

Healthy Moms and Infants

Selected Indicators

Queen Charlotte
Local Health Area 050
(Haida Gwaii)

March 2014



northern health
the northern way of caring

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What Determines Health?

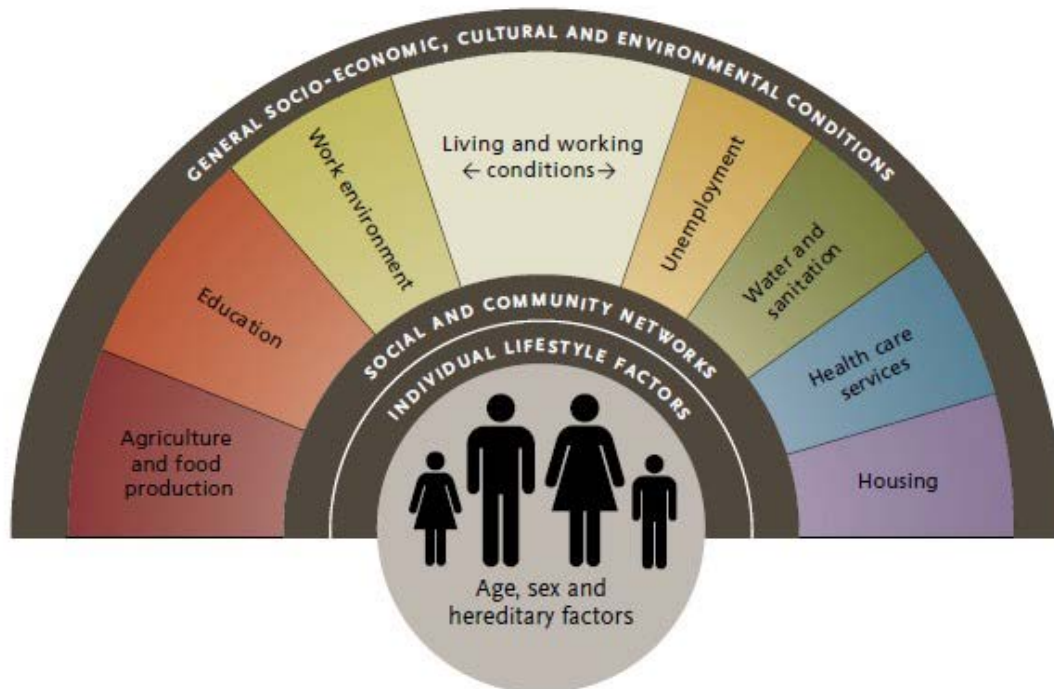


Figure: Health Council of Canada; Stepping it up to a Healthier Canada: 2010.

A good strong start in life; early and enriching experiences; educational opportunities; a sufficient and equitable distribution of employment, income, housing and food; water and sanitation; our interactions with the environment; our choices towards certain lifestyles and risks; our age and sex; genetics; as well as timely access to appropriate high quality health services are just some of the many factors that are known to influence our health.

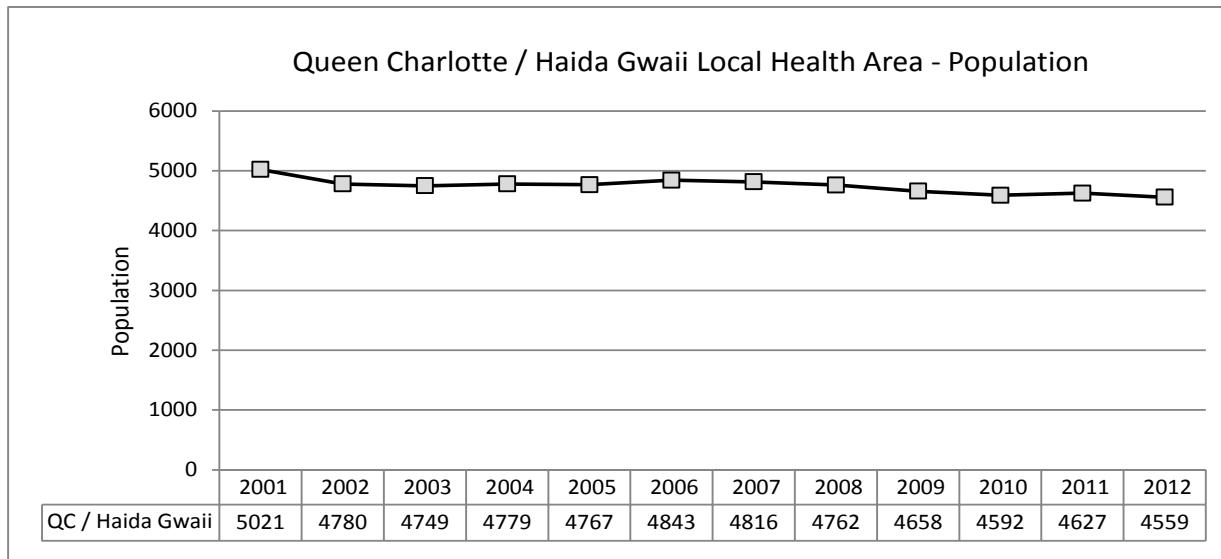
Additional Information (the text below is hyperlinked)

- [World Health Organization: Social Determinants of Health](#)
- [Public Health Agency of Canada: Best Practices Portal](#)
- [Canadian Institute for Health Information: Factors Affecting Health](#)
- [Canadian Institute for Health Information: Health System Performance](#)
- [Health Council of Canada: Stepping it Up to a Healthier Canada.](#)
- [National Collaborating Centre for Aboriginal Health: Social Determinants of Health](#)
- [Northern Health: Community Health Information Portal](#)

Overview

The Queen Charlotte Local Health Area (LHA 050), also known as Haida Gwaii, is a series of islands located on the north coast of British Columbia. This LHA, served by School District No. 50, covers just over 10, 418 square kilometers and is home to approximately 4,559 people.^{1, 2}

These islands are the traditional territories of the Haida peoples and were recently and formally renamed Haida Gwaii to honor this heritage. Today, the Haida people comprise about 35 % of the total population. In fact, the Haida communities of Old Massett and Skidegate are collectively, home to over 1600 people.^{3, 4, 5}



As shown above, the population of the Queen Charlotte LHA has been slowly decreasing over the past decade. It is projected that the population will remain stable at around 4600 persons through to 2030. During this period there will be decreases in the relative contributions of all age groups to the total population, except for the seniors (65+), who are expected to double in their numbers to approximately 1,400 persons by 2030.⁶

Additional Information

Village of Masset <http://www.massetbc.com/>

Village of Port Clements <http://www.portclements.ca/>

Village of Queen Charlotte <http://www.queencharlotte.ca/>

Council of the Haida Nation <http://www.haidanation.ca>

Skeena Queen Charlotte Regional District: <http://www.sqcrd.bc.ca/>

Queen Charlotte Visitor Information Centre <http://www.qcinfo.ca/>

Haida Gwaii Community Futures <http://www.haidaqwaiifutures.ca/>

BC Stats Community Fact Sheets <http://www.bcstats.gov.bc.ca/>

Healthy Moms ⁷

During the 2008/09 - 2012/13 period (5 years) 210 mothers from the Haida Gwaii / Queen Charlottes LHA delivered 213 infants. Here is a health summary for these mothers.

