

**Actuarial Study No. 9** 

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#### **FOREWORD**

The Canada Pension Plan (CPP) provides benefits to contributors and their families. In addition to providing retirement benefits, the CPP provides disability benefits to contributors and their dependents, and death and survivor benefits to contributors' surviving dependents.

This study provides a detailed historical analysis of the characteristics of CPP disability program beneficiaries. The study is based on CPP beneficiaries data provided by Service Canada and covers the period from 1970 up to 2008. Although the CPP disability program was implemented in 1966 as part of the CPP, contributors could not qualify for disability benefits before 1970 given the minimum contributory requirements at inception.

This study does not include an historical analysis of disability beneficiaries' characteristics under the Québec Pension Plan (QPP), which is a similar plan covering the residents of the province of Québec.

# **TABLE OF CONTENTS**

		1	Page
I.	Exe	cutive Summary	9
	A.	Purpose	9
	B.	Scope of the Study	9
	C.	Main Findings	9
II.	Bac	kground	12
	A.	Level of Benefit	12
	B.	Eligibility Criteria	12
III.	Min	imum Contributory Requirements	14
	A.	Historical Minimum Contributory Requirements	14
	B.	Experience of Contributors Meeting Minimum Contributory Requirements	15
IV.	Nev	v Beneficiaries	18
	A.	Classification of Causes of Disability	18
	B.	Determinants of CPP Disability Claims and Payouts (other than cause of disability)	18
	C.	Analysis by Sex	19
	D.	Analysis by Age and Sex	21
	E.	Analysis by Cause of Disability	23
	F.	Analysis by Cause of Disability and Age	24
	G.	Trends in Disability Incidence Rates	26
	H.	Average Disability Benefit	32
V.	Disa	ability Beneficiaries in Pay	35
	A.	Analysis by Sex	35
	B.	Analysis by Age and Sex	35
	C.	Analysis by Cause of Disability and Sex	37
VI.	Disa	ability Benefit Termination	39
	A.	Analysis by Duration of Benefit Payments	39
	B.	Analysis by Reason for Termination and Cause of Disability	40
	C.	Analysis of Mortality	
	D.	Analysis of Recovery	55
VII.	App	pendices	59
	A.	Supplementary Tables	
	B.	Bibliography	87
	C.	Acknowledgments	87

# LIST OF TABLES

		Page
Table 1	Population of Canada less Québec Eligible (Aged 18 to 64)	17
Table 2	Distribution of New Beneficiaries by Cause	24
Table 3	Age-Adjusted Disability Incidence Rates	27
Table 4	Disability Incidence Rates by Age – Males	29
Table 5	Disability Incidence Rates by Age – Females	30
Table 6	Average Monthly Benefit for New Beneficiaries	33
Table 7	Distribution of Beneficiaries in Pay by Age Group	36
Table 8	Distribution of Beneficiaries in Pay by Cause	37
Table 9	Average Duration of Payments for Terminated Benefits	39
Table 10	Distribution of Terminated Benefits by Duration	40
Table 11	Distribution of Terminated Benefits by Reason and Year of Termination	41
Table 12	Distribution of Terminated Benefits by Reason and Cause of Disability (2007)	41
Table 13	Distribution of Terminated Benefits by Reason, Cause of Disability, and Sex (200	07)42
Table 14	Mortality Rates by Age and Duration (1999-2008)	46
Table 15	Distribution of Deaths by Cause of Disability and Duration (2007)	47
Table 16	Distribution of Deaths by Cause and Level of Benefit	48
Table 17	Distribution of Exposures by Cause and Level of Benefit	48
Table 18	Distribution of Other than Neoplasm Exposures by Type and Level of Benefit	51
Table 19	Mortality Rates by Cause and Level of Benefit	52
Table 20	Average Duration of Benefit for Disabilities Caused by Neoplasms	53
Table 21	Recovery Rates by Age and Duration (1999-2008)	57
Table 22	Distribution of Recoveries by Cause and Duration (2007)	58
Table 23	Population of Canada less Québec Eligible (Aged 18 to 64)	59
Table 24	Number of New Beneficiaries	60
Table 25	Average Age of New Beneficiaries	61
Table 26	Age-Adjusted Disability Incidence Rates	62
Table 27	Disability Incidence Rates by Age – Males	63
Table 28	Disability Incidence Rates by Age – Females	64
Table 29	Distribution of New Beneficiaries by Cause	65
Table 30	Distribution of New Beneficiaries by Cause – Ages under 40	66
Table 31	Distribution of New Beneficiaries by Cause – Ages 40 to 54	67
Table 32	Distribution of New Beneficiaries by Cause – Ages 55 and Older	68
Table 33	Average Monthly Benefit for New Beneficiaries	69
Table 34	Average Age of Beneficiaries in Pay	70
Table 35	Distribution of Beneficiaries in Pay by Cause – Males	71
Table 36	Distribution of Beneficiaries in Pay by Cause – Females	72

Table 37	Average Duration of Payments for Terminated Benefits	73
Table 38	Distribution of Terminated Benefits by Duration – Males	74
Table 39	Distribution of Terminated Benefits by Duration – Females	75
Table 40	Distribution of Terminated Benefits by Reason and Year of Termination	76
Table 41	Mortality Rates by Year	77
Table 42	Mortality Rates During First Year After Benefit Commencement	78
Table 43	Mortality Rates by Age (2005-2007)	79
Table 44	Mortality Rates of Males and Females Aged 55-59	80
Table 45	Mortality Rates by Age and Duration – Males (1999-2008)	81
Table 46	Mortality Rates by Age and Duration – Females (1999-2008)	82
Table 47	Recovery Rates by Sex	83
Table 48	Recovery Rates by Age and Sex (2005-2007)	84
Table 49	Recovery Rates by Age and Duration – Males (1999-2008)	85
Table 50	Recovery Rates by Age and Duration – Females (1999-2008)	86

# LIST OF CHARTS

		Page
Chart 1	Number of Eligible Contributors	15
Chart 2	Proportion of Population of Canada less Québec Eligible (Aged 18 to 64)	16
Chart 3	Number of New Beneficiaries	20
Chart 4	Distribution of New Beneficiaries by Sex	21
Chart 5	Average Age of New Beneficiaries	
Chart 6	Distribution of New Beneficiaries by Age Group	
Chart 7	Distribution of New Beneficiaries by Cause	24
Chart 8	Distribution of New Beneficiaries by Cause_(Ages Under 40)	25
Chart 9	Distribution of New Beneficiaries by Cause (Ages 40 to 54)	25
Chart 10	Distribution of New Beneficiaries by Cause_(Ages 55 and Older)	26
Chart 11	Age-Adjusted Disability Incidence Rates	28
Chart 12	Disability Incidence Rates by Age – Males	31
Chart 13	Disability Incidence Rates by Age – Females	31
Chart 14	Average Monthly Benefit for New Beneficiaries	32
Chart 15	Ratio of Average Earnings-Related Portion to Maximum Earnings-Related Port Benefit for New Beneficiaries, by Age Group – Males	
Chart 16	Ratio of Average Earnings-Related Portion to Maximum Earnings-Related Port Benefit for New Beneficiaries, by Age Group – Females	
Chart 17	Average Age of Beneficiaries in Pay	36
Chart 18	Mortality Rates by Year and Sex	
Chart 19	Mortality Rates During First Year After Start of Benefit	44
Chart 20	Mortality Rates by Attained Age (2005-2007)	45
Chart 21	Mortality Rates of Males and Females Aged 55-59	
Chart 22	Exposures by Cause and Level of Benefit – Males (2005)	49
Chart 23	Exposures by Cause and Level of Benefit – Females (2005)	50
Chart 24	Neoplasm Mortality by Level of Benefit – Males	52
Chart 25	Other than Neoplasm Mortality by Level of Benefit – Males	53
Chart 26	Neoplasm Mortality by Level of Benefit – Females	54
Chart 27	Other than Neoplasm Mortality by Level of Benefit – Females	55
Chart 28	Recovery Rates	56
Chart 29	Recovery Rates by Age Group and Duration (2005 to 2007)	57
Chart 30	Recovery Rates by Age and Sex (2005 to 2007)	58

# I. Executive Summary

#### A. Purpose

This is the second experience study on CPP disability program beneficiaries prepared by the Office of the Chief Actuary (OCA). This study examines historical trends and characteristics of new beneficiaries, beneficiaries in pay, and benefit terminations since 1970.

#### B. Scope of the Study

Section II of the study provides some background information on the disability benefit program under the CPP. Section III describes the benefit minimum contributory requirements since the inception of the program. Sections IV and V provide detailed information on the experience and characteristics of beneficiaries. Section VI presents the experience in respect of benefit terminations by the different causes. Lastly, various appendices provide additional information on the characteristics of beneficiaries, a bibliography, and an acknowledgement of the organizations and individuals who assisted in the preparation of this study.

## C. Main Findings

#### Minimum contributory requirements

- In 2007, there were 5.8 million male contributors who met the minimum contributory requirements, representing about 70% of the male population of Canada less Québec, aged 18 to 64. The proportion of the male population of Canada excluding Québec, aged 18 to 64, that meets the minimum contributory requirements was 66% in 1970, increased to a peak of 87% in 1987, and has been relatively stable at about 70% since 1998.
- For females, there were 5.1 million contributors in 2007 who met the minimum contributory requirements, representing about 60% of the female population of Canada excluding Québec, aged 18 to 64. This proportion increased more over time compared to males, from 22% in 1970 to a peak of 71% in 1991, and has increased slightly since 1998 to reach 60%. The male-female gap between the proportions meeting the minimum contributory requirements has narrowed over time as more women have entered the labour force and made contributions to the CPP.

