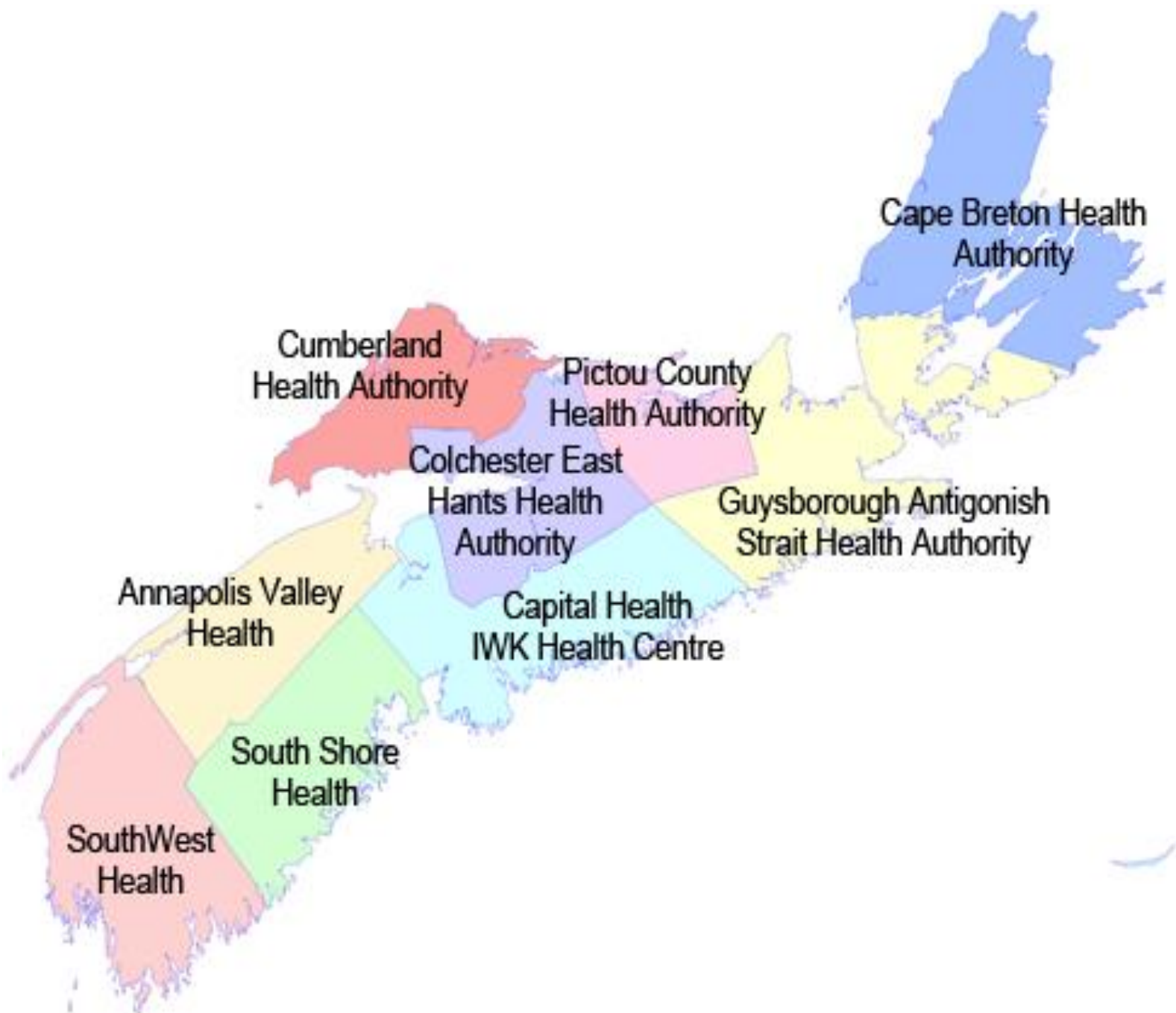


Nova Scotia Atlee Perinatal Database

Report of Indicators:

2002-2011



ACKNOWLEDGEMENTS

The Perinatal Epidemiology Research Unit is pleased to present its second Nova Scotia Atlee Perinatal Database Report of Indicators for 2002-2011. The Report was developed and prepared by members of the Perinatal Epidemiology Research Unit. Particular recognition is directed to Dr. Christy Woolcott for her programming used to develop the tables and graphs in this Report. We would also like to acknowledge Janet Slaunwhite for her assistance in preparing this Report and Colleen O'Connell whose knowledge of the Atlee Perinatal Database was essential. Of course, the contribution of the Reproductive Care Program of Nova Scotia and of all the health information professionals, health care providers and administrators at participating hospitals is invaluable in maintaining the high quality data found within the Atlee Perinatal Database.

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December, 2012



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Introduction

The Perinatal Epidemiology Research Unit is pleased to present its second Nova Scotia Atlee Perinatal Database Report. This version of the Report contains information on perinatal indicators for the years 2002-2011. This report is modeled on our previous report which included deliveries during the time period of January 1, 2000 to December 31, 2009. A few indicators have been added to the current report as a result of feedback from our previous report.

Purpose of Report

The data presented in this Report are meant to provide a quick reference to the sentinel indicators of perinatal health and care among Nova Scotia residents. In addition to providing a quick reference to these indicators, we hope that the data in this Report will assist with the development and monitoring of standards of care and will trigger research questions that can be pursued in the future.

Nova Scotia Atlee Perinatal Database

The Nova Scotia Atlee Perinatal Database (NSAPD) is a population-based database that contains detailed province-wide clinical and demographic information from 1988 onwards. Data are abstracted on-site in Nova Scotia health care facilities by health information professionals and are contributed to the NSAPD by these facilities. The Reproductive Care Program (RCP), a program of the Nova Scotia Department of Health and Wellness, is the NSAPD custodian.

The population in the NSAPD includes all reported live born infants, stillbirths born at a gestational age of at least 20 weeks or having a birth weight of at least 500 grams. In this Report, pregnancy terminations are not included. Every effort is made to ensure that the Nova Scotia Atlee Perinatal Database includes perinatal events for all Nova Scotia residents. Events that occurred in Nova Scotia facilities that do not have active maternity services are collected, as are events that occur in New Brunswick facilities where Nova Scotia residents regularly seek care. Home births have been included in the NSAPD since the introduction of regulated midwifery in 2009.

Important Note Regarding Definitions

In this Report, a delivery refers to the completed pregnancy, regardless of the number of infants born. "Birth" refers to the live born or stillborn infant. For example, when a woman delivers twins, one delivery and two births are represented. Please note that we have used a revised definition of gestational age, which is detailed in the Glossary. The new definition incorporates information on ultrasound measurements, as well as the previous metrics of last menstrual period and clinical estimate of gestational age. It is important to note the scale that is used in the Figures. In some instances, it appears that there are large variations in rates of a particular indicator from year to year, but this may be due to a narrow range for the scale. A Glossary of all terms used in this Report is found at the end of the Report.

Future Reports

We plan to continue to produce similar reports on a regular basis that will be posted on the RCP web site (<http://rcp.nshealth.ca>). As always, we welcome comments and suggestions for additional indicators to be included in future reports.

Section 1:
Deliveries and Births

1.1 Number of deliveries (live births and stillbirths) to residents by year, Nova Scotia, 2002-2011

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Singleton	8470	8348	8424	8276	8228	8580	8847	8664	8533	8581
Multiple	121	131	148	126	127	140	145	152	155	139
Total deliveries	8591	8479	8572	8402	8355	8720	8992	8816	8688	8720

1.2 Number of births by year, Nova Scotia, 2002-2011



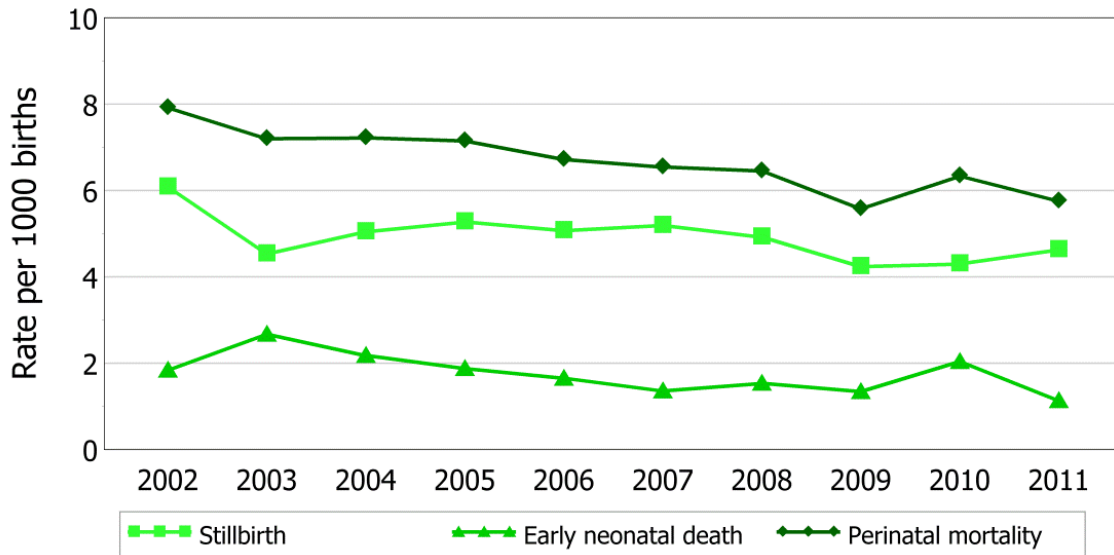
1.3 Number of births by outcome, sex, and year, Nova Scotia, 2002-2011

Sex	Outcome	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Male	Live birth	4421	4435	4319	4422	4351	4538	4660	4617	4521	4492
	Stillbirth	28	19	24	26	22	16	25	23	19	16
	Total births	4449	4454	4343	4448	4373	4554	4685	4640	4540	4508
Female	Live birth	4242	4138	4363	4068	4090	4280	4440	4314	4283	4327
	Stillbirth	25	20	19	19	20	28	18	14	17	23
	Total births	4267	4258	4382	4087	4110	4308	4458	4328	4300	4350
All	Live birth	8663	8573	8682	8490	8441	8818	9100	8931	8804	8819
	Stillbirth	53	39	44	45	43	46	45	38	38	41
	Total births	8716	8612	8726	8535	8484	8864	9145	8969	8842	8860

*infant sex could not be determined in some infants and these infants are not included in the male or female categories.

