

Health Goals Timeline

- 1991 Royal Commission recommends that health goals be developed
- 1993 Government commits to develop goals
- 1994 Provincial Health Officer asked to lead process
- 1994-96 Goals developed through consultation
- 1997 Goals approved by Cabinet
- 1998 Goals announced

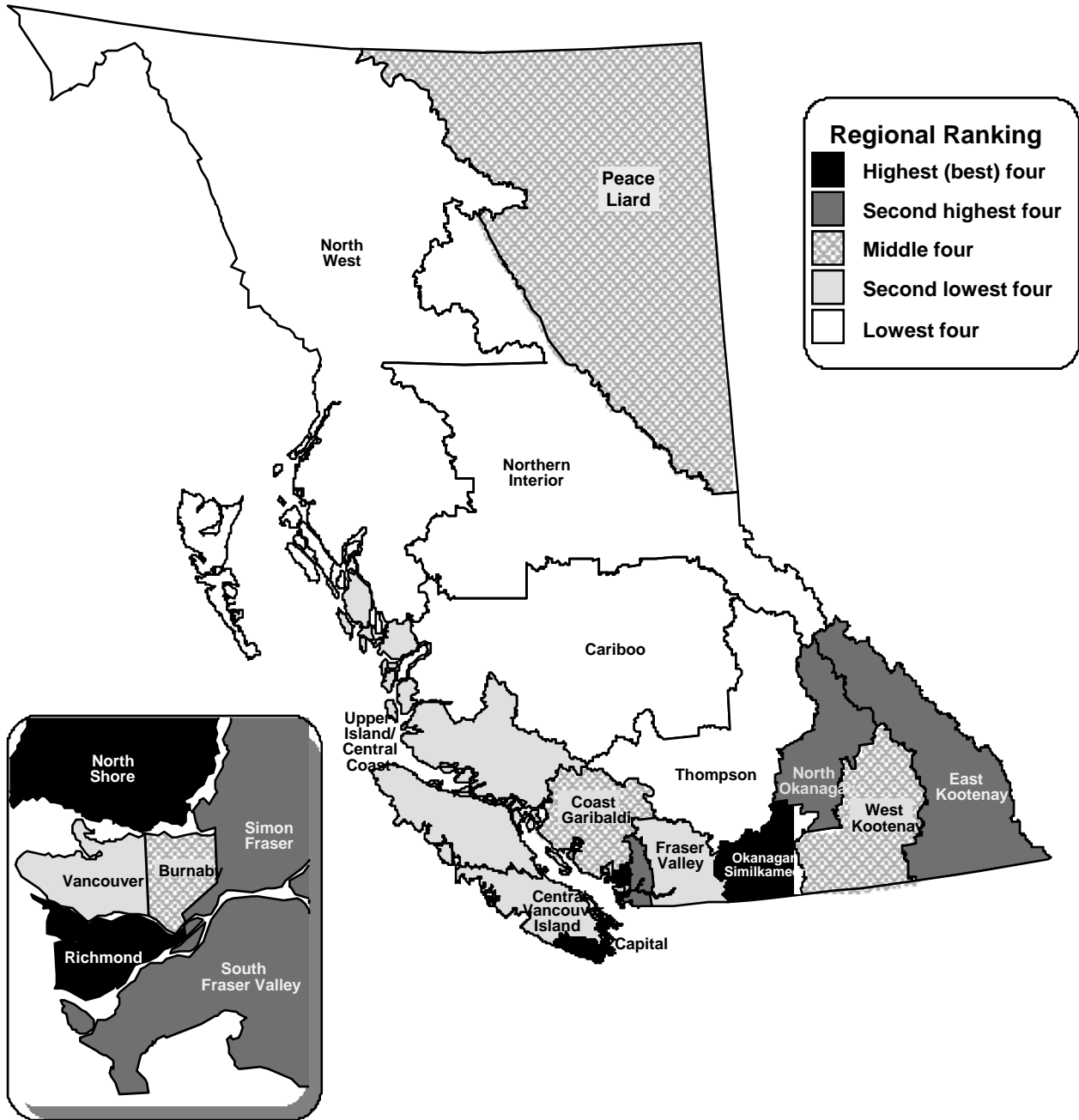
Health Goals for British Columbia

- Goal 1: Positive and supportive living and working conditions
- Goal 2: Opportunities for all to develop individual capacities, skills, and make healthy choices
- Goal 3: Diverse, sustainable, healthy safe physical environment
- Goal 4: Effective and efficient health services
- Goal 5: Improved health for Aboriginal peoples
- Goal 6: Disease and injury prevention
- Mission: Maintain and improve health of British Columbians by enhancing quality of life and minimizing inequalities in health status

Progress Toward B.C.'s Health Goals

	Trend	Number of indicators
✓	Improving	42
■	Not much change	39
⌚	Worsening	6
?	Trend not available	6
	Total	93

Health Goals Regional Index



Source: Ministry of Health and Ministry Responsible for Seniors
Office of the Provincial Health Officer

