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HALDIMAND-NORFOLK HEALTH UNIT

Rural Health:

A Qualitative Research Approach to Understanding Best Practices for Rural Health Service Delivery in a Public Health Setting

Rural Public Health Report

Prepared by Heather Lee Kilty, PhD for the Haldimand-Norfolk Health Unit

This report was developed to support the strategic direction of the Health Unit: To strengthen our leadership in rural health strategies.

Dedication

This report is dedicated to all persons who live and work in rural areas – that their health be supported and their way of life respected.

This report is also dedicated to all the personnel, staff and planning partners of the Haldimand-Norfolk Health Unit for their passion,
dedication, skills and expertise in public health work in a rural setting.

"The strength, resilience and innovation demonstrated by people living in rural and remote communities can be an inspiration to us all" (The Rural Think Tank, 2005, p. 23).

"Strong rural and remote communities are essential to the health and vitality of Canada"
(The Rural Think Tank, 2005, p. 23).

"Rural, remote and northern communities require resources and infrastructure to create their own solutions to their health challenges" (Rural Health in Rural Hands, 2002).

Acknowledgements

HALDIMAND-NORFOLK
HEALTH UNIT

Executive Summary

This report was developed as part of the overall strategic planning directions of the Haldimand-Norfolk Health Unit. It includes:

1. **A review of the literature related to public health,** including definitions of rural health, population trends in Canada and Ontario, rural health trends and challenges, rural socio-economic determinants of health, health-care services and delivery in rural areas, human resources in rural areas and rural health research.

   Haldimand and Norfolk counties are rural areas by their population density, lack of a large urban centre, history of farming and community way of life. As in other rural areas, a larger number of older people and children live in the rural areas and there is an out-migration of youth and working-age people. The health of rural Canadians was found to be lower than their urban counterparts, and those living in rural areas have less accessible health services available and travel longer distances for care.

2. **A summary of five focus group discussions conducted with 59 key informant staff of the Health Unit:** how they knew they worked in a rural area, the unique and positive aspects of working in public health in a rural area, the challenges and obstacles to their work in rural health, models and practices they were familiar with and what components they suggested for a model of practice for rural public health work.

   When asked how they knew they were working in a rural area, they generated answers that indicated they knew it was rural because of: the geography, transportation and distances to travel, the use of the land for agriculture, by self-definition of those living there, the philosophy and way of life, the nature of community relationships, and the lack of services and resources.

   "Transportation makes it rural – there is no public transit." "You see a lot of barns and animals, no skyscrapers." "Different things are important. (There's) a different philosophy – how you treat time and space." "The way we think about things makes us more rural." "Values that are built in Toronto, for example, don't work here." "Lots of green space." "We are reminded of the spring changes and the beauty of nature all around us."

   Themes that emerged in their discussions of what was unique or positive about working in public health in a rural area were: the strong sense of community relationships and partnerships for collaboration, the philosophy and way of life, the resources and resourcefulness of the rural community, the ability to make their own decisions and take leadership and the health benefits of living in a rural area.

   "Here it is an awesome sense of life and being alive – I love it here – it's alive." "There is more value in community, everyone connects with everyone else and knows who's in charge of things – yes, it is rural and personalized." "Our community partnerships are solid …voluntarism is very high … we have a good sense of community." "Other agencies know we exist and access our services." "We know the people in the community and they just come to us. Because we are with the   people and work and live here, we know what they need and want. We are closer to the grassroots and we know people through connections." "We are more autonomous and independent." "(There is) not as much red tape in smaller rural public health."

   Some of the major challenges they identified related to work with public health in a rural area were: the challenges to confidentiality, the philosophy and way of life, specific challenges of limited access to health services and other resources for health, organizational support issues, problems with recruiting and retaining new staff and special heath challenges for themselves and the populace as a result of living in a rural area.

   "There is a lack of anonymity – especially if you grew up in this area – it's kind of weird when you are trying to get them to do something if you're not from here." "New people are viewed as (if) they don't belong – also, health professionals are viewed that way." The people have an independent spirit – more private people – they don't want government intervention, whereas in (the city) it's more expected." "They have a different way of handling their business." "People tend to come here, get experience and get pulled away to another centre due to opportunity and salary." "I have a mother who comes to see me and must bring all seven children with her." "We need more decision-makers to understand our work and different measures of   success to be developed to measure results and outcomes." "You can't expect the numbers of people to come out to something to be the same (as in urban

areas) … you cannot measure success by the same numbers. It is challenging to determine what programs and services are viable with the resources you have in a rural setting." "You need to be a 'jack of all trades' and you need a bigger bag of skills."

3. **A review of models, theories and practices that are relevant to rural health planning:** overall Canadian rural health models and frameworks, the determinants of health, the population health approach, social cognitive theory, the health belief model, transtheoretical stages of change, the precede-proceed model, the health promotion model, nursing theories, transcultural theories and other models.

4. **Recommendations and specific strategies for Health Unit staff to develop and strengthen their leadership, visibility and expertise in rural health:** recruitment, education and retention of staff; organizational structure and supports; new programs and services to address specific rural health needs in their area; ways to increase their leadership, visibility and sharing of expertise in rural health and best practices and future research and evaluation related to rural public health.

The Haldimand-Norfolk Health Unit staff have experiences, leadership, expertise, best practices and success stories to share with others. With the implementation of some of the recommendations and specific strategies developed from this report, they will contribute even more to the health of rural Canadians and to the base of knowledge, skills and best practices in the field of rural public health.

Purpose of the report

This report was initiated by the Haldimand-Norfolk Health Unit primarily to strengthen their leadership in rural health strategies. The report was also intended to:

• Review the literature related to rural health and rural health- care services.

• Research the uniqueness and challenges of working in rural public health.

• Research models and practices in rural health planning and capacity building from the literature and the experience of public health practitioners.

• Identify key components of rural health planning models and practices.

• Identify key programs and services of the Haldimand and Norfolk area that exemplify rural health best practices.

• Recommend strategies to increase the leadership, effectiveness, visibility and recognition of Haldimand-Norfolk Health Unit expertise in rural health.

Sources of information

The information was gathered from the following sources:

• Scientific evidence and descriptive data available in the field of rural public health from existing reports, databases, web sites and published journal articles.

• The experiential knowledge of rural public health practitioners through semi-structured focus group sessions.

Evidence-based practice using scientific and experiential data

It has been suggested by Pesut and Herman (1999) that there is a science and an art part of each profession: the science part involves analyzing and evaluating data to make sound evidence-based decisions; the art part involves using intuition and experience to build meaningful, healing and caring relationships with colleagues and clients. The use of evidence in practice involves locating, understanding and critically analyzing the available evidence from the literature, applied and theoretical research, observation and experience to guide how you practise and make decisions.

According to Vratny and Shriver (2007), the first challenge is to synthesize the latest research and to make it actionable; the second challenge is to make plans that can be implemented into practice. They suggest that in regard to evidence-based practice (EBP), "education helps to nourish EBP, but leadership, enthusiasm, mentorship, clinical inquiry, and reflective practice make EBP thrive" (p. 162). Mattingly and Fleming (1994) argue that the practitioner must not be guided by research and theory alone, but also be guided by the evidence present-

ed in their therapeutic communication and engagement process with their clients.

Details of the study and participants

This study used qualitative research methodology and focus groups to gather data. According to Wilkinson (1998), the health-related focus group method is "an ideal method for gaining access to participants' own meaning, interactive data result in enhanced disclosure, improved access to participants' own language and concepts, better understanding of participants' own agendas, the production of more elaborated accounts, and the opportunity to observe the co-construction of meaning in action" (p. 329).

Five focus groups were organized for public health staff to engage in a guided discussion with consistent key questions related to rural community health work at the Haldimand-Norfolk Health Unit. The focus groups took place in April 2007 at the Health Unit over a two-week period. The focus groups were facilitated by Dr. Heather Lee Kilty, of Brock University, Faculty of Applied Health Sciences, Nursing Department. Each session was documented by a typist/recorder for analysis of the main themes that emerged. The focus groups included a total of 59 key informants. Staff represented the following teams within the Health Unit: population health; healthy babies, healthy children; family health; communicable diseases, clinical services, business administration, healthy environment and communications services team.

The researcher explained the purpose of the focus groups and that a final report would be prepared with staff input in the form of summary themes and sample quotes that would bear no individual identifiers. The focus groups were primarily made up of staff from various professional disciplines including nurses, health promoters, family home visitors, dental hygienists and speech therapists. Two hours were scheduled for the focus groups and discussion focused around the following questions:

- Do you think you work in a rural area? How would you know?

- What are the unique and/or positive things about working in public health in a rural area?

- What are the challenges and/or obstacles to your work in public health in a rural area?

- What models, frameworks or best practices are you familiar with that currently guide your work in public health in a rural area?

- What components would need to be included in a model of planning and practice that could guide your work best in public health in a rural area?

- What knowledge, skills and requirements would you need to work effectively in public health in a rural area?

- What other recommendations and suggestions do you have about working in public health in a rural area?

During the focus groups, staff also shared example programs and services they were particularly proud of in their rural health work.

Interpretation and analysis

The evidence and data from reports and studies were summarized. The data from the focus groups were analyzed using open, axial and selective coding to identify key themes. Recommendations and suggestions for future planning and initiatives in rural public health were drawn from the literature and research reviews and the debriefed experience and ideas from the focus groups.

Limitations

The literature and research studies reviewed for this report do not represent the entire body of knowledge and evidence available on the topic of rural public health, but an attempt was made to include current thinking, research, evidence and reports on the topic to guide Health Unit staff in their next stages of planning. The focus groups included diverse opinions, experiences and ideas by including a variation of program representation, ages, mix of professions, gender perspectives and differing years of experience in the field with public health in the attempt to provide as many points of view as possible. In this way, the data would be more trustworthy, valid and reliable. The data were collected over a two-week period with a set of guided questions and a consistent facilitator and recorder to increase the reliability and trustworthiness of the information collected.

The data represent a point in time -- thoughts and ideas and representative quotes were included so that the direct voices of those involved in the work could be heard as much as possible. Qualitative analysis by its very nature has the strength of including those voices, but the limitation is that not all voices and words are included in the final summary. Sample quotes that capture the main points of the discussion, emerging themes and input are included in this report along with some of the unique points of view.
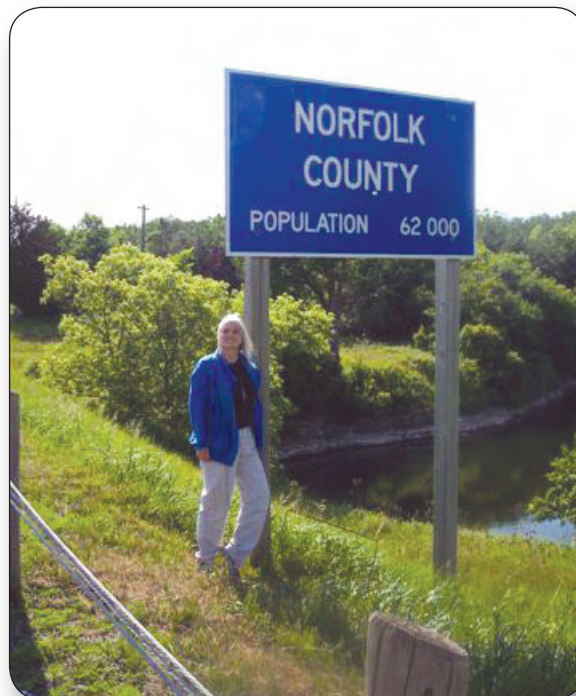
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Recommendations and specific strategies

Introduction to Rural Health

Definitions of rural

The quest for a meaningful and consistent way to determine whether an area is rural or not rural is relevant for most community health planners, researchers and policy analysts. How the term "rural" is defined has implications for health because the parameters established are often used to determine: resource allocations; policy and administrative decisions, organizational infrastructure designs, human resource planning and staffing mix and levels, research parameters, service access and delivery approaches and strategic approaches for health planning and community capacity building.

