

Health Region Taxonomies: rural-urban continua in Canada

Roger Pitblado^{1,2,3} Irene Koren^{1,3,4} Denis Heng¹ Claudia Lagacé⁵

¹ Centre for Rural and Northern Health Research, Laurentian University

² Department of Geography, Laurentian University

³ Sudbury & District Health Unit

⁴ School of Nursing, Laurentian University

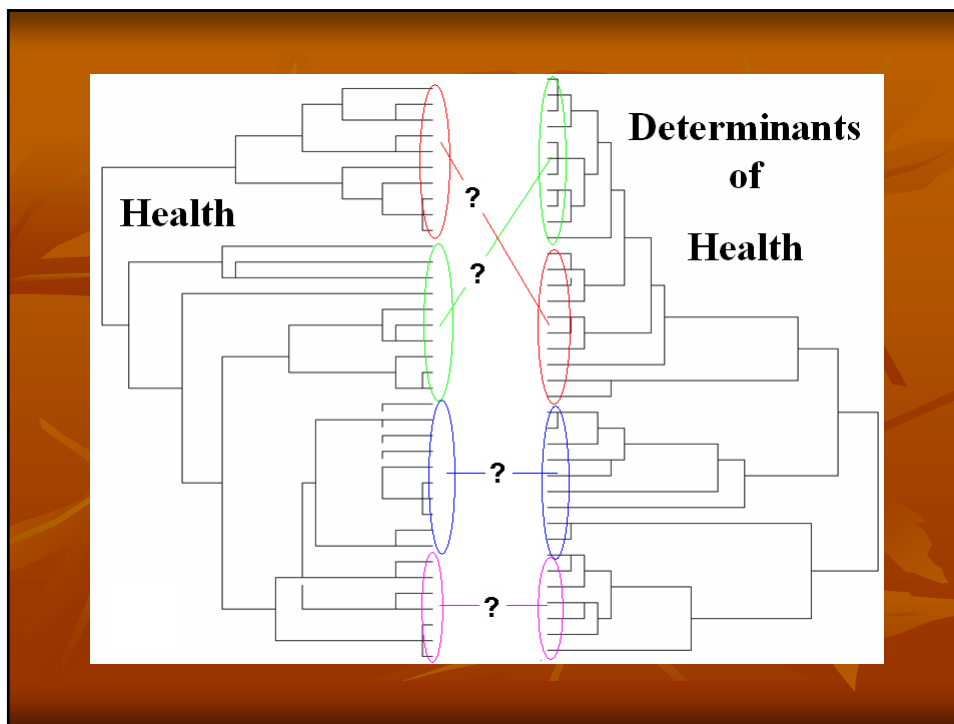
⁵ Centre for Chronic Disease Prevention and Control, Health Canada

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What are the Determinants of Rural Health?

- Create groups of rural communities to:
 - Describe heterogeneity of rural communities
 - Identify key determinants of rural health
- Communities equated with census subdivisions (CSDs)

	Health Status Indicators	
Health Determinants	Like	Unlike
Like	Type A	Type B
Unlike	Type C	Type D



While waiting for Claudia ... “the rural health deficit”

- 1991 Pampalon (Québec)
- 1999-2002 Pitblado & Pong, Pong & Pitblado, etc. (Ontario)
- 2002 Shields & Tremblay, Tremblay et al. (Statistics Canada)
- 2002 Romanow Commission (Health Canada)
- 2003 Mitura & Bollman (Statistics Canada)
- 2003 Martens (Manitoba)

Census

- Demography
- Income and Housing affordability
- Dependency ratios

CCHS

- Self perceived health status
- Use of health care services
- Health behaviours

Non-CCHS

- Death rates due to cancers
- General mortality rates
- Life expectancy, PYLL, etc.

Defining Rural

“Rural and Small Town” (RST)

- Core population < 10,000
- Cities, towns, villages, townships, etc. outside of Census Metropolitan Areas and Census Agglomerations
- OECD-like categories
 - Predominantly Rural (50+% RST)
 - Intermediate (15-49% RST)
 - Predominantly Urban (<15% RST)

Figure 1. Predominantly rural areas have the lowest proportions of women (18+ years of age) who experience a lot of life stress.

