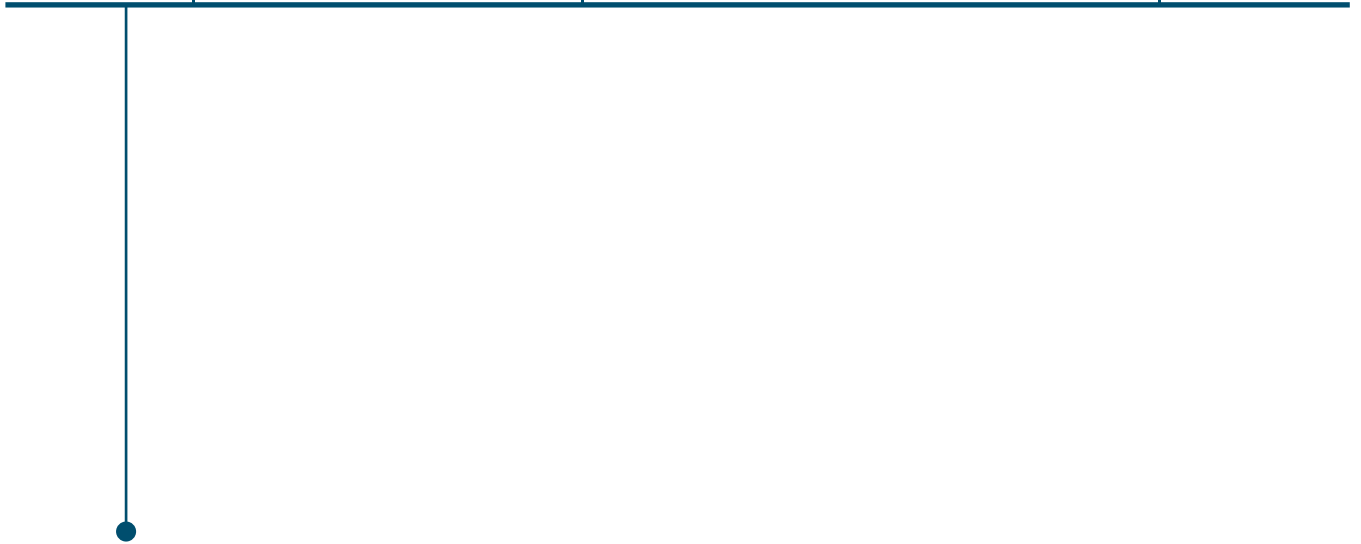


Birth-related Statistics



Birth Introduction

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. The tables refer only to live births except Table 7 which also includes stillbirths. The mother's usual residence is used to identify geographic location.

Births – General Indicators

Certain birth and parental characteristics that are presented in this section have been shown to be related to the infant's health status or are of general interest. These characteristics include age of mother, age of father, kind of birth (single, twin, or multiple), LHA of usual residence, and mode of delivery.

Table 7 shows the live birth cardinality by mother's age. About 82.2 percent of live births in 2009 were first or second births. Second, third, and subsequent live births tend to have been delivered to progressively older women.

Table 8 shows the number of live births in BC in 2009 by the age of mother and the age of father. It also shows, for each maternal age range, the number of infants born to couples who were not formally married to each other (Out-of-Wedlock).

Over half of the births (50.6 percent) in 2009 were to mothers 30 to 39 years old and 42.0 percent were to mothers in their 20s. Only 3.2 percent were to mothers less than 20 years and 4.1 percent to those 40 or older. For fathers, over half (52.7 percent) were in their 30s, more than a quarter (27.4 percent) were in their 20s, 14.0 percent were in their 40s or older, and 1.0 percent were less than 20 years old. In 4.9 percent of births, the father's age was not indicated.

Less than one percent (0.8 percent) of births (361) were to couples who were both in their teens; births to couples in which at least one person was a teen, made up 3.3 percent (1,501) of births.

While there were only 129 births (0.3 percent) to mothers age 45 years old and over, 4.3 percent (1,927) of all newborns had fathers in that age group.

Table 9 shows the number of births by birth kind (single, twin, triplet+) according to the mother's age group. In 2009, 4.4 percent of live births to mothers 35 years and older were multiple births, whereas 2.9 percent of live births to mothers aged 20 to 34 were multiples and teenagers had the lowest proportion (1.4 percent).

In recent decades there has been a gradual increase in multiple birth rates in BC (see Figure 8). The proportions of multiple live births increased from 1.9 percent of all live births in 1986 to 3.2 percent in 2009.

Table 10 shows the 2009 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 years of age over the five-year period 2004-2008 and the fertility rate for that age group.

In Figure 29, the Age Specific Fertility Rate (ASFR) statistics for 15-19 year olds for the five-year period 2004-2008 are shown by LHA. The ASFR is described more fully in the Glossary and an example of the calculation method is shown in the Methodology section.

Table 11 shows the number and percentage of births in each maternal age group according to their mode of delivery. Generally, the proportion of births that were spontaneous vertex deliveries (which generally require no medical intervention), and to a lesser extent births assisted by vacuum extraction, are higher for younger mothers. On the other hand, deliveries by cesarean section are proportionally higher for older mothers (see also Figure 13).

Cesarean section deliveries in BC increased from 209.59 per 1,000 live births in 1986 to 308.92 per 1,000 live births in 2009 (see Figure 11).

Table 12 shows live births by the 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 columns on the right side of the table indicate the total number of live births in 2009 to residents of each LHA and the birth rate per 1,000 population. The LHA with the highest live birth rate was more than five times the rate of the lowest. For more comparisons of cesarean section delivery rates, see also Figures 11, 12, and 13.

In Figure 30, the LHAs are grouped by their ratio of observed number of cesarean live births over expected number of cesarean live births for 2009. The figure shows the LHAs in quintiles from those with the highest cesarean ratios (quintile 5) to those with the lowest such rates (quintile 1).

Vital Statistics Information Box

BIRTHS BY MOTHER'S COUNTRY OF BIRTH

BRITISH COLUMBIA, 2009

Area	Province/Country	Births
Canada	Total	29,809
	British Columbia	21,645
	Ontario	2,608
	Alberta	2,573
	Manitoba	807
	Saskatchewan	774
	Quebec	590
	Nova Scotia	296
	Newfoundland & Labrador	184
	New Brunswick	132
	Yukon	86
	Northwest Territories	73
	Prince Edward Island	40
	Nunavut	1
North and Central America	Total	1,335
	United States	752
	Mexico	289
	Other North and Central American Countries	294
South America	Total	324
Europe	Total	2,171
	England	396
	Other United Kingdom	252
	Germany	199
	Russia	159
	Romania	130
	Poland	125
	Ukraine	92
	Scandinavian Countries	72
	Netherlands	68
	Switzerland	50
	Other European Countries	628
Asia and the Middle East	Total	9,889
	India	2,840
	China	2,176
	Philippines	1,442
	Vietnam	537
	Japan	365
	Iran	308
	Taiwan	306
	Hong Kong	281
	Korea	460
	Pakistan	223
	Afghanistan	136
	Other Asian and Middle Eastern Countries	815
Africa	Total	654
	South Africa	184
	Other African Countries	470
Oceania	Total	414
	Fiji	221
	Australia	128
	New Zealand	56
	Other Oceanic Countries	9
Unknown	Total	312
Total		44,908

Note: Births consist of live births only. Non-residents are excluded.

TABLE 7
BIRTHS BY AGE OF MOTHER AND LIVE BIRTHS BY BIRTH ORDER
 BRITISH COLUMBIA, 2009

Age of Mother	Birth Order										Total Live Births	Stillbirths	Total Births
	1	2	3	4	5	6	7	8	9+	N.S.			
<14	1	-	-	-	-	-	-	-	-	-	1	-	1
14	13	-	-	-	-	-	-	-	-	-	13	2	15
15	54	-	-	-	-	-	-	-	-	-	54	-	54
16	113	5	-	-	-	-	-	-	-	-	118	7	125
17	258	24	1	-	-	-	-	-	-	-	283	6	289
18	339	40	3	1	-	-	-	-	-	-	383	7	390
19	457	104	12	3	-	-	-	-	-	-	576	10	586
20	621	169	13	1	-	-	-	-	-	-	804	6	810
21	689	225	45	9	1	-	-	-	-	-	969	9	978
22	757	388	87	6	1	1	-	-	-	-	1,240	17	1,257
23	821	422	105	28	4	2	-	-	-	-	1,382	9	1,391
24	1,038	546	161	39	10	2	-	-	-	-	1,796	14	1,810
25	1,042	686	185	60	16	5	1	-	-	-	1,995	18	2,013
26	1,176	738	235	59	28	7	2	-	-	-	2,245	16	2,261
27	1,340	813	286	89	17	7	1	-	-	-	2,553	22	2,575
28	1,455	963	329	94	28	8	4	-	-	-	2,881	22	2,903
29	1,470	1,082	322	95	27	8	6	-	-	-	3,010	26	3,036
30	1,453	1,116	392	85	36	5	3	1	-	-	3,091	29	3,120
31	1,372	1,100	373	101	35	18	3	3	-	-	3,005	22	3,027
32	1,194	1,158	424	132	41	17	2	3	-	-	2,971	31	3,002
33	1,039	1,098	436	112	33	15	9	3	1	-	2,746	27	2,773
34	916	1,110	398	133	28	13	6	2	4	-	2,610	24	2,634
35	820	943	383	120	36	14	7	4	3	-	2,330	14	2,344
36	600	899	333	95	30	13	5	2	5	-	1,982	17	1,999
37	507	631	293	83	30	14	8	6	5	-	1,577	19	1,596
38	422	631	241	67	26	5	2	-	3	-	1,397	13	1,410
39	295	459	175	64	24	9	3	3	1	-	1,033	13	1,046
40	207	325	133	33	9	7	7	1	2	-	724	10	734
41	154	169	82	42	6	9	1	-	1	-	464	10	474
42	77	97	47	19	9	7	3	-	4	-	263	3	266
43	51	59	39	15	4	1	2	1	1	-	173	2	175
44	33	44	16	11	3	2	-	-	1	-	110	1	111
45	18	19	19	1	1	1	-	-	-	-	59	1	60
45+	26	21	10	4	1	4	1	2	1	-	70	2	72
TOTAL	20,828	16,084	5,578	1,601	484	194	76	31	32	-	44,908	429	45,337
PERCENT	46.4	35.8	12.4	3.6	1.1	0.4	0.2	0.1	0.1	-	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, 2009

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	2	-	1	-	-	-	-	-	-	3	-
15-19	9	350	62	6	3	1	-	-	-	431	1.0
20-24	-	556	1,926	522	80	18	3	1	-	3,106	6.9
25-29	-	151	2,438	5,157	1,252	194	23	2	-	9,217	20.5
30-34	-	38	799	4,440	6,792	1,243	102	3	-	13,417	29.9
35-39	-	15	238	1,474	4,265	3,891	350	11	-	10,244	22.8
40-44	-	4	79	371	1,204	1,946	741	28	-	4,373	9.7
45+	-	1	47	177	443	744	445	70	-	1,927	4.3
N.S.	3	299	601	537	384	282	70	14	-	2,190	4.9
TOTAL	14	1,414	6,191	12,684	14,423	8,319	1,734	129	-	44,908	
Percent	0.0	3.1	13.8	28.2	32.1	18.5	3.9	0.3	-		100.0
Out-of-Wedlock	14	1,229	3,478	3,482	2,509	1,443	352	36	-	12,543	

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 1,627 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, 2009

Age of Mother	Kind of Birth				Total
	Single	Twin	Triplets+	N.S.	
< 15	14	-	-	-	14
15-19	1,394	20	-	-	1,414
20-24	6,077	114	-	-	6,191
25-29	12,352	323	9	-	12,684
30-34	13,914	503	6	-	14,423
35-39	8,008	305	6	-	8,319
40-44	1,624	110	-	-	1,734
45 +	98	31	-	-	129
N.S.	-	-	-	-	-
TOTAL	43,481	1,406	21	-	44,908

