

Sensory Impairments among Canadians 55 years and Older: An Analysis of 1986 and 1991 Health and Activity Limitation Survey

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ABSTRACT

It has been well established that increasing age is associated with worsening health and decreasing functional ability among seniors (Mor, Wilcox, Rakowski, et al, 1994; Strawbridge, Kaplan, Camacho, et al, 1992; Badley, Yoshida, Webster, et al, 1993; Forbes, Hayward, and Agwani, 1991), including conditions that lead to hearing and seeing impairments. The development of such sensory impairments can lead to a reduced quality of life by interfering with the ability to carry out activities of daily living and engaging in social activities. The review, which precedes the findings of this report, highlights the impact of sensory impairments on seniors (65 years and older) by first describing the prevalence of hearing and seeing impairments in this population and then examining the association between sensory impairment and physical, cognitive, and social functioning.

INTRODUCTION

OVERVIEW

The population of most industrialized countries is aging and Canada is no exception. In 1994, 3.4 million Canadians, representing approximately 12% of the population, were seniors 65 years of age and older. By the year 2021, the population of seniors is expected to increase by 50% to over five million (Statistics Canada, 1994a). It has been well established that increasing age is associated with worsening health and decreasing functional ability among seniors (Mor, Wilcox, Rakowski, et al, 1994; Strawbridge, Kaplan, Camacho, et al, 1992; Badley, Yoshida, Webster, et al, 1993; Forbes, Hayward, and Agwani, 1991), including conditions that lead to hearing and seeing impairments. The development of such sensory impairments can lead to a reduced quality of life by interfering with the ability to carry out activities of daily living and engaging in social activities. The review, which precedes the findings of this report, highlights the impact of sensory impairments on seniors (65 years and older) by first describing the prevalence of hearing and seeing impairments in this population and then examining the association between sensory impairment and physical, cognitive, and social functioning.

PREVALENCE OF SENSORY IMPAIRMENTS AMONG SENIORS 65 YEARS AND OLDER

Hearing Impairments

Among seniors, it has been found that hearing impairments are more common than seeing impairments, tend to become more prevalent with increasing age, and are more likely to be experienced by males than females. For example, a survey of community dwelling seniors, 65 years of age and older from Ohio County, found that 30.0% of respondents reported having a hearing

impairment. Breaking the results down by age revealed that the number of seniors reporting a hearing impairment increased from 20.0% for 65-69 year olds to 64.0% for those 85 years and older (Gerson, Jarjoura, and McCord, 1989). Data from the Rural Health Promotion Project (RHPP), collected from 65-79 year old Medicare beneficiaries in five rural counties of northwestern Pennsylvania, indicated that self-reported hearing impairments were more prevalent in older age groups and that men were more likely to have hearing impairments than women. Among men, the percentage reporting hearing impairments increased from 40.5% for 65-69 year olds to 50.1% for 75-79 year olds. Among women, self-reported hearing impairments from the same two age groups increased from 18.0% to 30.8% (Ives, Bonino, Traven et al, 1995). A third study, using pure tone audiometry to assess the hearing of community dwelling seniors 70 years and older from an inner London borough, produced a pattern of results similar to studies using self-report to assess hearing ability. The hearing assessment revealed that 40.0% of participants had little or no deafness (hearing loss of 0-34 db), 18.0% were moderately deaf (hearing loss of 35-44 db), 32.0% were substantially deaf (hearing loss of 45-69 db) and 10.0% were severely deaf (hearing loss of 70+ db). The level of deafness was greater for older participants (80 years and older) compared to younger participants (70-79 years) (Herbst and Humphrey, 1980).

Findings from the 1985 General Social Survey (GSS) and the 1986 Health and Activity Limitation Survey (HALS) revealed that self-reported hearing impairments among the Canadian population were consistent with findings from other industrialized countries (Forbes, Hayward, and Agwani, 1991). Among Canadians 65 years of age and older, 25.8% (GSS) and 17.9% (HALS) reported having hearing impairments. The prevalence of hearing impairments was greater in older age groups, from 16.9% and 9.7% on the GSS and HALS, respectively for 55-64 year olds to 29.2%

and 28.2% for respondents 75 years and older. Further, at all ages, men were more likely than women to report having a hearing impairment.

Seeing Impairments

Studies from a number of industrialized countries reveal a consistent pattern of results with regard to seeing impairments among seniors 65 years and older. In general, the prevalence of seeing impairments and blindness tend to be greater in older age groups, with few differences between men and women. For example, in a survey of community dwelling seniors 65 years of age and older from Ohio County, 27.0% reported that they had a seeing impairment, with the percentage reporting a seeing impairment increasing from 20.0% for those 65-69 years of age to 49.0% for those 85 years and older (Gerson, Jarjoura, and McCord, 1989).

A study of patients 65 years and older who received eye examinations from an Inner London health center revealed a prevalence of blindness between 1.0% using World Health Organization (WHO) criteria (vision less than 3/60) and 3.9% using American criteria (vision less than or equal to 6/60). Further 7.7% of seniors had low vision by the WHO criteria (vision less than 6/18 in either eye) compared to 10.6% by American criteria (vision less than 6/12 but greater than 6/60). The level of visual impairment was higher for older patients (75 years and older) compared to younger patients (65-74 years), and males and females had equal levels of visual impairment (Wormald, Wright, Courtney, et al, 1992).

In Italy, based on three national sources of data for determining the prevalence of blindness: the National Household Health Survey, the National Registry of the Blind, and Welfare Lists (the Italian government provides money to low income earners with visual acuity less than .1), the

national prevalence of blindness was found to be between 1.4% and 4.5% for citizens of all ages (Nicolosi, Marighi, Rizzardi, et al, 1994). The prevalence of blindness was greater in older age groups, and was approximately equally prevalent among both men and women.

Findings from the 1985 General Social Survey (GSS) and the 1986 Health and Activity Limitation Survey (HALS) revealed that self-reported seeing impairments among the Canadian population were consistent with that of other industrialized countries (Forbes, Hayward, and Agwani, 1991). Among Canadians 65 years and older, 13.0% on the GSS and 9.7% on the HALS reported having seeing impairments. The level of impairment was greater in older age groups, from 6.3% and 3.1% on the GSS and HALS, respectively for 55-64 year olds to 20.0% and 16.7% for those 75 years and older. On both surveys, women were just slightly more likely than men to report a seeing impairment.

It should be noted that prevalence estimates of visual impairments in the community may underrepresent the prevalence of visual impairments in institutional environments, such as nursing homes. A prevalence survey of nursing home residents 40 years and older in the Baltimore area revealed a bilateral blindness prevalence (visual acuity less than or equal to 20/200) of 17.0% and a visual impairment (visual acuity less than 20/40 but greater than 20/200) of 18.8%. The level of blindness was greater in older age groups, from 15.2% for those under 60 years of age to 28.6% for those 90 years and older. These estimates of blindness among nursing home residents were 13 times greater than the estimated prevalence of blindness in the noninstitutionalized population from the same communities (Tielsch, Javitt, Coleman, et al, 1995).

Medical conditions which cause visual impairments in seniors have been found to be relatively consistent between different studies. The Baltimore Eye Survey, a population-based

survey conducted in communities of East Baltimore, found that the most common causes of visual impairment, defined as best corrected visual acuity in the better eye of less than 20/40, but greater than 20/200, were cataracts followed by age-related macular degeneration, diabetic retinopathy, primary open-angle glaucoma, optic neuropathy, and surgical complications (Rahmani, Tielsch, Katz, et al, 1996). Similar results were found from a survey of people 65 years and older from an Inner London Health Center (Wormald, Wright, Courtney, et al, 1992) for whom cataracts accounted for approximately two-thirds of visual impairments followed by aging maculopathy, optic atrophy, glaucoma, and myopic degeneration. In Italy, based on the Registry of the Blind, the major causes of blindness in that country for all ages were retinal diseases, followed by cataract, optic nerve, glaucoma, corneal capacities, and uvea (Nicolosi, Marighi, Rizzardi, et al, 1994).

RELATIONSHIP BETWEEN SENSORY IMPAIRMENTS AND PHYSICAL FUNCTIONING

Sensory impairments can have a potentially negative impact on the physical functioning of an impaired individual. The Study of the Well-Being of Older People in Cleveland, Ohio, 1975-1976, a one year longitudinal study of community-dwelling seniors (65 years and older) found that after adjusting for age, sex, and cognitive functioning, vision impairments were significant risk factors for functional decline as measured by six activities of daily living. However, in this study, no relationship was found between hearing impairment and functional decline (Laforge, Spector, and Sternberg, 1992).

Similar findings from the U.S. National Longitudinal Study of Aging (Rudberg, Furner, Dunn, et al, 1993) indicated that over a four year period, after adjusting for demographic variables, chronic conditions, and disability at baseline, noninstitutionalized seniors 70 years and older with

a visual impairment were more likely to have decreased physical functioning, as measured by activities of daily living, than those without visual impairment. However, no independent relationship was found between hearing impairment and increased disability. A study by Salive, Guralnik, Glynn, et al (1994) found among community-dwelling Americans 70 years and older who initially had no ADL limitations that distal visual acuity was related to the development of limitations in activities of daily living over a two year period, with poorer visual acuity leading to more ADL limitations after controlling for age, sex, race, income, and history of diabetes and stroke. Marx, Werner, Cohen-Mansfield, et al (1992) in a study of nursing home residents found that in comparison to residents with good vision, residents with poor vision were more dependent on their care givers for performing activities of daily living.

Despite the findings noted above of no relationship between hearing impairments and physical functioning, other studies suggest that such an association does exist. For example, a study by Bess, Lichtenstein, Logan, et al (1989) determined through a formal hearing assessment the level of hearing impairment for patients 65 years and older from a primary care practice in the United States. Level of hearing impairment was associated with greater functional and psychosocial impairment, as measured by the Sickness Impact Profile, after adjusting for demographic factors, chronic conditions, medications, and mental status. A community survey of noninstitutionalized seniors (70-75 years of age) conducted in a northern Italian town revealed that both seniors with a hearing impairment and seniors with a seeing impairment were at increased risk for depression and had decreased self-sufficiency in daily living activities. Visual impairment was also found to be associated with poorer social relationships (Carabellese, Appollonio, Rozzini, et al, 1993).

Studies have also indicated a relationship between sensory impairments and increased risk

of falling among the older population. The Yale Health and Aging Project, a one year prospective study of seniors 75 years and older living in the community, found that visual impairments were associated with falling after adjusting for demographic characteristics, environmental hazards, psychological functioning, health and physical functioning, medications and alcohol, and other physical symptoms or impairments (Tinetti, Speechley, and Ginter, 1988). A study by Gerson, Jarjoura, and McCord (1989) of seniors (65 years and older) found that both self-reported impaired vision and impaired hearing were important risk factors for imbalance after controlling for age and sex. Dunn, Rudberg, Furner, et al (1992), using the Longitudinal Study of Aging, found for seniors aged 70 years and older that over a two year period both visual deficits and hearing deficits were each associated with falling, after adjusting for demographic variables, other chronic conditions, and number of difficulties with activities of daily living at baseline.

RELATIONSHIP BETWEEN HEARING IMPAIRMENTS AND COGNITIVE FUNCTIONING

Not only have studies found a negative association between hearing loss and physical functioning, but other research has indicated that hearing loss may also be associated with decreased cognitive functioning, although findings in this area are mixed. In a case-control study by Uhlmann, Larson, Rees, et al (1989), the prevalence of hearing loss among 100 medical clinic outpatients who had Alzheimer's-type dementia were compared to 100 matched nondemented controls. The prevalence of hearing loss was higher among the Alzheimer's cases with greater levels of hearing loss associated with higher levels of dementia after adjusting for other potentially confounding variables, including age, sex, education, medication use, and depression. Hearing loss was also associated with higher scores on the Mini-Mental State Examination in both demented and

nondemented patients. A study by Ives, Bonino, Traven, et al (1995) of seniors 65-79 years of age from five rural counties in northwestern Pennsylvania found that seniors with a hearing impairment were more likely than their nonimpaired peers to have possible depression based on their scores on the Centers for Epidemiologic Studies of Depression Scale (CES-D) and possible dementia based on their scores on the Mini-Mental State Exam (MMSE).

In contrast to the findings noted above, other studies have failed to find an association between hearing loss and cognitive functioning. A five year longitudinal study by Gennis, Garry, Haaland, et al (1991) examined the relationship between hearing status and cognitive status in 259 healthy subjects 60 years of age and older from the Albuquerque, New Mexico area. Hearing level was assessed by audiometric testing and cognitive functioning with the Russell Revision of the Wechsler Memory Scale and the Jacobs Cognitive Screening Test. The results revealed no relationship between baseline hearing and changes in cognitive status over a five year period after adjusting for age and sex. A study by Herbst and Humphrey (1980) also revealed no relationship after adjusting for age between hearing impairments and mental status among 253 persons 70 years and older living in their own homes in an inner London borough.

USE OF SENSORY IMPAIRMENT ASSISTANCE DEVICES

Data from the 1986 Health and Activity Limitation Survey indicate that approximately 90% of seeing impaired Canadians 55 years and older used seeing assistance devices and that this percentage remained consistent across all age groups (Forbes, Hayward, and Agwani, 1993). Data from the same survey indicated that the percentage of hearing impaired people 55 years and older who reported using hearing assistance devices ranged from 23.7% of 55-64 year olds to 58.8% of

people 85 years of age and older (Forbes, Hayward, and Agwani, 1993).

Despite the potential benefits of hearing assistance devices, there appears to be a tendency for older people to be less satisfied with hearing assistance devices and less likely to use them. A review by Jerger, Chmiel, Wilson, et al (1995) found that older people are less satisfied with hearing aids than are younger persons, with only between 10.0% and 21.0% of older hearing impaired individuals reporting that they own hearing aids. Other studies have found that hearing aid use declines with increasing age. For example, Sorri, Luotonen, and Laitakari (1984) reported that fewer than half of all seniors aged 75 and older who owned hearing aids used them regularly despite the fact that hearing aids tend to improve quality of life for the majority of hearing impaired persons (Malinoff and Weinstein, 1989; Birk-Nielsen and Ewertsen, 1974; Salomon, Vesterager, and Jagd, 1988).

OVERVIEW AND GOALS OF THE REPORT

The main purpose of this report is to describe the prevalence of sensory (seeing and hearing) disabilities among Canadians 55 years and older using two cross-sectional national Health and Activity Limitation Surveys (1986 and 1991 HALS). Further, risk factors associated with having sensory disabilities are examined as well as the impact sensory disabilities have on every day living and functional independence. Because the two cross-sectional surveys were comparable in terms of sampling and item content, comparisons are made between findings from the 1986 and 1991 HALS. Specifically, this report has the following objectives:

- 1) To examine the prevalence of sensory disabilities (seeing and hearing) and the medical conditions which cause these disabilities among Canadians aged 55-64 years and 65 years and older.
- 2) To examine the risk factors associated with having sensory disabilities among Canadians aged 55-64 years and 65 years and older.
- 3) To examine the relationship between sensory disabilities and functional independence among Canadians aged 55-64 years and 65 years and older.

METHODS

OVERVIEW

In response to a recommendation to the parliament of Canada that a national data base be gathered on the disabled in Canada, Statistics Canada conducted the Health and Activity Limitation Surveys in 1986 and again in 1991. The main purpose of these two cross-sectional surveys was to determine the types and level of disabilities among Canadians and the impact these disabilities have on their activities of daily living. HALS defined a disability as “any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being” and that the restriction or lack of ability to perform an activity had lasted or was expected to last six months or more (Statistics Canada, 1989, 1995). However, people who used a technical aid to completely remove the restriction were not considered disabled (e.g., using corrective lenses to eliminate vision problems).

SURVEY DESIGN

Both the 1986 and 1991 Health and Activity Limitation Surveys were cross-sectional surveys designed to gather information on disabilities experienced by Canadians and the impact these disabilities had on their daily living. In both surveys, a nationally representative sample of disabled Canadians 15 years and older was selected based on the 1986 or 1991 Canadian Census. In 1986, both institutionalized and noninstitutionalized Canadians were included in the survey, whereas, in 1991, only noninstitutionalized Canadians were included. To facilitate comparability between the two surveys, for the purposes of this report, only data from the noninstitutionalized samples are

considered.

The noninstitutionalized survey was conducted in two stages. The first stage consisted of determining whether respondents to the 1986 or 1991 Census Long Form (which was completed by every fifth household) indicated that they had either a physical or mental disability that interfered with activities of daily living. A list of all people (with the exception of those in penal institutions and correctional facilities), 15 years of age and older, who indicated on the Census Long Form that they had a physical or mental disability was identified. From this list, a stratified sampling procedure was used to select the disabled sample with two major strata formed: Indian reserves and all other areas. All Indian reserves were included in the survey and a sample of the remaining areas was selected.

The result of a small field test indicated that many persons with a mild disability as well as some seniors did not indicate on the Census Long Form that they were disabled. As a result, a sample of individuals 15 years of age and older who indicated on the Census Long Form that they were not disabled was also selected. Among those originally selected for the nondisabled sample, approximately 5% were subsequently classified as disabled by HALS, and became part of the disabled sample (Statistics Canada, 1989, 1995).

SURVEY SAMPLE

The disabled sample for the Health and Activity Limitation Surveys consisted of individuals who identified themselves on the Census Long Form as having either a physical or mental disability or who originally indicated on the Census Long Form that they were nondisabled, but were classified as disabled when they completed the HALS. The nondisabled sample included Canadians

who indicated on the Census Long Form that they did not have a physical or mental disability and were also classified as nondisabled based on their responses to the HALS. The total response rates for the two surveys were 90% in 1986 and 92% in 1991. The overall sample sizes for each survey were 132,337 and 91,355 in 1986 and 1991, respectively. Sample sizes for the age groups used in this report (55-64 years and 65 years and older) are presented in Table 1.

SURVEY INSTRUMENT

Canadians who indicated on the Census Long Form that they had a disability completed the HALS through a face-to-face interview. For people unable to complete the interview themselves, usually due to their having a high level of disability, the interview was completed by proxy (approximately 12% of all cases). Canadians who indicated on the Census Long Form that they did not have disability completed the HALS through a shorter telephone interview.

Both the 1986 and 1991 HALS had similar formats and asked similar questions. All respondents completed Section A of the surveys, which asked them to indicate which of 19 physical restrictions they had based on a modified version of the Activities of Daily Living (ADL) Scale (see Table 2). Other items assessed respondents' level of cognitive functioning. Respondents who indicated that they had at least one ADL restriction or a cognitive limitation were classified as disabled. Of particular interest for this report are ADL restrictions used to define seeing and hearing disabilities. Respondents who indicated that they had at least one seeing-related ADL restriction were classified as having a seeing disability and those who indicated that they had at least one hearing-related ADL restriction were classified as having a hearing disability. For each ADL restriction respondents indicated they had, they were also asked to indicate what medical condition

was the primary cause of the restriction, the cause of the medical condition, the duration of the restriction, and assistance devices used to overcome their restrictions.

Only respondents who were classified as disabled completed the second part of the HALS which assessed the impact of their disability(ies) in areas of daily living such as assistance required for instrumental activities of daily living (e.g., help with housework), modifications made to residences to aid with disabilities, and participation in physical and leisure activities. Further, through a computer link with the Canadian census, additional demographic and household information, such as level of income, marital status, and household size, was available for all respondents.

VARIABLES USED IN THE ANALYSES

Demographic Variables

Demographic variables were available through a computer link with the 1986 and 1991 Canadian Census. Variables used in the analyses for this report include age, sex, marital status, type of dwelling (single versus other), tenure of dwelling (owned versus rented), household size, degree of urbanization, region of Canada, and total household income.

Disability Status

Overall Disability

Respondents who indicated on Section A of HALS that they had at least one restriction in activities of daily living or a cognitive limitation were classified by HALS as disabled. Those who reported no restrictions in activities of daily living and no cognitive limitations were classified as

nondisabled.

Types of Physical Disabilities

Respondents who were classified as disabled were further categorized by HALS according to the type of physical disability(ies) they had. Based on their responses to the 19 ADL items in Section A, respondents were classified by whether or not they had seeing, hearing, speaking, mobility, and agility disabilities (see Table 2 for a breakdown of the ADLs used to categorize respondents according to type of disability).

Type of Sensory Disability

Respondents who reported having at least one seeing or hearing disability were classified as sensory disabled (SD or HD). Those who reported having a sensory disability were further classified according to whether they were seeing disabled but hearing able (SD-HA), hearing disabled but seeing able (HD-SA), or both seeing and hearing disabled (SD-HD) (see Table 3).

Speaking, Mobility, and Agility Disabilities

Respondents who reported having at least one speaking, mobility, or agility disability were classified as SMA (speaking, mobility, or agility) disabled.

Medical Conditions Reported as Causing Sensory Disabilities

For each sensory ADL restriction a respondent reported, s/he was asked to indicate the medical condition which was the primary cause of the restriction. For both the 1986 and 1991

HALS, the medical conditions were coded using the classifications provided by the International Coding of Diseases (ICD), Ninth Revision (Statistics Canada, 1989, 1995) and the Musculo-Skeletal Codes list developed by Statistics Canada (1989, 1995). Each medical condition reported by respondents as the cause of a sensory ADL restriction was assigned a three digit code which corresponded to the medical condition. For example, a seeing disabled respondent who reported disease of the eye and adnexa would have been assigned the ICD-9 code of 360. For the 1986 HALS, a finer level of coding was used and the three digit ICD-9 and Musculo-Skeletal codes were further broken down (for example, the code for diseases of the eye and adnexa was divided into seven categories, each one indicating a more specific disease of the eye and adnexa). Because the coding used for the 1991 HALS did not break down the ICD-9 and Musculo-Skeletal codes into fine enough categories to be meaningful for the purposes of this report, only the disease codes from the 1986 HALS are presented.

