

# Mental Health

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## HIGHLIGHTS

- In the 2003 Canadian Community Health Survey, two-thirds of seniors in Peel and Ontario rated their mental health as excellent or very good (65%).
- In 2001, the prevalence of depression was estimated to be approximately 5% among Canadian seniors and 6% among Ontario seniors. The rates of depression were higher among females (7%) compared to males (4%).
- Hospitalization rates for Alzheimer's disease increased between 1995 and 2002 among seniors in both Peel and Ontario. In 2003, hospitalization rates for Alzheimer's disease in Peel increased by age group for males and peaked for females 75 to 84 years of age.
- There was a general increase in the mortality rates for dementia and Alzheimer's disease among seniors in both Peel and Ontario from 1986 to 2001. In 2001, the mortality rates for dementia and Alzheimer's disease increased by age group in Peel.
- Very few seniors contemplated suicide. The mortality rate for suicide among seniors decreased in both Peel and Ontario between 1986 and 2001.



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## INTRODUCTION

Mental health, which refers to an individual's sense of well-being, control over their life and ability to interact positively with others, has been shown to affect physical health and the utilization of health-care services. Research also indicates that promoting and maintaining mental health among seniors has a positive impact on their overall health and well-being and significantly affects their quality of life. Rather than only treating poor mental health, promoting good mental health is increasingly recognized as a priority in policy development and caring for seniors.<sup>20</sup>

Seniors' mental health issues also affect family members, many of whom experience caregiver stress, sometimes resulting in serious physical and mental health problems of their own. In Canada, an estimated 2.1 million people provide family or informal care to seniors with long-term health problems.<sup>21</sup>

Among Canadian seniors living in the community, approximately 10 to 15% exhibit depressive symptoms. For seniors living in long-term care institutions, the prevalence rate is estimated to be as high as 50%.<sup>20</sup>

This chapter of the report focuses on issues for seniors related to mental health such as general mental health, mood disorders (e.g., depression and bipolar disorder), dementia and Alzheimer's disease, schizophrenia, and suicide.

## GENERAL MENTAL HEALTH

In the 2003 Canadian Community Health Survey, two-thirds of seniors in Peel and Ontario rated their mental health as excellent or very good (65%).<sup>12</sup>

In Peel, men were more likely to rate their mental health as excellent or very good (68%) than women (62%). Seniors aged 65 to 74 years old were more likely to rate their mental health as excellent or very good (66%) compared to seniors aged 75 years and older (63%).

## MOOD DISORDERS

Mood disorders include a variety of mental illnesses such as depression and bipolar disorder.<sup>22</sup> Depression is a mental state characterized by feelings of sadness, despair and discouragement. Depression ranges from normal feelings of “the blues” to major depression.<sup>23</sup> Some of the symptoms of depression include changes in behaviour (e.g., loss of interest and pleasure in activities that previously provided some pleasure), emotional changes (e.g., anxiety or acute sadness), mental changes (e.g., suicidal thoughts) and physical changes (e.g., sleep disorders, chronic fatigue or lack of energy).

In 2001, the prevalence of depression in Canada was estimated to be approximately 5% among seniors.<sup>24</sup> The rates of depression were higher among Canadian females (7%) compared to males (4%). The prevalence of depression among Ontario seniors in 2001 (6%) was slightly higher than Canada (5%). Data for Peel seniors were not releasable due to small numbers.

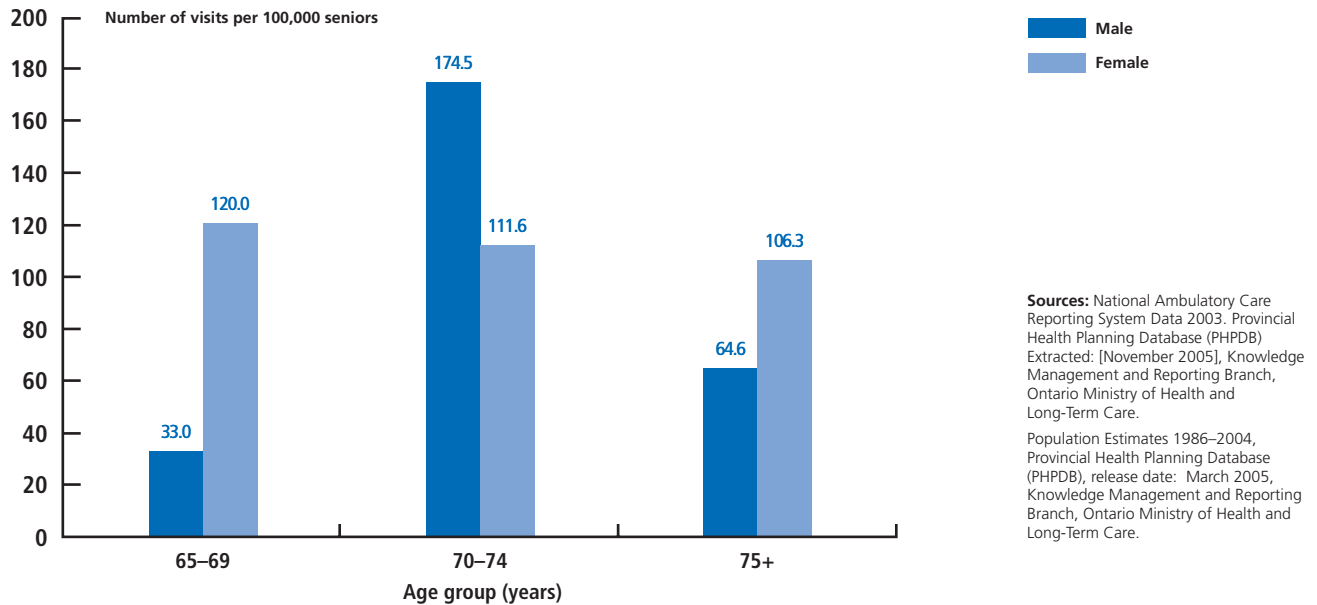
Morbidity and mortality data for depression and bipolar disorder are included in a category named “mood disorders” because the numbers are larger for this group of illnesses. People with these disorders may experience depressive episodes (feeling very “low”) or manic episodes (feeling very “high”), or both. Mood disorders are among the most common mental disorders – approximately one in 10 people experiences a mood disorder.<sup>22</sup>

### Emergency Department Visits for Mood Disorders

In 2003, there were 90 emergency department visits among Peel seniors for mood disorders.

The emergency department visit rates for mood disorders were highest for males aged 70 to 74 years and females aged 65 to 69 years (*see Figure 3.1*).

