FIRST ANNUAL CIRCUMPOLAR HEALTH METRICS CONFERENCE

STATISTICS IN SUPPORT OF HEALTH SYSTEMS IMPROVEMENT OCTOBER 31, 2011 | YELLOWKNIFE, CANADA

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Circumpolar Health Data:

What We Know



What We Don't Know



What We Don't Know we don't know



D.Rumsfeld (2006)

Types and sources of data

The Known Knowns:		Sources of Data									
	(a) Census	(b) Popn	(c) Vital	(d) Disease	(e) Health	(f) Health	(g) Other				
Indicator		Registries	Statistics	Registries	Admin	Surveys	Databases				
					Databases						
Health Status:											
Population	Х	Х									
Fertility/Reproductive Outcomes			Х	Х							
Mortality			Х	Х							
Disease incidence/ prevalence				Х	Х	Х					
Disability/activity limitation						Х					
Perceived health						Х					
Health Determinants:											
Social/cultural/economic factors	Х					Х					
Personal lifestyles/practices						Х					
Physical environment						Х	Х				
Human biological factors						Х					
Health Care:											
Health care resources							Х				
Utilization of services					Х	Х					
Perception of services						Х					
Health system performance					Х	Х	Х				

Data linkage can enhance capability of data systems, especially in causal associations

The Known Knowns:	Sources of Data								
Indicator	(a) Census	(b) Popn Bagistriag	(c) Vital	(d) Disease	(e) Health		(g) Other		
Indicator		Registries	Statistics	Registries	Admin Databases	Surveys	Databases		
Health Status:									
Population	Х	Х							
Fertility/Reproductive Outcomes			X	Χ					
Mortality			X	Χ					
Disease incidence/ prevalence				X	X	X –			
Disability/activity limitation						Х			
Perceived health						Х			
Health Determinants:									
Social/cultural/economic factors	X					Х			
Personal lifestyles/practices				L		X -			
Physical environment						Х	Х		
Human biological factors			i		<u>i</u>	X			
Health Care:									
Health care resources							Х		
Utilization of services						Х			
Perception of services	L								
Health system performance					Х	Х	Х		

Circumpolar Health Data:



2000 (8)

Circumpolar Health Indicators: Sources, Data, and Maps T. Kue Young Cartography by Winfried K. Dalimann



Circumpolar Health Observatory

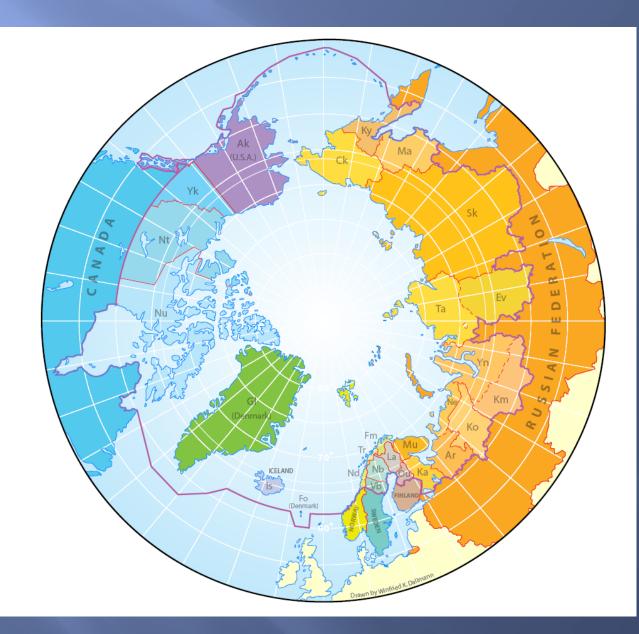
http://circhob.circumpolarhealth.org

www.ijch.fi/CHS/CHS_2008(3).pdf

About CircHOB

- international collaborative health information system
- systematic, standardized, and consistent data collection and analysis
- produces data for all northern regions in all circumpolar countries

- monitors trends and patterns in health status, health determinants, and health care
- provides evidence for planning and evaluation of health programs and services.
- on-going and sustainable with periodic updates.



