



Report on:
Sexual and Prenatal Health in Algoma

Message from the Medical Officer of Health

The Algoma District is a geographical jurisdiction that stretches hundreds of kilometres along the shores of Lake Huron and Lake Superior with a dispersed population. This report describes and analyzes Algoma's sexual and prenatal health, including sexually transmitted infections, reproductive health and available public health programs and services. Comparisons of provincial trends and experiences show how we differ or are similar to patterns in Ontario.

Please use this report to inform yourself and to assist you in achieving a better health status in some areas, or in other areas maintaining the quality of health that is experienced in our communities. Thanks are extended to the many contributors to the report and to the population of Algoma for pursuing healthy sexual and reproductive lifestyles.



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Recommended Citation

Algoma Public Health. (2010). *Report on: Sexual and Prenatal Health in Algoma*. Sault Ste. Marie, ON: Author.

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Executive Summary

Sexual and Prenatal Health in Algoma

This report reflects current trends of the sexual and reproductive health status of residents in Algoma. The information presented will be valuable when reviewing, planning and implementing programs and services for our community. The following are the key findings:

1. Algoma has relatively more live births to women ages 15-24 than Ontario.

Although live births to females 15-19 years and 20-24 years decreased for both Algoma and Ontario, from 1986-2006, Algoma's rates were statistically higher than the provincial rates for both age groups. Young mothers are at higher risk for social exclusion, poverty, dropping out of school and food insecurity. Communities need to implement comprehensive programs that support young mothers to complete their education, increase their parenting capacity and promote their sense of belonging.

2. Algoma has a greater proportion of pregnant women attending the Canada Prenatal Nutrition Program (CPNP) who smoke compared to Ontario.

Of the pregnant women participating in the CPNP in 2007-2008, 54% in Algoma reported they were smoking at the time of program registration, compared to 22% in Ontario. Maternal smoking during pregnancy increases the risk of obstetrical, fetal and newborn complications such as intrauterine growth retardation, preterm birth, placental complications, and sudden infant death syndrome. Everyone who works with expectant women needs to give consistent messages about smoking cessation during pregnancy and the importance of having smoke-free homes and vehicles.

3. Algoma has a greater proportion of pregnant women attending CPNP who are food insecure compared to Ontario.

Of the pregnant women participating in the CPNP in 2007-2008, 88% in Algoma reported their reason for attending was to get food, food vouchers or food coupons compared to 38% in Ontario. According to the 2006 APH report *Hidden Hunger: Food Insecurity in Algoma*, 25% of expectant women in Sault Ste. Marie and 30-45% of expectant women in Algoma accessed CPNP to get help with free milk and healthy food. Lack of money severely limits the choices that families can make with respect to the amount and quality of food they eat. Furthermore, limited nutritious food during pregnancy increases the risk of inadequate maternal weight gain and adverse pregnancy outcomes such as low birth weight, intrauterine growth restriction, and preterm birth. Community partners can influence birth outcomes by coordinating food access and advocating for food security with all levels of government. It is also vital to promote, protect and support breastfeeding, since breastmilk provides food security for the first six months of life.

4. Algoma has a higher rate of chlamydia than Ontario.

For the years 1998 to 2007, the average age-specific rates of lab-confirmed chlamydia infections for the age group 15-24 years were statistically higher for Algoma for all 3 groups – female, male, and both.

In response to the high rates of chlamydia in the age group of 15-24 years, APH has implemented community education campaigns that target the youth population. These campaigns strive to empower youth with knowledge about sexually transmitted infections (STIs) and blood-borne infections along with the associated risks, prevention, transmission and treatment.

5. Gender differences were evident for lab-confirmed cases of chlamydia in Algoma.

In Algoma from 1998 to 2007 for the 15-24 year age group, females accounted for 1262 new lab-confirmed cases (77%) and males accounted for 387 new lab-confirmed cases (23%).

This difference may be due to females being more likely to see their healthcare providers for regular Pap screening and birth control. Males may not routinely visit their healthcare providers limiting their opportunities for STI screening. Urine testing, a less invasive method for testing is now available for chlamydia and gonorrhoea. Creating more awareness about this method of testing may facilitate more males to access STI screening services.

6. The uptake of GARDASIL® in the Algoma district was 59% compared to 53% in Ontario.

Beginning in fall 2007, GARDASIL®, a three-dose HPV vaccine, was offered to 672 eligible young women in grade eight throughout the Algoma district. This school-based vaccination program is aimed at protecting young women against precancerous cervical lesions and cervical cancer. The vaccine is voluntary and administered by public health nurses. The program is funded by Ontario's Ministry of Health and Long-Term Care. Information letters with consents were sent to all eligible girls and their parents in August 2007. It is anticipated that over time the uptake both locally and provincially will increase.

7. Algoma has a higher rate of hepatitis C than Ontario.

For the years 1998-2007, the average age-adjusted rate in Algoma of 57 cases per 100,000 population was statistically higher than the Ontario's average age-adjusted rate of 42 cases per 100,000 population. To limit the ongoing transmission of the disease, APH follows up on each reported case to ensure that appropriate health teachings are initiated. To help the affected person access available treatment options, individuals are referred to the Ontario Hepatitis Nurse Program, managed locally through the Group Health Centre. Harm reduction strategies such as the needle exchange program are also important in reducing the potential of sharing contaminated needles in higher risk activities.

A Call to Action

Algoma Public Health (APH) is committed to ongoing data surveillance and research that informs practice to ensure that our sexual and reproductive health programs address the changing needs of the community.

Choose Health

APH recognizes that difficult personal circumstances can influence an individual's and family's ability to make healthy choices. It is our responsibility to mobilize community partners and ensure that helpful programs and services are readily available and accessible to those who need them.

In a healthy community, individuals are empowered to make positive choices for their health. These choices include:

- Practising safer sex
- Getting vaccinated
- Not sharing personal items such as toothbrushes, razors, and eating utensils

If you are pregnant or plan to be:

- Avoiding substances such as tobacco, alcohol, and drugs to improve birth outcomes
- Attending prenatal education sessions to increase parent confidence
- Planning to breastfeed your baby to increase food security
- Seeking community services for support

We All Play a Part

Community stakeholders and citizens can work together to raise awareness about the impacts of poverty and the other social determinants of health on individuals and families. Some examples of other social determinants of health include income and its distribution, early life experience, education, employment and working conditions, unemployment and employment security, housing and food security. These interrelated and cumulative factors have a significant impact on the health status of individuals and their families.

Strategies such as building community networks, advocating for change in government policy, and improving access to community support services for priority populations will strengthen community capacity. By communicating with our municipal, provincial and federal government representatives, we can advocate for policies that improve food security, adequate housing, and overall health.



Introduction

Algoma Public Health (APH) is committed to supporting healthy communities by providing a continuum of quality health services throughout the Algoma district. APH believes that research is an integral part of providing evidence-based and client centred programs and services to the residents of Algoma. The information compiled in the *Sexual and Prenatal Health in Algoma* report identifies community strengths and needs and will assist with the ongoing development of local prenatal and sexual health services.

The first *Sexual and Reproductive Health Progress Report for Algoma* was released in 2001. The new report focuses on the reproductive and sexual health status of Algoma residents and highlights trends, health outcomes and services that have evolved over time.

This report consists of the following sections:

- The social determinants of health
- Prenatal health services at APH
- Reproductive health indicators (live births, therapeutic abortions, pregnancy rates, stillbirths, low birth weights, and high birth weights)
- Sexual health services at APH
- Sexually transmitted infections, blood-borne infections and relevant indicators (chlamydia, gonorrhoea, HIV/AIDS, syphilis, human papillomavirus, Papanicolaou test, hepatitis B and hepatitis C)

The *Sexual and Prenatal Health in Algoma* report is intended for healthcare providers, community stakeholders, Aboriginal organizations, health units, school boards, local government representatives and the general public to assist in the coordination and planning of reproductive and sexual health programs.

Data Sources

The Algoma and Ontario data cited in this report came from various sources as highlighted below.

***intelli*HEALTH ONTARIO**

The Ontario Ministry of Health and Long-Term Care's *intelli*HEALTH ONTARIO is a health information database populated by datasets contained within the Provincial Health Planning Database (PHPDB) health database. Report data from this source include:

- Population estimates based on the 2006 census data for 1986 to 2007
- Live birth counts for 1986 to 2006

- Stillbirth counts for 1996 to 2005
- Therapeutic abortion counts for 2001 to 2006
- Low birth weights and high birth weights for 1996 to 2006

HELPS Database

The Ontario Ministry of Health and Long-Term Care's Health Planning System (HELPS) database administered by the Public Health Branch, a predecessor of *intelliHEALTH ONTARIO*, is an information system for reproductive health surveillance. Report data from this report include:

- Therapeutic abortion counts for 1996 to 2000

Integrated Public Health Information System (iPHIS)

The Ministry of Health and Long-Term Care's iPHIS is an information system for public health reporting and surveillance for reportable diseases in Ontario under the *Health Protection and Promotion Act (HPPA)*.

Report data from this source include:

- Lab-confirmed case counts for chlamydia, gonorrhea, HIV, infectious syphilis, hepatitis B and hepatitis C. Algoma counts were run by APH staff and Ontario counts were obtained from the Ontario Public Health portal.

Provincial Infectious Diseases Advisory Committee (PIDAC)

The Ministry of Health and Long-Term Care's document [Sexually Transmitted Infections Case Management and Contact Tracing Best Practice Recommendations](#) was also sourced. Report data from this source include:

- Ontario's 2006 infectious syphilis rate

Canadian Community Health Survey (CCHS) 2005

Health Canada and Statistics Canada created the CCHS, which is a cross-sectional survey that collects information related to health status, healthcare utilization and health determinants for the Canadian population. The survey is designed to provide reliable estimates at the health region level, as there is a large sample of respondents. Report data from this source include:

- Frequency of Pap smears for women aged 18-69 years within the following timeframes: the last 3 years; less than 1 year ago; and 1 year to less than 3 years ago; and more than 3 years ago.

Canada Prenatal Nutrition Program (CPNP)

Health Canada's CPNP publishes a Welcome Card Project Report yearly. This report provides aggregate information on clients who access the program from all delivery sites and compares them with Ontario and Canada. Report data from this source for 2007-2008 includes the following information about CPNP participants:

- Average age, minimum age, maximum age
- Aboriginal identity
- Smoker at time of registration
- Average number of years in school
- Average gestation at program entry
- First pregnancy
- Reasons for attending

APH Program Data

Program data kept by APH staff were used for program attendance at prenatal classes, genetic counselling and sexual health services.

Data Interpretation

For some sexually transmitted infections (STIs) included in the report, annual age-adjusted rates are reported. For other STIs, the annual number of cases is too low to report and thus we report the average rate over the time period of 1998 to 2007. When case counts are low (less than five cases) the exact case count is not stated because such reporting may compromise the confidentiality of the persons who contracted the infections.

Age-adjusted rates (also known as age standardized rates) take into account any differences in the age structure of two communities or changes in age structure of a population over time. Age-adjusted rates represent the overall disease rate of a community as if it had the same population structure as a reference population (for example, the population structure of Ontario as a whole). This adjustment corrects for differences in age structures of the population. Thus, only age-adjusted rates, standardized with the same reference population should be used to compare communities.

For most reproductive indicators annual age-specific rates are reported. An age-specific rate is the rate measured in a particular age group, in our case, women in their childbearing years ages 15-49. The numerator and the denominator for this rate refer to the same age group, that is, both have the same age distribution. Again, if the case counts are too low to report yearly, then an average age-specific rate was calculated over the time period. Based on data availability there is some variation of time periods for the reproductive indicator rates.

Confidence intervals at a 95% level have also been used to determine if the variability between the Algoma rates and the Ontario rates is statistically below, above, or no different. If the Algoma confidence intervals overlap the Ontario confidence intervals, then we can conclude that the difference between the two rates is not statistically significant.

The Social Determinants of Health

This report attempts to incorporate how the social determinants of health relate to the delivery of sexual and reproductive health programming throughout Algoma. Health is directly affected by one's economic and social circumstances. Not everyone has equal access to the social and economic resources that are required to be healthy. These resources are collectively called the social determinants of health. There are several versions of the determinants of health framework. This report cites the version developed from the 2002 York University National Social Determinants of Health Conference.

Income or lack of income serves as an overarching indicator that determines the quality of other social determinants of health like the quality of early life, education, employment and working conditions, unemployment and employment security, housing and food security (Raphael, 2004, p.8). These interrelated and cumulative factors have a significant impact on the health status of individuals and their families.

The Social Determinants of Health include:

- Aboriginal status
- early life
- education
- employment and working conditions
- food security
- healthcare services
- housing
- income and its distribution
- social safety net
- social exclusion
- unemployment and employment security

Source: Social Determinants of Health, Canadian Perspectives (2004). p. 6.

APH with partner agencies provides a range of programs and services that aim to improve the health of residents of Algoma. Some of these programs are population based, that is they serve the general population, while others are geared to priority populations. Priority populations are a key component of the requirements outlined in the Ontario Public Health Standards to identify and work with local priority populations. Priority populations are identified by surveillance, epidemiological, or other research studies and are those populations that are at risk and for whom public health interventions may be reasonably considered to have a substantial impact at the population level. In other words, priority populations are those whose lives are impacted negatively by the social determinants of health.



Reproductive Health

APH Reproductive Health Program and Services

The Reproductive Health Program at Algoma Public Health (APH) supports healthy pregnancies by providing education, resources and consultation to expectant women and their families, those planning a pregnancy, and people in their reproductive years. Public health nurses work with educators, health and social service providers, workplaces and the general public to increase awareness about the factors that impact healthy pregnancy outcomes.

Factors affecting healthy pregnancy outcomes include:

- Use of folic acid before conception and in early pregnancy
- Adequate nutrition, physical activity and optimal weight gain in pregnancy
- Smoking cessation and avoidance of alcohol and substances
- Stress reduction and management
- Benefits of support systems
- Access to prenatal care
- Early recognition and appropriate response to preterm labour

Prenatal Education

APH offers a variety of prenatal education options. Choices for prenatal education include evening sessions, daytime sessions, Young Parents Connection for expectant parents ages 25 years and under, Garden River Wellness Centre sessions and individual preconception and prenatal consultations.

Topics covered in the sessions include:

- Healthy lifestyle
- Labour and delivery
- Breastfeeding
- Period of purple crying ®
- Fatherhood
- Postpartum changes
- Newborn care and safety

Supporting the Work of Health and Social Service Providers

APH staff participate in multidisciplinary committees and provide updates around preconception and prenatal health to community professionals and agencies who work with pregnant families. This includes working collaboratively to promote key messages and public education resources. Our agency also hosts

workshops for professionals featuring topics such *Reaching Young Parents* and *Playing it Safe: Service Provider Strategies to Reduce Environmental Risks to Preconception, Prenatal and Child Health*.

Working with Educators

APH reproductive health program staff provide consultation to school boards and teacher training upon request regarding reproductive health curriculum topics. *Healthy Parents Healthy Babies* is a lesson plan developed for secondary school teachers, particularly those who teach parenting or health and physical education, to complement their lessons about preconception and prenatal health.

Working with the Community

APH staff participate in community coalitions such as the Algoma Fetal Alcohol Spectrum Disorder Committee for Sault Ste. Marie and Algoma and Young Parents Connection Committee. The booklet *Community Services for New Parents—Before, During and After Pregnancy*, was developed for the general public and professionals. It lists helpful phone numbers and websites for people planning a pregnancy, currently pregnant or those who are new parents.

Supporting Healthy Workplaces

Simple changes in the workplace can help promote and protect the health of pregnant workers. Employers and employees can request information about reproductive health risks in the work environment. Best practice resources can be provided to assist workplaces to develop family friendly policies.

Nurse Practitioner Services

Regular follow-up with a primary healthcare provider can improve pregnancy and birth outcomes. Nurse practitioners at APH provide services to mothers with children up to the age of five who do not have a healthcare provider. These services include well baby visits, child immunizations, and general woman healthcare, including referrals to obstetricians.

Genetic Counselling and Clinic Services

Public health nurses who work in the genetics program provide comprehensive information about prenatal screening and testing for genetic conditions to people planning a pregnancy or those already pregnant. Individuals and families may attend a Genetic Clinic and consult with a visiting geneticist and genetic counsellor at clinics that are held five to six times per year. The clinic also provides consultation to individuals and families investigating fetal alcohol syndrome and related disorders caused by prenatal exposure to alcohol.

Reproductive Health Indicators

This section focuses on reproductive health statistics from 1986-2006 for the female population aged 15-49 years for Algoma and Ontario. The intent is to highlight Algoma trends compared to Ontario trends.