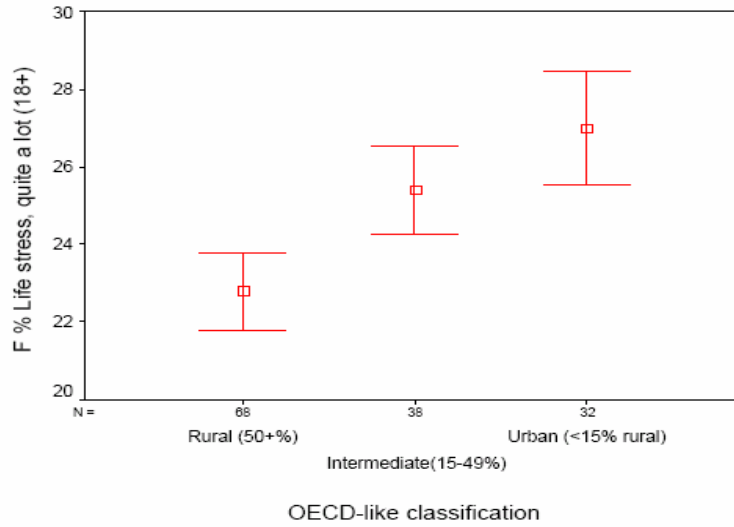


Figure 2. Predominantly rural areas have the highest proportions of deaths (for women and men) due to unintentional injuries.

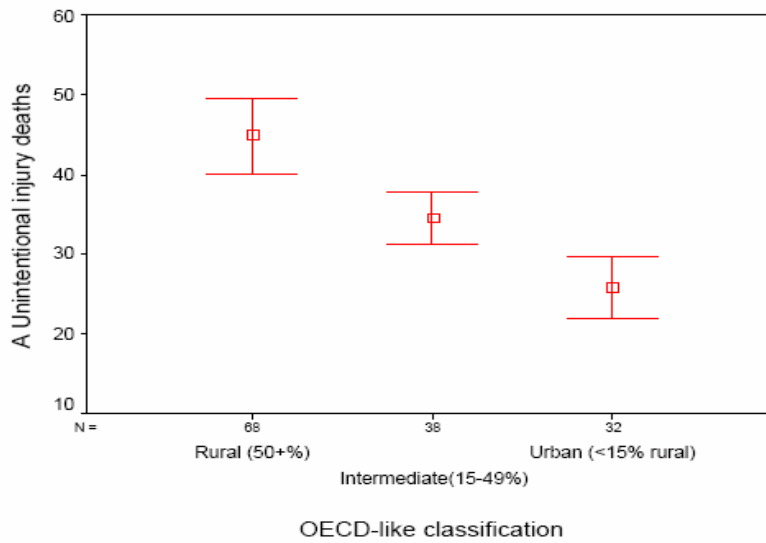