Circumpolar countries and regions

[US] United States [Ak] Alaska [CA] Canada [Yk] Yukon [Nt] Northwest Territories [Nu] Nunavut [DK] Denmark [GI] Greenland [Fo] Faroe Islands [IS] Iceland [NO] Norway [Nd] Nordland [Tr] Troms [Fm] Finnmark [SE] Sweden [Vb] Västerbotten [Nb] Norrbotten [FI] Finland [Ou] Oulu [La] Lappi [RU] Russian Federation [Mu] Murmansk Oblast [Ka] Kareliya Republic [Ar] Arkhangelsk Oblast - [Ne] Nenets AO [Ko] Komi Republic [Yn] Yamalo-Nenets AO [Km] Khanty-Mansi AO [Tm] Taymyr AO [Ev] Evenki AO [Sk] Sakha Republic [Ma] Magadan Oblast [Ky] Koryak AO [Ck] Chukotka AO

Data Sources



Guided Tour

http://circhob.circumpolarhealth.org

Reports/products

- Data Briefs on selected topics 2 per year in *International Journal of Circumpolar Health –* 3 published to date
- Circumpolar Health Atlas [in production, to be published by U of T Press in 2012]
- The Health of Circumpolar Peoples: A Report Card 2000-2009 [for release at IPY conference 2012]



Data brief: introduction and population

Introduction and population [2010-1]

T. Kue Young¹, Susan Chatwood^{1,2}, Rajiv Rawat²

DATA BRIEF FROM THE CIRCUMPOLAR HEALTH OBSERVATORY Health expenditures [2010:2]

T. Kue Young

DATA BRIEF FROM THE CIRCUMPOLAR HEALTH OBSERVATORY
Infectious Diseases [2011:1]

Dalla Lana School of Public Health, University

This is part of the series Data Briefs from the Circumpolar Health Observatory, http://circHOB.circumpolarhealth.org, a regular feature of the journal.

trends and patterns in health status, health determinants, and health care, and provide an on-

Forthcoming in 2012:

Circumpolar Health Atlas

senior editor T. Kue Young

associate editors Rajiv Rawat | Winfried Dallmann Susan Chatwood | Peter Bjerregaard



















Proposed reports

- 2-3 reports per year on specific topics:
- Cancer
- Diabetes/obesity
- Injury
- Infectious diseases
- Tobacco use
- Diet/nutrition
- others....

.... Need "buyers"

What's missing?

Country/Region	Рор	Fert	CDR	IMR	ASpM	LE	CoD	PMR	BW	GA	Ca	TB	Gc	GDP	Educ	Smok	Hosp	Exp	Pers
Alaska																			
N. Canada																			
Denmark																			
Greenland																			
Faroe Islands																			
Iceland																			
N. Norway																	Δ		
N. Sweden																			
N. Finland																			
Russian Federation																			
Russian regions				*			**	#	***			#	#				#	#	#



Known unknowns

- Data are there can't get at them:
 - Some Russian regions "status downgrade"
 - Data suppression for confidentiality reasons
- Data are there can't use them:
 - Lots of survey data, but not comparable due to differences in variable construction, sampling techniques, etc – eg. behaviours (physical activity)
 - Data interpretation dependent on contextual meanings of underlying concepts – eg. SES
- Data are not there they need to be created:
 - Performance indicators [quality of care, access, safety, efficiency, timeliness, cultural sensitivity, etc] across diverse health systems

Research on research – is current research filling in data gaps?



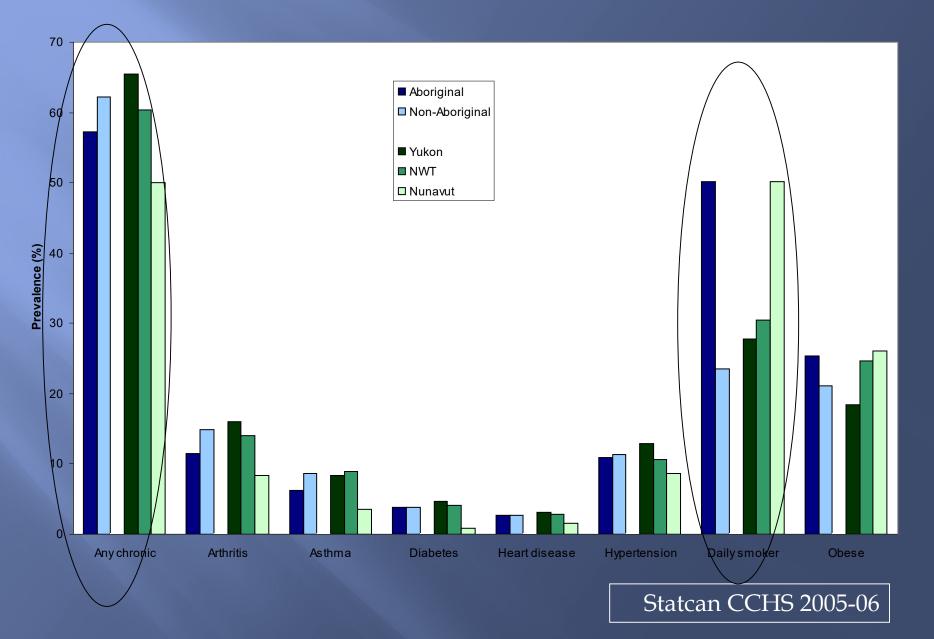
Young BMJ (2003)