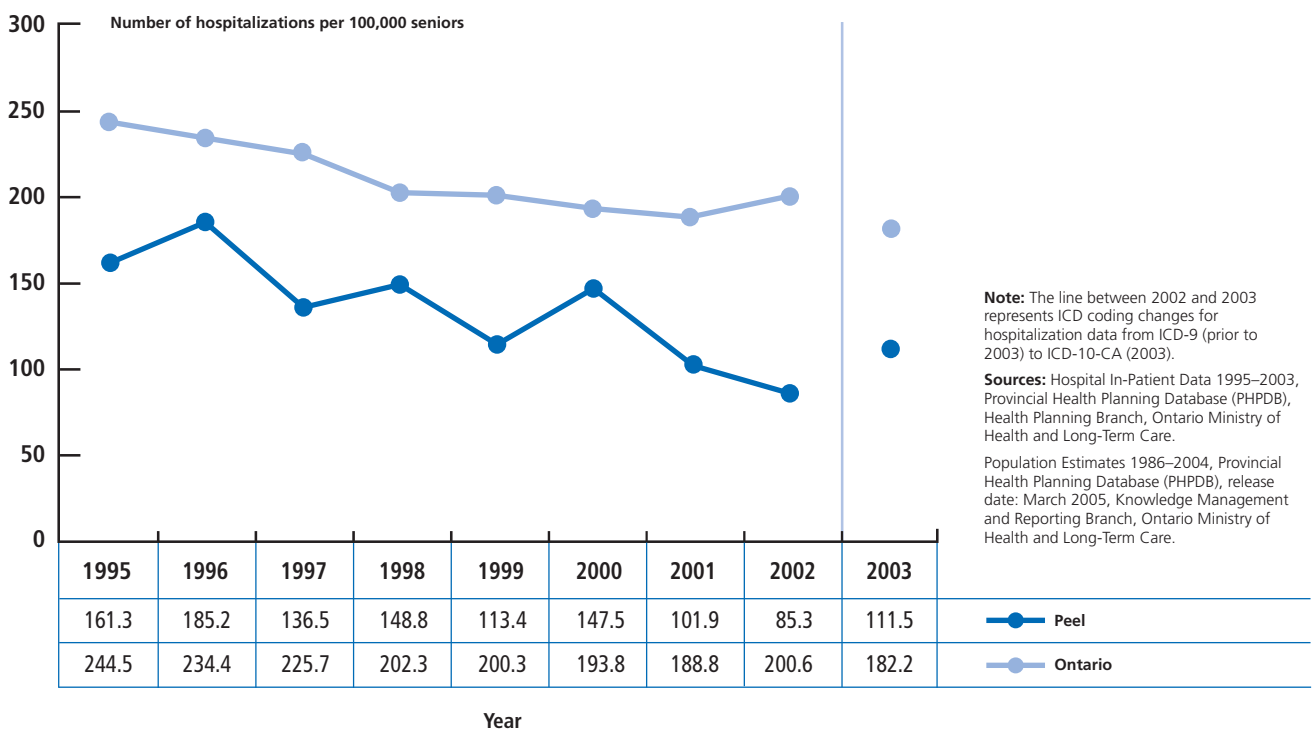
**Figure 3.1: Emergency Department Visits for Mood Disorders by Age Group and Sex, Region of Peel, 2003**



### Hospitalization for Mood Disorders

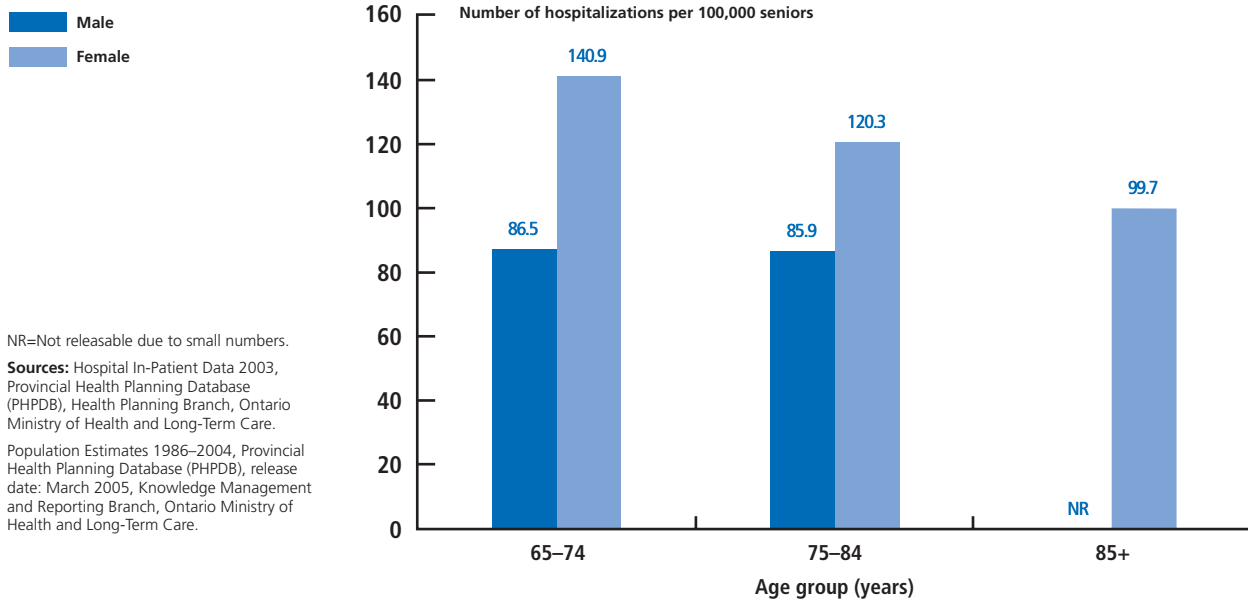
Hospitalization rates for mood disorders among seniors have decreased in both Peel and Ontario since 1995 (see Figure 3.2).

**Figure 3.2: Hospitalization for Mood Disorders by Year, Region of Peel and Ontario, 1995-2003**



In 2003, hospitalization rates for mood disorders decreased by age group among Peel females, while rates remained unchanged for males across both age groups available for comparison (see Figure 3.3). In 2003, seniors hospitalized for mood disorders stayed in hospital an average of 23.5 days (data not shown).

**Figure 3.3: Hospitalization for Mood Disorders by Age Group and Sex, Region of Peel, 2003**



### Mortality from Mood Disorders

There were 21 deaths from mood disorders among Peel seniors from 1986 to 2001. Trend data by year were not releasable due to the small number of deaths attributable to mood disorder each year.

### BIPOLAR DISORDER

Bipolar disorder is characterized by opposing moods which accompany the illness. People with bipolar disorder experience great highs (manic stage) and great lows (depressive stage). Bipolar illness often begins with a depression in adolescence or early adulthood, although the first manic episode may not occur until several years later. Bipolar disorder affects 1% of the population.<sup>25</sup>

### Hospitalization for Bipolar Disorder

Hospitalization data for bipolar disorder were available through ICD-10-CA starting in 2003. There were 22 hospital admissions for bipolar disorder among Peel seniors in 2003 (11 each for male and female).

## Mortality from Bipolar Disorder

There were no deaths from bipolar disorder among Peel seniors in 2001 and five deaths from bipolar disorder among Ontario seniors.

## DEMENTIA AND ALZHEIMER'S DISEASE

Dementia refers to a group of diseases characterized by a progressive and usually irreversible decline of mental functions. The symptoms are memory loss, disorientation, cognitive decline and inappropriate social behaviour. Although there are many types of dementia such as vascular dementia, alcohol dementia and Parkinson's disease, the most common type is Alzheimer's disease.

The prevalence of dementia among Canadian seniors in 1991 was 8%. Alzheimer's disease is the most common form of dementia; it accounts for 64% of all dementias.<sup>26</sup> Based on the assumption that prevalence estimates remain constant, it is estimated that in 2005 there would be 420,600 Canadian seniors who have Alzheimer's disease and related dementias (280,000 of whom have Alzheimer's disease).<sup>27</sup> Similarly in Ontario, the projected numbers of seniors with dementia and Alzheimer's in 2005 would be 157,850 and 104,240 respectively. While these calculations are only estimates, they indicate that with the increase in the size of the senior population, the number of seniors with Alzheimer's and other forms of dementia are expected to increase.<sup>27</sup>

In 1991, the prevalence of dementia in Canada increased with age group from 2% of 65- to 74-year-olds, to 11% of 75- to 84-year-olds and 35% of those aged 85 years and older.<sup>28</sup> The rates of dementia are higher for females than males across age groups.<sup>29</sup> The greater number of women with dementia is mainly due to the greater number of women in older age groups where the likelihood of dementia is higher.