Assistance Devices Used to Overcome Sensory Disabilities

Respondents who reported that they had a seeing disability indicated whether they used any seeing assistance devices to overcome their seeing disability, including glasses or contact lenses, hand-held magnifiers, recording equipment, white cane (1986 only), large print materials (1991 only), braille/audio (1991 only), or other assistance devices.

Respondents who reported that they had a hearing disability indicated whether they used any hearing assistance devices to overcome their hearing disability, including hearing aids, telecaption decoders, special amplification systems, volume control telephones, interpreter/computer (1991 only), or other assistance devices.

Restrictions in Instrumental Activities of Daily Living

Disabled respondents were asked to indicate whether they received assistance in performing seven instrumental activities of daily living (IADLS) including meal preparation, shopping, household chores, heavy chores, personal finances, personal care, and moving around residence. For analyses presented in this report, only respondents who indicated that the assistance they received was due to their disabilities were classified as having an IADL restriction. Based on their responses to the seven items assessing IADL restrictions, a variable was formed that classified disabled respondents according to whether or not they reported at least one IADL restriction.

Difficulties Leaving Residence and Taking Trips

Disabled respondents were asked to indicate whether or not they had difficulty leaving their residence for short trips, whether they considered themselves restricted to their residence (1991 only), whether they required an attendant for short trips, whether they had difficulty using a car (1986) or whether they could drive a car (1991), and whether their disability prevented them from taking long trips.

Participation in Leisure Activities

Disabled respondents indicated how often they engaged in the following leisure activities: listening to the television, radio, or tapes; reading; talking on the telephone; working on arts and crafts or other hobbies; social activities with family and friends; visiting friends and relatives; shopping; participating in religious activities; volunteering; attending sports events, plays, concerts and movies; visiting museums, libraries, art galleries, and historic sites; playing bingo, cards, or

other activities; visiting provincial or national parks; and taking courses or seminars. For this report, respondents were classified as either participating or not participating in each of the leisure activities.

Participation in Physical Activities

For the 1991 HALS only, disabled respondents were asked to indicate how often they engaged in the following physical activities: walking, gardening, exercise, swimming or aquatics, dancing, and wheeling or cycling. For this report, respondents were classified as either participating or not participating in each of the six types of physical activities.

Effects of Degree of Sensory Disability on Functional Independence

Three different measures were used to assess functional independence: restrictions in instrumental activities of daily living, emotional well-being, and decision making control.

Restrictions in Instrumental Activities of Daily Living

Respondents were categorized according to whether or not they reported needing help due to their disability for at least one instrumental activity of daily living.

Emotional Well-Being

Emotional well-being was assessed by the following question, “Overall, how would you say things are these days? Would you say you are very happy, pretty happy, or not happy”. Respondents who indicated they were “very happy” or “pretty happy” were classified as happy, those who

indicated they were “not happy” were classified as “unhappy”.

Decision Making Control

Perceived decision making control was assessed by the following question, “How much control do you feel you have in making decisions that affect your everyday activities?”. Respondents who indicated that they “made all the decisions” or made “most of the decisions” were classified as having decision making control. Those who indicated that they “did not have very much control” or “had no control” were classified as not having decision making control.

Degree of Sensory Disability

Severity indexes were formed to assess the degree of disability for SD-HA, HD-SA, SD-HD, and SD or HD respondents. The indexes were formed based on the formulation used by HALS in the development of an overall severity index (McDowell, 1988; Health and Activity Limitation Survey, 1995). Each of the three indexes are described below.

A seeing severity index was developed based on the number of seeing ADL restrictions respondents indicated they had and the degree to which the restrictions interfered with vision. Items used to form the seeing severity index are indicated in Table 4. Respondents who scored 1 on the seeing severity index were classified as mildly seeing disabled, 2 as moderately seeing disabled, and 3 or 4 as severely seeing disabled.

A hearing severity index was developed based on the number of hearing ADL restrictions respondents indicated they had and the degree to which the restrictions interfered with hearing. Items used to form the hearing severity index are indicated in Table 5. Respondents who scored 1

on the hearing severity index were classified as mildly hearing disabled, 2 as moderately hearing disabled, and 3 to 5 as severely hearing disabled.

A sensory disability (seeing or hearing) severity index was developed based on the number of seeing and hearing ADL restrictions respondents indicated they had and the degree to which the restrictions interfered with seeing or hearing. The sensory disability severity index was calculated by adding together the seeing and hearing severity indexes. Respondents classified as SD or HD who scored 1 on the sensory disability severity index were classified as mildly sensory disabled, 2 as moderately sensory disabled, and 3 to 9 as severely sensory disabled. Because SD-HD respondents could have a score no lower than 2 on the sensory disability severity index, respondents classified as SD-HD who scored 2 on the sensory disability severity index were classified as mildly sensory disabled, 3 as moderately sensory disabled, and 4 to 9 as severely sensory disabled.

Control Variables

For analyses testing the relationship between severity of sensory disability and functional independence, all associations were adjusted for age, sex, marital status, type of dwelling, degree of urbanization, total household income, whether or not respondents had difficulty leaving their residence for either short or long trips, SMA disability status, whether or not respondents used any physical aids to overcome their disabilities (includes aids used to overcome sensory and SMA disabilities), and whether or not respondents had modified their residence in any way to help deal with their disability.

STATISTICAL ANALYSES

Population Characteristics

Descriptive statistics were generated breaking down the sample by age (55-64 years and 65 years and older) for both the 1986 and 1991 HALS.

Types of Physical Disabilities

Descriptive statistics were generated breaking down the sample by each of the five types of physical disabilities assessed by HALS: seeing, hearing, speaking, mobility, and agility. Descriptive statistics were also generated breaking down the sample by different sensory disability classifications: seeing disabled but hearing able (SD-HA), hearing disabled but seeing able (HD-SA), both seeing and hearing disabled (SD-HD), and seeing or hearing disabled (SD or HD).

Risk Factors Associated with Having a Sensory Disability

Analyses were conducted to examine risk factors associated with being classified as SD-HA, HD-SA, SD-HD, or SD or HD among Canadians 55 years and older for both the 1986 and 1991 HALS. Risk factors examined included age, sex, marital status, type of dwelling, tenure of dwelling, household size, degree of urbanization, region of Canada, and total household income. Adjusted odds ratios were calculated using logistic regression analyses to determine the association between each demographic risk factor and being classified as disabled. Each odds ratio was adjusted for all other risk factors noted above.

Medical Conditions Reported as the Primary Causes of Sensory Disabilities

Using the 1986 HALS, descriptive statistics were generated examining what medical conditions were reported as the primary causes of sensory disabilities for each of the two ADL restrictions used to categorize respondents as seeing disabled and for each of the two ADL restrictions used to categorize respondents as hearing disabled.

Assistance Devices Used to Overcome Sensory Disabilities

The percentage of seeing disabled Canadians 55 years and older who reported using seeing assistance devices were analyzed by age for both the 1986 and 1991 HALS. Similarly, the percentage of hearing disabled Canadians 55 years and older who reported using hearing assistance devices were analyzed by age for both the 1986 and 1991 HALS.

Relationship Between Disabilities and the Activities of Disabled Canadians 55 Years and Older

The percentage of disabled respondents who reported participating (or having difficulty participating) in different types of activities was examined by age and sex for the four sensory disability classifications (SD-HA, HD-SA, SD-HD, and SD or HD) as well as for SMA disabilities. The types of activities examined were instrumental activities of daily living restrictions, difficulties leaving residence for trips, participation in leisure activities, and participation in physical activities (1991 only).

Among disabled respondents, for each disability classification (SD-HA, HD-SA, HD-SD, HD or SD, and SMA), logistic regression analyses were conducted comparing the odds of participating (or having difficulty participating) in an activity between respondents classified as

disabled versus those not classified as disabled. For example, the odds of respondents classified as SD-HA needing assistance with heavy chores was compared to the odds of all other disabled respondents needing assistance with heavy chores. All odds ratios were adjusted for marital status, type of dwelling, degree of urbanization, total household income, whether or not respondents used any physical aids to overcome their disabilities (includes aids used to overcome sensory and SMA disabilities), whether or not respondents had modified their residence in any way to help deal with their disability, and whether respondents had other disabilities. It should be noted that the disabilities that made up “other disabilities” changed depending on the analyses. For analyses using the SD-HA category, other disabilities included all physical disabilities other than seeing disabilities (i.e., hearing, speaking, mobility, and agility). Similarly, for analyses using the HD-SA category, other disabilities included all physical disabilities other than hearing disabilities (i.e., seeing, speaking, mobility, and agility). For analyses using the HD-SD and HD or SD, other disabilities included all physical disabilities other than seeing and hearing disabilities (i.e., speaking, mobility, and agility). Finally, for analyses using the SMA disability category, other disabilities included all physical disabilities other than speaking, mobility, and agility (i.e., seeing and hearing).

Relationship Between Sensory Disabilities and Functional Independence

Logistic regression analyses, using unweighted data, were conducted to examine the relationship between level of severity of sensory disabilities and functional independence among sensory disabled Canadians 55 years and older. Three different measures of functional independence were used: restrictions in instrumental activities of daily living (IADL), emotional well-being (defined as how happy respondents were in general), and perceived level of control over decision

making in everyday activities.

To examine the association between severity of seeing disability and functional independence, respondents who were categorized as seeing disabled but hearing able (SD-HA) were selected and three separate logistic regression analyses were run to determine the association between degree of severity of the seeing disability, as measured by the seeing severity index, and each of the three measures of functional independence (IADL restrictions, emotional well-being, and decision making control). The association between severity of seeing disability and each functional independence measure was adjusted for age, sex, marital status, type of dwelling, degree of urbanization, total household income, whether or not respondents had difficulty leaving their residence for either short or long trips, SMA disability status, whether or not respondents used any physical aids to overcome their disabilities (includes aids used to overcome sensory and SMA disabilities), and whether or not respondents had modified their residence in any way to help deal with their disability.

Similar logistic regression analyses, using the appropriate severity indexes, were conducted for hearing disabled but seeing able (HD-SA), seeing and hearing disabled respondents (SD-HD), and seeing or hearing disabled (SD or HD) respondents.

WEIGHTING

Due to the multi-staged, stratified sampling procedure, it was necessary to use weights for all analyses that provided population estimates for the estimates to correctly reflect the Canadian population. Each respondent in the survey was assigned a weight corresponding to the number of people that respondent represented based on the Canadian Census. These weights were used for all

analyses which generated population estimates.

Weighted data was used for all logistic regression analyses where corresponding population estimates were provided. However, despite the fact that the weighting procedure produces accurate population estimates, significance tests and confidence intervals are inflated, resulting in greater type I error. Therefore, for all logistic regression analyses using weighted data, weights were rescaled by dividing the weight for each respondent by the average weight of all respondents used in the analyses to produce more accurate significant tests and confidence intervals (Statistics Canada, 1989, 1995).

INTERPRETATION OF ODDS RATIOS

Due to the relatively large sample size of both the 1986 and 1991 HALS, many odds ratios generated from logistic regression analyses were significant, even after the weights were rescaled. For the purposes of this report, odds ratios of greater than 1.5 or less than 0.66 were defined as being meaningful for setting policy. Rather than discussing all significant odds ratios in this report, only odds ratios considered “policy meaningful” are discussed, with other odds ratios presented in tabular form only.

RESULTS

POPULATION CHARACTERISTICS AMONG CANADIANS 55 YEARS AND OLDER

Table 5 presents the population characteristics for both the 1986 and 1991 HALS for 55-64 year olds and seniors (65 years and older). For both age groups, there was little difference in their population characteristics between survey years, with the exception that respondents in 1991 tended to report higher levels of total household income. There were, however, differences between the two age groups on a number of population characteristics. A slightly higher percentage of seniors were women (approximately 57%) compared to 55-64 year olds (approximately 51%). Further, just over 57% of seniors were married and over a third were divorced, separated, or widowed. This compares to three quarters of 55-64 year olds who were married and less than 20% who were divorced, separated, or widowed. Among seniors, 90.0% and 80.6% in 1986 and 1991, respectively had a total household income below \$25,000. For 55-64 year olds, 74.5% and 61.4% had total household incomes below \$25,000.

PREVALENCE OF SENSORY DISABILITIES AMONG CANADIANS 55 YEARS AND OLDER

Figures 1a-d present the prevalence of the five different types of physical disabilities identified by HALS for Canadians 55 years and older. In both 1986 and 1991, for every type of physical disability, a greater percentage of seniors (65 years and older) reported being disabled than 55-64 year olds. Although mobility and agility disabilities were more prevalent among both age groups, sensory disabilities still accounted for a large number of disabilities. As shown in Table 6, among 55-64 year olds, 7.2% in 1986 and 8.2% in 1991 reported hearing disabilities and among seniors, these percentages more than doubled to 17.9% in 1986 and 17.5% in 1991. Further, for both age

groups, hearing disabilities were more prevalent among men than women (Figures 1a-d).

Among 55-64 year olds, 3.1% and 3.0% in 1986 and 1991, respectively reported having seeing disabilities compared to 9.7% and 10.3% of seniors (Table 6). Among seniors, women tended to be slightly more likely than men to report being seeing disabled (Figures 1a-d). Considering seeing and hearing disabilities together, 9.3% and 10.5% of 55-64 year olds reported having either a seeing or hearing disability (SD or HD) in 1986 and 1991 respectively. Among seniors, these percentages more than doubled to 22.8% and 23.0%. In both 1986 and 1991, 1% or fewer of 55-64 year olds reported being both seeing and hearing disabled, whereas, almost 5% of seniors reported having both seeing and hearing disabilities.

FACTORS ASSOCIATED WITH SENSORY DISABILITIES AMONG CANADIANS 55 YEARS AND OLDER

Tables 7a-d present risk factors associated with being classified as SD-HA, HD-SA, SD-HD, and SD or HD. For each table, the percentage of respondents classified as being in the sensory disability category of interest (e.g., for Table 7a, the percentage of respondents who were classified as SD-HA) are presented along with adjusted odds ratios to indicate the association between each risk factor and being classified into the disability category after controlling for all other risk factors. Initial analysis indicated a high degree of collinearity between some risk factors that were to be included in the regression equations. To reduce the collinearity, the variables “type of dwelling” and “number of persons in household” were not included in the final logistic regression equations.

For all four types of sensory disability categories (SD-HA, HD-SA, SD-HD, and SD or HD), seniors were more likely to be classified as disabled than 55-64 year olds, after adjusting for other

risk factors (OR's ranging from 1.69 to 5.88). Similarly, total household income was significantly associated with all four types of sensory disability categories, with higher levels of income generally associated with a lower likelihood of being disabled, after adjusting for other risk factors. Sex was also associated with having sensory disabilities, with men more likely to be classified as HD-SA, SD-HD, and SD or HD after adjusting for other risk factors. However, it should be noted that for SD-HD respondents, a slightly greater percentage of women were classified as disabled, but after adjusting for other risk factors, men were significantly more likely to be disabled. Although men were significantly less likely than women to be classified as SD-HA, the odds ratios did not reach the "policy meaningful" level (OR's of 0.85 and 0.77 for 1986 and 1991, respectively).

MEDICAL CONDITIONS REPORTED AS CAUSES OF SEEING DISABILITIES AMONG CANADIANS 55 YEARS AND OLDER

Table 9 presents the medical conditions and corresponding ICD-9 and Musculo-Skeletal codes reported as causes of seeing disabilities among seeing disabled Canadians 55 years and older from the 1986 HALS. For seniors, cataract was reported most often as the cause of seeing ADL restrictions (27.5% for difficulty reading newsprint and 28.9% for difficulty seeing faces from a distance). Other medical conditions reported by seniors as causing seeing restrictions were aging, other nonspecified disorders of the eye and adnexa, diabetes mellitus, and glaucoma. Among 55-64 year olds, cataract and nonspecified disorders of the eye and adnexa were the two most prevalent conditions reported as causing seeing restrictions. Cataract was reported by 10.6% of 55-64 year olds as the cause of difficulty reading newsprint and 16.4% reported cataract as the cause of difficulty seeing faces from a distance. Nonspecified disorders of the eye and adnexa was reported

by 15.9% of 55-64 year olds as the cause of having difficulty reading newsprint and 13.4% reported it as the cause of having trouble seeing faces from a distance. Other reported causes of seeing restrictions among 55-64 year olds included diabetes mellitus, blindness (both eyes), glaucoma, and disorders of refraction and accommodation.

MEDICAL CONDITIONS REPORTED AS CAUSES OF HEARING DISABILITIES AMONG CANADIANS 55 YEARS AND OLDER

Table 9 presents the medical conditions and corresponding ICD-9 and Musculo-Skeletal Codes reported as the primary causes of hearing disabilities among hearing disabled Canadians 55 years and older from the 1986 HALS. The most prevalent condition reported as causing either difficulty hearing a conversation with one person or hearing a conversation in a group of three or more was deafness, reported by over 40% of hearing disabled respondents in both age groups. Among seniors, aging, reported by 20% of respondents, was the second most prevalent condition causing hearing restrictions followed by other disorders of the ear, problems with hearing, and other disorders of the tympanic membrane. Among 55-64 year olds, the next most prevalent medical conditions after deafness reported as a cause of hearing restrictions were other disorders of the ear, problems with hearing, and aging.

SEEING ASSISTANCE DEVICES USED BY SEEING DISABLED CANADIANS 55 YEARS AND OLDER

Figures 2a and b indicate the percentage of seeing disabled Canadians 55 years and older who reported using seeing assistance devices. Among both age groups in both survey years, glasses and

contact lenses were the most common type of seeing assistance device used, although there was decline in their use between 1986 and 1991 from approximately 85% in 1986 in both age groups to just over 70% in 1991. The use of hand-held magnifiers was the second most common assistance device used in both years by both age groups. Among seniors, 38.4% and 36.4% in 1986 and 1991, respectively reported using hand-held magnifiers. Among 55-64 year olds, there was a decline in the percentage who reported using hand-held magnifiers from 30.1% in 1986 to 19.2% in 1991. Another relatively frequently used seeing assistance device, large print materials, was reportedly used by 15.7% of 55-64 year olds and 23.7% of seniors in 1991 (respondents were not specifically asked whether they used large print materials in the 1986 HALS).

HEARING ASSISTANCE DEVICES USED BY HEARING DISABLED CANADIANS 55 YEARS AND OLDER

Figures 3a and b indicate the percentage of hearing disabled Canadians 55 years and older who reported using hearing assistance devices. In both 1986 and 1991, approximately 20% of hearing disabled 55-64 year olds and 40% of hearing disabled seniors reported using hearing aids. The next most commonly used hearing assistance device, volume control telephones, was reportedly used by just under 10% of 55-64 year olds in both survey years compared to 13.3% and 20.9 % of seniors in 1986 and 1991, respectively.

EFFECTS OF DISABILITIES ON INSTRUMENTAL ACTIVITIES OF DAILY LIVING AMONG

DISABLED CANADIANS 55 YEARS AND OLDER

Tables 10a-d present the percentage of disabled Canadians 55 years and older who reported having restrictions due to their disability for each of seven different types of instrumental activities of daily living. Further, the percentage who reported having at least one of the seven types of IADL restrictions is also presented. Across both survey years, in general, over 50% of seniors had at least one IADL restriction (ranging from 45.0% for HD-SA males in 1986 to 91.0% of SD-HD females in 1986). For 55-64 year olds, the percentage reporting at least one activity restriction ranged from 28.0% (HD-SA males in 1991) to 87.3% (SD-HD females in 1986). Compared to respondents in the other disability categories, those who were classified as SD-HD tended to report having at least one IADL restriction the most often (range 57.5% to 74.2% for 55-64 year olds and 68.5% to 91.0% for seniors) and those classified as HD-SA tended to report at least one IADL restriction the least often (range 28.0% to 57.9% for 55-64 year olds and 45.0% to 66.2% for seniors).

Tables 11a-h present adjusted odds ratios representing the association between being disabled and having an IADL restriction among disabled Canadians 55 years and older. Having an SMA disability tended to be associated with a greater risk of reporting an IADL restriction among disabled respondents. For example, in 1986, among 55-64 year old disabled women, those who were classified as SMA disabled were 4.89 times more likely to report having a restriction in performing heavy chores compared to those not classified as SMA disabled. Further, respondents classified as HD-SA were generally at a decreased risk for having an IADL restriction. For example, in 1986, among 55-64 year old disabled women, those classified as HD-SA were 0.55 times as likely to report having a restriction in performing heavy chores compared to those who were not classified as HD-SA.

EFFECTS OF DISABILITIES ON DIFFICULTIES LEAVING RESIDENCE FOR TRIPS AMONG DISABLED CANADIANS 55 YEARS AND OLDER

Tables 12a-d present the percentage of disabled Canadians 55 years and older who reported difficulties leaving their residence for trips. Among disabled 55-64 year olds, between 2.4% and 36.2% reported difficulty leaving their residence for short trips and 10.3% to 45.1% reported difficulty leaving their residence for long trips. Among disabled seniors, between 6.5% and 32.7% reported difficulty leaving their residence for short trips and between 12.2% and 41.8% reported difficulty leaving their residence for long trips. In 1991, approximately 40% (range 18.0% to 58.0%) of disabled respondents considered themselves restricted to their residence.

Tables 13a-h present adjusted odds ratios representing associations between being disabled and having difficulties leaving residence for trips among disabled Canadians 55 years and older. Having an SMA disability tended to be associated with an increased risk for having difficulty taking trips. For example, SMA disabled respondents were more likely to report difficulty leaving their residence for short trips, with odds ratios ranging from 2.08 (females, 55-64 years, 1991) to 11.11 (females, 65 years and older, 1991) and also more difficulty taking long trips, with odds ratios ranging from 2.56 (females, 65 years and older, 1986) to 6.67 (females, 65 years and older, 1991). Among disabled respondents with sensory disabilities, there was no consistent pattern of associations between difficulty taking trips and disability status.

