

Birth-related Statistics



Birth Introduction

After a baby is born everyone asks about the baby's gender and weight and the condition of the mother and newborn. The same questions are important with regard to births in populations and they are the subject matter in this part of the 2006 Annual Report.

Statistics based on birth events form a crucial part of the demographic profile of communities, regions, provinces, and countries. They are used to derive important indicators of health status, fertility, infant mortality, and population growth. In turn, those indicators are used for health planning, policy formulation, research, and commerce. The tables in this part of the report present birth statistics categorized by maternal characteristics and other related measures, but all have been shown to relate in varying degrees to birth outcomes. The tables refer to live births although in some cases stillbirths are also included. The mother's usual residence was used to identify geographic location, not the place where the birth occurred.

Births – General Indicators

Certain birth and parental characteristics that have been shown to be related to outcome or are of general interest and they are presented in this section. These characteristics include age of mother, age of father, kind of birth (single, twin, or multiple), Local Health Area (LHA) of usual residence, and mode of delivery.

Table 7 shows the number of live births that were delivered by women at each age. In other words, the columns indicate the number of live born babies that mothers have had up to 2006 including the present one. See also Birth Order in the Glossary. Of course, second, third, and subsequent live births tend to have been delivered to progressively older women. Over 80 percent of 2006 live births were first or second births.

Table 7 can also be used to calculate the average age of mothers who gave birth in 2006. The average was 29.9 for all live births, 28.3 years for first live births, 30.9 years for second live births, and 32.0 years for three or more live births.

Additional calculations using data in Table 7 showed that stillbirth rates were almost flat across maternal age groups less than 39 years old. Mothers between 25 and 29 and between 30 and 34 years of age had the lowest stillbirth rates (6.64 and 7.18 per 1,000 total births respectively), followed by mothers between 15 and 19 years old (8.20 per 1,000 total births). Mothers between 35 and 39 and between 20 and 24 years old had somewhat higher rates (8.57 and 8.76 per 1,000 respectively), but mothers 40 years and older had the highest rate at 13.25 per 1,000 total births.

Table 8 shows the number of live births in British Columbia in 2006 cross tabulated by the age of mother and the age of father. It also has a line at the bottom showing the percentage of each column's births that occurred to couples who were not formally married to each other. The Percent row below TOTAL shows the percentage of live births to each age group of mothers. Likewise, the Percent column on the right of the table shows the percentage of live births to fathers in the various age groups.

Half of the births (50.2 percent) in 2006 were to mothers 30 to 39 years old and 42.4 percent were to mothers in their twenties (see table 8). Only 3.5 percent were to mothers less than 20 years and 3.9 percent to those 40 or older. For fathers, over half (51.6 percent) were in their thirties, a quarter (26.5 percent) were in their twenties, 13.8 percent were in their forties or older and 1.0 percent were less than 20 years old. In 7.2 percent of births, the father's age was not indicated.

Less than one percent (0.7 percent) of births (303) were to couples who were both in their teens; births to couples in which at only one was a teen made up 2.9 percent (1,207 excluding fathers whose age was N.S.) of all births and the mother was the teen for almost all of these (88.6 percent) as shown in Table 8. While there were only 100 births (0.2 percent) to mothers over 44 years old, 4.0 percent (1,659) of newborns had fathers over that age.

Table 8 also shows, for each age range of mothers, the number of infants born to couples who were not formally married to each other (Out-of-Wedlock). While this might once have been an indicator of unstable family structure, this is now more of a point of interest than an indicator of social dysfunction.

In general, the greatest potential value of Table 8 lies in its showing the incidence of live births to individuals at the upper and lower extremes of the age ranges.

Table 9 shows the number of births where a single baby was delivered, the number of births that were twin deliveries, and the number that were triplets or more according to the mother's age group. You should be aware that multiple births are not counted as instances of multiple birth deliveries but rather as the number of live born babies delivered in each kind of delivery. The table confirms that the likelihood of a multiple pregnancy increases with maternal age. In 2006, 5.0 percent of births to mothers 35 years and older were multiple live births; whereas, 2.7 percent of live births to mothers aged 20 to 34 were multiples and teenagers had the lowest proportion (1.0 percent). The table confirms that the proportion of births that are multiple births increases with increased maternal age.

In recent decades there has been a gradual increase in multiple birth rates in British Columbia (see Figure 8). The proportions of multiple live births increased from 1.9 percent of all live births in 1986 to 3.1 percent in 2006, but most deliveries (96.9 percent) are still singletons.

Table 10 shows 2006 fertility rates in the LHA where the mother resided and by maternal age groups. The table also shows the number of live births to women 15-19 of age over the five year period 2001-2005 and the fertility rate for that age group.

The columns (from left to right) show the number and name of the LHA (with a British Columbia total line), the number of live births that occurred (Observed) to 15-19 year olds over the years 2001-2005, and the age specific fertility rate (ASFR) in the same age group and time period. The ASFRs in 2006 are shown for six age ranges as well as the Total Fertility Rate (TFR), a measure of the potential effect of the current fertility rates on family size. After the ASFR for 2001-2005 and the TFR for 2006 there is a column labelled (p) which indicates the results of a statistical test of significance. For the definition of the ASFR and TFR see the Glossary. For computational descriptions of both rates see Fertility Rates in the Methodology section, this also provides an example of the statistical test of significance.

An area's fertility rate is affected by the age distribution of its population. As seen in table 10, live birth fertility rates for 2006 reached a peak between the ages of 25 and 34 years; areas where the age distribution is skewed away from that age range (either more younger or more older people) will have a lower proportion of individuals in the most fertile part of life.

Fertility rates are one determinant of an area's population increase or decrease. If the average number of children born to each woman in an area falls below 2.1, the total population will begin to decline unless there is sufficient counterbalancing population increase from in-migration.

The focus on teenage fertility in Table 10 is due to the potentially disruptive effects of pregnancy and birth on young women and the possible adverse outcomes to their babies. In British Columbia the 15-19 year old fertility rate for 2006 (10.6) was less than the rate for the years 2001-2005 (11.1).

In Figure 29 the ASFR statistics for 15-19 year olds from 2001 to 2005 are shown by LHA. The LHAs are grouped into five groups from those with the highest ASFRs (dark blue) to those with the lowest (dark grey). In general, more rural LHAs have higher ASFRs than more urban LHAs; and LHAs that are more northerly tend to have higher ASFRs than those LHAs that are more southerly.

Table 11 shows the number and percentage of births in each maternal age group according to their mode of delivery. Generally, the percent of age group births that were delivered by spontaneous vertex, and to a lesser extent by vacuum extraction, decreased as mothers got older. On the other hand, deliveries by Cesarean section increased proportionally as mothers got older (see also Figure 13). However, it is noteworthy that the percentage of first Cesarean sections gradually increased in age groups from 15-19 years up to the 40-44 year age group, but demonstrated a sharp increase among mothers aged 45 and over. Repeat Cesarean sections increased with increasing maternal age.

The number of Cesarean section deliveries in British Columbia increased from 21.0 percent of all live births in 1986 to 30.3 percent in 2006 (see Figure 11).

Table 12 shows live births by the Local Health Area (LHA) where the mother usually resided and focuses on spontaneous vertex and Cesarean section modes of delivery. Spontaneous breech, forceps, and vacuum deliveries are combined into the 'Other' category. The table shows the number and percent of live births that were delivered by Cesarean section. The ratios indicate the number of observed Cesarean section births to residents of the LHA divided by the number that would be expected if the LHA had the provincial rates. The (p) indicates which observed values were significantly different from the expected value. The Methodology section shows an example of the calculation method for the Observed versus Expected Ratio and the Statistical Test of Significance.

The columns on the right side of the table indicate the total number of live births in 2006 to residents of each LHA and the birth rate per 1,000 population. Expressing the number of births this way allows comparison of LHAs with regard to the birth 'productivity'. The LHA with the highest live birth rate had nearly four times the rate of the lowest. In areas where a high birth rate has been sustained over a number of years, the proportion of infants and young people may rise and the need for services dealing with that segment of the population could increase.

This look at births with regard to the mode of delivery also allows health care practitioners, administrators, and others to monitor delivery modes in their local area, make comparisons to other areas, and see their relative place in the province. For more comparisons of Cesarean rates see also Figures 11, 12, and 13.

In Figure 30 the Local Health Areas (LHAs) are grouped with regard to their Ratio of observed number of Cesarean live births over expected number of Cesarean live births for 2006. The figure shows the LHAs in quintiles (that is five groups with equal numbers of LHAs) from those with the highest Cesarean Ratios (quintile 5) to those with the lowest such rates (quintile 1).

TABLE 7
BIRTHS BY AGE OF MOTHER AND LIVE BIRTHS BY BIRTH ORDER
 BRITISH COLUMBIA, 2006

Age of Mother	Birth Order										Total Live Births	Stillbirths	Total Births
	1	2	3	4	5	6	7	8	9+	N.S.			
13	1	-	-	-	-	-	-	-	-	-	1	-	1
14	18	-	-	-	-	-	-	-	-	-	18	-	18
15	53	1	-	-	-	-	-	-	-	1	55	-	55
16	116	4	-	-	-	-	-	-	-	-	120	1	121
17	218	14	1	-	-	-	-	-	-	-	233	1	234
18	344	44	5	2	-	-	-	-	-	-	395	2	397
19	552	87	9	1	-	-	-	-	-	-	649	8	657
20	625	161	25	5	-	-	-	-	-	-	816	10	826
21	709	234	45	12	1	-	-	-	-	-	1,001	10	1,011
22	813	370	77	14	3	1	-	-	-	-	1,278	12	1,290
23	804	439	124	33	5	1	1	-	-	-	1,407	11	1,418
24	834	551	168	38	12	2	1	-	-	1	1,607	11	1,618
25	1,030	595	200	45	11	7	2	-	-	-	1,890	13	1,903
26	1,117	696	218	69	23	5	1	-	-	-	2,129	17	2,146
27	1,196	776	250	68	27	6	1	2	-	-	2,326	13	2,339
28	1,205	908	287	90	27	6	2	1	-	1	2,527	16	2,543
29	1,265	946	289	103	22	15	6	1	1	-	2,648	18	2,666
30	1,237	1,044	333	99	30	10	6	-	1	-	2,760	13	2,773
31	1,220	1,106	348	106	28	15	4	2	2	1	2,832	23	2,855
32	1,100	1,085	341	108	25	15	2	4	1	1	2,682	20	2,702
33	957	1,147	358	105	41	19	5	1	-	2	2,635	22	2,657
34	842	1,027	328	114	28	8	6	2	1	1	2,357	18	2,375
35	785	952	355	123	28	13	2	1	2	-	2,261	17	2,278
36	582	791	348	130	17	13	5	1	1	-	1,888	18	1,906
37	446	667	257	101	25	11	9	-	4	-	1,520	10	1,530
38	354	518	205	60	19	10	7	3	7	1	1,184	10	1,194
39	218	340	139	46	16	9	5	3	9	-	785	11	796
40	164	254	103	31	23	5	3	2	3	1	589	7	596
41	135	160	67	31	15	6	5	3	3	-	425	4	429
42	86	99	50	25	7	4	6	3	1	-	281	6	287
43	54	60	29	16	5	2	-	1	-	-	167	3	170
44	18	23	15	6	5	3	5	1	1	-	77	1	78
45	22	14	5	5	1	-	1	-	-	-	48	-	48
45+	14	18	8	5	2	1	1	1	1	1	52	1	53
TOTAL	19,134	15,131	4,987	1,591	446	187	86	32	38	11	41,643	327	41,970
PERCENT	45.9	36.3	12.0	3.8	1.1	0.4	0.2	0.1	0.1	0.0	100.0		

Note: Birth order denotes the number of live births. Total includes unknown gender. Non-residents are excluded. N.S. – Not stated.

TABLE 8
TOTAL LIVE BIRTHS BY AGE OF FATHER,
AGE OF MOTHER AND OUT-OF-WEDLOCK

BRITISH COLUMBIA, 2006

Age of Father	Age of Mother (in Years)									Total	Percent
	<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.		
< 15	1	-	-	-	-	-	-	-	-	1	0.0
15-19	8	294	90	10	-	3	-	-	-	405	1.0
20-24	2	571	1,832	473	84	17	1	-	-	2,980	7.2
25-29	-	161	2,180	4,385	1,108	173	19	2	-	8,028	19.3
30-34	-	38	799	4,003	5,999	1,140	90	2	-	12,071	29.0
35-39	-	21	246	1,316	3,969	3,523	339	10	-	9,424	22.6
40-44	-	6	79	396	1,148	1,793	623	25	-	4,070	9.8
45+	-	2	36	164	397	635	382	43	-	1,659	4.0
N.S.	8	359	847	773	561	354	85	18	-	3,005	7.2
TOTAL	19	1,452	6,109	11,520	13,266	7,638	1,539	100	-	41,643	
Percent	0.0	3.5	14.7	27.7	31.9	18.3	3.7	0.2			100.0
Out-of-Wedlock	16	1,200	3,309	2,897	2,002	1,231	323	26	-	11,004	

Note: Total percentage may not add up to 100 due to rounding.

Out-of-Wedlock - Indicates mother and father of child were not legally married to each other and excludes 1,796 cases where marital status was not stated.

Non-residents are excluded. N.S. - Not stated.