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

40

Local Health Area	2004-2008 Teenage Fertility Rate (15-19 yrs)			2009 ASFR ¹						TFR ²	
	Observed	ASFR ¹	(p)	15-19	20-24	25-29	30-34	35-39	40-44	Rate	(p)
001 Fernie	28	11.71		10.78	48.14	175.44	92.78	41.93	7.92	1,884.94	*
002 Cranbrook	83	19.50	*	32.18	65.90	141.62	67.34	27.33	6.47	1,704.16	*
003 Kimberley	13	10.97		15.33	61.67	139.04	85.37	66.93	3.36	1,858.44	
004 Windermere	17	11.63		11.40	63.44	102.94	90.09	29.15	2.81	1,499.17	
005 Creston	57	29.81	*	32.26	108.50	125.48	108.00	63.77	9.43	2,237.20	*
006 Kootenay Lake	4	7.49		-	21.74	142.86	54.55	38.76	-	1,289.51	
007 Nelson	33	8.28		7.37	40.95	100.00	113.23	53.42	9.41	1,621.91	
009 Castlegar	5	2.51	*	2.29	35.35	84.85	91.43	17.82	2.00	1,168.69	*
010 Arrow Lakes	4	7.37		20.98	48.19	103.90	50.51	14.81	14.71	1,265.47	
011 Trail	38	11.54		9.17	45.45	129.63	98.65	42.83	6.19	1,659.68	
012 Grand Forks	22	18.84	*	18.59	36.87	83.80	72.63	36.53	11.15	1,297.80	
013 Kettle Valley	4	10.03		-	35.09	79.37	49.38	10.64	-	872.37	*
014 Southern Okanagan	39	16.67	*	13.62	43.08	182.48	82.09	26.09	1.83	1,745.94	
015 Penticton	74	12.41		10.26	50.57	115.87	90.47	37.37	7.96	1,562.49	
016 Keremeos	9	13.91		13.61	78.95	206.35	131.31	26.32	12.42	2,344.77	*
017 Princeton	18	27.69	*	7.52	32.61	100.00	95.24	26.09	6.62	1,340.38	
018 Golden	12	11.19		-	47.17	50.85	64.00	47.81	8.20	1,090.11	*
019 Revelstoke	19	13.73		12.55	53.64	139.01	110.66	50.19	-	1,830.27	
020 Salmon Arm	65	12.13		13.19	53.67	134.75	98.59	30.57	6.33	1,685.54	
021 Armstrong - Spallumcheen	16	9.83		8.62	75.19	122.64	87.16	30.65	-	1,621.29	
022 Vernon	126	12.26		17.27	69.96	157.67	112.46	36.53	4.44	1,991.67	*
023 Central Okanagan	275	10.31		10.75	48.77	94.85	101.01	42.79	6.49	1,523.33	
024 Kamloops	210	11.60		12.25	55.60	104.01	104.76	43.13	6.37	1,630.53	*
025 100 Mile House	30	12.59		14.61	57.64	114.70	105.26	39.27	6.59	1,690.38	
026 North Thompson	15	19.89		12.35	86.96	169.81	100.00	22.22	7.04	1,991.89	
027 Cariboo - Chilcotin	119	24.81	*	34.67	82.07	103.36	85.68	31.13	4.19	1,705.50	*
028 Quesnel	112	26.67	*	20.98	78.46	160.39	88.01	28.82	5.92	1,912.89	*
029 Lillooet	22	30.05	*	27.78	88.89	102.80	49.59	27.59	-	1,483.22	
030 South Cariboo	36	30.64	*	18.80	91.37	120.48	102.41	12.50	-	1,727.80	
031 Merritt	53	26.71	*	37.47	100.84	116.28	95.85	33.90	2.48	1,934.05	*
032 Hope	40	31.23	*	41.49	64.78	120.00	110.47	14.71	-	1,757.21	
033 Chilliwack	275	20.24	*	22.65	90.80	150.79	99.81	42.89	8.97	2,079.52	*
034 Abbotsford	278	12.17	*	10.70	67.83	128.71	99.08	41.66	6.15	1,770.64	*
035 Langley	145	6.48	*	8.04	43.56	114.64	119.28	52.71	9.12	1,736.77	*
037 Delta	58	3.18	*	3.39	24.53	81.35	121.10	60.76	12.08	1,516.04	
038 Richmond	66	2.17	*	1.23	12.58	59.94	115.25	61.26	13.99	1,321.26	*
040 New Westminster	67	9.04		4.10	29.77	63.95	102.03	65.49	11.93	1,386.34	*
041 Burnaby	134	4.34	*	3.95	19.09	53.44	110.87	67.81	13.76	1,344.68	*
042 Maple Ridge	110	7.13	*	6.55	50.76	116.03	107.42	50.00	9.59	1,701.68	*
043 Coquitlam	138	3.75	*	4.64	21.52	67.91	130.28	76.45	10.77	1,557.86	*
044 North Vancouver	49	2.20	*	1.14	11.53	53.33	110.05	83.68	13.07	1,364.00	*
045 West Vancouver-Bowen Is.	28	3.00	*	1.53	5.90	41.71	110.68	66.72	18.95	1,227.44	*
046 Sunshine Coast	42	9.42		10.16	66.25	173.23	92.53	44.81	7.90	1,974.35	*
047 Powell River	40	13.43		8.21	69.03	132.95	105.26	19.84	6.06	1,706.75	*
048 Howe Sound	57	12.12		12.49	49.09	58.79	109.23	74.66	16.55	1,604.02	
049 Bella Coola Valley	42	74.34	*	25.00	97.09	70.59	123.29	46.51	-	1,812.37	
050 Queen Charlotte	18	25.07	*	7.14	76.92	72.58	76.92	34.72	13.25	1,407.68	
051 Snow Country	2	32.79		50.00	-	-	153.85	-	-	1,019.23	
052 Prince Rupert	113	37.04	*	38.82	97.61	135.21	96.77	35.93	5.60	2,049.67	*
053 Upper Skeena	39	34.61	*	46.51	91.50	181.82	105.96	46.98	5.00	2,388.87	*
054 Smithers	74	23.12	*	20.00	92.37	151.81	123.64	58.16	13.16	2,295.70	*
055 Burns Lake	34	23.43	*	21.34	95.04	134.53	145.08	49.55	-	2,227.70	*
056 Nechako	106	38.34	*	31.19	183.57	173.59	105.71	30.63	5.66	2,651.82	*
057 Prince George	340	19.52	*	25.28	71.51	109.40	100.75	35.21	5.48	1,738.15	*
059 Peace River South	117	23.60	*	28.94	102.45	136.36	85.38	44.55	5.14	2,014.15	*
060 Peace River North	206	33.86	*	19.53	140.12	156.89	97.03	36.95	13.03	2,317.73	*
061 Greater Victoria	233	7.79	*	6.76	20.82	43.67	90.57	58.01	13.03	1,164.23	*
062 Sooke	96	9.18		8.80	55.31	126.31	97.60	46.88	9.60	1,722.52	*
063 Saanich	74	7.28	*	10.04	23.76	91.23	138.97	39.60	6.55	1,550.66	
064 Gulf Islands	14	7.66		4.93	20.13	119.34	74.58	50.42	12.25	1,408.27	
065 Cowichan	187	18.29	*	19.51	53.46	135.62	99.65	47.71	8.19	1,820.72	*
066 Lake Cowichan	16	16.43		13.33	47.90	94.89	44.87	47.34	14.71	1,315.21	
067 Ladysmith	52	19.20	*	18.48	65.22	132.18	96.26	32.89	5.03	1,750.31	
068 Nanaimo	222	13.67	*	11.00	51.70	97.92	97.21	36.73	7.78	1,511.69	
069 Qualicum	41	7.43	*	6.69	54.40	122.48	92.99	34.62	1.63	1,564.01	
070 Alberni	163	31.74	*	25.20	110.86	134.23	82.66	37.40	6.34	1,983.51	*
071 Courtenay	122	12.14		10.44	55.86	104.47	96.89	35.79	9.00	1,562.21	
072 Campbell River	133	19.52	*	15.41	65.35	173.81	90.50	45.02	4.18	1,971.40	*
075 Mission	114	15.29	*	10.93	63.75	128.87	91.56	37.11	7.91	1,700.69	*
076 Agassiz - Harrison	47	35.96	*	32.79	94.42	145.83	91.30	36.00	3.80	2,020.74	*
077 Summerland	22	11.17		4.83	50.19	132.95	116.28	47.27	2.82	1,771.70	
078 Enderby	26	20.27	*	22.47	76.27	117.65	108.28	67.42	-	1,960.43	*
080 Kitimat	34	16.76	*	34.12	86.38	142.86	98.31	45.60	2.45	2,048.58	*
081 Fort Nelson	48	45.85	*	45.71	144.93	86.09	68.03	38.31	-	1,915.38	*
083 Central Coast	17	52.63	*	41.67	216.67	83.33	19.23	54.05	-	2,074.76	*
084 Vancouver Island West	19	49.35	*	78.95	98.36	100.00	65.22	67.80	-	2,051.61	*
085 Vancouver Island North	90	39.95	*	56.69	105.85	154.61	87.35	44.94	7.06	2,282.48	*
087 Stikine	2	13.61		43.48	64.52	88.24	58.82	68.97	-	1,620.09	
088 Terrace	126	32.13	*	30.83	99.25	174.00	93.75	40.79	5.33	2,219.75	*
092 Nisga'a	34	82.32	*	89.89	200.00	196.43	67.80	42.25	34.48	3,154.25	*
094 Telegraph Creek	3	17.86		76.92	66.67	90.91	43.48	153.85	-	2,159.12	*
161 Vancouver - City Centre	23	3.98	*	1.80	7.31	18.65	53.33	53.00	14.25	741.71	*
162 Vancouver - Downtown E.side	72	14.63	*	13.77	25.52	37.13	61.05	51.13	11.35	999.76	*
163 Vancouver - North East	81	5.62	*	5.32	22.03	55.10	101.51	68.73	13.42	1,330.59	*
164 Vancouver - Westside	23	1.20	*	0.76	5.16	22.52	83.73	68.38	19.65	1,001.06	*
165 Vancouver - Midtown	56	5.93	*	5.89	19.66	42.20	85.65	80.91	19.59	1,269.55	*
166 Vancouver - South	98	4.64	*	5.60	23.87	59.47	91.62	64.89	14.88	1,301.63	*
201 Surrey	584	9.67		8.85	57.42	116.07	114.20	52.34	10.47	1,796.75	*
202 South Surrey/White Rock	28	2.30	*	1.99	20.17	68.88	113.00	58.70	8.53	1,356.40	*
PROVINCIAL TOTAL	7,084	10.45		10.24	41.27	81.87	99.60	54.40	10.51	1,489.46	

Notes for this table follow the map.