Prepared by BC STATS

PROVINCIAL HEALTH OFFICERS' ANNUAL REPORT



November 2000

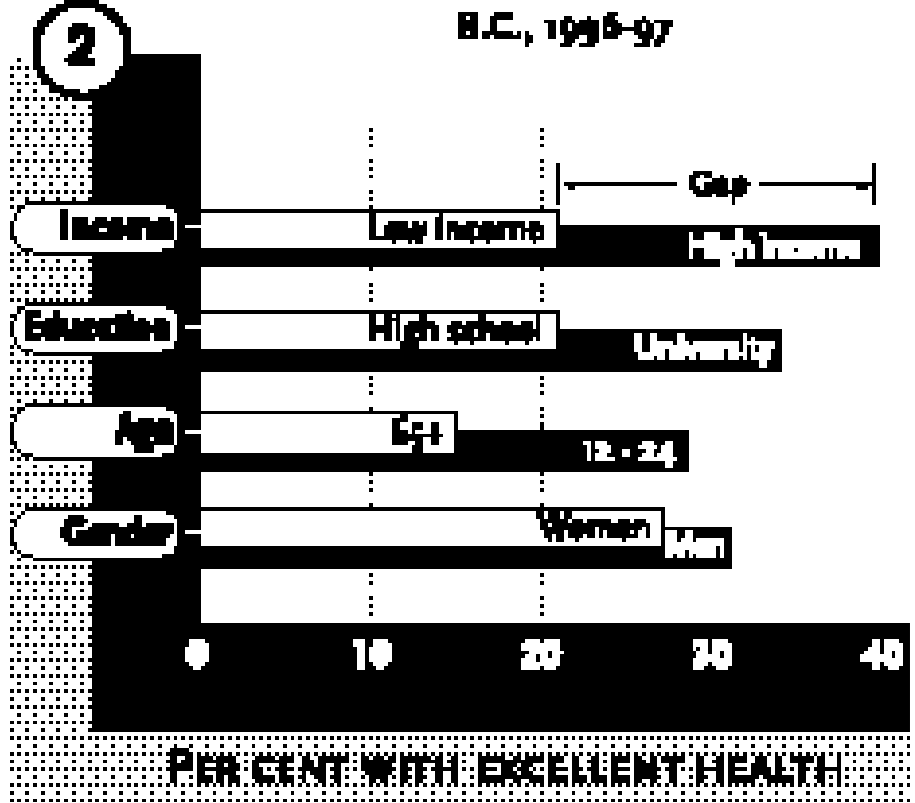
Mission: Maintain and improve the health of British Columbians by enhancing quality of life and minimizing inequalities in health status.

WELL-BEING	GENERAL HEALTH	HEALTH CONDITIONS	DEATHS
- Self-rated health ■	- Functional health ■	- Overweight ■	- Infant mortality ✓
- Positive mental health ?	- Activity limitation ✓	- Chronic conditions	- Premature deaths (PYLL) ✓
	- Disability-days ■	• arthritis, high blood pressure, heart disease ✓	- Life expectancy ✓
		• diabetes, asthma, allergies ⌚	
		- Chronic pain ■	
		- Mental health problems ■	