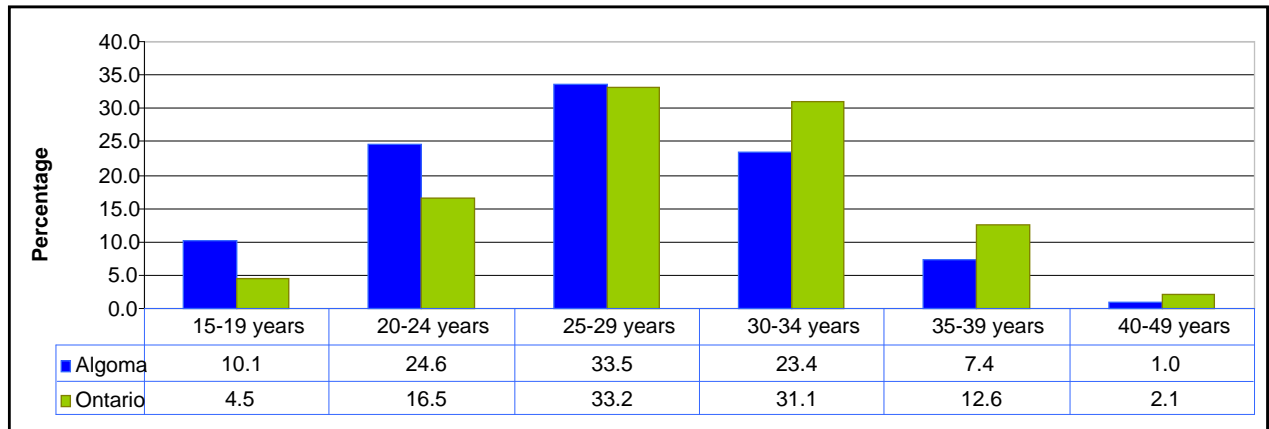
Live Birth Definition

A live birth is the complete delivery of a baby not depending on the duration of the pregnancy. Once separated from its mother, the baby must show evidence of life, i.e. heartbeat, umbilical cord rhythm, definite movement of voluntary muscles regardless of if the umbilical cord has been cut or the placenta is attached. A live birth is not necessarily a viable birth (APHEO, 2003).

Age Distribution of Live Births in Algoma and Ontario

From 1986-2006 there were 28,019 live births in Algoma compared to 2,919,533 live births in Ontario. Algoma's live births represent less than 1% of all live births during this time period. A breakdown for age groups comparing Algoma and Ontario is found in Figure 1 below.

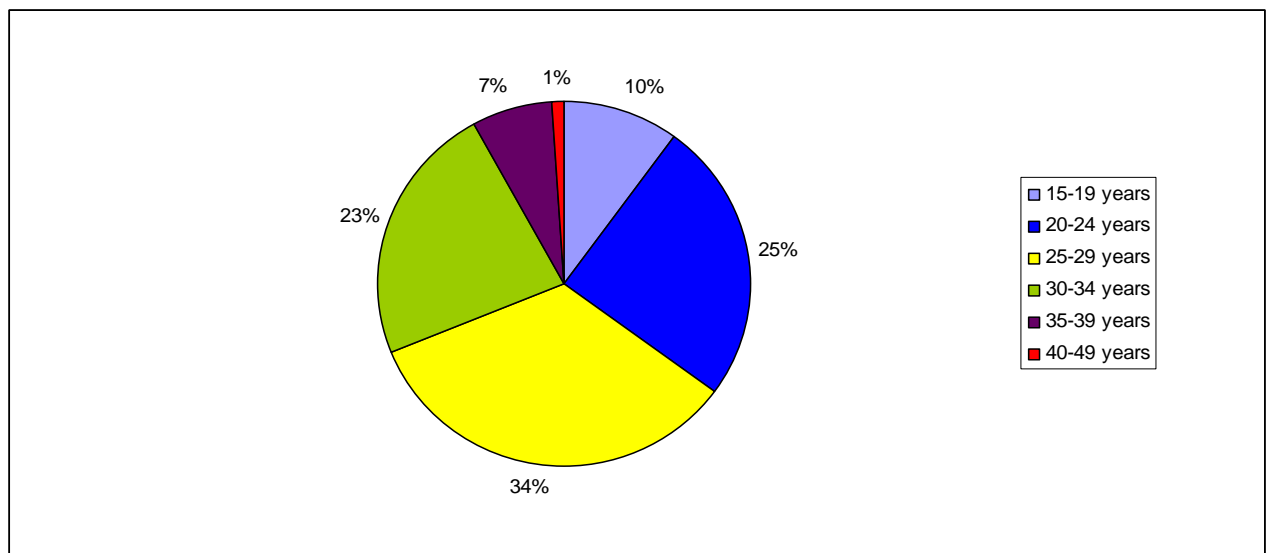
Figure 1 - Average Percentages of Live Births by Age Groups, Algoma and Ontario, 1986-2006



Source: *intelliHEALTH ONTARIO*

The percentages of live births by age groups for Algoma are found in Figure 2.

Figure 2 - Average Percentages of Live Births by Age Group in Algoma, 1986-2006



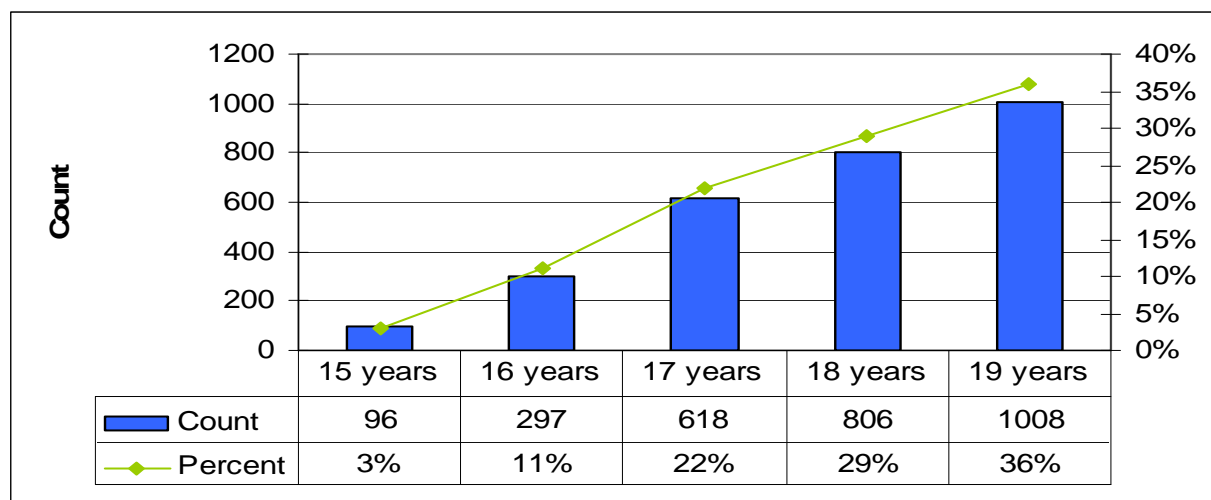
Source: *intelliHEALTH ONTARIO*

The age group breakdown by year for all live births from 1986-2006 in Algoma is found in Appendix A.

Age Distribution of Live Births to Teens in Algoma

From 1986-2006 in Algoma, there were 2825 live births to females aged 15-19 years. Figure 3 shows the combined total number of live births to teens by age and the percentage by age. From 1986-2006, 17 live births occurred to teens less than 15 years of age averaging less than one birth per year. The number of live births to teens in Algoma by age by year for 1986-2006 can be found in Appendix B.

Figure 3 - Total Teen Live Birth Count and Percentages, Algoma, 1996-2006



Source: *intelliHEALTH ONTARIO*

Live Birth Rates

The number of live births in Algoma has been decreasing over the last 20 years. The decrease in the number of live births may be attributed to a smaller cohort of women in their childbearing years, smaller families, and women delaying childbearing.

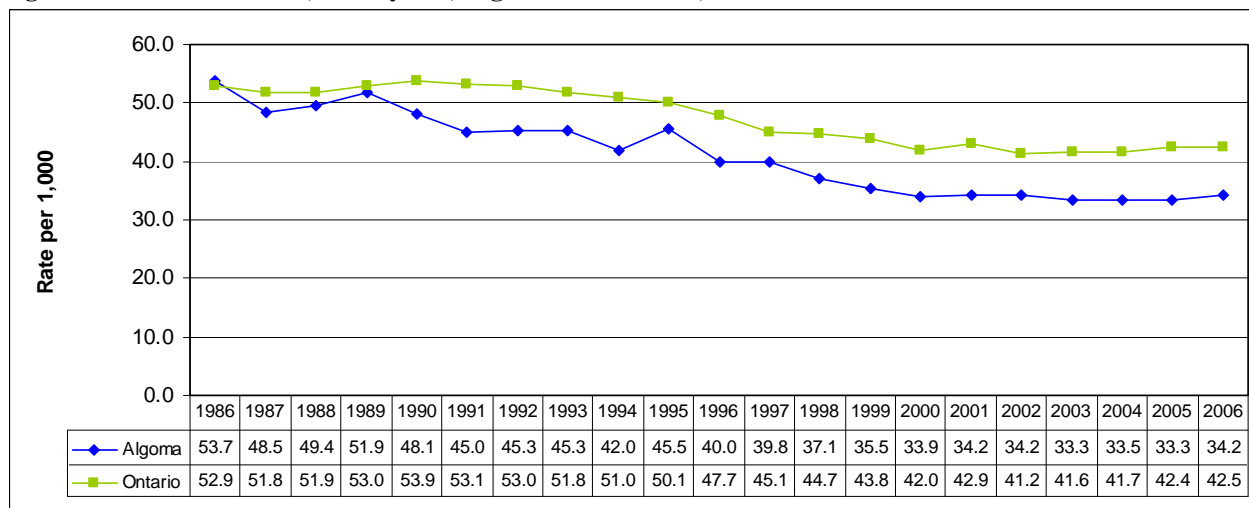
General Fertility Rates (Live Birth Rate ages 15-49 years)

General Fertility Rate Definition

The general fertility rate, also known as the live birth rate, is the ratio of the number of live births during a given time period to the female population aged 15-49 years (APHEO, 2003).

In Algoma, the general fertility rates were statistically lower than Ontario's rates for all years except 1986, 1988 and 1989 (Figure 4).

Figure 4 - Live Birth Rates, 15-49 years, Algoma and Ontario, 1986-2006



Source: *intelliHEALTH ONTARIO*

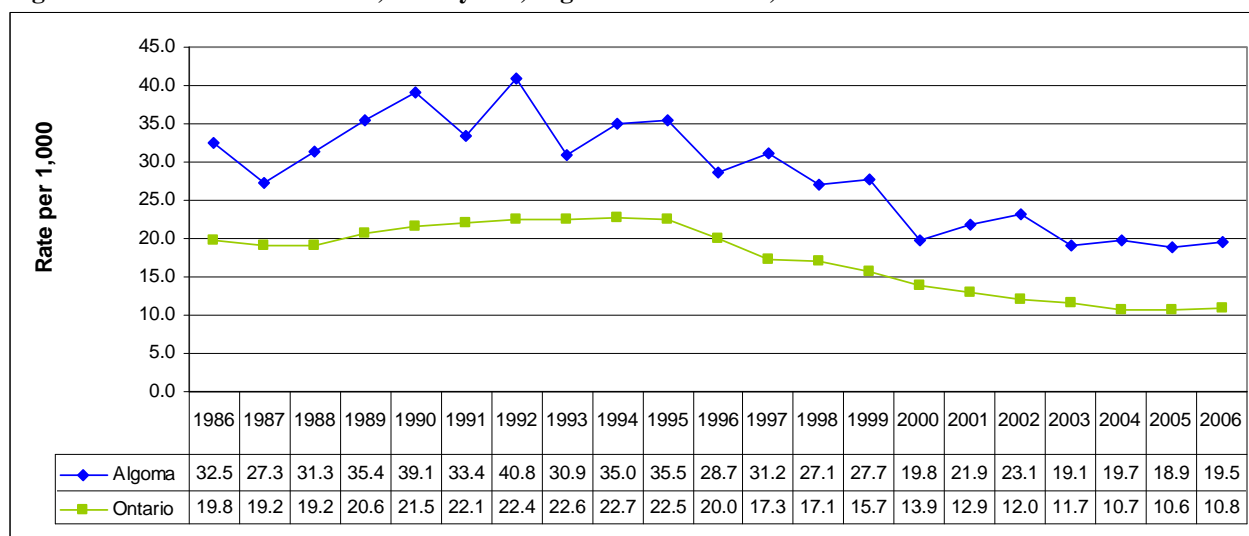
Age-Specific Live Birth Rates

An age-specific live birth rate is the ratio of the number of live births to women in a given age group relative to the number of women in that age group. This section of the report contains the live birth rates for the following age groups: 15-19 years (teen); 20-24 years; 25-29 years; 30-34 years; 35-39 years; and 40-49 years.

15-19 years (Teen)

Algoma teen live birth rates have been declining since 1992, but were statistically higher than Ontario's rates for all years (Figure 5).

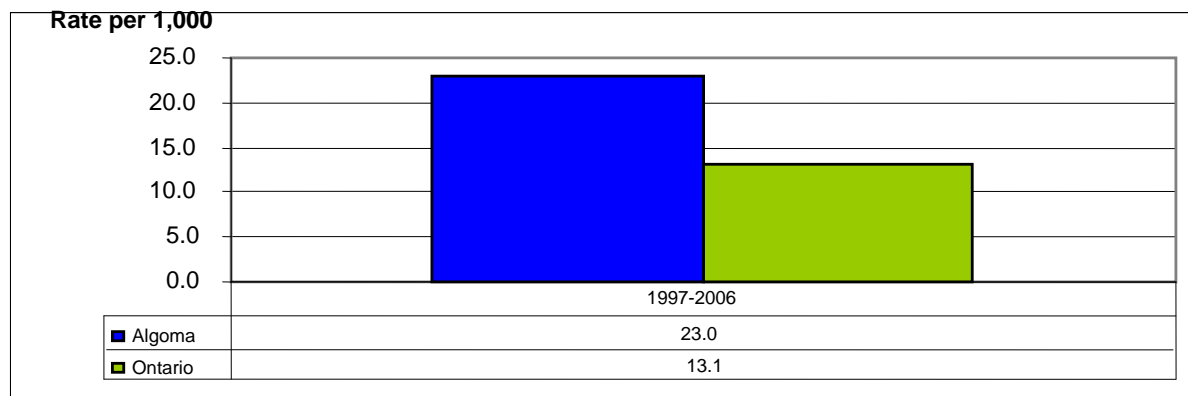
Figure 5 - Teen Live Birth Rates, 15-19 years, Algoma and Ontario, 1986-2006



Source: *intelliHEALTH ONTARIO*

Over the 10 year span from 1997 to 2006 the average age-specific live birth rate for the 15-19 years age group in Algoma was 23 per 1,000, statistically higher than 13.1 per 1,000 for Ontario (Figure 6).

Figure 6 - Average Age-Specific Live Birth Rate, 15-19 years, Algoma and Ontario, 1997-2006

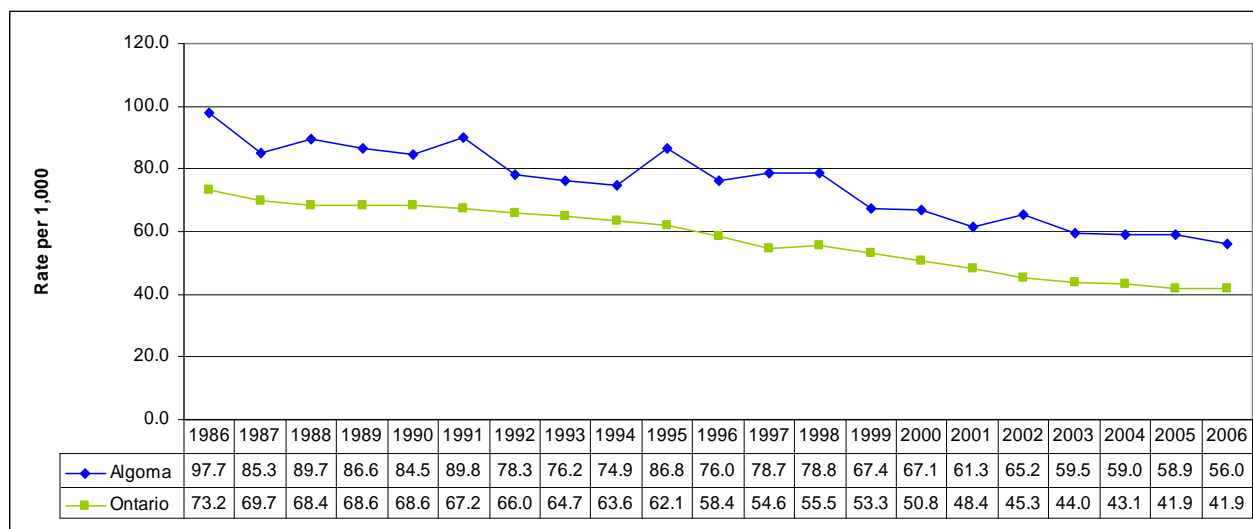


Source: *intelliHEALTH ONTARIO*

20-24 years

The live birth rate for the 20-24 years age group has been declining for both Algoma and Ontario with the live birth rates for Algoma females statistically higher than Ontario's rates for all years (Figure 7).

