

## RESULTS

### Response Rates

Over the course of the data collection phase, a total of 4,814 calls were made and 1,649 calls completed, yielding a response rate of 46%. This response rate was calculated as the number of completed calls divided by the sum of the number of completes, call backs, refusals, those with answering machines, language barriers, busy lines, no answer, and those who hung-up or were unable to be reached (i.e. excludes not eligible, not in service and wrong number categories). Table 1 shows the outcome of the data collection phase by call disposition category.

**Table 1**  
**Call Attempts and Results,**  
**Region of Peel, 2002**

Call Disposition	Frequency	Per Cent
Completed	1649	34.3%
Answering Machine	19	0.4%
Call Back	123	2.6%
Language Barrier	277	5.8%
Line is Busy	3	0.1%
No Answer	64	1.3%
Not Eligible	71	1.5%
Not in Service	410	8.5%
Refused	735	15.3%
Hang-up	74	1.5%
Wrong number, no new number given	756	15.7%
Unable to be reached	633	13.1%
Total number called	4,814	100.0%

Notes: Percentages may not equal 100% due to rounding. Numbers are based on unweighted data.

There were 964 completed calls for Mississauga, 467 for Brampton and 218 for Caledon, yielding response rates of 44%, 45% and 91%, respectively.

### Household, Child and Respondent Characteristics

Thirty-seven per cent of the households surveyed consisted of four people, while 31% were made up of three people, 17% of five people and 13% of six or more people (Table 2).

**Table 2**  
**Household Composition of Respondents,**  
**Region of Peel, 2002**

Household Composition	Per Cent
One person	0.0%
Two people	0.9%
Three people	31.1%
Four people	37.3%
Five people	17.4%
Six people	8.6%
Seven or more people	4.7%
Total	100.0%

Fifty-three per cent of mothers indicated that they had one child six years of age or younger, while 40% had two children six or under and 7% had three children aged six or younger (Table 3). While not shown here, single mothers (69%) and mothers in common-law relationships (70%) were more likely to have just one child six years or under than were married mothers (50%). There was also a higher proportion of mothers who were recent immigrants to Canada, i.e. had immigrated within five years or less, having only one child aged six or less (67%), compared to immigrants who had lived here six years or longer (50% with one child in this age group).

**Table 3**  
**Number of Children 0 to 6 Years in Respondent Households,**  
**Region of Peel, 2002**

Number of Children Aged 0 – 6 Years	Per Cent
One child	53.1%
Two children	40.0%
Three children	6.5%
Four children	0.3%
Five children	0.1%
Total	100%

Overall, 54% of respondents had only one child, 40% had two children and 6% had three or more children of any age (i.e. the children could be older than six years of age).

Thirty-one per cent of respondents had a youngest child who was less than one year old, 44% had a youngest child who was one year old and 24% had a youngest child who was two years old at the time of the survey (Table 4).

**Table 4**  
**Age of Respondents' Youngest Child,**  
**Region of Peel, 2002**

Age Group	Per Cent
Less than 1 year old	30.9%
1 year old to just under 2 years old	44.1%
2 years old to just under 3 years old	23.6%
3 years of age or older	0.1%

### ***Age and Marital Status***

The age and marital status of survey respondents was compared to information from the 1999 Ontario Live Birth Database for Peel (Tables 5 and 6). Higher proportions of mothers in the 30-34, 35-39 and 40-44 year age groups suggest that the survey respondents were slightly older than mothers who gave birth in 1999. Respondents who were married made up a slightly larger proportion of the total as compared to mothers giving birth in 1999; conversely, the proportion of single mothers was slightly higher in the Ontario Live Birth Database.

Most survey respondents were 30 years of age or older, with 39% being 30-34 years and 27% being 35-39 years of age. In addition, most mothers (86%) were married, while 7% were living in common-law arrangements. Only 6% of the mothers surveyed were single and had never been married.

**Table 5:  
Comparison of Maternal Age between 2002 Study Respondents and Mothers in the 1999 Ontario Live Birth Database**

Mothers' Age Group	Respondents (n = 1507)	Ontario Live Birth Database for Peel, 1999
10 - 14 yrs	0.1%	0.0%
15 - 19 yrs	1.1%	2.5%
20 - 24 yrs	6.5%	12.0%
25 - 29 yrs	18.5%	30.9%
30 - 34 yrs	39.1%	35.3%
35 - 39 yrs	26.5%	16.8%
40 - 44 yrs	5.1%	2.4%
45 - 49 yrs	0.8%	0.1%
50+ yrs	0.0%	0.0%
Unknown	2.3%	0.1%
Total	100.0%	100.0%

Sources: Region of Peel Pre-School Health Survey 2002; Ontario Live Birth Database 1999, distributed through the Health Planning System by the Ontario Ministry of Health and Long-Term Care.

**Table 6  
Comparison of Marital Status between 2002 Study Respondents and Mothers in the 1999 Ontario Live Birth Database**

Mothers' Marital Status	Respondents (n = 1507)	Ontario Live Birth Database for Peel, 1999
Married	86.1%	81.9%
Common law	6.5%	n/a
Separated	1.5%	0.0%
Divorced	0.3%	0.5%
Single	5.5%	9.6%
Widowed	0.0%	0.1%
Refused	0.1%	n/a
Unknown	0.0%	7.9%
Total	100.0%	100.0%

Notes: n/a = not applicable. Percentages may not equal 100% due to rounding.  
Sources: Region of Peel Pre-School Health Survey 2002; Ontario Live Birth Database 1999, distributed through the Health Planning System by the Ontario Ministry of Health and Long-Term Care

**Home Language**

The majority of respondents spoke English most often in the home (81%), while 18% indicated a language other than French or English (Table 7). This is somewhat different than the findings of the 2001 Census, in which 64% of the population spoke English most often in the home. This result may be a function of the fact that the survey was only provided in English; 6% of those contacted to participate in the survey could not because of a language barrier (Table 1).

Although not shown, respondents from Mississauga were less likely to speak English most often in the home (77%), compared to 85% of respondents from Brampton and 96% of respondents from Caledon.

**Table 7  
Comparison of Language Most Often Spoken in the Respondents' Home,  
Region of Peel, 2002 and Census of Canada, 2001**

Language	Respondents (n = 1507)	2001 Census (Peel)
English	80.6%	64.1%
Punjabi	2.9%	3.1%
Chinese (incl. Cantonese, Mandarin)	2.1%	3.2%
Urdu	2.1%	0.6%
Spanish	1.6%	0.5%
Arabic	1.4%	0.4%
Polish	1.2%	1.2%
Portuguese	0.9%	0.7%
French (incl. French + English)	0.8%	0.2%
Gujarati	0.7%	0.2%
Hindi	0.6%	0.2%
Tamil	0.5%	0.4%
Twi	0.5%	n/a
Italian	0.4%	0.5%
Croatian	0.3%	0.1%
Filipino	0.3%	0.4%
German	0.3%	0.0%
Other	2.9%	24.0%
Total	100.0%	100.0%

Notes: 2001 Census data are based on information for both sexes combined. The "Other" category includes 23% of the population reporting more than one language. N/A = not available. Percentages may not equal 100% due to rounding. Sources: Region of Peel Pre-School Health Survey 2002; Statistics Canada 2001 Census of Canada.

**Place of Birth**

Overall, 60% of respondents were born in Canada. The proportion of Canadian-born respondents ranged from 57% in Mississauga to 81% in Caledon (Table 8).

**Table 8**  
**Proportion of Canadian-born Respondents by Municipality, Region of Peel, 2002**

Municipality	Per Cent
Brampton	62.5%
Caledon	81.2%
Mississauga	57.4%
Peel Total	60.2%

Among those who were foreign-born, 22% had lived in Canada for five years or less, 23% had lived in Canada between 6 and 10 years, and 55% had lived in Canada for more than 10 years (Table 9).

**Table 9**  
**Proportion of Foreign-born Respondents by Length of Time in Canada, Region of Peel, 2002**

Number of Years Lived in Canada	Per Cent
0 – 5 yrs	22.2%
6 – 10 yrs	23.1%
11 – 20 yrs	26.5%
21 – 30 yrs	21.6%
31 – 40 yrs	6.5%
More than 40 yrs	0.1%
Total (Foreign-born)	100.0%

***Ethnic or Cultural Group***

When asked to which ethnic or cultural group their ancestors belonged, 16% of respondents indicated they were Canadian, 19% identified South Asian, 14% responded that they were English, and 10% identified Italian (Table 10). These four categories were among the top six ethnic groups identified in the 2001 Census for Peel.

**Table 10**  
**Comparison of Ethnic or Cultural Group of Respondents,**  
**Region of Peel, 2002 and Census of Canada, 2001**

<b>Ethnic or Cultural Group</b>	<b>Respondents (n = 1507)</b>	<b>2001 Census (Peel)</b>
South Asian	18.6%	15.9%
Canadian	15.6%	19.2%
English	13.9%	16.3%
Italian	10.1%	8.6%
Scottish	8.0%	10.8%
Irish	7.9%	10.3%
Portuguese	4.9%	5.2%
French	4.8%	5.0%
Black	4.6%	1.3%
German	4.0%	4.7%
Chinese	3.2%	4.9%
Polish	2.9%	5.3%
Dutch	1.9%	1.9%
Ukrainian	1.8%	2.4%
North American Indian	0.5%	0.8%
Jewish	0.2%	0.4%
Metis	0.1%	0.2%
Inuit/Eskimo	0.1%	0.0%
Other	16.7%	26.3%
Unknown	2.6%	n/a
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>

Notes: 2001 Census data are based on information for both sexes combined.  
 Percentages do not sum to 100% due to multiple response options. N/A = not applicable.  
 Sources: Region of Peel Pre-School Health Survey 2002; Statistics Canada 2001 Census of Canada.

**Highest Level of Education**

With respect to educational attainment, 68% of respondents had completed college, university or more, while 9% started but did not complete college or university, and 22% completed high school or less (Table 11). This demonstrates that the survey group was somewhat more educated than the population at large, as in the Census, only 47% completed college or university, while 37% had completed high school.

**Table 11**  
**Comparison of Highest Level of Education Attained by Respondents,**  
**Region of Peel, 2002 and Census of Canada, 2001**

Mother's Highest Level of Education	Respondents (n = 1507)	2001 Census (Peel)
Public school	0.1%	7.6%
High school	21.6%	29.5%
Some college	5.7%	7.0%
Some university	3.3%	8.3%
Completed college	29.6%	26.9%
Completed university	28.9%	20.7%
Postgraduate degree	9.1%	n/a
Refused	0.3%	n/a
Unknown	1.4%	n/a
Total	100.0%	100.0%

Notes: 2001 Census data are based on information for both sexes combined. N/A = not applicable.  
 Sources: Region of Peel Pre-School Health Survey 2002; Statistics Canada 2001 Census of Canada.

**Employment and Household Income**

Approximately two-thirds (65%) of respondents were currently employed at the time of the survey. Over one-third (35%) reported that their household income was \$80,000 or higher (Table 12). Fewer proportions of survey respondents reported incomes at the lower levels compared to the population as a whole; however, because 14% of respondents refused to give income information, it is difficult to determine whether the Pre-School survey sample was in fact comparable to the population of Peel with respect to income level.