✓ Improving ■ not much change ⌚ worsening ? trend not available

Figure 2 Differences in Excellent Health

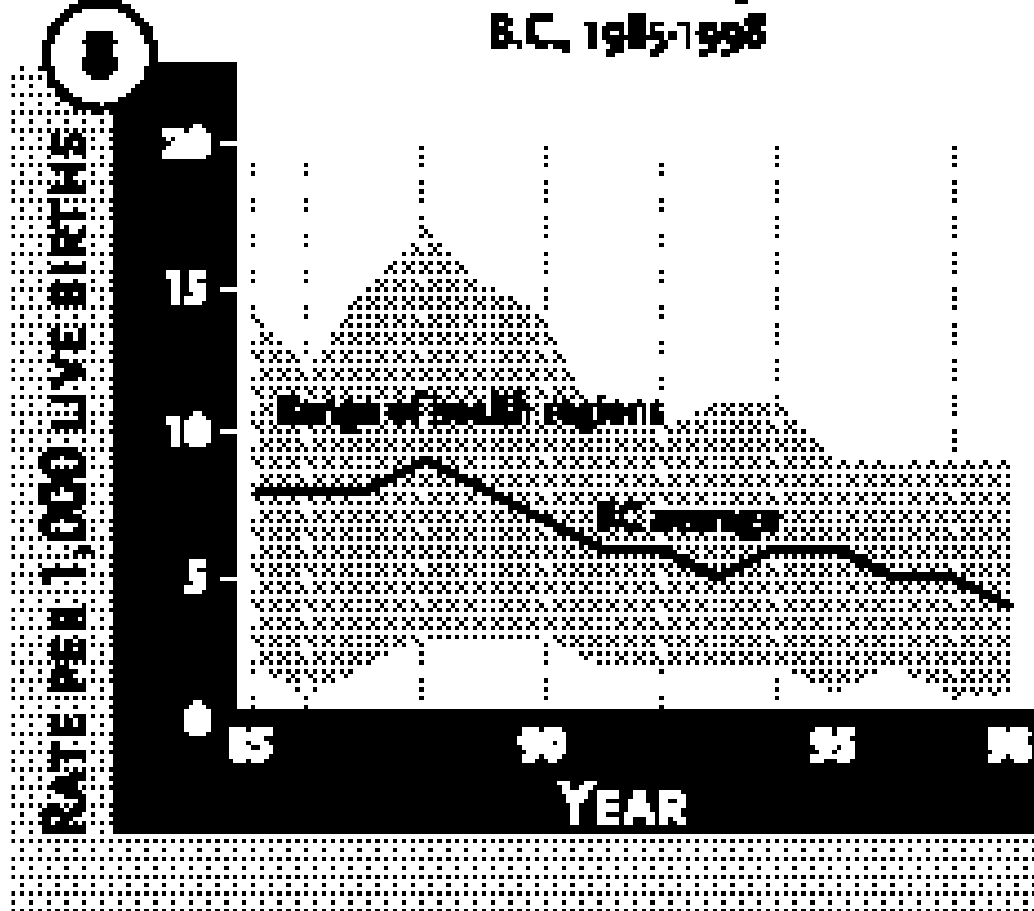
B.C., 1996-97



Statistics Canada, Medical Population Health Survey 1996-97. Public Use Microdata File. Prepared by Planning and Evaluation, B.C. Ministry of Health

Figure

Infant Mortality Rate B.C., 1985-1998



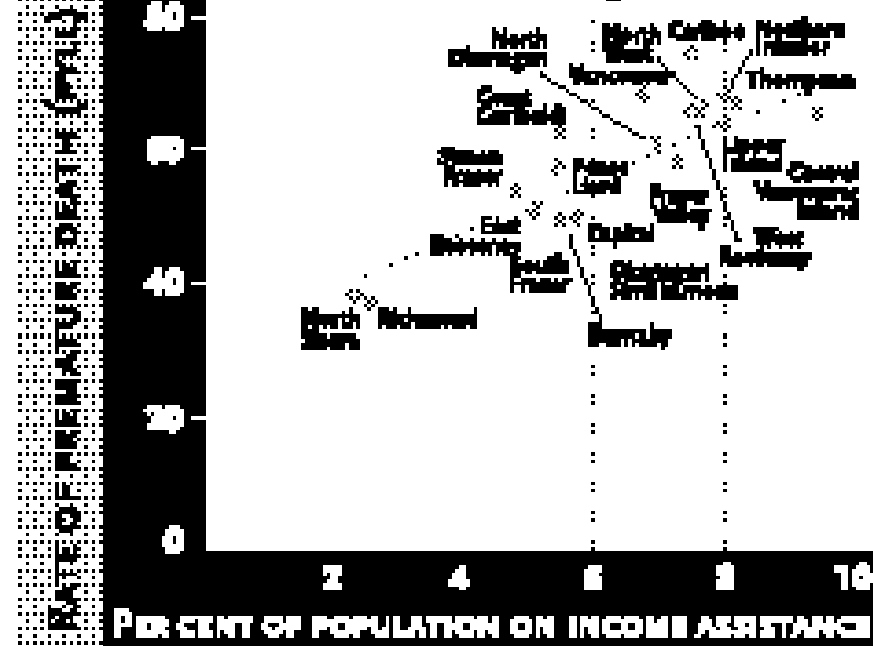
Infant deaths per 1,000 live births. Source: B.C. Vital Statistics Agency
Ministry of Health, Vancouver, British Columbia

Goal 1 Positive and supportive living and working conditions in all our communities.

EMPLOYMENT	INCOME	PARTICIPATION AND SOCIAL INTEGRATION	HOUSING AND COMMUNITY DESIGN
- Unemployment ✓	- Low income ■	- Social support ■	- Housing need ■
- Workplace injuries ✓	- Income assistance ✓	- Volunteering ✓	
- Decision-latitude at work ?	- Income inequality ■	- Crime ✓	
		- Children and youth in care ⌚	

✓ Improving ■ not much change ⌚ worsening ? trend not available

Figure 23 Relationship between Economic Hardship and Health B.C. Health Regions



Source/Analysis: For most of the population age 5-64 residing in the BC Health Region. September 2002. Prepared by BC FORT, Ministry of Finance and Corporate Relations. PYLD: Potential years of life lost (age under 75 years), all causes of death (average annual rate (age standardized) per 1,000 population for 5-year period 1994-1998). B.C. Vital Statistics Agency, Ministry of Health. Classified table.

Goal 1 Priority Actions

- Protect programs that reduce the gap between the rich and the poor.
- Increase availability of affordable housing, especially for people with special needs.
- Support initiatives that build community trust and participation.

Goal 2 Opportunities for all individuals to develop and maintain the capacities and skills needed to thrive and meet life's challenges and to make choices that enhance health.