Figure 7 - Live Birth Rates, 20-24 years, Algoma and Ontario, 1986-2006

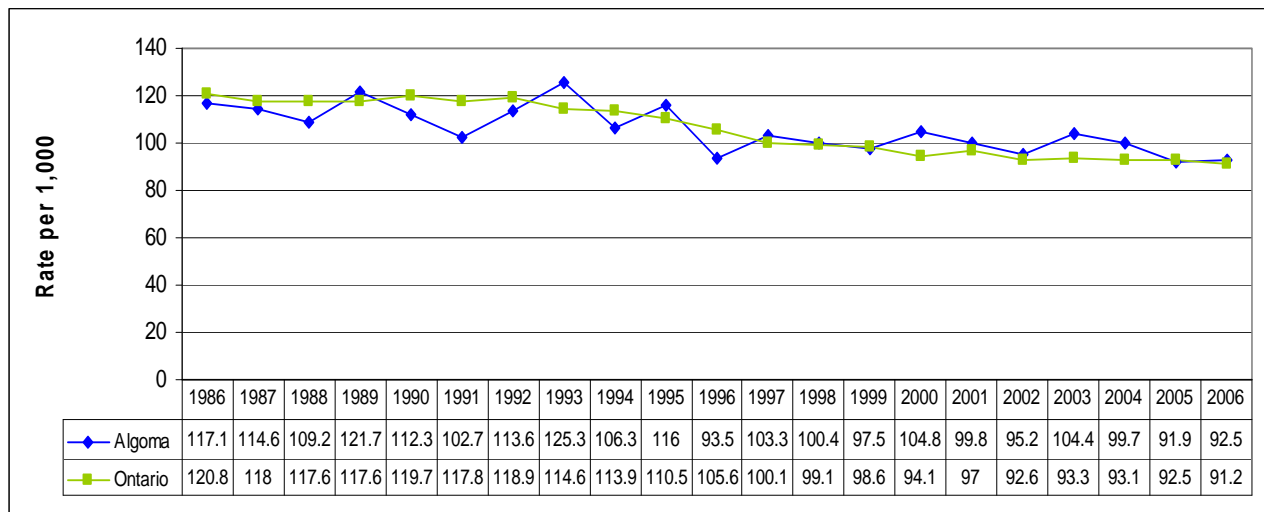


Source: *intelliHEALTH ONTARIO*

25-29 years

For the 25-29 age group, from 1986-2006, Algoma's live birth rates were not statistically different from those in Ontario for all years with the exceptions of 1991 and 1996 where Algoma's rates were statistically lower (Figure 8).

Figure 8 - Live Birth Rates, 25-29 years, Algoma and Ontario, 1986-2006

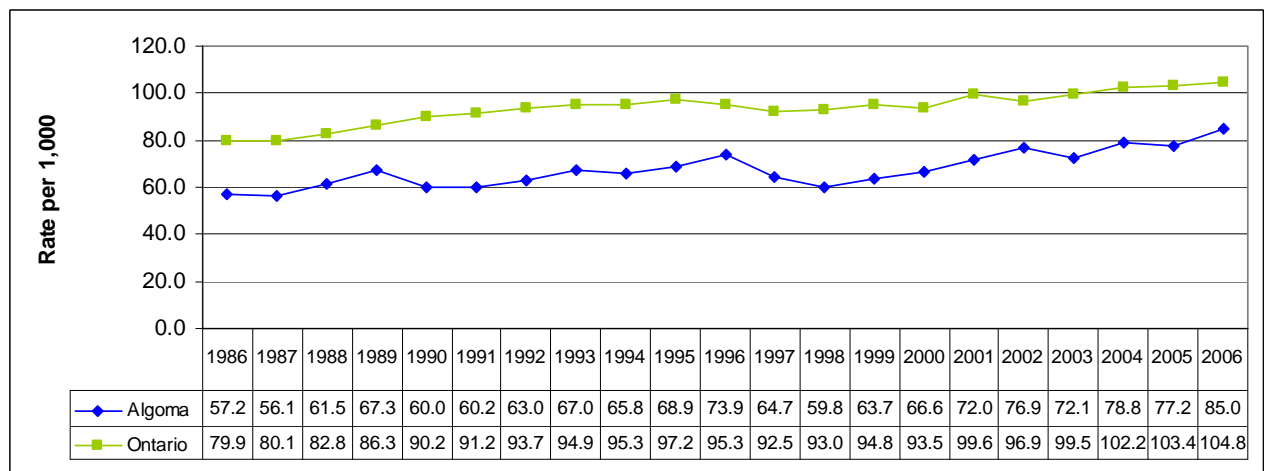


Source: *intelli*HEALTH ONTARIO

30-34 years

For the age group 30-34 years, Algoma's live birth rates were statistically lower than Ontario's for all years from 1986 to 2006 (Figure 9).

Figure 9 - Live Birth Rates, 30-34 years, Algoma and Ontario, 1986-2006

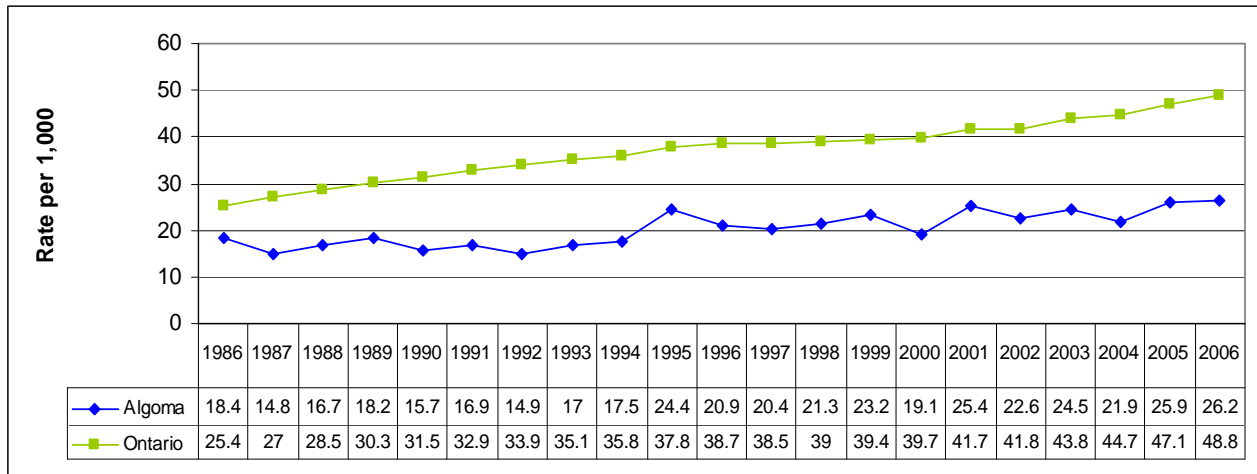


Source: *intelli*HEALTH ONTARIO

35-39 years

For the age group 35-39 years, Algoma’s live birth rates were statistically lower than Ontario’s rates for all years from 1986 to 2006 (Figure 10).

Figure 10 - Live Birth Rates, 35-39 years, Algoma and Ontario, 1986-2006

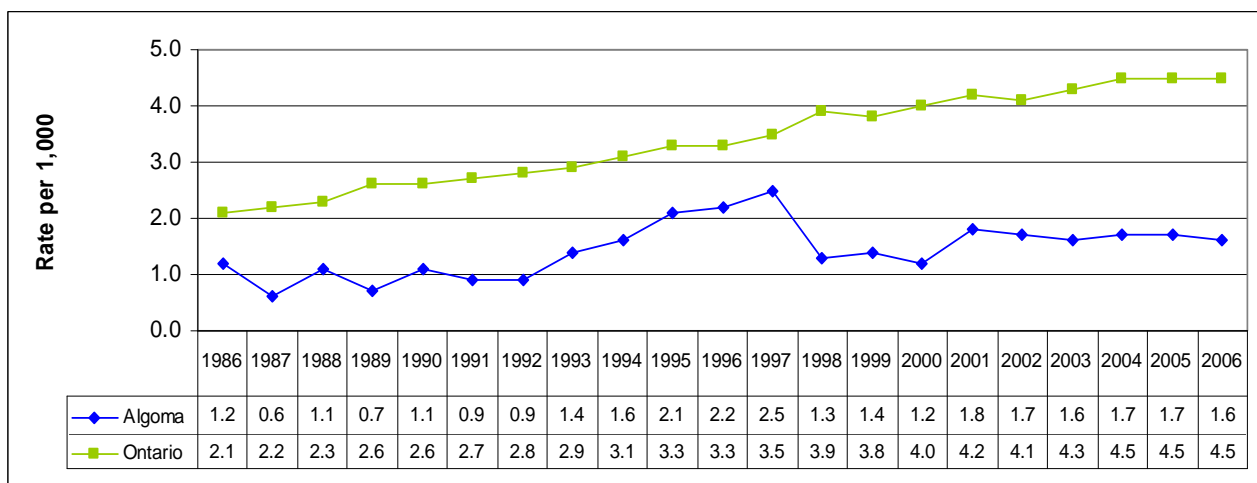


Source: *intelliHEALTH* ONTARIO

40-49 years

For this smaller cohort of women aged 40-49 years who gave birth, from 1986 to 1997 Algoma’s live birth rates were statistically lower than Ontario’s with the exception of 1986, 1995 and 1997 where there was no statistical difference when compared to Ontario. Algoma’s live birth rates were also statistically lower in 1998 and this trend continued through to 2006 (Figure 11).

Figure 11 - Live Birth Rates, 40-49 years, Algoma and Ontario, 1986-2006



Source: *intelliHEALTH* ONTARIO

Therapeutic Abortion Rates

Therapeutic Abortion Definition

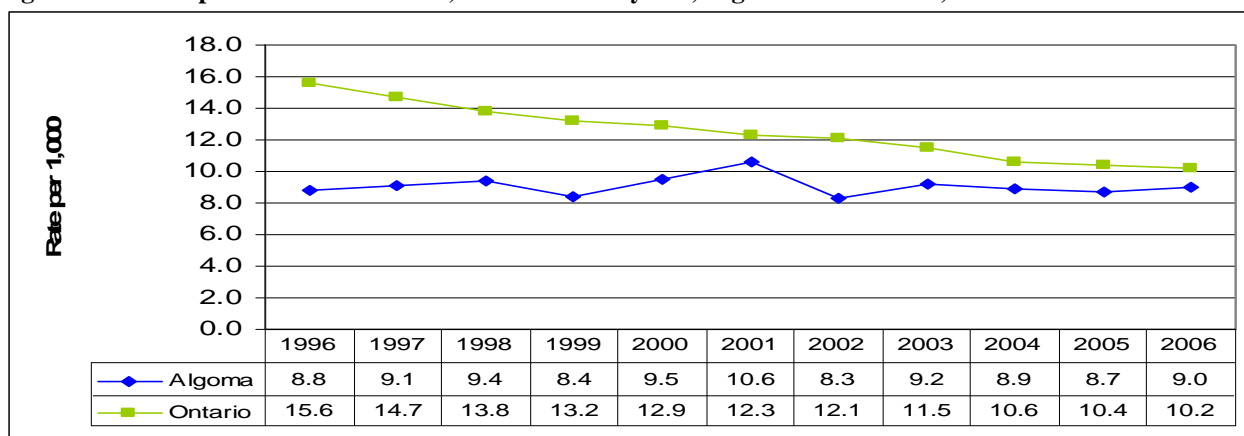
Therapeutic abortion is the deliberate termination of a pregnancy resulting in the death of the fetus or embryo. It is used to refer to induced abortions rather than spontaneous abortions or miscarriages, (APHEO, 2003).

The therapeutic abortion rate is the number of therapeutic abortions per 1,000 women in that age group. This section of the report contains therapeutic abortion rates for the following age groups: 15-49 years and 15-19 years for females in Algoma and Ontario from 1996-2006.

15-49 years

For the age group 15-49 years Algoma's therapeutic abortion rates were statistically lower than Ontario's rates from 1996 to 2005 (Figure 12).

Figure 12 - Therapeutic Abortion Rates, Females 15-49 years, Algoma and Ontario, 1996-2006

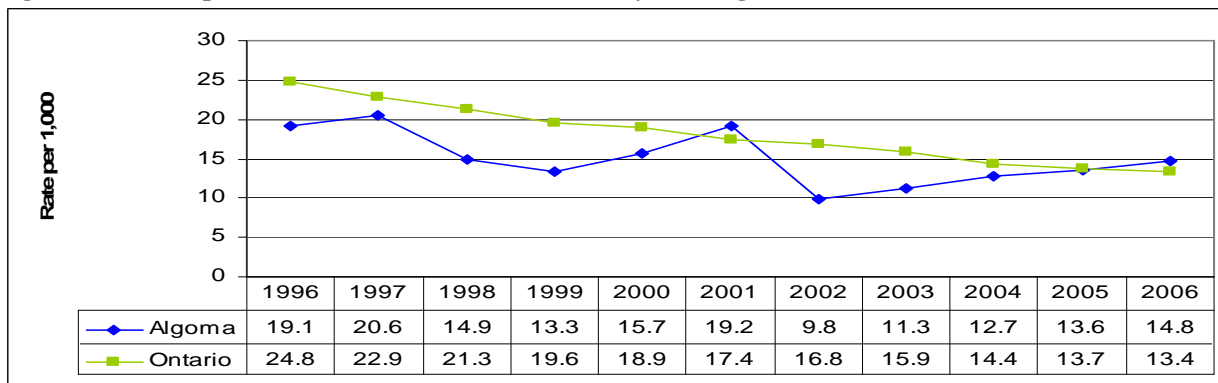


Sources: Ontario HELPS Database and *intelli*HEALTH ONTARIO

15-19 years (Teen)

For the teen therapeutic abortion rates, Algoma's rates were statistically lower than Ontario's rates for 1996, 1998, 1999, 2002, and 2003. Over the 11 years, while Algoma's rates showed fluctuations, Ontario's rates showed a steady decline (Figure 13).

Figure 13 – Therapeutic Abortion Rates, Females 15-19 years, Algoma and Ontario, 1996-2006



Sources: Ontario HELPS Database and *intelli*HEALTH ONTARIO

Pregnancy Rates

Pregnancy Definition

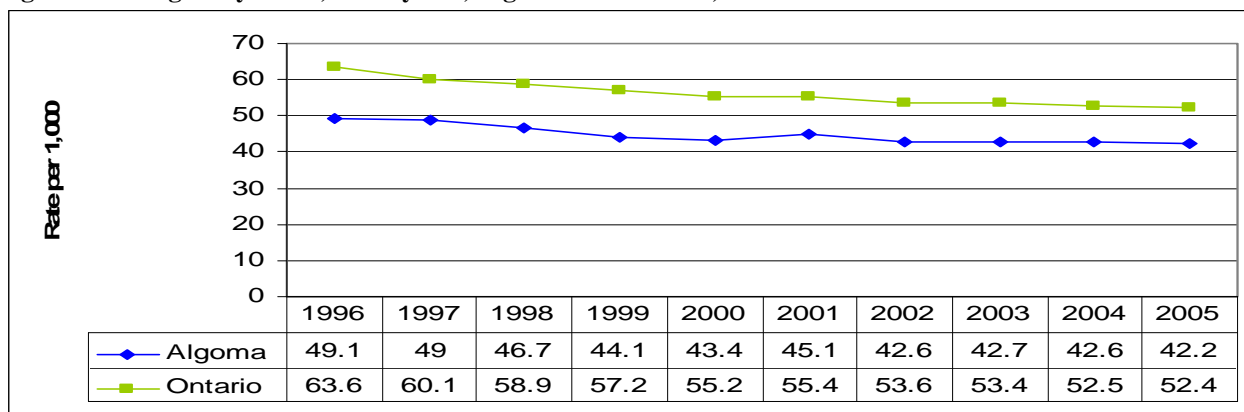
Pregnancy is the gestation process, from conception through to the expulsion of the product of conception from the body whether through miscarriage, therapeutic abortion, cesarean section, or vaginal delivery. A full-term pregnancy lasts approximately 266 days (38 weeks) from the day of fertilization (APHEO, 2003).

The pregnancy rate is the number of pregnancies (live births, stillbirths, and therapeutic abortions) per 1,000 women of reproductive age. This section of the report contains pregnancy rates for the following age groups: 15-49 years and 15-19 years for females in Algoma and Ontario from 1996-2005.

15-49 years

For the age group 15-49 years, Algoma's pregnancy rates were statistically lower than Ontario's rates for all years (Figure 14).