#### **New Beneficiaries**

- The number of new disability beneficiaries steadily increased from 8,400 in 1970 to 42,000 by the late 1980s. This was followed by a sharp increase that led to a peak of 58,000 in 1992. Following the peak, the number of new disability cases significantly decreased to reach 30,000 by 1996 and has since stabilized at a level of 33,000.
- As more women have entered the labour force, the proportion of new female beneficiaries steadily increased over time from 13% in 1970 to reach 51% of all new beneficiaries by 2005.
- The average age of new beneficiaries decreased from 55 years in 1970 to 49 in 1996, and since then has slightly increased to reach 51 years by 2007.

- Since the late 1990s, the distribution of new beneficiaries by the various causes of disability has been relatively stable. As of 2007, the three main causes of disability as proportions of all causes were mental disorders (22%), diseases of the musculoskeletal system and connective tissue (21%) and neoplasms (19%).
- Overall, the disability incidence rate reached a peak in 1992 of about 8 new cases per 1,000 eligible individuals, declined rapidly thereafter until 1997, and has been stable since at a level of about 3.5 new cases per 1,000 eligible individuals.
- Up until 1993, male disability incidence rates were higher than female rates, but the gap between the rates had narrowed over time. Since the mid-1990s, the gap has reversed in direction and widened. In 2007, the female disability incidence rate was 3.5 per 1,000 eligible, compared to 2.9 per 1,000 eligible for males.
- For both sexes, the disability incidence rates increase significantly by age and reach a peak between the ages of 60 and 64. However, the rates have generally declined since 1985, especially at the older ages. In 2007, the highest disability incidence rate for males occurred at age 64 at a level close to 14 per 1,000 eligible. For females in 2007, the rate was highest at age 62 at a level of about 12 per 1,000 eligible.

# **Beneficiaries in Pay**

- The total number of beneficiaries in pay has increased significantly over time, although for males, the total number of beneficiaries reached a peak in the mid-1990s of over 186,000, while for females the growth has been continuous but has varied in pace. In 2007, there were 162,000 and 175,000 male and female beneficiaries in pay, respectively.
- For both sexes, the highest proportion of beneficiaries pertains to the age group 55 and older. From 1980 to 2007, there was an overall decrease in the proportion of beneficiaries in this age group, which led to a decrease in the average age of beneficiaries. In 2007, the average age of beneficiaries in pay was about 54 years for males and 53 for females.
- Three major causes of morbidity, namely diseases of the musculoskeletal system and connective tissue, diseases of the circulatory system, and mental disorders, have accounted for about 65% of disability cases since the inception of the disability program.
- The proportions of male and female cases related to diseases of the musculoskeletal system and connective tissue increased from 12% for males and 18% for females in 1970 to peaks in 1992 of 31% and 40% for males and females, respectively. The proportions then decreased to 22% and 28% for males and females, respectively by 2007. The proportions of cases related to diseases of the circulatory system decreased over time from being the largest of all causes in 1970 (41% for males, 32% for females) to 13% and 6% for males and females, respectively in 2007. In comparison, the proportions of cases related to mental disorders increased over time to represent the largest of all causes in 2007 (from 7% to 25% for males, and from 13% to 31% for females).

#### **Benefit Terminations**

- About 60% of beneficiaries continue to receive their benefits up to age 65, at which time their disability benefits are automatically converted into a retirement pension. Another one-third of beneficiaries cease to receive their benefits as a result of death, and the remaining beneficiaries cease to receive benefits as a result of their recovery or because they no longer meet the definition of disability.
- The highest proportion (44%) of all beneficiaries who ceased to receive their benefits in 2007 due to death had a neoplasm as the cause of disability.
- The highest proportion (28%) of all beneficiaries who recovered in 2007 were receiving a disability benefit due to a mental disorder. Of all those beneficiaries who reached age 65 in 2007, the highest proportion (35%) had a disease of the musculoskeletal system and connective tissue as the cause of disability.
- The mortality rates of male and female beneficiaries aged 55 to 59 are on average five to six times higher than the mortality rates of the general population for that age group and each sex, and similar relationships are observed for other age groups.
- In 2007, 79% of all beneficiary deaths within the first two years after benefit commencement were attributable to neoplasms.
- Beneficiary mortality rates attributable to neoplasms for both sexes are much higher than for other causes of disability. For males with disabilities caused by neoplasms, those with higher benefits have higher mortality rates than those with lower benefits by about 20% up to age 60, after which the rates are similar. For females, the same relative difference in the rates is observed for all ages 45 to 64. For both sexes and for higher and lower benefit levels, neoplasm-related mortality rates start to decline after age 58.
- Male beneficiaries have an overall higher level of recovery than females, but the gap between
  the recovery rates has narrowed over time. There was an overall decrease in recovery rates
  for both sexes up to the mid-1990s, after which the rates stabilized. In 2007, there were
  about eight recoveries per thousand eligible male beneficiaries and six recoveries per
  thousand eligible female beneficiaries.
- Recovery rates are higher in the second year after benefit commencement but generally decline at longer durations since the start of benefit payments. Younger beneficiaries have a higher likelihood of being able to return to some form of working activity and as such, have higher recovery rates than older beneficiaries.
- For all causes of disability other than neoplasms, recovery generally becomes more likely as
  duration since benefit commencement increases. For disabilities caused by neoplasms,
  recovery becomes less likely at higher durations.

# II. Background

The Canada Pension Plan (CPP), which began in 1966, provides benefits to contributors and their families. The CPP covers employed and self-employed persons between the ages of 18 and 70 who have more than a minimum level of earnings in a calendar year. The Plan operates in every Canadian province and territory, except Québec, which operates its own similar pension plan, the Québec Pension Plan (QPP). The CPP provides retirement, disability, death, survivor, and children's benefits, as well as services under the CPP national vocational rehabilitation program. Benefits are increased each year in January to reflect increases in the average cost of living, as measured by the Consumer Price Index (CPI).

The CPP disability program is the largest such program in Canada. It is generally the first payer of disability benefits in relation to other entities such as provincial workers' compensation boards and private insurance companies. In 2007, about 337,000 individuals received CPP disability benefits, representing about 6.4% of all CPP beneficiaries (5.3 million individuals). In comparison, in 1970 about 1.5% (4,000) of all CPP beneficiaries (300,000) were disability beneficiaries. The number of disability beneficiaries is expected to continue to increase over the next decades mainly due to the baby boomers reaching older ages at which disability incidence is higher.

In terms of cost, CPP disability expenditures grew from \$4 million in 1970, representing 4% of total Plan expenditures of \$97 million, to \$3.2 billion in 2007, or 12% of total Plan expenditures of \$27.7 billion. From 1994 to 2007, the percentage of total benefits paid for disability decreased from 17% to 12%.

#### A. Level of Benefit

In 2011, the maximum monthly disability benefit is \$1,153.37, and the maximum monthly retirement benefit is \$960. While the retirement benefit is set at 25 percent of average adjusted career earnings, the disability benefit consists of two components: a flat-rate component of \$433.37 in 2011 and 75 percent of the retirement benefit (up to \$720). Children of disabled beneficiaries also receive a flat-rate monthly benefit of \$218.50 in 2011. The disability benefit automatically converts to a retirement pension at age 65. An individual may receive both the disability benefit and a survivor pension. In such cases, the maximum combined monthly benefit payable is set at the maximum disability benefit amount of \$1,153.37.

#### B. Eligibility Criteria

After the onset of a disability, a worker between the ages of 18 and 64 may become entitled to a monthly disability benefit under the CPP provided he or she:

- meets the definition of disability set forth in the Canada Pension Plan;
- has filed an application for the CPP disability benefit;
- satisfies the minimum contributory requirements of the legislation;
- has completed a four-month waiting period; and
- is not receiving a CPP retirement benefit.

Eligibility for the disability benefit is not affected by when an application for the benefit is actually filed. This has been the case since 1992, when a late applicant provision was introduced that removed any time restriction on applying for the benefit.

As defined under paragraph 42(2)(a) of the *Canada Pension Plan*, a person is considered disabled if he or she is determined to be suffering from a severe and prolonged mental or physical disability. A disability is considered severe if by reason of it the person is regularly incapable of pursuing any substantially gainful occupation; a disability is considered prolonged if it is likely to be long-continuing and of indefinite duration or likely to result in death.

Throughout this study, unless otherwise indicated, both onset and duration of disability refer respectively to the start and duration of benefit payments, that is, after the required initial four-month waiting period has been completed.

# **III.** Minimum Contributory Requirements

# A. Historical Minimum Contributory Requirements

CPP disability benefits first became payable in 1970 provided that both the minimum contributory requirements for eligibility to the benefit and the definition of being disabled had been met. Since the inception of the Plan, the minimum contributory requirements for entitlement to the disability benefit have depended on the number of years of contributions. Initially, from the start of the Plan to 1975, contributions were required in five years of the contributory period. Since an applicant needed contributions in five calendar years, the earliest a contributor could have received a disability benefit would have been in 1970. Subsequently, a series of amendments were implemented, which collectively are described below.

If an applicant became disabled between January 1, 1966 and August 31, 1986, he or she must have made valid contributions to the CPP:

- in 5 of the last 10 years of the contributory period; and
- in either one-third of the entire contributory period or in 10 years.

The applicant must have met both of the above requirements to fulfill the minimum contributory requirements. As for the initial requirements, since an applicant still needed valid contributions in five calendar years, the earliest a contributor could have received a disability benefit would have been in 1970.

If an applicant became disabled between September 1, 1986 and December 31, 1997, the applicant must have made valid contributions to the CPP:

- in 2 of the last 3 years of the contributory period; or
- in 5 of the last 10 years of the contributory period.

Stricter contributory requirements became effective as part of the 1997 CPP Reform. If an applicant became disabled between January 1, 1998 and March 2, 2008, he or she must have made valid contributions to the CPP:

• in 4 of the last 6 years of the contributory period.

CPP contributions are obtained by applying the legislated contribution rate (9.9% in 2011) to a band of earnings between the Year's Basic Exemption (YBE equal to \$3,500 in 2011) and the Year's Maximum Pensionable Earnings (YMPE equal to \$48,300 in 2011). Legislative changes that took effect in 1998 froze the YBE at \$3,500; however, for the purpose of the minimum contributory requirements for disability benefits, the YBE remains the highest multiple of \$100 that is less than or equal to 10% of the YMPE (or \$4,800 in 2011).

