





# Overview and Guide to the Child and Youth Health and Well-Being Indicators Project

This overview provides a guide to the Child and Youth Health and Well-Being Indicators Project materials. It includes a letter of introduction, a list of project documentation, summaries of project materials, and a list of knowledge transfer activities to date. These materials are available on the PHO website at www.health.gov.bc.ca/pho/reports/special.

#### Introduction

Let us imagine a society where the basic needs of all children and youth are met; where they achieve optimal health and well-being, and those in need of resources and services to reach their full potential are supported in a timely and appropriate manner. What core set of indicators will best allow us to measure the multiple dimensions of child and youth health and well-being, and to monitor them over time?

To answer this question, the Office of the Provincial Health Officer (PHO) of BC partnered with the Canadian Institute for Health Information (CIHI) to establish a conceptual framework for child and youth health and well-being, and identify a set of core evidence-based indicators to define and track child and youth health and well-being in BC over time. The goal was to develop a sustainable, solid measurement system that will support consistent and ongoing reporting over many years.

The child and youth health indicators project took approximately three years to complete, and included the support of a Project Advisory Committee, a Technical Advisory Committee, and a Project Working Group. Project activities included:

- completing a literature review to identify the range of issues and factors considered important, and the development of a holistic framework and criteria to guide the identification and selection of indicators;
- conducting a workshop with topic experts who assessed and validated the framework and selection criteria;
- evaluating the relevance of the selected concepts and indicators;
- developing methodology to evaluate the evidence for selected concepts and indicators to support their inclusion in a pending PHO report on child and youth health and well-being; and
- developing technical documentation for each indicator to provide guidance for ongoing data collection and measurement.







The result of the project was a joint summary report identifying a suite of evidence-based indicators for children and youth (age 0-18) health and well-being, and 13 appendices that provide support and evidence for the indicators selected. The suite of indicators includes 51 core health indicators, and 17 gap indicators that identify information gaps.

Together, these indicators will form the basis for future PHO reports on child and youth health and well-being in BC, and can help inform health system decision-making, and the development of policy, programs and services benefitting BC's children and youth. This project also supports CIHI's work to develop pan-Canadian health indicators.

Sincerely,

Eric R. Young, MD BSc, MHSc, CCFP, FRCPC

Deputy Provincial Health Officer

Anne McFarlane, MA, MSc.
Vice President, Western Canada and
Development Initiatives

Canadian Institute for Health Information







# **Project Documentation:**

Documentation for this project includes:

- Child and Youth Health and Well-Being Indicators Project: CIHI and BC PHO Joint Summary
- Appendices
  - Appendix A Discussion Paper: The Foundations of Child Health and Well-Being in British Columbia
  - o Appendix B Workshop Summary Report and Indicator Selection Criteria
  - o Appendix C Child and Youth Health and Well-Being Indicator Framework
  - o Appendix D Relevance Review Questionnaire
  - o Appendix E Evidence Review Protocol for Assessing Concepts and Indicators
  - o Appendix F Physical Health and Well-Being Evidence Review
  - o Appendix G Mental and Emotional Health and Well-Being Evidence Review
  - o Appendix H Social Relationships Evidence Review
  - o Appendix I Economic and Material Well Being Evidence Reviews
  - o Appendix J Cognitive Development Evidence Review
  - o Appendix K Indicator Technical and Methodology Documentation
  - o Appendix L Gap Measures Rationale and Summary
  - o Appendix M Indicator Summary Tables

# **Summary of Project Materials:**

# Child and Youth Health and Well-Being Indicators Project: CIHI and B.C. PHO Joint Summary Report (31 pages)

File name: Child Health and Well-Being Indicators Summary Report (0.9 MB)

This document provides a summary of the activities undertaken to develop the conceptual framework for child and youth health and well-being and identify and select the indicators. It describes project processes, reviews the indicator assessment and selection process, and provides lessons learned. This report recommends the suite of 51 core indicators for measuring the health and well-being of children and youth (ages 0-18), using an evidence-based population health approach.

This summary report is divided into five chapters:

- Chapter 1 introduces the project and sets the context.
- Chapter 2 describes the literature review, including the development of the proposed framework and indicator selection criteria.
- Chapter 3 describes the indicator selection activities.
- Chapter 4 presents the recommended indicators, including a summary of the rationale for including the indicators.
- Chapter 5 summarizes the key project lessons learned.







# Appendix A - Discussion Paper: The Foundations of Child Health and Well-Being in British Columbia (83 pages)

*File name: Appendix A - Discussion Paper* (1.9 MB)

This document is the initial literature review and synthesis conducted by Drs. Bonnie Leadbeater and Wayne Mitic of the University of Victoria. It identifies the major modifiable factors and conditions that are known to enhance health and well-being in young people. It also recommends specific criteria for identifying the most relevant indicators. This synthesis resulted in a proposed conceptual framework for predicting child well-being across contexts and over time. It also includes well-being indicators found in both national (several provinces) and international (USA, Ireland, Australia, New Zealand, United Kingdom, Europe, UNICEF) sources. It also itemizes child health data sources in BC.

#### Appendix B - Workshop Summary Report and Indicator Selection Criteria

(14 pages)

File name: Appendix B - Workshop Summary Report (1.5 MB)

This document summarizes the feedback from 57 experts in indicator development, child development and policy development who gathered together to review *The Foundations of Child Health and Well-being in British Columbia*. It then provides the final conceptual model to be used as the basis for the selection process. The model incorporates five dimensions of health and wellbeing: physical health and well-being, mental and emotional well-being, social relationships, economic and material well-being and cognitive development. These are viewed across five child-centred ecologies: individual, family and peers, schools, community, and society and culture and across the age span from infancy through pre-school, childhood, adolescence and emerging adulthood.

