 10,001–50,000, and 17% in communities greater than 50,000 in population.
With respect to nursing education, more respondents had a nursing diploma (85%) than any other qualification. One in five nurses (27%) also held a baccalaureate, 6% had advanced nursing practice certification, 1% held a master’s degree, and 3% had outpost certification. One RN held a doctoral degree in nursing.

With respect to non-nursing education, 5% of respondents had a baccalaureate degree, 2% held a master’s degree, and seven RNs (less than 1%) had attained a doctoral degree in another field.

The number of years respondents had been licensed to practise ranged from one to 50, with an average of 20 years. Nurses had been licensed for the following range of years: fewer than 12 years (27%), 13–20 years (24%), 21–28 years (26%), and 29+ years (23%).

One in five nurses (18%) indicated that their gross personal income from nursing was less than $30,000 while one in five (20%) reported that their gross personal nursing income was $60,000 or more. The remaining three in five RNs earned incomes that fell between these two extremes.

A small percentage of nurses (4%) estimated their gross household income from all sources to be less than $30,000, while the majority (62%) estimated it to be $60,000 or more. Three in ten (27%) RNs estimated their household income to be in the range of $30,000–$59,999. Approximately 7% of RNs did not reply to the household income question.

**Education for my job as a rural or remote nurse:**

“Most of my preparation for rural nursing was obtained ‘on-the-job.’ Luckily, I had great teachers (in the form of colleagues) who were experienced and willing to share with me.”

“Nursing training did not come close to preparing me for remote nursing. The basic principles of nursing you use, of course, but when it comes to cultural aspects involved in remote nursing, I learned this at Dalhousie taking the NCP (Northern Clinical Program) and by experience.”

“The only course that prepared me to work in a remote community (involved) a First Nations woman from a fly-in reserve (who) spoke to us about the difficulties she experienced nursing in a community where they viewed her as an ‘outsider.’ I do not feel any other course prepared me for remote nursing.”

“My education prepared me a little because I had the opportunity as a student nurse to practise in a rural setting for 3 months and to do a clinical practicum over another 4-month period.”
The impact of work-related travel on my life:

“I live on an island that can only be reached by ferry and when the weather is bad, can’t be reached by anything.”

“Stressful: gravel roads, hills, wildlife on roads, isolated travel, no residences on road to seek help, dead areas for cell phone coverage, mud, snow, ice, wear and tear on my vehicle and many km put on per year.”

“A time to slow down, take lots of time for whatever; read, stop over in lovely accommodations, practise patience...”

“40 min. to 1 hr one way depending on road conditions. This means almost 2 hr/day just for traveling – cuts down on sleep and family time.”

“One hour to work and one hour back means two hours more from my kids and (I) have to pay sitter additional two hours when I work.”

“Difficult to be away from family 30 days at a time.”

“Long and tiring – takes approximately 24 days a year off my life waiting in airports and sitting on planes.”

Overtime and isolation pay

The majority of rural and remote nurses reported that overtime pay contributed, in some fashion, to their nursing income: 37% reported that overtime pay accounted for one to 10 percent, and 15% indicated that overtime pay accounted for more than 10 percent of their income. A further 42% of nurses reported that overtime pay contributed nothing at all to their income (approximately 6 percent of nurses did not respond to this question).

A minority of rural and remote nurses stated that isolation pay contributed to their nursing income: 13% reported that isolation pay contributed one to 10 percent, 2% stated that isolation pay accounted for more than 10 percent, and 79% indicated that isolation pay did not contribute at all to their nursing income (approximately 6 percent of nurses did not respond to this question).

Work Settings

Nursing employment status

One in five nurses (21%) reported holding more than one nursing position at the time of the survey. Fifty-one percent of all nurses held full-time/permanent positions; 33% also worked elsewhere part-time/permanent, 20% casual, 8% contract/term, and 3% job shared. Of those RNs who were casually employed, half were employed as such by choice.

Work setting and main area of nursing practice

Figure 3 presents the proportions of respondents working in various settings. Rural and remote nurses were most likely to work in settings such as hospital/air ambulance/dialysis (39%). When asked to indicate the practice area in which they spent most of their time, 39% chose acute care, 17% indicated long-term care, 14% community health, 8% home care, and 7% primary care. A further 16% of nurses specified administration, education, research, government, or other practice as the area of current practice in which they spent most of their time.

