Addressing Rural Health Issues in Canada

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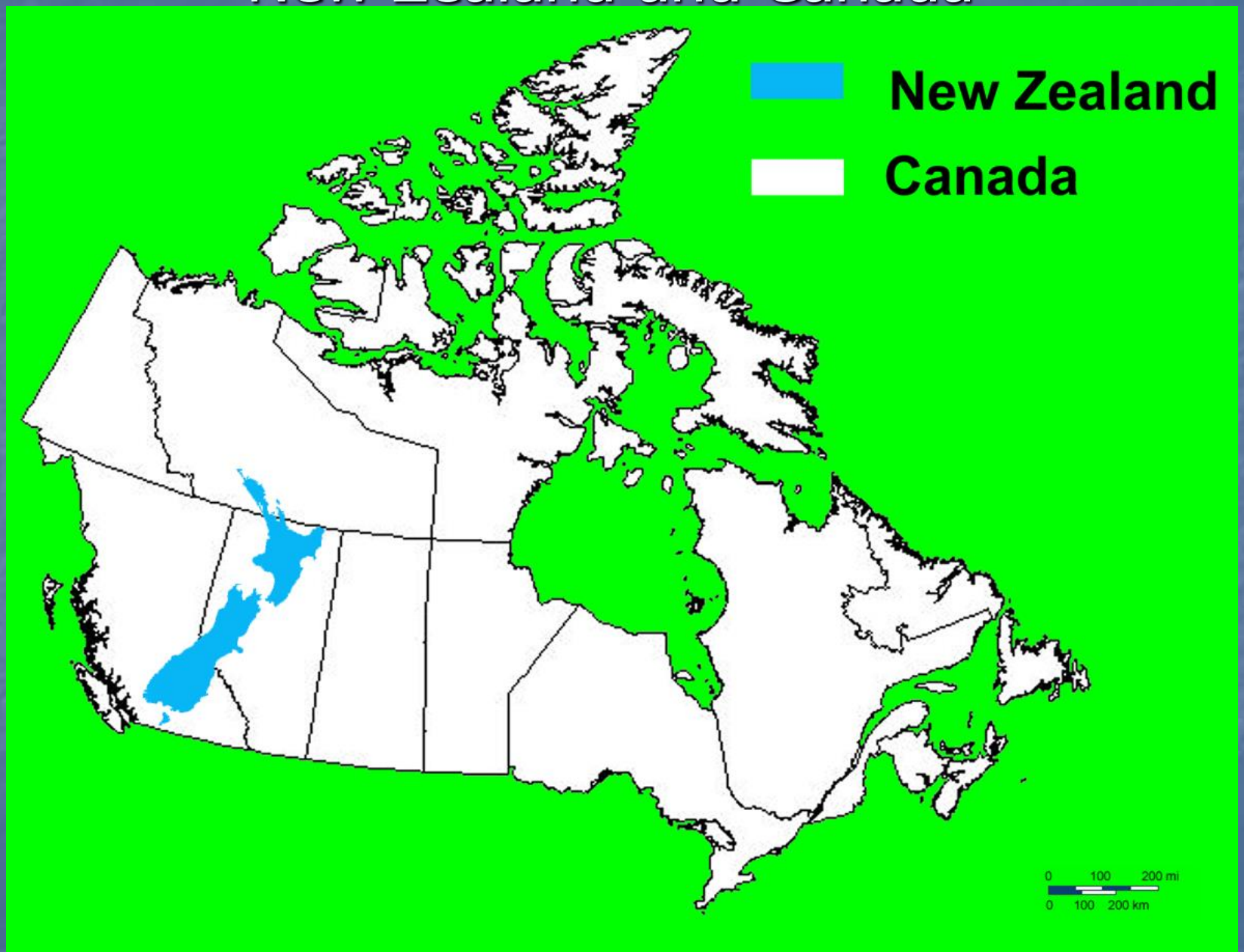
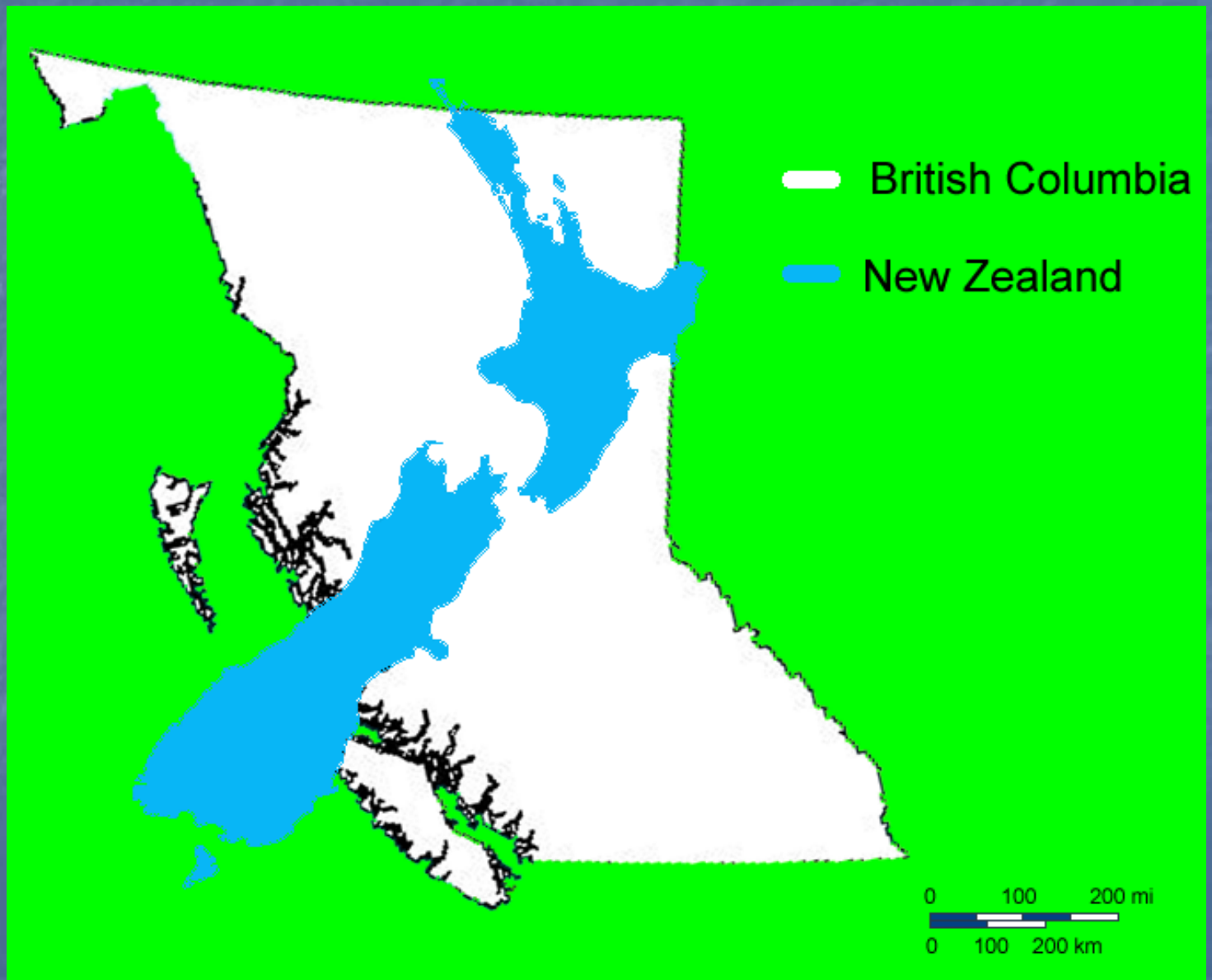
Geographical size comparison New Zealand and Canada



Geographical size comparison New Zealand and BC



New Zealand and British Columbia

New Zealand

- 268,680 sq km[1]
- 3 993 000 people[1]
- 15 people/sq km[3]