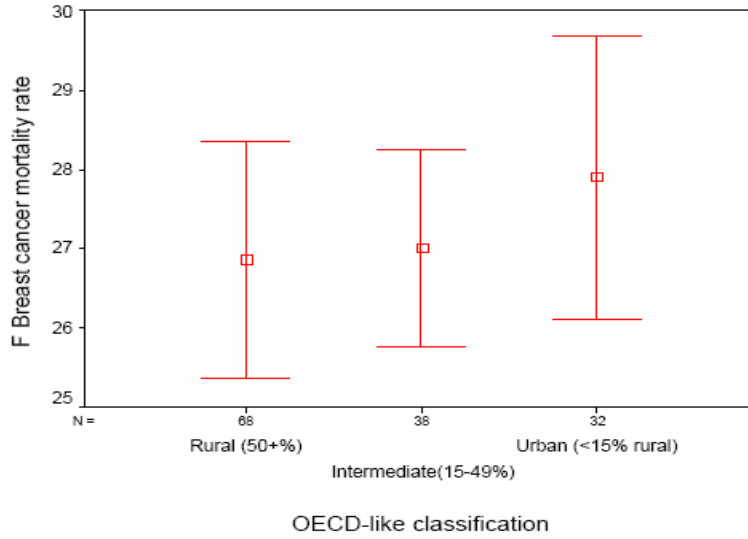
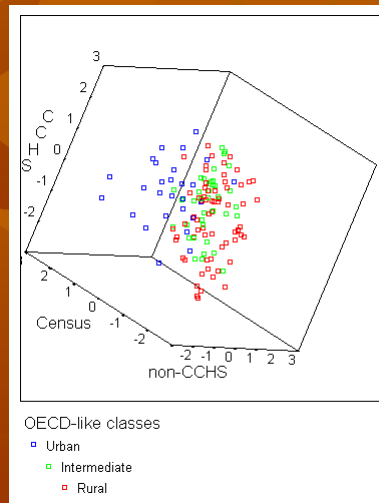
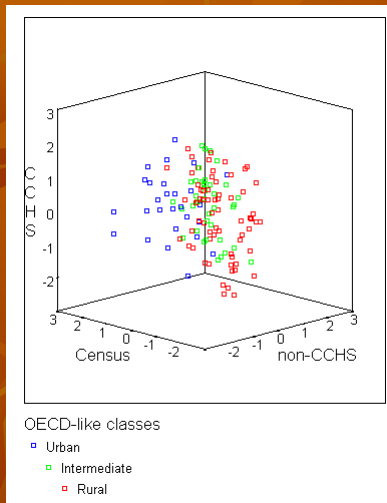
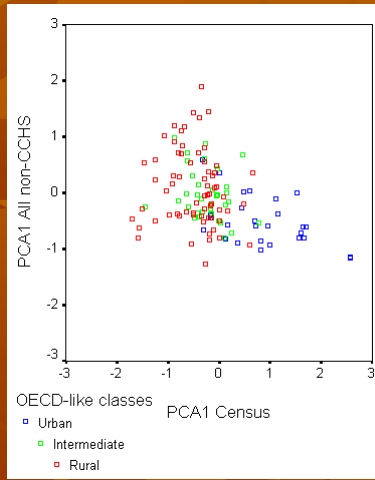
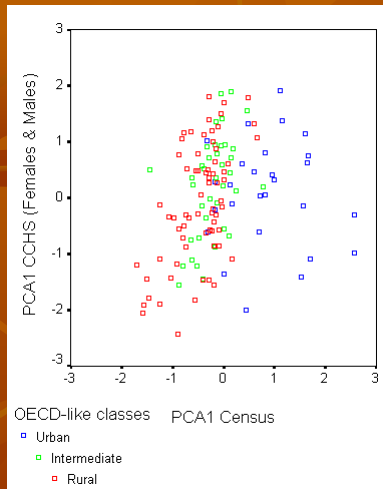