Plessis, Beshiri, Bollman and Clemenson (2002) explored the prevailing formal definitions of rural, but suggested that "rural" can refer to a geographical concept, a location of boundaries on a map, a social representation, a community interest, a culture or a way of life (p. 6). The continuum from rural to urban can also be defined by the functional relationships that develop between people and the space and place they live in. Six definitions of rural were explored by these authors and they suggested that different definitions generate a slightly different and variable number of rural people in a locale. They suggest that researchers consider the scale of the rural issue and whether it is of a local, community or regional scope and that they "consider which geographic dimensions are most relevant to the issue at hand – population size, population density, labour market or settlement context – and then choose a definition that incorporates those dimensions" (p. 1). Other options they suggest are to assign "degrees of rurality" to each territorial unit or to cross-classify two definitions of rural in order to focus on a specific sub-sector of the rural population.

The six main approaches to defining "rural" that were reviewed by du Plessis, Beshiri, Bollman and Clemenson (2002) and described herein were: census rural areas; rural and small town (RST) and metropolitan influenced zones (MIZ) or census agglomerated influenced zones; rural communities as defined by the Organization for Economic Co-operation and Development (OECD); predominantly rural regions (OECD); non-metropolitan areas, according to the Beale codes and rural postal codes as outlined by Ehrensaft and Beeman (1992).

According to the census approach, as the building blocks become larger, the geographical scale expands from "neighbourhood" to "community" to "region." This approach describes communities as: counties, regional dis-

tricts, regional municipalities; small town and surrounding rural municipality; incorporated towns, rural municipalities, cities; small communities without municipal status and areas surrounded by one census enumerator.

The Metropolitan Influenced Zone (MIZ) approach differentiates rural areas by determining the percentage of the employed population who commute to any urban core. According to this approach, a strong MIZ is where 30% or more of the employed workforce living in an area work and commute to an urban core; a moderate MIZ is when at least 5% but less than 30% of the employed commute to an urban core; a weak MIZ is when more than 0% but less than 5% of the employed commute to an urban core. No MIZ includes all census data areas that have a small employed labour force (fewer than 40 people) or areas that have no commuters.

OECD definitions of rural were developed among 29 countries to be able to compare internationally collected data (Enrensaft & Beeman, 1992). Its scheme differentiates between two levels of geography within nations: a local community level and a regional level. It classifies an area as rural, urban and more or less rural. The OECD uses a density threshold of 150 inhabitants per square kilometre to identify "rural communities" (OECD, 1994; 1996 in du Plessis, Beshiri, Bollman and Clemenson, 2002, p. 11). Rural, in this approach, includes individuals living in the countryside and towns and small cities (inside and outside the commuting zone of larger urban centres).

Types of regions are defined by the degree of rurality depending on the share of their population living in rural communities: predominantly rural regions where more than 50% of population lives in a rural community; intermediate regions where between 15% and 50% live in a rural community and predominantly urban regions where less than 15% of the population live in a rural community. The terms Rural Small Town (RST) and Large Urban Centre (LUC) are often used in the literature to compare health data and access to care.

The census data uses the Beale Code approach to identify diversity in predominantly rural regions: areas adjacent to metropolitan centres; areas not adjacent to a metropolitan centre and northern regions.

Rural postal codes determine rural as an area where there are no letter carriers and residents have to go to the post office or corner postal box to get their mail. They are assigned a rural route (RR#), a code "0" and are given a post office (PO) box number instead of a street address.

Population trends in rural Canada and rural Ontario

Based on Statistics Canada data (2001), 30.4% of Canada's population (more than nine million Canadians) was reported as living in predominantly rural areas. More than half of the population living in predominantly rural regions lived in rural metro-adjacent regions. The population in rural regions in Canada has steadily declined as a share of the total population since 1981 (Statistics Canada. Census of Population, 1981-2001).

Depending on the definition used, it is estimated that 22% to 38% of the Canadian population live in rural areas--22% according to the rural and small town definition and 38% according to the OECD rural community definition. In Ontario, 28.2% are rural according to the census rural areas; 25.1% are rural and small town; 28.3% as OECD rural communities; 23.8% are predominantly rural regions; 20.76% are non-metropolitan areas; 27.2% use rural postal codes.

The proportion of Canadians living in rural areas varies by province and territory. Ontario, followed by Quebec, has the smallest share of people living in predominantly rural areas. The rural population is a majority in the Atlantic provinces, the northern territories and Saskatchewan. The population migrates in and out of rural and urban centres across Canada and within provinces.

According the *Rural Health in Rural Hands Report* (Public Health Agency of Canada, 2002), 95% of Canada's land mass is considered to be rural, remote or northern. Most rural communities have large populations of older people and children and smaller populations of working-aged people (20 to 50 years of age). The age distribution is reported as being affected by: the aging of the rural population, the tendency of retirees to move to rural areas, large family sizes and the migration of rural youth to urban areas. "The cultural and linguistic make-up of rural Canada includes official language minority communities, a small immigrant population and more than half of Canada's 1.4 million Aboriginal people -- First Nations, Inuit and Metis people" (p. 3).

Rothwell, Bollman, Tremblay and Marshall (2002) explored the migration patterns in rural and small towns in Canada and suggested that youth 15 years of age and over are migrating out, and this could affect access to future human capital for rural communities. Out-migration was found to be highest in the 20-24 age class, as youth leave for post-secondary schooling and job experience. Some return when they are ready to raise a family but often have to commute to urban centres for employment. Migration rates were found to be generally lower for each increasing age group. RSTs were the net losers of youth but net gainers of individuals in all age classes 25-65 years of age with higher in-migration of early retirees. Many over 70 years of age were moving out of the rural area.

Employment and economic determinants of health in rural Canada

Socioeconomic determinants of health have an impact on overall health status. Alasia (2003) explored income disparities in Canada from 1992 to 1999 and concluded that income disparities were increasing and that "Space matters in addressing income disparities, and it does so in an evolving fashion" (p. ii). His review confirmed a trend in Canada, in that "the growth of the 'new economy' has been largely an urban or peri-urban phenomenon" (p. ii). Because of this trend, the writer suggested that there is a key role for urban core areas to be engaged in regional and rural development. In 1996, Alasia mapped the socio-economic diversity of rural Canada.

The *Rural Health in Rural Hands Report* (Public Health Agency of Canada, 2002) indicated that:

> The poorer health status has been linked to a broad range of personal, social economic and environmental factors and conditions that influence health, such as income, employment and working conditions, education, personal health practices and the environment. Most rural areas have higher unemployment rates and lower personal incomes than urban areas. In addition, rural workplace conditions have been found to pose serious health hazards. In a majority of rural communities, people have fewer years of formal education and higher rates of smoking, heavy alcohol consumption and physical inactivity than national averages. Access to safe drinking water has become a concern for rural areas (p.4).

According to Rupnik, Thomson-James and Bollman (2001), "Incomes are lower in rural areas. For the past three decades, rural families and individuals have had the lowest average and median incomes and the most populous areas (100,000 or more) have the highest incomes." In 1997, average incomes in rural areas were $48,850 compared to $59,920 in urban areas. Hart, Larson, and Lishner (2005) point out that "Rural populations are more vulnerable than their urban counterparts to economic downturns because of their concentrated economic specialization" (p. 1150).

According to Vera-Toscanao, Phimister and Weersink (2001) "Rural and small towns (RSTs) average incomes are uniformly below those of Large Urban Centers (LUCs) for the 1993-94 period, with a greater proportion of RST people concentrated in the bottom income classes. The persistently poor (over 2 years of poverty) were mostly characteristic of: females of working age, unattached individuals in one person households, married with children under 25 years old and female lone parents with children under 25. The number of self-employed was also found to be higher in RSTs than LUCs and a higher portion of both men and women in RSTs were affected by low pay, with the situation even more acute for women.

Rural Canada contributes significantly to the country's wealth and prosperity through participation in Canada's primary resource-based sectors (including fishing, forestry, mining and agriculture), tourism and small business enterprises (Government of Canada Canadian Rural Partnership, checklist of rural lens consideration, 2007).

The Canadian Rural Partnership (Government of Canada, 2006) explored rural youth trends from 1997 to 2005 and found: the average unemployment rate for rural youth was 12.5% (only 0.2% higher than urban youth rate), the yearly unemployment rate for rural youth had declined steadily, both rural and urban youth unemployment rates were 6% higher than adult rates and both young and older rural workers experienced more variation in unemployment rates than their urban counterparts.

According to Beshiri and Bollman (2001) "the rural industrial picture is changing in Canada. As in most Western nations, primary industries are losing jobs and the service sector is employing more people every year." They suggest that rural and small town Canada is very active with new jobs and migration. Workers tend to move into construction and service industries, while employment in farming has gone down. They state, "One of the most serious structural problems affecting the Canadian labour market is regional inequality" (p. 2).

The subject of human capital has been found to be relevant to rural health trends. Human capital refers to the skills and talents of individuals that are available to them and to the community. Bollman (1999) uses the terms human capacity and human capital interchangeably "to encompass the overall capacity of an individual to contribute to his/her own well being and the well being of the community/economy" (p. 5). Reich (1991, in Bollman, 1999) argued that "the wealth of a locality is contained in the human capacity of the residents" (p. 5). The Bollman literature review suggests that human capacity is built primarily by the nutrition and nurturing of children early in life so that they can be educated and develop their skills and talents later in life. Bollman also pointed out that rural Canada is experiencing high unemployment rates, out-migration of its young people and an increasing number of rural persons retiring from the workforce. Combined, these trends may have a negative impact on the human capital available to rural communities. However, this impact may be offset by the migration of urban workers to locate their families in rural settings adjacent to urban centres. He also suggested that the ability to cope with change and deal with disequilibria and to have analytic skills will be important human capital potentials for the future. Therefore, it would be wise to develop these skills into rural capacity-building strategies.

Rural health trends and issues

The Centre for Rural and Northern Health Research at Laurentian University, funded by a research partnership between Canadian Public Health Institute (CPHI) and the Public Health Agency of Canada (PHAC), prepared a report on The differences in health for rural and urban Canadians (PHAC, 2006). The report compared four rural areas using the MIZ definitions for rural: those with high commuting flow (at least 30% of the population commute to an urban area to work), moderate, weak and no commuting flow.

They found the health trends of Canadians living in rural and remote areas indicate:

• Higher death rates than urban counterparts (pronounced among children and adolescents ages five to 19, particularly deaths due to injuries, circulatory diseases and injuries).

• Factors such as smoking and obesity were reported more frequently by rural people than their urban counterparts.

• Rural residents had increased risk of dying from circulatory disease, respiratory disease, diabetes, injuries and suicide (women had a higher risk of dying from diabetes, men from respiratory disease).

• Mortality rates due to motor-vehicle-related injuries were higher for all ages, with the risk being two to three times higher than in urban areas.

• Those under 20 living in most rural areas had the highest risk of dying from suicide. Boys were four times, and girls five times, more likely to commit suicide than their urban counterparts.

Health advantages of living in rural areas:

• Less likely to be diagnosed with a new case of cancer than urban counterparts.

• Better reported quality of life than urban counterparts.

• Lower stress levels and stronger sense of community than urban counterparts.

• Death rates due to cancer lower in rural populations for some specific cancers (e.g. breast cancer).

Other health problems reported for those living in rural areas:

• Higher smoking rates (32% rural; 25% urban), and more exposure to secondhand smoke.

• Lower percent eat five fruits and vegetables daily (38% urban, 31% rural).

- Rural Canadians are more likely to be overweight or obese (BMI greater than 25) (57% rural , 47% urban).

- Cervical cancer is higher for women in rural areas.

- Men 45-64 years of age have higher rates of lung cancer (for women lung cancer did not differ rural to urban).

Generally, they reported the health status of people living in rural, remote, northern and Aboriginal communities was poorer than their urban counterparts and that health status declines with the distance from urban centres. Rural Canadians were found to have shorter life expectancies, higher death rates and higher infant mortality rates.

HIV/AIDS-infected rural men were found to have higher rates of depression risk than infected urban men. According to Uphold et al. (2005, in Anonymous, 2005) "We found that rural men as compared to urban men had similar levels of total stress, AIDS related stress, social support, active coping and violence coping, but higher rates of depression" (p. 61).