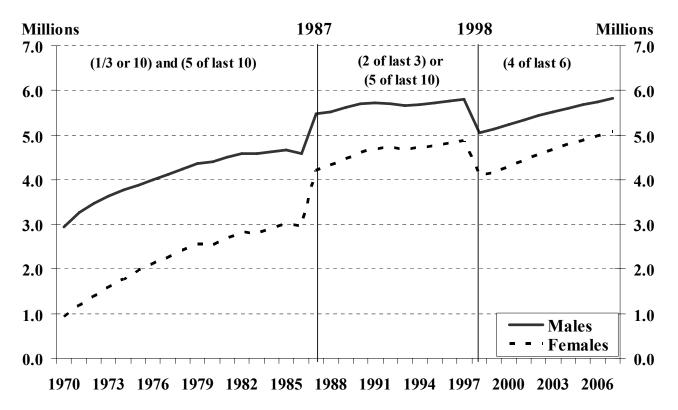
Bill C-36, which became effective on March 3, 2008 relaxed the minimum contributory requirements. If an applicant becomes disabled on or after March 3, 2008, he or she must have made valid contributions to the CPP:

- in 4 of the last 6 years of the contributory period, if less than twenty-five years of valid contributions were made to the CPP; or
- in 3 of the last 6 years of the contributory period, if twenty-five or more years of valid contributions were made to the CPP.

The current requirements are less difficult to meet for applicants with at least 25 years of valid contributions, as valid contributions preceding disablement are only required in three of the last six years instead of four in the last six years. As a result, it is expected that the number of contributors meeting the minimum contributory requirements will slightly increase in the future.

## B. Experience of Contributors Meeting Minimum Contributory Requirements

The number of CPP contributors meeting the minimum contributory requirements for a CPP disability benefit has increased over time. In total, the number meeting the contributory requirements steadily increased from 3.9 million in 1970 to 7.5 million in 1986. As the minimum contributory requirements were relaxed in 1987, the number of male and female contributors meeting the contributory requirements increased that year by 20% and 42%, respectively to reach a total of 9.7 million individuals (5.5 million men and 4.2 million women). The number of contributors meeting the minimum contributory requirements then continued to increase and reached 10.7 million in 1997. As a result of the strengthening of the minimum contributory requirements in 1998, the number meeting the minimum contributory requirements decreased that year by 13% and 16% for males and females, respectively to reach a total of 9.2 million individuals (5.1 million men and 4.1 million women). Chart 1 shows the evolution of the number of male and female contributors meeting the minimum contributory requirements for a CPP disability benefit from 1970 to 2007.



**Chart 1** Number of Eligible Contributors

The number of eligible contributors expressed as a percentage of the population of Canada excluding Québec, aged 18 to 64 (i.e., the population pertaining to all possible CPP disability beneficiaries) is presented in Chart 2 and Table 1. The increase in this proportion is not as pronounced as the increase in the number of eligible contributors, since the population aged 18 to 64 is increasing at a faster pace

than the number of contributors. However, as a result of the change in contributory requirements in 1987, there were significant increases in that year when the proportions went up by 13 and 20 percentage points to reach 87% and 68% for males and females, respectively.

As the requirements were changed again in 1998, the proportions of the population eligible went down by 11 and 12 percentage points to reach 70% and 57% for males and females, respectively. The malefemale gap between the percentages of the population eligible has been narrowing over time as more women have entered the labour force and are making contributions to the CPP.

Since 1998, the proportion of the male population of Canada excluding Québec eligible, aged 18 to 64, has stabilized at around 70%, and this level is at the lowest since the early 1970s. With respect to females, the corresponding proportion eligible for the period from 1998 to 2007 increased to about 60%, which was higher than for the period 1970 to 1986 but lower than for the period 1987 to 1997.

With the relaxation of the minimum contributory requirements in 2008 for long-term contributors, it is expected that the proportion of the contributors eligible will slightly increase in the future.

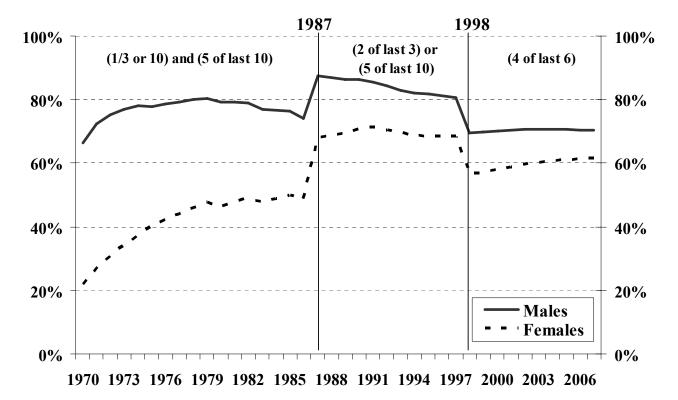


Chart 2 Proportion of Population of Canada less Québec Eligible (Aged 18 to 64)

 Table 1
 Population of Canada less Québec Eligible (Aged 18 to 64)

		Males		I	Females		Both Sexes			
Year	Number of Eligible Population % of Contributors 18-64 Pop.		Number of Eligible Contributors	Population 18-64	% of Pop.	Number of Eligible Contributors	Population 18-64	% of Pop.		
,	(millions)	(millions)		(millions)	(millions)		(millions)	(millions)		
1970	2.9	4.4	66%	0.9	4.3	22%	3.9	8.7	44%	
1975	3.9	5.0	78%	2.0	4.9	40%	5.8	9.9	59%	
1980	4.4	5.6	79%	2.5	5.5	46%	6.9	11.1	63%	
1985	4.7	6.1	76%	3.0	6.0	50%	7.7	12.1	63%	
1987	5.5	6.3	87%	4.2	6.2	68%	9.7	12.5	78%	
1990	5.7	6.6	86%	4.6	6.5	71%	10.3	13.1	79%	
1995	5.7	7.0	82%	4.8	7.0	69%	10.5	14.0	75%	
1998	5.1	7.3	70%	4.1	7.2	57%	9.1	14.5	63%	
2000	5.2	7.5	70%	4.3	7.4	58%	9.5	14.9	64%	
2005	5.7	8.0	71%	4.9	8.0	61%	10.6	16.0	66%	
2007	5.8	8.3	71%	5.1	8.2	62%	10.9	16.5	66%	

#### IV. New Beneficiaries

In this section, the main characteristics of new disability beneficiaries since 1970 are considered.

#### A. Classification of Causes of Disability

Although the evolution over time of the various causes of disability is similar for males and females, the causes affect the sexes in different ways. In recent years, the disability program has experienced important sex distinct differences in the distribution of new beneficiaries by the underlying cause of morbidity as classified under the International Classification of Diseases (ICD) of the World Health Organization<sup>1</sup>. For the purpose of this study, the causes of disability were classified by cause of morbidity as follows:

Musculoskeletal system and connective tissue diseases

Circulatory system diseases

Mental disorders (including behavioural disorders)

Neoplasms

Nervous system diseases

Injury (including poisoning and certain other consequences of external causes)

Others

The category 'Others' includes all the other underlying causes of morbidity classified under the ICD, which are:

Certain infectious or parasitic diseases

Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism

Endocrine, nutritional and metabolic diseases

Diseases of the eye and adnexa

Diseases of the ear and mastoid process

Diseases of the respiratory system

Diseases of the digestive system

Diseases of the skin and subcutaneous tissue

Diseases of the genitourinary system

Complications of pregnancy, childbirth and the puerperium

Certain conditions originating in the perinatal period

Congenital malformations, deformations and chromosomal abnormalities

External causes of morbidity

Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified

#### B. Determinants of CPP Disability Claims and Payouts (other than cause of disability)

Many factors affect the number of disability claims filed as well as the subsequent decisions to either allow or deny benefits. However, the impact of any one factor is difficult to evaluate. Following is a list of some of the leading determinants, other than the cause of disability, that may have an impact on both the number of claims filed and the rate of favourable assessments (benefit payouts):

<sup>&</sup>lt;sup>1</sup> The World Health Organization's ICD: the International Statistical Classification of Diseases and Related Health Problems, 10<sup>th</sup> Revision, Version for 2007, is available at: http://www.who.int/classifications/icd/en/

- changes to the disability program, including changes in the impairment listings and changes in medical evidentiary requirements and diagnostic trends;
- actions to increase program awareness and encouragement of enrolment;
- strength of national and regional economies;
- employment shifts historically, the level of female labour force participation has affected program growth and volatility;
- changes in the nature of work the level of full-time versus part-time or temporary work; and
- demographic shifts the aging of the population and especially that of the baby boom generation is expected to have a significant impact on program growth.

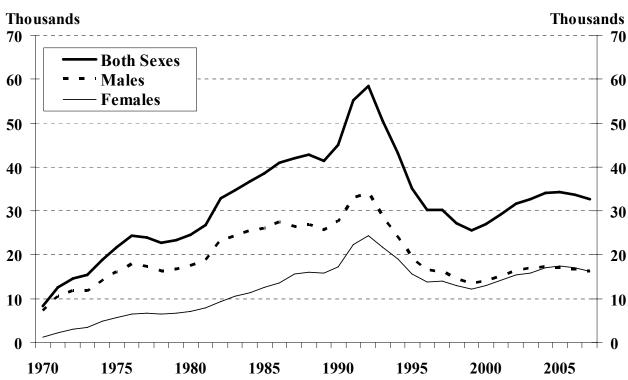
# C. Analysis by Sex

Since the commencement of the payout of benefits in 1970, the disability program has been subject to many factors. The number of new beneficiaries steadily increased from 8,400 in 1970 to 42,000 by the late 1980s.

