



# **A Profile of Child, Youth and Family Health in Grey and Bruce Counties**

## **Technical Report**



**Prepared by Glenda Clarke and Associates for the  
Grey Bruce Children's Alliance**

**April, 2010**

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## **1. Introduction**

### **1.1 Background**

In 2007 the Grey Bruce Children's Alliance identified the need for comprehensive planning across the very complex mix of services for children, youth and families. In 2008 the Ontario Trillium Foundation agreed to support the Alliance with a 2 year grant to undertake a Measuring and Planning for Child and Youth Health project.

The outcome of the "measuring" component of the project is this Profile which brings together statistics and research findings about children, youth and families in Grey and Bruce Counties and their health. The Alliance will also complete a Children's Service Plan for Grey Bruce. These products will inform decision-making and will guide the work of the Children's Alliance over the next few years.

### **1.2 Purpose**

The purpose of the Profile is to:

- Provide information specific to Grey and Bruce Counties that will assist service providers and parents to identify areas of strength and vulnerability in the population of children and youth;
- Serve as a planning tool for service providers to consider opportunities to respond to areas of vulnerability, and;
- Provide a baseline of information to track changes over time.

### **1.3 Health and the Determinants of Health**

For the purpose of this Profile, health is defined broadly to refer to "a state of complete physical, mental and social well-being."<sup>1</sup> The Profile provides statistical data related to the determinants of health that are understood to impact the health of children, youth and families in Grey Bruce.

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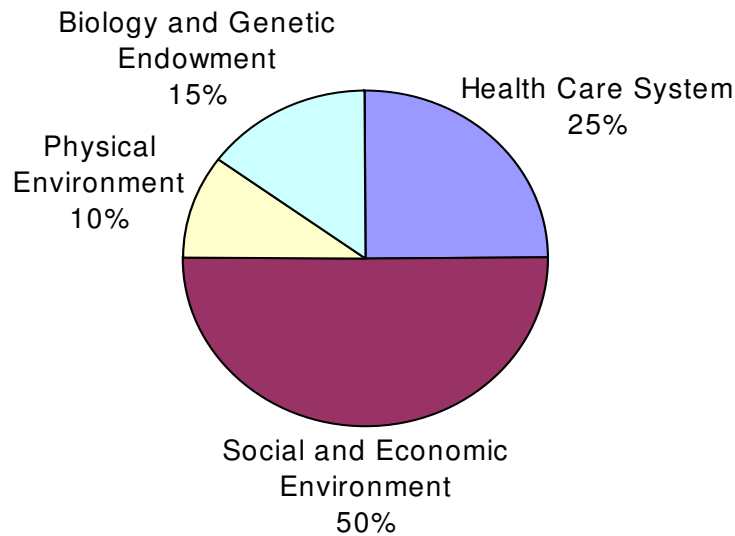
<sup>1</sup> World Health Organization "Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference", New York June 19- July 22, 1946 <http://www.who.int/suggestions/faq/en/index.html>

“The health of individuals and communities is significantly influenced by complex interactions between social and economic factors, the physical environment, and individual behaviours and living conditions. These factors are referred to as the determinants of health, and together they play a key role in determining the health status of the population as a whole.”<sup>2</sup> The determinants of health are considered the key factors that make children and youth healthy. “Each of these factors is important in its own right. At the same time, the factors are interrelated.”<sup>3</sup>

Figure 1 illustrates the estimated impact of the determinants of health on the health status of any population.

**Figure 1**

**Estimated Impact of Determinants of Health on the Health Status of the Population**



Source: Bumstead, L., Goetz-Perry, C., Miller, L., Solomon, M. Grey Bruce Chronic Disease Prevention and Management Framework Implementation Tool Kit, Powerpoint Presentation, 2008

<sup>2</sup> Public Health Division, Ontario Ministry of Health and Long-Term Care *Initial Report on Public Health* August 2009, p. 5

<sup>3</sup> Public Health Agency of Canada “What Makes Canadians Healthy or Unhealthy?” October 2008 <http://www.phac-aspc.gc.ca/ph-sp/determinants/index-eng.php>

## **1.4 Data Limitations**

The statistical data gathered for the Profile has been drawn from a number of sources. Where possible, data has been requested for at least the three year period 2006, 2007 and 2008, to begin to assess trends over time. In many instances the secondary data is only available in the form and for the time period(s) in which it was originally collected and published.

Where possible, the Profile includes analyses of the statistical significance of variances between the results at the local level compared to a benchmark (e.g. provincial results). The use of the term “significant” in the Profile refers to those instances where a statistically significant variation has been identified.

Data for Grey Bruce was not readily available for some elements of the determinants of health. The time required to collect and synthesize the data included in the report was very extensive. These time and data limitations restricted the comprehensiveness of the completed Profile.

## **1.5 Organization of the Technical Report**

This detailed Technical Report has been developed as a resource document. It includes:

- a geographic and demographic overview;
- information related to the determinants of health, and;
- a summary of what has been interpreted to be the key findings from an analysis of the data presented, and their implications for planning.

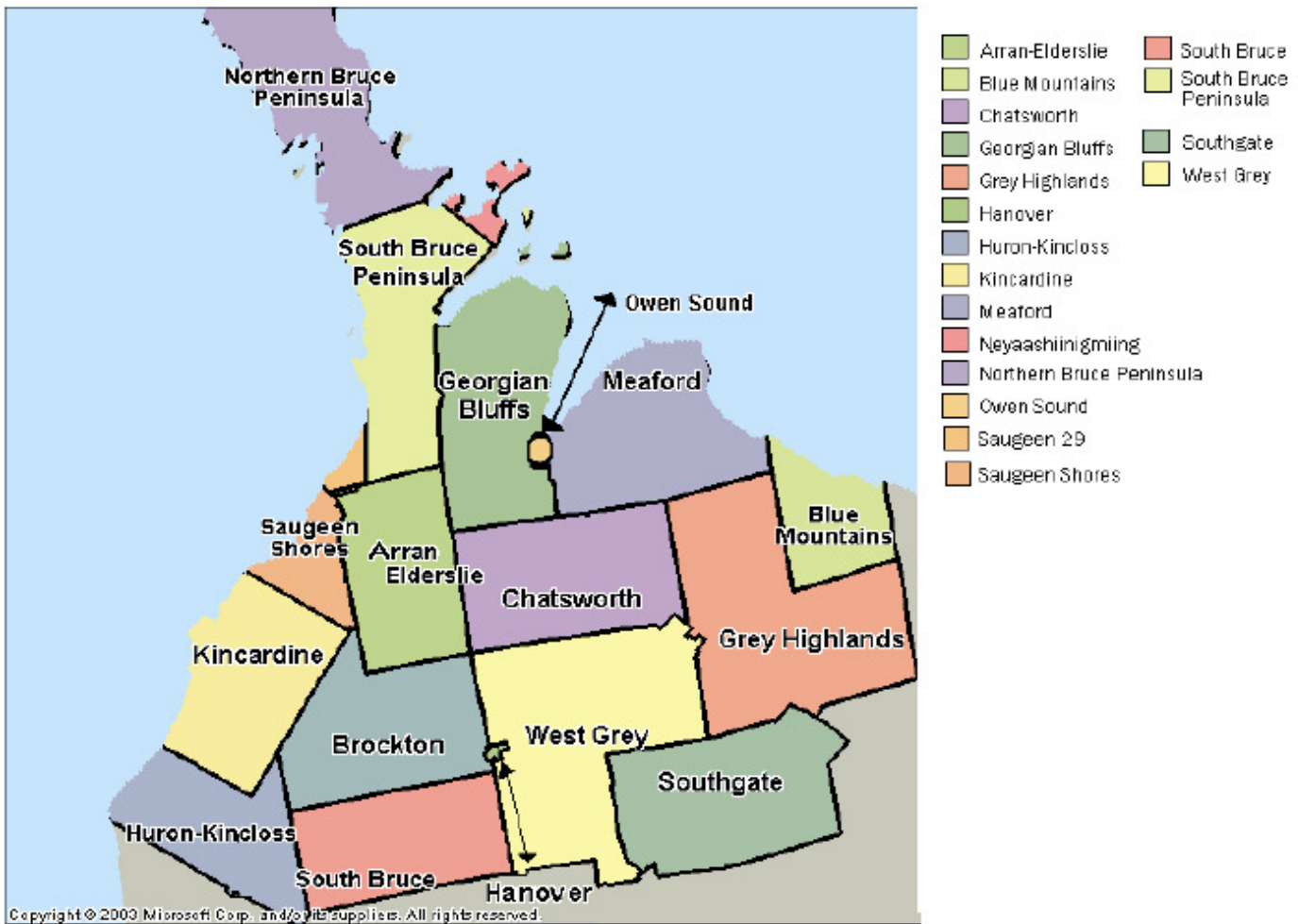
## 2. Geographic and Demographic Overview

### 2.1 Geography of Grey and Bruce Counties

Grey and Bruce Counties are situated in the South West Region of Ontario. The two counties are surrounded by Georgian Bay and Lake Huron to the north and the west, Huron and Wellington Counties to the south, and Simcoe and Dufferin Counties to the east.

The two Counties encompass a large geographic area (8,587 square km). Owen Sound is the only city in Grey Bruce. The remainder of the population resides in smaller rural communities dispersed across the two Counties.

**Map1**  
**Map of Municipalities Grey and Bruce Counties**



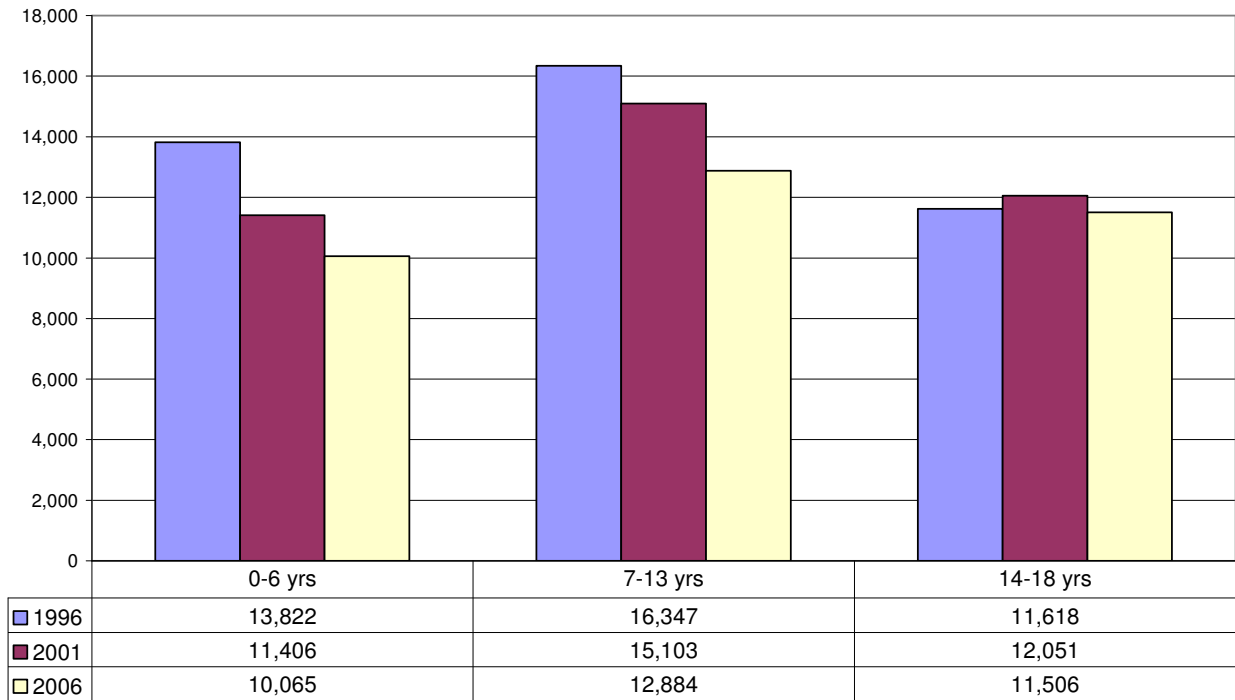
Source: Adapted from OEYC Grey Bruce, 2008

## 2.2 Children Youth and Families in Grey Bruce

The combined population of Grey and Bruce Counties based on 2006 Census totaled 157,760 people, including 34,455 children and youth 18 years of age and under. The total number of children and youth in the two counties has decreased by 20% over the past 10 years from 41,787 in 1996. The decline has been most prevalent in the 0-6 and 7-13 age groups. The age group 14-18 has remained stable. The number of children and youth by individual ages, age groups and municipality of residence in 2006, are included in Appendix A.

**Figure 1**

**Population Change Grey Bruce Children and Youth 1996-2006  
by Age Group**

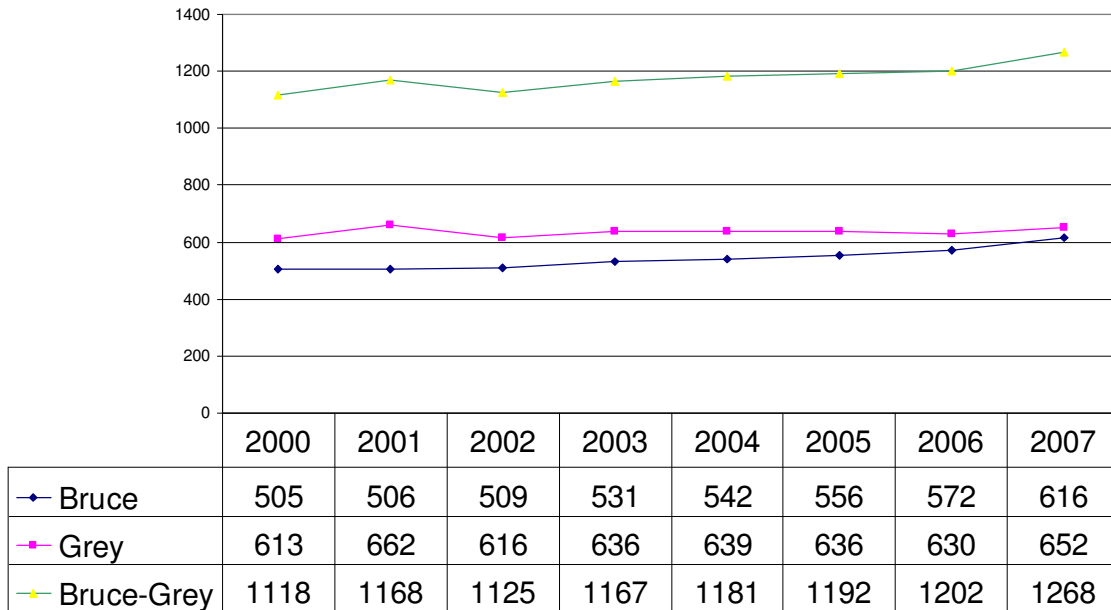


Source: Statistics Canada. 2006. Community Profiles, Population and Dwelling Counts, Bruce and Grey County. Ottawa, Ontario, July 24<sup>th</sup>, 2009.

The number of births in Grey and Bruce Counties has remained stable over the period 2000- 2007.

