FOCUS ON

*Health*STATS

Contents

About the Data	2
Babies in Simcoe Muskoka	2
Understanding Fertility	3
Health Behaviours	4
Social Determinants of Health	7
Influencing Health	8
Partnerships	9
Definitions	10
Data Sources	11
References	12

simcoe muskoka DISTRICT HEALTH UNIT

Tel: 721-7520
Toll free: 1-877-721-7520
www.simcoemuskokahealth.org

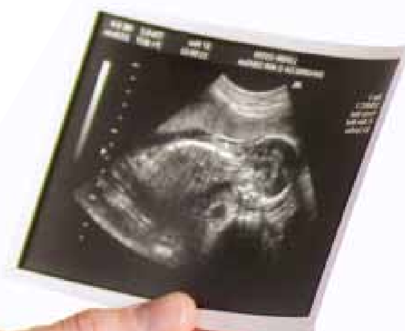
Reproductive Health in Simcoe Muskoka

"Women are pivotal contributors to society in their roles as mothers, individuals, family members and as citizens. When a woman's health is poor, her contribution to society is decreased." [1]

Reproductive health focuses on the years prior to conception as well as pregnancy and the early postpartum period. Reproductive health information offers insight into the ability of a population to produce healthy infants and an understanding of the relationships between healthy mothers and healthy babies. Optimizing the health and circumstances of women throughout this stage of life will enhance the health of babies born in Simcoe Muskoka. It can also add to the mother's experience of her new role.

More than any other time of life, the reproductive health phase is accompanied by many emotional, social and physical changes. Having supportive social and health care networks can improve a woman's ability to cope with the biological, psychological, environmental and lifestyle factors that can have an impact on the health of her baby. Although reproductive health is also a male issue, this report focuses primarily on maternal health issues and how the characteristics and behaviours of women of childbearing age in our area affect birth outcomes and a woman's own health at this pivotal time in her life.

Understanding local reproductive health data can assist in planning for the supports women and their families need. Reproductive health information can also contribute to improved local decision making and the establishment of healthy practices and policies for parents and infants.

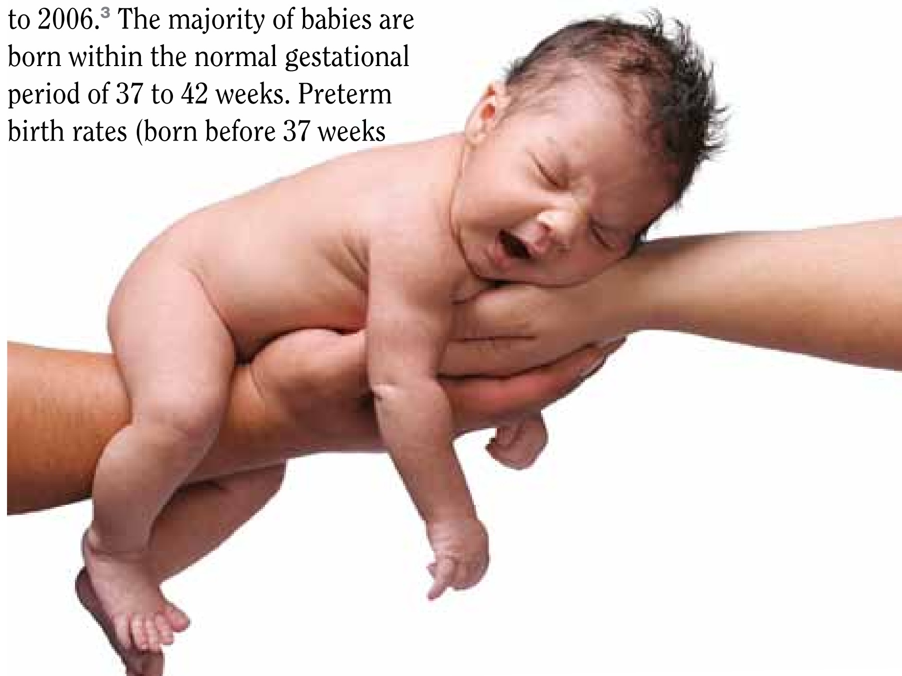


About the Data

The data included in this report are from a variety of sources and are the most recent available at the time of writing. Provincial comparisons are provided where possible. It is important to note that 3% of people living in Simcoe Muskoka report French as their mother tongue.[2] The same percentage of the Simcoe Muskoka population identify themselves with at least one Aboriginal group.[2] Studies have shown that these populations differ from the general population with respect to certain health indicators, however there are no data focused on these populations in Simcoe Muskoka, thus it is not known whether the content of this report can be generalized to them as a whole.

A Brief Overview of Babies in Simcoe Muskoka

In Simcoe Muskoka, between 4,400 and 4,900 babies have been born in each of the past 10 years.[3] The majority of these newborns are within a healthy range for birth weight, size and gestational age. Similar trends have been seen across Ontario.[3] The low birth weight (between 500 grams and 2,499 grams or 1 lb 2 oz and 5 lbs 8 oz) rate for babies born in Simcoe Muskoka has varied between 4.4% and 5.9% from 1986 to 2006.[3] The majority of babies are born within the normal gestational period of 37 to 42 weeks. Preterm birth rates (born before 37 weeks gestation) for live births in Simcoe Muskoka has increased from 5.2% and 7.9% between 1986 and 2006.[3] This may be associated with increased rates of obstetric intervention (i.e. medically indicated labour induction and Caesarean delivery) and multiple births, as well as the health, behavioural and social circumstances of the mother.[4] Post-term birth rates (born after 42 weeks gestation) decreased from 9.1% to 0.4% in the same time period. This may be associated with better management of post-term pregnancy either through inducing labour electively at 41 to 42 weeks or fetal monitoring while awaiting the onset of spontaneous labour.[5]



