

General Information



Introduction

The Agency is responsible for the ascertainment, registration, and certification of vital events through the administration of the *Vital Statistics Act*, *Marriage Act*, and *Name Act*. Statistical information contained in this report is summary data provided by the Agency for use by government agencies, health planners, researchers, and the general public. In order to maintain confidentiality, the information does not disclose personally identifiable data.

Registrations

Section 44 of the *Vital Statistics Act* states: "As soon as convenient after January 1 in each year, the chief executive officer must make, for the use of the Legislative Assembly and for public information, a statistical report of the births, stillbirths, marriages, deaths, adoptions and changes of name registered during the preceding calendar year."

The table below is presented to fulfill these requirements.

VITAL EVENTS REGISTERED IN BRITISH COLUMBIA IN 2009

Event Type	Residents	Non-Residents	Total
Live Births	44,908	233	45,141
Deaths	31,227	289	31,516
Stillbirths	429	12	441
Marriages ¹	20,088	2,381	22,469
Adoptions	612	66	678
Changes of Name ²	4,832	-	4,832

Note: ¹Residents include marriages where only one party was a British Columbia resident, as well as those where both parties were residents.

²These registrations resulted in 5,240 name changes.

Although the *Vital Statistics Act* requires registration of events that occurred in the province, and Section 44 specifically requires that these be reported, vital events are often a reflection of the health status of the population; therefore, most of the information in this report pertains to residents. Specifically, live birth, stillbirth, and death statistics summarize events that occurred in the province to BC residents only, and exclude events to non-residents except where noted. Marriage statistics summarize all events that occurred in the province to either residents or non-residents. Vital events that occurred to BC residents outside the province are not shown in this report; Statistics Canada makes adjustments in its publications for events that occur to Canadians outside their province of usual residence.

VITAL EVENT DATA

Data presented in this report are based on registrations of birth, stillbirth, death, and marriage as reported to the Agency. Registration requirements for each type of event are outlined briefly as follows:

Live Births: The *Vital Statistics Act* prescribes the legal requirements for the registration of live births. The parent(s) of the child have the responsibility to complete the Registration of Live Birth within 30 days of the event. The physician or registered midwife who was in attendance at the birth must complete a Notice of Live Birth or Stillbirth (NOB) form which must be made available to the Agency within 48 hours of the event. Other requirements must be met if the birth was not attended by a physician or registered midwife.

Stillbirths: In the event of a stillbirth, the parent(s) must complete the Registration of Stillbirth. The physician or registered midwife who was in attendance at the birth must complete a Notice of Live Birth or Stillbirth (NOB) form. In addition, a physician or coroner is required to complete the Medical Certification of Stillbirth portion of the Registration of Stillbirth and deliver it to the funeral director who in turn submits it to the Agency.

Deaths: The physician in attendance at the last illness of the deceased person, or the coroner conducting an inquiry into the death of the person is required to complete a Medical Certification of Death. The Registration of Death is completed by the informant with assistance from the funeral home. The funeral home director submits both documents to the Agency to complete the registration and proceeds to issue the burial permit.

Marriages: The *Marriage Act* prescribes the legal qualifications of individuals to marry, the authorization of religious representatives and marriage commissioners to perform the marriage ceremony, and the solemnization of marriage. Under the *Marriage Act*, the Agency licences religious representatives of established religious denominations who desire the authority to solemnize marriage. The Agency recommends for appointment marriage licence issuers and marriage commissioners to perform civil ceremonies.

Couples who meet the legal qualifications to marry must obtain a marriage licence up to 90 days before the ceremony. They can choose a civil ceremony performed by a Marriage Commissioner or a religious ceremony performed by a religious representative. The Registration of Marriage is completed by the officiant after the ceremony, and must be signed by the officiant, the parties getting married, and two witnesses.

MEDICAL CODING

The Notice of Live Birth or Stillbirth (NOB) includes information on birth weight, gestation, and mode of delivery, as well as abnormalities of the infant and complications of pregnancy, labour, and delivery. The Medical Certification of Death and the Medical Certification of Stillbirth include information on the immediate cause of death or stillbirth, antecedent causes giving rise to the immediate cause, and other significant conditions contributing to the death or stillbirth. This information is processed by medically trained staff using the World Health Organization's International Statistical Classification of Diseases (ICD) coding scheme. For deaths, the coding system is applied via coding software developed in the United States and distributed for use across Canada by Statistics Canada. In some instances the Agency's medical coding staff has determined that strict adherence to the automated ICD classification process would misstate the intention of the physician completing the Medical Certification of Death.

In these cases, the Agency deviates slightly from standard ICD coding software output for the material presented in this report. Data coded to automated ICD classification standards are maintained by the Agency for comparison to other jurisdictions and for submission to Statistics Canada. The data presented in this report do not necessarily correspond to data for BC published elsewhere.