Figure 14 - Pregnancy Rates, 15-49 years, Algoma and Ontario, 1996-2005

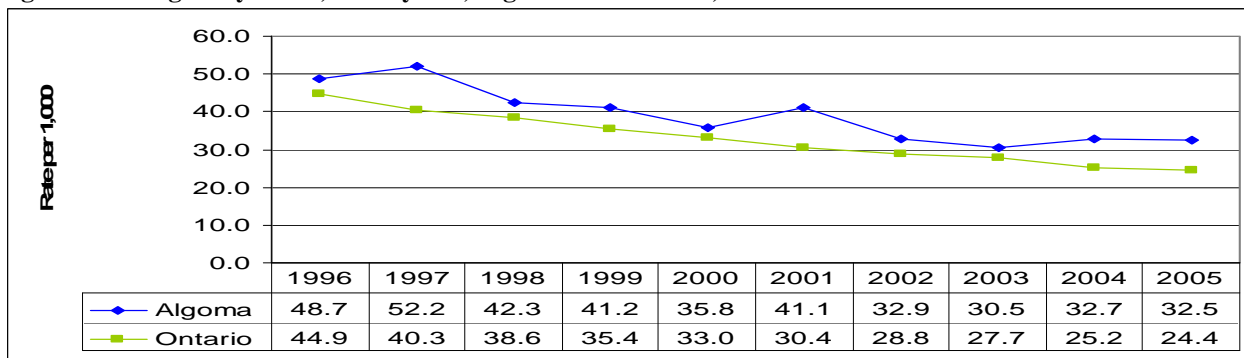


Sources: Ontario HELPS Database and *intelliHEALTH* ONTARIO

15-19 years (Teen)

Teen pregnancy rates for Algoma and Ontario have been declining since 1996, except for 2001 for Algoma. Algoma rates were statistically higher than Ontario's for 1997, 2001, 2004, and 2005 (Figure 15).

Figure 15 - Pregnancy Rates, 15-19 years, Algoma and Ontario, 1996-2005



Sources: Ontario HELPS Database and *intelliHEALTH* ONTARIO

Stillbirth Rates

Stillbirth Definition

A stillbirth is defined as a product of conception weighing 500 grams or more or of 20 or more weeks gestation which, after being completely delivered shows no sign of life, (APHEO, 2003).

The stillbirth rate is the number of stillbirths per 1,000 births in a specified age group. From 1996 to 2005 for Algoma and Ontario for the age group 15-49 years, the stillbirth rates were consistently between 1-3 stillbirths per 1,000 births for all years.

Low Birth Weight Rates

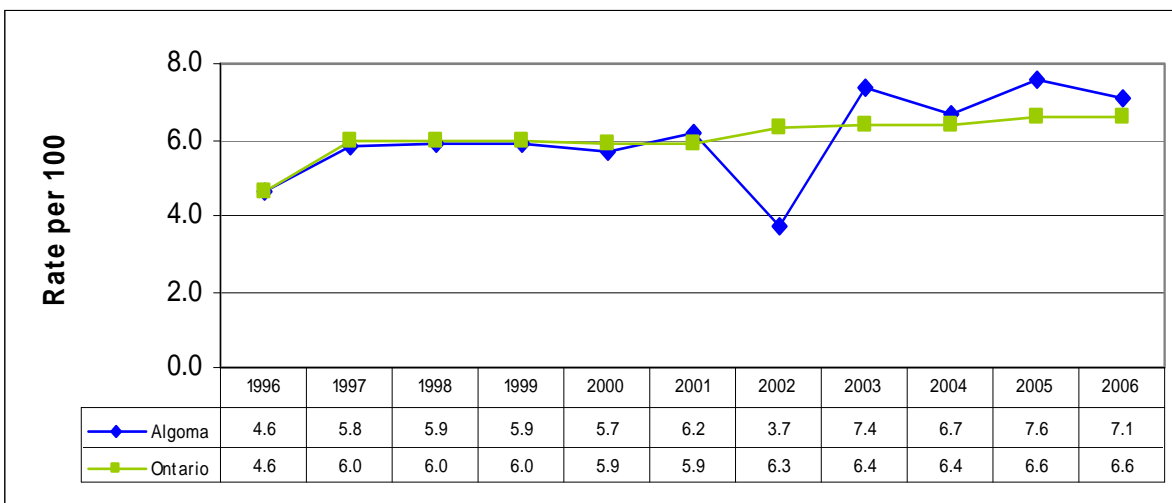
Low Weight Definition

Low birth weight is when a fetus or infant at the time of delivery weighs less than 2,500 grams, or 5 pounds 8 ounces, (APHEO, 2003).

The low birth weight rate is the number of live births weighing less than 2,500 grams per 100 live births for a specified age group. Birth weight of less than 2,500 grams is an important predictor of future health problems and disability, regardless of whether it is caused by poor intrauterine growth or preterm birth (Best Start Resource Centre, Preterm Birth, 2004).

For the 15-49 years age group, the low birth weight rates for Algoma and Ontario from 1997-2001 were not statistically different hovering around 6 per 100 live births. In 2002, Algoma's rate dropped to 3.7, statistically lower than Ontario's rate at 6.3. From 2003-2006 both rates were not statistically different (Figure 16).

Figure 16 - Low Birth Weights, <2500 grams, Algoma and Ontario, 1996-2006



Source: and *intelli*HEALTH ONTARIO

High Birth Weight Rates

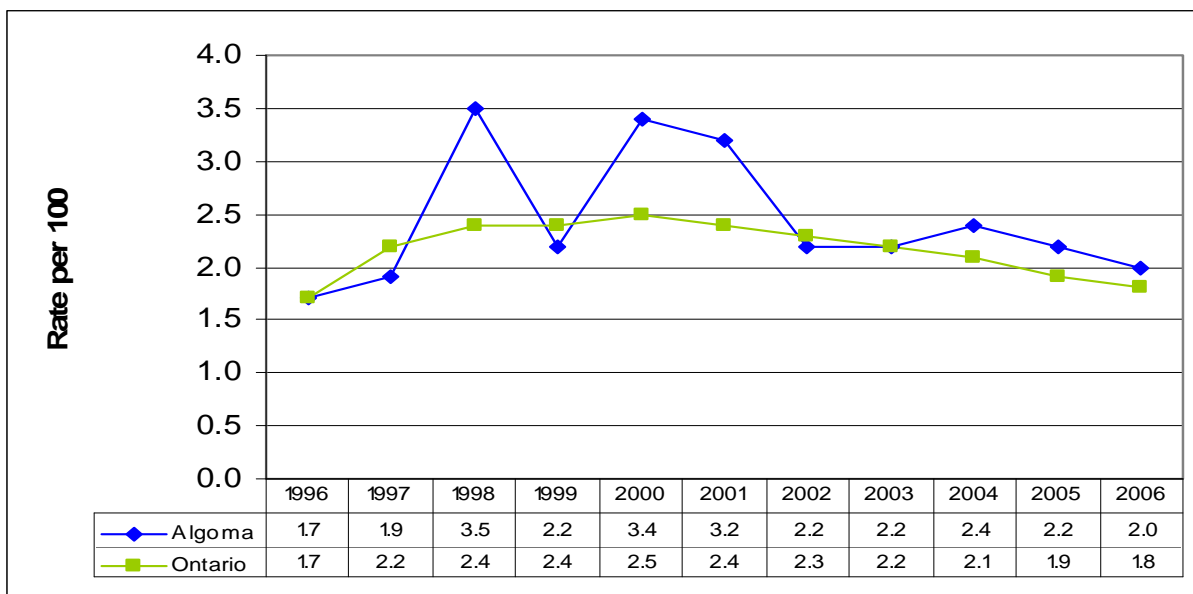
High Birth Weight Definition

High birth weight is when a fetus or infant at the time of delivery weighs greater than 4,500 grams (Statistics Canada, 2005).

The high birth weight rate is the number of live births weighing more than 4,500 grams per 100 live births for a specified age group. High birth weight is a risk factor for type 2 diabetes later in the child's life (PHAC, Canadian Perinatal Hions (Figure 17). ealth Report, 2008).

For the 15-49 years age group, the high birth weight rates for Algoma and Ontario from 1996-2006 were not statistically different with Algoma rates showing more fluctuat

Figure 17 - High Birth Weight Rates (4500 grams and over) Algoma and Ontario, 1996-2006



Source: *intelliHEALTH* ONTARIO

Preterm Births

Preterm Birth Definition

A preterm birth is when a fetus or infant is delivered before the 37 completed weeks (259) days gestation (APHEO, 2003).

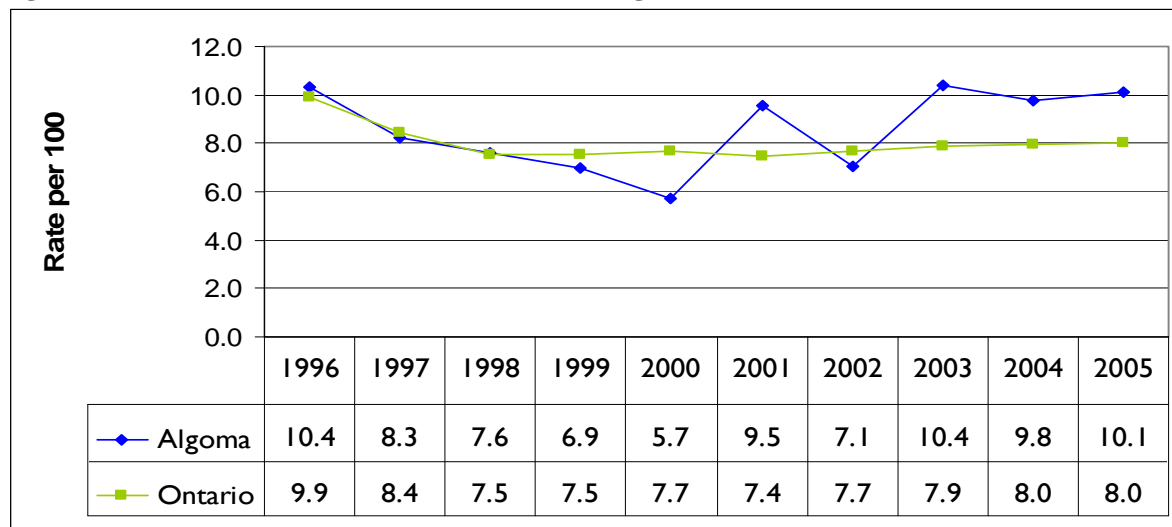
According to the Canadian Perinatal Health Report, 2008 edition, preterm birth is the leading cause of neonatal and infant mortality in industrialized countries and accounts for a substantial portion of all neonatal morbidity (p.123).

Newborn complications include acute respiratory failure, gastrointestinal, immunologic and nervous system impairments, while longer term or lifelong problems may occur with motor, cognitive, visual, hearing, and behavioural development and physical growth. These challenges result in higher healthcare costs for longer hospital stays, more outpatient medical services, early intervention, and developmental and educational expenses.

Prevention of preterm birth is a public health priority that must include a social determinants of health focus. Risk factors for preterm birth include single marital status, younger or older maternal age, previous preterm delivery, infection, smoking, low pre-pregnancy weight, low or high weight gain, multiple gestation, race/ethnicity and maternal stress.

For the 15-49 years age group, preterm birth rates for Algoma and Ontario from 1996-1999 were not statistically different. In 2000, Algoma's rate dropped to 5.7 per 100 births statistically lower than Ontario's at 7.7 per 100 births. From 2001-2005 there was no statistical difference between Algoma and Ontario except for in 2003 where Algoma's rate of 10.4 was statistically higher than Ontario's at 7.9 (Figure 18).

Figure 18 - Preterm Birth Rates (<37 weeks at birth) Algoma and Ontario, 1996-2005



Source: *intelliHEALTH* ONTARIO

Algoma Prenatal Programs

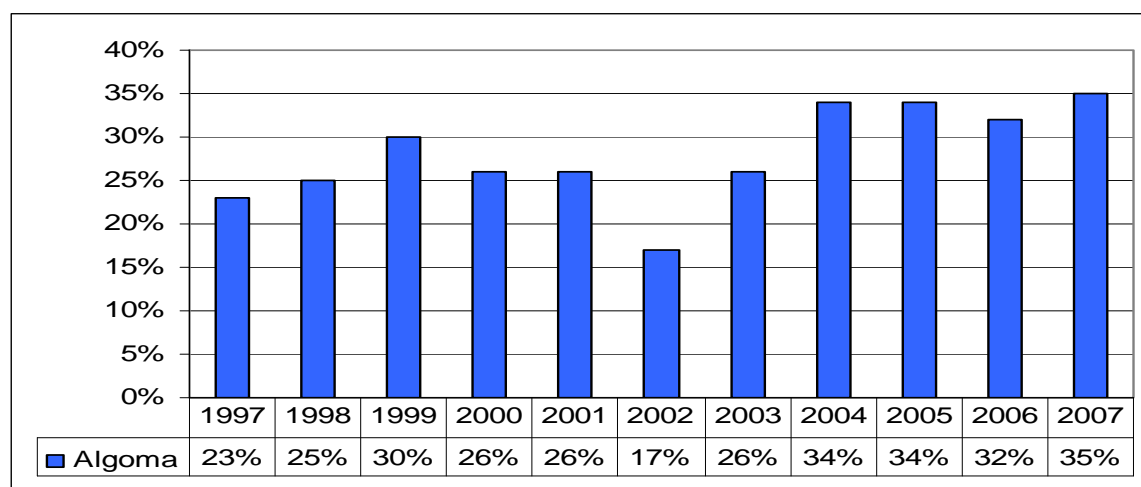
Prenatal Education and Classes

Expectant parents have many questions as they prepare for their new baby. Algoma Public Health (APH) believes in providing a client centred care approach by offering prenatal education options to all pregnant women and their families suited to learning styles, information needs and schedules.

Participants may choose to attend one or more prenatal sessions held during the day or evening, including Young Parents Connection for those 25 years of age or younger. Expectant mothers and their partners receive information and resources about pregnancy, labour and delivery, breastfeeding, newborn care, readiness for parenting, and community services. People who attend prenatal classes often feel more confident to deal with labour, delivery, breastfeeding and the transition to parenting.

APH became the primary provider of formal prenatal education in 2006 when the Group Health Centre discontinued offering Lamaze classes. With the exception of 2002, prenatal class attendance at APH increased during the eleven year span from 1997-2007 (Figure 19).

Figure 19 – Percentage of Algoma Pregnant Women who attended at Least One Prenatal Class, 1997-2007



Source: APH Program Statistics

In 2006, 300 women (32%) with a live birth in Algoma attended prenatal classes with their most recent pregnancy. This is consistent with a 2006 Canadian report that stated that 33% of women with a live birth attended prenatal classes with their most recent pregnancy (Chalmers, 2008).

Young Parents Connection

The Context

Engaging pregnant teens and young parents to attend parenting programs and services can present challenges. These adolescents are prone to social exclusion if they do not receive the support they need from their families, peers, schools and communities. There is still “a social tendency to moralize and blame pregnant teens for ‘irresponsible’ behaviour” (Best Start Resource Centre, Reducing the Impact 2002).

Expectant teens with few social supports are more likely to quit school and less likely to seek early prenatal care, which increases their risk for pregnancy complications and poor birth outcomes.

From a social determinants of health point of view, teen pregnancy often delays the mother's ability to pursue educational and employment opportunities. In turn, this affects the child's early life experiences, putting the child at risk for less than optimal child developmental outcomes.

Teens Surveyed

Prior to the inception of Young Parents Connection, various community agencies independently offered prenatal and parenting programs and services for young parents. However, each agency faced similar challenges—reaching only small numbers of participants at a time and having sporadic attendance.

In 2005, teen parents involved in the Learning, Earning, and Parenting (LEAP) Program of Ontario Works were surveyed to identify gaps in services for young parents. The survey showed that the teens wanted a “one stop shop” at a central location, accessible by city transit, where young parents could meet weekly for a meal and attend prenatal or parenting classes or a community kitchen. Childcare and recreation options were cited as being important components of the program. Community stakeholders met to plan a comprehensive program that materialized in 2006 as Young Parents Connection.

The Program

The goal of Young Parents Connection is to support young parents in improving the health and well-being of their families by providing information, skill-building activities and social inclusion through a weekly event in which partner agencies collaborate.

Young Parents Connection provides an innovative and integrated approach for delivering weekly prenatal and parenting education to male and female participants aged 25 and under in Sault Ste. Marie. Weekly transportation, childcare, community kitchens, recreation and a shared meal are included to encourage attendance. On average, 30 individuals attend either the prenatal, postpartum, or toddler parenting classes or community kitchens each week at the YMCA.

The lead agencies include Ontario Works LEAP Program, Algoma Public Health, Canadian Red Cross, and the YMCA. Partner agencies include the Children's Aid Society of Algoma, Child Care Algoma, The Pregnancy Centre, Sault College, Women in Crisis Algoma, and Nog-Da-Win-Da-Min Family and Community Services.

Since 2003, 61 LEAP participants have completed grade twelve and met their parenting class requirements through Young Parents Connection. Of these, 37 have continued with post-secondary studies. We know that educational attainment is a key determinant of health that affects employment and income potential, and ultimately, one's quality of life. According to the 2009 report *With Our Best Future in Mind*, “we are all aware that the successful economies and societies of the future will be the best educated and the most innovative” (Pascal, 2009, p. 4). Young Parents Connection removes barriers and provides supports for young people to complete their education, acquire life skills, and increase parenting capacity.