The term congenital anomaly refers to any physiological or structural abnormality that is present at the time of birth. The rate of one kind of congenital anomaly, neural tube defects (NTDs), is noteworthy because it has been influenced by public health policy. In Simcoe Muskoka and Ontario this rate decreased from approximately 20 NTDs per 10,000 live births in 1974 to fewer than five in 2007.[6] This decrease can be partly attributed to the mandatory fortification of a variety of cereal products with folic acid that began across Canada in 1998.[7]

Finally, the infant mortality rate is very low. The number of infant deaths per 1,000 live births per year has decreased from 9.3 to 4.2 in Simcoe Muskoka between 1986 and 2005. This follows the provincial trend.[8;9]

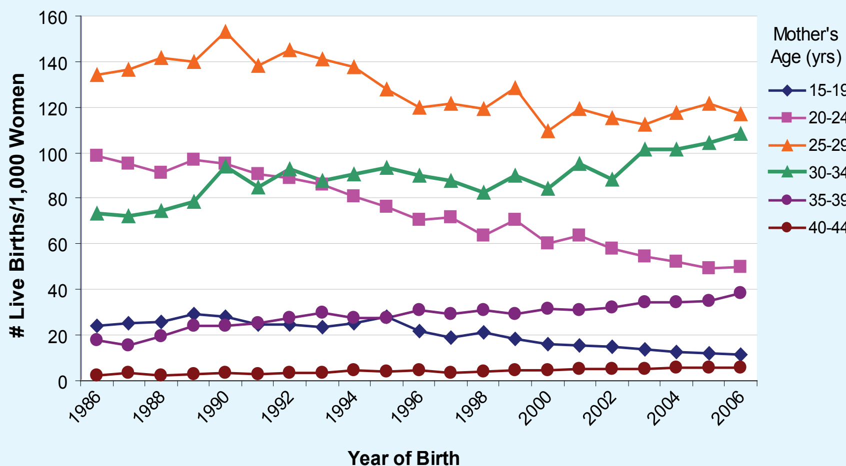
Understanding Fertility

In general, women of reproductive age (15 to 49 years) in Simcoe Muskoka are having fewer babies and at an older age. This is a trend seen across Ontario and is evident in three types of fertility rate measurements.

The general fertility rate (the number of live births per 1,000 women of reproductive age per year) in Ontario and Simcoe Muskoka has been decreasing since the early 1990s. The general fertility rate was approximately 55 live births per 1,000 women of reproductive age in 1986. This decreased to 40 per 1,000 in 2006.[3;8]

The total fertility rate (the average number of children born per woman during her reproductive years) has also been decreasing. This is a trend seen in most developed countries over the past few decades, including Canada. Between 1986 and 2006, the total fertility rate in Simcoe Muskoka reached a high of 1.99 children per women (1990), a low of 1.53 (2000) and ending at a rate of 1.65 in 2006.[3;8] A rate of approximately 2.1 is required in developed countries to replace the population without any migration.

The age-specific fertility rates show the differences in fertility among age groups. Since 1986, in Simcoe Muskoka and Ontario, there has been an overall trend toward increasing maternal age. The graph below illustrates the almost 50% decrease in fertility rates in Simcoe Muskoka from 1986 to 2006 among 20 to 24-year-olds and a more than doubling of fertility rates among 35 to 39-year-olds (from 18 to 38 live births per 1,000 women).[3;8]



The teen pregnancy rate in Simcoe Muskoka has decreased from 33 to 27 pregnancies per 1,000 women ages 15 to 19 between 2001 and 2007. This is comparable to Ontario.[8;10;11]

There are very few maternal deaths associated with pregnancy, childbirth or the postpartum period in Simcoe Muskoka and Ontario. Across Ontario between 2000 and 2005 the mortality rate was between 0.20 and 0.56 deaths per 100,000 women between the ages of 15 and 49 years.[8;9]

Reasons for the decrease in fertility rates can be related to economic, social, cultural and demographic factors.[12-15] *Regardless of the cause, Canadian women are having babies at an older age, which results in an overall decrease in the number of babies born.*

Women who have babies at an older age may be more likely to develop health problems that could affect their pregnancy. They are also more likely to experience complications during pregnancy, labour and delivery and their babies may have poorer birth outcomes.[16] *On the other hand, women who delay childbearing often have a higher level of education and socioeconomic status, which decreases some of the health problems associated with their pregnancy. So women who choose to have their first baby at an older age and who have no chronic conditions, generally have healthy pregnancies and healthy babies.*[16]

Health Behaviours of Women of Reproductive Age

Maternal health and well-being are key components of healthy pregnancies and birth outcomes. Understanding women's lifestyle choices and the social determinants of health provides insight into how the health of mothers and their babies can be improved. This section provides an overview of health behaviours and choices made by women of reproductive age in Simcoe Muskoka that can affect pregnancy in some way.

Preconception Health and Healthy Pregnancy

Having a healthy pregnancy begins before conception. Eating according to *Canada's Food Guide*, exercising regularly and having regular checkups with a health care provider are ways a woman can maximize her own health as well as the health of any future baby. Lifestyle choices made by a mother before and during pregnancy can also affect the health of the unborn child. These choices can affect the child for his or her entire life. Maintaining a healthy weight and avoiding alcohol and other drugs including tobacco during pregnancy all contribute to optimal maternal and infant health.