Since the early 1900s, the ICD has been revised regularly in order to reflect advances in medical science and changes in diagnostic terminology. The ninth revision of ICD (ICD-9) was used for medical coding of birth complications and causes of death from 1979 until 1999. Coding according to the tenth revision (ICD-10) was implemented at the beginning of the year 2000. Many changes in the codes and in the rules for selection of the underlying cause of death precluded direct comparison of data in ICD-10 with data from earlier years. Translation tables were used, and extensive manual reviews and recoding of data from ICD-9 to ICD-10 were completed in order to be able to provide trend data in this annual report.

TIME PERIODS

This report pertains to events that occurred in the calendar year 2009. Selected tables present aggregate information for the previous five-year period. These broader time periods permit more meaningful tests of statistical significance when analyzing data at sub-provincial levels, and can smooth out random fluctuations that occur when annual numbers are small. For regional health status profiles, readers are encouraged to refer to measures of statistical significance and use data presented for the five-year aggregates.

The data for earlier years have been updated and may differ from other publications. Readers should treat this report as a replacement of previous publications and avoid comparisons with tables in earlier publications.

POPULATION DATA

Mid-year population estimates for incorporated communities, local health areas, and health regions were provided by BC STATS, Ministry of Citizens' Services. In the mortality section of this report, a 'standard population' is used in the calculation of Age Standardized Mortality Rates (ASMR) and Potential Years of Life Lost Standardized Rates (PYLLSR). The Agency has used the 1991 Canadian Census population as the 'standard population' in the calculation of these age-standardized measures since 1998. Please refer to Standard Population in the Glossary for a more detailed description and the Methodology section for examples of computations of measures and statistical tests.

SPATIAL ANALYSIS AND MAPPING

This report presents regional analyses using data dissemination areas used by the Ministry of Health Services (Health Authority (HA), Health Service Delivery Area (HSDA), and Local Health Area (LHA)) and for incorporated communities (see Figures 1 and 2). This continues the practice established in 2001 and provides HAs with a consistent time series of health status indicators for their regions. Health care services are managed and delivered by five HAs that govern, plan, and coordinate services regionally within 16 HSDAs. The Interior Health Authority encompasses four HSDAs. Fraser, Vancouver Coastal, Vancouver Island, and Northern Health Authorities each consist of three HSDAs. HSDAs can be further divided into LHAs. Vital events are allocated to these data dissemination areas by the postal codes recorded on registration documents.

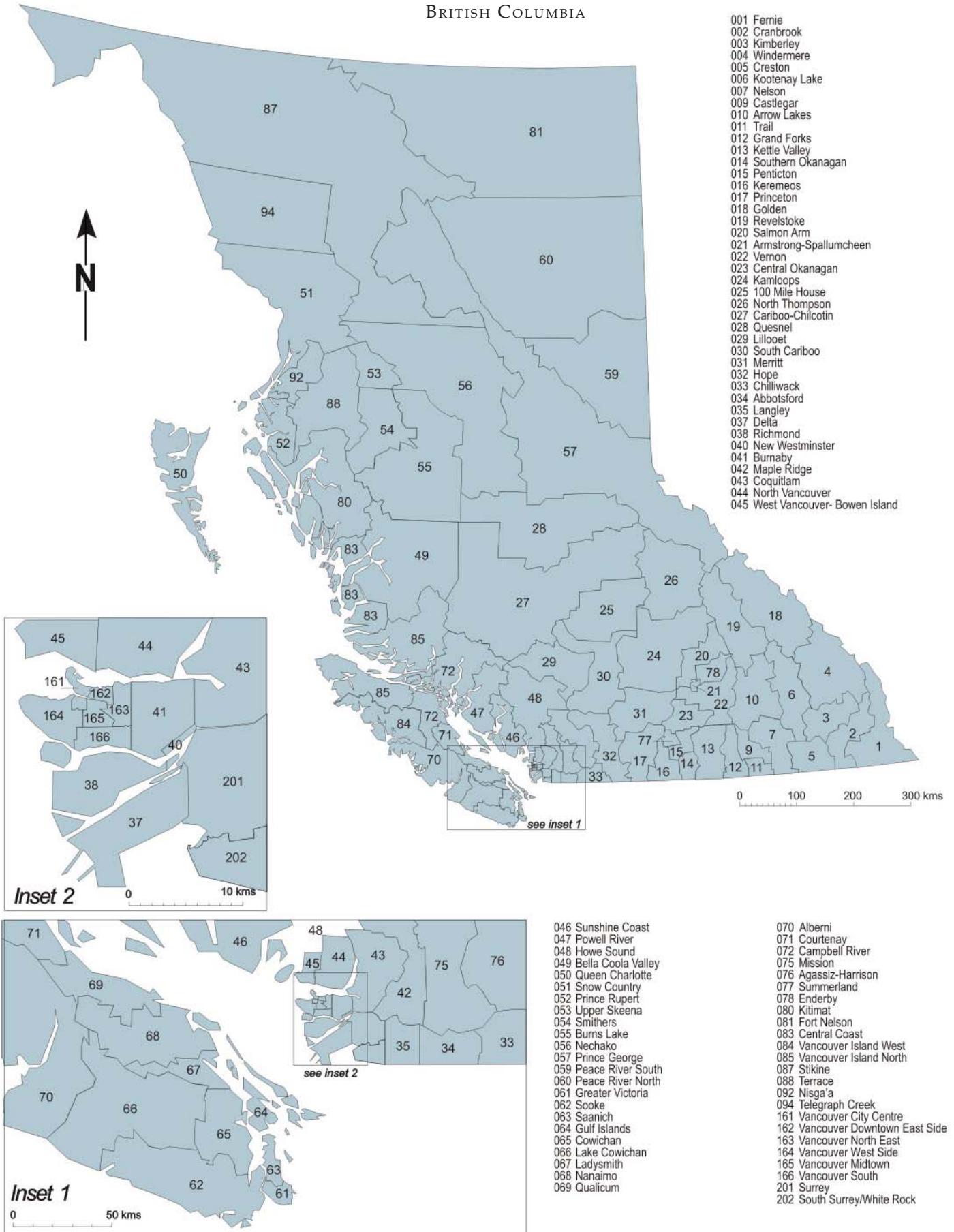
Marriages are assigned geographically by the postal code of the location where the marriage ceremony was performed; other vital events are assigned by the usual residence of the parents (for live births and stillbirths) or the decedent (for deaths).