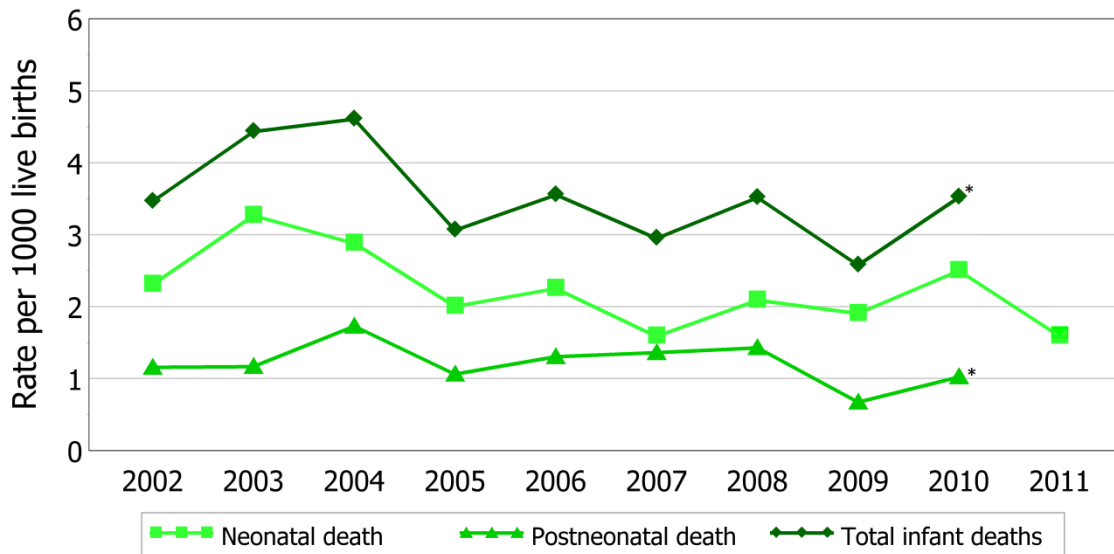
Section 2: Perinatal and Infant Mortality

2.1 Perinatal mortality by year, Nova Scotia, 2002-2011



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# births	8716	8612	8726	8535	8484	8864	9145	8969	8842	8860
Rate per 1000 births:										
Stillbirth	6.1	4.5	5.0	5.3	5.1	5.2	4.9	4.2	4.3	4.6
Early neonatal death (<7 days)	1.8	2.7	2.2	1.9	1.7	1.4	1.5	1.3	2.0	1.1
Perinatal mortality (Stillbirths + early neonatal deaths)	7.9	7.2	7.2	7.1	6.7	6.5	6.5	5.6	6.3	5.8

2.2 Infant mortality by year, Nova Scotia, 2002-2011



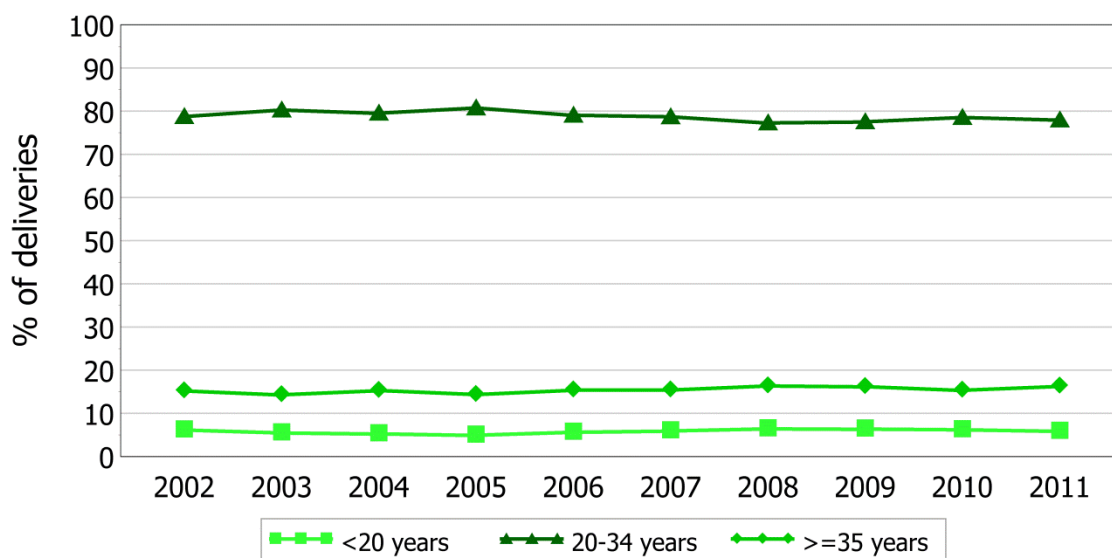
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# live births	8663	8573	8682	8490	8441	8818	9100	8931	8804	8819
Rate per 1000 births:										
Neonatal death (<28 days)	2.3	3.3	2.9	2.0	2.3	1.6	2.1	1.9	2.5	1.6
Postneonatal death (28-364 days)	1.2	1.2	1.7	1.1	1.3	1.4	1.4	0.7	1.0	*
Total infant deaths	3.5	4.4	4.6	3.1	3.6	2.9	3.5	2.6	3.5	*

*Ascertainment of postneonatal deaths for births occurring in 2011 is not yet complete

Section 3

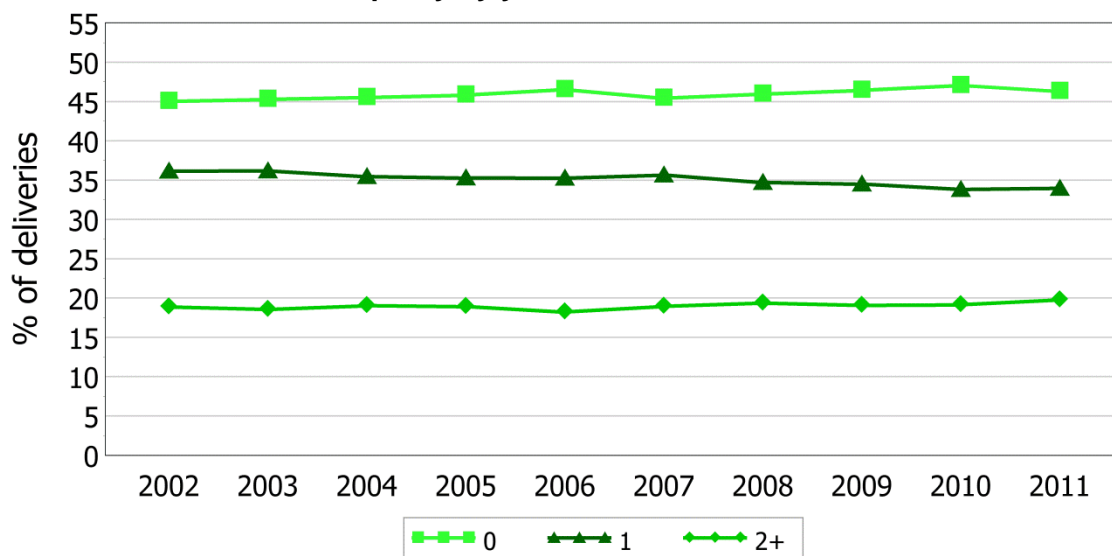
Determinants of Maternal, Fetal and Infant Health

3.1 Maternal age by year, Nova Scotia, 2002-2011



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# deliveries	8591	8479	8572	8402	8355	8720	8992	8816	8688	8720
<20 yrs	6.1%	5.4%	5.2%	4.9%	5.6%	5.9%	6.4%	6.3%	6.1%	5.8%
20-34 yrs	78.7%	80.3%	79.5%	80.7%	79.1%	78.7%	77.3%	77.5%	78.5%	77.9%
≥35 yrs	15.2%	14.3%	15.2%	14.4%	15.4%	15.4%	16.3%	16.2%	15.3%	16.3%
Mean	28.9	29.0	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2
(SD)	(5.7)	(5.6)	(5.6)	(5.5)	(5.6)	(5.6)	(5.7)	(5.8)	(5.7)	(5.7)

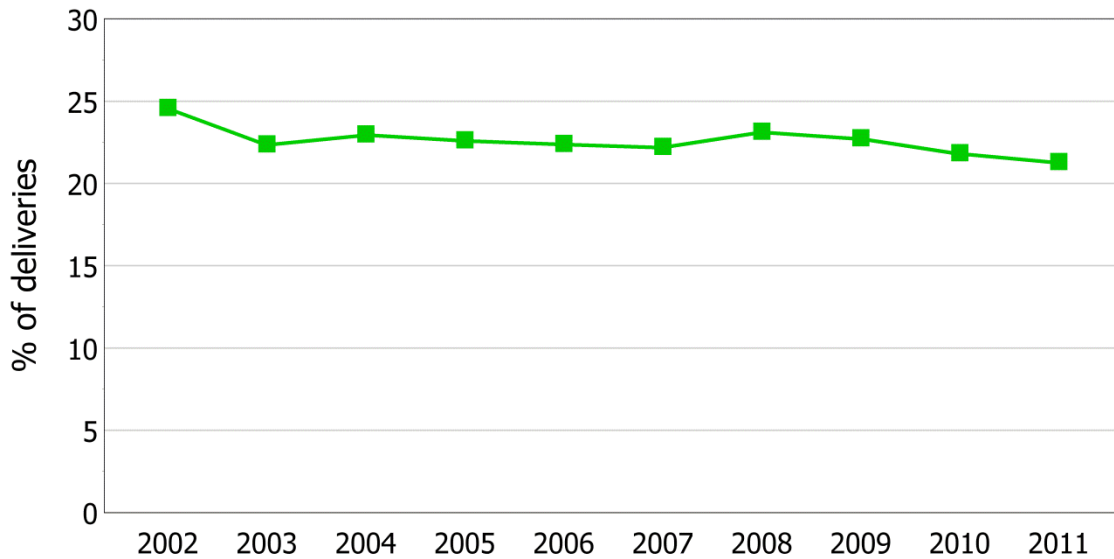
3.2 Maternal parity by year, Nova Scotia, 2002-2011



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# deliveries*	8591	8478	8570	8402	8355	8720	8992	8814	8687	8720
0	45.0%	45.3%	45.5%	45.8%	46.5%	45.4%	46.0%	46.4%	47.0%	46.3%
1	36.1%	36.2%	35.4%	35.3%	35.3%	35.7%	34.7%	34.5%	33.8%	34.0%
2+	18.9%	18.6%	19.0%	18.9%	18.2%	18.9%	19.4%	19.1%	19.1%	19.8%

*with known parity

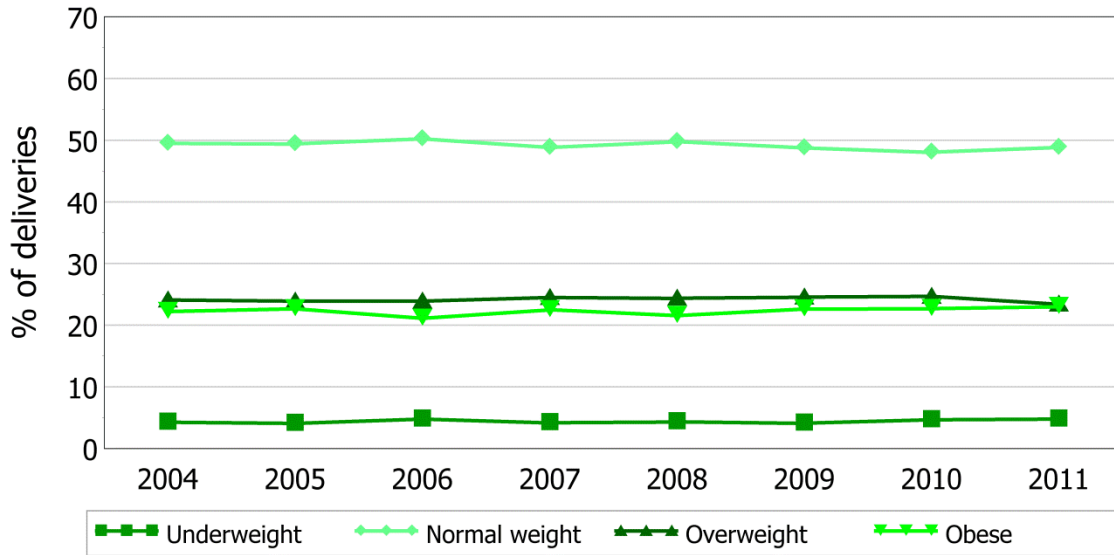
3.3 Maternal smoking during pregnancy by year, Nova Scotia, 2002-2011



