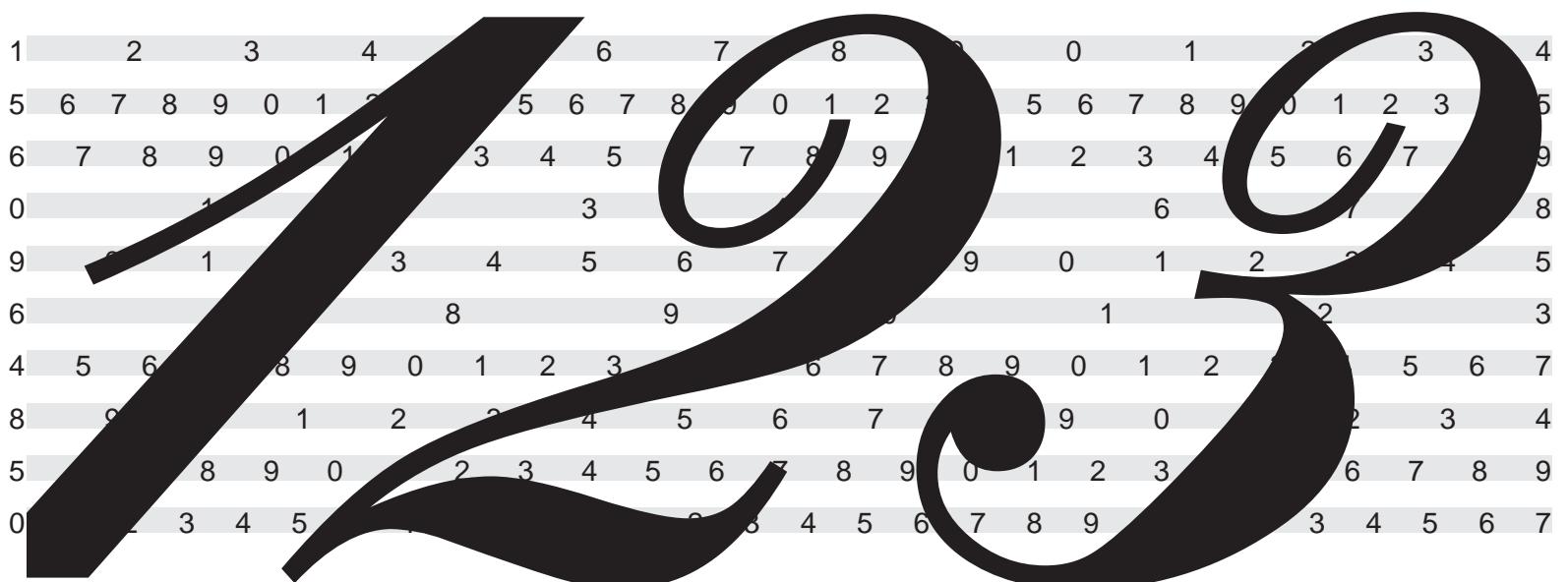


# *Birthrelated Statistics*



### Vital Statistics Information Box

#### TOP 25 BABY NAMES IN 2004

Each year the British Columbia Vital Statistics Agency produces lists 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 Kathryn) are not combined. The complete list for 2004, as well as a list for several previous years can be found at <http://www.vs.gov.bc.ca/babynames/index.html>. In 2004, 576 boys' names and 643 girls' names were chosen for five or more newborns.

Baby Boys			Baby Girls	
Rank	Name	Number	Name	Number
1	Ethan	332	Emma	281
2	Jacob	268	Emily	249
3	Matthew	259	Hannah	194
4	Ryan	234	Olivia	184
5	Joshua	227	Madison	162
6	Nathan	217	Sarah	162
7	Benjamin	192	Jessica	160
8	Alexander	191	Ella	153
9	Nicholas	186	Grace	142
10	Owen	181	Sophia	128
11	Daniel	166	Hailey	124
12	Liam	165	Isabella	122
13	Dylan	164	Abigail	117
14	Logan	158	Megan	115
15	Tyler	149	Samantha	114
16	Andrew	147	Lauren	109
17	Evan	147	Paige	107
18	Noah	147	Ava	103
19	William	147	Rachel	102
20	Samuel	145	Ashley	101
21	James	142	Chloe	100
22	Connor	140	Anna	99
23	Lucas	139	Taylor	94
24	Adam	126	Julia	93
25	Michael	126	Alyssa	91

## *Summary*

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Statistics arising from birth events in British Columbia are presented in this section. These events are assigned to a Local Health Area (LHA) based on the usual residence of the mother. Information is included on birth weight, gestational age, mode of delivery, maternal and paternal age, birth order, birth kind, complications of pregnancy and delivery, and perinatal complications. Maps depicting the variations in rates or ratios by LHA accompany several tables.

Statistics on birth events for 2004 are summarized below:

- There were 40,318 live births and 280 stillbirths in the province to B.C. residents. The live birth rate was 9.61 per 1,000 population (see Table 1); the stillbirth rate was 6.90 per 1,000 total births.
- The average age of B.C. women giving birth in 2004 was 29.9 years.
- Out of the 40,318 live births in 2004, only 1,165 (2.9%) were multiple births. There were 1,128 live born twins, and 37 triplets or more.
- Three fifths (60.0%) of live births in 2004 were delivered spontaneously. Almost one third of all live births (29.7%) were delivered by cesarean section (11,973) and almost two thirds of these (63.5%) were first cesareans (7,608). The 2004 cesarean section rate was 296.96 per 1,000 live births.
- There were 20,711 males (51.4%) and 19,606 females (48.6%) born in 2004.
- Almost nine out of ten live births (35,493) were delivered at term (from 37 to 41 weeks gestation) with normal birth weight (2,500 to 4,499 grams). These babies with "healthy" gestational ages and birth weights accounted for 88.0% of live births in 2004.
- There were 2,260 live births with low birth weight (less than 2,500 grams) and 3,080 pre-term (less than 37 weeks gestation) live births in 2004. A total of 1,644 babies (4.1%) were both pre-term and low birth weight; in of this group, approximately one in nine (175 births) had very low birth weight (less than 1,500 grams) and was extremely premature (less than 28 weeks gestation).
- Of live births to teenage mothers (less than 20 years of age), 91.6% had healthy birth weights, 6.0% had low and 2.5% had high birth weights. For mothers in the 40 or older age group, 90.4% of live births had healthy birth weights, 7.7% had low and 1.8% had high birth weights.
- In 2004, there were 2,260 live births with low birth weight (less than 2,500 grams). The provincial low birth weight (LBW) live birth rate was 56.05 per 1,000 live births.

**TABLE 7**  
**BIRTHS BY AGE OF MOTHER AND LIVE BIRTHS BY BIRTH ORDER**  
**BRITISH COLUMBIA, 2004**

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	
13	-	-	-	-	-	-	-	-	-	-	-	1	1	
14	3	-	-	-	-	-	-	-	-	-	3	-	3	
15	50	-	-	-	-	-	-	-	-	-	50	1	51	
16	130	5	-	-	-	-	-	-	-	-	135	1	136	
17	227	20	-	-	-	-	-	-	-	-	247	3	250	
18	335	57	5	1	-	-	-	-	-	-	1	399	4	403
19	464	115	10	1	-	-	-	-	-	-	590	4	594	
20	653	194	33	3	-	-	-	-	-	-	883	8	891	
21	633	265	55	10	1	1	-	-	-	-	965	10	975	
22	750	358	92	16	4	-	-	-	-	-	1,220	11	1,231	
23	826	467	120	30	2	-	-	-	-	-	1,445	10	1,455	
24	836	555	155	31	8	1	-	-	-	-	2	1,588	12	1,600
25	946	610	210	49	16	1	-	-	-	-	-	1,832	16	1,848
26	1,035	717	209	57	17	3	1	-	-	-	-	2,039	14	2,053
27	1,105	735	253	64	17	6	3	1	-	-	-	2,184	6	2,190
28	1,116	865	280	77	19	10	5	-	-	-	-	2,372	15	2,387
29	1,229	947	301	99	18	7	4	-	-	-	-	2,605	12	2,617
30	1,192	995	347	105	21	11	3	1	1	1	-	2,677	9	2,686
31	1,176	1,067	359	104	37	16	1	1	-	1	-	2,762	18	2,780
32	1,099	1,058	367	117	20	10	6	2	1	-	-	2,680	10	2,690
33	935	1,086	411	101	37	9	7	3	2	-	-	2,591	22	2,613
34	860	989	395	113	41	9	8	-	4	-	-	2,419	15	2,434
35	754	843	333	104	29	13	3	1	7	-	-	2,087	19	2,106
36	523	728	311	91	33	13	4	3	3	-	-	1,709	12	1,721
37	450	532	243	75	23	10	2	2	3	-	-	1,340	16	1,356
38	320	465	192	56	22	15	2	5	6	1	-	1,084	7	1,091
39	236	351	149	66	20	8	5	4	3	-	-	842	4	846
40	191	237	96	46	17	12	11	3	6	-	-	619	7	626
41	120	161	76	26	11	2	6	2	2	-	-	406	5	411
42	59	94	42	24	8	2	4	3	4	-	-	240	2	242
43	48	43	25	10	8	1	1	-	2	-	-	138	4	142
44	23	23	15	6	1	3	2	2	5	-	-	80	1	81
45+	23	26	21	3	3	4	2	2	1	-	-	85	1	86
N.S.	1	-	-	-	-	-	-	-	-	-	-	1	-	1
<b>TOTAL</b>	<b>18,349</b>	<b>14,608</b>	<b>5,105</b>	<b>1,485</b>	<b>433</b>	<b>167</b>	<b>80</b>	<b>35</b>	<b>50</b>	<b>6</b>	<b>40,318</b>	<b>280</b>	<b>40,598</b>	

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

#### HIGHLIGHTS TO TABLE 7

- Of the 40,318 live births in 2004, almost half (45.5%) were first born (18,349), more than a third (36.2%) were second born (14,608), and about one in five (18.2%) was third born or greater (7,355).
- The average age of B.C. women giving birth in 2004 was 29.9 years. The average maternal age of first live births was 28.4 years, compared to 30.6 years for mothers of second live births and 32.0 years for mothers having their third or more live birth.
- In 2004, there were 1,425 live births to mothers younger than 20 years old, resulting in a teenage mother rate of 35.34 per 1,000 live births.
- There were 8,630 live births to mothers aged 35 or older in 2004. The elderly gravida rate has increased in recent years (see Figure 6); the 2004 rate was 214.05 per 1,000 live births.
- There were 280 stillbirths in 2004. Including stillbirths, there were 40,598 total births in 2004 to B.C. residents. The 2004 stillbirth rate was 6.90 per 1,000 total births.

**TABLE 8**  
**TOTAL LIVE BIRTHS BY AGE OF FATHER,**  
**AGE OF MOTHER AND OUT-OF-WEDLOCK**  
**BRITISH COLUMBIA, 2004**

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	-	3	-	1	-	-	-	-	-	4	-
15-19	1	304	74	3	-	1	-	-	-	383	0.9
20-24	-	494	1,816	445	84	21	1	-	-	2,861	7.1
25-29	-	186	2,192	4,300	1,112	156	15	-	-	7,961	19.7
30-34	-	53	807	3,979	6,202	1,128	105	2	-	12,276	30.4
35-39	-	17	270	1,218	3,894	3,154	354	8	-	8,915	22.1
40-44	-	6	72	341	1,067	1,728	572	14	-	3,800	9.4
45+	-	-	39	133	367	626	355	52	-	1,572	3.9
N.S.	3	358	831	612	403	248	81	9	1	2,546	6.3
<b>TOTAL</b>	<b>4</b>	<b>1,421</b>	<b>6,101</b>	<b>11,032</b>	<b>13,129</b>	<b>7,062</b>	<b>1,483</b>	<b>85</b>	<b>1</b>	<b>40,318</b>	
<b>Percent</b>	<b>0.0</b>	<b>3.5</b>	<b>15.1</b>	<b>27.4</b>	<b>32.6</b>	<b>17.5</b>	<b>3.7</b>	<b>0.2</b>	<b>0.0</b>		<b>100.0</b>
<b>Out-of-Wedlock</b>	<b>4</b>	<b>1,172</b>	<b>3,181</b>	<b>2,580</b>	<b>1,885</b>	<b>1,095</b>	<b>296</b>	<b>19</b>	-	<b>10,232</b>	

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

Out-of-Wedlock - Indicates mother and father of child were not legally married to each other and excludes 1,823 cases where marital status was not stated.

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

#### HIGHLIGHTS TO TABLE 8

- Out of 100 live births in 2004, approximately:
  - 4 were to teenage mothers, less than 20 years old (1,425)
  - 42 were to mothers 20 to 29 years old (17,133)
  - 50 were to mothers 30 to 39 years old (20,191)
  - 4 were to mothers 40 years of age or older (1,568)
- Out of 100 live births in 2004, approximately:
  - 1 was to a teenage father, less than 20 years old (387)
  - 27 were to fathers 20 to 29 years old (10,822)
  - 53 were to fathers 30 to 39 years old (21,191)
  - 13 were to fathers 40 years of age or older (5,372)
  - 6 did not include father's age (2,546)
- There were 308 live births (0.8%) where both parents were teenagers (less than 20 years of age) and 835 where only one of the parents was a teenager (2.1%).
- There were 993 live births (2.5%) where both parents were 40 years of age or older and 4,864 births where only one of the parents was 40 years or older (12.1%).
- One quarter (25.4%) of the live births in 2004 were reported as out-of-wedlock (10,232). The number of out-of-wedlock births may actually be higher since births where it was not known if the parents were married to each other have not been included.

**TABLE 9**  
**LIVE BIRTHS BY AGE OF MOTHER AND KIND OF BIRTH**  
**BRITISH COLUMBIA, 2004**

Age of Mother	Kind of Birth			Total
	Single	Twin	Triplets+	
< 15	4	-	-	4
15-19	1,393	28	-	1,421
20-24	5,957	138	6	6,101
25-29	10,779	253	-	11,032
30-34	12,750	360	19	13,129
35-39	6,772	284	6	7,062
40-44	1,422	58	3	1,483
45 +	75	7	3	85
N.S.	1	-	-	1
<b>TOTAL</b>	<b>39,153</b>	<b>1,128</b>	<b>37</b>	<b>40,318</b>

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. Total includes unknown gender. Non-residents are excluded. N.S.- Not stated.

#### HIGHLIGHTS TO TABLE 9

- Out of the 40,318 live births in 2004, only 1,165 (2.9%) were multiple births.
- Of all live births in 2004:
  - almost all (97.1%) were singletons (39,153)
  - one baby in 36 live births was a twin (1,128 twins)
  - one baby in 1,090 live births was from a set of three or more (37 triplets or greater)
- Older mothers, 35 years of age or older, had the highest proportion of multiple births; 361 births or 4.2% of live births to these mothers were multiple births. The 776 multiple births to mothers aged 20 to 34 years accounted for 2.6% of births to mothers in this age group. The lowest proportion of multiple births was to teenage mothers; the 28 twins born to teens accounted for 2.0% of births to mothers in this age group.