TABLE 9
LIVE BIRTHS BY AGE OF MOTHER AND KIND OF BIRTH
BRITISH COLUMBIA, 2006

Age of Mother	Kind of Birth			Total
	Single	Twin	Triplets+	
< 15	19	-	-	19
15-19	1,438	14	-	1,452
20-24	5,982	124	3	6,109
25-29	11,245	274	-	11,520
30-34	12,848	415	3	13,266
35-39	7,291	335	12	7,638
40-44	1,440	96	3	1,539
45 +	78	22	-	100
N.S.	-	-	-	-
TOTAL	40,341	1,280	21	41,643

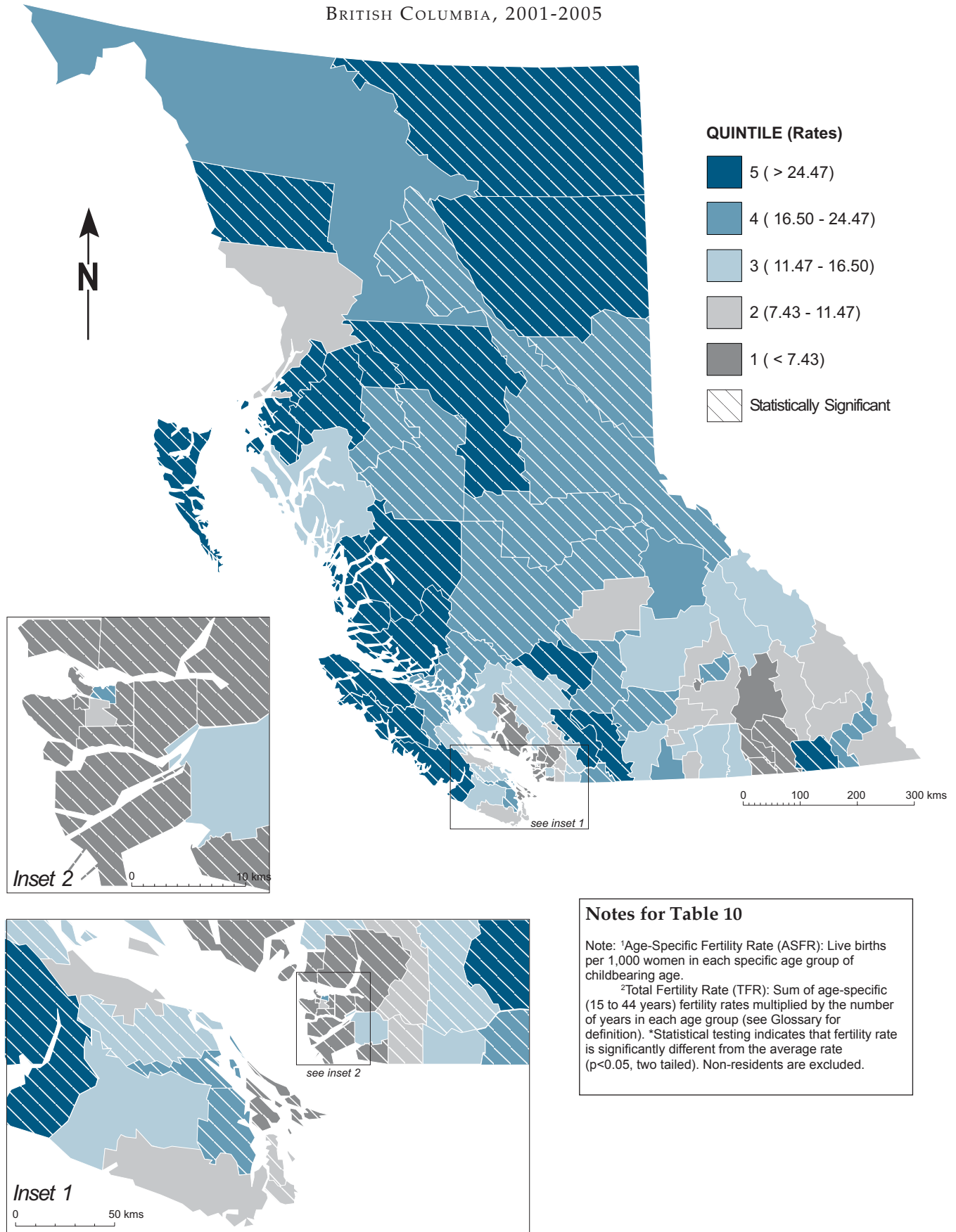
Note: For the multiple births which include stillbirths, only live births are shown in this table. Triplets+ : included in this column are the live births from multiple births of three or more. Non-residents are excluded. N.S.- Not stated.

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Local Health Area	2001-2005 Teenage Fertility Rate (15-19 yrs)			2006 ASFR ¹						TFR ²
	Observed	ASFR ¹	(p)	15-19	20-24	25-29	30-34	35-39	40-44	Rate (p)
001 Fernie	33	11.34		17.86	43.34	94.76	78.72	31.45	-	1,330.59
002 Cranbrook	92	18.90	*	13.99	52.68	85.96	83.45	33.33	9.89	1,396.52
003 Kimberley	14	11.36		18.02	46.61	65.79	128.71	29.41	8.57	1,485.57
004 Windermere	19	11.38		10.14	51.02	78.18	65.36	22.99	4.75	1,162.15
005 Creston	77	32.65	*	18.63	72.56	109.85	108.43	33.44	2.22	1,725.73
006 Kootenay Lake	6	11.39		11.36	29.41	56.34	83.33	21.74	9.01	1,055.97
007 Nelson	25	5.39	*	9.22	45.21	72.92	121.71	46.39	8.31	1,518.76
009 Castlegar	11	4.71	*	2.17	34.62	49.41	93.75	33.80	4.14	1,089.49
010 Arrow Lakes	5	6.69		15.27	41.96	92.86	72.07	40.00	-	1,310.77
011 Trail	25	6.39	*	16.64	39.11	78.43	107.23	31.67	9.67	1,413.77
012 Grand Forks	23	14.15		20.16	43.35	88.61	159.72	42.25	9.62	1,818.56
013 Kettle Valley	9	15.18		8.85	36.36	94.59	194.44	11.76	-	1,730.08
014 Southern Okanagan	27	10.30		22.73	36.30	96.65	63.11	48.46	6.62	1,369.30
015 Penticton	88	13.68		16.67	54.59	88.28	80.47	28.62	5.42	1,370.20
016 Keremeos	10	16.69		16.95	74.63	106.87	89.11	39.06	17.44	1,720.30
017 Princeton	10	13.23		20.13	42.25	65.42	78.95	7.52	5.41	1,098.40
018 Golden	15	12.53		13.04	53.28	82.61	104.17	28.30	3.10	1,422.48
019 Revelstoke	20	13.01		19.17	52.08	151.04	102.22	26.63	-	1,755.72
020 Salmon Arm	53	9.43		13.60	46.89	86.74	87.62	32.70	5.72	1,366.37
021 Armstrong - Spallumcheen	10	5.14	*	8.85	61.58	85.37	66.33	25.86	2.68	1,253.31
022 Vernon	123	11.26		8.28	42.86	78.59	87.46	35.07	6.12	1,291.91
023 Central Okanagan	272	10.13		9.48	43.61	80.56	80.74	37.12	5.45	1,284.79
024 Kamloops	226	12.24		11.72	48.90	85.36	74.12	34.15	4.52	1,293.84
025 100 Mile House	31	11.18		12.66	34.97	109.89	75.09	13.51	3.32	1,247.17
026 North Thompson	16	16.68		12.66	52.94	113.04	67.31	41.67	5.41	1,465.11
027 Cariboo - Chilcotin	122	22.32	*	21.59	64.49	104.90	67.28	28.00	9.22	1,477.40
028 Quesnel	89	18.15	*	17.64	74.84	117.80	69.37	34.13	3.24	1,585.12
029 Lillooet	27	25.86	*	43.48	60.11	70.92	62.99	37.31	5.15	1,399.85
030 South Cariboo	32	22.87	*	22.22	52.26	83.70	97.90	15.23	3.80	1,375.60
031 Merritt	42	17.33	*	30.84	75.92	103.77	77.38	29.41	8.37	1,628.47
032 Hope	44	28.28	*	30.53	75.86	72.16	98.68	18.45	3.14	1,494.20
033 Chilliwack	297	21.30	*	17.01	77.72	114.51	122.52	31.31	7.44	1,852.54
034 Abbotsford	277	12.25		10.92	73.54	147.87	96.28	32.29	5.59	1,832.51
035 Langley	178	8.28	*	7.35	33.71	107.68	129.11	51.76	6.86	1,682.33
037 Delta	79	4.06	*	3.43	24.36	85.36	106.72	58.51	6.80	1,425.88
038 Richmond	84	3.07	*	3.11	16.70	55.46	98.71	57.79	11.86	1,218.10
040 New Westminster	81	12.22		11.63	42.35	91.81	87.06	51.71	11.20	1,478.82
041 Burnaby	185	6.13	*	4.42	23.49	72.67	97.69	57.87	9.89	1,330.16
042 Maple Ridge	131	8.72	*	7.49	33.35	90.66	115.45	42.88	7.95	1,488.91
043 Coquitlam	190	5.49	*	2.94	23.29	74.95	117.99	61.02	8.61	1,443.94
044 North Vancouver	81	3.84	*	2.17	14.30	46.36	113.23	73.24	12.17	1,307.36
045 West Vancouver-Bowen Is.	18	2.18	*	4.19	8.93	20.29	99.64	87.03	17.62	1,188.53
046 Sunshine Coast	36	7.05	*	4.63	33.21	66.59	83.33	47.12	7.72	1,213.06
047 Powell River	44	13.17		9.80	33.64	79.75	101.32	33.49	5.99	1,320.00
048 Howe Sound	69	16.10	*	13.68	41.28	67.75	90.34	76.33	11.47	1,504.20
049 Bella Coola Valley	37	50.07	*	71.43	142.86	133.33	122.45	57.85	8.33	2,681.26
050 Queen Charlotte	21	25.42	*	27.21	98.36	106.80	82.80	35.40	-	1,752.84
051 Snow Country	1	10.64		-	62.50	100.00	95.24	31.25	-	1,444.94
052 Prince Rupert	127	39.71	*	37.91	88.97	91.11	68.18	32.89	1.56	1,603.15
053 Upper Skeena	45	45.09	*	40.20	55.05	54.95	83.33	29.29	-	1,314.07
054 Smithers	70	19.82	*	24.84	88.44	150.11	87.97	39.36	9.02	1,998.69
055 Burns Lake	36	23.56	*	18.66	99.36	116.18	69.65	18.45	17.67	1,699.84
056 Nechako	102	32.13	*	24.60	99.66	109.24	87.95	21.90	5.90	1,746.28
057 Prince George	350	17.72	*	19.73	65.18	90.91	88.42	31.45	5.63	1,506.60
059 Peace River South	120	23.14	*	25.00	99.29	135.43	59.14	18.42	4.42	1,708.48
060 Peace River North	172	27.80	*	42.59	110.53	155.81	107.08	24.35	7.63	2,239.90
061 Greater Victoria	277	9.07	*	10.81	26.07	63.50	78.35	44.47	7.87	1,155.32
062 Sooke	108	10.76		7.68	36.23	98.09	122.99	45.03	6.24	1,581.36
063 Saanich	75	7.82	*	6.29	30.33	67.89	87.36	45.90	12.11	1,249.42
064 Gulf Islands	11	4.95	*	2.31	16.00	64.43	99.69	44.82	11.36	1,193.09
065 Cowichan	186	18.70	*	19.80	49.58	83.61	112.20	53.65	5.96	1,624.02
066 Lake Cowichan	19	16.32	*	13.27	44.18	73.86	88.89	14.49	-	1,173.48
067 Ladysmith	57	20.26	*	23.85	50.93	110.05	105.41	35.47	4.56	1,651.36
068 Nanaimo	249	14.54	*	13.26	45.77	73.60	78.94	32.10	7.18	1,254.29
069 Qualicum	56	9.66		4.78	51.28	64.42	58.26	37.35	3.11	1,096.03
070 Alberni	151	28.00	*	23.26	69.93	98.31	95.79	42.51	4.87	1,673.27
071 Courtenay	157	14.27	*	12.89	35.31	78.49	84.87	41.67	5.39	1,293.09
072 Campbell River	129	17.19	*	15.05	47.22	106.64	99.63	28.11	4.68	1,506.63
075 Mission	113	14.85	*	14.42	48.19	111.76	107.25	43.11	5.05	1,648.88
076 Agassiz - Harrison	36	24.69	*	31.03	77.92	132.08	82.47	64.66	14.18	2,011.73
077 Summerland	16	7.82		10.42	24.55	74.85	129.03	51.38	12.22	1,512.31
078 Enderby	31	22.61	*	3.97	63.12	113.86	118.88	33.90	6.41	1,700.71
080 Kitimat	36	14.04		10.87	41.56	118.85	83.33	16.55	11.09	1,411.24
081 Fort Nelson	41	30.48	*	41.32	120.14	76.66	64.98	37.67	8.51	1,746.41
083 Central Coast	17	49.13	*	142.86	301.89	218.75	96.15	40.82	-	4,002.32
084 Vancouver Island West	22	43.14	*	29.13	32.26	57.97	171.88	10.10	-	1,506.66
085 Vancouver Island North	102	35.09	*	25.90	95.69	212.45	75.83	22.53	9.14	2,207.72
087 Stikine	4	24.24		-	30.30	96.77	23.81	-	-	754.43
088 Terrace	128	29.26	*	30.93	78.85	99.85	88.79	14.86	6.11	1,596.94
092 Nisga'a	28	69.83	*	72.29	182.93	130.43	102.94	-	-	2,442.96
094 Telegraph Creek	7	54.26	*	34.48	86.96	250.00	105.26	29.41	-	2,530.57
161 Vancouver - City Centre	27	4.81	*	3.89	10.76	29.56	37.39	35.54	7.87	625.03
162 Vancouver - Downtown E.side	93	20.69	*	14.97	40.03	62.90	60.02	43.39	10.14	1,157.24
163 Vancouver - North East	80	5.90	*	7.29	30.89	74.07	95.26	60.00	14.13	1,408.23
164 Vancouver - Westside	19	0.98	*	1.24	4.86	20.82	78.23	89.76	21.03	1,079.68
165 Vancouver - Midtown	101	9.92		5.90	35.15	79.95	101.21	59.61	14.24	1,480.30
166 Vancouver - South	94	4.53	*	5.94	25.75	66.22	92.14	60.75	15.29	1,330.50
201 Surrey	623	11.56		9.87	63.71	136.19	109.63	45.34	8.08	1,864.10
202 South Surrey/White Rock	22	1.97	*	0.87	12.40	52.71	121.64	68.81	7.18	1,318.06
PROVINCIAL TOTAL	7,550	11.09		10.61	40.77	81.38	92.24	47.72	8.69	1,407.02

Notes for this table follow the map.