Coinciding with the recession of the early 1980s, the increase in the number of male beneficiaries during those years was more pronounced than for females, but then stabilized for the remainder of the 1980s.

As the recession of the early 1990s took hold, the number of new beneficiaries grew sharply, attaining a peak of 58,000 in 1992. In that year, a late applicant provision was introduced, which removed the link between eligibility for the benefit and when an applicant actually applied for the benefit. This further led to the increase in the number of new cases. As stated in the paper, "The Canada Pension Plan Disability Benefit", by Sherri Torjman, 2002, other factors that led to the rapid growth in new cases in the early 1990s included: "improved information about the program and its benefits", as well as "referrals to the CPP by provincial assistance programs and referrals to CPP disability from insurance companies, which also were experiencing an increase in applications".

A significant decrease followed after 1992 until 1996, such that new beneficiaries numbered only 30,000 in 1996. The number of new cases per year continued to decrease over the next few years and then slightly increased to stabilize at around 33,000 between 2003 and 2007. Chart 3 shows the historical number of new beneficiaries since 1970.



**Chart 3** Number of New Beneficiaries

The factors that strongly influenced the reversal in the growing trend of new beneficiaries are related to administrative changes put in place in the early 1990s. The CPP administration implemented a range of measures designed to effectively manage the growing pressure on the disability program. In particular, the guidelines for the determination of disability were revised to put the emphasis back on a medical basis instead of consideration of socioeconomic factors. The guidelines were applied at all levels in the determination process, thus greatly increasing consistency in decision-making.

Strong economic growth associated with low levels of unemployment and the stricter minimum contributory eligibility requirements that were implemented as part of the 1997 Reform of the CPP also contributed to the reduction in CPP disability incidence. Disability incidence rates (i.e., the ratio of the number of new disability beneficiaries to the eligible population) at the younger ages have been relatively stable over time, while at the older ages they have fallen since the mid-1980s but remain nonetheless significantly higher than at the younger ages (as discussed later in subsection G). The combination of these age characteristics of the rates with the aging of the population explains the increase observed in the overall rates since the late 1990s; that is, the observed increase has been driven by the higher incidence rates at the older ages.

Chart 4 shows the historical proportions of new beneficiaries by sex. Initially, the proportion of new female beneficiaries represented only about 13% of all new beneficiaries. However, that proportion has steadily increased over time to reach 51% by 2005.

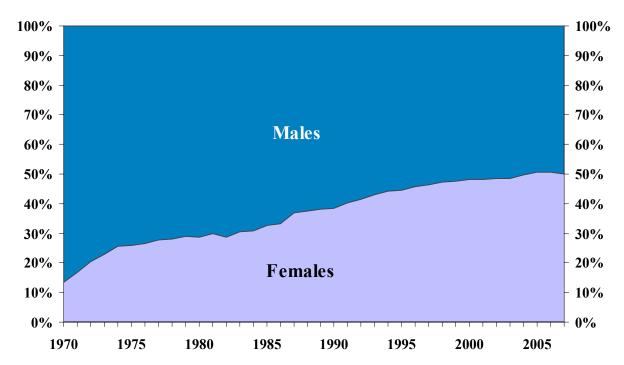


Chart 4 Distribution of New Beneficiaries by Sex

#### D. Analysis by Age and Sex

Chart 5 shows that the average age of new beneficiaries was around 55 years for most of the 1970s for both sexes. The average age then started to decline and reached 53 years by 1983. Up to that point, the difference in the average age between males and females had been within one year. From 1983, the average age of new beneficiaries increased to reach 54 years in 1985 and then decreased to reach 49 years by 1996. Since 1996, the average age has slightly increased to reach 51 years by 2007.

Initially, the average age of new female beneficiaries was slightly higher than for new male beneficiaries. Starting in 1976, this gap reversed, as new male beneficiaries started to be older on average than new female beneficiaries. This gap grew until 1990 to reach two years and remained close to that level until 2000. Since 2000, the gap has slightly decreased to reach one year by 2007.

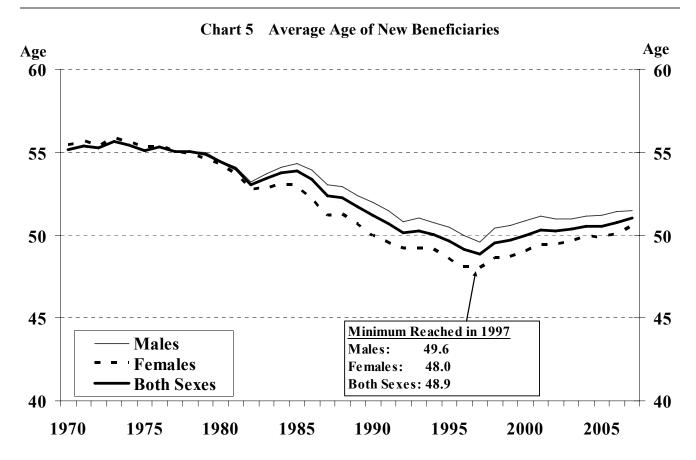


Chart 6 shows the distribution over time of the proportions of new beneficiaries by age group. The proportion of new beneficiaries aged 55 and older was about 65% in the 1970s and decreased thereafter to reach 33% by 1997. Since 1997, the proportion increased to reach 43% by 2007.

The proportion of new beneficiaries aged 40 to 54 was stable until the mid-1980s at about 30%, but then increased significantly thereafter to reach 49% by 1997. Since 1997, this proportion has decreased slowly to reach 46% by 2007.

The proportion of new beneficiaries under age 40 increased from 5% in 1970 to 18% in 1997 and then decreased to reach 12% by 2007. Similar patterns were experienced for both male and female beneficiaries for each age group.

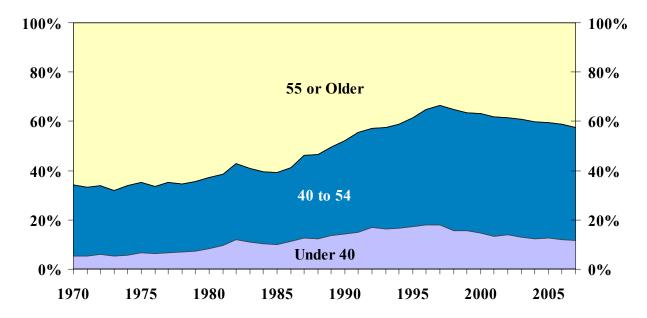


Chart 6 Distribution of New Beneficiaries by Age Group

## E. Analysis by Cause of Disability

The proportion of new beneficiaries with diseases of the musculoskeletal system and connective tissue steadily increased from 13% in 1970 to reach a peak of 33% in 1991. Thereafter, the proportion quickly reduced to 21% by 1996 and has remained close to that level through 2007. With respect to cases related to diseases of the circulatory system, the proportion steadily decreased from a high of 39% in 1970 to 12% in 2000 and has remained stable at around 10% since then.

The proportion of new cases related to mental disorders was quite stable at around 8% to 10% for the first 20 years and then increased sharply to reach 26% by 1997. Since 1997, this proportion has stabilized at around 22%. The proportion of new cases related to neoplasms was stable between 10% and 13% until 1994, then suddenly increased to over 16% by 1995, and has remained at levels between 16% and 19% since. For cases related to other causes, including diseases of the nervous system and injuries, the proportion has been stable and represents slightly less than 30% of new cases throughout the period under study.

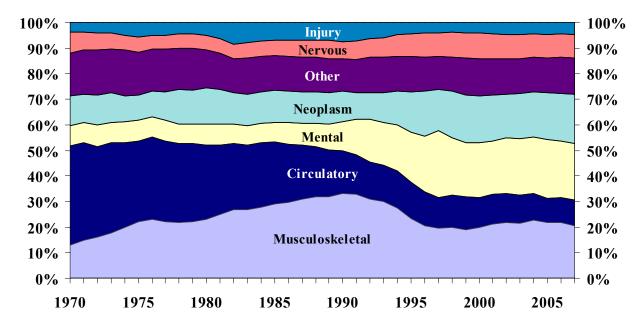
Since the late 1990s, the distribution of new beneficiaries by the various causes has been relatively stable with mental disorders, diseases of the musculoskeletal system and connective tissue, and neoplasms being the leading causes.

Table 2 and Chart 7 show the distribution of new beneficiaries by cause of disability for the period 1970 to 2007.

**Table 2** Distribution of New Beneficiaries by Cause

	Musculos and Coni Tissi	nective	Circul	atory	Mer	ıtal	Neop	lasm	Oth	er	Nerv	vous	Ini	ury
Year	(,000,)	%	(,000)	%	(,000)	%	(,000)	%	(,000)	%	(,000)	%	(,000)	%
1970	1.1	13%	3.2	39%	0.7	8%	1.0	12%	1.4	17%	0.7	8%	0.3	4%
1975	4.8	22%	6.9	32%	1.8	8%	2.1	10%	3.6	17%	1.3	6%	1.2	6%
1980	5.7	23%	7.1	29%	2.0	8%	3.5	14%	3.6	15%	1.4	6%	1.2	5%
1985	11.2	29%	9.5	24%	2.9	8%	4.9	13%	5.2	14%	2.3	6%	2.7	7%
1990	14.9	33%	7.6	17%	5.1	11%	5.5	12%	5.6	12%	3.1	7%	3.4	7%
1995	8.2	23%	5.0	14%	6.8	20%	5.5	16%	4.9	14%	3.1	9%	1.5	4%
2000	5.3	20%	3.2	12%	5.8	21%	5.0	18%	3.9	15%	2.7	10%	1.1	4%
2005	7.4	22%	3.3	10%	7.8	23%	6.3	18%	4.7	14%	3.2	9%	1.6	5%
2006	7.3	22%	3.3	10%	7.5	22%	6.2	19%	4.7	14%	3.1	9%	1.5	5%
2007	6.7	21%	3.3	10%	7.2	22%	6.2	19%	4.7	14%	3.0	9%	1.5	5%

**Chart 7** Distribution of New Beneficiaries by Cause



#### F. Analysis by Cause of Disability and Age

Age Group Under 40

For new beneficiaries in 2007 under age 40, the leading cause of disability was mental disorders with 38% of new cases, followed by neoplasms and other causes, both with 14% of new cases. In 1970, the leading cause was diseases of the nervous system with 22%. The proportion of new beneficiaries with mental disorders increased from 12% in 1970 to 38% in 2007. For musculoskeletal system and connective tissue diseases, the proportion of new cases increased from 9% in 1970 to a peak of 26% in 1982, and then decreased to about 11% in 2007. The proportion relating to injuries was 17% in 1970, reached a peak of 23% in 1982, and then decreased to 7% by 2007.