**Figure 2**

**Number of Births, Bruce Grey and Bruce-Grey 2000 - 2007**

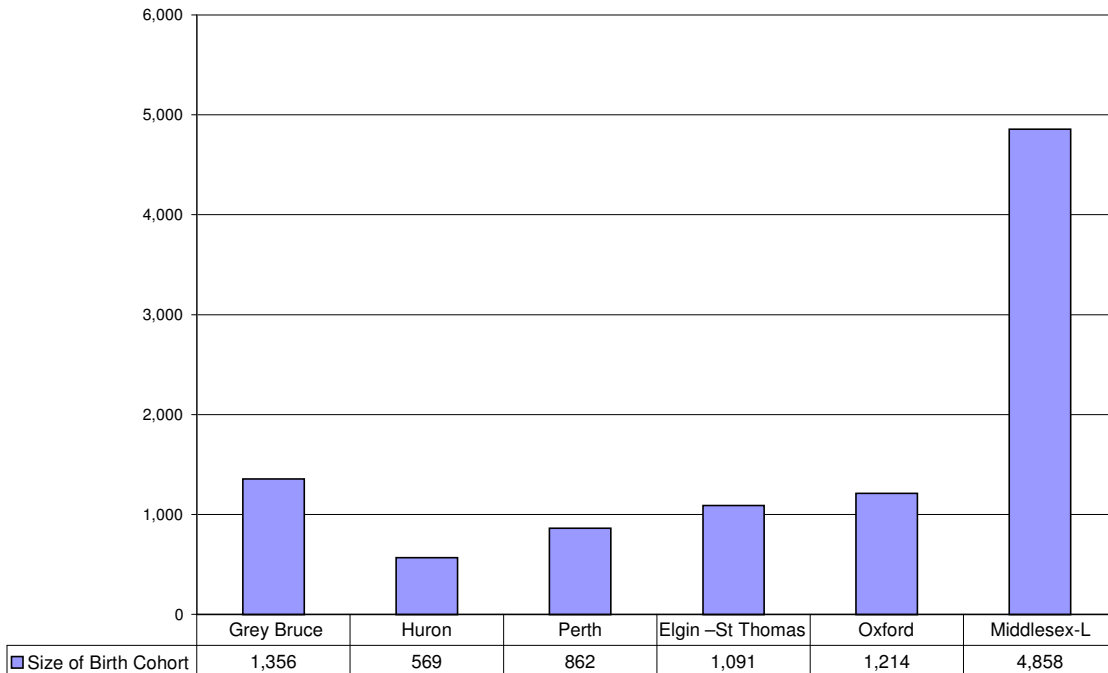


Source: SWLHIN 2009: Ministry of Health and Long Term Care, Provincial Health Planning Database

The size of the Grey Bruce birth cohort in 2007 was similar to that of the health unit areas in the South West Region of Oxford County, Elgin-St.Thomas, and the combined cohort for Huron and Perth Counties. The birth cohorts of all of these “mainly rural”<sup>4</sup> health unit areas in the South West are considerably smaller than that for the Middlesex London area.

<sup>4</sup> Public Health Division, Ministry of Health and Long-Term Care *Initial Report on Public Health*, August 2009 p. 78

**Figure 3**  
**Size of Birth Cohort in 2007 within Health Unit Areas in the South West Region**



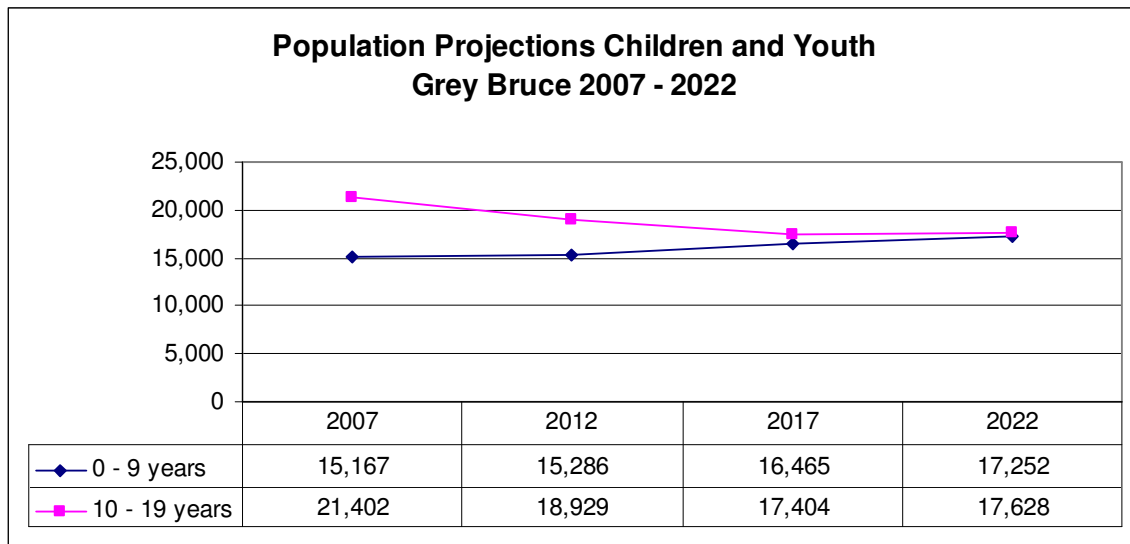
Source: Public Health Division, Ministry of Health and Long-Term Care *Initial Report on Public Health*, August 2009 p. 8

Note: The source for the data in Figure 3 above is different from the source for data in Figure 2

Over the 15 year period 2007 to 2022, it is projected that the child and youth population in Grey Bruce will remain somewhat stable, changing from 36,569 in 2007 to 34,880 in 2022. As indicated in Figures 4 the older age group (10-19yrs) is expected to decline and the younger age group (aged 0-9 years) is expected to increase.



Figure 4



Source: SWLHIN: intelliHEALTH May 2008

### 2.3 The Interdependence Between the Young and the Old

The demographic changes occurring across Canada are such that “children and youth represent a shrinking proportion of the population. As our population changes, there is a risk that a larger and larger share of our health and social resources will go to meeting the health needs of older Canadians and the needs of children and youth will be neglected. Faced with what may seem like competing demands, we must recognize the interdependence between the young and the old.”<sup>5</sup>

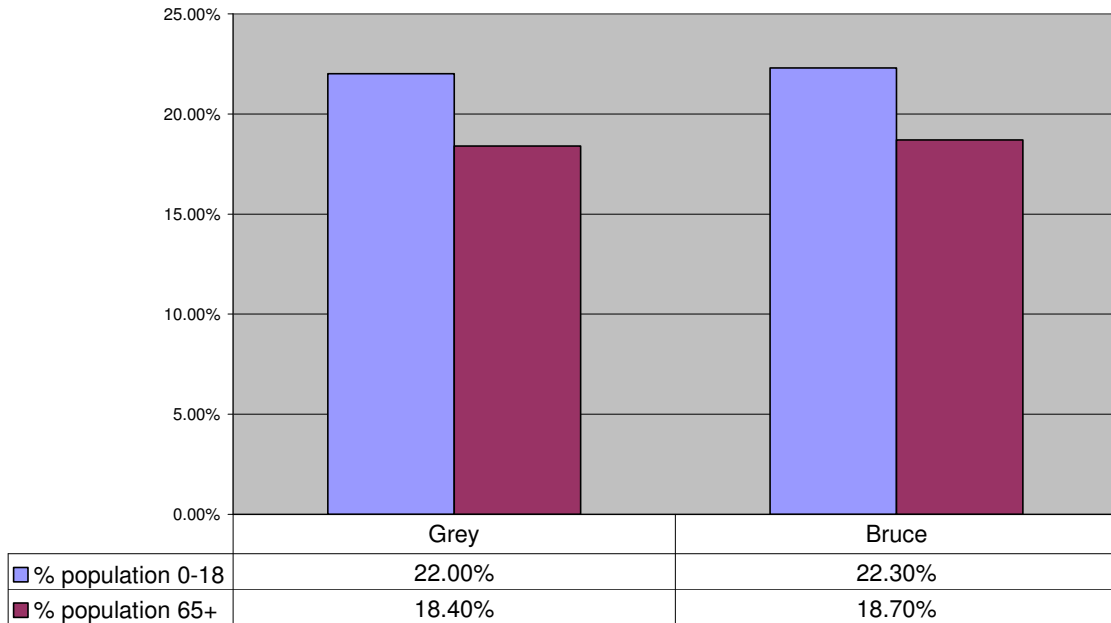
In 2006 children and youth aged 0-18 years represented 22% of the population of Grey Bruce. Persons over age 65 represented 18-19% of the population. (See Figure 5). It is expected that the seniors population will grow in the Grey Bruce, the Southwest Region and all of Ontario over the next several years. “It is projected that, compared to 2006, there will be 31.1% more seniors in the South West Local Health Integration Network in 2016.”<sup>6</sup>

<sup>5</sup> Health Council of Canada *Their Future is Now Healthy Choices for Canada's Children and Youth* June 2006 p.9

<sup>6</sup> South West LHIN, *Environmental Scan*, October 31, 2006 p. 20

**Figure 5**

**Percent of the Population 0-18 Years and 65+ Years in  
Grey and Bruce Counties, 2006**



Sources: Statistics Canada. 2006. Community Profiles, Population and Dwelling Counts, Bruce and Grey County. Ottawa, Ontario, July 24<sup>th</sup>, 2009

### 3. Determinants of Health

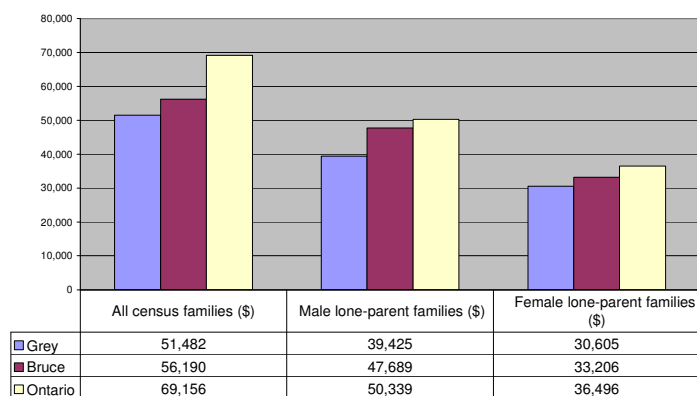
#### 3.1 Family Life – Social and Economic Status

##### Impact on Child and Youth Health

- “The family provides the most significant influence on a child’s development.”<sup>7</sup>
- “There is strong and growing evidence that higher social and economic status is associated with better health. In fact, these two factors seem to be the most important determinants of health.”<sup>8</sup> Social and economic status can be measured by assessing income, occupation, and education.
- “Children in low income households experience a higher risk of health problems throughout their life spans, independent of their later socioeconomic status.”<sup>9</sup>

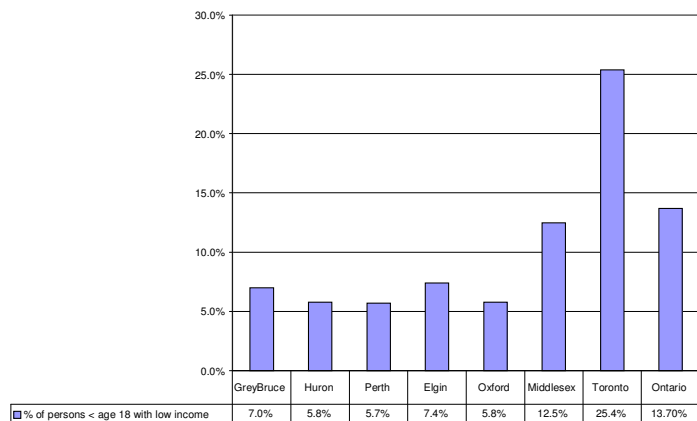
##### Grey Bruce

**Median Family Income: All Families and Lone Parent Families, Grey Bruce and Ontario, 2005**



Source: Statistics Canada (2006). Community Profiles, Income in 2006, Bruce and Grey County. Ottawa, Ontario, July 24th, 2009.

**Percent of Persons less than Age 18 with Low Income**



Source: Public Health Division, Ministry of Health and Long-Term Care *Initial Report on Public Health*, August 2009 p. 20

According to Statistics Canada (2006) there were 46,620 families in Grey Bruce. The majority of those families were 2-parent families that were either married or living in a common-law relationship (Grey 88%; Bruce 90%). There were 5,185 lone-parent families in Grey- Bruce representing 12% of Grey County families and 10% of Bruce County families.

In 2006 the median income for all families in Grey Bruce was well below the provincial median of \$69,156. The median income for lone- parent families within Grey Bruce (and Ontario) is well below the overall Provincial median, particularly for female-led lone parent families.

In 2006 it is estimated that there were approximately 2,400 children and youth living in poverty in Grey Bruce, based on Statistics Canada’s Low Income Measure. Statistics Canada defines persons with low income as those who spend 20% more of their after-tax income on food, shelter and clothing.<sup>10</sup>

In Grey Bruce, the proportion of all persons under 18 with low income is similar to that of most other Counties within the South West Region and well below the proportion for Middlesex/London, Toronto and all of Ontario.

Selected indicators of social vulnerability from Statistics Canada 2006 census are included for each municipality in Appendix B.

<sup>7</sup> Canadian Council on Social Development *The Progress of Canada’s Children and Youth 2006* p.14

<sup>8</sup> Public Health Agency of Canada “What Makes Canadians Healthy or Unhealthy?” October 2008 <http://www.phac-aspc.gc.ca/ph-sp/determinants/index-eng.php>

<sup>9</sup> The Ontario Physicians Poverty Work Group “Why poverty makes us sick” Physician Backgrounder” *Ontario Medical Review* May 2008

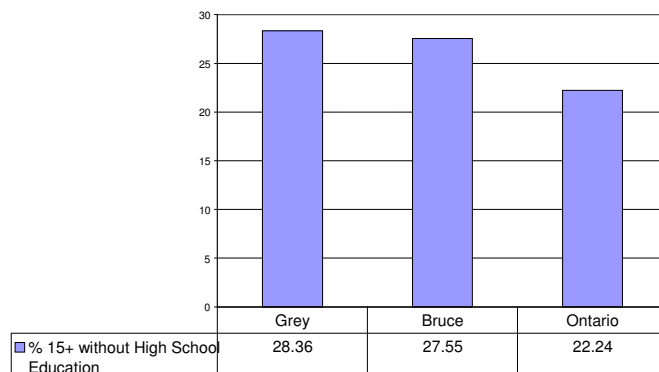
## Family Life – Social and Economic Status (continued)

### Impact on Child and Youth Health

- “Health status improves with level of education. Education is closely tied to socioeconomic status, and effective education for children and lifelong learning for adults are key contributors to health and prosperity for individuals.”<sup>11</sup>
- “People with little education, income, or control over their lives are more likely to have difficulties. Social and developmental outcomes include weight and health at birth, academic achievement, mental and physical health status, literacy rates, criminal activities, and mortality. People with low socioeconomic status (SES) have the least chance of having good outcomes and those with high SES have the best chance.”<sup>12</sup>
- “Canadian children living in poverty are more likely to develop a variety of illnesses and injuries, as well as suffer growth retardation and developmental difficulties. They are also more likely to experience hospitalization, mental health problems, and difficulties in school, such as lower school achievement and early school leaving.”<sup>13</sup>

### Grey Bruce

**Proportion of the Population 15+ without a High School Education: Grey Bruce and Ontario**



Source: Statistics Canada, 2009. 2006 Community Profiles, Educational Attainment, Bruce and Grey County. Ottawa, Ontario, July 24th, 2009.