EFFECTS OF DISABILITIES ON PARTICIPATION IN LEISURE ACTIVITIES AMONG DISABLED CANADIANS 55 YEARS AND OLDER

Tables 14a-d present the percentage of disabled Canadians 55 years and older who reported participating in different leisure activities by age and type of disability. In general, the percentage of respondents who reported participating in each of the leisure activities was approximately equal across the five types of disability categories, although there was a tendency toward a smaller percentage of SD-HD respondents reporting participation in leisure activities, particularly among seniors.

Tables 15a-h present adjusted odds ratios representing associations between being disabled and participating in leisure activities among disabled Canadians 55 years and older. In general, disabled respondents who were classified as SD-HA tended to be less likely to report participating in leisure activities. For example, SD-HA females 55-64 years old in 1986 were 0.37 times as likely to participate in social activities with family and friends than those not classified as SD-HA. Respondents classified as SMA disabled as well as seniors classified as SD-HD also tended to be less likely to report participating in leisure activities.

EFFECTS OF DISABILITIES ON PARTICIPATION IN PHYSICAL ACTIVITIES AMONG DISABLED CANADIANS 55 YEARS AND OLDER

Tables 16a-b present the percentage of disabled Canadians 55 years and older who reported participating in different physical activities by age and type of disability for the 1991 HALS. In general, the percentage of respondents who reported participating in each of the physical activities was approximately equal across the five types of disability categories, with seniors tending to report participating in physical activities less often than 55-64 year olds.

Tables 17a-d present adjusted odds ratios representing associations between being disabled

and participating in physical activities among disabled Canadians 55 years and older. Respondents classified as SMA disabled tended to be less likely to report participating in leisure activities than respondents classified as not SMA disabled. For example, among disabled females 55-64 years old in 1986, those who were classified as SMA disabled were 0.21 times as likely than those not classified as SMA disabled to report walking as a physical activity. Among disabled respondents with sensory disabilities, there was no consistent pattern of associations between participation in physical activities and disability status.

ASSOCIATION BETWEEN SEVERITY OF SENSORY DISABILITIES AND FUNCTIONAL INDEPENDENCE AMONG CANADIANS 55 YEARS AND OLDER

Table 18 presents the adjusted odds ratios and 95% confidence intervals between the degree of severity for each sensory disability category (SD-HA, HD-SA, SD-HD, and SD or HD) and each of the three measures of functional independence. As shown in Table 18, the severity of sensory disability for SD-HA and SD or HD respondents was significantly associated with having at least one IADL restriction, although the odds did not reach a “policy meaningful” level for SD or HD respondents. In both cases, respondents classified as severely disabled were more likely to report having at least one IADL restriction than respondents classified as mildly disabled (OR’s = 3.81 and 1.33 for SD-HA and SD or HD, respectively). No significant association between severity of sensory disability and having an IADL restriction was found for HD-SA and SD-HD respondents.

The severity of sensory disability for HD-SA, SD-HD, and SD or HD respondents was significantly associated with perceived decision making control. HD-SA, SD-HD, and SD or HD respondents classified as severely disabled reported having less decision making control than

respondents classified as mildly sensory disabled (OR's = 0.54, 0.22, and 0.54 for HD-SA, SD-HD, and SD or HD, respectively). There was no association between severity of sensory disability and perceived decision making control for SD-HA respondents.

Only the severity of sensory disability for SD or HD respondents was significantly associated with emotional well-being, although the odds ratio just fell short of "policy meaningfulness". Again, those who were classified as severely sensory disabled reported significantly poorer emotional well-being than those who were only mildly sensory disabled (OR = 0.70).

DISCUSSION

This report uses two cross-sectional National Health and Activity Limitation Surveys (1986 and 1991 HALS) to examine the level of sensory disabilities in Canadians 55-64 years and 65 years and older. Population characteristics between the 1986 and 1991 HALS were similar with the exception that respondents in the 1991 survey reported higher total household income. However, much of this increase may have been due to inflation rather than an increase in real income.

The findings of this report indicate that almost a quarter of all Canadians, 65 years and older, suffer from at least one sensory disability, and 5% of seniors reported being both seeing and hearing disabled. Hearing disabilities, as assessed by being restricted in the ability to either hear a conversation with one person or hear a conversation in a group of three or more people, were approximately three times more prevalent than seeing disabilities, as defined by difficulty reading newsprint or difficulty seeing faces from a distance. Consistent with past research (Ives, Bonino, Traven, et al 1995; Forbes, Hayward, and Agwani, 1991), men were more likely than women to report having hearing disabilities. Women were just slightly more likely to report seeing disabilities than men, a result consistent with other studies suggesting little difference in the prevalence of seeing disabilities between older men and women (Wormald, Wright, Courtney, et al, 1992; Nicolosi, Marighi, Rizzardi, et al. 1994; Forbes, Hayward, and Agwani, 1991).

Two risk factors, age and total household income, were found to be consistently associated with having a sensory disability. Seniors, 65 years and older, were more likely than 55-64 year olds to experience a sensory disability. There are at least two possible explanations for the finding that increasing age is associated with greater sensory disability. First, seniors may be more prone to

diseases which cause sensory disabilities. For example, the difference between seniors and 55-64 year olds in terms of seeing disabilities can be largely explained by the fact that seniors seem to be more prone to developing cataracts, one of the most common causes of seeing disabilities. Second, the aging process itself may contribute to the development of sensory disabilities among as evidenced by the fact that seniors were much more likely than 55-64 year olds to report aging as the cause of a sensory disability. This finding is particularly true for hearing disabilities, for which aging was reported as the cause of over 20% of hearing disabilities among seniors. Other researchers have also noted the prevalence of presbycusis (hearing loss associated with aging) and its etiology (Jerger, Chmiel, Wilson, et al, 1995; Stein and Bienenfeld, 1992).

The other risk factor associated with having a sensory disability was total household income, with lower income associated with an increased likelihood of both being seeing disabled and being hearing disabled. This finding should be of particular concern when considering the income level of seniors. Findings from this report indicate that the total household income for seniors is considerably lower than for 55-64 year olds. This is probably mainly due to many seniors having to live on retirement income or government assistance. Findings from Raina, Dukeshire, Lindsay, et al (1997) indicate that over 40% of seniors live below a low income cut-off line that identifies families who spend 20% more of their income than the national average on food, shelter, and clothing (Statistics Canada, 1994b). Findings from the same study also suggest that senior women may be at an even greater risk for experiencing low income due to the fact that they tend to outlive their spouses, and may have their income reduced with the death of a husband.

The low income of seniors, and particularly senior women, may be one contributing factor toward seniors developing sensory disabilities. A review of studies examining the relationship

between income and health status demonstrated that lower income was associated with poorer health. Further, some longitudinal studies (see Raina, Dukeshire, Lindsay, et al, 1997 for a review) suggest a casual relationship with lower income causing poorer health. If a similar causal relationship is found specifically for sensory disabilities, it would indicate that low income is one factor contributing to seniors' experiencing higher levels of sensory disability than younger age groups.

The medical conditions reported as the primary cause of seeing disabilities was consistent with findings from other studies (Rahmani, Tielsch, Katz, et al., 1996; Wormald, Wright, Courtney, et al, 1992). Particular attention should be focussed on medical conditions for which there are currently effective interventions. For example, findings from the study by Rahmani, Tielsch, Katz, et al (1996) revealed that 53.8% of seeing disabled participants, 40 years of age and older, could have had their vision improved with appropriate surgery, primarily cataract surgery. Although HALS did not provide information concerning what percentage of medical conditions which caused seeing disabilities were treatable, results from Rahmani, Tielsch, Katz, et al (1996) suggest that at least some of the medical conditions resulting in seeing disabilities in seniors are either preventable or treatable. Further research is warranted to determine whether the prevalence of sensory disabilities could be reduced through medical interventions that already exist.

Most respondents indicated that they used assistance devices to help overcome their sensory disabilities, although it should be noted that these devices were not sufficient in allowing them to completely overcome their sensory disability, otherwise they would not have been classified as disabled by HALS. The majority of seeing disabled respondents reported using a seeing assistance device, with glasses/contact lenses the device reportedly used most often by seeing disabled

respondents. Interestingly, however, there was a decline in the percentage of seeing disabled respondents who reported wearing glasses or contact lenses, from approximately 85% in 1986 to 70% in 1991. Additional analyses revealed that there was no difference between 1986 and 1991 in the percentage of respondents who indicated that they needed glasses or contact lenses but did not have them. There does not seem to be an immediate explanation for the decline in the use of glasses or contact lenses and further research should determine whether this decline continues, and if so, to examine possible reasons for the decline.

Among hearing disabled respondents, hearing aids were the most common type of hearing assistance device used, followed by volume control telephones. Hearing disabled seniors were more likely to report using hearing assistance devices than were 55-64 year olds, a finding which contradicts other studies that suggest older people are less likely to use hearing aids and are less satisfied with them (see Jerger, Chmiel, Wilson, et al, 1995 for a review). However, the HALS did not provide information concerning how often respondents used their hearing aids and under what circumstances. It would be important to determine whether seniors who have hearing aids use them in such a manner as to gain their full benefit, and if they are found not to use them in an optimal manner, to determine under what circumstances they are not used and why. For example, seniors may find that hearing aids are not good in certain environments such as places where much background noise is present (Jerger, Chmiel, Wilson, et al, 1995). Improving existing assistance devices or developing new ones may help to reduce the level of sensory disability in circumstances for which current assistance devices are not found to be very effective.

Further research is also needed to determine why seniors who have a sensory disability do not use other types of assistance devices to help them overcome their disability. For example, less than

10% of hearing disabled 55-64 year olds and 20% of hearing disabled seniors reported using a volume control telephone. Presumably, other hearing disabled people would also benefit from such an assistance device. Research to determine why some hearing disabled have certain hearing assistance devices and others do not is needed. Both the 1986 and 1991 HALS addressed this issue somewhat by asking respondents to indicate whether there were any assistance devices they needed but did not have and reasons for not having the devices. Although not broken down by type of assistance device, among sensory disabled respondents 55 years and older, the three most common reasons provided for not having a needed sensory assistance device was cost, not being prescribed the assistance device, and not knowing where to obtain the device. These findings suggest that providing assistance devices that are cheaper and increasing people's awareness of the need for such devices and their availability could serve to increase the number of sensory disabled persons who use assistance devices to overcome their sensory disabilities.

Among disabled respondents, having a sensory disability was generally not associated with decreased participation in activities associated with work, pleasure, or travel, except for respondents who had both a seeing and hearing disability. It should be noted, though, that it was not possible using HALS to compare sensory disabled respondents' participation in activities to nondisabled people. To truly get a measure of the impact of sensory disabilities on the lives of disabled individuals, it would be necessary to compare sensory disabled people to those who are not disabled.

The relationship of sensory disabilities to functional independence was examined through logistic regression analyses. In general, the severity of sensory disability was negatively associated with three measures of functional independence. This relationship is best illustrated by examining the association between degree of severity of any sensory disability (SD or HD) and having a

functional limitation. After controlling for potential confounding factors, the degree of sensory disability (SD-HD) was positively associated with having an IADL restriction and negatively associated with perceived decision making control and emotional well-being. In other words, the degree of severity of sensory disabilities was associated with decreased independence on three different measures of functional independence, with severely sensory disabled respondents more likely to report decreased functional independence compared to mildly sensory disabled respondents. These findings suggest that medical interventions and assistance devices that serve to reduce the degree of severity of sensory disabilities could benefit sensory disabled people by increasing their level of functional independence.

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Table 1. Sample Sizes for Respondents 55 Years and Older, Health and Activity Limitation Cross-Sectional Surveys

	1986	1991
55-64 Years		
Unweighted N	22,386	11,507
Weighted N	2,313,100	2,365,000
65 Years and Older		
Unweighted N	38,518	5,106
Weighted N	2,484,800	2,906,900

Table 2. Activities of Daily Living Items Used to Assess Disability Status, Health and Activity Limitation Surveys, 1986 and 1991

ADLs Used to Assess a Seeing Disability
Do you have any difficulty seeing ordinary newsprint, with glasses or contact lenses if usually worn? Do you have any difficulty clearly seeing the face of someone across a room (that is from 4 meters/12 feet), with glasses or contact lenses if usually worn?
ADLs Used to Assess a Hearing Disability
Do you have any difficulty hearing what is said in a conversation with one other person? Do you have any difficulty hearing what is said in a group conversation with at least three other people?
ADL Used to Assess a Speaking Disability
Do you have any difficulty speaking and being understood?
ADLs Used to Assess a Mobility Disability
Do you have any difficulty walking 350 meters or 400 yards without resting (about three city blocks, about half a kilometre or a quarter of a mile)? Do you have any difficulty walking up and down a flight of stairs (about 12 steps)? Do you have any difficulty carrying an object of 4.5 kg for 10 metres or 10 pounds for 30 feet (for example, carrying a bag of groceries)? Do you have any difficulty moving from one room to another? Do you have any difficulty standing for more than 20 minutes?
ADLs Used to Assess an Agility Disability
When standing, do you have any difficulty bending down and picking up an object from the floor (for example, a shoe)? Do you have any difficulty dressing and undressing yourself? Do you have any difficulty getting in and out of bed? Do you have any difficulty cutting your own toenails (That is, is it physically difficult for you to cut your own toenails)? Do you have any difficulty using your fingers to grasp or handle (such as using pliers or scissors)? Do you have any difficulty reaching in any direction (for example, above your head)? Do you have any difficulty cutting your own food?

Table 3. Sensory Disability Classifications, Health and Activity Limitation Surveys, 1986 and 1991

Sensory Disability Classification	Disability Status		
	Seeing Disabled		Hearing Disabled
Seeing or Hearing Disabled (SD or HD)	Yes	or	Yes
Seeing Disabled, Hearing Able (SD-HA)	Yes		No
Hearing Disabled, Seeing Able (HD-SA)	No		Yes
Seeing and Hearing Disabled (SD-HD)	Yes	and	Yes

Table 4. Activity of Daily Living Items Used to Form Seeing Severity Index, Health and Activity Limitation Survey, 1991

ADL Item	Score on Seeing Severity Index
Difficulty seeing ordinary newsprint with glasses or contact lenses if usually worn?	No = 0 Yes, but able = 1 Yes, completely unable = 2
Difficulty clearly seeing the face of someone across a room with glasses or contact lenses if usually worn?	No = 0 Yes, but able = 1 Yes, completely unable = 2
	Total possible score = 4

Table 5. Activity of Daily Living Items Used to Form Hearing Severity Index, Health and Activity Limitation Survey, 1991

Item	Score on Hearing Severity Index
Difficulty hearing what is said in a conversation with one person?	No = 0 Yes, but able = 1 Yes, completely unable = 2
Difficulty hearing what is said in a group conversation with at least three other people?	No = 0 Yes, but able = 1 Yes, completely unable = 2
Able to hear what is said over the telephone?	Yes = 0 No = 1
	Total possible score = 5

Table 5. Population Characteristics of Canadians 55 Years and Older, Health and Activity Limitation Surveys

Population Characteristic	1986		1991	
	55-64 (2,313,100)	65+ (2,484,800)	55-64 (2,365,000)	65+ (2,906,900)
Sex				
Male	48.4	43.1	49.0	42.9
Female	51.6	56.9	51.0	57.1
Marital Status				
Single	6.7	7.1	6.9	8.5
Now married	75.8	57.4	74.4	57.6
Divorced/separated/widowed	17.5	35.5	18.7	33.9
Number of Persons in Household				
One Person	12.5	27.8	11.6	26.2
Two Persons	45.5	50.5	47.9	51.7
Three or more Persons	42.0	21.7	40.6	22.1
Tenure of Dwelling				
Owned	76.4	68.6	79.6	71.5
Rented	22.3	29.7	17.5	26.2
Other	1.3	1.7	2.9	2.2
Type of Dwelling				
Single	68.5	61.1	68.7	60.6
Other	31.5	38.9	31.3	39.4
Degree of Urbanization				
Urban	77.8	77.8	78.0	82.0
Rural	22.2	22.2	22.0	18.0
Region of Canada				
Atlantic	8.0	9.3	7.8	8.7
Quebec	26.5	24.0	26.6	24.2
Ontario	38.1	36.9	38.2	37.7
Prairies	15.4	16.7	15.0	15.9
British Columbia	11.8	13.0	12.2	13.3
Yukon and NWT	0.1	0.1	0.2	0.1
Total Household Income				
Less than \$10,000	45.6	54.9	34.9	30.2
\$10,000-\$24,999	28.9	35.1	26.5	50.4
\$25,000-\$34,999	13.7	5.2	14.7	8.1
\$35,000 and over	11.9	4.8	23.9	11.3

Sample sizes presented in parentheses represent weighted n's.

Figure 1a. Type of Disabilities Reported by Canadians 55-64 Years by Sex
Health and Activity Limitation Survey, 1986

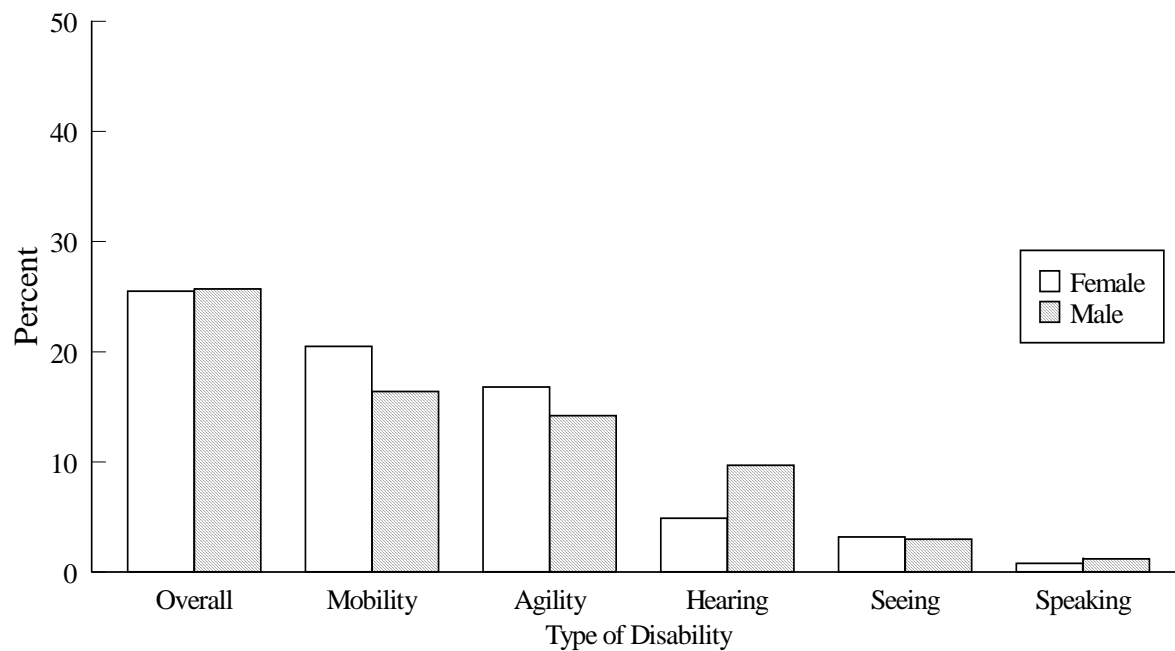


Figure 1b. Type of Disabilities Reported by Canadians 65 Years and Older by Sex
Health and Activity Limitation Survey, 1986

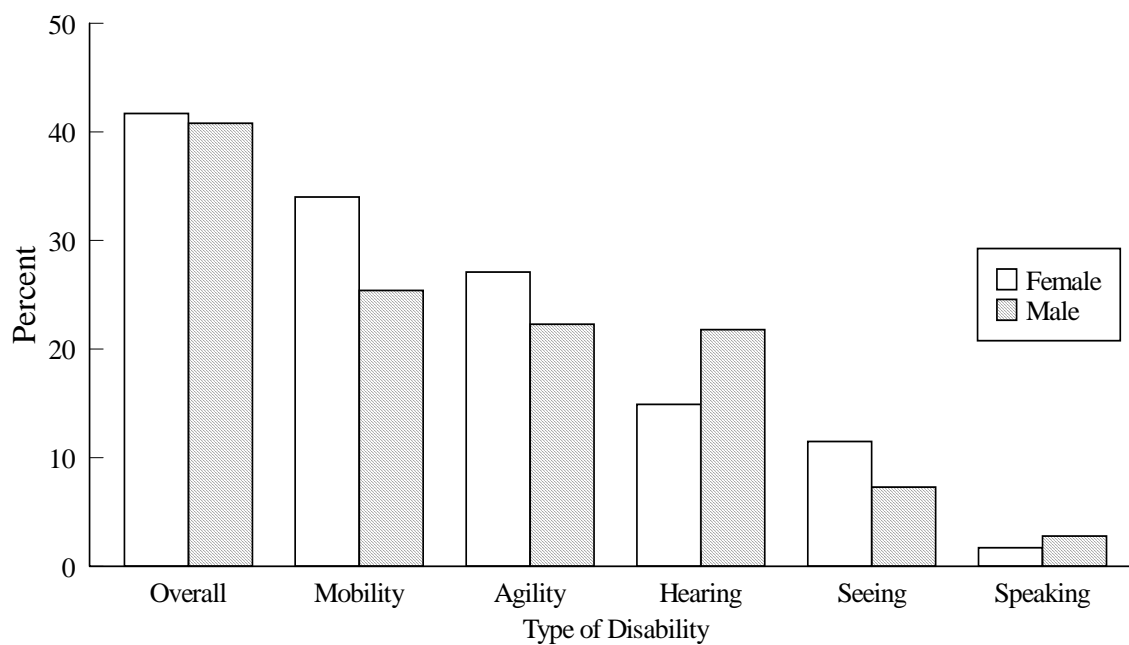


Figure 1c. Type of Disabilities Reported by Canadians 55-64 Years by Sex
Health and Activity Limitation Survey, 1991