Physical Activity

- In Simcoe Muskoka in 2007/08, 30% (95% confidence interval 25%, 35%) of all women ages 15 to 49 were physically active. This was significantly higher than the Ontario percentage of 23% (22%, 25%).[17]

Women who are physically active before and during pregnancy are more likely to maintain a healthy weight and have a baby with a healthy birth weight. They are also better able to maintain a positive outlook and cope with the challenges of pregnancy.

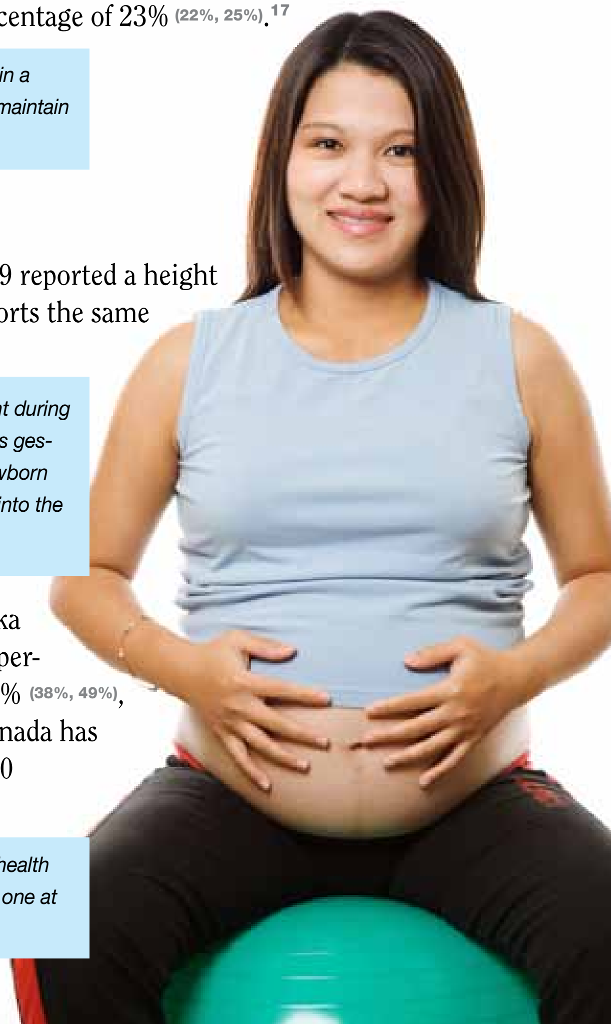
Healthy Weight

- In 2007/08 in Simcoe Muskoka, 35% (30%, 41%) of women ages 15 to 49 reported a height and weight that classified them as overweight or obese. Ontario reports the same percentage.[17]

Women who start a pregnancy overweight or obese are more likely to gain excess weight during their pregnancy and continue this weight gain pattern over time. Complications of excess gestational weight gain include an increased risk for Caesarean delivery and delivering a newborn with an excessive birth weight. In addition, the challenges of excess weight gain extend into the postpartum period as obese women are less likely to initiate breastfeeding.[18]

- In 2007/08, less than half of women ages 15 to 49 in Simcoe Muskoka ate enough fruits and vegetables to maintain a healthy weight. The percentage who reported eating more than five servings per day was 43% (38%, 49%), which is on par with other Ontario women.[17] Since then, Health Canada has increased the recommended intake of fruits and vegetables to 7 to 10 servings per day.

Eating a well-balanced diet ensures that a woman has the essential nutrients for proper health and well-being. Not consuming the recommended amount of fruits and vegetables puts one at greater risk for becoming overweight or obese.[18]



Vitamin Supplements

- In Simcoe Muskoka in 2007, 64% (47%, 78%) of women ages 15 to 55 who gave birth in the past five years took a folic acid supplement before their last pregnancy. This is similar to the Ontario percentage of 59% (55%, 63%).[17]

Folic acid or folate (one of the 'B' vitamins) is essential to the normal development of an unborn baby's spine, brain and skull, especially during the first four weeks of pregnancy. Folate also supports the pregnant woman's expanding blood volume and growing maternal and fetal tissues. Eating according to Canada's Food Guide and taking a daily multivitamin that has 400mcg (0.4mg) of folic acid will help prepare the woman for a healthy pregnancy and can reduce the risk of a baby developing neural tube defects such as spina bifida. It is recommended that a folic acid supplement be taken daily at least three months before getting pregnant and throughout pregnancy.

Prenatal Care

- In Simcoe Muskoka in 2007/08, 92% (87%, 95%) of women ages 15 to 49 had a regular medical doctor.[17] In 2008, 90% (82%, 97%) of women ages 18+ who were pregnant or had a baby in the past five years received prenatal care in the first trimester of their pregnancy.[19]

Early prenatal care promotes the health and well-being of mothers, babies and families. Women who receive prenatal care early and regularly have better birth outcomes than those who do not.[20]

Breastfeeding

- Many women think about how they will feed their baby before they get pregnant. In a 2003 Simcoe County survey, 91% (89%, 94%) of mothers who had given birth in the past year stated they planned to breastfeed their baby and the same percentage actually initiated breast-feeding.[21] In a more recent 2007/08 survey in Simcoe Muskoka, 93% (79%, 98%) of women who had given birth in the past five years initiated breastfeeding with their newborns.[17]

Health Canada recommends that infants be exclusively breastfed for the first six months of life to achieve optimal growth, development and health.[22] After that, breastfeeding should continue with the gradual introduction of solid foods for two years and more. Breastfeeding within the first hour following delivery is associated with increased exclusive and long-lasting breastfeeding.[23] For many women, breastfeeding support and education during pregnancy and the postpartum period are essential to achieving these goals.