FIGURE 29
LIVE BIRTH TEENAGE FERTILITY RATES BY LOCAL HEALTH AREA
 BRITISH COLUMBIA, 2001-2005



Note: ASFR - Age-Specific Fertility Rate - Live births per 1,000 women age 15 to 19 years. Refer to Figure 1 to clarify geographical location of Local Health Area

TABLE 11
LIVE BIRTHS BY MODE OF DELIVERY AND AGE OF MOTHER
 BRITISH COLUMBIA, 2006

Mode of Delivery	Age of Mother (in Years)									Total
	<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.	
Spontaneous vertex	14	1,021	4,036	7,060	7,713	4,084	720	45	-	24,693
Percent	73.7	70.3	66.1	61.3	58.1	53.5	46.8	45.0	-	59.3
Spontaneous breech	-	4	18	38	36	28	9	2	-	135
Percent	0.0	0.3	0.3	0.3	0.3	0.4	0.6	2.0	-	0.3
Forceps	-	42	186	438	530	265	51	4	-	1,516
Percent	0.0	2.9	3.0	3.8	4.0	3.5	3.3	4.0	-	3.6
Vacuum	1	114	437	842	773	383	68	2	-	2,620
Percent	5.3	7.9	7.2	7.3	5.8	5.0	4.4	2.0	-	6.3
First cesarean	3	251	1,078	2,123	2,429	1,527	388	40	-	7,839
Percent	15.8	17.3	17.6	18.4	18.3	20.0	25.2	40.0	-	18.8
Repeat cesarean	-	20	347	1,006	1,766	1,344	302	7	-	4,792
Percent	0.0	1.4	5.7	8.7	13.3	17.6	19.6	7.0	-	11.5
N.S.	1	-	7	13	19	7	1	-	-	48
TOTAL	19	1,452	6,109	11,520	13,266	7,638	1,539	100	-	41,643
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0

Note: Breech presentations may be coded to forceps, vacuum, first cesarean or repeat cesarean mode of delivery, as well as spontaneous breech. Total percentage may not add up to 100 due to rounding. Non-residents are excluded. N.S. - Not stated.



Vital Statistics Information Box

PLACE OF BIRTH FOR MIDWIFE ASSISTED BIRTHS

BRITISH COLUMBIA, 2000-2006

The College of Midwives of British Columbia was established in 1995 and the first midwives were registered to practice in 1998. The Vital Statistics Agency implemented procedures to identify births delivered by registered midwives in 1998, and, by 1999, could identify all midwife assisted births. The table below shows the place of birth for midwife assisted births in the province from 2000 to 2006.

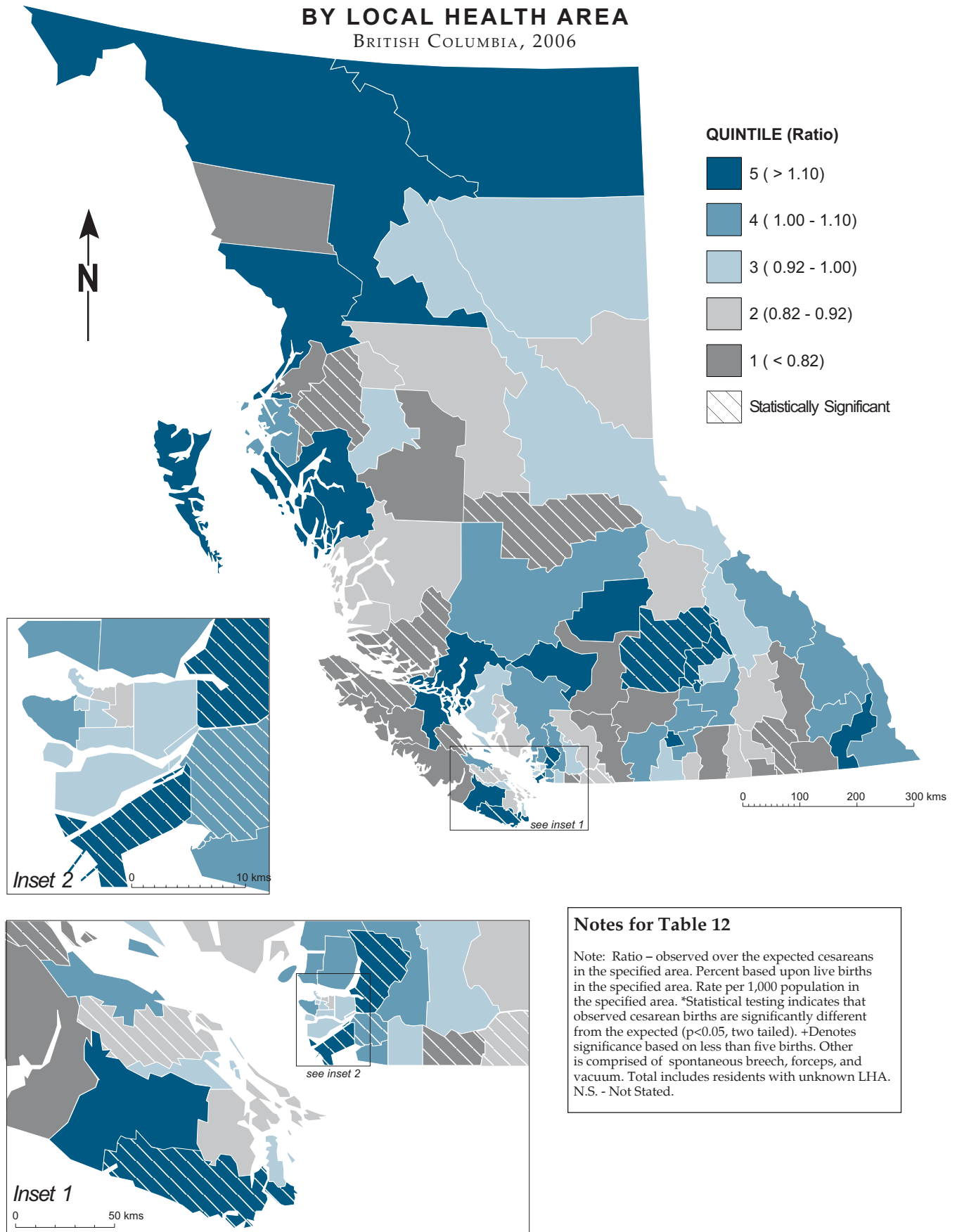
Place of Birth	2000		2001		2002		2003		2004		2005		2006	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Hospital	661	62.1	854	63.2	837	62.9	1,052	68.4	1,167	69.3	1,489	70.0	1,740	73.0
Home	387	36.3	415	30.7	414	31.1	431	28.0	459	27.3	424	19.9	157	6.6
Other and unknown*	17	1.6	82	6.1	79	5.9	55	3.6	57	3.4	213	10.0	488	20.5
Midwife Assisted Births	1,065	100.0	1,351	100.0	1,330	100.0	1,538	100.0	1,683	100.0	2,126	100.0	2,385	100.0
Percent of Total Births														
Delivered by		2.6		3.3		3.3		3.8		4.2		5.2		5.7
Registered Midwives														
Registered Practicing	61		60		65		68		78		88		104	
Midwives														
Total Registered	64		67		73		80		89		104		128	
Midwives														

Note: *Other and unknown includes birthing clinics.

44		Local Health Area	Spontaneous Vertex	Cesarean					Other	N.S.	Total Live Births	
				First	Repeat	Total	Ratio	(p)	Percent		Number	Rate
001	Fernie	75	21	19	40	1.05	31.7		11	-	126	8.25
002	Cranbrook	137	52	32	84	1.19	36.1		12	-	233	9.35
003	Kimberley	45	17	5	22	1.04	31.4		3	-	70	8.49
004	Windermere	47	18	6	24	1.03	31.2		6	-	77	7.94
005	Creston	82	12	10	22	0.67	20.4		4	-	108	8.28
006	Kootenay Lake	12	3	1	4	0.78	23.5		1	-	17	5.41
007	Nelson	165	25	17	42	0.62	18.8	*	15	2	224	9.10
009	Castlegar	54	14	9	23	0.88	26.7		9	-	86	6.58
010	Arrow Lakes	23	5	4	9	0.87	26.5		1	1	34	7.26
011	Trail	93	26	10	36	0.79	24.0		21	-	150	7.69
012	Grand Forks	50	9	11	20	0.87	26.3		6	-	76	8.39
013	Kettle Valley	21	1	4	5	0.61	18.5		-	1	27	7.41
014	Southern Okanagan	87	19	16	35	0.87	26.3		10	1	133	6.80
015	Penticton	204	73	32	105	1.03	31.2		28	-	337	8.15
016	Keremeos	26	10	3	13	1.00	30.2		4	-	43	8.36
017	Princeton	13	3	5	8	1.10	33.3		3	-	24	4.68
018	Golden	40	15	6	21	1.05	31.8		5	-	66	9.12
019	Revelstoke	52	13	10	23	0.92	28.0		7	-	82	9.86
020	Salmon Arm	146	59	38	97	1.24	37.6	*	14	1	258	7.64
021	Armstrong - Spallumcheen	33	25	14	39	1.67	50.6	*	5	-	77	7.98
022	Vernon	292	92	70	162	1.08	32.7		40	2	496	7.78
023	Central Okanagan	832	268	176	444	1.03	31.3		140	1	1,417	8.33
024	Kamloops	542	188	136	324	1.15	34.8	*	66	-	932	8.67
025	100 Mile House	48	25	12	37	1.39	42.0		3	-	88	5.93
026	North Thompson	29	5	5	10	0.85	25.6		-	-	39	8.93
027	Cariboo - Chilcotin	162	43	49	92	1.07	32.5		29	-	283	10.51
028	Quesnel	159	28	30	58	0.76	23.2	*	32	1	250	10.63
029	Lillooet	24	11	6	17	1.30	39.5		2	-	43	9.49
030	South Cariboo	43	8	4	12	0.68	20.7		3	-	58	8.04
031	Merritt	84	13	17	30	0.80	24.2		8	2	124	10.81
032	Hope	42	10	6	16	0.81	24.6		7	-	65	7.67
033	Chilliwack	622	144	110	254	0.87	26.2	*	92	-	968	11.98
034	Abbotsford	1,036	235	170	405	0.82	24.8	*	194	1	1,636	12.54
035	Langley	832	217	149	366	0.93	28.1		102	2	1,302	10.60
037	Delta	482	191	120	311	1.13	34.4	*	110	1	904	8.86
038	Richmond	951	275	196	471	0.97	29.5		172	-	1,594	8.72
040	New Westminster	393	132	64	196	0.97	29.3		80	-	669	10.83
041	Burnaby	1,276	425	206	631	0.97	29.3		243	4	2,154	10.15
042	Maple Ridge	525	167	112	279	1.00	30.3		117	1	922	10.28
043	Coquitlam	1,076	427	272	699	1.14	34.7	*	237	2	2,014	9.74
044	North Vancouver	684	249	137	386	1.05	32.0		138	-	1,208	8.88
045	West Vancouver-Bowen Is.	175	46	52	98	1.07	32.6		27	1	301	5.82
046	Sunshine Coast	130	35	18	53	0.89	26.9		13	1	197	6.77
047	Powell River	84	20	20	40	0.94	28.6		16	-	140	6.95
048	Howe Sound	235	98	40	138	1.09	33.1		43	1	417	12.85
049	Bella Coola Valley	34	9	5	14	0.84	25.5		7	-	55	17.79
050	Queen Charlotte	26	12	4	16	1.10	33.3		6	-	48	9.52
051	Snow Country	4	1	1	2	1.10	33.3		-	-	6	10.60
052	Prince Rupert	106	33	22	55	1.03	31.3		15	-	176	11.77
053	Upper Skeena	35	5	9	14	0.87	26.4		4	-	53	9.66
054	Smithers	138	33	31	64	0.95	29.0		19	-	221	13.65
055	Burns Lake	53	7	11	18	0.67	20.5		17	-	88	11.31
056	Nechako	125	33	18	51	0.89	27.0		13	-	189	11.74
057	Prince George	647	187	125	312	0.97	29.4		103	-	1,062	10.96
059	Peace River South	211	55	28	83	0.86	26.0		25	-	319	11.75
060	Peace River North	368	97	63	160	0.96	29.1		22	-	550	16.35
061	Greater Victoria	1,022	441	182	623	1.18	35.7	*	98	1	1,744	7.89
062	Sooke	337	164	78	242	1.31	39.6	*	32	-	611	9.89
063	Saanich	258	80	36	116	0.97	29.3		22	-	396	6.24
064	Gulf Islands	60	17	5	22	0.83	25.3		3	2	87	5.63
065	Cowichan	371	92	55	147	0.89	27.0		25	2	545	9.63
066	Lake Cowichan	26	10	4	14	1.10	33.3		2	-	42	6.58
067	Ladysmith	100	24	20	44	0.95	28.8		9	-	153	8.67
068	Nanaimo	555	126	88	214	0.86	26.1	*	51	-	820	8.16
069	Qualicum	153	48	25	73	1.00	30.4		13	1	240	5.31
070	Alberni	207	49	31	80	0.82	25.0		32	1	320	9.96
071	Courtenay	324	60	43	103	0.73	22.2	*	36	-	463	7.43
072	Campbell River	209	78	50	128	1.13	34.4		34	1	372	8.97
075	Mission	243	59	63	122	0.99	30.1		40	-	405	10.20
076	Agassiz - Harrison	62	11	13	24	0.82	25.0		10	-	96	10.65
077	Summerland	42	16	12	28	1.13	34.1		10	2	82	6.78
078	Enderby	44	15	6	21	0.99	30.0		4	1	70	9.19
080	Kitimat	44	11	24	35	1.30	39.3		10	-	89	8.43
081	Fort Nelson	52	27	10	37	1.26	38.1		6	2	97	14.79
083	Central Coast	25	8	2	10	0.89	27.0		2	-	37	26.30
084	Vancouver Island West	14	4	1	5	0.75	22.7		3	-	22	9.21
085	Vancouver Island North	114	16	15	31	0.63	19.0	*	18	-	163	13.05
087	Stikine	2	2	-	2	1.32	40.0		1	-	5	4.78
088	Terrace	172	19	25	44	0.61	18.6	*	19	1	236	11.35
092	Nisga'a	26	2	3	5	0.48	14.7		3	-	34	16.92
094	Telegraph Creek	7	1	1	2	0.73	22.2		-	-	9	12.71
161	Vancouver - City Centre	479	206	49	255	0.97	29.3		137	-	871	7.97
162	Vancouver - Downtown E.side	293	94	38	132	0.90	27.2		59	1	485	8.63
163	Vancouver - North East	645	191	100	291	0.91	27.5		122	1	1,059	10.59
164	Vancouver - Westside	688	227	140	367	1.00	30.4		151	2	1,208	9.18
165	Vancouver - Midtown	599	197	105	302	0.97	29.3		130	-	1,031	11.72
166	Vancouver - South	789	239	162	401	0.97	29.5		169	1	1,360	10.19
201	Surrey	2,492	955	591	1,546	1.08	32.8	*	669	2	4,709	13.34
202	South Surrey/White Rock	308	99	67	166	1.07	32.5		36	1	511	6.28
	PROVINCIAL TOTAL	24,693	7,839	4,792	12,631	1.00	30.3		4,271	48	41,643	9.66

Notes for this table follow the map.