Healthy Mom Indicators	Haida Gwaii LHA		BC Overall	
	Number	%	Number	%
Total Number of Mothers	210	100	217,975	100
Caesarean Section Deliveries	49	23.33	67,170	30.82
Births to women ages \leq 19 yrs (teen moms)	6	2.86	6,422	2.95
Births to women ages > 35 (elderly gravida)	46	21.90	49,809	22.85
Mothers who smoked during pregnancy	40	19.05	18,692	8.58

Caesarean Section Delivery – is a surgical procedure used to deliver a baby through incisions in the abdomen and the uterus. A care provider may recommend a caesarean birth to protect you or your baby if: your cervix does not open completely; labor is not progressing; the baby is too big to fit through your pelvis; the baby is in distress or in a difficult position; you have serious medical condition; or you have an active infection that makes vaginal birth unsafe for the baby. ⁸

A C-section delivery is a delivery option that some women and their physicians choose in advance of the delivery. As an elective procedure it can increase the risk to both mother and infant as it is an invasive surgical operation. There continues to be an active debate in the medical community regarding the appropriateness of many C-section deliveries given that in a large number of cases, a safer natural option exists: vaginal delivery.

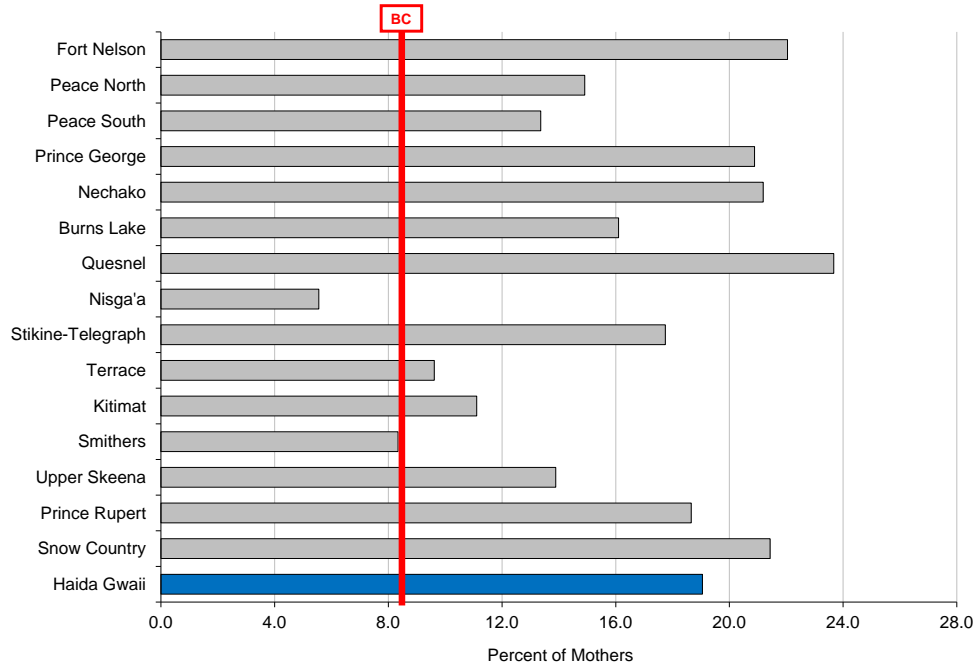
Births to Teen Moms This indicator can provide indirect information about the effectiveness of sexual health education, access to contraceptives and other services for this age group, as it is assumed that most pregnancies among teens are unintended. ⁹ Northern BC mothers have some of the highest teen pregnancy and teen birth rates in BC. ^{10, 11}

Births to Women over the age of 35 years – Women over 35 are considered to be of advanced childbearing age. These moms have an increased risk of having a baby with a disease or condition that is inherited as well as a greater chance of having complications during the pregnancy. Examples of such complications are diabetes, high blood pressure, an increased risk of caesarean birth and an increased risk of miscarriage. ¹²

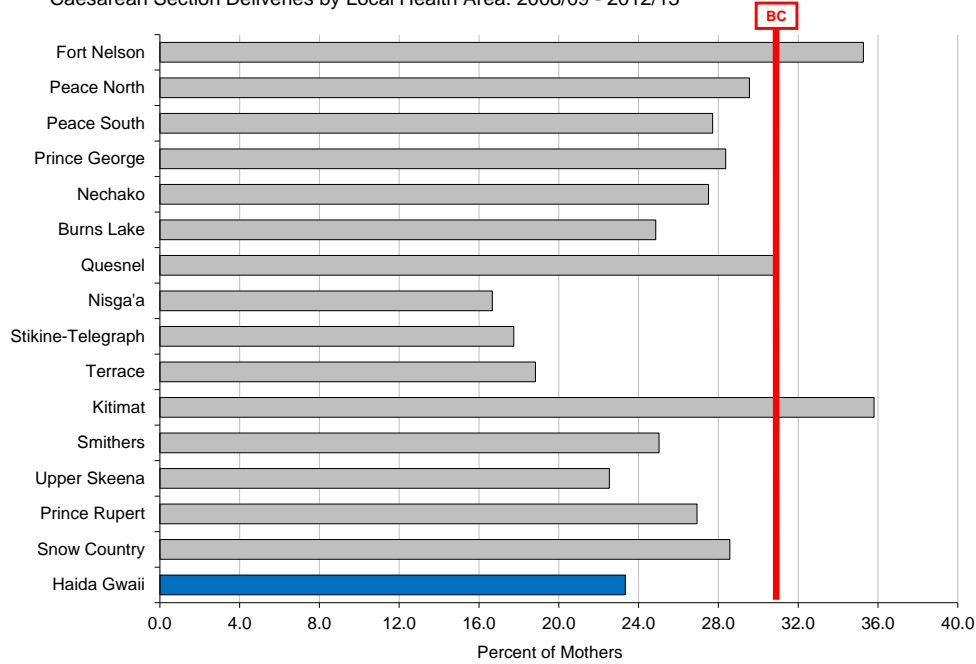
Mothers Who Smoke - Cigarette smoke contains over 4000 chemicals: many of which are very toxic and capable of crossing the placenta and entering a developing baby's blood-stream. ¹³ Exposure to the chemicals in tobacco smoke during pregnancy is associated with adverse outcomes including increased risk of preterm birth, stillbirth, low birth-weight, and placental abruption. ¹⁴ Mothers from Northern BC have the highest "smoking during pregnancy" rates in BC. ¹⁵ In addition, the proportion of mothers identified as smokers and, for whom drugs are a recognized risk factor, is highest amongst northern BC mothers. ¹⁶