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# deliveries*	8508	8384	8473	8315	8304	8656	8899	8731	8614	8667
Smoked during pregnancy	24.6%	22.3%	22.9%	22.6%	22.4%	22.2%	23.1%	22.7%	21.8%	21.3%

*with known smoking

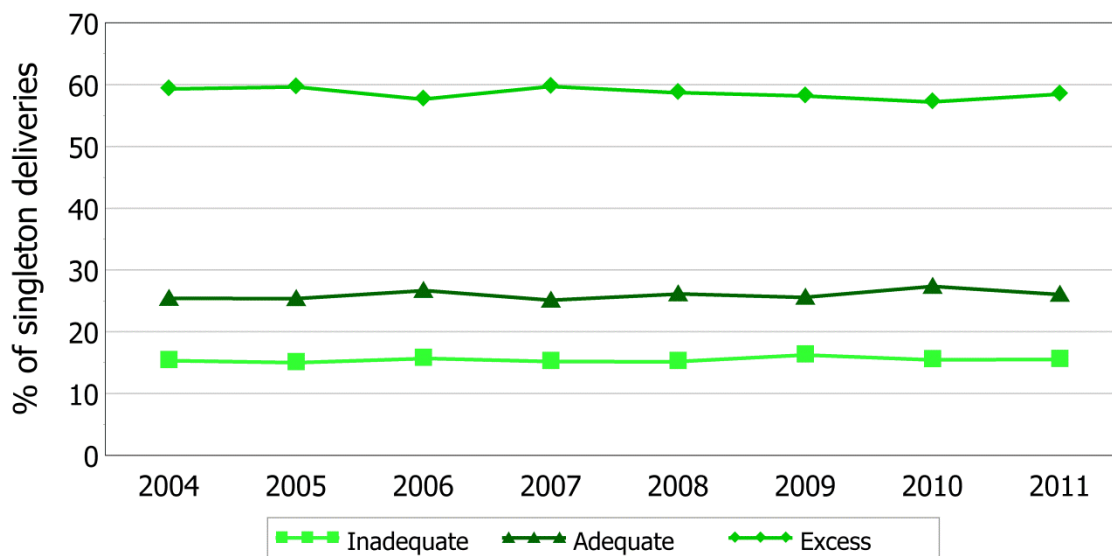
3.4 Pre-pregnancy body mass index (BMI), Nova Scotia, 2004-2011



	2004	2005	2006	2007	2008	2009	2010	2011
# deliveries*	4363	4974	5649	6256	6611	6692	6719	6808
Underweight	4.2%	4.1%	4.8%	4.2%	4.3%	4.1%	4.6%	4.8%
Normal weight	49.5%	49.4%	50.2%	48.8%	49.8%	48.8%	48.0%	48.8%
Overweight	24.1%	23.9%	23.9%	24.5%	24.4%	24.5%	24.7%	23.4%
Obese	22.2%	22.7%	21.1%	22.5%	21.6%	22.6%	22.7%	23.0%

*with known pre-pregnancy weight and height. See glossary for definition of the BMI categories. Maternal height was introduced into the NS Prenatal record in 2003. Thus data for this indicator are shown only from 2004 onward

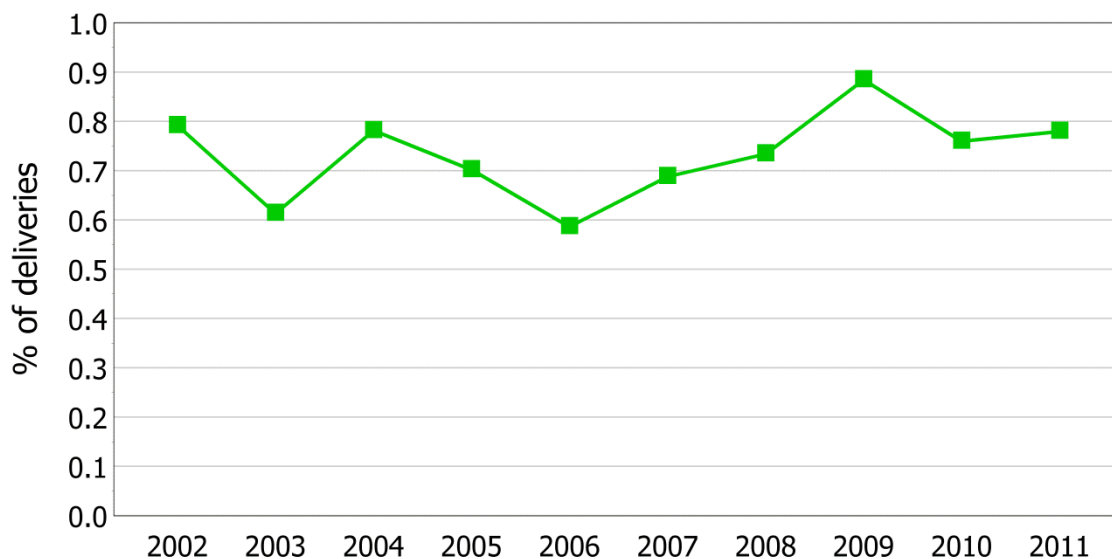
3.5 Gestational weight gain according to recommendations, Nova Scotia, 2002-2011



	2004	2005	2006	2007	2008	2009	2010	2011
# singleton deliveries*	3601	4283	4969	5550	5880	5805	5954	6013
Inadequate	15.3%	15.0%	15.7%	15.2%	15.2%	16.2%	15.5%	15.5%
Adequate	25.4%	25.4%	26.7%	25.1%	26.1%	25.6%	27.3%	26.0%
Excess	59.3%	59.7%	57.7%	59.7%	58.7%	58.2%	57.2%	58.5%

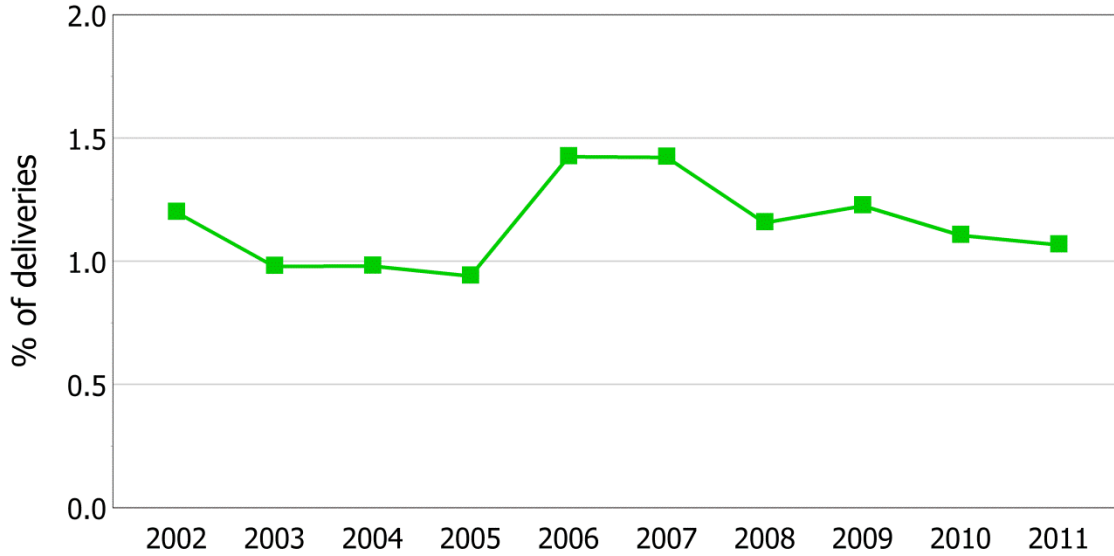
*with known pre-pregnancy and delivery weights and height. Gestational weight gain relative to guidelines set by Health Canada (see Glossary). Maternal height was introduced into the NS Prenatal record in 2003. Thus data for this indicator are shown only from 2004 onward.

3.6 Pre-existing diabetes by year, Nova Scotia, 2002-2011



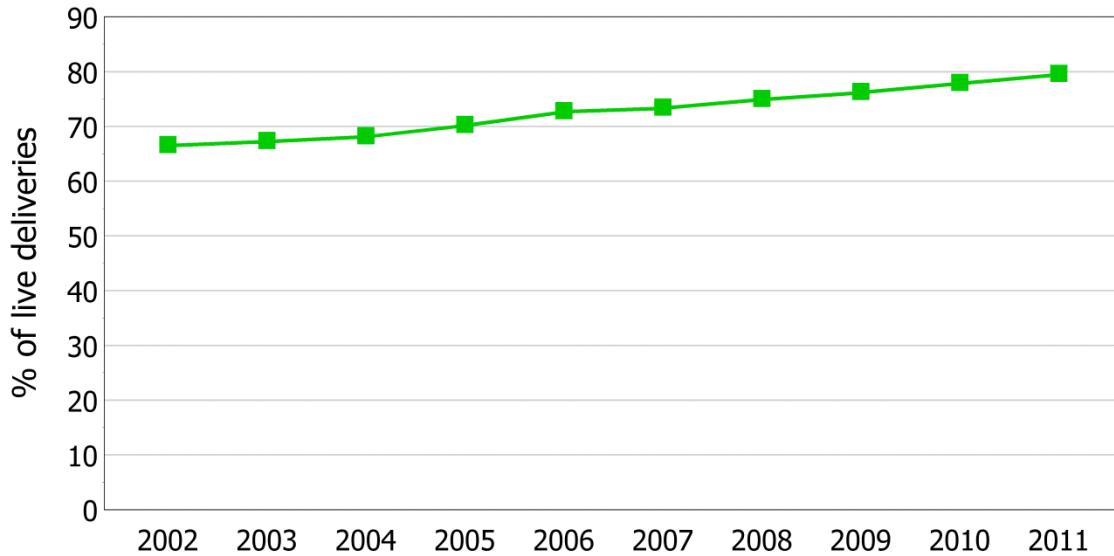
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# deliveries	8591	8479	8572	8402	8355	8720	8992	8816	8688	8720
Pre-existing diabetes	0.8%	0.6%	0.8%	0.7%	0.6%	0.7%	0.7%	0.9%	0.8%	0.8%

3.7 Pre-existing hypertension by year, Nova Scotia, 2002-2011



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# deliveries	8591	8479	8572	8402	8355	8720	8992	8816	8688	8720
Pre-existing hypertension	1.2%	1.0%	1.0%	0.9%	1.4%	1.4%	1.2%	1.2%	1.1%	1.1%