FIGURE 30
**CESAREAN DELIVERIES OF LIVE BORN INFANTS
 BY LOCAL HEALTH AREA**
 BRITISH COLUMBIA, 2006



Note: Ratio - Observed over the expected. Refer to Figure 1 to clarify geographical location of Local Health Area

Births – Birth Weight

There are good reasons for family and friends to ask about a newborn baby's weight. Size at birth is recognized as the primary indicator of newborn health not only in British Columbia and Canada but worldwide. It is also an important predictor of subsequent health and well being, as well as disability and death, among newborn infants. In British Columbia a baby is weighed (in grams) immediately after birth and weight is used as one of the diagnostic indicators of fetal growth.

The following tables show birth weight categorized by other indicators related to birth weight, such as gender, gestational age, and maternal age.

Birth weight for gestational age is the most widely accepted indicator of health status of newborns and predictor of their subsequent well being. Birth weight alone is considered a valuable indicator of the infant's health status but the addition of gestational age can provide an indication of potential growth restriction during pregnancy. Unfortunately reliable estimates of gestational age are not available in some jurisdictions so birth weight has to suffice, but in British Columbia recording methods are well established so birth weight for gestational age is an accepted indicator of fetal growth. In recognition of its importance the Vital Statistics Agency periodically publishes reports dedicated to the analysis of birth weight for gestational age for various sub-populations in the province.

Babies born at term (37 to 41 weeks) and between 2,500 and 4,499 grams have been shown to have the most favourable prospects for good health and Table 13 indicates that 36,830 births or 88.4 percent of all live births in 2006 were in that category. There were 3,137 pre-term births (less than 37 weeks) which accounted for 7.53 percent of all live births.

Table 14 shows the number of live births to residents of British Columbia in 2006 according to maternal age and infant birth weight category. In all maternal age categories, the majority of babies born had healthy birth weights (from 2,499 to 4,499 grams). Table 14 shows that the proportion of live births having healthy birth weights declined with increasing maternal age, and the proportion of live births having low birth weights (less than 2,499 grams) increased, particularly among those with a maternal age over 35.

Table 15 displays the number and percent of LBW babies by gender according to the mother's age group. Female babies generally have a lower birth weight than males (see Table 13), so it is not surprising that they have a higher rate of LBW (60.73 per 1,000 female live births) than males (51.05 per 1,000 male live births).

Figure 31 graphically shows the pattern of LBW by maternal age groups. Rates of low birth weight are lowest among women under the age of 35 and appear to increase in subsequent age groups. Older mothers not only have increased rates of LBW babies but the rate among older mothers has shown an increasing trend since 1986 as indicated in Figure 10.

Table 16 shows the incidence of LBW babies in the period 2001 to 2005 and the year 2006, stratified by the LHA in which the mother resided with statistics for the whole province. As well as the incidence of such births, the 2001 to 2005 part of the table shows the LBW rate per 1,000 live births and the ratio of the observed number of LBW births in the LHA divided by the number that would be expected if the LHA had the provincial rates. The (p) column indicates those LHAs where the observed number was significantly different from the expected number. See Expected Low Birth Weight in the Glossary and an example of the computational method of the ratio with a reference to the statistical test under Observed versus Expected Ratios in the Methodology section. There were 22 LHAs with ratios that were statistically significant, of these only 8 were high. The 2006 part of the table shows the incidence figures broken down by three categories of gestational age of the newborn, the total number of LBW births, and the rate. In some LHAs the number of LBW babies was quite low in 2006 so the rates should be viewed with caution.

Figure 32 shows British Columbia LHAs displayed in five levels according to the 2001-2005 observed versus expected LBW ratio. High ratios, (Quintile 5, dark blue colour) mean that an LHA had quite a high ratio in the years 2001-2005. At the other extreme, the areas shown as dark grey have a relatively low ratio. The spatial relationship of the high ratio LHAs to the low ratio LHAs has no obvious pattern.

TABLE 13
LIVE BIRTHS BY BIRTH WEIGHT, GENDER, AND GESTATIONAL AGE
BRITISH COLUMBIA, 2006

Birth Weight (in Grams)	Gender		Gestational Age (in Weeks)						Total
	Male	Female	<20	20-27	28-36	37-41	42+	N.S.	
<500	18	19	6	30	-	1	-	-	37
500-749	25	29	-	50	4	-	-	-	54
750-999	28	24	-	40	12	-	-	-	52
1,000-1,249	40	37	-	18	59	-	-	-	77
1,250-1,499	43	61	-	3	100	1	-	-	104
1,500-1,749	114	87	-	-	193	8	-	-	201
1,750-1,999	131	164	-	-	265	30	-	-	295
2,000-2,249	230	280	-	-	381	128	1	-	510
2,250-2,499	463	529	-	-	510	482	-	-	992
2,500-2,749	912	1,194	-	-	556	1,549	1	-	2,106
2,750-2,999	1,809	2,207	-	-	450	3,561	5	-	4,016
3,000-3,249	3,247	3,612	-	-	242	6,594	23	-	6,859
3,250-3,499	4,115	4,173	-	-	127	8,125	36	-	8,288
3,500-3,749	4,004	3,565	-	-	47	7,467	55	-	7,569
3,750-3,999	2,968	2,288	-	-	27	5,188	41	-	5,256
4,000-4,249	1,789	1,212	-	-	6	2,944	51	-	3,001
4,250-4,499	920	509	-	-	6	1,402	21	-	1,429
4,500-4,749	344	166	-	-	4	486	20	-	510
4,750-4,999	114	50	-	-	1	156	7	-	164
5,000-5,249	52	15	-	-	-	64	3	-	67
5,250-5,499	5	6	-	-	-	11	-	-	11
5,500+	2	5	-	-	-	7	-	-	7
N.S.	18	20	-	-	-	-	-	38	38
TOTAL	21,391	20,252	6	141	2,990	38,204	264	38	41,643

Note: Non-residents are excluded. N.S. – Not stated.

TABLE 14
LIVE BIRTHS BY BIRTH WEIGHT AND AGE OF MOTHER
 BRITISH COLUMBIA, 2006

Birth Weight (in Grams)	Age of Mother (in Years)									Total
	<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.	
<500	-	1	2	8	8	8	9	1	-	37
500-749	-	1	6	15	19	7	5	1	-	54
750-999	1	1	8	12	17	11	2	-	-	52
1,000-1,249	-	1	14	23	19	17	3	-	-	77
1,250-1,499	-	4	15	23	29	21	12	-	-	104
1,500-1,749	-	4	24	46	67	46	13	1	-	201
1,750-1,999	-	11	38	72	82	78	14	-	-	295
2,000-2,249	-	15	91	135	133	105	28	3	-	510
2,250-2,499	-	35	132	264	315	190	45	11	-	992
2,500-2,749	1	78	324	562	658	373	104	6	-	2,106
2,750-2,999	4	136	643	1,144	1,219	706	154	10	-	4,016
3,000-3,249	5	253	1,002	1,906	2,217	1,242	218	16	-	6,859
3,250-3,499	2	287	1,203	2,303	2,653	1,509	316	15	-	8,288
3,500-3,749	4	273	1,151	2,091	2,399	1,375	263	13	-	7,569
3,750-3,999	1	184	747	1,459	1,720	948	185	12	-	5,256
4,000-4,249	-	96	395	839	993	572	98	8	-	3,001
4,250-4,499	1	50	205	386	461	284	39	3	-	1,429
4,500-4,749	-	14	70	152	162	94	18	-	-	510
4,750-4,999	-	5	22	49	53	29	6	-	-	164
5,000-5,249	-	2	9	16	21	14	5	-	-	67
5,250-5,499	-	-	2	1	6	2	-	-	-	11
5,500+	-	-	1	4	1	-	1	-	-	7
Low	1	73	330	598	689	483	131	17	-	2,322
Percent	5.26	5.03	5.40	5.19	5.19	6.32	8.51	17.00	-	5.58
Healthy	18	1,357	5,670	10,690	12,320	7,009	1,377	83	-	38,524
Percent	94.74	93.46	92.81	92.80	92.87	91.76	89.47	83.00	-	92.51
High	-	21	104	222	243	139	30	-	-	759
Percent	-	1.45	1.70	1.93	1.83	1.82	1.95	-	-	1.82
N.S.	-	1	5	10	14	7	1	-	-	38
TOTAL	19	1,452	6,109	11,520	13,266	7,638	1,539	100	-	41,643

Note: Low birth weight <2,500 grams. Healthy birth weight 2,500 - 4,499 grams. High birth weight 4,500+ grams. Percent of age category in birth weight group. Non-residents are excluded. N.S. - Not stated.

TABLE 15
LOW BIRTH WEIGHT LIVE BIRTHS BY AGE OF MOTHER AND GENDER
 BRITISH COLUMBIA, 2006

Age of Mother	Male		Female		Total		
	Number	Percent	Number	Percent	Number	Percent	Rate
< 15	-	-	1.0	0.1	1	-	52.63
15-19	37	3.4	36	2.9	73	3.1	50.28
20-24	170	15.6	160	13.0	330	14.2	54.02
25-29	278	25.5	320	26.0	598	25.8	51.91
30-34	318	29.1	371	30.2	689	29.7	51.94
35-39	224	20.5	259	21.1	483	20.8	63.24
40-44	59	5.4	72	5.9	131	5.6	85.12
45 +	6	0.5	11	0.9	17	0.7	170.00
N.S.	-	-	-	-	-	-	-
TOTAL	1,092	100.0	1,230	100.0	2,322	100.0	55.76

Note: Rate per 1,000 live births for the specified age group.

Low birth weight: birth weight less than 2,500 grams.

Total percentage may not add up to 100 due to rounding. Total includes unknown gender.

+ Denotes the number of cases is less than five

Non-residents are excluded. N.S. – Not stated.