Healthy Moms

Mothers who Smoked during Pregnancy by Local Health Area: 2008/09 - 2012/13



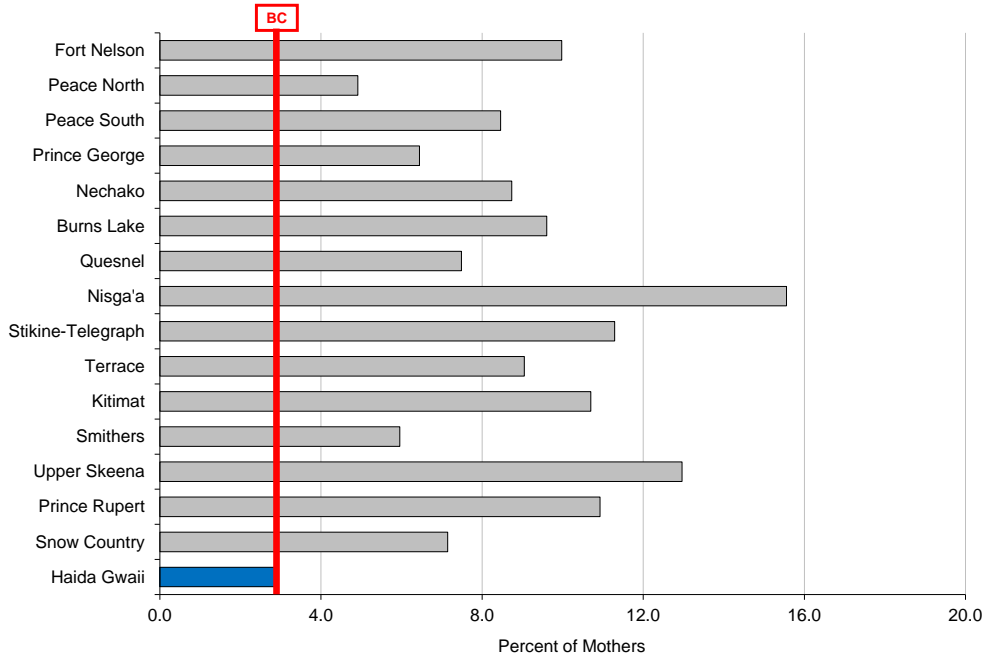
Caesarean Section Deliveries by Local Health Area: 2008/09 - 2012/13



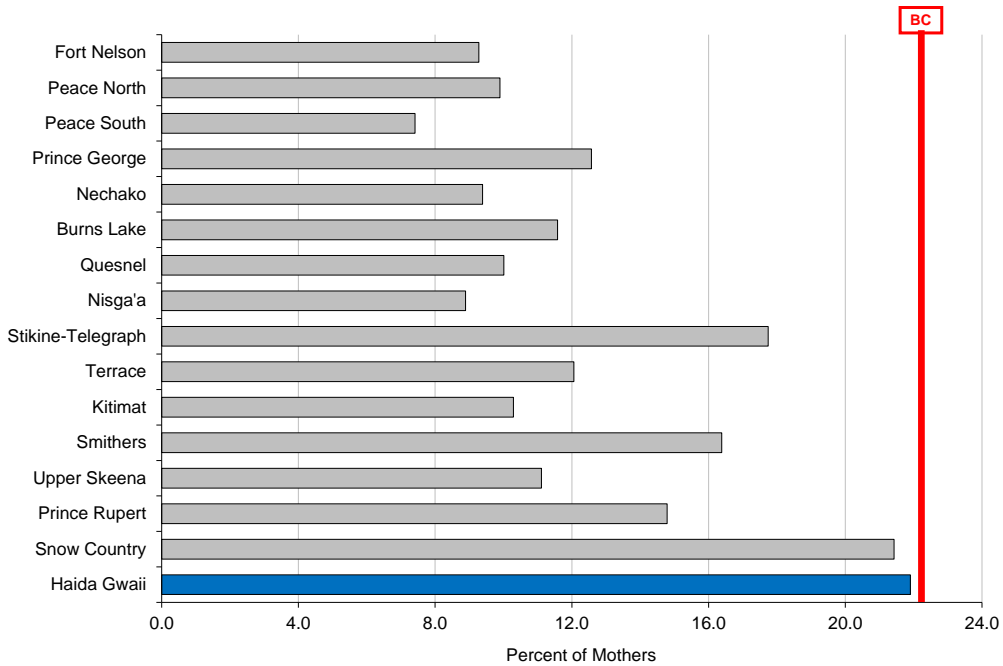
Due to a small number of occurrences, the data for Stikine-Telegraph and Snow Country LHAs should be interpreted with caution. These figures are based upon mother's usual Local Health Area (LHA) of residence, not the facility location where delivery occurred.

Healthy Moms

Teen Moms (births to mothers \leq 19 yrs) by Local Health Area: 2008/09 - 2012/13



Older Moms (births to mothers \geq 35 yrs) by Local Health Area: 2008/09 - 2012/13



Due to a small number of occurrences, the data for Stikine-Telegraph and Snow Country LHAs should be interpreted with caution. These figures are based upon mother's usual Local Health Area (LHA) of residence, not the facility location where delivery occurred.

Healthy Infants ¹⁷

During the 2008/09 - 2012/13 period (5 years) 210 mothers from the Haida-Gwaii / Queen Charlottes LHA delivered 213 Infants. Here is a health summary for these infants.

Healthy Infant Indicators	Haida Gwaii LHA		BC Overall	
	Number	%	Number	%
Total Number of Newborns	213	100	221,526	100
Total Number of Live Births	210	98.59	220,532	99.55
Preterm Births (births before 37 weeks)	15	7.04	21,732	9.81
Low Birth-weight (< 2500 grams)	6	2.82	12,774	5.77
Small for Gestational Age (SGA)	7	3.29	15,089	6.81
High Birth-weight (> 4000 grams)	42	19.72	26,396	11.92
Large for Gestational Age (LGA)	50	23.47	27,897	12.59

Preterm Births are those births where the infant is delivered before 37 weeks gestation. ¹⁸ A preterm delivery is more likely if a woman has: already had a preterm baby; is carrying more than one baby; smokes or is exposed to smoke in pregnancy; does not eat a healthy diet; is using alcohol and/or drugs; works long hours causing fatigue; is physically or emotionally abused; living with a chronic illness, such as diabetes, high blood pressure, heart disease, or kidney disease; and, has a current bladder or kidney infection. ¹⁹

Preterm infants are a concern as these infants may have immature organ systems and other complications at the time of birth. The likelihood of these complications increases as the infants become increasingly premature. ²⁰