Canada Prenatal Nutrition Program

The Program

Canada Prenatal Nutrition Program (CPNP) funded by the Public Health Agency of Canada, supports community based projects that promote public health and address health disparities affecting pregnant women and their infants. These projects aim to increase access to health and social supports for women who face challenging circumstances that put their health and the health of their infants at risk (CPNP, 2007). Participants receive free prenatal vitamins and vouchers for milk and/or food as well as support, counselling, and referrals. Women may remain in the program throughout pregnancy and up to six months after their babies are born to support women who continue to breastfeed. Breastfeeding is encouraged not only because it provides health benefits for the baby, it also provides the baby with food security. CPNP addresses the social determinants of health since 95% of projects focus on pregnant women living in poverty, teens, and women living in isolation or with poor access to services. Other client groups served include women who abuse alcohol or drugs, live with violence, women with gestational diabetes, Aboriginal women, and immigrant and/or refugee women (CPNP, 2007).

Who Accesses CPNP?

The table below compares Algoma CPNP participants with Ontario participants:

Profile of Women who Access Canada Prenatal Nutrition Program (CPNP) in Algoma and Ontario, 2007/08		
Source: (PHAC, Welcome Card Project Report, 2008)		
Indicator	Algoma	Ontario
Average Age of Participants	22.8 years	26.1 years
Minimum Age of Participants	15 years	13 years
Maximum Age of Participants	40 years	50 years
Aboriginal	23%	8%
Smoker at Time of Program Registration	54%	22%
Average Number of Years of School	11.5 years	12.3 years
Average Gestation at Program Entry	19.7 weeks	20.8 weeks
First Pregnancy	48%	45%
Reason for Attending – to get food, food vouchers or food coupons	88%	38%
Reason for Attending – to learn about healthy pregnancies	27%	66%

In Algoma

In Algoma, 88% of pregnant women accessed CPNP to “get food, food vouchers, or milk” (PHAC, 2008). According to the 2006 report, *Hidden Hunger: Food Insecurity in Algoma*, approximately 25% of all expectant women in Sault Ste. Marie and between 30-45% of pregnant women in the rest of Algoma access the CPNP to get help with free milk and healthy food (Algoma Health Unit, 2006). Annually this represents approximately 200 Algoma women who register for the CPNP (PHAC, Welcome Card Project Report, 2008).

During program visits in Sault Ste. Marie, clients may see a dietitian, public health nurse, lactation consultant or family support worker for pregnancy and parenting education, emotional support, or for referrals to community programs and services. Mothers and their preschool children may also access a

dental hygienist for free dental screening or register with the on-site nurse practitioner for primary care if they do not have a primary healthcare provider.

CPNP is also delivered by public health nurses in North Algoma, Central Algoma, Blind River and Elliot Lake.

Pregnant Women and Smoking

Of the women who attend CPNP in Algoma, 54% reported smoking at the time of program registration, as compared to 22% in Ontario (PHAC, Welcome Card Project Report, 2008). As part of CPNP, pregnant women who smoke are given a clear message about the health benefits of quitting or reducing smoking during pregnancy and are offered resources and support to help them quit. In Algoma, there are numerous self-help resources and community support services available free of charge.

Pregnant Women and Alcohol

Fetal Alcohol Spectrum Disorder (FASD) is a term used to describe the range of effects that can occur in an individual whose mother drank alcohol during pregnancy. These effects may include lifelong physical, mental, behavioural and/or learning disabilities. While there is no cure for FASD, these individuals can still do well with helpful supports and services.

FASD affects an estimated 300,000 Canadians. While little data is available for Ontario and Algoma, the number of referrals to the APH Genetic Clinic for investigation of FASD is increasing each year. On average, 15 to 20 individuals are referred to the program annually and the majority of them are under 10 years of age.

FASD is a complex public health issue with significant social and economic implications. It is vital to promote the message that there is no safe amount of alcohol during pregnancy.

The Algoma FASD Coalition is comprised of caregivers of alcohol-affected children, as well as health and social service providers who work with these families. A monthly FASD Caregiver Support Group was initiated in 2007 and continues to offer education, support, and practical strategies for managing FASD at home, school, and other environments.

Tips for service providers who work with pregnant women in difficult life situations and tips for the women who access prenatal services can be found in Appendix C.

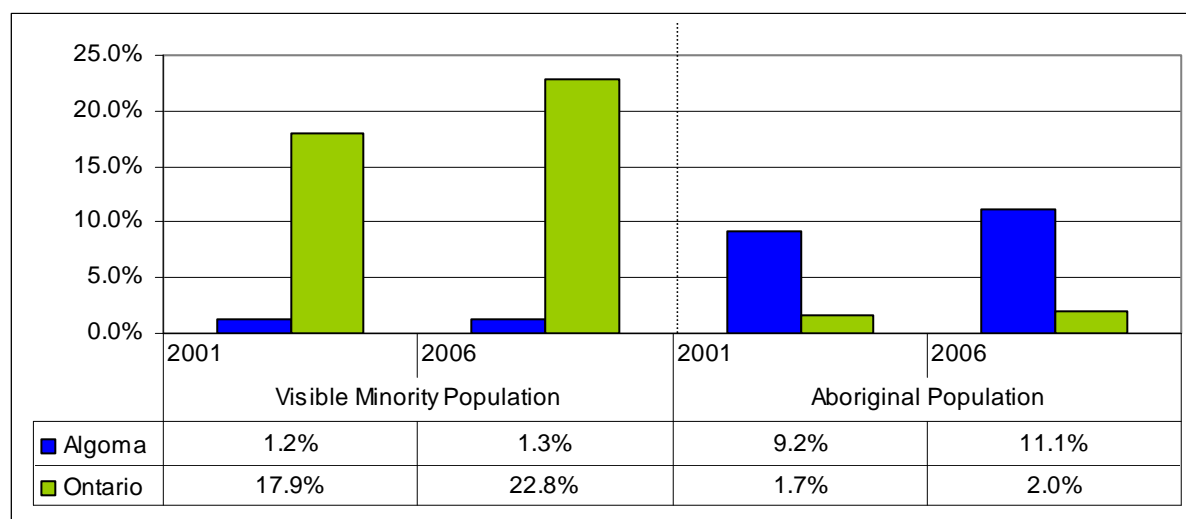
Algoma Aboriginal and Visible Minority Population

In Canada, Aboriginal people are a young and growing population. The mean age of this group is 27 years, as compared to 40 years of age in the non-Aboriginal population. Furthermore, the Aboriginal population has increased by 45% from 1996-2006, almost six times faster than the non-Aboriginal group. This is due in part to a high birth rate and longer life expectancies than in previous years (Statistics Canada, 2008).

Aboriginal status is a social determinant of health, since Aboriginal individuals are at higher risk for poverty, food insecurity, unemployment, homelessness, alcohol and substance use, obesity and chronic disease. Aboriginal families are three times more likely to experience poverty as compared to non-Aboriginal families. About 75% of Aboriginal women in Canada have been victims of family violence, compared to 7% of non-Aboriginal women (Raphael, 2004).

In Algoma, Aboriginal identity (First Nations, Métis, and Inuit) is five times higher than that of Ontario for both 2001 (9.2%) and 2006 (11.1%). Conversely, only about 1% of Algoma's population belongs to a visible minority, compared to Ontario at 18% in 2001 and 23% in 2006 (Figure 20).

Figure 20 - Percentage of Population Identified as Visible Minority or Aboriginal, Algoma and Ontario, 2001 and 2006



Source: Statistics Canada Community Profiles

Meeting the Needs of Aboriginal Expectant Families in Algoma

Aboriginal identity is different for each individual, family and community, depending on how they were raised, their belief system, and whether they grew up in a First Nations, Métis, or Inuit community or in an urban setting. It is important that service providers consider the unique circumstances of Aboriginal families, learning how they prefer to receive services, and by providing those services in a holistic manner (Best Start Resource Centre, A Sense of Belonging, 2006).

Garden River First Nation Partnership

In 2007, APH was contracted by the Garden River Wellness Centre to provide services for expectant and new parents in Garden River First Nation. To ensure services were coordinated and culturally appropriate, APH staff worked collaboratively with the Garden River Wellness Centre health team to plan and implement prenatal and parenting programs and services.

Parent Child Services staff participated in cultural sensitivity training at the Dan Pine Healing Lodge in Garden River in May 2008. The goal was to create awareness among staff who work with Aboriginal families so that they would be more sensitive to the unique issues facing Aboriginal people. As a result of this informative presentation, staff reported having increased knowledge about Aboriginal culture and parenting practices and feeling more prepared to meet the needs of Aboriginal families.

The first services to be provided were home visits to families with new babies and some prenatal and postnatal classes. Services were soon expanded to meet the needs of the community, which included the addition of parent child clinics and community presentations.

This unique partnership augments existing services to residents of Garden River and addresses the need for more prenatal and parenting services for this young and growing population.

Strategies to assist non-Aboriginal organizations working with Aboriginal expectant families can be found in Appendix D.

Genetic Counselling and Clinic Services

The Genetic Counselling and Clinical Services program counsels approximately 50-100 women a year to provide comprehensive information about prenatal screening/diagnosis and testing for familial genetic conditions. The majority of women are of advanced maternal age (35 years and older) who wish to learn about their risks of having a baby with Down syndrome. The program also processes all positive prenatal screens, ensuring the ordering physicians are aware of the results and recommendations for further follow-up.

A public health nurse meets with the woman and her partner to obtain a detailed family history and to assess any prenatal exposures to teratogens. She explains how chromosome abnormalities can occur and reviews age-related risks for Down syndrome, as well as total risk for chromosome abnormalities. Various prenatal screening options are discussed, including first trimester screening, integrated prenatal screening, and maternal serum screening. Prenatal diagnostic tests, such as chorionic villus sampling and amniocentesis are reviewed with the clients. Genetic nurses help couples make informed decisions, thus allowing them to choose the best option for their particular situation.

Depending on the outcomes from the initial visit, women and their partners may attend a Genetic Clinic to meet with a medical geneticist and genetic counsellor for further assessment and diagnosis. Clients are linked to appropriate community services as needed. Referrals from healthcare providers, agencies or self-referrals are accepted by mail, fax or phone call.



Sexual Health

APH Sexual Health Programs and Services

The Sexual Health Program is a comprehensive program that supports healthy sexuality throughout the district of Algoma through clinical services, one-on-one counselling, health promotion, community education, consultation and resources. This community development approach helps address the social determinants of health by building on existing community strengths and capacity to achieve a greater collaborative impact. The APH sexual health clinics service both men and women who are of reproductive age or sexually active. In 2007, there were approximately 11,300 client contacts for services from the Sexual Health Program.

Types of services included:

- Access to affordable contraception and counselling
- Comprehensive pregnancy counselling and testing
- General sexual health information
- Sexually transmitted infection testing, treatment and counselling

Contraception Services

Contraceptive counselling, also known as birth control counselling is an essential aspect of reproductive healthcare. With so many options available, making the right decisions about contraceptives can be overwhelming (Society of Obstetricians and Gynaecologists of Canada (SOGC), 2009). Sexual health services include counselling and support for contraception options.

Since 2000, APH receives funding for nurse practitioner services to improve access to comprehensive sexual transmitted infections (STI) management and full range birth control options and counselling. The nurse practitioner and the public health nursing staff work collaboratively in delivering services of the Sexual Health Program.

Clients seeking birth control are offered a complete review of methods available, each with its own advantages and disadvantages. Some of these methods require a prescription from a healthcare provider. A public health nurse or nurse practitioner is available to explain any health issues and works with clients so they can make an informed decision. A variety of birth control pills as well as the birth control patch and IUDs are available for purchase at affordable pricing. Condoms and lubricants are provided free of charge.

Pregnancy Counselling and Testing

The sexual health clinic provides pregnancy testing and counselling for residents throughout the district of Algoma. Pregnancy testing is free of charge. Public health nurses provide comprehensive pregnancy option counselling and referral.

Community Education/General Sexual Health Information

The Sexual Health Program includes health promotion strategies such as public media campaigns, direct education to individuals and groups, as well as community education sessions for teachers and community agency providers. In 2007, there were approximately 116 education sessions conducted in school and community settings. Sexual health educational resources are also made available from APH for youth, parents, schools and other service providers.

Specific sexual health education and promotion campaigns that have been implemented to increase community awareness include: *Care for Kids*, *Know your Partner*, *Know your Risk* and urlife.ca. In addition, as part of the substance use prevention strategy, APH is working in partnership with school boards in raising awareness of the sexual health risks that exist with being under the influence of drugs or alcohol.

Care for Kids Program

Care for Kids is an early childhood sexuality education program for children ages 3 to 8 years. The program has been designed to focus on healthy sexuality education in combination with sexual abuse prevention. It also takes into account developmental levels, societal and family influences and the ways children learn and absorb information.

Currently in our community Care For Kids has been adapted by many agencies; some of them include: public and separate school boards, Sault College's Early Childhood Education program, Algoma Family Services, the Children's Aid Society, and Sault Area Hospital's Sexual Assault Care Centre.

Know Your Partner, Know Your Risk Campaign

In 2007/08 a campaign promoting the message "Know your partner... Know your risks" ran in newspapers across the district with an estimated reach of close to 60,000 Sault residents, 13,000 Algoma district residents, and 14,500 high school/college-age youth. In addition, posters were distributed to local post-secondary schools and other community locations where the intended audience would be reached. The focus for this campaign was to encourage young adults, prior to their engaging in sexual activity to consider their risks for STIs including HIV, and to take protective action. Promotion of risk reduction strategies included abstinence, being selective when choosing a partner, condom use for all oral, anal and vaginal sex and STI testing and treatment as necessary.

urlife.ca

In 2007, Statistics Canada reported that 97% of 16-17 year olds use the internet for school work, text messaging, video games and downloading music (Statistics Canada, 2007). Since this demographic group tends to go online to find their information, a new website, urlife.ca (your life), has been created to provide relevant health information intended to help them make healthier choices. Topics such as relationships, birth control, STIs including HIV, drug and substance use, tattooing and piercing are health issues that they can face as part of their daily lives. By providing relevant information that is easy to access, teens and young adults are encouraged to take responsibility and make informed healthy choices. To drive traffic to our new website, a prize draw was part of the launch with 180 youth entering between February and May 2009. Another draw held between September and November 2009 yielded 499 entrants, demonstrating growing interest in the website.

Sexually Transmitted Infections (STIs)

The majority of STIs discussed in this document are those that are reportable diseases in Ontario. These STIs include: chlamydia, gonorrhoea, infectious syphilis and blood-borne infections including hepatitis B, hepatitis C, and human immunodeficiency virus (HIV)/AIDS. Human papillomavirus (HPV), although not a reportable STI, is also included in this report.

STIs and blood-borne infections are caused by a variety of bacteria and viruses found in blood and body fluids (semen, vaginal fluids, and sometimes breast milk and saliva).

STIs such as chlamydia, gonorrhoea and infectious syphilis are primarily contracted through unprotected sexual contact; other infections such as HIV and hepatitis B can be spread through both blood and sexual transmission. Blood-borne infections such as hepatitis C and HIV can be spread through non-sterile equipment such as needles, tattooing and piercing equipment.

Furthermore, some of these STIs and blood-borne infections can be transmitted from mother to infant in the womb, at birth or while breastfeeding.

Sexually Transmitted Infection Services

Algoma Public Health, under the authority of the Health Protection and Promotion Act (HPPA) and the Ontario Public Health Standards (OPHS), provides specific programs and services that include:

- Screening, diagnosis, treatment and counselling of cases and contacts of reportable STIs;
- Screening, diagnosis, treatment, and counselling for individuals sharing drug-using equipment; and
- Providing means of reducing the risk of transmission (OPHS, 2008).

Our services are offered to men and women throughout the district of Algoma. Condoms and some treatments for STIs are available free of charge. Anonymous HIV counselling and testing is also available.

Prevention

Effective prevention, health protection and promotion is not just about providing STI screening, treatment, free condoms and counselling. It is also about building partnerships with parents, school boards, and community health and social services. A community development approach brings key players in our district to work together and establish positive outcomes for overall community health. Parents are the primary source of values and beliefs for their children and are the main influence in their lives. When making personal choices, youth are influenced by these values, by their self-esteem and their ability to handle personal relationships. We support parents to find the words to talk with their young children and encourage positive open relationships with their teenagers, which can enable youth to make positive lifestyle choices.

STIs are preventable. However, certain behaviours can put anyone at risk for STIs and blood-borne infections. It's not who you are that puts you at risk – it's what you do. Knowing the facts can help individuals make good decisions about their sexual health. The best preventative measures to reduce the risk of acquiring a STI include abstinence, delaying the onset of sexual activity, limiting the number of sexual partners and using latex condoms every time for oral, vaginal and anal intercourse. Next to abstinence, the safest practice is mutual monogamy. In addition, not sharing drug, tattooing or piercing equipment can reduce your risk of becoming infected. Being under the influence of drugs or alcohol can increase the risk of engaging in risky behaviour like sharing drug equipment or having unprotected sex.

Individuals who share drug injection and inhalation equipment are at increased risk for infectious diseases. Algoma Public Health, in partnership with Algoma Family Services and Access AIDS Network provides needle exchange services in Sault Ste. Marie. This program can help to reduce infectious diseases like hepatitis B, hepatitis C and HIV that are transmitted through sharing drug equipment. In 2008, approximately 56,627 used needles were brought into the exchange while approximately 78,354 needles were distributed.

