

# Older Residents of Health Care Institutions

Patricia Tully and Chris Mohl\*

As the population ages, discussion increasingly focuses on how to keep people *in* the community and *out of* health care institutions. But when health fails, the only option may be long-term residential care.

According to the National Population Health Survey (see *Data source*), in 1995, just under a quarter million Canadians were living in long-term health care institutions in the ten provinces. They accounted for about 1% of the population aged 12 and over. The vast majority (81%) of these institutional residents were aged 65 and over, but they represented only a small proportion of Canadians in this age group (5%). However, the proportion rises to approximately 18% at age 80 and over (Chart 1).

People tend to enter these facilities at relatively advanced ages when their health is poor and their ability to function seriously limited, and when they require assistance with many basic activities. The results of the National Population Health Survey (NPHS) suggest that certain conditions—Alzheimer's disease and other dementia, incontinence, and the effects of stroke—greatly increase the likelihood that individuals will be living in a health care institution.

## Older women more likely to be residents

In 1995, 73% of long-term health care institution residents aged 65 and over were women. Women also made up the majority of people aged 65 and

over living in households, but the proportion (57%) was well below that for health care institutions. Thus, elderly women were more likely than men to be residents of these institutions (Table 1).

### Data source

Statistics Canada's National Population Health Survey (NPHS) includes a segment of the population usually excluded from national surveys—residents of long-term health care facilities.<sup>1</sup> These are people living in institutions such as hospitals, nursing homes, and residential facilities for persons with disabilities

To obtain the sample, a list of provincial long-term health care facilities (excluding those on military bases, in correctional institutions, or on Indian reserves) was prepared. From this list, a random sample of 232 institutions was selected. With the assistance of administrators in each institution, a subsample of residents was randomly selected. The administrator determined if these people were capable of answering the questionnaire or if a proxy respondent was needed. The proxy respondent could be a relative, or a staff member or volunteer at the institution. The interviews took place from January to March 1995.

Of the selected institutions that were in-scope (that is, they met the NPHS definition of a long-term health care facility), 96% agreed to participate. Within these institutions, 94% of residents or their next-of-kin agreed to an interview, yielding a total sample size of 2,287. Proxy respondents completed 57% of the interviews.

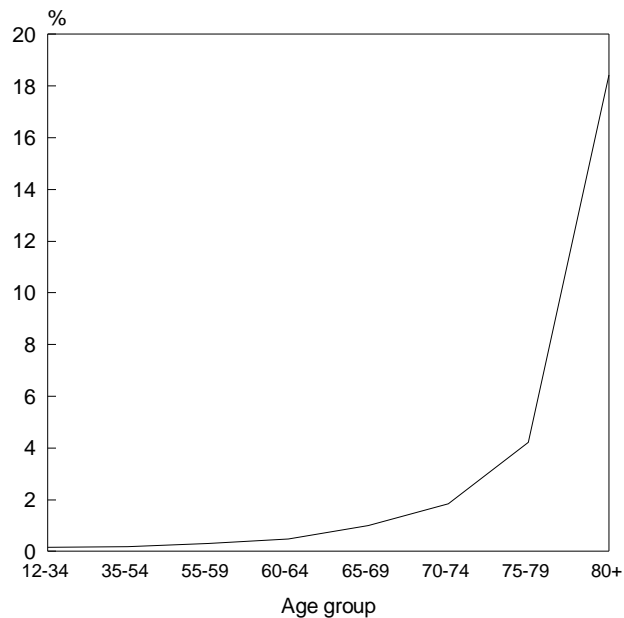
The interviews collected information on self-perceived general health, vision, hearing, speech, mobility, dexterity, emotions, memory, cognition, pain, chronic conditions, activity limitations, falls, smoking, alcohol use, social support, medication use, and contact with health care providers.

In this article, when comparisons of institutional residents were made with the household population, the statistics for institutional residents were adjusted to account for the different age and sex profiles of the two groups. Age- and sex-adjustment was particularly relevant for determining the prevalence of different chronic health conditions.

\* Patricia Tully (613-951-8782) is with the Health Statistics Division and Chris Mohl (613-951-6966) is with the Household Surveys Methods Division at Statistics Canada, Ottawa K1A 0T6. This article is based on an October 27, 1995 presentation in Vancouver at the 24th Annual Scientific and Educational Meeting of the Canadian Association on Gerontology.

Chart 1

**Proportion of Canadian population living in long-term health care institutions, by age group, Canada, 1995**



**Source:** National Population Health Survey, 1994-95

Most elderly residents had entered the facility relatively recently. Excluding those who had come from other nursing homes or hospitals (about one in five), 54% of residents had lived in the facility two years or less, and 22% had been there less than one year. Men tended to have been residents for shorter periods than women—29% of them had lived in the institution less than one year, compared with 20% of the women.

### Poor health

Institutional residents were much less healthy than their contemporaries living in households. Of those aged 65 and over in health care institutions, 58% rated their general health as no better than fair (according to age- and sex-standardized estimates<sup>a</sup>), compared with 27% of elderly people in households.

<sup>a</sup> The composition of the institutional and household populations differs by sex and age. To account for this difference, estimates for residents of institutions are age- and sex-standardized when comparisons are made between the two groups.