**Table 12**  
**Comparison of Household Income of Respondents,**  
**Region of Peel, 2002 and Census of Canada, 2001**

Household Income Level	Respondents (n = 1507)	2001 Census (Peel)
< \$10,000	1.0%	3.5%
\$10,000 - \$19,999	1.2%	5.4%
\$20,000 - \$29,999	4.5%	6.4%
\$30,000 - \$39,999	7.1%	8.2%
\$40,000 - \$49,999	6.8%	8.7%
\$50,000 - \$59,999	9.9%	9.1%
\$60,000 - \$69,999	9.2%	9.4%
\$70,000 - \$79,999	7.1%	8.6%
\$80,000 +	34.9%	40.7%
don't know	4.8%	n/a
refused	13.6%	n/a
Total	100.0%	100.0%

Note: N/A = not applicable

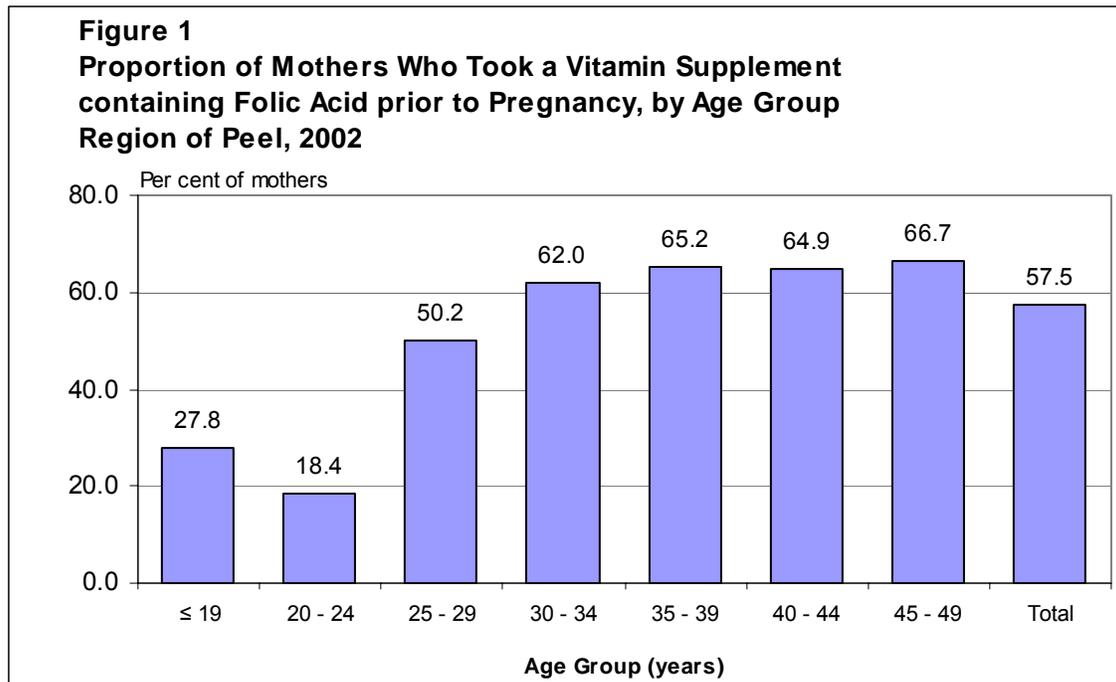
Sources: Region of Peel Pre-School Health Survey 2002; Statistics Canada 2001 Census of Canada.

## Preconception Health and Folic Acid Supplementation

An increased intake of folic acid by women prior to pregnancy reduces the risk of Neural Tube Defects (NTDs).<sup>4,5</sup> NTDs are birth defects that affect the brain and spinal cord, and may result in serious disability, including paralysis or death. NTDs include spina bifida, anencephaly and encephalocele.

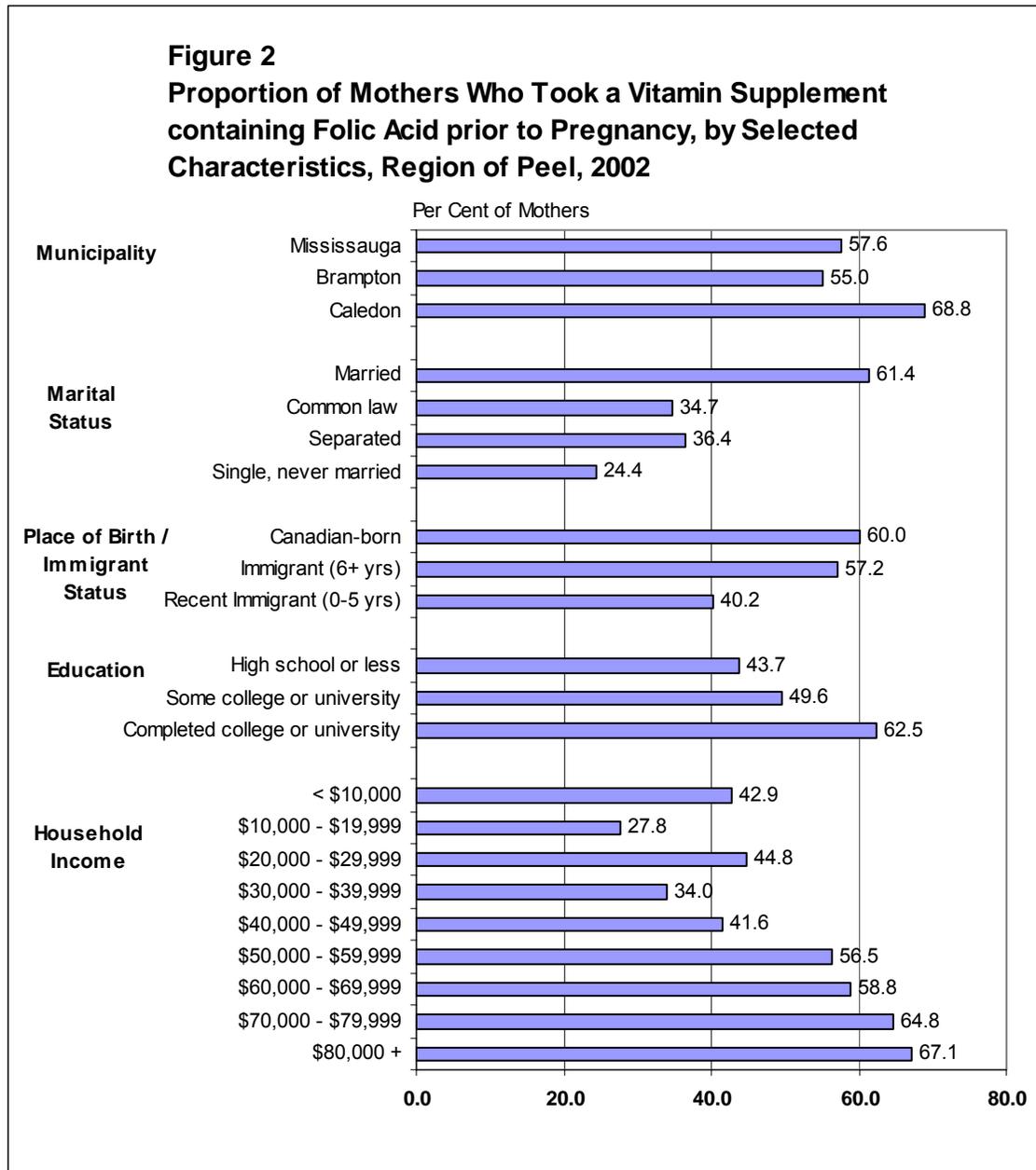
NTDs can occur in the first month of pregnancy as the neural tube is developing, which is often at a time when a woman may not even know she is pregnant.<sup>6</sup> For this reason, folic acid needs to be included in the diet before conception and during early pregnancy. Vitamin supplements that contain 0.4 milligrams of folic acid should be taken every day at least three months before a woman becomes pregnant and continued through the first three months of pregnancy.

Survey respondents were asked whether they took a vitamin supplement containing folic acid before becoming pregnant the most recent time. Overall, 58% of mothers reported taking such a supplement. Figure 1 depicts these results by age of the mother. Women aged 30 or older were more likely to have taken folic acid supplementation than younger women.



Results from the 2000-2001 Canadian Community Health Survey showed that 57% of Peel and 52% of Ontario mothers who had given birth in the past five years reported having taken a vitamin supplement containing folic acid before their last pregnancy.

Figure 2 shows folic acid supplementation prior to pregnancy by selected characteristics of respondents. Mothers who lived in Caledon, were married, completed college or university, or had higher levels of income were also more likely to have taken vitamin supplements containing folic acid prior to pregnancy than were other women.

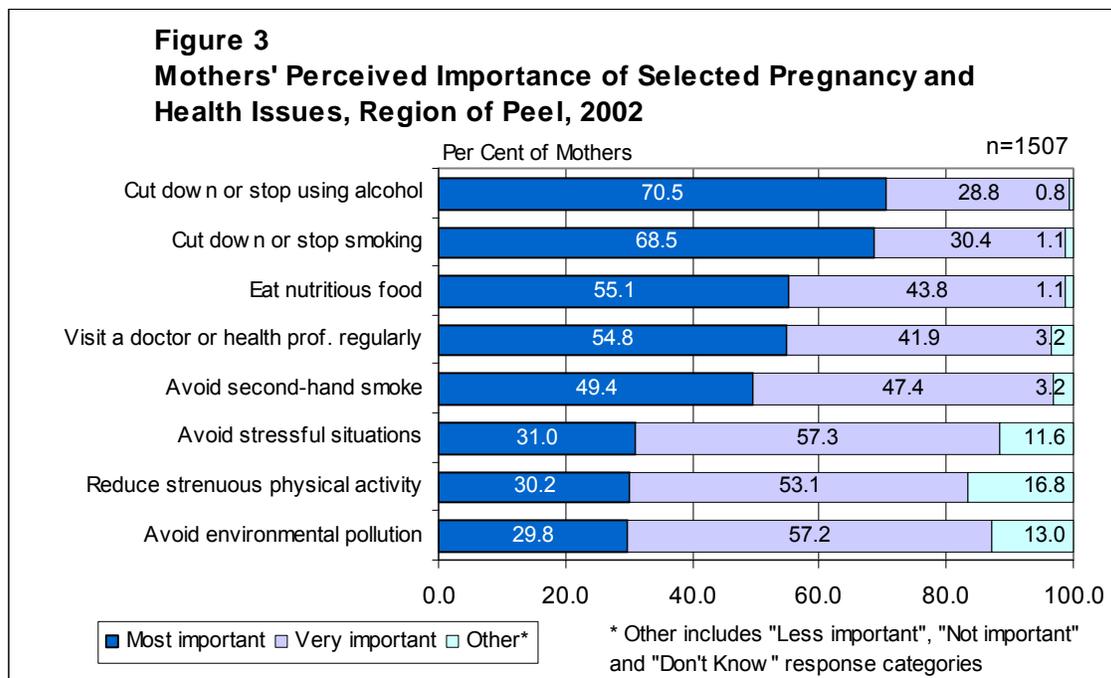


### Knowledge of Risk Factors during Pregnancy

It is well recognized that certain factors during pregnancy can have adverse effects on the developing fetus and health of the newborn after delivery. For example, smoking during pregnancy has been implicated in causing low birth weight, prematurity and intrauterine growth retardation.<sup>7</sup>

In order to gauge mothers' awareness and knowledge of health issues concerning pregnant women, respondents were asked a series of questions about a variety of health behaviours. These included behaviours such as reducing or eliminating the use of alcohol and tobacco, eating nutritious food, visiting a doctor or health professional on a regular basis, avoiding second-hand smoke, stressful situations or environmental pollution and reducing strenuous physical activity. Mothers were asked their opinions as to whether each of these was "the most important thing to do", "a very important thing to do", "a less important thing to do" or "not important to do".

The vast majority of mothers felt that all of these behaviours were either "the most important thing to do" or "a very important thing to do" (87% to 99%). However, reduction of both alcohol use and smoking were ranked as most important (Figure 3). This result was found regardless of regional or demographic factors such as age, marital status or income.



Alcohol consumption during pregnancy can cause a series of adverse health effects known as Fetal Alcohol Syndrome (FAS). Research examining the levels

of alcohol consumed compared to the severity of health effects on the child has been found to be equivocal, resulting in no amount of alcohol being determined to be safe.<sup>8</sup> For this reason, physicians and public health officials recommend against having any alcohol if a woman knows or suspects she is pregnant: “The prudent choice for women who are or may become pregnant is to abstain from alcohol”.<sup>9</sup>

Mothers were asked their perceptions on how safe they thought it was for a pregnant woman to drink certain amounts of alcohol, while taking into consideration the health effects on the baby. Respondents felt that the safety level decreased with increasing amounts or frequency of alcohol used during pregnancy (Table 13).

**Table 13**  
**Mothers’ Perceptions of the Safety of Different Levels of Alcohol Use during Pregnancy, Region of Peel, 2002**

Level of Alcohol Use by Pregnant Woman	Mothers’ Perceptions of Safety			
	Not at all safe	Not very safe	Somewhat safe	Very safe
3-4 drinks each weekend	82.8%	15.6%	0.9%	0.1%
1 drink each day	77.3%	16.4%	5.3%	0.3%
2 drinks on 2-3 occasions	55.0%	14.8%	26.5%	2.9%
1-2 drinks in total	42.8%	8.6%	33.2%	14.8%

Note: Respondents were asked “Considering the effects on the baby, do you think it would be very safe, somewhat safe, not very safe, or not at all safe for a pregnant woman to drink each of the following amounts of alcohol?”