In contrast, Craig, Weinert, Walton and Derwinski-Robinson (2006) found that rural-dwelling people with one or more chronic conditions reported high levels of hope and low levels of depression despite living with chronic illness. They found that spirituality had no independent effect.

Walker, Pullen, Hertzog, Boeckner and Hagemen (2006) examined the cognitive determinants of older women's health according to the Health Promotion Model (HPM) (perceived self-efficacy, benefits, barriers and interpersonal influences), especially in relation to lifestyle behaviours of activity and eating habits. They reported that midlife and older rural women are priority targets for lifestyle behaviour change, as they report more functional limitations and physical disability and use more health services than men do. The Walker et al. study found that the 450 rural women in their study reported poorer subjective health status, a higher rate of obesity and sedentary behaviour, a greater incidence of chronic disease and were slower in meeting the U.S. Healthy People 2010 objectives than urban women were. They also found that rural women were found to be less likely than urban women to receive comprehensive lifestyle-change counselling.

Leipert and Reutter (2005) found that older women in northern, geographically isolated settings "experienced vulnerability to physical and safety risks, psychosocial health risks, and risks of inadequate health care" (p. 49). They also found that they responded to these vulnerabilities by developing resilience, becoming hardy and making the most of the area they lived in.

According to *Rural, remote and northern women's health: policy and research directions* (Sutherne, McPhedron & Haworth-Brockman, 2003), women described the benefits of living in rural, remote and northern Canadian communities as having more space, better air quality, a closeness with nature and stronger community ties. However, the main challenges to women's health they identified were:

- **Poverty** (unstable income, unemployment, dependency on spouses, low paying and seasonal jobs, poor public transportation, non-affordable child care, housing and healthy foods).

- **Limited health care and support services** (fewer nurses, family physicians and specialists available; little choice, especially if homophobia is present and culturally sensitive health delivery services are not available; it is difficult to get relief when women are often the caregivers 24 hours a day).

- **Geographic isolation** (being far from neighbours makes it hard to establish and maintain social networks, emergency services are often delayed).

- **Lack of confidentiality and anonymity** (everyone seems to know everyone else's business, so they may not seek services or travel far to get them).

- **Stress of multiple roles** (work long hours, juggle family, farm, volunteering and caring for family members).

Sutherne and Fish (2003) prepared a *Community Kit* to accompany the report for planning purposes to address rural women's health issues.

Aboriginal people tend to have the poorest health status. *The Rural Health in Rural Hands Report* (Public Health Agency, 2002) outlined some of the highlights of Aboriginal health challenges in Canada:

- The gap in life expectancy between Aboriginal people and the general population varies from 6 to 14 years.

- The infant mortality rate for Aboriginal people is double that of the Canadian population overall.

- Aboriginal communities have a high prevalence of all major chronic diseases and high rates of suicide, fatal injuries, smoking and alcohol consumption.

- Low incomes, low levels of education, unemployment, inadequate housing, exposure to environmental contaminants and the legacy of the residential school era have a strong influence on the health status of Aboriginal people in Canada (p. 20).

Health care access, delivery and human resources in rural areas

It has been suggested that "A two-tier healthcare system exists in Canada – rural versus urban" (CIHR, 2001). Many rural Canadians have expressed concerns about their inability to access the health services they need in a timely fashion, close to home, and the futility of complaining about access problems (Jones, Meehan-Andrews, Smith, Humphreys, Griffin and Wilson, 2006). These researchers conducted their study "to validate earlier findings that lack of access to health services is the most likely issue of complaint for rural consumers, and a lack of knowledge about how to make effective complaints and skepticism that response to complaints about service improvements accounts for the under-representation of complaints from rural consumers." They found that 54.8% made a complaint and many more wanted to but did not, mostly because they felt it was futile to do so.

Rural people travel long distances for health care, amenities and other services and this poses risks of higher motor vehicle injuries and accidents. Most health care providers and specialists are located in larger urban areas. Only 17% of family physicians, 4% of specialists and 17 % of registered nurses practice in rural, remote or northern communities where an estimated 30% of the population lives in spread-out areas (Public Health agency of Canada, 2002, p. 4).

According to an article in the *American Family Physician* (Anonymous, 2006), "Ensuring access to emergency care in rural areas remains a challenge. High costs and low patient volume makes 100 percent staffing of rural emergency departments less than a reality." They state that, "As rurality increases, so does the dependence on family physicians to provide emergent care" (p. 1163). In addition, rural hospitals, because of their smaller and less predictable patient volumes, are less likely to staff Emergency Departments (EDs) with Emergency Physicians (EPs) (p.1163).

Meyer and Morrissey (2007) reviewed the evidence for the effectiveness of community-based services for rural areas especially for community mental health treatment and intensive case management and state "Service delivery to persons with severe mental illness is challenged by low population densities, limited services, and shortages of professionals." "Rural mental health providers must structure services to accommodate many diversely populated and dispersed communities that lack specialized personnel and whose residents face long travel time and other costs in accessing centrally located services. Mental health professionals have reported difficulties in adapting existing urban-based treatments to rural communities, and very little research is available on evidence-based practices in rural communities to guide them" (p.121).

According to a report in *Health Management Technology* (Anonymous, 2005), studies show "rural trauma patients die twice as often as those in urban areas and time, distance and training are the primary culprits" (p. 40). In addition, "Longer discovery times after injury, greater distances to travel for treatment and the availability – or lack of – trauma training all contribute to increased, possibly unnecessary deaths" (p. 40). The article reviews the use of telemedicine and video conferencing in rural areas. In the article, according to Michael Caputo, of the University of Vermont College of Medicine, telemedicine and video conferencing works in more rural areas of Vermont and upstate New York: "We don't want them having to fumble with a phone book or trying to figure out how to make the system work. They make an 800 call on the telephone and we call back by video" (p. 41).

Smith (2005) stated that "Telemedicine has the potential to be a major contributor to improvements in access and cost of health care, especially in rural areas" (p. 16). The author suggested that there needs to be more research on hospital systems, including rural hospitals, and "although people living in both urban and rural settings have a strong desire to be near medical facilities, the rural setting is different because there are fewer facilities and providers" (p. 16). He suggests that the future of rural hospitals is uncertain and that rural hospitals suffer the most when there are mergers, closings, centralizations and reductions in services.

Dougherty, Simpson and McCormick (2006) found there was little research on children living in rural areas and the conditions in adulthood that may have origins in childhood. "Given the growing body of knowledge pointing to a volume-outcome relationship in children's health care, such a strategy for providing specialty services in rural areas might negatively affect quality and safety as most providers would see only a small number of cases" (p. 265). They suggest "Other approaches to improving access include the use of mobile clinics and other forms of outreach such as circuit-riding by specialists and the use of telemedicine" (p. 265).

Farmer, Clark, Sherman, Marien and Selva (2005) suggest that comprehensive primary care for children with special care needs and chronic conditions are conducted in large urban centres and are not available to rural children. According to a study by Mayer, Slifkin and Skinner (2005), rural residence and other vulnerabilities are associated with decreased perception of need for health services, and more specifically they found that parents of rural children were less likely to report a need for routine or specialty services and poor children whose mothers had less education were less likely to perceive a need for physician services.

According to a Public Health Agency Report (2004) on the abuse of women in rural settings, domestic violence occurs in urban and rural communities but has been found to have some significant differences. "Until recently, many people were reluctant to acknowledge that domestic violence exists in their rural communities" and "Rural attitudes are often conservative and slow to change." "Women may be expected to stay in a relationship no matter what." "Women living in rural areas are slightly more likely to leave their partners due to domestic violence and are more likely to return" (p.1). Older adults living in rural areas report higher rates of emotional and financial abuse than their urban counterparts. The major characteristics of abuse and violence related to rural women identified were:

- **Geographical location and isolation** (it is easier to hide the abuse, lengthy response times, lack of access to people to help in an emergency and lack of public transportation).

- **Economic conditions** (lack of affordable housing and employment, those who leave often end up in poverty, women on farms are often more financially dependent as they do not receive a wage for their work and have no unemployment insurance or pension and they leave behind their lifetime investment for themselves and the legacy of their children).

- **Lack of access to services** (distant from many specialized services for family violence, services have been centralized in urban areas, dispersed and complex delivery and locations of services for needed lawyers, social services, mental health, school counselors etc.).

- **Lack of confidentiality** (hard to preserve confidentiality, social stigma may be a deterrent to getting help, fear of exposure, strong ethic of self-sufficiency, belief that family matters are private and lack of trust in service providers).

- **Attitudes** (slow to admit that domestic violence is a serious problem, stigma attached if they go to mental health services, hard to admit to abuse because they feel it is their fault, leaving means leaving a way of life, one's home and one's community, disruption of leaving is even greater for farm women as there is no separation between home and work).

 Hayes (2006) wrote an article, Home is where their health is: *rethinking perspectives of informal and formal care by rural Appalachian women who live alone.* The rural women in the study described how they cared for themselves informally and the value they put on independence and privacy. The study reveals how changes in the formal care system could support health promotion and prevention strategies grounded in everyday ways of maintaining health within the context of home. Providing care in the home in rural areas, especially for the elderly, is a strategy to explore further, but it may cost more for travel and care time.

There appears to be an underdevelopment of mental health services, a lack of diagnostic services, poor access to emergency and acute care services and a lack of non-acute health care services, health promotion programs and under-servicing of special-needs groups, such as seniors and people with disabilities and mental health needs. Hospitals and services have been undergoing restructuring and merging into larger urbanized delivery systems. Health care has increasingly become centralized, reduced or eliminated. Hospital-based services have often been reduced without fully developing or enhancing community-based services.

Hauenstein, Petterson, Menwin, Rovnyak et al. (2006) found that gender and place contributed to disparities in the use of mental health services. Specifically, they found that rural men receive less mental health treatment than do rural women and less specialty mental health treatment than do men in metropolitan areas. Reported mental health deteriorates as the level of rurality increases. Overall, they found that there is a considerable unmet need for mental health services in most U.S. rural areas.

Wong (2002) summarized the findings of 33 projects funded by the Health Transition fund related to rural health. The findings dealt mostly with the lack of access to health services, especially in the smaller and more remote areas with poor transportation systems; the increased use of telehealth and the acute and persistent shortage of health- care practitioners in rural areas. Many of the projects were initiated to study the problems and to initiate and study solutions in parts of Canada. The report has valuable information regarding policy implications and future recommendations for positive change.

In a Clark (2005) study reviewed in the *Australian Nursing Journal* (Anonymous, 2006), it was reported that rural nurses did not feel equipped for dealing with mental health issues: "It is unacceptable that many nurses in rural and remote areas find themselves required to provide services for which they are inadequately prepared" (p. 7). She states that "Inadequacies like these in the delivery of health care services can contribute to the pro-longed and adverse outcomes for mentally ill patients seeking care" (p. 7). The writer concludes by suggesting that the nursing curricula needs to include more on mental health care to provide rural and remote nurses with the knowledge and clinical skills required.

Kaeding and Ramir (2003) shared the lessons learned from the Rural Nurse Leadership Project in Vermont, the most rural state in the U.S. They suggested that strong nurse leaders are needed "who can combine knowl-edge of health policy, finance, resource management, ethics, conflict resolution, and patient advocacy in a way that transforms the health care system to more fully meet the needs of society" (p. 250) and that this need was even more acute in rural nursing, "where human resources and financial resources are scarce and solutions typically derived from an urban setting often exacerbate the problems of a rural health system" (p. 250). They believe a model of leadership development for the rural setting needs to created that can be successfully trans-ferred to other rural or under-served communities and that this model should include transformational leader-ship and quality improvement frameworks for success. An arsenal of tools and skills such as a change agent and coach would also be required as part of the model they suggest.