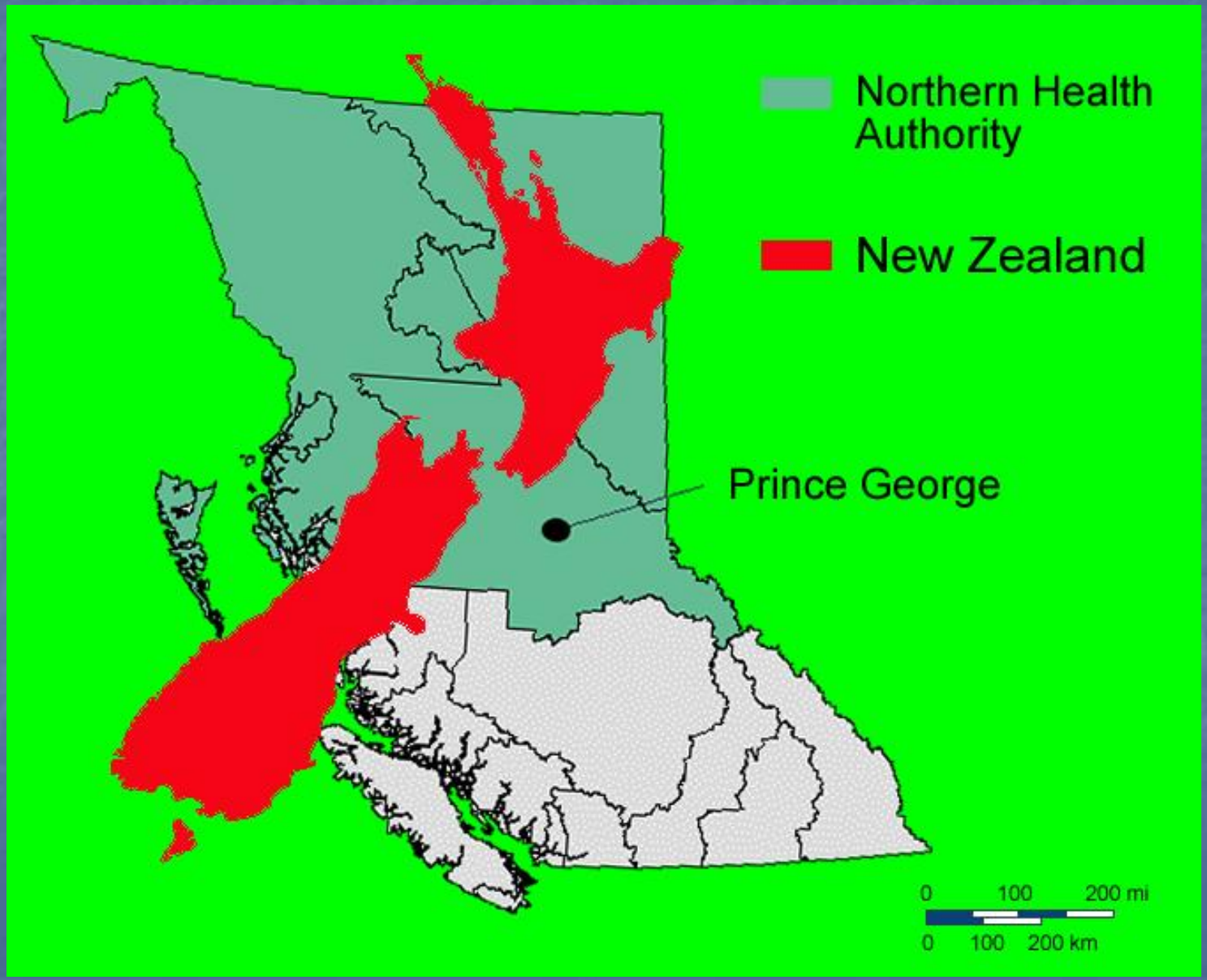
British Columbia

- 947, 800 sq km[2]
- 4 177 400 people[2]
- 4.2 people/sq km[4]

(NHA <0.83 people/sq km)[4]

1. CIA The World Factbook (2004). New Zealand. Accessed from http://www.cia.gov/cia/publications/factbook/geos/nz.html on September 5th 2004
2. BC Stats. (2004). Quick Facts. Accessed from http://www.bcstats.gov.bc.ca/ on September 5th 2004
3. Wikipedia. (2004). New Zealand. Accessed from http://en.wikipedia.org/wiki/New_Zealand on Sept 8th 2004
4. Stats Canada. (2001). Population density per square kilometre, Canada, provinces, territories, health regions and peer groups, 2001. Accessed from http://www.statcan.ca/english/freepub/82-221-XIE/00604/tables/html/42_01.htm on September 7th 2004

Geographical size comparison
New Zealand and Northern Health Authority



New Zealand and Canada Aboriginal population comparison

New Zealand

- Māori population of 598, 800 people represent 15% of total population

Canada

- Aboriginal population of 1, 007, 330 people represents 3.4% of total population

British Columbia and NHA Aboriginal population comparison

British Columbia

- Aboriginal peoples (170, 280 people) represent 4.4% of total population

Northern Health Authority

- Aboriginal peoples (44, 165 people) represent 15.6% of total population

Nature of Nursing Practice in Rural and Remote Canada

Aim:

- to examine and articulate the nature of registered nursing practice in primary care, acute care, community health, continuing care (home care) and long term care settings within rural and remote Canada

The Study Components

- Survey (n= 3,933)
- Registered Nurses Data Base (RNDB)
- Narrative Study (n= 152)
- Documentary Analysis

Principal Investigators and Decision-maker

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- Roger Pitblado,PhD
  Laurentian University
- Marian Knock
  B.C. Ministry of Health Planning (to 2003)

NURSING PRACTICE IN RURAL AND REMOTE CANADA

Funding Partners

- Canadian Health Services Research Foundation
- Canadian Institutes of Health Research
- Nursing Research Fund
- Ontario Ministry of Health and Long-Term Care
- Alberta Heritage Foundation for Medical Research
- Michael Smith Foundation for Health Research
- Nova Scotia Health Services Research Foundation
- British Columbia Rural and Remote Health Research Institute
- Saskatchewan Industries and Resources
- Provincial and Territorial Nurses Associations
- Government of Nunavut
- Canadian Institute for Health Information

Rural and Remote Nursing

Access to Care

Quality of Care

Sustainability of Care

Central Issues in Providing Rural and Remote Health Care

- Understanding and appreciating the nature of 'rural'
- Ensuring a well qualified and appropriately deployed workforce
- Ensuring relevant and responsive support structures and processes for rural and remote practitioners and communities

What is Rural?

- *Predominantly rural regions*
- *Rural and small town (RST)*

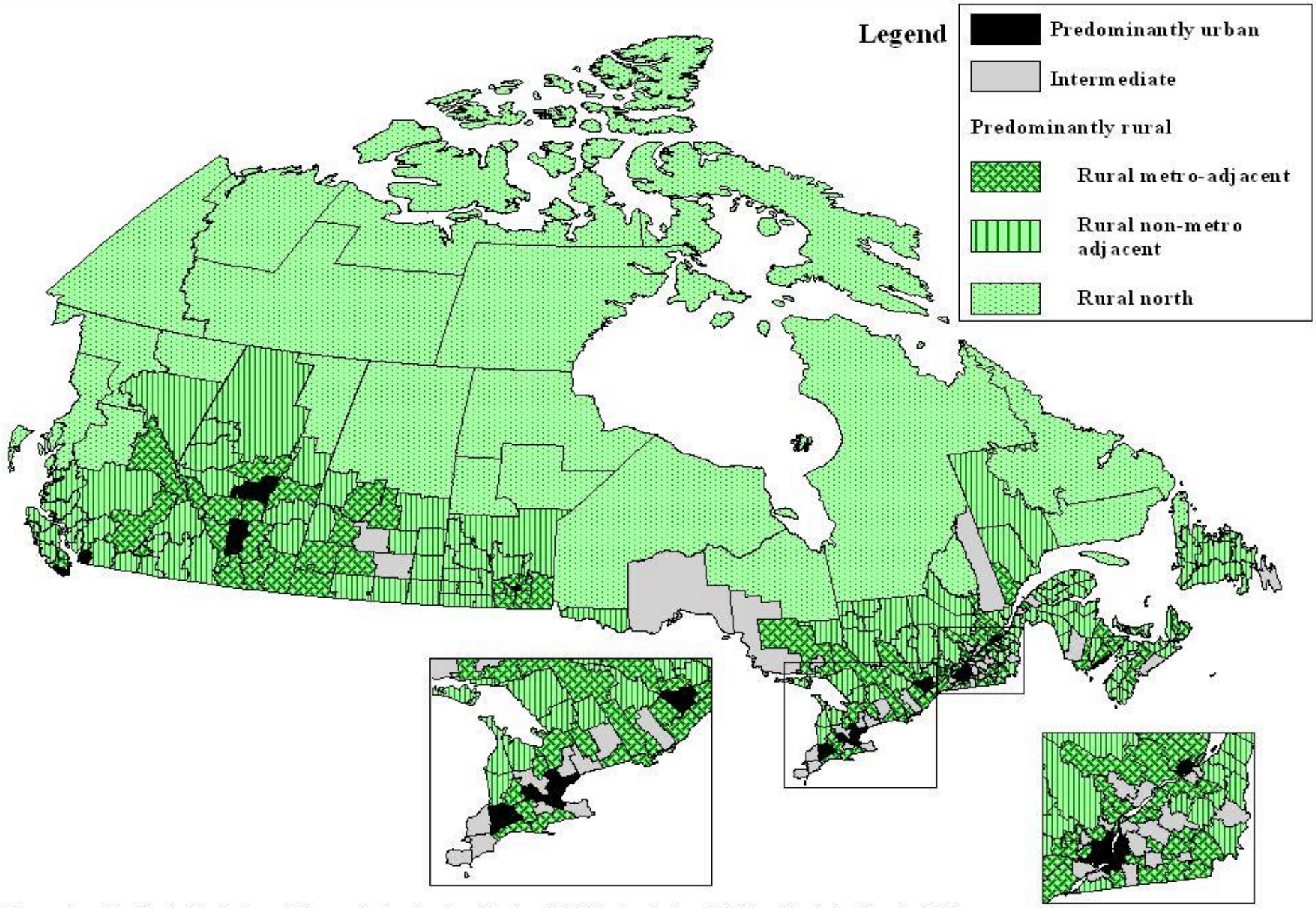
Predominantly Rural Region

More than 50% of the population living in rural communities and population density <150 person/km²