### Vital Statistics Information Box

#### MOST POPULAR BABY NAMES IN BRITISH COLUMBIA IN THE 20<sup>TH</sup> CENTURY

**R**obert, David, and Michael were the most popular names for boys born in British Columbia in the 20th century (1901-2001); Jennifer, Mary, and Margaret were the most popular names for girls. Girls had a wider selection of names; nearly 170 different names for girls were registered over the last century (based on names chosen for 10 or more babies), compared to just over 100 names for boys. Over the last 25 years, the number of new names has increased substantially and the turnover among popular names has accelerated. Historically, there has been less continuity among names for girls than among names for boys, that is, fashionable names for girls changed more frequently over time. In 2004, eight names, Andrew, Daniel, James, Joshua, Matthew, Michael, Ryan, and William, appeared that were also on the most chosen list of 20th century names for boys, and the girls' list included four popular names from the last century, Ashley, Emily, Jessica, and Sarah.

Baby Boys			Baby Girls	
Rank	Name	Number	Name	Number
1	Robert	38,296	Jennifer	14,185
2	David	34,725	Mary	13,578
3	Michael	32,852	Margaret	11,010
4	John	32,751	Patricia	10,812
5	James	29,961	Linda	9,804
6	William	27,167	Sarah	9,724
7	Christopher	17,225	Susan	9,348
8	Richard	16,647	Barbara	9,286
9	Daniel	14,840	Jessica	9,006
10	Matthew	12,534	Karen	8,986
11	Ryan	12,325	Sandra	8,364
12	Kenneth	12,166	Nicole	8,198
13	Donald	11,855	Michelle	8,031
14	Kevin	10,744	Lisa	7,922
15	Andrew	9,733	Amanda	7,362
16	Brian	9,667	Elizabeth	6,967
17	Ronald	9,494	Ashley	6,142
18	Jason	9,358	Donna	6,135
19	Thomas	9,294	Sharon	6,053
20	Steven	8,743	Heather	6,018
21	George	8,594	Kathleen	5,807
22	Douglas	8,451	Dorothy	5,149
23	Gordon	8,405	Deborah	4,992
24	Mark	7,715	Emily	4,955
25	Joshua	6,821	Carol	4,925

Table prepared by P. A. Dunae, T. Blogg, and A. Speed, Malaspina University-College.

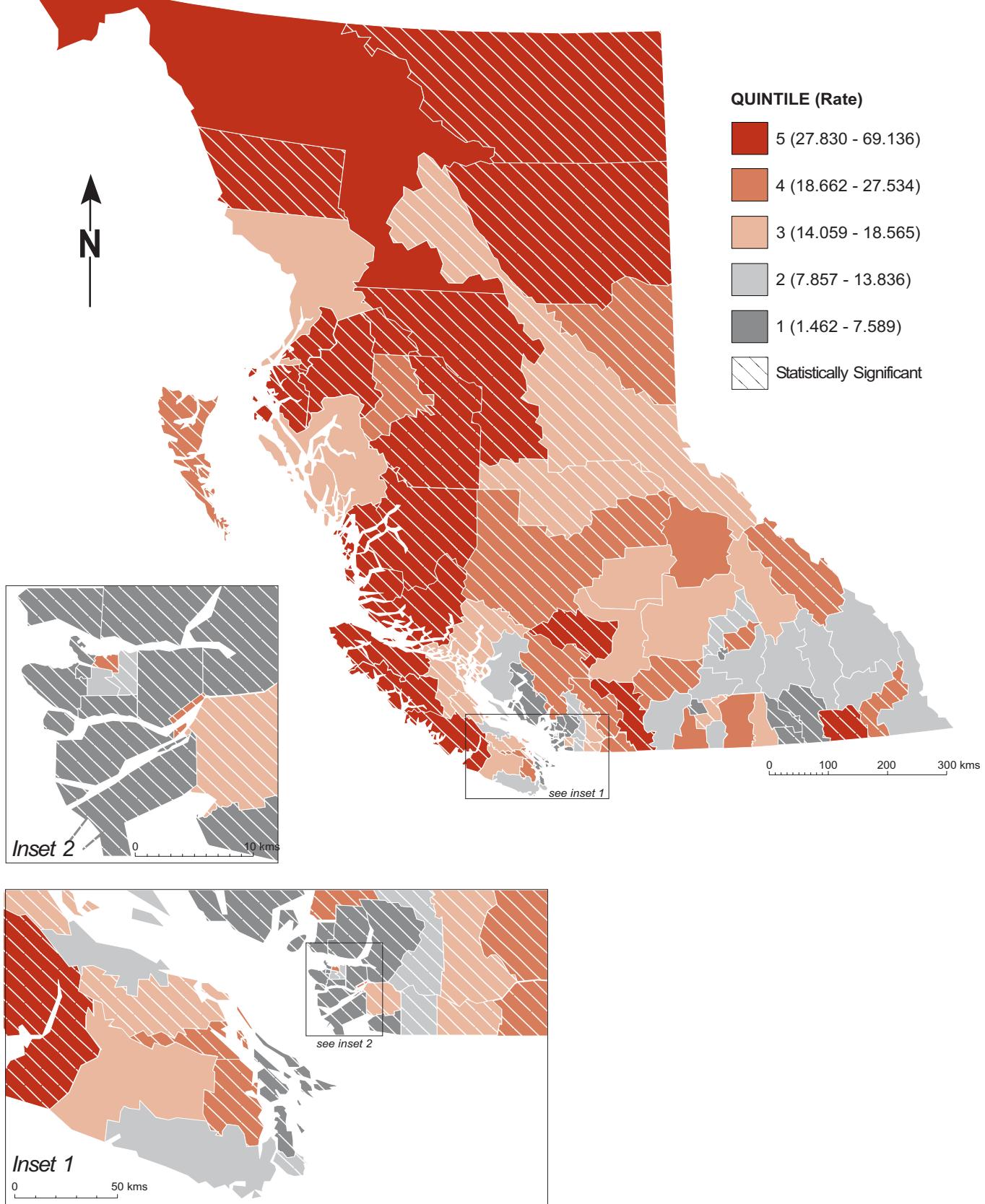
LIVE BIRTH FERTILITY RATES BY LOCAL HEALTH AREA, BRITISH COLUMBIA, 1999–2003 AND 2004

Table 10

Local Health Area	1999–2003 Teenage Fertility Rate (15–19 yrs)			2004 ASFR <sup>1</sup>						TFR <sup>2</sup> Rate (p)
	Observed	ASFR <sup>1</sup> (p)		15–19	20–24	25–29	30–34	35–39	40–44	
001 Fernie	40	13.84	*	15.65	42.55	104.71	68.35	31.48	3.79	1,332.71
002 Cranbrook	115	22.74	*	18.04	53.87	70.49	72.08	23.34	0.95	1,193.84 *
003 Kimberley	19	13.65		12.10	32.85	58.82	80.19	43.33	5.14	1,162.15
004 Windermere	23	13.11		12.12	33.59	100.75	55.56	25.86	6.55	1,172.14
005 Creston	97	44.45	*	21.74	84.47	123.40	69.09	26.16	4.41	1,646.36
006 Kootenay Lake	7	10.84		30.93	60.61	156.25	123.60	50.42	7.94	2,148.68 *
007 Nelson	31	6.44	*	2.24	40.33	113.40	118.04	42.05	8.33	1,621.99 *
009 Castlegar	19	7.45	*	-	30.02	67.23	77.56	30.08	-	1,024.42 *
010 Arrow Lakes	8	9.78		13.25	63.95	65.69	77.52	15.87	5.03	1,206.55
011 Trail	30	7.30	*	4.13	36.68	81.53	59.79	33.07	7.23	1,112.20 *
012 Grand Forks	24	14.55		26.23	53.51	139.39	52.94	61.95	10.84	1,724.32
013 Kettle Valley	13	20.93		-	68.97	176.47	154.76	11.63	7.58	2,097.01
014 Southern Okanagan	34	13.47		11.24	52.04	123.81	70.00	25.70	3.36	1,430.74
015 Penticton	117	18.27	*	7.70	40.46	81.36	74.42	25.10	3.06	1,160.55 *
016 Keremeos	13	20.00		9.52	41.67	114.58	30.61	51.47	6.02	1,269.40
017 Princeton	7	9.59		19.87	46.88	71.43	44.44	29.63	-	1,061.23
018 Golden	28	20.74	*	4.33	52.81	64.36	45.98	26.87	5.41	998.69 *
019 Revelstoke	27	17.43		-	61.86	148.15	84.68	34.68	10.42	1,698.90
020 Salmon Arm	50	8.79	*	10.68	41.60	63.69	83.44	28.39	6.66	1,172.32 *
021 Armstrong - Spallumcheen	15	7.15	*	5.38	35.71	124.00	78.05	19.61	4.41	1,335.76
022 Vernon	125	11.49		13.88	43.46	104.25	86.66	41.29	3.61	1,465.74
023 Central Okanagan	313	12.15		9.28	40.35	84.13	90.12	32.85	5.57	1,311.58 *
024 Kamloops	259	14.06		11.59	48.92	88.03	77.43	33.33	5.84	1,325.69
025 100 Mile House	41	14.27		10.85	43.56	182.86	70.92	26.87	4.88	1,699.71
026 North Thompson	21	20.19		25.13	65.22	118.64	70.97	8.62	4.90	1,467.39
027 Cariboo - Chilcotin	159	27.25	*	18.00	56.60	87.70	90.29	20.11	7.88	1,402.89
028 Quesnel	94	18.02	*	18.00	66.27	95.17	60.48	27.37	1.88	1,345.87
029 Lillooet	39	38.77	*	13.45	75.27	145.04	67.16	34.48	4.33	1,698.68
030 South Cariboo	27	18.23		32.73	63.12	61.11	43.72	20.49	3.40	1,122.85
031 Merritt	47	20.12	*	16.53	62.34	104.17	71.62	26.00	3.94	1,423.04
032 Hope	50	31.08	*	32.47	46.36	100.59	109.38	30.61	2.79	1,610.99
033 Chilliwack	299	22.72	*	23.85	73.74	127.13	112.25	34.74	5.65	1,886.84 *
034 Abbotsford	369	17.02	*	9.98	72.84	135.28	98.60	31.84	7.16	1,778.51 *
035 Langley	211	10.03	*	6.59	41.61	107.19	119.81	47.50	7.54	1,651.11 *
037 Delta	109	5.86	*	2.61	34.77	97.32	113.73	50.13	10.28	1,544.28 *
038 Richmond	100	3.57	*	3.29	13.77	55.21	96.53	55.60	11.53	1,179.60 *
040 New Westminster	125	18.76	*	7.89	45.64	82.33	74.25	47.37	10.30	1,338.88
041 Burnaby	234	7.59	*	5.57	21.75	66.26	92.45	55.21	9.48	1,253.54 *
042 Maple Ridge	150	10.35	*	6.20	35.22	111.64	130.21	42.25	6.95	1,662.40 *
043 Coquitlam	245	7.15	*	6.09	25.29	76.30	102.11	53.52	7.62	1,354.67
044 North Vancouver	91	4.34	*	1.91	18.94	53.49	122.37	75.84	12.49	1,425.20
045 West Vancouver - Bowen Is.	15	1.86	*	1.77	5.86	13.37	117.99	74.16	18.10	1,156.28 *
046 Sunshine Coast	35	7.33	*	5.81	24.64	61.71	83.60	42.42	1.81	1,099.94 *
047 Powell River	47	13.39		17.11	43.96	80.49	78.24	25.00	3.56	1,241.79
048 Howe Sound	82	18.66	*	11.33	51.09	73.40	86.99	64.21	13.60	1,503.07
049 Bella Coola Valley	30	41.49	*	65.79	142.86	131.58	88.00	16.13	7.14	2,257.49 *
050 Queen Charlotte	22	27.53	*	32.68	73.53	111.94	119.27	37.82	-	1,876.15 *
051 Snow Country	2	16.26		66.67	34.48	62.50	24.39	-	-	940.20
052 Prince Rupert	128	39.14	*	46.06	43.33	90.74	67.37	31.34	4.13	1,414.84
053 Upper Skeena	54	46.43	*	58.14	108.43	70.18	59.41	30.19	4.22	1,652.81
054 Smithers	75	20.37	*	21.62	94.86	141.45	68.39	28.45	11.49	1,831.32 *
055 Burns Lake	44	27.83	*	28.75	83.89	111.65	95.44	30.41	6.62	1,783.80 *
056 Nechako	98	27.83	*	29.08	100.95	125.26	86.12	24.45	4.18	1,850.19 *
057 Prince George	377	18.56	*	17.78	58.74	93.49	74.00	28.53	3.70	1,381.18
059 Peace River South	132	26.68	*	14.99	99.55	114.32	53.05	18.60	0.85	1,506.86
060 Peace River North	203	33.40	*	22.45	112.43	171.88	93.84	31.90	7.66	2,200.75 *
061 Greater Victoria	317	10.86	*	6.99	31.56	58.36	79.87	45.43	9.76	1,159.86 *
062 Sooke	114	11.75		10.13	41.39	107.40	133.80	40.23	8.36	1,706.56 *
063 Saanich	70	7.31	*	10.85	24.55	63.40	108.34	50.16	5.60	1,314.49
064 Gulf Islands	15	6.82	*	2.30	23.06	49.18	98.98	41.06	10.46	1,125.16 *
065 Cowichan	215	22.14	*	18.07	61.53	95.63	109.09	28.16	7.96	1,602.23 *
066 Lake Cowichan	22	17.83		21.83	54.62	101.45	80.54	17.94	3.61	1,399.95
067 Ladysmith	64	22.60	*	22.18	47.62	131.66	91.33	26.22	3.11	1,610.65
068 Nanaimo	271	16.30	*	11.09	50.27	81.28	84.34	31.66	5.90	1,322.69
069 Qualicum	65	11.67		5.98	39.52	63.93	80.90	28.52	6.31	1,125.79 *
070 Alberni	163	29.78	*	29.38	75.32	103.18	68.02	29.20	3.80	1,544.59
071 Courtenay	170	15.70	*	18.37	35.91	96.19	84.38	35.84	6.38	1,385.40
072 Campbell River	140	18.57	*	17.25	51.66	115.18	69.91	20.63	2.28	1,384.54
075 Mission	133	17.96	*	15.66	69.66	121.95	119.68	33.17	5.92	1,830.13 *
076 Agassiz - Harrison	36	26.14	*	29.80	79.55	136.36	140.70	51.72	9.90	2,240.20 *
077 Summerland	11	5.17	*	7.61	18.26	60.15	84.44	57.63	5.84	1,169.69
078 Enderby	32	21.86	*	30.65	52.12	108.84	70.18	20.83	6.08	1,443.50
080 Kitimat	42	15.92		9.62	56.91	121.34	64.52	22.22	5.79	1,401.97
081 Fort Nelson	42	31.16	*	29.85	107.91	116.73	83.59	43.64	4.05	1,928.86 *
083 Central Coast	15	42.61	*	50.63	76.92	214.29	61.54	14.49	-	2,089.36
084 Vancouver Island West	20	38.46	*	60.87	104.65	125.00	108.11	33.56	6.99	2,195.89 *
085 Vancouver Island North	119	40.30	*	33.22	98.21	143.77	47.62	20.83	8.13	1,758.95 *
087 Stikine	8	38.46		34.48	45.45	-	20.41	-	-	501.73 *
088 Terrace	123	28.30	*	25.44	76.07	118.12	68.75	29.41	5.25	1,615.26 *
092 Nisga'a	28	69.14	*	81.08	86.96	117.65	98.36	37.04	-	2,105.41
094 Telegraph Creek	7	58.82	*	-	50.00	117.65	64.52	57.14	27.03	1,581.67
161 Vancouver - City Centre	25	4.36	*	2.25	11.13	22.36	40.57	33.93	13.55	618.90 *
162 Vancouver - Downtown E.side	95	21.70	*	21.79	50.77	59.24	56.61	36.02	9.61	1,170.17 *
163 Vancouver - North East	106	7.86		3.95	30.79	70.07	93.06	57.76	12.29	1,339.54
164 Vancouver - Westside	27	1.46	*	0.53	4.99	22.77	77.02	70.65	13.91	949.30 *
165 Vancouver - Midtown	128	12.65		8.91	34.67	69.38	83.50	50.31	11.43	1,290.98 *
166 Vancouver - South	117	5.65	*	3.42	23.78	67.59	87.27	61.41	13.55	1,285.03 *
201 Surrey	726	14.45	*	12.01	75.92	149.62	99.25	44.12	7.77	1,943.48 *
202 South Surrey/White Rock	33	3.11	*	0.46	17.89	75.43	142.39	72.19	10.05	1,592.03 *
<b>PROVINCIAL TOTAL</b>	<b>8,670</b>	<b>12.90</b>		<b>10.47</b>	<b>42.13</b>	<b>82.49</b>	<b>88.95</b>	<b>44.46</b>	<b>8.26</b>	<b>1,383.84</b>

Notes for this table follow highlight notes.