FIGURE 29
LIVE BIRTH TEENAGE FERTILITY RATES BY LOCAL HEALTH AREA
 BRITISH COLUMBIA, 2004-2008

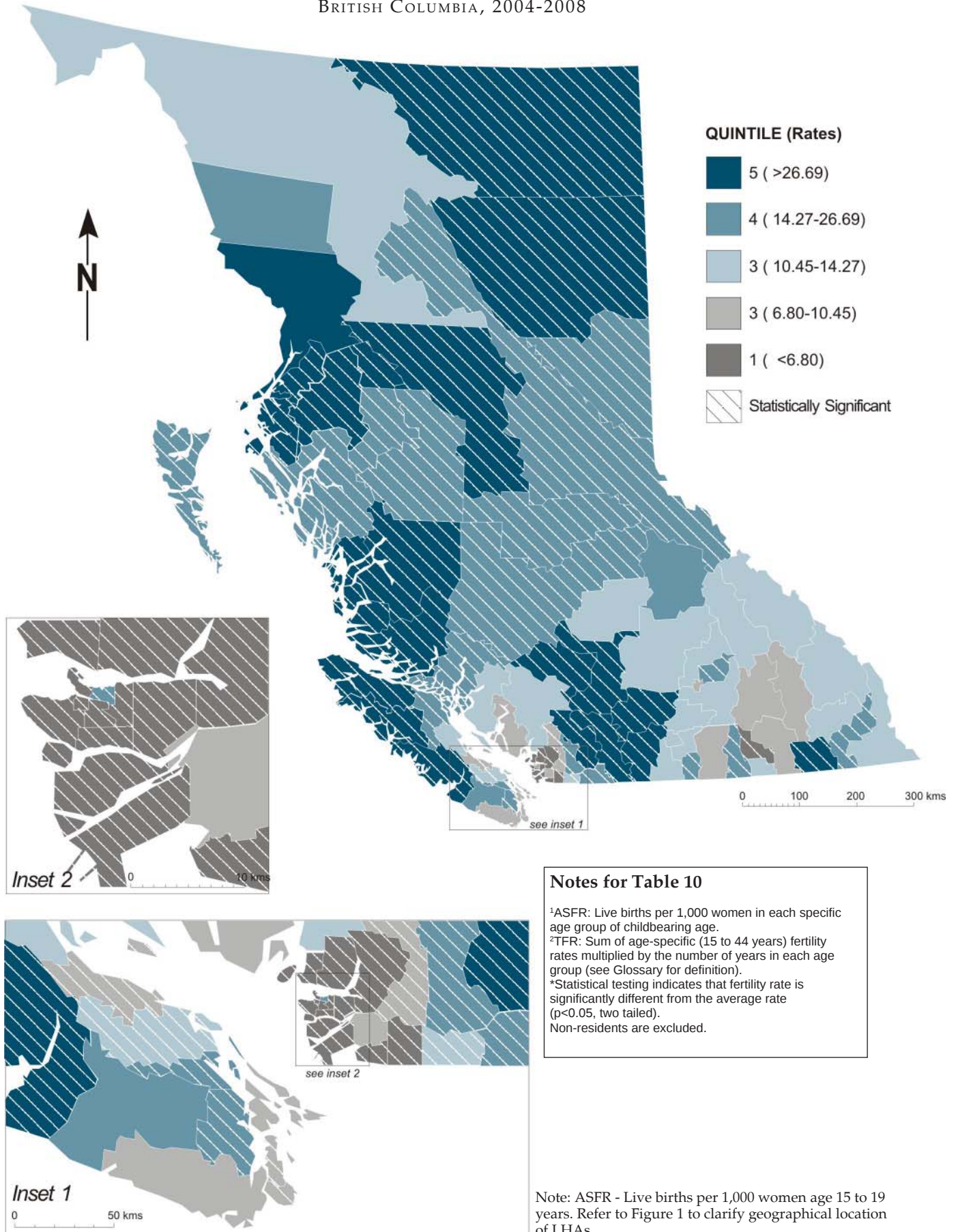


TABLE 11
LIVE BIRTHS BY MODE OF DELIVERY AND AGE OF MOTHER
 BRITISH COLUMBIA, 2009

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	10	1,033	4,080	7,844	8,301	4,355	772	39	-	26,434
Percent	71.4	73.1	65.9	61.8	57.6	52.4	44.5	30.2	-	58.9
Spontaneous breech	-	4	14	54	36	31	11	1	-	151
Percent	0.0	0.3	0.2	0.4	0.2	0.4	0.6	0.8	-	0.3
Forceps	-	33	193	398	482	274	47	4	-	1,431
Percent	0.0	2.3	3.1	3.1	3.3	3.3	2.7	3.1	-	3.2
Vacuum	2	107	482	873	966	482	101	6	-	3,019
Percent	14.3	7.6	7.8	6.9	6.7	5.8	5.8	4.7	-	6.7
First cesarean	-	218	1,059	2,295	2,734	1,598	451	52	-	8,409
Percent	0.0	15.4	17.1	18.1	19.0	19.2	26.0	40.3	-	18.7
Repeat cesarean	-	19	363	1,220	1,904	1,579	352	27	-	5,464
Percent	0.0	1.3	5.9	9.6	13.2	19.0	20.3	20.9	-	12.2
N.S.	-	-	-	-	-	-	-	-	-	-
TOTAL	14	1,414	6,191	12,684	14,423	8,319	1,734	129	-	44,908
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, 2005-2009

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 2005 to 2009.

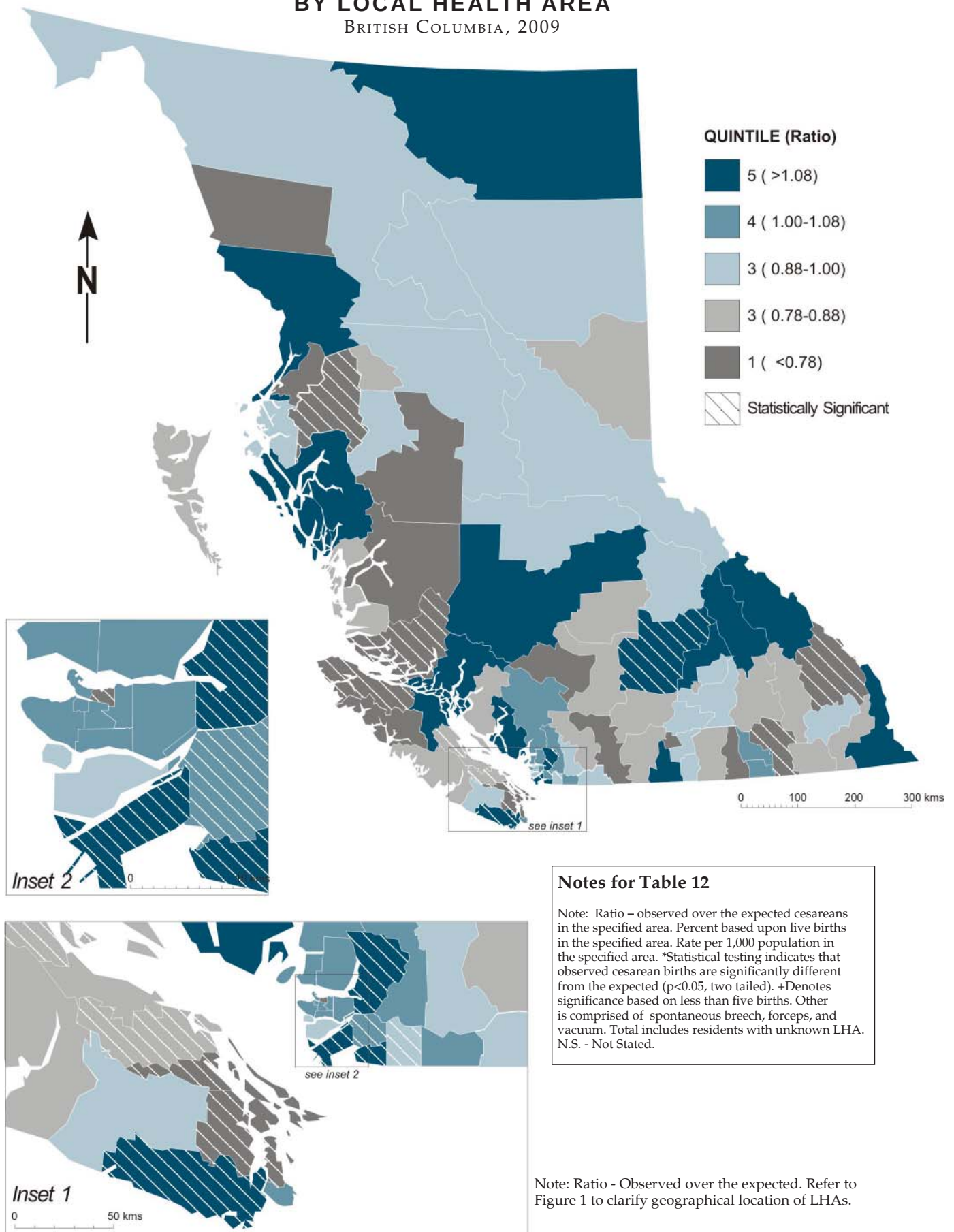
Place of Birth	2005		2006		2007		2008		2009	
	No.	%	No.	%	No.	%	No.	%	No.	%
Hospital	1,505	70.8	1,760	74.1	2,054	75.6	2,509	76.2	2,949	75.9
Home	475	22.3	223	9.4	647	23.8	721	21.9	851	21.9
Other & unknown*	146	6.9	393	16.5	15	0.6	62	1.9	83	2.1
Midwife Assisted Births	2,126	100.0	2,376	100.0	2,716	100.0	3,292	100.0	3,883	100.0
Percent of Total Births Delivered by Registered Midwives		5.2		5.7		6.2		7.5		8.6

Note: *Other and unknown includes birthing clinics.

44		Spontaneous	Cesarean						Other	N.S.	Total Live Births	
Local Health Area			Vertex	First	Repeat	Total	Expected	Ratio (p)			Percent	Number
001	Fernie	82	33	30	63	51.28	1.23	38.0	21	-	166	11.15
002	Cranbrook	182	40	29	69	79.39	0.87	26.8	6	-	257	9.98
003	Kimberley	52	12	13	25	25.64	0.98	30.1	6	-	83	9.67
004	Windermere	75	12	8	20	31.20	0.64	19.8	6	-	101	9.42
005	Creston	95	23	11	34	41.70	0.82	25.2	6	-	135	10.66
006	Kootenay Lake	14	5	1	6	6.80	0.88	27.3	2	-	22	5.72
007	Nelson	170	37	21	58	75.99	0.76	23.6	18	-	246	9.79
009	Castlegar	51	12	14	26	25.95	1.00	31.0	7	-	84	6.25
010	Arrow Lakes	16	4	2	6	7.41	0.81	25.0	2	-	24	5.02
011	Trail	94	19	33	52	50.05	1.04	32.1	16	-	162	8.36
012	Grand Forks	36	7	3	10	16.06	0.62	19.2	6	-	52	5.75
013	Kettle Valley	8	-	3	3	3.71	0.81	25.0	1	-	12	3.25
014	Southern Okanagan	78	21	12	33	36.14	0.91	28.2	6	-	117	5.90
015	Penticton	203	69	33	102	103.18	0.99	30.5	29	-	334	8.02
016	Keremeos	23	6	7	13	12.05	1.08	33.3	3	-	39	7.44
017	Princeton	15	3	3	6	6.80	0.88	27.3	1	-	22	4.35
018	Golden	28	8	13	21	16.99	1.24	38.2	6	-	55	7.46
019	Revelstoke	49	17	13	30	27.19	1.10	34.1	9	-	88	11.10
020	Salmon Arm	156	50	45	95	81.56	1.16	36.0	13	-	264	7.56
021	Armstrong - Spallumcheen	54	11	8	19	23.48	0.81	25.0	3	-	76	7.85
022	Vernon	410	111	77	188	200.49	0.94	29.0	51	-	649	9.85
023	Central Okanagan	994	288	221	509	523.31	0.97	30.0	191	-	1,694	9.19
024	Kamloops	638	211	171	382	338.58	1.13	34.9	76	-	1,096	9.89
025	100 Mile House	70	19	10	29	33.98	0.85	26.4	11	-	110	7.45
026	North Thompson	27	8	5	13	13.59	0.96	29.5	4	-	44	10.21
027	Cariboo - Chilcotin	163	56	41	97	87.12	1.11	34.4	22	-	282	10.55
028	Quesnel	156	49	29	78	79.70	0.98	30.2	24	-	258	10.94
029	Lillooet	26	4	3	7	11.43	0.61	18.9	4	-	37	8.36
030	South Cariboo	40	7	8	15	19.15	0.78	24.2	7	-	62	8.36
031	Merritt	89	21	11	32	40.16	0.80	24.6	9	-	130	11.09
032	Hope	48	9	6	15	21.32	0.70	21.7	6	-	69	8.41
033	Chilliwack	679	179	129	308	334.56	0.92	28.4	96	-	1,083	12.80
034	Abbotsford	1,003	337	209	546	545.24	1.00	30.9	216	-	1,765	12.98
035	Langley	943	234	169	403	455.04	0.89	27.4	127	-	1,473	11.38
037	Delta	437	162	148	310	257.33	1.20	37.2	86	-	833	8.28
038	Richmond	1,064	325	225	550	552.66	1.00	30.7	175	-	1,789	9.26
040	New Westminster	386	153	75	228	226.13	1.01	31.1	118	-	732	11.26
041	Burnaby	1,343	475	270	745	731.21	1.02	31.5	279	-	2,367	10.62
042	Maple Ridge	565	200	129	329	309.23	1.06	32.9	107	-	1,001	10.73
043	Coquitlam	1,258	473	307	780	700.94	1.11	34.4	231	-	2,269	10.53
044	North Vancouver	697	235	153	388	376.57	1.03	31.8	134	-	1,219	8.83
045	West Vancouver-Bowen Is.	146	50	34	84	78.47	1.07	33.1	24	-	254	4.94
046	Sunshine Coast	121	50	22	72	65.80	1.09	33.8	20	-	213	7.21
047	Powell River	97	20	16	36	45.10	0.80	24.7	13	-	146	7.36
048	Howe Sound	282	91	60	151	145.50	1.04	32.1	38	-	471	13.54
049	Bella Coola Valley	25	2	2	4	9.58	0.42	12.9	2	-	31	10.72
050	Queen Charlotte	24	8	2	10	11.43	0.87	27.0	3	-	37	7.95
051	Snow Country	2	-	1	1	0.93	1.08	33.3	-	-	3	6.12
052	Prince Rupert	102	28	25	53	55.61	0.95	29.4	25	-	180	12.64
053	Upper Skeena	52	8	13	21	24.10	0.87	26.9	5	-	78	14.42
054	Smithers	136	37	24	61	67.04	0.91	28.1	20	-	217	13.59
055	Burns Lake	67	9	11	20	30.58	0.65	20.2	12	-	99	12.56
056	Nechako	152	42	27	69	71.36	0.97	29.9	10	-	231	15.39
057	Prince George	713	210	127	337	350.01	0.96	29.7	83	-	1,133	11.79
059	Peace River South	218	54	32	86	103.80	0.83	25.6	32	-	336	12.46
060	Peace River North	396	103	87	190	190.30	1.00	30.8	30	-	616	17.69
061	Greater Victoria	1,080	395	213	608	568.72	1.07	33.0	153	-	1,841	8.31
062	Sooke	437	170	109	279	234.47	1.19	36.8	43	-	759	11.38
063	Saanich	263	50	41	91	118.93	0.77	23.6	31	-	385	6.05
064	Gulf Islands	65	11	6	17	25.33	0.67	20.7	-	-	82	5.22
065	Cowichan	386	69	56	125	167.74	0.75	23.0	32	-	543	9.54
066	Lake Cowichan	28	6	6	12	12.97	0.92	28.6	2	-	42	6.54
067	Ladysmith	102	14	15	29	43.25	0.67	20.7	9	-	140	7.62
068	Nanaimo	598	144	93	237	285.13	0.83	25.7	88	-	923	8.97
069	Qualicum	158	30	29	59	73.21	0.81	24.9	20	-	237	5.23
070	Alberni	217	61	35	96	109.98	0.87	27.0	43	-	356	11.29
071	Courtenay	339	79	46	125	152.61	0.82	25.3	30	-	494	7.71
072	Campbell River	223	94	53	147	127.58	1.15	35.6	43	-	413	9.93
075	Mission	272	85	46	131	140.25	0.93	28.9	51	-	454	10.75
076	Agassiz - Harrison	61	13	12	25	30.27	0.83	25.5	12	-	98	10.90
077	Summerland	53	8	9	17	23.79	0.71	22.1	7	-	77	6.58
078	Enderby	49	14	7	21	23.17	0.91	28.0	5	-	75	9.82
080	Kitimat	64	33	13	46	36.14	1.27	39.3	7	-	117	11.36
081	Fort Nelson	50	27	12	39	29.04	1.34	41.5	5	-	94	15.37
083	Central Coast	14	4	2	6	7.11	0.84	26.1	3	-	23	15.68
084	Vancouver Island West	16	3	2	5	7.41	0.67	20.8	3	-	24	10.15
085	Vancouver Island North	113	20	12	32	49.12	0.65	20.1	14	-	159	12.94
087	Stikine	7	1	2	3	3.09	0.97	30.0	-	-	10	9.89
088	Terrace	198	26	19	45	80.01	0.56	17.4	16	-	259	12.77
092	Nisga'a	32	6	-	6	12.36	0.49	15.0	2	-	40	20.33
094	Telegraph Creek	7	-	2	2	2.78	0.72	22.2	-	-	9	13.01
161	Vancouver - City Centre	544	265	73	338	327.76	1.03	31.9	179	-	1,061	8.89
162	Vancouver - Downtown E.side	357	99	34	133	171.76	0.77	23.9	66	-	556	8.60
163	Vancouver - North East	615	232	124	356	340.43	1.05	32.3	131	-	1,102	10.53
164	Vancouver - Westside	633	222	126	348	346.30	1.00	31.0	140	-	1,121	8.42
165	Vancouver - Midtown	563	224	105	329	324.98	1.01	31.3	160	-	1,052	11.93
166	Vancouver - South	708	249	172	421	401.91	1.05	32.4	172	-	1,301	9.77
201	Surrey	2,831	982	729	1,711	1,601.75	1.07	33.0	643	-	5,185	13.58
202	South Surrey/White Rock	301	116	80	196	163.73	1.20	37.0	33	-	530	6.29
PROVINCIAL TOTAL		26,434	8,409	5,464	13,873	13,873.00	1.00	30.9	4,601	-	44,908	10.08