The article entitled *The nature of nursing practice in rural and remote Canada* (Anonymous, 2005) reported on a study that examined rural nursing issues using four complementary research methods. The quantitative research survey with 3,933 rural nurses indicated that the majority of rural Canadian nurses have a diploma when they begin their practice; 9% had a bachelor's degree at entry to practice in 2000 and 27% in 2003. The writer sug-gests that "Rural nursing is unique; it is multi-specialist, generalist practice" (p. 12). In the qualitative interviews, participants said: "Working in a small rural community, I really see that you need a wide range of knowledge. You don't have to know everything, but you need a general knowledge and you need to know where the resources are, so if you don't have the answer, you know where to get it" and "The workload changes quickly; you have to change gears." The University of Northern British Columbia, Laurentian University and the First Nations University of Canada were found to have nursing programs with theoretical content relevant to rural nursing and rural health care and provided rotations in a variety of rural communities with rural nurse precep-tors (Anonymous, 2005).

Social capital involves inclusion and participation in community networks and is an important part of community capacity building. In this regard, Rothwell and Turcotte (2006) found this to be a strength in rural areas. In their study of voluntarism and civic engagement across Canada's rural and urban spectrum, they found that:

- Individuals at all levels of educational attainment are more likely to volunteer if they live in rural rather than urban areas, but this is particularly evident for those with a high school education.

- Close to four out of five of those who have a university degree and who live in rural areas close to urban centres are members of at least one organization such as a sports organization, a political party or a cultural group.

- Public meeting attendance is higher in rural areas across all educational levels.

Rural health research

Kelly and Rourke (2002) conducted a project to encourage medical students to undertake research elective projects in northwestern Ontario. They also reviewed the status of rural health research and stated that "while primary care research is in its adolescence, rural research is in its infancy" (p. 1476). They write that:

> Both urban primary care research and rural health research share the need to develop adequate research expertise and appropriate infrastructure and funding. Rural populations are large, spread out in distance, and have limited health care services. Rural patients also have a shorter life expectancy and a greater burden of occupational and chronic health problems. Rural researchers, working in isolation with gaps in the literature have little effect. The trickle down theory has not worked for medical human resource distribution, nor will it be effective in rural health research. A national funding agency is required to support multiple models of rural research projects, including both grass-roots initiatives and large collaborative initiatives (p. 1476).

They further suggest that "A solid evidence base from which to formulate appropriate action will accelerate progress and overcome existing barriers that are responsible for the continuing poor health status characterizing many rural and remote communities" (p. 15).

The Rural Health Research and Northern Research Initiative (2003-2004), reported on by the Canadian Institutes of Health Research (2001), was established to build a strong foundation for rural and remote health research in Canada, to identify the key components of a Canadian Rural and Remote Health Research Strategy and to develop the CIHR roles to support rural research in Canada. A forum was conducted in St. John's, Newfoundland, to help establish Canada as an international leader in rural health research and to explore several key questions: why rural research should be conducted, how rural research could make a difference, what we could learn from other countries, what key topics should comprise a Canadian rural research agenda, what criteria should determine the specific content within the broad topics identified, what topics should be added to the CIHR health research menu, how we could begin, what were some of the innovative and multidisciplinary approaches to address rural health research questions and how such research could have an impact on rural community sustainability.

CIHR (2001) developed a *Framework: Key components of a rural health strategy* and identified the role of CIHR in providing support, training/human resource development, funding, partnerships, knowledge translation, building local research capacity, methodology and data management and research grant reviews to support rural health research in Canada.

Haldimand and Norfolk as rural areas

Haldimand and Norfolk as currently constituted are predominantly rural. The area contains non-metropolitan cities (20,000-49,000 people), small towns (2,500 to 19, 999 people), no large urban centre over 100,000 in population and no northern hinterland. The area served by the Haldimand-Norfolk Health Unit is a rural area with a high incidence of agricultural activity and covers two counties -- Norfolk and Haldimand.

According to Statistics Canada (Community Profiles, 2006) Norfolk County's population was 60,847 in 2001 and 62,563 in 2006. The land area covered was 1,606.91 square kilometres and the population density was 38.9 per square kilometre. Haldimand County's population was 43,728 in 2001 and 45,212 in 2006. The land covered was 1,251.58 square kilometres and the population density was 36.1 per square kilometre.

Hart, Larson and Lishner (2005) point out that there are "huge variations in the demography, economics, culture, and environmental characteristics of different rural places" (p. 1149). While some rural areas may be pastoral farming areas, others may not.

Some areas within the two counties served by the Health Unit are more rural than others, and this can have an impact on the emerging health needs and issues. The degree of rurality can also have an impact on how services are delivered and the policies, staffing and health strategies that are chosen to meet the public health mandate. There is rich diversity within the geographic district that needs to be taken into account. The differing degrees of rurality can also be determined by the distances required to travel to school, treatment centres, shopping and the price of travel. Specific sub-populations and issues need to be identified and delineated within the regional setting. A community with a given set of distance and density parameters will have different opportunities. For instance, tourism may flourish more if located in a region with a post-secondary educational facility or natural beauty.

Alasia (1996) mapped the socio-economic diversity of rural Canada and identified one of the major challenges in development strategies by region: "today it is widely recognized that regions have different characteristics that shape their potential path of development and that the policy process should not overlook the diversity of their conditions. One of the crucial questions associated with the policy focus on small geographical units is whether, and to what extent it is possible to implement development strategies and policies for each type of region" (p. 1).

Within Haldimand and Norfolk there is an Aboriginal community, a Low-German-speaking Mennonite community and a seasonal foreign migrant worker population. This Health Unit has developed effective leadership and expertise to deliver public health services and programs to its constituents. The expertise for developing increased community capacity building for health in this predominantly rural area was deemed to be a strength of the Health Unit and provided an opportunity to explore further leadership.

Both Haldimand and Norfolk are rural communities and the rural health trends identified in this literature review and their implications are relevant to take into consideration in planning strategies for the health of those working and living in both counties. It is imperative that the public health staff strengthen their existing excellent knowledge, skills, leadership and expertise to be effective in health planning in their rural context, with all of its inherent strengths and challenges. The strategic plan for this region called for strategies to strengthen the leadership and expertise of the entire Health Unit in this regard. To do this, it is important to find relevant models, best practices and frameworks to guide public health work, generally and specifically in each of the existing projects and program areas. This Health Unit provides examples of innovative rural health planning that could be of benefit to others.

To be most effective in rural health planning, it is also imperative to have policy makers and service providers who truly understand the changing picture of the influences that shape health in smaller geographical and rural areas. Because the experiences, influences, strengths and challenges related to health are in dynamic change in rural Canada, it is important to have competent personnel who are in touch with the environment and who understand the citizens who live there, the health determinants and the formal and informal infrastructures that are in place. In this regard, it would be important to harvest the years of expertise and community relationships that have been built that make public health staff effective in this rural locale. The strength of this knowledge and the skills of community capacity building in a rural context could be lost if the decision-making and delivery personnel are far removed from the rural context and rural grassroots issues and connections.

Focus Group Results and Discussion

This section of the report presents the major themes and findings of the focus groups regarding working in public health in a rural area conducted in April 2007 with the staff of the Haldimand-Norfolk Health Unit. Sample quotes will also appear in an attempt to clarify the key points and to let the direct voices and opinions speak where possible.

Do you work in a rural area? How do you know?

All participant key informants involved in the focus groups responded to the question of whether they worked in a rural community with a clear and sometimes expressive affirmative, that "yes," they work in a rural area. When asked how they knew they were working in a rural area, they generated answers that indicated they knew it was rural because of: the geography, transportation and distances to travel, the use of the land for agriculture, self-definition, the philosophy and way of life, community relationships and lack of services and resources.

They are geographically rural ...
The focus group participants made reference to the visibly rural area with *"lots of green space"* and that *"we are reminded of the spring changes and the beauty of nature all around us."* The service area covers 4,400 square miles and is made up of one major city and many towns and villages. Many made reference to the more formal definitions that identified their area as rural, including their population density, the demographics of the area, the fact they are not attached to an adjacent metropolitan area, many of the residents are engaged in agricultural work (farming) and that many commute to other urban centres for work. They indicated that the area is indeed rural by many of these definitions. *"Yes, it is rural, because it is very agricultural and very open." "You see a lot of barns and animals, no skyscrapers." "It's alive (here)."*

Some made reference to private wells and water sources and that there is plenty of hunting, fishing and water activities. Several participants indicated that they see their area is becoming a rural and urban mix and that the rural life is changing. It was pointed out that they had some other rural indicators because within their boundaries, they also have a Mennonite, Low-German-speaking farming population, an Aboriginal population (on- and off-reserve) and migrant foreign workers brought in seasonally for the farming industry.

Transportation issues and distances to travel …

Participants pointed out that *"everybody is spread out"* and they know they are working in a rural area because it required longer distances and time to travel each day to accomplish their work. They also pointed out that they know they work in a rural area because they find people often by 911 numbers as opposed to street names and they have to look for historic and other types of landmarks and specific barns and structures to find their way.

Regarding transportation in the area, many pointed out that *"transportation – or lack of it-- is a huge barrier. (You) cannot get from point A to B." "Transportation makes it rural – there is no public transit."* Several participants discussed the isolation factors related to living in rural areas and motor vehicle accidents and injuries related to traveling longer distances on dark, winding country roads makes it more rural. They said that many in their area see London and Toronto as very far away and those from outside the area often don't even know that their area or cities exist.

Self-definition …

Increasingly, it is valid to ask people how they define themselves. This has been used effectively in helping people to define their race, ethnicity, sexual orientation or gender. The effect of "place" and where one is born or currently located has been found to have an impact on perspectives and health issues. In this regard, staff members were asked if they perceived that they were working in a rural area. *"Yes, we work in a rural area from identifying with other people who see themselves as rural." "We do things differently here." "In the city there is a hub-bub of activity."* Some saw their area as more rural than others because of their differing personal experiences and perspectives: having worked in Toronto or other big cities, having lived here all their lives or coming from smaller communities in the Arctic or other countries where they were born. Many mentioned that there were different *"degrees of rurality"* in self-definition and actuality across sections of the two counties they serve.

Philosophy of life …

Many made reference to there being a different way of thinking and living that made them feel they lived in a rural area. *"Different things are important. (There's) a different philosophy – how you treat time and space." "The way we think about things makes us more rural." "The education level makes it rural – people don't see beyond farm-ing – ideas are small town and they think people from Toronto are all about making money."* Several made comments about the changes with the *"huge numbers moving in (from the city) who don't feel connected to the commu-nity"* and that *"Values that are built in Toronto for example don't work here." "I worked in Toronto for a while … here it is an awesome sense of life and being alive – I love it here – it's alive."*

Community relationships …

Most made comments about the strong sense of community relationships that is indicative of it being a rural area. *"There is more value in community, everyone connects with everyone else and knows who's in charge of things – yes, it is rural and personalized."* Regarding the community, they commented on how "people know everything about each other." This was seen mostly as positive and evidence of connectedness. However, they also com-mented on the lack of confidentiality. *"The local hospital is not anonymous as in the big city – you can't get away with anything – everyone knows you but also everyone knows your neighbour, they are deeply rooted in this area and have lived here a long time – I am still the newbie after 20 years."*

Lack of access to services and resources …

You know it is rural because many health services are clustered in main areas and they have to direct clients to seek services, specialists and shopping amenities out of their area and in the cities. Many made comments that they, too, did not always have the funding and lack resources to do their public health work in a larger rural area because *"sometimes they, the decision-makers, don't understand what it is like to work in a rural area."* A few made comments that the cities also don't know what resources, programs and services are offered in their area. *"The cities don't know about us. They don't realize we have some services."*

What is unique and/or positive about working in public health in a rural area?

Some themes emerged in their discussions of what was unique and/or positive about working in public health in a rural area: the strong sense of community relationships and partnerships for collaboration, the philosophy and way of life, the resources and resourcefulness of the rural community, the ability to make their own decisions and leadership and living in a rural area contributes to their own and the populace's health.