Alcohol Use

- Between 2003 and 2007/08 in Simcoe Muskoka, an average of 45% (41%, 48%) of women ages 15 to 49 reported having a heavy drinking episode (5+ alcoholic drinks on one occasion) in the past 12 months. This was significantly higher than 34% (33%, 35%) reported by Ontario women.[17] Drinking alcohol during pregnancy is directly associated with Fetal Alcohol Spectrum Disorder (FASD) and many fetuses are inadvertently exposed to alcohol before a woman knows she is pregnant.

Fetal Alcohol Spectrum Disorder (FASD) is a range of birth defects that may occur when a woman drinks alcohol while she is pregnant. It is the leading cause of preventable developmental delays. Alcohol can damage the baby's brain, organs and body and result in problems that will last a lifetime. Damage by alcohol to the fetus is most significant during the early weeks of pregnancy when a woman may not know she is pregnant. No amount or type of alcohol is safe during pregnancy and there is no safe time to drink alcohol while pregnant. Women who are pregnant or trying to become pregnant should not drink any alcohol.

Tobacco Use

- In Simcoe Muskoka in 2007/08, 10% (6%, 18%) of women who gave birth in the previous five years smoked during their most recent pregnancy. This decreased from 18% (12%, 26%) in 2001. The percentage of pregnant women exposed to second-hand smoke has also decreased since 2001.[17]

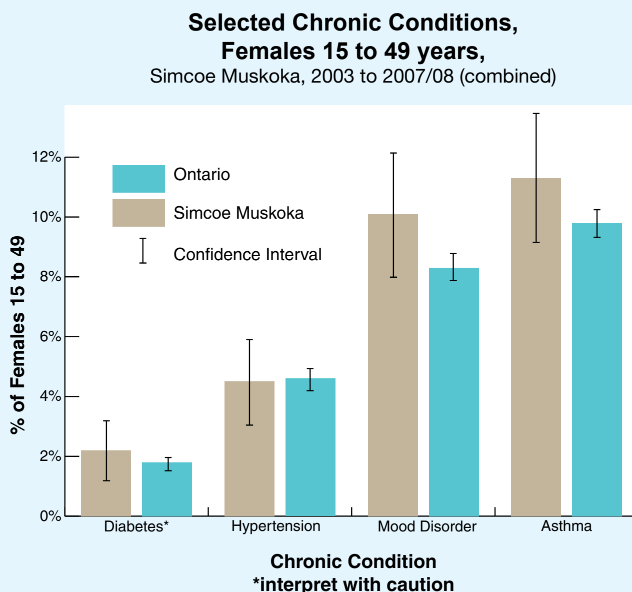
Smoking during pregnancy is the largest preventable cause of fetal and infant ill health and death. It may increase the risk of ectopic pregnancy by up to 250% and the risk of miscarriage is higher in women who smoke. Women who smoke during pregnancy are also at risk for complications that affect the placenta, have babies who are on average 200-250 g (6.5-8 oz) lighter than those of non-smokers and are at increased risk of having premature babies. These conditions may have long-term health consequences for the baby. Furthermore, babies of women who smoke during pregnancy are more likely to suffer from perinatal death (either stillbirth or neonatal death). The greater the number of cigarettes smoked during pregnancy, the greater the risk of perinatal death.[24]

Chronic Diseases

- The graph to the right shows the percentage of women, ages 15 to 49 years, between 2003 and 2007/08 in Simcoe Muskoka and Ontario who reported being diagnosed by a doctor with one or more of the following chronic conditions: asthma, mood disorder, diabetes and hypertension.[17]

Women who enter into pregnancy with chronic conditions may need additional medical care and are also at increased risk for a number of different complications.

Selected Chronic Conditions, Females 15 to 49 years,
Simcoe Muskoka, 2003 to 2007/08 (combined)



Chronic Condition
***interpret with caution**

Data Source: Canadian Community Health Survey Cycles 2.1 (2003), 3.1 (2005) and 4.1 (2007/08)

Behaviours that increase risk for chronic diseases among women of reproductive age are evident in Simcoe Muskoka. Physical inactivity, obesity, overweight, inadequate fruit and vegetable intake, along with smoking and alcohol consumption, are all modifiable risk factors that affect the health of the mother as well as the lifelong health of her infant.

Social Determinants of Health

A woman's life circumstances play a major role in determining the health of her baby. Known as "social determinants of health" these circumstances include factors such as income and education level, social supports, physical environment and working conditions. For example, pregnant women with low income and education and few social supports may have poorer birth outcomes than pregnant women with higher incomes, education levels and strong social supports.