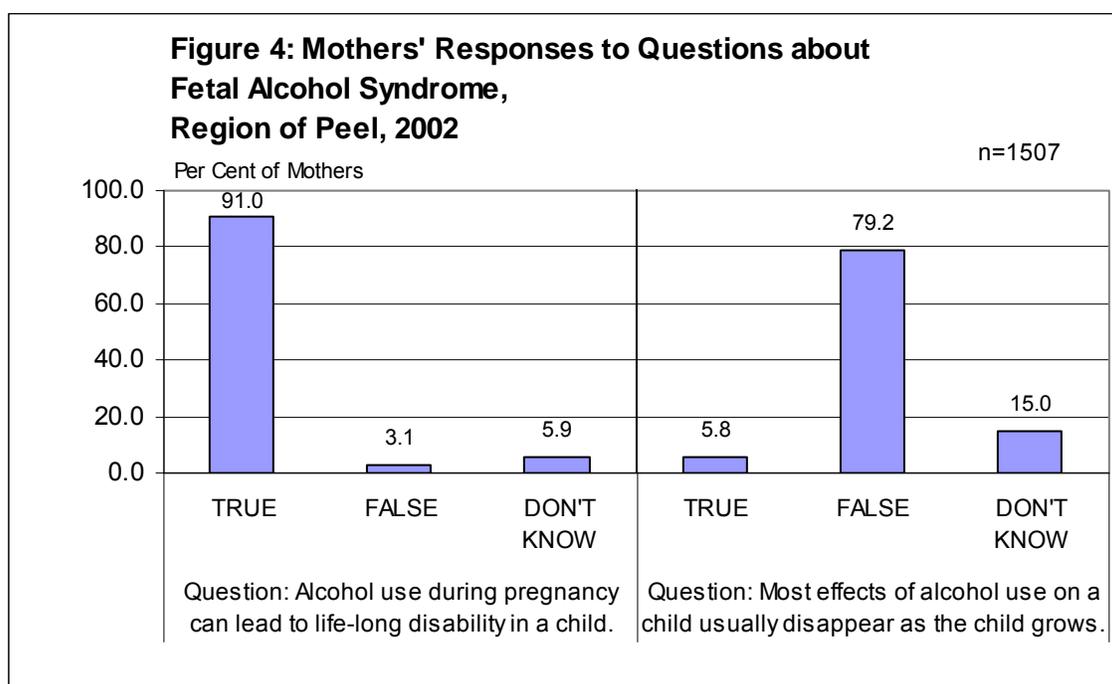
When these results were examined by municipality, mothers from Caledon were less likely to report that alcohol use was not at all safe (Table 14).

**Table 14**  
**Proportion of Mothers Reporting Alcohol Use during Pregnancy as Not at All Safe, by Level of Alcohol Use and Municipality, Region of Peel, 2002**

Level of Alcohol Use by Pregnant Woman	Municipality			
	Mississauga	Brampton	Caledon	Peel Total
3-4 drinks each weekend	82.1%	85.2%	78.4%	82.5%
1 drink each day	75.9%	81.2%	71.6%	76.8%
2 drinks on 2-3 occasions	53.3%	60.4%	42.7%	53.9%
1-2 drinks in total	41.3%	47.8%	31.7%	41.8%

Although not shown here, mothers in the lowest income category, as well as those in the highest income category, were less likely to perceive even low levels of alcohol as being unsafe.

Respondents were asked two true or false questions on the topic of Fetal Alcohol Syndrome: “Alcohol use during pregnancy can lead to life-long disabilities in a child” and “Most of the effects of alcohol use on a child usually disappear as the child grows”. The majority of respondents (91%) correctly identified that alcohol use during pregnancy can lead to life-long disabilities in a child. However, 9% of respondents either did not know or answered incorrectly (Figure 4).



Seventy-nine per cent of respondents answered the second question correctly; however, a much larger proportion (21%) either did not know that the effects of alcohol use on a child would not disappear as the child grew or answered incorrectly.

No differences were observed among age groups, education levels, income levels or municipalities with respect to the proportions of mothers answering correctly to these two questions. However, those who were foreign-born, and especially those who were recent immigrants, had much higher proportions of respondents not knowing whether or not the effects of alcohol use on a child would disappear as the child grew, at 21% and 29%, respectively.

## Child Health and Parenting

### *Access to health services and information*

The ability to access health information and services when needed is extremely important to parents of small children. It is especially difficult when first-time parents are presented with problems for which they have no experience, and their young child cannot tell them what is wrong. The majority of Peel residents appear to be well-linked to family physicians, and have access to various resources available through community centres, telephone information lines, the internet and the public health department.

Nearly all mothers (99%) reported having a family physician or paediatrician, and among those, 84% indicated that they had not had difficulty getting an appointment for their child within the previous 12 months. Of the 16% of mothers who had had difficulty, most expressed concerns that the wait was too long, the office hours were not convenient, the doctors were too busy to see them or the doctor was unavailable because of being on-call, ill or on maternity leave (Table 15). No trends or differences were seen among the various demographic groups examined, including those who immigrated within the past 5 years.

**Table 15**  
**Reason for Difficulty in Getting Appointments with Family Physicians or Paediatricians in the Past 12 Months, Region of Peel, 2002**

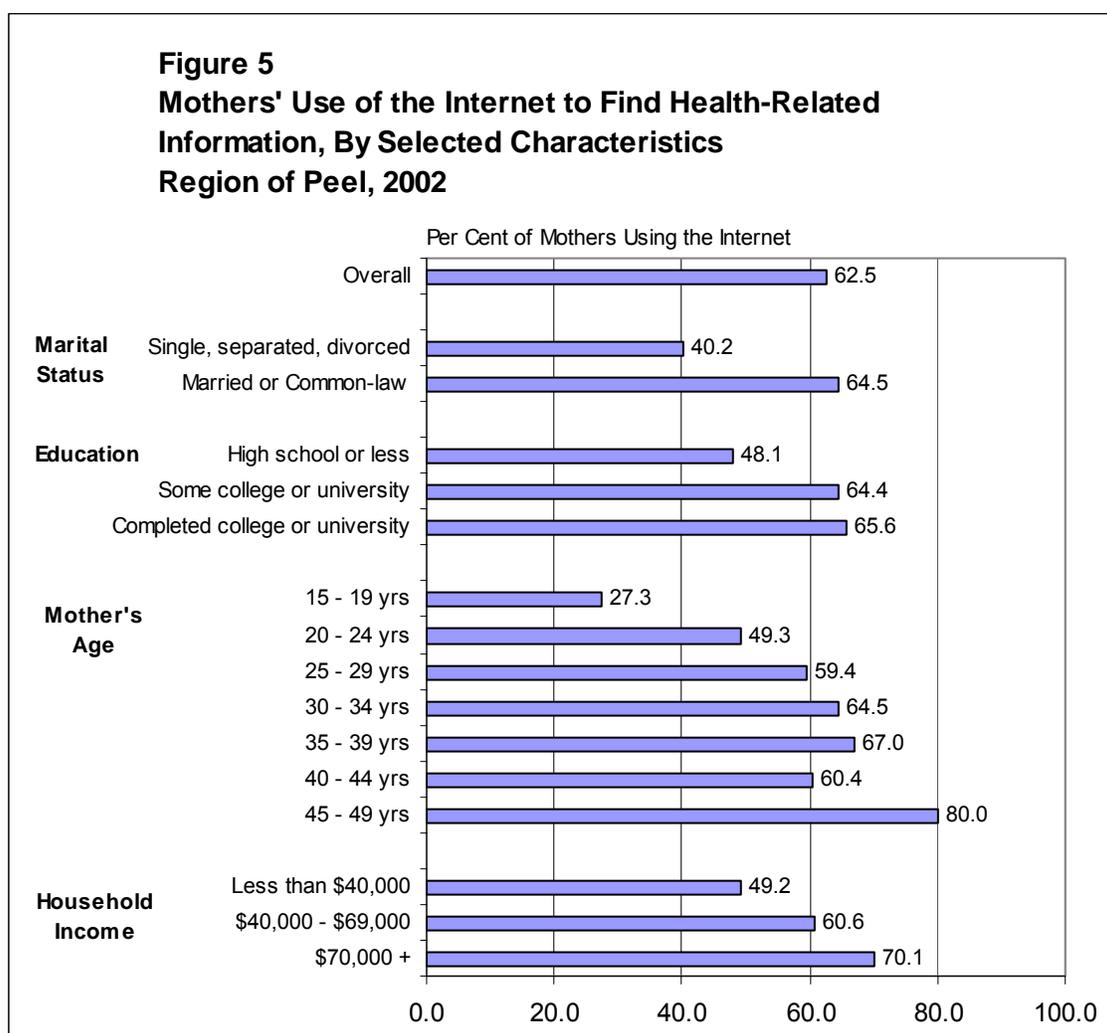
<b>Reason for Difficulty in Getting Appointments (n=234)</b>	<b>Per Cent</b>
Wait is too long to get appointment	74.4%
Office hours not convenient	14.1%
Doctor is too busy (too many patients)	9.4%
Doctor is not available (on-call, ill, maternity leave)	6.0%
Telephone line is busy and can't get through	3.0%
Can't get or find doctor	3.0%
No appointments available on short notice	1.7%
Distance to office too far	1.7%
Other	5.1%

Notes: Only those reporting having difficulties accessing their family doctors are included in this analysis. Percentages do not sum to 100% due to multiple response options.

Fifty-eight per cent of mothers reported that they had made use of a walk-in clinic to take their youngest child to see a doctor.

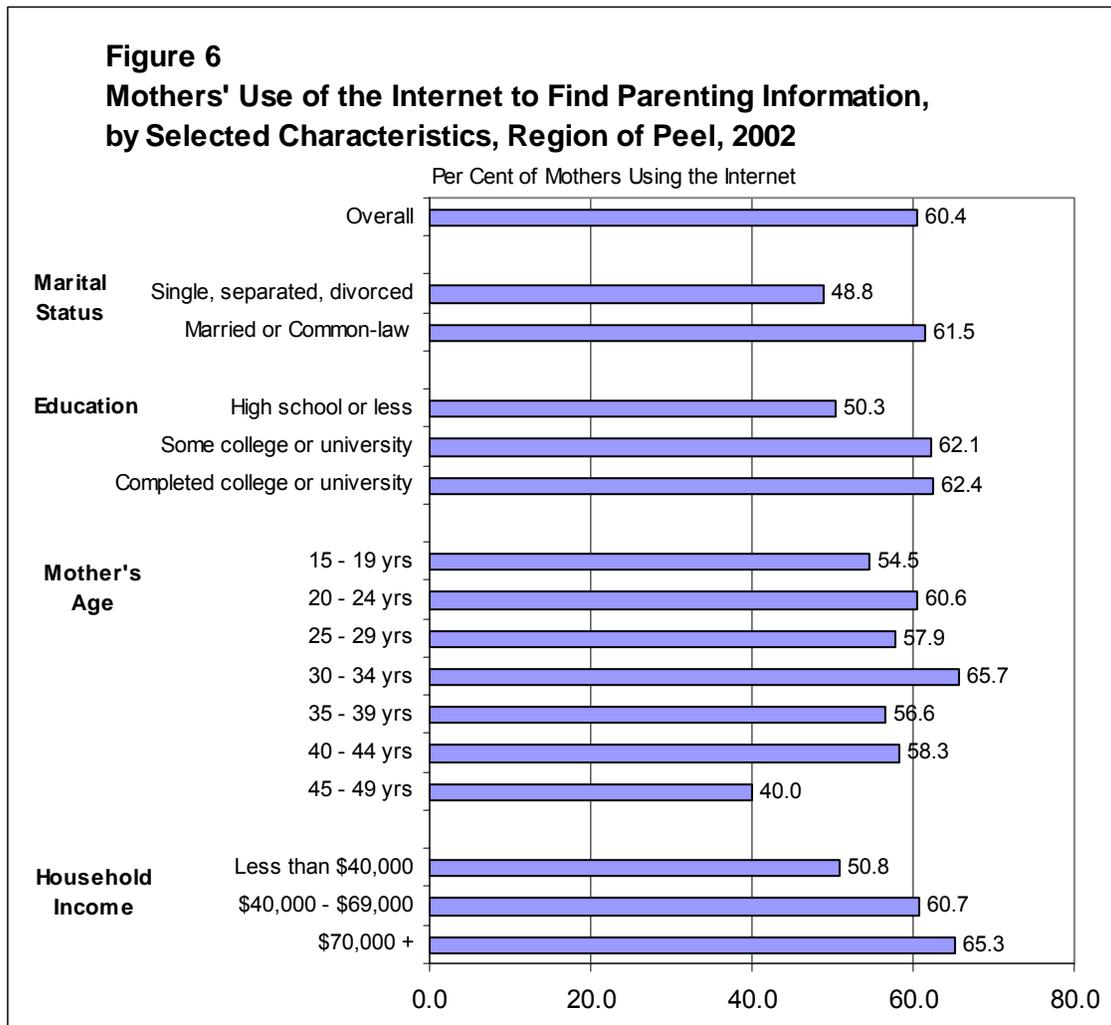
Almost three-quarters of mothers (73%) reported using the internet. These results varied by certain demographic groups. For example, lower proportions of mothers in the youngest and oldest age groups reported using the internet compared to mothers in the other age groups. Those with higher levels of education and higher incomes were more likely to use the internet than were those with lower education or income.