Figure 3: Percent of respondents by work setting (N=3,933)
Distance from major centre

The majority of nurses (70%) worked in communities further than 100 km from a major centre of 50,000 or greater population. Specifically, 22% of nurses worked in communities that were 101–200 km away, and 48% of nurses worked in communities that were further than 200 km from a major centre of 50,000 or greater population. The remaining 30% of nurses worked in communities that were within 100 km of a major centre of 50,000 or greater population.

Internet access and Telehealth

Slightly more than half of the RNs (56%) reported that they had direct workplace access via the computer to other information sources such as those on the Internet for use in nursing practice. One in four nurses (25%) indicated that Telehealth was available at their work site. Of this group, 76% were satisfied with the availability and use of Telehealth in their area.

Required to be on call

Approximately 40% of rural and remote nurses were required to be on call.

Benefits not received

Nurses were asked to indicate the benefits currently received from their employer/contractor. Table 1 outlines these benefits, and the corresponding percentages of nurses who did not receive these benefits, in order of ascending frequency.

Table 1: Respondents Not Receiving Benefit

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Percenta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacation/holidays</td>
<td>9</td>
</tr>
<tr>
<td>Sick/maternity leave</td>
<td>14</td>
</tr>
<tr>
<td>Pension</td>
<td>15</td>
</tr>
<tr>
<td>Extended health insurance</td>
<td>24</td>
</tr>
<tr>
<td>Dental</td>
<td>26</td>
</tr>
<tr>
<td>Banked time</td>
<td>31</td>
</tr>
<tr>
<td>Continuing education support</td>
<td>40</td>
</tr>
<tr>
<td>Salary continuance plan for chronic illness</td>
<td>41</td>
</tr>
<tr>
<td>Provincial/territorial health care premium payment</td>
<td>43b</td>
</tr>
<tr>
<td>Family day leave</td>
<td>50</td>
</tr>
<tr>
<td>Continuing education travel and sustenance support</td>
<td>55</td>
</tr>
<tr>
<td>Professional registration fee</td>
<td>61</td>
</tr>
<tr>
<td>Tuition reimbursement</td>
<td>71</td>
</tr>
<tr>
<td>Work vehicle for work-related travel</td>
<td>72</td>
</tr>
<tr>
<td>Isolation allowance</td>
<td>77</td>
</tr>
<tr>
<td>Cell/mobile phone</td>
<td>79</td>
</tr>
<tr>
<td>Daycare for child/elder</td>
<td>95</td>
</tr>
</tbody>
</table>

a Sample includes nurses whose employment status was full-time permanent, part-time permanent, job share or casual (n=3,727).
b Applicable to 35% of this sample.

Being on call:

“I have been on call 24 hours a day, 7 days a week with every second weekend off (24 hours) for 3 months because a second nurse could not be found to work here.”

“On call is voluntary.”

“(I am on call) because of shortage of RNs. If one RN is sick, the shift must be covered, we only have three full-time and two casual RNs.”

“On call 24/7.”

“Because there is no doctor, we have been asked to work on call on weekends. Two RNs have refused. I am one of those because I work full time already and feel I can do no more.”

“My contract states 24 hr on call, but in reality, I’m seldom called on for other than minor problems after hours.”

“Depends on how many other nurses are available for on call duties.”

“We are very obligated to do this much as there are only 3 OR nurses and we do not want to lose this service in this community.”

“I am not required to be on call but I am expected to be available if needed.”
Steadiness of work and job security

The majority of nurses (90%) indicated that their work was regular and steady, while a minority (10%) noted that their work was seasonal, they faced frequent layoffs, or characterized their work steadiness in ‘other’ terms.

Rural and remote nurses were more likely (80%) than not (20%) to believe that their job security was good.