Income & Employment

Women are more likely than men in Simcoe Muskoka to be unemployed, earn less money and raise their children without the support of a partner. For instance, after-tax income in Simcoe Muskoka is 25% lower for lone-parent families headed by women than those headed by men.[2] While unemployment fluctuates with the economic climate, Simcoe Muskoka consistently has a lower unemployment rate than Ontario. Nevertheless, both locally and provincially, women have a higher unemployment rate than men.[2] People with higher incomes generally live longer, healthier lives than people with lower incomes.[25]

Income and employment can influence a woman's mental and physical health and sense of well-being, which in turn can affect her baby. Generally, women suffer more depression and stress overload than men, often due to efforts to balance work and family life.[26] High levels of maternal stress correlate with adverse perinatal outcomes, specifically preterm labour and low birth weight.[27] Psychological stress can also lead to unhealthy behaviours in women such as smoking, poor weight gain and alcohol and other drug abuse, all of which are associated with adverse birth outcomes.[27]

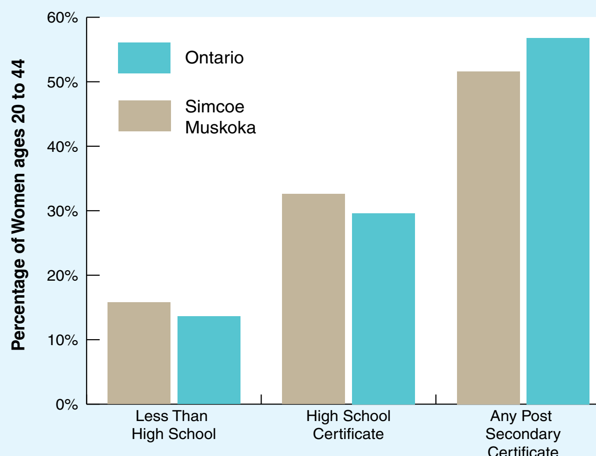
Education

Women who are better educated are more likely to engage in healthful behaviours such as supplementing prenatally with folic acid, seeking early prenatal care, attending prenatal education and exclusively breastfeeding for six months. As well, the rates of preterm birth, small for gestational age, stillbirth, infant mortality, smoking, exposure to second-hand smoke and alcohol consumption during pregnancy all decrease as the level of the mother's education increases.[28]

In general, education levels are lower in Simcoe Muskoka than Ontario.[2]

Social Supports

Whether planning to become a parent or expecting a new baby, a strong social network is essential for all mothers to be, especially if they are on their own. A network of friends and family members can provide both emotional and material support.[27] Of the lone-parent families in Simcoe Muskoka, 80% were headed by females.[2]



Overall, women of reproductive age in Simcoe Muskoka reflect their Ontario counterparts. Nevertheless, women rank more poorly than men when it comes to several key social determinants of health. Improving reproductive health for women in Simcoe Muskoka requires a collaborative approach involving policy makers, practitioners, community supports and efforts by women themselves.

Influencing Reproductive Health

The Ontario Public Health Standards (OPHS) describe the work health units are required to do. The OPHS goals for Reproductive Health in Ontario are: to enable individuals and families to achieve optimal preconception health; experience a healthy pregnancy; have the healthiest newborn possible; and be prepared for parenthood.[29] The Simcoe Muskoka District Health Unit works with individuals and community partners to achieve these goals in a variety of ways.

The *Healthy Babies Healthy Children* program supports pregnant women and families with new babies by providing home visits from public health nurses and family home visitors. The program offers support and information on pregnancy, breastfeeding, parenting and child development as well as referrals to community services. In 2009, public health nurses and family home visitors carried out 4,026 home visits in Simcoe Muskoka.[30]

The *Getting Ready for Baby* series helps expectant parents prepare for their new baby. Topics covered include healthful newborn behaviour and appearance, breastfeeding, infant safety and the transition to parenthood. The series is offered in locations throughout Simcoe Muskoka and is free of charge. Public health nurses support pregnant women who are at risk of not breastfeeding to make informed infant-feeding decisions through the *Prenatal Breastfeeding Education Project.*

Other public health programs and services that support optimal reproductive health are:

- Sexual health clinics where clients can access contraception as well as testing and treatment for sexually transmitted infections.
- Vaccine preventable disease clinics for immunization against diseases such as Hepatitis B and Human Papilloma Virus.
- Tobacco and alcohol programming to improve health and reduce chronic disease and injury among residents of Simcoe Muskoka.
- Programs to address environmental issues such as air quality and safe water.

To learn more about these reproductive health and other health unit programs, contact *Your Health Connection* by phone at 1-877-721-7520 or the health unit's website: www.simcoemuskokahealth.org.

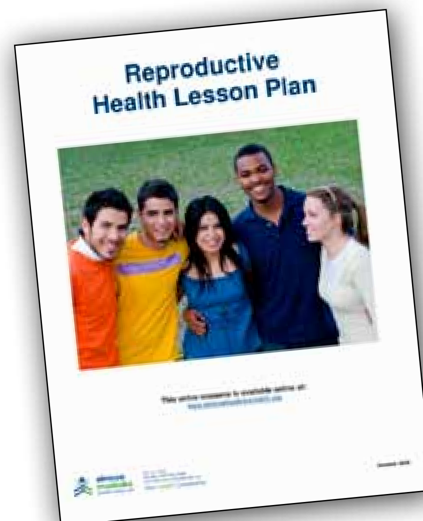
Your Health Connection links residents to information and resources about all health unit programs and services. Information about reproductive and other health statistics can be found at the health unit's HealthSTATS website: www.simcoemuskokahealthstats.org.

Supporting Reproductive Health Through Partnerships

The Simcoe Muskoka District Health Unit works with local health care professionals to meet the reproductive health needs of the community. The *20 Hour Breastfeeding Course for Health Care Professionals* is offered biannually to enable health care providers to educate and support breastfeeding women. It also strengthens the knowledge and skills of health care professionals towards successful implementation of the Baby-Friendly Initiative™ to promote and support breastfeeding in health care settings.