In 2006, 28% of Grey County residents aged 15 and older and 28% of Bruce County residents of the same age did not complete high-school. These proportions are well above the proportion for all of Ontario (22%).

The level of education attained by adults in Grey Bruce and throughout Ontario has improved over the past ten years. In 1996, 39% of Grey Bruce adults did not complete high-school while Ontario was 33%.

According to the TOP Report<sup>14</sup> 15% of persons in Grey Bruce aged 25-34 (parental age) have low educational attainment and will experience significant employment-related concerns particularly employment stability and financial steadiness with a resulting decrease in resiliency. For the 45-54 age groups, about 30% have high school diplomas while 17% hold no form of certificate, diploma or degree. Grey Bruce lags behind the province in each category by 3%.

<sup>10</sup> Statistics Canada (2006). Community Profiles, Income in 2006, Bruce and Grey County. Ottawa, Ontario, July 24th, 2009.

<sup>11</sup> Public Health Agency of Canada “What Makes Canadians Healthy or Unhealthy?” October 2008 <http://www.phac-aspc.gc.ca/ph-sp/determinants/index-eng.php>

<sup>12</sup> Margaret Norrie McCain, J. Fraser Mustard, Dr. Stuart Shanker *EARLY YEARS STUDY 2 Putting Science into Action* March 2007 p.78.

<sup>13</sup> The Ontario Physicians Poverty Work Group “Why poverty makes us sick” Physician Backgrounder” *Ontario Medical Review* May 2008.

## 3.2 Family Life – Character of Family Relationships

### Impact on Child and Youth Health

- “The relationship between caregiver and infant plays a pivotal role in the child’s capacity to interact with others and influences neural pathways for language and higher cognitive functions.”<sup>15</sup> “The effect of the social environment on brain development and function in early life contributes to physical and mental health problems throughout life... Exposure to: maternal depression; caregiver substance abuse; family violence; physical, sexual, or verbal abuse, [and/or]; other traumatic experiences may damage deep structures in the brain that affect the quality of future social interactions.”<sup>16</sup>
- “The character of family relationships influences youth health. Students who report that their parents usually do not know their whereabouts are more likely to report [mental health] problems, even when taking into account all other predictor variables. Compared to students who report a good relationship with their parents, students with a poor relationship with their parents are more likely to be at risk for depression, report psychological distress and thoughts about suicide, even after controlling for other factors. They are also more likely to report delinquent behaviour, be at risk for a gambling problem, hazardous/harmful drinking, a drug use problem, and to report co-existing problems.”<sup>17</sup>

### Grey Bruce

#### Healthy Babies Healthy Children Program

Results of Parkyn Screens - "At Risk"	2006	2007	2008
# families who were assessed as "at risk" and referred to HBHC	478	451	422
% of all families screened	43	39	38

#### Children’s Aid Societies in Grey Bruce

Total Investigations Completed	06/07	07/08	08/09
Grey	766	697	661
Bruce	432	447	492
Average Number of Children in Care			
Grey	179	195	187
Bruce	106	107	127
Adoptions			
Grey	5	3	14
Bruce	2	4	6

Source: The Children’s Aid Society of Owen Sound and the County of Grey and the Children’s Aid Society of the County of Bruce, 2006-2008.

Through the Healthy Babies Healthy Children (HBHC) Program, parents of all newborns are screened in hospital prior to discharge using the Parkyn Screening Tool. Families are assessed for various risk factors including violence, substance misuse, social isolation and mental health issues and are then linked with community resources as appropriate. Over the period 2006 to 2008 about 450 families per year were identified as “at risk” and were referred to the HBHC ongoing home visiting program. “At risk” may be defined as clients who score over 9 on the Parkyn Postpartum Screening tool, or over 13 on the Larson Prenatal Screening Tool, or a client who has a positive score on the brief assessment, or clients with other risk factors noted during an interaction with a health professional. The Ministry of Children and Youth Services sets a standard of 25% of families should be referred to ongoing home visiting; in Grey and Bruce Counties this number represents 40% of families screened.<sup>18</sup>

The Children’s Aid Society of Owen Sound and the County of Grey and the Children’s Aid Society of the County of Bruce investigate situations where the welfare of children is of concern due to neglect, physical or sexual abuse. In the event that a child is not able to remain safely within his or her family, they are placed in the care of the CAS. Over the period 2006/07 – 2008/09:

- the number of investigations in Grey County declined from 766 to 661 and the number in Bruce County increased from 432 to 492;
- the number of children in case in Grey County remained somewhat stable ranging from 179 to 195; and the number in Bruce County increased from 106/107 in the first two years to 127 in 2008/09
- the number of adoptions in Grey County increased from 4-5 in the first two years to 14 in 2008/09 and the number in Bruce County has gradually increased from 2 to 6 over the three year time period

<sup>14</sup> TOP Report; Trends, Opportunities, Priorities, March 2009. Training Board of Bruce, Grey, Huron, and Perth Georgian Triangle, Walkerton, Ontario.

<sup>15</sup> Margaret Norrie McCain, J. Fraser Mustard, Dr. Stuart Shanker, *EARLY YEARS STUDY 2 Putting Science into Action* March 2007 p 28

<sup>16</sup> Ibid p 28.

<sup>17</sup> Centre for Addiction and Mental Health, Research Document Series 21, Drug Use Among Ontario Students, 1977-2007.

<sup>18</sup> Integrated Services for Children Database (ISCIS), Ministry of Children and Youth Services, Data extract May 2009.

### 3.3 Family Life – Gender

#### Impact on Child and Youth Health

- Canada’s National Longitudinal Survey of Children and Youth (NLSCY) found that “on average boys tend to be more vulnerable than girls due to both cognitive difficulties and behavioural problems.”<sup>19</sup>
- “Whether we look at cancer, asthma, birth defects, or learning and behavioural disorders, the boys are often faring worse than the girls. The reasons that boys appear to be at greater risk for these conditions are largely unknown, but several reasons have been suggested, including increased exposure and genetic, hormonal and physiological differences between the sexes.”<sup>20</sup>
- “Lone-parent families headed by women are the only family type where over 50% live in poverty ... Children in female lone-parent families have a poverty rate three times that of all children and four and a half times that of children in two parent families.”<sup>21</sup>
- The research indicates that “father involvement has enormous implications for men on their own path of adult development, for their wives and partners in the co-parenting relationship and most importantly, for their children in terms of social, emotional, physical and cognitive development.”<sup>22</sup>

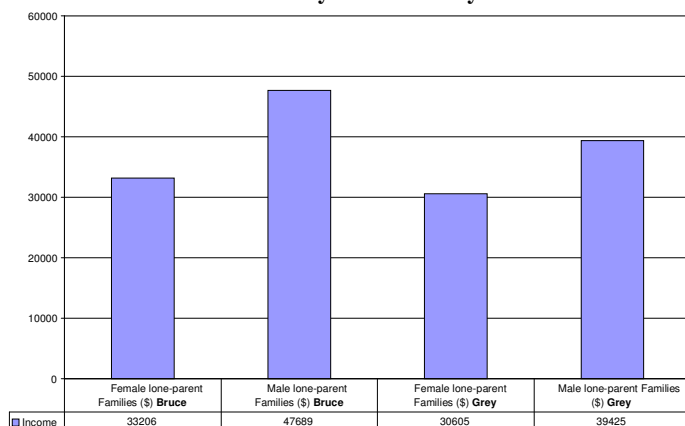
#### Grey Bruce

##### Calculating Gender Vulnerability using NYLSC

	Boys Ages 0-19 yrs	Girls Ages 0-19 yrs	Boys Vul @31.3%	Girls Vul @ 26%
Grey	11,310	10,490	3540	2727.4
Bruce	7,815	7,430	2446.1	1931.8
Grey Bruce	19,125	17,920	5986.1	4659.2

Source: Statistics Canada. 2006 Community Profiles

Lone-Parent Family Incomes Grey Bruce



Source: Statistics Canada. 2006 Community Profiles.

The results of the NLSCY indicated that 31.3% of boys and 26% of girls studied were found to be vulnerable. Using those prevalence rates, it can be estimated that in Grey Bruce in 2006 there were 1,327 more boys than girls who could be expected to be vulnerable.

(Note: The definition of vulnerability used in the NLSCY does not include physical or mental handicaps, learning disabilities, or health problems... Unless a handicapping condition or health problem resulted in a behaviour problem or poor cognitive development, the child would not be considered vulnerable in the study.)

According to Statistics Canada (2006) lone-parent family income for women in Bruce County is approximately \$14,400 lower than male lone-parent households. In Grey County, the difference in income between male and female lone-parents is greater at \$16,400.

<sup>19</sup> J Douglas Wilms ed. *Vulnerable Children Findings from Canada’s National Longitudinal Survey of Children and Youth* 2002 p.46-55

<sup>20</sup> Canadian Partnership for Children’s Health and Environment *A Fathers Day Report- Men, Boys and Environmental Health Threats - Summary Report* June 15, 2007, p. 1

<sup>21</sup> National Council of Welfare as cited in Purdon, C. “Changing the Picture of Poverty”. September 2008

<sup>22</sup> Sarah Allen et. al “*The effects of father involvement: an updated research summary of evidence*” University of Guelph, March 2007

### 3.4 Family Life – Employment and Working Conditions

#### Impact on Child and Youth Health

- Income for the family and economic opportunities which can influence family health is influenced by the availability and/or the type of paid employment parents are engaged in.
- Parents' health is also influenced by employment. "Employment has a significant effect on a person's physical, mental and social health. Paid work provides not only money, but also a sense of identity and purpose, social contacts and opportunities for personal growth. When a person loses these benefits, the results can be devastating to both the health of the individual and his or her family. Unemployed people have a reduced life expectancy and suffer significantly more health problems than people who have a job. Conditions at work (both physical and psychosocial) can have a profound effect on people's health and emotional well-being."<sup>23</sup>
- Youth health is also impacted by their employment opportunities. "Entering the labour market is a key transition from adolescence to adulthood. Working during the teenage years can help smooth the transition to adulthood. Summer jobs and part-time work during the school year provide teens with valuable work experience and independent income."<sup>24</sup> Educational attainment is also an important factor in the success of this transition. "Young people with post-secondary education are much less likely to be unemployed."<sup>25</sup>

#### Grey Bruce

##### Number of People in Receipt of Regular Employment Insurance Benefit for December 2007 and December 2008.

	December 2007	December 2008	% Increase
Grey County	720	1,111	40%
Bruce County	883	1,236	54%

Source: Service Canada, June 2009

In 2006 the unemployment rate in Grey (5.2%) and Bruce (5.3%) counties was below the provincial rate (6.4%).<sup>26</sup> The downturn in world-wide economy in 2008 and 2009 is affecting the residents of Grey Bruce. In June 2009, the unemployment rate for Grey Bruce Huron and Perth was 8.5%, again below the provincial rate of 9.6%.<sup>27</sup> Over the year, December 2007 to December 2008, the number of Grey Bruce residents receiving regular employment insurance as a result of unemployment rose by between 40-54%.<sup>28</sup>

The employment opportunities in Grey Bruce for persons aged 25-34 who are most likely to be having families, is influenced by their education. In Grey Bruce in 2006 15% of this age group did not complete high school.<sup>29</sup>

Youth report that Grey Bruce lacks employment opportunities for their age group. Currently, the retail sector is the largest employer of teenagers while the accommodation and food service sector is the next biggest. Of note is that there is not enough opportunity within either sector to provide for all youth looking for part-time employment in Grey Bruce.<sup>30</sup>

<sup>23</sup> Public Health Agency of Canada "What Makes Canadians Healthy or Unhealthy?" October 2008 <http://www.phac-aspc.gc.ca/ph-sp/determinants/index-eng.php>

<sup>24</sup> Canadian Council in Social Development *The Progress of Canada's Children and Youth 2006* p. 79

<sup>25</sup> Ibid p. 78

<sup>26</sup> Statistics Canada, 2009. 2006 Community Profiles, Unemployment, Bruce and Grey County. Ottawa, Ontario

<sup>27</sup> Denis Langlois "Employment Plummets" in *The Sun Times* July 11, 2009 p.1

<sup>28</sup> Service Canada, 2009. <http://www.servicecanada.gc.ca/eng/home.shtml> accessed July 01, 2009.

<sup>29</sup> Statistics Canada (2006). Community Profiles, Bruce and Grey County. Ottawa, Ontario, July 24th, 2009

<sup>30</sup> Youth Today, the Real Picture (2007). Report on Youth in Grey Bruce, Grey Bruce Health Unit, Grey Bruce Partners in Health, and Youth Roots.

### 3.5 Family Life – Culture

#### Impact on Child and Youth Health

- “Support from friends and community is associated with better health.”<sup>31</sup>
- “Some persons or groups may face additional health risks due to...dominant cultural values that contribute to the perpetuation of conditions such as marginalization, stigmatization, loss or devaluation of language and culture and lack of access to culturally appropriate health care and services.”<sup>32</sup>
- “First Nations, Inuit and Métis families disproportionately experience social and economic circumstances that threaten the health and well-being of their children and youth...Immigrant children and youth are also more likely to live in poverty than non-immigrant children and youth... To thrive in Canadian society, immigrant children must overcome language, cultural and socio-economic challenges.”<sup>33</sup>
- “Discrimination limits young people’s opportunities and their feelings of inclusion in society. Visible minorities and immigrant youth are far more likely than other youth to experience discrimination as non-immigrant youth.”<sup>34</sup>

#### Grey Bruce

##### Total Population of Visible Minorities

	Grey	Bruce	Ontario
% Total Population Visible Minority	1.6%	1.5%	22.8%
% Total Population Immigrated between 2001 and 2006	0.51%	0.59%	4.8%
% Total Population English Spoken at Home	97.2%	97.1%	80.3%

Source: Statistics Canada. 2007. 2006 Community Profiles.

In 2006 in Grey Bruce:

- almost all residents spoke English at home
- less than 2% of residents were visible minorities
- less than 1% of were recent immigrants

This cultural profile is very different from that of Ontario as a whole.

Two First Nation Reserves are located in Bruce County:

- The Chippewas of Nawash Unceded First Nation Neyaashiinigiing Indian Reserve No. 27; and,
- The Chippewas of Saugeen First Nation No. 29

There are over 100 families within the Métis Nation of Ontario in Grey Bruce.

There are several Mennonite and Amish communities, however, their numbers are difficult to ascertain at this time.

The mostly rural aspects of Grey Bruce add to the experience of isolation for culturally diverse families.