Among mothers who had used the internet, 63% had used the internet to obtain health-related information, and 60% had used the internet to find information on parenting. These results varied depending on the demographic characteristics of the mother (see Figures 5 and 6).



Lower proportions of mothers with an education equivalent to high school or less reported using the internet to find health-related information compared to those with higher levels of education (Figure 5). There was a trend towards increasing

use of the internet to access health-related information with increasing age of the mother. Mothers from households with incomes of \$70,000 or more were more likely to use the internet to obtain health-related information than were mothers with incomes of less than \$40,000, although there were no significant differences compared to the middle income group (\$40,000 to \$69,999). Mothers who were married or in common-law relationships were more likely to use the internet to find health-related information than mothers who were single, separated or divorced.



Trends were somewhat similar for parenting-related information, except that lower proportions of mothers aged 45-49 accessed parenting information on the internet compared to mothers in the other age groups (Figure 6).

Mothers were also asked where they go to obtain information about parenting or children's health (Table 16). The most common sources of information included

friends and family (51%), books and library resources (43%), doctors (43%) and magazines (40%). Ten per cent of mothers reported obtaining information from Health Department services, including Health Line Peel, Healthy Babies Healthy Children Family Visitors and Nurses, Healthy Start Nurses and New Baby Clinics, while 9% had used the TeleHealth Ontario telephone information line.

**Table 16**  
**Mothers' Reported Sources of Parenting and Child Health Information,**  
**Region of Peel, 2002**

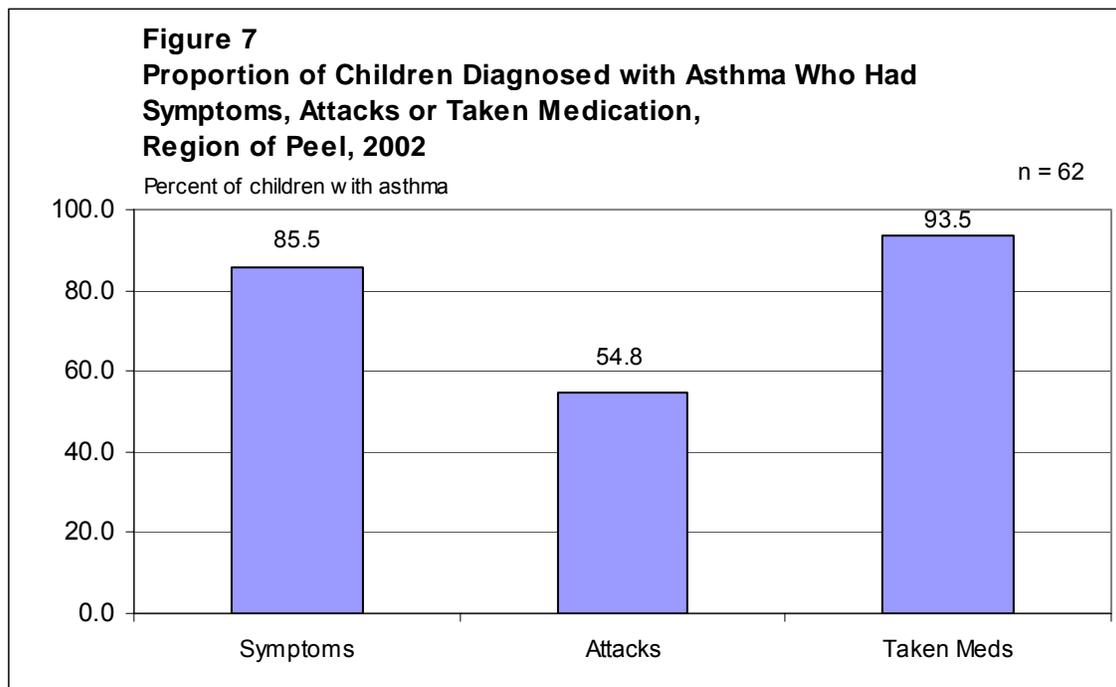
Sources of Parenting and Child Health Information	Per Cent
Friends, family	50.8%
Books, Library	43.3%
Doctor	42.9%
Magazines, pamphlets, other printed	39.5%
TeleHealth Ontario telephone line	8.9%
Internet	7.4%
Hospital	5.6%
<b>Health Department information</b>	<b>5.1%</b>
<b>Health Department "Health Line Peel"</b>	<b>3.3%</b>
Television	3.2%
Community centres (parent-child, drop-in)	3.0%
Newspapers	2.7%
Professional training, experience	2.3%
<b>Health Department nurses, visitors, other</b>	<b>1.6%</b>
Prenatal programs (not specified)	1.3%
Pharmacy	1.3%
Support groups (mother, teen, parent)	1.3%
Work, co-workers or relates to job	0.7%
Other Health Lines (SickKids, MotherRisk)	0.7%
Other	2.3%

Note: Percentages do not sum to 100% due to multiple response options.

**Asthma**

Asthma is a chronic respiratory illness, affecting people of all ages, but is more prevalent among children and adolescents. When bronchial tubes become inflamed and swollen, the flow of air to the lungs becomes blocked, resulting in wheezing, coughing, tightness of the chest, shortness of breath and an increased production of mucus. Symptoms can range from mild to life-threatening.

In this survey, mothers were asked if their youngest child had asthma that had been diagnosed by a health professional. Only four per cent of mothers said that their child had asthma. However of these, 86% had had symptoms within the past year, about half (55%) had had an asthma attack, and nearly all (94%) had taken prescription medicine for their symptoms.



Responses to the prevalence of asthma question did not vary widely based on municipality of residence, age of the mother, marital status, education level, income level or country of birth. Similarly, no significant differences were observed in the use of prescribed medications for asthma based on these demographic characteristics.

Return to school has been postulated as one explanation for a summer trough and fall peak seen in seasonal patterns of asthma hospitalizations among children aged 10 and younger.<sup>10</sup> However, findings from the present study did not show any differences in the proportion of children diagnosed with asthma

when comparing whether these children were cared for in daycares and nursery schools (49% with asthma) versus the home (51% with asthma).

Prevalence rates of asthma among Canadian children aged 5 to 19 have been reported to be as high as 13%.<sup>11</sup> However, this proportion is based on data that exclude children less than five years of age. While comparisons are not available from other jurisdictions, the fact that asthma is the leading cause of hospitalization among one to nine year-olds in Peel<sup>3</sup> suggests that asthma is a common condition.

### **Car Seat Safety**

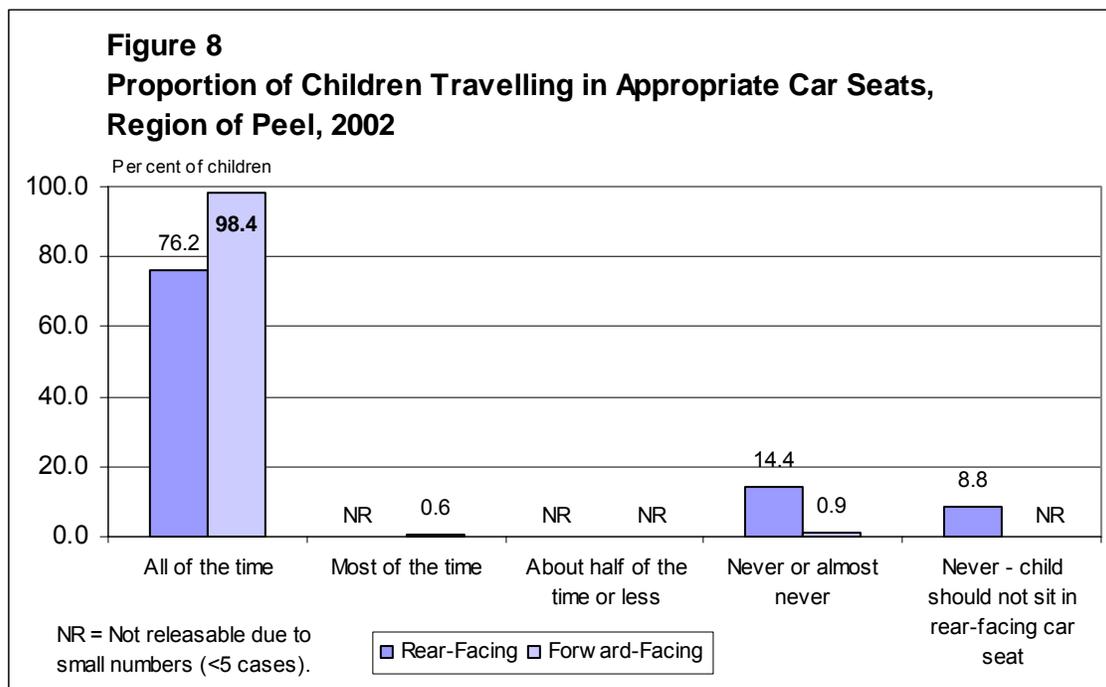
Correctly used child restraints can prevent about 70% of motor vehicle collision-related injuries and deaths.<sup>12</sup> During 2002 in Canada, less than 20% of all car seats checked were correctly installed, meaning that four out of every five children were not properly restrained in their car seats.<sup>12</sup> Common car seat installation mistakes include placing rear-facing infant carriers in a forward-facing position, improper use of the tether strap, failure to use locking clips on seat belts and improper tightening of seat belts.<sup>13</sup> In Ontario, the penalty for not ensuring that a child is properly secured in a vehicle is \$110.00 and two demerit points against the driver's licence.<sup>14,15</sup>

Requirements for car seats or restraints vary depending on the weight and height of the child.<sup>12</sup> Rear-facing infant seats should be used from birth until the child weighs 10 kilograms (22 pounds); these should never be placed in a seat equipped with an air bag. Forward-facing child seats are intended to be used when the child weighs 10 -18 kilograms (22 - 40 pounds) and can independently pull to a standing position. These seats must be anchored to the vehicle frame using a tether strap. Booster seats are used for children weighing 18 kilograms (40 pounds) or more. The purpose of these seats is to raise the sitting height of the child to make the adult seat belt assembly (lap and shoulder harness) fit properly. Seat belts may be used when the child reaches 27 kilograms (60 pounds), although some booster seats can accommodate children weighing up to 100 pounds.<sup>16</sup> The lap belt should be worn low on the hips, while the shoulder belt should be worn over the shoulder and across the chest, not behind the back or under the arm, as this could cause serious injury or death.<sup>16</sup>

Mothers in the survey were asked their children's weight and age in order to determine whether or not rear- and forward-facing car seats were being used properly. A total of 1459 mothers provided sufficient information for this analysis.

Out of the 319 mothers whose children were aged less than one and weighed less than 22 pounds, 76% said that their child always travelled restrained in a rear-facing car seat. Some misunderstanding about the use of these seats was demonstrated, as 9% of mothers believed that the child should never be in a rear-facing car seat (Figure 8). No differences were found among the demographic variables examined.

Out of the 901 mothers whose children were aged one or older and weighed 22 pounds or more, 98% said that their child always travelled restrained in a forward-facing car seat (Figure 8). These results did not vary by any of the demographic variables examined.



Among all children for whom age and weight were provided (n=1459), 78% were restrained in car seats appropriate to their age and weight. One limitation to the survey design was that it was conducted over the telephone rather than in person, thus observations of whether the child’s car seat was installed correctly and used appropriately could not be obtained.

The back seat of the vehicle is the safest place in which children can travel.<sup>16</sup> Transport Canada recommends that children aged 12 and younger be properly restrained in the back seat, especially if there is a front passenger air bag in the vehicle.<sup>12</sup> Nearly all mothers (99%) reported that their children always travelled in the back seat of the vehicle, and there were no differences amongst demographic groups for this question.