Notes for this table follow the map.

FIGURE 30
**CESAREAN DELIVERIES OF LIVE BORN INFANTS
 BY LOCAL HEALTH AREA**
 BRITISH COLUMBIA, 2009



Births – Birth Weight

Birth weight is recognized as a primary indicator of newborn health not only in BC 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 BC, a baby is weighed (in grams) immediately after birth, and that 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.

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. Table 13 indicates that 39,672 births or 88.3 percent of all live births in 2009 were in that category. There were 3,343 pre-term births (less than 37 weeks), which accounted for 7.4 percent of all live births.

Table 14 shows the number of live births to residents of BC in 2009 according to maternal age group and infant birth weight category. By far, most of the babies in each age group had healthy weights (from 2,500 to 4,499 grams).

Table 14 shows that mothers in the mid-age categories had the largest proportions of healthy weight babies and the lowest proportions of Low Birth Weight (LBW) babies (weighing less than 2,500 grams).

Table 15 displays the number and percent of LBW babies by gender according to the mother's age group. Female babies have a higher rate of LBW (58.36 per 1,000 female live births) than males (53.11 per 1,000 male live births).

Figure 31 graphically shows the pattern of LBW by maternal age groups. Women in the middle age groups had the lowest rates of LBW babies in 2009 with increasing rates 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 2004 to 2008 and the year 2009, stratified by the LHA of maternal residence for the whole province. As well as the incidence of such births, the 2004 to 2008 portion of the table shows the LBW rate per 1,000 live births and the ratio of the observed and expected number of LBW births in the LHA.

There were 16 LHAs with ratios that were statistically significant. Of these, 7 were high. The 2009 data show the incidence figures broken down by three categories: 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 2009, so the rates should be viewed with caution.

Figure 32 shows BC LHAs displayed in five levels according to the 2004-2008 observed versus expected LBW ratio. High ratios, (Quintile 5, dark blue colour) mean that an LHA had quite a high ratio in the years 2004-2008. At the other extreme, the areas shown as dark grey had a relatively low ratio.

TABLE 13
LIVE BIRTHS BY BIRTH WEIGHT, GENDER, AND GESTATIONAL AGE
 BRITISH COLUMBIA, 2009

Birth Weight (in Grams)	Gender		Gestational Age (in Weeks)						Total
	Male	Female	<20	20-27	28-36	37-41	42+	N.S.	
<500	15	17	3	29	-	-	-	-	32
500-749	29	34	-	57	6	-	-	-	63
750-999	35	35	-	52	18	-	-	-	70
1,000-1,249	58	42	-	27	73	-	-	-	100
1,250-1,499	68	65	-	4	125	4	-	-	133
1,500-1,749	124	98	-	-	218	4	-	-	222
1,750-1,999	143	160	-	-	280	23	-	-	303
2,000-2,249	268	278	-	1	412	133	-	-	546
2,250-2,499	491	539	-	-	513	517	-	-	1,030
2,500-2,749	934	1,132	-	-	537	1,528	1	-	2,066
2,750-2,999	1,978	2,508	-	-	474	4,008	4	-	4,486
3,000-3,249	3,410	3,950	-	-	280	7,059	21	-	7,360
3,250-3,499	4,464	4,620	-	1	145	8,899	39	-	9,084
3,500-3,749	4,409	3,811	-	-	52	8,116	52	-	8,220
3,750-3,999	3,200	2,393	-	-	22	5,514	57	-	5,593
4,000-4,249	1,969	1,268	-	-	11	3,184	42	-	3,237
4,250-4,499	915	473	-	-	1	1,364	23	-	1,388
4,500-4,749	408	186	-	-	1	580	13	-	594
4,750-4,999	164	64	-	-	1	220	6	1	228
5,000-5,249	52	20	-	-	-	68	4	-	72
5,250-5,499	15	8	-	-	-	23	-	-	23
5,500+	4	1	-	-	-	5	-	-	5
N.S.	26	27	-	-	-	-	-	53	53
TOTAL	23,179	21,729	3	171	3,169	41,249	262	54	44,908

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



TABLE 14
LIVE BIRTHS BY BIRTH WEIGHT AND AGE OF MOTHER
 BRITISH COLUMBIA, 2009

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	-	-	4	10	12	4	2	-	-	32
500-749	-	3	12	14	24	5	4	1	-	63
750-999	-	3	10	21	18	12	5	1	-	70
1,000-1,249	-	4	8	24	29	26	6	3	-	100
1,250-1,499	-	1	12	34	43	30	11	2	-	133
1,500-1,749	-	6	32	53	62	52	15	2	-	222
1,750-1,999	-	9	33	79	103	54	24	1	-	303
2,000-2,249	-	12	65	130	174	133	30	2	-	546
2,250-2,499	1	30	123	272	327	207	61	9	-	1,030
2,500-2,749	-	78	299	545	660	382	90	12	-	2,066
2,750-2,999	1	128	597	1,297	1,492	772	184	15	-	4,486
3,000-3,249	3	227	1,036	2,074	2,347	1,363	292	18	-	7,360
3,250-3,499	3	272	1,321	2,563	2,870	1,722	306	27	-	9,084
3,500-3,749	2	280	1,079	2,344	2,657	1,546	300	12	-	8,220
3,750-3,999	4	177	739	1,688	1,750	1,025	198	12	-	5,593
4,000-4,249	-	104	484	852	1,085	591	118	3	-	3,237
4,250-4,499	-	54	197	400	455	228	46	8	-	1,388
4,500-4,749	-	18	93	168	195	95	24	1	-	594
4,750-4,999	-	7	24	67	74	48	8	-	-	228
5,000-5,249	-	1	12	22	24	11	2	-	-	72
5,250-5,499	-	-	3	9	7	4	-	-	-	23
5,500+	-	-	-	2	1	2	-	-	-	5
Low	1	68	299	637	792	523	158	21	-	2,499
Percent	7.1	4.8	4.8	5.0	5.5	6.3	9.1	16.3	-	5.6
Healthy	13	1,320	5,752	11,763	13,316	7,629	1,534	107	-	41,434
Percent	92.9	93.4	92.9	92.7	92.3	91.7	88.5	82.9	-	92.3
High	-	26	132	268	301	160	34	1	-	922
Percent	-	1.8	2.1	2.1	2.1	1.9	2.0	0.8	-	2.1
N.S.	-	-	8	16	14	7	8	-	-	53
TOTAL	14	1,414	6,191	12,684	14,423	8,319	1,734	129	-	44,908

Note: Low birth weight <2,500 grams. Healthy birth weight 2,500 to 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, 2009

Age of Mother	Male		Female		Total		
	Number	Percent	Number	Percent	Number	Percent	Rate
< 15	-	-	1	0.1	1	0.0	+
15-19	31	2.5	37	2.9	68	2.7	48.09
20-24	147	11.9	152	12.0	299	12.0	48.30
25-29	320	26.0	317	25.0	637	25.5	50.22
30-34	384	31.2	408	32.2	792	31.7	54.91
35-39	250	20.3	273	21.5	523	20.9	62.87
40-44	85	6.9	73	5.8	158	6.3	91.12
45 +	14	1.1	7	0.6	21	0.8	162.79
N.S.	-	-	-	-	-	-	-
TOTAL	1,231	100.0	1,268	100.0	2,499	100.0	55.65