**FIGURE 29**  
**LIVE BIRTH TEENAGE FERTILITY RATES BY LOCAL HEALTH AREA**  
 BRITISH COLUMBIA, 1999-2003



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

## HIGHLIGHTS TO TABLE 10/FIGURE 29

- The Province's 2004 Total Fertility Rate (TFR) was 1,383.84 births per 1,000 women of childbearing age (15 to 44 years of age). See the Glossary for a definition of total fertility rates.

- There were 23 Local Health Areas (LHAs) with statistically significant TFRs that were higher than the Provincial TFR in 2004. The five highest were:

049	Bella Coola Valley	2,257.49
076	Agassiz - Harrison	2,240.20
060	Peace River North	2,200.75
084	Vancouver Island West	2,195.89
006	Kootenay Lake	2,148.68

- There were 20 LHAs with statistically significant TFRs that were lower than the Provincial TFR in 2004. The five lowest were:

087	Stikine	501.73
161	Vancouver-City Centre	618.90
164	Vancouver-Westside	949.30
018	Golden	998.69
009	Castlegar	1,024.42

- There were 10.47 live births per 1,000 young women in the 15-19 year age group in 2004. This age-specific fertility rate for 2004 was lower than the 1999-2003 teenage fertility rate of 12.90.

- For the 1999-2003 period, there were 41 LHAs with statistically significant teenage fertility rates that were higher than the provincial teenage fertility rate. The five LHAs with the highest statistically significant rates (number of births in parentheses) were:

092	Nisga'a	(28)	69.14
094	Telegraph Creek	(7)	58.82
053	Upper Skeena	(54)	46.43
005	Creston	(97)	44.45
083	Central Coast	(15)	42.61

- There were 23 LHAs in the 1999-2003 period with statistically significant teenage fertility rates that were lower than the provincial teenage fertility rate. The five LHAs with the lowest statistically significant rates (number of births in parentheses) were:

164	Vancouver-Westside	(27)	1.46
045	West Vancouver-Bowen Island	(15)	1.86
202	South Surrey/White Rock	(33)	3.11
038	Richmond	(100)	3.57
044	North Vancouver	(91)	4.34

### Notes for Table 10

Note: <sup>1</sup>Age-Specific Fertility Rate (ASFR): Live births per 1,000 women in each specific age group of childbearing age.

<sup>2</sup>Total Fertility Rate (TFR): Sum of age-specific (15 to 44 years) fertility rates multiplied by the number of years in each age group (see Glossary for definition). \*Statistical testing indicates that fertility rate is significantly different from the average rate ( $p < 0.05$ , two tailed). Non-residents are excluded.

**TABLE 11**  
**LIVE BIRTHS BY MODE OF DELIVERY AND AGE OF MOTHER**  
**BRITISH COLUMBIA, 2004**

Mode of Delivery	Age of Mother (in Years)									Total	Percent
	<15	15-19	20-24	25-29	30-34	35-39	40-44	45+	N.S.		
Spontaneous vertex	3	985	4,010	6,870	7,630	3,841	715	32	1	24,087	59.7
Spontaneous breech	-	4	11	33	36	30	4	-	-	118	0.3
Forceps	-	52	214	440	543	221	39	1	-	1,510	3.7
Vacuum	-	104	464	778	822	380	78	4	-	2,630	6.5
First cesarean	1	251	1,110	1,989	2,420	1,429	376	32	-	7,608	18.9
Repeat cesarean	-	25	292	922	1,678	1,161	271	16	-	4,365	10.8
N.S.	-	-	-	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>4</b>	<b>1,421</b>	<b>6,101</b>	<b>11,032</b>	<b>13,129</b>	<b>7,062</b>	<b>1,483</b>	<b>85</b>	<b>1</b>	<b>40,318</b>	<b>100.0</b>
<b>Percent</b>	<b>0.0</b>	<b>3.5</b>	<b>15.1</b>	<b>27.4</b>	<b>32.6</b>	<b>17.5</b>	<b>3.7</b>	<b>0.2</b>	<b>0.0</b>	<b>100.0</b>	

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. Total includes unknown gender. Non-residents are excluded. N.S. - Not stated.

#### HIGHLIGHTS TO TABLE 11

- Three fifths (60.0%) of live births in 2004 were delivered spontaneously: 59.7% (24,087) were vertex and 0.3% (118) were breech. One in 27 births required the use of forceps (1,510 births) and one in 15 used vacuum (2,630 births).
- Almost one third of all live births (29.7%) were delivered by cesarean section (11,973) and almost two thirds of these (63.5%) were first cesareans (7,608). The 2004 cesarean section rate was 296.96 per 1,000 live births.
- Among teenage mothers (less than 20 years of age), one in five live births (19.4%) were delivered by cesarean section (277 births). Of these, 9.0% (25) were repeat cesarean sections.
- About one in four live births to mothers aged 20 to 34 (27.8%) were delivered by cesarean section (8,411). Of these deliveries, 34.4% (2,892) were repeat C-sections.
- For mothers aged 35 or older, more than one in three live births (38.1%) were delivered by cesarean section (3,285). Of these, 44.1% (1,448) were repeat C-sections.

### Vital Statistics Information Box

#### **PLACE OF BIRTH FOR MIDWIFE ASSISTED BIRTHS**

BRITISH COLUMBIA, 1999-2004

**T**he 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 1999 to 2004.

<b>Place of Birth</b>	<b>1999</b>		<b>2000</b>		<b>2001</b>		<b>2002</b>		<b>2003</b>		<b>2004</b>	
	<b>Number</b>	<b>%</b>										
Hospital	611	63.4	615	62.5	769	65.6	641	64.3	698	68.6	699	69.0
Home	348	36.1	357	36.3	367	31.3	303	30.4	287	28.2	284	28.0
Other and unknown*	4	0.4	12	1.2	37	3.2	53	5.3	32	3.1	30	3.0
<b>Midwife Assisted Births</b>	<b>963</b>	<b>100.0</b>	<b>984</b>	<b>100.0</b>	<b>1,173</b>	<b>100.0</b>	<b>997</b>	<b>100.0</b>	<b>1,017</b>	<b>100.0</b>	<b>1,013</b>	<b>100.0</b>
<b>Percent of Total Births</b>		<b>2.3</b>		<b>2.4</b>		<b>2.9</b>		<b>2.5</b>		<b>2.5</b>		<b>2.5</b>
<b>Delivered by</b>												
<b>Registered Midwives</b>												

Note: \*Other and unknown includes birthing clinics.

## Vital Statistics Information Box

**BIRTHS BY MOTHER'S COUNTRY OF BIRTH AND DEATHS BY DECEDENT'S COUNTRY OF BIRTH  
BRITISH COLUMBIA, 2004**

Area	Province/Country	Births	Deaths
<b>Canada</b>	<b>Total</b>	<b>26,596</b>	<b>19,986</b>
	British Columbia	18,633	7,526
	Alberta	2,252	2,907
	Saskatchewan	851	3,890
	Ontario	2,530	2,015
	Manitoba	829	2,156
	Quebec	696	657
	Nova Scotia	269	380
	New Brunswick	152	231
	Newfoundland	223	123
	Yukon	76	21
	Prince Edward Island	35	56
	Northwest Territories	46	14
	Nunavut	1	-
	Unknown Province	3	10
<b>North and Central America</b>	<b>Total</b>	<b>1,152</b>	<b>803</b>
	United States	713	721
	Other North and Central American Countries	439	82
<b>South America</b>	<b>Total</b>	<b>248</b>	<b>60</b>
<b>Europe</b>	<b>Total</b>	<b>1,981</b>	<b>6,137</b>
	England	486	1,940
	Germany	184	596
	Scotland	89	639
	Other United Kingdom	171	377
	Poland	118	277
	Scandinavian Countries	51	340
	Former USSR	119	186
	Italy	28	287
	Former Yugoslavia	65	66
	Other European Countries	670	1,429
<b>Asia and the Middle East</b>	<b>Total</b>	<b>8,946</b>	<b>2,195</b>
	India	2,792	522
	China	1,728	923
	Philippines	1,129	153
	Vietnam	624	61
	Hong Kong	499	138
	Korea	441	71
	Japan	328	58
	Taiwan	331	25
	Other Asian and Middle Eastern Countries	1,074	244
<b>Africa</b>	<b>Total</b>	<b>551</b>	<b>162</b>
<b>Oceania</b>	<b>Total</b>	<b>477</b>	<b>158</b>
	Fiji	282	97
	Australia	183	61
	Other Oceanic Countries	12	-
<b>Unknown</b>		<b>367</b>	<b>151</b>
<b>Total</b>		<b>40,318</b>	<b>29,652</b>

Note: Non-residents are excluded.