HEALTHY CHILD DEVELOPMENT	LEARNING OPPORTUNITIES	HEALTHY CHOICES	INDEPENDENT LIVING
- Low birthweight ■	- High school graduation ✓	- Smoking ■	- Living arrangements, age 65+ ✓
- Breastfeeding ✓	- Post-secondary graduation ✓	- Regular heavy drinking ⌚	
- Family functioning ■	- Grad 12 exam completion ✓	- Physical activity ■	
- School readiness ✓		- Bicycle helmet use ✓	
		- High-risk sexual practices ■	
		- Teen pregnancy ✓	

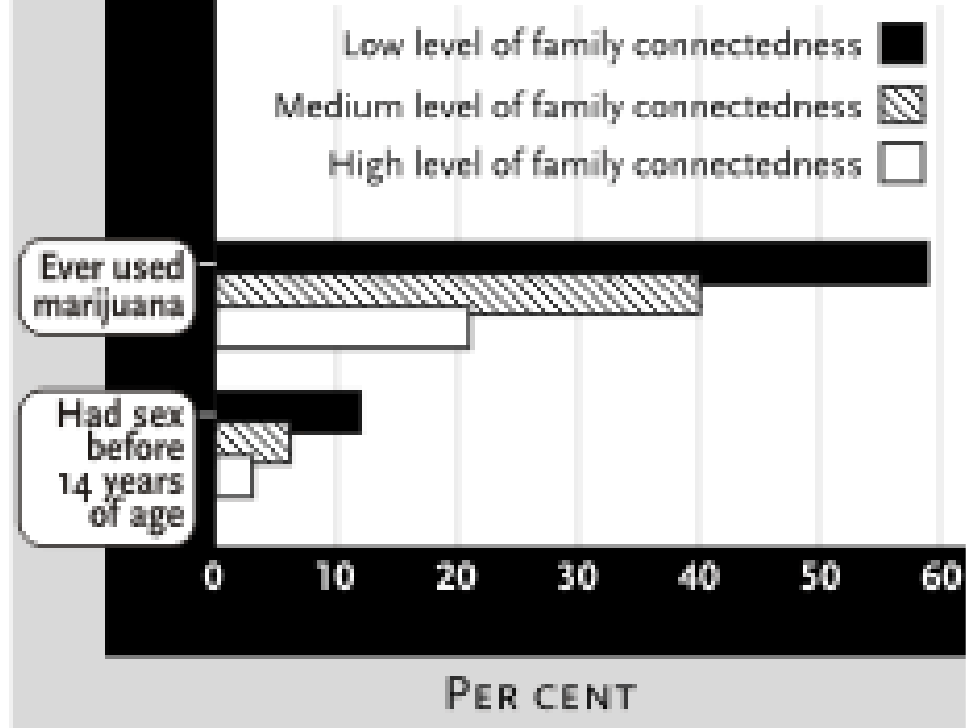
✓ Improving ■ not much change ⌚ worsening ? trend not available

Figure

25

Family Connectedness and Risk Behaviours

B.C. Youth, 1998



Source: *Healthy Connections: Listening to BC Youth. Highlights from the Adolescent Health Survey II, p. 27. The McCoskey Centre Society, 1999*

Goal 2 Priority Actions

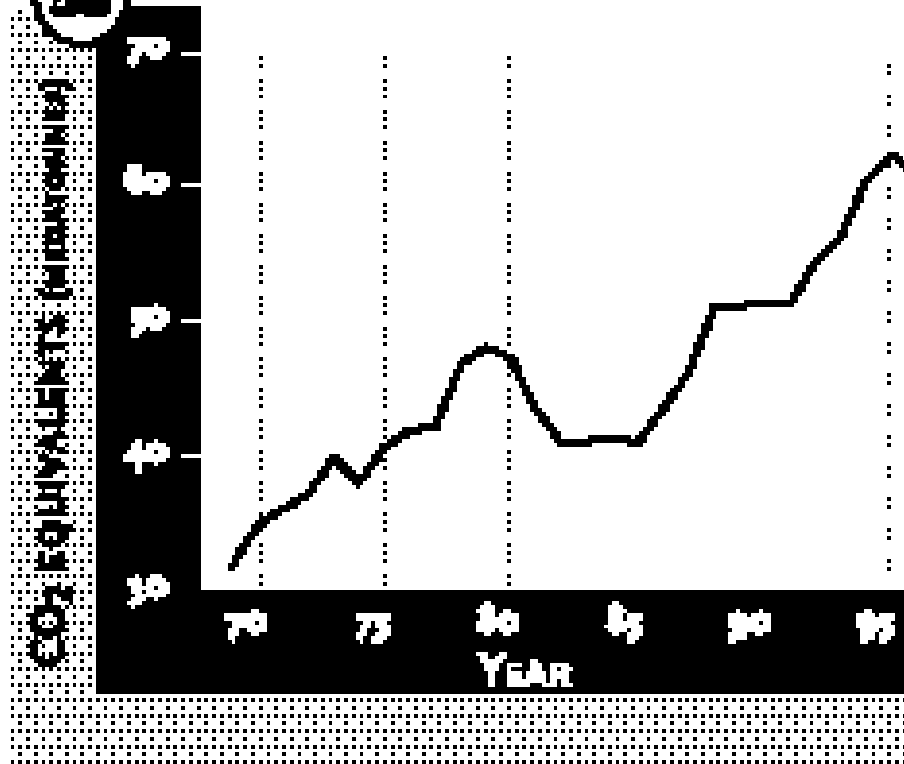
- Make quality child care and other services accessible to all children.
- Help communities meet needs of young children in a coordinated way.
- Help young people stay in school, with special attention to disadvantaged students.
- Promote non-smoking, drug and alcohol awareness, regular physical activity, and healthy eating.