In Canada, Alzheimer's disease is most common in seniors and its prevalence increases with age group from 1% among 65- to 74- year-olds to 7% among 74- to 84-year-olds and 26% among those aged 85 years and older. The causes of Alzheimer's are relatively unknown; however, known risk factors include age, genetics/family history, education, previous head injury, strokes/depression, mild cognitive impairment and smoking.<sup>30</sup> There is no way to stop its progression although several medications are available that can help with some symptoms. These medications can slow down the decline of memory, language and thinking abilities.

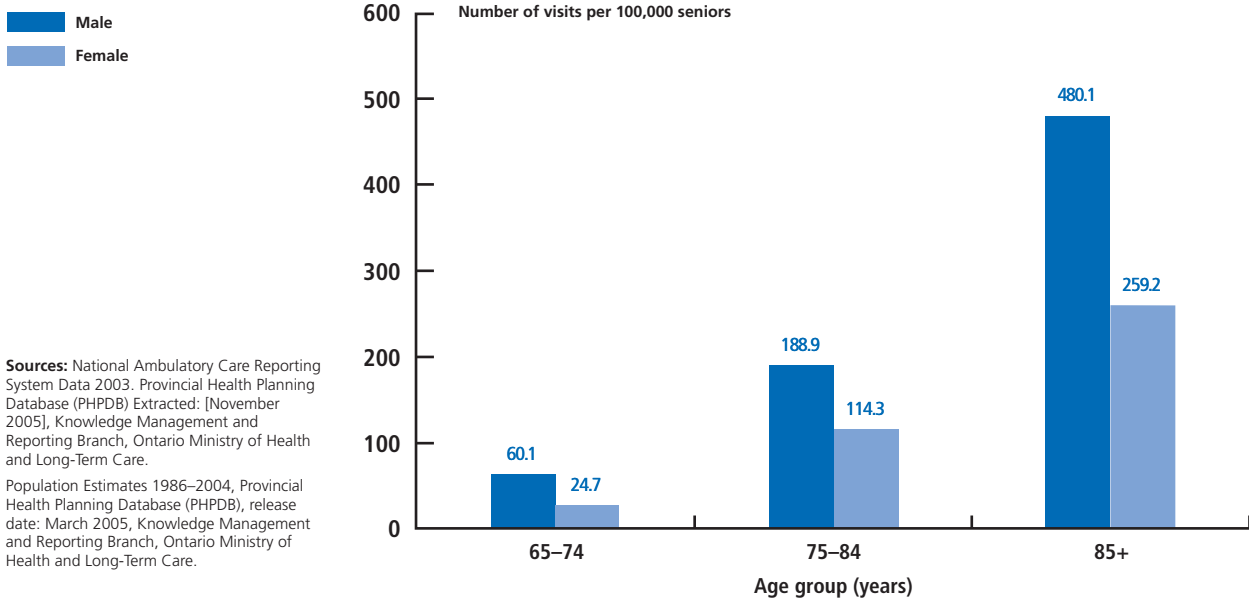
According to the 2003 Canadian Community Health Survey (CCHS), about 2% of Ontario's senior population reported that they had Alzheimer's or some other form of dementia. Alzheimer's and other dementia increased by age from 1% of 65- to 74-year-olds to 3% of seniors aged 75 years and older. Data for Peel were not releasable due to small numbers. The low proportion of reported dementia may be due to the data relying on self reports and failing to capture those seniors who are no longer living at home.

Although Alzheimer’s disease is the most common type of dementia, the following section on morbidity and mortality will present dementia and Alzheimer’s disease data as separate diseases. The dementia data, therefore, exclude Alzheimer’s disease (see ICD-9/ICD-10-CA coding table in data methods section).

### Emergency Department Visits for Dementia and Alzheimer’s Disease

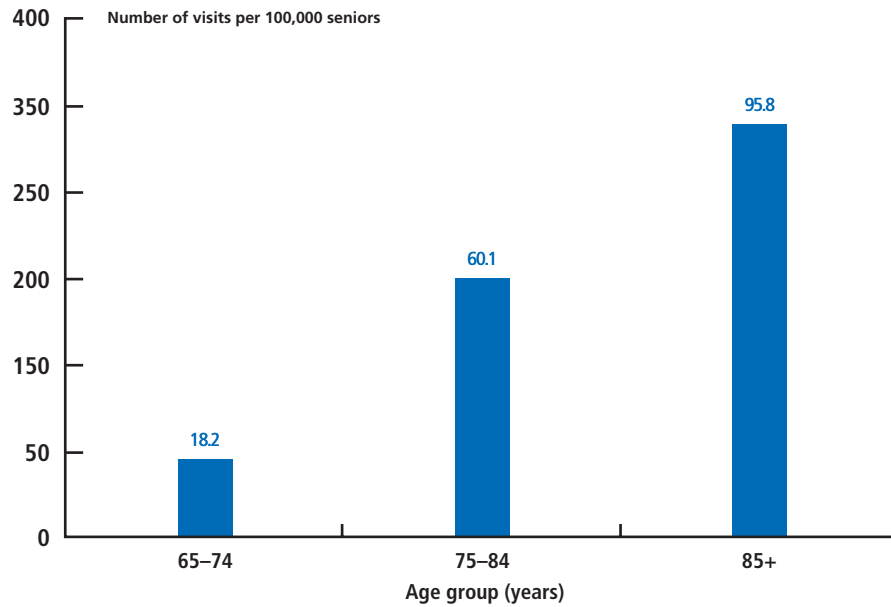
In 2003, there were 88 emergency department visits among Peel seniors for dementia. The rates of emergency department visits for dementia increased by age for both males and females (see Figure 3.4). The rates were higher for males compared to females across all age groups.

**Figure 3.4: Emergency Department Visits for Dementia by Age Group and Sex, Region of Peel, 2003**



There were 34 emergency department visits among Peel seniors for Alzheimer’s disease. The rates of emergency department visits for Alzheimer’s disease increased by age (see Figure 3.5).