Public health nurses also work with local midwifery practices to increase access to smoking cessation materials for pregnant women, their partners and families.

Eating a well-balanced diet prenatally is an important step towards having a healthy baby. The *Canada Prenatal Nutrition Program (CPNP)* supports vulnerable pregnant women and women with babies up to six months of age to increase the incidence of healthy birth weights, improve the health of infants and mothers and encourage breastfeeding. Public health nurses work with local agencies to support at-risk pregnant women to improve their chances of having a healthy baby.



The *Reproductive Health Lesson Plan* helps youth to understand the importance of their health and how it relates to their future role as parents. The content helps teachers meet the expectations of the Ministry of Education's Ontario Curriculum for Grades 11 and 12 Health and Physical Education (2000). The health unit works with schools in Simcoe Muskoka to bring school administrators, teachers, students, parents and community partners together to promote health and wellness within the school community.

By working collaboratively with community partners the Simcoe Muskoka District Health Unit supports women and their families to adopt healthful behaviourals. These partnerships also work to address the social determinants of health with the goal of enhancing the reproductive health status of women and babies in Simcoe Muskoka.

Definitions

Adverse birth/perinatal outcomes – occur when a baby is born with less than optimal health.

After-tax income - is the total income minus federal, provincial and territorial income taxes

Chronic disease – is a disease that is long-lasting or recurrent.

Congenital anomaly – is a physiological or structural abnormality that is present at the time of birth.

Diabetes – is a disorder characterized by high blood glucose in which the pancreas does not produce enough insulin or the body does not properly use the insulin it makes.

Gestation - is the period of time spent in the uterus between conception and birth

Gestational age – is the age of a fetus or newborn, expressed in weeks dating from the first day of the mother's last menstrual period. It is subject to error due to recall, post-conception bleeding, irregular or long/short menstrual cycles, delayed ovulation, and unrecognized fetal loss. Gestational age may be somewhat more accurate in recent years due to ultrasounds.

Gestational weight gain – is the amount of weight a woman gains during her pregnancy.

Infant – is a child between zero and one year of age

Live Birth – is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which, after such separation, breathes or shows any other evidence of life such as heartbeat, umbilical cord pulsation, or definite movement of voluntary muscles, whether the umbilical cord has been cut or the placenta is attached. A live birth is not necessarily a viable (capable of sustaining life) birth. Live births weighing < 500 grams are excluded from calculations in this report because registration of these births as live births varies over time and geography.

Low birth weight – is an infant weighing between 500 (1lb 2oz) and 2499 grams (5lbs 8oz) at birth regardless of gestational age.

Multiple births – occur when more than one fetus is carried to term in a single pregnancy.

Neonatal – relates to the infant during the first month after birth.

Neural tube defects – are abnormalities in the development of the spinal cord, skull and brain, resulting from failure of the neural tube to close properly during fetal development.

Overweight/obese – are labels for ranges of weight that are greater than what is generally considered healthy for a given height. Health Canada defines overweight as having a Body Mass Index (BMI) between 25 and 29.9; and obesity as having a BMI>=30.0.

Pregnancy Rate – is the number of pregnancies per 1,000 women in a specified time period. Pregnancy includes live births, still births and therapeutic abortions. Miscarriages and ectopic pregnancies are not included.

Physically active – is when enough metabolic energy has been expended during leisure time over the past three months to give some cardiovascular benefit.

Postpartum – is the period beginning immediately after the birth of a child and extending for six weeks.

Preterm birth – is a birth that occurs prior to 37 weeks gestation.

Reproductive years – begin in girls during puberty and end when menstruation ceases at menopause. During the reproductive years, pregnancy may occur as the result of unprotected sexual intercourse.

Singleton births – occur when one fetus is carried to term in a single pregnancy.

Small for Gestational Age (SGA) – refers to a baby who is smaller than 90% of babies of the same gestational age for singleton infants born in Canada between 1994 and 1996. This reference was created during a period of increased availability of ultrasound confirmation of gestational age, and it is gender-specific.

Spina bifida – is a birth defect that involves the incomplete development of the spinal cord or its coverings.

Still birth - is a product of conception of 20 or more weeks gestation or fetal weight of 500 grams or more, which did not breathe or show other signs of life at delivery. At what gestational age a miscarriage becomes a stillbirth depends on the policy or law of that province, region or country.

Termination of pregnancy – is the active removal of the human embryo or fetus from the uterus before the stage of viability, or 20 weeks gestation.

Therapeutic abortion – is the deliberate termination of a pregnancy resulting in the death of the fetus or embryo. It is used to refer to induced abortions rather than spontaneous abortions or miscarriages.

95% confidence interval – indicates the interval or range within which the true population percentage probably lies. The reason for using confidence intervals is the uncertainty, or sampling error, associated with using results obtained from a sample to draw conclusions about the entire population from which the sample was drawn. The 95% confidence interval can also be interpreted as being 95% likely to include the percentage value we would have obtained if we had studied every member of the target population.

Data Sources

Birth data: Information on live births is collected by the Office of the Registrar General (ORG) using the birth registration form completed by parents and the Physician Notice of Birth or Stillbirth form (PNOB). Live birth registration is required by law. Data from the parent registration form may be subject to some recall bias. Data are analyzed by the residence of the mother, not by where the birth occurred. Audits have shown an increase in unregistered births (up to approximately 3% of all births) in districts of Ontario that charge a service fee for birth registration, and for infants who die within days of the birth.