Work environment

We asked respondents to indicate their level of agreement with statements concerning the environment in their primary workplace. The percentages of rural and remote nurses who agreed with these statements are as follows:

- feel physically safe during the work day (92%)
- feel physically safe during the work evening/night (74%)
- personnel is trained to use the available equipment (83%)
- nursing care supplies are available when needed (82%)
- the equipment is maintained and ready for use (80%)
- the equipment needed for care is available (76%)
- the equipment needed for care is up-to-date (71%)

Violence in the workplace

Rural and remote nurses reported that they experienced a significant degree of aggression against them while performing their nursing duties. Within the one month period prior to completing the survey, 30% of RNs reported emotional abuse, 18% a threat of assault, 16% physical assault, 16% verbal/sexual harassment, as well as 1% sexual assault. In total, 45% of all nurses experienced at least one ‘aggressive episode.’

Of all nurses who experienced aggression, 77% indicated than an aggressor was a patient/client, 23% reported that family or a visitor was an aggressor, 19% nursing co-worker, 13% physician, 8% community member, and 6% other person.

Nurses as first contact for health care services and sole RN in workplace

Approximately half of the respondents (47%) indicated that they were the first health care contact in their primary work area. One in five (20%) respondents used an interpreter to assist in their work. Twelve percent of nurses indicated that they worked alone (Figure 4). Figure 4 provides more details regarding the numbers of nurses in work settings.

Figure 4: Percent of full-time equivalent (FTE) RN positions (including self) at primary workplace (n=3,585)

<table>
<thead>
<tr>
<th>Number of FTE RN positions</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 - 1.0</td>
<td>11.5</td>
</tr>
<tr>
<td>1.5 - 6.0</td>
<td>43.0</td>
</tr>
<tr>
<td>6.5 - 14</td>
<td>22.4</td>
</tr>
<tr>
<td>14.5 +</td>
<td>23.1</td>
</tr>
</tbody>
</table>
Nursing Practice

Advanced nursing practice
Approximately half (48%) of RNs facilitated health promotion activities in their communities. The majority of RNs noted that in an average day of practice, they were required to work with many different kinds of patients (76%), that nothing was routine (63%), and that they were required to take on other roles depending on demand (57%). More than one in three nurses used protocols specific to advanced nursing practice (36%) and thought of their role as advanced nursing practice (34%).

Scope of practice
Nurses were asked to indicate the nursing procedures or functions they performed as part of their current nursing practice. These procedures are outlined in Table 2 in rank order from highest to lowest frequency.

Table 2: Respondents Regularly Performing Nursing Procedure or Function as Part of Their Current Nursing Practice (n=3,917)

<table>
<thead>
<tr>
<th>Scope of Practice</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunizations</td>
<td>49</td>
</tr>
<tr>
<td>Direct referral to an allied health professional</td>
<td>49</td>
</tr>
<tr>
<td>(e.g. physiotherapist)</td>
<td></td>
</tr>
<tr>
<td>Dispensing (not administrating) medication</td>
<td>46</td>
</tr>
<tr>
<td>Pronouncing death</td>
<td>41</td>
</tr>
<tr>
<td>Post-natal care</td>
<td>39</td>
</tr>
<tr>
<td>Evacuating patients</td>
<td>37</td>
</tr>
<tr>
<td>Interpreting diagnostic tests</td>
<td>34</td>
</tr>
<tr>
<td>Pre-natal care</td>
<td>34</td>
</tr>
<tr>
<td>Performing diagnostic tests</td>
<td>32</td>
</tr>
<tr>
<td>Ordering diagnostic tests</td>
<td>28</td>
</tr>
<tr>
<td>Casting/splinting</td>
<td>25</td>
</tr>
<tr>
<td>Management of labor</td>
<td>22</td>
</tr>
<tr>
<td>Direct referral to a medical specialist</td>
<td>22</td>
</tr>
<tr>
<td>Management of delivery</td>
<td>20</td>
</tr>
<tr>
<td>Suturing</td>
<td>20</td>
</tr>
<tr>
<td>Prescribing medication</td>
<td>18</td>
</tr>
<tr>
<td>Performing pap smears</td>
<td>16</td>
</tr>
</tbody>
</table>

Nursing knowledge
Nurses were also asked to indicate their level of agreement with a series of statements regarding their personal nursing knowledge and their organization’s role in developing that knowledge. For those to whom the statement was applicable, the statements and the corresponding percentages of RNs who agreed with these statements are as follows:

- personal nursing knowledge is current (90%)
- know how to operate special equipment in workplace (89%)
- have access to current information that would help in my job (83%)
- always someone to help with equipment problems (74%)

Nursing practice and decision-making skills that I perform at an advanced level in my area of practice:

“A rural nurse needs to be competent in several clinical areas including emergency, cardiac, trauma, obstetrical areas, medicine, surgery, (and) perform some diagnostic tests.”