31.4 percent of Canada's population lives in predominantly rural regions (in 1996)

Beshiri & Bollman (2001)

Rural Canada: Geographic Areas



Map produced by Spatial Analysis and Geomatics Applications Section (SAGA), Agriculture Division, Statistics Canada, 1999

Rural and Small Town

Outside the commuting zones of larger urban centres (with 10,000 or more)

duPlessis, Beshiri, & Bollman (2000)


HOSPITAL
EMERGENCY
ENTRANCE

What is Rural? - Part 2

- *Rural indices*
- *Nurses' understanding of rural*

Nurses' Understanding of Rural

- distance
- isolation
- access to amenities (shopping, non-medical services, leisure activities)
- community socio-demographic characteristics
- availability of health care resources (staff, equipment and facilities, medical transportation, etc.)
- character of their nursing practices (first-line providers of care, levels of responsibility, etc.)

Health Status of Canadians in Rural and Remote Communities

Table 7.1
Health Status for Populations in Predominately Urban, Intermediate and Predominately Rural Health Regions in Canada, 1996[1]

Indicator of Health Status	Predominantly Urban	Intermediate	Predominately Rural
Life expectancy at birth: years	78.8	77.7	77.0
Infant mortality rate per 1,000 live births	5.1	6.3	7.1
Total mortality: age-standardized rate per 100,000 people	657.0	704.8	748.3
All circulatory disease-related deaths: age-standardized rate per 100,000 people	243.4	260.5	269.6
All cancer-related deaths: age-standardized rate per 100,000 people	181.1	193.0	194.6
Unintentional injury-related deaths: age-standardized rate per 100,000 people	25.9	34.7	45.4

1 The health regions are grouped according to proportion of total population located in rural and small town (RST) areas in a manner similar to the OECD classification of rural and urban. Predominately urban health regions contained less than 15% RST population; intermediate health regions contained 15-50% RST population and predominately rural health regions contained over 50% RST population. The rates are the average values for the health-region groups. Data are as of 2001. The data also have not been adjusted to take into account the gender distribution of people in the different regions.

Source: Statistics Canada 2001c.

Rural and Remote Health Status

- *Self-rated health declines from urban to most remote areas*
- *Risk factors more prevalent*
- *Little difference in chronic disease and functional health*

Mitura & Bollman, 2003)

- Need for care that focuses on determinants of health in addition to illness care

Ensuring a Well-Prepared Workforce

- *The importance of nursing in rural communities*

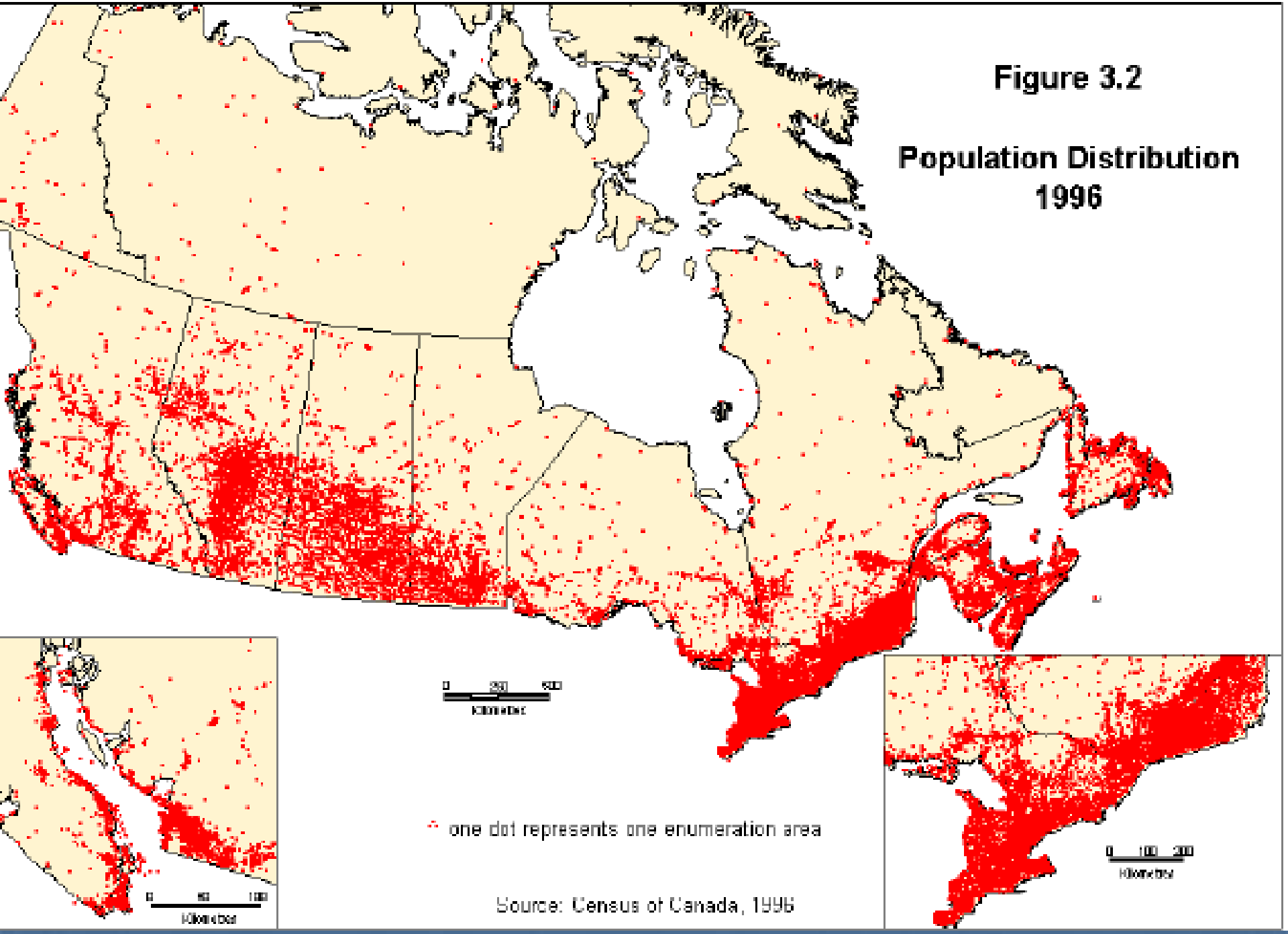


Figure 3.2
Population Distribution
1996
one dot represents one enumeration area
Source: Census of Canada, 1996