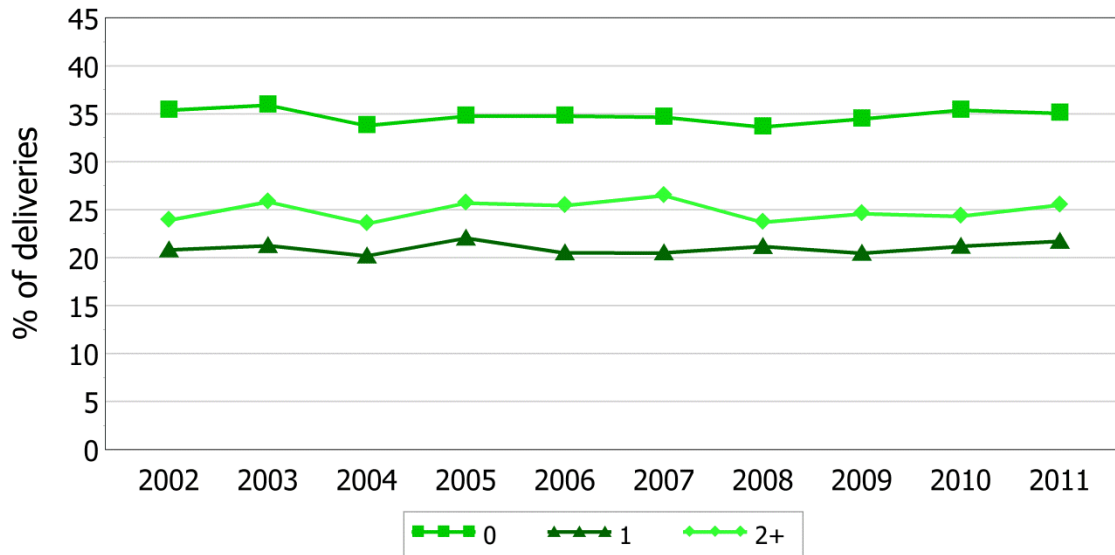
3.8 Breastfeeding at discharge by year, Nova Scotia, 2002-2011



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# live deliveries*	8523	8418	8515	8341	8296	8662	8934	8767	8637	8667
Breastfeeding at discharge	66.5%	67.2%	68.1%	70.2%	72.7%	73.3%	74.9%	76.2%	77.9%	79.5%

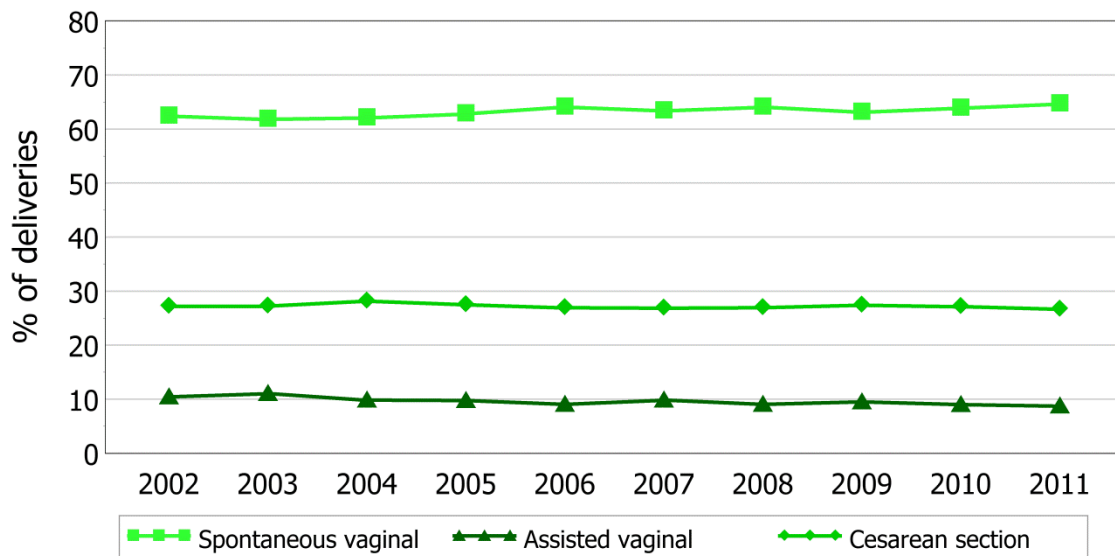
Section 4: Labour and Birth Processes

4.1 Induced labour by parity and year, Nova Scotia, 2002-2011



Parity		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
0	# deliveries	3867	3838	3900	3850	3887	3960	4132	4093	4087	4035
	% induced	35.4%	35.9%	33.8%	34.8%	34.8%	34.6%	33.6%	34.4%	35.4%	35.1%
1	# deliveries	3104	3067	3038	2963	2946	3109	3120	3040	2938	2962
	% induced	20.8%	21.3%	20.2%	22.0%	20.5%	20.5%	21.2%	20.5%	21.2%	21.7%
2+	# deliveries	1620	1573	1632	1589	1522	1651	1740	1681	1662	1723
	% induced	23.9%	25.8%	23.5%	25.7%	25.4%	26.5%	23.7%	24.6%	24.3%	25.5%

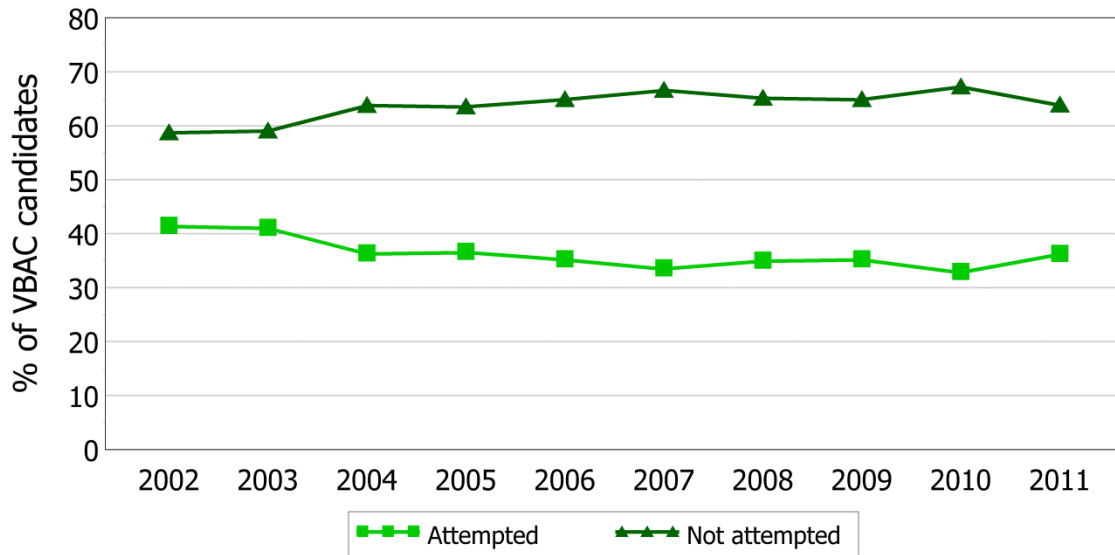
4.2 Type of delivery by year, Nova Scotia, 2002-2011



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# deliveries*	8590	8478	8572	8402	8353	8720	8989	8816	8688	8719
Spontaneous vaginal	62.4%	61.8%	62.1%	62.8%	64.1%	63.3%	64.0%	63.1%	63.9%	64.6%
Assisted vaginal	10.4%	11.0%	9.8%	9.7%	9.0%	9.8%	9.0%	9.5%	9.0%	8.7%
Cesarean section	27.2%	27.2%	28.1%	27.5%	26.9%	26.8%	26.9%	27.4%	27.1%	26.6%

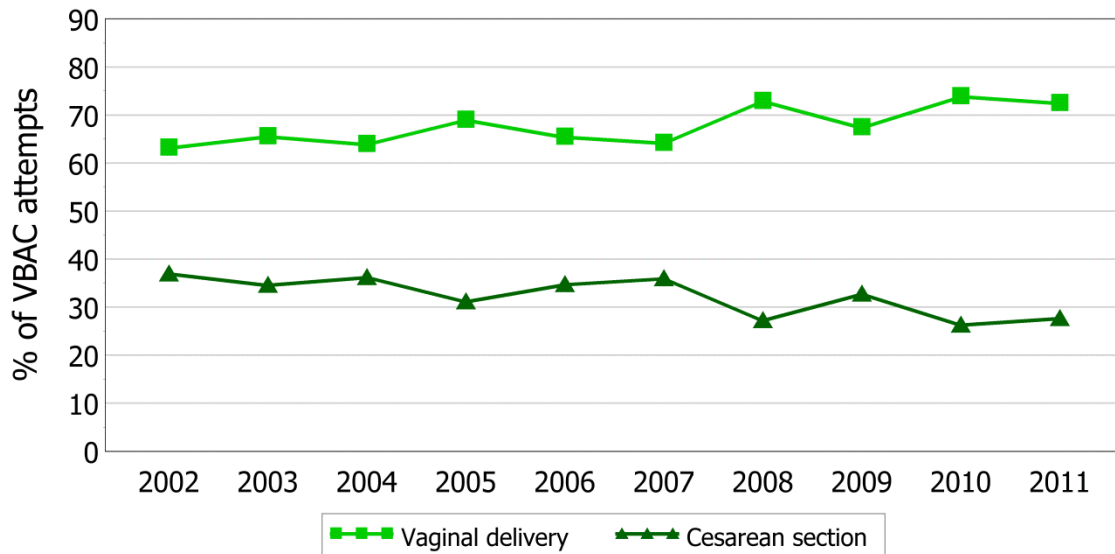
*with known type of delivery

4.3 Attempt at vaginal delivery among VBAC candidates by year, Nova Scotia, 2002-2011



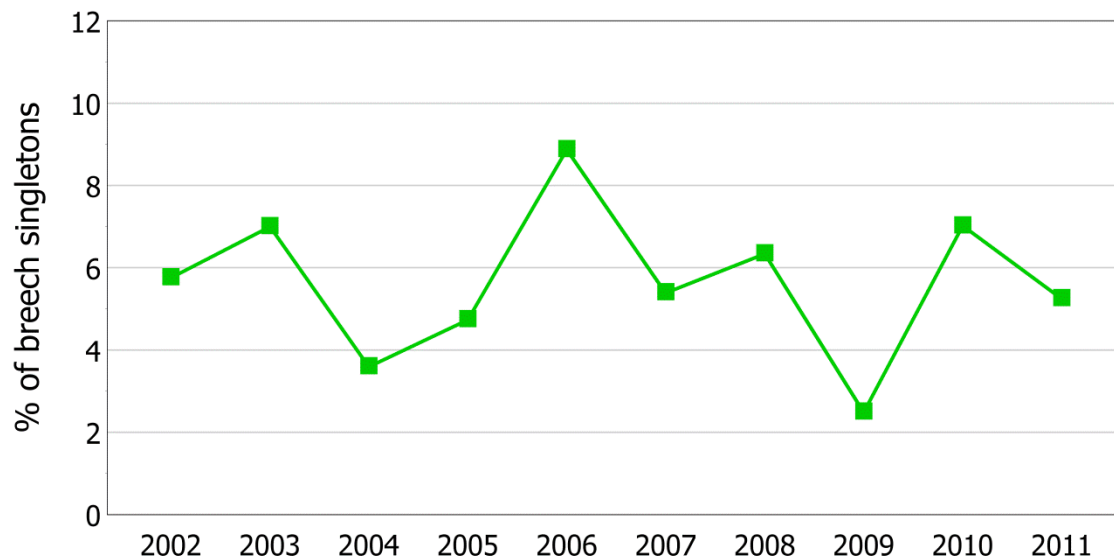
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# VBAC candidates	813	820	847	819	862	891	854	862	814	802
Attempted	41.3%	41.0%	36.2%	36.5%	35.2%	33.4%	34.9%	35.2%	32.8%	36.2%
Not attempted	58.7%	59.0%	63.8%	63.5%	64.8%	66.6%	65.1%	64.8%	67.2%	63.8%