Testing

Many people who have contracted a STI have no symptoms and can unknowingly pass it on to their sexual partners. Getting tested is an important first step to early diagnosis, treatment and support. Although being tested can be stressful, the one-on-one individual counselling provided by public health nurses and healthcare providers can help each client understand the ways to protect oneself. We now offer urine testing to detect some STIs, which is a less invasive method of testing individuals who may be at risk.

We offer testing for STIs including blood-borne infections to individuals who have one or more of the following risk factors (OPHS, 2008):

- Having sexual contact with person(s) with a known STI
- Being sexually active and under 25 years
- Having a new partner; having had multiple partners in the past year
- Being street involved and/or homeless
- Being a sex worker
- Having anonymous sexual partners
- Injection drug use
- Using other substances such as alcohol and drugs
- Having a previous STI; and not using condoms for oral, vaginal or anal sex.

Case Management

Public health nurses follow-up on all diagnosed and reported cases of specific STIs and blood-borne infections in the district of Algoma. Comprehensive case management includes:

- Explaining the role of APH regarding reportable infections and contact tracing as legislated
- Providing confidential counselling and support to clients who have tested positive for a reportable infection
- Confirming that appropriate treatment has been provided in accordance with Canadian Guidelines on STI infections (2006)
- Recommending complete STI testing including HIV testing
- Offering and providing free treatment for bacterial infections
- Educating individuals about safer sex practices and other harm reduction methods
- Notifying/ensuring that the contacts of a confirmed reportable STI or blood-borne infection are notified and counselled to seek appropriate testing and possible treatment in order to prevent further transmission.

Treatment

Free treatment is available and provided for bacterial STIs throughout the district of Algoma.

Sexually Transmitted Infection Rates in Algoma

Chlamydia

Chlamydia is a bacterial infection caused by a bacterium known as *Chlamydia trachomatis*.

Transmission

It is transmitted through unprotected oral, genital or anal sex with an infected person. It can also be spread from mother to child during birth.

Symptoms

Symptoms for chlamydia infection in females include changes in vaginal discharge (colour, odour, amount), burning during urination, abnormal vaginal bleeding, and lower abdominal and pelvic pain. If left untreated in women, tubal infertility, ectopic pregnancy and chronic pelvic pain may occur. For males, symptoms include burning during urination, discharge from penis and testicular pain. If left untreated in males, complications such as pain in the testicles and infertility can occur. Chlamydia is likely under-diagnosed because many individuals who have the infection do not have any symptoms.

Testing

Chlamydia can now be detected through urine testing for men and women. This non-invasive screening tool will likely increase the number of people who access testing. More females than males are diagnosed with chlamydia; a possible reason for this, is because females routinely see their healthcare providers for cervical PAP screenings and birth control. If circumstances warrant, STI screening may also be done during these routine visits. Females need to be aware that STI screening is not automatically done at the time of cervical screening. Women can ask their healthcare provider about their practice for STI screening. Males may not routinely visit their healthcare providers and so they have fewer opportunities for STI screening.

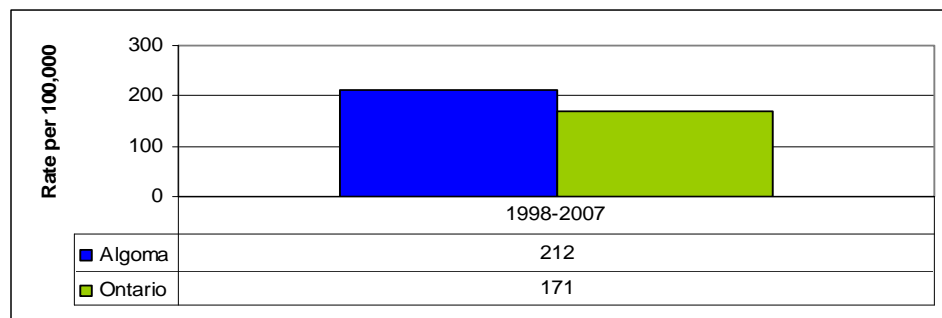
Treatment

Chlamydia can be easily treated with antibiotics. Current and recent sex partners should be tested, counselled and treated. Persons with chlamydia should abstain from sexual intercourse (oral, vaginal and anal) until they and their sex partners have completed treatment, otherwise re-infection is possible.

In Algoma

In Algoma from 1998 to 2007, 2124 lab-confirmed cases of chlamydia were reported. Females accounted for 1564 cases (74%) and males accounted for 560 cases (26%). For 1998 to 2007, the average age-adjusted rate of lab-confirmed chlamydia infections was 212 cases per 100,000 in Algoma, statistically higher than the Ontario rate of 171 cases per 100,000 (Figure 21).

Figure 21 - Chlamydia, Average Age-Adjusted Rates, Algoma and Ontario, 1998-2007

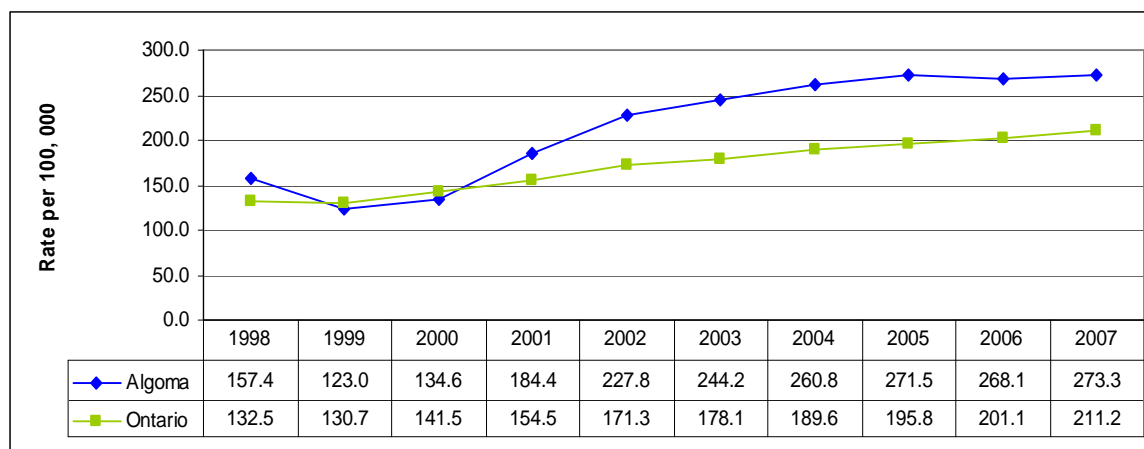


Source: iPHIS

Since many chlamydia infections are symptom-free, the actual rates of infection were likely higher than the reported rates. It is estimated that 50% of male and 70% of female cases are asymptomatic and therefore not reported (Health Canada, 2006).

The annual age-adjusted rates for lab-confirmed cases of chlamydia for both Algoma and Ontario followed similar rising trends over the last 10 years. Since 2001, Algoma's yearly chlamydia rates have been statistically higher than those of Ontario's (Figure 22).

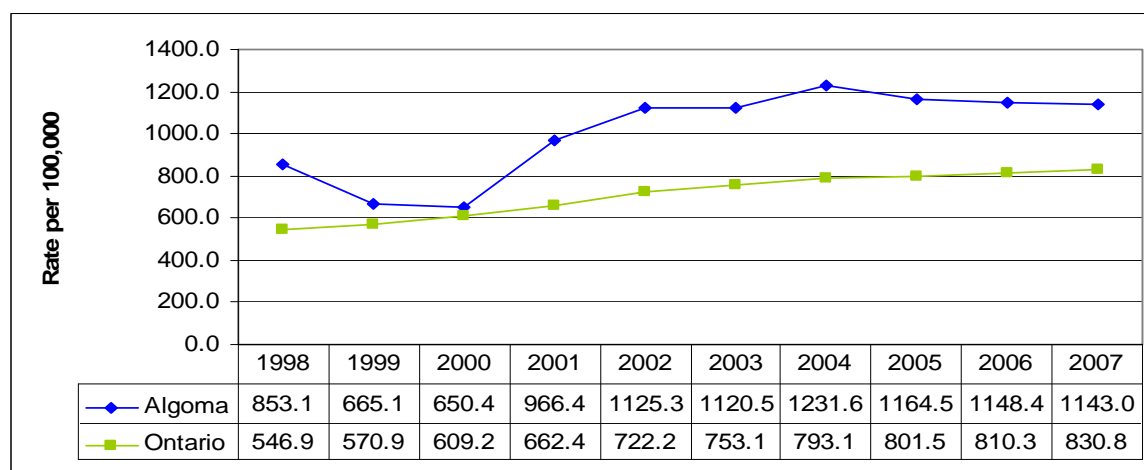
Figure 22 - Chlamydia, Age-Adjusted Rates, Algoma and Ontario, 1998-2007



Source: iPHIS

In Algoma, the 15-24 years age group accounted for 78% (1,649 cases) of the total lab-confirmed chlamydia cases from 1998 to 2007. Algoma's age-specific rates compared to Ontario's rates were statistically higher for 1998 and for 2001 to 2007 inclusive (Figure 23).

Figure 23 - Chlamydia, Age-Specific Rates, 15-24 years, Algoma and Ontario, 1998-2007



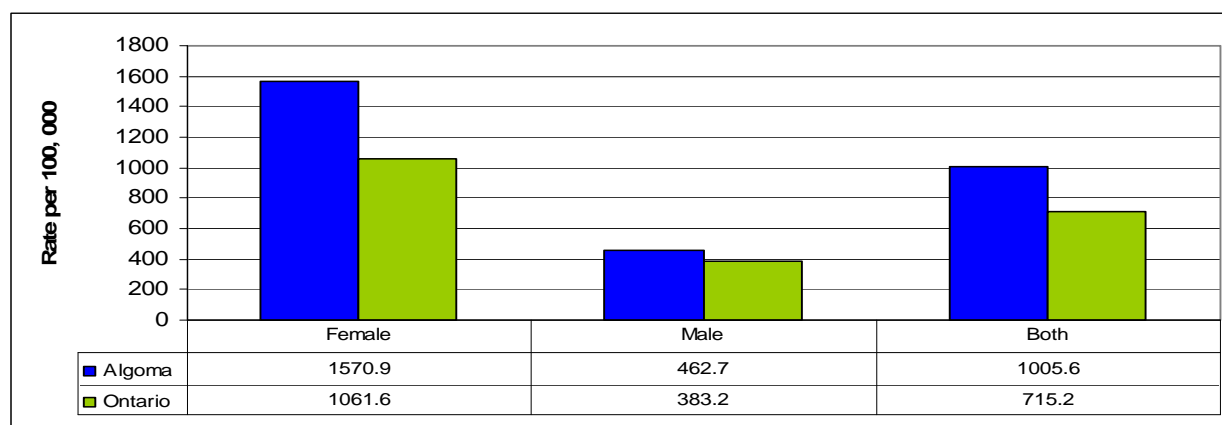
Source: iPHIS

Gender differences were evident for all lab-confirmed cases of chlamydia in both Algoma and Ontario; there were more females with lab-confirmed cases than males. In Algoma from 1998 to 2007 for all age groups there were 2124 new lab-confirmed cases. Females accounted for 1564 of these cases (74%) and males accounted for 560 (26%). This difference may be in part due to females being more likely to see their healthcare providers for regular Pap screening and birth control. Males may not routinely visit their healthcare providers, which limit their opportunities for STI screening.

In Algoma from 1998 to 2007 for the 15-24 year age group there were 1649 new lab-confirmed cases of chlamydia with females accounting for 1262 new lab-confirmed cases (77%) and males accounting for 387 new lab-confirmed cases (23%).

For the years 1998 to 2007, the average age-specific rates of lab-confirmed chlamydia infections for the age group 15-24 years were statistically higher for Algoma for all three groups – female, male, and both (Figure 24).

Figure 24 - Chlamydia, Average Age-Specific Rates, 15-24 years by Gender, Algoma and Ontario, 1998-2007



Source: iPHIS

For females, the Algoma rate was 1570.9 per 100,000 population statistically higher than the Ontario rate of 1061.6 per 100,000 population. For males, the Algoma rate was 462.7 per 100,000 population, also statistically higher than the Ontario rate of 383.2 per 100,000 population. The Algoma rate for both sexes was 1005.6 per 100,000, again statistically higher than the Ontario rate of 715.2 per 100,000.

Why Is There An Increase in STI Cases?

The reasons for the increase in STI cases are complex with no single cause:

- Introduction of urine testing for chlamydia and gonorrhea
- Increased screening for STIs
- More sensitive laboratory tests for STIs
- Unprotected oral sex
- Young adults may not be as familiar with safer sex messages
- Safer sex burnout among older adults who no longer want to use condoms
- Complacency about the burden of illness that some STIs can actually cause (e.g. infertility, ectopic pregnancy, cancer, and chronic and long-term health complications)
- Online partner finding
- Unprotected sex among “men who have sex with men”

Gonorrhea

Gonorrhea is a sexually transmitted infection caused by the bacteria *Neisseria gonorrhoeae*.

Transmission

It is transmitted through unprotected oral, genital or anal sex with an infected person. It can also be spread from mother to child during birth.

Symptoms and Complications

More than 50% of people infected show no symptoms or have symptoms that are not recognized as *Neisseria gonorrhoeae*. In males, when symptoms occur, they can appear in 2 to 7 days after becoming infected. However, it is not uncommon for symptoms to take as long as 30 days to appear. Symptoms in males include a white or yellowish discharge from the penis, pain when urinating, and painful or swollen testicles. When a woman has symptoms, they can be so non-specific as to be mistaken for a bladder or vaginal infection. If symptoms do occur in women they can include a painful or burning sensation when urinating, increased vaginal discharge or vaginal bleeding between periods.

If gonorrhea is left untreated in females, this infection may lead to pelvic inflammatory disease (PID) which can cause tubal infertility, chronic pelvic pain, and life threatening ectopic pregnancy. Men can develop scarring of the urethra, making urination difficult. Infertility is sometimes a complication of gonorrhea in males. Gonorrhea can spread to the blood and cause infection and damage in the joints, heart, liver and brain.

Testing

Urine testing is commonly used to detect gonorrhea for both males and females.

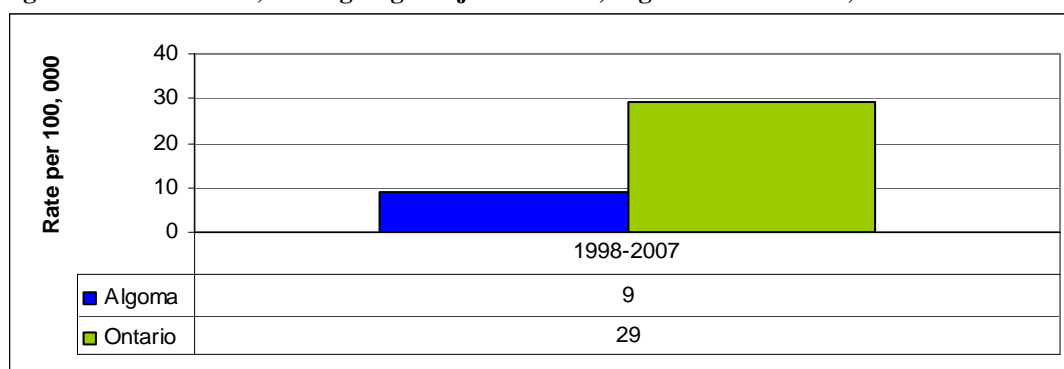
Treatment

Gonorrhea is treated with oral antibiotics. For resistant strains, alternative antibiotics are prescribed.

In Algoma

In Algoma from 1998 to 2007, 91 lab-confirmed cases of gonorrhea were reported. Forty cases (44%) were male and 51 cases (56%) were female. The average age-adjusted rate for gonorrhea was statistically lower at 9 cases per 100,000 population in Algoma, one-third the Ontario rate of 29 cases per 100,000 population (Figure 25).

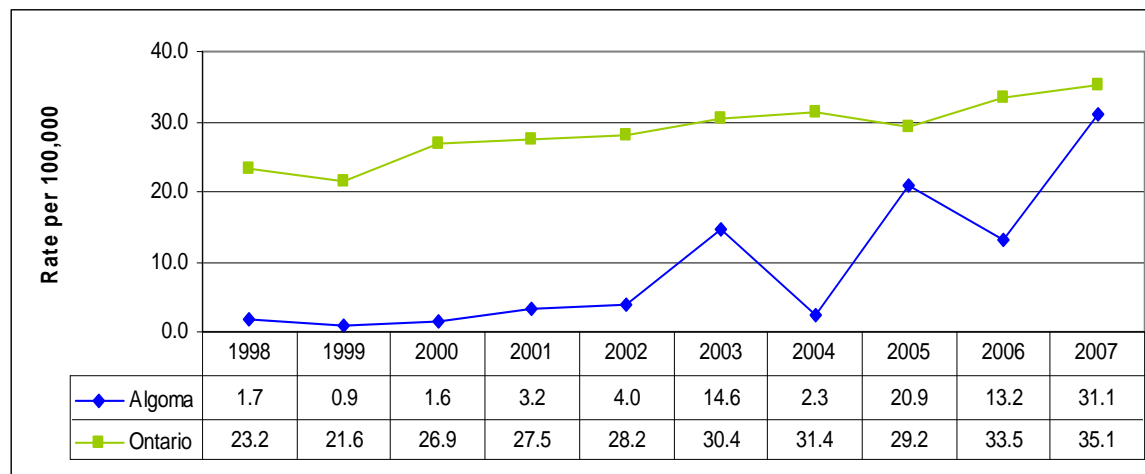
Figure 25 - Gonorrhea, Average Age-Adjusted Rates, Algoma and Ontario, 1998-2007



Source: iPHIS

The annual age-adjusted rates for gonorrhoea increased for both Algoma and Ontario from 1998 to 2007. Algoma's rates were statistically lower than Ontario's from 1998 to 2004 inclusive and for 2006 (Figure 26).

