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

<table>
<thead>
<tr>
<th>Trend</th>
<th>Number of indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>🔄 Improving</td>
<td>42</td>
</tr>
<tr>
<td>🔄 Not much change</td>
<td>39</td>
</tr>
<tr>
<td>🔄 Worsening</td>
<td>6</td>
</tr>
<tr>
<td>🔄 Trend not available</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
</tr>
</tbody>
</table>
**Mission:** Maintain and improve the health of British Columbians by enhancing quality of life and minimizing inequalities in health status.

<table>
<thead>
<tr>
<th>WELL-BEING</th>
<th>GENERAL HEALTH</th>
<th>HEALTH CONDITIONS</th>
<th>DEATHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Self-rated health</td>
<td>- Functional health</td>
<td>- Overweight</td>
<td>- Infant mortality</td>
</tr>
<tr>
<td>- Positive mental health</td>
<td>- Activity limitation</td>
<td>- Chronic conditions</td>
<td>- Premature deaths (PYLL)</td>
</tr>
<tr>
<td></td>
<td>- Disability-days</td>
<td>- Overweight</td>
<td>- Infant mortality</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Chronic conditions</td>
<td>- Premature deaths (PYLL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Life expectancy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Life expectancy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• arthritis, high blood pressure, heart disease</td>
<td>- Life expectancy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• diabetes, asthma, allergies</td>
<td>- Life expectancy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Chronic pain</td>
<td>- Life expectancy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Mental health problems</td>
<td>- Life expectancy</td>
</tr>
</tbody>
</table>

✔ Improving  ≠ not much change  ✂ worsening  ? trend not available
Figure 2  Differences in Excellent Health

B.C., 1996-97

- Income
- Education
- Age
- Gender

PERCENT WITH EXCELLENT HEALTH

Figure 8
Infant Mortality Rate
B.C., 1985-1996

Actual deaths per 1,000 live births. Source: B.C. Vital Statistics Agency.
Ministry of Health, unpublished data.
Goal 1 Positive and supportive living and working conditions in all our communities.

<table>
<thead>
<tr>
<th>EMPLOYMENT</th>
<th>INCOME</th>
<th>PATRICATION AND SOCIAL INTEGRATION</th>
<th>HOUSING AND COMMUNITY DESIGN</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Unemployment ✔</td>
<td>- Low income -</td>
<td>- Social support -</td>
<td>- Housing need</td>
</tr>
<tr>
<td>- Workplace injuries ✔</td>
<td>- Income assistance ✔</td>
<td>- Volunteering ✔</td>
<td></td>
</tr>
<tr>
<td>- Decision-latitude at work ?</td>
<td>- Income inequality -</td>
<td>- Crime ✔</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Children and youth in care ☹</td>
<td></td>
</tr>
</tbody>
</table>

✔ Improving  ≠ not much change  ☹ worsening  ? trend not available
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.

<table>
<thead>
<tr>
<th>HEALTHY CHILD DEVELOPMENT</th>
<th>LEARNING OPPORTUNITIES</th>
<th>HEALTHY CHOICES</th>
<th>INDEPENDENT LIVING</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Low birthweight</td>
<td>- High school graduation</td>
<td>- Smoking</td>
<td>- Living arrangements, age 65+</td>
</tr>
<tr>
<td>- Breastfeeding</td>
<td>- Post-secondary graduation</td>
<td>- Regular heavy drinking</td>
<td></td>
</tr>
<tr>
<td>- Family functioning</td>
<td>- Grad 12 exam completion</td>
<td>- Physical activity</td>
<td>- Bicycle helmet use</td>
</tr>
<tr>
<td>- School readiness</td>
<td></td>
<td>- High-risk sexual practices</td>
<td>- Teen pregnancy</td>
</tr>
</tbody>
</table>

✔ Improving  ▲ not much change  ❁ worsening  ? trend not available
Figure 25

Family Connectedness and Risk Behaviours
B.C. Youth, 1998

Low level of family connectedness
Medium level of family connectedness
High level of family connectedness

Ever used marijuana

Had sex before 14 years of age

Source: Healthy Connections: Listening to BC Youth. Highlights from the Adolescent Health Survey II, p. 27. The McCuskey 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.

<table>
<thead>
<tr>
<th>AIR</th>
<th>WATER</th>
<th>FOOD</th>
<th>LAND &amp; SOIL</th>
<th>SUSTAINABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>- PM$_{10}$</td>
<td>- Boil-water</td>
<td>- Critical hazards in food</td>
<td>- Blood lead</td>
<td>- Greenhouse gas</td>
</tr>
<tr>
<td>air pollution</td>
<td>advisories</td>
<td>premises</td>
<td>levels in children</td>
<td>emissions</td>
</tr>
<tr>
<td>- Exposure</td>
<td>- Water quality</td>
<td>- Food quality sample</td>
<td></td>
<td>- Energy consumption</td>
</tr>
<tr>
<td>to second-hand smoke</td>
<td>index</td>
<td>exceeding guidelines</td>
<td></td>
<td>- Land in protected</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>areas</td>
</tr>
</tbody>
</table>

- ✔ Improving
- ✗ not much change
- ✂ worsening
- ? trend not available
Figure

Greenhouse Gas Emissions
B.C., 1970 - 1997

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.