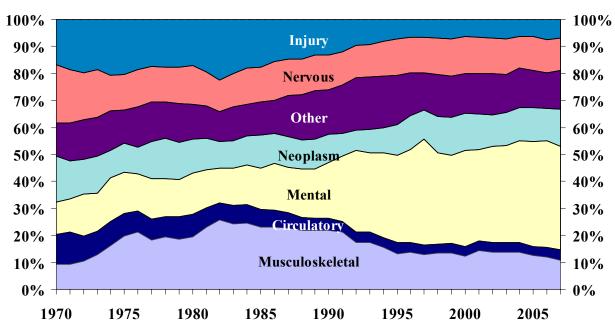


Chart 8 Distribution of New Beneficiaries by Cause (Ages Under 40)

Age Group 40 to 54

In 2007, for the 40 to 54 age group, the leading cause of disability was mental disorders, representing 26% of new cases, followed by neoplasms and diseases of the musculoskeletal system and connective tissue with 19% and 18% of new cases, respectively. In 1970, the main cause was diseases of the circulatory system with 34% of new cases, which subsequently decreased to 8% by 2007.

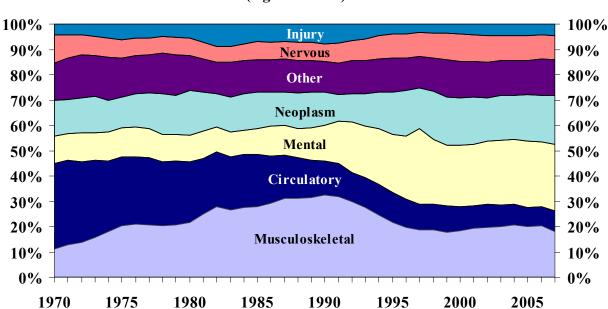


Chart 9 Distribution of New Beneficiaries by Cause (Ages 40 to 54)

#### Age Group 55 and Older

For the 55 and older age group, the leading cause in 2007 was diseases of the musculoskeletal system and connective tissue, representing 26% of new cases, followed by neoplasms with 20% of new cases. Mental disorders, circulatory system diseases, and other causes of disability followed with about 14% each of new cases in 2007. In 1970, 43% of new cases were related to diseases of the circulatory system, which decreased to 14% by 2007.

If the proportions of new beneficiaries by cause of disability are analyzed across age groups, it is observed that the proportions pertaining to diseases of the musculoskeletal system and connective tissue and diseases of the circulatory system all increase with age at emergence. In comparison, the proportion of new cases associated with mental disorders decreases with age at emergence.

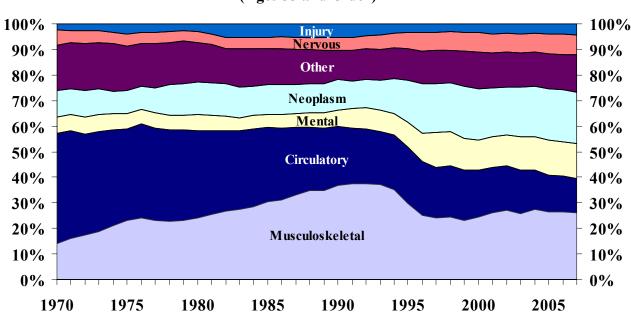


Chart 10 Distribution of New Beneficiaries by Cause (Ages 55 and Older)

#### **G.** Trends in Disability Incidence Rates

The disability incidence rate (DIR) is defined as the ratio of the number of new disability beneficiaries to the eligible population. New beneficiaries must have met both the CPP medical requirement and the minimum contributory requirement in order to qualify for the CPP disability benefit. The eligible population is the population of CPP contributors who are not disabled and not in receipt of CPP retirement benefits, but who meet the disability benefit minimum contributory requirement.

#### 1. Disability Incidence Rates by Sex

Table 3 and Chart 11 present the evolution of the DIRs for males and females. The rates in the table and chart are age-adjusted, meaning that the eligible population used to calculate the overall DIR for all ages by sex is constant throughout the years (equal to the eligible population in 2009), thereby eliminating the aging effect of the population and allowing a better comparison basis between years. Overall, the DIR reached a peak in 1992, declined rapidly until 1997, and has been stable since at a level of about 3.5 new cases per 1,000 eligible individuals.

For both sexes, disability incidence rates since 1970 generally increased, reaching peaks in 1992 of 8 new cases per 1,000 eligible men and 7.5 new cases per 1,000 eligible women. The incidence rates fell in the late 1980s coinciding with the introduction in 1987 of early (and late) CPP retirement pension take-up from age 60 (to 70). The significant increase in the rates in the early 1990s corresponded with the recession, introduction of the late applicant provision, improved information about the program, and referrals from other programs and insurance companies, as mentioned earlier.

The significant decrease in rates after 1992 resulted largely from administrative changes to the program put in place since that year. Up until 1993, male disability incidence rates were higher than female rates, although the gap narrowed over time. Since mid-1990s, the gap has reversed in direction and widened. This was mainly due to a smaller eligible population for females, while the numbers of new disabled cases remained about the same for both sexes. In 2007, the female disability incidence rate was 3.5 new cases per 1,000 eligible, compared to the male rate of 2.9. Historically, disability incidence rates have generally moved in the same direction as unemployment rates.

**Table 3** Age-Adjusted Disability Incidence Rates\* (per 1,000 eligible)

Year	Males	Females	<b>Both Sexes</b>
1970	2.6	1.2	1.9
1975	4.2	3.2	3.8
1980	4.4	3.6	4.0
1985	6.4	5.8	6.1
1990	6.6	5.7	6.2
1995	4.4	4.4	4.4
2000	3.1	3.5	3.3
2005	3.1	3.8	3.4
2007	2.9	3.5	3.1

<sup>\*</sup> Age-adjusted means that the eligible population used to calculate the overall DIR for all ages by sex is constant throughout the years (equal to the eligible population in 2009), thereby eliminating the aging effect of the population and allowing a better comparison basis between years.

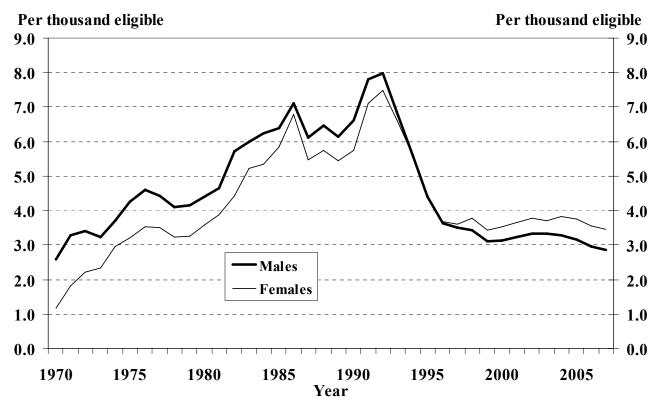


Chart 11 Age-Adjusted Disability Incidence Rates\*

#### 2. Disability Incidence Rates by Age

Tables 4 and 5 along with Charts 12 and 13 show the evolution of the DIRs over time by age and sex. The DIRs increase considerably with age and reach a peak between the ages of 60 and 64. The DIRs for both sexes were higher in 1985 than in 1975. However, the rates have generally declined since 1985, especially at the older ages.

Since 1987, disability incidence rates have been lower for ages 60 to 64, reflecting the new CPP flexible retirement provisions that became effective that year allowing individuals to receive their CPP retirement pension as early as age 60 (with an actuarial adjustment). If an individual becomes disabled after beginning to receive a CPP retirement pension, he or she can no longer qualify for a CPP disability benefit, unless it is within 6 months of receiving a CPP retirement pension, in which case the CPP retirement pension can be cancelled and the CPP disability benefit initiated.

<sup>\*</sup> Age-adjusted means that the eligible population used to calculate the overall DIR for all ages by sex is constant throughout the years (equal to the eligible population in 2009), thereby eliminating the aging effect of the population and allowing a better comparison basis between years.