“In the ‘city’ hospital my knowledge was only in one direction – surgery and post op care – some medicine. Now I’m a jack of all trades, master of none. I can go from delivering a baby in the birthing room, to OPD and perform CPR; or assist with putting on a cast, draw blood, or go put the coffee on.”

“All medical decisions are supposed to follow established procedures or take place in consultation with a doctor over the telephone. However, there are time-sensitive situations when we make decisions that are usually made at a doctor’s level.”

“Almost everything we do is advanced practice.”

“No physician in community—often have to use advanced practice to stabilize patients.”
Barriers to continuing education

Two of every three nurses (66%) perceived barriers to participating in continuing education.

Opportunities for continuing education

- Adequate orientation provided for nurses changing practice areas (63%)
- Employer encourages staff to attend continuing education events (62%)
- Adequate opportunities to share knowledge from continuing education events (66%)
- Enough opportunities exist to attend continuing education events (59%)

Satisfaction

Work satisfaction

Work satisfaction was assessed on the basis of responses to a standard 5-item scale, comprised of six five-point subscales. Mean scores of overall work satisfaction clustered at the low end for nurses residing in Quebec, New Brunswick, and Newfoundland. In comparison, nurses living in British Columbia, Alberta, and Northwest Territories reported higher mean scores of work satisfaction than nurses living in any other area. Overall variations in pay satisfaction corresponded most closely to variations in overall work satisfaction. Compared with nurses residing in every other province or territory, nurses living in Alberta reported highest satisfaction with pay, while Newfoundland nurses reported lowest pay satisfaction.

General satisfaction

The majority of nurses were satisfied with their own health (62%), with their life in general (92%). With respect to self-reported health, 62% of nurses reported their health “excellent” or “very good,” 29% “good,” 8% “fair,” and 1% “poor.”

**Figure 5: Respondents indicating use of a source of new information on nursing practice (N=3,933)**

- **Journal subscription:** 65.3
- **Inservice:** 80.1
- **Nursing colleagues:** 90.4
- **Journal club:** 3.1
- **Internet:** 57.3
- **Library:** 40.9
- **Non-nursing work colleagues:** 58.0
- **Other:** 5.5

- **Continuing education programs:**
  - **Multidisciplinary team meetings:** 60.8
  - **In-service training:** 80.1
  - **Journal subscription:** 65.3
  - **Workshops:** 71.9
  - **Library:** 40.9
  - **Non-nursing work colleagues:** 58.0
  - **Internet:** 57.3
  - **Other:** 5.5
Satisfaction with scheduling and overtime required to work
Overall, nurses were satisfied with their scheduling in terms of number of hours, shifts, flexibility, rotation, and overtime. RNs’ scores on the 7-item scheduling dissatisfaction scale averaged 11.9 (range 7–28). Of those nurses who were required to work overtime, 55% preferred to work about the same amount, 39% preferred to work less, and 6% preferred to work more overtime.

Community satisfaction
A community satisfaction scale measured RNs’ satisfaction with features of their home communities such as friendliness, trust, social/recreational opportunities, quality of schools, safety, size, and distance from a major centre. RNs’ scores on the 11-item Community Satisfaction Scale averaged 39.4 (range 11-55). RNs living in Prince Edward Island ranked highest in terms of community satisfaction, while nurses living in Quebec and Nunavut/Northwest Territories ranked lowest.

Career Plans

Attractive employment opportunities in community
Nurses were more likely to believe that their community offered attractive employment opportunities inside of nursing (38%) than outside (25%).