A strong sense of community relationships and partnerships for collaboration …

By far, this was the main positive and unique part of what was identified as unique and positive about working in this rural area in public health. They highlighted how it is easier to partner because people know each other and they are personally or professionally acquainted with community, school, police and agency leaders and they in turn know who the public health staff are. *"Our community partnerships are solid …voluntarism is very high … we have a good sense of community." "Other agencies know we exist and access our services." "We know the people in the community and they just come to us. Because we are with the people and work and live here, we know what they need and want. We are closer to the grassroots and we know people through connections."*

They suggested that there is a high level of trust and credibility that they have built over time that makes it possible to quickly bring people together to consult, to set up programs (i.e. needle exchange program) or to get donations. *"Because we are smaller, not overwhelming, (there is) no hustle and bustle to get together." "You see them at the grocery store or the gym and you can talk to them about programs … and get the job done."*

In regard to client contact, they also felt the sense of community relationships made it possible to work on projects and to help one another *"If you have a fire – people stick together and help – more than in the big cities."* They pointed out that many of their staff have worked over a longer time and have established multigenerational links of service: *"Families stay in the area … you may have visited the mother when she had her children."*

People know the staff and their families and it was reported that they often comply because of embarrassment or they would felt humiliated that other people might know what happened. *"We were getting compliance without enforcement."*

The philosophy and way of life …

Many key informants commented on the pace of life and way of life in the rural area as unique and positive and less stressful. They said that rural people were used to identifying and solving problems and helping their own and these were compatible with rural health capacity building and health promotion models.

The resources and resourcefulness of the rural community …

All groups pointed out the number of *"fantastic and active"* churches and service clubs in the rural communities who have local leaders who are working on public health issues with them. They also commented that there is a misconception that urban sites get everything and pointed out that they have 12 day care centres out in smaller areas. They spoke proudly of many of their specific projects and saw them as resources specific to community needs to support their health. They pointed out how resourceful the rural community was and how they would bring forward clothes, money and resources to work together. Comments were also made about the natural resources and the beauty of their area as a positive and that it provided opportunities for outdoor activities.

Ability to make decisions and supportive leadership …

Most key informants felt the smaller bureaucracy within their agency made decision-making in their work a positive. They felt they had more control in creating programs and offering more services to wider groups of people. They felt they had an opportunity to have variety and diversity in their skills and the work they were engaged in. They felt that the leaders in the agency were facilitative and supportive to their expertise and this allowed them more empowerment and autonomy in their work. *"We know what needs to be done, we ask for it and usually get it." "We are more autonomous and independent." "(There is) not as much red tape in smaller rural public health." "You can see accomplishments of what you – you see the results … it starts and finishes with us."*

It is unique for speech pathologists to have their services attached to a Health Unit and this was seen as positive. They felt work in non-rural areas was more treatment focused, but they could use other interventions and approaches and never get stuck in a "treatment mode" only. In other program areas, that was remarked on often also: *"We can spend more time on education rather than focusing on enforcement."*
Some commented on the travel as a positive and that they had the opportunity to travel and appreciate all parts of their communities and it gave them time to think and plan.

A positive regarding their work for the community was described as, *"We don't put people on a waiting list like they do in the city. We find a solution right away. We will work through lunch before putting people on a waiting list."* Although this was mostly seen as positive, they felt they might be their own worst enemies doing this.

What is challenging about working in public health in a rural community? What are the obstacles to your work?

Most of the focus groups identified two major areas of challenges: those challenges and obstacles directly related to work in public health in a rural area and those challenges or obstacles that had an impact on the health of those living in rural communities that they were in a position to help address. Some of the major challenges they identified that related to work with public health in a rural area were: the community connections and challenges to confidentiality, the philosophy and way of life, specific challenges of limited access to health services and other resources for health, organizational support issues, problems with recruiting and retaining new staff in their field and special heath challenges for themselves and the populace as a result of living in a rural area.

Community connections and challenges to confidentiality ...

The community connections that are established in rural areas were seen as positive to their work and also a major challenge to their work in public health. First, because everyone knows them and each other, they found that confidentiality is often an issue. *"There is a lack of anonymity – especially if you grew up in this area –it's kind of weird when you are trying to get them to do something." "You can be called at home, it's all connected." "The kids you are working with may be friends of your kids."* They say, *"Hey, you're the condom lady."* They said that it could be hard for people come to you for AIDS information, STIs or parenting help because of these connections.

They identified the challenge to gain the trust of all their diverse clients especially if, *"you are not from here." "New people are viewed as (if) they don't belong – also, health professionals are viewed that way."*

Many commented on their perception that in the rural area is less ethnically diverse and they do not have as many multiple languages. The diverse communities of Aboriginal populations, the Low-German-speaking, Mennonite populations and migrant foreign workers in their areas tend to be clustered in areas of their own. *"Race is still an issue… people still say some negative comments towards people of colour. They can be more racist, sexist and homophobic."* They commented that some of the traditional churches and beliefs of the residents make them more homophobic or they don't see women in certain roles. The increase of the numbers who live in the rural area and work in an urban area has made more of a bedroom community in some areas and this makes for a challenge to get local civic participation and leadership in community health initiatives.

The philosophy and way of life of the rural community is changing and causing some conflict ...

Key informants pointed out that the philosophy and rural way of life is changing. Many urban dwellers are relocating to their rural areas and this has caused some misunderstandings. They perceived that urban folks come with expectations of having services and their urban lifestyles are different from what is offered in the rural setting. *"People came from London and went into culture shock thinking we had all the same services." "We are rural, but have a lot of cottagers and they have a different attitude and a lot more money and want more – they want speed and paperwork that travels at a different pace." "We deal with raccoons, bats, barn cats, deer, hunters. "People from the city don't want manure sitting next to their house."*

The environmentalists, farmers, developers and public health workers occasionally have some conflict with each other over land use and decisions. The Caledonia conflict regarding Aboriginal land rights has caused an ongoing conflict in the community and the public health workers saw it as far from being resolved.

The key informants also stated that, *"the people have an independent spirit – more private people – they don't want government intervention, whereas in (the city) it's more expected." "It can end up being challenging where there is a dog and a shotgun when you go to the property – they have a different way of handling their business." "It is difficult to explain what you need in view of what their value system is."* They felt that rural public health worker had a challenge to be aware of the differing beliefs, values and existing conflicts to work well in this rural setting and to start where the people were at to do their work.

Special challenges to health and limited access to health services and other services ...

The participants pointed out there was a shortage of physicians and clinics for primary health care. They were concerned that care for babies and the elderly are negatively affected. Waiting times for a doctor's appointment and having no doctor made access to timely health services limited. They felt it was harder to attract doctors

to rural areas to practise. They perceived a lack of emergency services and specialist services in the area. They noted that many residents have to be airlifted out. *"Realistically, if you have a very sick child, they are airlifted out of here. If you hear a helicopter you know there has been a tragedy in the community. You hear the airlift and feel, wonder if it is someone you know. That doesn't happen in the city."* *"Sometimes it is hard to access supports for people – they have no extended family … you're it sometime."*

Participants expressed that some particular public health initiatives may not get as much attention in the rural communities. Cervical screening was used as an example since, *"We don't have access to it – so why promote it?"*

Specific groups were identified as providing particular challenges for public health work in rural areas:

• *Youth health*, for there is little to do and few centralized places to work with them and a loss of youth to larger cities for education and after they are educated.

• *Migrant workers* and the challenges and approaches to educate them on the farms and places of work to discuss bike safety or other health issues.

• *Women and their children* who need education, day care and financial support.

• *The elderly who are isolated*, living at home, with relatives or in home care centers.

• *Farm workers.*

Other health challenges that were identified were:

• Sedentary lifestyle, seasonal work. *"(You) can't walk to the store, can't walk safely along country roads for exercise"* *"(You) have to go out of town and travel to take your kids swimming."*

• Lack of availability of healthy foods and money for the costs of good nutrition, especially in the off season – *"(You) eat fast foods because there are not the choices for shopping and food choices in rural restaurants or grocery stores close to home."*

• Inadequate, poor and dangerous housing.

• *"Those with lower financial means often don't see the reasons for smoking cessation or better food choices."*

• Motor vehicle accidents on the roads, in farming and with recreational vehicles.

• Drinking and driving.

• Depression and mental health issues because of isolation and poverty.

Challenges to recruit, train and retain rural public health staff …
They felt that the professional shortages were not only in the area of physicians, and that there were other health professional shortages, including a potential shortage of public health specialists to work in rural areas. *"People tend to come here, get experience and get pulled away to another centre due to opportunity and salary."* They felt they were recruiting good new staff, but those hired right out of school often leave after they gain skills and experience in order to have a social life offered closer to urban areas. *"If you're right out of school (you) won't find a social life here."* *"A lot of them are city people … (having) no social life is a huge issue."*

They suggested that the pay was less for rural staff, because the funding is based on the population stats, *"So we are smaller and don't paid as much."* *"It's harder to get people to stay … we don't have the restaurants, social life (and have) little organized entertainment."*

They suggested there was a need for training and education in universities and professional programs to prepare workers to work in a rural area. They identified the need for a coalition of rural public health specialists with a body of knowledge and increased support for rural public health specialists.

Economic challenges …
Key informants discussed both the economic challenges of carrying out public health work and the economic challenges for their rural residents that had an impact on their health status.

Regarding the economics of public health, participants in the focus groups discussed the reality that they cover

a geographically huge area with a sparse population. It takes three and a half to four hours to cross the area. They expressed concern that the formula for financing their work was based on the population and didn't take into account the reality of costs to reach a smaller population that is spread out. They faced a challenge of travel time and challenges to meet their mandate to all residents across the area. *"We are spending so much more time than those in populated areas."* They pointed out that they have a lower tax base, an aging population and fewer donations from businesses or industries to do their work. *"We have to fight for resources."* They identified the challenges of needing funding for more travel to work in a rural setting, a better staffing formula to take into account the distances and time to work in rural areas and increased funding for local marketing and public education campaigns that work in the rural setting.

Participants pointed out that their rural constituents have a higher unemployment rate and lower income that affects their overall health status *"They are too busy putting food on the table to know there are choices and services available to them."* Other economic challenges they identified were: small farmers have little money; the area has plenty of nursing homes, but not many larger employing industries or businesses and the tobacco industry historically had a big impact on the finances of the area but no longer does.

They also have spread out workplace venues that provide a challenge to planning workplace health and safety initiatives. *"We haven't got to the farm as a workplace yet."* Farms and workplaces *"are all so different."* Since there is little transportation within their area, many new enterprises are located near urban areas. Rural residents commute to larger areas and spend more money to go to work, to shop and to get health-care services. In addition, the increased travel has put them at greater risk of motor vehicle accidents. *"We lack jobs here … we've had lots of layoffs and our children don't have job opportunities."* *"Youth leave the area for jobs."*

The co-existence of rich and poor populations in their area …
Participants commented on their perceptions that they serve an area where some people have resources for health and cars to access services, while there are some very poor groups where money and basic resources impede their health and access to services. Their comments particularly were related to women with children.

"It can be hard for young women that need help or for people on a limited income." The cost to participate in health supportive programs and services was identified as a challenge particularly related to transportation problems in a rural area: *"… for example a Mom from here may have no car, language barriers, etc., and services may be in Hamilton – paying for parking and gas is expensive."* *"I have a mother who comes to see me and must bring all seven children with her. Most day care centres are full."*

Key informants said that different measures of success were needed for work in public health in a rural setting. They gave many examples, including the fact that you have to offer programs in many settings so that people can get to them. *"You can't expect the numbers of people to come out to something to be the same (as in urban areas) … you cannot measure success by the same numbers. It is challenging to determine what programs and services are viable with the resources you have in a rural setting. We do campaigns that try to encompass everybody."* **"We need more decision-makers to understand our work and different measures of success to be developed to measure results and outcomes…"**

The use of media and access to resources was discussed as a positive and also as a challenge in rural areas. Urban centre often get the dollars for media campaigns because of the numbers they can reach and they can work with fewer, centralized media. However, the rural health workers still need resources to work appropriately with local press, radio, newsletters and local and town internet sites to reach their constituents. The directives from the Ministry according to many key informants don't reflect an understanding of the rural setting: *"They have never been here and don't know the program won't work here. Our work is sometimes dictated by the needs and approaches from the bigger cities."* *"We don't have a problem with bus shelters or a lot of big office building"* re: smoking issues. *"We don't have home and apartment marijuana grow problems, they plant it in a huge corn field."* They pointed out that they have trailer parks, not subdivisions; well water, not city water; septic tanks, not city sewers; marijuana in corn fields, not in homes. *"Politicians don't value what we do."* *"The Ministry asks you why it takes so long to see a client … they don't understand (our) travel time."* *"The decision-makers do not know rural areas and the politicians are influenced by other priorities."*

They all articulated the fear that *"the distinct community personalities and public health expertise would be wiped out and the voices of the little areas will be snuffed out"* with potential future mergers and centralized planning and staffing.