<sup>31</sup> Public Health Agency of Canada “What Makes Canadians Healthy or Unhealthy?” October 2008 <http://www.phac-aspc.gc.ca/ph-sp/determinants/index-eng.php>

<sup>32</sup>Ibid

<sup>33</sup> Health Council of Canada *Their Future is Now Healthy Choices for Canada’s Children and Youth* June 2006 p. 16

<sup>34</sup> Canadian Council on Social Development *The Progress of Canada’s Children and Youth 2006* p.65



### 3.6 Social Networks and Environments

#### Impact on Child and Youth Health

- “If we want all children to grow up able to reach their full potential, then all those who have contact with them must be committed to providing more than the bare minimum to achieve that goal. Teachers, neighbours, community members, and government all have to take action to meet the needs of children and help supply the healthy environment known through scientific and social research to produce the best outcomes in our children.”<sup>35</sup>
- “Social connectedness can be referred to as “civic vitality [which] means that there are people beyond the family who contribute to children’s lives and their well-being...Civic vitality encompasses the social and cultural environments of children and youth – the world beyond their families, where they experience their day-to-day lives... A vital community is one which provides young people with opportunities to grow and develop to their full potential; it encourages them to participate in local initiatives, and advocates on their behalf...”<sup>36</sup>
- “Establishing friendships is fundamental to youth development and children with close friends tend to have better social and academic outcomes.”<sup>37</sup>
- “Rural Canadians are, on average, less healthy than their urban counterparts... health status indicators are inversely related to the degree of rurality or remoteness, such that residents in the most rural and remote regions tend to have the worst health status.”<sup>38</sup>

#### Grey Bruce

##### Perception or Sense of Belonging to Community

Age 12 yrs and Older	2008	2007	2005	2003
Sense of Belonging to the Community	74 %	69 %	71%	66 %

Source: Canada Community Health Surveys 2008. Adapted from report by Myatt, M. and Leffley, A. (2007), Grey Bruce Health Unit, Owen Sound, ON

##### Variations in Rurality

Former Townships/ Municipalities	Rurality Measure
Southampton	71.24
Walkerton	61.27
Hanover	55.54
Owen Sound	26.47

Source: B Kralj “Measuring “rurality” for purposes of health-care planning” in Ontario Medical Review October 2000 p 33-52

Over the period 2003 – 2008 between 66 - 74 percent of those surveyed in Grey Bruce reported that they felt a sense of belonging to the community. This is a statistically higher percentage compared with those from Canada, Ontario or other health regions with similar demographics. In 2008, 77 percent of youth in Grey Bruce aged 12-19 reported a sense of belonging to the community.<sup>39</sup>

Moving away from a neighbourhood or a community can disrupt established social networks and contribute to social vulnerability. In 2006, the vast majority of Grey Bruce residents lived at the same residence as they did one year ago (Grey 88 % Bruce 90% and Ontario 86%).

Regardless of what measure of population size and density is used (e.g., population density; % of population living within a Census Metropolitan Area) Grey and Bruce Counties are considered a rural area.<sup>40</sup>

A rurality index developed by Boris Kralj for the Ontario Medical Association included 10 distinct components that reflect relative degrees of rurality. These rurality measures for communities within Grey Bruce ranged from 26 in Owen Sound to over 70 in smaller communities.

<sup>35</sup> Center of Knowledge on Healthy Child Development website “What Do Children Need” October, 2008

[http://www.knowledge.offordcentre.com/need/child\\_need\\_01a.html](http://www.knowledge.offordcentre.com/need/child_need_01a.html)

<sup>36</sup> Canadian Council in Social Development *The Progress of Canada’s Children and Youth 2006* p. 43

<sup>37</sup> Ibid p.61

<sup>38</sup> The Standing Senate Committee on Agriculture and Forestry *Beyond Freefall: Halting Rural Poverty* June 2008 p. 268-283

<sup>39</sup> Statistics Canada, Canadian Community Health Survey (2008) CANSIM Table 105-0502, Grey Bruce Health Unit, June 26th, 2009.

<sup>40</sup> South West Local Health Integration Network *Environmental Scan* October 31, 2006

### 3.7 Physical Safety – Injuries

#### Impact on Child and Youth Health

- A safe environment includes protection from crime and violence, and measures to reduce the risk of injuries.”<sup>41</sup>
- “The stress on children, their families, and the health care system associated with serious injuries cannot be underestimated. Many children who survive their injuries live with long-term disabilities, both physical and emotional.”<sup>42</sup>

#### Grey Bruce

##### Rates of Hospitalization due to Falls Age 0-15 years and 16-24 years 2001/2002

	Females per 10,000 population	Males per 10,000 population	Females per 10,000 population	Males per 10,000 population
	0-15 years		16-24 years	
Grey Bruce	8.1	18.1	8.6	22.8
Southwest	10	16.6	5.3	15.6
Ontario	10.2	16.1	5.4	14.4

##### Rates of Hospitalization due to Motor Vehicle Collisions 0-15 years and 16-24 years 2001/2002

	All Persons 0-15 Years per 10,000 population	All Persons 16-24 years per 10,000 population
Grey Bruce	6.6	40.4
Southwest	6.9	20.0
Ontario	2.4	12.8

Source: Leffley, A. (2004). Grey Bruce Health Unit Report adapted from Ontario Trauma Registry, Injury Hospitalizations 2001-2002, Grey Bruce, Southwestern Ontario, and Ontario.

In 2000/2001 hospitalization rates for children and youth in Grey Bruce due to falls are significantly higher than the rates for Southwestern Ontario (including Grey Bruce) and Ontario. In 2001, total falls hospitalization rates for Grey Bruce (59 per 10,000 population) were 70% higher than the provincial rate (35 per 10,000 population).

In 2000/2001 hospitalization rates in Grey Bruce due to motor vehicle collisions in the 0-15 year age group were 175% higher than provincial rates (6.6 in Grey Bruce compared to 2.4 for Ontario per 10,000). In the 16-24 year age group, they were 216% higher in Grey Bruce compared to Ontario (40.4 Grey Bruce compared to 12.8 in Ontario per 10,000).<sup>43</sup>

The number one killer of Grey Bruce teens is motor vehicle collisions. From 2000 to 2003, motor vehicle collisions were the cause of 79% (26 of 33) of deaths for youth aged 15-19 in Grey Bruce. This is significantly higher than the Ontario average of 31% and the national average of 35%.<sup>44</sup>

<sup>41</sup> Canadian Council in Social Development *The Progress of Canada's Children and Youth 2006* p. 23

<sup>42</sup> Health Council of Canada *Their Future is Now Healthy Choices for Canada's Children and Youth* June 2006 p.18-19

<sup>43</sup> Leffley, A. & Myatt, M.(2004). Grey Bruce Health Unit Report adapted from Ontario Trauma Registry, Injury Hospitalizations 2001-2002, Grey Bruce, Southwestern Ontario, and Ontario

<sup>44</sup> News Advisory, Grey Bruce Health Unit April 27, 2009

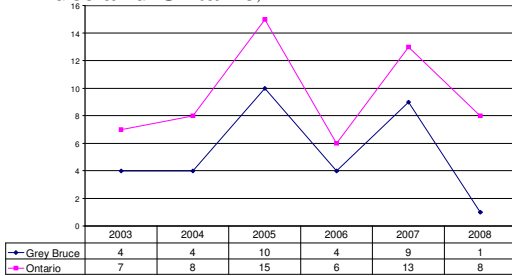
### 3.8 Physical Safety – Air and Water Quality

#### Impact on Child and Youth Health

- “Children...need safe environments in which to grow and play. A safe environment includes having access to clean air, water, and land. It also includes protection from crime and violence, and measures to reduce the risk of injuries.”<sup>45</sup>
- Poor air quality and exposure to smog creates health risks across several life stages including pregnancy outcomes, fetal development and infant health. Smog is a toxic mixture created when air pollutant chemicals (like ozone) react with sunlight throughout the entire year. Smog can travel with the wind after being created in distant places like the American Midwest or in large urban areas in the south of Ontario.<sup>46</sup> Children, infants, and the unborn fetus are particularly sensitive to the adverse health effects of air pollution.
- “Trace levels of contaminants can occur in drinking water. These contaminants, such as metals or chemicals, can arise from industrial sources or from agricultural uses of pesticides. Lead can also enter drinking water from the water supply pipes. Microbial contaminants, such as *E. coli*, and other pathogens, are of particular concern and need to be killed via disinfection techniques. For well water, elevated levels of nitrates can be a significant health concern, especially for babies, and regular testing is necessary.”<sup>47</sup>

#### Grey Bruce

##### Smog Advisories Issued 2003-2008 Grey Bruce and Ontario.



Source: Smog Advisory Stats Ontario: [www.airqualityontario.com](http://www.airqualityontario.com)  
 Accessed August 02, 2009.

A smog advisory is issued when conditions are expected to reach dangerous levels for human health. Pregnant women, children, asthmatics and people who exercise and play outside are most at risk during this time. Over the period 2003 – 2008 Grey Bruce experienced an average of 5.3 smog advisories per year, fewer than the total number of advisories issued for the province as a whole (average 9.5 per year).

The duration of poor air quality conditions can linger for several days after an advisory is issued and may present ongoing health risks. Prevailing westerly and south-westerly winds move contaminated air masses from other jurisdictions over Grey Bruce.

##### Adverse Water Quality Incidents, 2007

Public Health Unit	# Small Drinking Water Systems	# Adverse Water Quality Incidents
Grey Bruce	1304	234
Huron County	256	165
Perth County	398	30
Simcoe Muskoka	1483	446

Source: Initial Report on Public Health in Ontario, Public Health Division, Ministry of Health and Long Term Care, 2009.

Residents of Grey Bruce get their drinking water from either private wells where the water quality is tested by the property owners, or from drinking water systems where the water quality is monitored by the local public health unit. If the monitoring indicates a quality problem it is referred to as an adverse water quality incident and residents are advised to boil their water before drinking it.

Grey Bruce, like Simcoe County has a number of small drinking water systems. In 2007, there were considerably fewer adverse water quality incidents in Grey Bruce (234) compared to Simcoe County (446). The number of incidents in Grey Bruce was twice that of Huron County (165) and 7 times that of Perth County (30), where there are a fewer number of small drinking water systems.

<sup>45</sup> Canadian Council in Social Development *The Progress of Canada’s Children and Youth 2006* p. 23

<sup>46</sup> The air you breathe; smog and your health, [www.publichealthgreybruce.on.ca](http://www.publichealthgreybruce.on.ca) access July 27<sup>th</sup>, 2009

<sup>47</sup> Canadian Partnership for Children’s Health and Environment *Child Health And The Environment: A Primer* August 2005 p.73-74

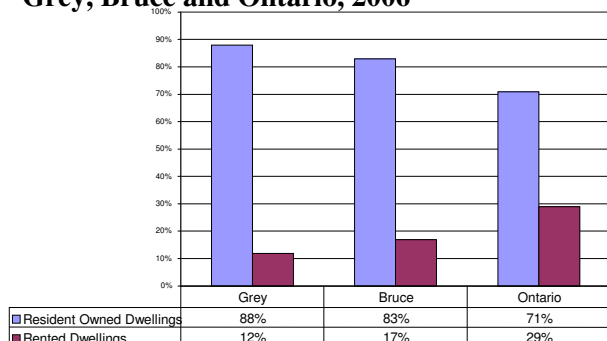
### 3.10 Physical Safety – Housing

#### Impact on Child and Youth Health

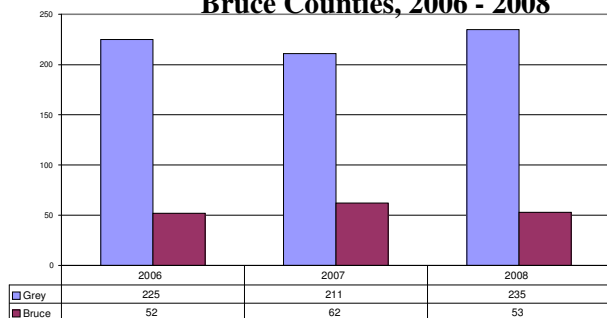
- “Housing can directly and indirectly impact health. The term acceptable housing used here refers to housing that is affordable (costing less than 30% of before-tax income), does not require major repairs and is not overcrowded...
- Inadequate housing may produce direct effects in extreme climates. Respiratory disease/ poor lung function and allergies related to moulds from cold, damp or poorly ventilated houses may develop. Other health conditions can arise related to exposure to specific toxic substances like lead and asbestos from substandard plumbing and insulation, environmental tobacco smoke and residential radon from contaminated soil...
- Overcrowding and poorly ventilated houses can also increase susceptibility to disease. The number of people per dwelling has been known to greatly impact the physical and mental health of inhabitants, including raising the risk of acquiring tuberculosis...
- Homelessness is also a health issue... While homelessness can affect a broad range of people, approximately one third of the homeless are between the ages of 16 and 24 years.”<sup>48</sup>

#### Grey Bruce

##### Percentage of Dwellings Owned or Rented in Grey, Bruce and Ontario, 2006



##### Wait Lists for Rent Geared to Income Housing in Grey and Bruce Counties, 2006 - 2008



Sources: Statistics Canada, 2009. 2006 Community Profiles Occupied private dwelling characteristics, Bruce and Grey County.

In 2006, 88% of Grey county dwellings and 83% of Bruce county dwellings were owned by their residents. These proportions are well above the Provincial average of 71%.

In 2009, there are 372 Rent-Geared-to-Income (RGI) Housing Units for families in Grey County, and 158 RGI Units for families in Bruce County. Grey County also has 4 Affordable Housing Family Units and 8 Housing Allowance Family Units.

An average of 279 families in Grey and Bruce Counties (Grey 224: Bruce 56) were on waiting lists for RGI housing during the period 2006 through 2008.

Homelessness is a challenge for some youth and families in Grey Bruce. The number of people who were homeless or at risk of homelessness, and accessed the YMCA Housing Support Program, has increased substantially. In 2006, 1,179 youth and adult accessed the service. By September 30, 2009, 1,602 people had accessed the service, including 95 youth.

<sup>49</sup> <sup>50</sup>

<sup>48</sup> David Butler-Jones *The Chief Public Health Officer’s Report on the State of Public Health in Canada 2008* p. 45-46

<sup>49</sup> Glenda Clarke, A Report on Homelessness in Grey-Bruce July 2008

<sup>50</sup> The Family “Y” Housing Support Program Statistical Report, September 2009

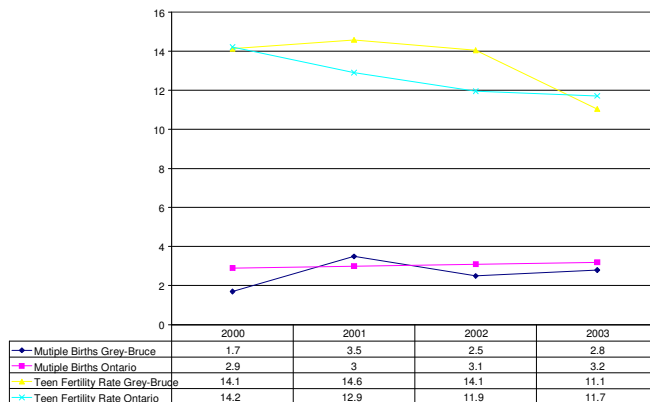
### 3.11 Child Development – Birth Outcomes

#### Impact on Child and Youth Health

- “Babies born prematurely (before 37 weeks gestation) and/or with low birth weight (less than 2,500 grams) are at risk for poor health and development, and are more likely to die during infancy...”
- Twins and triplets are more likely to be born prematurely and to have low birth weight.”<sup>51</sup>
- High birth weight infants (live births greater than 4,000 grams) “are at increased risk for low blood glucose, cesarean delivery or trauma to the head, neck and/or shoulder during delivery. It is also implicated as a risk factor for many immediate and long-term health concerns including obesity.”<sup>52</sup>
- “Pregnancy before age 20 entails a number of significant medical and health risks for both mother and child... Childbearing in teen years can also result in loss of educational and occupational opportunities for teen parents. This may have long-term social and economic consequences for teen parents and their children.”<sup>53</sup>

#### Grey Bruce

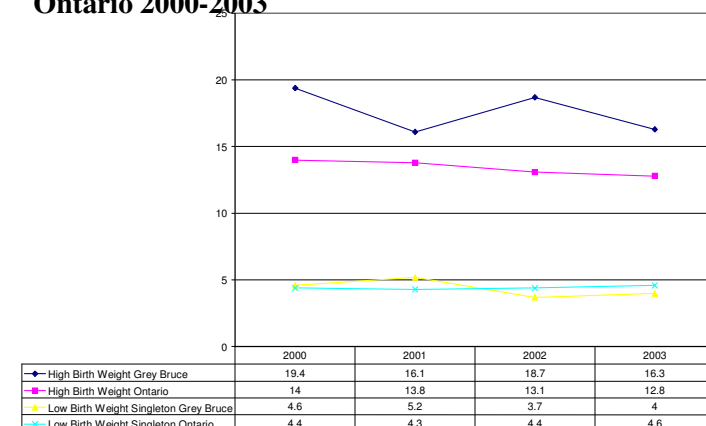
#### Multiple Births and Teen Fertility Rates Grey, Bruce and Ontario 2000-2003



Over the period 2000 – 2003:

- The rates of multiple births in Grey Bruce were slightly lower than the provincial average for most years except for 2001 when there were 47 multiple births.
- Teen fertility rate (fertility rate is the number of live births to a woman in a given age group (15-19) relative to the number of women in that age group per 1,000 population) declined in both Grey Bruce and Ontario. Grey Bruce was higher in fertility rates than Ontario in 2001 and 2002.