Figure 26 - Gonorrhoea, Age-Adjusted Rates, Algoma and Ontario, 1998-2007



Source: iPHIS

HIV/AIDS

HIV (human immunodeficiency virus) is a virus that attacks the immune system and weakens the body's ability to fight off infections and diseases. AIDS (acquired immune deficiency syndrome) is the late stage of HIV infection and is life threatening. There is no cure, nor is there a vaccine to prevent HIV infection, however, it is mostly preventable through lifestyle choices.

Transmission

HIV can be found in blood, semen, vaginal fluids and breast milk of an infected person. The virus is spread by unprotected sexual intercourse (oral, vaginal and anal). It is also spread through sharing contaminated needles or drug equipment. An infected mother can also pass the virus on to her baby during pregnancy, at birth or through breastfeeding. Non-sterilized needles used for tattooing, skin piercing or acupuncture along with occupational exposure in healthcare and personal care settings, also pose risks for transmitting HIV. In Canada, blood donors have been screened and tested for HIV infection since 1985.

Symptoms

When people are initially infected with HIV, the symptoms can go unnoticed or are brushed off as having the flu. When people start developing opportunist infections (those infections that take advantage of weaknesses in the immune defenses), they then seek medical attention. Some common opportunist infections include oral yeast infections, Kaposi's sarcoma (a type of skin disease) and fatal pneumonia. The onset of these infections can take several years after the initial contact with the HIV virus.

Testing

The only way to know if HIV is present is to screen for the virus through blood testing. Early detection of the virus is very important so that people do not spread HIV unknowingly. Prenatal HIV testing was introduced in Ontario in January 1999.

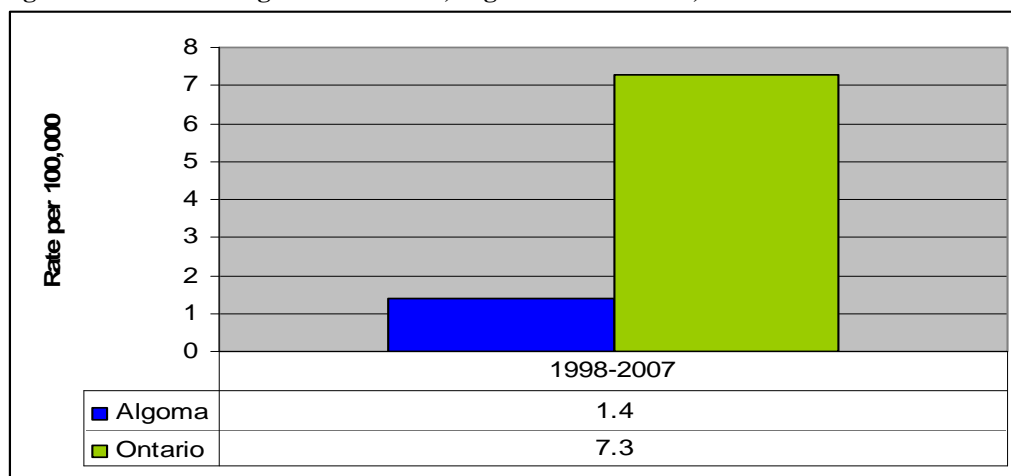
Treatment

There is no way to "clear" HIV from the body and there is no cure for AIDS. There are drugs that can slow down the HIV virus, and slow down the damage to the immune system. In most cases, these drugs work very well. The newer, stronger anti-HIV drugs have also helped reduce the rates of most opportunistic infections. This is an increasingly complex area with rapid changes in optimal therapy as new research becomes available. With advances in antiretroviral therapy, it is anticipated that the life expectancy for people with HIV infection will increase.

In Algoma

Between 1998 and 2007, the Algoma average annual incidence rate for HIV diagnoses was 1.4 per 100,000 population considerably lower than the Ontario rate at 7.3 per 100,000 population (Figure 27).

Figure 27 - HIV Average Annual Rates, Algoma and Ontario, 1998-2007



Source: iPHIS

Syphilis

Syphilis is a complex yet rare infection caused by the *Treponema pallidum* bacterium. This infection progresses through stages from primary syphilis (earliest stage) to tertiary syphilis (final stage). In the tertiary stage, syphilis can do the most damage to the body, affecting the brain, blood vessels, the heart and bones. It can eventually lead to death.

Transmission

Syphilis is passed from person to person through direct contact with a syphilis sore during vaginal, anal or oral sex. Infants can be infected with syphilis when in utero resulting in miscarriage, stillbirth, premature birth and congenital infection. Newborns can be infected during delivery.

Symptoms

In primary syphilis, a painless open sore appears at the site where the bacteria first entered the body, usually the genital area, throat or anus. Symptoms can occur within a few weeks or several months after the initial infection. While the sore may go away on its own without treatment, the infection remains and leads to secondary syphilis. In secondary syphilis, the symptoms can include patchy hair loss, a rash on the soles of the feet or the palms of the hands or elsewhere on the body, fever, swollen glands, and muscle and joint pain. Again, these symptoms usually disappear without treatment but the infection does not. There are people who are infected with syphilis who do not show any symptoms for years.

Testing

Syphilis is diagnosed through a simple blood test. In Ontario, pregnant women are routinely screened for syphilis.

Treatment

Syphilis is treated with penicillin or other antibiotics. Testing, treatment and contact tracing are very important to control this infection as well as prevent serious and long-term health effects that occur when the infection is left untreated.

In Algoma

Fewer than 5 lab-confirmed cases of infectious syphilis were reported to APH between the 10-year span of 1998 and 2007, which is well below the 2006 Ontario rate of 2.76 per 100,000 (PIDAC, 2009).

Human Papillomavirus

Human Papillomavirus (HPV) is a virus that infects the skin and mucous membranes of the genital areas of men and women.

Transmission

HPV is transmitted through genital contact, most often during vaginal or anal sex. It can also be transmitted from mother to child during birth.

Symptoms

HPV can cause normal cells on infected skin or mucous membranes to turn abnormal. Most people with HPV do not develop symptoms or health problems. About 70 per cent of adults will have had at least one genital HPV infection over their lifetime and not even know it. In most cases, the body fights off HPV naturally and the infected cells then go back to normal.

Certain types of HPV can cause genital warts in men and women. Other HPV types can cause cervical cancer and other less common cancers, such as cancers of the vulva, vagina, anus and penis. The types of HPV that can cause genital warts are not the same as the types that can cause cancer.

HPV types are often referred to as “low-risk” (wart-causing) or “high-risk” (cancer-causing) based on whether they put a person at risk for cancer.

Genital warts usually appear as small bumps or groups of bumps, usually in the genital area. They can be raised or flat, single or multiple, small or large, and sometimes cauliflower shaped.

They can appear on the vulva, in or around the vagina or anus, on the cervix, and on the penis, scrotum, groin or thigh. Warts may appear within weeks or months after sexual contact with an infected person; or

they may not appear at all. If left untreated, genital warts may go away, remain unchanged, or increase in size or number. They will not turn into cancer.

Cervical cancer does not have symptoms until it is quite advanced. For this reason, it is important for women to get screened regularly for cervical cancer.

Other less common HPV-related cancers, such as cancers of the vulva, vagina, anus and penis, also may not have signs or symptoms until they are advanced.

Testing

The HPV test is only used as part of cervical cancer screening. In 90% of cases, the body's immune system clears the HPV infection naturally within two years. This is true of both high-risk and low-risk types.

Prevention

In July 2006, Health Canada approved a new HPV vaccine, GARDASIL® that provides protection against four types of HPV, two that are responsible for about 70 per cent of cervical cancers. The vaccine is most effective when given to females before they become sexually active and exposed to HPV infections. The best immune response was observed in young girls aged 9–13 years. This vaccine is currently licensed for use for females aged 9-26 years.

The vaccine is given in the arm, in three doses over six months. The duration of immunity following a complete schedule of immunization with GARDASIL® has not been established but is known to offer protection for at least five years. Potential adverse reactions after vaccination could include pain, swelling and erythema (redness) at the injection site. Systemic side effects such as fever, headache and nausea are uncommon.

Although the vaccine provides protection against HPV, it is not a replacement for cervical cancer screening using the Pap test, which should be initiated once females become sexually active. Regular cervical cancer screening, combined with the vaccine, provides the best protection against cervical cancer.

The use of condoms during sexual activity may lower the risk of developing certain types of HPV but only if used correctly all the time. HPV can infect areas that are not covered by a condom so the only way to prevent HPV is to avoid all sexual activity.

In Algoma

Beginning in the fall of 2007, GARDASIL®, a three-dose HPV vaccine was offered to 672 eligible young women in grade eight throughout the Algoma district. This school-based vaccination program is aimed at protecting young women against precancerous cervical lesions and cervical cancer. The vaccine is voluntary and is administered by public health nurses. The program is funded by Ontario's Ministry of Health and Long-Term Care. Information letters with consents were sent to all eligible girls and their parents in August 2007.

The uptake in the Algoma district was 59% (APH program statistics) compared to 53% (E. Karas, MOHLTC communication, February 19, 2008) in Ontario. It is anticipated that over time the uptake both locally and provincially will increase.

There were no reported adverse vaccine reactions in the Algoma district.

Pap Test (Papanicolaou Test)

The Pap test is a screening test used to check for cell changes on the cervix. Early changes in cervical cells are called abnormal cells, not cancer. These abnormal cells often change back to normal on their own. If left untreated, abnormal cells could lead to cervical cancer. Cervical cancer usually develops slowly over many years. Often there are no symptoms or warning signs. It only takes a few minutes to have a Pap test done. Healthcare providers use a small spatula and brush to take samples of cervical cells. A Pap test does not check for other types of cancer such as cancer of the ovaries, vagina or uterus. It also does not check for sexually transmitted infections.

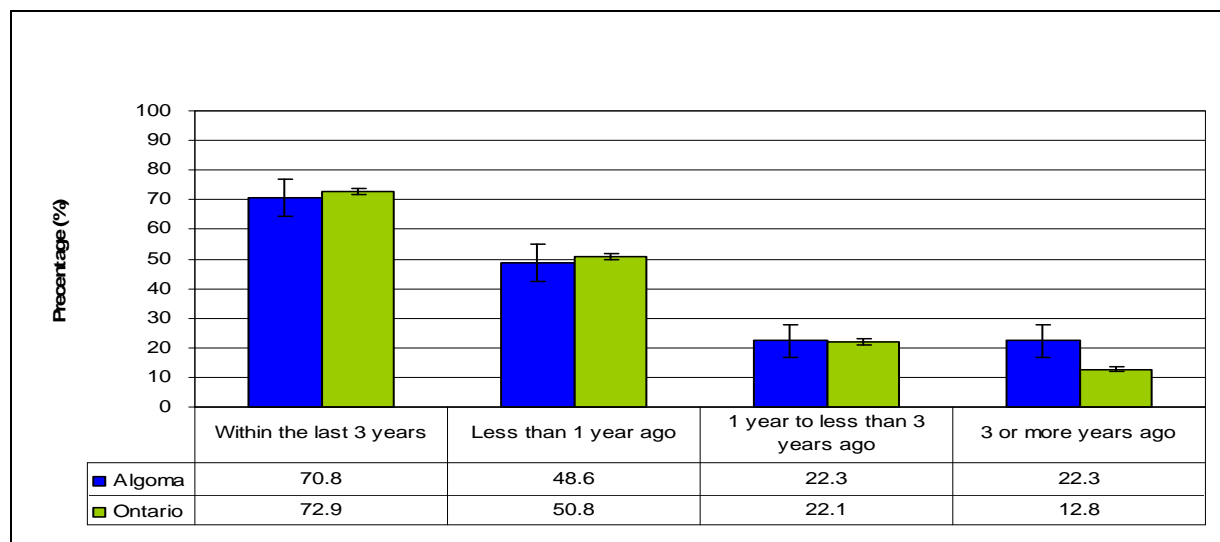
The Ontario Cervical Screening Program guidelines recommend:

- Have your first Pap test within three years after starting vaginal sexual activity;
- If test results are normal three years in a row, have a Pap test every two or three years;
- Continue to have Pap tests done until at least age 70. Changes in the cells of the cervix can happen in older women, even after menopause and even if there are no symptoms;
- Women over 70 years can stop having Pap tests if they have had at least three normal tests in the previous 10 years;
- Regular Pap tests are necessary for all women who have ever been sexually active, and also for women who have sex with women;
- Women with weakened immune systems (due to organ transplants or other medical problems) or who test positive for HIV should have a Pap test once a year; and
- Women who are pregnant and women who have had a hysterectomy (operation to remove uterus and one or both of your ovaries and cervix) should check with their healthcare provider to see if they need a Pap test.

In Algoma

In 2005, Algoma and Ontario women aged 18-69 years were not statistically different in the percentage of women who received a Pap smear within the following timeframes: the last 3 years; less than 1 year ago; and 1 year to less than 3 years ago. Algoma was statistically higher at 22.3% compared to Ontario at 12.8% for the group who reported receiving a Pap smear more than 3 years ago (Figure 28).

Figure 28 - Last Pap Smear, Females aged 18-69 years, Algoma and Ontario, 2005



Source: CCHS Survey, 2005

Blood-borne Infections

Hepatitis B

Hepatitis B is the most prevalent type of hepatitis worldwide. It is spread through the blood and other body fluids from an infected person. This infection is caused by the hepatitis B virus (HBV). Diseases such as hepatitis B have an enormous impact in the developing world but are strongly limited by effective vaccine protection in Canada.

Transmission

Hepatitis B is primarily a sexually transmitted infection, but it can also be contracted through sharing of contaminated needles during intravenous drug use, body and ear piercing and tattooing. An infected mother can pass it to her child at birth.

Symptoms

Hepatitis B infection can present with symptoms ranging from no symptoms at all to mild non-specific illness such as loss of appetite, nausea, and tiredness, to signs of severe liver involvement including jaundice of the skin and eyes, to liver failure. It is the biggest cause of liver disease worldwide.

Prevention

Hepatitis B can be prevented by adopting safer sex practices, immunization with hepatitis B vaccine or giving hepatitis B immune globulin to people who have had recent contact with infected body fluids. Since 1994 in Ontario, a hepatitis B vaccination is offered to all grade 7 students as a universal program. Ontario's *Initial Report on Public Health* report cites that in 2007, Algoma's immunization coverage for hepatitis B was 89% compared to Ontario's at 79.8% (Ministry of Health and Long-Term Care, August 2009, p. 21).

Hepatitis B vaccine is also offered to individuals who meet the following high-risk criteria:

- Household and sexual contacts of persons with acute or chronic hepatitis B
- Persons with chronic liver disease
- Intravenous drug users
- Men who have sex with men
- Individuals with multiple sex partners
- Infants born to mothers infected with hepatitis B
- Persons on renal dialysis and those with diseases requiring frequent blood products
- Individuals who incur needle-stick injuries in a non-healthcare setting
- Individuals awaiting liver transplants
- Children less than 7 years of age who have emigrated from countries with a high prevalence of hepatitis B.

Testing

A simple blood test can be done to diagnose hepatitis B infection, acute or chronic, as well as to determine immunity to the hepatitis B virus.

Treatment

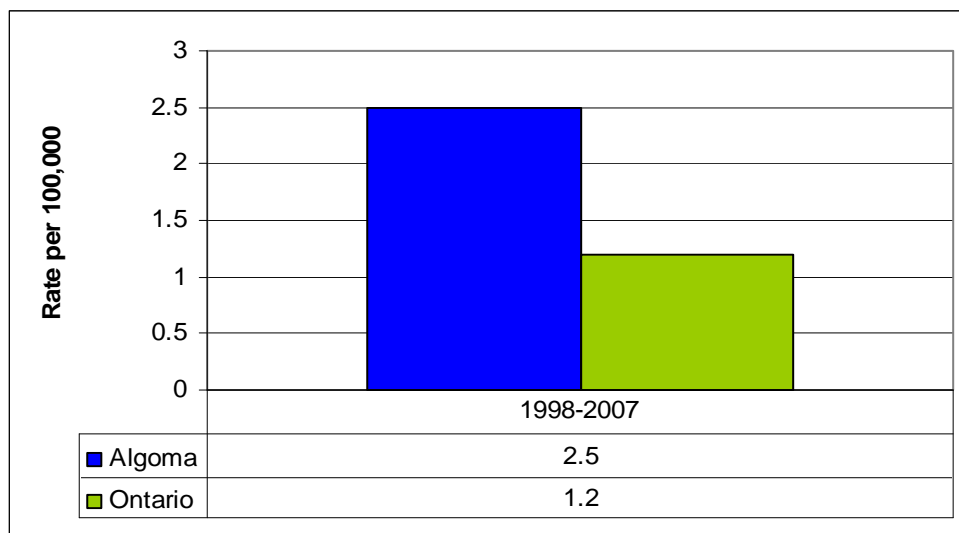
No specific treatment is available for acute hepatitis B. Antiviral medications have had limited success in treating some individuals with chronic hepatitis B infection.