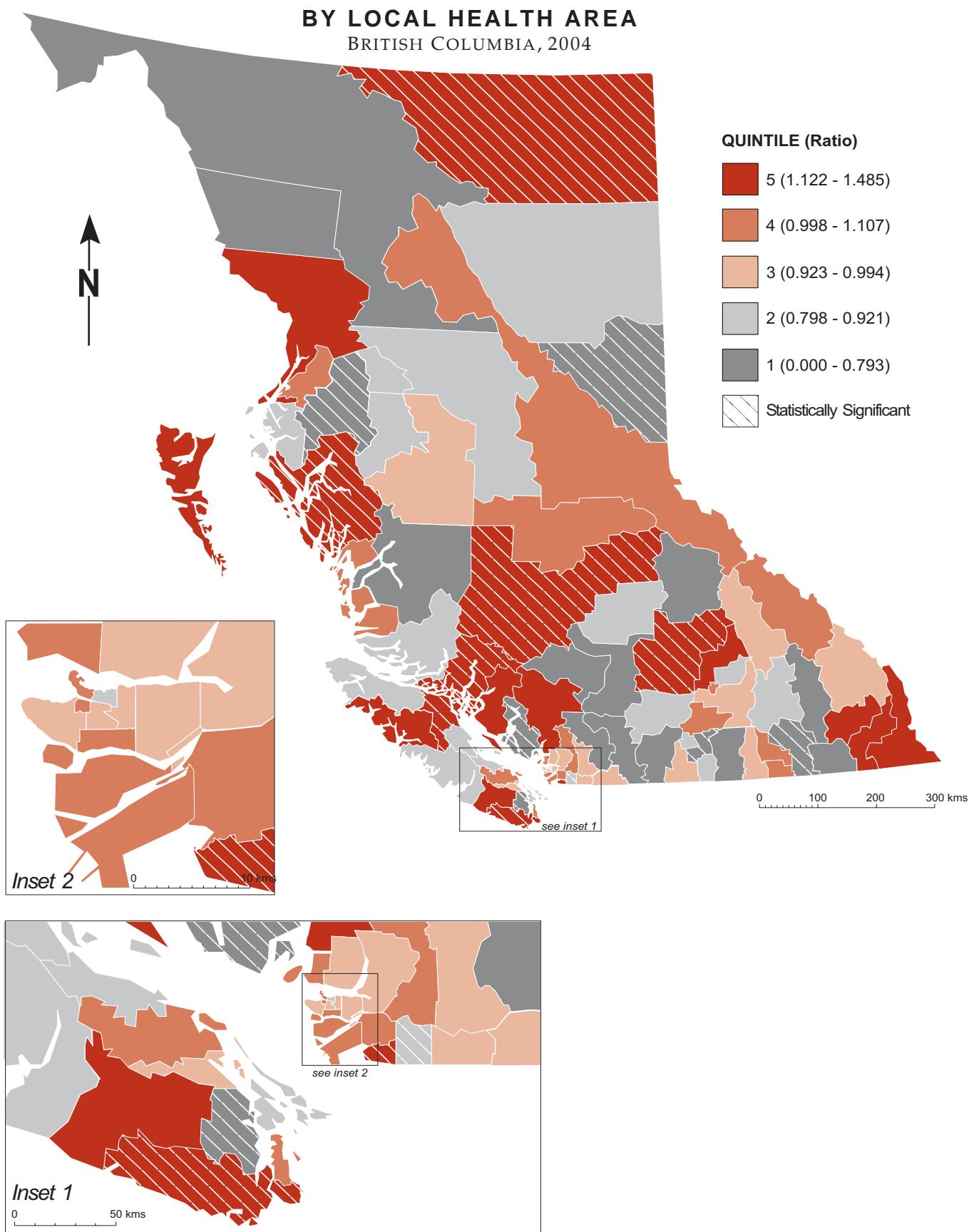
LIVE BIRTHS BY LOCAL HEALTH AREA AND MODE OF DELIVERY, BRITISH COLUMBIA, 2004

Table 12

Local Health Area	Spontaneous Vertex	Cesarean					Other	N.S.	Total Live Births		
		First	Repeat	Total	Ratio (p)	Percent			Number	Rate	
001 Fernie	70	28	14	42	1.16	34.4	10	-	122	7.69	
002 Cranbrook	124	45	26	71	1.16	34.3	12	-	207	7.90	
003 Kimberley	33	13	6	19	1.12	33.3	5	-	57	6.37	
004 Windermere	44	13	7	20	0.92	27.4	9	-	73	7.46	
005 Creston	77	11	10	21	0.70	20.8	3	-	101	7.88	
006 Kootenay Lake	30	5	3	8	0.69	20.5	1	-	39	10.92	
007 Nelson	177	28	14	42	0.62 *	18.3	10	-	229	9.25	
009 Castlegar	51	14	10	24	1.01	30.0	5	-	80	5.94	
010 Arrow Lakes	26	7	2	9	0.87	25.7	-	-	35	6.77	
011 Trail	71	18	18	36	1.01	30.0	13	-	120	5.97	
012 Grand Forks	50	13	8	21	0.96	28.4	3	-	74	8.16	
013 Kettle Valley	27	1	3	4	0.42	12.5	1	-	32	8.97	
014 Southern Okanagan	78	25	10	35	0.92	27.3	15	-	128	6.77	
015 Penticton	180	39	22	61	0.76 *	22.5	30	-	271	6.60	
016 Keremeos	21	6	2	8	0.93	27.6	-	-	29	5.82	
017 Princeton	19	3	-	3	0.44	13.0	1	-	23	4.78	
018 Golden	30	10	7	17	1.08	32.1	6	-	53	6.80	
019 Revelstoke	45	13	10	23	0.98	29.1	11	-	79	9.27	
020 Salmon Arm	122	44	32	76	1.21	36.0	13	-	211	6.37	
021 Armstrong - Spallumcheen	46	14	10	24	1.11	32.9	3	-	73	7.21	
022 Vernon	317	86	62	148	0.95	28.2	59	-	524	8.56	
023 Central Okanagan	798	276	151	427	1.07	31.7	124	-	1,349	8.30	
024 Kamloops	556	192	117	309	1.14 *	33.9	47	-	912	8.74	
025 100 Mile House	68	15	11	26	0.81	24.1	14	-	108	7.31	
026 North Thompson	30	3	6	9	0.67	20.0	6	-	45	8.58	
027 Cariboo - Chilcotin	139	62	47	109	1.32 *	39.2	30	-	278	9.55	
028 Quesnel	136	45	22	67	1.00	29.8	22	-	225	8.73	
029 Lillooet	32	7	5	12	0.79	23.5	7	-	51	10.56	
030 South Cariboo	41	6	3	9	0.56	16.7	4	-	54	6.85	
031 Merritt	71	15	13	28	0.90	26.7	6	-	105	9.05	
032 Hope	52	6	11	17	0.78	23.3	4	-	73	8.34	
033 Chilliwack	570	153	109	262	0.96	28.5	87	-	919	12.00	
034 Abbotsford	945	265	181	446	0.95	28.2	191	-	1,582	12.42	
035 Langley	777	199	123	322	0.88 *	26.2	130	-	1,229	10.24	
037 Delta	517	189	123	312	1.10	32.6	129	-	958	9.36	
038 Richmond	896	291	184	475	1.03	30.6	182	-	1,553	8.99	
040 New Westminster	348	132	51	183	0.99	29.4	92	-	623	10.69	
041 Burnaby	1,232	374	211	585	0.97	28.7	218	-	2,035	10.03	
042 Maple Ridge	523	194	111	305	1.08	32.0	125	-	953	11.00	
043 Coquitlam	1,220	385	222	607	0.99	29.5	229	-	2,056	9.96	
044 North Vancouver	832	252	135	387	0.97	28.7	130	-	1,349	9.98	
045 West Vancouver - Bowen Is.	170	49	34	83	1.00	29.7	26	-	279	5.46	
046 Sunshine Coast	111	23	8	31	0.67 *	19.9	14	-	156	5.64	
047 Powell River	73	25	23	48	1.21	35.8	13	-	134	6.56	
048 Howe Sound	235	93	48	141	1.16	34.5	33	-	409	12.92	
049 Bella Coola Valley	33	5	6	11	0.79	23.4	3	-	47	14.03	
050 Queen Charlotte	39	12	10	22	1.14	33.8	4	-	65	12.45	
051 Snow Country	2	1	1	2	1.35	40.0	1	-	5	6.23	
052 Prince Rupert	117	23	18	41	0.80	23.7	15	-	173	10.38	
053 Upper Skeena	39	14	5	19	0.91	27.1	12	-	70	12.21	
054 Smithers	140	33	26	59	0.90	26.7	22	-	221	12.28	
055 Burns Lake	57	15	10	25	0.93	27.5	9	-	91	11.64	
056 Nechako	149	34	26	60	0.92	27.3	11	-	220	12.43	
057 Prince George	655	196	114	310	1.01	30.0	69	-	1,034	10.09	
059 Peace River South	197	30	25	55	0.68 *	20.2	20	-	272	9.82	
060 Peace River North	332	73	58	131	0.89	26.4	34	-	497	15.55	
061 Greater Victoria	1,049	439	173	612	1.16 *	34.4	116	-	1,777	8.38	
062 Sooke	340	121	85	206	1.18 *	34.9	44	-	590	10.27	
063 Saanich	246	76	47	123	1.05	31.3	24	-	393	6.30	
064 Gulf Islands	54	12	6	18	0.81	24.0	3	-	75	5.13	
065 Cowichan	362	83	35	118	0.79 *	23.6	21	-	501	9.26	
066 Lake Cowichan	30	15	5	20	1.35	40.0	-	-	50	7.89	
067 Ladysmith	97	24	14	38	0.93	27.7	2	-	137	8.09	
068 Nanaimo	517	153	91	244	1.00	29.6	62	-	823	8.72	
069 Qualicum	143	36	22	58	0.88	26.0	22	-	223	5.34	
070 Alberni	178	47	32	79	0.91	27.1	35	-	292	9.08	
071 Courtenay	297	78	45	123	0.89	26.5	45	-	465	7.74	
072 Campbell River	180	86	42	128	1.32 *	39.3	18	-	326	8.12	
075 Mission	273	83	36	119	0.95	28.3	29	-	421	10.82	
076 Agassiz - Harrison	72	12	10	22	0.74	22.0	6	-	100	11.61	
077 Summerland	46	9	9	18	0.92	27.3	2	-	66	5.39	
078 Enderby	39	11	5	16	0.91	27.1	4	-	59	7.82	
080 Kitimat	49	27	14	41	1.48 *	44.1	3	-	93	8.04	
081 Fort Nelson	52	29	15	44	1.36 *	40.4	13	-	109	16.60	
083 Central Coast	15	5	2	7	1.07	31.8	-	-	22	13.00	
084 Vancouver Island West	22	7	5	12	1.12	33.3	2	-	36	14.43	
085 Vancouver Island North	106	25	14	39	0.87	25.8	6	-	151	10.84	
087 Stikine	4	-	-	-	-	-	-	-	4	3.28	
088 Terrace	177	28	26	54	0.74 *	22.0	14	-	245	10.97	
092 Nisga'a	15	5	3	8	1.04	30.8	3	-	26	13.99	
094 Telegraph Creek	8	-	-	-	-	-	-	-	8	12.58	
161 Vancouver - City Centre	427	202	55	257	1.05	31.3	137	-	821	8.02	
162 Vancouver - Downtown E.side	287	94	23	117	0.86	25.6	53	-	457	8.70	
163 Vancouver - North East	648	201	95	296	0.93	27.5	133	-	1,077	10.85	
164 Vancouver - Westside	609	196	99	295	0.96	28.6	127	-	1,031	8.32	
165 Vancouver - Midtown	554	194	90	284	0.98	29.2	133	-	971	11.05	
166 Vancouver - South	728	250	134	384	1.01	29.9	172	-	1,284	10.10	
201 Surrey	2,387	815	537	1,352	1.03	30.5	696	-	4,435	13.61	
202 South Surrey/White Rock	305	122	71	193	1.16 *	34.6	60	-	558	7.15	
<b>PROVINCIAL TOTAL</b>		<b>24,087</b>	<b>7,608</b>	<b>4,365</b>	<b>11,973</b>	<b>1.00</b>	<b>29.7</b>	<b>4,258</b>	-	<b>40,318</b>	<b>9.61</b>

Notes for this table follow highlight notes.

FIGURE 30  
**CESAREAN DELIVERIES OF LIVE BORN INFANTS  
 BY LOCAL HEALTH AREA**  
 BRITISH COLUMBIA, 2004



## HIGHLIGHTS TO TABLE 12/FIGURE 30

- There were 11,973 cesarean deliveries of live born babies in 2004, and 24,087 spontaneous vertex deliveries. The 2004 cesarean section rate was 296.96 per 1,000 live births.

- The cesarean ratio is the number of C-section births in the area, compared to the number that would be expected based on the provincial rate and the number of live births in the area. The eight Local Health Areas (LHAs) with cesarean ratios that were statistically significant and high in 2004 (number of cesarean deliveries in parentheses) were:

080	Kitimat	(41)	1.48
081	Fort Nelson	(44)	1.36
027	Cariboo - Chilcotin	(109)	1.32
072	Campbell River	(128)	1.32
062	Sooke	(206)	1.18
202	South Surrey/White Rock	(193)	1.16
061	Greater Victoria	(612)	1.16
024	Kamloops	(309)	1.14

- The seven LHAs with cesarean ratios that were statistically significant and low in 2004 (number of cesarean deliveries in parentheses) were:

007	Nelson	(42)	0.62
046	Sunshine Coast	(31)	0.67
059	Peace River South	(55)	0.68
088	Terrace	(54)	0.74
015	Penticton	(61)	0.76
065	Cowichan	(118)	0.79
035	Langley	(322)	0.88

- Two LHAs, 087 Stikine and 094 Telegraph Creek, had no live births delivered by cesarean in 2004.
- The 2004 provincial live birth rate was 9.61 live births per 1,000 population. The five LHAs with the highest live birth rates in 2004 (number of births in parentheses) were:

081	Fort Nelson	(109)	16.60
060	Peace River North	(497)	15.55
084	Vancouver Island West	(36)	14.43
049	Bella Coola Valley	(47)	14.03
092	Nisga'a	(26)	13.99

- The LHA with the lowest birth rate in 2004 was 087 Stikine with 3.28 live births per 1,000 population, but this rate is not considered reliable since it is based on only four births. The five LHAs with the lowest live birth rates in 2004 based on at least five births (number of births in parentheses) were:

017	Princeton	(23)	4.78
064	Gulf Islands	(75)	5.13
069	Qualicum	(223)	5.34
077	Summerland	(66)	5.39
045	West Vancouver-Bowen Island	(279)	5.46

### Notes for Table 12

Note: Ratio—observed over the expected cesareans in the specified area. Percent based upon live births in the specified area. Rate per 1,000 population in the specified area. \*Statistical testing indicates that observed cesarean births are significantly different from the expected ( $p<0.05$ , two tailed). +Denotes significance based on less than five births. Other is comprised of spontaneous breech, forceps, and vacuum. Non-residents are excluded. N.S.-NotStated.

**TABLE 13**  
**LIVE BIRTHS BY BIRTH WEIGHT, GENDER, AND GESTATIONAL AGE**  
**BRITISH COLUMBIA, 2004**

Birth Weight (in Grams)	Gender		Gestational Age (in Weeks)						Total
	Male	Female	<20	20-27	28-36	37-41	42+	N.S.	
<500	26	24	3	46	-	2	-	-	51
500-749	26	31	-	54	3	-	-	-	57
750-999	33	30	-	44	19	-	-	-	63
1,000-1,249	42	29	-	25	46	-	-	-	71
1,250-1,499	67	55	-	3	119	-	-	-	122
1,500-1,749	89	76	-	-	162	3	-	-	165
1,750-1,999	125	140	-	-	235	30	-	-	265
2,000-2,249	239	239	-	-	356	122	-	-	478
2,250-2,499	456	532	-	-	529	459	-	-	988
2,500-2,749	829	1,009	-	1	506	1,330	1	-	1,838
2,750-2,999	1,734	2,191	-	-	442	3,477	6	-	3,925
3,000-3,249	2,918	3,443	-	-	260	6,079	22	-	6,361
3,250-3,499	3,919	3,978	-	-	124	7,730	43	-	7,897
3,500-3,749	3,914	3,566	-	-	54	7,373	53	-	7,480
3,750-3,999	3,053	2,303	-	-	28	5,254	74	-	5,356
4,000-4,249	1,763	1,163	-	-	13	2,873	40	-	2,926
4,250-4,499	900	515	-	-	3	1,377	35	-	1,415
4,500-4,749	360	171	-	-	1	517	13	-	531
4,750-4,999	123	61	-	-	1	177	6	-	184
5,000-5,249	43	24	-	-	1	65	1	-	67
5,250-5,499	22	6	-	-	1	27	-	-	28
5,500+	5	1	-	-	-	6	-	-	6
N.S.	25	19	1	-	-	-	-	43	44
<b>TOTAL</b>	<b>20,711</b>	<b>19,606</b>	<b>4</b>	<b>173</b>	<b>2,903</b>	<b>36,901</b>	<b>294</b>	<b>43</b>	<b>40,318</b>

Note: Total includes unknown gender.

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

### HIGHLIGHTS TO TABLE 13

- There were 20,711 males (51.4%) and 19,606 females (48.6%) born in 2004. The average weight for a live born baby was 3,405 grams, 3,458 grams for males and 3,349 grams for females.
- Almost nine out of ten live births (35,493) were delivered at term (from 37 to 41 weeks gestation) with normal birth weight (2,500 to 4,499 grams). These babies with "healthy" gestational ages and birth weights accounted for 88.0% of live births in 2004.
- There were 2,260 live births with low birth weight (less than 2,500 grams) and 3,080 pre-term (less than 37 weeks gestation) live births in 2004. A total of 1,644 babies (4.1%) were both pre-term and low birth weight; in of this group, approximately one in nine (175 births) had very low birth weight (less than 1,500 grams) and was extremely premature (less than 28 weeks gestation).
- Post-term (42 or more weeks of gestation) deliveries occurred in 294 live births in 2004. There were 816 births with high birth weight (4,500 grams or more), 20 of which were also post-term.
- Out of 1,000 live births in 2004:

<i>by birth weight</i>	<i>by gestational age</i>
- 56 were low birth weight (2,260 births), of which:	- 76 were pre-term (3,080 births), of which:
~ 1 had birth weight less than 500 grams (51)	~ 4 were extremely premature (less than 28 weeks)
~ 8 had birth weight from 500 to 1,499 grams (313)	(177)
- 923 were normal birth weight (37,198)	- 915 were term (36,901)
- 20 were high birth weight (816)	- 7 were post-term (294)
- 1 did not include birth weight (44)	- 1 did not include gestational age (43)

**TABLE 14**  
**LIVE BIRTHS BY BIRTH WEIGHT AND AGE OF MOTHER**  
**BRITISH COLUMBIA, 2004**

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	6	12	15	14	3	-	-	51
500-749	-	2	10	12	14	17	2	-	-	57
750-999	-	3	10	15	22	12	1	-	-	63
1,000-1,249	-	5	15	19	17	10	5	-	-	71
1,250-1,499	-	9	22	25	35	25	6	-	-	122
1,500-1,749	-	7	25	41	50	32	10	-	-	165
1,750-1,999	-	13	42	64	78	51	14	3	-	265
2,000-2,249	-	24	76	135	134	86	21	2	-	478
2,250-2,499	-	21	139	258	324	192	48	6	-	988
2,500-2,749	-	79	279	475	576	343	81	5	-	1,838
2,750-2,999	-	151	622	1,084	1,216	699	141	12	-	3,925
3,000-3,249	-	221	927	1,795	2,031	1,160	211	16	-	6,361
3,250-3,499	-	277	1,177	2,170	2,640	1,321	296	16	-	7,897
3,500-3,749	2	245	1,136	2,046	2,531	1,233	277	10	-	7,480
3,750-3,999	1	199	834	1,458	1,732	944	184	4	-	5,356
4,000-4,249	1	89	443	801	976	507	106	3	-	2,926
4,250-4,499	-	40	216	389	457	258	50	5	-	1,415
4,500-4,749	-	22	76	147	180	87	17	2	-	531
4,750-4,999	-	10	32	45	56	35	6	-	-	184
5,000-5,249	-	2	8	17	23	15	2	-	-	67
5,250-5,499	-	-	2	8	10	7	1	-	-	28
5,500+	-	1	-	2	1	1	-	1	-	6
N.S.	-	-	4	14	11	13	1	-	1	44
<b>TOTAL</b>	<b>4</b>	<b>1,421</b>	<b>6,101</b>	<b>11,032</b>	<b>13,129</b>	<b>7,062</b>	<b>1,483</b>	<b>85</b>	<b>1</b>	<b>40,318</b>

Note: Total includes unknown gender.