4.4 Type of delivery among VBAC candidates attempting VBAC by year, Nova Scotia, 2002-2011



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# VBAC attempts	336	336	307	299	303	298	298	303	267	290
Vaginal delivery	63.1%	65.5%	63.8%	68.9%	65.3%	64.1%	72.8%	67.3%	73.8%	72.4%
Cesarean section	36.9%	34.5%	36.2%	31.1%	34.7%	35.9%	27.2%	32.7%	26.2%	27.6%

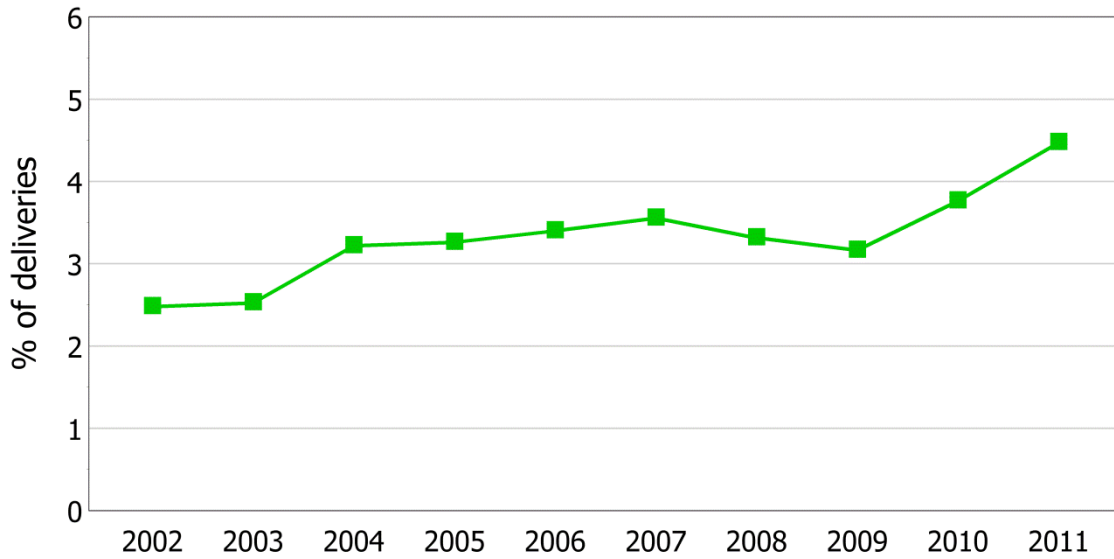
4.5 Vaginal delivery among breech singletons, Nova Scotia, 2002-2011



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# breech singletons	365	343	362	359	327	334	363	321	342	324
Vaginal delivery	5.8%	7.0%	3.6%	4.7%	8.9%	5.4%	6.3%	2.5%	7.0%	5.2%

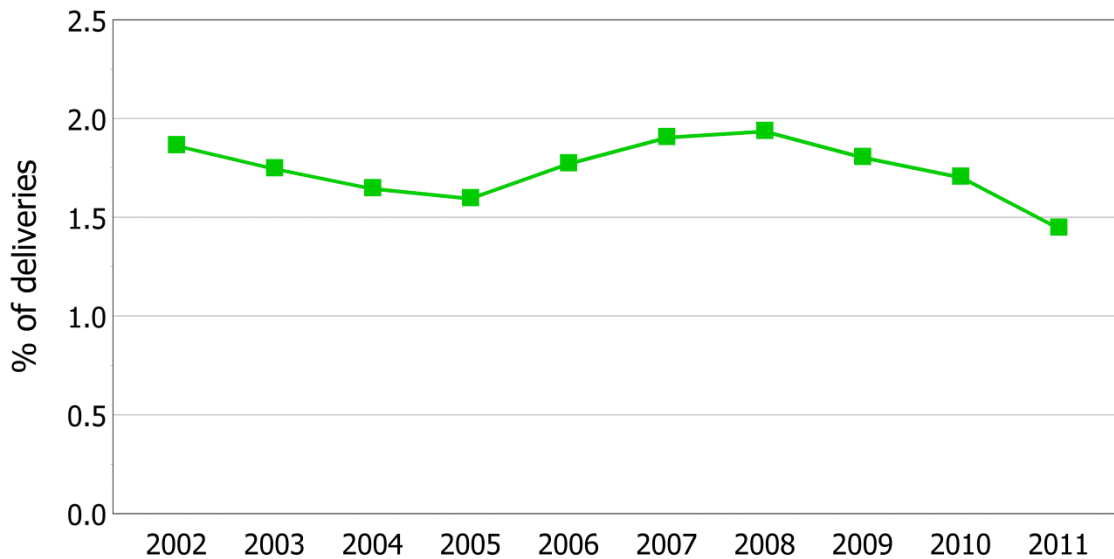
Section 5: Maternal, Fetal and Infant Health Outcomes

5.1 Gestational diabetes by year, Nova Scotia, 2002-2011



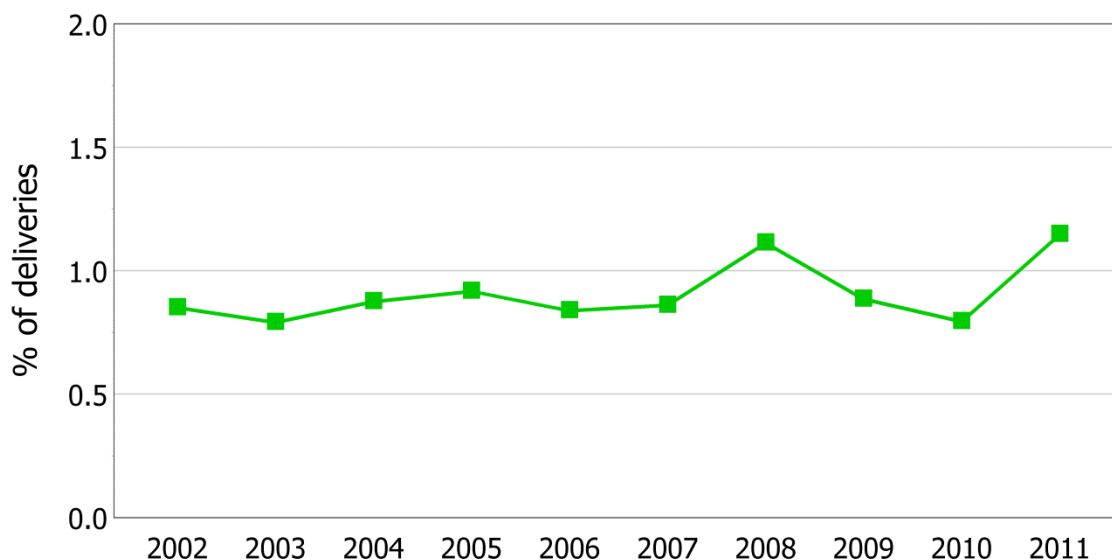
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# deliveries	8591	8479	8572	8402	8355	8720	8992	8816	8688	8720
Gestational diabetes	2.5%	2.5%	3.2%	3.3%	3.4%	3.6%	3.3%	3.2%	3.8%	4.5%

5.2 Severe pregnancy-induced hypertension by year, Nova Scotia, 2002-2011



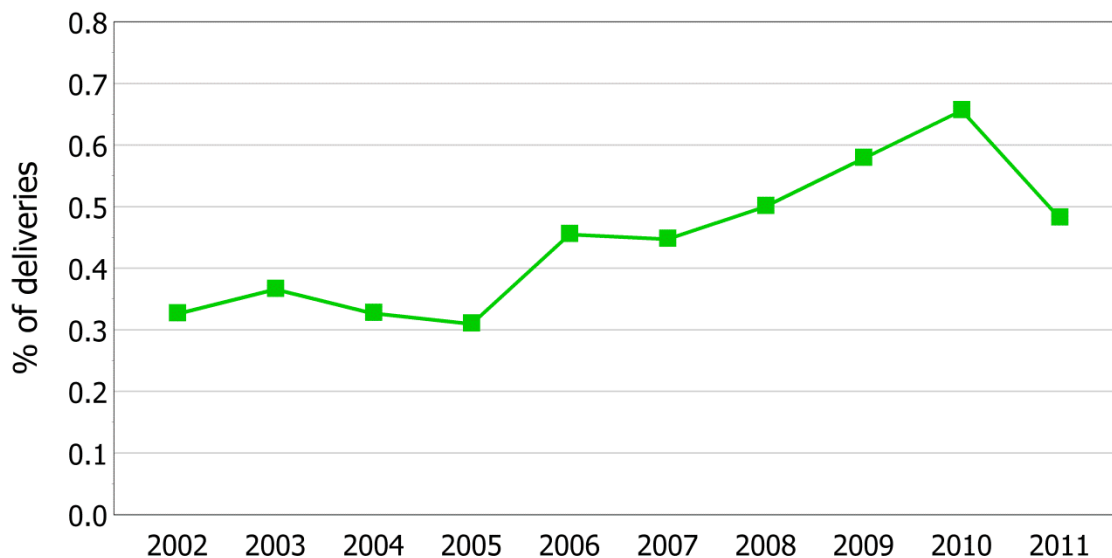
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# deliveries	8591	8479	8572	8402	8355	8720	8992	8816	8688	8720
Severe PIH	1.9%	1.7%	1.6%	1.6%	1.8%	1.9%	1.9%	1.8%	1.7%	1.4%

5.3 Placental abruption by year, Nova Scotia, 2002-2011



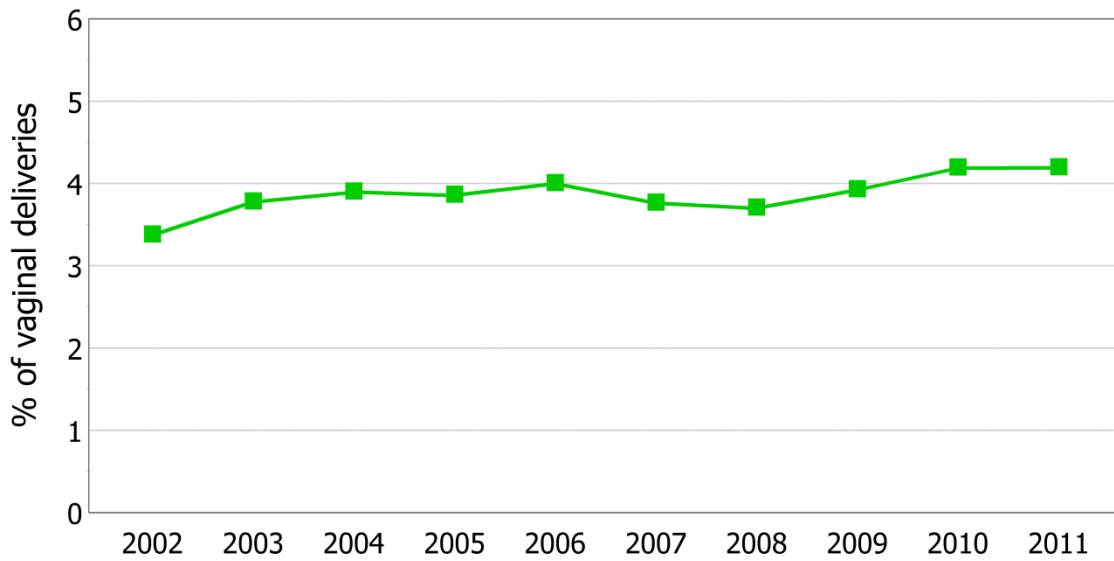
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# deliveries	8591	8479	8572	8402	8355	8720	8992	8816	8688	8720
Placental abruption	0.8%	0.8%	0.9%	0.9%	0.8%	0.9%	1.1%	0.9%	0.8%	1.1%