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, 2009

Rate per 1,000 Live Births

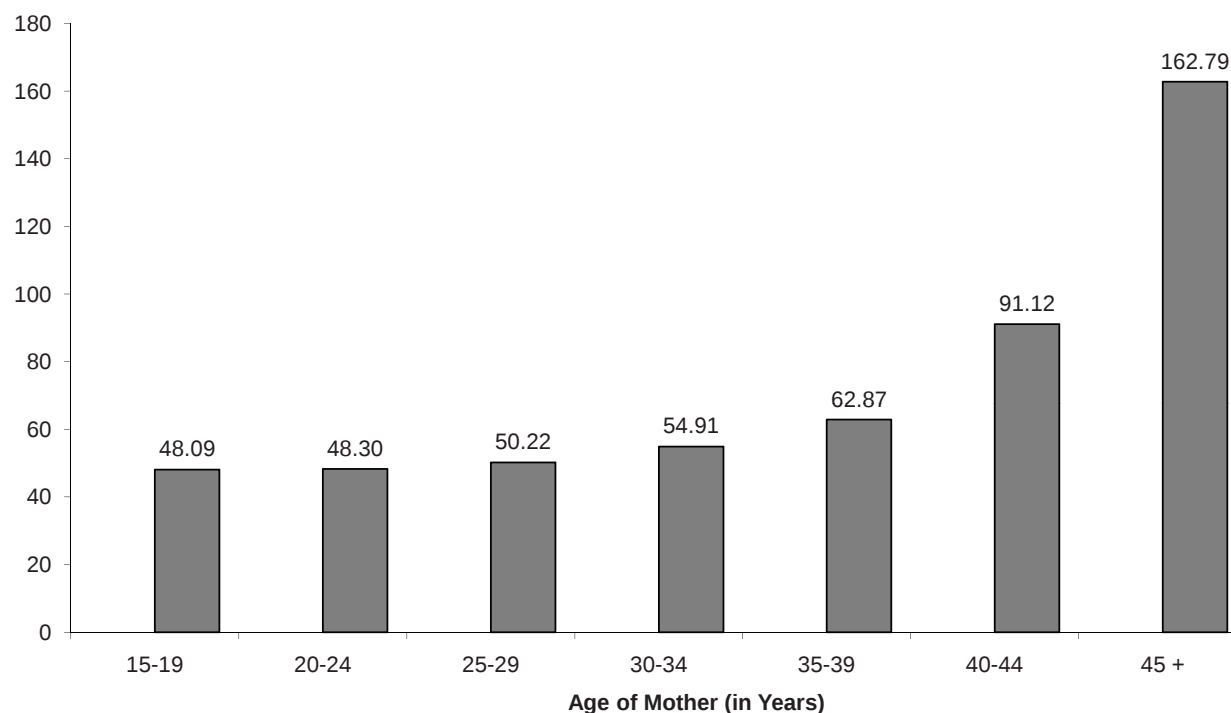


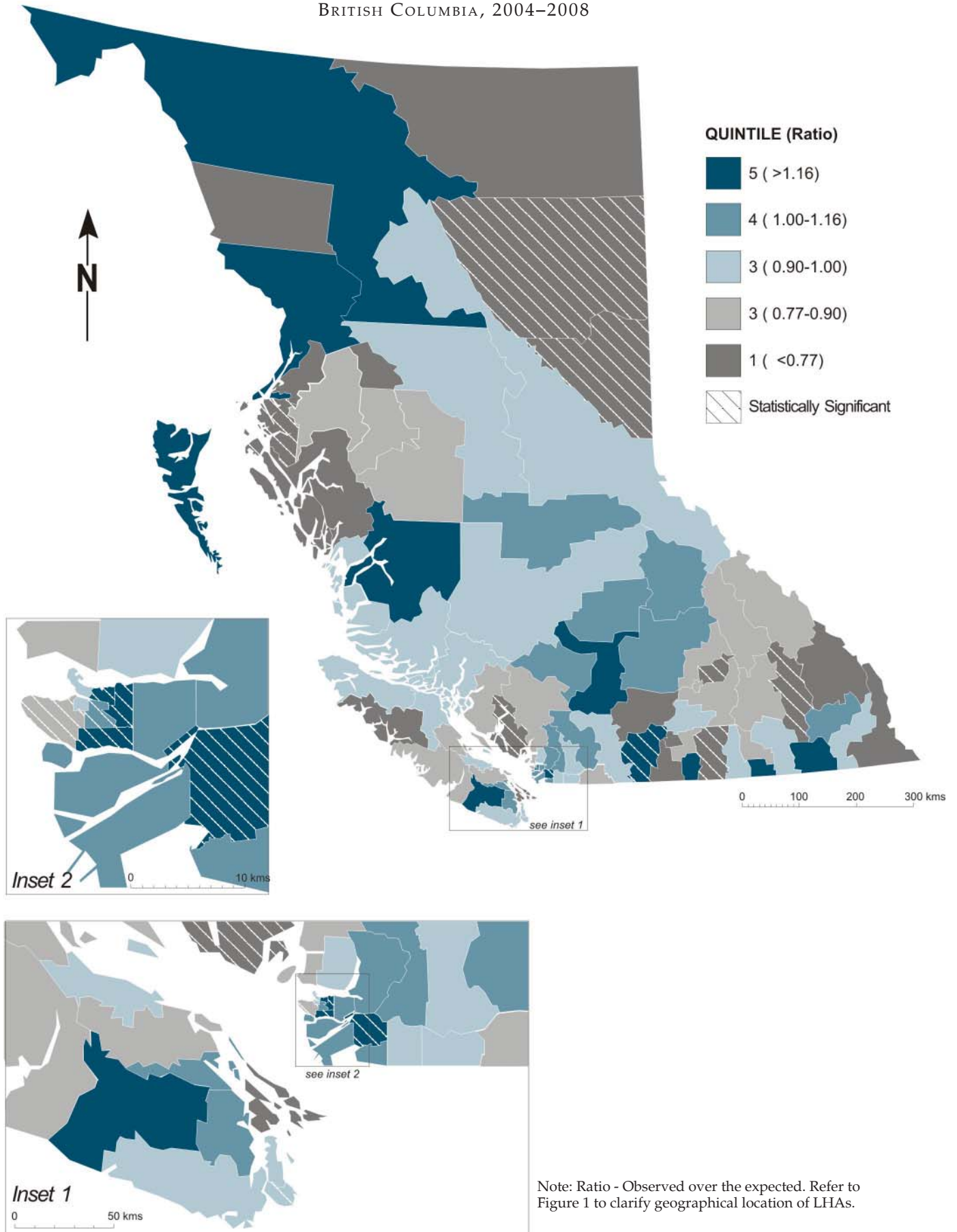
Table 16

LOW BIRTH WEIGHT LIVE BIRTHS BY LOCAL HEALTH AREA AND GESTATIONAL AGE,
BRITISH COLUMBIA, 2004-2008 AND 2009

50	Local Health Area	2004-2008				2009					
		Low Birth Weight Live Births				Gestational Age (in Weeks)				Total	Rate
		Observed	Ratio	(p)	Rate	<37	37-41	42+	N.S.		
001	Fernie	27	0.72		40.30	4	2	-	-	6	36.14
002	Cranbrook	65	0.99		55.32	7	4	-	-	11	42.80
003	Kimberley	22	1.15		63.95	3	2	-	-	5	60.24
004	Windermere	17	0.75		41.87	10	4	-	-	14	138.61
005	Creston	38	1.21		67.74	4	2	-	-	6	44.44
006	Kootenay Lake	2	0.23	+	12.99	3	-	-	-	3	136.36
007	Nelson	59	0.92		51.22	9	1	-	-	10	40.65
009	Castlegar	20	0.79		44.15	2	1	-	-	3	35.71
010	Arrow Lakes	8	0.86		47.90	-	-	-	-	-	-
011	Trail	52	1.23		68.51	6	3	-	-	9	55.56
012	Grand Forks	17	0.91		51.05	2	1	-	-	3	57.69
013	Kettle Valley	2	0.28	+	15.38	1	-	-	-	1	83.33
014	Southern Okanagan	48	1.34		74.65	6	6	-	-	12	102.56
015	Penticton	77	0.88		49.08	9	6	-	-	15	44.91
016	Keremeos	6	0.60		33.52	4	1	-	-	5	128.21
017	Princeton	14	1.86	*	103.70	2	-	-	-	2	90.91
018	Golden	16	0.83		46.24	2	2	-	-	4	72.73
019	Revelstoke	17	0.82		45.70	1	4	-	-	5	56.82
020	Salmon Arm	60	0.85		47.43	9	6	-	-	15	56.82
021	Armstrong - Spallumcheen	20	0.86		47.96	1	1	-	-	2	26.32
022	Vernon	133	0.90		50.19	27	7	-	-	34	52.39
023	Central Okanagan	386	0.93		52.17	60	21	-	-	81	47.82
024	Kamloops	282	1.05		58.81	48	17	-	-	65	59.31
025	100 Mile House	31	1.09		61.14	5	1	-	-	6	54.55
026	North Thompson	13	1.02		57.02	3	1	-	-	4	90.91
027	Cariboo - Chilcotin	79	0.98		54.79	12	3	-	-	15	53.19
028	Quesnel	69	1.02		56.70	13	2	-	-	15	58.14
029	Lillooet	15	1.07		59.76	-	1	-	-	1	27.03
030	South Cariboo	22	1.32		73.83	3	1	-	-	4	64.52
031	Merritt	23	0.71		39.38	3	2	-	-	5	38.46
032	Hope	19	0.92		51.63	1	2	-	-	3	43.48
033	Chilliwack	239	0.89		49.68	42	6	-	-	48	44.32
034	Abbotsford	425	0.92		51.27	85	26	-	-	111	62.89
035	Langley	341	0.94		52.66	47	19	-	-	66	44.81
037	Delta	251	1.00		56.06	40	17	-	-	57	68.43
038	Richmond	460	1.01		56.41	62	26	-	-	88	49.19
040	New Westminster	215	1.18	*	65.73	33	10	-	-	43	58.74
041	Burnaby	629	1.04		58.08	90	42	-	-	132	55.77
042	Maple Ridge	278	1.07		59.82	36	6	-	-	42	41.96
043	Coquitlam	607	1.06		59.05	110	34	-	-	144	63.46
044	North Vancouver	329	0.96		53.58	56	25	-	-	81	66.45
045	West Vancouver-Bowen Is.	64	0.81		45.17	5	3	-	-	8	31.50
046	Sunshine Coast	39	0.70	*	39.20	10	2	-	-	12	56.34
047	Powell River	30	0.80		44.78	4	-	-	-	4	27.40
048	Howe Sound	103	0.85		47.47	19	5	-	-	24	50.96
049	Bella Coola Valley	18	1.36		75.95	3	-	-	-	3	96.77
050	Queen Charlotte	17	1.20		67.19	-	-	-	-	-	-
051	Snow Country	3	1.85		103.45	-	-	-	-	-	-
052	Prince Rupert	34	0.71	*	39.72	5	-	-	-	5	27.78
053	Upper Skeena	10	0.56		31.15	2	-	-	-	2	25.64
054	Smithers	49	0.81		45.04	10	3	-	-	13	59.91
055	Burns Lake	21	0.86		47.95	4	2	-	-	6	60.61
056	Nechako	56	0.93		51.80	9	3	-	-	12	51.95
057	Prince George	291	0.96		53.58	49	24	-	-	73	64.43
059	Peace River South	63	0.73	*	40.83	13	3	-	-	16	47.62
060	Peace River North	113	0.73	*	40.71	22	13	-	-	35	56.82
061	Greater Victoria	451	0.91	*	50.63	65	25	-	-	90	48.89
062	Sooke	179	0.98		54.92	22	8	-	-	30	39.53
063	Saanich	107	0.98		54.62	15	3	-	-	18	46.75
064	Gulf Islands	17	0.70		39.35	1	3	-	-	4	48.78
065	Cowichan	164	1.12		62.60	17	11	-	-	28	51.57
066	Lake Cowichan	16	1.26		70.48	-	-	-	-	-	-
067	Ladysmith	46	1.10		61.42	5	4	-	-	9	64.29
068	Nanaimo	211	0.88		48.94	41	11	-	-	52	56.34
069	Qualicum	65	0.94		52.67	7	7	-	-	14	59.07
070	Alberni	80	0.89		49.50	13	2	-	-	15	42.13
071	Courtenay	121	0.90		50.42	18	6	-	-	24	48.58
072	Campbell River	95	0.92		51.55	19	5	-	-	24	58.11
075	Mission	119	0.95		52.80	19	3	-	-	22	48.46
076	Agassiz - Harrison	29	1.07		59.55	4	1	-	-	5	51.02
077	Summerland	13	0.66		36.62	1	4	-	-	5	64.94
078	Enderby	11	0.55	*	30.47	3	-	-	-	3	40.00
080	Kitimat	19	0.76		42.22	3	2	-	-	5	42.74
081	Fort Nelson	20	0.70		39.06	5	-	-	-	5	53.19
083	Central Coast	8	0.97		54.05	-	-	-	-	-	-
084	Vancouver Island West	4	0.60		33.33	-	-	-	-	-	-
085	Vancouver Island North	41	0.96		53.59	10	-	-	-	10	62.89
087	Stikine	3	2.15		120.00	2	-	-	-	2	200.00
088	Terrace	58	0.85		47.46	14	2	-	-	16	61.78
092	Nisga'a	6	0.67		37.27	1	2	-	-	3	75.00
094	Telegraph Creek	-	-		-	-	-	-	-	-	-
161	Vancouver - City Centre	224	0.90		50.47	46	16	-	-	62	58.44
162	Vancouver - Downtown E.side	156	1.21	*	67.59	41	3	-	-	44	79.14
163	Vancouver - North East	364	1.19	*	66.19	40	29	-	-	69	62.61
164	Vancouver - Westside	273	0.87	*	48.48	45	16	-	-	61	54.42
165	Vancouver - Midtown	318	1.12	*	62.72	49	12	-	-	61	57.98
166	Vancouver - South	462	1.26	*	70.17	52	21	-	-	73	56.11
201	Surrey	1,548	1.17	*	65.14	221	109	-	-	330	63.65
202	South Surrey/White Rock	162	1.08		60.20	23	3	-	-	26	49.06
PROVINCIAL TOTAL		11,738	1.00		55.85	1,818	681	-	-	2,499	55.65

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, 2004–2008



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

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 conditions 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. Note 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.