**Figure 3.5: Emergency Department Visits for Alzheimer's Disease by Age Group, Region of Peel, 2003**



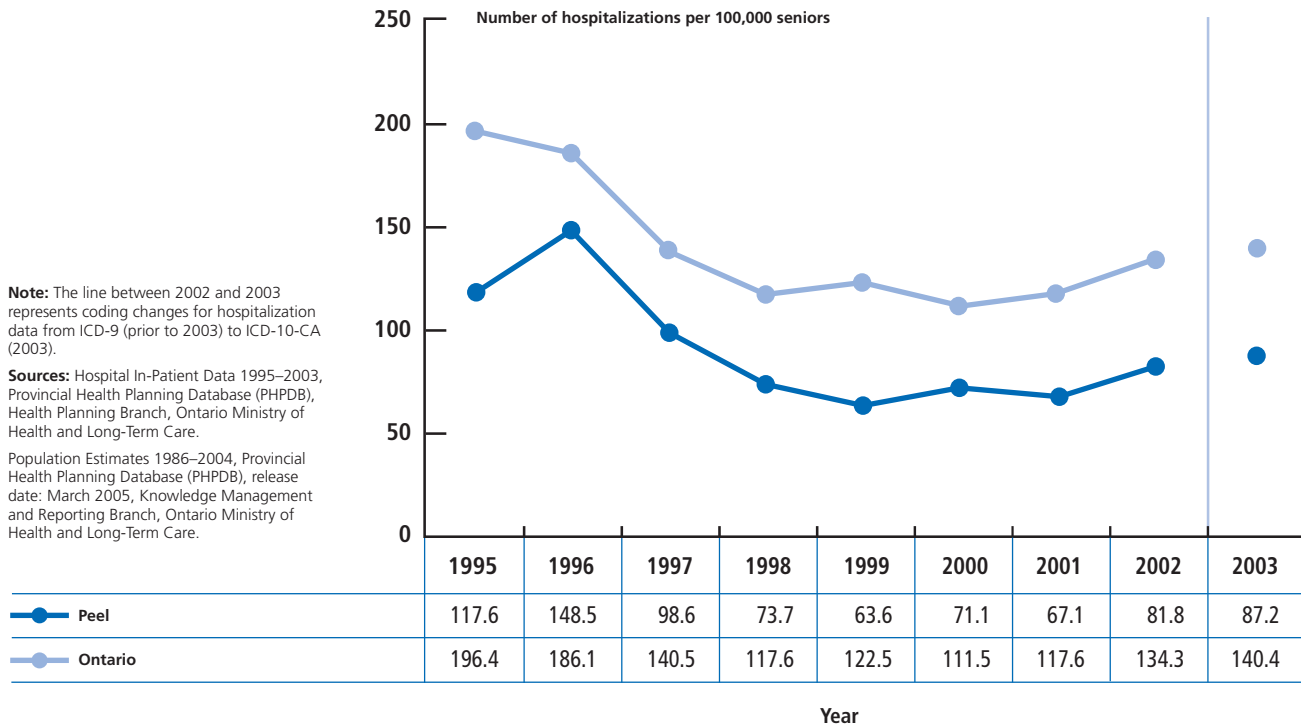
**Sources:** National Ambulatory Care Reporting System Data 2003, Provincial Health Planning Database (PHPDB) Extracted: [November 2005], Knowledge Management and Reporting Branch, Ontario Ministry of Health and Long-Term Care.

Population Estimates 1986-2004, Provincial Health Planning Database (PHPDB), release date: March 2005, Knowledge Management and Reporting Branch, Ontario Ministry of Health and Long-Term Care.

### Hospitalization for Dementia and Alzheimer's Disease

Although hospitalization rates for dementia among seniors have declined since 1995, there was a slight increase in rates between 2001 and 2003 for both Peel and Ontario (*see Figure 3.6*).

**Figure 3.6: Hospitalization for Dementia by Year, Region of Peel and Ontario, 1995–2003**



**Note:** The line between 2002 and 2003 represents coding changes for hospitalization data from ICD-9 (prior to 2003) to ICD-10-CA (2003).

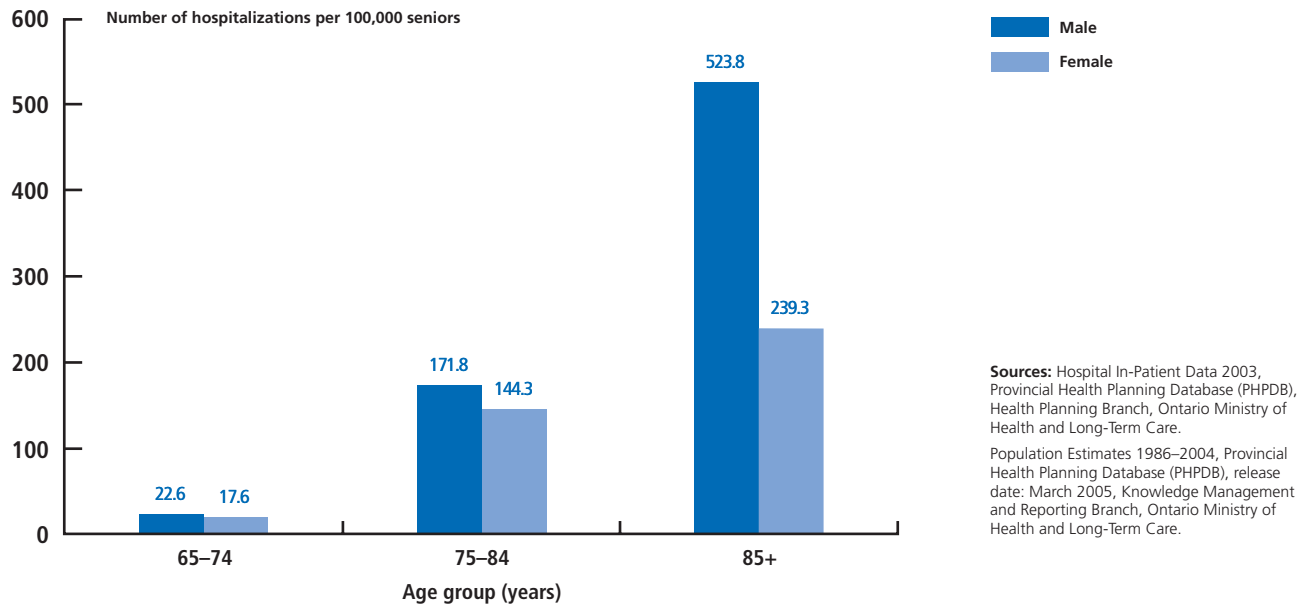
**Sources:** Hospital In-Patient Data 1995–2003, Provincial Health Planning Database (PHPDB), Health Planning Branch, Ontario Ministry of Health and Long-Term Care.

Population Estimates 1986–2004, Provincial Health Planning Database (PHPDB), release date: March 2005, Knowledge Management and Reporting Branch, Ontario Ministry of Health and Long-Term Care.

In 2003, hospitalization rates for dementia in Peel increased by age and were higher for males compared to females across all age groups (see Figure 3.7). The average length of stay for dementia among seniors was 22.9 days in 2003.