**Table 4 Disability Incidence Rates by Age – Males** (per 1,000 eligible)

	Year								
Age	1975	1980	1985	1987	1990	1995	2000	2005	2007
20	0.0	0.0	0.0	0.3	0.2	0.2	0.0	0.1	0.1
25	0.2	0.3	0.4	0.5	0.5	0.3	0.4	0.3	0.4
30	0.7	0.6	0.8	0.9	1.3	1.0	0.6	0.5	0.6
35	0.9	0.8	1.4	1.5	1.5	1.5	1.0	1.0	1.0
40	1.5	1.7	2.2	2.1	2.6	2.0	1.5	1.6	1.7
45	2.3	2.6	3.4	3.6	3.8	3.2	2.2	2.4	2.2
50	4.5	4.4	6.9	7.2	7.9	5.3	4.0	4.3	3.5
51	5.3	5.8	7.6	8.8	9.2	6.2	4.1	4.3	4.2
52	6.0	6.1	8.8	9.8	10.4	6.4	4.9	4.9	4.3
53	8.0	7.4	10.3	11.1	11.9	7.6	5.3	5.4	5.2
54	7.6	8.7	13.0	12.6	14.0	8.5	6.6	6.3	5.8
55	8.7	10.3	14.6	15.6	16.0	9.8	6.7	6.8	6.3
56	11.0	11.2	18.0	17.7	18.5	11.0	7.9	7.5	6.2
57	12.6	13.0	19.4	19.8	20.9	12.4	9.2	8.2	7.6
58	15.7	15.6	23.0	23.1	24.2	14.6	10.8	10.3	9.2
59	19.0	18.4	29.2	26.5	27.1	16.8	12.2	11.5	10.5
60	20.9	21.3	32.0	27.5	29.0	18.8	12.6	11.9	9.2
61	23.5	24.3	34.7	27.8	30.6	19.9	12.6	11.9	11.5
62	25.7	27.0	37.4	26.4	31.8	20.8	13.7	13.2	12.1
63	28.5	29.4	38.9	26.2	30.1	19.6	14.4	13.7	12.0
64	37.8	36.1	44.2	25.8	29.4	20.6	13.6	13.1	13.9
All Ages*	4.2	4.4	6.4	6.1	6.6	4.4	3.1	3.1	2.9

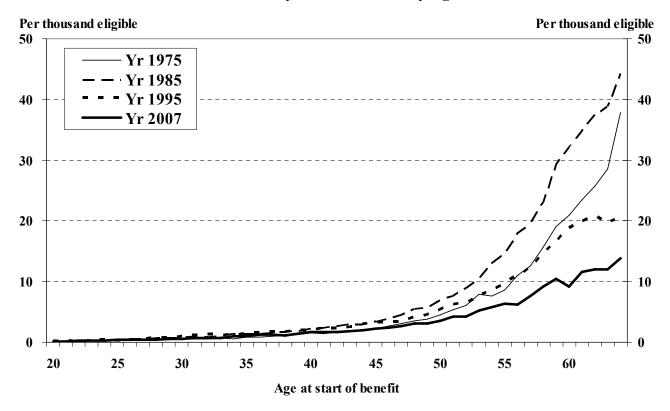
<sup>\* &</sup>quot;All Ages" disability incidence rates shown are age-adjusted, which means that the eligible population used to calculate the overall DIR for all ages is constant throughout the years (in this case, 2009), thereby eliminating the aging effect of the population and allowing a better comparison basis between years.

**Table 5 Disability Incidence Rates by Age – Females** (per 1,000 eligible)

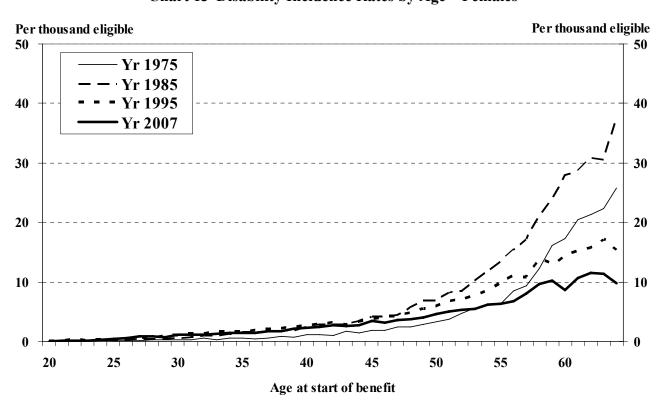
	Year									
Age	1975	1980	1985	1987	1990	1995	2000	2005	2007	
20	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	
25	0.1	0.1	0.2	0.4	0.4	0.4	0.3	0.5	0.4	
30	0.4	0.3	0.6	0.8	1.0	1.0	0.8	1.0	1.1	
35	0.5	0.6	1.5	1.5	1.8	1.7	1.6	1.7	1.5	
40	1.1	1.6	2.4	2.3	2.7	2.6	2.2	2.4	2.4	
45	1.9	2.1	4.2	3.9	4.2	3.7	3.3	3.3	3.6	
50	3.3	4.2	6.9	7.8	7.8	5.9	4.5	4.9	4.8	
51	3.8	4.3	8.2	8.6	9.6	6.8	5.4	5.8	5.3	
52	4.8	5.7	8.5	10.0	10.4	7.1	6.0	5.7	5.6	
53	5.6	6.8	10.2	10.5	11.0	7.7	6.4	6.2	5.7	
54	6.0	7.7	11.8	12.3	12.1	8.5	6.8	7.1	6.5	
55	6.3	8.4	13.4	14.2	14.5	10.0	7.6	8.0	6.6	
56	8.5	8.7	15.4	15.7	15.3	11.0	8.6	9.0	7.1	
57	9.3	9.9	17.2	16.5	16.7	10.8	8.8	9.2	8.5	
58	12.2	11.7	21.2	19.4	19.3	14.0	10.5	10.7	10.1	
59	16.1	16.3	23.9	20.2	21.0	13.0	11.2	11.8	10.7	
60	17.3	19.1	27.9	20.0	21.5	14.4	11.1	11.7	9.0	
61	20.5	19.0	28.7	20.3	21.5	15.2	12.8	11.8	11.2	
62	21.3	22.4	30.8	19.1	22.0	15.7	11.5	13.0	12.1	
63	22.3	25.0	30.5	18.7	19.2	17.1	12.8	14.3	11.9	
64	25.8	30.0	37.6	18.9	22.3	15.4	11.4	12.7	10.3	
All Ages*	3.2	3.6	5.8	5.5	5.7	4.4	3.5	3.8	3.5	

<sup>\* &</sup>quot;All Ages" disability incidence rates shown are age-adjusted, which means that the eligible population used to calculate the overall DIR for all ages is constant throughout the years (equal to the eligible population in 2009), thereby eliminating the aging effect of the population and allowing a better comparison basis between years.

Chart 12 Disability Incidence Rates by Age - Males



**Chart 13 Disability Incidence Rates by Age – Females** 

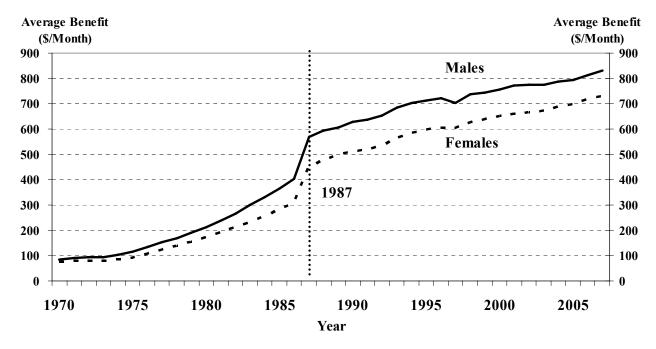


## H. Average Disability Benefit

For new beneficiaries, the amount of the monthly benefit payable is the sum of a flat-rate portion depending only on the year in which the benefit is paid and an earnings-related portion equal, when it commences, to 75% of the retirement pension under the basic Plan that would be payable at the onset of disability if the contributory period ended on that date and no actuarial adjustment applied. For all subsequent years, the benefit is adjusted in line with inflation.

# 1. Average Disability Benefit by Sex

Chart 14 shows the evolution of the average monthly benefit for new beneficiaries, expressed in current dollars, that is, pertaining to any given year shown. From the chart, two distinct periods can be observed. From 1970 to 1986, new beneficiaries experienced increases in their average benefit. Then, in 1987, the flat-rate portion of the benefit was increased substantially from \$91 to \$243 per month, which had the effect of increasing the average new benefit by about 40%. After 1987, the average benefit for both sexes continued to increase, but at a more moderate pace.



**Chart 14 Average Monthly Benefit for New Beneficiaries** 

Table 6 presents the evolution of the flat-rate (FR) and average earnings-related (ER) portions of the average monthly benefit, as well as the average ER portions in relation to the maximum ER amounts. The FR portion of the benefit is indexed annually with the CPP Pension Index, which is based on inflation. However, as specified earlier, the ad hoc increase made in 1987 that increased the FR portion had the effect of increasing the average total benefit.

The maximum ER portion is linked to the evolution of the YMPE. The YMPE increased on average by 12% per year between 1974 and 1985 and by 10% in 1986. Since 1987, the pace of growth in the YMPE has been slower. The average ER portion of the benefit is based on a relationship between the average career earnings of beneficiaries and the YMPE. The pace of

growth in average earnings has been somewhat slower than the growth in the YMPE, and this explains why the average ER portion of the benefit as a percentage of the maximum has decreased over time.

The ratio of the average ER portion to the maximum ER portion is higher for males than females. In the early 1980s, the ratios reached their peaks with males receiving on average an ER benefit at 86% of the maximum ER benefit and females receiving 63%. By 2007, the ratio of the average ER portion relative to the maximum decreased to 65% and 50% for males and females, respectively. This can be explained by the slower growth in average career earnings compared to the growth in the YMPE.

The gap between males and females is explained mainly by the lower career earnings of females versus males. This effect is slightly mitigated by the FR portion of the benefit when considering total benefits paid.