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

#### HIGHLIGHTS TO TABLE 14

- There were 37,198 live births with healthy birth weights (2,500 to 4,499 grams) in 2004. Out of approximately 100 of these births:
  - 4 were births to teenage mothers (1,305)
  - 43 were births to mothers aged 20 to 29 years (15,852)
  - 50 were births to mothers aged 30 to 39 years (18,624)
  - 4 were births to mothers 40 years of age or older (1,417)
- There were 2,260 live births with low birth weight (less than 2,500 grams) in 2004. Out of every 100 of these births:
  - 4 were births to teenage mothers (85)
  - 41 were births to mothers aged 20 to 29 years (926)
  - 50 were births to mothers aged 30 to 39 years (1,128)
  - 5 were births to mothers 40 years of age or older (121)
- There were 816 live births with high birth weight (4,500 grams or over) in 2004. Out of every 100 of these births:
  - 4 were births to teenage mothers (35)
  - 41 were births to mothers aged 20 to 29 years (337)
  - 51 were births to mothers aged 30 to 39 years (415)
  - 4 were births to mothers 40 years of age or older (29)
- Nine out of ten (92.4%) live births to mothers in the four maternal age groups from 20-24 to 35-39 had "healthy" birth weights. One in 18 births in these age groups (5.5%) had low birth weight and one in 50 (2.0%) had high birth weight.
- Of live births to teenage mothers (less than 20 years of age), 91.6% had healthy birth weights, 6.0% had low and 2.5% had high birth weights. For mothers in the 40 or older age group, 90.4% of live births had healthy birth weights, 7.7% had low and 1.8% had high birth weights.

**TABLE 15**  
**LOW BIRTH WEIGHT LIVE BIRTHS BY AGE OF MOTHER AND GENDER**  
**BRITISH COLUMBIA, 2004**

Age of Mother	Male		Female		Total		
	Number	Percent	Number	Percent	Number	Percent	Rate
< 15	-	-	-	-	-	-	-
15-19	41	3.7	44	3.8	85	3.8	59.82
20-24	167	15.1	178	15.4	345	15.3	56.55
25-29	287	26.0	293	25.3	581	25.7	52.66
30-34	328	29.7	361	31.2	689	30.5	52.48
35-39	221	20.0	218	18.9	439	19.4	62.16
40-44	54	4.9	56	4.8	110	4.9	74.17
45 +	5	0.5	6	0.5	11	0.5	129.41
N.S.	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>1,103</b>	<b>100.0</b>	<b>1,156</b>	<b>100.0</b>	<b>2,260</b>	<b>100.0</b>	<b>56.05</b>

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

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

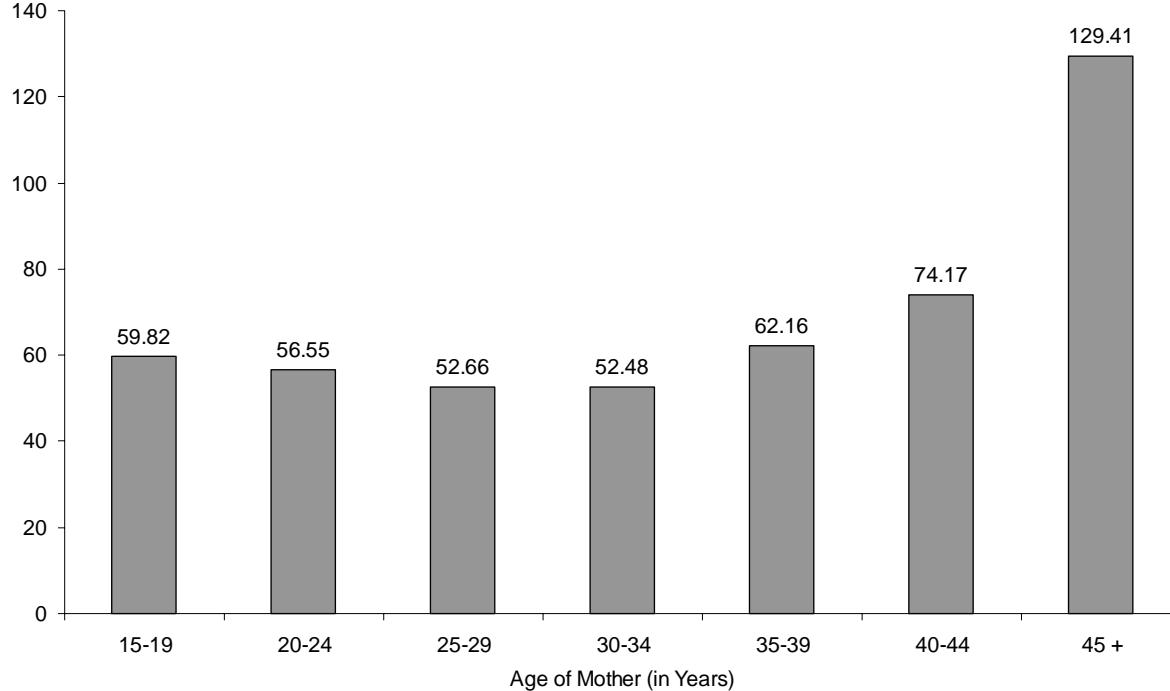
Total percentage may not add up to 100 due to rounding. Total includes unknown gender.

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

**FIGURE 31**  
**LOW BIRTH WEIGHT LIVE BIRTHS BY AGE OF MOTHER**

BRITISH COLUMBIA, 2004

Rate per 1,000 Live Births



#### HIGHLIGHTS TO TABLE 15/FIGURE 31

- In 2004, there were 2,260 live births with low birth weight (less than 2,500 grams). The provincial low birth weight (LBW) live birth rate was 56.05 per 1,000 live births.
- Among live births in 2004, 5.3% of the 20,711 male births had low birth weight (1,103) and 5.9% of the 19,606 female births had low birth weight (1,156). (see Table 13 for the number of male and female live births.)
- Of the low birth weight live births, 51.2% were females.
- Mothers aged 30-34 and those aged 25-29 had the lowest LBW rates (52.48 and 52.66 per 1,000 live births respectively). The next lowest LBW rate was for mothers aged 20-24 (56.55 per 1,000 live births). Teenage mothers (aged 15-19) had a low birth weight rate of 59.82. The oldest maternal age groups had the highest LBW rates (74.17 for mothers aged 40-44 and 129.41 for mothers aged 45+).

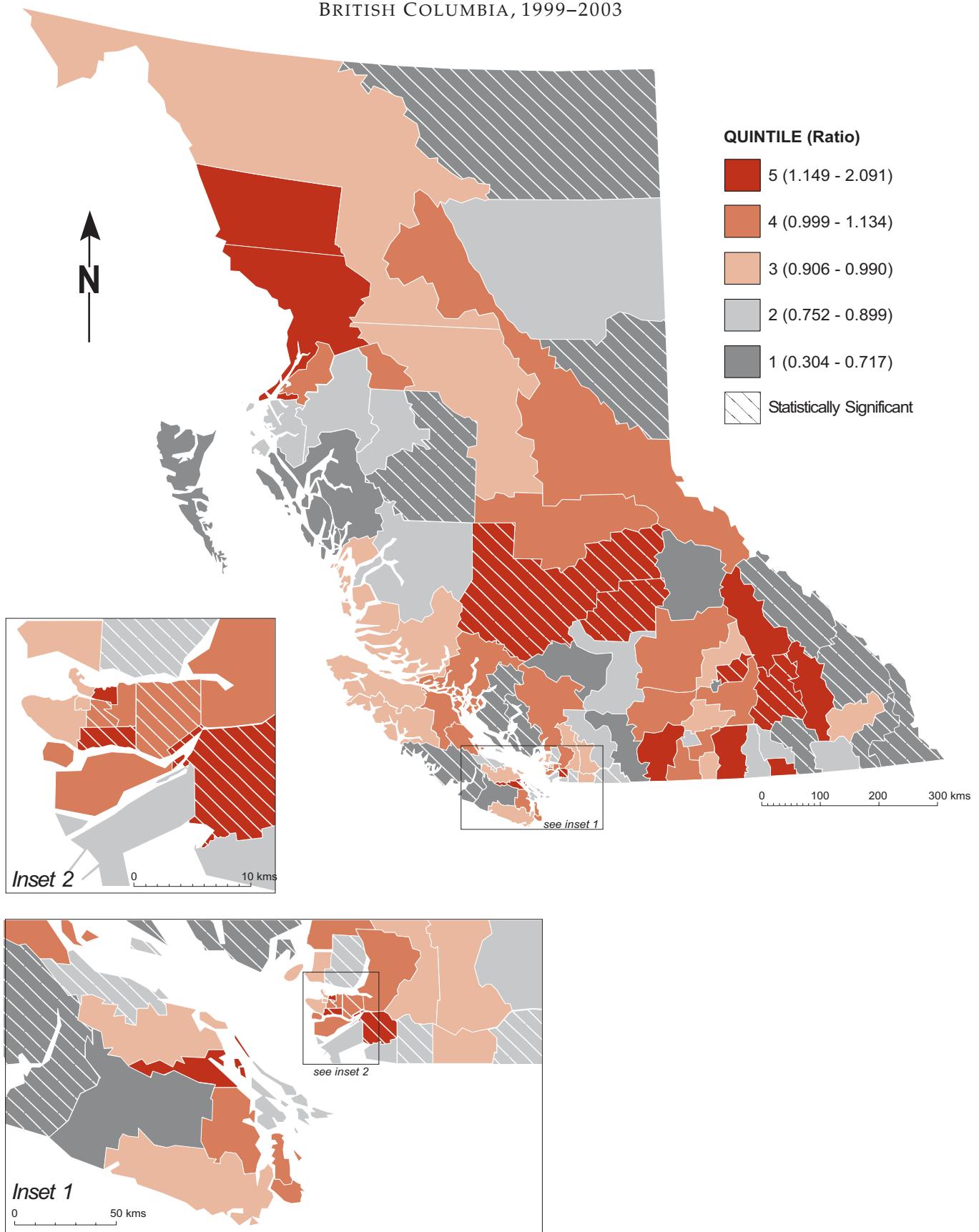
**LOW BIRTH WEIGHT LIVE BIRTHS BY LOCAL HEALTH AREA AND GESTATIONAL AGE,  
BRITISH COLUMBIA, 1999–2003 AND 2004**

**Table 16**

Local Health Area	1999–2003				2004					
	Observed	Ratio	Live Births (p)	Rate	<37	37–41	42+	N.S.	Total	Rate
001 Fernie	19	0.61	*	31.20	3	2	-	-	5	40.98
002 Cranbrook	34	0.58	*	29.57	3	2	-	-	5	24.15
003 Kimberley	13	0.91		46.10	1	-	-	-	1	17.54
004 Windermere	8	0.48	*	24.39	1	2	-	-	3	41.10
005 Creston	29	0.85		43.09	4	1	-	-	5	49.50
006 Kootenay Lake	14	1.58		80.46	-	1	-	-	1	25.64
007 Nelson	39	0.71	*	36.14	8	4	-	-	12	52.40
009 Castlegar	23	0.90		45.73	3	3	-	-	6	75.00
010 Arrow Lakes	19	1.83	*	93.14	-	-	-	-	-	-
011 Trail	49	1.30		66.04	6	4	-	-	10	83.33
012 Grand Forks	14	0.88		44.59	2	3	-	-	5	67.57
013 Kettle Valley	9	1.37		69.77	-	1	-	-	1	31.25
014 Southern Okanagan	32	0.96		49.08	4	4	-	-	8	62.50
015 Penticton	87	1.13		57.69	14	4	-	-	18	66.42
016 Keremeos	12	1.13		57.69	-	-	-	-	-	-
017 Princeton	10	1.48		75.19	2	-	-	-	2	86.96
018 Golden	9	0.51	*	25.94	1	-	-	-	1	18.87
019 Revelstoke	23	1.19		60.53	4	1	-	-	5	63.29
020 Salmon Arm	53	0.93		47.41	6	4	-	-	10	47.39
021 Armstrong - Spallumcheen	12	0.59		30.23	4	1	-	-	5	68.49
022 Vernon	148	1.13		57.25	26	9	-	-	35	66.79
023 Central Okanagan	321	0.94		47.79	55	13	-	-	68	50.41
024 Kamloops	239	1.06		53.83	37	27	-	-	64	70.18
025 100 Mile House	40	1.41	*	71.81	4	2	-	-	6	55.56
026 North Thompson	8	0.67		33.90	1	3	-	-	4	88.89
027 Cariboo - Chilcotin	104	1.29	*	65.70	7	1	-	-	8	28.78
028 Quesnel	67	1.08		54.78	6	7	-	-	13	57.78
029 Lillooet	10	0.66		33.33	1	2	-	-	3	58.82
030 South Cariboo	12	0.83		42.11	2	1	-	-	3	55.56
031 Merritt	30	1.12		56.82	2	1	-	-	3	28.57
032 Hope	13	0.67		34.30	3	1	-	-	4	54.79
033 Chilliwack	172	0.83	*	42.24	31	11	-	-	42	45.70
034 Abbotsford	376	0.93		47.23	64	38	-	-	102	64.48
035 Langley	270	0.86	*	43.91	39	15	-	-	54	43.94
037 Delta	227	0.89		45.09	39	14	-	-	53	55.32
038 Richmond	403	1.02		51.87	55	24	-	-	79	50.87
040 New Westminster	188	1.15	*	58.64	29	22	-	-	51	81.86
041 Burnaby	588	1.12	*	57.14	94	32	-	-	126	61.92
042 Maple Ridge	216	0.98		49.86	43	10	-	-	53	55.61
043 Coquitlam	541	1.00		51.04	89	31	-	-	120	58.37
044 North Vancouver	274	0.83	*	42.21	61	13	-	-	74	54.86
045 West Vancouver - Bowen Is.	72	0.92		47.03	6	2	-	-	8	28.67
046 Sunshine Coast	28	0.57	*	29.08	6	1	-	-	7	44.87
047 Powell River	23	0.59	*	29.83	6	-	-	-	6	44.78
048 Howe Sound	103	1.03		52.52	22	6	-	-	28	68.46
049 Bella Coola Valley	11	0.86		43.82	3	-	-	-	3	63.83
050 Queen Charlotte	12	0.72		36.47	8	-	-	-	8	123.08
051 Snow Country	3	1.25		63.83	-	-	-	-	-	-
052 Prince Rupert	42	0.77		38.92	5	2	-	-	7	40.46
053 Upper Skeena	19	1.00		50.80	-	-	-	-	-	-
054 Smithers	48	0.78		39.83	5	2	-	-	7	31.67
055 Burns Lake	7	0.30	*	15.49	1	2	-	-	3	32.97
056 Nechako	58	0.99		50.35	12	2	-	-	14	63.64
057 Prince George	279	1.02		51.72	45	14	-	-	59	57.06
059 Peace River South	52	0.71	*	35.86	8	5	-	-	13	47.79
060 Peace River North	102	0.83		42.46	18	5	-	-	23	46.28
061 Greater Victoria	455	1.05		53.16	73	18	-	-	91	51.21
062 Sooke	141	0.99		50.14	30	6	-	-	36	61.02
063 Saanich	110	1.08		55.03	21	2	-	-	23	58.52
064 Gulf Islands	21	0.90		45.75	-	-	-	-	-	-
065 Cowichan	129	1.04		52.65	31	5	-	-	36	71.86
066 Lake Cowichan	7	0.60		30.43	5	1	-	-	6	120.00
067 Ladysmith	42	1.18		60.26	9	1	-	-	10	72.99
068 Nanaimo	198	0.97		49.33	30	12	-	-	42	51.03
069 Qualicum	45	0.75	*	38.23	4	1	-	-	5	22.42
070 Alberni	54	0.71	*	36.24	7	2	-	-	9	30.82
071 Courtenay	137	1.13		57.68	23	7	-	-	30	64.52
072 Campbell River	97	1.01		51.19	9	2	-	-	11	33.74
075 Mission	102	0.94		47.82	22	4	-	-	26	61.76
076 Agassiz - Harrison	16	0.77		39.41	-	1	-	-	1	10.00
077 Summerland	17	0.89		45.09	1	1	-	-	2	30.30
078 Enderby	24	1.59	*	81.08	-	-	-	-	-	-
080 Kitimat	20	0.68		34.54	3	-	-	-	3	32.26
081 Fort Nelson	12	0.52	*	26.37	2	2	-	-	4	36.70
083 Central Coast	6	0.97		49.59	3	-	-	-	3	136.36
084 Vancouver Island West	8	0.94		47.62	-	-	-	-	-	-
085 Vancouver Island North	42	0.98		49.94	8	1	-	-	9	59.60
087 Stikine	2	0.94		47.62	2	-	-	-	2	500.00
088 Terrace	59	0.84		42.57	7	4	-	-	11	44.90
092 Nisga'a	8	1.06		54.05	1	-	-	-	1	38.46
094 Telegraph Creek	5	2.09		106.38	-	-	-	-	-	-
161 Vancouver - City Centre	174	0.91		46.54	32	12	-	-	44	53.59
162 Vancouver - Downtown E.side	135	1.16		59.24	35	14	-	-	49	107.22
163 Vancouver - North East	319	1.11		56.27	54	15	-	-	69	64.07
164 Vancouver - Westside	258	0.96		48.81	31	7	-	-	38	36.86
165 Vancouver - Midtown	296	1.12	*	56.94	37	20	-	-	57	58.70
166 Vancouver - South	386	1.20	*	61.13	49	27	-	-	76	59.19
201 Surrey	1,270	1.15	*	58.44	195	88	-	-	283	63.81
202 South Surrey/White Rock	106	0.88		44.58	21	8	-	-	29	51.97
<b>PROVINCIAL TOTAL</b>		<b>10,316</b>	<b>1.00</b>	<b>50.87</b>	<b>1,644</b>	<b>616</b>	<b>-</b>	<b>-</b>	<b>2,260</b>	<b>56.05</b>