Members of one of team particularly felt they did not have enough public health inspectors to do the practical work: *"Sometimes the work we do is reactionary. We don't have the luxury of time to do as much promotional, preventative or educational work."*

What knowledge, skills and experiences are required to work effectively in public health in a rural area?

They identified these particular knowledges, skills and experiences as being essential to work in rural public health:

"You need to be a 'jack of all trades' and you need a bigger bag of skills." Many suggested that you needed more skills to work in a rural area, and to be able to be generalists and specialists at the same time.

"You need capacity building and community mobilizing skills and the ability to facilitate leadership in others." Many suggested that to work in rural health you had to be able to empower others and develop and support community leadership. *"Don't come in as the big expert. You have to find where people are at and be coalition capacity builders." "You need to mobilize (others) and walk them through the change." "You have to value sustaining partnerships."*

"You need to be passionate about your work and about rural people." *"You have to be passionate about what you do to spark and motivate others." "You have to reach people with home-based things." "You have to really be in touch with what is going on in the community."*

They said **"you need high-level communication skills** *to be able to deal with the diversity in a rural context." "You need higher-order communication skills when working in rural areas because you are usually the only person working with the person."* They felt that good listening skills were essential. They also pointed out that it was important to be kind and compassionate, to be able to understand and to connect with constituents. They also made mention of being able to communicate through wider public communications and to have marketing and media skills that are appropriate to rural areas.

Many mentioned that part of this was to be knowledgeable about the community services and resources available to the area and communicate to their residents what they can offer and how to access them.

You need to be client-centred. Most felt it was important to recognize that each person, community and family is different. *"You have to 'get' the rural community." "You have to engage the client in goal setting."* They also felt that part of this was to respect client autonomy and self-determination to some degree to be able to help individuals and rural sectors to solve problems themselves.

You need to be flexible, adaptable, creative and resilient. *"You need to have a plan and be able to abandon your plan." "You need to be able to juggle priorities."*

You need to have some practical skills to work in rural areas. Many mentioned that you need to know north from south, to read a map well and to know you way around rural areas and translate "what barn" into landmarks. They suggested you need to have good driving skills, especially in the winter. Some said you should be healthy and be able to lug equipment around and to work in a variety of settings, homes and circumstances.

You need to be able to work independently and to be self-directed. Many comments were made about being able to problem solve, to find resources and to plan your day and your work independently as well as to work with others.

You need to know how to support each other. Many made mention of the need for mentoring and team work and meetings to support each other. They felt there was a challenge in a rural area because funding and other factors mean many staff are one-of-a-kind in their work or have small numbers dedicated to a program area: *"these people often don't have colleagues doing the same job."* They felt that you need meet and to celebrate successes with each other.

Focus group members described their orientation programs and buddying up with others for mentoring as being essential for learning from others to work in a rural area. Many made comments about how they liked working with their colleagues in this Health Unit and that their group support was positive.

You need to be able to measure outcomes and effectiveness in a rural sense. Many key informants made mention of the skills required to identify objectives and outcomes, to implement strategies, to meet outcomes and to be able to evaluate how effective they were at meeting them. They also pointed out that the strategies to meet outcomes and the markers for success may be slightly different in a rural area and such indicators, markers and outcomes need to be established that make sense in a rural context. They suggested this be done with input from the stakeholders.

According to the *Rural Think Tank* (2005), conducted in Canada, when selecting program staff you should consider individuals who:

• Are passionate about helping rural and remote residents.

• Share ideas and skills willingly.

• Understand the realities of living and working in a rural and remote community.

• Recognize local skills and build local leaders.

• Think and plan creatively.

They also suggest using the following five points (STAFF) as guides to find staff to work in rural areas. They need to be:

1. Supportive and innovative in delivering services.

2. Team approach to planning and delivering programs.

3. Approachable.

4. Facilitate leadership development.

5. Flexible and a *"jack of all trades."*

Quotes from the Rural Think Tank (2005) related to recruitment and training of staff in rural planning:
"Opportunities for staff training and development are limited in rural areas. Ideally they would like to participate in training that includes a rural perspective."
"Staff must set and maintain personal and professional boundaries because family and work relationships can overlap in a small community."
"It is essential to have the 'right person for the job,' someone who is sensitive to rural attitudes and creates an atmosphere of trust and respect."

What models are you familiar with that help you to work in public health in a rural area?

The main models focus group participants mentioned that they are currently familiar with and that they consider help in their work in rural public health are:

• The Determinants of Health.

• Population Health Approach.

• Transtheoretical Stages of Change Model.

• Community-Based Planning Model.

• Logic Model.

• Health Promotion Models.

• Best Practice Guidelines (RNAO).

Of the Community-Based Planning Model, many described networking, partnering and community development and community-capacity-building as strong aspects of what they do. *"Everyone has to use coalitions, networks, committees and task forces and involve others." "We need to work as a group around a table on issues and solve problems … they need our people power, we can't just set a meeting and slip out."*

Participants commented several times that they use logic models in planning and in their organizational operational plan. The main Registered Nurses' Association of Ontario (RNAO) Best Practice Guidelines (BPGs) they reported using were the ones for breastfeeding and postpartum depression. Many made mention (with pride) of the award they got from RNAO regarding the use of best practices in their work, and that *"We make every attempt to follow best practices."*

Other planning models that were also mentioned were the Ecological Model, the Health Belief Model, Social Learning Theory, Social Democracy Model (Finnish Equity Model), Maslow's Hierarchy of Needs and KISS (Keep It Simple Stupid). The two nursing models that were mentioned were the Orem Model and the Roy Model. However, a comment was made that nursing models generally aren't as relevant for rural public health work.

In addition, many staff made mention of the fact that they *"tend to look to other Health Units in dealing with specific issues"* and they look to what other rural Health Units, such as Elgin-St. Thomas, Huron County Health Unit, and Peterborough County Health Unit, are doing and modify them for their own work because *"their outlook is different from those in big urban centres."*

Many reported that the models and theories they learned in school for the most part did not help them in practice, especially in rural areas. *"When you come here, you understand that there are things that impact on us here that they don't teach you."* A suggestion was made that, *"theoretical multiplicity is the order of the day. (You) have to switch if one isn't working."*

Some teams made mention of using existing theories and models more in their work; others did not mention using any theories or models in their work. No teams made mention of any cultural models such as Leininger's Theory of Diversity and Universality or Purnell and Paulanka's Transcultural Nursing Model or rural health planning models such as The Rural Lens or those models developed by the Rural Canadian Partnership.

Note: Participants shared stories of many of their initiatives and approaches to child and family health, workplace health, injury prevention and youth work that were examples of best practices. One of the recommendations is to write these up and to share them with others at conferences, in university health programs and in the literature.

What components should be in any model for rural health practice?

These are the suggested components of a model to help plan rural health initiatives that were generated from the questions posed in the focus groups. The ideas came out randomly, but were analyzed and put into like areas and stages of planning. These are ideas they feel must be in any model, best practice examples or planning frameworks.

It should have a planning framework or approach…

- Conducts needs assessment.
- Has a work plan with steps and process.
- Puts theory, process and practice together.
- Identifies outcomes and desired changes.
- Maps the issues, concerns, trends and directions.
- Is an overall planning approach but has decentralized delivery approaches close to the people who are affected.
- It should be specific and holistic as well.

It should be inclusive and build partnerships…

- Focuses on partnering, networking and coalition building.
- Values sustaining partnerships.
- Includes diversity and a variety of opinions and backgrounds.

It should be client-centered and community-focused…

- Starts with where people, resources, leadership, issues are at and builds from there.
- Includes stakeholders in the process, decision-making and leadership.
- Is client-focused (individual and community clients).
- Uses specific knowledge and awareness of sub-populations, demographics, trends, needs, health challenges and health strengths.
- Values diversity and open-minded attitudes and starting from where people are at.
- Is respectful of the diverse experiences and points of view of others.

It should be action oriented…

- Has the capacity to make positive change and to mobilize action for change.
- Builds the capacity of the community to take action and leadership.
- Implements strategies, programs, approaches, projects and initiatives with others.
- Has a sustainable plan for leadership development and ongoing action.

It should have the resources to do the work…

- Has the necessary human resources, leadership development and sustainability, funding, travel, media, communications tools (cell phones, laptops), facilities, planning monies and research monies to carry out the work in a rural context.
- Has an educational-, consciousness- and culture-developing capacity.
- Recruits, educates and retains the rural health leadership and knowledge in agencies and in the community.
- Provides education and training to planners and participants in the process.
- Ongoing leadership and knowledge building and transfer.

It should have the necessary collaboration and support to be successful…

- Uses a team work and a collaborative approach.
- Has the support from politicians, managers, decision-makers and other care providers.

It should include research/evaluation from start to finish…

- Has evaluation of outcomes and process built in to the model.
- Identifies data that are collectable, usable and understandable.
- Collects scientific and quantifiable data and data that take into account people's perceptions, meanings and experiences.

It should have the capacity to celebrate, share and advocate…

- Has ways to celebrate successes and see how far they have come, how awesome and resourceful they are.
- Has ways to share the programs, projects, problems and successes.
- Has ways to share best practices, staff expertise and stories.

Models, theories, frameworks and best practices for rural health planning

A brief description of some of the key existing models, theories, frameworks and practices that have been developed and documented for rural health, or could be adapted well for rural public health work, will be presented in this section for review. Models and frameworks offer planning approaches and possibilities for research. Best practices provide an approach to continuous learning and improvement by offering processes, planning approaches and tools. Best practices offer a benchmark from which further evidence gathering, learning and improvements can evolve.

Overall Canadian Models, theories and practices

The Canadian Rural Partnership

This partnership was established in 1998 and it has promoted greater consideration of rural issues and concerns in the design and delivery of federal policies and programs. It encourages departments and agencies to scrutinize their policies and programs through The Rural Lens (Government of Canada, 2007).

The Rural Lens is a way of viewing issues through the eyes of rural Canadians in order to raise awareness of rural and remote issues by asking them to assess the effect of policies and decisions and services on Canadians living in rural and remote areas. It is an attempt at the federal level to ensure that initiatives support the social and economic well-being of rural and remote communities and strengthen the capacity of communities to meet local challenges. This Lens highlights rural concerns such as maintaining safe communities and promoting the value of rural Canada as a place to live, work and raise a family.

The Federal Framework for Action in Rural Canada

This initiative involved rural Canadians who identified the following as areas for needed focused attention and improvements:

• Access to federal government programs and services.

• Access to financial resources for rural business and community development.

- More targeted opportunities, programs and services for rural and Aboriginal youth.

- Rural community-capacity-building, leadership and skills development.

- Infrastructure for community development.

- Skills and technology to participate in the knowledge-based economy.

- Economic diversification in rural Canada through more targeted assistance.

- Access to health care at a reasonable cost.

- Access to education at a reasonable cost.

- Strategic partnerships to facilitate rural community development.

- Promotion of rural Canada as a place to live, work and raise a family.

The Rural Lens

The Rural Lens proposes the following areas to address when planning and making decisions involving rural impacts: **considerations** (questions for program/policy developers and decision-makers), **delivery** (issues to consider for delivering initiatives), **communications** (issues to consider for communicating initiatives) and **research** (measuring and evaluating rural impacts).

Considerations Questions for program/policy developers and decision-makers:

- How is this initiative relevant to rural and remote Canada?

- Is the impact specific to a selected rural or remote environment or region?

- Have the most likely positive and negative effects on rural Canadians been identified and, where relevant, addressed?

- Is the initiative designed to respond to the priorities identified by rural Canadians?