**Child Care**

Many parents of young children make use of different types of child care.<sup>1</sup> Factors that can influence whether or not parents use child care include the age and employment status of the mother, and the composition of the family. Children of mothers who work and children of single mothers are more likely to be in child care compared to children of mothers who do not work or mothers who are married.<sup>17</sup>

In the present survey, mothers were asked if they currently made use of child care such as day-care, babysitting, care by a relative or other caregiver, and if so, for how many hours each week. Almost half (49%) of all mothers reported that they used some form of child care. Table 17 shows the percentage of mothers using child care by various demographic characteristics.

**Table 17  
Child Care Use, By Selected Demographic Characteristics of the Mother,  
Region of Peel, 2002**

Selected Demographic Characteristics of the Mother		Per Cent Using Child Care
Overall		49.2%
Employment Status	Employed	86.4%
	Not employed	13.4%
Marital Status	Separated	78.3%
	Single	64.6%
	Married	48.1%
	Common law	45.9%
Place of Birth / Immigrant Status	Canadian-born	53.3%
	Foreign-born: New Immigrant (0-5 yrs)	30.7%
	Foreign-born: Immigrant (6+ yrs)	47.1%
Education	High school or less	40.4%
	Some college or university	49.3%
	Completed college or university	52.0%
Household Income	< \$40,000	42.9%
	\$40,000 to \$69,999	39.2%
	> \$70,000	58.4%

Eighty-six per cent of mothers using child care were employed compared to 13% who were not employed. Mothers who were single (65%) or separated (78%) were more likely to use child care than mothers who were married (48%) or living

in common-law relationships (46%). Those mothers who were new immigrants (31%) and those in the lowest education group (40%) were not as likely to report use of child care. Mothers with household incomes in the highest category (58%) were more likely to use child care than mothers from the middle (39%) or lowest income categories (43%).

Of mothers reporting use of child care, 39% indicated that it took place in their own home, more often by a relative (32%) than a non-relative (7%) (Table 18). Care outside of the home was most often provided in another person’s home that was not a licensed day-care (21%).

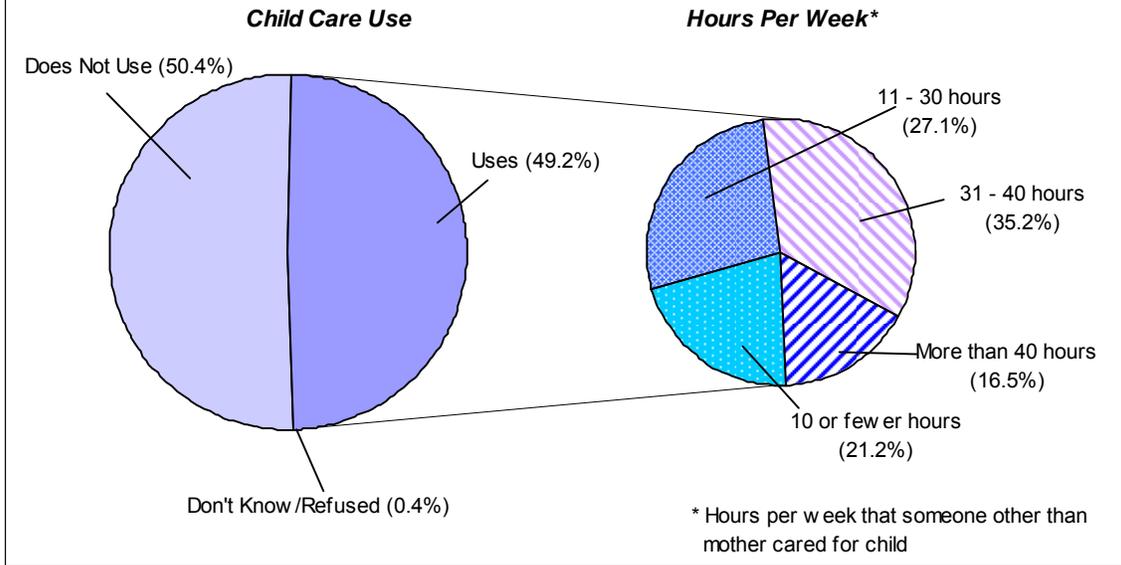
**Table 18**  
**Type of Child Care among Those Using Child Care,**  
**Region of Peel, 2002**

<b>Types of Child Care Used (n = 742)</b>	<b>Per Cent</b>
Care in own home - by relative	32.4%
Care in own home - by non-relative	6.8%
<b>Subtotal Care in own home</b>	<b>39.2%</b>
Care outside of the home - other's home - licensed	12.7%
Care outside of the home - other's home - not licensed	20.6%
Care outside of the home - day care	15.4%
Care outside of the home - nursery school	1.7%
Care outside of the home - other	10.4%
<b>Subtotal – Care outside of the home</b>	<b>60.8%</b>

The provision of child care by a relative was more often used by younger mothers, single mothers, new immigrants, and those of lower income groups (data not shown).

Among mothers using child care, more than half reported that their child was looked after by someone other than themselves for over 30 hours per week (Figure 23).

**Figure 9**  
**Child Care Use, by Hours per Week,**  
**Region of Peel, 2002**



### ***Dental Health Practices***

Oral health is an area which is often over-looked, but plays an important role in general well-being. In children, dental disease can cause abscesses in the mouth and undue pain, which can affect eating, sleeping and growth and development.<sup>18</sup> While oral diseases are seldom life-threatening, there is increasing evidence that some oral conditions such as gum infections can be associated with systemic diseases like diabetes, heart disease and stroke.<sup>18</sup>

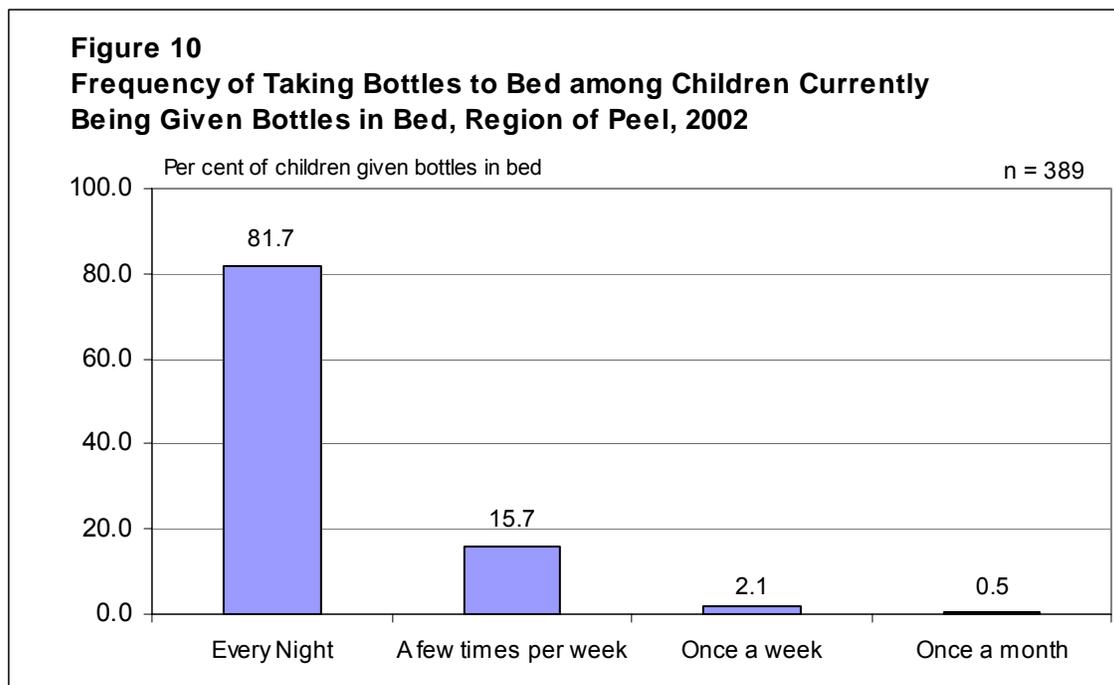
To date, there have been no dental health assessments of the pre-school aged child population in Peel. The present survey asked mothers about a variety of dental health behaviours, such as: whether their children take bottles to bed and if so, what are the contents; how often they brush their children's teeth or provide supervision for this activity; and whether their children had ever been taken to see a dentist.

The Canadian Dental Association (CDA) recommends that babies and young children not be given bottles in bed; if bottles must be given, the CDA suggests using plain water.<sup>19</sup> This is because formula, cow's milk, breast milk and fruit juice all contain sugars. Prolonged exposure of the teeth to these sugars can increase the risk of dental caries.<sup>20</sup>

In the present study, 32% of mothers said that their children had taken a drink in a bottle to bed at some point in their lives. Mothers from Caledon were less likely to report that their children had taken a bottle to bed (19%), compared to mothers from either Mississauga (32%) or Brampton (34%). The proportion of mothers reporting that their children had ever taken a bottle to bed decreased with increasing age of the mother, increasing levels of education and increasing levels of household income. Single mothers and mothers who were new immigrants were more likely to report that their children had taken a bottle to bed.

Among mothers who said that their children had taken a bottle to bed, 81% reported that this practice still continued. When asked about the frequency of their children taking a bottle to bed, 82% of these mothers said bottles were taken to bed every night (Figure 10). The most commonly reported contents of the bottles included milk (75%), water (14%), formula (12%) and juice (8%), followed by other contents such as cereal mixtures, diluted juice or breast milk.

Among those mothers who had already discontinued the practice of allowing their child to take a bottle to bed, 61% reported that their child had stopped by the age of one year.

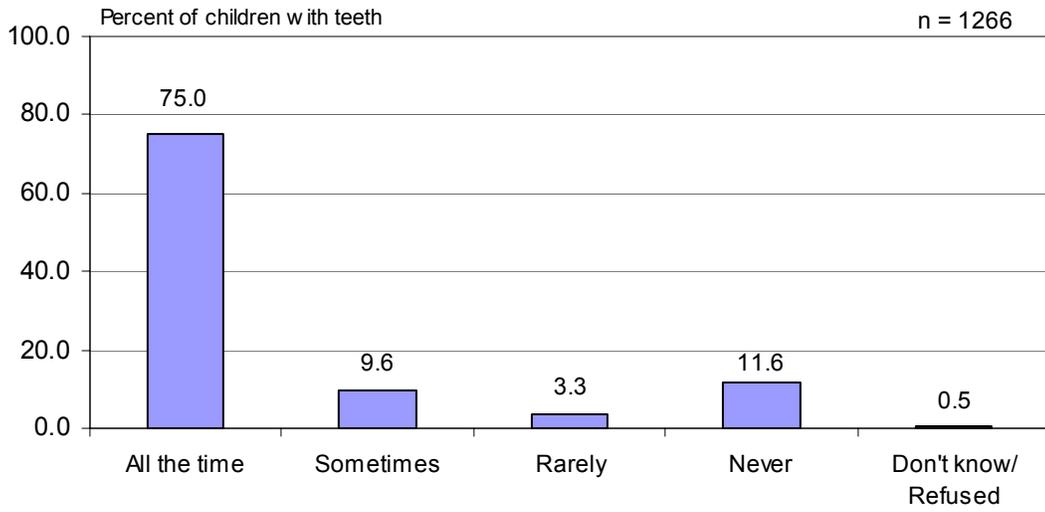


The majority of mothers (84%) reported that their children had teeth to brush. Among these, 75% of mothers said that they either brushed their children’s teeth or supervised when they were brushing their teeth all the time (Figure 11). However, 15% said they rarely or never brushed or supervised the brushing of their children’s teeth. One-half of all mothers indicated that their children swallowed or ate toothpaste when brushing their teeth.

The CDA recommends that children be taken for their first visit to the dentist within six months of the eruption of their first tooth, or around age one.<sup>21</sup> Among mothers whose children had teeth, 90% reported having a family dentist but only 9% had actually taken their youngest child for a visit to the dentist. The majority of those who had taken their child did not report any difficulties or problems in getting their child to the dentist (93%). Most of the dentist visits (75%) occurred in 2002; however, 22% occurred in the preceding year. While 37% of mothers indicated that they planned to take their child to the dentist within the next twelve months, 49% said they weren’t planning to take them for more than a year, and 13% did not know when they were next going to take their child to the dentist.

These dental health patterns were consistent across municipalities and demographic characteristics of the mother.