Converting statistical data to maps can often reveal relationships that are not readily discernable in tabular form. The maps in this report present local health area data ranked by quintiles and allow easy visual examination of spatial patterns. Although statistics for all LHAs are presented in the maps, emphasis should be placed on those that are statistically significant. Maps have been included in the Vital Statistics Annual Reports since 1989 in order to disseminate relevant community level health information to the public and to local health service providers, planners, and educators. These allow communities to address their own specific health challenges and identify local health priorities. This can foster locally based solutions and more appropriate decision making.

TERMS, METHODS, AND COMPUTATIONAL EXAMPLES

Readers are encouraged to refer to the Glossary for explanations of terms. The Methodology section provides examples of computations of measures and statistical tests.

FIGURE 1
LOCAL HEALTH AREA MAP
 BRITISH COLUMBIA



- 001 Fernie
- 002 Cranbrook
- 003 Kimberley
- 004 Windermere
- 005 Creston
- 006 Kootenay Lake
- 007 Nelson
- 009 Castlegar
- 010 Arrow Lakes
- 011 Trail
- 012 Grand Forks
- 013 Kettle Valley
- 014 Southern Okanagan
- 015 Penticton
- 016 Keremeos
- 017 Princeton
- 018 Golden
- 019 Revelstoke
- 020 Salmon Arm
- 021 Armstrong-Spallumcheen
- 022 Vernon
- 023 Central Okanagan
- 024 Kamloops
- 025 100 Mile House
- 026 North Thompson
- 027 Cariboo-Chilcotin
- 028 Quesnel
- 029 Lillooet
- 030 South Cariboo
- 031 Merritt
- 032 Hope
- 033 Chilliwack
- 034 Abbotsford
- 035 Langley
- 037 Delta
- 038 Richmond
- 040 New Westminster
- 041 Burnaby
- 042 Maple Ridge
- 043 Coquitlam
- 044 North Vancouver
- 045 West Vancouver- Bowen Island

- 046 Sunshine Coast
- 047 Powell River
- 048 Howe Sound
- 049 Bella Coola Valley
- 050 Queen Charlotte
- 051 Snow Country
- 052 Prince Rupert
- 053 Upper Skeena
- 054 Smithers
- 055 Burns Lake
- 056 Nechako
- 057 Prince George
- 059 Peace River South
- 060 Peace River North
- 061 Greater Victoria
- 062 Sooke
- 063 Saanich
- 064 Gulf Islands
- 065 Cowichan
- 066 Lake Cowichan
- 067 Ladysmith
- 068 Nanaimo
- 069 Qualicum
- 070 Alberni
- 071 Courtenay
- 072 Campbell River
- 075 Mission
- 076 Agassiz-Harrison
- 077 Summerland
- 078 Enderby
- 080 Kitimat
- 081 Fort Nelson
- 083 Central Coast
- 084 Vancouver Island West
- 085 Vancouver Island North
- 087 Stikine
- 088 Terrace
- 092 Nisga'a
- 094 Telegraph Creek
- 161 Vancouver City Centre
- 162 Vancouver Downtown East Side
- 163 Vancouver North East
- 164 Vancouver West Side
- 165 Vancouver Midtown
- 166 Vancouver South
- 201 Surrey
- 202 South Surrey/White Rock

FIGURE 2
HEALTH AUTHORITY & HEALTH SERVICE DELIVERY AREA MAP
 BRITISH COLUMBIA