FIGURE 31
LOW BIRTH WEIGHT LIVE BIRTHS BY AGE OF MOTHER
 BRITISH COLUMBIA, 2006

Rate per 1,000 Live Births

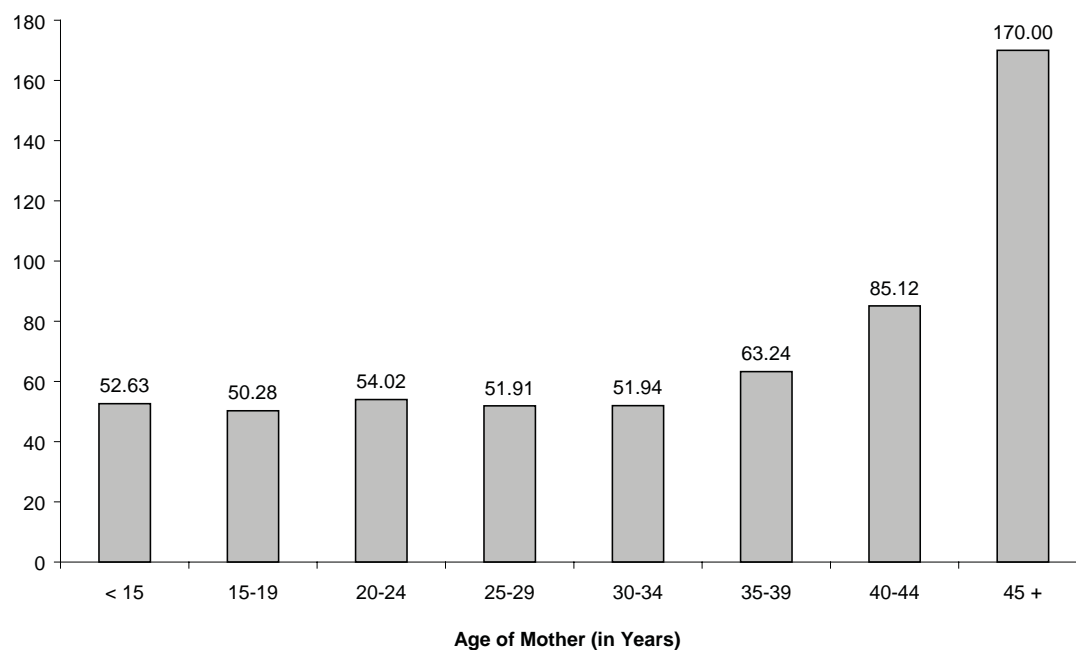


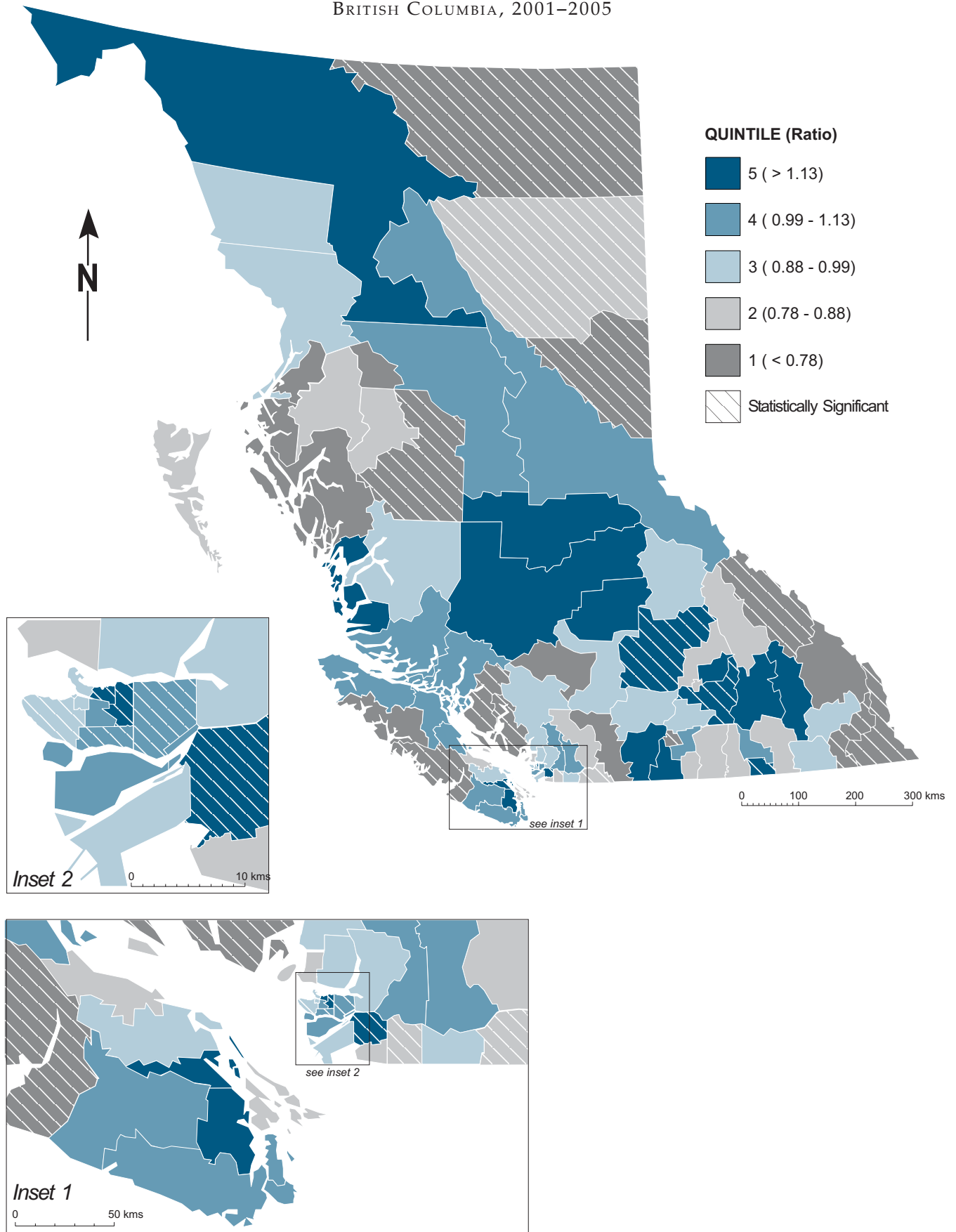
Table 16

LOW BIRTH WEIGHT LIVE BIRTHS BY LOCAL HEALTH AREA AND GESTATIONAL AGE,
BRITISH COLUMBIA, 2001-2005 AND 2006

50	Local Health Area	2001-2005				2006					
		Low Birth Weight Live Births				Gestational Age (in Weeks)				Total	Rate
		Observed	Ratio	(p)	Rate	<37	37-41	42+	N.S.		
001	Fernie	20	0.63	*	33.84	5	2	-	-	7	55.56
002	Cranbrook	41	0.69	*	36.84	13	5	-	-	18	77.25
003	Kimberley	13	0.88		47.27	2	2	-	-	4	57.14
004	Windermere	10	0.58		31.06	3	1	-	-	4	51.95
005	Creston	30	0.92		49.26	4	3	-	-	7	64.81
006	Kootenay Lake	13	1.26		67.36	-	-	-	-	-	-
007	Nelson	45	0.78		41.82	6	3	1	-	10	44.64
009	Castlegar	25	1.01		54.23	1	1	-	-	2	23.26
010	Arrow Lakes	14	1.51		80.92	2	-	-	-	2	58.82
011	Trail	50	1.37	*	73.53	5	3	-	-	8	53.33
012	Grand Forks	15	0.85		45.45	5	1	-	-	6	78.95
013	Kettle Valley	6	0.85		45.45	-	-	-	-	-	-
014	Southern Okanagan	25	0.79		42.16	10	3	-	-	13	97.74
015	Penticton	75	0.99		52.93	12	4	-	-	16	47.48
016	Keremeos	12	1.22		65.22	-	1	-	-	1	23.26
017	Princeton	9	1.37		73.17	1	-	-	-	1	41.67
018	Golden	9	0.50	*	26.79	1	-	-	-	1	15.15
019	Revelstoke	16	0.78		41.88	3	1	-	-	4	48.78
020	Salmon Arm	52	0.86		45.86	8	6	-	-	14	54.26
021	Armstrong - Spallumcheen	16	0.78		41.67	3	1	-	-	4	51.95
022	Vernon	165	1.17	*	62.59	20	5	-	-	25	50.40
023	Central Okanagan	345	0.96		51.30	49	34	-	-	83	58.57
024	Kamloops	267	1.14	*	60.88	35	17	-	-	52	55.79
025	100 Mile House	31	1.17		62.50	4	1	-	-	5	56.82
026	North Thompson	12	0.98		52.63	3	-	-	-	3	76.92
027	Cariboo - Chilcotin	94	1.21		64.69	7	3	-	-	10	35.34
028	Quesnel	69	1.14		60.95	8	3	-	-	11	44.00
029	Lillooet	12	0.78		41.52	2	-	-	-	2	46.51
030	South Cariboo	14	0.90		47.95	11	-	-	-	11	189.66
031	Merritt	28	0.97		52.04	5	2	-	-	7	56.45
032	Hope	14	0.72		38.57	3	1	-	-	4	61.54
033	Chilliwack	200	0.87	*	46.65	42	12	-	-	54	55.79
034	Abbotsford	409	0.95		50.87	56	17	-	-	73	44.62
035	Langley	284	0.87	*	46.72	56	20	-	-	76	58.37
037	Delta	246	0.95		50.74	29	13	-	-	42	46.46
038	Richmond	417	1.00		53.56	53	24	-	-	77	48.31
040	New Westminster	189	1.11		59.36	29	14	-	-	43	64.28
041	Burnaby	606	1.09	*	58.46	103	37	-	-	140	65.00
042	Maple Ridge	238	1.01		54.29	40	12	-	-	52	56.40
043	Coquitlam	545	0.99		52.88	99	17	-	-	116	57.60
044	North Vancouver	313	0.93		49.58	44	14	-	-	58	48.01
045	West Vancouver-Bowen Is.	68	0.85		45.27	8	2	-	-	10	33.22
046	Sunshine Coast	28	0.59	*	31.78	3	1	-	-	4	20.30
047	Powell River	24	0.63	*	33.61	3	2	-	-	5	35.71
048	Howe Sound	97	0.94		50.05	25	2	-	-	27	64.75
049	Bella Coola Valley	12	0.90		48.39	4	-	-	-	4	72.73
050	Queen Charlotte	14	0.85		45.60	4	-	-	-	4	83.33
051	Snow Country	2	0.98		52.63	-	-	-	-	-	-
052	Prince Rupert	39	0.75		40.12	11	3	-	-	14	79.55
053	Upper Skeena	13	0.65		34.67	1	1	-	-	2	37.74
054	Smithers	51	0.86		45.90	8	3	-	-	11	49.77
055	Burns Lake	12	0.51	*	27.15	3	-	-	-	3	34.09
056	Nechako	62	1.01		54.01	5	3	-	-	8	42.33
057	Prince George	290	1.03		55.38	40	15	-	-	55	51.79
059	Peace River South	49	0.66	*	35.58	6	5	-	-	11	34.48
060	Peace River North	106	0.80	*	42.91	18	8	-	-	26	47.27
061	Greater Victoria	473	1.02		54.40	70	17	-	-	87	49.89
062	Sooke	166	1.06		56.62	22	6	-	-	28	45.83
063	Saanich	109	1.00		53.27	17	8	-	-	25	63.13
064	Gulf Islands	18	0.78		41.67	4	-	-	-	4	45.98
065	Cowichan	143	1.13		60.64	24	3	-	-	27	49.54
066	Lake Cowichan	12	1.11		59.41	1	-	-	-	1	23.81
067	Ladysmith	46	1.21		64.97	10	1	-	-	11	71.90
068	Nanaimo	203	0.93		49.93	30	12	-	-	42	51.22
069	Qualicum	50	0.82		43.86	11	3	-	-	14	58.33
070	Alberni	59	0.74	*	39.57	13	6	-	-	19	59.38
071	Courtenay	125	1.02		54.56	15	3	-	-	18	38.88
072	Campbell River	95	1.00		53.58	6	6	-	-	12	32.26
075	Mission	118	1.03		55.04	13	5	-	-	18	44.44
076	Agassiz - Harrison	20	0.85		45.35	7	2	-	-	9	93.75
077	Summerland	9	0.48	*	25.94	3	4	-	-	7	85.37
078	Enderby	21	1.29		69.31	-	-	-	-	-	-
080	Kitimat	18	0.68		36.22	-	3	-	-	3	33.71
081	Fort Nelson	15	0.56	*	30.00	1	2	-	-	3	30.93
083	Central Coast	9	1.40		75.00	-	-	-	-	-	-
084	Vancouver Island West	6	0.69		36.81	1	-	-	-	1	45.45
085	Vancouver Island North	42	1.00		53.64	4	5	-	-	9	55.21
087	Stikine	3	1.87		100.00	-	-	-	-	-	-
088	Terrace	58	0.84		45.17	8	3	-	-	11	46.61
092	Nisga'a	4	0.54		28.99	-	-	-	-	-	-
094	Telegraph Creek	2	0.89		47.62	-	-	-	-	-	-
161	Vancouver - City Centre	194	0.91		48.66	42	16	-	-	58	66.59
162	Vancouver - Downtown E.side	169	1.38	*	73.77	22	6	-	-	28	57.73
163	Vancouver - North East	340	1.14	*	61.09	47	20	-	-	67	63.27
164	Vancouver - Westside	259	0.89	*	47.58	37	19	-	-	56	46.36
165	Vancouver - Midtown	275	1.04		55.59	44	25	-	-	69	66.93
166	Vancouver - South	378	1.12	*	60.03	83	22	-	-	105	77.21
201	Surrey	1,362	1.15	*	61.63	197	117	-	-	314	66.68
202	South Surrey/White Rock	119	0.87		46.32	17	8	-	-	25	48.92
PROVINCIAL TOTAL		10,790	1.00		53.52	1,671	650	1	-	2,322	55.76

Note: Low Birth Weight – birth weight less than 2,500 grams. Ratio – observed over the expected low birth weight live births. * Statistical testing indicates that observed low birth weight live births are significantly different from the expected ($p < 0.05$, two tailed). Rate per 1,000 live births in the specified area. Total includes residents with unknown LHA. N.S. - Not Stated.

FIGURE 32
LOW BIRTH WEIGHT LIVE BIRTHS BY LOCAL HEALTH AREA
 BRITISH COLUMBIA, 2001–2005



Note: Ratio - Observed over the expected. Refer to Figure 1 to clarify geographical location of Local Health Area

Births – Maternal Complications and Perinatal Conditions

Both maternal complications and perinatal conditions can be used as health status indicators. Only diagnoses affecting pregnancy, labour, or delivery were selected for the maternal complications part of this report. Perinatal complications consist of diagnoses affecting the baby shortly before, during, or after birth.

The maternal complications shown in Table 17 are limited to those diagnoses that affected pregnancy, labour, or delivery. Bear in mind that an unlimited number of complications can be noted for each birth, so the total number of maternal complications can be greater than the number of live births with maternal complications.

It is immediately obvious that Assisted or Surgical Delivery and Maternal Abnormalities of the Pelvic Organs were the two most frequent diagnostic categories of maternal complications in 2006 and the previous five years. The proportions of age group births that had maternal pelvic organ abnormalities increased with advancing maternal age from 1.56 percent for mothers under 20 years to 19.59 percent for mothers 40 years and over. The proportions of age group births that had at least one complication are shown along the bottom of the table. There was a steady increase in the likelihood of a complication as mothers got older.

Elderly primigravida (ICD-10 code Z35.5) refers to women aged 35 or older who are experiencing their first pregnancy. This condition has always been recorded, however, the ICD-9 code (659.5) was included with other complications of labour and delivery, while ICD-10 puts elderly primigravida in the chapter with factors influencing health status and contact with health services. Elderly primigravida was responsible for 5.0 percent of all maternal complications in 2001-2005 and 5.5 percent in 2006 as shown in Table 17.

Table 18 shows the incidence of live births with maternal complications by Local Health LHA for the period 2001-2005 and for the year 2006. The observed births columns show the number of live births with complications by the LHA in which the mother lived. The ratios indicate the number of observed births divided by the number that would be expected if the LHA had the provincial rates and (p) indicates those LHAs where the observed number was significantly different from the expected. Expected births with maternal complications are not shown for 2001-2005 but they are presented for 2006. For more information see Expected Complications in the Glossary and the statistical test under Observed versus Expected Ratios in the Methodology section. There were low ratios that were statistically significant in 9 LHAs and 6 LHAs had high ratios that were statistically significant. In the 2001 to 2005 period, 20 LHAs had low ratios that were statistically significant and 14 LHAs had high ratios that were statistically significant.

The map in Figure 33 shows the LHAs arranged in five groups according to their 2001-2005 ratios of observed births with maternal complications versus the expected number of births with such conditions. LHAs with the highest rate of complications are coloured dark blue; those with the lowest rates are dark grey. There is no obvious pattern. Not north-south or urban-rural; perhaps there is a coastal-interior difference, with the interior LHAs tending to have lower rates of maternal complications than the more coastal LHAs.