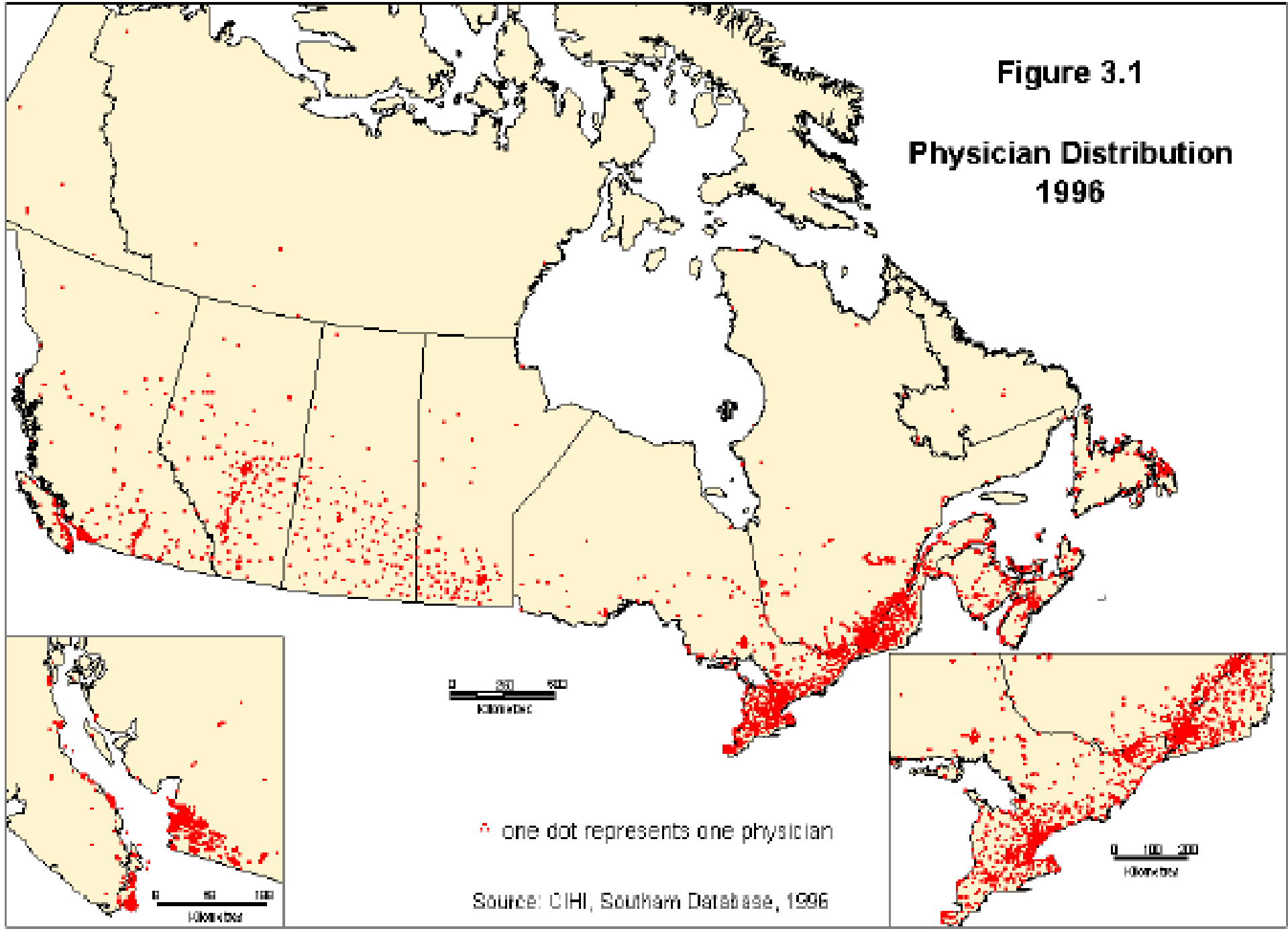
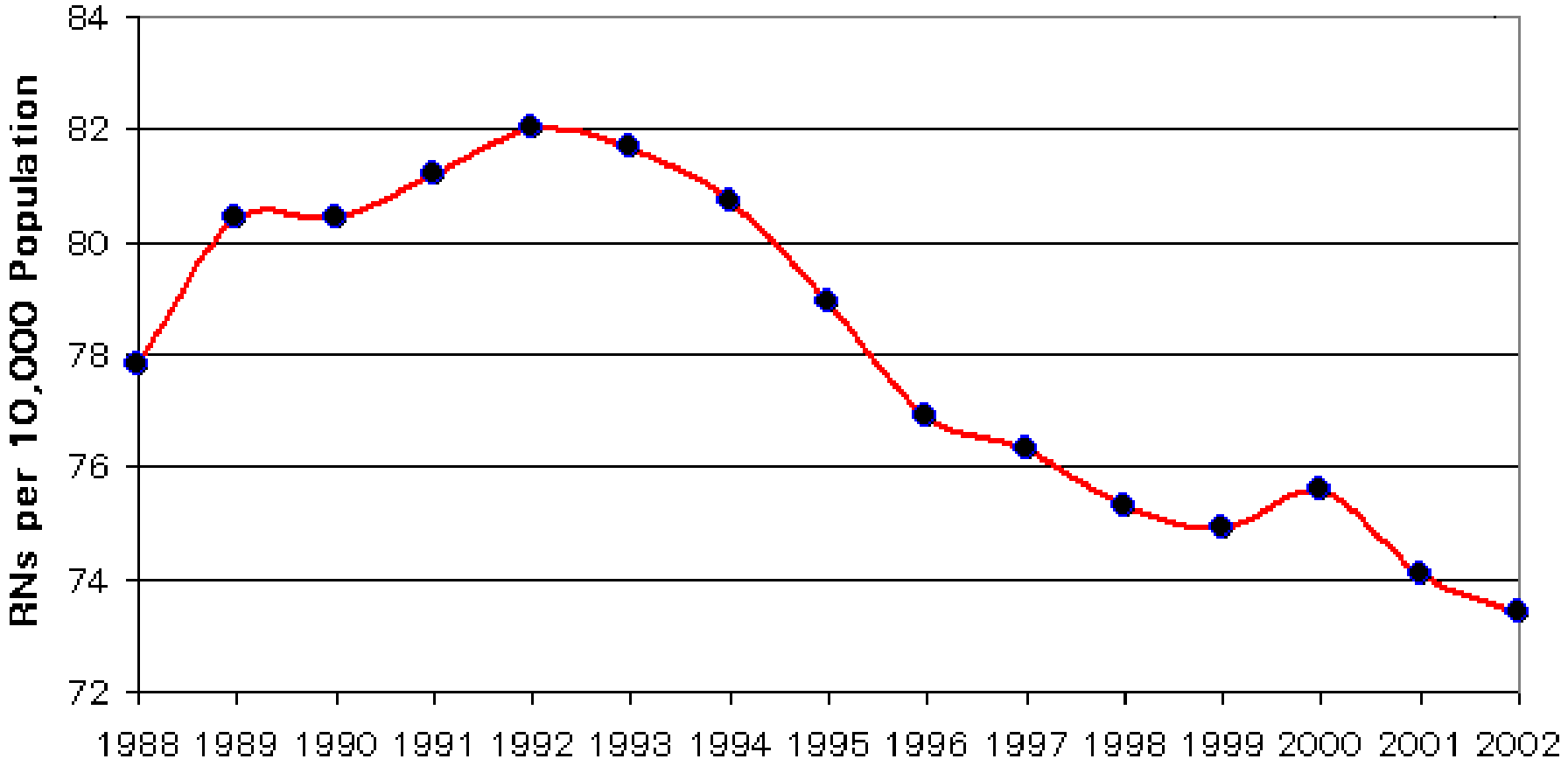


Figure 3.1
Physician Distribution
1996
one dot represents one physician
Source: CIHI, Southam Database, 1996

Access to Care

- Supply and Distribution of Nurses
- Education of Nurses

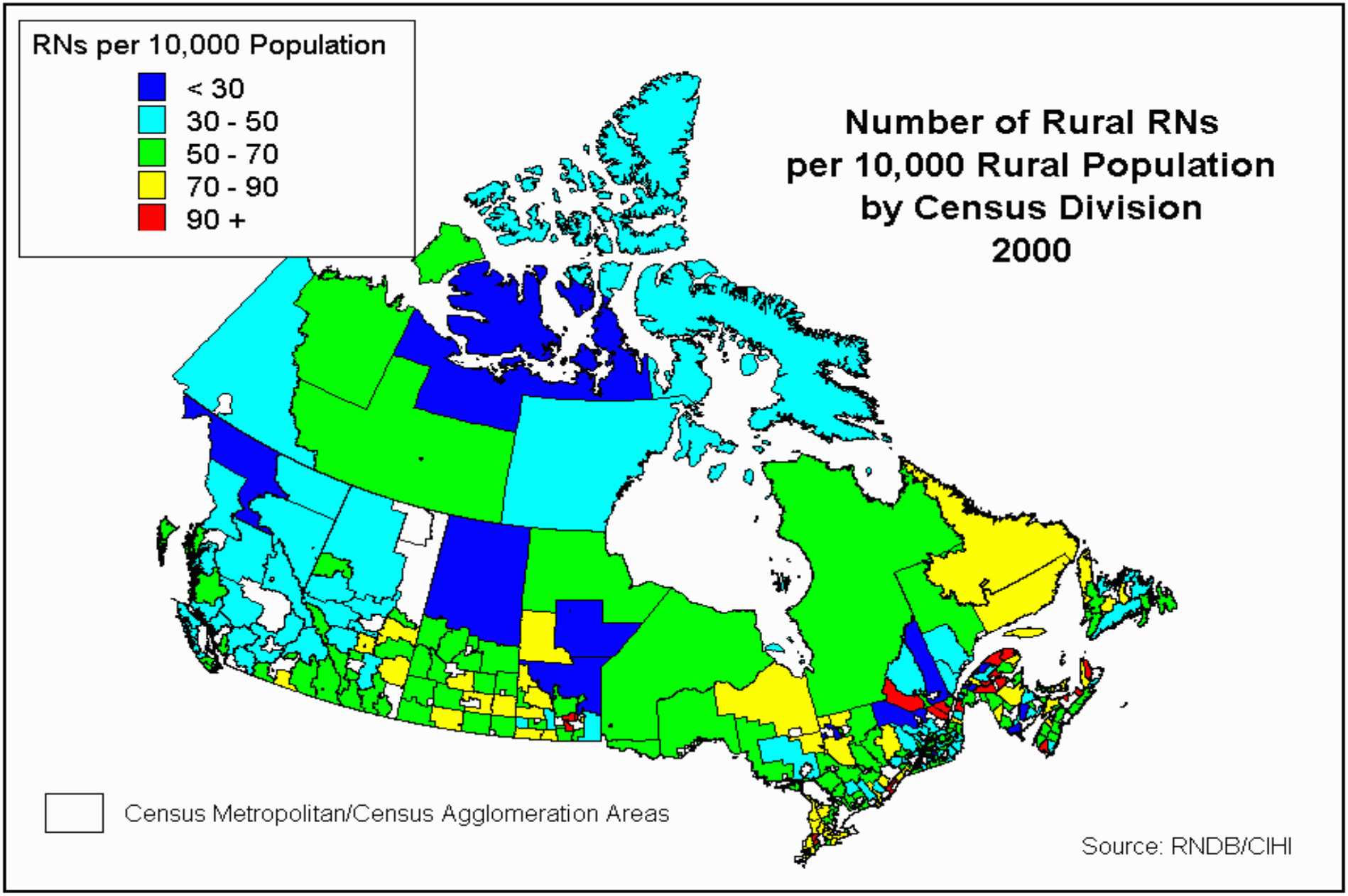
Nurse to Population Ratios (All RNs), 1988-2002