 Table 6
 Average Monthly Benefit for New Beneficiaries

		Average Earnings- Related Portion (\$)			rage Benefit		Average Earnings- Related Portion as a % of Maximum Earnings- Related Portion		
Year	Flat-Rate Portion (\$)	Males	Females	Males	Females	Maximum Total Benefit (\$)	Males	Females	
1970	26.53	58.68	48.91	85.21	75.44	106.43	73%	61%	
1975	37.27	77.31	54.57	114.58	91.84	139.35	76%	53%	
1980	57.25	156.05	114.67	213.30	171.92	240.58	85%	63%	
1985	87.56	278.39	192.66	365.95	280.22	414.13	85%	59%	
1986	91.06	310.62	213.94	401.68	305.00	455.64	85%	59%	
1987	242.95	326.29	208.79	569.24	451.74	634.09	83%	53%	
1988	253.64	338.99	222.48	592.63	476.12	660.94	83%	55%	
1989	264.04	342.13	232.03	606.17	496.07	681.23	82%	56%	
1990	276.71	351.21	236.39	627.92	513.10	709.52	81%	55%	
1991	289.99	346.82	226.90	636.81	516.89	743.64	76%	50%	
1992	306.81	345.72	228.29	652.53	535.10	783.89	72%	48%	
1993	312.33	372.07	250.36	684.40	562.69	812.85	74%	50%	
1994	318.26	383.80	266.78	702.06	585.04	839.09	74%	51%	
1995	319.85	392.68	276.75	712.53	596.60	854.74	73%	52%	
1996	325.61	396.71	278.50	722.32	604.11	870.92	73%	51%	
1997	330.49	371.58	272.49	702.07	602.98	883.10	67%	49%	
1998	336.77	401.55	287.51	738.32	624.28	895.36	72%	51%	
1999	339.80	404.90	297.21	744.70	637.01	903.55	72%	53%	
2000	345.24	411.37	304.78	756.61	650.02	917.43	72%	53%	
2001	353.87	416.71	304.14	770.58	658.01	935.12	72%	52%	
2002	364.49	410.50	301.40	774.99	665.89	956.05	69%	51%	
2003	370.32	404.47	302.50	774.79	672.82	971.26	67%	50%	
2004	382.17	406.12	306.85	788.29	689.02	992.80	67%	50%	
2005	388.67	406.64	308.81	795.31	697.48	1,010.23	65%	50%	
2006	397.61	415.77	318.24	813.38	715.85	1,031.05	66%	50%	
2007	405.96	423.79	326.19	829.75	732.15	1,053.77	65%	50%	

# 2. Average Disability Benefit by Age

The evolution of the ratio of the average ER portion to the maximum ER amount over time by age group is shown in Charts 15 and 16 for males and females, respectively. For both sexes and each age group shown, the ratios have been generally decreasing since the early 1980s. In most years observed, younger age groups have a lower ER benefit in relation to the maximum due to their career earnings generally being lower compared to those in older age groups. Years of low or no earnings also have a relatively larger impact on average career earnings for younger age groups due to the existence of fewer working years. The lower earnings at younger ages are generally attributable to the inclusion of years in attendance at school with associated lower or no earnings, as well as the fact that the effect of cumulative salary increases has not yet occurred.

Chart 15 Ratio of Average Earnings-Related Portion to Maximum Earnings-Related Portion of Benefit for New Beneficiaries, by Age Group – Males

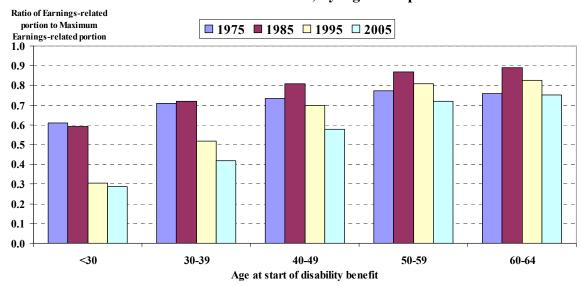
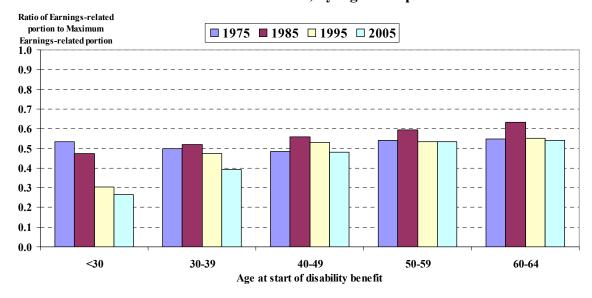


Chart 16 Ratio of Average Earnings-Related Portion to Maximum Earnings-Related Portion of Benefit for New Beneficiaries, by Age Group – Females



# V. Disability Beneficiaries in Pay

In this section, the general characteristics of all beneficiaries in pay are considered. The number of cases in pay at the end of any given year is equal to the number of cases in pay at the end of the previous year, increased by the number of new beneficiaries during the year and decreased by the number of terminations that occur during the year.

As discussed in the following subsections, the number of beneficiaries in pay has steadily increased over time since the inception of the program, although the trends have varied by age, sex, and cause of disability.

## A. Analysis by Sex

The total number of male beneficiaries (all causes combined) increased to reach a maximum of 186,000 in 1994 and then decreased to 158,000 by 2002. Since 2002, the number of male beneficiaries has slowly increased to 162,000 in 2007. In comparison, the number of female beneficiaries has continuously increased since 1970. The rate of increase slowed down substantially between 1995 and 2000, with the number of female beneficiaries reaching 149,000 by 2000. Thereafter, the number of female beneficiaries continued to increase at a much faster pace, reaching 175,000 by 2007.

#### B. Analysis by Age and Sex

Table 7 shows the evolution of the number and proportion of beneficiaries by age and sex. For both sexes and each year, the highest proportion of beneficiaries pertains to the oldest age group shown (55 and older), the reason being that disability incidence rates increase with age. Over the period 1980 to the late 1990s there was a gradual decrease in the proportion of beneficiaries in the age group 55 and older, with a corresponding increase in the age group 40 to 54 and to a much lesser extent, in the age group of less than 40. As a result, the average age of beneficiaries decreased over that period from about 56 to 52.5 years. Since 1998 for females and since 2000 for males, there have been slight increases in the proportions of beneficiaries aged 55 and older, resulting in a small increase in the overall average age of beneficiaries.

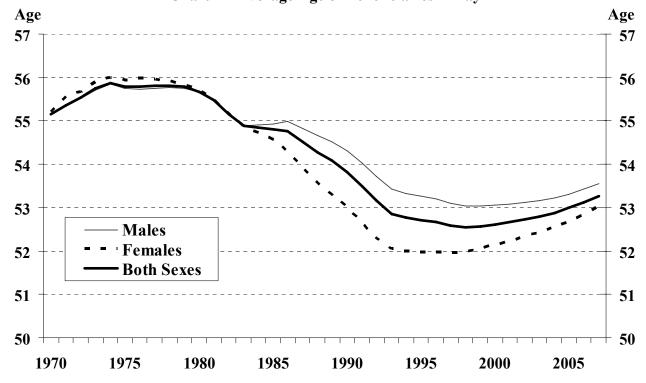
Chart 17 shows the evolution of the average age of beneficiaries for males and females since 1970. The decrease in the average age of all beneficiaries from the late 1970s until 1998 is shown. The average age increased thereafter, with the increase slightly greater for females. The observed increase is consistent with more stringent eligibility rules since 1998 that make it more difficult for younger contributors to be eligible.

Table 7 Distribution of Beneficiaries in Pay by Age Group

				Ma	ales			
_	under	40	40-	54	55 and	older	Total	
Year	(,000)	%	(,000)	%	(,000)	%	(,000)	Average Age
1980	4.1	6%	18.3	26%	48.0	68%	70.5	55.7
1990	12.5	9%	42.9	29%	90.6	62%	146.0	54.3
2000	14.3	9%	63.4	39%	84.3	52%	162.1	53.1
2007	10.1	6%	64.8	40%	87.4	54%	162.3	53.6

Females 40-54 under 40 55 and older **Total** Average (,000)(,000)Year **%** (,000)**% %** (,000)Age 1980 1.8 6% 7.6 26% 20.4 68% 29.7 55.7 1990 9.4 11% 30.1 34% 48.2 55% 87.6 53.0 14.5 46% 52.1 2000 10% 65.7 44% 68.9 149.1 2007 7% 75.8 43% 87.5 50% 174.8 53.0 11.4

Chart 17 Average Age of Beneficiaries in Pay



#### C. Analysis by Cause of Disability and Sex

Three major causes of disability, namely diseases of the musculoskeletal system and connective tissue, diseases of the circulatory system, and mental disorders, have accounted for about 65% of disability cases since the inception of the disability program. The proportion of all cases related to diseases of the musculoskeletal system and connective tissue increased steadily from 12% for males and 18% for females in 1970 to peaks of 31% for males and 40% for females by 1992. The proportions then steadily decreased to 22% for males and 28% for females by 2007. Initially, the largest proportion of cases, representing 41% of male beneficiaries and 32% of female beneficiaries, were caused by diseases of the circulatory system; however, this proportion decreased steadily over time to 13% for males and 6% for females in 2007. The proportion of beneficiaries with mental disorders increased from 7% for males and 13% for females in 1970 to the largest proportions for both sexes by 2007. In that year, 25% and 31% of all male and female beneficiaries, respectively, had a mental disorder as the cause of disability. The proportions for the other causes of disability have been more stable over time.

The evolution of the number of beneficiaries in pay and the corresponding distributions by cause of disability are shown in Table 8 for males and females.

 Table 8
 Distribution of Beneficiaries in Pay by Cause

	Males														
	Musculoskeletal and Connective Tissue		Circul	atory	Men	tal	Neopla	sm	Oth	er	Nervous		Injury		Total
Year	(,000)	%	(,000)	%	(,000)	%	(,000)	%	(,000)	%	(,000)	%	(,000)	%	(,000)
1970	0.4	12%	1.5	41%	0.3	7%	0.3	10%	0.6	17%	0.3	9%	0.1	4%	3.6
1975	7.8	18%	15.4	36%	3.8	9%	2.0	5%	7.9	19%	3.1	7%	2.4	6%	42.5
1980	15.2	22%	23.7	34%	6.9	10%	3.3	5%	11.9	17%	5.1	7%	4.2	6%	70.5
1985	28.7	26%	31.8	29%	10.6	10%	5.1	5%	16.2	15%	8.1	7%	9.6	9%	110.1
1990	43.9	30%	35.2	24%	15.2	10%	6.5	4%	20.0	14%	11.3	8%	13.9	10%	146.0
1995	56.8	31%	35.5	19%	27.7	15%	7.5	4%	24.8	13%	15.7	8%	18.1	10%	186.1
2000	42.4	26%	25.5	16%	33.7	21%	6.9	4%	21.5	13%	16.3	10%	15.7	10%	162.1
2002	39.0	25%	23.3	15%	35.5	22%	7.2	5%	21.5	14%	16.6	10%	15.3	10%	158.5
2005	37.1	23%	21.7	13%	39.2	24%	8.2	5%	22.4	14%	17.4	11%	15.2	9%	161.1
2006	36.6	23%	21.1	13%	40.4	25%	8.5	5%	22.6	14%	17.6	11%	15.2	9%	162.0
2007	36.1	22%	20.4	13%	41.2	25%	8.7	5%	23.0	14%	17.8	11%	15.2	9%	162.3