Sought other employment opportunities within past 12 months
One in three RNs (35%) reported seeking other employment opportunities within the past year. Of this group, 72% sought a nursing position, 22% searched for both nursing and non-nursing opportunities, and 6% sought a non-nursing position.

Plans in the next 5 years
Figure 6 indicates that the majority of nurses (63%) expected to continue nursing in the same location five years into the future. Plans to retire (21%) or take further nursing education/training (20%) were distant second and third choices. More than one response was allowed.

Figure 6: Respondents’ plans within next 5 years (n=3,893)
What We Have Learned So Far and Plans for Future Analysis of the National Survey

What we have learned so far

- Although there were regional differences, RNs reported on average somewhat positive work satisfaction (between 4 and 5 on a 7-point scale) and somewhat positive community satisfaction (between 3 and 4 on a 5-point scale).
- For RNs in practice areas (i.e., excluding administration, education and research), work satisfaction was greater when the workplace was in smaller communities (<10,000 population); and community satisfaction was greater when RNs resided in larger communities (10,000+).
- Nurses who worked as sole RNs were more satisfied with their employment when they had some face-to-face contact with colleagues, fewer barriers to continuing education, and greater decision latitude in the organization and skill discretion in their work.
- RNs were more likely to intend to leave their present nursing position in the next 12 months if they: were male, reported higher perceived stress, did not have dependent children or relatives, had higher education, had been employed by their primary agency for a shorter time, had lower community satisfaction, had greater dissatisfaction with job scheduling, had lower satisfaction with autonomy in their jobs, were required to be on call, performed advanced decisions or practice, and worked in a remote setting.
- Nurses who worked “North of 60” (n=526), had higher education (39% with nursing baccalaureate) compared to RNs south of the 60th latitude (26% with baccalaureate). For RNs “North of 60,” 54% thought of their role as advanced nursing practice, 62% regularly evacuated patients, 30% regularly managed deliveries, 45% prescribed medication, 48% to 53% ordered, undertook and interpreted diagnostic tests, and 32% directly referred to a medical specialist.
- Of the RNs who indicated that a patient/client was the initiator of at least one aggressive episode toward the nurse in the past month (n=1,338), the most frequent primary diagnosis was dementia (29%).
- Rural and remote RNs were more likely to use central sources (i.e., produced within their work environments) to obtain new information on their nursing practice than peripheral sources produced outside their environments.
- Inter-provincial migration rates of RNs within Canada ranged from 11% to 27% across rural and remote Canada. The pattern of movement tended to be: (1) from east to west, (2) to a province adjacent to the province of graduation from original nursing program, and (3) to a larger “magnet” province (e.g., ON, AB, BC).

Plans for future analysis

This report is a ‘first-cut’ of data and information gathered from a comprehensive survey of rural and remote registered nurses. In the coming months and years, various members of the survey research team will explore specific themes in separate reports, such as predictors of work satisfaction, information use, predictors of intent to leave, violence in the workplace, etc., and characteristics of particular groups of rural and remote nurses, such as nurse practitioners, RNs working alone, aboriginal RNs, etc.

The National Survey of Nursing Practice in Rural and Remote Canada provides a rich source of data and information about the work lives and experiences of rural and remote registered nurses that can be used to guide and influence policy.
Acknowledgements and Funding Sources

The survey team would like to thank the thousands of nurses across Canada who took the time to complete the lengthy questionnaire upon which this report was based. We acknowledge our partners who provided funding or in-kind support: Canadian Health Services Research Foundation, Nursing Research Fund, Canadian Institutes of Health Research, Ontario Ministry of Health and Long-Term Care, Alberta Heritage Foundation for Medical Research, Michael Smith Foundation for Health Research, Nova Scotia Health Research Foundation, British Columbia Rural and Remote Health Research Institute, Saskatchewan Industry and Resources, all provincial and territorial nurses associations, Government of Nunavut, and the Canadian Institute for Health Information. We also acknowledge our Advisory Team, with over 20 members from all provinces and territories and numerous other individuals who contributed to the success of the survey.

Further Reading

A current publication list can be found on our website at:
http://ruralnursing.unbc.ca


Suggested Citation Format


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Printed in Canada, University of Saskatchewan Printing Services.