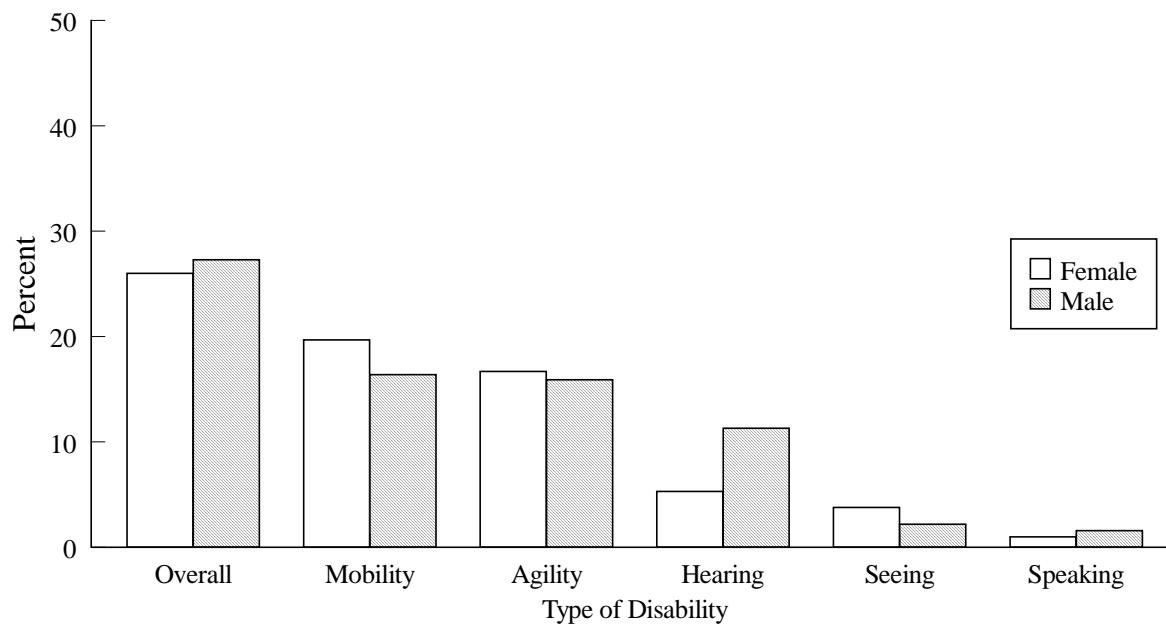


Figure 1d. Type of Disabilities Reported by Canadians 65 Years and Older by Sex
Health and Activity Limitation Survey, 1991

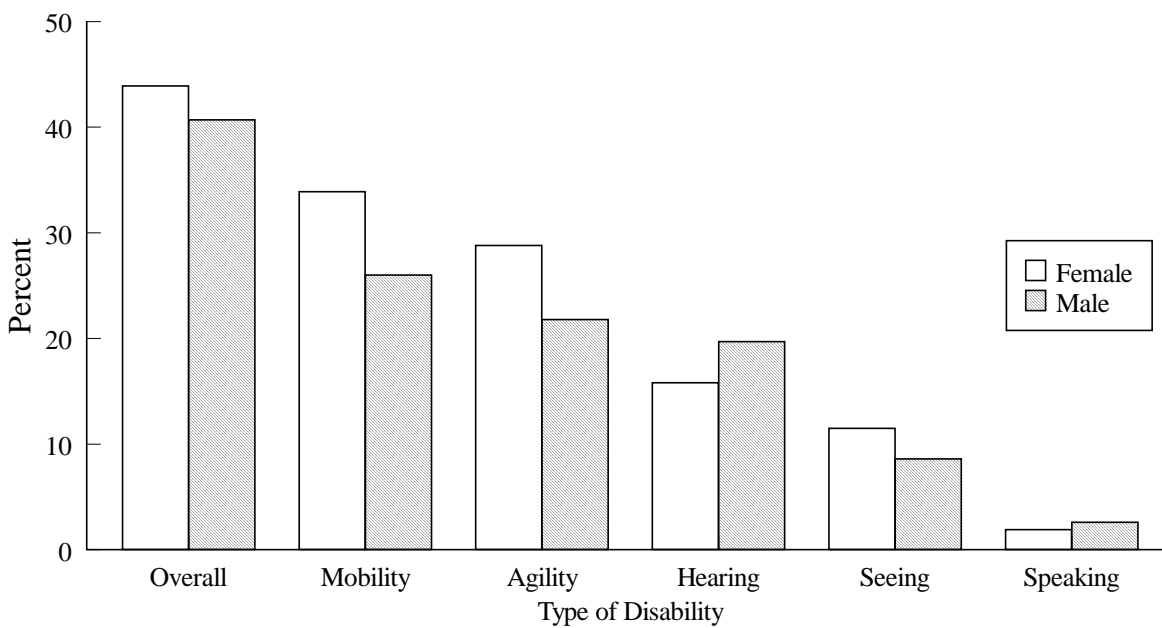


Table 6. Percentage of Canadians 55 Years and Older Classified as Having a Sensory Disability, Health and Activity Limitation Surveys

Sensory Disability Classification	1986		1991	
	55-64 (2,313,100)	65+ (2,484,800)	55-64 (2,365,000)	65+ (2,906,900)
Any Sensory Disability	9.3	22.8	10.5	23.0
Seeing Disabled	3.1	9.7	3.0	10.3
Hearing Disabled	7.2	17.9	8.2	17.5
Seeing Disabled, Hearing Able	2.1	5.0	2.2	5.6
Hearing Disabled, Seeing Able	6.2	13.1	7.5	12.8
Seeing and Hearing Disabled	1.0	4.8	0.7	4.7

Sample sizes presented in parentheses represent weighted n's.

Table 7a. Relationship Between SD-HA Status and Socio-Demographic Characteristics Among Canadians 55 Years and Older, Health and Activity Limitation Surveys

Variable		1986 (4,797,900)		1991 (5,271,900)	
		Disabled (%)	Adjusted Odds Ratio* (95% CI)	Disabled (%)	Adjusted Odds Ratio* (95% CI)
Age	55-64 Years	2.1	referent	2.2	referent
	65+ Years	5.0	1.96 (1.77-2.16)	5.6	2.00 (1.66-2.41)
Sex	Female	4.5	referent	5.3	referent
	Male	2.4	0.85 (0.77-0.95)	2.7	0.77 (0.63-0.92)
Marital Status	Single	4.3	referent	3.0	referent
	Married	2.6	0.63 (0.53-0.75)	2.9	1.32 (0.87-2.00)
	Div/sep/wid	5.8	1.07 (0.90-1.27)	7.3	2.72 (1.79-4.12)
Type of Dwelling**	Single House	3.1	----	3.5	----
	Other	4.5	----	5.0	----
Tenure of Dwelling	Owned	3.1	referent	3.6	referent
	Rented	4.8	1.23 (1.11-1.36)	5.6	1.05 (0.87-1.27)
Number of Persons in Household**	1 person	5.2	----	7.2	----
	2 persons	3.3	----	3.2	----
	3+ persons	3.0	----	3.4	----
Degree of Urbanization	Urban	3.1	referent	4.3	referent
	Rural	4.8	0.93 (0.83-1.04)	3.0	0.82 (0.65-1.04)
Region of Canada	Atlantic	4.4	referent	3.9	referent
	Quebec	3.7	0.81 (0.69-0.96)	3.6	0.83 (0.60-1.16)
	Ontario	3.3	0.84 (0.72-0.98)	4.9	1.29 (0.95-1.77)
	Prairies	3.8	0.93 (0.78-1.10)	3.8	1.02 (0.72-1.45)
	British Columbia	3.1	0.72 (0.60-0.88)	3.0	0.82 (0.56-1.20)
	Yukon and NWT	3.3	0.82 (0.20-3.32)	2.8	0.89 (0.06-12.9)
Total Household Income	less than \$10,000	5.0	referent	4.7	referent
	\$10,000-\$24,999	2.7	0.54 (0.49-0.61)	5.2	0.79 (0.66-0.96)
	\$25,000-\$34,999	1.0	0.27 (0.20-0.35)	1.3	0.27 (0.17-0.42)
	\$35,000 and over	0.9	0.25 (0.19-0.34)	2.0	0.47 (0.35-0.65)

Sample sizes presented in parentheses represent weighted n's.

*Adjusted for all other demographic variables.

**Type of Dwelling and Number of Persons in Household were not included in the logistic regression analyses due to their high collinearity with other predictor variables.

Table 7b. Relationship Between HD-SA Status and Socio-Demographic Characteristics Among Canadians 55 Years and Older, Health and Activity Limitation Surveys

Variable		1986 (4,797,900)		1991 (5,271,900)	
		Disabled (%)	Adjusted Odds Ratio* (95% CI)	Disabled (%)	Adjusted Odds Ratio* (95% CI)
Age	55-64 Years	6.2	referent	7.5	referent
	65+ Years	13.1	2.07 (1.94-2.19)	9.8	1.69 (1.51-1.89)
Sex	Female	7.1	referent	8.4	referent
	Male	12.9	2.57 (2.41-2.74)	12.8	1.93 (1.72-2.16)
Marital Status	Single	9.1	referent	12.9	referent
	Married	9.1	0.99 (0.88-1.11)	10.4	0.73 (0.60-0.90)
	Div/sep/wid	11.4	1.42 (1.25-1.60)	9.6	0.74 (0.60-0.92)
Type of Dwelling**	Single House	9.9	----	11.6	----
	Other	9.5	----	8.2	----
Tenure of Dwelling	Owned	9.3	referent	10.5	referent
	Rented	11.0	1.26 (1.18-1.34)	10.1	1.06 (0.93-1.91)
Number of Persons in Household**	1 person	11.1	----	10.7	----
	2 persons	10.3	----	10.8	----
	3+ persons	8.1	----	9.5	----
Degree of Urbanization	Urban	9.2	referent	9.3	referent
	Rural	11.8	1.28 (1.19-1.36)	14.8	1.69 (1.49-1.91)
Region of Canada	Atlantic	12.9	referent	13.1	referent
	Quebec	7.8	0.61 (0.55-0.67)	6.6	0.53 (0.43-0.66)
	Ontario	10.1	0.87 (0.79-0.96)	10.1	1.04 (0.86-1.25)
	Prairies	10.5	0.86 (0.78-0.96)	13.8	1.28 (1.04-1.56)
	British Columbia	9.6	0.79 (0.70-0.88)	13.0	1.26 (1.02-1.55)
	Yukon and NWT	13.9	1.30 (0.63-2.66)	14.6	1.06 (0.30-3.76)
Total Household Income	less than \$10,000	10.0	referent	10.8	referent
	\$10,000-\$24,999	11.2	0.89 (0.84-0.95)	11.7	0.86 (0.76-0.97)
	\$25,000-\$34,999	6.3	0.55 (0.49-0.62)	8.3	0.59 (0.49-0.72)
	\$35,000 and over	6.8	0.56 (0.49-0.63)	7.9	0.57 (0.48-0.68)

Sample sizes presented in parentheses represent weighted n's.

*Adjusted for all other demographic variables.

**Type of Dwelling and Number of Persons in Household were not included in the logistic regression analyses due to their high collinearity with other predictor variables.

Table 7c. Relationship Between SD-HD Status and Socio-Demographic Characteristics Among Canadians 55 Years and Older, Health and Activity Limitation Surveys

Variable		1986 (4,797,900)		1991 (5,271,900)	
		Disabled (%)	Adjusted Odds Ratio* (95% CI)	Disabled (%)	Adjusted Odds Ratio* (95% CI)
Age	55-64 Years	1.0	referent	0.7	referent
	65+ Years	4.8	3.69 (3.24-4.19)	4.7	5.88 (4.40-7.87)
Sex	Female	3.2	referent	3.0	referent
	Male	2.7	1.36 (1.22-1.52)	2.8	1.57 (1.28-1.93)
Marital Status	Single	3.0	referent	3.2	referent
	Married	2.0	0.66 (0.54-0.81)	2.3	0.90 (0.61-1.34)
	Div/sep/wid	5.4	1.54 (1.26-1.89)	4.4	1.55 (1.04-2.31)
Type of Dwelling**	Single House	2.8	----	2.7	----
	Other	3.3	----	3.4	----
Tenure of Dwelling	Owned	2.8	referent	2.3	referent
	Rented	3.4	0.95 (0.85-1.06)	4.7	1.63 (1.32-2.02)
Number of Persons in Household**	1 person	3.9	----	4.6	----
	2 persons	2.7	----	2.7	----
	3+ persons	2.8	----	2.1	----
Degree of Urbanization	Urban	3.0	referent	2.9	referent
	Rural	2.8	0.91 (0.80-1.03)	2.9	1.03 (0.80-1.32)
Region of Canada	Atlantic	3.4	referent	3.5	referent
	Quebec	2.4	0.75 (0.62-0.90)	2.6	0.68 (0.47-0.99)
	Ontario	3.0	1.00 (0.84-1.18)	2.6	0.86 (0.61-1.22)
	Prairies	3.3	1.03 (0.85-1.24)	4.0	1.32 (0.92-1.91)
	British Columbia	3.2	1.05 (0.86-1.28)	2.8	0.92 (0.61-1.37)
	Yukon and NWT	2.8	0.94 (0.21-4.23)	2.7	0.89 (0.06-13.9)
Total Household Income	less than \$10,000	3.6	referent	4.0	referent
	\$10,000-\$24,999	2.9	0.74 (0.67-0.83)	3.1	0.49 (0.39-0.60)
	\$25,000-\$34,999	0.7	0.25 (0.18-0.35)	1.4	0.36 (0.24-0.56)
	\$35,000 and over	1.7	0.60 (0.47-0.76)	1.6	0.43 (0.30-0.61)

Sample sizes presented in parentheses represent weighted n's.

*Adjusted for all other demographic variables.

**Type of Dwelling and Number of Persons in Household were not included in the logistic regression analyses due to their high collinearity with other predictor variables.

Table 7d. Relationship Between SD or HD Status and Socio-Demographic Characteristics
Among Canadians 55 Years and Older, Health and Activity Limitation Surveys

Variable		1986 (4,797,900)		1991 (5,271,900)	
		Disabled (%)	Adjusted Odds Ratio* (95% CI)	Disabled (%)	Adjusted Odds Ratio* (95% CI)
Age	55-64 Years	9.8	referent	10.5	referent
	65+ Years	22.8	2.43 (2.32-2.56)	23.0	2.25 (2.04-2.47)
Sex	Female	14.8	referent	16.6	referent
	Male	18.0	1.94 (1.84-2.04)	18.3	1.59 (1.45-1.75)
Marital Status	Single	16.4	referent	19.2	referent
	Married	13.7	0.82 (0.75-0.90)	15.6	0.84 (0.71-1.00)
	Div/sep/wid	22.5	1.45 (1.31-1.60)	21.3	1.21 (1.01-1.45)
Type of Dwelling**	Single House	15.8	----	17.9	----
	Other	17.2	----	16.6	----
Tenure of Dwelling	Owned	15.1	referent	16.4	referent
	Rented	19.3	1.21 (1.15-1.28)	20.4	1.20 (1.08-1.33)
Number of Persons in Household**	1 person	20.2	----	22.6	----
	2 persons	16.3	----	16.8	----
	3+ persons	13.8	----	15.0	----
Degree of Urbanization	Urban	15.8	referent	16.6	referent
	Rural	18.0	1.13 (1.07-1.20)	20.8	1.41 (1.27-1.57)
Region of Canada	Atlantic	20.7	referent	20.5	referent
	Quebec	13.8	0.64 (0.59-0.70)	12.9	0.59 (0.50-0.70)
	Ontario	16.4	0.87 (0.80-0.94)	17.6	1.07 (0.92-1.26)
	Prairies	19.9	0.89 (0.81-0.97)	21.5	1.27 (1.07-1.50)
	British Columbia	16.0	0.79 (0.72-0.87)	18.8	1.11 (0.93-1.33)
	Yukon and NWT	17.7	1.14 (0.61-2.17)	20.0	0.98 (0.32-3.03)
Total Household Income	less than \$10,000	18.6	referent	19.5	referent
	\$10,000-\$24,999	16.8	0.74 (0.71-0.78)	20.0	0.74 (0.67-0.82)
	\$25,000-\$34,999	8.0	0.40 (0.36-0.45)	11.1	0.44 (0.37-0.53)
	\$35,000 and over	9.4	0.46 (0.41-0.51)	11.5	0.49 (0.42-0.56)

Sample sizes presented in parentheses represent weighted n's.

*Adjusted for all other demographic variables.

**Type of Dwelling and Number of Persons in Household were not included in the logistic regression analyses due to their high collinearity with other predictor variables.

Table 8. Percent of Seeing Disabled Canadians 55 Years and Older Who Reported the Following Medical Conditions as the Primary Cause of Their Seeing Disability, Health and Activity Limitation Survey, 1986

Medical Condition Reported as Primary Cause of Seeing Disability	Difficulty Reading Newsprint with Glasses		Difficulty Seeing Faces from 12feet/4meters	
	55-64 (66,000)	65+ (225,500)	55-64 (26,800)	65+ (123,500)
Cataract (I-366)	10.6	27.5	16.4	28.9
Problems with Sight (V41.0)	10.7	4.5	4.0	2.9
Diabetes Mellitus (I-250)	6.8	6.1	6.9	8.5
Disorders of Refraction and Accommodation (I-367)	6.2	3.2	4.6	1.7
Aging (I-797.0)	2.5	12.5	1.2	11.3
Glaucoma (I-365)	3.4	5.1	5.3	7.1
Unspecified Vision Loss (I-369.9)	1.7	2.9	1.7	1.9
Visual Disturbances (I-368)	3.3	1.6	1.9	1.0
Blindness, Both Eyes (I-369.0)	1.9	1.6	5.9	2.9
Other Retinal Disorders (I-362)	1.3	3.2	2.6	4.7
Nonspecified Disorders of the Eye and Adnexa (I-360, 361, 363, 364, 369.1, 369.2, 369.3, 369.7, 369.8, 370-379, V41.1)	15.9	10.5	13.4	9.2
All Other Conditions and Health Problems Reported as Causes of Seeing Disabilities	34.2	20.9	33.5	19.3
Not Applicable/Unknown/Unstated	1.4	0.5	2.8	0.6

Sample sizes presented in parentheses represent weighted n's.

Disease Codes Beginning with "I" are ICD-9 Codes, Disease Codes beginning with "V" are Musculo-Skeletal Codes.

Table 9. Percent of Hearing Disabled Canadians 55 Years and Older Who Reported the Following Medical Conditions as the Primary Cause of their Hearing Disability, Health and Activity Limitation Survey, 1986

Medical Condition Reported as Primary Cause of Hearing Disability	Difficulty Hearing Conversation With Single Person		Difficulty Hearing Conversation in Group of Three or More	
	55-64 (123,000)	65+ (338,500)	55-64 (157,500)	65+ (422,200)
Deafness (I-389)	42.5	44.4	44.3	45.8
Other Disorders of the Ear (I-388)	13.9	7.5	14.1	7.4
Aging (I-797.0)	4.3	20.6	5.4	20.1
Problems with Hearing (V41.2)	7.5	5.5	8.0	5.3
Other Disorders of Tympanic Membrane (I-384)	2.8	3.6	2.6	2.7
Injury, other and unspecified, to ear (I-959)	2.6	2.5	2.5	2.2
Suppurative and Unspecified Otitis Media (I-382)	1.6	0.7	1.7	0.9
Disorders of the External Ear (I-380)	0.3	0.5	0.3	0.4
Stroke (I-436.0)	0.2	0.6	0.3	1.2
Other Ill-Defined and Unknown Causes of Morbidity (I-799)	0.5	0.4	0.6	0.6
Other Specified and Unspecified Disabilities (VT00, 14-19; VU00, 14-19)	2.7	0.4	2.4	0.6
Other Ear Problems (V41.3)	2.2	0.3	1.8	0.4
Other Diseases of the Ear and Mastoid Process (I-381, 383, 385-387)	3.7	1.1	3.2	1.6
All Other ICD-9 Re Hearing	14.5	11.6	11.9	10.5
Not Applicable/Unknown/Unstated	0.8	0.4	0.8	0.4

Sample sizes presented in parentheses represent weighted n's.

Disease Codes Beginning with "I" are ICD-9 Codes, Disease Codes beginning with "V" are Musculo-Skeletal Codes.