Source: RNDB/Statistics Canada and CIHI

Year	Number of rural (RST) RNs	% of all RNs	Rural (RST) % of total Canadian population
1994	42,303	18.0	22.3
2000	41,502	17.9	21.7
2002	40,648	17.6	20.6

2002 – based on CIHI figure generated without Quebec data



From:
Pitblado, R., Medves, J., MacLeod, M., Stewart, N., and Kulig, J. (2002).
Supply and Distribution of Registered Nurses in Rural and Small Town Canada, 2000.
Ottawa: Canadian Institute for Health Information.

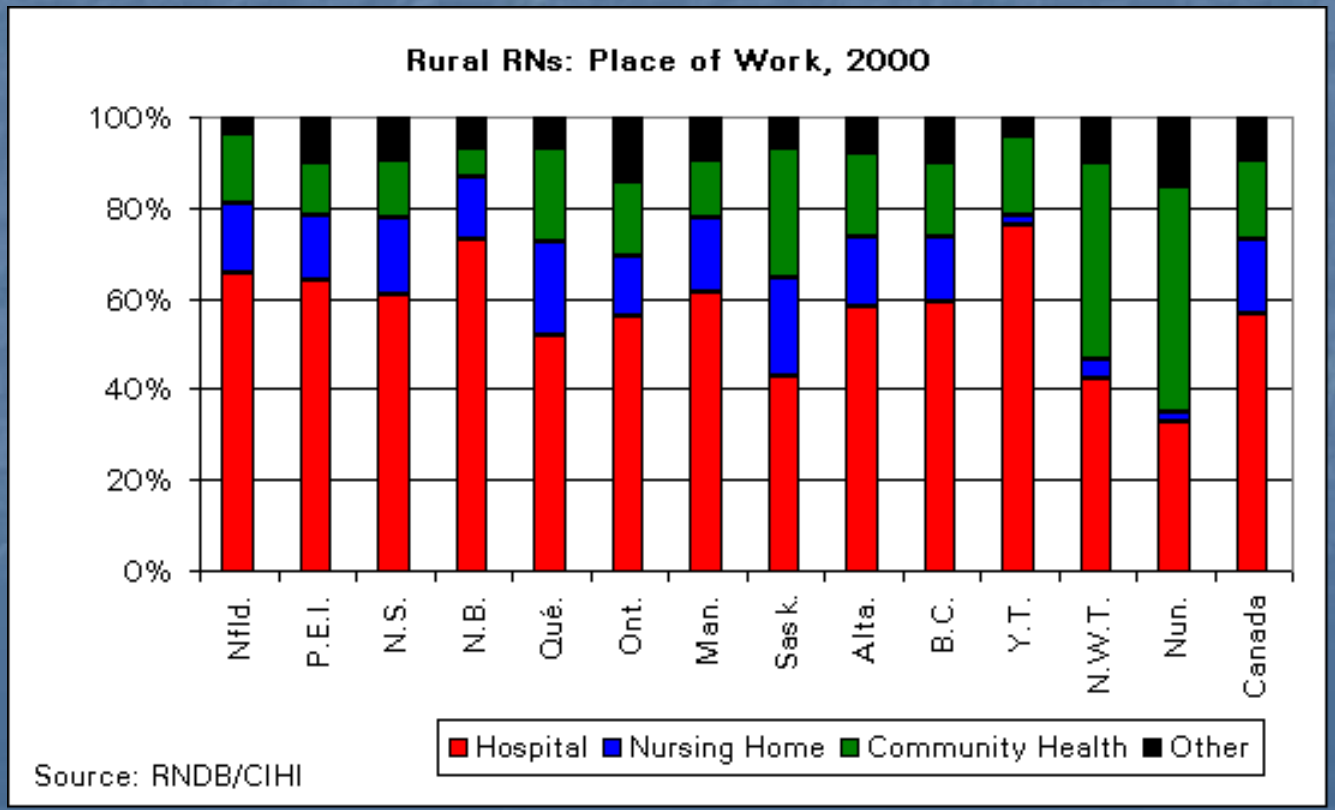
.. an aging workforce

- Rural RNs
  - 1994 average age: 40.6 years
  - 2000 average age: 42.9 years
- Urban RNs
  - 1994 average age: 41.6 years
  - 2000 average age: 43.5 years
- All RNs
  - 1994 average age: 41.5 years
  - 1998 average age: 42.6 years
  - 2000 average age: 43.4 years
  - 2002 average age: 44.2 years

.. Increasing number of male RNs, but only slight increases in rural Canada

.. Place of work

- 60.9% of all RNs work in hospitals
- Proportionally fewer rural RNs work in hospitals: 57.2% in 1994, 53.8% in 2000
- Increasing proportions of rural RNs are now working in Nursing Home/Long-Term Care and Community Health/Health Centre settings



Education Level of RNs in Rural Canada, 2000

(Source: RNDB)

Diploma	81.4%
Bachelor's	18%
Master's/Doctorate	0.6%

Educational Preparation of RNs in Rural and Remote Areas

- Paucity of information in available reports
- Most nursing associations equate rural with accessibility issues regarding education
- Entry-level competencies focus on generic requirements

- Education for remote practice links it with First Nations health issues
- No special program funding or assistance to nursing students in rural settings for rural travel and accommodation
- Nursing programs prepare graduates to be computer-literate but technology not always available or feasible in rural and remote settings

Educational Needs
(Source: Narratives)

- Basic education is inadequate for rural and remote practice
- Rural health nursing needs to part of basic nursing program
- Additional infrastructure and financial support is needed for educational institutions that are preparing nurses for rural nursing

Supporting Practitioners and their Communities

- *Communities as shaping practice*
- *Supporting interprofessional practice*
- *Promoting retention - sustaining practice*

Community Shaping Practice

- Size, distance, demographics
- Expectations of communities
- Knowing the client in the context of community; the community in the context of the client

Size, Distance, Demographics

As I stepped off the ski plane I stepped into a foreign world. My role as a nurse was changed completely and my personal life soon became unfamiliar to me in my unfamiliar surroundings

We do get a lot of moms with children with various things, but mostly with kids, you know, it's the head colds, bad ear, sore throat, bit of abdo pain. […] Our kids are basically a healthy population.

I remember being up in this same community and working 36 hours straight, no sleep, no break, nothing