#### Low and High Birth Weights Grey, Bruce and Ontario 2000-2003



- Low birth weight (LBW) rates (singletons) for Grey Bruce and Ontario remained relatively stable. The only deviation was in 2000 and 2001 when Grey Bruce had more LBW's than Ontario.
- The rates of high birth weight (HBW) were on average 25% higher in Grey Bruce compared to Ontario (all differences are statistically significant).

Sources: Leffley, A. (2007). Grey Bruce Health Unit Reproductive Outcomes and Statistics for Grey and Bruce Counties 2000 - 2003.

<sup>51</sup> Health Council of Canada *Their Future is Now Healthy Choices for Canada's Children and Youth* June 2006 p.15

<sup>52</sup> Leffley, A. Grey Bruce Health Unit Reproductive Outcomes and Statistics for Grey and Bruce Counties 2000 to 2003

<sup>53</sup> York Region Our Children Preliminary Status Report on York Region's Children 2004 p.22

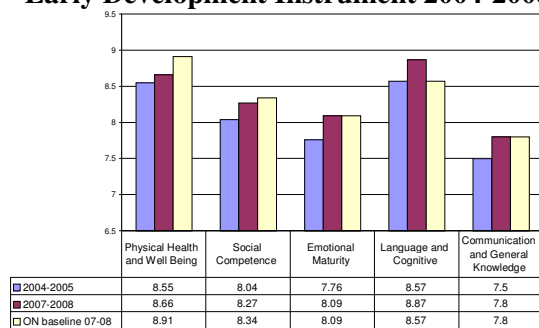
### 3.12 Child Development and Early Learning

#### Impact on Child and Youth Health

- “A child’s development before birth and during the early years affects health, resilience, learning and behaviour throughout that child’s life. Experiences in childhood influence how nerve cells form pathways in the brain which, in turn, affect language, literacy, memory, behaviour (including violence), mental health, and the capacity to learn throughout a child’s life. These same pathways affect physical health – including the immune system – and can determine life-long risks for coronary heart disease, hypertension, type 2 diabetes, mental health problems and other conditions in adult life.”<sup>54</sup>
- “Research shows that the most successful children in school are those who were nurtured and stimulated when they were toddlers and preschoolers – either at home or in early learning and child care settings. Such children are exposed to books, ideas, and number concepts, they are introduced to problem-solving techniques, and they have opportunities to develop their social and emotional skills in group settings. With the skills acquired through these activities, and children’s innate abilities and temperament, they have a learning base upon which they can thrive. And they arrive at school ready to learn.”<sup>55</sup>
- McCain et al report that “learning is the process of acquiring knowledge, skills, attitudes or values that causes a permanent change in behaviour or understanding. It is a process that depends on experience, brain development and physical growth... [There is] evidence that the most sensitive period for the development of language capability is in the early years.”<sup>56</sup>

#### Grey Bruce

##### Early Development Instrument 2004-2008



Source: Offord Centre for Child Studies (2008). Early Development Instrument, Hamilton, Ontario

The Early Development Instrument is a survey that is administered by senior kindergarten teachers across Ontario to assess a child’s readiness to learn when entering school.

Over the period 2004 – 2008 Grey Bruce children show an improvement in average EDI scores and results are generally on par with the Ontario baseline.

The 2008 survey identified the following domains where further improvement is needed given the proportion of Grey Bruce children considered at risk regarding readiness to learn for school.

- Gross and Fine Motor Skills (31.5%)
- Overall Social Competence (10.9%)
- Prosocial and Helping Behaviour (34.4%)
- Advanced Literacy (11.4 %)
- Communication Skills and General Knowledge (33.3%)<sup>57</sup>

<sup>54</sup> Health Council of Canada *Their Future is Now Healthy Choices for Canada’s Children and Youth* June 2006 p.8

<sup>55</sup> Canadian Council in Social Development *The Progress of Canada’s Children and Youth 2006* p. 68

<sup>56</sup> Margaret Norrie McCain, J. Fraser Mustard, Dr. Stuart Shanker, *EARLY YEARS STUDY 2, Putting Science into Action*, March 2007 p 41

<sup>57</sup> Offord Centre for Child Studies, Early Development Instrument, Hamilton, Ontario, 2008.

### 3.13 Success at School

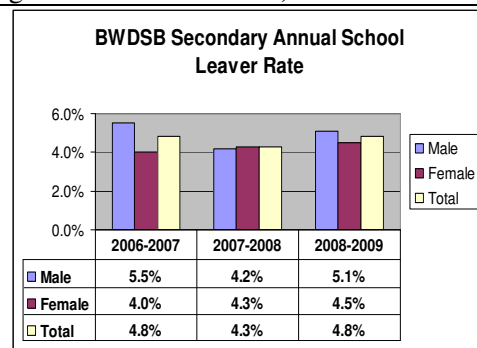
#### Impact on Child and Youth Health

- “Children who are strongly connected to schools tend to do better academically and they are more likely to aspire to postsecondary education...Parental involvement in children’s schooling and their expectations concerning education have a critical impact on how well the children do at school..”<sup>58</sup>
- “Nearly all children with disabilities attend school (96 per cent), but many have trouble getting the special education services they need..”<sup>59</sup>
- “Students who leave school prematurely are more likely to be unemployed and to earn less over their working life. Trends toward a higher skilled labour force will make it even harder for such youth economically. Although many early leavers pursue a GED (General Education Diploma) certification, they are not adequately prepared for attaining well-paying employment or for accessing higher education. In addition, leavers tend to experience higher levels of early pregnancy and substance abuse and are likely to require social services of various types... Early school leaving is a long term, multi-dimensional process that is influenced by a wide variety of school and out-of-school experiences.”<sup>60</sup>

#### Grey Bruce

The Education Quality and Accountability Office (EQAO) issues standardized tests for students in selected grades in all Ontario schools. Trends in the reading writing and mathematics scores for all Grade 3 and Grade 6 students tested within both the Bruce Grey Catholic District School Board (BGCDSB) and the Bluewater District School Board (BWDSB) over the period 2005/06 to 2007/08 have been similar to the Provincial averages for those years.<sup>61</sup>

EQAO reports indicate that over the period 2004/05 through 2007/08 the percentage of students in Grade 3 and Grade 6 with special needs in both the BGCDSB and the BWDSB have been above the provincial average.<sup>62</sup> (Note EQUAO refers to Students with Special Needs as students who have been formally identified by an Identification, Placement and Review Committee (IPRC), as well as students who have an Individual Education Plan (IEP). Students identified as gifted are not included.)



Over the three school years 2006/07 to 2008/09 the proportion of Bluewater District School Board students who left BWDSB secondary schools prior to earning their diploma ranged between 4.3% and 4.8%.

Source: Bluewater District School Board, Jan. 2010

<sup>58</sup> Canadian Council in Social Development *The Progress of Canada’s Children and Youth 2006* p.68,71

<sup>59</sup> Health Council of Canada *Their Future is Now Healthy Choices for Canada’s Children and Youth* June 2006 p. 17

<sup>60</sup> Bruce Ferguson et.al. *Early School Leavers: Understanding the Lived Reality of Student Disengagement from Secondary School* Final Report May 30, 2005 p. 4

<sup>61</sup> The Education Quality and Accountability Office School Board Reports: Bluewater DSB (66001) and Bruce Grey Catholic District School Board

<sup>62</sup> Ibid

### 3.14 Health Behaviours – Healthy Eating

#### Impact on Child and Youth Health

- Breastfed babies are more likely to have healthy brain and nervous system development and be protected against infectious diseases, and less likely to develop sudden infant death syndrome (SIDS), diabetes, asthma, and obesity.<sup>63</sup>
- It is particularly important for children and youth to have sufficient nutritious food. “When children go to school hungry or poorly nourished, their energy levels, memory, problem-solving skills, creativity, concentration and behaviour are all negatively impacted...As a result of being hungry at school, these children may not reach their full developmental potential-an outcome that can have a health impact throughout their entire lives.”<sup>64</sup>

#### Grey Bruce

##### **Breastfeeding:**

In Grey Bruce, as in many other parts of Ontario, the proportion of new mothers exclusively breastfeeding has declined over the five years period 2003 - 2007. In Grey Bruce there has been approximately a 9% drop in exclusive breastfeeding at hospital discharge. Correspondingly, there has also been a significant increase in the number of mothers using both breast milk and formula to feed their infants. In a recent provincial public health report (2009), the region served by Grey Bruce Health Unit was ranked 2nd amongst 11 other peer health units for the indicator of breastfeeding duration. Grey Bruce has a 53% breastfeeding duration rate at 6 months postpartum compared with Ontario at 50%.<sup>65 66</sup>

##### **Nutrition:**

The costs of a nutritious food basket in Grey Bruce for a family of four (2008) was \$145. This cost is consistent with those for other health unit areas in the Southwest and for Ontario.<sup>67</sup>

According to the Canadian Community Health Survey (2008) about 40% of males and 60% of females between the ages of 12 to 19 in Grey Bruce indicate they are eating fruit and vegetables 5 times or more per day.

A survey of 2,255 Grey Bruce students in grades 5-12 (ages 11-18) conducted in 2008 found that:

- about one in four students typically consume sufficient fruits and vegetables.
- 40% percent of students (elementary and secondary) reported eating junk foods four or more times a day.
- less than 50% of students are having breakfast each morning before school.<sup>68</sup>

A study involving 504 children between the ages of 8 and 13 years attending 7 different elementary schools in Grey and Bruce Counties found that:

- Children’s diets reflect the wider North American trend toward high energy and carbohydrate intake and low intake of most vitamins and minerals.
- Children consume large amounts of processed, pre-packaged and fried foods such as processed luncheon meats, wieners and French fries. As a result, children have very high fat and sodium intake.
- There are significant differences in diet between boys and girls. Boys have greater energy, protein, carbohydrate and fat intake than girls, a finding that likely contributes to their greater obesity prevalence.

In interviews, children display excellent knowledge of Canada’s Food Guide to Healthy Eating. As young as age 8, they can name the food groups and give a rough estimate of the quantities of servings from each that constitute a healthy diet. However, their dietary intake does not, in general, reflect attention to dietary guidelines on the part of families.<sup>69</sup>

<sup>63</sup> Health Council of Canada *Their Future is Now Healthy Choices for Canada’s Children and Youth* June 2006 p.15

<sup>64</sup> David Butler-Jones *The Chief Public Health Officer’s Report on the State of Public Health in Canada 2008* p. 41

<sup>65</sup> Breastfeeding at Discharge – Integrated Services for Children database 2009 data extract. Canadian Community Health Survey (2008);

<sup>66</sup> Breastfeeding duration (2003, 2005, 2007). Ontario Public Health Report: Population Health Indicators (2009).

<sup>67</sup> Public Health Division, Ministry of Health and Long-Term Care *Initial Report on Public Health*, August 2009 p. 8

<sup>68</sup> Grey Bruce Health Unit News Release “Childhood Obesity – One Issue Two Solutions” October 27, 2008

<sup>69</sup> Tracey Galloway, Department of Public Health Sciences University of Toronto *Grey-Bruce Health Unit Media Event 2008-10-17*



### 3.15 Health Behaviours – Healthy Weights and Physical Activity

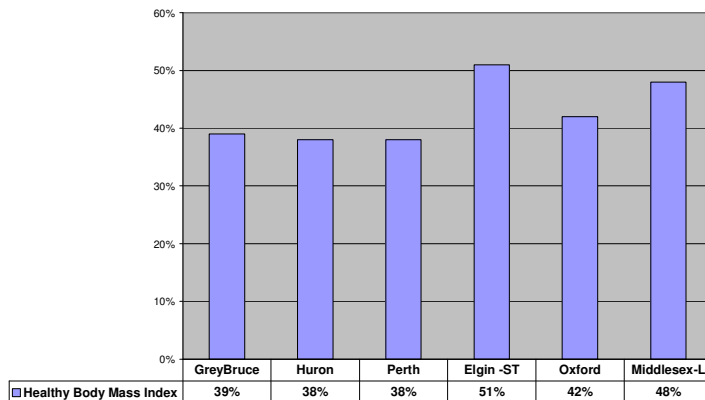
#### Impact on Child and Youth Health

- “Being overweight or obese during childhood can have a life-long impact on health and quality of life.”<sup>70</sup>
- “Physical activity is essential to children’s healthy growth and development. Regular physical activity improves cardiovascular fitness and helps develop strength, flexibility, and bone density. It helps young people maintain a healthy body weight and improves cognitive performance. It promotes their self-esteem and a greater sense of well-being.”<sup>71</sup>

#### Grey Bruce

A healthy BMI is defined as a BMI of 18.5 – 24.9. Obesity is defined as having a BMI of greater than 30. Overweight is defined as having a BMI between 25 and 29.9.

Healthy Body Mass Index within Health Unit Areas in the South West Region



Source: Public Health Division, Ministry of Health and Long-Term Care *Initial Report on Public Health*, August 2009 p. 21, 25

In 2007 the proportion of people age 18 and older in Grey Bruce whose self reported height and weight indicates a healthy Body Mass Index (BMI) was 39% in 2007. The trend over the period 2001 to 2007 in Grey Bruce is that there has been an increase in the proportion of people who are considered overweight or obese from 54.7 in 2001 to 61.5 in 2007.

The proportion of people considered overweight or obese are statistically higher than the proportion of all of Ontario, but not when compared with other regions with similar demographics including the mainly rural health unit areas in the Southwest Region.