Indigenous people data

Alaska and Greenland most complete; Sami and Russia least available; Canada in between – added work, added value



Self reported chronic diseases and risk factors



One size does not fit all

- The three demographic groups Non-Aboriginal, First Nations/Metis, and Inuit – differ in disease burden, risk factor prevalence, and health care needs
- Non-Aboriginal in the North tend to have better education, income, employment and health status than Canadians nationally – selective migration?
- Breaking down into Aboriginal vs non-Aboriginal is not sufficient – more informative if further breakdown of Aboriginal into Inuit and FN/Metis, but problem of small numbers
 - Diabetes: FN>Non-Ab>Inuit
 - Smoking: Inuit>FN>Non-Ab

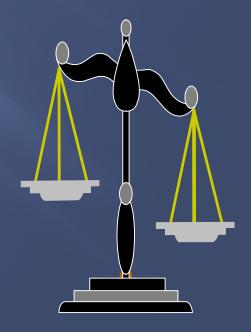
The unknown unknowns?

Resource development?
Climate change?
Global economy?

Risk vs Benefits

Measurable health effects?

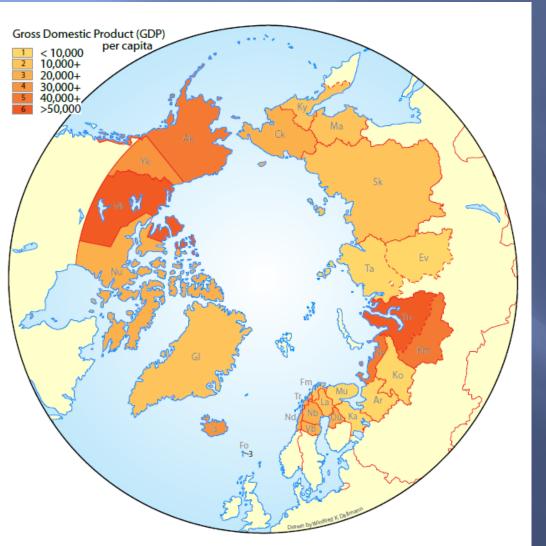
Can existing indicators capture change?





Oulu, Finland

Resource development







Economic benefits vs environmental costs









Climate change impacts on infrastructure



Sydgrønlandske landmænd har høstet 92 tons kartofler i år. Næste år regner man med, at der også er jordbær på vej. Foto: John Rasmussen, Narsag Foto

Næste år er der grønlandske jordbær

Temperaturen sætter ny rekord i Grønland . Blomkål, kartofler og broccoli dyrkes på friland. Næste år er der grønlandske jordbær. Greenland government aims to develop agriculture, sheep ranching, and diary farming

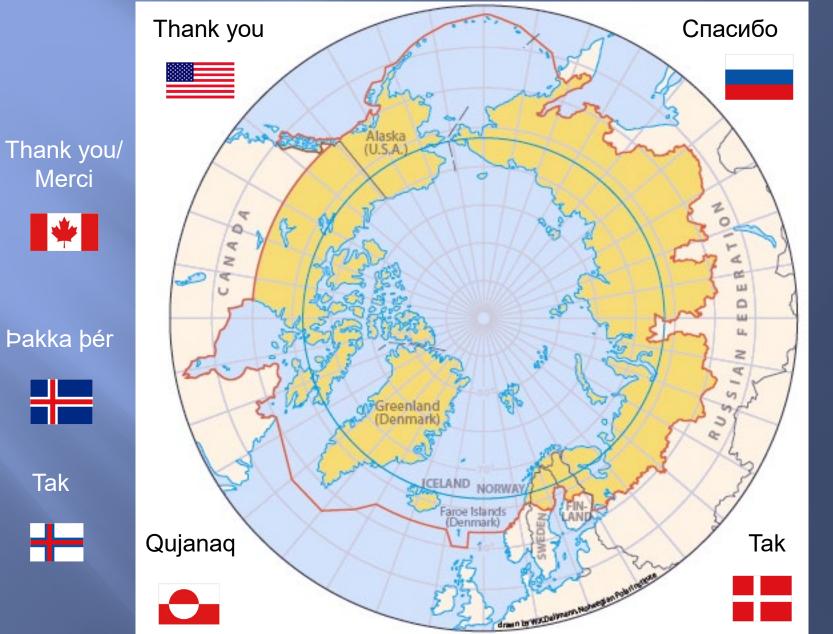
New economic opportunities?

Taking advantage of climate change?

Data, data, everywhere and nowhere

- Always ask the question: Do we need to know this, or is it just nice to know?
- Data collection as an end in itself, or with a specific purpose – "in support of health systems improvement"?!





Kiitos/ Tack





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