Goal 3 A diverse and sustainable physical environment with clean, healthy, and safe air, water, and land.

AIR	WATER	FOOD	LAND & SOIL	SUSTAINABILITY
- PM ₁₀ air pollution ✓	- Boil-water advisories ■	- Critical hazards in food premises ■	- Blood lead levels in children ✓	- Greenhouse gas emissions ⌚
- Exposure to second-hand smoke ✓	- Water quality index ■	- Food quality sample exceeding guidelines ■		- Energy consumption ■
				- Land in protected areas ✓

✓ Improving ■ not much change ⌚ worsening ? trend not available

**Figure 50 Greenhouse Gas Emissions
B.C., 1970 - 1997**



Source: Environment Canada, 1998. Data obtained from B.C. Ministry of Environment, Lands and Parks, State of Environment Reporting
<http://www.env.gov.bc.ca/rep/rep.html>

Goal 3 Priority Actions

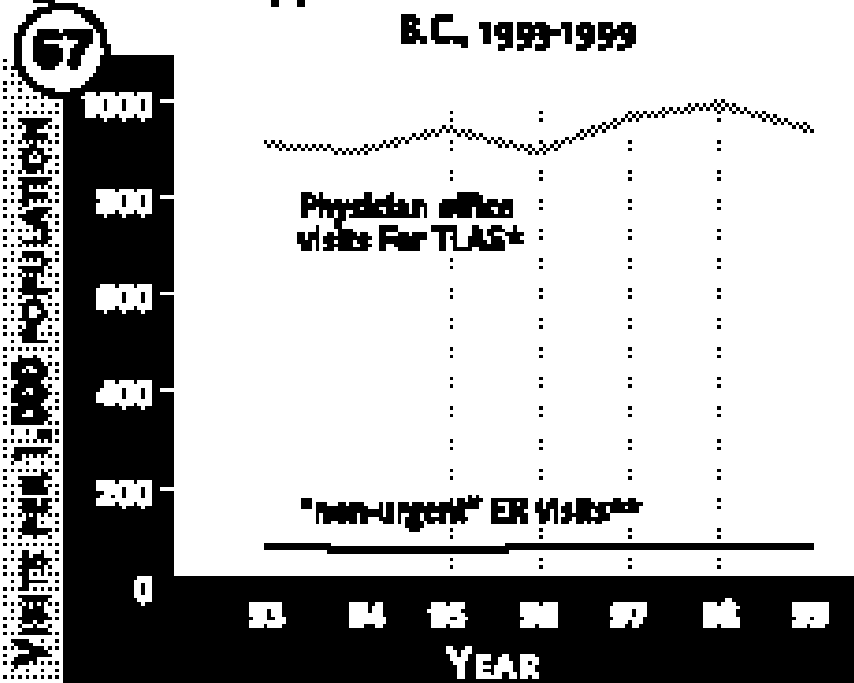
- Develop community plans for improving air and water quality.
- Encourage alternatives to single occupancy vehicle use.
- Maintain food and water safety programs.
- Develop better ways to measure and communicate issues related to a sustainable environment.

Goal 4 An effective and efficient health service system that provides equitable access to appropriate services.

ACCESSIBILITY	DOING THE RIGHT THINGS RIGHT		IMPROVING HEALTH
- Childhood immunizations ■	- Opportunities for self-care ■	- May not require hospitalization ✓	- Improved health behaviours ■
- Influenza immunizations ■	- Use of protocols and guidelines ✓	- Expected compared to actual stay ✓	- Deaths due to medically-treatable diseases ■
- Screening mammography ✓	- Breast-conserving surgery ✓	- Alternate level of care days ⌚	
- Pap smears ■	- Cesarean deliveries ■	- Community follow-up after hospitalization ?	
- Smoking cessation ✓	- Antibiotic prescribing ✓		
- Dental visits in pas year ?	- Preventable admissions ✓		
- Unmet health care needs ■			

✓ Improving ■ not much change ⌚ worsening ? trend not available

**Figure 67 Opportunities for Self-Care
B.C., 1993-1999**



*TLAS: Time-Limited Acute Symptoms such as colds, back problems, headaches, and skin rashes, that could be considered appropriate for self-care treatment

**Non-urgent ER visits: Physician services for Level 1 emergency care - services that require only an abbreviated history, exam, and treatment, and that are generally available in a waiting area separate from an emergency room. Source: Population Support Branch, Medical Services Plan, in Partnership for Better Health: A Self-Care Pilot Project Final Evaluation Report, May 2000

Goal 4 Priority Actions

- Reorganize the way primary care is provided.
- Provide more public education about appropriate treatment for common diseases.
- Develop better information about the results of health services that people receive.