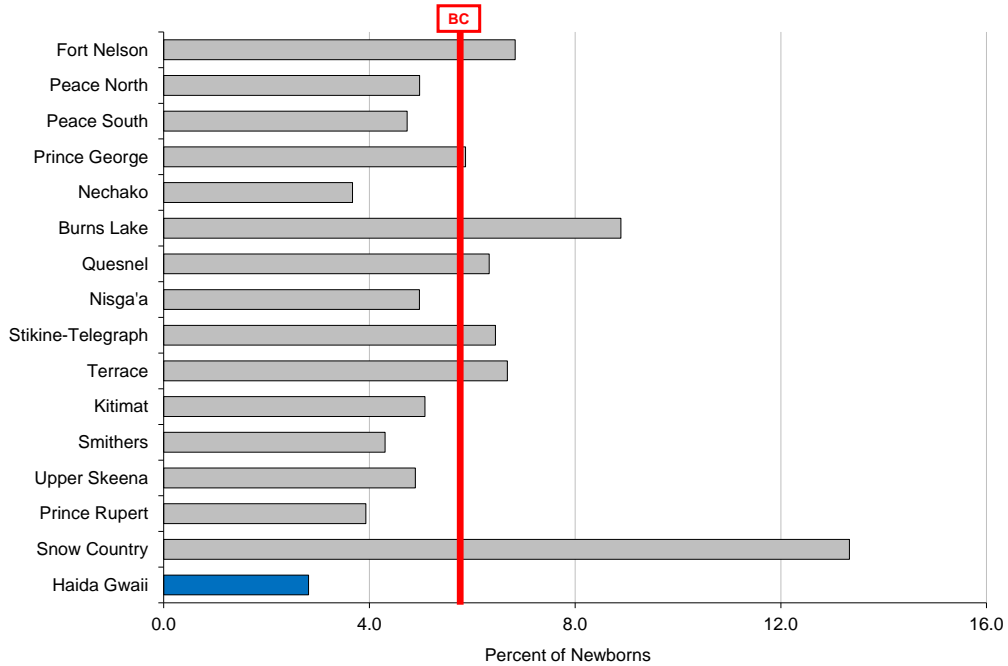
Low birth weight is now the principal risk factor associated with infant mortality, particularly between the ages of 28 to 365 days. Maternal factors that are associated with low birth weight include smoking, poor diet during pregnancy, low weight prior to pregnancy, poverty and pregnancy in very young or very old mothers. ²¹

High Birth-weight deliveries tend to have higher rates of complications due to diabetes, Cephalo-Pelvic Disproportion (CPD) and / or obstructed labor. Shoulder dystocia and asphyxia in the infant are complications that are closely associated with high birth weight babies. ²² In the province of British Columbia, shoulder dystocia in the infant and CPD are some of the most common indications for Cesarean-section deliveries. ²³

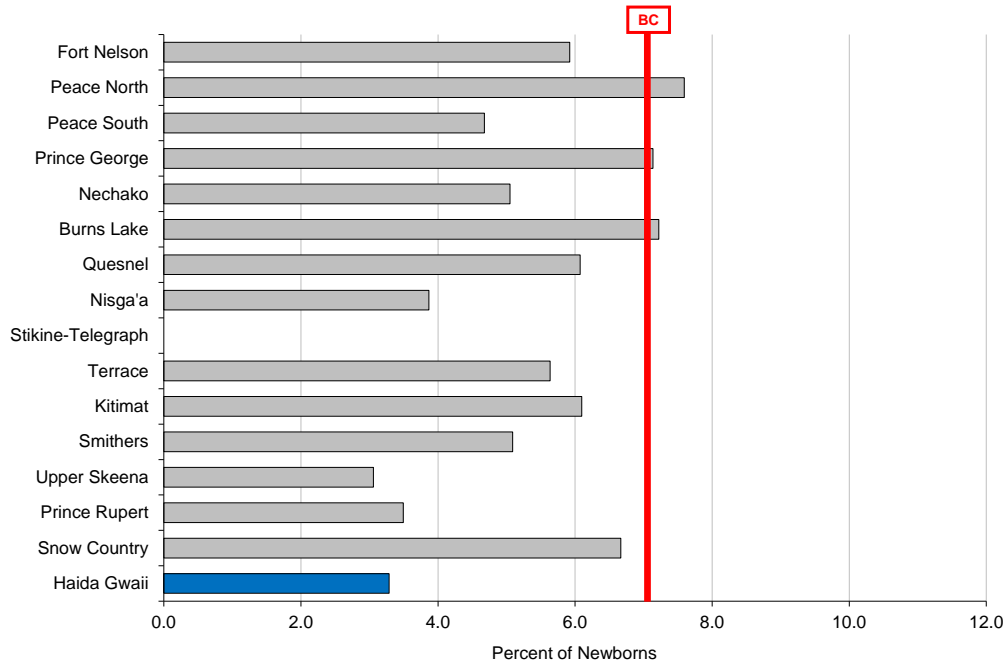
Large or Small for Gestational Age - A normal pregnancy can range from 38 to 42 weeks. During this time, the baby grows and develops inside the mother's womb. Knowing an infant's growth and development relative to the gestational age assists care providers in making various delivery related decisions, such as whether to consider a C-section or if there may be a need for additional supports following delivery such as increased feedings and monitoring. ^{24 25 26}

Healthy Infants

Low Birthweight Infants (≤ 2500 grams) by Local Health Area: 2008/09 - 2012/13



Small for Gestational Age at Birth by Local Health Area: 2008/09 - 2012/13



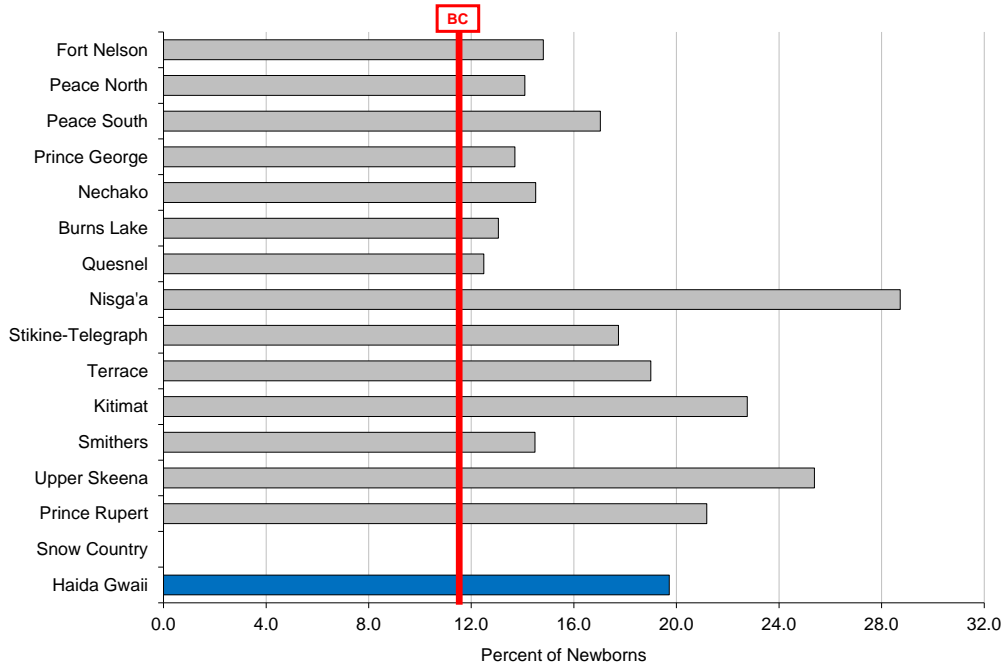
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These figures are based upon mother's usual Local Health Area (LHA) of residence, not the facility location where delivery occurred.