Assisted or Surgical Delivery and Maternal Abnormalities of the Pelvic Organs were the two most frequent diagnostic categories of maternal complications in 2009 and the previous five years. The proportions of age group births that had pelvic organ abnormalities (including conditions such as cervical incompetence as well as scarring from surgeries such as previous cesarean sections) were observed more frequently in older mothers. Births complicated by Maternal Abnormality of Pelvic Organs made up 1.8 percent of births to mothers under 20 years old compared to 21.0 percent of births 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.

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 comprised 5.4 percent of all maternal complications in 2004-2008 and 5.6 percent in 2009 as shown in Table 17.

Table 18 shows the incidence of live births with maternal complications by LHA for the period 2004-2008 and for the year 2009. The observed births columns show the number of live births with complications stratified by maternal LHA of residence. 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.

In 2009, there were statistically significant low ratios in 8 LHAs, whereas 6 LHAs had high ratios that were statistically significant. In the 2004-2008 period, 19 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 identified in their quintile ranks by their 2004-2008 ratios of observed births with maternal complications versus the expected number of births with such conditions. LHAs with the highest ratios are coloured dark blue, and those with the lowest ratios are dark grey.

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 2004-2008 and 2009. The 2009 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 may exceed the number of live births with at least one perinatal condition.

Intrauterine hypoxia and birth asphyxia accounted for most of the perinatal conditions in both time periods (42.6 percent in 2004-2008 and 42.7 percent in 2009). Conditions related to short gestation and those related to long gestation or high birth weight together accounted for 36.6 percent of the conditions in 2009 and 37.7 percent in the 2004-2008 period.

Table 20 shows the incidence of live births with perinatal conditions by the mother's LHA of residence for the period 2004-2008 and for the year 2009. In 2009, there were 21 LHAs where the observed number of perinatal conditions was significantly different from the expected number, and in 13 of these, the observed number was significantly higher.

Figure 34 map shows the LHAs identified in their quintile ranks by their 2004-2008 ratios of observed births with perinatal conditions to the expected number of births with such conditions. LHAs with the highest ratios are coloured dark blue, and those with the lowest ratios are dark grey.

TABLE 17
**MATERNAL COMPLICATIONS OF PREGNANCY AND
 DELIVERY IN LIVE BIRTHS BY AGE OF MOTHER**
 BRITISH COLUMBIA, 2004–2008 AND 2009

Maternal Complications	ICD-10 Code(s)	2004–2008		2009						
		Total	Percent	Age of Mother (in Years)					Total	Percent
				<20	20–29	30–39	40+	N.S.		
Hypertension/hypertensive disorders in pregnancy	O10-O11, O13, O16	2,532	1.7	20	206	274	43	-	543	1.7
Edema and proteinuria without hypertension	O12	30	0.0	-	-	1	-	-	1	0.0
Pre-eclampsia/eclampsia	O14-O15	935	0.6	12	92	111	15	-	230	0.7
Hemorrhage in early pregnancy	O20	3	0.0	-	1	2	-	-	3	0.0
Hyperemesis gravidarum	O21	65	0.0	1	4	5	1	-	11	0.0
Other maternal disorders predominantly related to pregnancy	O22-O23, O25-O29	1,826	1.2	14	148	181	13	-	356	1.1
Diabetes in pregnancy	O24	2,303	1.5	5	149	308	55	-	517	1.6
Multiple gestation and related complications	O30-O31	6,255	4.2	20	435	791	139	-	1,385	4.2
Fetal malpresentation	O32	6,807	4.6	35	580	782	66	-	1,463	4.5
Disproportion	O33	440	0.3	2	27	36	1	-	66	0.2
Maternal abnormality of pelvic organs	O34	25,209	16.9	26	1,646	3,541	392	-	5,605	17.1
Disorders of amniotic fluid and membranes	O40-O42	4,251	2.9	19	369	480	49	-	917	2.8
Placental disorders	O43-O45, O73	2,181	1.5	13	171	284	41	-	509	1.6
Antepartum hemorrhage	O46	396	0.3	2	30	46	6	-	84	0.3
Prolonged pregnancy	O48	1,275	0.9	3	102	124	7	-	236	0.7
Preterm labour and delivery	O60	9,095	6.1	82	786	857	88	-	1,813	5.5
Abnormalities of forces of labour	O62-O63	6,261	4.2	34	622	783	57	-	1,496	4.6
Obstructed labour	O64-O66	11,639	7.8	90	1,140	1,254	78	-	2,562	7.8
Intrapartum hemorrhage	O67	-	-	-	-	-	-	-	-	-
Evidence of fetal distress	O68	8,615	5.8	64	833	1,024	91	-	2,012	6.1
Cord complications	O69	2,413	1.6	21	242	273	20	-	556	1.7
Obstetrical trauma	O70-O71	1,506	1.0	12	193	175	6	-	386	1.2
Postpartum hemorrhage	O72	1,995	1.3	30	234	228	16	-	508	1.6
Assisted or surgical delivery - no cause given ¹	O81-O82	30,596	20.5	148	2,692	3,320	325	-	6,485	19.8
Maternal and puerperal infections	O85-O86, O98, A34	287	0.2	6	43	28	3	-	80	0.2
Other puerperal complications	O87-O92	63	0.0	-	6	7	1	-	14	0.0
Maternal noninfectious diseases complicating the pregnant state	O99	2,200	1.5	22	204	266	27	-	519	1.6
Elderly primigravida	Z355	8,096	5.4	-	-	1,579	255	-	1,834	5.6
Maternal drug use	O355	457	0.3	4	36	29	3	-	72	0.2
Other maternal complications	O00-O08, O350-O353, O356-O36, O47, O61, O74-O75, O95-O97	11,312	7.6	92	1,050	1,211	125	-	2,478	7.6
Total maternal complications		149,043	100.0	777	12,041	18,000	1,923		32,741	100.0
Live births with the above maternal complications	- Number	109,889		571	8,954	12,769	1,256	-	23,550	
	- Percent(*)	52.3		40.0	47.4	56.1	67.4		52.4	

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.

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

Vital Statistics Information Box

TOP 25 BABY NAMES IN 2009

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 2009 list, as well as lists for several previous years can be found at <http://www.vs.gov.bc.ca/babynames/index.html>. In 2009, 679 boys' names and 756 girls' names were chosen for five or more newborns.

Baby Boys			Baby Girls	
Rank	Name	Number	Name	Number
1	Ethan	300	Olivia	243
2	Liam	286	Emma	228
3	Jacob	225	Sophia	226
4	Logan	217	Ava	223
5	Noah	205	Emily	201
6	Matthew	203	Isabella	184
7	Lucas	197	Chloe	183
8	Alexander	195	Lily	152
9	Benjamin	195	Hannah	151
10	Nathan	187	Ella	145
11	Owen	182	Sophie	136
12	Ryan	173	Abigail	131
13	Joshua	168	Grace	131
14	Mason	164	Alexis	126
15	William	164	Madison	120
16	Daniel	152	Sarah	116
17	James	151	Maya	108
18	Jack	148	Charlotte	107
19	Samuel	142	Avery	102
20	Carter	141	Brooklyn	100
21	Oliver	141	Elizabeth	98
22	Evan	140	Claire	97
23	Dylan	138	Taylor	96
24	Jayden	138	Julia	91
25	Aiden	135	Hailey	83

**MATERNAL COMPLICATIONS OF PREGNANCY AND DELIVERY IN LIVE BIRTHS BY LOCAL HEALTH AREA,
BRITISH COLUMBIA, 2004-2008 AND 2009**