Goal 5 Improved health for Aboriginal peoples

HEALTH STATUS		FACTORS AFFECTING HEALTH	
---------------	--	--------------------------	--

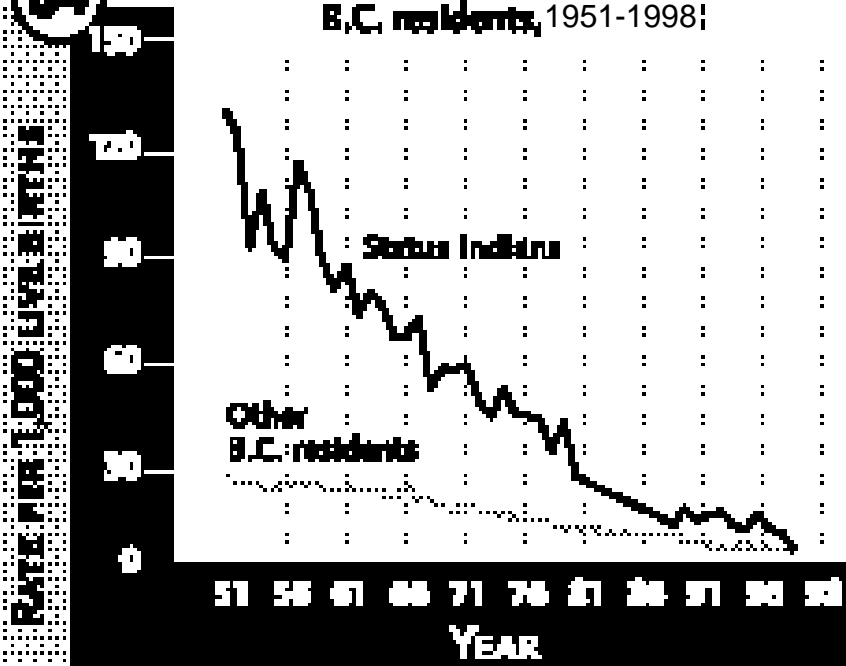
- Self-rated health	?	- Infant mortality	✓	- School completion	✓	- Unemployment	✓
- Premature death (PYLL)	✓	- Life expectancy	✓	- Low income	■	- Community control	✓

✓ Improving ■ not much change ⌚ worsening ? trend not available

Figure

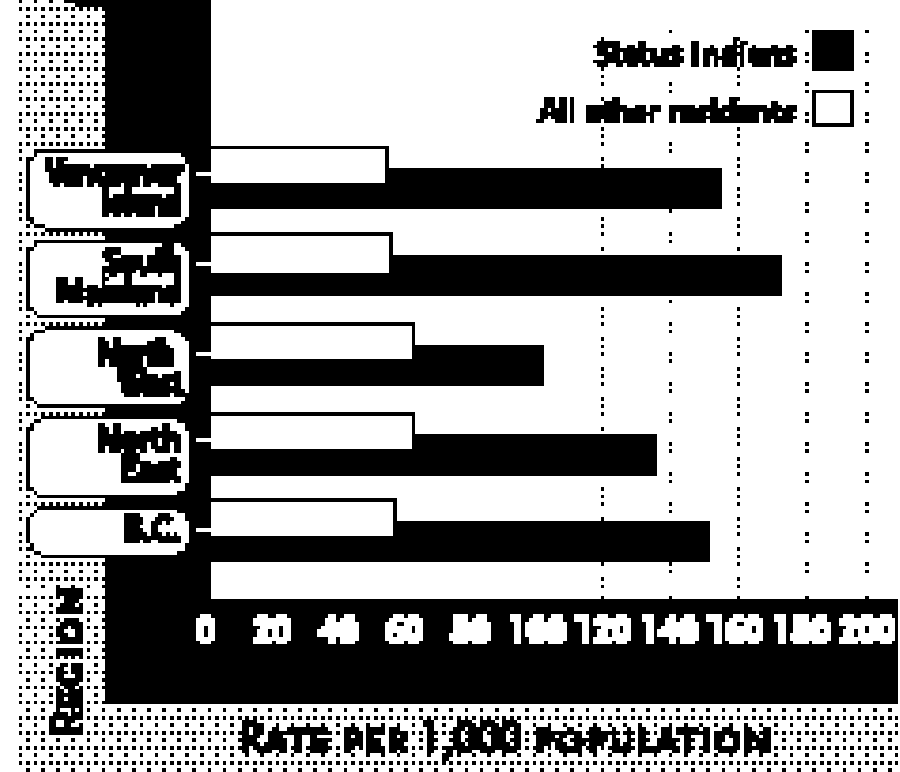
34

Infant Mortality Rate
Status Indians & Other
B.C. residents, 1951-1998



Source: B.C. Vital Statistics, Annual, Ministry of Health. Classified tables

Figure 85 Potential Years of Life Lost
 Status Indian and Other Residents,
 B.C., 1991-1998