**Figure 11**  
**Frequency of Toothbrushing/Supervision of Toothbrushing for**  
**Children with Teeth, Region of Peel, 2002**



**Exposure to Second-hand Smoke**

Smoking is a leading cause of premature death and preventable illness, both among smokers and non-smokers.<sup>3,22</sup> Among young children, exposure to second-hand smoke has been associated with the development of pneumonia, bronchitis and other lung diseases, and is a suspected cause of Sudden Infant Death Syndrome (SIDS).<sup>23</sup>

According to the Ontario Health Survey 1996/97, 24% of Peel children aged 12 to 19 were exposed to second-hand smoke in the home; however, children younger than 12 were not included in that survey. The present study asked whether anyone in the household smoked regularly, and what the rules and understandings were with respect to where and when smoking was allowed.

Five per cent of mothers reported that someone in the household regularly smoked inside the home. Table 19 shows that the majority of mothers reported that smoking was not allowed in the home at all (94%), nor was it allowed in vehicles (94%). Although not shown, a total of 90% of mothers reported that smoking was not allowed in their homes or vehicles. This suggests that approximately 10% of pre-school aged children are exposed to some level of second-hand smoke in either the home or vehicle.

**Table 19  
Reported Smoking Policies in Homes and Vehicles,  
Region of Peel, 2002**

Smoking Policies in Homes and Vehicles	Per Cent of Mothers
Smoking in the home is not allowed at all	93.7%
Smoking in the home is allowed some of the time	0.8%
Smoking in the home is allowed in certain areas	3.8%
Smoking in the home is allowed except if children are present	0.7%
Smokers do whatever they want when in the home	1.0%
Smoking in the vehicle is not allowed at all	94.4%
Smoking in the vehicle is allowed some of the time	1.7%
Smoking in the vehicle is allowed except if children are present	2.6%
Smokers do whatever they want when in the vehicle	0.8%

No differences were found with respect to municipality or demographics of the mother. The above findings are consistent with the responses of mothers that avoiding second-hand smoke during pregnancy was either one of the most important things to do (49%) or a very important thing to do (47%) (Figure 3).

**Family Meals**

According to the Vanier Institute of the Family, 45% of the Canadian labour force is made up of parents, thus nearly half of all employed people need to balance the demands of their jobs with the needs of their children.<sup>24</sup> With respect to perceived time stress, women indicate higher levels than men, and married women with children report the highest levels of time stress.<sup>24</sup>

In these days of busy schedules with both parents often working, it is difficult to find the time to eat even one family meal together per day. The benefits of family meal times include that: children are more likely to eat properly balanced meals; important attitudes and habits about eating are developed; useful nutritional information can be shared between adults and children; opportunities to bond with other family members are provided; and communication skills, both conversational and listening, can be improved.<sup>25</sup>

Mothers were asked how many days in the week the whole family ate together. Only 58% reported that the entire family ate together every day (Table 20).

**Table 20**  
**Frequency of Family Meals Eaten Together,**  
**Region of Peel, 2002**

Frequency of Family Meals Together	Per Cent
Every day	57.5%
5-6 days per week	15.0%
3-4 days per week	13.5%
1-2 days per week	11.2%
1-2 times per month	0.5%
Rarely or never	2.0%
Don't know	0.2%

Although not shown, new immigrant mothers more often reported eating together every day (80%) compared to mothers who were Canadian-born (56%) or mothers who had been immigrants to Canada for more than five years (55%).

Mothers were also asked about the frequency with which their children ate breakfast. The majority of mothers (94%) reported that their children ate breakfast every day. Single mothers and mothers living in common-law relationships reported in slightly lower proportions that their children ate breakfast each day (88% and 89%, respectively), compared to married mothers (95%).

**Food Insecurity**

“Food insecurity” is a term used to define hunger in developed countries.<sup>26</sup> It is the inability to acquire or consume an adequate quality or quantity of food in a socially acceptable way, or the uncertainty that one will be able to do so.

According to data from the National Population Health Survey, 10% of Canadians, or about 3 million people, were living in food-insecure households in 1998/99.<sup>27</sup> Households having low incomes or those depending on social assistance, those led by female lone-parents or those living in rental accommodation had a higher likelihood of experiencing food insecurity. This condition was found to be associated with poor health, multiple chronic illnesses, obesity, distress and depression.

Mothers were asked whether, in the past 12 months, they or someone in their household: worried that there would not be enough food for the family to eat; did not eat the desired quality or variety of foods; or did not have enough food for the family to eat, because of a lack of money. Five per cent of respondents indicated that they worried about insufficient quantity of food. Nine per cent said that they or someone in the household did not eat the quality or variety of foods they wanted to, and 4% said that someone in fact did not have enough food to eat because of a lack of money at some point in the past 12 months.

**Table 21**  
**Food Insecurity by Selected Demographic Characteristics of the Mother, Region of Peel, 2002**

Selected Demographic Characteristics of the Mother		...worry there would not be enough food because of a lack of money?	...not eat the quality or variety of food because of a lack of money?	...not have enough food for family to eat because of a lack of money?
Overall		5.1%	8.9%	3.5%
Mother's Age	15 to 19 years	23.5%	29.4%	23.5%
	20 years or more	4.8%	8.6%	3.2%
Marital Status	Separated	31.8%	40.9%	22.7%
	Single	14.6%	20.7%	14.6%
	Married	3.6%	6.9%	2.0%
Education	High school or less	10.1%	15.9%	7.4%
	Some college or university	2.9%	8.0%	3.6%
	Completed college or univ.	3.6%	6.7%	2.2%
Household Income	< \$40,000	13.2%	23.4%	8.8%
	\$40,000 - \$69,999	4.2%	11.4%	3.4%
	> \$70,000	1.0%	1.9%	0.6%

Note: Respondents were asked “In the past 12 months, did you or anyone else in your household...?”

Mothers who were single or separated, those with only high school education, and those in the lowest income category were more likely to report worrying about there not being enough food for their family because of a lack of money (Table 21). These groups were also more likely to report that they or someone in their household did not eat the variety or quality of food they wanted, or have enough food at some point in the preceding 12 months.

## ***Injuries***

“Injuries” are the effects on the body resulting from a transfer of energy which cannot be tolerated by the body. Forms of energy that cause injury include mechanical (such as the impact from falls), thermal (e.g. burns, hypothermia), chemical, electrical or those related to radiation.<sup>28</sup> “Accidents” are often considered to be events that are unexpected or unintentional, that happen by chance or without an apparent cause.<sup>29</sup> Many health professionals prefer not to use the term “accident” when referring to unintentional injuries, since it is often the case that these injuries could have been prevented through changes in behaviours, either on the part of the child or the caregiver.

There is consensus among experts that most injuries are predictable, preventable events having identifiable risk factors that can be reduced.<sup>30</sup> However, a 1996 Health Canada study on parental attitudes toward unintentional childhood injuries found that parents were less likely to hold the view that these injuries were preventable.<sup>31</sup> The majority of parents felt that injuries to children were only “fairly preventable” (42%) or “somewhat preventable” (32%), whereas 17% felt they were “very preventable” and only 2% said they were “completely preventable”.

In the present study, mothers were asked if their youngest child had, in the past 12 months, experienced an injury serious enough to require medical attention by a doctor, nurse or dentist. Injuries were characterized according to the type of injury, body part affected, place of occurrence and reason for the injury. Where the child had sustained more than one injury, details were collected only on the most serious injury as perceived by the mother.

Nine per cent of mothers indicated that their child had been injured in the past 12 months. Of these, 43% of the injuries were cuts, scrapes or bruises, 11% were broken or fractured bones, 9% were burns or scalds, 6% were dislocations, 6% were dental injuries, 5% were concussions, and 2% were sprains or strains (Table 22).

Of the body parts affected, 31% mentioned head or neck, 27% involved arms or hands, 20% involved face or scalp and 10% involved legs or feet (Table 23).

The majority of these injuries occurred either inside the child’s own home or apartment (66%) or just outside the home or apartment, including the yard or driveway, parking lot, or other shared areas related to the home such as apartment hallways or laundry rooms (13%). Injuries at playgrounds or parks represented only 1% of all injury locations; this was also the case for school or daycare settings.

**Table 22**  
**Type of Most Serious Injury among those Children with Injuries,**  
**Region of Peel, 2002**

Type of Injury (n = 128)	Per Cent
Cut, scrape or bruise	43.0%
Broken or fractured bone	10.9%
Burn or scald	9.4%
Dislocation	6.3%
Dental injury	5.5%
Concussion	4.7%
Sprain or strain	2.3%
Internal injury	0.8%
Other (mostly "head")	17.2%

**Table 23**  
**Location of Most Serious Injury among those Children with Injuries,**  
**Region of Peel, 2002**

Body Part Affected (n = 128)	Per Cent
Head or neck (excluding eyes, face or scalp)	31.3%
Arms or hands	26.6%
Face or scalp (excluding eyes)	20.3%
Legs or feet	10.2%
Eyes	4.7%
Shoulder	2.3%
Trunk (excluding back or spine; including chest or internal organs)	1.6%
Systemic	1.6%
Back or spine	0.0%
Hip	0.0%
Unknown	3.1%

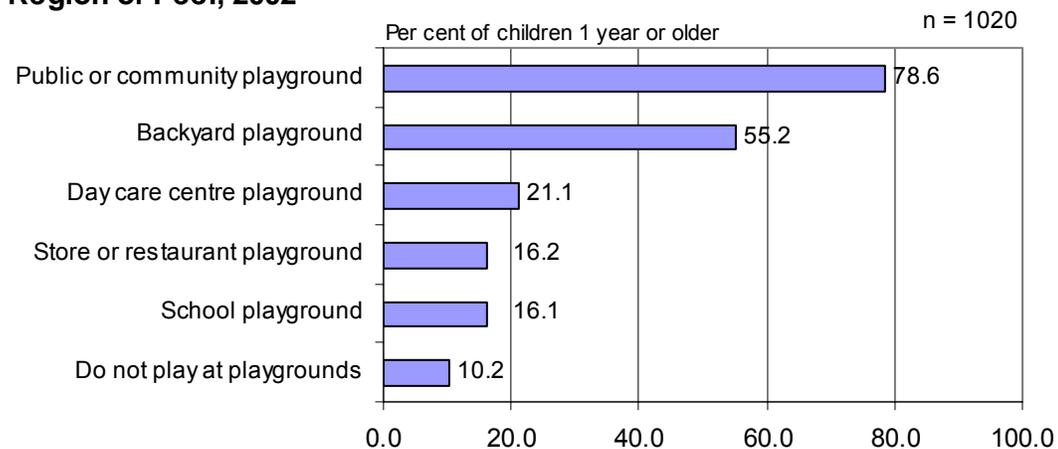
Responses about the nature of the accident revealed that 55% were the result of “falls (excluding bicycle or sports)”. An additional 9% of injuries that were counted in the “Other” category were related to falling from something (e.g. change table, stroller, shopping cart), jumping on the bed and falling, slipping and falling on a wet floor or tripping over objects left on the floor.

Analyses of the frequency of injuries by demographic variables did not reveal any trends with respect to age of the mother, marital status, education level, or immigrant status, as most numbers once broken down were too small to be reliable. Residents of Brampton reported a slightly lower proportion of injuries (6%) among their children compared to those from Mississauga (10%) or Caledon (8%).

This survey also asked mothers about their practices regarding use of playground equipment during the spring and summer and supervision of children at playground facilities. Approximately 30% of all mothers reported their youngest child did not play on playground equipment, and upon further examination, it was determined that 77% of these children were under one year of age, and thus likely too young to make use of these types of facilities. All children aged less than one year were subsequently removed from further analyses of playground and bicycle helmet use.

Ninety per cent of mothers with children aged one year or more named at least one type of playground at which their child spent time each week during the spring or summer. Most frequently mentioned were public or community playgrounds (79%) and backyard playgrounds (55%) (Figure 12).