Studies involving school students in Grey Bruce found that:

- height and body mass index are significantly greater than expected in this population and the prevalence of overweight is higher in both boys and girls<sup>72</sup>
- 14% of secondary school students report getting no activity either in school or outside of school and at least one in four students spend 3 or more hours daily in front of a TV, computer screen or on the phone. The national recommendation is for two hours or less of these activities daily.<sup>73</sup>

<sup>70</sup> Health Council of Canada *Their Future is Now Healthy Choices for Canada’s Children and Youth* June 2006 p.19-20

<sup>71</sup> Canadian Council in Social Development *The Progress of Canada’s Children and Youth 2006* p. 54

<sup>72</sup> Grey Bruce Health Unit News Release “Childhood Obesity – One Issue Two Solutions” October 27, 2008

<sup>73</sup> Tracey Galloway, Department of Public Health Sciences University of Toronto *Grey-Bruce Health Unit Media Event 2008-10-17*

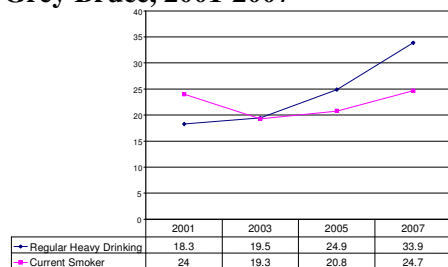
### 3.16 Health Behaviors – Smoking and Alcohol Use

#### Impact on Child and Youth Health

- Smoking during pregnancy is a known risk factor for unhealthy fetal growth and development.”<sup>74</sup>
- “Cigarette smoking in the home is a significant risk factor for children, including while in the womb. Environmental Tobacco Smoke (ETS) is associated with effects on the respiratory system, including the development of asthma and as a trigger in those who already have the disease. ETS is also associated with impacts on brain development and contains over 40 known carcinogens.”<sup>75</sup>
- “Drinking during pregnancy can result in serious health and development problems for children as a result of Fetal Alcohol Spectrum Disorder (FASD) – a preventable life-long disability. It is estimated that 1% of children born in Canada have FASD.”<sup>76</sup>
- “Almost one-third of youth ages 15 to 19 report using illicit drugs, half of them use drugs at least monthly, and almost three out of every 100 are dependent on drugs.”<sup>77</sup>

#### Grey Bruce

#### Regular Heavy Drinking and Smoking, Grey Bruce, 2001-2007



Source: Canada Community Health Surveys, adapted by Grey Bruce Health Unit. Myatt, M. and Leffley, A. (2007)

**Smoking** Over the period 2001 – 2007, the rate of Grey Bruce residents reporting that they are a current smoker declined between 2001 and 2005 (24% to 21%) and then increased in 2007 to 25%.

**Alcohol:** The rate of Grey Bruce residents reporting heavy drinking (consuming 5 or more drinks on one occasion at least once per month in the past year) has increased significantly from 18 % in 2001 to 34 % in 2007. These results were significantly higher than rates in Canada, Ontario and other health regions. Data for 2007 indicates that heavy drinking in Grey Bruce is more prevalent among the population over age 20. Fifty four percent (54%) of Grey Bruce adults reported heavy drinking, higher than the Ontario rate of 37%. Twenty-seven percent (27%) of Grey Bruce youth aged 12-19 reported heavy drinking, similar to the Ontario rate of 25%.<sup>78</sup>

A 2007 survey of Ontario students grades 7-12 found that of all drivers in grades 10-12 surveyed, 12% reported driving within one hour of drinking 2 drinks of alcohol at least once within the past 12 months. Male drivers are more likely to drive after drinking than female (14% vs 9%). Over 33% of 12<sup>th</sup> graders reported riding in a car with an intoxicated driver (drugs or alcohol) in the past 12 months.<sup>79</sup>

**Fetal Alcohol:** The results of a study completed in Grey Bruce in 2004/05 found that the rate of fetal alcohol exposure in this neonatal population was estimated to be a minimum of 2.5%. Given the annual birth rates in Grey Bruce it could be estimated that approximately 28 - 32 babies born each year over the past 18 years could be affected by FASD representing 500 – 576 children and youth.<sup>80</sup>

<sup>74</sup> David Butler-Jones *The Chief Public Health Officer’s Report on the State of Public Health in Canada 2008* p.55

<sup>75</sup> Canadian Partnership for Children’s Health and Environment *Child Health And The Environment: A Primer* August 2005 p 8-10

<sup>76</sup> David Butler-Jones *The Chief Public Health Officer’s Report on the State of Public Health in Canada 2008* 58

<sup>77</sup> Health Council of Canada *Their Future is Now Healthy Choices for Canada’s Children and Youth* June 2006 p. 21

<sup>78</sup> Public Health Division, Ministry of Health and Long-Term Care *Initial Report on Public Health*, August 2009 p. 20

<sup>79</sup> Centre for Addiction and Mental Health, *Drug Use Among Ontario Students Survey*, 2007.

<sup>80</sup> Gareri et al “Prevalence of Fetal Ethanol Exposure in a Regional Population –Based Sample by Meconium Analysis of Fatty Acid Esters” in *The Drug Monit* 2008;30

### 3.17 Health Behaviors – Infectious Diseases

#### Impact on Child and Youth Health

- “Immunization carried out as recommended provides protection for most children against vaccine preventable diseases.”<sup>81</sup>
- “Canadian youth are becoming sexually active at younger ages than previous generations.”<sup>82</sup>
- Youth and young adults have the highest rates of sexually transmitted infections (STI) in Canada, particularly street youth who have rates 10 to 12 times higher than their peers in the general population and a greater susceptibility to the hepatitis B virus.<sup>83</sup>

#### Grey Bruce

Grey Bruce Public Health reports that in 2008 there were almost 200 sexually transmitted infections (STI's), an increase of 40% from 2003. Sexually transmitted infection (STI) rates in Grey Bruce are 50% more prevalent in females than males. Grey Bruce is currently lower in STI rates compared with the provincial average.<sup>84</sup> For example, in 2007, the incidence rate of Chlamydia in Grey was 159.1% compared to the Ontario rate of 219.8%.<sup>85</sup>

Immunization coverage rates for children age 7-17 years in Grey Bruce have remained steady over the past five years. Children are required to be immunized for diphtheria, tetanus, polio, measles, mumps & rubella under the School Pupils Act. June 2009 immunization coverage data for diphtheria, tetanus, polio, measles, mumps & rubella indicates that about:

- 95% complete for age DPT-Polio & MMR for 7- 17 years
- 96% complete for DP & T for 7-17 years
- 96% complete for MMR for 7-17 years
- 97 % complete for Polio IPV/OPV for 7-17 years<sup>86</sup>

The rate of immunization coverage for measles, mumps and rubella in Grey Bruce (95.6%) is above the provincial rate of 84.9%<sup>87</sup>

Other recommended vaccines include Hepatitis B vaccine and Meningococcal vaccine for Grade 7 students. Also, HPV (Human Papillomavirus vaccine) for Grade 8 females was introduced into the Ontario immunization schedule in September 2007. June 2009 Immunization coverage data indicates:

- 99% complete for Hib (Haemophilus b)
- 70% complete for HPV (Human Papillomavirus) for Grade 8 females (up from 53% in 2008)
- 91% complete for Hepatitis B for Grade 7 students
- 91 % complete for Meningococcal C vaccine for Grade 7 students<sup>88</sup>

The rate of immunization coverage for Hepatitis B in Grey Bruce (90.7%) is above the provincial rate of 84.9%<sup>89</sup>

<sup>81</sup> York Region *Our Children Preliminary Status Report on York Region's Children 2004* January 2005 p. 16

<sup>82</sup> David Butler-Jones *The Chief Public Health Officer's Report on the State of Public Health in Canada 2008* p. 58

<sup>83</sup> Ibid p. 58

<sup>84</sup> Grey Bruce Public Health Unit, Sexually Transmitted Infections Data, 2009

<sup>85</sup> Public Health Division, Ministry of Health and Long-Term Care Initial Report on Public Health, August 2009 p. 21

<sup>86</sup> Grey Bruce Public Health Unit, Immunization Data, 2009

<sup>87</sup> Public Health Division, Ministry of Health and Long-Term Care Initial Report on Public Health, August 2009 p. 21

<sup>88</sup> Grey Bruce Public Health Unit, Immunization Data, 2009

<sup>89</sup> Public Health Division, Ministry of Health and Long-Term Care Initial Report on Public Health, August 2009 p. 21

### 3.18 Access to Community Services and Supports – Overview

Access to health care is considered “fundamental to health”<sup>90</sup>. “Communities need to provide accessible health and social programs and resources for families with children... Unfortunately, some people face barriers to health care services including physical inaccessibility, socio-cultural issues or the cost of non-insured health services (e.g. eye and dental care, mental health counseling and prescription drugs).”<sup>91</sup>

Health care is typically understood to refer to those services that are funded through Ontario’s publicly funded health care system and include those provided by physicians, other primary care professionals, hospitals and other community agencies that fall within the jurisdiction of the Ministry of Health and Long-Term Care and the Local Health Integration Networks.

For the purposes of this report, the scope of the assessment of “access” extends beyond health care as described above. It refers to “access to services and supports” for children, youth and families and includes available data regarding both health care and social supports. Many of the services referred to fall within the jurisdictions of the Ministry of Children and Youth Services and the Ministry of Community and Social Services, as well as services funded by municipal and federal governments.

As noted in Section 1. 4, time limitations restricted the development of a comprehensive profile regarding access to all services and supports available to children, youth and families in Grey Bruce. What follows is available data for some services and supports.

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<sup>90</sup> David Butler-Jones *The Chief Public Health Officer’s Report on the State of Public Health in Canada 2008* p.

<sup>91</sup>Ibid p. 46, 59

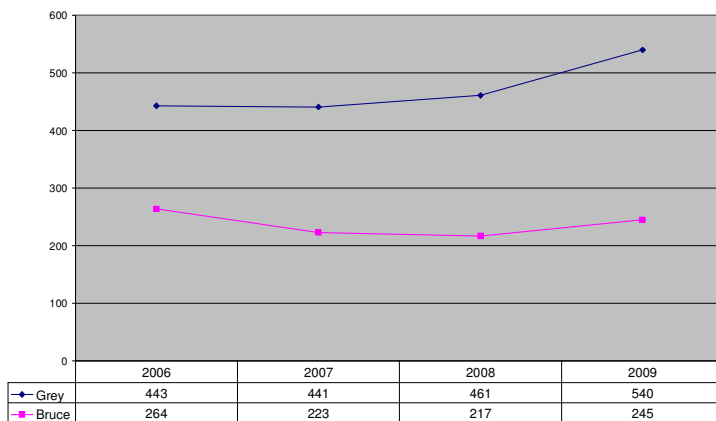
### 3.19 Access to Community Services and Supports – Income Support

#### Impact on Child and Youth Health

- Canadian children living in poverty are more likely to develop a variety of illnesses and injuries, as well as suffer growth retardation and developmental difficulties. They are also more likely to experience hospitalization, mental health problems, and difficulties in school, such as lower school achievement and early school leaving. Of course, many poor children do better themselves economically as they grow into adults...Growing up in poverty often leaves lifetime scars. Children in low income households experience a higher risk of health problems throughout their lifespans, independent of their later socioeconomic status.”<sup>92</sup>

#### Grey Bruce

Average Monthly Ontario Works Cases Involving Children or Youth 2006-2009  
Grey and Bruce Counties



Source: Bruce County and Grey County Social Services Departments, January 2010

#### 2009 Average Monthly OW Caseloads

	Grey	Bruce
Sole Support Parents	399	163
Couples with Children	72	45
Youth Under 18	10	4
Temporary Care	59	33

Source: Bruce County and Grey County Social Services Departments, January 2010

Ontario income support programs (for eligible residents) includes Ontario Works and Ontario Disability Support.

Ontario Works services are delivered by Grey County and Bruce County. Cases involving children or youth include: sole support parents, couples with children, youth under 18 and in temporary care. In Grey County over the period 2006 to 2008, the average monthly Ontario Work caseloads involving children or youth were relatively stable ranging from 443 to 461. In 2009 these cases increased to 540. In Bruce County this same caseload decreased from 264 in 2006 to 217 in 2008. In 2009, this average monthly caseload increased to 245.

The Ontario Disability Support Program is delivered by the Ministry of Community and Social Services. In 2007 and 2008 the average number of children whose families were in receipt of ODSP ranged from 630 to 634.

<sup>92</sup> The Ontario Physicians Poverty Work Group “Why poverty makes us sick” Physician Background” *Ontario Medical Review* May 2008

### 3.20 Access to Community Services and Supports – Physician Services

#### Grey Bruce

Physician Group	Estimated Population Per Physician
SWLHIN Family Medicine Physicians	1,228
Bruce - Non Specialist Physicians	1,257
Grey - Non Specialist Physicians	1,170

Source: Ontario Physician Human Resources Data Centre "Physicians in Ontario 2007", 2008.

Grey Bruce	2007	2005	2003	2001
Contact with MD in Past 12 Months	73.9	79.2	75.8	78.6
Has a Regular Medical Doctor	86.8	86.6	91.9	94.2

Source: Myatt, M. and Leffley, A. (2007) Canada Community Health Surveys, 2006, Prepared for Grey Bruce Health Unit.

2007 data from the Ontario Physician Human Resources Data Centre indicates that the population per physicians that are not specialists in Grey Bruce is similar to that for family physicians in the Southwest LHIN.

Results of the Canada Community Health Survey indicate that in Grey Bruce

- A statistically lower percentage (73.9%) of persons had contact with an MD in 2007 when compared with the percentage of persons who had contact with an MD in the past 12 months in 2005 (79.2%).
- 86.8% of persons in our region have a regular medical doctor and this is not statistically different from Canada, Ontario or regions with similar demographics, but is statistically lower when compared with the percentage of people in Grey Bruce who had a regular medical doctor in 2001 (94.2%).

Family Health Teams have been established in Owen Sound, Brockton (serving Walkerton, Chesley, Durham, Paisley and Mildmay); Sauble Beach and North Bruce Peninsula. Family Health Teams include the General Practitioner physician services along with the services of Nurse practitioners, Nurses, Dietitians, Social workers and other allied health professionals.

A Community Health Centre is planned to serve the South East portion of Grey County.

A Pediatric Clinic is offered by Grey Bruce Health Services (GBHS) where families can access a variety of health care providers as needed, including a collaborative approach to children's mental health services.

Collaborative services are available at GBHS for adolescents with mental health needs, involving physicians, pediatricians, nurse practitioners, children's mental health providers and school staff.