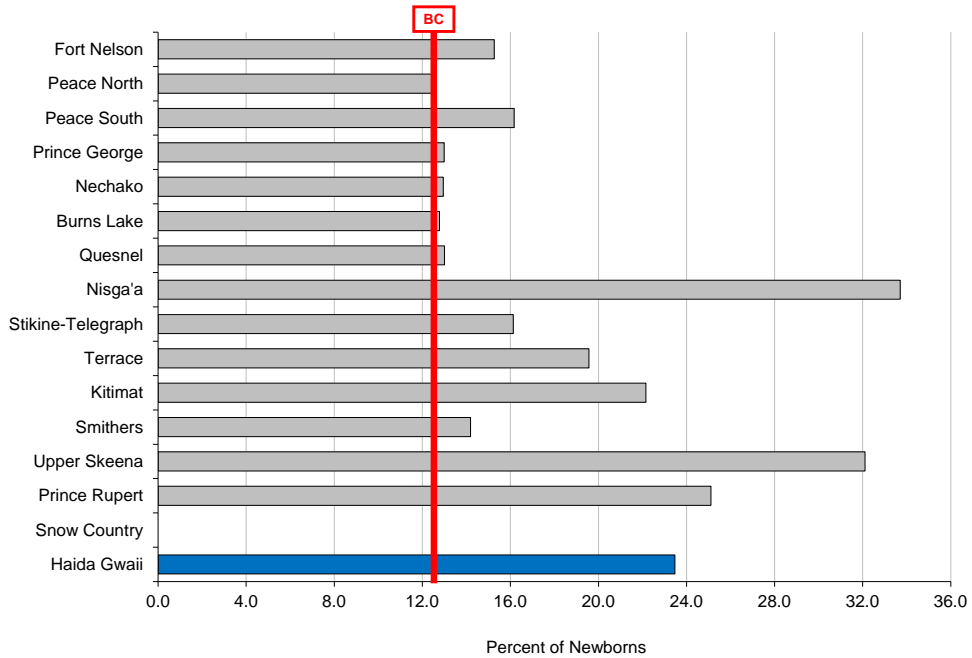
Small or Large for Gestational Age calculation is based on gender, birth number (singleton, multiple) and birth weight / gestational age charts for BC.

Healthy Infants

High Birthweight Infants (> 4000 grams) by Local Health Area: 2008/09 - 2012/13



Large for Gestational Age at Birth by Local Health Area: 2008/09 - 2012/13



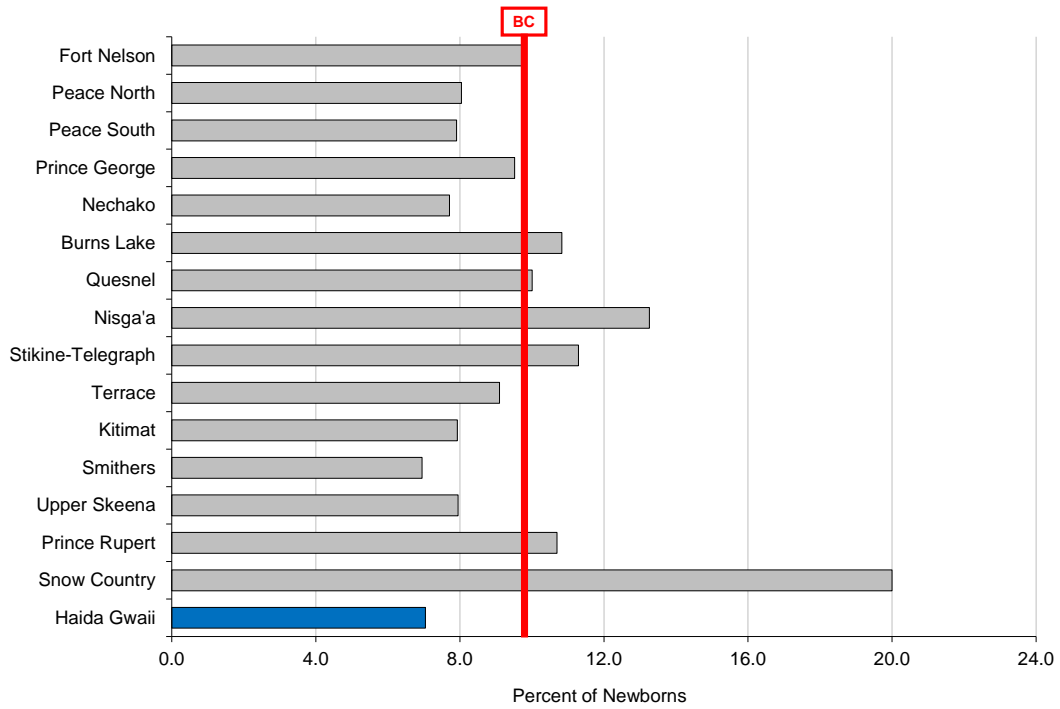
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Small or Large for Gestational Age calculation is based on gender, birth number (singleton, multiple) and birth weight / gestational age charts for BC.