The conditions listed in Table 19 consist of diagnoses affecting the baby shortly before, during, or after birth. The table shows the number and percent of all perinatal conditions in each condition category for 2001-2005 and 2006. The 2006 portion of the table also shows the conditions by maternal age group. Again, an unlimited number of complications can be noted for each birth, so the total number of perinatal conditions at the bottom of the table can exceed the number of live births with at least one perinatal condition. Note that mothers between 30 and 39 years old had the lowest proportion of live births with perinatal conditions and there were small increases in the proportions for older or younger mothers.

Intrauterine hypoxia and birth asphyxia accounted for most of the perinatal conditions in both time periods (46.5 percent in 2001-2005 and 43.5 percent in 2006). Conditions related to short gestation and those related to long gestation or high birth weight together accounted for over a third (37.3 percent) of the conditions in 2006 and somewhat less (29.4 percent) in the 2001-2005 period.

Table 20 shows the incidence of live births with perinatal conditions, by the mother's Local Health Area (LHA) of residence for the period 2001-2005 and for the year 2006. This table is in the same format as Table 18 with the same indicators and statistical computations so they will not be reviewed here. Refer to the Glossary for a definition of Expected Perinatal Conditions.

In 2006, there were 21 LHAs where the observed number of perinatal conditions was significantly different from the expected number, and in 9 of these the observed number was significantly lower.

Figure 34 shows BC divided into its 89 LHAs, each coloured to show its allocation to one of five groups according to the value of its perinatal conditions ratio for the 2001-2005 period. Those coloured dark blue have the highest ratios; these are the areas where there was a high number of live births with perinatal conditions relative to the expected number. The other LHAs are shown by colour to have a relatively lower number of these conditions, down to those coloured dark grey, with the lowest relative number of live births with perinatal conditions. There was no obvious pattern of variation in the geographic distribution of the LHAs regarding perinatal conditions.

TABLE 17
**MATERNAL COMPLICATIONS OF PREGNANCY AND
 DELIVERY IN LIVE BIRTHS BY AGE OF MOTHER**
 BRITISH COLUMBIA, 2001–2005 AND 2006

Maternal Complications	ICD-10 Code(s)	2001–2005		2006					Total	Percent
		Total	Percent	Age of Mother (in Years)				N.S.		
Hypertension/hypertensive disorders in pregnancy	O10-O11, O13, O16	2,514	1.8	21	194	237	34	-	486	1.7
Edema and proteinuria without hypertension	O12	33	-	1	7	2	-	-	10	-
Pre-eclampsia/eclampsia	O14-O15	868	0.6	10	81	90	11	-	192	0.7
Hemorrhage in early pregnancy	O20	6	-	-	1	-	-	-	1	-
Hyperemesis gravidarum	O21	64	-	1	5	5	-	-	11	-
Other maternal disorders predominantly related to pregnancy	O22-O23, O25-O29, F179	1,778	1.3	22	176	163	12	-	373	1.3
Diabetes in pregnancy	O24	2,327	1.7	1	118	277	38	-	434	1.5
Multiple gestation and related complications	O30-O31	5,764	4.1	14	388	745	120	-	1,267	4.4
Fetal malpresentation	O32	6,959	5.0	43	533	725	53	-	1,354	4.7
Disproportion	O33	504	0.4	1	37	42	1	-	81	0.3
Maternal abnormality of pelvic organs	O34	21,696	15.5	23	1,437	3,237	321	-	5,018	17.3
Disorders of amniotic fluid and membranes	O40-O42	4,007	2.9	33	338	408	41	-	820	2.8
Placental disorders	O43-O45, O73	2,201	1.6	12	158	217	25	-	412	1.4
Antepartum hemorrhage	O46	352	0.3	4	28	40	3	-	75	0.3
Prolonged pregnancy	O48	1,709	1.2	15	119	110	12	-	256	0.9
Preterm labour and delivery	O60	8,087	5.8	97	771	815	92	-	1,775	6.1
Abnormalities of forces of labour	O62-O63	5,947	4.2	57	542	571	36	-	1,206	4.1
Obstructed labour	O64-O66	11,155	8.0	87	1,059	1,099	86	-	2,331	8.0
Intrapartum hemorrhage	O67	-	-	-	-	-	-	-	-	-
Evidence of fetal distress	O68	8,240	5.9	70	696	854	74	-	1,694	5.8
Cord complications	O69	2,509	1.8	15	210	229	16	-	470	1.6
Obstetrical trauma	O71-O71	1,386	1.0	13	135	131	10	-	289	1.0
Postpartum hemorrhage	O72	1,941	1.4	13	177	164	13	-	367	1.3
Assisted or surgical delivery - no cause given ¹	O81-O82	30,463	21.7	178	2,618	3,026	303	-	6,125	21.1
Maternal and puerperal infections	O85-O86, O98, A34	134	0.1	2	35	29	3	-	69	0.2
Other puerperal complications	O87-O92	61	-	1	7	8	-	-	16	0.1
Maternal noninfectious diseases complicating the pregnant state	O99	1,878	1.3	6	171	241	20	-	438	1.5
Elderly primigravida	Z355	7,065	5.0	-	1	1,361	229	-	1,591	5.5
Maternal drug use	O355	375	0.3	8	62	29	3	-	102	0.4
Other maternal complications	O00-O08, O350-O353, O356-O36, O47, O61, O74-O75, O95-O97	10,290	7.3	84	776	894	73	-	1,827	6.3
Total maternal complications		140,313	100.0	832	10,880	15,749	1,629	-	29,090	100.0
Live births with the above maternal complications	- Number	104,178		644	8,381	11,559	1,072	-	21,656	
	- Percent(*)	51.7		43.8	47.5	55.3	65.4		52.0	

Note: Percent based upon maternal complications. Percent (*) based upon live births for the specified maternal age group.

¹Where no other complication code is found. Total percentage may not add up to 100 due to rounding. Counts relating to Maternal Tobacco use (ICD-10 Code F179) have been revised in this annual report and as such data in the category "Other maternal disorders predominantly related to pregnancy" from previous years should not be compared to 2006 data.

N.S. - Not Stated. Non-residents are excluded.

Vital Statistics Information Box

TOP 25 BABY NAMES IN 2006

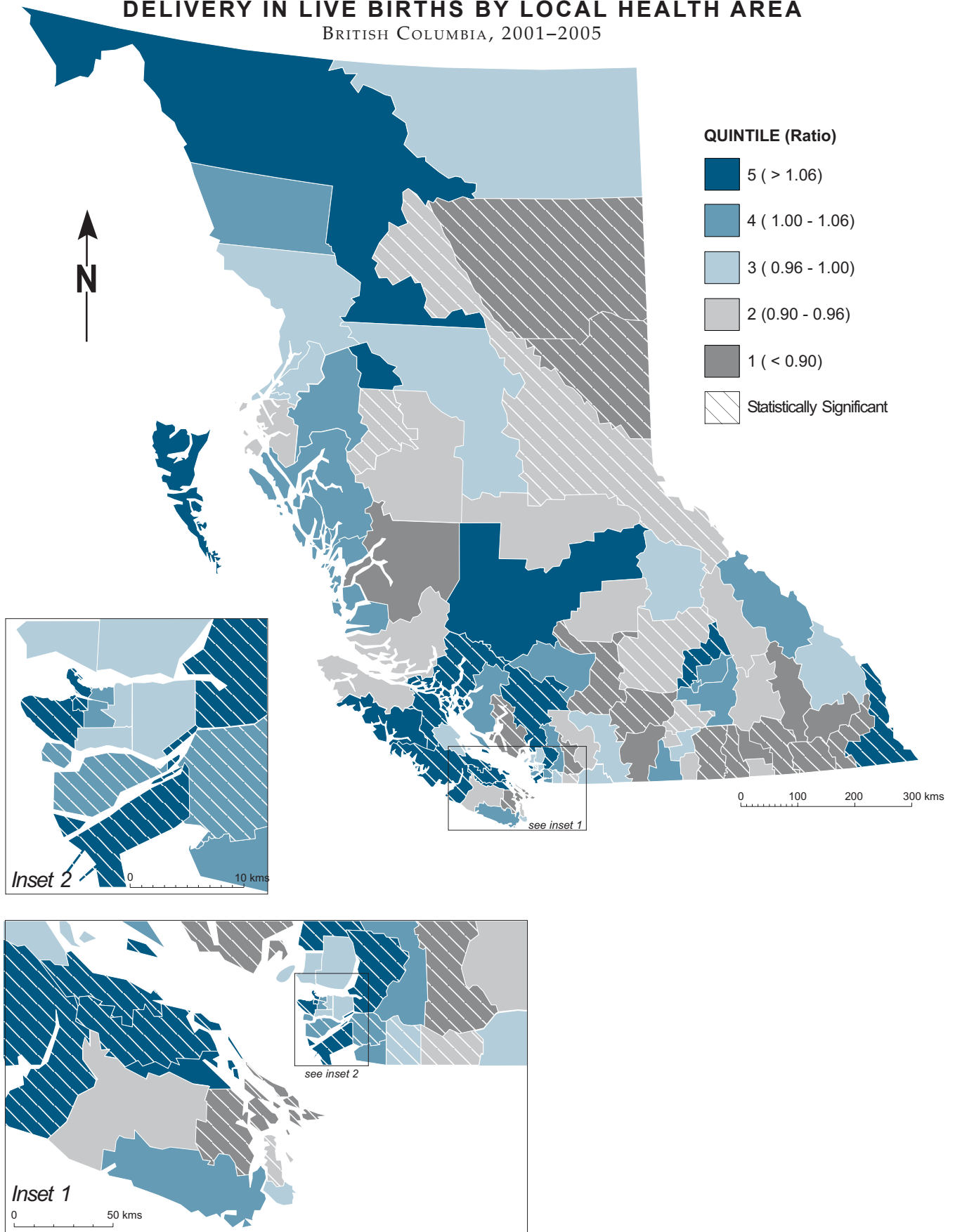
Each year the British Columbia Vital Statistics Agency produces a list of the most chosen baby names. The table below provides the top 25 names. Alternate spellings of names that sound alike (such as Catherine, Katherine, and Katharine) are not combined. The complete list for 2006, as well as lists for several previous years can be found at <http://www.vs.gov.bc.ca/babynames/index.html>. In 2006, 592 boys' names and 686 girls' names were chosen for five or more newborns.

Baby Boys			Baby Girls	
Rank	Name	Number	Name	Number
1	Ethan	277	Emma	246
2	Jacob	235	Emily	234
3	Matthew	225	Ava	232
4	Joshua	223	Olivia	198
5	Nathan	213	Hannah	190
6	Liam	200	Sarah	170
7	Benjamin	196	Sophia	157
8	Ryan	191	Ella	155
9	Logan	187	Isabella	149
10	Daniel	184	Madison	138
11	Alexander	183	Grace	131
12	Noah	181	Chloe	130
13	Lucas	174	Abigail	120
14	James	158	Samantha	112
15	William	151	Taylor	97
16	Owen	149	Brooklyn	96
17	Nicholas	145	Maya	96
18	Samuel	140	Sophie	90
19	Tyler	135	Julia	87
20	Jack	134	Lauren	86
21	Carter	133	Anna	84
22	Evan	133	Hailey	84
23	Andrew	129	Lily	83
24	Cole	126	Ashley	82
25	Aidan	125	Kaitlyn	82