Figure 2a. Percent of Seeing Disabled Canadians 55 Years and Older Who Use Assistance Devices for Seeing, Health and Activity Limitation Survey, 1986

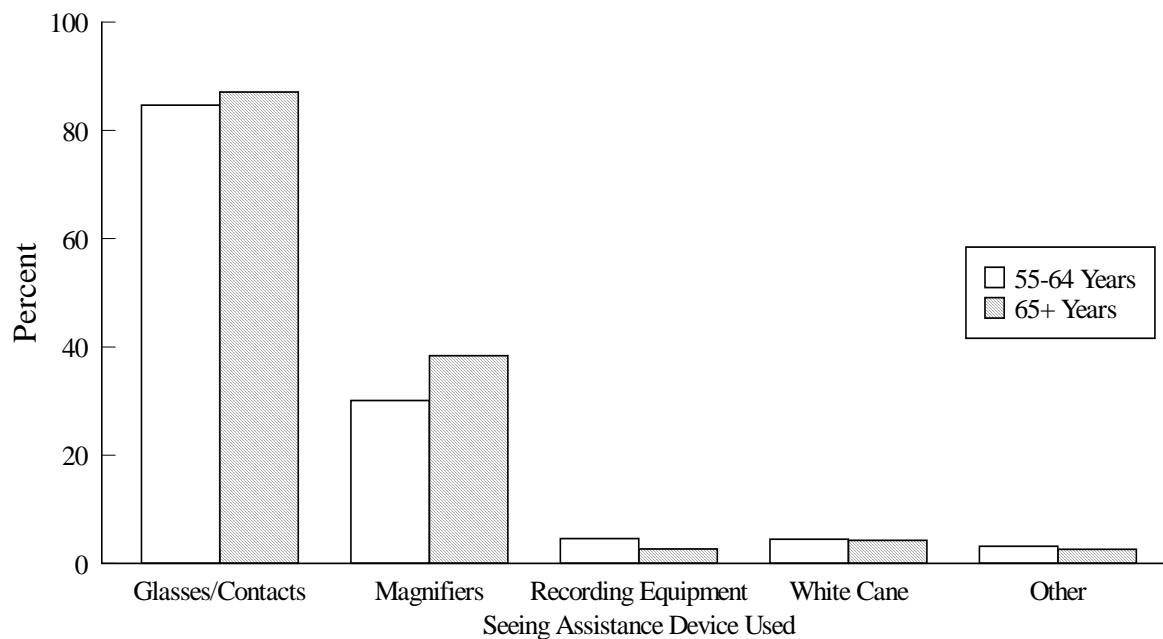


Figure 2b. Percent of Seeing Disabled Canadians 55 Years and Older Who Use Assistance Devices for Seeing, Health and Activity Limitation Survey, 1991

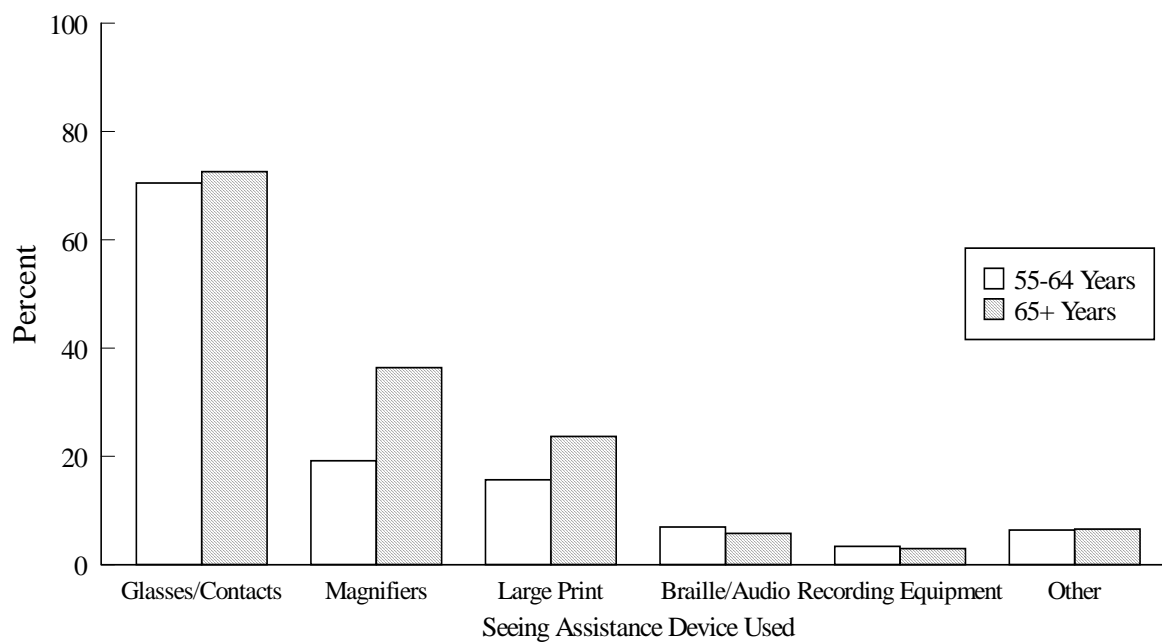


Figure 3a. Percent of Hearing Disabled Canadians 55 Years and Older Who Use Assistance Devices for Hearing, Health and Activity Limitation Survey, 1986

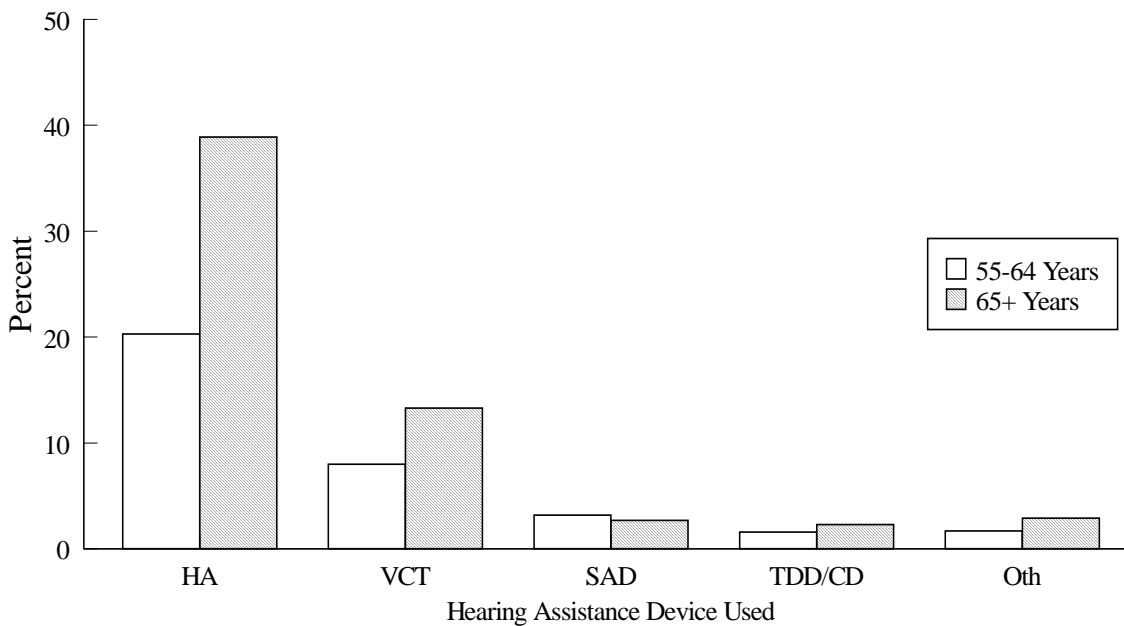
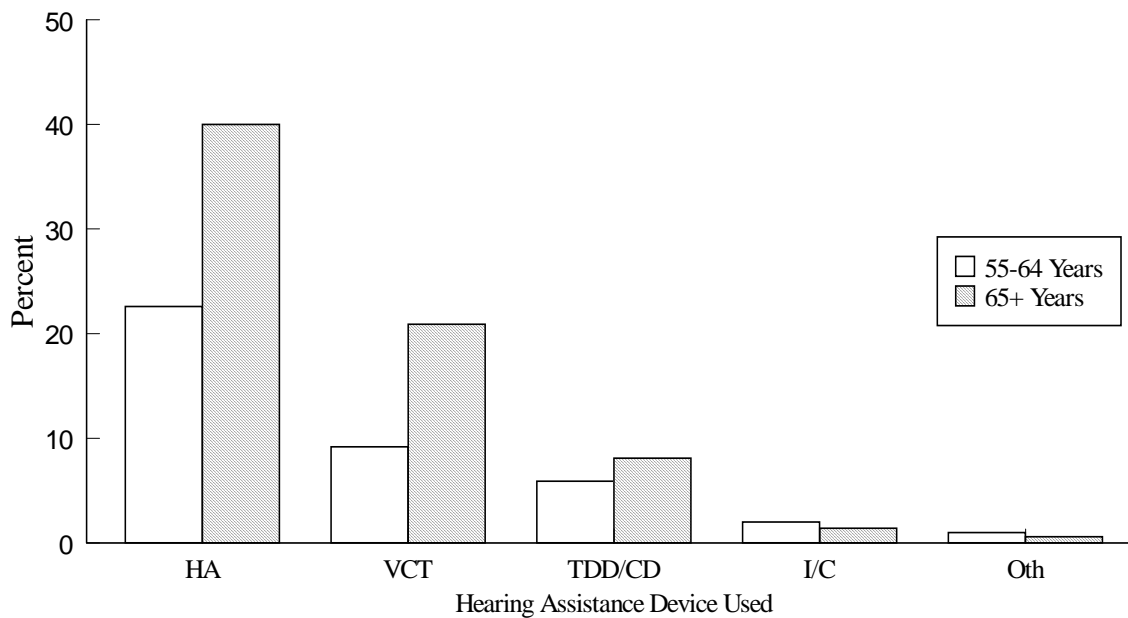


Figure 3b. Percent of Hearing Disabled Canadians 55 Years and Older Who Use Assistance Devices for Hearing, Health and Activity Limitation Survey, 1991



HA = Hearing Aid, VCT = Volume Control Telephone, SAD = Special Amplification Device,
 TDD/CD = Telecommunications Device for the Deaf/Caption Decoder, I/C = Interpreter/Computer,
 Oth = Other

Table 10a. Percent of Disabled Females Who Need Assistance with Instrumental Activities of Daily Living Due to Their Disability, Health and Activity Limitation Survey, 1986

IADL Restriction	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Heavy Chores					
55-64	72.4	53.2	85.3	63.4	72.4
65+	74.9	62.3	87.9	72.3	75.4
Grocery Shopping					
55-64	43.5	21.5	54.9	32.8	33.1
65+	50.2	37.3	61.0	46.9	46.2
Housework					
55-64	36.9	17.3	51.8	28.0	31.6
65+	45.2	30.9	51.7	40.2	40.7
Meal Preparation					
55-64	18.5	6.8	19.9	12.2	12.7
65+	24.5	13.7	34.1	21.8	20.9
Personal Finances					
55-64	25.3	6.1	24.0	14.6	13.3
65+	30.5	20.8	46.1	29.9	27.3
Personal Care					
55-64	10.3	2.2	5.8	5.3	5.8
65+	13.6	9.3	20.5	13.3	12.2
Moving Around Residence					
55-64	4.4	0.9	4.1	2.5	2.8
65+	6.6	3.7	8.7	5.8	5.5
At Least One IADL Restriction					
55-64	79.0	57.9	87.3	68.4	73.9
65+	78.2	66.2	91.0	75.8	78.8

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;
SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;
SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 10b. Percent of Disabled Males Who Need Assistance with Instrumental Activities of Daily Living Due to Their Disability, Health and Activity Limitation Survey, 1986

IADL Restriction	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Heavy Chores					
55-64	58.0	32.5	54.5	38.7	61.0
65+	57.5	40.7	63.0	46.5	60.5
Grocery Shopping					
55-64	29.3	7.6	28.6	13.1	17.4
65+	36.6	14.0	39.6	21.1	25.5
Housework					
55-64	24.9	9.1	27.6	13.5	19.2
65+	30.1	14.4	40.1	20.7	26.7
Meal Preparation					
55-64	19.1	5.0	21.3	8.9	9.9
65+	22.9	8.8	28.6	13.9	16.6
Personal Finances					
55-64	22.0	5.1	20.3	9.3	9.8
65+	34.0	12.4	34.7	18.8	19.8
Personal Care					
55-64	12.5	2.9	10.9	5.2	6.8
65+	14.8	7.2	19.1	10.1	12.9
Moving Around Residence					
55-64	7.2	0.7	3.6	2.0	2.2
65+	7.1	2.5	7.5	3.9	5.1
At Least One IADL Restriction					
55-64	73.9	33.3	57.5	40.5	62.0
65+	70.7	45.0	69.1	52.3	65.2

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;
SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;
SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 10c. Percent of Disabled Females Who Need Assistance with Instrumental Activities of Daily Living Due to Their Disability, Health and Activity Limitation Survey, 1991

IADL Restriction	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Heavy Chores					
55-64	55.8	42.9	44.0	47.7	54.0
65+	50.5	53.0	58.5	53.4	59.7
Grocery Shopping					
55-64	30.7	19.4	47.2	25.9	29.6
65+	39.6	32.6	50.9	38.5	37.6
Housework					
55-64	18.5	20.9	39.8	21.7	25.1
65+	33.2	32.5	51.5	36.6	35.9
Meal Preparation					
55-64	15.8	7.3	23.0	11.7	13.3
65+	14.2	13.7	29.8	17.2	18.9
Personal Finances					
55-64	13.9	6.2	24.4	10.5	9.8
65+	18.1	21.5	30.1	22.2	21.0
Personal Care					
55-64	4.9	3.0	----	4.5	5.3
65+	16.2	8.1	26.6	14.3	12.1
Moving Around Residence					
55-64	----	4.1	----	3.6	3.2
65+	6.2	7.8	11.3	8.0	7.3
At Least One IADL Restriction					
55-64	60.8	46.6	74.2	54.1	62.8
65+	73.0	61.3	80.0	68.7	75.4

Cell entries denoted by “----” are based on an unweighted n of less than 15 and have been suppressed due to the instability of the estimate.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;
 SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;
 SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 10d. Percent of Disabled Males Who Need Assistance with Instrumental Activities of Daily Living Due to Their Disability, Health and Activity Limitation Survey, 1991

IADL Restriction	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Heavy Chores					
55-64	38.6	23.7	39.5	26.3	38.9
65+	57.5	46.7	52.0	49.5	53.9
Grocery Shopping					
55-64	25.1	6.9	35.1	10.6	15.0
65+	26.4	14.0	30.2	19.3	21.3
Housework					
55-64	18.0	7.4	33.0	10.1	15.5
65+	34.3	15.3	29.5	21.3	24.0
Meal Preparation					
55-64	16.8	4.1	24.5	6.7	8.8
65+	20.9	10.0	26.1	15.1	19.5
Personal Finances					
55-64	14.7	4.7	24.3	7.0	8.5
65+	23.4	15.1	32.7	20.0	19.4
Personal Care					
55-64	8.2	6.5	----	6.5	7.6
65+	13.4	6.6	19.1	10.2	11.9
Moving Around Residence					
55-64	----	2.0	----	2.2	2.4
65+	----	3.9	12.0	5.2	6.0
At Least One IADL Restriction					
55-64	48.9	28.0	59.7	32.2	46.0
65+	63.9	51.4	68.5	56.9	64.5

Cell entries denoted by “----” are based on an unweighted n of less than 15 and have been suppressed due to the instability of the estimate.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;
SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;
SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 11a. Associations Between Different Types of Disabilities and Assistance Needed with Instrumental Activities of Daily Living Among Disabled Females 55-64 Years, Health and Activity Limitation Survey, 1986

IADL Restriction	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Heavy Chores					
Adj OR	0.88	0.55	1.40	0.56	4.89
95% CI	(0.63-1.24)	(0.43-0.70)	(0.74-2.62)	(0.44-0.70)	(3.70-6.44)
Grocery Shopping					
Adj OR	1.07	0.66	1.23	0.77	3.57
95% CI	(0.79-1.45)	(0.50-0.86)	(0.78-1.93)	(0.62-0.96)	(2.42-5.28)
Housework					
Adj OR	0.98	0.55	1.50	0.69	4.83
95% CI	(0.72-1.33)	(0.42-0.73)	(0.96-2.36)	(0.55-0.86)	(3.10-7.55)
Meal Preparation					
Adj OR	1.11	0.58	0.91	0.72	2.78
95% CI	(0.76-1.63)	(0.38-0.88)	(0.52-1.60)	(0.54-0.97)	(1.52-5.09)
Personal Finances					
Adj OR	1.34	0.48	0.90	0.75	2.59
95% CI	(0.94-1.91)	(0.31-0.74)	(0.53-1.52)	(0.56-1.01)	(1.44-4.68)
Personal Care					
Adj OR	1.08	0.44	0.44	0.54	10.44
95% CI	(0.66-1.76)	(0.22-0.88)	(0.18-1.11)	(0.35-0.83)	(1.83-59.67)
Moving Around Residence					
Adj OR	1.24	0.43	1.01	0.74	----*
95% CI	(0.60-2.56)	(0.15-1.23)	(0.33-3.07)	(0.40-1.36)	----*
Any Activity					
Adj OR	1.35	0.66	1.92	0.81	5.36
95% CI	(0.95-1.92)	(0.52-0.84)	(1.00-3.69)	(0.65-1.01)	(4.11-6.99)

*Odds ratios could not be calculated due to a very small number of non-SMA disabled respondents who reported needing assistance to move around their residence.

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 11b. Associations Between Different Types of Disabilities and Assistance Needed with Instrumental Activities of Daily Living Among Disabled Females 65 Years and Older, Health and Activity Limitation Survey, 1986

IADL Restriction	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Heavy Chores					
Adj OR	1.16	0.80	2.41	1.15	4.91
95% CI	(0.99-1.37)	(0.70-0.91)	(1.94-2.98)	(1.01-1.30)	(4.22-5.72)
Grocery Shopping					
Adj OR	1.18	0.90	1.39	1.12	4.91
95% CI	(1.04-1.35)	(0.80-1.01)	(1.21-1.61)	(1.00-1.24)	(4.08-5.92)
Housework					
Adj OR	1.21	0.82	1.18	0.97	4.06
95% CI	(1.06-1.38)	(0.73-0.92)	(1.02-1.36)	(0.87-1.09)	(3.34-4.93)
Meal Preparation					
Adj OR	1.10	0.69	1.54	1.00	4.63
95% CI	(0.94-1.28)	(0.60-0.81)	(1.32-1.80)	(0.88-1.14)	(3.45-6.22)
Personal Finances					
Adj OR	1.05	0.78	1.71	1.16	3.97
95% CI	(0.91-1.22)	(0.68-0.89)	(1.48-1.98)	(1.02-1.31)	(3.14-5.03)
Personal Care					
Adj OR	1.05	0.94	1.38	1.13	8.81
95% CI	(0.87-1.27)	(0.79-1.13)	(1.15-1.65)	(0.96-1.33)	(5.14-15.09)
Moving Around					
Residence					
Adj OR	0.99	0.85	1.07	0.83	12.35
95% CI	(0.76-1.29)	(0.65-1.11)	(0.83-1.39)	(0.66-1.05)	(4.26-39.71)
Any Activity					
Adj OR	1.13	0.80	2.65	1.13	5.30
95% CI	(0.96-1.32)	(0.70-0.90)	(2.11-3.33)	(1.00-1.28)	(4.58-6.13)

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 11c. Associations Between Different Types of Disabilities and Assistance Needed with Instrumental Activities of Daily Living Among Disabled Males 55-64 Years, Health and Activity Limitation Survey, 1986

IADL Restriction	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Heavy Chores					
Adj OR	1.29	0.49	1.02	0.49	5.49
95% CI	(0.92-1.81)	(0.41-0.59)	(0.68-1.53)	(0.41-0.59)	(4.40-6.85)
Grocery Shopping					
Adj OR	1.91	0.50	1.90	0.86	2.63
95% CI	(1.33-2.75)	(0.38-0.67)	(1.24-2.91)	(0.68-1.08)	(1.87-3.69)
Housework					
Adj OR	1.24	0.60	1.58	0.77	3.19
95% CI	(0.85-1.81)	(0.46-0.78)	(1.03-2.43)	(0.61-0.97)	(2.25-4.53)
Meal Preparation					
Adj OR	1.53	0.59	1.93	1.02	1.74
95% CI	(1.00-2.34)	(0.41-0.84)	(1.20-3.11)	(0.76-1.37)	(1.17-2.59)
Personal Finances					
Adj OR	1.78	0.58	1.58	1.01	1.42
95% CI	(1.18-2.69)	(0.41-0.82)	(0.98-2.53)	(0.75-1.35)	(0.97-2.09)
Personal Care					
Adj OR	1.60	0.67	1.05	0.87	6.72
95% CI	(0.96-2.68)	(0.43-1.04)	(0.58-1.91)	(0.60-1.25)	(2.73-16.53)
Moving Around					
Residence					
Adj OR	3.07	0.50	0.92	1.12	3.60
95% CI	(1.51-6.26)	(0.21-1.15)	(0.35-2.44)	(0.61-2.06)	(1.04-12.41)
Any Activity					
Adj OR	1.47	0.46	1.01	0.48	4.61
95% CI	(1.06-2.04)	(0.39-0.55)	(0.68-1.50)	(0.41-0.58)	(3.77-5.64)

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 11d. Associations Between Different Types of Disabilities and Assistance Needed with Instrumental Activities of Daily Living Among Disabled Males 65 Years and Older, Health and Activity Limitation Survey, 1986

IADL Restriction	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Heavy Chores					
Adj OR	1.22	0.83	1.42	0.83	5.05
95% CI	(0.99-1.50)	(0.74-0.93)	(1.17-1.73)	(0.73-0.94)	(4.36-5.83)
Grocery Shopping					
Adj OR	1.48	0.69	1.72	0.95	4.65
95% CI	(1.20-1.82)	(0.59-0.79)	(1.42-2.07)	(0.82-1.10)	(3.72-5.83)
Housework					
Adj OR	1.16	0.71	1.93	0.92	5.97
95% CI	(0.93-1.44)	(0.62-0.82)	(1.60-2.33)	(0.80-1.07)	(4.71-7.57)
Meal Preparation					
Adj OR	1.23	0.64	1.77	0.92	3.67
95% CI	(0.97-1.56)	(0.54-0.75)	(1.45-2.16)	(0.78-1.09)	(2.82-4.78)
Personal Finances					
Adj OR	2.00	0.77	1.91	1.41	2.70
95% CI	(1.62-2.47)	(0.66-0.89)	(1.58-2.30)	(1.20-1.65)	(2.20-3.31)
Personal Care					
Adj OR	1.16	0.93	1.32	0.98	21.26
95% CI	(0.88-1.54)	(0.78-1.12)	(1.05-1.67)	(0.81-1.18)	(10.77-41.99)
Moving Around Residence					
Adj OR	1.26	0.81	0.99	0.74	----*
95% CI	(0.86-1.84)	(0.61-1.08)	(0.71-1.37)	(0.56-0.99)	----*
Any Activity					
Adj OR	1.77	0.82	1.37	0.91	5.00
95% CI	(1.43-2.18)	(0.73-0.92)	(1.13-1.66)	(0.80-1.02)	(4.38-5.71)

*Odds ratios could not be calculated due to a very small number of non-SMA disabled respondents who reported needing assistance to move around their residence.