- Have rural Canadians been consulted during the development or modification of the initiative?

- How is the benefit to rural Canadians maximized (e.g., cooperation with other partners, development of local solutions for local challenges, flexibility for decision-making)?

Delivery - Issues to consider for delivering initiatives:

- Identify the factors that affect the delivery of the program, policy or service (e.g., geographic distance, limited access to government offices and to the internet).

- Determine the appropriate delivery vehicles, which accommodate rural and remote considerations.

- Partner with organizations (e.g., other departments/agencies and/or levels of government, private sector, non-governmental organizations) to maximize benefits.

- Consider using community-based organizations to deliver the program or service to meet unique local challenges.

- Address concerns regarding roles and responsibilities of differing government levels.

Communications - Issues to consider for communicating initiatives:

- Test communications products and messages with both rural and urban Canadians.

- Identify the communication vehicles appropriate for rural Canada (e.g., community-based local newspapers, radio, posters at government offices, local TV).

- Advertise new programs and services through the 1-800 O Canada toll-free line, the Canada site (www.canada.gc.ca) and the rural site (www.rural.gc.ca).

- Refer to the Canada Rural Partnership, the Federal Framework for Action in Rural Canada and the Government of Canada's commitment to rural and remote Canada where appropriate.

Measuring and Evaluating Rural Impacts

- Determine how the initiative will be assessed for rural implications during the design, development and implementation.

- Determine how the initiative will improve the quality of life for rural Canadians (e. g., health, education, economic and community benefits).

- Identify the phases (e.g. pilot, post-implementation evaluation) where rural considerations will be reviewed to determine if changes are needed to accommodate rural needs.

- Include rural considerations during periodic reviews of the initiative.

- Modify new initiatives to accommodate rural issues where appropriate.

Specific Canadian project models for rural development and community capacity building

In 2005, the Ministry of Agriculture and Agri-Food funded a research initiative to investigate an integrated approach to services in rural communities. This *Integrated Hub Model* was already functioning in Manitoba. This initiative produced reports and fact sheet descriptions on different models that were used for different rural health issues, rural community settings across Canada, target populations, approaches to community and unique initiatives. Many of the models provide community-capacity-building and leadership development for health in diverse rural circumstances and detailed information on these models can be found at www.rural.gc.ca/programs/social_e.phtml.

The models described in more detail that can be adopted, modified or adapted to other rural settings and target populations are:

- The Integrated Hub Model.
- Community Consensus Building.
- Community Collaboration Project.
- The Rural Philanthropy Resource Network.
- The Rural Knowledge Cluster.
- Models for Sustainable Community Learning.
- Leading communities.
- Northern governance and community Capacity Building Model.
- Social Enterprise: A Community Wealth Builder.
- Micro-Credit Financing.
- Youth Engagement in the Community.
- The Place aux Jeunes.
- The Skownan Model.
- Kuglutuk- Tahiuqtiit Model.
- Reseau Migration – Foire des Villages.
- Maisons Familiales Rurales.
- Universite Rurale Quebecoise.
- Yukon Sustainable Partnership.
- Les Petit Crayons.

Rural women's health approaches and strategies

In Canada, *Rural, remote and northern women's health: Policy and research directions final summary report* (Sutherne, McPhedren & Haworth-Brockman, 2003) included an extensive review of the literature available in the field, a summary of national consultation with rural women across Canada, recommendations for research priorities and a 27-point agenda for policy recommendations. The report is a landmark summary of the field of rural health in general and women's health in particular. It could be used to develop a framework of planning for policy, research and community developers in the field of public health. It also could be used to generate projects and initiatives to address many of the recommendations in a rural setting to improve health for women, old and young, who live in rural areas.

The use of the Canadian Rural Partnership Community Decision-Making Toolkit in specific rural health projects close to Haldimand and Norfolk

(www.rural.gc.ca/decsion/tools_ephtml)

The Township of North Dumfries by Waterloo Cambridge implemented several rural programs. One such program was "to close the distance" between youth and seniors. It was funded by Public Health Aging of Canada (PHAC) in January 2005 and was entitled *Youth and Seniors creating relationships — The Intergeneration Mini-grant Program.* Social isolation has been identified as a significant problem facing youth and seniors in rural areas.

The project results are available along with their use of some of the decision-making tools and models they used from the *Canadian Rural Partnership Community Decision-Making Toolkit* including: Force Field Analysis (driving and restraining forces), Effort-Impact Grid, Plus/Minus Implications, SWOT Analysis (strengths, weakness, opportunities, challenges), Brainstorming, Charette Procedure, Asset Mapping, Dotmocracy, Community Dialogue, Nominal Group Technique, First Impressions and Multi Voting. Many of these tools provide methods for consultation and inclusion, evaluation, decision-making, leadership development, creative problem solving and strategic planning that are relevant tools for rural health planning.

B.C. Rural Academic Health Project

The College of Health disciplines at the University of British Columbia developed a Rural Academic Health Project (RAHP) (2007) aimed at developing a longer-term sustainable model for strengthening inter-professional student placements in rural British Columbia. The project was aimed particularly at pre-licensure, entry level knowledge and application experience in rural health. However, it was also intended to develop the capacity for ongoing professional development and research for the health disciplines in rural health.

Rural health models in the United Kingdom (U.K.)

In the U.K., in 2004 a conference on rural health convened more than 1,000 nurses, doctors, allied health providers, managers, policy makers and community members from rural and remote areas in Australia to discuss the state of rural health (Gilmore, 2005). The result were 18 priority and 250 delegate recommendations covering indigenous health, mental health, arts-in-health, the health workforce and research that could help rural communities deal with the health and social effects of the drought. The article by Gilmore entitled *Rural health: Different issues, different answers* outlined recommendations at the end of the conference and this was used by the National Rural Alliance to plan their future work.

Significant differences were noted about this rural health conference as "it explores health from different angles, taking into consideration aesthetic, ecological, social and economic factors, as well as more orthodox issues to do with the provision of care." Art-in-health is often a major focus in the U.K. with film, singing, music and dance being used to lighten the load for those who go home to rural and remote areas and to provide alternative ways of healing individuals and groups in isolated settings. In the year of the conference, they gave a strong focus on remote area issues and on health of indigenous Australians. They addressed financing reform for rural health, diversity in rural health and "one size dies not fit all," barriers that prevent people from accessing high quality care wherever they live, delivering better Primary Health Care services at both ends of life and facilities in rural areas. "Women having babies and older people needing help at home are often required to leave family and friends and relocate temporarily or permanently to cities or regional towns during those life events" (Gilmore, p. 15).

Conference participants raised concerns about boundary issues between jurisdictions, professions and practice modes and how health reform at local, state and national levels could improve outcomes for patients. They identified a number of successful programs as model programs that should be replicated widely. They generated ideas for how health workforce challenges can be overcome, and a number of specific research proposals relating to rural and remote health. The 9th National Rural Health Conference (2007) proceedings are available in a report that presents 18 priority and 250 delegate recommendations for rural health planning. Some of these recommendations have relevance to Canadian rural health planning. The Australian Government developed a publication *Building Healthy Communities: a guide for community projects to deal with chronic disease at the local level* (2004).

Rural health models in the United States

The Rural Assistance Center (RAC) has developed summaries of successful projects addressing rural health and rural human services issues. In addition, they have created a web site to share success stories and link to tools and models for health planning and developed a rural monitor newsletter and several publications. To assist in the development of best practices, they also offer links to several tools for work in rural health including: an idea generator, a database for health disparities projects and interventions, a web site entitled Managing Information with Rural America (MIRA), a database on NACCHO's model practices, National Health Corps success stories, a web site on Models that Work, links to rural best practices, model projects, case studies, a Rural Health Outreach Grantee Directory, Rural Healthy People 2010: Models of Practice, success stories database and the USDA Rural Development success stories. These resources are available at www.raconline.org/success/.

Formal planning and health promotion models, theories and frameworks relevant to rural public health work

The determinants of health

The determinants of health have been used to guide health promotion and planning and suggest that at every stage of life, health is determined by complex interactions between social factors, economic factors, the physical environment and individual behaviour. These factors do not exist in isolation of each other and their combined influence determines health status. The determinants of health include: income and social status, social support networks, education and literacy, employment/working conditions, social environments, physical environments, personal health practices and coping skills, healthy child development, biology and genetic endowment, health services, gender and culture.

Raphael (2004) explored the socio-economic determinants of health from a Canadian perspective. He is quoted in The Canadian Nurse Association (CNA, 2005) backgrounder paper on the social determinants of health and nursing:

> "social determinants of health are the economic and social conditions that influence the health of individuals, communities and jurisdictions as a whole. Social determinants of health determine whether individuals stay healthy or become ill (a narrow definition of healthy). Social determinants of health also determine the extent to which a person possesses the physical, social and personal resources to identify achieve personal aspirations, satisfy need and cope with the environment (a broader definition of health). Social determinants of health are about the quantity and quality of a variety of resources that a society makes available to its members" (p. 1).

The World Health Organization (Wilkinson & Warmot, 2003) identified the following as the most important determinants of health: poverty, economic inequality, social status, stress, education and care in early life, social exclusion, employment and job security, social support and food security.

In 1996, Statistics Canada estimated that 23% of years of life lost from all causes prior to age 75 could be attributed to income differences (in Raphael, 2004). The two diseases where the links to social determinants have been investigated most thoroughly are heart disease and diabetes.

Juanita Sherwood, a nurse who has worked over 25 years in Aboriginal health and education in both rural and urban settings, however, expressed frustration with using the social determinants of the health model with Aboriginal populations (Anonymous, 2006). She feels that "the model does not adequately reflect indigenous understandings of health." She also felt it didn't "adequately acknowledge the impact of insitutionalised racism and colonization" (p. 25). Ultimately, she believes to work with indigenous populations, you need to give them more control over looking after their matters and to work on what is important to them. Professor Kildea, who works in Australia, agrees and gives the example that simply advising a young pregnant mom who is not gaining weight to eat more is not adequate and that the nurse should work with the elders to ensure that more food is available to her.

The population health approach

The Population Health Approach is positioned in the Public Health Agency of Canada (PHAC) (2007) as a unifying force for the entire spectrum of health system interventions – from prevention and promotion to health protection, diagnosis and treatment and care. The approach is integral to the department's broader role of improving the health of Canadians. As an approach, population health focuses on the interrelated conditions and factors that influence the heath of populations over the life course, identifies systematic variations in their patterns of occurrence and applies the resulting knowledge to develop and implement policies and actions to improve the health and well-being of those populations.

The key steps in this approach are: address determinants of health, focus on the health of populations, invest upstream (in prevention and health promotion), base decisions on evidence, apply multiple strategies to act on the determinants of health, collaborate across levels and sectors, employ mechanisms to engage citizens and increase accountability for health outcomes.

The historic landmarks for the population health approach in Canada as outlined in the PHAC (2007) paper are:

• In 1974, LaLonde prepared the White Paper LaLonde Report regarding new perspectives on the health of Canadians related to lifestyle and social and physical environment improvements.

• In 1986, The Ottawa Charter for Health Promotion was developed entitled *Achieving health for all: A framework for health promotion* (Epp, 1986) that included broader social, economic and environmental factors that affect health.

• In 1989, The Canadian Institute for Advanced Research (CIAR) introduced the population health approach proposing that individual determinants of health do not act in isolation and are interrelated to other influences.

• In 1994, the population health approach was officially endorsed by the federal, provincial and territorial Ministers of Health in a report entitled *Strategies for Population Health; Investing in the Health of Canadians.* This document was intended to provide a framework to guide the development of policies and strategies to improve population health.

• In 1996, the Public Health Agency of Canada released *Towards a common understanding: Clarifying the core concepts of population health a public health agency of Canada discussion.*

According to the Public Health Agency of Canada (2007), using the population health approach involves taking action on the complex interactions between factors that contribute to health and requires the following:

• A focus on the root causes of a problem, with evidence to support the strategy to address the problem.

• Efforts to prevent the problem.

• Improving aggregate health status of the whole society, while considering the special needs and vulnerabilities of sub-populations.

• A focus on partnerships and intersectoral cooperation.