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

**FIGURE 32**  
**LOW BIRTH WEIGHT LIVE BIRTHS BY LOCAL HEALTH AREA**  
 BRITISH COLUMBIA, 1999–2003



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

### **HIGHLIGHTS TO TABLE 16/FIGURE 32**

- The provincial low birth weight (LBW) (less than 2,500 grams) live birth rate for 2004 was 56.05 per 1,000 live births, higher than the 1999-2003 LBW rate (50.87).

- The five Local Health Areas (LHAs) with the highest LBW rates based on at least five births were:

050	Queen Charlotte	(8)	123.08
066	Lake Cowichan	(6)	120.00
162	Vancouver - Downtown Eastside	(49)	107.22
011	Trail	(10)	83.33
040	New Westminster	(51)	81.86

- The five LHAs with lowest LBW rates based on at least five births in 2004 (number of births in parentheses) were:

069	Qualicum	(5)	22.42
002	Cranbrook	(5)	24.15
045	West Vancouver-Bowen Island	(8)	28.67
027	Cariboo - Chilcotin	(8)	28.78
070	Alberni	(9)	30.82

- In 2004, eight LHAs, 010 Arrow Lakes, 016 Keremeos, 051 Snow Country, 053 Upper Skeena, 064 Gulf Islands, 078 Enderby, 084 Vancouver Island West, and 094 Telegraph Creek, did not have any low birth weight births, and there were 20 other LHAs with less than five LBW live births.

- There were nine LHAs with low birth weight ratios for the period 1999-2003 that were statistically significant and high (number of births and LBW rate per 1,000 live births in parentheses). The five highest (number of births and LBW rate per 1,000 live births in parentheses) were:

010	Arrow Lakes	(19)	1.83	(93.14)
078	Enderby	(24)	1.59	(81.08)
025	100 Mile House	(40)	1.41	(71.81)
027	Cariboo - Chilcotin	(104)	1.29	(65.70)
166	Vancouver - South	(386)	1.20	(61.13)

- There were 15 LHAs with low birth weight ratios for the period 1999-2003 that were statistically significant and low, based on at least five births. The five lowest (number of births and LBW rate per 1,000 live births in parentheses) were:

055	Burns Lake	(7)	0.30	(15.49)
004	Windermere	(8)	0.48	(24.39)
018	Golden	(9)	0.51	(25.94)
081	Fort Nelson	(12)	0.52	(26.37)
046	Sunshine Coast	(28)	0.57	(29.08)

### **HIGHLIGHTS TO TABLE 17**

- There were 27,934 maternal complications of pregnancy and delivery noted in 21,040 live births in 2004. Included in these complications are preterm births, multiple births, assisted or surgical deliveries where no cause was given, and elderly primigravida (first births to women aged 35 or older). Just over half of all live births involved maternal complications (52.2% in 2004 and 50.3% in 1999-2003).
- The percentage of live births with maternal complications of pregnancy and delivery increased with the age of mother. Teenage mothers had maternal complications in 44.7% of their births. In the age groups 20-29 and 30-39, maternal complications occurred in 47.8% and 55.4% of live births, respectively. For mothers aged 40 or older, the proportion rose to almost two thirds (65.1%).
- The largest categories of maternal complications of pregnancy and delivery in 2004 were assisted or surgical deliveries where no cause was given (22.0%) and maternal abnormality of pelvic organs (16.4%). These complications combined accounted for more than a third of all maternal complications (38.4% in 2004 and 35.2% in 1999-2003).

**TABLE 17**  
**MATERNAL COMPLICATIONS OF PREGNANCY AND**  
**DELIVERY IN LIVE BIRTHS BY AGE OF MOTHER**  
 BRITISH COLUMBIA, 1999–2003 AND 2004

Maternal Complications	ICD-10 Code	1999–2003		2004						Total	Percent
		Total	Percent	<20	20–29	30–39	40+	N.S.			
Hypertension/hypertensive disorders in pregnancy	O10-O11, O13, O16	2,591	1.9	15	205	228	38	-	486	1.7	
Edema and proteinuria without hypertension	O12	33	0.0	3	5	1	-	-	9	0.0	
Pre-eclampsia/eclampsia	O14-O15	800	0.6	8	96	100	11	-	215	0.8	
Hemorrhage in early pregnancy	O20	10	0.0	-	-	1	-	-	1	0.0	
Hyperemesis gravidarum	O21	62	0.0	-	7	6	-	-	13	0.0	
Other maternal disorders predominantly related to pregnancy	O22-O23, O25-O29, F179	1,602	1.2	14	178	177	13	-	382	1.4	
Diabetes in pregnancy	O24	2,452	1.8	4	125	250	29	-	408	1.5	
Multiple gestation and related complications	O30-O31	5,314	3.8	28	385	655	68	-	1,136	4.1	
Fetal malpresentation	O32	7,221	5.2	45	542	717	49	-	1,353	4.8	
Disproportion	O33	1,643	1.2	2	31	50	5	-	88	0.3	
Maternal abnormality of pelvic organs	O34	19,461	14.0	27	1,297	2,947	303	-	4,574	16.4	
Disorders of amniotic fluid and membranes	O40-O42	3,677	2.6	32	343	443	39	-	857	3.1	
Placental disorders	O43-O45, O73	2,379	1.7	15	160	208	35	-	418	1.5	
Antepartum hemorrhage	O46	372	0.3	1	25	36	4	-	66	0.2	
Prolonged pregnancy	O48	2,219	1.6	13	136	113	14	-	276	1.0	
Preterm labour and delivery	O60	8,598	6.2	92	709	801	53	-	1,655	5.9	
Abnormalities of forces of labour	O62-O63	6,366	4.6	35	493	530	33	-	1,091	3.9	
Obstructed labour	O64-O66	10,386	7.5	112	1003	1056	79	-	2,250	8.1	
Intrapartum hemorrhage	O67	-	-	-	-	-	-	-	-	-	
Evidence of fetal distress	O68	8,747	6.3	86	738	795	71	-	1,690	6.0	
Cord complications	O69	2,688	1.9	19	205	203	20	-	447	1.6	
Obstetrical trauma	O70-O71	1,467	1.1	11	121	118	5	-	255	0.9	
Postpartum hemorrhage	O72	2,091	1.5	9	169	183	16	-	377	1.3	
Assisted or surgical delivery - no cause given <sup>1</sup>	O81-O82	29,548	21.2	181	2,607	3,079	277	-	6,144	22.0	
Maternal and puerperal infections	O85-O86, O98, A34	192	0.1	2	13	6	-	-	21	0.1	
Other puerperal complications	O87-O92	60	0.0	-	2	6	1	-	9	0.0	
Maternal noninfectious diseases complicating the pregnant state	O99	1,639	1.2	12	146	214	27	-	399	1.4	
Elderly primigravida	Z355	6,463	4.6	-	2	1,343	238	-	1,583	5.7	
Maternal drug use	O355	301	0.2	5	49	17	2	-	73	0.3	
Other maternal complications	O00-O08, O35-O36, O47, O61, O74-O75, O95-O97	10,916	7.8	58	739	799	62	-	1,658	5.9	
<b>Total maternal complications</b>		<b>139,298</b>	<b>100.0</b>	<b>829</b>	<b>10,531</b>	<b>15,082</b>	<b>1,492</b>	-	<b>27,934</b>	<b>100.0</b>	
<b>Live births with the above maternal complications</b>	<b>- Number</b>	<b>101,999</b>		<b>637</b>	<b>8,195</b>	<b>11,187</b>	<b>1,021</b>	-	<b>21,040</b>		
	<b>- Percent(*)</b>	<b>50.3</b>		<b>44.7</b>	<b>47.8</b>	<b>55.4</b>	<b>65.1</b>			<b>52.2</b>	

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

<sup>1</sup>Where 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.

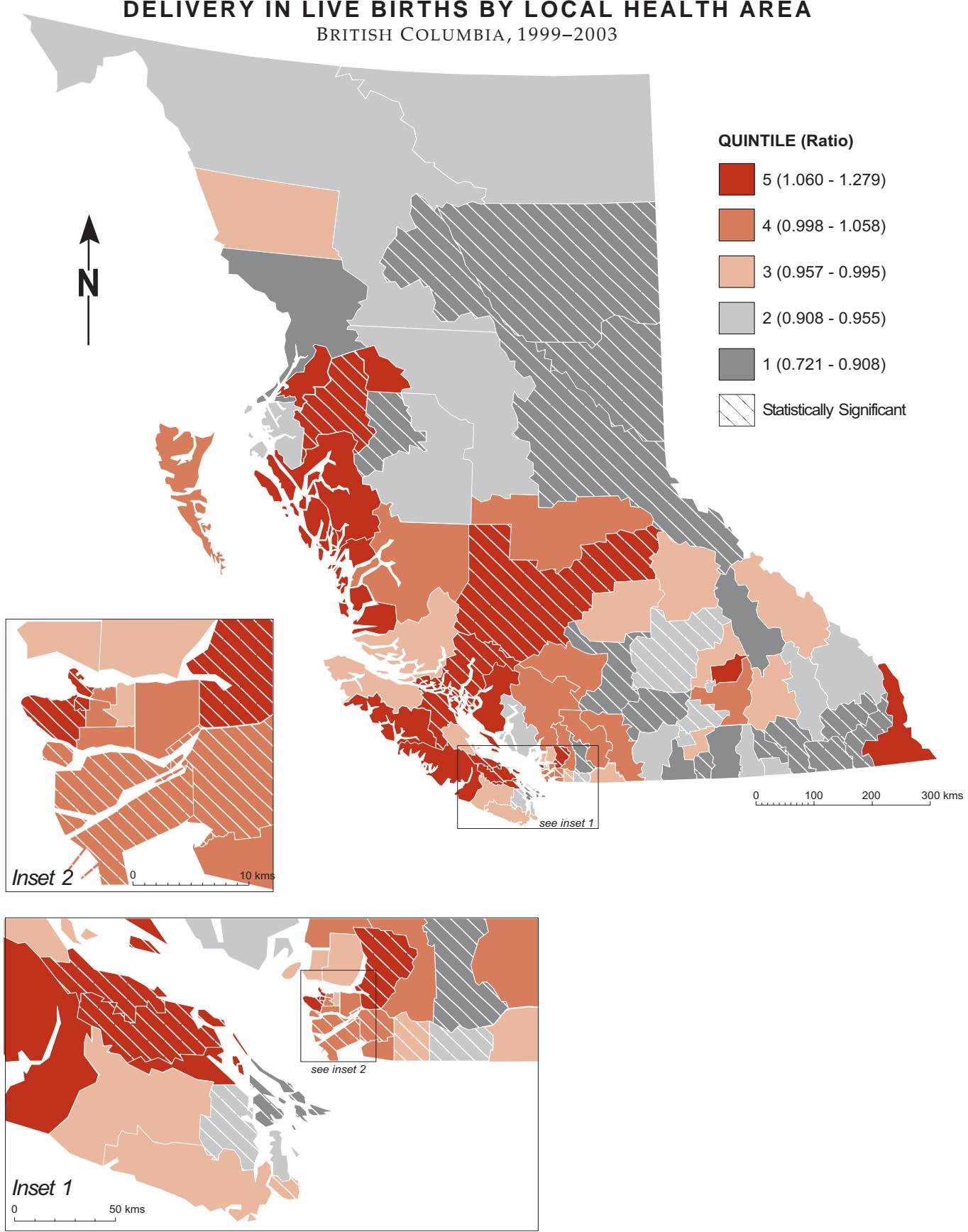
MATERNAL COMPLICATIONS OF PREGNANCY AND DELIVERY IN LIVE BIRTHS BY LOCAL HEALTH AREA,  
BRITISH COLUMBIA, 1999–2003 AND 2004