The number of years of life lost for deaths that occurred before age 75, expressed as an age-standardized rate per 1,000 population in the region. Regions are the four administrative areas used by Medical Services Branch Health Canada. Source: B.C. Vital Statistics Agency (2000, January). Analysis of Health Statistics for Status Indians in British Columbia 1991-1998, Table 12

Goal 5 Priority Actions

- Promote efforts to reduce poverty and improve living conditions.
- Support Aboriginal people to achieve self-governance.
- Help Aboriginal students stay in school.
- Encourage Aboriginal participation in the design and delivery of health services.

Goal 6 Reduction of preventable illness, injuries, disabilities, and premature deaths.

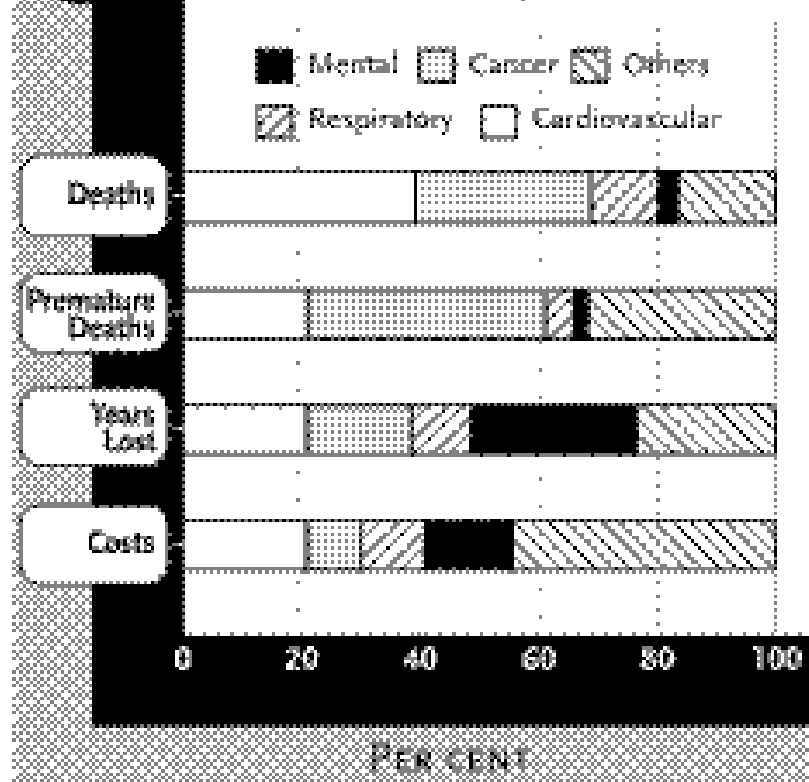
NON-COMMUNICABLE DISEASE	COMMUNICABLE DISEASE	INJURIES
- Heart disease and stroke deaths ✓	- Vaccine-preventable diseases ✓	- Unintentional injuries ✓
- Cancer incidence and deaths ■	- Tuberculosis ■	- Hip fractures ■
- Respiratory disease and deaths ■	- HIV infection ✓	- Illicit drug deaths ■
- Mental health hospitalizations ■	- Sexually transmitted diseases ✓	- Spousal assaults ■
- Neural tube defects ✓	- Food and waterborne diseases ■	- Child abuse ⌚
	- Waterborne disease outbreaks ■	- Suicide ■