5.4 Placenta previa by year, Nova Scotia, 2002-2011



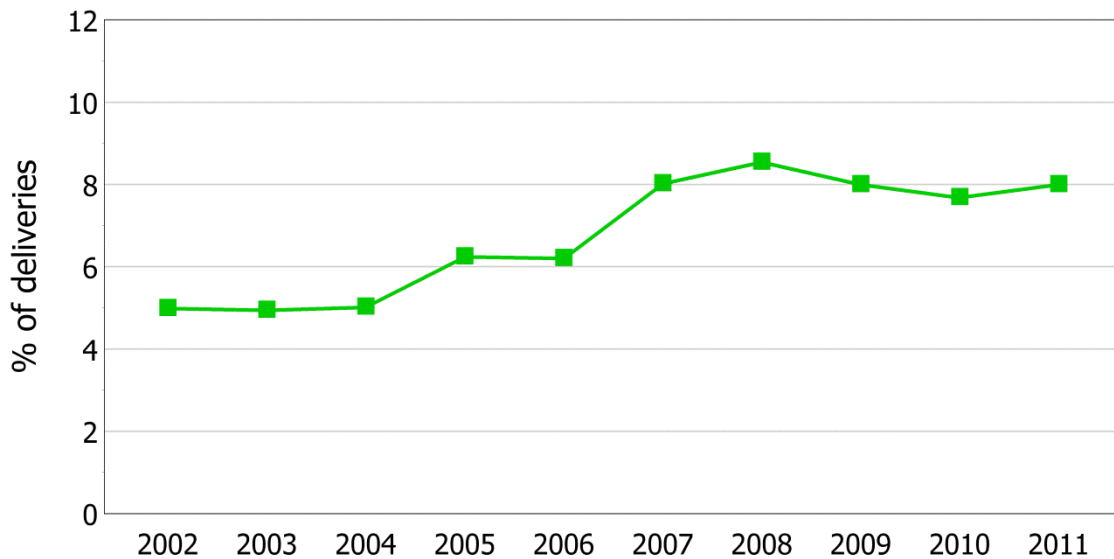
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# deliveries	8591	8479	8572	8402	8355	8720	8992	8816	8688	8720
Placenta previa	0.3%	0.4%	0.3%	0.3%	0.5%	0.4%	0.5%	0.6%	0.7%	0.5%

5.5 3rd or 4th degree lacerations among vaginal deliveries by year, Nova Scotia, 2002-2011



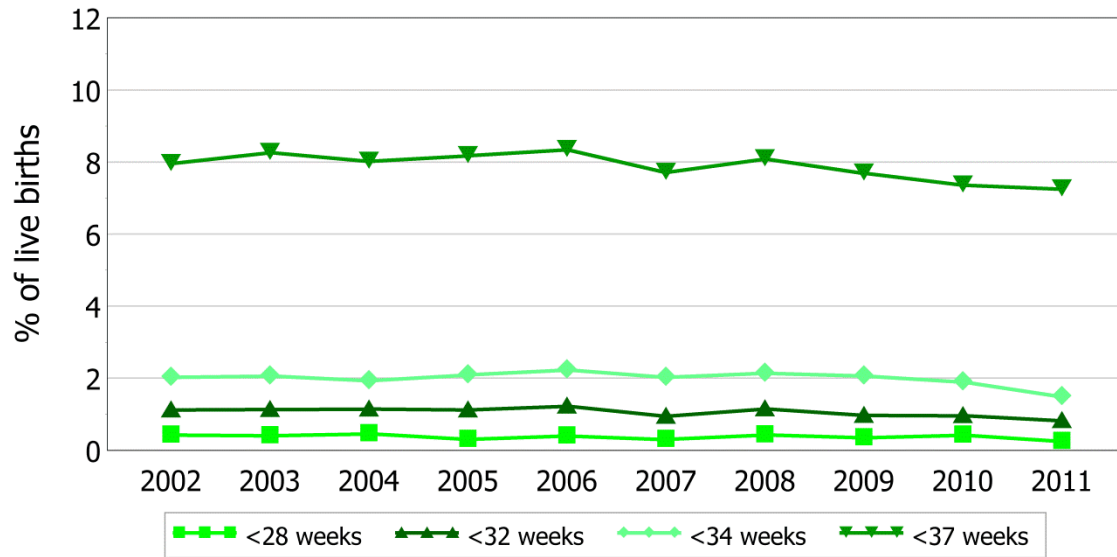
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# vaginal deliveries	6256	6172	6160	6094	6105	6380	6568	6400	6330	6396
3rd or 4th degree laceration	3.4%	3.8%	3.9%	3.9%	4.0%	3.8%	3.7%	3.9%	4.2%	4.2%

5.6 Postpartum hemorrhage by year, Nova Scotia, 2002-2011



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# deliveries	8591	8479	8572	8402	8355	8720	8992	8816	8688	8720
Postpartum hemorrhage	5.0%	4.9%	5.0%	6.2%	6.2%	8.0%	8.5%	8.0%	7.7%	8.0%

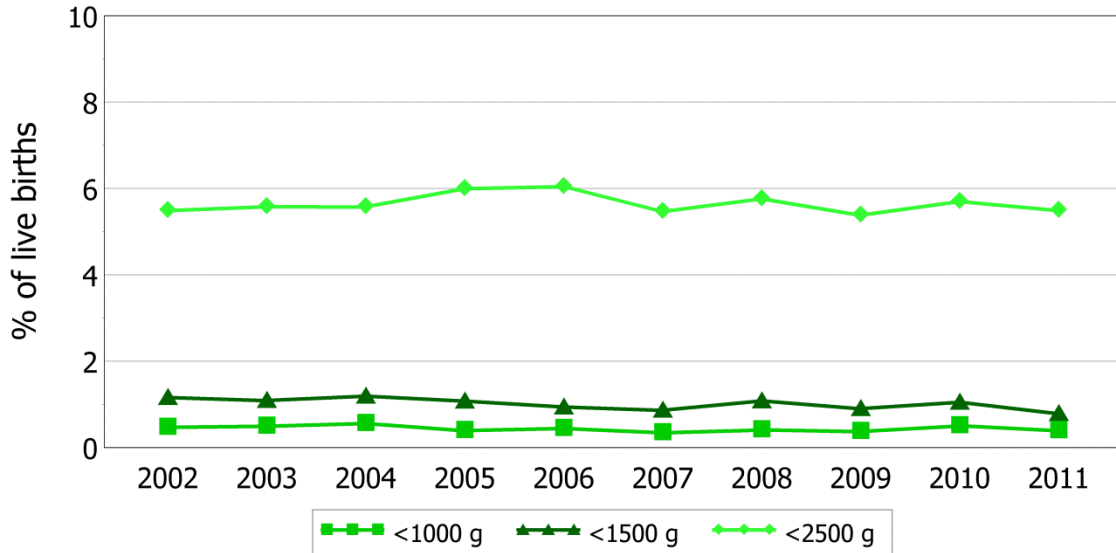
5.7 Preterm births by year Nova Scotia, 2002-2011



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# live births*	8597	8497	8603	8414	8352	8714	8990	8778	8642	8664
<28 weeks	0.4%	0.4%	0.5%	0.3%	0.4%	0.3%	0.4%	0.3%	0.4%	0.2%
<32 weeks	1.1%	1.1%	1.1%	1.1%	1.2%	0.9%	1.1%	1.0%	1.0%	0.8%
<34 weeks	2.0%	2.1%	1.9%	2.1%	2.2%	2.0%	2.1%	2.1%	1.9%	1.5%
<37 weeks	8.0%	8.3%	8.0%	8.2%	8.3%	7.7%	8.1%	7.7%	7.4%	7.2%

*with known gestational age

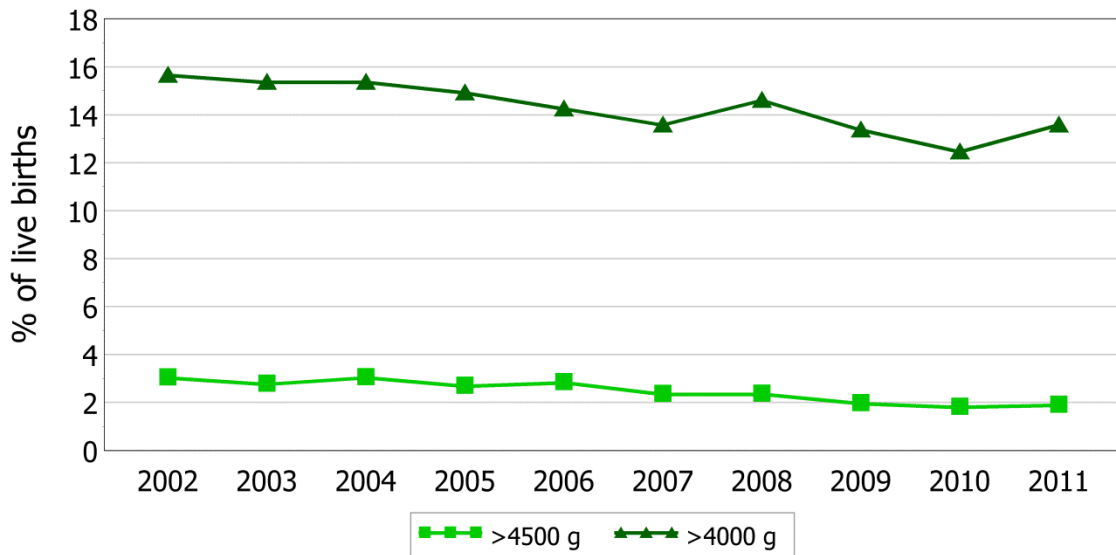
5.8 Low birth weight by year, Nova Scotia, 2002-2011



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# live births*	8658	8570	8680	8488	8437	8817	9097	8919	8795	8816
<1000 g	0.5%	0.5%	0.6%	0.4%	0.4%	0.3%	0.4%	0.4%	0.5%	0.4%
<1500 g	1.2%	1.1%	1.2%	1.1%	0.9%	0.9%	1.1%	0.9%	1.0%	0.8%
<2500 g	5.5%	5.6%	5.6%	6.0%	6.0%	5.5%	5.8%	5.4%	5.7%	5.5%