Healthy Infants

Preterm Infants (< 37 weeks gestation) by Local Health Area: 2008/09 - 2012/13



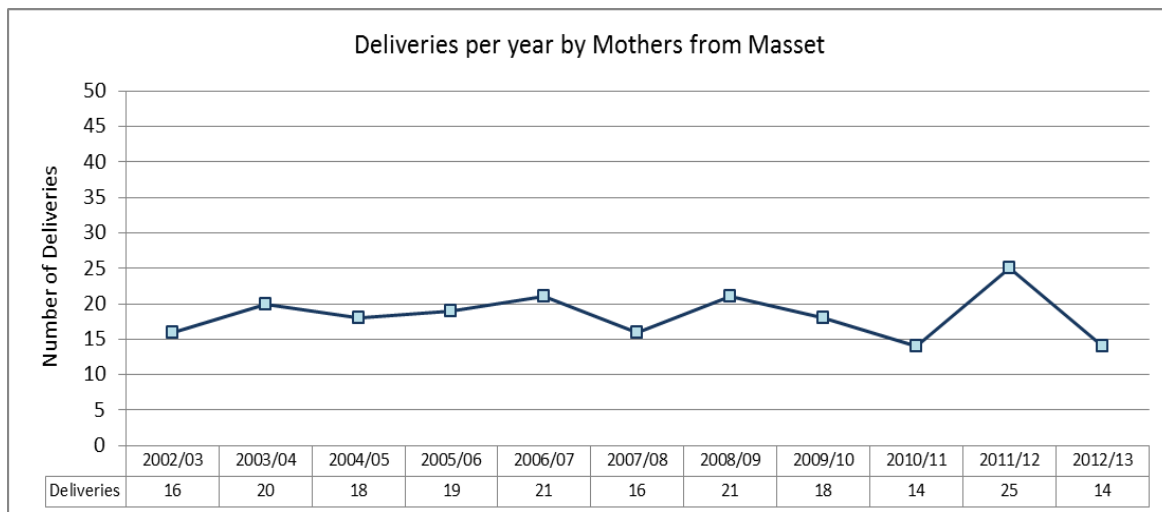
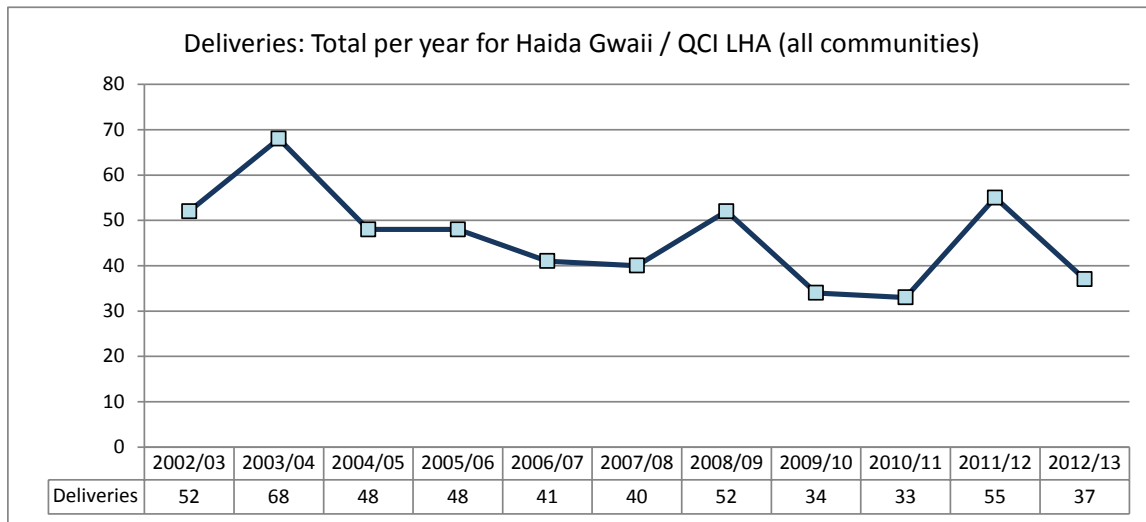
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Delivery Trends by Community ²⁷

Knowing how many mothers are delivering infants helps us to plan and deliver a range of prenatal, maternity and post-natal services. This type of information can also inform other services such as immunization programs and the childhood screening programs that target developmental concerns such as vision, hearing and dental health.

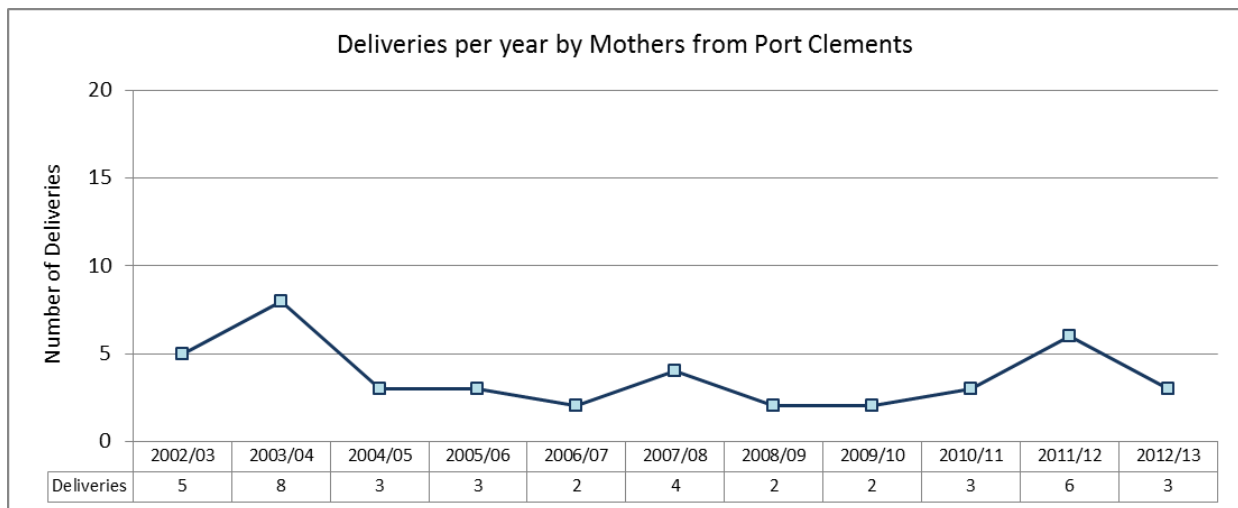
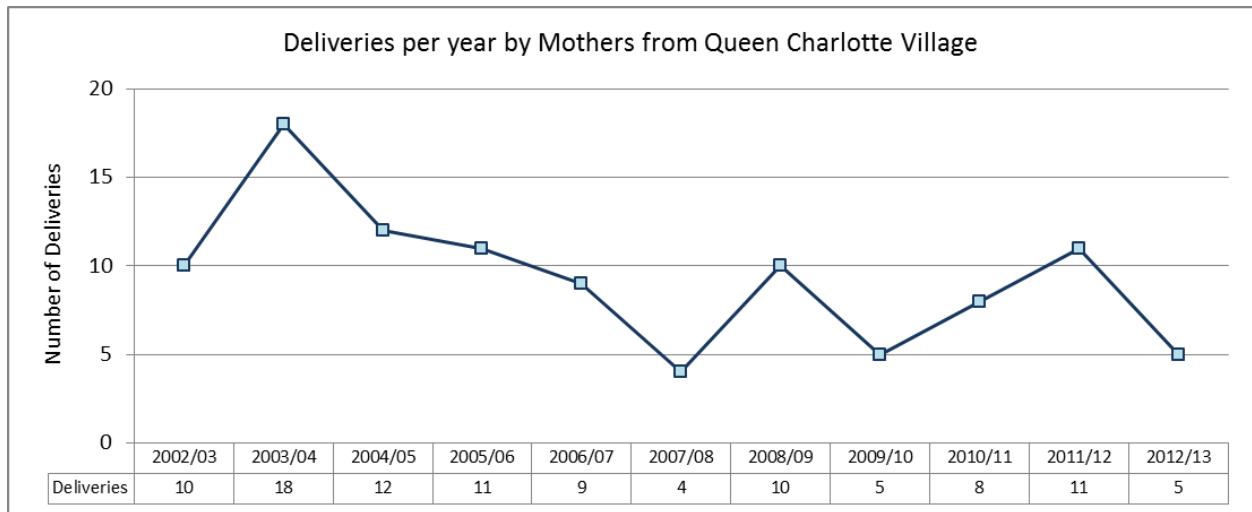


Figures shown for Masset include people residing on Massett No.1 IR.