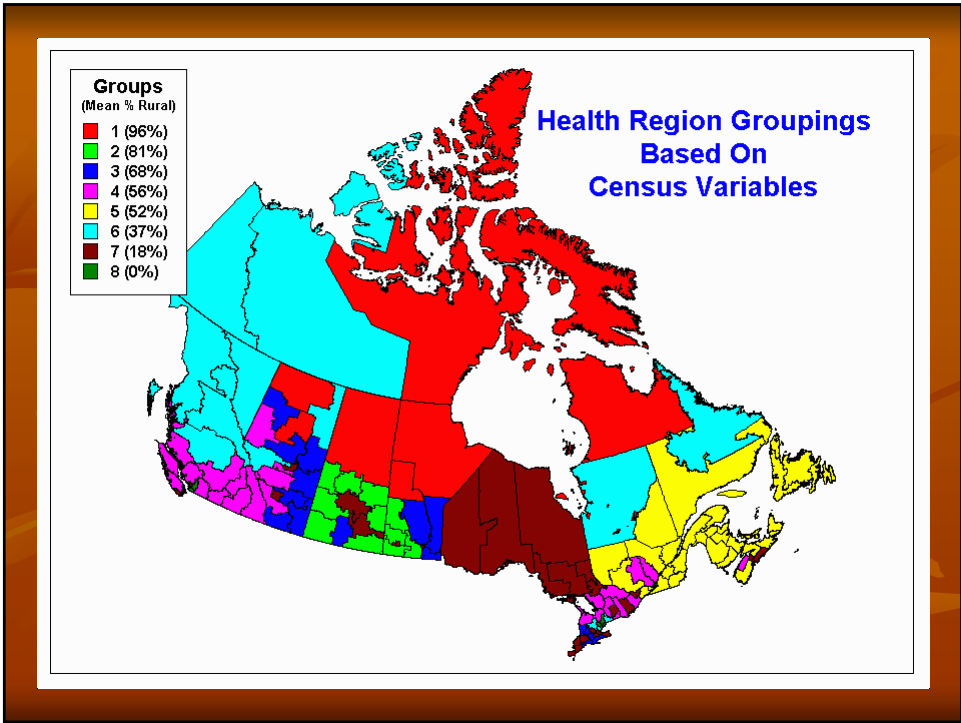
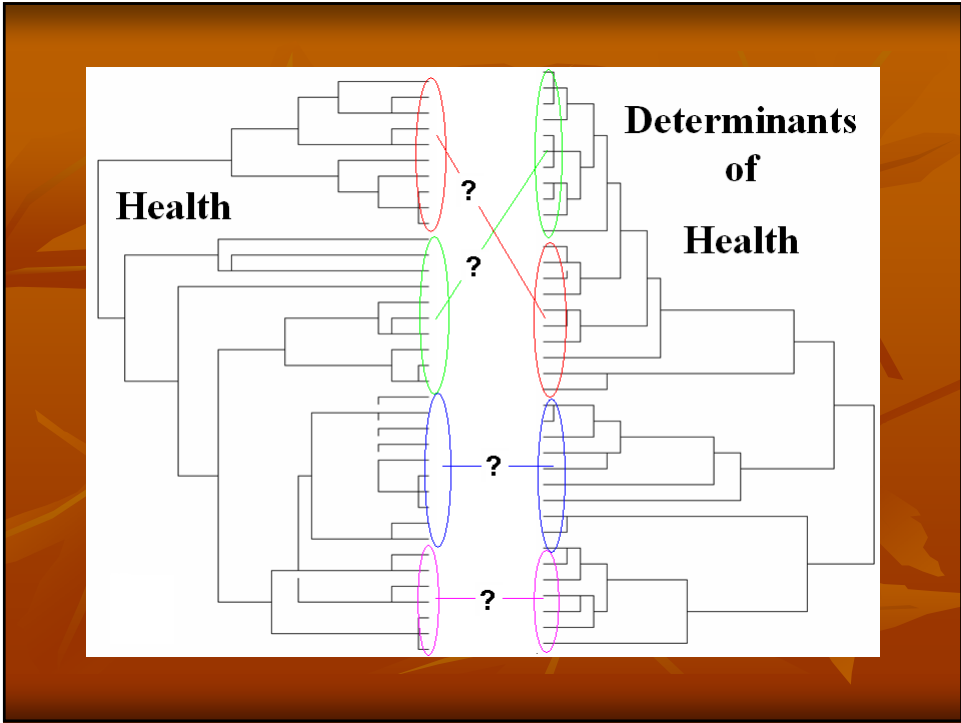
Figure 3. No rural-urban trends exist across health regions with respect to female breast cancer mortality rates.