*with known birth weight

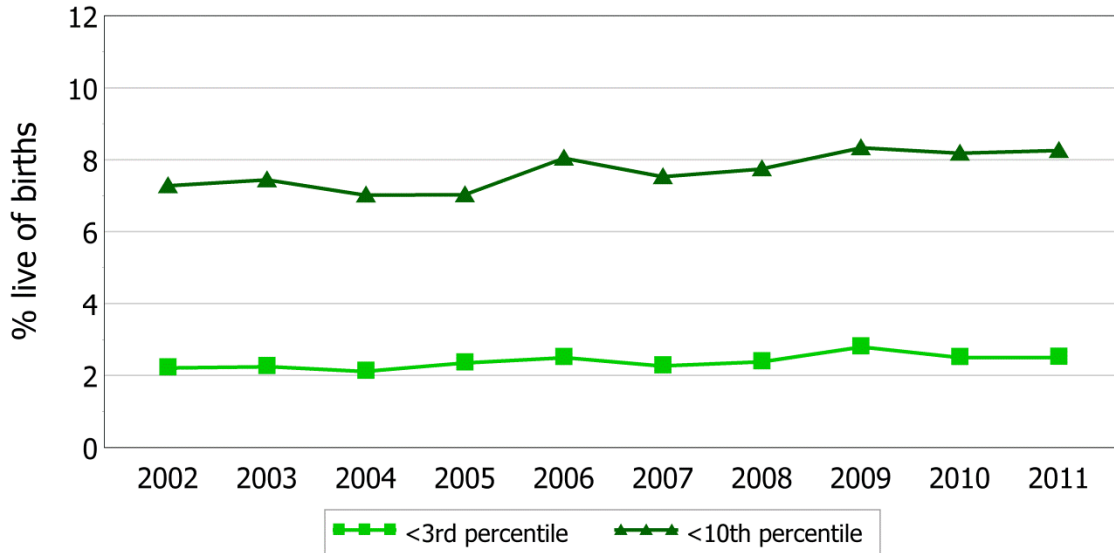
5.9 Macrosomia by year, Nova Scotia, 2002-2011



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# live births*	8658	8570	8680	8488	8437	8817	9097	8919	8795	8816
>4500 g	3.0%	2.8%	3.0%	2.7%	2.8%	2.3%	2.3%	2.0%	1.8%	1.9%
>4000 g	15.7%	15.4%	15.4%	14.9%	14.2%	13.6%	14.6%	13.4%	12.5%	13.6%

* with known birth weight

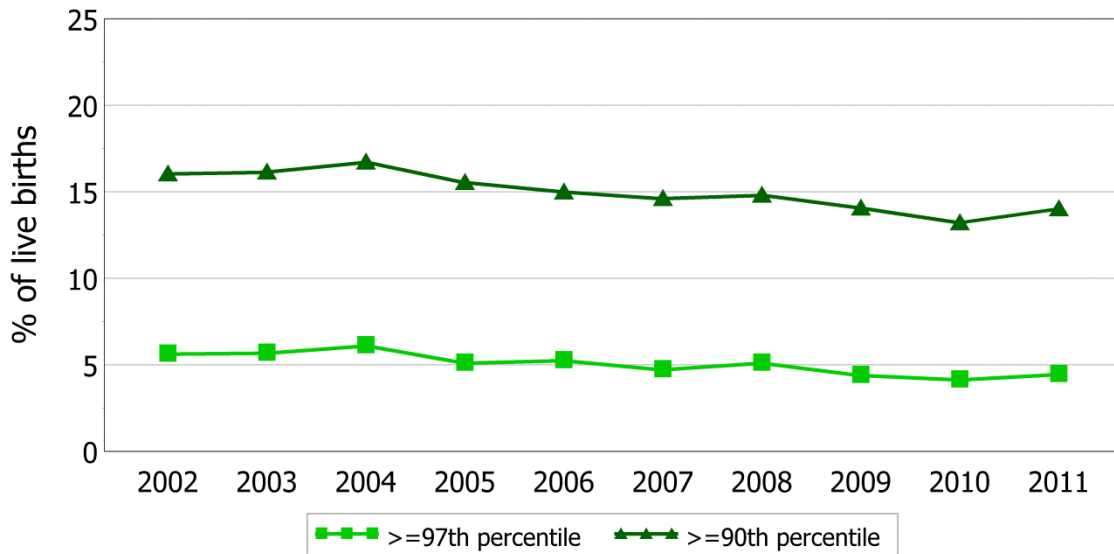
5.10 Small for gestational age by year, Nova Scotia, 2002-2011



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# live births*	8634	8535	8649	8469	8406	8792	9074	8882	8764	8791
<3rd percentile	2.2%	2.2%	2.1%	2.3%	2.5%	2.3%	2.4%	2.8%	2.5%	2.5%
<10th percentile	7.3%	7.4%	7.0%	7.0%	8.0%	7.5%	7.7%	8.3%	8.2%	8.3%

* with known birth weight and gestational age

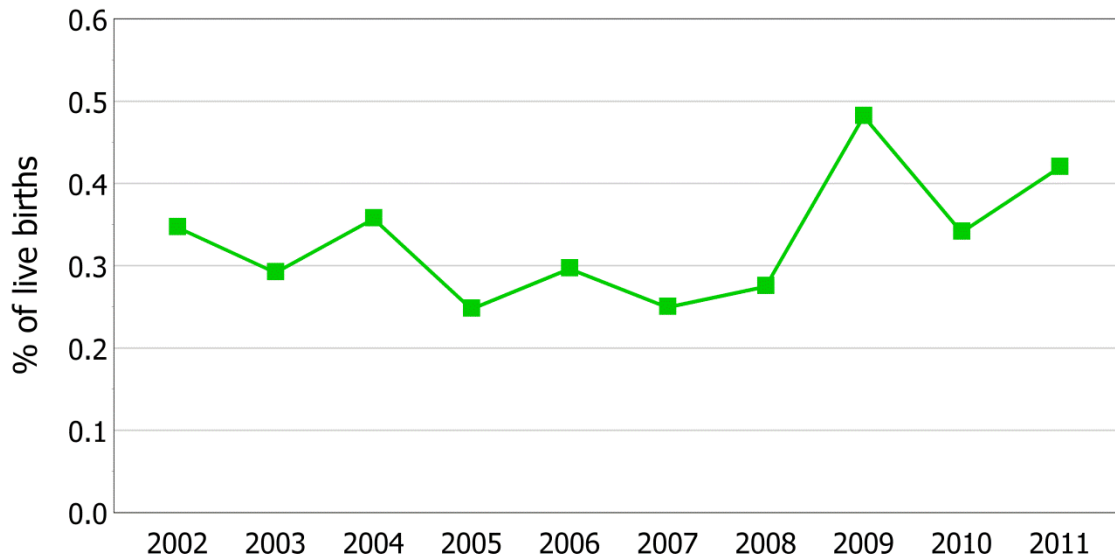
5.11 Large for gestational age by year, Nova Scotia, 2002-2011



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# live births*	8634	8535	8649	8469	8406	8792	9074	8882	8764	8791
≥97th percentile	5.6%	5.7%	6.1%	5.1%	5.2%	4.7%	5.1%	4.4%	4.1%	4.4%
≥90th percentile	16.0%	16.1%	16.7%	15.5%	15.0%	14.6%	14.8%	14.1%	13.2%	14.0%

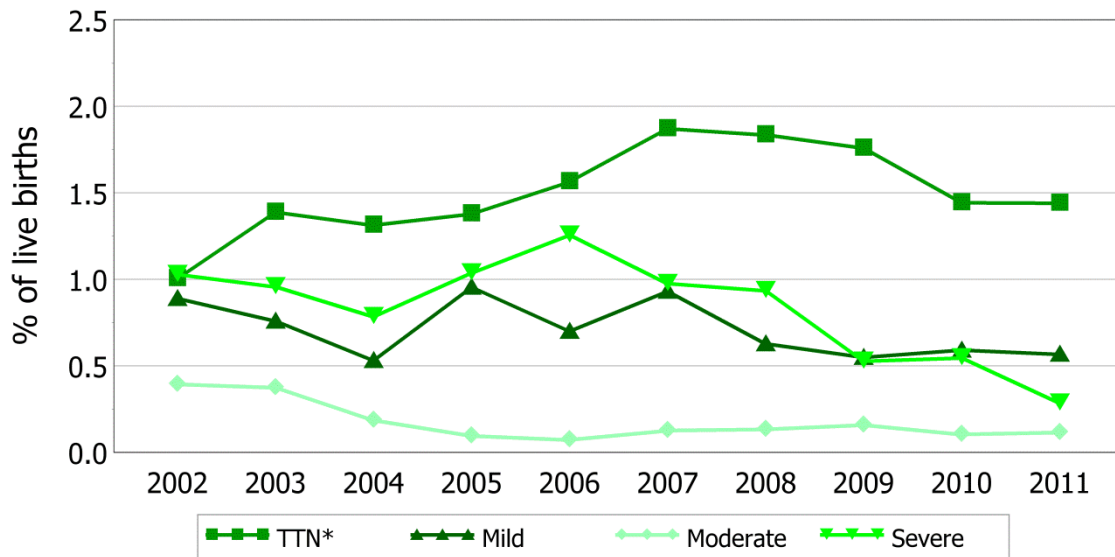
* with known birth weight and gestational age

5.12 Birth injury by year, Nova Scotia, 2002-2011



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# live births	8663	8573	8682	8490	8441	8818	9100	8931	8804	8819
Birth injury	0.3%	0.3%	0.4%	0.2%	0.3%	0.2%	0.3%	0.5%	0.3%	0.4%

5.13 Type of respiratory distress syndrome by year, Nova Scotia, 2002-2011

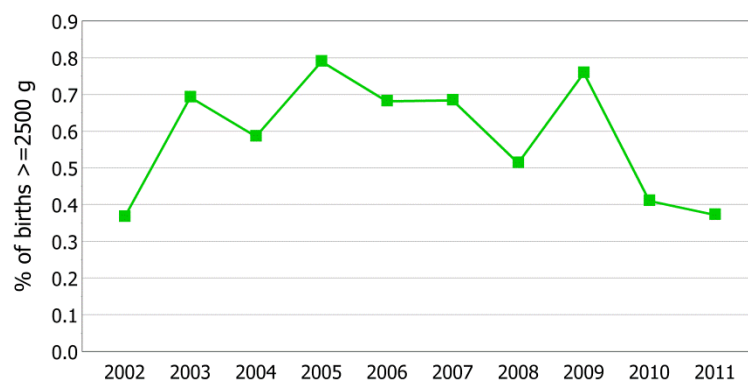
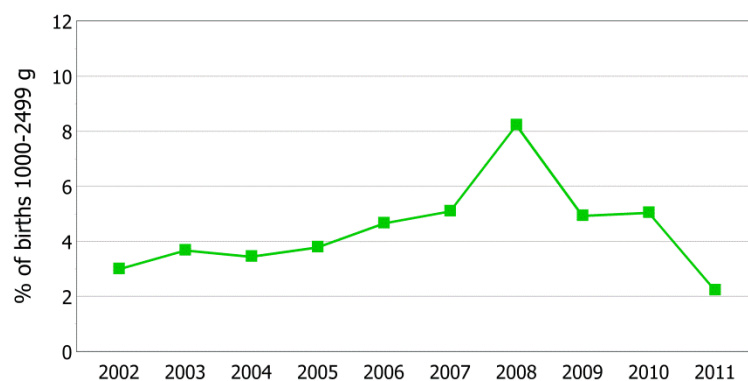
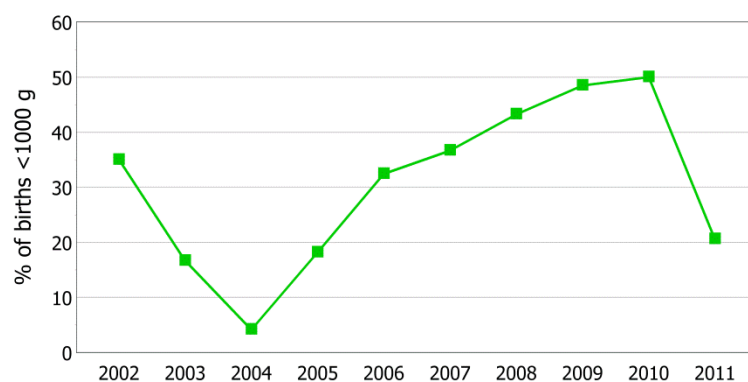