These figures are based upon mother's usual Local Health Area (LHA) of residence, not the facility location where delivery occurred.

Delivery Trends by Community

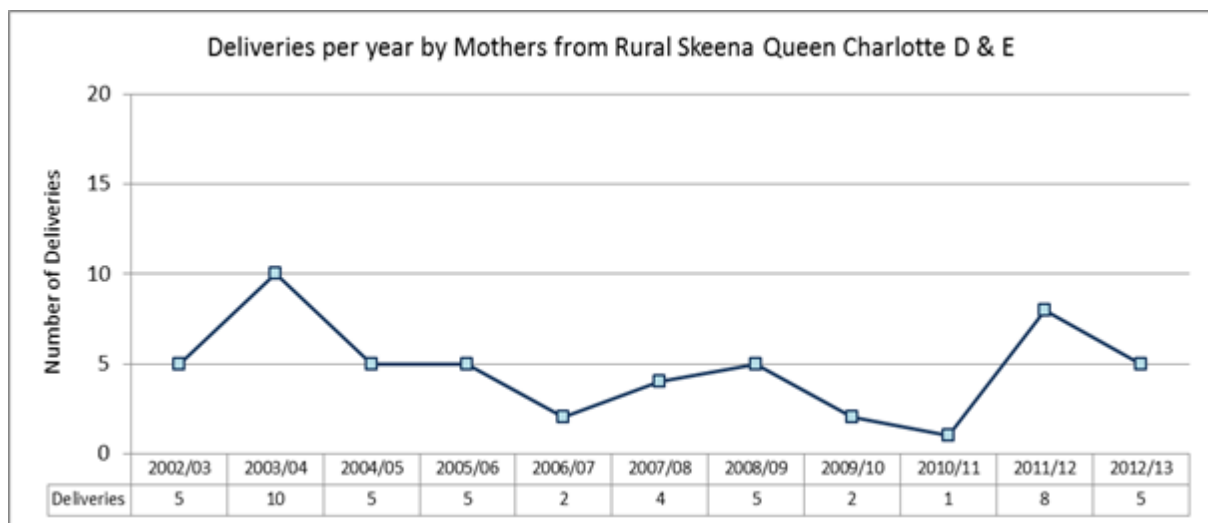
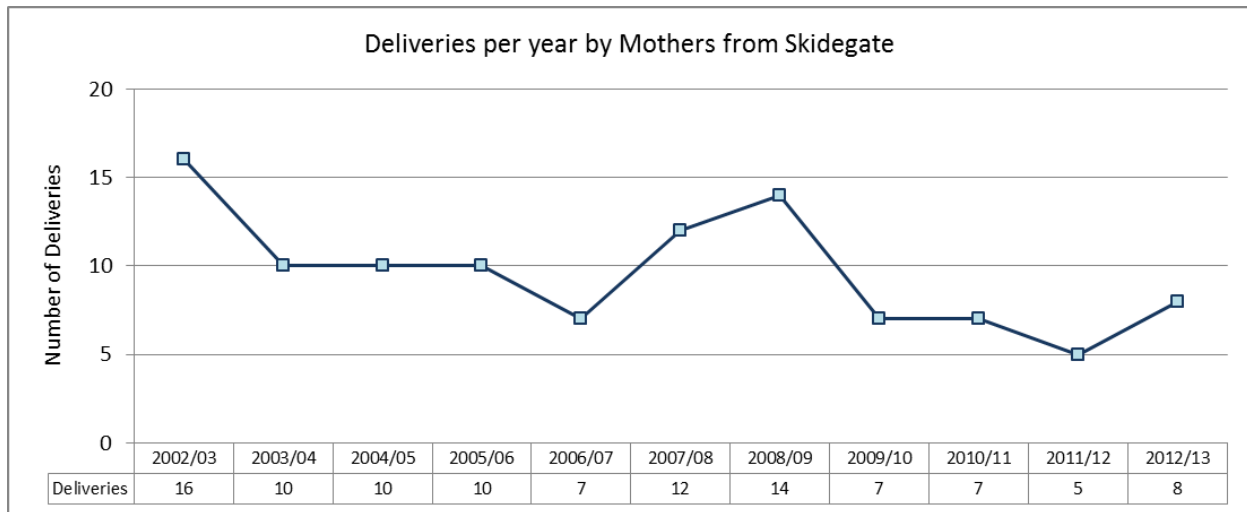
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Where Moms Delivered their Infants ²⁸

Mom's Home Community	Delivery Locations 2002/03 – 2012 /13					
	Prince Rupert	Queen Charlotte	Masset	Other NH Location	Other BC Location	Total
Masset VL	107	25	2	27	36	197
Port Clements VL	16	11	0	8	6	41
SQC-RD (D)	3	5	0	1	7	16
SQC-RD (E)	5	8	0	2	21	36
Queen Charlotte VL	30	35	0	11	27	103
Skidegate IR	50	35	0	6	16	107
Total Deliveries	211	119	2	55	113	500

Notes

- DM = District Municipality IR = Indian Reserve T = Town VL = Village
- SQC-RD (D) refers to Skeena Queen Charlotte Regional District, Area D.
- SQC-RD (E) refers to Skeena Queen Charlotte Regional District, Area E.
- Figures shown for Masset VL include people residing on Massett No.1 IR.
- Maps of these areas are available on the following pages