56		2004-2008					2009				
Local Health Area		Observed Births	Ratio	(p)	Percent	Total Live Births	Observed Births	Expected Births	Ratio	(p)	Percent Live Births
001	Fernie	386	1.10		57.6	670	108	87.1	1.24	*	65.1
002	Cranbrook	518	0.84	*	44.1	1,175	89	134.8	0.66	*	34.6
003	Kimberley	157	0.87		45.6	344	34	43.5	0.78		41.0
004	Windermere	209	0.98		51.5	406	43	53.0	0.81		42.6
005	Creston	228	0.78	*	40.6	561	52	70.8	0.73	*	38.5
006	Kootenay Lake	46	0.57	*	29.9	154	10	11.5	0.87		45.5
007	Nelson	428	0.71	*	37.2	1,152	105	129.0	0.81	*	42.7
009	Castlegar	198	0.84	*	43.7	453	41	44.1	0.93		48.8
010	Arrow Lakes	70	0.80		41.9	167	13	12.6	1.03		54.2
011	Trail	384	0.97		50.6	759	91	85.0	1.07		56.2
012	Grand Forks	145	0.83	*	43.5	333	22	27.3	0.81		42.3
013	Kettle Valley	35	0.51	*	26.9	130	4	6.3	0.64		33.3
014	Southern Okanagan	344	1.02		53.5	643	54	61.4	0.88		46.2
015	Penticton	841	1.03		53.6	1,569	183	175.2	1.04		54.8
016	Keremeos	98	1.05		54.7	179	19	20.5	0.93		48.7
017	Princeton	60	0.85		44.4	135	11	11.5	0.95		50.0
018	Golden	194	1.07		56.1	346	31	28.8	1.07		56.4
019	Revelstoke	184	0.95		49.5	372	49	46.1	1.06		55.7
020	Salmon Arm	778	1.18	*	61.5	1,265	153	138.4	1.11		58.0
021	Armstrong - Spallumcheen	235	1.08		56.4	417	37	39.9	0.93		48.7
022	Vernon	1,481	1.07	*	55.9	2,650	349	340.3	1.03		53.8
023	Central Okanagan	3,785	0.98		51.2	7,399	914	888.3	1.03		54.0
024	Kamloops	2,441	0.97		50.9	4,795	570	574.7	0.99		52.0
025	100 Mile House	236	0.89		46.5	507	48	57.7	0.83		43.6
026	North Thompson	98	0.82		43.0	228	20	23.1	0.87		45.5
027	Cariboo - Chilcotin	747	0.99		51.8	1,442	152	147.9	1.03		53.9
028	Quesnel	606	0.95		49.8	1,217	139	135.3	1.03		53.9
029	Lillooet	130	0.99		51.8	251	20	19.4	1.03		54.1
030	South Cariboo	134	0.86		45.0	298	28	32.5	0.86		45.2
031	Merritt	258	0.84	*	44.2	584	56	68.2	0.82		43.1
032	Hope	181	0.94		49.2	368	25	36.2	0.69		36.2
033	Chilliwack	2,371	0.94	*	49.3	4,811	492	567.9	0.87	*	45.4
034	Abbotsford	3,880	0.90	*	46.8	8,290	849	925.6	0.92	*	48.1
035	Langley	3,225	0.95	*	49.8	6,475	741	772.4	0.96		50.3
037	Delta	2,408	1.03		53.8	4,477	459	436.8	1.05		55.1
038	Richmond	4,198	0.98		51.5	8,154	914	938.2	0.97		51.1
040	New Westminster	1,899	1.11	*	58.1	3,271	439	383.9	1.14	*	60.0
041	Burnaby	5,559	0.98		51.3	10,829	1,241	1,241.3	1.00		52.4
042	Maple Ridge	2,539	1.04	*	54.6	4,647	520	524.9	0.99		51.9
043	Coquitlam	5,988	1.11	*	58.2	10,280	1,292	1,189.9	1.09	*	56.9
044	North Vancouver	3,265	1.02		53.2	6,140	652	639.3	1.02		53.5
045	West Vancouver-Bowen Is.	732	0.99		51.7	1,417	139	133.2	1.04		54.7
046	Sunshine Coast	500	0.96		50.3	995	118	111.7	1.06		55.4
047	Powell River	340	0.97		50.7	670	69	76.6	0.90		47.3
048	Howe Sound	1,225	1.08	*	56.5	2,170	273	247.0	1.11		58.0
049	Bella Coola Valley	115	0.93		48.5	237	15	16.3	0.92		48.4
050	Queen Charlotte	144	1.09		56.9	253	19	19.4	0.98		51.4
051	Snow Country	18	1.19		62.1	29	1	1.6	0.64		33.3
052	Prince Rupert	413	0.92		48.2	856	94	94.4	1.00		52.2
053	Upper Skeena	194	1.16	*	60.4	321	49	40.9	1.20		62.8
054	Smithers	519	0.91	*	47.7	1,088	102	113.8	0.90		47.0
055	Burns Lake	213	0.93		48.6	438	40	51.9	0.77		40.4
056	Nechako	526	0.93		48.7	1,081	123	121.1	1.02		53.2
057	Prince George	2,555	0.90	*	47.0	5,431	552	594.2	0.93		48.7
059	Peace River South	620	0.77	*	40.2	1,543	143	176.2	0.81	*	42.6
060	Peace River North	1,140	0.79	*	41.1	2,776	262	323.0	0.81	*	42.5
061	Greater Victoria	4,709	1.01		52.9	8,908	1,023	965.4	1.06		55.6
062	Sooke	1,778	1.04		54.6	3,259	414	398.0	1.04		54.5
063	Saanich	975	0.95		49.8	1,959	177	201.9	0.88		46.0
064	Gulf Islands	174	0.77	*	40.3	432	33	43.0	0.77		40.2
065	Cowichan	1,185	0.86	*	45.2	2,620	246	284.8	0.86	*	45.3
066	Lake Cowichan	111	0.94		48.9	227	23	22.0	1.04		54.8
067	Ladysmith	404	1.03		53.9	749	71	73.4	0.97		50.7
068	Nanaimo	2,641	1.17	*	61.3	4,311	554	484.0	1.14	*	60.0
069	Qualicum	719	1.11	*	58.3	1,234	125	124.3	1.01		52.7
070	Alberni	1,013	1.20	*	62.7	1,616	205	186.7	1.10		57.6
071	Courtenay	1,197	0.95		49.9	2,400	237	259.1	0.91		48.0
072	Campbell River	1,109	1.15	*	60.2	1,843	244	216.6	1.13		59.1
075	Mission	1,080	0.92	*	47.9	2,254	223	238.1	0.94		49.1
076	Agassiz - Harrison	235	0.92		48.3	487	49	51.4	0.95		50.0
077	Summerland	190	1.02		53.5	355	46	40.4	1.14		59.7
078	Enderby	190	1.01		52.6	361	39	39.3	0.99		52.0
080	Kitimat	236	1.00		52.4	450	59	61.4	0.96		50.4
081	Fort Nelson	256	0.96		50.0	512	48	49.3	0.97		51.1
083	Central Coast	79	1.02		53.4	148	10	12.1	0.83		43.5
084	Vancouver Island West	70	1.12		58.3	120	14	12.6	1.11		58.3
085	Vancouver Island North	378	0.94		49.4	765	72	83.4	0.86		45.3
087	Stikine	14	1.07		56.0	25	8	5.2	1.53		80.0
088	Terrace	581	0.91	*	47.5	1,222	113	135.8	0.83		43.6
092	Nisga'a	86	1.02		53.4	161	19	21.0	0.91		47.5
094	Telegraph Creek	21	0.84		43.8	48	4	4.7	0.85		44.4
161	Vancouver - City Centre	2,670	1.15	*	60.2	4,438	632	556.4	1.14	*	59.6
162	Vancouver - Downtown E.side	1,199	0.99		51.9	2,308	296	291.6	1.02		53.2
163	Vancouver - North East	2,830	0.98		51.5	5,499	609	577.9	1.05		55.3
164	Vancouver - Westside	3,061	1.04	*	54.4	5,631	604	587.9	1.03		53.9
165	Vancouver - Midtown	2,692	1.02		53.1	5,070	611	551.7	1.11	*	58.1
166	Vancouver - South	3,434	1.00		52.2	6,584	677	682.3	0.99		52.0
201	Surrey	12,875	1.04	*	54.2	23,763	2,733	2,719.0	1.01		52.7
202	South Surrey/White Rock	1,452	1.03		54.0	2,691	264	277.9	0.95		49.8
PROVINCIAL TOTAL		109,889	1.00		52.3	210,153	23,550	23,550.0	1.00		52.4
											44,908

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 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, 2004–2008

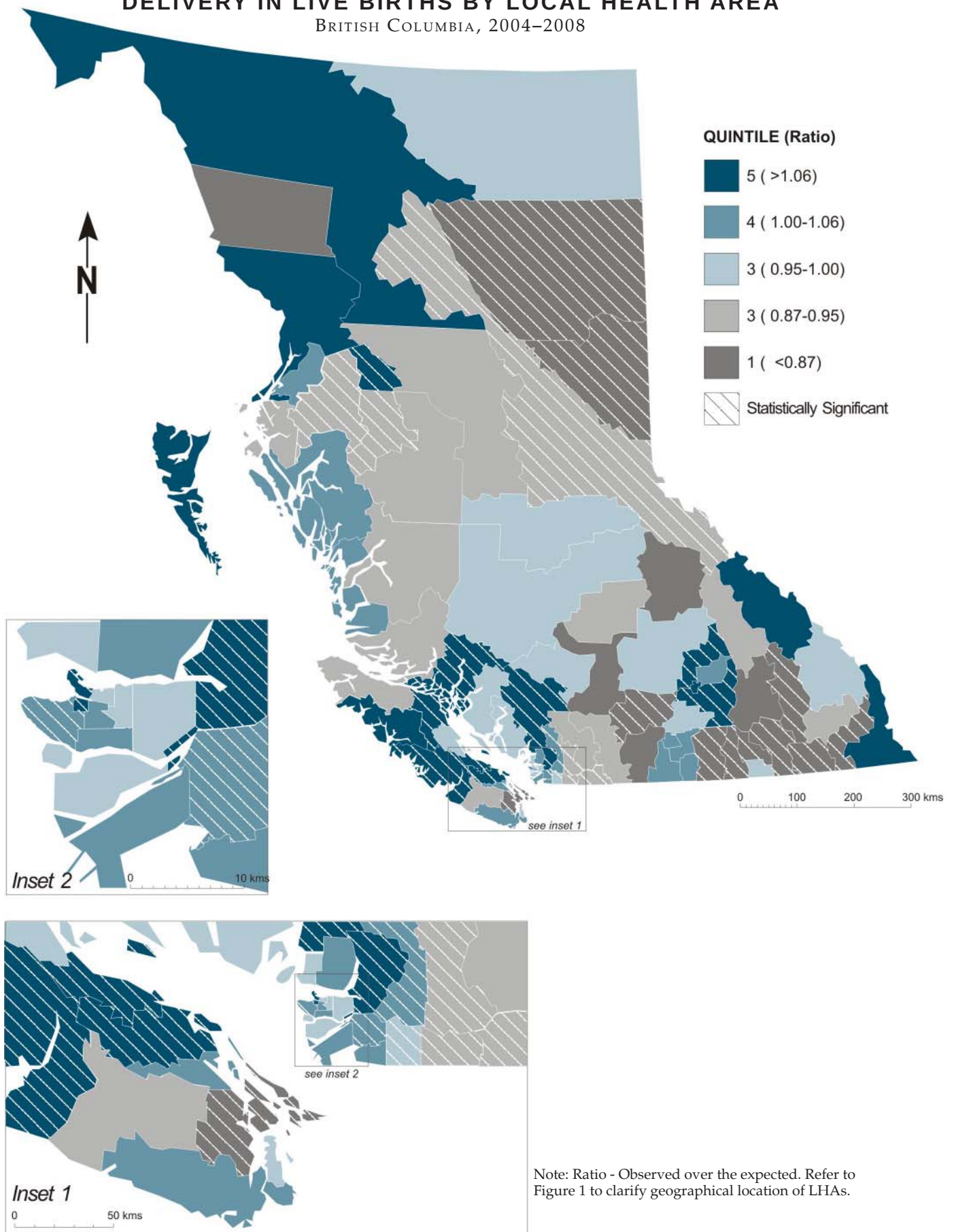


TABLE 19
PERINATAL CONDITIONS IN LIVE BIRTHS BY AGE OF MOTHER
 BRITISH COLUMBIA, 2004–2008 AND 2009

Perinatal Conditions	ICD-10 Code	2004–2008		2009						
				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	41	0.0	1	9	18	1	-	29	0.1
Complications of pregnancy, labour and delivery	P01, P03	11,596	12.6	66	1,046	1,419	192	-	2,723	13.7
Fetus/newborn affected by complications of placenta, cord and membranes	P02	2,871	3.1	25	308	395	42	-	770	3.9
Fetus affected by noxious influences transmitted via placenta (or breast milk)	P04	35	0.0	3	9	8	-	-	20	-
Slow fetal growth and malnutrition	P05	2,170	2.4	12	116	129	26	-	283	1.4
Perinatal disorders related to short gestation	P072, P073	15,529	16.9	111	1,209	1,646	218	-	3,184	16.0
Disorders related to long gestation or high birth weight	P08	19,051	20.7	129	1,708	2,074	168	-	4,079	20.6
Perinatal birth trauma	P10-P15	304	0.3	1	41	27	1	-	70	0.4
Intrauterine hypoxia and birth asphyxia	P20-P21	39,109	42.6	350	3,825	3,935	354	-	8,464	42.7
Respiratory conditions of fetus and newborn	P22-P28	524	0.6	3	36	38	3	-	80	0.4
Cardiovascular disorders originating in the perinatal period	P29	-	0.0	-	-	-	-	-	-	0.0
Infections specific to the perinatal period	P35-P39	33	0.0	-	1	-	-	-	1	0.0
Fetal and neonatal hemorrhage	P50-P52, P54	90	0.1	-	3	11	2	-	16	0.1
Perinatal jaundice/other hematological disorders	P53, P55-P61	45	0.0	-	3	5	1	-	9	0.0
Perinatal endocrine and metabolic disorders	P70-P74	35	0.0	-	2	2	-	-	4	0.0
Digestive system disorders of fetus and newborn	P76-P78	5	0.0	-	-	-	-	-	-	0.0
Perinatal conditions of the integument and of temperature regulation	P80-P83	145	0.2	1	24	11	1	-	37	0.2
Other disorders originating in the perinatal period	P90-P96	255	0.3	5	34	30	3	-	72	0.4
All Perinatal Conditions		91,838	100.0	707	8,374	9,748	1,012	-	19,841	100.0
Live births with the above perinatal conditions	- Number	72,248		567	6,600	7,659	720	-	15,546	
	- Percent(*)	34.4		39.7	35.0	33.7	38.6		34.6	

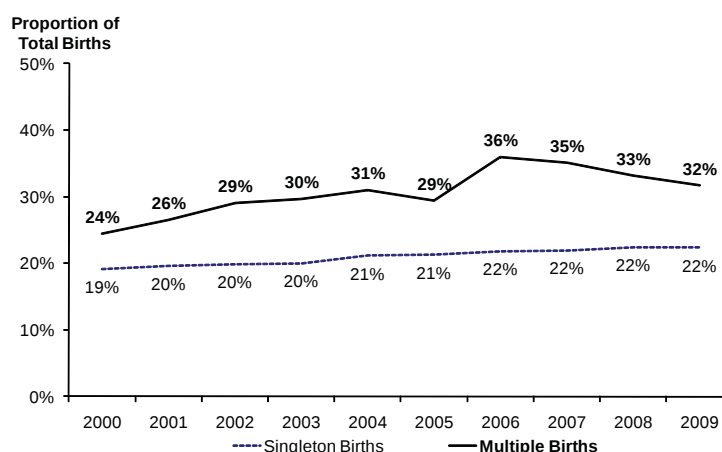
Note: Percent based upon perinatal conditions. Percent (*) based upon live births for the maternal age group. Total percentage may not add up to 100 due to rounding. N.S. - Not stated. Non-residents are excluded.