Expectations of Communities

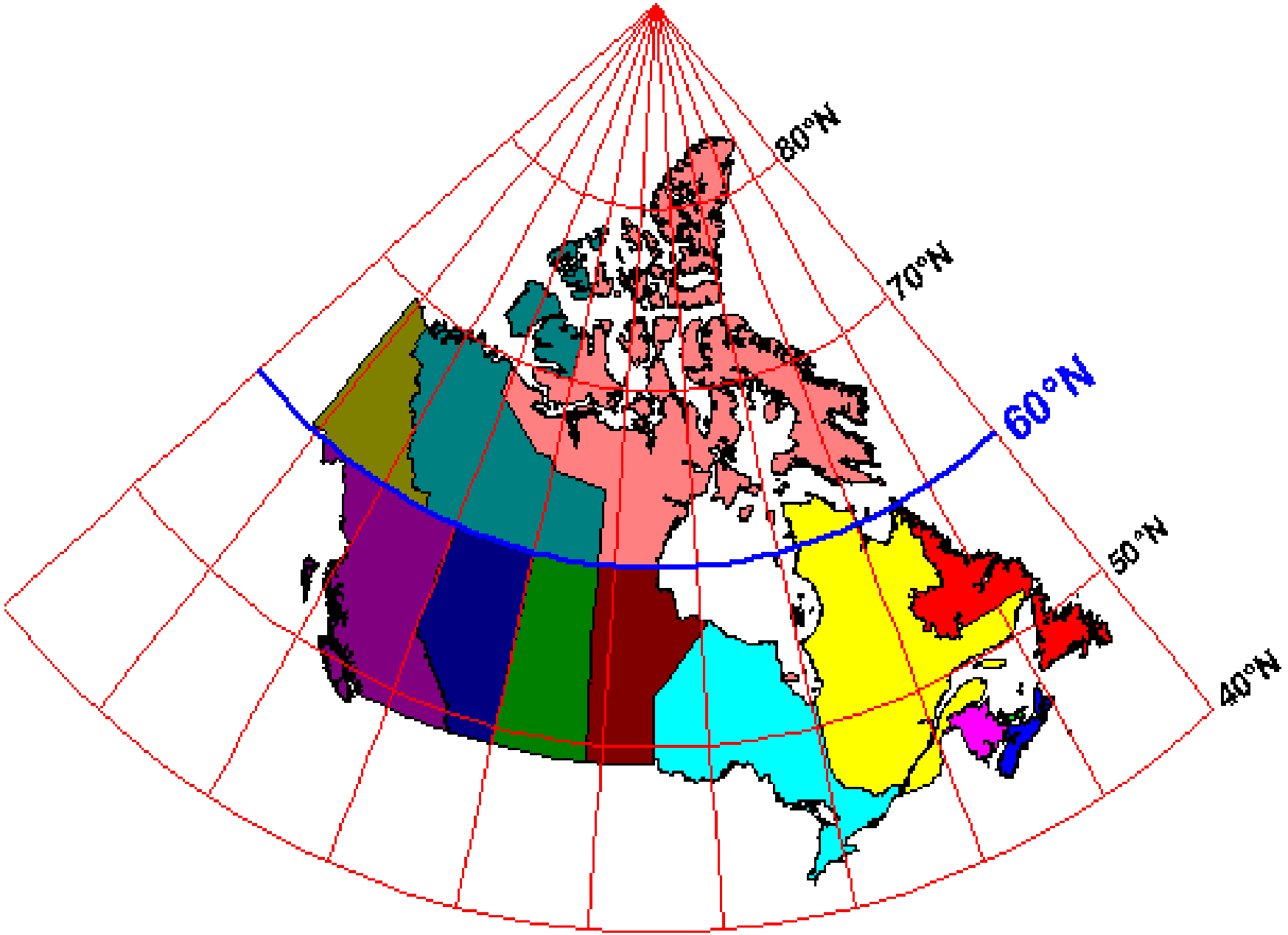
I always say it's a double edged sword because they hold you to high respect because you're their own.[…] . And because of that you can't be the normal person that you are. You have to always be this person that everybody looks up to. And the clinic is situated on the top of a hill, so that I can look down at all the [community] around me. And most times I feel that way, that people think it's like that. That I'm the person on the hill looking down on everybody else. And there's a lot of pressure to be the perfect person when you're the nurse.

Knowing the Client: Knowing the Community

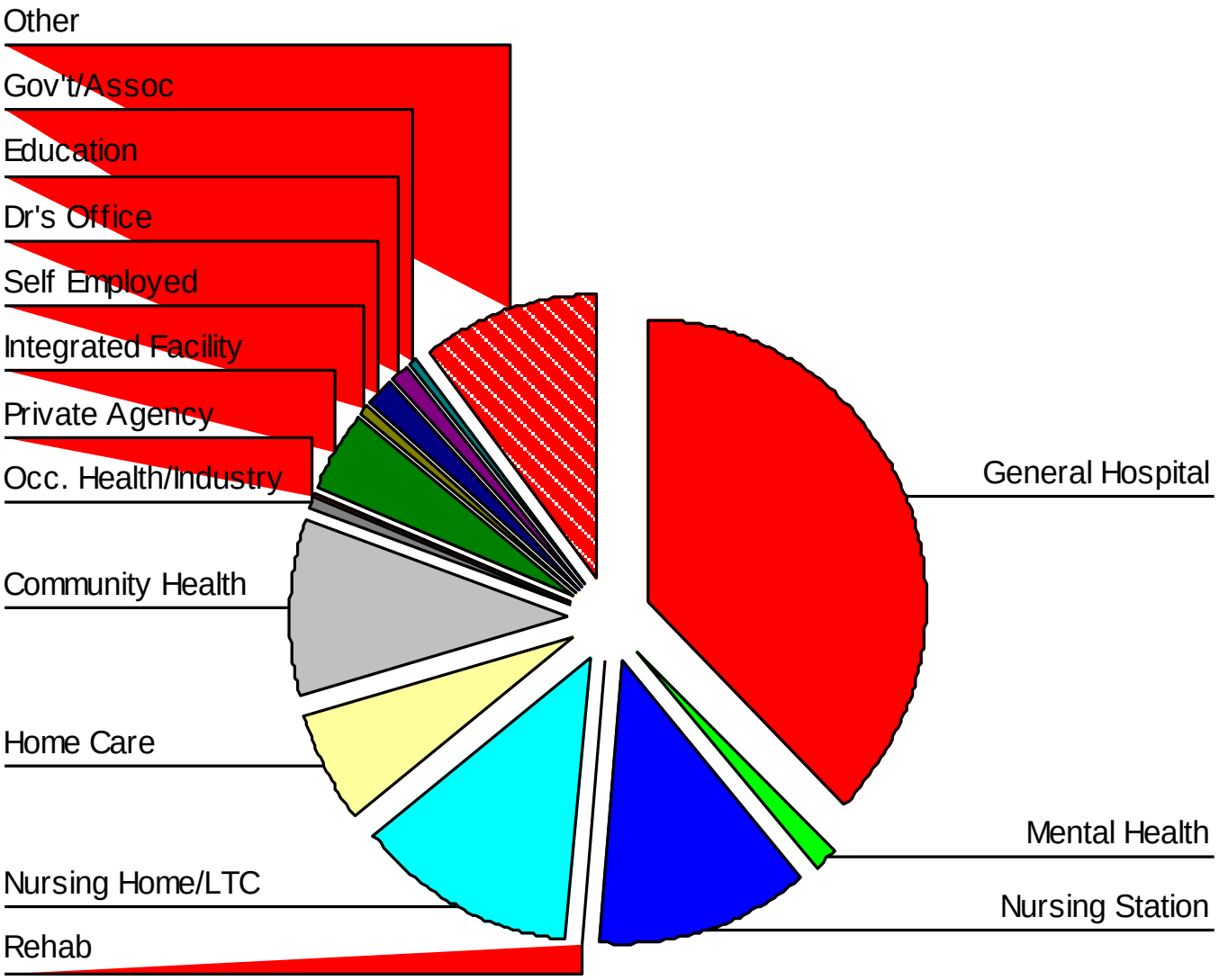
We are very responsive in our community because we see those people in our churches and in our grocery stores. And so you know we try and be all things to all people, maybe that is kind of bad. But in the end we are the one who see these people outside of our work life too.

Supporting Practitioners and their Communities

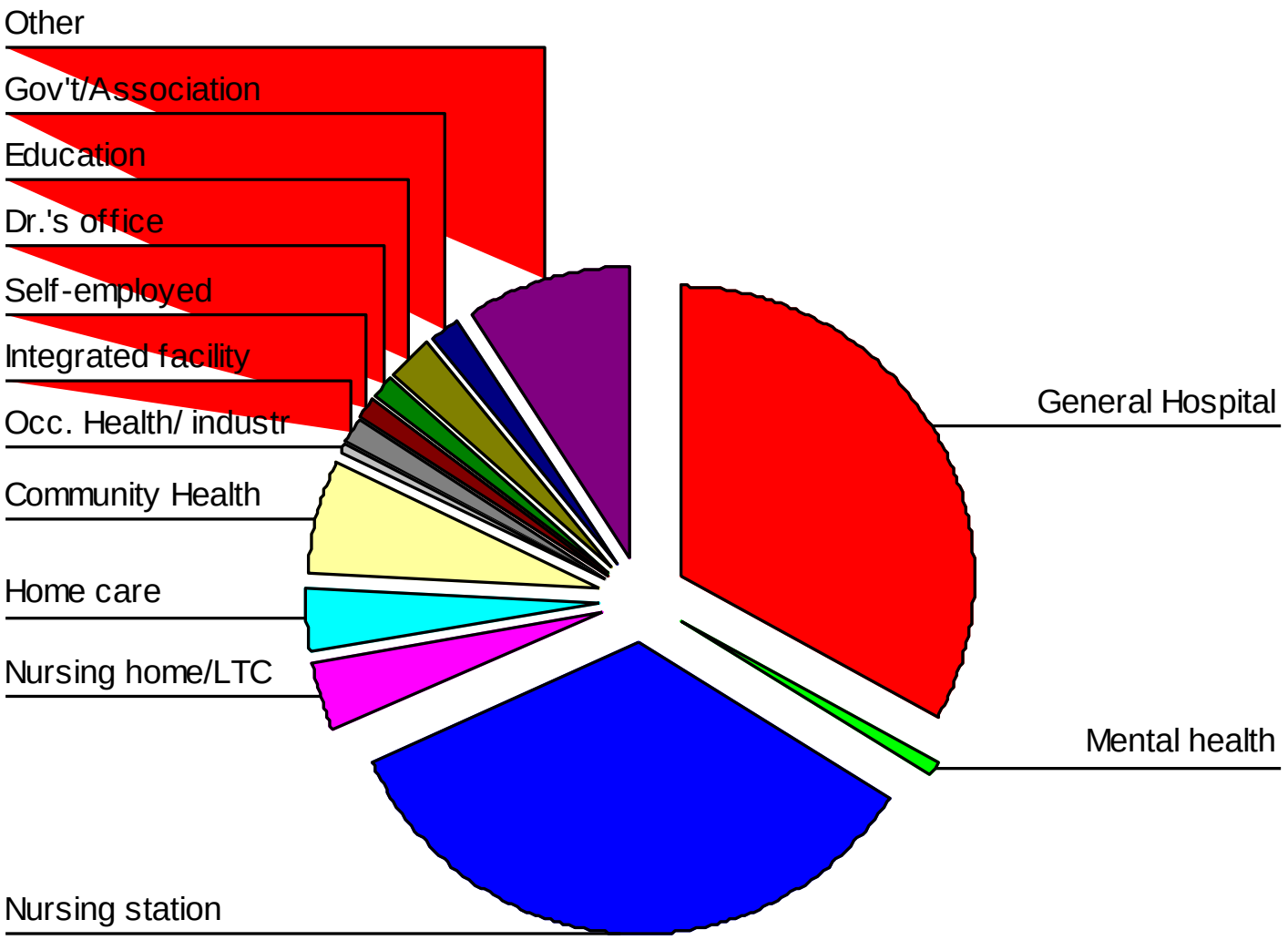
- *Supporting interprofessional practice*