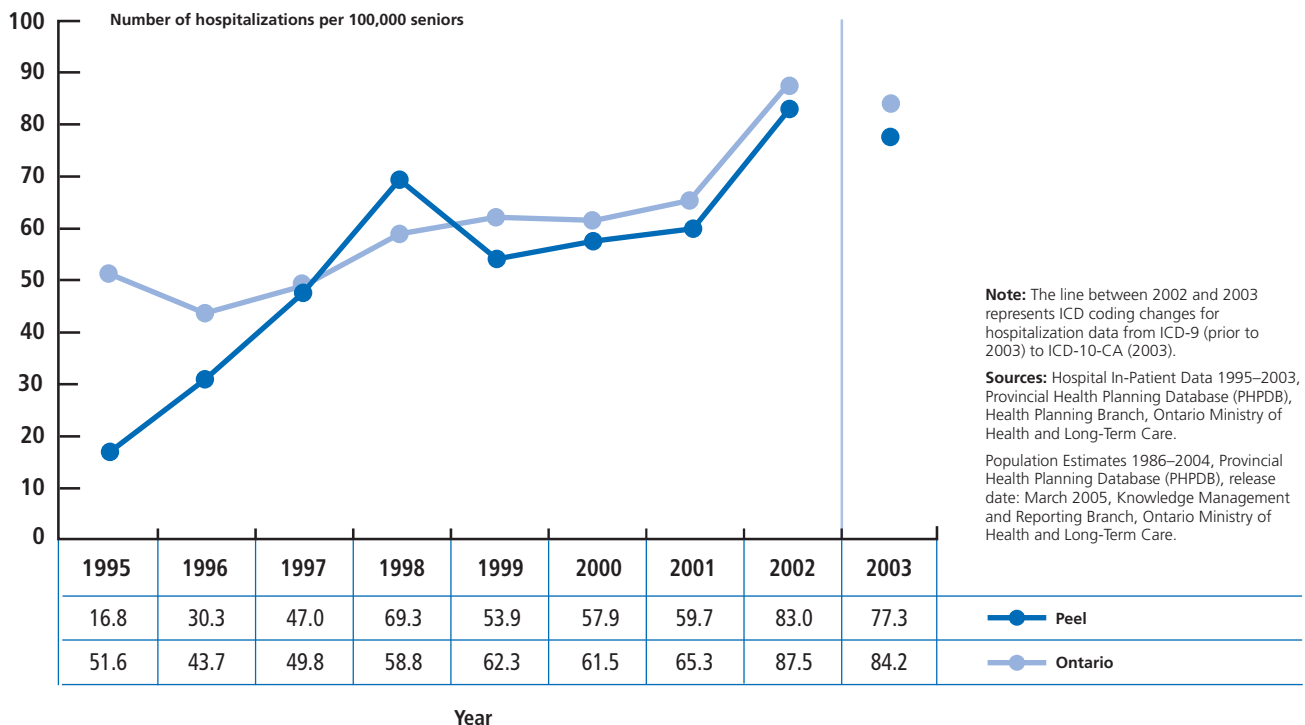


**Figure 3.7: Hospitalization for Dementia by Age Group and Sex, Region of Peel, 2003**



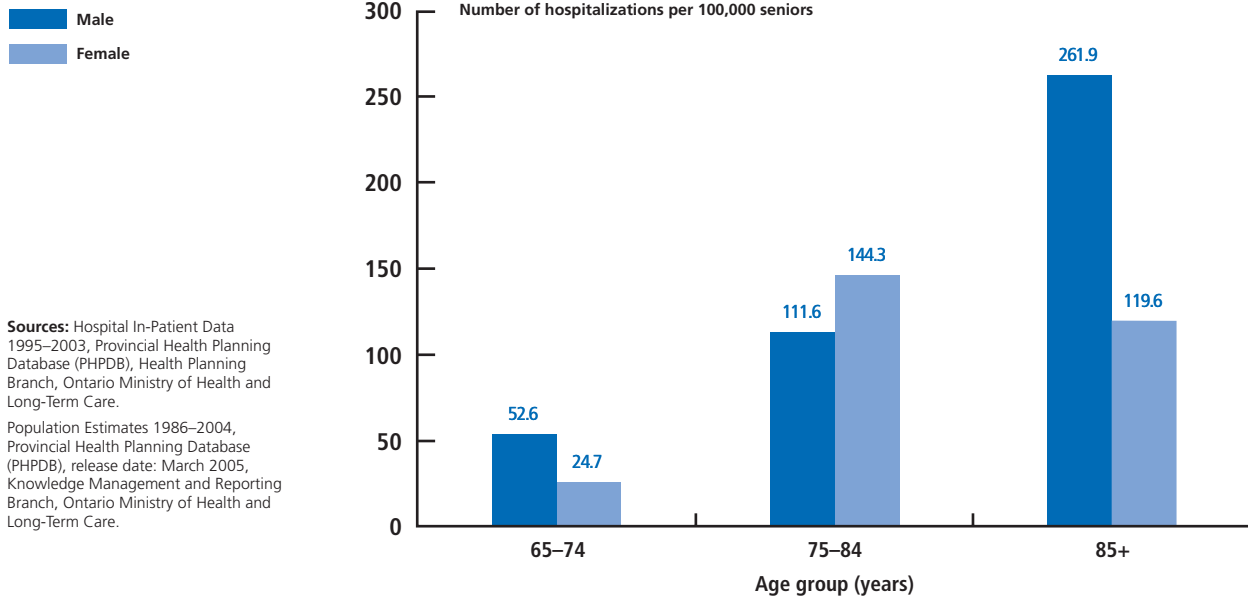
Hospitalization rates for Alzheimer’s disease increased between 1995 and 2002 among seniors in both Peel and Ontario (see Figure 3.8).

**Figure 3.8: Hospitalization for Alzheimer's Disease by Year, Region of Peel and Ontario, 1995-2003**



In 2003, hospitalization rates for Alzheimer’s disease in Peel increased by age group for males and peaked for females 75 to 84 years of age (see Figure 3.9). In 2003, the average length of stay for Alzheimer’s disease was 33.5 days.

**Figure 3.9: Hospitalization for Alzheimer's Disease by Age Group and Sex, Region of Peel, 2003**

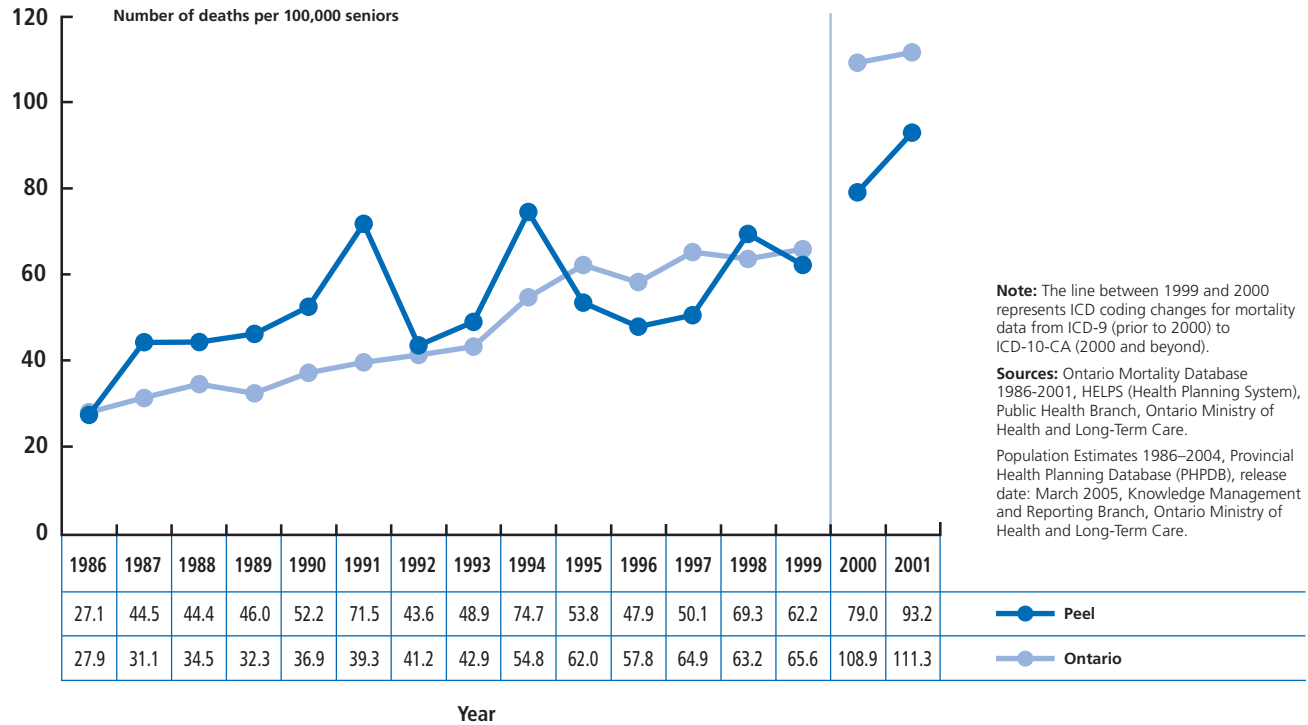


**Sources:** Hospital In-Patient Data 1995–2003, Provincial Health Planning Database (PHPDB), Health Planning Branch, Ontario Ministry of Health and Long-Term Care.  
Population Estimates 1986–2004, Provincial Health Planning Database (PHPDB), release date: March 2005, Knowledge Management and Reporting Branch, Ontario Ministry of Health and Long-Term Care.