Home Births on Haida Gwaii

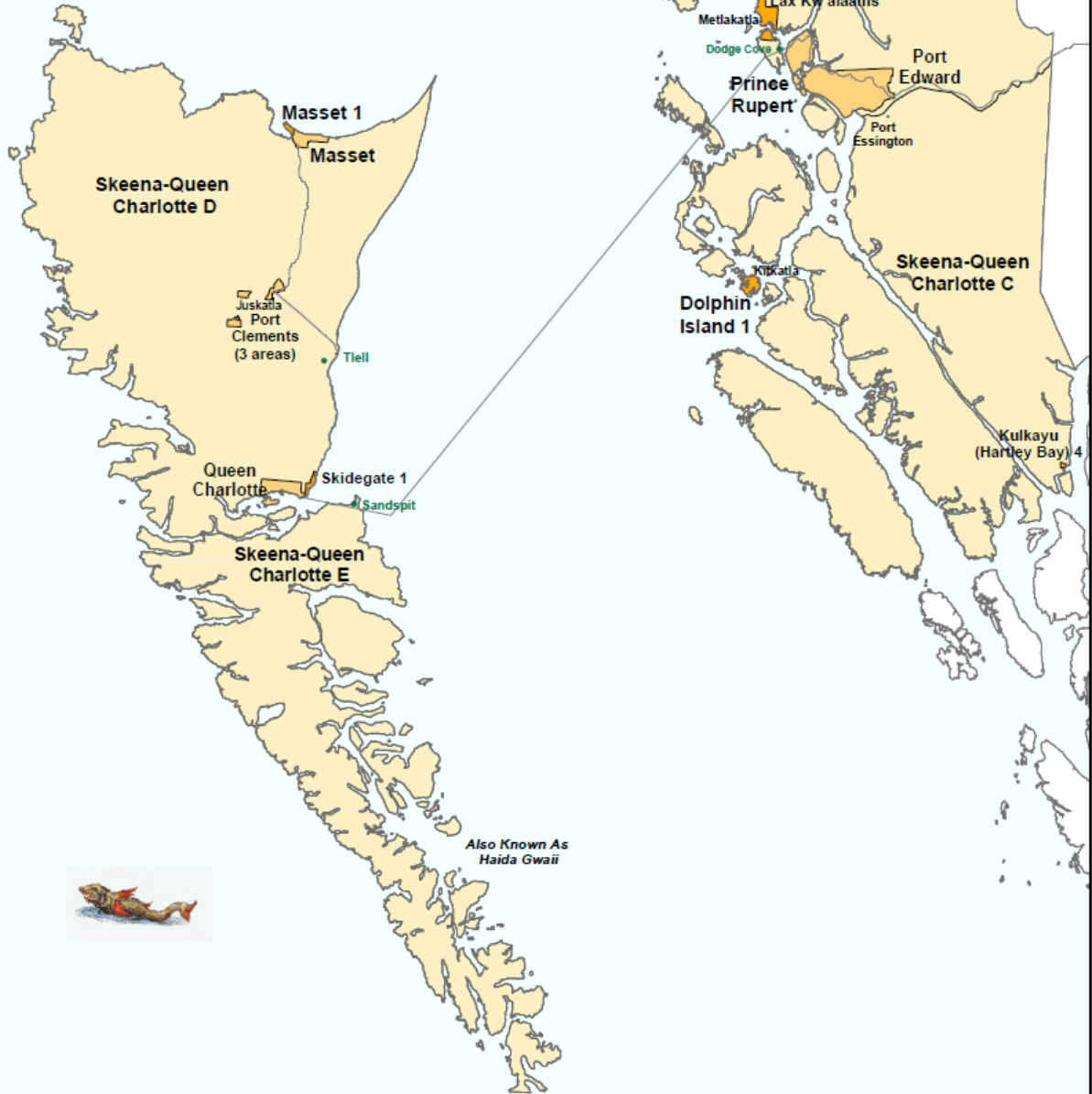
There were slightly more than 10 home births recorded in the Queen Charlottes / Haida Gwaii LHA during the 10 year period from 2002 / 03 – 2012/13. Because these numbers are so small and this could ultimately lead to the identification of these clients, we are unable to publish any details. Home births occurring in the Queen Charlotte / Haida Gwaii LHA, have thus been aggregated into the "Other NH Location" column shown in the table above.



Skeena-Queen Charlotte Regional District

Legend

- Designated Placename
- Locality
- Highway
- Reserve
- Municipality
- Regional District Electoral Area



Prepared by BC Stats
 Source: 2006 Census
 Statistics Canada

0 5 10 20
 Kilometers

Acknowledgements

Over the years we have worked closely with the team from Perinatal Services BC. We are especially grateful to Ms. Cathe Johnson who has been an unflinching champion of our efforts to better utilize and understand the data.

We are also very grateful to Donna Boyd and her colleagues in the Alberta Perinatal Health Program who support us with data so that we might better understand the health needs and outcomes of northerners who choose to receive maternity services in Alberta.

BC Stats, Ministry of Technology, Innovation and Citizens' Services is the central statistics agency for the province of British Columbia. The works of BC Stats including the most recent population estimates and projections, community facts and maps are embedded in this document in an effort to help us to better paint the landscape in which we operate.



We would not be able to produce this annual update without the generous and continuing expertise provided by these provincial agencies.

Thank you.

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- 2 BC Stats: Population Estimates for Local Health Areas: PEOPLE 2013.
<http://www.bcstats.gov.bc.ca/StatisticsBySubject/Demography/PopulationEstimates.aspx>
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- 6 BC Stats Population Projections: BC Stats PEOPLE 2013. Prepared August 27,2013.
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- 7 Northern Health Resident Mothers and Newborn Babies: Selected Indicators April 01, 2008 – March 31, 2013. Data prepared for Northern Health by Perinatal Services BC: February 2012. Request No. 2013-047.
- 8 Baby's Best Chance: Glossary page 156. <http://www.health.gov.bc.ca/library/publications/year/2013/bbc.pdf>
- 9 BC Provincial Health Officers Annual Report 1999. Appendix C: Indicator Definitions
<http://www.health.gov.bc.ca/pho/reports/>
- 10 BC Vital Statistics Agency Annual Reports: <http://www.vs.gov.bc.ca/stats/annual/index.html>
- 11 Northern Health Resident Mothers and Newborn Babies: Selected Indicators April 01, 2008 – March 31, 2013. Data prepared for Northern Health by Perinatal Services BC: February 2012. Request No. 2013-047.
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- 17 Northern Health Resident Mothers and Newborn Babies: Selected Indicators April 01, 2008 – March 31, 2013. Data prepared for Northern Health by Perinatal Services BC: February 2012. Request No. 2013-047.
- 18 Perinatal Services BC Perinatal Core Surveillance Quarterly Report 2013/2014
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- 21 BC Provincial Health Officers Annual Report 1999. Appendix C: Indicator Definitions.
<http://www.health.gov.bc.ca/pho/reports/>
- 22 Infant Macrosomia Among First Nations in British Columbia: Prevalence, Trends and Characteristics. Key Findings: page IV. BC Vital Statistics Agency: 2007. <http://www.vs.gov.bc.ca/>
- 23 Validation of the Indications for Caesarean Delivery in the BC Perinatal Registry: Volume 1, Issue 5, April 2012. Refer to Table 3, page 7: Perinatal Services BC: <http://www.perinataleservicesbc.ca>
- 24 Medline: National Libraries of Medicine: National Institutes of Health.
<http://www.nlm.nih.gov/medlineplus/ency/article/002367.htm>
- 25 Charting Birth Outcomes in BC: BC Vital Statistics Agency; Accessed through Perinatal Services BC; March 2014
<http://www.perinataleservicesbc.ca/NR/rdonlyres/8FDA8BCD-95CF-4E25-9341-1E22F41E4E82/0/ResourcesChartingBirthOutcomeReport.pdf>
- 26 Statistics-Canada; Vital-Statistics Definitions: <http://www.statcan.gc.ca/pub/82-221-x/2013001/def/def1-eng.htm>
- 27 Northern Health Resident Mothers that Delivered a Baby in British Columbia, by Resident Municipality, April 01 2002 - March 31, 2013: Data prepared for Northern Health by Perinatal Services BC. Request 2013-047.
- 28 Northern Health Resident Mothers that Delivered a Baby in British Columbia, by Resident Municipality, April 01 2002 - March 31, 2013: Data prepared for Northern Health by Perinatal Services BC. Request 2013-047.