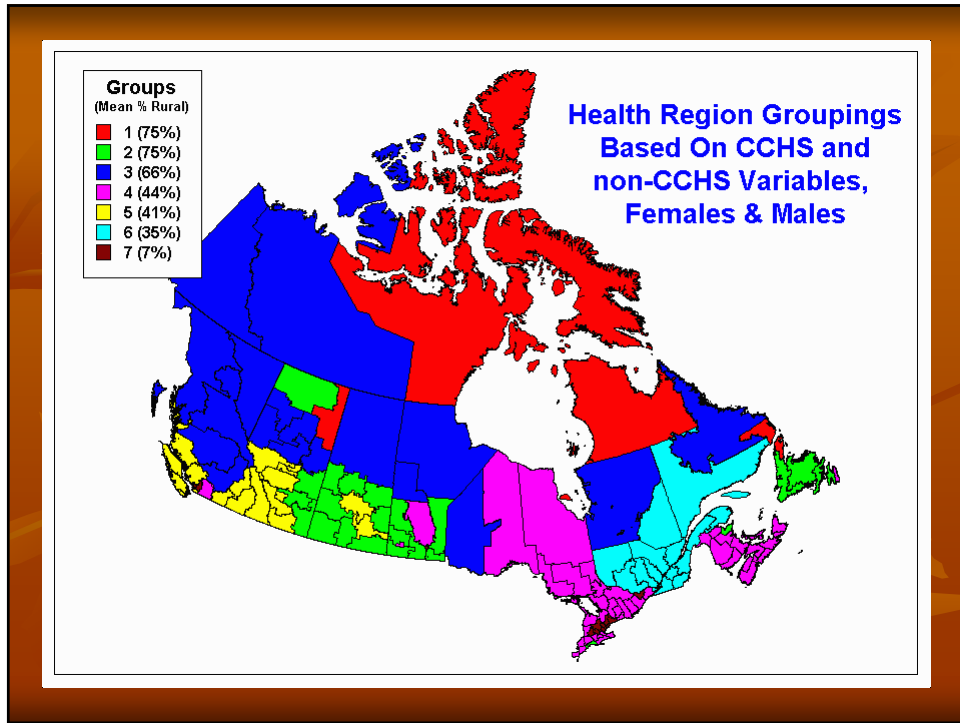


- 172 health indicators

Health status in rural areas is <u>better</u> than in urban areas	9.3%
No significant rural-urban differences	26.7%
Health status in rural areas is <u>worse</u> than in urban areas	64.0%





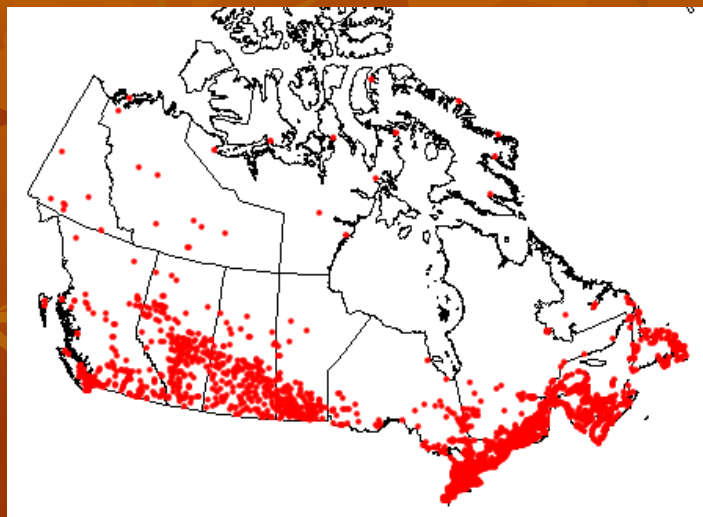


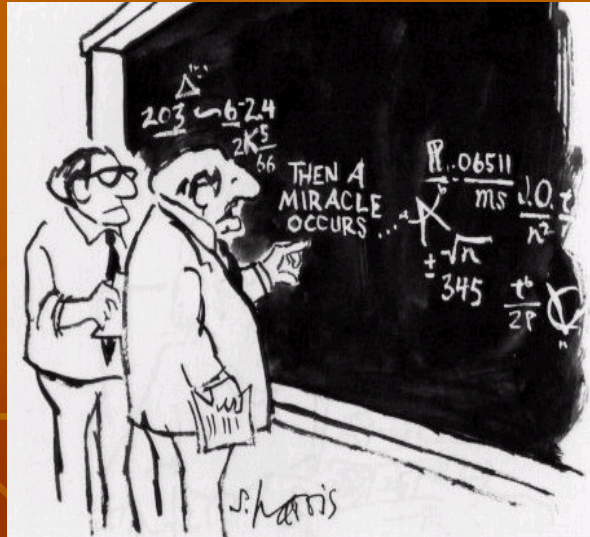
		CCHS & non-CCHS Classes (Females & Males)						
		1	2	3	4	5	6	7
Census Classes	1	2	1	5				
	2		11					
	3		7	3	4	1		1
	4			2	9	10	2	
	5	1	4		13		12	
	6	1		8		1		3
	7			1	18	5		4
	8					1	1	7

Lessons Learned

- Avoid selective use of small numbers of indicators.
- Analyses with large numbers of indicators can become unwieldy if restricted to only univariate or even bivariate techniques.
- Graphical representations are useful but still limit the amount of information that can be shown.
- Use multivariate techniques.
- Avoid simplistic classification systems.
- Find a balance between the **UNIQUE** versus the **SUPER GENERAL** (i.e. a balance that describes both the “forest” and the “trees”).

Next step: 2,071 CSDs





"I think you should be more explicit here in step two."

from *What's so Funny about Science?* by Sidney Harris (1977)