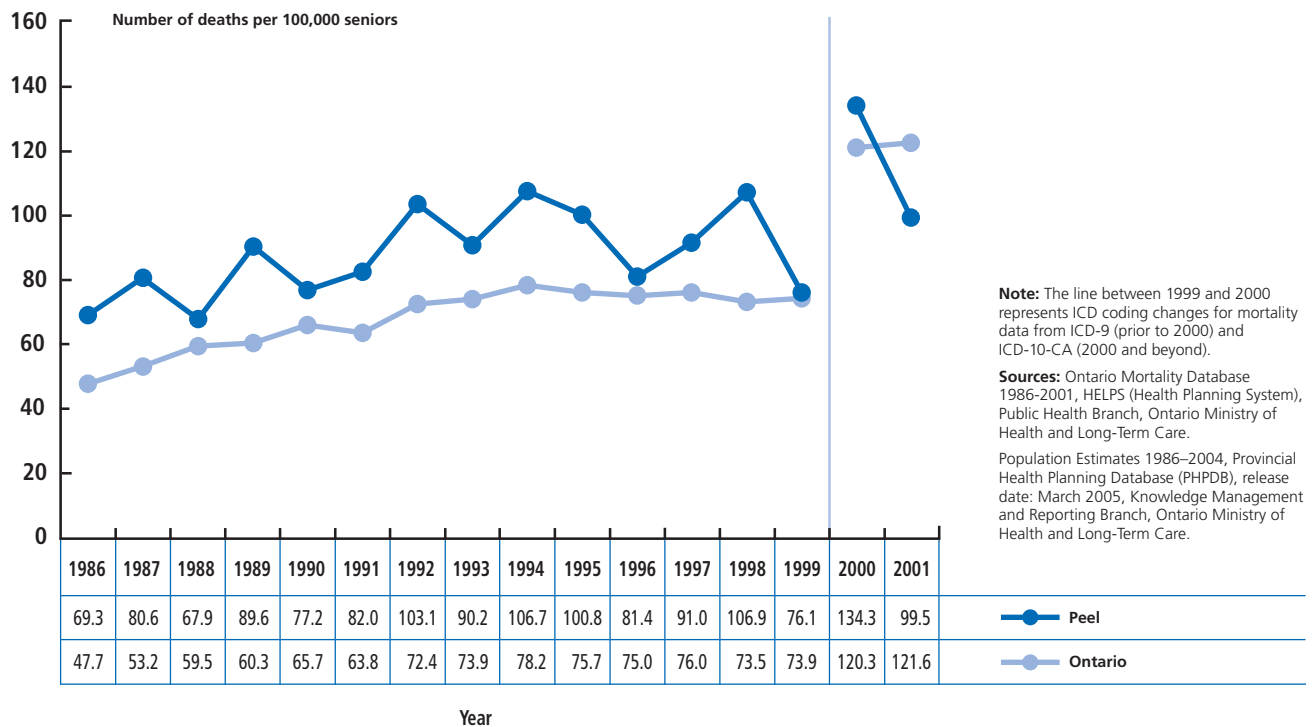
### Mortality from Dementia and Alzheimer’s Disease

There was a general increase in the mortality rates for dementia and Alzheimer’s disease among seniors in both Peel and Ontario between 1986 and 2001 (see Figures 3.10 and 3.11). The changes in the mortality rates between 1999 and 2000 was due to a coding change from ICD-9 to ICD-10-CA. In ICD-9 many deaths classified as pre-senile dementia are now classified in ICD-10-CA as Alzheimer’s disease. This coding change is described more fully in the Data Methods section at the end of this report.

**Figure 3.10: Mortality from Dementia by Year, Region of Peel and Ontario, 1986–2001**

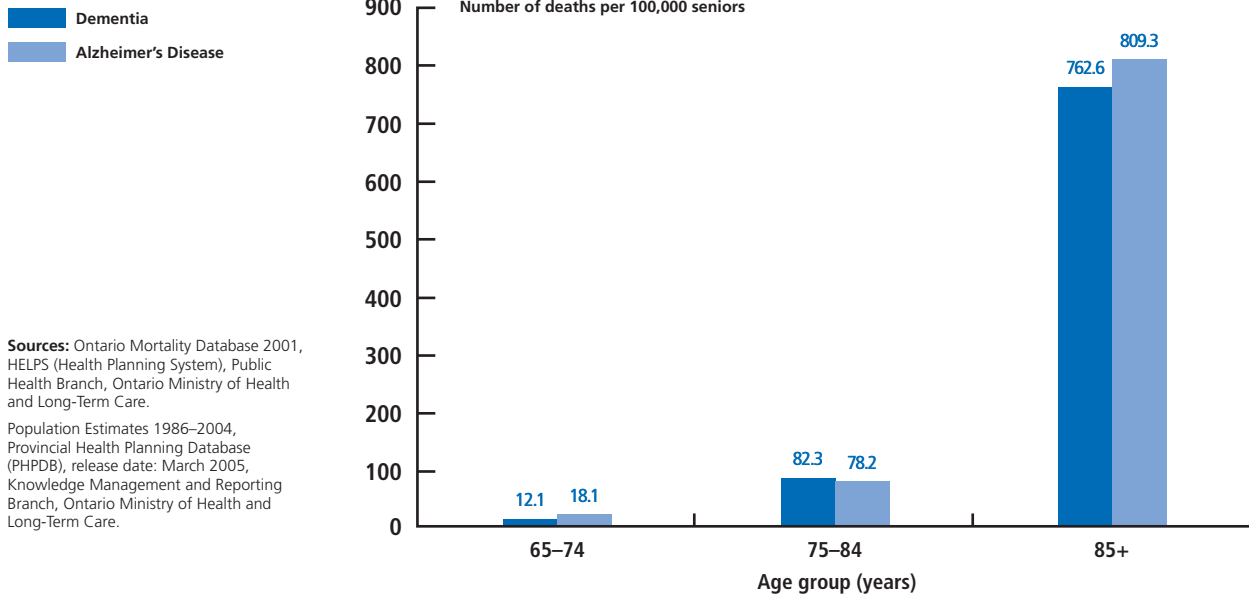


**Figure 3.11: Mortality from Alzheimer's Disease by Year, Region of Peel and Ontario, 1986–2001**



In 2001, the mortality rates for dementia and Alzheimer's disease increased by age group in Peel (see Figure 3.12).

**Figure 3.12: Mortality from Dementia and Alzheimer's Disease by Age Group, Region of Peel, 2001**



**Sources:** Ontario Mortality Database 2001, HELPS (Health Planning System), Public Health Branch, Ontario Ministry of Health and Long-Term Care.  
Population Estimates 1986-2004, Provincial Health Planning Database (PHPDB), release date: March 2005, Knowledge Management and Reporting Branch, Ontario Ministry of Health and Long-Term Care.