### 3.21 Access to Community Services and Supports – Early Learning and Development

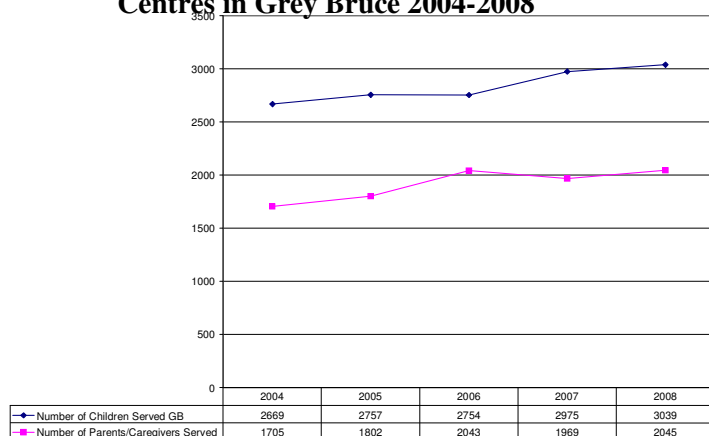
#### Grey Bruce

#### Grey Bruce Licensed Child Care

		Capacity (#children)
Home Child Care	137 homes	
Child Care Centres	35 centres	1,362
School Age Summer & Vacation Program	2	
Half Day Nursery Schools	8 nursery schools	156
Before and After School Programs	26 programs	879
Summer School Day Camps	2	

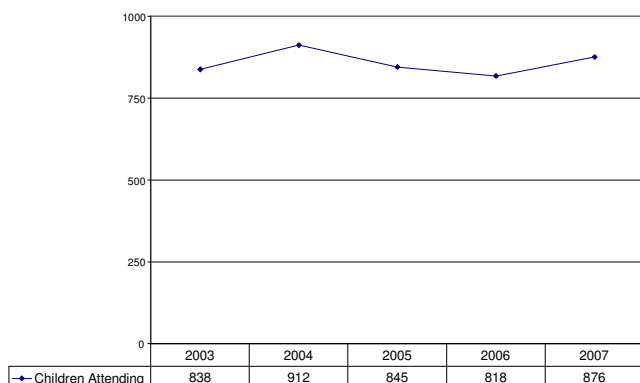
Source: Ministry of Children and Youth Services Licensing Data, Grey Bruce, 2008

#### Children and Parents Served in Ontario Early Year's Centres in Grey Bruce 2004-2008



Source: Grey and Bruce OEYC Program, 2009

#### Children Attending Early Kindergarten Registration



Sources: Griffith, C., et. al., (2006). Lets Learn 2006-2007 Final Report and Kindergarten Registration Annual Report, Prepared for Grey Bruce Health Unit.

Licensed child care is available to over 2,400 children in Grey Bruce through home child care, licensed child care centres, half day nursery schools and before and after school programs.

Ontario Early Years Centres offer early learning and parenting services in multiple sites across Grey and Bruce Counties.

Over the period 2004 – 2008 the number of children served in Ontario Early Years Centres in Grey Bruce increased from 2,669 children in 2004 to 3,039 children in 2008. The number of parents served increased from 1705 in 2004 to 1845 in 2008.

The Grey Bruce Let's Learn Kindergarten Registration Program is a comprehensive process for entry to elementary school. Families are able to register their child early for kindergarten (at age 3) and at the same time have the child undergo growth and development screening. Families can be referred to available community resources if the screening identifies developmental delays.

Over the period 2003 to 2007 an average of 858 children participated in the Early Kindergarten Registration program, representing an average of 65% of the children eligible for Junior Kindergarten in Grey and Bruce Counties.

## Access to Community Services and Supports – Early Learning and Development (con't)

- “The relationship between caregiver and infant plays a pivotal role in the child’s capacity to interact with others and influences neural pathways for language and higher cognitive functions.”<sup>93</sup> “The effect of the social environment on brain development and function in early life contributes to physical and mental health problems throughout life... Exposure to: maternal depression; caregiver substance abuse; family violence; physical, sexual, or verbal abuse, [and/or]; other traumatic experiences may damage deep structures in the brain that affect the quality of future social interactions.”<sup>94</sup>

### Grey Bruce

Keystone Child Youth and Family Services offers services to families needing extra support to help them have and raise healthy babies and preschoolers.

Programs include:

Healthy Beginnings – Canada Prenatal Nutrition Program  
Cradlelink – Nurse run - volunteer home-visiting program  
Parent Mutual Aid – parent support groups

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<sup>93</sup> Margaret Norrie McCain, J. Fraser Mustard, Dr. Stuart Shanker, *EARLY YEARS STUDY 2 Putting Science into Action* March 2007 p 28

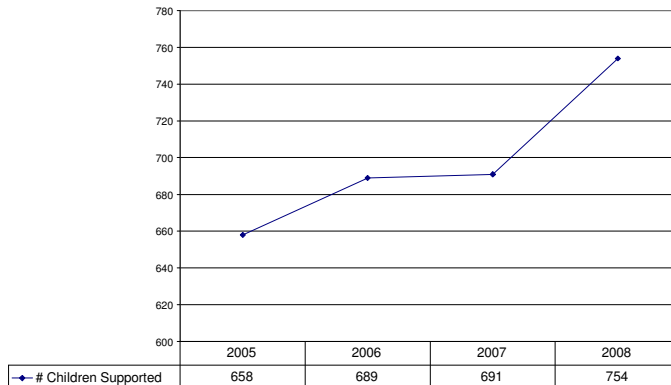
<sup>94</sup> Ibid p 28.



### 3.22 Access to Community Services and Supports – Developmental Services

#### Grey Bruce

**Number of Children Supported by Developmental Support Agencies Grey Bruce 2005-2008**



Source: Grey Bruce Developmental Support Network, Children’s Survey Analysis, 2008.

Diagnosis	2008
Delays in Development	208
At Risk of Developmental Delays	181
Diagnosed Developmental Disability	312
Physical Disability	78
Medically Fragile	56
Autism Spectrum Disorder (ASD)	125
Visual Challenge	48
Hearing Impairment	24
Dual Diagnosis (mental health and developmental concerns)	23
Behaviour Issues - (verbal, physical, sexual)	102
Fetal Alcohol Spectrum Disorder (FASD)	31

Source: Grey Bruce Developmental Support Network, Children’s Survey Analysis, 2008.

It is estimated that between 2 and 3% of the general population have a developmental disability.<sup>95</sup> Based on a rate of 2.5% of the population it could be expected that in 2006 there were 872 children and youth with a developmental disability.

Each year Community Living Agencies staff that provide developmental support to children in Grey Bruce complete a survey. Over the period 2005 – 2008 there was an increase in the number of children supported from 658 in 2005 to 754 in 2008.

Children receiving support have a range of diagnosed challenges with some children having multiple diagnoses.

<sup>95</sup> Ouellette-Kuntz et al, 2004, as cited in Rice And Associates *Community Networks Of Specialized Care Environmental Scan* December 16, 2005 p 8-9

### 3.23 Access to Community Services and Supports – Paediatric Rehabilitation

Grey Bruce		
<b>Number of Children and Youth Receiving Rehabilitation</b>		
<b>Age Group</b>	<b>Bruce</b>	<b>Grey</b>
Age 0-4	210	283
Age 5-9	230	332
Age 10-14	301	396
Age 15-19	335	439
Total 0-19	1,067	1,450
<p>Source: SWLIN Presentation on Child and Youth Priority Action Team High level Recommendations, October 2008.</p>		
<p>It is estimated that 7% of the child and youth population 0-19 have some form of disability that limits their participation and that 1-3% children and youth may need more specialized services in addition to their core rehabilitation services available locally.<sup>96</sup></p> <p>Using the above noted prevalence rate, the SWLHIN estimated that in 2006 2,517 children and youth in Grey Bruce could be expected to have a disability.<sup>97</sup></p> <p>Studies completed in 2005<sup>98</sup> and in 2008<sup>99</sup> both indicated that there are not enough rehabilitation services to meet the need for services for disabled children in Grey Bruce.</p>		

<sup>96</sup> Thames Valley Children’s Centre and the Grey Bruce Huron Perth District Health Council *Grey Bruce Huron Perth Children’s Rehabilitation Planning Report*, January 2005

<sup>97</sup> SWLIN Presentation on Child and Youth Priority Action Team High Level Recommendations, October 2008

<sup>98</sup> Thames Valley Children’s Centre and the Grey Bruce Huron Perth District Health Council *Grey Bruce Huron Perth Children’s Rehabilitation Planning Report*, January 2005

<sup>99</sup> SWLIN, Presentation on Child and Youth Priority Action Team High Level Recommendations, October 2008

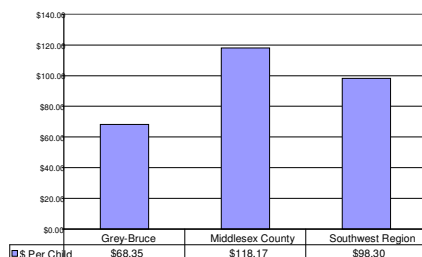
### 3.24 Access to Services – Child and Youth Mental Health

#### Impact on Child and Youth Health

- “Across cultures, about one in five Ontario children and youth experience a mental health or behavioural disorder requiring intervention.”<sup>100</sup> Eighty (80) per cent of these young people do not receive mental health services or support.<sup>101</sup> The most prevalent mental illnesses in Canadian children between 4 and 17 are: Anxiety Disorders 6.4%, Attention Deficit/Hyperactivity Disorder 4.8%, Conduct Disorder 4.2%, Depressive Disorders 3.5%, Substance Abuse .8%, & Pervasive Developmental Disorder .3%<sup>102</sup>
- Rates of mental health problems, such as suicide, depression, and substance abuse, are significantly higher in many Aboriginal communities than in the general population. Suicide and self-injury were the leading causes of death for Aboriginal youths. In 2000 ...suicide rates of Registered Indian youths (aged 15 to 24) were eight times higher than the national rate for females and five times higher than the national rate for males.<sup>103</sup>

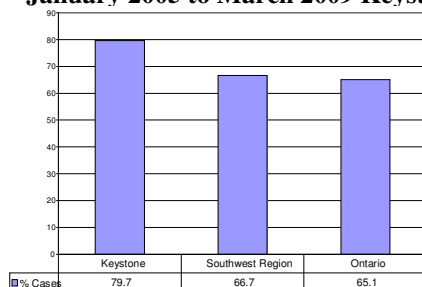
#### Grey Bruce

**MCSS Children's Mental Health Expenditures per Child, Grey Bruce, Middlesex and Southwest Region, 2000**



Source: MCSS Southwest Region Children’s Mental Health Review Phase One – Service Mapping, November 2000

**% Cases with Clinically Significant Improvement after Treatment January 2005 to March 2009 Keystone, Southwest and Ontario**



Source: Results of Child & Adolescent Functional Assessment Scale and Brief Child and Family Home Interview Standardized Intake/Triage Instrument, Keystone, August 2009

Keystone Child Family and Youth Services is the primary children’s mental health agency. Services provided include:

- Primary care for families with children enrolled in the Owen Sound and Area Family Health Team
- Birth to Senior Kindergarten Program
- Individual and family counselling ages 0-17
- Telepsychiatric and Paediatric Consultations
- Community Day Treatment
- WRAP Team (intensive supports provided in collaboration with school staff)
- Residential Crisis Assessment and Stabilization

In 2000, the results of a “mapping” exercise commissioned by the Ministry of Community and Social Services indicated that:

- the expenditure for children’s mental health services in Grey Bruce was almost ½ that for Middlesex County.
- 10.6% of the children living in the Southwest Region at that time lived in Grey Bruce, however, funding for services for Grey Bruce children comprised only 6.3% of the total funding.

Over the period Jan 1, 2005 to March 31, 2009 cases with clinical significant improvement after receiving services through Keystone was well above the rate for both the Southwest Region and the Province.

There are no in-patient child and adolescent services within Grey and Bruce Counties. Ministry of Health funded services include the Family Health Team services offered by Keystone and other physician and hospital-based services.

<sup>100</sup> Honourable Roy McMurtry and Dr. Alvin Curling *The Review of the Roots of Youth Violence Executive Summary* p.13

<sup>101</sup> Ibid p. 13

<sup>102</sup> Can J Psychiatry 2005: 50:4

<sup>103</sup> Canadian Mental Health Association – “Aboriginal People/First Nations”

### 3.25 Access to Services – Youth Employment Support

Grey Bruce				
<b>Job Connect Employment Program, Owen Sound and Area Family YMCA</b>				
	<b>2009/10 (First 6 months)</b>	<b>2008/09</b>	<b>2007/08</b>	
<b>Number of Program Participants</b>	252	515	539	
<b>Age</b>				
16 -19	139	282	300	
20-24	113	233	239	
<b>Status 3 months after exit</b>				
Employed	74%	76%	77%	
Education/training	10%	5%	5%	
Unemployed	17%	13%	8%	
Unable to work	7%	4%	5%	
Lost contact	4%	3%	2%	
Source: Family YMCA Job Connect Employment Program Statistical Report, 2009				
			<p>The Owen Sound and Area Family YMCA offers a Youth Employment Program to young people in Grey Bruce between the ages of 16 and 24 years. The Program staff offer youth who are out of school and out of work assistance with finding a job.</p> <p>Over the period April 2007 to September 2009 the YMCA Program supported over 500 young people per year. Over half of the clients were in the 16-19 year age range.</p> <p>The majority of the clients (74-77%) were employed three months after leaving the Program, with an additional 5-10% involved in education or training at that time.</p>	

### 3.26 Access to Community Services and Supports – Youth Probation

Grey Bruce														
<b>Youth Probation Grey Bruce 2005- 2009</b>														
<table border="1"> <thead> <tr> <th>Year</th> <th>2005/06</th> <th>2006/07</th> <th>2007/08</th> <th>2008/09</th> </tr> </thead> <tbody> <tr> <td>Average Number of Youth on Probation per Month</td> <td>144</td> <td>146</td> <td>171</td> <td>152</td> </tr> </tbody> </table>					Year	2005/06	2006/07	2007/08	2008/09	Average Number of Youth on Probation per Month	144	146	171	152
Year	2005/06	2006/07	2007/08	2008/09										
Average Number of Youth on Probation per Month	144	146	171	152										
Source: MCYS Youth Justice, Western Region, Youth Caseload 2005/06 – 2008/09.														
			<p>The Youth Criminal Justice Act is the legislation in Canada that deals with young people who break the law. The legislation applies to young people who were 12 to 17 years old when the action they are accused of was committed.</p> <p>Over the period 2005/06 – 2008/09 an average of 153 young people per month in Grey Bruce, who had been convicted of breaking the law, were participating in the youth probation program.</p>											

## **4. Summary of Findings and Implications for Planning**

### **4.1 The Child and Youth Population**

There are approximately 35,000 children and youth living in Grey Bruce who range in age from infants through to those 18 years old. The number of children and youth living in the two Counties has decreased by 20% over the past 10 years when the child and youth population totaled almost 42,000.

The number of births in Grey and Bruce Counties has remained stable over the period 2000- 2007. The size of the Grey Bruce birth cohort in 2007 was similar to that of the “mainly rural”<sup>104</sup> health unit areas in the South West and considerably smaller than that for the Middlesex London Health Unit.

Population projections suggest that the total number of children and youth will remain somewhat stable over the next 15 years with the older age groups (0-19yrs) expected to decline and the number of younger children (aged 0-9 years) expected to increase.

In 2006 children and youth aged 0-18 years represented 22% of the population of Grey Bruce. Persons over age 65 represented 18-19% of the population. The number of older persons is expected to grow and there, with the risk that more health and social resources will go to meeting the health needs of older persons, neglecting the needs of children and youth.

### **4.2 Family Life**

Socio-economic status and the character of family relationships are critical to healthy child development. Strengths within the socio-economic situations of families in Grey Bruce that can be expected to have a positive impact on the health of children and youth include the following.

- Improvements in the education level of adults over the past 10 years.
- Historic unemployment rates below provincial rates
- A strong sense of belonging to the community, statistically higher than the rates for Ontario or Canada.