56		2001-2005					2006					
		Observed	Ratio	(p)	Percent	Total	Observed	Expected	Ratio	(p)	Percent	Total
Local Health Area		Births				Live Births	Births	Births				Live Births
001	Fernie	361	1.18	*	61.1	591	67	65.5	1.02		53.2	126
002	Cranbrook	468	0.81	*	42.0	1,113	104	121.2	0.86		44.6	233
003	Kimberley	119	0.84		43.3	275	27	36.4	0.74		38.6	70
004	Windermere	160	0.96		49.7	322	41	40.0	1.02		53.2	77
005	Creston	226	0.72	*	37.1	609	41	56.2	0.73	*	38.0	108
006	Kootenay Lake	83	0.83		43.0	193	6	8.8	0.68		35.3	17
007	Nelson	388	0.70	*	36.1	1,076	82	116.5	0.70	*	36.6	224
009	Castlegar	210	0.88		45.6	461	39	44.7	0.87		45.3	86
010	Arrow Lakes	81	0.91		46.8	173	15	17.7	0.85		44.1	34
011	Trail	317	0.90		46.6	680	73	78.0	0.94		48.7	150
012	Grand Forks	142	0.83	*	43.0	330	38	39.5	0.96		50.0	76
013	Kettle Valley	49	0.72	*	37.1	132	7	14.0	0.50		25.9	27
014	Southern Okanagan	282	0.92		47.6	593	59	69.2	0.85		44.4	133
015	Penticton	732	1.00		51.7	1,417	182	175.3	1.04		54.0	337
016	Keremeos	99	1.04		53.8	184	22	22.4	0.98		51.2	43
017	Princeton	53	0.83		43.1	123	11	12.5	0.88		45.8	24
018	Golden	177	1.02		52.7	336	37	34.3	1.08		56.1	66
019	Revelstoke	180	0.91		47.1	382	41	42.6	0.96		50.0	82
020	Salmon Arm	636	1.09	*	56.1	1,134	161	134.2	1.20	*	62.4	258
021	Armstrong - Spallumcheen	200	1.01		52.1	384	50	40.0	1.25		64.9	77
022	Vernon	1,411	1.04		53.5	2,636	277	257.9	1.07		55.8	496
023	Central Okanagan	3,224	0.93	*	47.9	6,725	740	736.9	1.00		52.2	1,417
024	Kamloops	2,121	0.94	*	48.4	4,386	469	484.7	0.97		50.3	932
025	100 Mile House	232	0.91		46.8	496	48	45.8	1.05		54.5	88
026	North Thompson	115	0.98		50.4	228	14	20.3	0.69		35.9	39
027	Cariboo - Chilcotin	799	1.06		55.0	1,453	154	147.2	1.05		54.4	283
028	Quesnel	545	0.93		48.1	1,132	126	130.0	0.97		50.4	250
029	Lillooet	150	1.00		51.9	289	24	22.4	1.07		55.8	43
030	South Cariboo	117	0.78	*	40.1	292	29	30.2	0.96		50.0	58
031	Merritt	235	0.85	*	43.7	538	54	64.5	0.84		43.5	124
032	Hope	186	0.99		51.2	363	32	33.8	0.95		49.2	65
033	Chilliwack	2,135	0.96		49.8	4,287	446	503.4	0.89	*	46.1	968
034	Abbotsford	3,824	0.92	*	47.6	8,040	721	850.8	0.85	*	44.1	1,636
035	Langley	3,022	0.96	*	49.7	6,079	621	677.1	0.92	*	47.7	1,302
037	Delta	2,671	1.07	*	55.1	4,848	495	470.1	1.05		54.8	904
038	Richmond	4,158	1.03	*	53.4	7,785	797	828.9	0.96		50.0	1,594
040	New Westminster	1,757	1.07	*	55.2	3,184	373	347.9	1.07		55.8	669
041	Burnaby	5,315	0.99		51.3	10,366	1,080	1,120.2	0.96		50.1	2,154
042	Maple Ridge	2,309	1.02		52.7	4,384	487	479.5	1.02		52.8	922
043	Coquitlam	5,759	1.08	*	55.9	10,307	1,217	1,047.4	1.16	*	60.4	2,014
044	North Vancouver	3,172	0.97		50.2	6,313	640	628.2	1.02		53.0	1,208
045	West Vancouver-Bowen Is.	755	0.97		50.3	1,502	158	156.5	1.01		52.5	301
046	Sunshine Coast	396	0.87	*	44.9	881	95	102.4	0.93		48.2	197
047	Powell River	389	1.05		54.5	714	72	72.8	0.99		51.4	140
048	Howe Sound	1,071	1.07	*	55.3	1,938	237	216.9	1.09		56.8	417
049	Bella Coola Valley	113	0.88		45.6	248	36	28.6	1.26		65.5	55
050	Queen Charlotte	171	1.08		55.7	307	29	25.0	1.16		60.4	48
051	Snow Country	19	0.97		50.0	38	2	3.1	0.64		33.3	6
052	Prince Rupert	467	0.93		48.0	972	87	91.5	0.95		49.4	176
053	Upper Skeena	221	1.14		58.9	375	35	27.6	1.27		66.0	53
054	Smithers	519	0.90	*	46.7	1,111	105	114.9	0.91		47.5	221
055	Burns Lake	215	0.94		48.6	442	45	45.8	0.98		51.1	88
056	Nechako	572	0.96		49.8	1,148	91	98.3	0.93		48.1	189
057	Prince George	2,444	0.90	*	46.7	5,237	535	552.3	0.97		50.4	1,062
059	Peace River South	561	0.79	*	40.7	1,377	134	165.9	0.81	*	42.0	319
060	Peace River North	1,019	0.80	*	41.3	2,470	223	286.0	0.78	*	40.5	550
061	Greater Victoria	4,406	0.98		50.7	8,695	919	906.9	1.01		52.7	1,744
062	Sooke	1,525	1.01		52.0	2,932	351	317.7	1.10		57.4	611
063	Saanich	985	0.93	*	48.1	2,046	183	205.9	0.89		46.2	396
064	Gulf Islands	173	0.77	*	40.0	432	34	45.2	0.75		39.1	87
065	Cowichan	1,091	0.90	*	46.3	2,358	250	283.4	0.88	*	45.9	545
066	Lake Cowichan	95	0.91		47.0	202	23	21.8	1.05		54.8	42
067	Ladysmith	399	1.09		56.4	708	87	79.6	1.09		56.9	153
068	Nanaimo	2,626	1.25	*	64.6	4,066	468	426.4	1.10	*	57.1	820
069	Qualicum	709	1.20	*	62.2	1,140	142	124.8	1.14		59.2	240
070	Alberni	863	1.12	*	57.9	1,491	202	166.4	1.21	*	63.1	320
071	Courtenay	1,146	0.97		50.0	2,291	218	240.8	0.91		47.1	463
072	Campbell River	1,045	1.14	*	58.9	1,773	217	193.5	1.12		58.3	372
075	Mission	966	0.87	*	45.1	2,144	200	210.6	0.95		49.4	405
076	Agassiz - Harrison	207	0.91		46.9	441	52	49.9	1.04		54.2	96
077	Summerland	164	0.91		47.3	347	51	42.6	1.20		62.2	82
078	Enderby	162	1.03		53.5	303	37	36.4	1.02		52.9	70
080	Kitimat	261	1.02		52.5	497	55	46.3	1.19		61.8	89
081	Fort Nelson	253	0.98		50.6	500	48	50.4	0.95		49.5	97
083	Central Coast	64	1.03		53.3	120	19	19.2	0.99		51.4	37
084	Vancouver Island West	89	1.06		54.6	163	10	11.4	0.87		45.5	22
085	Vancouver Island North	389	0.96		49.7	783	80	84.8	0.94		49.1	163
087	Stikine	17	1.10		56.7	30	3	2.6	1.15		60.0	5
088	Terrace	691	1.04		53.8	1,284	97	122.7	0.79	*	41.1	236
092	Nisga'a	70	0.98		50.7	138	17	17.7	0.96		50.0	34
094	Telegraph Creek	22	1.01		52.4	42	3	4.7	0.64		33.3	9
161	Vancouver - City Centre	2,356	1.14	*	59.1	3,987	515	453.0	1.14	*	59.1	871
162	Vancouver - Downtown E.side	1,196	1.01		52.2	2,291	260	252.2	1.03		53.6	485
163	Vancouver - North East	2,848	0.99		51.2	5,566	517	550.7	0.94		48.8	1,059
164	Vancouver - Westside	3,001	1.07	*	55.1	5,443	651	628.2	1.04		53.9	1,208
165	Vancouver - Midtown	2,621	1.03		53.0	4,947	525	536.2	0.98		50.9	1,031
166	Vancouver - South	3,252	1.00		51.6	6,297	705	707.3	1.00		51.8	1,360
201	Surrey	11,913	1.04	*	53.9	22,101	2,601	2,448.9	1.06	*	55.2	4,709
202	South Surrey/White Rock	1,393	1.05		54.2	2,569	266	265.7	1.00		52.1	511
PROVINCIAL TOTAL		104,178	1.00		51.7	201,595	21,656	21,656.0	1.00		52.0	41,643

Note: *Statistical testing indicates that the observed number of births with maternal complications is significantly different from the expected ($p < 0.05$, two tailed). Ratio - observed over the expected. Percent of observed births is based on total live births. Total includes residents with unknown LHA. Non-residents are excluded.

FIGURE 33
**MATERNAL COMPLICATIONS OF PREGNANCY AND
 DELIVERY IN LIVE BIRTHS BY LOCAL HEALTH AREA**
 BRITISH COLUMBIA, 2001–2005



Note: Ratio - Observed over the expected. Refer to Figure 1 to clarify geographical location of Local Health Area

TABLE 19
PERINATAL COMPLICATIONS IN LIVE BIRTHS BY AGE OF MOTHER
 BRITISH COLUMBIA, 2001–2005 AND 2006

Perinatal Complications	ICD-10 Code	2001–2005		2006						
				Age of Mother (in Years)					Total	Percent
		Total	Percent	<20	20–29	30–39	40+	N.S.		
Fetus/newborn affected by maternal conditions that may be unrelated to present pregnancy	P00	57	0.1	-	1	1	1	-	3	0.0
Complications of pregnancy, labour and delivery	P01, P03	12,344	13.8	51	843	1,139	151	-	2,184	12.5
Fetus/newborn affected by complications of placenta, cord and membranes	P02	3,847	4.3	16	195	251	19	-	481	2.7
Fetus affected by noxious influences transmitted via placenta (or breast milk)	P04 13	0.0	-	1	2	-	-	3	-	
Slow fetal growth and malnutrition	P05	3,771	4.2	14	205	178	16	-	413	2.4
Perinatal disorders related to short gestation	P072, P073	14,162	15.9	121	1,215	1,547	185	-	3,068	17.5
Disorders related to long gestation or high birth weight	P08	12,080	13.5	110	1,426	1,806	131	-	3,473	19.8
Perinatal birth trauma	P10-P15	286	0.3	1	25	12	-	-	38	0.2
Intrauterine hypoxia and birth asphyxia	P20-P21	41,480	46.5	361	3,385	3,581	280	-	7,607	43.5
Respiratory conditions of fetus and newborn	P22-P28	654	0.7	7	50	55	1	-	113	0.6
Cardiovascular disorders originating in the perinatal period	P29	-	-	-	-	-	-	-	-	0.0
Infections specific to the perinatal period	P35-P39	48	0.1	1	3	3	-	-	7	0.0
Fetal and neonatal hemorrhage	P50-P52, P54	109	0.1	1	18	7	1	-	27	0.2
Perinatal jaundice/other hematological disorders	P53, P55-P61	50	0.1	-	4	6	-	-	10	0.1
Perinatal endocrine and metabolic disorders	P70-P74	28	0.0	1	4	4	1	-	10	0.1
Digestive system disorders of fetus and newborn	P76-P78	4	0.0	-	-	1	-	-	1	0.0
Perinatal conditions of the integument and of temperature regulation	P80-P83	113	0.1	2	4	19	1	-	26	0.1
Other disorders originating in the perinatal period	P90-P96	196	0.2	3	20	16	2	-	41	0.2
All Perinatal Complications		89,242	100.0	689	7,399	8,628	789	-	17,505	100.0
Live births with the above perinatal complications	- Number	68,981		578	5,923	6,819	590	-	13,910	
	- Percent(*)	34.2		39.3	33.6	32.6	36.0		33.4	

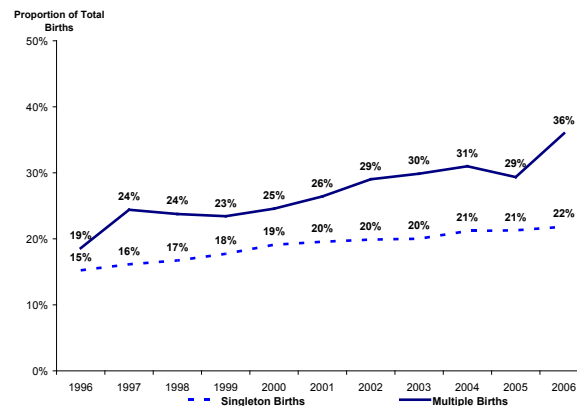
Note: Percent based upon perinatal complications. Percent (*) based upon live births for the maternal age group. Total percentage may not add up to 100 due to rounding. N.S. - Not stated. Non-residents are excluded.

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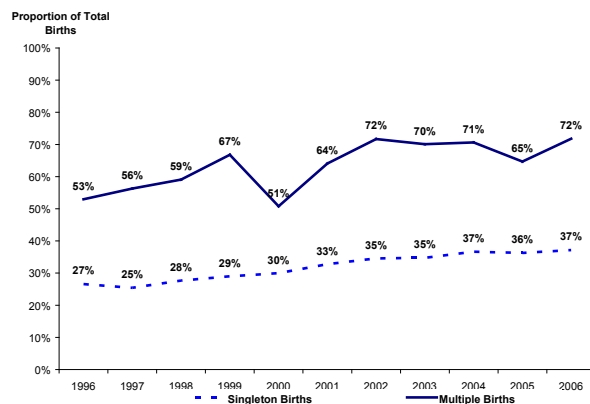
BIRTH AND OLDER MOTHERS IN BRITISH COLUMBIA 1996 - 2006

Older mothers, those aged 35 and over have increased their share of the total births to women in British Columbia. Since 1996, the share of singleton births attributable to older mothers has increased by nearly 50 percent and the share of multiple births attributable to older mothers has nearly doubled. More of these births are via Caesarean section, however, the proportion of these births considered to be Low Birth Weight has remained relatively stable.