• Finding flexible and multidimensional solutions for complex problems.

• Public involvement and community participation.

The Social Cognitive Theory

In 1941, Miller and Dollard proposed the theory of social learning. In 1963, Bandura and Walters broadened this concept and added the principles of observational learning and vicarious reinforcement. Bandura added the concept of self-efficacy in 1977. This theory is relevant to health communication because it deals with cognitive and emotional aspects that help shape behaviour. The social cognitive theory explains how people maintain certain behavioural patterns, while also providing the basis for intervention strategies (Bandura, 1997). Evaluating behavioural change according to the SCT depends on the triadic factors of the environment, person and behaviour, SCT has been used to provide a framework for designing, implementing and evaluating programs. It has also been foundational in the development of many of the health promotion models that are used in public health planning.

The Health Belief Model (HBM)

This is a psychological model that attempts to explain and predict health behaviours by focusing on the attitudes and beliefs of individuals. It was first developed in the 1950s by social psychologists Hochbaum, Rosenstock and Kegels (in Rosenstock, Strecher & Becker, 1988) in the Public Health Service in the United States regarding a response to a free TB screening program. Since then, this model has been used to explore short- and long-term health behaviours such as sexual risk behaviours and the transmission of HIV/AIDS.

HBM spelled out four constructs related to an individual's readiness to act: perceived susceptibility, perceived severity, perceived benefits and perceived barriers. The cues for action are also part of the model that helps activate that readiness and stimulate overt behaviour. The concept of self-efficacy was an added dimension to this model that suggests that one's confidence in his or her ability to perform an action can help an individual deal with challenges such as changing habitual unhealthy behaviours such as lack of exercise, smoking or overeating (Glanz, Rimer & Lewis, 1997; 2002).

The Transtheoretical Stages of Change Model

The Transtheoretical Stages of Change Model as outlined by Prochaska and DiClemente (1984) involves progressive steps in the process of change related to health behaviours and decision-making: pre-contemplation, contemplation, preparation, action and maintenance. The process involves weighing the pros and cons of the decision.

The Maslow Hierarchy of Needs Theory (1943)

The Maslow Hierarchy of Needs Theory suggests that you progress through level of need satisfaction: safety and security, belonging and self-actualization. Heylighten (1992) reviewed Maslow's theory and added more detail to the concept of self-actualization and the need for growth and psychological satisfaction.

The Precede-Proceed Model

The Precede-Proceed Model for health promotion planning is built on 40 years of work by Dr. Lawrence Green and has been used as a planning model in the United States, Canada, Europe, China, Australia, Singapore, Japan and Africa where there are rural populations. In 2001, a study was conducted by Linnan that surveyed 253 universities offering graduate and post graduate degrees specialization in health education and found that the Precede-Proceed Model was taught by 88% of the universities and used by 85.7% in teaching and by 74.6% in practice -- the highest among 10 models listed. It was also ranked highest of the models in its usefulness for research (86%) and usefulness for practice (90.8%). Green and Kreuter (2005) teamed with Robert Gold, of the College of Health and Human Performance at the University of Maryland, to build EMPOWER (Gold, Green & Kreuter, 1998), a CD ROM software and manual resource to help in planning. They suggested that "If you want more evidence-based practice, we need more practice-based evidence" (p. 15).

The Health Promotion Model (HPM)

The Health Promotion Model described by Pender, Murdaugh and Parsons (2005) has been revised as a framework since 1996 for planning and research. It has been used particularly for the promotion of healthy lifestyle

behaviours including physical activity and eating. The HPM identifies the determinants of health-promoting behaviours as including general individual characteristics and experiences that influence behaviours indirectly, and four behaviour-specific cognitions that affect behaviour specifically (perceived benefits, barriers, self-efficacy and interpersonal influences on behaviour change). Health promotion according to the World Health Organization (WHO, 1986) has been described as the process of enabling people to increase control over and improve their health.

Nursing theories

A nursing theory link page is available from Clayton State University (2007) with descriptions and links for details on many of the nursing theories and models that may have relevance to working in rural areas. Marriner-Tomey and Alligood (2005) also reviewed and described nursing theories and their application to practice.

Transcultural theories and models

The Leininger Transcultural Nursing Theory and Diagrammatic Sunrise Model is helpful for rural health planning, in that it takes into account the social, environmental and political contexts that are particularly relevant the rural health. People who live in a rural context inhabit a rural cultural context with beliefs and values that have an impact on their health beliefs and practices. Other cultural planning models that are available are the Purnell and Paulanka (1998) care approach and the Griger and Davidhizar (2004) nursing cultural care model.

These models may be of increasing importance in public health work in a rural context. Surkan was quoted at the Third Annual Rural Conference, in Red Deer, where she is mayor, as stating, "They (rural communities) have not really dealt with true diversity, and yet the future of our rural communities will depend on being inclusive of many cultures, languages, values that may not be familiar as those we've historically had inside our communities … The real challenge is to be inclusive after being homogeneous for so long" (2004, in the Canadian Rural Partnership Newsletter, 2005).

Other change models for personal and community change

Weinstein and Sandman (1992) developed a seven-stage theory entitled the *Precaution Adoption Process Model* that moves along a continuum of action likelihood from ignorance to completed preventative action. Schwarzer (1992) developed the *Health Action Process Approach* for goal achievement through phases of action: risk perception, outcome expectancies, goals, planning, initiative, maintenance and recovery. The theory also takes into account barriers, resources and self-efficacy. Kurt Lewin (1951) developed a change process to plan change from the existing state toward the desired state. Restraining forces and driving forces are analyzed and dealt with in order to unfreeze, mobilize and refreeze in the new desired state. The *Healthy Cities/Healthy Communities Model* of the WHO has been adopted internationally for over 10 years and planning strategies have been developed that could help in rural health planning.

Recommendations and specific strategies

This section will present recommendations that emerged from the literature review; focus group input of staff and the review of models, theories, best practices and frameworks. Each area will contain specific recommendations for how to proceed to further develop expertise and best practices in rural health for the Haldimand-Norfolk Health Unit. Specific example activities and strategies are given for each section. It is suggested that the next logical step would be to review this report and the specific recommendations and implications for future action. If this set of recommendations is adopted, staff could be engaged in an exercise to brainstorm specific strategies attached to each recommendation for each team and program areas. This follow-up workshop could be facilitated by an outside facilitator.

Recommendations regarding recruitment, education and retention of staff

1. Attract new staff members who understand working and living in a rural community and who have the training and the required skills to be successful.

2. Advocate for university and professional programs to include rural health issues, models for rural health promotion and planning, rural health internships and clinical placements and rural health research in their curriculum.

3. Continue to offer good orientation, mentoring and ongoing education opportunities for ongoing development of rural health planning, implementation strategies and research skills for all staff.

4. Advocate for equal, or better, pay for rural health staff so that the Health Unit can compete for and retain current talent.

5. Continue to develop teamwork and support networks for the general populace and also for public health staff to increase retention beyond their first few years of practice.

6. Help staff to further develop their assessment skills, their community development skills, their political savvy skills and their marketing skills to better be able to build the capacities of various rural sectors.

Example of a specific strategy for #1. Send a letter to the nursing programs at Brock University, McMaster University and the University of Western Ontario to advocate for curricula, content and clinical placements for rural health nursing. Design and offer a two- to three-hour public health presentation to each of the nursing programs and other related health programs at these universities on rural health (definitions, challenges, research, best practice skills and programs).

Recommendations regarding organizational structure and supports for public health work in their rural areas

1. Develop a list of key rural health needs for the area served and develop initiatives and specific strategies to address each of them.

2. Develop indicators and methods of measuring the outcomes and effectiveness of programs that might be more specific to rural areas.

3. Advocate for increased funding based on the real needs for travel, staffing and the time required to work in a rural context.

4. Explore other governance structures that further support public health effectiveness in a rural area. The present structure has a County Council as the board of health; perhaps an independent health board could deal better with public health issues and priorities.

5. Educate politicians and decision-makers in rural health and to look at all their decisions through a Rural Health Lens.

6. Advocate for a specific coalition for rural public health specialists so that they can meet and share expertise and build the body of knowledge and practice of rural health work further together.

Example of a specific strategy example for #6: Suggest that at the next Public Health Ontario and national conferences that themes and special sectors be established for rural health specialists. Send workers to conferences and education sessions specific to rural health.

Recommendations regarding models, best practices and frameworks to use for rural public health

1. Explore various models and frameworks of planning that are general and have been found to be appropriate for rural health planning (Health Determinants, Health Belief Model, Transtheoretical Stages of Change, Social Learning Theory, Penner's Health Promotion Model, the Precede/Proceed Model and Transcultural Models). Adopt a model, or several, that is best used in specific rural health planning. Evaluate the effectiveness of the use of such an approach for planning or best practices.

2. Explore and critically review several models and frameworks that were developed that are specific to rural health (Rural Health Lens; Models for Rural Development and Community Capacity Building). Adopt a model, or several, that is best used in specific health planning initiatives. Evaluate the use of this approach to planning or rural best practices.

3. Explore and critically review various best practices that have been developed for health initiatives that are relevant to the public health mandate, programs and services (RNAO Best Practice guidelines; Rural Health Models and best practices www.rnao.org; www.rural.gc.ca/programs/decsritions_ephtml).

4. Develop a new model of rural health planning based on the experience of your Health Unit and the components staff identified to contribute to the field and submit it for publication, peer review and pilot evaluation.

Example of specific strategy for #3: Advocate with RNAO to convene a taskforce to explore and develop Best Practice Guidelines for Rural Health and offer to chair or be a member of the group.

Recommendations regarding new programs or service initiatives to address specific rural health needs

1. Conduct a brainstorming and decision-making organizational exercise to review several new initiatives with specific target rural sub-populations and specific needs that emerge from a review of the evidence and available reports.

2. Within your overall mandate, choose several key new initiatives to pilot, implement, market and evaluate that have a rural health focus.

Examples of specific strategies for #2: Farming as a workplace, health and safety on the farm, migrant workers health initiative, rural safe driving initiative, rural youth health, elderly living at home in a rural context: safety and socialization connections, exercise for rural folks who live in the country and along rural roadways and youth and elders connection and co-leadership project.

Recommendations regarding taking leadership and sharing expertise in rural health and best practices

1. Write up several of the key existing programs and services that are examples of rural public health best practices (title, background, model description, funding, research/evaluation, outcomes and contact person) and submit them for review.

2. Submit an abstract to several professional and research conferences regarding your experiences, skills and lessons learned from rural public health work (results of your focus groups, best practice programs, etc.).

3. Review all of your documents, formal communications and ways of reporting (annual reports, newsletters, etc.), and where appropriate, brand your area of rural expertise and leadership with sayings, visuals and ways of communicating your expertise in this area.

4. Have staff prepare and publish reviews of existing reports and books relevant to rural health.

5. Submit a funding/research proposal along with Brock University for a specific and needed rural health project or organize and host a Rural Health Summit for rural public health practitioners.

Examples of specific strategies for #3: *"We are leaders in rural health." "We lead with others in rural health." "Developing leaders for the future health of rural areas." "Rural health – we build a healthy community together.""To strengthen our leadership in rural health strategies."*

Recommendations regarding future research and evaluation

1. Write up the results of current evaluations for rural health publications.

2. Submit a proposal for research funding.

3. Develop the applied research skills of all staff further by conducting an educational session on research and ensure that staff members are able to continue their education and develop evaluation appropriate to their work, skills and time available.

> *"We have the know-how – let's do it, and let's share it!"*
> (Kilty, 2007)
>
> *"Together we build on what we have, and we will take action for sustainable rural communities – where there is heart and where there is hope"*
> (A message from Honourable Wayne Easter, Parliamentary Secretary to the Minister of Agriculture and Agri-Food with Special Emphasis on Rural Development, Canadian Rural Partnership, 2005).

"We need to understand rural communities as essential living environments where people feel they have a shared sense of future, where they have influence, where they work together to build common value systems" (Surkan, 2006 , Mayor of Red Deer, at the Third National Rural Conference, 2004 in The Rural Canadian Partnership Newsletter, 2005).

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