Canadian Community Health Survey (CCHS): CCHS is an ongoing population health survey conducted by Statistics Canada to provide cross-sectional (at one point in time) estimates of the factors that influence the health of the population, health status of the population and use of the health system by the population for 126 health regions across Canada. CCHS share file data is provided to the health unit by the Ontario Ministry of Health and Long-Term Care. The health unit has CCHS share files for cycles: 1.1 (2000/01), 2.1 (2003) 3.1 (2005) and 4.1(2007/08). Respondents 12 years of age and older were randomly selected, one per household. The target population of the CCHS includes household residents in all provinces and territories, with the exclusion of populations on Indian Reserves, Canadian Forces Bases and some remote areas.

Canadian Congenital Anomalies Surveillance System (CCASS): This database provides birth prevalence rates for selected congenital anomalies in Canada. Live births up to one year of age and registered stillbirths are captured by CCASS. Data are primarily collected from the Canadian Institute for Health Information (CIHI) acute in-patient abstract file “Discharge Abstract Database” (DAD). CCASS data are coded according to the International Classification of Diseases, Ninth Edition (ICD-9). One of the most significant limitations is the inability to monitor the impact of prenatal diagnosis on the birth prevalence of selected congenital anomalies. Affected pregnancies that are terminated prior to meeting the jurisdictional criteria for a stillbirth are not captured in CCASS data.

Census: The Canadian Census is conducted by Statistics Canada every five years to provide a reliable source for describing the characteristics of Canada’s people, dwellings and agricultural operations. The Census provides the population and dwelling counts not only for Canada, but also for each province and territory and for smaller geographic units such as cities or districts within cities. The Census also provides information about Canada’s demographic, social and economic characteristics. The most recent Census of Canada took place on May 16, 2006.

Death data: Mortality data are derived from death certificates completed by physicians, which are collected by the Office of the Registrar General (ORG). The cause of death reported is that which initiates the sequence of events leading to death. Consequently, there may be some uncertainty in classifying when there are multiple causes of death. Determining true cause of death may be influenced by the social or legal conditions surrounding the death and by the level of medical investigation, e.g. AIDS and suicide. Data are analyzed by the residence of the deceased, not where the death occurred. Records for Ontario residents who die outside of the province are not available.

Hospitalization data: Data are collected from each patient’s chart at the time of discharge from hospital and are recorded on an abstract provided by Canadian Institute for Health Information (CIHI). The abstract collects information on the patient and the nature of their stay. One abstract is completed for each separation (stillbirth, death, discharge) from the hospital. The data are reported for completed cases only. Hospitals do not report on cases that are still being treated. The data represents the number of discharges, not the number of people.

Infant Feeding Survey (IFS): This survey was conducted in 2002/03 on 500 mothers who gave birth and lived in Simcoe County about their infant feeding experience. Mothers gave their voluntary consent at hospital discharge, during a public health nurse follow-up or when asked by their midwife. Interviews were conducted by telephone in two separate interviews, first at six weeks after birth, then again at six months after birth.

Integrated Services for Children Information System (ISCIS): ISCIS is a data system used for collecting information for the Healthy Baby Healthy Children (HBHC) program. A Postpartum Screen is generally applied in hospital by maternity nurses consisting of questions designed to identify factors associated with risk of parenting problems. This screen aims to reach all women (consenting) who give birth in Ontario, and is the main source of information in ISCIS. A number of other HBHC Program screens and assessments can be entered into ISCIS including: Larson Prenatal Screen, Brief Assessment and In-Depth Family Assessment.

Population Estimates: The source data used are population estimates by single year of age (up to 90+) and sex for Ontario’s Census Subdivisions (CSD). The population estimates are produced by the Demography Division, Statistics Canada, and are based on the 1986, 1991, 1996, 2001 and 2006 Census counts adjusted for net undercoverage.

Rapid Risk Factor Surveillance System (RRFSS): RRFSS is an ongoing monthly telephone survey that occurs in various public health units across Ontario. Every month, a random sample of 100 adults aged 18 years and older in each participating health unit area is interviewed regarding awareness, knowledge, attitudes and behaviours about topics and issues of importance to public health. These can include: smoking, sun safety, use of bike helmets, water testing in private wells, air quality, etc. The telephone survey is conducted by the Institute for Social Research at York University on behalf of the Simcoe Muskoka District Health Unit.

Therapeutic Abortion Summary: Information on therapeutic abortions (TAs) is collected by hospitals and clinics and provided to the Ontario Ministry of Health. The information is provided voluntarily by hospitals but is considered to be relatively complete. Since clinics must provide the information as a condition of their license, the data essentially capture all in-clinic TAs. Data are based on the client’s residence, not where the TA was performed. TAs performed out-of-province are not included.

Reference List

(1) Society of Obstetricians and Gynaecologists of Canada. Improving sexual and reproductive health: integrating women's empowerment and reproductive rights 2nd Ed. 2009 Sep. Available from: URL: http://iwhp.sogc.org/uploads/File/ISRH_booklet_web.pdf

(2) Statistics Canada. 2006 Census.

(3) Ontario Ministry of Health and Long-Term Care. Birth data [1986-2006]. IntelliHEALTH. Extracted 2009/6/1.