Table 18

Local Health Area	1999–2003				2004				
	Observed Births	Ratio (p)	Percent	Total Live Births	Observed Births	Expected Births	Ratio (p)	Percent	Total Live Births
001 Fernie	330	1.08	54.2	609	74	63.7	1.16	60.7	122
002 Cranbrook	417	0.72	*	36.3	1,150	91	108.0	0.84	44.0
003 Kimberley	115	0.81	*	40.8	282	28	29.7	0.94	49.1
004 Windermere	154	0.93	*	47.0	328	37	38.1	0.97	50.7
005 Creston	265	0.78	*	39.4	673	42	52.7	0.80	41.6
006 Kootenay Lake	83	0.95	*	47.7	174	12	20.4	0.59	30.8
007 Nelson	402	0.74	*	37.3	1,079	80	119.5	0.67	*
009 Castlegar	219	0.87	*	43.5	503	35	41.7	0.84	43.8
010 Arrow Lakes	102	0.99	50.0	204	12	18.3	0.66	34.3	35
011 Trail	353	0.95	47.6	742	64	62.6	1.02	53.3	120
012 Grand Forks	149	0.94	47.5	314	28	38.6	0.73	37.8	74
013 Kettle Valley	53	0.82	41.1	129	8	16.7	0.48	*	25.0
014 Southern Okanagan	288	0.88	*	44.2	652	63	66.8	0.94	49.2
015 Penticton	734	0.97	48.7	1,508	146	141.4	1.03	53.9	271
016 Keremeos	95	0.91	45.7	208	18	15.1	1.19	62.1	29
017 Princeton	63	0.94	47.4	133	10	12.0	0.83	43.5	23
018 Golden	173	0.99	49.9	347	30	27.7	1.08	56.6	53
019 Revelstoke	172	0.90	45.3	380	42	41.2	1.02	53.2	79
020 Salmon Arm	550	0.98	49.2	1,118	125	110.1	1.14	59.2	211
021 Armstrong - Spallumcheen	189	0.95	47.6	397	36	38.1	0.95	49.3	73
022 Vernon	1,306	1.00	50.5	2,585	296	273.5	1.08	56.5	524
023 Central Okanagan	3,069	0.91	*	45.7	6,718	677	704.0	0.96	50.2
024 Kamloops	2,094	0.94	*	47.2	4,440	441	475.9	0.93	48.4
025 100 Mile House	276	0.99	49.6	557	49	56.4	0.87	45.4	108
026 North Thompson	118	0.99	50.0	236	21	23.5	0.89	46.7	45
027 Cariboo - Chilcotin	862	1.08	*	54.5	1,583	160	145.1	1.10	57.6
028 Quesnel	616	1.00	50.4	1,223	107	117.4	0.91	47.6	225
029 Lillooet	151	1.00	50.3	300	27	26.6	1.01	52.9	51
030 South Cariboo	119	0.83	*	41.8	285	22	28.2	0.78	40.7
031 Merritt	230	0.87	*	43.6	528	45	54.8	0.82	42.9
032 Hope	193	1.01	50.9	379	35	38.1	0.92	47.9	73
033 Chilliwack	1,974	0.96	48.5	4,072	462	479.6	0.96	50.3	919
034 Abbotsford	3,713	0.93	*	46.6	7,961	770	825.6	0.93	48.7
035 Langley	2,980	0.96	*	48.5	6,149	609	641.4	0.95	49.6
037 Delta	2,672	1.06	*	53.1	5,034	528	499.9	1.06	55.1
038 Richmond	4,131	1.06	*	53.2	7,770	817	810.4	1.01	52.6
040 New Westminster	1,705	1.06	*	53.2	3,207	347	325.1	1.07	55.7
041 Burnaby	5,164	1.00	50.2	10,290	1,025	1,062.0	0.97	50.4	2,035
042 Maple Ridge	2,263	1.04	52.2	4,332	530	497.3	1.07	55.6	953
043 Coquitlam	5,650	1.06	*	53.3	10,600	1,147	1,072.9	1.07	*
044 North Vancouver	3,179	0.97	49.0	6,492	684	704.0	0.97	50.7	1,349
045 West Vancouver-Bowen Is.	749	0.97	48.9	1,531	133	145.6	0.91	47.7	279
046 Sunshine Coast	452	0.93	46.9	963	59	81.4	0.72	*	37.8
047 Powell River	416	1.07	54.0	771	74	69.9	1.06	55.2	134
048 Howe Sound	1,032	1.05	52.6	1,961	222	213.4	1.04	54.3	409
049 Bella Coola Valley	132	1.05	52.6	251	21	24.5	0.86	44.7	47
050 Queen Charlotte	175	1.06	53.2	329	38	33.9	1.12	58.5	65
051 Snow Country	21	0.89	44.7	47	4	2.6	1.53	80.0	5
052 Prince Rupert	500	0.92	46.3	1,079	71	90.3	0.79	*	41.0
053 Upper Skeena	203	1.08	54.3	374	45	36.5	1.23	64.3	70
054 Smithers	543	0.90	*	45.1	1,205	106	115.3	0.92	48.0
055 Burns Lake	215	0.95	47.6	452	49	47.5	1.03	53.8	91
056 Nechako	543	0.94	47.1	1,152	111	114.8	0.97	50.5	220
057 Prince George	2,430	0.90	*	45.1	5,394	497	539.6	0.92	48.1
059 Peace River South	637	0.87	*	43.9	1,450	103	141.9	0.73	*
060 Peace River North	981	0.81	*	40.8	2,402	201	259.4	0.77	*
061 Greater Victoria	4,118	0.96	*	48.1	8,559	921	927.3	0.99	51.8
062 Sooke	1,377	0.97	49.0	2,812	324	307.9	1.05	54.9	590
063 Saanich	952	0.95	47.6	1,999	190	205.1	0.93	48.3	393
064 Gulf Islands	184	0.80	*	40.1	459	32	39.1	0.82	42.7
065 Cowichan	1,132	0.92	*	46.2	2,450	218	261.4	0.83	*
066 Lake Cowichan	115	0.99	50.0	230	25	26.1	0.96	50.0	50
067 Ladysmith	384	1.10	55.1	697	83	71.5	1.16	60.6	137
068 Nanaimo	2,582	1.28	*	64.3	4,015	534	429.5	1.24	*
069 Qualicum	745	1.26	*	63.3	1,177	131	116.4	1.13	58.7
070 Alberni	801	1.07	53.8	1,490	175	152.4	1.15	59.9	292
071 Courtenay	1,188	0.99	50.0	2,375	237	242.7	0.98	51.0	465
072 Campbell River	1,103	1.16	*	58.2	1,895	191	170.1	1.12	58.6
075 Mission	962	0.90	*	45.1	2,133	192	219.7	0.87	45.6
076 Agassiz - Harrison	208	1.02	51.2	406	44	52.2	0.84	44.0	100
077 Summerland	181	0.95	48.0	377	29	34.4	0.84	43.9	66
078 Enderby	162	1.09	54.7	296	30	30.8	0.97	50.8	59
080 Kitimat	315	1.08	54.4	579	50	48.5	1.03	53.8	93
081 Fort Nelson	215	0.94	47.3	455	63	56.9	1.11	57.8	109
083 Central Coast	70	1.15	57.9	121	12	11.5	1.05	54.5	22
084 Vancouver Island West	95	1.12	56.5	168	17	18.8	0.90	47.2	36
085 Vancouver Island North	419	0.99	49.8	841	72	78.8	0.91	47.7	151
087 Stikine	20	0.95	47.6	42	2	2.1	0.96	50.0	4
088 Terrace	754	1.08	*	54.4	1,386	126	127.9	0.99	51.4
092 Nisga'a	80	1.07	54.1	148	17	13.6	1.25	65.4	26
094 Telegraph Creek	23	0.97	48.9	47	6	4.2	1.44	75.0	8
161 Vancouver - City Centre	2,163	1.15	*	57.8	3,739	512	428.4	1.20	*
162 Vancouver - Downtown E.side	1,189	1.04	52.2	2,279	247	238.5	1.04	54.0	457
163 Vancouver - North East	2,810	0.99	49.6	5,669	555	562.0	0.99	51.5	1,077
164 Vancouver - Westside	2,914	1.10	*	55.1	5,286	544	538.0	1.01	52.8
165 Vancouver - Midtown	2,694	1.03	51.8	5,198	526	506.7	1.04	54.2	971
166 Vancouver - South	3,233	1.02	51.2	6,314	677	670.1	1.01	52.7	1,284
201 Surrey	11,194	1.02	*	51.5	21,733	2,429	2,314.4	1.05	*
202 South Surrey/White Rock	1,210	1.01	50.9	2,378	314	291.2	1.08	56.3	558
<b>PROVINCIAL TOTAL</b>		<b>101,999</b>	<b>1.00</b>	<b>50.3</b>	<b>202,804</b>	<b>21,040</b>	<b>21,040.0</b>	<b>1.00</b>	<b>52.2</b>
									<b>40,318</b>

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. Non-residents are excluded.

FIGURE 33  
**MATERNAL COMPLICATIONS OF PREGNANCY AND  
DELIVERY IN LIVE BIRTHS BY LOCAL HEALTH AREA**  
BRITISH COLUMBIA, 1999–2003



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

### HIGHLIGHTS TO TABLE 18/FIGURE 33

- There were four Local Health Areas (LHAs) with maternal complication ratios that were statistically significant and high in 2004 (number of births with maternal complications in parentheses):

068	Nanaimo	(534)	1.24
161	Vancouver-City Centre	(512)	1.20
043	Coquitlam	(1,147)	1.07
201	Surrey	(2,429)	1.05

- All of the above LHAs also had statistically significant high ratios for the 1999-2003 period.
- There were seven LHAs with maternal complication ratios that were statistically significant and low in 2004. The seven LHAs with the lowest ratios that were statistically significant (number of births with maternal complications in parentheses) were:

013	Kettle Valley	(8)	0.48
007	Nelson	(80)	0.67
046	Sunshine Coast	(59)	0.72
059	Peace River South	(103)	0.73
060	Peace River North	(201)	0.77
052	Prince Rupert	(71)	0.79
065	Cowichan	(218)	0.83

- Nelson, Peace River South, Peace River North, and Cowichan also had statistically significant and low ratios for 1999-2003.
- There were 12 LHAs with statistically significant and high maternal complication ratios in 1999-2003. The five LHAs with the highest ratios that were statistically significant (number of births with maternal complications in parentheses) were:

068	Nanaimo	(2,582)	1.28
069	Qualicum	(745)	1.26
072	Campbell River	(1,103)	1.16
161	Vancouver-City Centre	(2,163)	1.15
164	Vancouver-Westside	(2,914)	1.10

- There were 20 LHAs with statistically significant and low maternal complication ratios in 1999-2003. The six LHAs with the lowest ratios that were statistically significant (number of births with maternal complications in parentheses) were:

002	Cranbrook	(417)	0.72
007	Nelson	(402)	0.74
005	Creston	(265)	0.78
064	Gulf Islands	(184)	0.80
060	Peace River North	(981)	0.81
003	Kimberley	(115)	0.81

**TABLE 19**  
**PERINATAL COMPLICATIONS IN LIVE BIRTHS BY AGE OF MOTHER**  
 BRITISH COLUMBIA, 1999–2003 AND 2004

Perinatal Complications	ICD-10 Code	1999–2003		2004					2004 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	49	0.1	2	8	3	-	-	13	0.1
Complications of pregnancy, labour and delivery	P01, P03	14,412	15.9	68	938	1,219	121	-	2,346	13.0
Fetus/newborn affected by complications of placenta, cord and membranes	P02	3,788	4.2	30	320	355	45	-	750	4.2
Fetus affected by noxious influences transmitted via placenta or breast milk	P04	46	0.1	-	-	-	-	-	-	-
Slow fetal growth and malnutrition	P05	4,341	4.8	17	294	324	37	-	672	3.7
Perinatal disorders related to short gestation	P072, P073	13,392	14.8	128	1,210	1,515	138	-	2,991	16.6
Disorders related to long gestation or high birth weight	P08	9,020	10.0	87	1,182	1,418	108	-	2,795	15.5
Perinatal birth trauma	P10-P15	319	0.4	5	35	18	3	-	61	0.3
Intrauterine hypoxia and birth asphyxia	P20-P21	43,805	48.4	395	3,630	3,800	326	-	8,151	45.3
Respiratory conditions of fetus and newborn	P22-P28	775	0.9	8	58	55	4	-	125	0.7
Infections specific to the perinatal period	P35-P39	54	0.1	-	5	6	-	-	11	0.1
Fetal and neonatal hemorrhage	P50-P52, P54	111	0.1	1	12	6	1	-	20	0.1
Perinatal jaundice/other hematological disorders	P53, P55-P61	63	0.1	-	2	3	-	-	5	0.0
Perinatal endocrine and metabolic disorders	P70-P74	37	0.0	-	1	1	2	-	4	0.0
Digestive system disorders of fetus and newborn	P76-P78	5	0.0	-	1	-	-	-	1	0.0
Perinatal conditions of the integument and of temperature regulation	P80-P83	111	0.1	1	12	17	-	-	30	0.2
Other disorders originating in the perinatal period	P29, P90-P96	215	0.2	1	13	15	1	-	30	0.2
<b>All Perinatal Complications</b>		<b>90,543</b>	<b>100.0</b>	<b>743</b>	<b>7,721</b>	<b>8,755</b>	<b>786</b>	<b>-</b>	<b>18,005</b>	<b>100.0</b>
<b>Live births with the above perinatal complications</b>	<b>- Number</b>	<b>70,274</b>		<b>583</b>	<b>5,939</b>	<b>6,762</b>	<b>573</b>	<b>-</b>	<b>13,857</b>	
	<b>- Percent(*)</b>	<b>34.7</b>		<b>40.9</b>	<b>34.7</b>	<b>33.5</b>	<b>36.5</b>			<b>34.4</b>

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.

#### HIGHLIGHTS TO TABLE 19

- There were 18,005 perinatal complications noted in 13,857 live births or one in three live births (34.4%) in 2004. These complications were noted in 34.7% of live births in 1999–2003.
- The proportion of births that had perinatal complications was highest (40.9%) in births to teenage mothers. Perinatal complications occurred in 34.7% of live births to mothers aged 20–29, 33.5% of live births to mothers aged 30–39, and 36.5% of live births to mothers 40 years of age and older.
- Intrauterine hypoxia and birth asphyxia accounted for almost half the perinatal complications (45.3% in 2004 and 48.4% in 1999–2003). The next largest categories of perinatal complications in 2004 were short gestation (16.6%), long gestation and high birth weight (15.5%), and complications of pregnancy, labour and delivery (13.0%).

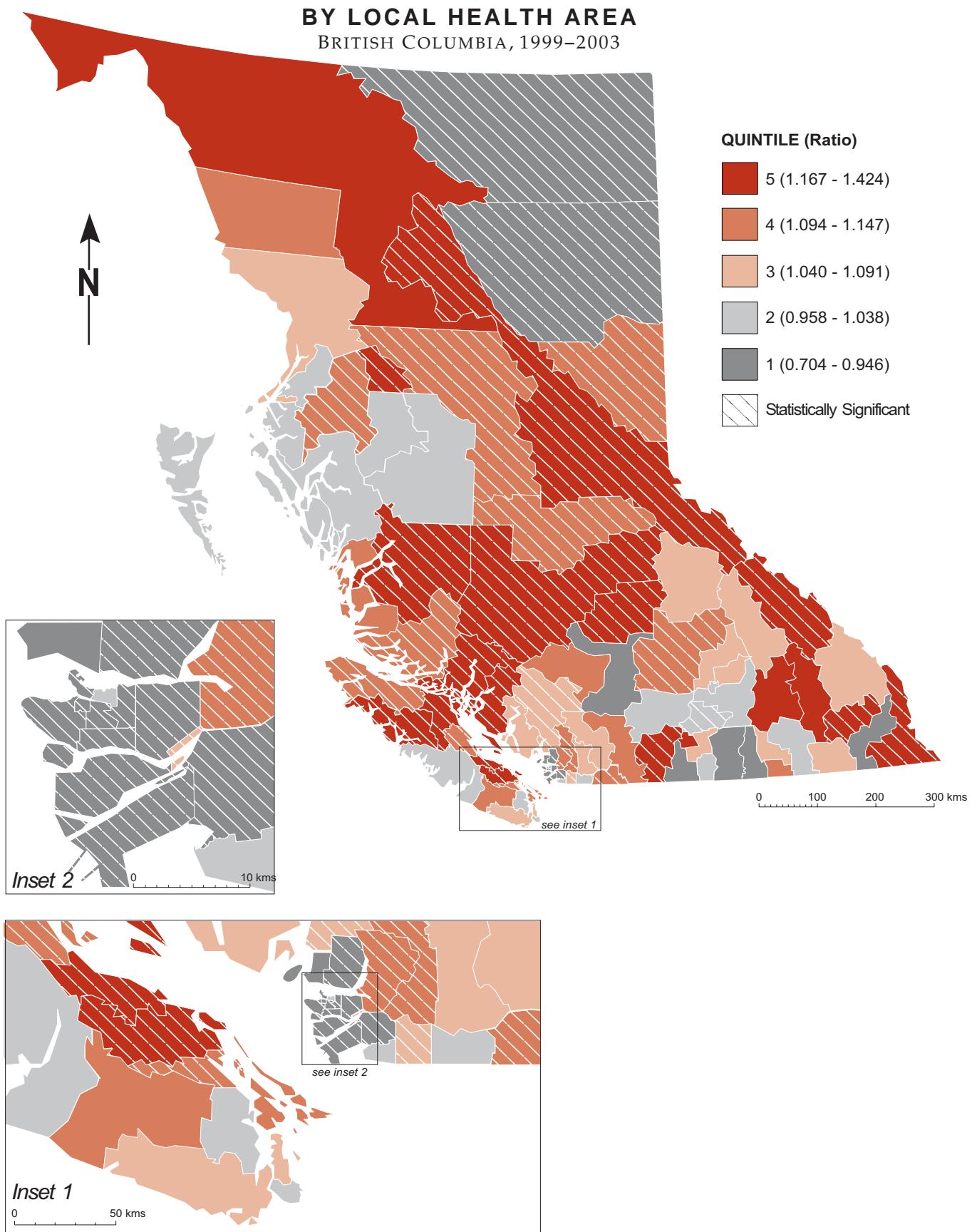
**PERINATAL COMPLICATIONS IN LIVE BIRTHS BY LOCAL HEALTH AREA,  
BRITISH COLUMBIA, 1999-2003 AND 2004**