In Algoma

In Algoma between 1998 and 2007, 32 lab-confirmed cases of hepatitis B were reported, 30 of which were reported between 2003 and 2007. The average age-adjusted rate for hepatitis B in Algoma from 1998 to

2007 was 2.5 cases per 100,000 population. Algoma's rate was statistically higher than Ontario's rate of 1.2 cases per 100,000 population (Figure 29).

Figure 29 - Hepatitis B, Average Age-Adjusted Rates, Algoma and Ontario, 1998-2007



Source: iPHIS

Hepatitis C

Hepatitis C is a disease characterized by inflammation of the liver and caused by the hepatitis C virus (HCV). Hepatitis C has only been described since 1989 and has been reportable since 1992.

Transmission

Hepatitis C is transmitted mainly by direct contact with infected blood or blood products. Intravenous drug users are at highest risk for hepatitis C. The risk seems greatest from young adulthood to middle age, but often symptoms of disease are not seen until later in life. Sexual transmission of the hepatitis C virus also occurs, but less frequently than hepatitis B or HIV.

Prior to modern screening techniques, people who received blood transfusions were at risk of contracting hepatitis C but new screening techniques have virtually eliminated the risk of transmission to users of Canada's blood system.

The immune system has great difficulty overcoming the hepatitis C virus. This results in most hepatitis C infections becoming chronic, with some eventually leading to liver disease and liver failure. Although there is no vaccine available for protection against hepatitis C, vaccinations against hepatitis A and hepatitis B are provided, free of charge, for individuals infected with hepatitis C. Needle exchange clinics providing free sterile needles are a key harm reduction strategy in reducing transmission in higher risk groups.

Symptoms

Most people with hepatitis C have no symptoms and may feel quite healthy. Others may develop fatigue, yellowing of the eyes and skin, abdominal and joint pain, nausea and lack of appetite.

Testing

Only a blood test can detect the hepatitis C infection.

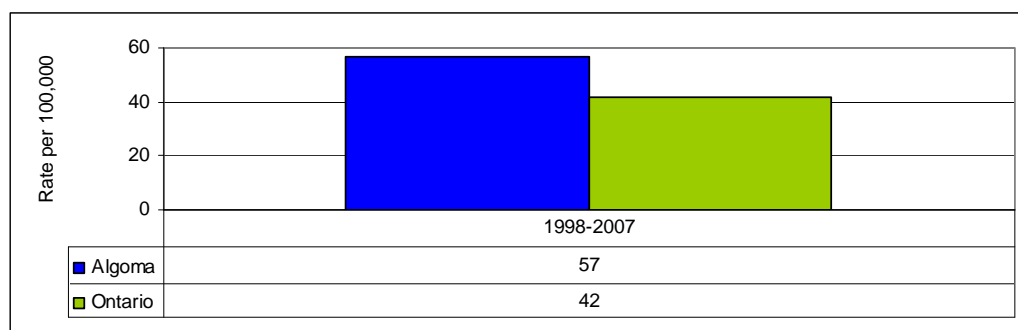
Treatment

Of all those infected with hepatitis C, about 75 per cent will not rid the virus without medical intervention. Fortunately, antiviral treatment can clear the virus in some individuals, but the success of treatment depends on the genotype. Certain genotypes respond better to treatment than others; therefore, a specialist needs to be consulted.

In Algoma

In Algoma from 1998 to 2007, 776 lab-confirmed cases of Hepatitis C were reported. Eighty-three per cent of these cases were individuals between the ages of 30-59 years. The average age-adjusted rate for hepatitis C in Algoma from 1998 to 2007 was 57 cases per 100,000 population, statistically higher than the Ontario average age-adjusted rate at 42 cases per 100,000 population (Figure 30).

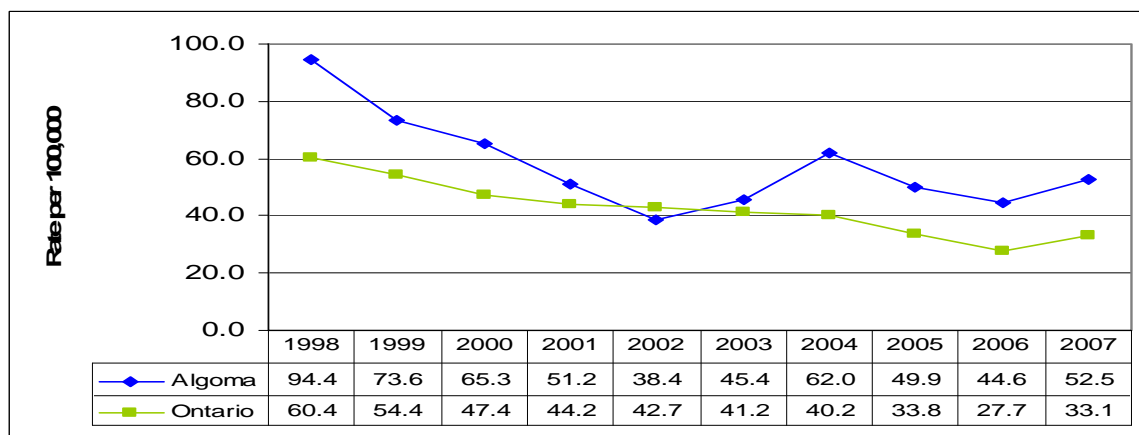
Figure 30 - Hepatitis C, Average Age-adjusted Rates, Algoma and Ontario, 1998-2007



Source: iPHIS

The annual age-adjusted rates for hepatitis C for Algoma and Ontario were both on a downward trend (Algoma until 2003 and Ontario until 2006). Algoma's rates were statistically higher for all years except for 2001, 2002 and 2003 (Figure 31).

Figure 31 - Hepatitis C, Age-Adjusted Rates, Algoma and Ontario, 1998-2007



Source: iPHIS

Conclusions

This report reflects current trends of the sexual and reproductive health status of residents in Algoma. The information presented will be valuable when reviewing, planning and implementing programs and services for our community.

1. Algoma has relatively more live births to women ages 15-24 than Ontario.

Although live births to females 15-19 years and 20-24 years decreased for both Algoma and Ontario, from 1986-2006, Algoma's rates were statistically higher than the provincial rates for both age groups. Young mothers are at higher risk for social exclusion, poverty, dropping out of school and food insecurity. Communities need to implement comprehensive programs that support young mothers to complete their education, increase their parenting capacity and promote their sense of belonging.

2. Algoma has a greater proportion of pregnant women attending Canada Prenatal Nutrition Program (CPNP) who smoke compared to Ontario.

Of the pregnant women participating in the Canada Prenatal Nutrition Program (CPNP) in 2007-2008, 54% in Algoma reported they were smoking at the time of program registration, compared to 22% in Ontario. Maternal smoking during pregnancy increases the risk of obstetrical, fetal and newborn complications such as intrauterine growth retardation, preterm birth, placental complications, and sudden infant death syndrome. Everyone who works with expectant women needs to give consistent messages about smoking cessation during pregnancy and the importance of having smoke-free homes and vehicles.

3. Algoma has a greater proportion of pregnant women attending CPNP who are food insecure compared to Ontario.

Of the pregnant women participating in CPNP in 2007-2008, 88% in Algoma reported their reason for attending was to get food, food vouchers or food coupons compared to 38% in Ontario. According to the 2006 APH report *Hidden Hunger: Food Insecurity in Algoma*, 25% of expectant women in Sault Ste. Marie and 30-45% of expectant women in Algoma accessed CPNP to get help with free milk and healthy food. Lack of money severely limits the choices that families can make with respect to the amount and quality of food they eat. Furthermore, limited nutritious food during pregnancy increases the risk of inadequate maternal weight gain and adverse pregnancy outcomes such as low birth weight, intrauterine growth restriction, and preterm birth. Community partners can influence birth outcomes by coordinating food access and advocating for food security with all levels of government. It is vital to promote, protect and support breastfeeding, since breastmilk provides food security for the first six months of life.

4. Algoma has a higher rate of chlamydia than Ontario.

For the years 1998 to 2007, the average age-specific rates of lab-confirmed chlamydia infections for the age group 15-24 years were statistically higher for Algoma for all 3 groups – female, male, and both.

In response to the high rates of chlamydia in the age group of 15-24 years, APH has implemented community education campaigns which target the youth population. These campaigns strive to empower youth with knowledge about STIs and blood-borne infections along with the associated risks, prevention, transmission and treatment.

5. Gender differences were evident for lab-confirmed cases of chlamydia in Algoma

In Algoma from 1998 to 2007 for the 15-24 year age group, females accounted for 1262 new lab-confirmed cases (77%) and males accounted for 387 new lab-confirmed cases (23%).

This difference may be due to females being more likely to see their healthcare providers for regular Pap screening and birth control. Males may not routinely visit their healthcare providers limiting their opportunities for STI screening. Urine testing, a less invasive method for testing is now available for chlamydia and gonorrhoea. Creating more awareness about this method of testing may facilitate more males to access STI screening services.

6. The uptake of GARDASIL® in the Algoma district was 59% compared to 53% in Ontario.

Beginning in fall 2007, GARDASIL®, a three-dose HPV vaccine, was offered to 672 eligible young women in grade eight throughout the Algoma district. This school-based vaccination program is aimed at protecting young women against precancerous cervical lesions and cervical cancer. The vaccine is voluntary and administered by public health nurses. The program is funded by Ontario's Ministry of Health and Long-Term Care. Information letters with consents were sent to all eligible girls and their parents in August 2007. It is anticipated that over time the uptake both locally and provincially will increase.

7. Algoma has a higher rate of hepatitis C than Ontario.

For the years 1998-2007, the average age-adjusted rate in Algoma of 57 cases per 100,000 population was statistically higher than the Ontario's average age-adjusted rate of 42 cases per 100,000 population. To limit the ongoing transmission of the disease, APH follows up on each reported case to ensure that appropriate health teachings are initiated. To help the affected person access available treatment options, individuals are referred to the Ontario Hepatitis Nurse Program, managed locally through the Group Health Centre. Harm reduction strategies such as the needle exchange program are also important in removing the potential of sharing contaminated needles in higher risk activities.

A Call to Action

Algoma Public Health is committed to ongoing data surveillance and research that informs practice to ensure that our sexual and reproductive health programs address the changing needs of the community.

Choose Health

APH recognizes that difficult personal circumstances can influence the individual and family's ability to make healthy choices. It is our responsibility to mobilize community partners and ensure that helpful programs and services are readily available and accessible to those who need them.

In a healthy community, individuals are empowered to make positive choices for their health. These choices include:

- Practising safer sex
- Getting vaccinated
- Not sharing personal items such as toothbrushes, razors, and eating utensils

If you are pregnant or plan to be:

- Avoiding substances such as tobacco, alcohol, and drugs to improve birth outcomes
- Attending prenatal education sessions to increase parent confidence
- Planning to breastfeed your baby to increase food security
- Seeking community services for support.

We All Play a Part

Community stakeholders and citizens can work together to raise awareness about the impacts of poverty and the other social determinants of health on individuals and families. Some examples of other social determinants of health include income and its distribution, early life experience, education, employment and working conditions, unemployment and employment security, housing and food security. These interrelated and cumulative factors have a significant impact on the health status of individuals and their families.

Strategies such as building community networks, advocating for change in government policy, and improving access to community support services for priority populations will strengthen community capacity. By communicating with our municipal, provincial and federal government representatives, we can advocate for policies that improve food security, adequate housing, and overall health.

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Appendix A

Algoma Live Births Counts by Age Groups, 1986-2006							
	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-49 years	Total
1986	178	582	737	324	88	9	1918
1987	145	464	691	324	69	5	1698
1988	163	468	648	359	80	9	1727
1989	182	440	707	405	90	6	1830
1990	197	399	642	363	81	9	1691
1991	166	391	529	359	89	8	1542
1992	199	336	547	364	81	8	1535
1993	147	326	562	382	94	12	1523
1994	165	319	444	364	99	15	1406
1995	166	366	452	369	138	20	1511
1996	132	318	355	369	119	21	1314
1997	141	320	376	308	115	24	1284
1998	122	305	347	266	117	13	1170
1999	123	250	325	259	123	14	1094
2000	87	243	331	248	96	12	1017
2001	95	215	302	257	120	18	1007
2002	99	233	275	264	100	18	989
2003	81	220	293	239	102	16	951
2004	82	229	279	250	86	17	943
2005	78	238	265	235	96	17	929
2006	77	232	277	243	95	16	940
Total	2825	6894	9384	6551	2078	287	28019
Data Source: Ministry of Health and Long-Term Care, <i>intelli</i> HEALTH ONTARIO, Date: March 5, 2009 11:16:59 AM, Report #: 01-0003							

Appendix B

Algoma Teen Live Birth Counts, 1986-2006					
Year	15-16 years	17 years	18 years	19 years	15-19 years Total
1986	25	41	48	64	178
1987	20	28	39	58	145
1988	23	31	46	63	163
1989	19	31	58	74	182
1990	28	53	57	59	197
1991	31	37	51	47	166
1992	40	43	53	63	199
1993	22	35	51	39	147
1994	22	49	46	48	165
1995	21	41	39	65	166
1996	14	32	40	46	132
1997	25	33	33	50	141
1998	19	22	44	37	122
1999	15	25	38	45	123
2000	14	22	15	36	87
2001	8	20	28	39	95
2002	17	24	25	33	99
2003	10	17	21	33	81
2004	6	14	27	35	82
2005	7	7	22	42	78
2006	7	13	25	32	77
Total	393	618	806	1008	2825
Data Source: Ministry of Health and Long-Term Care, <i>intelliHEALTH</i> ONTARIO, March 12, 2009 12:43:48 PM, Report #: 01-003					

Appendix C

Top Ten Tips from Service Providers Working with Pregnant Women

- Always have written resources available for pregnant women to read; they are private and anonymous.
- Analyze programming from the woman's perspective—*would I feel comfortable walking into this situation?*
- Encourage women, especially new ones, to bring a friend to the program.
- If doing focus groups, pay the women for their time. Ask them what they need and implement their suggestions. For example, cover childcare and transportation costs or provide food during the groups.
- Acknowledge women when they arrive and when they leave—it honours them.
- Let women borrow resources and eliminate any that are out of date. Copy pertinent sections for them.
- Be aware of community services and refer to them.
- Ensure all staff is non-judgmental, friendly, accepting of all family types, and knowledgeable about programs to ensure information is consistent and accurate.
- Respect differences in childrearing practices, relationship choices, and food preparation.
- Don't be solution-focused all the time. Often, it's best to listen and let the woman tell her story.

Top Ten Tips from Pregnant Women Using Services

- Providing information on health risks is not enough. We need practical information, advice, resources, support and encouragement.
- We want the best for our children but our lives are very stressful and it is difficult to put advice into practice.
- Talking with other women is so helpful.
- Don't make assumptions about what we need; instead, ask what we think would be helpful.
- Help us make changes but without guilt or shame (e.g. smoking).
- Create a welcoming environment to foster belonging and fitting in.
- Find out about our cultural beliefs, our challenges, what it's like to live on a limited income.
- Provide practical information about food banks, geared to income housing, crisis shelters, second hand maternity clothes depots, how to get a car seat, etc.
- Make it easier to use services by helping with transportation costs, childcare, and location of services.
- Look at the big picture—think about things that can change in the community, not just about the things you can help me change.

Adapted with permission from *Reducing the Impact: Working with Pregnant Women who Live in Difficult Life Situations*, Best Start Resource Centre, 2002.

Appendix D

Working with Aboriginal Expectant Families

The following strategies are helpful when building a trusting and respectful relationship with Aboriginal expectant families:

- Ask families about their beliefs and traditions and work within their framework
- Be open to learning about families and their culture as they see it
- Use a strength based approach and do not focus only on risk
- Ask families how they would like to be supported and empower them to reach those goals as much as possible
- Respect the opinions and ideas of families, recognizing that you may learn from them as well
- Be familiar with Aboriginal services in the community and refer families to them
- Include Aboriginal workers or support people in meetings and plans of care
- Think holistically and support the family as a whole unit

Adapted with permission from “A Sense of Belonging: Supporting Healthy Child Development in Aboriginal Families”, Best Start Resource Centre, 2006.

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Published Date: March 2010

Updated: June 2 2010



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