✓ Improving ■ not much change ⌚ worsening ? trend not available

Figure

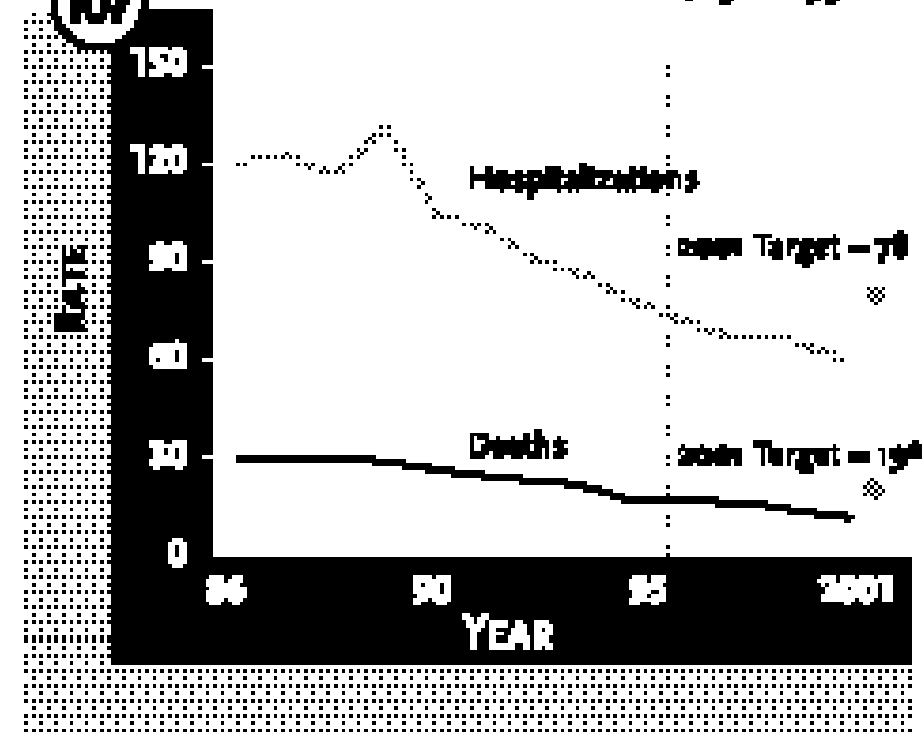
88

Burden of Non-Communicable Diseases



Deaths and premature deaths. Deaths (all ages) and Potential Years of Life Lost (PYLL) for deaths under age 75. B.C. residents, 1988. B.C. Vital Statistics Agency. Ministry of Health. Years of healthy life lost (Disability-Adjusted Life Years (DALYs), a measure of the burden of disease that compares years of life lost to premature death and years lived with a disability. Figures are estimates for high-income countries, 1988. World Health Organization. The World Health Report 1988. Annex Table 2. Costs. Estimated direct costs based on expenditures for physicians, hospitals, drugs, and research. Canada, 1993. Economic Burden of Illness in Canada, 1993. Health Canada Catalogue No. H21-138/1993E. Other diseases: Other non-communicable diseases and conditions (ICD-9 140-799), excluding injuries. Mental case costs exclude expenditures for pregnancy and post-natal care.

Figure 107 Unintentional Injuries Children & Youth B.C., 1986-1998



*1994 targets are below target since 1994.
 Rate: Deaths per 100,000 and hospitalizations per 10,000 population age 0-24.
 Source: B.C. Child Evaluation Agency (Medical) and LAM Accident Reporting System versus S.O. (hospitalizations). Targets are based on a 10 per cent reduction from baseline rates (annual averages for the 5-year period 1986-1990), which were 31.2 per 10,000 for hospitalizations, 22.8 per 100,000 for deaths.

Goal 6 Priority Actions

- Pay more attention to addiction and mental illness as major public health problems.
- Work together on smoking, physical inactivity, poor diet, and other major risk factors.
- Tackle the root causes of disease and injury, such as poverty, coping skills, marginalization.
- Develop a comprehensive plan for addiction services.

Priority Actions Identified by the Advisory Committee on Health Goals for British Columbia

1. Protect programs and policies that reduce the gap between the rich and the poor.
2. Make quality child care and other services accessible to all children.
3. Reform the way primary care services are provided.
4. Pay more attention to addiction and mental illness as public health problems.

Recommended Actions Provincial Health Officer's Annual Report 1999

- Government Actions
- Individual Actions
- Family Actions
- Employer Actions
- Community Actions

Summary

- Overall, British Columbians are getting healthier.
- We're making progress on all six provincial health goals.
- There is room for improvement in several key areas.
- All British Columbians have a role to play in making our province healthier.

Health Goals Regional Index 1999

How the Ranking was Done

Step 1

Select indicators and variables

93 indicators in Provincial Health Officers' Annual Report 1999

⌚ 48 indicators with regional data available

⌚ 60 variables included in Index

Step 2

Calculate standardized scores for each variable

✍ Methodology based on recent work by BC STATS

✍ Index value = Deviation from provincial median value, standardized by the interquartile range

$$I_j = (D_j - D_{\text{median}}) / (D_{25^{\text{th}}} - D_{75^{\text{th}}}), \text{ where}$$

I_j is the Index value for region j

D_j is the data observation for region j

D_{median} is the median observation for data variable D

$D_{25^{\text{th}}}$, $D_{75^{\text{th}}}$ are the 25th and 75th percentile observations for data variable D

✍ Scores further refined to tone down the Index value for outliers

If Index absolute value greater than two times the interquartile range, the cube root of the Index value was used

Step 3

Compute indices for health status and each of the health goals

✍ Apply weightings to each variable, where sum of weights = 1.0

(see Health Goals Regional Index paper for weightings used)

✍ Compute composite score for Health Status and for Health Goals 1, 2, 3, 4, 6

(regional data not available for Goal 5 at this time)

Step 4

Compute overall Index

✍ Overall score = weighted average of indices for health status and health goals

Weightings:

Health status 15%, Goal 1 30%, Goal 2 15%, Goal 3 10%, Goal 4 15%, Goal 6 15%

Step 5

Compute regional rankings

✍ Determine rank, where rank = order of each region according to their scores

1 = highest (best)-ranked, 20 = lowest-ranked

✍ Group regions into clusters (quintiles - five groups of four each)

Next steps

✍ Index to be reviewed in the coming year

✍ Feedback welcome!