**Table 20**

Local Health Area	1999-2003				2004					
	Observed Births	Ratio(p)	Percent	Total Live Births	Observed Births	Expected Births	Ratio(p)	Percent	Total Live Births	
001 Fernie	267	1.27 *	43.8	609	57	41.9	1.36 *	46.7	122	
002 Cranbrook	365	0.92	31.7	1,150	68	71.1	0.96	32.9	207	
003 Kimberley	119	1.22 *	42.2	282	17	19.6	0.87	29.8	57	
004 Windermere	122	1.07	37.2	328	29	25.1	1.16	39.7	73	
005 Creston	254	1.09	37.7	673	41	34.7	1.18	40.6	101	
006 Kootenay Lake	71	1.18	40.8	174	19	13.4	1.42	48.7	39	
007 Nelson	366	0.98	33.9	1,079	88	78.7	1.12	38.4	229	
009 Castlegar	189	1.08	37.6	503	30	27.5	1.09	37.5	80	
010 Arrow Lakes	84	1.19	41.2	204	10	12.0	0.83	28.6	35	
011 Trail	287	1.12	38.7	742	44	41.2	1.07	36.7	120	
012 Grand Forks	97	0.89	30.9	314	22	25.4	0.87	29.7	74	
013 Kettle Valley	40	0.89	31.0	129	5	11.0	0.45	15.6	32	
014 Southern Okanagan	222	0.98	34.0	652	41	44.0	0.93	32.0	128	
015 Penticton	561	1.07	37.2	1,508	108	93.1	1.16	39.9	271	
016 Keremeos	67	0.93	32.2	208	14	10.0	1.40	48.3	29	
017 Princeton	62	1.35 *	46.6	133	7	7.9	0.89	30.4	23	
018 Golden	145	1.21 *	41.8	347	33	18.2	1.81 *	62.3	53	
019 Revelstoke	137	1.04	36.1	380	33	27.2	1.22	41.8	79	
020 Salmon Arm	406	1.05	36.3	1,118	93	72.5	1.28 *	44.1	211	
021 Armstrong - Spallumcheen	140	1.02	35.3	397	21	25.1	0.84	28.8	73	
022 Vernon	908	1.01	35.1	2,585	196	180.1	1.09	37.4	524	
023 Central Okanagan	2,229	0.96 *	33.2	6,718	475	463.6	1.02	35.2	1,349	
024 Kamloops	1,690	1.10 *	38.1	4,440	333	313.4	1.06	36.5	912	
025 100 Mile House	249	1.29 *	44.7	557	44	37.1	1.19	40.7	108	
026 North Thompson	89	1.09	37.7	236	15	15.5	0.97	33.3	45	
027 Cariboo - Chilcotin	744	1.36 *	47.0	1,583	129	95.5	1.35 *	46.4	278	
028 Quesnel	482	1.14 *	39.4	1,223	96	77.3	1.24 *	42.7	225	
029 Lillooet	115	1.11	38.3	300	25	17.5	1.43	49.0	51	
030 South Cariboo	93	0.94	32.6	285	23	18.6	1.24	42.6	54	
031 Merritt	190	1.04	36.0	528	36	36.1	1.00	34.3	105	
032 Hope	149	1.13	39.3	379	30	25.1	1.20	41.1	73	
033 Chilliwack	1,580	1.12 *	38.8	4,072	370	315.9	1.17 *	40.3	919	
034 Abbotsford	2,743	0.99	34.5	7,961	532	543.7	0.98	33.6	1,582	
035 Langley	2,274	1.07 *	37.0	6,149	478	422.4	1.13 *	38.9	1,229	
037 Delta	1,557	0.89 *	30.9	5,034	304	329.3	0.92	31.7	958	
038 Richmond	2,259	0.84 *	29.1	7,770	454	533.8	0.85 *	29.2	1,553	
040 New Westminster	1,212	1.09 *	37.8	3,207	252	214.1	1.18 *	40.4	623	
041 Burnaby	3,162	0.89 *	30.7	10,290	583	699.4	0.83 *	28.6	2,035	
042 Maple Ridge	1,671	1.11 *	38.6	4,332	356	327.5	1.09	37.4	953	
043 Coquitlam	4,019	1.09 *	37.9	10,600	737	706.6	1.04	35.8	2,056	
044 North Vancouver	2,103	0.93 *	32.4	6,492	441	463.6	0.95	32.7	1,349	
045 West Vancouver-Bowen Is.	492	0.93	32.1	1,531	73	95.9	0.76 *	26.2	279	
046 Sunshine Coast	353	1.06	36.7	963	57	53.6	1.06	36.5	156	
047 Powell River	314	1.18 *	40.7	771	50	46.1	1.09	37.3	134	
048 Howe Sound	738	1.09 *	37.6	1,961	132	140.6	0.94	32.3	409	
049 Bella Coola Valley	111	1.28 *	44.2	251	22	16.2	1.36	46.8	47	
050 Queen Charlotte	111	0.97	33.7	329	34	22.3	1.52 *	52.3	65	
051 Snow Country	17	1.04	36.2	47	2	1.7	1.16	40.0	5	
052 Prince Rupert	371	0.99	34.4	1,079	51	59.5	0.86	29.5	173	
053 Upper Skeena	169	1.30 *	45.2	374	36	24.1	1.50 *	51.4	70	
054 Smithers	416	1.00	34.5	1,205	69	76.0	0.91	31.2	221	
055 Burns Lake	158	1.01	35.0	452	37	31.3	1.18	40.7	91	
056 Nechako	444	1.11 *	38.5	1,152	77	75.6	1.02	35.0	220	
057 Prince George	2,181	1.17 *	40.4	5,394	438	355.4	1.23 *	42.4	1,034	
059 Peace River South	552	1.10 *	38.1	1,450	111	93.5	1.19	40.8	272	
060 Peace River North	710	0.85 *	29.6	2,402	147	170.8	0.86	29.6	497	
061 Greater Victoria	2,936	0.99	34.3	8,559	615	610.7	1.01	34.6	1,777	
062 Sooke	1,027	1.05	36.5	2,812	222	202.8	1.09	37.6	590	
063 Saanich	739	1.07	37.0	1,999	152	135.1	1.13	38.7	393	
064 Gulf Islands	174	1.09	37.9	459	24	25.8	0.93	32.0	75	
065 Cowichan	837	0.99	34.2	2,450	198	172.2	1.15 *	39.5	501	
066 Lake Cowichan	89	1.12	38.7	230	18	17.2	1.05	36.0	50	
067 Ladysmith	277	1.15 *	39.7	697	59	47.1	1.25	43.1	137	
068 Nanaimo	1,980	1.42 *	49.3	4,015	369	282.9	1.30 *	44.8	823	
069 Qualicum	573	1.40 *	48.7	1,177	91	76.6	1.19	40.8	223	
070 Alberni	534	1.03	35.8	1,490	118	100.4	1.18	40.4	292	
071 Courtenay	921	1.12 *	38.8	2,375	196	159.8	1.23 *	42.2	465	
072 Campbell River	871	1.33 *	46.0	1,895	127	112.0	1.13	39.0	326	
075 Mission	788	1.07	36.9	2,133	161	144.7	1.11	38.2	421	
076 Agassiz - Harrison	152	1.08	37.4	406	32	34.4	0.93	32.0	100	
077 Summerland	153	1.17	40.6	377	24	22.7	1.06	36.4	66	
078 Enderby	107	1.04	36.1	296	20	20.3	0.99	33.9	59	
080 Kitimat	200	1.00	34.5	579	46	32.0	1.44 *	49.5	93	
081 Fort Nelson	111	0.70 *	24.4	455	27	37.5	0.72	24.8	109	
083 Central Coast	46	1.10	38.0	121	7	7.6	0.93	31.8	22	
084 Vancouver Island West	78	1.34 *	46.4	168	18	12.4	1.45	50.0	36	
085 Vancouver Island North	328	1.13 *	39.0	841	62	51.9	1.19	41.1	151	
087 Stikine	17	1.17	40.5	42	3	1.4	2.18	75.0	4	
088 Terrace	539	1.12 *	38.9	1,386	97	84.2	1.15	39.6	245	
092 Nisga'a	50	0.97	33.8	148	10	8.9	1.12	38.5	26	
094 Telegraph Creek	18	1.11	38.3	47	2	2.7	0.73	25.0	8	
161 Vancouver - City Centre	1,225	0.95 *	32.8	3,739	251	282.2	0.89	30.6	821	
162 Vancouver - Downtown E.side	777	0.98	34.1	2,279	149	157.1	0.95	32.6	457	
163 Vancouver - North East	1,597	0.81 *	28.2	5,669	302	370.2	0.82 *	28.0	1,077	
164 Vancouver - Westside	1,713	0.94 *	32.4	5,286	308	354.3	0.87 *	29.9	1,031	
165 Vancouver - Midtown	1,576	0.87 *	30.3	5,198	284	333.7	0.85 *	29.2	971	
166 Vancouver - South	1,852	0.85 *	29.3	6,314	328	441.3	0.74 *	25.5	1,284	
201 Surrey	6,486	0.86 *	29.8	21,733	1,332	1,524.3	0.87 *	30.0	4,435	
202 South Surrey/White Rock	842	1.02	35.4	2,378	180	191.8	0.94	32.3	558	
<b>PROVINCIAL TOTAL</b>		<b>70,274</b>	<b>1.00</b>	<b>34.7</b>	<b>202,804</b>	<b>13,857</b>	<b>13,857.0</b>	<b>1.00</b>	<b>34.4</b>	<b>40,318</b>

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

FIGURE 34  
**PERINATAL COMPLICATIONS IN LIVE BIRTHS  
 BY LOCAL HEALTH AREA**  
 BRITISH COLUMBIA, 1999–2003



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

### **HIGHLIGHTS TO TABLE 20/FIGURE 34**

- There were 15 Local Health Areas (LHAs) with statistically significant and high perinatal complication ratios in 2004. The five LHAs with the highest ratios that were statistically significant (number of births with perinatal complications in parentheses) were:

018	Golden	(33)	1.81
050	Queen Charlotte	(34)	1.52
053	Upper Skeena	(36)	1.50
080	Kitimat	(46)	1.44
001	Fernie	(57)	1.36

- Golden, Upper Skeena, and Fernie also had statistically significant and high ratios for the 1999-2003 period.
- The eight LHAs that had statistically significant and low perinatal complication ratios in 2004 (number of births with perinatal complications in parentheses) were:

166	Vancouver-South	(328)	0.74
045	West Vancouver-Bowen Island	(73)	0.76
163	Vancouver-North East	(302)	0.82
041	Burnaby	(583)	0.83
038	Richmond	(454)	0.85
165	Vancouver-Midtown	(284)	0.85
201	Surrey	(1,332)	0.87
164	Vancouver-Westside	(308)	0.87

- All of the above LHAs except West Vancouver-Bowen Island also had statistically significant and low ratios for 1999-2003.
- There were 28 LHAs with statistically significant and high perinatal complication ratios in 1999-2003. The five LHAs with the highest ratios that were statistically significant (number of births with perinatal complications in parentheses) were:

068	Nanaimo	(1,980)	1.42
069	Qualicum	(573)	1.40
027	Cariboo-Chilcotin	(744)	1.36
017	Princeton	(62)	1.35
084	Vancouver Island West	(78)	1.34

- There were 13 LHAs with statistically significant and low perinatal complication ratios in 1999-2003. The five LHAs with the lowest ratios that were statistically significant (number of births with perinatal complications in parentheses) were:

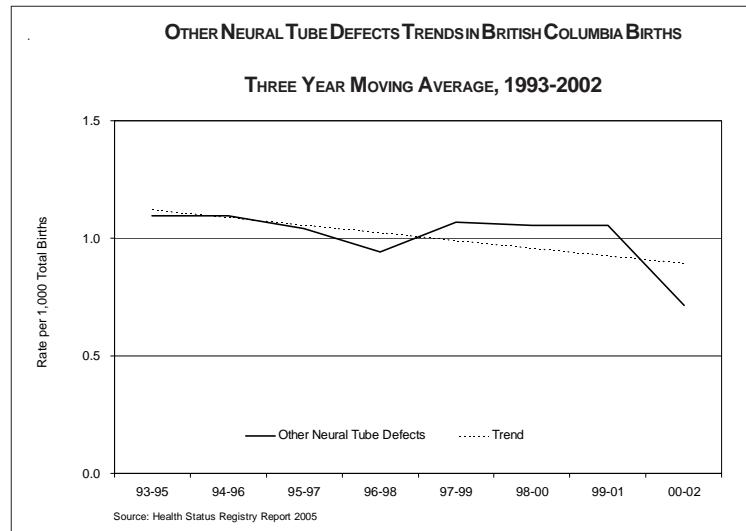
081	Fort Nelson	(111)	0.70
163	Vancouver-North East	(1,597)	0.81
038	Richmond	(2,259)	0.84
166	Vancouver-South	(1,852)	0.85
060	Peace River North	(710)	0.85

## Vital Statistics Information Box

### NEURAL TUBE DEFECTS

**N**eural tube defects (NTDs) are the result of the neural tube failing to close properly during the fourth week of pregnancy, a time when many women may be unaware that they are pregnant. NTDs include anencephaly, the absence of a major portion of the brain, spina bifida, a condition where the spinal column fails to close around the spinal cord, and encephalocele, where the brain protrudes through an opening in the skull. If not stillborn, infants with anencephaly are usually blind, deaf, unconscious, and unable to feel pain; typically these infants die within a few hours or days after birth. The degree of disability from other neural tube defects can range from almost none to paralysis.

One way to reduce the incidence of neural tube defects is to ensure that women who may become pregnant meet the daily-recommended intake of 0.4 mg of folic acid (Vitamin B12) either through diet or vitamin supplements. Since the introduction of folic acid recommendations in 1994 and the introduction of food fortification in 1999, the incidence of other neural tube defects (spina bifida and encephalocele) in British Columbia appears to have fallen, although the decrease from 1993-2002 was not statistically significant. The graph presents data from the Health Status Registry Report 2005, which provides information about neural tube defects, other congenital anomalies, genetic defects, and selected disabilities. The report is available at <http://www.vs.gov.bc.ca/stats/hsr/index.html>.



The Health Status Registry is a partner in the long term national study of the impact of folic acid fortification on the epidemiology of neural tube defects in Canada. Results of this study will be available in a few years.