#### Appendix C - Child and Youth Health and Well-Being Indicator Framework

(1 page)

*File name: Appendix C - Indicator Framework* (0.1 MB)

This document incorporates into one table: the five dimensions of health and well-being used (physical health and well-being, mental and emotional well-being, social relationships, economic and material well-being, and cognitive development); the five child-centred ecologies used (individual, family and peers, schools, community, and society and culture); and age span (infancy, preschool, childhood, adolescence, and emerging adults).

## Appendix D - Relevance Review Questionnaire

(63 pages)

File name: Appendix D - Relevance Review Questionnaire (1.2 MB)

Because there are over 2,000 indicators that have been used to measure various aspects of child and youth health, and over 100 potential indicators and "concepts" corresponding to the dimensions and ecologies were identified in the framework paper, one key step was to develop a relevance assessment through a modified Delphi process. A survey asked 125 experts to rank order the key 125 concepts within each dimension based on the significance of the concept being measured to the health and well-being of children, and of the relevance to policy/programs/ services. Fifty seven responses were received (46% response rate), and resulted in 93 concepts







being prioritized. Feedback was also solicited from 152 young people on indicators of health and well-being, through a consultation conducted by the McCreary Centre Society.

#### Appendix E - Evidence Review Protocol for Assessing Concepts and Indicators (53 pages)

File name: Appendix E - Evidence Review Protocol (1.3 MB)

This document presents the methodology that was used for the evidence reviews, including criteria for identifying literature search parameters and for accepting articles. The guiding principles were:

- be comprehensive
- be evidence-informed
- include positive and negative influences and outcomes on children's lives
- take into account both well-being and well-becoming; and
- be forward-looking.

This document also provides parameters for assessing the degree to which concepts and indicators met the six selection criteria:

- significance to the health and well-being of children and youth;
- relevance to policy;
- based on rigorous methods;
- capable of producing estimates for key sub-groups;
- easily understood by multiple stakeholders; and
- amenable to common interpretation and comparability.

# Appendix F - Physical Health and Well-Being Evidence Review (262 pages)

*File name: Appendix F - Physical Health Evidence Review* (2.5 MB)

This document summarizes the literature on the association between **physical health and well-being** concepts and the health and well-being of children and youth. The literature reviews conducted were aimed at determining how *important* and *feasible* a particular concept (e.g., nutrition, self-rated health, or antenatal care) might be for tracking child and youth health and well-being at a population level.

#### Appendix G - Mental and Emotional Health and Well-Being Evidence Review

(154 pages)

*File name: Appendix G - Mental & Emotional Health Evidence Review* (2.9 MB)

This document summarizes the literature on the association between **mental and emotional well-being** concepts and the health and well-being of children and youth. The literature reviews conducted were aimed at determining how *important* and *feasible* a particular concept (e.g., family functioning, self-esteem) might be for tracking child and youth health and well-being at a population level.







### Appendix H - Social Relationships Evidence Review

(188 pages)

File name: Appendix H - Social Relationships Evidence Review (2.1 MB)

This document summarizes the literature on the association between **social relationships** concepts and the health and well-being of children and youth. The literature reviews conducted were aimed at determining how *important* and *feasible* a particular concept (e.g., relationships with parents, bullying, school connectedness) might be for tracking child and youth health and well-being at a population level.

### Appendix I - Economic and Material Well Being Evidence Reviews

(115 pages)

File name: Appendix I - Economic & Material Well Being Evidence Review (1.8 MB)

This document summarizes the literature on the association between selected **material and economic well-being** concepts and the health and well-being of children and youth. The literature reviews conducted were aimed at determining how *important* and *feasible* a particular concept (e.g., family income, lone parent families, food security) might be for tracking child and youth health and well-being at a population level.

#### Appendix J - Cognitive Development Evidence Review

(193 pages)

File name: Appendix J - Cognitive Development Evidence Review (2.1 MB)

This document summarizes the literature on the association between **cognitive development** concepts and the health and well-being of children and youth. The literature reviews conducted were aimed at determining how *important* and *feasible* a particular concept (e.g., number knowledge skills, youth English proficiency, high school completion) might be for tracking child and youth health and well-being at a population level.

#### **Appendix K - Indicator Technical and Methodology Documentation** (52 pages)

*File name: Appendix K - Technical Documentation* (0.9MB)

This document provides detailed, technical documentation for each of the 51 indicators that were selected and are recommended for inclusion in the PHO report on the health and well-being of children and youth in BC.

#### Appendix L - Gap Measures Rationale and Summary

(5 pages)

File name: Appendix L - Gap Measures Summary (0.7 MB)

This document provides rationale for indicators that were recommended to be included in the PHO report as gap measures.

#### Appendix M - Indicator Summary Tables

(9 pages)

File name: Appendix M- Indicator Summary Tables (0.7 MB)

This document contains a table that lists 95 indicators, which concepts they relate to, if they are recommended for inclusion and a rational for each.







# **Knowledge Transfer Activities**

As of May 30, 2014 project findings have been presented or published in the following venues:

- Combining Vision with Evidence for Child Health and Well-being Indicators in British Columbia", Healthcare Quarterly, 14 Special Issue (3) 2011: 17-20.
- The Health Officers Council of BC Conference. April 2011.
- Canada/Israel workshop on Child Health Indicators Jerusalem, Israel. November 2011.
- The Health Officers' Council of BC Conference. October 2012.
- Public Health Association of BC, Vancouver BC. "Measuring a Generation: BC Child Health and Well-Being Indicators Project." November 22, 2012.
- The 4th International Society for Child Indicators Conference Child Indicators in a Globalized World: Implications for Research, Practice and Policy Seoul, Korea. May 2013.