Table 1

**Population aged 65 and over living in long-term health care institutions, Canada, 1995**

|                | Total population aged 65+ | Residents of long-term health care institutions | %  |
|----------------|---------------------------|---|----|
| Both sexes 65+ | 3,436,500                 | 185,600   | 5  |
| 65-69          | 1,117,000                 | 11,200  | 1  |
| 70-74          | 972,100                   | 18,000  | 2  |
| 75-79          | 647,900                   | 27,400  | 4  |
| 80+            | 699,500                   | 128,900   | 18 |
| Women 65+      | 1,987,800                 | 135,500   | 7  |
| 65-69          | 587,500                   | 5,500   | 1  |
| 70-74          | 569,000                   | 11,300  | 2  |
| 75-79          | 382,300                   | 19,800  | 5  |
| 80+            | 449,000                   | 98,900  | 22 |
| Men 65+        | 1,448,700                 | 50,100  | 3  |
| 65-69          | 529,500                   | 5,700*  | 1* |
| 70-74          | 403,100                   | 6,700   | 2  |
| 75-79          | 265,600                   | 7,600   | 3  |
| 80+            | 250,500                   | 30,100  | 12 |

**Source:** National Population Health Survey, 1994-95

**Note:** Numbers do not sum due to rounding.

\* Estimates subject to high sampling variability.

In addition to asking residents to rate their general health, the NPHS included questions about vision, hearing, speech, mobility, dexterity, emotions, memory, cognition, and pain. The Health Utility Index<sup>b</sup> incorporates these components of health into a single measure.<sup>2</sup> A score of 0.800 (out of a possible 1.000) indicates fairly good health. The age- and sex-standardized proportion of elderly residents of institutions and the unadjusted proportion of household residents with Health Utility Index scores less than 0.800 were 85% and 32%, respectively.

<sup>b</sup> The Health Utility Index used here was based on data from a survey conducted in Hamilton, Ontario of approximately 200 parents of school-age children. This index was then applied to NPHS data. The validity of this application is constrained by the similarity, or lack thereof, between the health preferences of the participants in the Hamilton survey and those of all Canadians.

## Chronic conditions

Three chronic conditions—Alzheimer's disease or other dementia, incontinence, and the effects of stroke—were much more common among elderly residents of long-term health care institutions than among those living in households. This suggests that these conditions may have an especially strong relationship to the likelihood of institutionalization.

The age- and sex-standardized prevalence of Alzheimer's disease or other dementia was 30% for institutional residents; only a very small proportion of the elderly in the community had such conditions. Close to half (46%) the residents of institutions reported urinary or bowel incontinence, whereas just 4% of those in households reported urinary incontinence.<sup>c</sup> The effects of stroke were reported by 26% of institutional residents, in contrast to 4% of those in households (Table 2).

The prevalence of other chronic conditions did not differ to such an extent. For instance, high blood pressure was reported by 29% of those in households and 27% of institutional residents. The prevalence of arthritis/ rheumatism was 40% among elderly people in households and 35% among institutional residents.

## Activity limitation

Older residents of health care institutions require considerable personal assistance. In 1995, 75% of them needed help with one or more of the following activities: personal care; moving about inside the institution; getting in and out of bed; and getting in and out of a chair. Many residents (39%) required help with all four activities. Because of their health, half the residents spent most of the day in a bed or chair.

**Table 2**

### Proportion aged 65 and over reporting chronic conditions diagnosed by a health professional, by place of residence, Canada, 1994-95

| Residents of long-term health care institutions               | %  |    | Residents of households               |
|---|----|----|---------------------------------------|
| Bowel or urinary incontinence                                 | 46 | 4  | Urinary incontinence                  |
| Arthritis or rheumatism                                       | 35 | 40 | Arthritis or rheumatism               |
| Alzheimer's disease or other dementia                         | 30 | -- | Alzheimer's disease or other dementia |
| High blood pressure   | 27 | 29 | High blood pressure                   |
| Effects of stroke   | 26 | 4  | Effects of stroke                     |
| Heart disease, angina, effects of heart attack                | 22 | 17 | Heart disease                         |
| Cataracts   | 21 | 14 | Cataracts                             |
| Diabetes  | 18 | 11 | Diabetes                              |
| Digestive conditions, such as stomach or intestinal ulcers    | 13 | 5  | Stomach or intestinal ulcers          |
| Chronic bronchitis, emphysema, other lung/breathing condition | 11 | 6  | Chronic bronchitis or emphysema       |

**Source:** National Population Health Survey, 1994-95

**Note:** Estimates for residents of health care institutions were age- and sex-standardized.

<sup>c</sup> The NPHS asked residents of institutions about bowel and urinary incontinence; people living in households were asked only about urinary incontinence.

## Falls

Residents of long-term health care institutions are particularly susceptible to falls, which at older ages, are an important cause of injury and even death.<sup>3,4</sup> In the 12 months before the survey, 38% of them had fallen, and of those who had fallen, 27% had done so three or more times. During those 12 months, 24% of all institutional residents had been injured in a fall; in the same period, only 5% of household residents had suffered a fall serious enough to restrict their normal activities.

The most common reasons why older institutional residents had fallen were problems with balance (29%), and weakness or frailty (26%). The most serious injury suffered by the majority (62%) of those injured as the result of a fall was a bruise, scrape or cut, although 29% had broken a bone.

## Social support

Over half (58%) of elderly residents did not belong to groups or participate in group activities in the institution. An even larger proportion (63%) had no close friends there, and 49% had no close friends outside the facility. Only 40% reported feeling close to the institution's staff members. Nevertheless, many elderly residents received support from a family member: 89% had relatives to whom they felt close, and 61% saw these relatives once a week or more.

Just 15% of elderly institutional residents were married or in a common-law relationship, compared with 60% of the elderly household population. Most (66%) institutional residents were widowed. Women, who constituted the majority in these facilities, were more likely than men to be widowed: 75% versus 40%.

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