Vulnerabilities that can be expected to pose risks to the health of children and youth include the following.

- Moderate income levels, lower than the median incomes for all families in Ontario and lower income levels for female lone parents when compared to provincial levels.
- Lower education levels among adults when compared to provincial levels.

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<sup>104</sup> Public Health Division, Ministry of Health and Long-Term Care *Initial Report on Public Health*, August 2009 p. 78

- Substantial recent increase in the number of people unemployed, receiving unemployment insurance or receiving financial assistance through Ontario Works.
- Youth reporting limited opportunities for employment.
- First Nations families living on or off reserves, at risk of marginalization, discrimination, and limited access to culturally appropriate services.
- Small proportions of the population who are visible minorities, recent immigrants, or Mennonite/Amish at risk of isolation, marginalization, discrimination and limited access to culturally appropriate services.
- A higher proportion of families considered at risk and referred to the Healthy Babies Healthy Children program for support, when compared to the MCYS standard.
- The rural nature of Grey Bruce.

The socio-economic vulnerabilities in Grey Bruce identified above, suggest that considerable emphasis should be placed on enhancing the service system's capacity to support children youth and families experiencing challenges associated with low socio-economic status and/or unique cultural needs. The high proportion of families identified as 'at risk' should be examined in greater depth

### **4.3 Physical Safety**

The safety of the physical environment children and youth grow up in is a key factor that contributes to their health.

The available data suggests that children and youth in Grey Bruce are more vulnerable compared to young people in other communities as a result of injuries due to falls or motor vehicle collisions. The geography of Grey Bruce is such that frequent motor vehicle travel is a necessity in the lives of many families. The health impacts from injuries may be time limited, however in some cases they may lead to long-term disabilities, both physical and emotional. The most tragic impact of these injuries is death. The leading cause of death among Grey Bruce teens between 2000 and 2003 were motor vehicle collisions. To minimize the negative health impacts due to injuries, ongoing prevention initiatives are required, particularly regarding safe driving practices.

Air or water quality may continue to pose health risks to children and youth in Grey Bruce. Systems are in place to alert families when air or water quality is poor and precautions need to be taken. Ongoing awareness and education about when and how to respond to pollution exposure risks is required.

Housing is considered acceptable if it is: affordable (costing less than 30% of before-tax income); does not require major repairs; and, is not overcrowded. An apparent strength within the housing area in Grey Bruce is that almost 90% of residents own their own homes; however, home ownership does not necessarily mean that housing meets the above criteria. An area of vulnerability in Grey Bruce is the health of the children and youth living in the 290 families that are eligible and on waiting lists for rent-geared-to-income (RGI) housing. Short term supports for vulnerable families are needed, as well as long-term strategies to increase the stock of affordable housing in Grey Bruce.

#### **4.4 Early Child Development**

Strengths within the Grey Bruce service system that can be expected to have a positive impact on the health of young children include the following.

- Birth outcome data which suggests that trends in teen pregnancy, multiple births and low birth weights are consistent with trends in other communities.
- Available licensed child care.
- Increases over time in the numbers of children participating in early learning opportunities through the Ontario Early Years Centre Programs.
- Access to early kindergarten registration where children receive growth and development screening and referrals to available services if developmental delays are identified.
- Improvements over time in early child development measures (EDI scores).
- Access by parents and young children considered at risk, to a targeted supports (e.g. Prenatal Nutrition Program, Healthy Babies Healthy Children Program, Cradle Link, Parent Mutual Aid).

Vulnerabilities that may pose risks to the health of young children

- The higher rates of high birth weight babies in Grey Bruce when compared to Ontario rates.
- The increasing and significantly high rate of heavy drinking among adults in Grey Bruce combined with a much higher incidence rate of fetal alcohol exposure in Grey Bruce babies compared to national rates.
- Limited access to pediatric rehabilitation services for the preschool population.
- Some domains where Grey Bruce children are considered at risk regarding readiness to learn for school.

The higher proportion of babies born with high birth weights suggests that the health of these babies may be at risk at or near the time of birth, and over the longer term due to issues such as obesity. This trend suggests the need for continued prenatal education regarding healthy birth weights and possibly the need for active monitoring and health screening of high birth weight babies as they grow and develop.

There is a disturbing high incidence rate of fetal alcohol exposure in Grey Bruce which may be associated with the increasing and significantly high rate of heavy drinking among adults. Fetal Alcohol Spectrum Disorder (FASD) is a preventable, life-long disability. Ongoing efforts to prevent women from drinking during pregnancy and to enhance the services to support children and youth with FASD are needed.

#### **4.5 School Aged Children and Youth**

Strengths within the Grey Bruce service system that can be expected to have a positive impact on the health of school aged children include the following:

- The high proportion of youth reporting a sense of belonging to the community.

- Trends in standardized reading writing and mathematics within both School Boards which are similar to the Provincial average.
- The increase in the number of children supported by developmental support agencies.
- The higher proportion of children and youth with mental health challenges that show clinically significant improvement after receiving available services.
- The employment supports for youth available from the Owen Sound and Area Family YMCA.

Vulnerabilities that can be expected to pose risks to the health of school aged children and youth include the following:

- The low proportion of students that report eating a healthy diet.
- The high proportion of students who are overweight or obese.
- The low levels of physical activity among students.
- The lack of equity in funding available for children and youth mental health services in Grey Bruce compared to other communities in the South West Region.
- Youth reporting a lack of employment opportunities in Grey Bruce.

The low proportion of school aged children and youth who eat a healthy diet and are physically active, and the high proportion of youth that are overweight or obese suggests the need for ongoing initiatives to promote healthy eating and physical activity with this target group.

The lack of equity in funding for children’s mental health services suggests the need for dialogue and advocacy with the Ministry of Children and Youth Services.

#### **4.6 Implications for Planning**

The analysis of the vulnerabilities among children, youth and families in Grey Bruce outlined in the *Profile of Child and Youth Health* identified the following opportunities for action by the Alliance to respond to areas of vulnerability.

- a. Continue to work with community partners to enhance the service system’s capacity to effectively support children youth and families experiencing challenges associated with low socio-economic status (poverty).
- b. Continue to work with community partners to enhance the service system’s capacity to offer inclusive, culturally appropriate services for children youth and families with unique cultural needs.
- c. Discuss with the Grey Bruce Health Unit and /or explore with Lets Grow, the need to for supplemental assistance from the Alliance partners or other community stakeholders to:
  - i. enhance prenatal education regarding healthy birth weights, and;
  - ii. initiate active monitoring and health screening of high birth weight babies as they grow and develop.



- d. Collaborate with the Fetal Alcohol Spectrum Disorder Coordinating Committee regarding the need to for supplemental assistance from the Alliance partners or other community stakeholders to:
  - i. enhance prenatal education regarding the effects of drinking during pregnancy, and;
  - ii. enhance the services to support children and youth with FASD.
- e. Collaborate with the Lets Grow Evaluation Subcommittee to examine the data which suggests that there are a higher proportion of families at risk in Grey Bruce compared to what could be expected given the Ministry of Children and Youth Services standard.
- f. Collaborate with the Lets Grow Committee to monitor readiness for school.
- g. Collaborate with the Grey Bruce Health Unit to update local data on the prevalence of injuries from falls and motor vehicle crashes.
- h. Liaise with the Grey Bruce Health Unit about the need for supplemental assistance from the Alliance partners (or other community stakeholders) to enhance current education and awareness activities or programs related to:
  - i. injury prevention
  - ii. the reduction of negative health impacts for children, youth and families regarding exposure to environmental threats including poor air and water quality.
  - iii. Improving healthy eating habits, and physical activity among school aged children and youth.
- i. Liaise with Keystone Child Youth and Family Services regarding the limited funding for child and youth mental health services.

## Appendix A Population of Children and Youth by Individual Ages and Municipality

### Ages and Age Groups

<b>2006 Census</b>	0	1	2	3	4	5	<b>0-5</b>	6	<b>0-6</b>	7	8	9	10	11	12	13	<b>7-13</b>	14	15	16	17	18	<b>14-18</b>	0-18
City of Owen Sound	191	192	180	193	186	231	<b>1173</b>	234	<b>1407</b>	229	250	231	262	265	273	280	<b>1790</b>	284	312	319	320	300	<b>1535</b>	4732
Georgian Bluffs	72	75	88	91	97	87	<b>510</b>	92	<b>602</b>	112	116	120	114	129	134	138	<b>863</b>	149	154	141	160	162	<b>766</b>	2231
Meaford	72	69	76	74	76	86	<b>453</b>	84	<b>537</b>	98	96	95	105	97	125	125	<b>741</b>	124	149	150	154	172	<b>749</b>	2027
Blue Mountains	40	51	41	37	58	47	<b>274</b>	62	<b>336</b>	52	48	71	49	65	65	64	<b>414</b>	80	93	73	79	88	<b>413</b>	1163
Chatsworth	74	59	71	65	81	90	<b>440</b>	72	<b>512</b>	91	83	100	80	87	90	88	<b>619</b>	93	84	115	91	103	<b>486</b>	1617
West Grey	109	125	95	106	107	132	<b>674</b>	153	<b>827</b>	123	137	132	147	168	149	168	<b>1024</b>	177	167	167	190	169	<b>870</b>	2721
Hanover	56	54	53	61	54	68	<b>346</b>	66	<b>412</b>	68	78	67	68	56	77	74	<b>488</b>	73	81	87	100	114	<b>455</b>	1355
Grey Highlands	83	88	79	92	103	101	<b>546</b>	107	<b>653</b>	101	119	129	114	120	149	152	<b>884</b>	130	150	159	161	149	<b>749</b>	2286
Southgate	76	91	90	95	88	91	<b>531</b>	111	<b>642</b>	115	123	108	101	133	114	134	<b>828</b>	139	124	166	136	149	<b>714</b>	2184
<b>Grey</b>							<b>4947</b>		<b>5928</b>								<b>7651</b>						<b>6737</b>	<b>20316</b>
Northern Br Pen	20	27	25	26	30	19	<b>147</b>	27	<b>174</b>	25	29	37	31	32	33	44	<b>231</b>	46	34	44	48	47	<b>219</b>	624
South Br. Pen.	75	62	74	64	64	72	<b>411</b>	63	<b>474</b>	75	71	79	98	82	102	88	<b>595</b>	97	105	121	103	107	<b>533</b>	1602
Saugeen Shores	55	76	73	78	78	52	<b>412</b>	78	<b>490</b>	74	87	93	110	123	114	145	<b>746</b>	136	162	161	165	167	<b>791</b>	2027
Kincardine	81	83	99	84	97	79	<b>523</b>	85	<b>608</b>	101	94	117	131	138	141	160	<b>882</b>	171	183	180	172	158	<b>864</b>	2354
Huron Kinloss	92	80	75	79	76	89	<b>491</b>	82	<b>573</b>	76	87	92	73	99	103	91	<b>621</b>	110	105	106	122	107	<b>550</b>	1744
Arran-Elderslie	72	71	89	80	65	70	<b>447</b>	72	<b>519</b>	92	90	79	92	101	92	114	<b>660</b>	109	97	118	95	104	<b>523</b>	1702
Brockton	116	99	93	91	92	111	<b>602</b>	101	<b>703</b>	94	101	110	110	138	116	149	<b>818</b>	144	132	176	162	148	<b>762</b>	2283
South Bruce	79	97	83	77	84	76	<b>496</b>	100	<b>596</b>	82	86	102	86	115	88	121	<b>680</b>	112	106	97	99	113	<b>527</b>	1803
<b>Bruce</b>							<b>3529</b>		<b>4137</b>								<b>5233</b>						<b>4769</b>	<b>14139</b>
<b>Grey Bruce</b>							<b>8476</b>		<b>10065</b>								<b>12884</b>						<b>11506</b>	<b>34455</b>

**Appendix B**  
**Social Vulnerability Indicators by Municipality, Grey Brice Counties, Statistics Canada Census, 2006**

	Total Population	Number of Children and Youth 0-19 yrs	% Unemployment	% All Persons Low Income (After Tax)	% Persons Less Than 18 Low Income (After tax)	% Income from Gov't Transfer Payments	% 15+ without Highschool Education	% Recent Immigrants	% Do Not Own Home	% Lived at Same Address 1 yr Ago	% Lone Parent Families
<b>Ontario</b>			<b>6.4</b>	<b>11.1</b>	<b>13.7</b>	<b>9.8</b>	<b>22.24</b>	<b>4.83</b>	<b>28.81</b>	<b>86.6</b>	<b>15.8</b>
<b>Grey</b>	<b>92,411</b>	<b>21,805</b>	<b>5.2</b>	<b>6.5</b>	<b>7.8</b>	<b>14.2</b>	<b>28.36</b>	<b>0.51</b>	<b>27.52</b>	<b>88.19</b>	<b>11.9</b>
City of Owen Sound	32,259	7,425	6.1	7.6	10.4	15.1	27.26		30.26	86.26	14.52
Georgian Bluffs	10,506	2,420	4.9	3.7	3.4	11.0	24.21	0.24	7.2	90.94	5.61
Meaford	10,948	2,355	5.4	5.9	7.7	14.1	25.26	0.69	16.87	88.47	10.4
Town of the Blue Mountains	6,825	1,290	4.2	5.8	4.8	11.4	16.45	0.59	15.67	87.94	7.51
Chatsworth	6,392	1,660	5.4	4.9	5.4	15.3	31.02	0.16	7.59	90.06	10.8
West Grey	12,193	2,970	3.1	6.4	7.6	14.2	31.56	0.33	15.77	91.28	9.64
Hanover	7,147	1,585	5.2	7.2	10.1	16.4	34.76	0.29	34.81	84.12	14.29
Grey Highlands	9,480	2,345	5.6	4.8	5.0	13.1	29.17	0.37	12.89	89.16	11.56
Southgate	7,167	2,180	4.7	5.7	4.9	12.8	35.23	0.28	11.89	92.24	9.8
<b>Bruce</b>	<b>65349</b>	<b>15,245</b>	<b>5.3</b>	<b>5.4</b>	<b>5.7</b>	<b>12.2</b>	<b>27.55</b>	<b>0.59</b>	<b>17.3</b>	<b>90.06</b>	<b>10.02</b>
Northern Bruce Peninsula	3,850	640	8.9	5.2	2.7	19.4	26.74	0.79	11.27	86.84	4.18
South Bruce Peninsula	8,415	1,655	5.3	6.3	8.7	19.1	26.65	0.30	17.60	91.10	11.46
Saugeen Shores	11,720	2,425	6.7	3.7	5.4	8.5	19.94	1.04	17.89	88.76	11.05
Kincardine	11,173	2,460	4.9	4.8	4.5	9.1	21.60	1.22	18.15	89.61	9.39
Huron Kinloss	6,515	1,655	3.4	6.6	7.6	12.3	31.54	0.00	14.81	90.47	7.51
Arran-Elderslie	6,747	1,780	4.8	7.2	6.8	15.1	33.40	0.23	17.40	92.39	10.23
Brockton	9,641	2,435	4.1	6.1	5.2	12.1	32.63	0.16	19.14	89.71	10.85
South Bruce	5,939	1,745	2.9	4.8	3.9	12.3	35.39	0.59	17.63	91.06	7.53