Vital Statistics Information Box

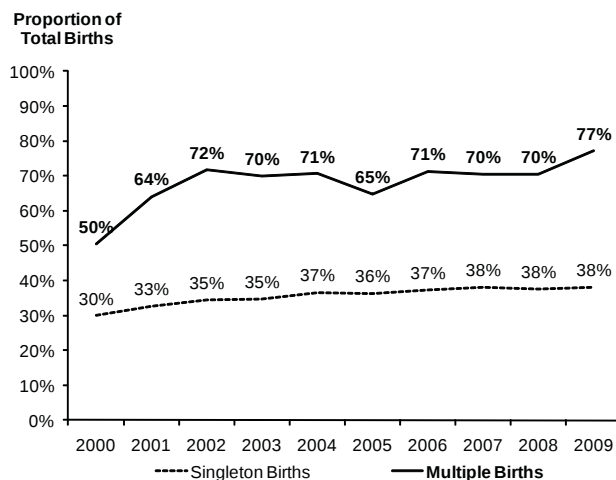
BIRTH AND OLDER MOTHERS IN BRITISH COLUMBIA, 2000 - 2009

Older mothers, those aged 35 and over, have increased their share of the total births to women in British Columbia. Since 2000, the share of multiple births attributable to older mothers has increased by almost one third. Most of these births are via cesarean section; however, the proportion of these births considered to be Low Birth Weight has remained relatively stable.

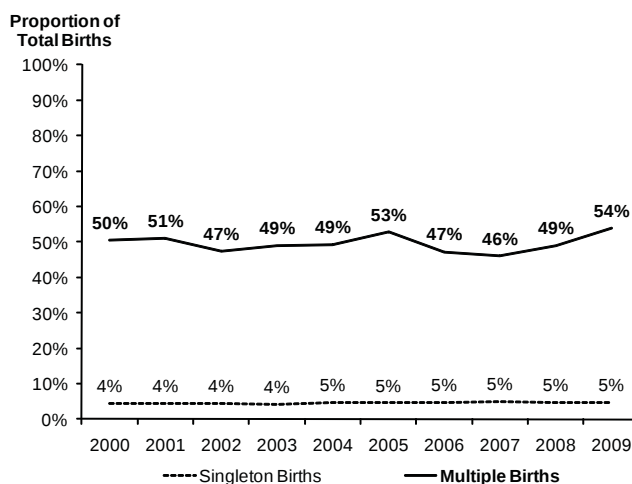
PROPORTION OF SINGLETON AND MULTIPLE BIRTHS
TO MOTHERS AGED 35 AND OLDER
BRITISH COLUMBIA, 2000 - 2009



PROPORTION OF SINGLETON AND MULTIPLE BIRTHS
TO MOTHERS AGED 35 AND OLDER BIRTHED
VIA CESAREAN SECTION
BRITISH COLUMBIA, 2000 - 2009



PROPORTION OF SINGLETON AND MULTIPLE BIRTHS
TO MOTHERS AGED 35 AND OLDER WITH
LOW BIRTH WEIGHT (<2500 GRAMS)
BRITISH COLUMBIA, 2000 - 2009



PERINATAL CONDITIONS IN LIVE BIRTHS BY LOCAL HEALTH AREA,
BRITISH COLUMBIA, 2004-2008 AND 2009

60		2004-2008					2009					
		Observed	Ratio	(p)	Percent	Total	Observed	Expected	Ratio	(p)	Percent	Total
Local Health Area		Births				Live Births	Births	Births				Live Births
001	Fernie	262	1.14	*	39.1	670	60	57.5	1.04		36.1	166
002	Cranbrook	427	1.06		36.3	1,175	78	89.0	0.88		30.4	257
003	Kimberley	137	1.16		39.8	344	28	28.7	0.97		33.7	83
004	Windermere	148	1.06		36.5	406	41	35.0	1.17		40.6	101
005	Creston	211	1.09		37.6	561	47	46.7	1.01		34.8	135
006	Kootenay Lake	49	0.93		31.8	154	10	7.6	1.31		45.5	22
007	Nelson	385	0.97		33.4	1,152	91	85.2	1.07		37.0	246
009	Castlegar	170	1.09		37.5	453	28	29.1	0.96		33.3	84
010	Arrow Lakes	59	1.03		35.3	167	12	8.3	1.44		50.0	24
011	Trail	287	1.10		37.8	759	67	56.1	1.19		41.4	162
012	Grand Forks	101	0.88		30.3	333	24	18.0	1.33		46.2	52
013	Kettle Valley	27	0.60	*	20.8	130	2	4.2	0.48		16.7	12
014	Southern Okanagan	202	0.91		31.4	643	38	40.5	0.94		32.5	117
015	Penticton	573	1.06		36.5	1,569	112	115.6	0.97		33.5	334
016	Keremeos	65	1.06		36.3	179	16	13.5	1.19		41.0	39
017	Princeton	50	1.08		37.0	135	7	7.6	0.92		31.8	22
018	Golden	155	1.30	*	44.8	346	22	19.0	1.16		40.0	55
019	Revelstoke	173	1.35	*	46.5	372	39	30.5	1.28		44.3	88
020	Salmon Arm	530	1.22	*	41.9	1,265	103	91.4	1.13		39.0	264
021	Armstrong - Spallumcheen	149	1.04		35.7	417	26	26.3	0.99		34.2	76
022	Vernon	974	1.07	*	36.8	2,650	249	224.7	1.11		38.4	649
023	Central Okanagan	2,568	1.01		34.7	7,399	653	586.4	1.11	*	38.5	1,694
024	Kamloops	1,699	1.03		35.4	4,795	426	379.4	1.12	*	38.9	1,096
025	100 Mile House	215	1.23	*	42.4	507	48	38.1	1.26		43.6	110
026	North Thompson	82	1.05		36.0	228	16	15.2	1.05		36.4	44
027	Cariboo - Chilcotin	663	1.34	*	46.0	1,442	150	97.6	1.54	*	53.2	282
028	Quesnel	486	1.16	*	39.9	1,217	123	89.3	1.38	*	47.7	258
029	Lillooet	100	1.16		39.8	251	18	12.8	1.41		48.6	37
030	South Cariboo	105	1.02		35.2	298	26	21.5	1.21		41.9	62
031	Merritt	198	0.99		33.9	584	60	45.0	1.33	*	46.2	130
032	Hope	150	1.19	*	40.8	368	19	23.9	0.80		27.5	69
033	Chilliwack	1,994	1.21	*	41.4	4,811	443	374.9	1.18	*	40.9	1,083
034	Abbotsford	2,867	1.01		34.6	8,290	616	611.0	1.01		34.9	1,765
035	Langley	2,492	1.12	*	38.5	6,475	534	509.9	1.05		36.3	1,473
037	Delta	1,413	0.92	*	31.6	4,477	256	288.4	0.89		30.7	833
038	Richmond	2,262	0.81	*	27.7	8,154	473	619.3	0.76	*	26.4	1,789
040	New Westminster	1,223	1.09	*	37.4	3,271	268	253.4	1.06		36.6	732
041	Burnaby	3,054	0.82	*	28.2	10,829	632	819.4	0.77	*	26.7	2,367
042	Maple Ridge	1,866	1.17	*	40.2	4,647	404	346.5	1.17	*	40.4	1,001
043	Coquitlam	3,737	1.06	*	36.4	10,280	812	785.5	1.03		35.8	2,269
044	North Vancouver	1,878	0.89	*	30.6	6,140	378	422.0	0.90	*	31.0	1,219
045	West Vancouver-Bowen Is.	395	0.81	*	27.9	1,417	76	87.9	0.86		29.9	254
046	Sunshine Coast	388	1.13	*	39.0	995	79	73.7	1.07		37.1	213
047	Powell River	269	1.17	*	40.1	670	50	50.5	0.99		34.2	146
048	Howe Sound	719	0.96		33.1	2,170	157	163.0	0.96		33.3	471
049	Bella Coola Valley	116	1.42	*	48.9	237	15	10.7	1.40		48.4	31
050	Queen Charlotte	111	1.28	*	43.9	253	13	12.8	1.01		35.1	37
051	Snow Country	11	1.10		37.9	29	1	1.0	0.96		33.3	3
052	Prince Rupert	329	1.12	*	38.4	856	75	62.3	1.20		41.7	180
053	Upper Skeena	158	1.43	*	49.2	321	33	27.0	1.22		42.3	78
054	Smithers	406	1.09		37.3	1,088	87	75.1	1.16		40.1	217
055	Burns Lake	159	1.06		36.3	438	30	34.3	0.88		30.3	99
056	Nechako	450	1.21	*	41.6	1,081	104	80.0	1.30	*	45.0	231
057	Prince George	2,301	1.23	*	42.4	5,431	478	392.2	1.22	*	42.2	1,133
059	Peace River South	629	1.19	*	40.8	1,543	147	116.3	1.26	*	43.8	336
060	Peace River North	822	0.86	*	29.6	2,776	215	213.2	1.01		34.9	616
061	Greater Victoria	3,130	1.02		35.1	8,908	683	637.3	1.07		37.1	1,841
062	Sooke	1,229	1.10	*	37.7	3,259	311	262.7	1.18	*	41.0	759
063	Saanich	722	1.07		36.9	1,959	147	133.3	1.10		38.2	385
064	Gulf Islands	146	0.98		33.8	432	32	28.4	1.13		39.0	82
065	Cowichan	1,016	1.13	*	38.8	2,620	197	188.0	1.05		36.3	543
066	Lake Cowichan	85	1.09		37.4	227	14	14.5	0.96		33.3	42
067	Ladysmith	293	1.14	*	39.1	749	57	48.5	1.18		40.7	140
068	Nanaimo	1,899	1.28	*	44.1	4,311	401	319.5	1.26	*	43.4	923
069	Qualicum	505	1.19	*	40.9	1,234	95	82.0	1.16		40.1	237
070	Alberni	665	1.20	*	41.2	1,616	146	123.2	1.18	*	41.0	356
071	Courtenay	885	1.07	*	36.9	2,400	188	171.0	1.10		38.1	494
072	Campbell River	781	1.23	*	42.4	1,843	164	143.0	1.15		39.7	413
075	Mission	834	1.08	*	37.0	2,254	168	157.2	1.07		37.0	454
076	Agassiz - Harrison	204	1.22	*	41.9	487	39	33.9	1.15		39.8	98
077	Summerland	123	1.01		34.6	355	32	26.7	1.20		41.6	77
078	Enderby	139	1.12		38.5	361	28	26.0	1.08		37.3	75
080	Kitimat	190	1.23	*	42.2	450	38	40.5	0.94		32.5	117
081	Fort Nelson	148	0.84	*	28.9	512	35	32.5	1.08		37.2	94
083	Central Coast	72	1.42	*	48.6	148	9	8.0	1.13		39.1	23
084	Vancouver Island West	57	1.38	*	47.5	120	9	8.3	1.08		37.5	24
085	Vancouver Island North	331	1.26	*	43.3	765	67	55.0	1.22		42.1	159
087	Stikine	12	1.40		48.0	25	4	3.5	1.16		40.0	10
088	Terrace	495	1.18	*	40.5	1,222	108	89.7	1.20		41.7	259
092	Nisga'a	79	1.43	*	49.1	161	15	13.8	1.08		37.5	40
094	Telegraph Creek	16	0.97		33.3	48	4	3.1	1.28		44.4	9
161	Vancouver - City Centre	1,404	0.92	*	31.6	4,438	353	367.3	0.96		33.3	1,061
162	Vancouver - Downtown E.side	773	0.97		33.5	2,308	205	192.5	1.07		36.9	556
163	Vancouver - North East	1,492	0.79	*	27.1	5,499	312	381.5	0.82	*	28.3	1,102
164	Vancouver - Westside	1,659	0.86	*	29.5	5,631	328	388.1	0.85	*	29.3	1,121
165	Vancouver - Midtown	1,542	0.88	*	30.4	5,070	304	364.2	0.83	*	28.9	1,052
166	Vancouver - South	1,793	0.79	*	27.2	6,584	348	450.4	0.77	*	26.7	1,301
201	Surrey	7,109	0.87	*	29.9	23,763	1,520	1,794.9	0.85	*	29.3	5,185
202	South Surrey/White Rock	956	1.03		35.5	2,691	170	183.5	0.93		32.1	530
PROVINCIAL TOTAL		72,248	1.00		34.4	210,153	15,546	15,546.0	1.00		34.6	44,908

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

FIGURE 34
**PERINATAL CONDITIONS IN LIVE BIRTHS
 BY LOCAL HEALTH AREA**
 BRITISH COLUMBIA, 2004–2008