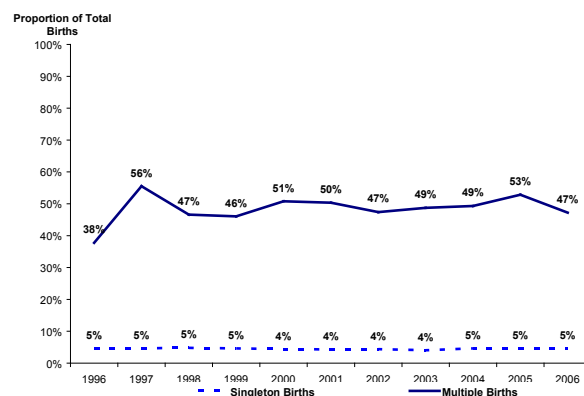
PROPORTION OF SINGLETON AND MULTIPLE BIRTHS
TO MOTHERS AGED 35 AND OLDER
BRITISH COLUMBIA, 1996 - 2006



PROPORTION OF SINGLETON AND MULTIPLE BIRTHS
TO MOTHERS AGED 35 AND OLDER BIRTHED
VIA CAESAREAN SECTION
BRITISH COLUMBIA, 1996 - 2006



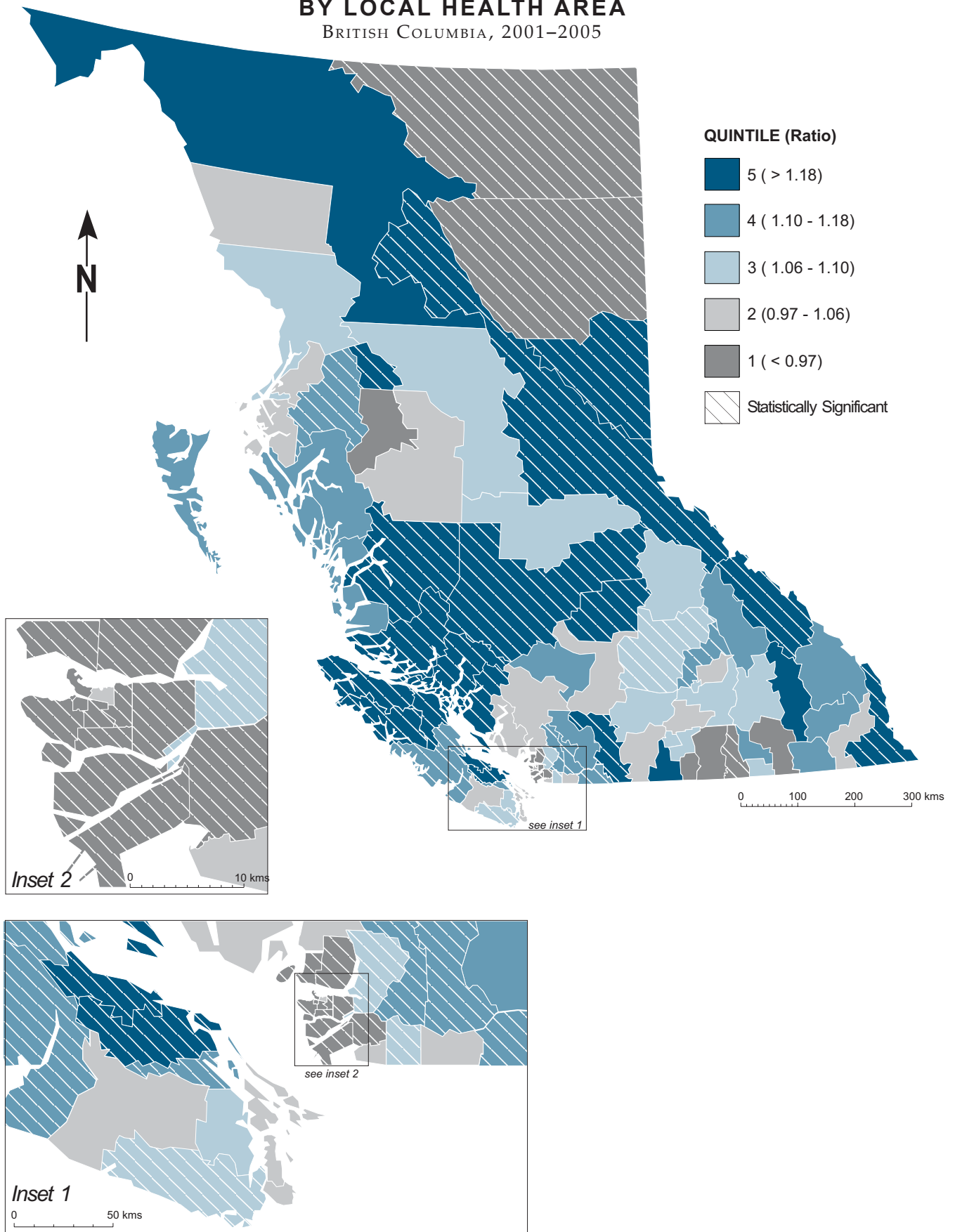
PROPORTION OF SINGLETON AND MULTIPLE BIRTHS
TO MOTHERS AGED 35 AND OLDER WITH
LOW BIRTH WEIGHT (<2500 GRAMS)
BRITISH COLUMBIA, 1996 - 2006



Local Health Area	2001-2005					2006					
	Observed				Total	Observed	Expected				Total
	Births	Ratio	(p)	Percent	Live Births	Births	Births	Ratio	(p)	Percent	Live Births
001 Fernie	266	1.32	*	45.0	591	55	42.1	1.31	*	43.7	126
002 Cranbrook	390	1.02		35.0	1,113	82	77.8	1.05		35.2	233
003 Kimberley	107	1.14		38.9	275	30	23.4	1.28		42.9	70
004 Windermere	126	1.14		39.1	322	27	25.7	1.05		35.1	77
005 Creston	233	1.12		38.3	609	40	36.1	1.11		37.0	108
006 Kootenay Lake	79	1.20		40.9	193	6	5.7	1.06		35.3	17
007 Nelson	356	0.97		33.1	1,076	66	74.8	0.88		29.5	224
009 Castlegar	175	1.11		38.0	461	36	28.7	1.25		41.9	86
010 Arrow Lakes	63	1.06		36.4	173	13	11.4	1.14		38.2	34
011 Trail	253	1.09		37.2	680	61	50.1	1.22		40.7	150
012 Grand Forks	92	0.81	*	27.9	330	30	25.4	1.18		39.5	76
013 Kettle Valley	38	0.84		28.8	132	5	9.0	0.55		18.5	27
014 Southern Okanagan	185	0.91		31.2	593	45	44.4	1.01		33.8	133
015 Penticton	523	1.08		36.9	1,417	98	112.6	0.87		29.1	337
016 Keremeos	76	1.21		41.3	184	16	14.4	1.11		37.2	43
017 Princeton	43	1.02		35.0	123	8	8.0	1.00		33.3	24
018 Golden	150	1.30	*	44.6	336	26	22.0	1.18		39.4	66
019 Revelstoke	150	1.15		39.3	382	36	27.4	1.31		43.9	82
020 Salmon Arm	443	1.14	*	39.1	1,134	117	86.2	1.36	*	45.3	258
021 Armstrong - Spallumcheen	139	1.06		36.2	384	27	25.7	1.05		35.1	77
022 Vernon	954	1.06		36.2	2,636	160	165.7	0.97		32.3	496
023 Central Okanagan	2,260	0.98		33.6	6,725	483	473.3	1.02		34.1	1,417
024 Kamloops	1,639	1.09	*	37.4	4,386	317	311.3	1.02		34.0	932
025 100 Mile House	211	1.24	*	42.5	496	28	29.4	0.95		31.8	88
026 North Thompson	84	1.08		36.8	228	16	13.0	1.23		41.0	39
027 Cariboo - Chilcotin	691	1.39	*	47.6	1,453	124	94.5	1.31	*	43.8	283
028 Quesnel	424	1.09		37.5	1,132	99	83.5	1.19		39.6	250
029 Lillooet	110	1.11		38.1	289	21	14.4	1.46		48.8	43
030 South Cariboo	101	1.01		34.6	292	17	19.4	0.88		29.3	58
031 Merritt	199	1.08		37.0	538	38	41.4	0.92		30.6	124
032 Hope	153	1.23	*	42.1	363	25	21.7	1.15		38.5	65
033 Chilliwack	1,719	1.17	*	40.1	4,287	424	323.3	1.31	*	43.8	968
034 Abbotsford	2,727	0.99		33.9	8,040	549	546.5	1.00		33.6	1,636
035 Langley	2,236	1.07	*	36.8	6,079	525	434.9	1.21	*	40.3	1,302
037 Delta	1,469	0.89	*	30.3	4,848	280	302.0	0.93		31.0	904
038 Richmond	2,189	0.82	*	28.1	7,785	430	532.4	0.81	*	27.0	1,594
040 New Westminster	1,189	1.09	*	37.3	3,184	235	223.5	1.05		35.1	669
041 Burnaby	2,999	0.85	*	28.9	10,366	604	719.5	0.84	*	28.0	2,154
042 Maple Ridge	1,678	1.12	*	38.3	4,384	360	308.0	1.17	*	39.0	922
043 Coquitlam	3,805	1.08	*	36.9	10,307	721	672.7	1.07		35.8	2,014
044 North Vancouver	1,928	0.89	*	30.5	6,313	333	403.5	0.83	*	27.6	1,208
045 West Vancouver-Bowen Is.	429	0.83	*	28.6	1,502	82	100.5	0.82		27.2	301
046 Sunshine Coast	306	1.02		34.7	881	74	65.8	1.12		37.6	197
047 Powell River	291	1.19	*	40.8	714	54	46.8	1.15		38.6	140
048 Howe Sound	679	1.02		35.0	1,938	133	139.3	0.95		31.9	417
049 Bella Coola Valley	111	1.31	*	44.8	248	26	18.4	1.42		47.3	55
050 Queen Charlotte	116	1.10		37.8	307	23	16.0	1.43		47.9	48
051 Snow Country	14	1.08		36.8	38	1	2.0	0.50		16.7	6
052 Prince Rupert	331	1.00		34.1	972	68	58.8	1.16		38.6	176
053 Upper Skeena	183	1.43	*	48.8	375	29	17.7	1.64	*	54.7	53
054 Smithers	367	0.97		33.0	1,111	93	73.8	1.26	*	42.1	221
055 Burns Lake	149	0.99		33.7	442	30	29.4	1.02		34.1	88
056 Nechako	423	1.08		36.8	1,148	83	63.1	1.31	*	43.9	189
057 Prince George	2,198	1.23	*	42.0	5,237	453	354.7	1.28	*	42.7	1,062
059 Peace River South	556	1.18	*	40.4	1,377	124	106.6	1.16		38.9	319
060 Peace River North	739	0.87	*	29.9	2,470	143	183.7	0.78	*	26.0	550
061 Greater Victoria	3,023	1.02		34.8	8,695	597	582.5	1.02		34.2	1,744
062 Sooke	1,106	1.10	*	37.7	2,932	203	204.1	0.99		33.2	611
063 Saanich	737	1.05		36.0	2,046	143	132.3	1.08		36.1	396
064 Gulf Islands	150	1.01		34.7	432	27	29.1	0.93		31.0	87
065 Cowichan	855	1.06		36.3	2,358	202	182.0	1.11		37.1	545
066 Lake Cowichan	73	1.06		36.1	202	16	14.0	1.14		38.1	42
067 Ladysmith	284	1.17	*	40.1	708	59	51.1	1.15		38.6	153
068 Nanaimo	1,927	1.39	*	47.4	4,066	371	273.9	1.35	*	45.2	820
069 Qualicum	514	1.32	*	45.1	1,140	107	80.2	1.33	*	44.6	240
070 Alberni	581	1.14	*	39.0	1,491	108	106.9	1.01		33.8	320
071 Courtenay	897	1.14	*	39.2	2,291	153	154.7	0.99		33.0	463
072 Campbell River	785	1.29	*	44.3	1,773	142	124.3	1.14		38.2	372
075 Mission	827	1.13	*	38.6	2,144	141	135.3	1.04		34.8	405
076 Agassiz - Harrison	174	1.15		39.5	441	43	32.1	1.34		44.8	96
077 Summerland	129	1.09		37.2	347	36	27.4	1.31		43.9	82
078 Enderby	106	1.02		35.0	303	25	23.4	1.07		35.7	70
080 Kitimat	190	1.12		38.2	497	35	29.7	1.18		39.3	89
081 Fort Nelson	126	0.74	*	25.2	500	32	32.4	0.99		33.0	97
083 Central Coast	48	1.17		40.0	120	11	12.4	0.89		29.7	37
084 Vancouver Island West	73	1.31	*	44.8	163	11	7.3	1.50		50.0	22
085 Vancouver Island North	317	1.18	*	40.5	783	67	54.4	1.23		41.1	163
087 Stikine	14	1.36	*	46.7	30	4	1.7	2.39		80.0	5
088 Terrace	509	1.16	*	39.6	1,284	94	78.8	1.19		39.8	236
092 Nisga'a	47	1.00		34.1	138	14	11.4	1.23		41.2	34
094 Telegraph Creek	15	1.04		35.7	42	3	3.0	1.00		33.3	9
161 Vancouver - City Centre	1,293	0.95		32.4	3,987	262	290.9	0.90		30.1	871
162 Vancouver - Downtown E.side	792	1.01		34.6	2,291	171	162.0	1.06		35.3	485
163 Vancouver - North East	1,518	0.80	*	27.3	5,566	259	353.7	0.73	*	24.5	1,059
164 Vancouver - Westside	1,701	0.91	*	31.3	5,443	329	403.5	0.82	*	27.2	1,208
165 Vancouver - Midtown	1,467	0.87	*	29.7	4,947	290	344.4	0.84	*	28.1	1,031
166 Vancouver - South	1,724	0.80	*	27.4	6,297	355	454.3	0.78	*	26.1	1,360
201 Surrey	6,510	0.86	*	29.5	22,101	1,371	1,572.9	0.87	*	29.1	4,709
202 South Surrey/White Rock	900	1.02		35.0	2,569	189	170.7	1.11		37.0	511
PROVINCIAL TOTAL	68,981	1.00		34.2	201,595	13,910	13,910.0	1.00		33.4	41,643

Note: *Statistical testing indicates that the observed number of births with perinatal complications is significantly different from the expected ($p < 0.05$, two tailed). Ratio-observed over the expected. Percent of observed births is based on total live births and includes residents with unknown LHA and excludes non-residents.

FIGURE 34
**PERINATAL COMPLICATIONS IN LIVE BIRTHS
 BY LOCAL HEALTH AREA**
 BRITISH COLUMBIA, 2001–2005



Note: Ratio - Observed over the expected. Refer to Figure 1 to clarify geographical location of Local Health Area

Vital Statistics Information Box

BIRTHS BY MOTHER'S COUNTRY OF BIRTH

BRITISH COLUMBIA, 2006

Area	Province/Country	Births
Canada	Total	27,639
	British Columbia	19,670
	Ontario	2,545
	Alberta	2,348
	Saskatchewan	793
	Manitoba	785
	Quebec	650
	Nova Scotia	291
	Newfoundland	239
	New Brunswick	144
	Yukon	92
	Prince Edward Island	36
	Northwest Territories and Nunavut	45
	Unknown Province	1
North and Central America	Total	1,176
	United States	709
	Other North and Central American Countries	467
South America		235
Europe	Total	1,801
	England	436
	Other United Kingdom	211
	Germany	159
	Poland	129
	Former Yugoslavia	142
	Romania	96
	Ukraine	69
	Netherlands	67
	Scandinavian Countries	57
	France	52
	Italy	30
	Other Europe	353
Asia and the Middle East	Total	9,362
	India	2,726
	China	1,942
	Philippines	1,225
	Vietnam	576
	Hong Kong	426
	Korea	403
	Japan	341
	Taiwan	273
	Pakistan	237
	Iran	225
	Other Asian and Middle Eastern Countries	988
Africa		581
Oceania	Total	409
	Fiji	246
	Australia	109
	Other Oceanic Countries	54
Unknown		440
Total		41,643