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 11e. Associations Between Different Types of Disabilities and Assistance Needed with Instrumental Activities of Daily Living Among Disabled Females 55-64 Years, Health and Activity Limitation Survey, 1991

IADL Restriction	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Heavy Chores					
Adj OR	1.25	1.01	0.54	1.00	4.66
95% CI	(0.96-1.63)	(0.81-1.26)	(0.33-0.90)	(0.83-1.20)	(3.54-6.13)
Grocery Shopping					
Adj OR	1.02	0.84	1.67	0.92	7.52
95% CI	(0.76-1.37)	(0.64-1.09)	(0.99-2.83)	(0.74-1.14)	(4.63-12.23)
Housework					
Adj OR	0.66	1.32	1.75	1.02	8.82
95% CI	(0.47-0.91)	(1.02-1.72)	(1.03-2.96)	(0.82-1.27)	(5.08-15.32)
Meal Preparation					
Adj OR	1.29	0.67	1.44	0.93	6.24
95% CI	(0.90-1.85)	(0.45-0.98)	(0.79-2.62)	(0.71-1.23)	(3.04-12.80)
Personal Finances					
Adj OR	1.49	0.77	2.13	1.22	2.72
95% CI	(1.01-2.20)	(0.51-1.17)	(1.16-3.91)	(0.90-1.65)	(1.48-5.00)
Personal Care					
Adj OR	0.83	0.71	1.57	0.80	6.24
95% CI	(0.46-1.48)	(0.39-1.26)	(0.72-3.41)	(0.52-1.21)	(1.53-25.40)
Moving Around					
Residence					
Adj OR	0.72	2.17	0.98	1.39	----*
95% CI	(0.33-1.54)	(1.27-3.70)	(0.32-2.97)	(0.86-2.27)	----*
Any Activity					
Adj OR	1.00	0.84	1.68	0.89	5.32
95% CI	(0.76-1.32)	(0.67-1.05)	(0.93-3.03)	(0.73-1.08)	(4.06-6.96)

*Odds ratios could not be calculated due to a very small number of non-SMA disabled respondents who reported needing assistance to move around their residence.

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 11f. Associations Between Different Types of Disabilities and Assistance Needed with Instrumental Activities of Daily Living Among Disabled Females 65 Years and Older, Health and Activity Limitation Survey, 1991

IADL Restriction	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Heavy Chores					
Adj OR	0.85	0.86	1.19	0.82	4.14
95% CI	(0.65-1.11)	(0.69-1.08)	(0.86-1.64)	(0.66-1.02)	(2.99-5.73)
Grocery Shopping					
Adj OR	1.00	1.02	1.15	0.95	5.00
95% CI	(0.74-1.34)	(0.79-1.30)	(0.83-1.59)	(0.75-1.20)	(3.10-8.05)
Housework					
Adj OR	0.70	1.02	1.32	0.89	3.21
95% CI	(0.51-0.94)	(0.79-1.31)	(0.95-1.82)	(0.70-1.13)	(2.08-4.94)
Meal Preparation					
Adj OR	0.68	0.74	1.47	0.72	5.14
95% CI	(0.46-0.99)	(0.54-1.02)	(1.02-2.10)	(0.55-0.96)	(2.48-10.66)
Personal Finances					
Adj OR	0.69	1.12	1.19	0.93	3.90
95% CI	(0.49-0.98)	(0.86-1.48)	(0.85-1.68)	(0.72-1.22)	(2.24-6.78)
Personal Care					
Adj OR	1.21	0.66	1.84	1.26	4.73
95% CI	(0.82-1.79)	(0.45-0.98)	(1.26-2.69)	(0.89-1.79)	(1.87-11.99)
Moving Around					
Residence	0.78	1.30	1.03	0.94	----*
Adj OR	(0.45-1.33)	(0.85-1.99)	(0.62-1.70)	(0.62-1.43)	----*
95% CI					
Any Activity					
Adj OR	1.20	0.64	1.26	0.73	6.09
95% CI	(0.88-1.64)	(0.50-0.82)	(0.84-1.88)	(0.57-0.93)	(4.40-8.43)

*Odds ratios could not be calculated due to a very small number of non-SMA disabled respondents who reported needing assistance to move around their residence.

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 11g. Associations Between Different Types of Disabilities and Assistance Needed with Instrumental Activities of Daily Living Among Disabled Males 55-64 Years, Health

and Activity Limitation Survey, 1991					
IADL Restriction	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Heavy Chores					
Adj OR	1.12	0.74	1.18	0.77	4.53
95% CI	(0.77-1.63)	(0.61-0.91)	(0.71-1.96)	(0.63-0.92)	(3.41-6.03)
Grocery Shopping					
Adj OR	1.70	0.54	2.75	0.84	3.71
95% CI	(1.08-2.66)	(0.40-0.73)	(1.59-4.75)	(0.64-1.10)	(2.30-5.98)
Housework					
Adj OR	1.18	0.64	2.41	0.79	6.81
95% CI	(0.72-1.94)	(0.48-0.87)	(1.38-4.20)	(0.61-1.04)	(3.72-12.45)
Meal Preparation					
Adj OR	1.67	0.51	3.19	0.89	2.00
95% CI	(0.98-2.82)	(0.35-0.75)	(1.73-5.88)	(0.64-1.24)	(1.20-3.34)
Personal Finances					
Adj OR	1.70	0.73	3.14	1.12	2.87
95% CI	(0.98-2.96)	(0.50-1.05)	(1.71-5.77)	(0.81-1.57)	(1.62-5.10)
Personal Care					
Adj OR	1.51	1.75	0.29	1.50	----*
95% CI	(0.76-3.01)	(1.22-2.51)	(0.08-1.11)	(1.05-2.15)	----*
Moving Around					
Residence	2.03	1.30	0.47	1.30	----*
Adj OR	(0.71-5.77)	(0.69-2.45)	(0.08-2.85)	(0.69-2.42)	----*
95% CI					
Any Activity					
Adj OR	1.27	0.72	2.03	0.81	4.94
95% CI	(0.87-1.83)	(0.59-0.88)	(1.20-3.43)	(0.67-0.98)	(3.78-6.45)

*Odds ratios could not be calculated due to a very small number of non-SMA disabled respondents who reported needing assistance with their person care or to move around their residence.

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 11h. Associations Between Different Types of Disabilities and Assistance Needed with Instrumental Activities of Daily Living Among Disabled Males 65 Years and Older, Health and Activity Limitation Survey, 1991

IADL Restriction	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Heavy Chores					
Adj OR	1.59	1.20	0.96	1.38	3.67
95% CI	(1.06-2.40)	(0.91-1.58)	(0.65-1.41)	(1.06-1.81)	(2.67-5.06)
Grocery Shopping					
Adj OR	1.65	0.62	1.33	0.81	3.02
95% CI	(0.99-2.76)	(0.42-0.89)	(0.84-2.08)	(0.56-1.17)	(1.71-5.32)
Housework					
Adj OR	1.87	0.58	1.08	0.83	2.42
95% CI	(1.20-2.91)	(0.41-0.81)	(0.70-1.65)	(0.60-1.16)	(1.51-3.85)
Meal Preparation					
Adj OR	1.18	0.43	1.39	0.61	2.42
95% CI	(0.71-1.95)	(0.29-0.63)	(0.88-2.20)	(0.42-0.87)	(1.43-4.08)
Personal Finances					
Adj OR	1.21	0.79	1.76	1.26	1.68
95% CI	(0.74-1.98)	(0.55-1.13)	(1.15-2.70)	(0.88-1.80)	(1.07-2.62)
Personal Care					
Adj OR	1.64	0.58	1.52	0.85	20.32
95% CI	(0.87-3.09)	(0.36-0.95)	(0.88-2.61)	(0.54-1.36)	(3.67-112.28)
Moving Around					
Residence					
Adj OR	0.32	0.89	1.84	0.89	5.72
95% CI	(0.08-1.25)	(0.47-1.70)	(0.91-3.70)	(0.47-1.67)	(1.51-21.72)
Any Activity					
Adj OR	1.31	0.93	1.42	1.10	3.64
95% CI	(0.85-2.01)	(0.70-1.24)	(0.93-2.17)	(0.83-1.45)	(2.67-4.95)

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 12a. Percent of Disabled Females Who Have Difficulties Taking Trips, Health and Activity Limitation Survey, 1986

Type of Trip Difficulty	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Difficulty Leaving Residence for Short Trips					
55-64	15.6	7.5	11.9	10.7	8.6
65+	17.4	12.1	17.6	15.0	15.1
Requires Attendant for Short Trips					
55-64	24.7	6.4	41.0	16.0	13.9
65+	33.6	20.4	43.6	29.7	28.4
No Trouble Driving a Car					
55-64	65.5	87.5	51.6	76.4	80.1
65+	57.6	72.7	54.3	64.0	69.7
Disability Prevents Long Distance Trips					
55-64	31.0	12.9	45.1	22.6	21.1
65+	32.9	22.2	33.4	28.2	27.1

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;
SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;
SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 12b. Percent of Disabled Males Who Have Difficulties Taking Trips, Health and Activity Limitation Survey, 1986

Type of Trip Difficulty	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Difficulty Leaving Residence for Short Trips					
55-64	11.6	2.4	7.0	4.3	5.8
65+	19.3	6.5	15.5	9.6	10.9
Requires Attendant for Short Trips					
55-64	21.0	4.6	15.8	8.1	8.6
65+	30.0	10.1	37.0	16.6	18.7
No Trouble Driving a Car					
55-64	63.0	93.2	67.0	86.2	83.0
65+	50.2	78.4	50.5	71.2	72.6
Disability Prevents Long Distance Trips					
55-64	21.4	10.3	28.0	13.9	19.3
65+	31.8	15.0	30.9	19.8	24.0

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;
SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;
SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 12c. Percent of Disabled Females Who Have Difficulties Taking Trips, Health and Activity Limitation Survey, 1991

Type of Trip Difficulty	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Difficulty Leaving Residence for Short Trips					
55-64	18.0	10.6	33.0	15.2	18.1
65+	27.8	31.5	42.7	32.7	30.7
Considers Oneself Restricted to Residence					
55-64	43.9	41.8	44.4	43.2	44.6
65+	50.9	27.6	44.3	38.2	36.6
Requires Attendant for Short Trips					
55-64	16.4	19.5	20.2	18.5	17.1
65+	36.5	30.6	59.3	37.8	34.2
Drives a Car					
55-64	28.0	53.9	46.9	44.1	49.5
65+	14.3	22.0	5.1	16.4	22.5
Disability Prevents Long Distance Trips					
55-64	25.8	18.2	25.3	21.5	25.0
65+	26.3	24.8	41.8	28.7	26.4

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;
SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;
SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 12d. Percent of Disabled Males Who Report Difficulties Taking Trips, Health and Activity Limitation Survey, 1991

Type of Trip Difficulty	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Difficulty Leaving Residence for Short Trips					
55-64	21.1	8.6	36.2	11.7	13.8
65+	19.5	11.5	21.4	14.9	17.4
Considers Oneself Restricted to Residence					
55-64	42.0	49.6	----	42.0	40.8
65+	----	51.0	58.0	50.4	49.5
Requires Attendant for Short Trips					
55-64	16.6	7.3	21.3	9.1	10.4
65+	33.9	15.7	38.2	23.2	22.7
Drives a Car					
55-64	61.3	90.2	63.1	85.6	81.1
65+	42.1	81.3	46.5	67.9	68.6
Disability Prevents Long Distance Trips					
55-64	31.5	15.6	23.5	17.8	22.2
65+	14.9	12.2	34.3	17.4	20.9

Cell entries denoted by “----” are based on an unweighted n of less than 15 and have been suppressed due to the instability of the estimate.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;
SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;
SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 13a. Associations Between Different Types of Disabilities and Difficulties with Taking Trips Among Disabled Females 55-64 Years, Health and Activity Limitation Survey, 1986

Type of Trip Difficulty	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Difficulty Leaving Residence for Short Trips					
Adj OR	2.08	1.19	0.86	1.54	5.26
95% CI	(1.35-3.23)	(0.79-1.79)	(0.43-1.72)	(1.10-2.13)	(2.17-12.50)
Requires Attendant for Short Trips					
Adj OR	1.18	0.40	2.27	0.84	1.56
95% CI	(0.79-1.72)	(0.26-0.63)	(1.35-3.70)	(0.63-1.14)	(0.96-2.50)
No Trouble Driving a Car					
Adj OR	0.83	1.60	0.59	1.11	0.72
95% CI	(0.59-1.19)	(1.13-2.27)	(0.36-0.96)	(0.85-1.45)	(0.50-1.05)
Disability Prevents Long Distance Trips					
Adj OR	1.28	0.70	1.72	1.00	5.00
95% CI	(0.93-1.79)	(0.51-0.96)	(1.09-2.70)	(0.79-1.27)	(2.86-9.09)

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 13b. Associations Between Different Types of Disabilities and Difficulties with Taking Trips Among Disabled Females 65 Years and Older, Health and Activity Limitation Survey, 1986

Type of Trip Difficulty	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Difficulty Leaving Residence for Short Trips					
Adj OR	1.54	0.99	1.08	1.27	4.76
95% CI	(1.30-1.82)	(0.85-1.16)	(0.89-1.30)	(1.10-1.47)	(3.45-6.67)
Requires Attendant for Short Trips					
Adj OR	1.37	0.83	1.52	1.18	5.00
95% CI	(1.18-1.59)	(0.72-0.95)	(1.28-1.75)	(1.04-1.35)	(4.00-6.25)
No Trouble Driving a Car					
Adj OR	0.67	1.19	0.69	0.78	0.71
95% CI	(0.58-0.78)	(1.04-1.35)	(0.59-0.81)	(0.69-0.88)	(0.61-0.83)
Disability Prevents Long Distance Trips					
Adj OR	1.39	0.93	1.11	1.16	2.56
95% CI	(1.20-1.59)	(0.83-1.06)	(0.96-1.28)	(1.04-1.32)	(2.13-3.13)

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 13c. Associations Between Different Types of Disabilities and Difficulties with Taking Trips Among Disabled Males 55-64 Years, Health and Activity Limitation Survey, 1986

Type of Trip Difficulty	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Difficulty Leaving Residence for Short Trips					
Adj OR	1.79	0.57	0.81	0.77	2.50
95% CI	(1.06-3.03)	(0.35-0.91)	(0.40-1.61)	(0.52-1.12)	(1.35-4.76)
Requires Attendant for Short Trips					
Adj OR	2.78	0.74	1.43	1.27	2.63
95% CI	(1.75-4.35)	(0.51-1.08)	(0.83-2.44)	(0.92-1.75)	(1.64-4.35)
No Trouble Driving a Car					
Adj OR	0.39	2.69	0.47	1.29	0.62
95% CI	(0.27-0.56)	(2.00-3.62)	(0.31-0.71)	(1.01-1.63)	(0.47-0.83)
Disability Prevents Long Distance Trips					
Adj OR	1.15	0.78	1.59	0.87	4.00
95% CI	(0.78-1.67)	(0.60-0.99)	(1.04-2.38)	(0.69-1.09)	(2.86-5.88)

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 13d. Associations Between Different Types of Disabilities and Difficulties with Taking Trips Among Disabled Males 65 Years and Older, Health and Activity Limitation Survey, 1986

Type of Trip Difficulty	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Difficulty Leaving Residence for Short Trips					
Adj OR	2.33	0.74	1.28	1.15	2.78
95% CI	(1.82-2.94)	(0.61-0.90)	(1.02-1.64)	(0.94-1.39)	(2.08-3.57)
Requires Attendant for Short Trips					
Adj OR	1.85	0.74	2.44	1.37	4.55
95% CI	(1.45-2.33)	(0.63-0.87)	(2.00-3.03)	(1.15-1.64)	(3.45-5.56)
No Trouble Driving a Car					
Adj OR	0.45	1.39	0.42	0.67	0.75
95% CI	(0.37-0.56)	(1.22-1.59)	(0.35-0.51)	(0.58-0.78)	(0.64-0.86)
Disability Prevents Long Distance Trips					
Adj OR	1.82	0.82	1.33	1.01	3.13
95% CI	(1.47-2.22)	(0.72-0.94)	(1.10-1.61)	(0.87-1.16)	(2.63-3.85)

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 13e. Associations Between Different Types of Disabilities and Difficulties with Taking Trips Among Disabled Females 55-64 Years, Health and Activity Limitation Survey, 1991

Type of Trip Difficulty	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Difficulty Leaving Residence for Short Trips					
Adj OR	0.80	0.61	1.43	0.70	2.08
95% CI	(0.56-1.15)	(0.43-0.85)	(0.83-2.44)	(0.55-0.91)	(1.37-3.23)
Considers Oneself Restricted to Residence					
Adj OR	1.03	0.98	0.86	0.92	2.78
95% CI	(0.54-1.96)	(0.53-1.82)	(0.37-2.00)	(0.58-1.45)	(1.00-7.69)
Requires Attendant for Short Trips					
Adj OR	0.85	1.67	0.98	1.27	2.22
95% CI	(0.58-1.22)	(1.27-2.22)	(0.51-1.89)	(0.99-1.64)	(1.47-3.33)
Drives a Car					
Adj OR	0.30	0.95	0.97	0.60	0.68
95% CI	(0.22-0.40)	(0.75-1.20)	(0.57-1.67)	(0.49-0.72)	(0.52-0.86)
Disability Prevents Long Distance Trips					
Adj OR	1.43	0.94	0.98	1.09	5.88
95% CI	(1.04-1.92)	(0.72-1.23)	(0.56-1.72)	(0.87-1.35)	(3.45-9.09)

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 13f. Associations Between Different Types of Disabilities and Difficulties with Taking Trips Among Disabled Females 65 Years and Older, Health and Activity Limitation Survey, 1991

Type of Trip Difficulty	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Difficulty Leaving Residence for Short Trips	0.78 (0.57-2.33)	1.49 (1.15-1.92)	1.19 (0.85-1.67)	1.15 (0.90-1.47)	11.11 (5.26-25.00)
Considers Oneself Restricted to Residence	1.37 (0.80-2.33)	0.56 (0.35-0.88)	1.09 (0.65-1.82)	0.78 (0.50-1.20)	3.85 (0.54-25.00)
Requires Attendant for Short Trips	0.85 (0.62-1.19)	0.88 (0.68-1.16)	1.92 (1.33-2.78)	1.08 (0.83-1.39)	2.08 (1.39-3.13)
Drives a Car	0.57 (0.37-0.88)	0.97 (0.72-1.32)	0.21 (0.10-0.45)	0.55 (0.41-0.73)	0.88 (0.60-1.32)
Disability Prevents Long Distance Trips	0.97 (0.70-1.33)	1.18 (0.89-1.56)	1.56 (1.11-2.22)	1.32 (1.01-1.69)	6.67 (3.45-14.29)

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 13g. Associations Between Different Types of Disabilities and Difficulties with Taking Trips Among Disabled Males 55-64 Years, Health and Activity Limitation Survey, 1991

Type of Trip Difficulty	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Difficulty Leaving Residence for Short Trips					
Adj OR	1.56	0.86	3.33	1.22	4.35
95% CI	(0.97-2.56)	(0.65-1.15)	(1.92-5.56)	(0.93-1.61)	(2.63-7.14)
Considers Oneself Restricted to Residence					
Adj OR	1.20	2.33	0.24	1.37	4.00
95% CI	(0.51-2.86)	(1.30-4.17)	(0.08-0.72)	(0.82-2.27)	(1.18-14.29)
Requires Attendant for Short Trips					
Adj OR	2.04	0.89	2.44	1.25	4.00
95% CI	(1.16-3.57)	(0.64-1.25)	(1.27-4.55)	(0.92-1.72)	(2.27-7.14)
Drives a Car					
Adj OR	0.25	1.54	0.38	0.91	0.54
95% CI	(0.15-0.40)	(1.15-2.04)	(0.21-0.69)	(0.70-1.18)	(0.38-0.76)
Disability Prevents Long Distance Trips					
Adj OR	1.92	0.85	0.93	0.97	2.70
95% CI	(1.27-2.94)	(0.68-1.08)	(0.52-1.67)	(0.78-1.20)	(1.96-3.85)

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 13h. Associations Between Different Types of Disabilities and Difficulties with Taking Trips Among Disabled Males 65 Years and Older, Health and Activity Limitation Survey, 1991

Type of Trip Difficulty	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Difficulty Leaving Residence for Short Trips					
Adj OR	1.33	0.69	1.04	0.74	5.88
95% CI	(0.77-2.33)	(0.46-1.04)	(0.63-1.72)	(0.50-1.09)	(2.56-14.29)
Considers Oneself Restricted to Residence					
Adj OR	0.55	1.18	1.14	0.93	0.83
95% CI	(0.17-1.82)	(0.50-2.78)	(0.42-3.03)	(0.42-2.08)	(0.12-5.88)
Requires Attendant for Short Trips					
Adj OR	2.56	0.87	2.50	2.13	7.69
95% CI	(1.56-4.17)	(0.60-1.27)	(1.54-4.00)	(1.43-3.13)	(3.70-16.67)
Drives a Car					
Adj OR	0.30	2.56	0.30	0.72	0.81
95% CI	(0.19-0.48)	(1.82-3.70)	(0.19-0.47)	(0.52-1.00)	(0.56-1.16)
Disability Prevents Long Distance Trips					
Adj OR	0.66	0.56	2.38	0.77	4.76
95% CI	(0.37-1.19)	(0.38-0.82)	(1.52-3.70)	(0.54-1.11)	(2.44-9.09)

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 14a. Percent of Disabled Females 55 Years and Older Who Participate in Leisure Activities, Health and Activity Limitation Survey, 1986