(4) Public Health Agency of Canada. Canadian perinatal health report. p.123: Public Health Agency of Canada; 2008. [Accessed 2010/4/27] Available from: URL: http://www.phac-aspc.gc.ca/publicat/2008/cphr-rspc/pdf/cphr-rspc08-eng.pdf

(5) Public Health Agency of Canada. Canadian perinatal health report. p.127: Public Health Agency of Canada; 2008. [Accessed 2010/4/27] Available from: URL: http://www.phac-aspc.gc.ca/publicat/2008/cphr-rspc/pdf/cphr-rspc08-eng.pdf

(6) Public Health Agency of Canada. Canadian Congenital Anomalies Surveillance System. [1974-2006].

(7) Reduction in neural-tube defects after folic acid fortification in Canada. The New England Journal of Medicine 2007 Jul 12;357:135-142.

(8) Ontario Ministry of Health and Long-Term Care. Population Estimates and Projections [1986-2009]. IntelliHEALTH. Extracted 2009/6/1.

(9) Ontario Ministry of Health and Long-Term Care. Mortality data [1986-2006]. IntelliHEALTH. Extracted 2009/6/1.

(10) Ontario Ministry of Health and Long Term Care. Theraputic Abortion Summary [2001-2007]. IntelliHEALTH. Extracted 2009/6/1.

(11) Ontario Ministry of Health and Long-Term Care. Hospitalization data [2001-2009]. IntelliHEALTH. Extracted 2009/6/1.

(12) Belanger A., Oikawa C. Who has a third child? Statistics Canada; 1999. [Accessed 2 A.D.].

(13) Lee R. The demographic transition: three centuries of fundamental change. The Journal of Economic Perspectives 2003;17(4):167-90.

(14) Statistics Canada. Report on the demographic situation in Canada. Statistics Canada; 2001. [Accessed 2010/5/5].

(15) Rowe T. Vanishing Canadians. p.111-112: J Obstet Gynacol Can 2007;29(2); 2007 Jan. [Accessed 2010/5/3].

(16) Public Health Agency of Canada. Canadian perinatal health report. p.67: Public Health Agency of Canada; 2008. [Accessed 2010/4/27] Available from: URL: http://www.phac-aspc.gc.ca/publicat/2008/cphr-rspc/pdf/cphr-rspc08-eng.pdf

(17) Ontario Ministry of Health and Long Term Care. Canadian Community Health Survey (CCHS) [2003, 2005, 2007/2008]. Statistics Canada, Share file, Ontario Ministry of Health and Long-Term Care.

(18) Rasmussen KM, Catalano OM, Yaktine AL. Weight gain during pregnancy: reexamining the guidelines. Washington, D.C.: National Academies Press; 2009.

(19) Simcoe Muskoka District Health Unit. Rapid Risk Factor Surveillance System (RRFSS) [2008].

(20) Health Canada. Family-centred maternity and newborn care: national guidelines. Ottawa, ON: Minister of Public Works and Government Services; 2000. [Accessed 2010/4/27] Available from: URL: http://www.phac-aspc.gc.ca/dca-dea/publications/pdf/fcmc04_e.pdf

(21) Simcoe Muskoka District Health Unit. Infant Feeding Survey 2002 - 2003. Extracted 2003.

(22) Public Health Agency of Canada. Breastfeeding and Infant Nutrition. Public Health Agency of Canada; Available from: URL: http://www.phac-aspc.gc.ca/dca-dea/prenatal/nutrition-eng.php

(23) Unicef. Breastfeeding - the remarkable first hour of life. Ref Type: Pamphlet.

(24) British Medical Association Board of Science and Education & Tobacco Control Resource Centre. Smoking and reproductive life. British Medical Association Board of Science and Education & Tobacco Control Resource Centre; 2004 Feb. [Accessed 2010/4/27] Available from: URL: http://www.bma.org.uk/images/smoking_tcm41-21289.pdf

(25) Federal Provincial and Territorial Advisory Committee on Population Health. Toward a healthy future: second report on the health of Canadians. p.41; 1999. [Accessed 2010/4/27] Available from: URL: http://origin.phac-aspc.gc.ca/ph-sp/report-rapport/toward/pdf/toward_a_healthy_english.PDF

(26) Federal Provincial and Territorial Advisory Committee on Population Health. Toward a healthy future: second report on the health of Canadians. p.8; 1999. [Accessed 2010/4/27] Available from: URL: http://origin.phac-aspc.gc.ca/ph-sp/report-rapport/toward/pdf/toward_a_healthy_english.PDF

(27) Best Start: Ontario's Maternal Newborn and Early Child Development Resource Centre. Preconception and health: research and strategies. p.57: Best Start: Ontario's Maternal,Newborn and Early Child Development Resource Centre; 2001. [Accessed 2010/4/27] Available from: URL: http://www.beststart.org/resources/preconception/pdf/Preconception.pdf

(28) Public Health Agency of Canada. Canadian perinatal health report. p.57-58: Public Health Agency of Canada; 2008. [Accessed 2010/4/27] Available from: URL: http://www.phac-aspc.gc.ca/publicat/2008/cphr-rspc/pdf/cphr-rspc08-eng.pdf

(29) Ministry of Health and Long-Term Care. Ontario Public Health Standards 2008. 2008. [Accessed 2005/5/5] Available from: URL: http://www.health.gov.on.ca/english/providers/program/pubhealth/oph_standards/ophs/progstds/pdfs/ophs_2008.pdf

(30) Simcoe Muskoka District Health Unit. HBHC ISCIS Monitoring Report. Integrated Services for Children Information System. Extracted 2010/4/10.

For more information about the data presented in this report, contact *Your Health Connection* at (705) 721-7520, toll free at 1-877-721-7520 or email at hconnect@smdhu.org, or visit www.simcoemuskokahealth.org.