## SCHIZOPHRENIA

Schizophrenia is a complex brain disorder characterized by delusions, hallucinations, social withdrawal, and bizarre behaviour. These symptoms often develop slowly between the ages of 16 to 30 years. Schizophrenia is estimated to affect one in every hundred Canadians.<sup>31</sup>

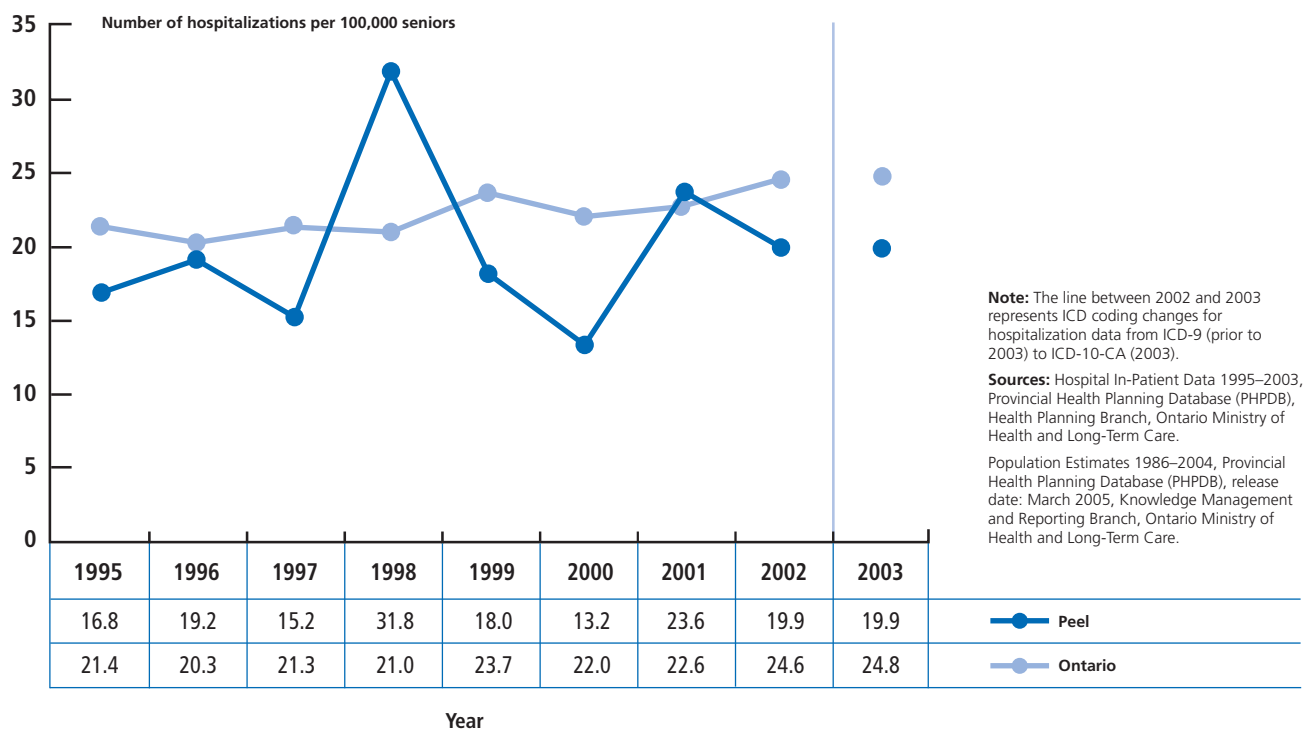
### Emergency Department Visits for Schizophrenia

In 2003, there were eight emergency department visits for schizophrenia among Peel seniors 65 to 69 years of age.

### Hospitalization for Schizophrenia

The hospitalization rates for schizophrenia among seniors fluctuated in Peel between 1995 and 2003 due to small numbers, but have been stable among Ontario seniors (between 20 and 25 per 100,000) as shown in Figure 3.13.

**Figure 3.13: Hospitalization for Schizophrenia by Year, Region of Peel and Ontario, 1995–2003**



In 2003, more than half of the 18 hospitalizations for schizophrenia occurred among Peel seniors 65 to 69 years of age. Schizophrenia caused the highest average length of hospital stay compared to all other causes among seniors in Peel (37.3 days).

### Mortality from Schizophrenia

There were 10 deaths from schizophrenia among Peel seniors between 1986 and 2001. In Ontario there were between one and two deaths per 100,000 seniors from schizophrenia every year between 1986 and 2001 (data not shown).

### SUICIDE

Suicide is defined as “the intentional self-infliction of death.”<sup>32</sup> Suicidal behaviour is an important and preventable public health problem in Canada. While not in itself a mental illness, suicidal behaviour is highly correlated with mental illness and raises many similar issues. Suicide includes: suicidal thoughts, suicide attempts and completed suicides, also referred to as “committed suicides” or “suicide deaths.”

Suicide is often thought of as a threat primarily to young people, yet the reality is that men over the age of 80 years have the highest suicide mortality rate among Canadians.<sup>33</sup> There are unique risk factors and stressors in the lives of seniors which may lead to thoughts of suicide. However, as with all other age groups, recognition of the warning signs and risk factors can lead to successful interventions to help people survive difficult periods of their life.

Some common warning signs for suicide are repeated expressions of hopelessness, helplessness or desperation, signs of depression, loss of interest in previously enjoyed activities or relationships, and giving away personal possessions or putting personal affairs in order.<sup>33</sup> Specific risk factors for seniors can include social isolation, depression, and loss of their health and social roles.<sup>34</sup> A previous attempt at suicide is one of the strongest risk factors for a future completed suicide.<sup>32</sup>

In 2002, less than 2% of Canadian seniors reported suicidal thoughts in the past 12 months.<sup>35</sup>

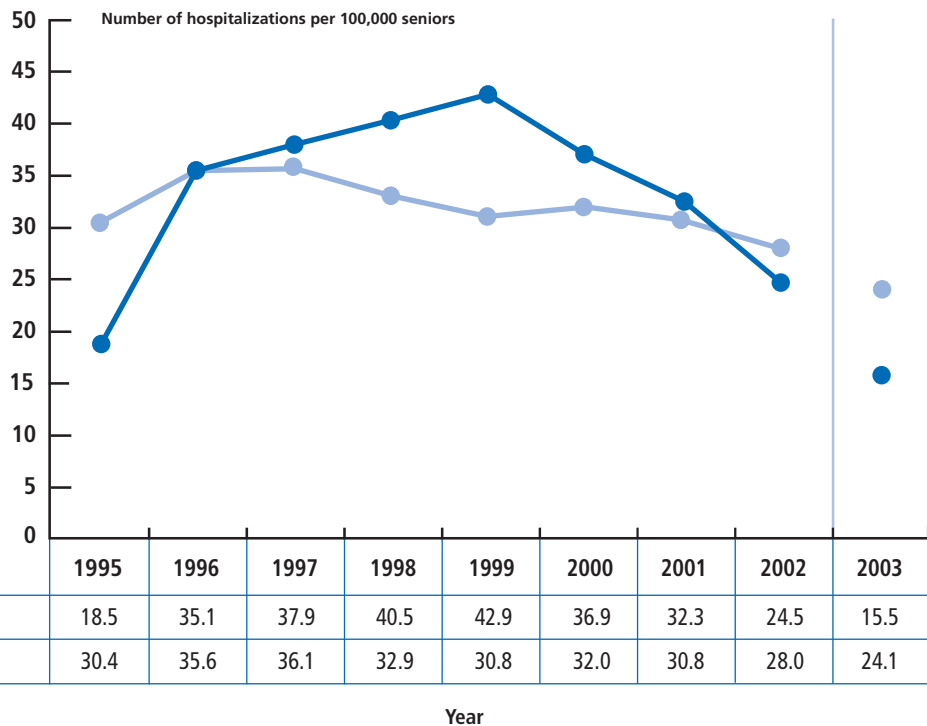
### Emergency Department Visits for Suicide

In 2003, suicide attempts were the tenth leading external cause for emergency department visits among Peel seniors. There were 20 emergency department visits for suicide attempts among Peel seniors. Three-quarters of emergency department visits for suicide attempts were among 65- to 74-year-olds.