Leisure Activity	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
TV, Radio, Records/Tapes, Reading					
55-64	94.2	99.0	98.5	97.4	98.4
65+	97.3	95.8	94.7	96.0	97.6
Talking on Telephone					
55-64	80.5	83.7	81.4	82.4	83.2
65+	81.7	83.2	76.6	81.1	82.2
Arts and Crafts/Other Hobbies					
55-64	51.2	72.2	47.3	62.4	62.5
65+	45.8	58.5	47.9	52.1	55.9
Social Activities with Family/Friends					
55-64	71.2	84.4	72.6	78.7	83.7
65+	78.2	84.7	79.6	81.5	79.1
Visiting Friends/Relatives					
55-64	73.0	85.2	85.9	81.3	87.0
65+	75.6	83.8	72.1	78.5	78.8
Shopping					
55-64	78.2	92.7	85.5	87.1	90.6
65+	75.6	81.0	64.4	75.4	76.0
Religious Activities/Volunteer Work					
55-64	48.6	48.7	39.3	47.5	46.5
65+	48.3	52.1	37.0	47.4	45.8
Sports Events, Concerts, Plays, Movies					
55-64	17.2	27.7	12.5	22.5	23.3
65+	9.9	20.4	8.6	14.3	17.1
Museums, Libraries, Historic Sites, etc.					
55-64	10.7	26.9	10.1	19.6	19.5
65+	11.0	16.6	11.2	13.6	17.2
Visiting National/Provincial Parks					
55-64	17.8	21.2	13.5	19.2	17.3
65+	9.5	13.4	9.4	11.3	10.7
Taking a Course/Seminar					
55-64	2.2	8.0	----	5.5	4.2
65+	1.7	2.3	1.4	1.9	3.5
Activities such as Bingo, Clubs, Cards					
55-64	24.3	39.8	25.5	33.1	31.3
65+	30.2	36.3	27.0	32.2	31.7

Cell entries denoted by “----” are based on an unweighted n of less than 15 and have been suppressed due to the instability of the estimate. SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able; SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled; SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 14b. Percent of Disabled Males 55 Years and Older Who Participate in Leisure Activities, Health and Activity Limitation Survey, 1986

Leisure Activity	SD-HA	HI-SA	SD-HD	SD or HD	SMA Dis
TV, Radio, Records/Tapes, Reading					
55-64	98.1	99.3	98.1	99.0	99.1
65+	94.8	98.0	94.3	97.0	97.4
Talking on Telephone					
55-64	57.6	57.2	59.8	57.6	57.9
65+	57.8	51.3	45.0	51.0	52.7
Arts and Crafts/Other Hobbies					
55-64	42.1	66.1	52.2	60.9	50.8
65+	37.4	54.4	38.7	49.6	43.7
Social Activities with Family/Friends					
55-64	74.6	77.6	84.7	77.9	79.7
65+	74.5	80.9	75.8	79.2	80.2
Visiting Friends/Relatives					
55-64	80.5	88.4	84.5	86.8	87.5
65+	78.0	85.7	70.4	82.2	80.6
Shopping					
55-64	76.9	85.3	72.4	82.6	79.2
65+	67.7	81.7	59.0	76.1	73.6
Religious Activities/Volunteer Work					
55-64	37.7	41.4	35.8	40.0	42.0
65+	41.0	48.1	35.0	45.0	40.5
Sports Events, Concerts, Plays, Movies					
55-64	18.1	30.3	18.6	27.2	27.1
65+	15.2	21.4	12.1	19.0	18.7
Museums, Libraries, Historic Sites, etc.					
55-64	10.6	22.8	29.6	21.7	18.4
65+	9.3	19.7	10.6	16.9	14.9
Visiting National/Provincial Parks					
55-64	17.3	25.5	11.6	22.8	20.3
65+	13.9	19.5	9.5	17.1	15.7
Taking a Course/Seminar					
55-64	3.4	8.1	3.7	6.9	5.5
65+	2.1	3.4	0.4	2.7	2.5
Activities such as Bingo, Clubs, Cards					
55-64	31.3	32.5	24.1	31.4	30.3
65+	25.6	36.6	18.2	32.3	28.7

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;
SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;
SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 14c. Percent of Disabled Females 55 Years and Older Who Participate in Leisure Activities, Health and Activity Limitation Survey, 1991

Leisure Activity	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
TV, Radio, Records, Tapes					
55-64	94.7	99.6	98.2	97.7	98.9
65+	99.3	97.1	93.4	97.0	97.9
Reading					
55-64	90.5	85.0	73.7	86.0	89.3
65+	67.2	95.8	67.9	81.3	87.1
Talking on Telephone					
55-64	99.3	91.0	88.4	93.8	95.7
65+	98.6	96.0	87.1	94.9	94.5
Arts and Crafts or Other Hobbies					
55-64	60.6	75.2	50.7	67.8	63.3
65+	47.5	55.5	37.4	49.2	48.3
Social Activities/Visiting Family/Friends					
55-64	94.5	89.4	90.1	91.3	92.1
65+	88.3	83.6	81.9	84.7	85.4
Shopping					
55-64	94.4	95.3	88.5	94.4	92.8
65+	78.6	85.9	69.2	80.2	81.3
Religious Activities					
55-64	52.9	63.5	62.0	59.6	67.4
65+	59.7	65.2	64.8	63.4	64.4
Sports Events, Concerts, Plays, Movies					
55-64	40.3	45.0	39.9	42.9	45.1
65+	27.4	31.4	16.6	27.1	29.2
Museums, Libraries, etc.					
55-64	48.8	51.4	36.1	49.2	47.4
65+	17.8	30.4	18.5	24.1	24.6
Visiting National/Provincial Parks					
55-64	44.8	49.1	36.0	46.4	47.7
65+	16.8	30.2	14.8	22.9	21.1
Taking a Course/Seminar					
55-64	9.7	27.4	----	20.1	17.3
65+	----	14.3	----	8.3	6.6
Activities such as Bingo, Clubs, Cards					
55-64	36.6	37.4	36.2	37.0	37.2
65+	43.8	35.4	35.1	37.9	36.2
Volunteer Work					
55-64	19.9	40.0	34.6	32.3	28.5
65+	16.3	24.6	11.9	19.4	21.8

Cell entries denoted by “----” are based on an unweighted n of less than 15 and have been suppressed due to the instability of the estimate. SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able; SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled; SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 14d. Percent of Disabled Males 55 Years and Older Who Participate in Leisure Activities, Health and Activity Limitation Survey, 1991

Leisure Activity	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
TV, Radio, Records, Tapes					
55-64	98.3	99.7	95.6	99.3	99.2
65+	98.2	96.3	98.1	97.0	97.3
Reading					
55-64	74.0	90.7	67.9	87.5	85.1
65+	79.0	87.5	66.3	81.7	79.7
Talking on Telephone					
55-64	96.2	89.3	87.2	89.9	91.4
65+	85.0	82.5	84.1	83.2	79.6
Arts and Crafts or Other Hobbies					
55-64	26.9	41.5	28.9	39.2	38.4
65+	31.4	35.7	20.4	31.9	34.0
Social Activities/Visiting Family/ Friends					
55-64	90.1	96.4	83.8	95.0	91.7
65+	72.1	87.9	69.1	81.3	80.1
Shopping					
55-64	85.7	80.1	77.4	80.5	83.4
65+	77.3	84.0	65.4	79.1	72.9
Religious Activities					
55-64	51.5	61.1	57.0	59.8	54.7
65+	59.0	56.2	38.8	53.1	56.0
Sports Events, Concerts, Plays, Movies					
55-64	50.1	52.3	37.4	51.2	45.0
65+	26.7	40.6	23.0	34.6	33.9
Museums, Libraries, etc.					
55-64	33.0	44.8	26.5	42.4	37.2
65+	31.6	43.2	25.2	37.6	28.7
Visiting National/Provincial Parks					
55-64	53.9	56.1	36.9	54.7	50.2
65+	19.2	52.3	22.2	40.8	31.3
Taking a Course/Seminar					
55-64	----	22.8	----	20.2	14.1
65+	----	12.0	----	10.0	5.5
Activities such as Bingo, Clubs, Cards					
55-64	34.8	36.5	23.4	35.5	33.9
65+	32.9	43.5	23.5	37.7	33.9
Volunteer Work					
55-64	29.7	34.8	28.5	33.9	24.3
65+	29.1	25.8	13.0	23.7	19.8

Cell entries denoted by “----” are based on an unweighted n of less than 15 and have been suppressed due to the instability of the estimate. SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able; SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled; SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 15a. Associations Between Different Types of Disabilities and Participation in Leisure Activities Among Disabled Females 55-64 Years, Health and Activity Limitation Survey, 1986

Leisure Activity	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
TV, Radio, Records/Tapes, Reading					
OR	0.09	1.60	0.84	0.33	0.20
95% CI	(0.04-0.20)	(0.58-4.42)	(0.13-5.31)	(0.17-0.66)	(0.04-1.02)
Talking on Telephone					
OR	1.13	1.05	1.27	1.20	0.43
95% CI	(0.79-1.63)	(0.78-1.41)	(0.72-2.25)	(0.92-1.55)	(0.28-0.66)
Arts and Crafts/Other Hobbies					
OR	0.72	1.50	0.90	1.15	0.71
95% CI	(0.53-0.96)	(1.18-1.91)	(0.57-1.42)	(0.94-1.41)	(0.54-0.94)
Social Activities with Family/ Friends					
OR	0.37	1.09	0.53	0.58	0.82
95% CI	(0.26-0.52)	(0.81-1.46)	(0.32-0.88)	(0.45-0.74)	(0.58-1.16)
Visiting Friends/Relatives					
OR	0.40	0.65	1.56	0.50	0.28
95% CI	(0.28-0.57)	(0.48-0.89)	(0.83-2.92)	(0.38-0.65)	(0.16-0.49)
Shopping					
OR	0.39	1.14	1.06	0.65	0.39
95% CI	(0.27-0.58)	(0.76-1.70)	(0.56-1.98)	(0.47-0.89)	(0.21-0.71)
Religious Activities/Volunteer Work					
OR	1.22	0.93	0.99	1.05	0.74
95% CI	(0.91-1.63)	(0.75-1.15)	(0.63-1.55)	(0.87-1.27)	(0.58-0.95)
Sports Events, Concerts, Plays, Movies					
OR	0.81	1.25	0.75	1.07	0.76
95% CI	(0.56-1.19)	(0.98-1.61)	(0.39-1.44)	(0.85-1.35)	(0.58-0.99)
Museums, Libraries, Historic Sites, etc.					
OR	0.47	1.42	0.55	0.96	0.51
95% CI	(0.30-0.76)	(1.10-1.84)	(0.27-1.12)	(0.76-1.23)	(0.39-0.67)
Visiting National/Provincial Parks					
OR	1.05	1.22	0.79	1.15	0.80
95% CI	(0.72-1.53)	(0.93-1.60)	(0.42-1.49)	(0.89-1.47)	(0.60-1.08)
Taking a Course/Seminar					
OR	0.36	0.94	1.02	0.81	0.20
95% CI	(0.14-0.92)	(0.60-1.46)	(0.28-3.66)	(0.53-1.24)	(0.14-0.29)
Activities such as Bingo, Clubs, Cards					
OR	0.65	1.30	0.90	1.03	0.63
95% CI	(0.46-0.90)	(1.04-1.63)	(0.54-1.48)	(0.84-1.27)	(0.49-0.81)

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 15b. Associations Between Different Types of Disabilities and Participation in Leisure Activities Among Females 65 Years and Older, Health and Activity Limitation Survey, 1986

Leisure Activity	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
TV, Radio, Records/Tapes, Reading					
OR	1.30	0.76	0.46	0.42	1.70
95% CI	(0.89-1.91)	(0.56-1.03)	(0.33-0.64)	(0.30-0.59)	(1.24-2.34)
Talking on Telephone					
OR	1.05	1.05	0.72	0.90	0.80
95% CI	(0.89-1.25)	(0.91-1.21)	(0.61-0.85)	(0.79-1.03)	(0.67-0.96)
Arts and Crafts/Other Hobbies					
OR	0.72	1.22	0.89	0.91	1.00
95% CI	(0.63-0.82)	(1.10-1.36)	(0.77-1.02)	(0.82-1.01)	(0.87-1.14)
Social Activities with Family/ Friends					
OR	0.85	1.53	0.86	1.14	0.80
95% CI	(0.72-0.99)	(1.32-1.76)	(0.73-1.02)	(1.00-1.29)	(0.67-0.95)
Visiting Friends/Relatives					
OR	0.73	1.28	0.76	0.90	0.40
95% CI	(0.63-0.85)	(1.12-1.48)	(0.65-0.88)	(0.79-1.02)	(0.33-0.50)
Shopping					
OR	1.01	1.12	0.67	0.94	0.26
95% CI	(0.87-1.18)	(0.98-1.28)	(0.57-0.77)	(0.83-1.06)	(0.20-0.32)
Religious Activities/Volunteer Work					
OR	1.01	1.04	0.74	0.98	0.41
95% CI	(0.89-1.15)	(0.94-1.16)	(0.64-0.86)	(0.89-1.09)	(0.35-0.47)
Sports Events, Concerts, Plays, Movies					
OR	0.52	1.05	0.46	0.59	0.51
95% CI	(0.43-0.64)	(0.92-1.21)	(0.36-0.57)	(0.51-0.67)	(0.44-0.59)
Museums, Libraries, Historic Sites, etc.					
OR	0.66	0.91	0.71	0.63	0.80
95% CI	(0.54-0.80)	(0.79-1.05)	(0.58-0.88)	(0.55-0.73)	(0.67-0.94)
Visiting National/Provincial Parks					
OR	0.64	0.95	0.93	0.77	0.36
95% CI	(0.52-0.80)	(0.81-1.12)	(0.74-1.18)	(0.65-0.90)	(0.31-0.43)
Taking a Course/Seminar					
OR	0.48	0.64	0.41	0.33	0.90
95% CI	(0.31-0.77)	(0.46-0.89)	(0.24-0.72)	(0.24-0.45)	(0.62-1.31)
Activities such as Bingo, Clubs, Cards					
OR	1.15	0.79	0.96	0.74	0.84
95% CI	(1.03-1.28)	(0.68-0.92)	(0.86-1.06)	(0.65-0.85)	(0.73-0.96)

The referent for all odds ratios is "not disabled". Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status. SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able; SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled; SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 15c. Associations Between Different Types of Disabilities and Participation in Leisure Activities Among Disabled Males 55-64 Years, Health and Activity Limitation Survey, 1986

Leisure Activity	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
TV, Radio, Records/Tapes, Reading					
OR	0.61	1.68	0.56	1.01	1.09
95% CI	(0.18-2.08)	(0.66-4.26)	(0.15-2.17)	(0.44-2.28)	(0.44-2.68)
Talking on Telephone					
OR	0.98	0.91	1.11	0.89	0.89
95% CI	(0.72-1.33)	(0.77-1.08)	(0.78-1.59)	(0.76-1.05)	(0.75-1.06)
Arts and Crafts/Other Hobbies					
OR	0.51	1.30	0.77	1.07	0.42
95% CI	(0.37-0.71)	(1.09-1.54)	(0.53-1.12)	(0.90-1.26)	(0.35-0.51)
Social Activities with Family/ Friends					
OR	0.76	0.83	1.34	0.79	1.27
95% CI	(0.53-1.10)	(0.67-1.02)	(0.82-2.19)	(0.65-0.97)	(1.02-1.58)
Visiting Friends/Relatives					
OR	0.60	1.05	0.73	0.80	1.11
95% CI	(0.40-0.90)	(0.81-1.36)	(0.44-1.21)	(0.63-1.02)	(0.85-1.46)
Shopping					
OR	0.76	1.22	0.64	1.01	0.53
95% CI	(0.53-1.10)	(0.98-1.52)	(0.42-0.96)	(0.82-1.25)	(0.41-0.69)
Religious Activities/Volunteer Work					
OR	1.07	0.83	1.00	0.87	0.99
95% CI	(0.78-1.47)	(0.70-0.98)	(0.69-1.46)	(0.73-1.02)	(0.83-1.19)
Sports Events, Concerts, Plays, Movies					
OR	0.49	0.80	0.57	0.68	0.64
95% CI	(0.33-0.73)	(0.67-0.96)	(0.36-0.89)	(0.56-0.81)	(0.53-0.78)
Museums, Libraries, Historic Sites, etc.					
OR	0.42	1.10	1.85	1.02	0.76
95% CI	(0.26-0.68)	(0.90-1.34)	(1.23-2.77)	(0.84-1.25)	(0.61-0.93)
Visiting National/Provincial Parks					
OR	0.89	1.21	0.48	1.09	0.88
95% CI	(0.59-1.33)	(0.99-1.47)	(0.28-0.83)	(0.89-1.32)	(0.72-1.09)
Taking a Course/Seminar					
OR	0.50	1.52	0.59	1.25	0.90
95% CI	(0.22-1.13)	(1.08-2.13)	(0.24-1.47)	(0.89-1.76)	(0.63-1.30)
Activities such as Bingo, Clubs, Cards					
OR	0.96	0.98	0.72	0.96	0.90
95% CI	(0.69-1.34)	(0.82-1.17)	(0.48-1.08)	(0.81-1.14)	(0.74-1.08)

The referent for all odds ratios is "not disabled". Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status. SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able; SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled; SMA Dis = Speaking, Mobility, or Agility Disabled. Table

Table 15d. Associations Between Different Types of Disabilities and Participation in Leisure

Activities Among Disabled Males 65 Years and Older, Health and Activity
Limitation Survey, 1986

Leisure Activity	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
TV, Radio, Records/Tapes, Reading					
OR	0.83	1.52	0.47	0.76	0.90
95% CI	(0.52-1.32)	(1.08-2.15)	(0.32-0.69)	(0.53-1.10)	(0.63-1.29)
Talking on Telephone					
OR	1.34	0.75	0.75	0.72	0.76
95% CI	(1.11-1.62)	(0.68-0.84)	(0.63-0.88)	(0.64-0.80)	(0.68-0.86)
Arts and Crafts/Other Hobbies					
OR	0.70	1.15	0.82	0.99	0.48
95% CI	(0.58-0.86)	(1.03-1.29)	(0.69-0.97)	(0.88-1.10)	(0.43-0.54)
Social Activities with Family/ Friends					
OR	0.84	1.32	0.81	1.04	1.30
95% CI	(0.68-1.04)	(1.16-1.51)	(0.67-0.99)	(0.91-1.19)	(1.13-1.50)
Visiting Friends/Relatives					
OR	0.99	1.34	0.58	0.98	0.63
95% CI	(0.79-1.25)	(1.16-1.55)	(0.48-0.70)	(0.85-1.13)	(0.54-0.75)
Shopping					
OR	0.75	1.30	0.52	0.91	0.49
95% CI	(0.61-0.93)	(1.14-1.48)	(0.44-0.62)	(0.80-1.05)	(0.42-0.57)
Religious Activities/Volunteer Work					
OR	1.22	1.25	0.92	1.37	0.74
95% CI	(1.01-1.48)	(1.12-1.39)	(0.77-1.09)	(1.22-1.53)	(0.65-0.83)
Sports Events, Concerts, Plays, Movies					
OR	0.78	0.88	0.63	0.73	0.60
95% CI	(0.60-1.01)	(0.77-1.01)	(0.49-0.81)	(0.64-0.84)	(0.52-0.69)
Museums, Libraries, Historic Sites, etc.					
OR	0.51	1.18	0.62	0.91	0.63
95% CI	(0.37-0.70)	(1.02-1.36)	(0.47-0.80)	(0.78-1.05)	(0.54-0.73)
Visiting National/Provincial Parks					
OR	0.84	1.17	0.50	0.93	0.69
95% CI	(0.64-1.10)	(1.02-1.35)	(0.38-0.65)	(0.80-1.08)	(0.60-0.80)
Taking a Course/Seminar					
OR	0.53	0.82	0.11	0.51	0.46
95% CI	(0.28-0.99)	(0.60-1.12)	(0.03-0.35)	(0.37-0.70)	(0.34-0.62)
Activities such as Bingo, Clubs, Cards					
OR	0.75	1.32	0.48	1.01	0.63
95% CI	(0.60-0.92)	(1.18-1.48)	(0.39-0.59)	(0.90-1.14)	(0.56-0.71)

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 15e. Associations Between Different Types of Disabilities and Participation in Leisure Activities Among Disabled Females 55-64 Years, Health and Activity Limitation Survey, 1991

Leisure Activity	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
TV, Radio, Records, Tapes					
Adj OR	0.05	2.74	0.38	0.11	0.19
95% CI	(0.02-0.14)	(0.50-14.90)	(0.06-2.48)	(0.04-0.29)	(0.03-1.25)
Reading					
Adj OR	1.16	0.44	0.32	0.46	0.30
95% CI	(0.74-1.82)	(0.32-0.60)	(0.18-0.56)	(0.34-0.61)	(0.17-0.52)
Talking on Telephone					
Adj OR	7.73	0.21	0.22	0.35	0.27
95% CI	(1.96-30.42)	(0.14-0.33)	(0.10-0.50)	(0.23-0.54)	(0.12-0.63)
Arts and Crafts or Other Hobbies					
Adj OR	0.79	1.59	0.53	1.13	0.72
95% CI	(0.60-1.04)	(1.25-2.02)	(0.33-0.86)	(0.93-1.37)	(0.56-0.94)
Social Activities/Visiting Family/Friends					
Adj OR	1.44	0.50	0.82	0.67	0.29
95% CI	(0.83-2.51)	(0.35-0.71)	(0.37-1.84)	(0.48-0.93)	(0.14-0.58)
Shopping					
Adj OR	1.29	1.16	0.76	1.21	0.14
95% CI	(0.74-2.24)	(0.72-1.86)	(0.34-1.67)	(0.83-1.75)	(0.04-0.44)
Religious Activities					
Adj OR	0.47	0.81	0.90	0.61	1.07
95% CI	(0.36-0.62)	(0.65-1.01)	(0.56-1.47)	(0.50-0.73)	(0.83-1.36)
Sports Events, Concerts, Plays, Movies					
Adj OR	0.70	0.79	0.94	0.73	0.57
95% CI	(0.53-0.92)	(0.63-0.98)	(0.58-1.53)	(0.60-0.88)	(0.45-0.73)
Museums, Libraries, etc.					
Adj OR	0.98	0.87	0.67	0.90	0.53
95% CI	(0.75-1.28)	(0.69-1.08)	(0.41-1.11)	(0.74-1.08)	(0.41-0.67)
Visiting National/Provincial Parks					
Adj OR	0.88	0.80	0.65	0.81	0.61
95% CI	(0.67-1.15)	(0.64-1.00)	(0.39-1.08)	(0.67-0.98)	(0.48-0.78)
Taking a Course/Seminar					
Adj OR	0.34	1.15	1.03	0.81	0.35
95% CI	(0.22-0.53)	(0.88-1.52)	(0.54-1.97)	(0.63-1.03)	(0.27-0.46)
Activities such as Bingo, Clubs, Cards					
Adj OR	1.01	1.15	0.93	1.05	1.45
95% CI	(0.77-1.33)	(0.92-1.43)	(0.57-1.53)	(0.87-1.26)	(1.12-1.87)
Volunteer Work					
Adj OR	0.45	1.46	1.22	0.98	0.59
95% CI	(0.32-0.62)	(1.17-1.83)	(0.74-2.01)	(0.81-1.19)	(0.46-0.75)