	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
# live births	8663	8573	8682	8490	8441	8818	9100	8931	8804	8819
TTN*	1.0%	1.4%	1.3%	1.4%	1.6%	1.9%	1.8%	1.8%	1.4%	1.4%
Mild	0.9%	0.8%	0.5%	1.0%	0.7%	0.9%	0.6%	0.5%	0.6%	0.6%
Moderate	0.4%	0.4%	0.2%	0.1%	0.1%	0.1%	0.1%	0.2%	0.1%	0.1%
Severe	1.0%	1.0%	0.8%	1.0%	1.3%	1.0%	0.9%	0.5%	0.5%	0.3%
All types of RDS**	3.3%	3.7%	3.3%	3.9%	4.2%	4.8%	4.3%	4.5%	3.9%	3.4%

*Transient tachypnea of the newborn

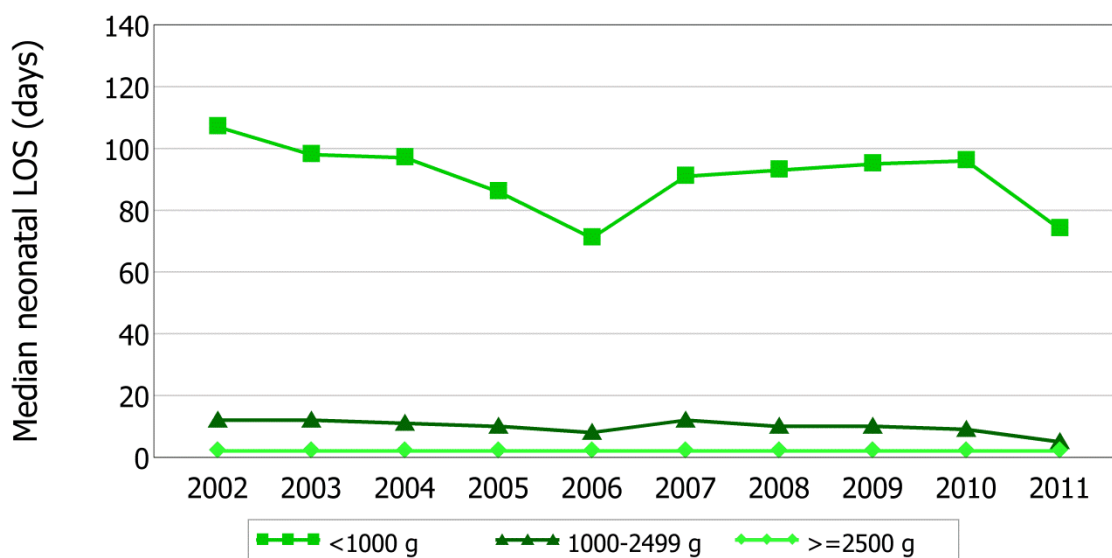
**Percents do not add up to total because total includes RDS of unknown severity

5.14 Neonatal sepsis by birth weight and year, Nova Scotia, 2002-2011



Birth weight	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<1000g										
# live births	40	42	48	33	37	30	37	33	44	34
Neonatal sepsis	35.0%	16.7%	4.2%	18.2%	32.4%	36.7	43.2%	48.5%	50.0%	20.6%
1000-2499g										
# live births	435	436	436	476	473	452	487	447	457	450
Neonatal sepsis	3.0%	3.7%	3.4%	3.8%	4.7%	5.1%	8.2%	4.9%	5.0%	2.2%
≥2500g										
# live births	8183	8092	8196	7979	7927	8335	8573	8439	8294	8332
Neonatal sepsis	0.4%	0.7%	0.6%	0.8%	0.7%	0.7%	0.5%	0.8%	0.4%	0.4%
All live births										
# live births	8663	8573	8682	8490	8441	8818	9100	8931	8804	8819
Neonatal sepsis	0.7%	0.9%	0.7%	1.0%	1.0%	1.0%	1.1%	1.2%	0.9%	0.5%

5.15 Median neonatal length of stay (days) by birth weight and year, Nova Scotia, 2002-2011



Birth weight	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<1000 g										
# live births	27	26	34	22	22	16	26	26	31	29
Median LOS	107.0	97.5	97.0	85.5	70.5	90.5	93.0	94.5	96.0	74.0
1000-2499 g										
# live births	430	430	432	471	467	449	483	439	454	445
Median LOS	12.0	12.0	11.0	10.0	8.0	12.0	10.0	10.0	8.5	5.0
≥2500 g										
# live births	8181	8086	8187	7974	7925	8335	8572	8437	8286	8328
Median LOS	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

Section 6: Glossary

Glossary

In order to clarify terminology used in this report, the term “birth” is differentiated from “delivery”. By convention in this report “delivery” marks the end of pregnancy, regardless of the number of infants born. “Birth” refers to infants. For example, a woman who had twins is counted as having one delivery and two births.

Assisted vaginal delivery

Vaginal delivery involving the use of forceps and/or vacuum.

Birth injury

Any injury to the infant such as fracture (e.g. femur, clavicle, rib, humerus , depressed skull) or central nervous system trauma (e.g. cerebral hemorrhage, spinal cord hemorrhage, brachial plexus palsy) occurring during delivery.

Body Mass Index (BMI)

Calculated as weight in kilograms divided by the square of height in metres.

Underweight: BMI <18.5 kg/m²

Normal weight: BMI 18.5 to 24.9 kg/m²

Overweight: BMI 25.0 to 29.9 kg/m²

Obese: BMI ≥ 30.0 kg/m²

Breastfeeding at discharge

Describes the method of feeding during the hospital stay. Breastfeeding refers to when the infant was given breast milk, either exclusively or with supplementation. Those noted as ‘No’ in this field indicates there was no breast milk given at all during the hospital stay.

Cesarean section delivery

Delivery of the fetus through an incision in the abdominal and uterine walls.

Early neonatal death

Death of a liveborn infant, occurring up to the sixth completed day of life (6 days, 23 hours and 59 minutes).

Gestational Age

Gestational age is calculated from an algorithm that incorporates information from early ultrasound measurements (before 25 weeks), the first day of the last normal menstrual period (LMP), and a clinical estimate based on a physical examination of the infant shortly after birth. The derivation is primarily based on the date of the mother’s last menstrual period (LMP). If LMP is unknown or LMP-estimated gestational age is discordant with that estimated by early fetal ultrasound measurements, then gestational age based on early fetal ultrasound measurements is used. If early fetal ultrasound measurements are unavailable and gestational age based on LMP is discordant from that clinically estimated by the neonatal physical exam, then the clinically estimated gestational age is used.

Gestational weight gain

Gestational weight gain guidelines set by the US Institute of Medicine and Health Canada are specific to a woman's prepregnancy BMI category.

Underweight : 12.5 to 18 kg

Normal weight: 11.5 to 16 kg

Overweight: 7 to 11.5 kg

Obese: 5 to 9 kg

Infant mortality

Death of a liveborn infant occurring within the first year of life.

Lacerations

3rd degree (Anal sphincter)

4th degree (Rectal mucosa)

Large for gestational age

See 'Size for gestational age'

Live birth

Live birth refers to birth of an infant with signs of life.

Macrosomia

Refers to growth beyond two specific thresholds, 4000 grams and 4500 grams. The American College of Obstetricians and Gynecologists supports use of the 4500 grams threshold for diagnosis of macrosomia because morbidity increases sharply beyond this weight, but acknowledges there is some increased risk of morbidity at weights >4000 grams. (ACOG Practice Bulletin No.22: Fetal Macrosomia. American College of Obstetricians and Gynecologists, Washington DC 2000.)

Neonatal death

Death of a liveborn infant, occurring up to the 27th completed day of life (27 days, 23 hours and 59 minutes).

Neonatal length of stay

The total number of days a baby stayed in the delivery hospital and transfer hospital (if applicable) before being discharged home. This calculation does not include in-hospital neonatal death.

Neonatal sepsis

Pneumonia (intrauterine or postnatal) or positive blood/cerebrospinal fluid cultures.

Obese

BMI ≥ 30.0 kg/m² where BMI is calculated as weight in kilograms divided by the square of height in metres.

Overweight

BMI 25.0 to 29.9 kg/m² where BMI is calculated as weight in kilograms divided by the square of height in metres.

Parity

Number of pregnancies, excluding the present pregnancy, which resulted in the delivery of 1 or more infants weighing 500 grams or more at birth (regardless of the outcome of such infants).

Perinatal mortality

Death of an infant, occurring up to the sixth completed day of life (6 days, 23 hours and 59 minutes). Includes stillbirths and early neonatal deaths.

Placenta previa

Placenta entirely or partially covering the internal os (diagnosis not made on ultrasound alone – must be confirmed clinically).

Placental abruption

Bleeding from the placental site due to the partial or complete separation of the placenta (diagnosis not made on ultrasound alone – must be confirmed clinically).

Postneonatal death

Death of a liveborn infant weighing 500 grams or more at birth, occurring from 28 days to 1 year of life.

Postpartum hemorrhage

Excessive bleeding from the genital tract with an estimated blood loss of greater than 500ml for vaginal deliveries or 1000mls for C-section deliveries.

Pre-existing hypertension

History of hypertensive disease prior to the current pregnancy or prior to 20 weeks gestation in the current pregnancy.

Respiratory Distress Syndrome (RDS)

Grunting, retractions, and decreased air entry - occurring before 3 hours of age and persisting beyond 6 hours of age and not explained by any other disease. Categories of severity are as stated by physician in the medical record:

Mild RDS: <35% O₂

Moderate RDS: 35% O₂ or CPAP

Severe RDS: Ventilated

TTN (Transient Tachypnea of the Newborn)

Severity not stated

Severe pregnancy-induced hypertension

Gestational hypertension with significant proteinuria. Includes HELLP syndrome (Hemolysis, Elevated Liver Enzymes, Low Platelets).

Size for gestational age

Sex-specific percentiles of birth weight for gestational age are from: Kramer MS, Platt RW, Wen SW, Joseph KS, Allen A, Abrahamowitz M, Blondel B, Bréart G. A New and Improved Population-Based Canadian Reference for Birth Weight for Gestational Age. *Pediatrics* 2001; 108 (2):e35.

<http://pediatrics.aappublications.org/content/108/2/e35.full.html>

Small for gestational age

See 'Size for gestational age'

Stillbirth

Stillbirth is defined as the complete expulsion or extraction from its mother after at least 20 weeks pregnancy, or after attaining a weight of 500 grams or more, of a fetus in which, after such expulsion or extraction, there is no breathing, beating of the heart, pulsation of the umbilical cord, or unmistakable movement of voluntary muscle.

Underweight

BMI <18.5 kg/m² where BMI is calculated as weight in kilograms divided by the square of height in metres.

VBAC (Vaginal Birth After Cesarean) candidate

A woman who has had no more than one previous cesarean section delivery (and that one involved a transverse incision); whose current pregnancy is a singleton in vertex presentation; and who has no contraindications for labour.