<table>
<thead>
<tr>
<th>ACCESSIBILITY</th>
<th>DOING THE RIGHT THINGS RIGHT</th>
<th>IMPROVING HEALTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Childhood immunizations</td>
<td>- Opportunities for self-care</td>
<td>- May not require hospitalization</td>
</tr>
<tr>
<td>- Influenza immunizations</td>
<td>- Use of protocols and guidelines</td>
<td>- Expected compared to actual stay</td>
</tr>
<tr>
<td>- Screening mammography</td>
<td>- Breast-conserving surgery</td>
<td>- Alternate level of care days</td>
</tr>
<tr>
<td>- Pap smears</td>
<td>- Cesarean deliveries</td>
<td>- Community follow-up after hospitalization</td>
</tr>
<tr>
<td>- Smoking cessation</td>
<td>- Antibiotic prescribing</td>
<td></td>
</tr>
<tr>
<td>- Dental visits in past year</td>
<td>- Preventable admissions</td>
<td></td>
</tr>
<tr>
<td>- Unmet health care needs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

✔ Improving  ❌ not much change  ❋ worsening  ❓ trend not available
Figure 67: Opportunities for Self-Care
B.C., 1993-1999

**TLAS**: Time-limited Acute Symptom - colds, back problems, menstruation, and skin concerns that could be considered appropriate for outpatient treatment.

**Non-urgent ER visits**: Physician services for care - services that require only an extended history, exam, and treatment, and that are potentially available in a setting less expensive than an emergency room.

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

<table>
<thead>
<tr>
<th>HEALTH STATUS</th>
<th>FACTORS AFFECTING HEALTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Self-rated health</td>
<td>- Infant mortality</td>
</tr>
<tr>
<td>?</td>
<td>✓</td>
</tr>
<tr>
<td>- Premature death (PYLL)</td>
<td>- Life expectancy</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>- School completion</td>
<td>- Unemployment</td>
</tr>
<tr>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>- Low income</td>
<td>- Community control</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

✓ Improving  △ not much change  ☢ worsening  ? trend not available
Infant Mortality Rate
Status Indians & Other B.C. residents, 1951-1998

Figure 8.5
Potential Years of Life Lost
Status Indian and Other Residents,

Rate per 1,000 Population

The number of years of life lost for selected fatal causes in Indians age 75 or over is expressed as an age-standardized rate per 1,000 population in the regions where the data were collected. Data for the entire province were used by the Indian Health Services Branch, Health Canada. Sources: B.C. Vital Statistics Agency (1998), January. Analysis of Vital Statistics for Indians and Non-Indians in British Columbia, 1995-1998, Table 1.2.
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.

<table>
<thead>
<tr>
<th>Non-Communicable Disease</th>
<th>Communicable Disease</th>
<th>Injuries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart disease and stroke deaths</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Cancer incidence and deaths</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Respiratory disease and deaths</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Mental health hospitalizations</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Neural tube defects</td>
<td>✔️</td>
<td>✗</td>
</tr>
<tr>
<td>Vaccine-preventable diseases</td>
<td>✔️</td>
<td>✗</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>HIV infection</td>
<td>✔️</td>
<td>✗</td>
</tr>
<tr>
<td>Sexually transmitted diseases</td>
<td>✔️</td>
<td>✗</td>
</tr>
<tr>
<td>Food and waterborne diseases</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Waterborne disease outbreaks</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Unintentional injuries</td>
<td>✔️</td>
<td>✗</td>
</tr>
<tr>
<td>Hip fractures</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Illicit drug deaths</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Spousal assaults</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Child abuse</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Suicide</td>
<td>✗</td>
<td>✗</td>
</tr>
</tbody>
</table>

✔️ Improving  ✗ not much change  ❓ worsening  ❓ trend not available
Figure 88

Burden of Non-Communicable Diseases

- Mental
- Cancer
- Others
- Respiratory
- Cardiovascular

Deaths

Premature Deaths

Years Lost

Costs

Note: PERCENT

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

Hospitalizations

Number of hospitalizations per 100,000 population.

Deaths

Number of deaths per 100,000 population.

Source: B.C. Vital Statistics Agency (Health Canada) and B.C. Health Reporting System version 2.0 (hospitalizations). Targets were based on a 10-year average from Ontario rates (annual average for the 10-year period 1986-1995), which were 91.5 per 100,000 for hospitalizations and 22.6 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 Officer 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
  \[ I_j = \frac{(D_j - D_{\text{median}})}{(D_{25th} - D_{75th})}, \]
  where
  - \( I_j \) is the Index value for region \( j \)
  - \( D_j \) is the data observation for region \( j \)
  - \( D_{\text{median}} \) is the median observation for data variable \( D \)
  - \( D_{25th}, D_{75th} \) 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!