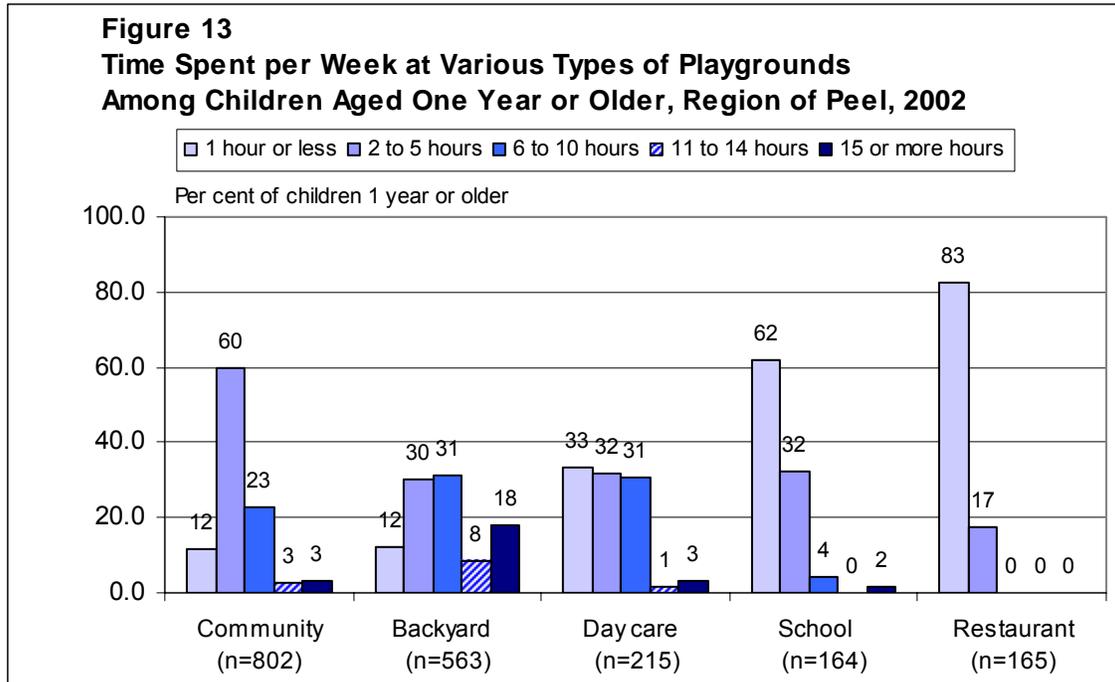
**Figure 12**  
**Use of Playground Equipment Among Children Aged One Year or Older, by Type of Playground, Region of Peel, 2002**



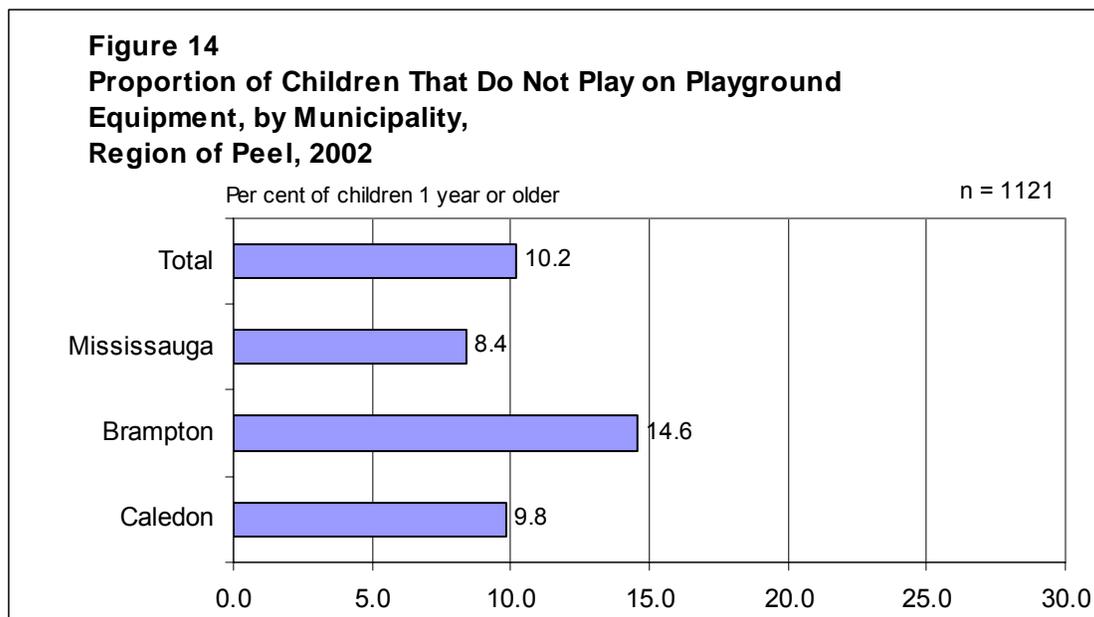
Note: Percentages do not sum to 100% due to multiple response options.

Longer amounts of time were spent each week during the spring or summer at backyard playgrounds and public or community facilities, followed by those at daycares and schools. Sixty per cent of mothers reported their youngest child aged one or more spending 2 to 5 hours per week at a community playground,

with an additional 23% saying their child spent 6 to 10 hours per week at such a facility (Figure 13). Thirty per cent of mothers reported their child spending 2 to 5 hours on backyard playground equipment, with 31% saying their child spent 6 to 10 hours each week and a further 26% saying their child spent 11 or more hours each week playing on backyard equipment.



While overall, 10% of mothers reported that their youngest child did not play on playground equipment, this proportion varied by municipality of the mother, from 8% in Mississauga and 10% in Caledon, to 15% in Brampton (Figure 14).



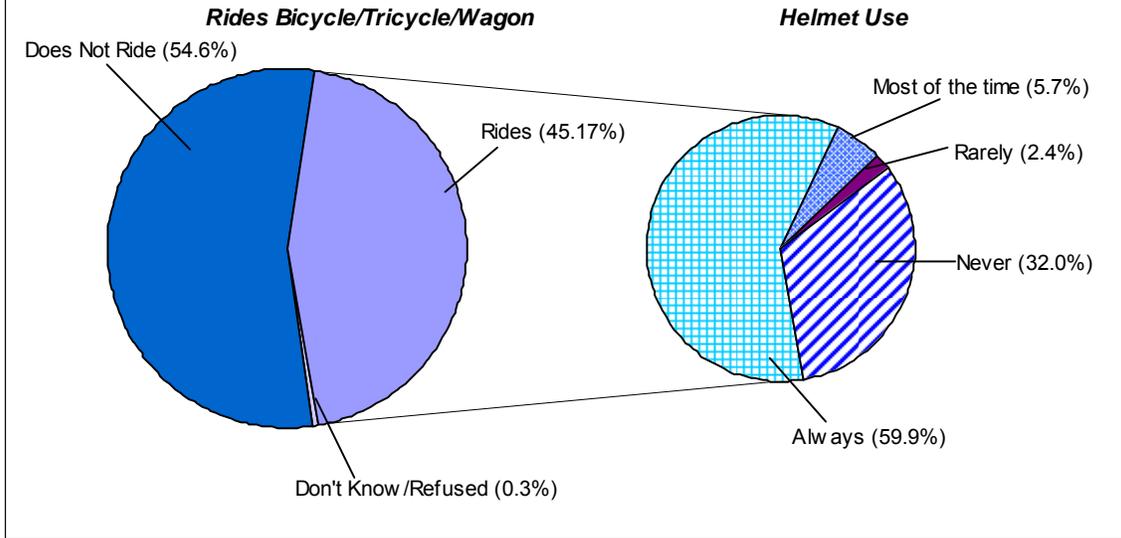
Although not shown here, there was a slight trend of decreasing use of playground equipment by children with decreasing levels of income of the mother.

The vast majority (98%) of mothers reported accompanying their children to the playground, and of these, 82% reported that they stayed close enough to catch their child in case of a fall. Less than one per cent of mothers whose children used playground equipment indicated that their child had suffered a playground injury serious enough to require a medical visit to the doctor's office, emergency room or clinic.

In Ontario, the law requires that children and youth under the age of 18 wear an approved bicycle helmet when traveling on any public road.<sup>32</sup> Research has shown that wearing helmets is effective in preventing head injuries. According to the Hospital for Sick Children, helmet use can reduce the risk of brain injury by up to 88%.<sup>33</sup> It has also been found that provinces having helmet laws in place have experienced a 45% reduction in the number of head injuries, based on data from 9650 Canadian children aged 5-19 years of age, hospitalized because of a bicycle-related injury.<sup>34</sup>

In the present study, 55% of mothers indicated that their youngest child aged one year or older was not a rider or passenger of a bicycle, tricycle or wagon. Among those who were, 60% of children always wore a helmet, 6% wore a helmet most of the time, 2% rarely wore a helmet and 32% never wore a helmet during these activities (Figure 15).

**Figure 15**  
**Proportion of Children Aged One Year or Older that Wear Bicycle Helmets when Riding on Bicycles, Tricycles or in Wagons, Region of Peel, 2002**



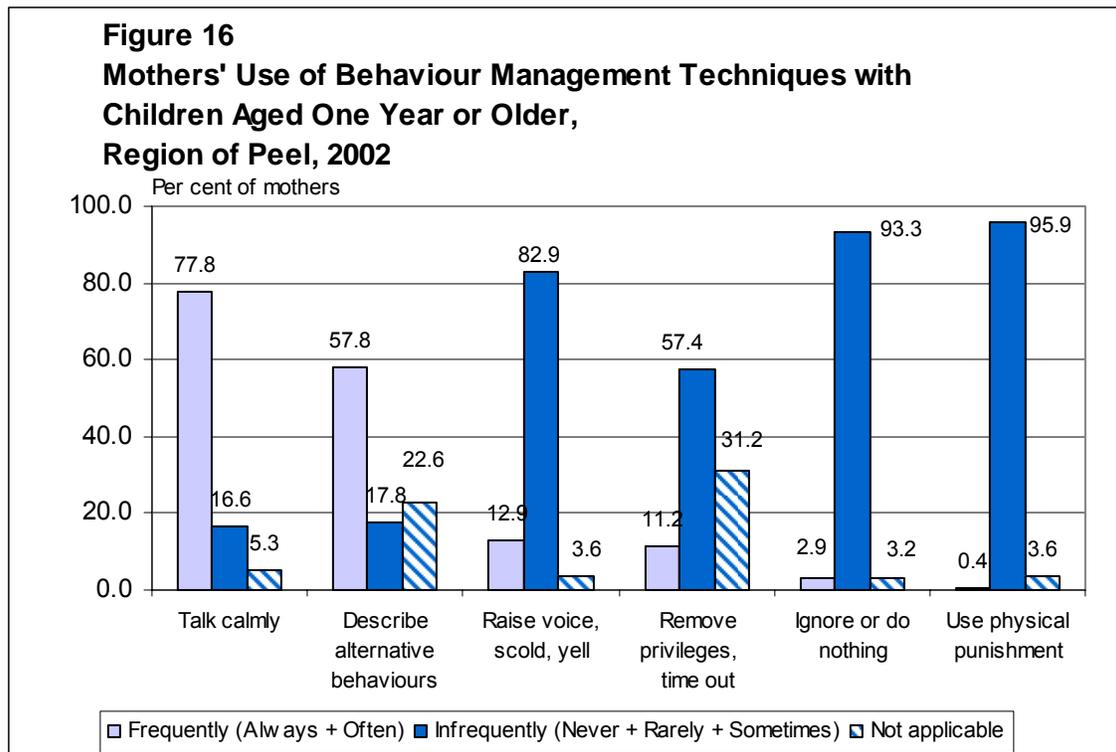
More riders aged two years old “always” wore helmets (65%) compared to riders aged one year old (56%). There is still room for improvement with regards to public education about helmet laws, as all riders of bicycles or tricycles in this age group should have been wearing helmets for their protection.

**Managing Children's Behaviour**

There are various alternatives available when attempting to teach children appropriate behaviours and the differences between “right” and “wrong”. Some choices include talking calmly, describing alternate ways of behaving that are acceptable, removing privileges or imposing “time-outs”.

When asked about the frequency of use of various approaches to managing children's behaviour, there was a notable proportion of mothers that said that discipline strategies were not applicable to their situation. Most of these responses were from mothers of children less than one year of age. Children of this age were removed from further analyses of managing behaviours.

The most frequently used strategies by mothers of children aged one year or more were talking calmly to their children (78%) or describing alternative behaviours (58%) (Figure 16). Fewer mothers reported frequently raising their voices (13%) or taking away privileges (11%). The majority of mothers reported infrequent use of physical punishment (96%) or ignoring their child after inappropriate behaviour (93%).



In general, there were no large differences in the frequency of responses among the various demographic groups examined.

Less than one per cent of all mothers surveyed thought that shaking an infant was either “safe”, “somewhat safe” or did not know whether it was safe to do, while the vast majority (99%) recognized it as being “not at all safe to do”. These results did not vary across demographic groups.

Thirty-four per cent of mothers found the challenge of balancing work and parenting to be “quite” or “very” stressful, 23% reported it as being “stressful” and 29% said it was “a little” stressful (Table 24). Only 11% of mothers thought that finding the balance between work and parenting was “not at all stressful”.