The referent for all odds ratios is "not disabled". Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status. SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able; SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled; SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 15f. Associations Between Different Types of Disabilities and Participation in Leisure Activities Among Disabled Females 65 Years and Older, Health and Activity Limitation Survey, 1991

Leisure Activity	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
TV, Radio, Records, Tapes					
Adj OR	3.77	0.44	0.43	0.35	0.16
95% CI	(0.89-16.0)	(0.21-0.93)	(0.20-0.91)	(0.14-0.90)	(0.01-3.29)
Reading					
Adj OR	0.25	5.29	0.36	0.45	0.73
95% CI	(0.18-0.35)	(3.18-8.80)	(0.25-0.52)	(0.32-0.64)	(0.45-1.18)
Talking on Telephone					
Adj OR	4.09	1.07	0.20	0.75	0.06
95% CI	(1.44-11.6)	(0.61-1.86)	(0.11-0.35)	(0.46-1.24)	(0.01-0.59)
Arts and Crafts or Other Hobbies					
Adj OR	0.82	1.52	0.53	1.02	0.75
95% CI	(0.62-1.08)	(1.21-1.92)	(0.38-0.73)	(0.82-1.26)	(0.54-1.03)
Social Activities/Visiting Family/Friends					
Adj OR	1.26	0.84	0.85	0.89	0.53
95% CI	(0.82-1.94)	(0.61-1.16)	(0.56-1.30)	(0.65-1.22)	(0.31-0.90)
Shopping					
Adj OR	0.84	1.53	0.69	1.05	0.14
95% CI	(0.59-1.20)	(1.11-2.11)	(0.48-0.99)	(0.79-1.40)	(0.23-0.72)
Religious Activities					
Adj OR	0.61	0.92	1.10	0.78	0.34
95% CI	(0.46-0.81)	(0.72-1.17)	(0.79-1.55)	(0.62-0.99)	(0.23-0.51)
Sports Events, Concerts, Plays, Movies					
Adj OR	0.77	1.12	0.55	0.84	0.54
95% CI	(0.56-1.06)	(0.87-1.44)	(0.36-0.84)	(0.66-1.06)	(0.39-0.75)
Museums, Libraries, etc.					
Adj OR	0.48	1.33	0.68	0.84	0.42
95% CI	(0.33-0.70)	(1.02-1.74)	(0.45-1.03)	(0.65-1.09)	(0.30-0.59)
Visiting National/ Provincial Parks					
Adj OR	0.51	1.51	0.67	1.03	0.41
95% CI	(0.34-0.74)	(1.16-1.96)	(0.43-1.04)	(0.79-1.34)	(0.29-0.57)
Taking a Course/Seminar					
Adj OR	0.34	3.29	0.32	2.02	0.84
95% CI	(0.16-0.74)	(2.22-4.89)	(0.11-0.91)	(1.32-3.09)	(0.50-1.40)
Activities such as Bingo, Clubs, Cards					
Adj OR	1.14	0.83	0.86	0.89	0.38
95% CI	(0.86-1.51)	(0.65-1.06)	(0.61-1.21)	(0.71-1.11)	(0.28-0.53)
Volunteer Work					
Adj OR	0.55	1.19	0.51	0.73	0.47
95% CI	(0.38-0.79)	(0.90-1.56)	(0.31-0.82)	(0.56-0.95)	(0.33-0.66)

The referent for all odds ratios is "not disabled". Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status. SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able; SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled; SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 15g. Associations Between Different Types of Disabilities and Participation in Leisure Activities Among Disabled Males 55-64 Years, Health and Activity Limitation Survey, 1991

Leisure Activity	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
TV, Radio, Records, Tapes					
Adj OR	0.17	3.27	0.08	0.71	0.24
95% CI	(0.03-0.85)	(0.78-13.56)	(0.02-0.34)	(0.25-2.04)	(0.03-1.73)
Reading					
Adj OR	0.50	1.20	0.34	0.83	0.43
95% CI	(0.32-0.78)	(0.91-1.59)	(0.19-0.58)	(0.63-1.07)	(0.30-0.62)
Talking on Telephone					
Adj OR	2.79	0.54	0.64	0.59	0.88
95% CI	(1.07-7.28)	(0.40-0.74)	(0.31-1.32)	(0.43-0.81)	(0.61-1.27)
Arts and Crafts or Other Hobbies					
Adj OR	0.50	0.96	0.60	0.80	0.71
95% CI	(0.33-0.76)	(0.80-1.15)	(0.35-1.02)	(0.67-0.96)	(0.58-0.87)
Social Activities/Visiting Family/Friends					
Adj OR	0.93	2.11	0.45	1.58	0.54
95% CI	(0.49-1.76)	(1.41-3.14)	(0.23-0.88)	(1.12-2.22)	(0.33-0.88)
Shopping					
Adj OR	1.41	0.63	0.79	0.66	0.83
95% CI	(0.82-2.41)	(0.50-0.80)	(0.44-1.42)	(0.52-0.83)	(0.63-1.10)
Religious Activities					
Adj OR	0.73	0.89	1.04	0.87	0.49
95% CI	(0.50-1.06)	(0.74-1.07)	(0.63-1.71)	(0.73-1.04)	(0.39-0.60)
Sports Events, Concerts, Plays, Movies					
Adj OR	0.98	0.94	0.70	0.94	0.49
95% CI	(0.66-1.46)	(0.78-1.13)	(0.42-1.17)	(0.78-1.12)	(0.40-0.61)
Museums, Libraries, etc.					
Adj OR	0.55	1.08	0.54	0.91	0.51
95% CI	(0.37-0.83)	(0.90-1.30)	(0.31-0.94)	(0.76-1.09)	(0.42-0.63)
Visiting National/Provincial Parks					
Adj OR	1.17	1.28	0.64	1.24	0.94
95% CI	(0.80-1.73)	(1.07-1.54)	(0.39-1.06)	(1.04-1.48)	(0.77-1.16)
Taking a Course/Seminar					
Adj OR	0.18	1.00	0.82	0.82	0.32
95% CI	(0.08-0.42)	(0.79-1.28)	(0.39-1.74)	(0.64-1.04)	(0.25-0.41)
Activities such as Bingo, Clubs, Cards					
Adj OR	0.99	0.90	0.52	0.82	0.71
95% CI	(0.67-1.47)	(0.74-1.08)	(0.30-0.92)	(0.68-0.98)	(0.58-0.87)
Volunteer Work					
Adj OR	1.45	1.39	1.34	1.57	0.60
95% CI	(0.96-2.19)	(1.14-1.70)	(0.78-2.31)	(1.29-1.91)	(0.49-0.74)

The referent for all odds ratios is "not disabled". Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status. SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able; SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled; SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 15h. Associations Between Different Types of Disabilities and Participation in Leisure Activities Among Disabled Males 65 Years and Older, Health and Activity Limitation Survey, 1991

Leisure Activity	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
TV, Radio, Records, Tapes					
Adj OR	1.39	0.29	1.63	0.41	0.14
95% CI	(0.30-6.43)	(0.12-0.68)	(0.40-6.57)	(0.15-1.13)	(0.02-1.09)
Reading					
Adj OR	0.86	1.37	0.32	0.82	0.42
95% CI	(0.50-1.48)	(0.94-2.01)	(0.20-0.50)	(0.58-1.18)	(0.26-0.68)
Talking on Telephone					
Adj OR	1.01	0.77	0.97	0.85	0.36
95% CI	(0.56-1.84)	(0.53-1.10)	(0.57-1.65)	(0.59-1.22)	(0.23-0.58)
Arts and Crafts or Other Hobbies					
Adj OR	0.98	0.98	0.49	0.68	0.73
95% CI	(0.62-1.54)	(0.74-1.30)	(0.31-0.78)	(0.51-0.90)	(0.54-1.01)
Social Activities/Visiting Family/Friends					
Adj OR	0.58	1.50	0.58	0.92	0.39
95% CI	(0.35-0.94)	(1.03-2.20)	(0.37-0.91)	(0.64-1.31)	(0.24-0.64)
Shopping					
Adj OR	1.10	1.37	0.66	1.33	0.24
95% CI	(0.65-1.84)	(0.97-1.95)	(0.42-1.03)	(0.95-1.85)	(0.15-0.41)
Religious Activities					
Adj OR	1.33	1.21	0.48	0.86	1.09
95% CI	(0.86-2.05)	(0.92-1.60)	(0.32-0.71)	(0.66-1.13)	(0.81-1.48)
Sports Events, Concerts, Plays, Movies					
Adj OR	0.96	1.42	0.58	1.07	0.95
95% CI	(0.59-1.57)	(1.06-1.91)	(0.36-0.91)	(0.80-1.43)	(0.69-1.32)
Museums, Libraries, etc.					
Adj OR	1.01	0.98	0.58	0.98	0.24
95% CI	(0.63-1.64)	(0.72-1.33)	(0.36-0.94)	(0.72-1.33)	(0.17-0.34)
Visiting National/Provincial Parks					
Adj OR	0.23	1.51	0.38	0.83	0.18
95% CI	(0.13-0.42)	(1.13-2.02)	(0.24-0.62)	(0.62-1.11)	(0.13-0.26)
Taking a Course/Seminar					
Adj OR	0.27	2.49	2.18	3.08	0.42
95% CI	(0.06-1.23)	(1.48-4.20)	(1.11-4.30)	(1.67-5.68)	(0.24-0.74)
Activities such as Bingo, Clubs, Cards					
Adj OR	1.00	1.59	0.58	1.27	0.77
95% CI	(0.64-1.57)	(1.20-2.10)	(0.37-0.90)	(0.96-1.68)	(0.57-1.05)
Volunteer Work					
Adj OR	1.88	1.16	0.49	1.14	0.66
95% CI	(1.16-3.05)	(0.84-1.61)	(0.28-0.84)	(0.82-1.59)	(0.47-0.94)

The referent for all odds ratios is "not disabled". Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status. SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able; SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled; SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 16a. Percent of Disabled Females 55 Years and Older Who Participate in Physical Activities, Health and Activity Limitation Survey, 1991

Physical Activity	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Walking					
55-64	52.4	67.5	62.7	61.6	58.1
65+	55.0	51.2	48.2	51.8	45.2
Gardening					
55-64	37.9	47.2	29.1	42.3	35.7
65+	27.1	36.9	26.0	31.7	26.2
Exercise					
55-64	27.4	24.1	32.0	26.0	26.9
65+	33.0	18.3	19.6	23.1	18.6
Swimming or Aquatics					
55-64	18.0	17.4	----	17.7	13.0
65+	----	17.2	----	11.0	8.2
Dancing					
55-64	23.8	21.6	----	21.2	20.3
65+	10.5	6.1	----	7.1	3.6
Wheeling or Cycling					
55-64	14.9	14.1	----	14.6	12.4
65+	----	3.9	----	2.4	2.7
Other					
55-64	----	7.3	----	6.2	3.5
65+	----	----	----	2.8	1.1

Cell entries denoted by “----” are based on an unweighted n of less than 15 and have been suppressed due to the instability of the estimate.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;
SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;
SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 16b. Percent of Disabled Males 55 Years and Older Who Participate in Physical Activities, Health and Activity Limitation Survey, 1991

Physical Activity	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Walking					
55-64	62.5	68.6	59.4	67.4	59.1
65+	64.5	51.6	42.7	51.7	51.9
Gardening					
55-64	31.5	48.6	31.3	45.7	36.7
65+	43.6	29.8	29.7	32.0	35.6
Exercise					
55-64	10.3	31.6	20.4	28.6	22.1
65+	21.2	15.4	13.0	15.8	17.4
Swimming or Aquatics					
55-64	8.0	18.9	----	17.3	16.3
65+	----	8.9	----	8.1	7.7
Dancing					
55-64	8.5	28.9	----	26.2	17.4
65+	----	12.1	----	11.0	11.1
Wheeling or Cycling					
55-64	----	16.3	----	15.3	16.5
65+	----	12.1	----	11.5	8.1
Other					
55-64	----	17.1	----	15.5	12.1
65+	----	9.4	----	7.6	4.3

Cell entries denoted by “----” are based on an unweighted n of less than 15 and have been suppressed due to the instability of the estimate.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;
SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;
SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 17a. Associations Between Different Types of Disabilities and Participation in Physical Activities Among Disabled Females 55-64 Years, Health and Activity Limitation Survey, 1991

Physical Activity	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Walking					
Adj OR	0.50	0.96	1.35	0.80	0.21
95% CI	(0.38-0.67)	(0.76-1.21)	(0.81-2.25)	(0.66-0.97)	(0.15-0.29)
Gardening					
Adj OR	0.83	1.02	0.65	0.96	0.35
95% CI	(0.61-1.12)	(0.80-1.30)	(0.36-1.17)	(0.78-1.18)	(0.27-0.46)
Exercise					
Adj OR	0.70	0.69	1.10	0.67	0.50
95% CI	(0.52-0.95)	(0.54-0.89)	(0.66-1.84)	(0.54-0.82)	(0.39-0.64)
Swimming or Aquatics					
Adj OR	0.58	0.72	1.09	0.71	0.23
95% CI	(0.40-0.85)	(0.56-1.02)	(0.58-2.02)	(0.54-0.91)	(0.17-0.30)
Dancing					
Adj OR	0.96	0.87	0.26	0.78	0.51
95% CI	(0.69-1.32)	(0.67-1.13)	(0.11-0.64)	(0.62-0.98)	(0.39-0.66)
Wheeling or Cycling					
Adj OR	0.84	0.65	1.35	0.70	0.37
95% CI	(0.56-1.25)	(0.47-0.90)	(0.69-2.64)	(0.53-0.92)	(0.27-0.49)
Other					
Adj OR	0.53	1.26	2.71	1.20	0.32
95% CI	(0.26-1.07)	(0.77-2.05)	(1.13-6.53)	(0.77-1.87)	(0.20-0.50)

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 17b. Associations Between Different Types of Disabilities and Participation in Physical Activities Among Disabled Females 65 Years and Older, Health and Activity Limitation Survey, 1991

Physical Activity	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Walking					
Adj OR	1.42	0.90	1.45	1.57	0.24
95% CI	(1.07-1.90)	(0.71-1.14)	(1.04-2.02)	(1.25-1.97)	(0.17-0.36)
Gardening					
Adj OR	1.20	1.41	1.66	2.14	0.36
95% CI	(0.85-1.70)	(1.08-1.85)	(1.11-2.49)	(1.63-2.81)	(0.25-0.51)
Exercise					
Adj OR	2.14	0.77	1.05	1.43	0.58
95% CI	(1.56-2.92)	(0.58-1.04)	(0.70-1.57)	(1.09-1.88)	(0.41-0.82)
Swimming or Aquatics					
Adj OR	0.59	3.17	0.52	2.49	0.89
95% CI	(0.32-1.07)	(2.19-4.59)	(0.24-1.13)	(1.67-3.71)	(0.54-1.47)
Dancing					
Adj OR	1.05	0.57	0.73	1.04	0.15
95% CI	(0.57-1.95)	(0.34-0.96)	(0.33-1.61)	(0.62-1.75)	(0.09-0.24)
Wheeling or Cycling					
Adj OR	0.67	2.73	0.13	1.39	3.36
95% CI	(0.21-2.11)	(1.43-5.23)	(0.01-1.49)	(0.69-2.83)	(0.85-12.63)
Other					
Adj OR	0.82	0.37	1.86	0.69	0.06
95% CI	(0.33-2.03)	(0.16-0.86)	(0.66-5.24)	(0.32-1.47)	(0.02-0.12)

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 17c. Associations Between Different Types of Disabilities and Participation in Physical Activities Among Disabled Males 55-64 Years, Health and Activity Limitation Survey, 1991

Physical Activity	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Walking					
Adj OR	0.98	1.33	0.98	1.36	0.51
95% CI	(0.66-1.45)	(1.10-1.60)	(0.60-1.61)	(1.13-1.63)	(0.41-0.64)
Gardening					
Adj OR	0.80	1.19	1.13	1.20	0.50
95% CI	(0.53-1.21)	(0.98-1.44)	(0.64-1.99)	(1.00-1.44)	(0.41-0.62)
Exercise					
Adj OR	0.34	1.33	0.88	1.16	0.50
95% CI	(0.19-0.61)	(1.09-1.64)	(0.48-1.61)	(0.95-1.42)	(0.40-0.62)
Swimming or Aquatics					
Adj OR	0.29	1.03	0.58	0.82	0.58
95% CI	(0.15-0.56)	(0.82-1.31)	(0.28-1.22)	(0.65-1.03)	(0.45-0.74)
Dancing					
Adj OR	0.35	1.59	1.20	1.41	0.48
95% CI	(0.18-0.68)	(1.28-1.98)	(0.64-2.23)	(1.13-1.75)	(0.38-0.60)
Wheeling or Cycling					
Adj OR	0.27	1.06	0.96	0.85	1.01
95% CI	(0.13-0.57)	(0.83-1.35)	(0.50-1.85)	(0.68-1.08)	(0.77-1.32)
Other					
Adj OR	0.37	1.26	0.78	1.04	0.62
95% CI	(0.17-0.79)	(0.97-1.63)	(0.36-1.69)	(0.81-1.35)	(0.47-0.81)

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 17d. Associations Between Different Types of Disabilities and Participation in Physical Activities Among Disabled Males 65 Years and Older, Health and Activity Limitation Survey, 1991

Physical Activity	SD-HA	HD-SA	SD-HD	SD or HD	SMA Dis
Walking					
Adj OR	2.00	0.82	0.92	1.02	0.61
95% CI	(1.28-3.12)	(0.62-1.09)	(0.63-1.36)	(0.77-1.34)	(0.44-0.83)
Gardening					
Adj OR	2.27	0.60	1.23	0.85	1.02
95% CI	(1.43-3.61)	(0.44-0.83)	(0.79-1.92)	(0.63-1.15)	(0.73-1.43)
Exercise					
Adj OR	1.48	0.67	0.88	0.76	0.82
95% CI	(0.87-2.53)	(0.46-0.96)	(0.50-1.52)	(0.54-1.07)	(0.56-1.21)
Swimming or Aquatics					
Adj OR	1.88	0.84	0.09	0.68	0.51
95% CI	(0.96-3.68)	(0.51-1.38)	(0.02-0.48)	(0.42-1.09)	(0.32-0.81)
Dancing					
Adj OR	0.66	0.53	0.86	0.55	0.46
95% CI	(0.31-1.39)	(0.34-0.82)	(0.45-1.64)	(0.37-0.83)	(0.30-0.69)
Wheeling or Cycling					
Adj OR	1.82	1.57	1.11	2.55	0.62
95% CI	(0.93-3.54)	(1.00-2.48)	(0.57-2.14)	(1.50-4.33)	(0.37-1.04)
Other					
Adj OR	1.28	1.65	0.57	1.61	0.48
95% CI	(0.52-3.19)	(0.91-2.98)	(0.20-1.67)	(0.84-3.07)	(0.27-0.86)

The referent for all odds ratios is "not disabled".

Odds ratios adjusted for marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, and "other" disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;

SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;

SMA Dis = Speaking, Mobility, or Agility Disabled.

Table 18. Association Between Severity of Sensory Disability and Functional Independence, Health and Activity Limitation Survey, 1991

Degree of Sensory Severity	IADL Restriction	Decision Making	Emotional Well-Being
SD-HA			
mild	referent	referent	referent
moderate	1.16 (0.78-1.70)	0.65 (0.37-1.14)	1.19 (0.76-1.86)
severe	3.81 (2.19-6.63)	0.99 (0.49-1.97)	0.85 (0.52-1.39)
HD-SA			
mild	referent	referent	referent
moderate	0.89 (0.71-1.11)	0.87 (0.58-1.31)	0.74 (0.53-1.01)
severe	0.82 (0.60-1.12)	0.54 (0.34-0.87)	0.77 (0.50-1.18)
SD-HD			
mild	referent	referent	referent
moderate	0.77 (0.38-1.55)	0.39 (0.13-1.22)	0.87 (0.44-1.72)
severe	1.03 (0.52-2.03)	0.22 (0.07-0.63)	0.81 (0.43-1.54)
SD or HD			
mild	referent	referent	referent
moderate	0.98 (0.82-1.18)	0.86 (0.63-1.18)	0.94 (0.74-1.18)
severe	1.33 (1.07-1.65)	0.54 (0.40-0.74)	0.70 (0.54-0.89)

Odds ratios adjusted for age, sex, marital status, type of dwelling, degree of urbanization, total household income, use of physical aids, residence modification, difficulty leaving residence, and SMA disability status.

SD-HA = Seeing Disabled, Hearing Able; HD-SA = Hearing Disabled, Seeing Able;
 SD-HD = Seeing Disabled, Hearing Disabled; SD or HD = Seeing Disabled or Hearing Disabled;
 SMA Dis = Speaking, Mobility, or Agility Disabled.