### Hospitalization for Suicide

In Peel, the hospitalization rate for suicide attempts among seniors peaked in 1999, and decreased between 1999 and 2003 (see Figure 3.14). There were 14 hospitalizations for suicide attempts among Peel seniors in 2003. Due to small numbers in 2003 for Peel, data cannot be provided by age group.

**Figure 3.14: Hospitalization for Suicide or Self-Inflicted Injury by Year, Region of Peel and Ontario, 1995–2003**



**Note:** The line between 2002 and 2003 represents ICD coding changes for hospitalization data from ICD-9 (prior to 2003) to ICD-10-CA (2003).

**Sources:** Hospital In-Patient Data 1995–2003, Provincial Health Planning Database (PHPDB), Health Planning Branch, Ontario Ministry of Health and Long-Term Care.

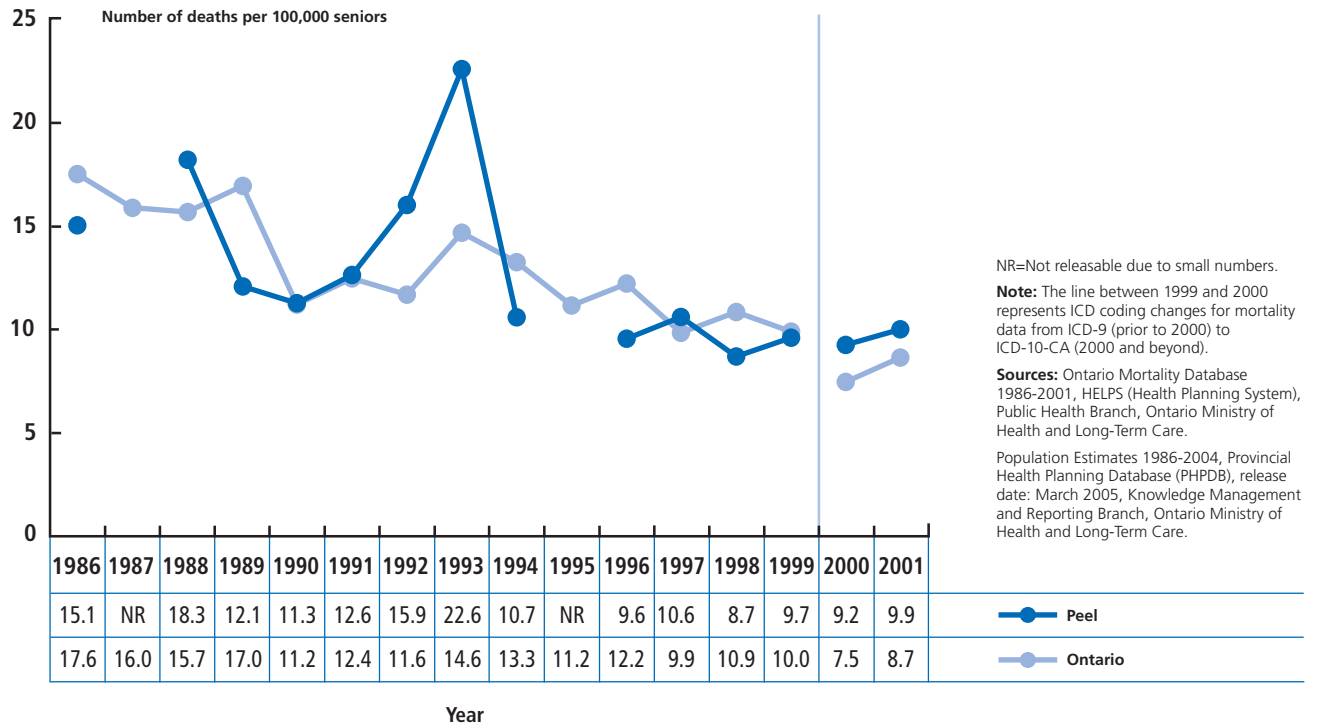
Population Estimates 1986–2004, Provincial Health Planning Database (PHPDB), release date: March 2005, Knowledge Management and Reporting Branch, Ontario Ministry of Health and Long-Term Care.

\* Data should be interpreted with caution due to high sampling variability.

## Mortality from Suicide

The mortality rate for suicide among seniors decreased in both Peel and Ontario between 1986 and 2001 (see Figure 3.15). There were eight deaths from suicide among Peel seniors in 2001. Due to small numbers in 2001 for Peel, data cannot be provided by age group.

**Figure 3.15: Mortality from Suicide by Year, Region of Peel and Ontario, 1986–2001**



## SUMMARY

### General Mental Health

According to the 2003 Canadian Community Health Survey (CCHS), two-thirds (65%) of seniors in Peel rated their mental health as excellent or very good. A similar proportion of seniors in Ontario rated their mental health as excellent or very good.

### Mood Disorders

The prevalence of depression among Ontario seniors in 2001 (6%) was slightly higher than Canada (5%). Data for Peel seniors were not releasable due to small numbers.

Hospitalization rates for mood disorders among seniors have decreased since 1995 in both Peel and Ontario, although rates have been relatively stable in Ontario between 1998 and 2003. The hospitalization rates for mood disorders were higher for female seniors than male seniors across all age groups. There were 21 deaths from mood disorders among Peel seniors between 1986 and 2001.

### Bipolar Disorders

Data for bipolar disorders were available starting in 2003. There were 22 hospital admissions for bipolar disorder among Peel seniors in 2003 (11 each for male and female).

### Dementia and Alzheimer's Disease

According to the 2003 CCHS, about 2% of Ontario's population reported that they had Alzheimer's or some other dementia. Self-reported Alzheimer's and other dementia increased by age from 1% of 65- to 79-year-olds to 5% of those aged 80 years and older.

In 2003, the rates of emergency department visits for dementia and Alzheimer's disease increased by age group among Peel seniors.

Although hospitalization rates for dementia among seniors in 2003 have declined since 1995, there was a slight increase in rates between 2000 and 2003 for both Peel and Ontario. In 2003, hospitalization rates for dementia in Peel increased by age and were higher for male seniors compared to female seniors across all age groups.

The average length of hospital stay for dementia among Peel seniors in 2003 was 22.9 days in 2003.

Hospitalization rates for Alzheimer's disease increased between 1995 and 2003 among seniors in both Peel and Ontario. In 2003, hospitalization rates for Alzheimer's disease in Peel increased by age for males and peaked for females 75 to 84 years of age. In 2003, the average length of hospital stay for Alzheimer's disease was 33.5 days.



There was an increase in the mortality rates for dementia and Alzheimer's disease among seniors in both Peel and Ontario between 1986 and 2001. This increase in 2001 is due to coding changes in mortality data. In 2001, the mortality rates for dementia and Alzheimer's disease increased by age group in Peel.

### **Schizophrenia**

The hospitalization rates for schizophrenia among seniors fluctuated in Peel between 1995 and 2003, but have remained stable among Ontario seniors. In 2003, schizophrenia had the highest average length of hospital stay compared to all other causes among seniors in Peel (37.3 days).

There were 10 deaths from schizophrenia among Peel seniors between 1986 and 2001.

### **Suicide**

In 2002, less than 2% of Canadian seniors reported suicidal thoughts in the past 12 months.

In 2003, suicide attempts were the tenth leading external cause for emergency department visits among Peel seniors. There were 20 emergency department visits for suicide attempts among Peel seniors. Three-quarters of emergency department visits for suicide attempts were among 65- to 74-year-olds.

In Peel, the hospitalization rate for suicide attempts among seniors peaked in 1999, and decreased between 1999 and 2003.

The mortality rate for suicide among seniors decreased in both Peel and Ontario between 1986 and 2001.