80°N
70°N
60°N
50°N
40°N

Work Setting (N=3933)



Work Setting (n=526)



Facility Ownership: North of 60

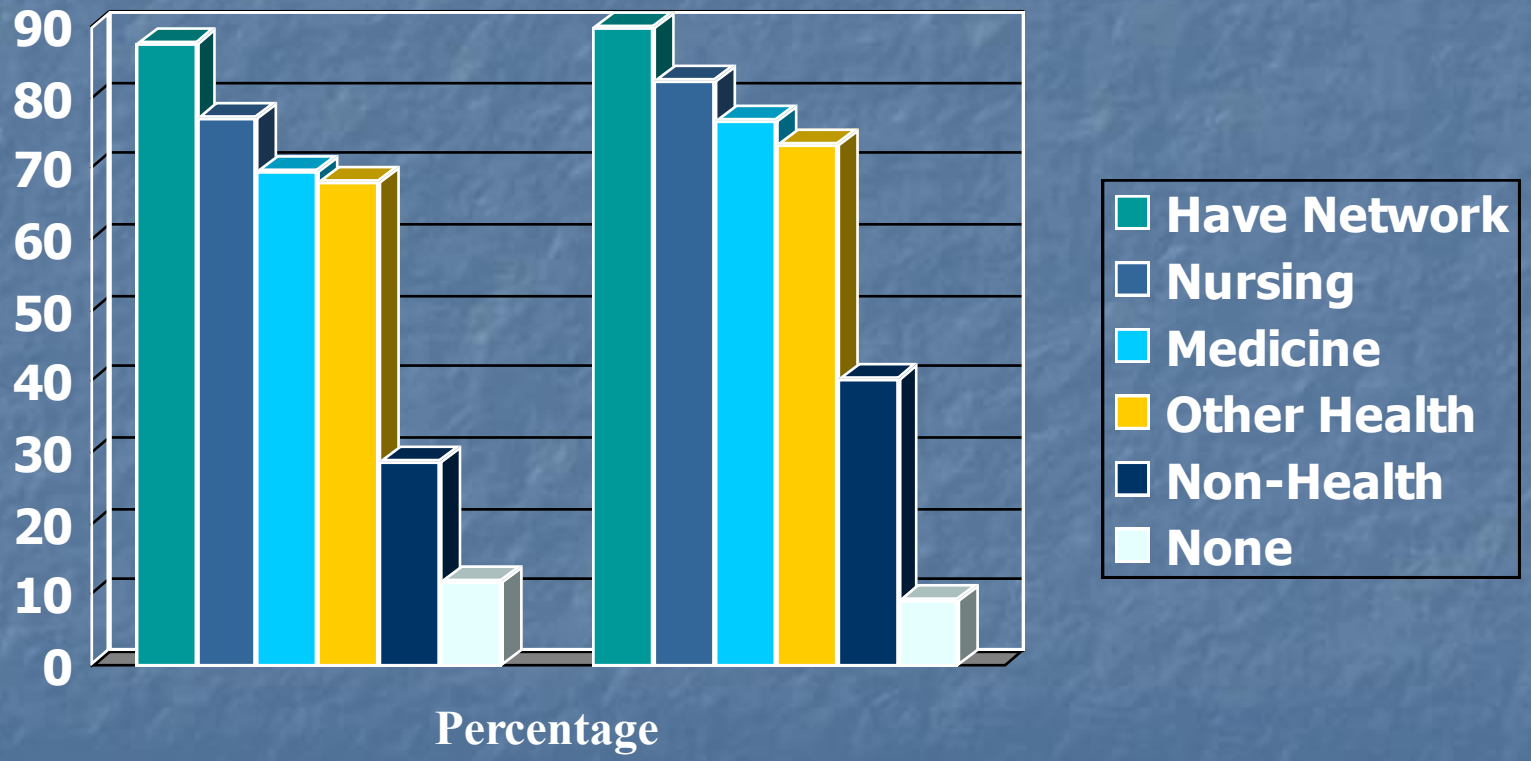
Territory/prov. government :	329 (64.3%)
Local health board:	109 (21.3%)
Private facility:	27 (5.3%)
Tribal council/band:	12 (2.3%)
Federal government:	9 (1.2%)
Other:	26 (5.1%)

RNs in Workplace: North of 60*

Sole RN in workplace:	44 RNs (8.9%)
>1 and < 6 RNs:	234 RNs (47.2%)
6 to 12 RNs:	109 RNs (22%)
13 to 35 RNs:	53 RNs (10.7%)
40 to 150 RNs:	56 RNs (11.3%)