**Table 24**  
**Mothers’ Reported Level of Stress When Balancing Work and Parenting,**  
**Region of Peel, 2002**

Level of Stress	Per Cent
Very stressful	19.3%
Quite stressful	14.4%
Stressful	22.6%
A little stressful	28.6%
Not at all stressful	11.4%
Don’t know/Refused	3.7%

A higher proportion of mothers who completed college or university reported that they found balancing work and parenting to be quite or very stressful (36%) compared to mothers who reported high school as being their highest level of education attained (28%). Although one might have expected to find differences among groups by marital status, none were found. For example, similar proportions of mothers who were separated versus married found balancing work and parenting to be quite or very stressful (33% and 34%, respectively).

### ***Physical Activity Levels of Children***

Growing evidence suggests that Canada's children and youth are facing an activity and fitness crisis.<sup>35</sup> The combination of sedentary lifestyles, in which children prefer to watch television, play video or computer games and get rides to school or other venues, along with food choices that are high in content of fat and sugar, has resulted in increases in the proportion of overweight and obese children.<sup>36,37</sup>

This is a concern because patterns of behaviour which can lead to an unhealthy adult weight often begin in childhood, and obesity in adulthood is a risk factor for heart disease, high blood pressure, diabetes, gall bladder disease and some types of cancer.<sup>22</sup> Lack of physical activity can also result in the loss of its protective benefit in reducing the risk of osteoporosis and limiting the disabling effects of heart disease and stroke.<sup>35</sup>

The benefits of physical activity to children include that it: builds stronger bones and muscles; improves cardiovascular fitness; helps maintain a healthy weight; increases energy levels; improves attention span; reduces stress and feelings of depression or anxiety; improves self-esteem; improves memory, problem-solving and decision-making; decreases the likelihood of involvement with smoking, drugs or crime; reduces violent tendencies; leads to more cooperative relationships; and improves attitudes, discipline, behaviour and creativity.<sup>38</sup>

While most of the research on activity levels and childhood obesity has been conducted on children aged five or older, these behaviours likely start at an even earlier age as a function of parental practices. With respect to young children, it is up to the parents and caregivers to ensure that children are provided with healthy food choices, shown healthy eating behaviours and given opportunities to be physically active.

In the current study, mothers were asked if there were any barriers to their youngest child being physically active, and if so, to identify these barriers. Nineteen per cent of mothers said that there were barriers; of these, 57% identified time, 39% identified lack of money and 15% identified cost of the activity as barriers to participation (Table 25).

Although not shown, responses were found to vary depending on the marital status and income level of the mother. Mothers who were single, separated or divorced were more likely to report that lack of money was a barrier to participation, whereas mothers who were married or in common-law relationships were more likely to report that time was a barrier to their child participating in physical activity. Mothers with lower incomes were more likely to report that lack of money was a barrier to participation, whereas mothers who had higher

incomes were more likely to report that time was a barrier to their child participating in physical activity.

**Table 25**  
**Barriers to Physical Activity of Children\*,**  
**Region of Peel, 2002**

<b>Barrier to Physical Activity* (n = 282)</b>	<b>Per Cent</b>
Time	57.4%
Lack of Money	38.7%
Cost	14.5%
Child has Physical Disability	2.5%
Convenience	0.7%
Parent has Physical Activity Limitation	0.4%
Other	2.8%

\* Based on respondents who reported barriers to physical activity among their children. Percentages do not sum to 100% due to multiple response options.

Mothers were asked about the frequency with which they or another adult went for a walk, went to the park or played games with their youngest child. Sixty-three per cent of mothers said that they or another adult went for a walk with their child daily or several times each day and an additional 32% went for a walk with their child a few times per week.

No trends were found when examining these results by age, income, education, marital status or municipality of the mother. However, Canadian-born mothers were more likely to report that they or another adult took their child for walks daily or more (68%) compared to foreign-born mothers (55%).

Only 24% of mothers said they or another adult took their child to the park on at least a daily basis; however, nearly half of all mothers (48%) said their child went to the park a few times per week. There were no differences between demographic groups on this question.

The most frequently reported activity was playing games: 94% of mothers responded that they or another adult usually played games with their child daily or several times each day. Again, there were no differences between demographic groups for this question.

Mothers were also asked their opinion as to whether they thought their youngest child was more, less or equally as active as other children of the same age and

sex. Just over 60% of mothers thought their child was more active than his or her peers (Table 26).

**Table 26**  
**Mothers' Opinion of Physical Activity Levels of their Children**  
**Compared to Peers of the Same Age and Sex,**  
**Region of Peel, 2002**

<b>Opinion of Child's Activity Level</b>	<b>Per Cent</b>
Much more active	35.8%
Moderately more active	25.1%
Equally active	35.2%
Moderately less active	1.3%
Much less active	0.5%

One limitation of this survey is that it did not provide the ability to determine children's actual levels of activity. It is possible that mothers' answers to the above question were biased towards the more socially acceptable response of being more active, although there is no means of confirming this.

**Reading to Children**

Reading is a very important parent-child activity that is associated with improved readiness for school among young children.<sup>39</sup> It provides an opportunity for parents to nurture their children, as well as exposes children to language and vocabulary, both of which can have a positive effect on behaviour and other skills.<sup>1</sup>

Mothers in the survey were asked if they or another adult read to their children or showed them pictures or wordless baby books, and if so, how often and at what age this activity was started. Overall, 95% cent of mothers responded that their children were read to, with approximately 75% of these being read to daily or several times per day. By comparison, mothers who were new immigrants within the last five years were less likely to report reading to their children (84%), and only 63% reported that their children were read to daily or several times per day.

Mothers in the highest income group were more likely to report reading at least daily compared to mothers in the lowest income group: 80% of mothers with household incomes of at least \$70,000 read to their child at least once per day compared to 69% of mothers with incomes under \$40,000. There were no other large differences between demographic groups.

Table 27 shows the age in months at which reading to the child was reported to begin. By the age of three months, about 50% of mothers said they or another adult had started to read to their child. This proportion increased to 75% by six months of age. Most mothers (87%) reported that their child was being read to before the child reached one year of age.

**Table 27**  
**Age at which Reading to Children\* Began,**  
**Region of Peel, 2002**

<b>Age of Child* (in Months)</b>	<b>Per Cent</b>	<b>Cumulative Per Cent</b>
0 to 3 months	49.6%	49.6%
4 to 6 months	24.9%	74.6%
7 to 9 months	9.3%	83.8%
10 to 11 months	3.4%	87.2%
12 or more months	9.8%	97.0%
Don't know/No response	3.0%	100.0%

\* Based on respondents who reported reading to their children.

Although the trend was not consistent across all age groups, more mothers aged 20 to 24 and 25 to 29 years read to their children at an early age compared to older mothers. Only 30% of mothers aged 40 to 44 reported starting to read to their children at zero to three months, compared to 63% of mothers aged 20 to 24 and 53% of mothers aged 25 to 29 years. Regionally, 58% of Caledon mothers and 55% of those from Brampton started reading to their children at zero to three months compared to 49% of mothers from Mississauga. New immigrant mothers were not as likely to start to read to their children at a very young age, as only 31% reported reading to them at three months or less; meanwhile, 57% of Canadian-born mothers read to their children at this age. Higher proportions of mothers reported that reading started at three months or less as income levels increased.

Mothers were also asked how often their children looked at books or other reading materials on their own at home. Two-thirds of mothers reported that their children looked at books daily or a few times each day, while another 12% reported this activity occurring a few times per week. However, about 17% of mothers said their children never or rarely looked at books on their own; these children were found to be of varying ages, not just those who were very young.

**Sun Safety**

The risk of skin cancer, one of the most frequent of all types of cancer, increases with over-exposure to ultraviolet (UV) rays from the sun.<sup>40</sup> Children are even more vulnerable than adults because their skin is thinner and more sensitive, thus the UV rays can penetrate more easily. In infants, even a short exposure to summer sun (less than 15 minutes) between 11:00 a.m. and 4:00 p.m. might result in serious burns.<sup>40</sup> Protecting young children from the sun may greatly reduce their risk of developing skin cancer later on in life.<sup>41</sup>

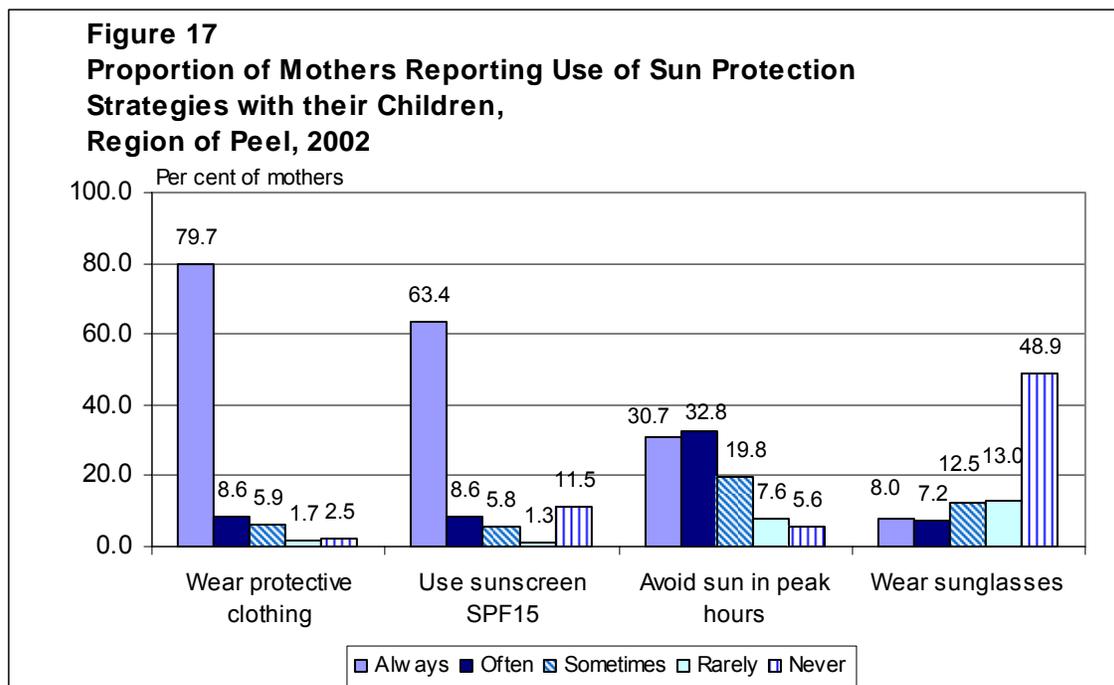
Several diseases of the eye can also result from exposure to UV radiation, and the damaging effects are cumulative, building up steadily over a person's life.<sup>42</sup> For this reason, it is recommended that people of all ages wear sunglasses that block out harmful UV rays.

Mothers in the survey were asked whether any part of their children's bodies had been sunburned and practices associated with protecting their children from exposure to the sun. Only 5% of mothers reported that their children had been sunburned at some point in their lives. These results were consistent across all demographic groups examined.

The most commonly used strategy to protect children from the sun was the wearing of protective clothing; 88% of mothers reported their children wore protective clothing "always" or "often" (Figure 17). The use of sunscreen with a sun protection factor (SPF) of 15 or higher was the second most frequently mentioned strategy, with 72% of mothers using sunscreen on their children either "always" or "often".

Avoiding sun exposure between the hours of 11:00 a.m. and 4:00 p.m. was a strategy "always" or "often" employed by 64% of mothers. Nearly half (49%) of all mothers said their children never wore sunglasses with UV protection when in the sun.

Some of these results were found to vary by demographic group. For example, those mothers who were foreign-born and especially those who were new immigrants were not as likely to have their children always wear protective clothing, sunscreen or sunglasses; however, they were more likely to have their children avoid sun exposure during peak hours (Table 28). Although not shown, mothers from lower income groups were also less likely to have their children always wear protective clothing or sunscreen compared to mothers with higher incomes.



**Table 28**  
**Proportion of Mothers Reporting Use of Sun Protection Strategies with their Children, by Selected Demographic Characteristics, Region of Peel, 2002**

Selected Demographic Characteristics	Always Wears Protective Clothing	Always Wears Sunscreen SPF15	Always Avoids Sun 11am-4pm	Always Wears Sunglasses
Overall	79.7%	63.4%	30.7%	8.0%
Canadian-born	84.4%	73.5%	25.2%	9.9%
Foreign-born	72.7%	48.0%	38.9%	5.2%
New Immigrant	63.0%	36.2%	44.1%	3.1%