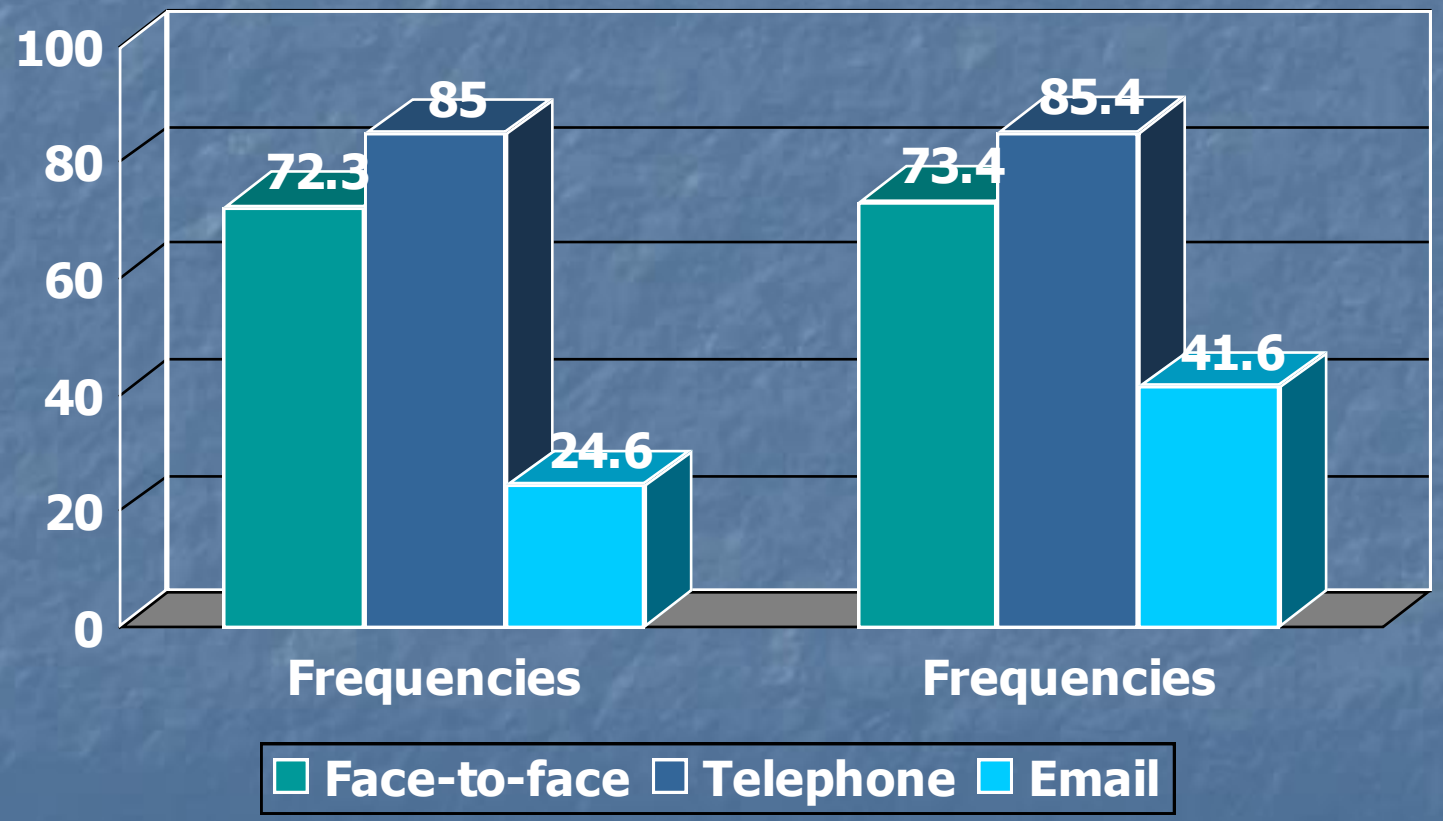
* 496 RNs responded to this question

Colleague Support
N = 3933 n = 526



Colleague Contact

N=3933 n = 526



Advanced Nursing Practice

- 54.2% of RNs who work north of 60, think of their role as advanced nursing practice
- 62% regularly evacuate patients
- 29.6% regularly manage deliveries
- 45.3% prescribe medication
- 48-53% regularly order, undertake & interpret diagnostic tests
- 32.1% directly refer to a medical specialist

Frequency of Interdisciplinary Contact (n=526)

Profession	*Daily*	*Weekly*	*Monthly*	*Q2-6 months*	*Q7-12 months*	*Not available*
Public Health Services	*428 81.4%*	*28 5.3%*	*2 0.4%*	*3 0.6%*	*2 0.4%*	*44 8.7%*
Pharmacy Services	*389 74.0%*	*19 3.6%*	*3 0.6%*	*1 0.2%*	*1 0.2%*	*94 18.5%*
Home Care	*361 68.6%*	*54 10.3%*	*4 0.8%*	*2 0.4%*	*5 1.0%*	*82 16.1%*
Family Physician	*317 60.3%*	*24 4.6%*	*101 19.2%*	*45 8.6%*	*0 0.0%*	*22 4.3%*
Dental	*303 57.6%*	*21 4.0%*	*17 3.2%*	*113 21.5%*	*18 3.4%*	*41 7.9%*
Mental Health Services	*302 57.4%*	*19 3.6%*	*38 7.2%*	*61 11.4%*	*20 3.8%*	*67 13.2%*

Frequency of Interdisciplinary Contact (n=526)

Profession	*Daily*	*Weekly*	*Monthly*	*Q2-6 months*	*Q7-12 months*	*Not available*
Physiotherapy	*245* *46.6%*	*18* *3.4*	*10* *1.9*	*55* *10.5*	*46* *8.7*	*131* *25.9*
Nutritionist	*228* *43.3*	*16* *3.0*	*3* *0.6*	*21* *4.0*	*24* *4.6*	*214* *42.3*
Occupational Therapy	*226* *43.0*	*19* *3.6*	*11* *2.1*	*60* *11.4*	*52* *9.9*	*135* *26.8*
Alternative Medicine	*161* *30.6*	*11* *2.1*	*2* *0.4*	*5* *1.0*	*4* *0.8*	*306* *62.6*
Medical Specialist	*122* *23.2*	*10* *1.9*	*60* *11.4*	*136* *25.9*	*30* *5.7*	*128* *26.3*

Promoting Retention - Sustaining Practice and Communities

- Predictors of Intent To Leave
- Migration of Nurses

Predictors of Intent To Leave Variables

- Individual
  - Sociodemographic & professional
  - Satisfaction with work & community
- Work place
- Community

Predictors of Intent To Leave

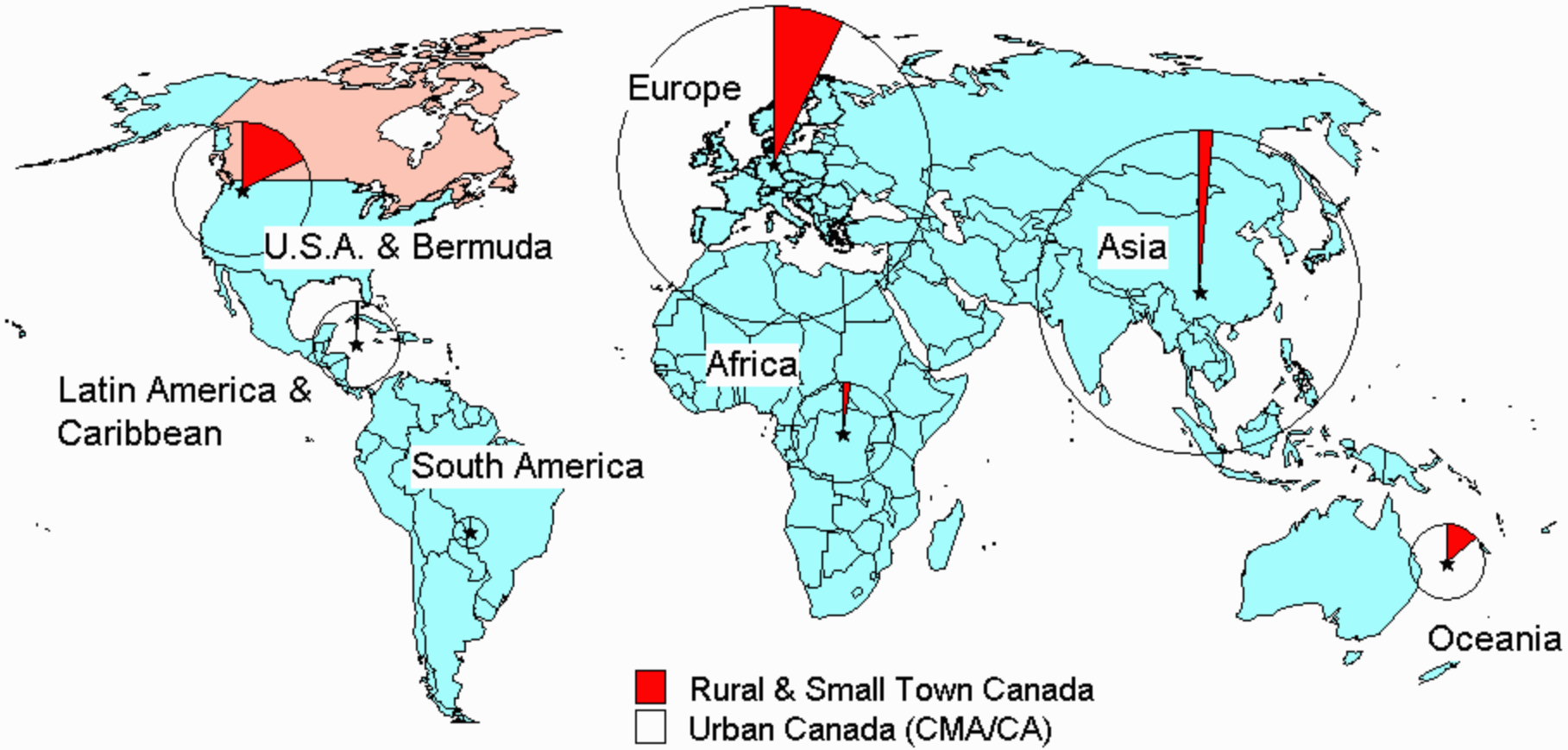
Registered Nurses were more likely to intend to leave their present nursing position within the next 12 months if they:

- Were male
- Reported higher perceived stress
- Did not have dependent children or relatives
- Had higher education
- Were employed by their primary agency for a shorter time
- Had lower community satisfaction
- Had greater dissatisfaction with job scheduling
- Had lower job satisfaction re: autonomy
- Were required to be on call
- Performed advanced decisions or practice
- Worked in a remote setting

Sustainability of Care

- Migration of Nurses

Major World Region Origins of the International Nursing Graduate RNs of Canada



Source: RNDB/CIHI, 2000

Advice re Support: Listen to Learn-Learn to Listen

Number one, do a lot of listening initially, and very little talking

Listen to your nurses! Listen to them and respect their opinions and have an open dialogue

Revisiting the Central Issues

- Understanding and appreciating the nature of 'rural'
- Ensuring a well qualified and appropriately deployed workforce
- Ensuring relevant and responsive support structures and processes for rural and remote practitioners and communities

Implications

- Create a "rural lens"
- Understand and support the fact of the inseparability of nurses' professional and personal roles
- Provide supports at a distance - in-person and via technology
- Partner with nurses and communities in recruiting and retaining nurses

Implications

- Develop new models of interprofessional practice
- Attend to the needs of Aboriginal communities
- Develop undergraduate and post-graduate education for rural nursing

Final Thoughts

- Understand and appreciate the diversity of rural and the complexity of rural practice
- Focus on retention and support, coupled with renewal of the workforce
- Leadership is key
- Support rural-focused research