**Females** 

							Teman	7.0							
	Musculoskeletal and Connective Tissue		Circul	atory	Men	tal	Neopl	asm	Oth	er		ous		ry	Total
Year	(,000)	%	(,000)	%	(,000)	%	(,000)	%	(,000)	%	(,000)	%	(,000)	<b>%</b>	(,000)
1970	0.1	18%	0.2	32%	0.1	13%	0.1	13%	0.1	11%	0.1	10%	0.0	3%	0.5
1975	3.6	26%	3.8	28%	1.7	12%	0.9	7%	2.0	15%	1.0	8%	0.4	3%	13.5
1980	9.3	31%	7.1	24%	3.7	12%	1.9	7%	4.4	15%	2.4	8%	1.0	3%	29.7
1985	18.5	36%	9.7	19%	6.4	12%	3.4	7%	7.1	14%	4.3	8%	2.6	5%	52.0
1990	34.6	39%	11.4	13%	12.2	14%	5.2	6%	11.1	13%	8.1	9%	5.1	6%	87.6
1995	54.5	38%	13.1	9%	28.3	20%	7.3	5%	16.6	12%	14.6	10%	7.9	6%	142.3
2000	48.7	33%	10.9	7%	38.8	26%	8.0	5%	17.9	12%	17.5	12%	7.2	5%	149.1
2002	47.4	31%	10.5	7%	42.6	28%	8.7	6%	18.7	12%	18.7	12%	7.2	5%	153.9
2005	48.3	29%	10.2	6%	49.4	30%	10.2	6%	20.3	12%	20.8	12%	7.5	4%	166.8
2006	48.8	28%	10.3	6%	51.5	30%	10.8	6%	20.9	12%	21.4	12%	7.5	4%	171.3
2007	48.9	28%	10.3	6%	53.3	31%	11.3	6%	21.6	12%	21.8	12%	7.6	4%	174.8

#### Diseases of the musculoskeletal system and connective tissue

After being the main cause of disability for many years, diseases of the musculoskeletal system and connective tissue ranked second in 2007 with 22% and 28% of all male and female beneficiaries with this cause of disability. The number of such cases peaked at 58,000 (31%) in 1994 for males and 55,000 (38%) in 1995 for females and then decreased to 36,000 and 49,000 for male and female beneficiaries, respectively by 2007. This cause of disability is more prominent at the older ages.

#### Diseases of the circulatory system

There was a higher proportion of male beneficiaries (13%) with diseases of the circulatory system than of females (6%) in 2007. In 1970, this group of beneficiaries represented the largest group by cause of disability. The proportions of beneficiaries with this cause at that time were 41% and 32% of male and female beneficiaries, respectively. In terms of the number of cases, the number of male beneficiaries increased to a peak of 37,000 in 1993 and reduced thereafter to reach 20,000 by 2007. For females, the number of beneficiaries reached a peak of 13,000 in 1994 and then reduced slowly to 10,000 by 2007.

#### Mental disorders

As shown, the main cause of disability in 2007 among beneficiaries was mental disorders. The number of such cases has continuously increased since 1970 to reach 41,000 cases for males and 53,000 cases for females by 2007. The number of such cases represented 25% and 31% of all male and female beneficiaries, respectively in that year. Moreover, the proportion of beneficiaries with mental disorders also increased the most over the period 1970 to 2007 compared to other disability causes: from 7% to 25% for males and from 13% to 31% for females. This cause of disability is more prominent at the younger ages.

#### **Neoplasms**

The proportions of beneficiaries with neoplasms in 2007 were 5% for males and 6% for females. The proportions have been stable over time, slightly increasing in more recent years. The number of beneficiaries has slowly increased since 1970 to reach 9,000 male and 11,000 female disability beneficiaries in 2007. Older beneficiaries tend to be more afflicted. An important point related to this condition is that the average duration of benefit payments for neoplasm cases is much lower than for the other causes of disability.

The low proportion of neoplasms cases in pay in relation to the proportion of new neoplasm cases is attributed to the fact that neoplasms are the leading cause of death among beneficiaries. However, for those who survive this cause of disability, the level of recovery is higher compared to other causes (see subsection VI.B).

### VI. Disability Benefit Termination

In this section, the characteristics of disability beneficiaries whose benefits eventually terminated are considered.

#### A. Analysis by Duration of Benefit Payments

Table 9 shows the evolution of the duration of benefit payments for benefits that were eventually terminated, by year of benefit commencement. For cases that came into pay up to the early 1990s, the length of time that beneficiaries were in pay, whose benefits eventually terminated, increased for both sexes. The duration was about a year longer on average for females compared to males. In addition, a higher proportion of females remained in pay. After the early 1990s, it is difficult to draw any conclusion, since the data are incomplete with respect to future terminated benefits. However, it is expected that the duration would remain relatively stable, since the average age at which the benefit starts is relatively constant, and the benefit cannot be paid past age 65 due to the conversion to a retirement benefit. The main factor that drives the duration of benefit payments is the cause of disability.

Table 9 Average Duration of Payments for Terminated Benefits

	Average Du	ration in Months	Proportion of Benefits Terminate				
Year of Start of Benefit	Males	Females	Males	Females			
1970	65	76	100%	100%			
1975	66	80	100%	100%			
1980	68	79	99%	98%			
1985	69	84	97%	95%			
1990	77	94	90%	83%			

<sup>\*</sup> After 1990, data are considered incomplete and therefore are not shown.

Table 10 shows the distribution of terminated benefits by duration of benefit payments and year of benefit commencement, for each sex. A trend toward higher durations (six years or more) is observed over time up to 1990. This indicates that beneficiaries are on average in pay for a longer period of time and thus have a higher probability of reaching age 65 and consequently having their disability benefits converted into retirement pensions. These higher durations may be explained by the higher proportions of new beneficiaries with causes of disability attributed to mental disorders.

Table 10 Distribution of Terminated Benefits by Duration

	Males												
Year of	Duration of Benefit												
Start of Benefit*	Less than 1 Yr	1 to 2 yrs	2 to 3 yrs	3 to 4 yrs	4 to 5 yrs	5 to 6 yrs	6 years or more						
1970	15%	14%	12%	10%	8%	7%	33%						
1975	16%	16%	12%	10%	8%	7%	32%						
1980	18%	14%	10%	8%	8%	7%	35%						
1985	16%	13%	11%	9%	8%	7%	36%						
1990	12%	10%	9%	8%	8%	8%	45%						

	remaies													
Year of	<b>Duration of Benefit</b>													
Start of Benefit*	Less than 1 Yr 1 to 2 yrs 2 to 3 yrs 3 to 4 yrs 4 to 5 yrs 5 to 6 yrs													
1970	12%	13%	11%	9%	8%	7%	40%							
1975	10%	13%	10%	10%	9%	8%	41%							
1980	13%	13%	9%	8%	9%	8%	41%							
1985	12%	11%	9%	8%	8%	7%	45%							
1990	9%	8%	6%	6%	7%	7%	57%							

<sup>\*</sup> Data after 1990 are considered incomplete and therefore are not shown.

#### B. Analysis by Reason for Termination and Cause of Disability

Many variables can affect the rate at which disability benefits terminate, including the nature of the disabling condition, vocational rehabilitation support, take-up of the CPP retirement pension, and death of the beneficiary. In 2007, there were 29,800 beneficiaries who ceased to receive their benefits. Of those, 32% (or 9,500) beneficiaries ceased to receive their benefits as a result of death, 8% (or 2,300) due to their recovery or because they no longer met the definition of disability as a result of improved health and/or a return to work (collectively referred to as "recoveries"), and 60% (or 18,000) due to the automatic conversion at age 65 of their benefits into retirement pensions. Table 11 presents the distribution of benefit terminations by reason for and year of termination.

Table 11 Distribution of Terminated Benefits by Reason and Year of Termination

	Die	Died		ered	Attain of Ago	Total	
Year of Termination	(,000) %		(,000)	%	(,000)	%	(,000)
1975	3.7	38%	0.9	9%	5.1	53%	9.7
1980	6.0	34%	1.3	8%	10.3	58%	17.6
1985	7.4	29%	2.9	11%	14.9	59%	25.2
1990	8.9	31%	2.4	8%	17.5	61%	28.8
1995	10.4	31%	2.0	6%	21.0	63%	33.4
2000	8.8	29%	2.2	7%	19.3	64%	30.3
2005	9.0	32%	1.8	7%	17.4	61%	28.3
2007	9.5	32%	2.3	8%	18.0	60%	29.8

An analysis of benefit terminations by each reason for termination and cause of disability shows that in 2007, 44% of all beneficiaries' deaths were associated with neoplasms as the cause of disability and only 3% were associated with injuries. For those who recovered in 2007, 28% of them were receiving a benefit due to mental disorders, 19% were due to neoplasms, and only 6% were due to injuries. For those who reached age 65 in 2007, 35% of them were receiving a benefit due to diseases of the musculoskeletal system and connective tissue and only 5% due to neoplasms. For all termination causes combined, 25% of those who ceased to receive a benefit in 2007 were receiving the benefit due to diseases of the musculoskeletal system and connective tissue and 19% were due to neoplasms. Table 12 presents the distribution of terminations in 2007 by reason for termination and cause of disability.

Table 12 Distribution of Terminated Benefits by Reason and Cause of Disability (2007)

					Attainn		A	
	Di	ed	Recov	vered	Age 65		Terminations	
Causes of Disability	(,000)	%	(,000)	%	(,000)	%	(,000)	%
Musculoskeletal system								
and connective tissue	0.8	8%	0.4	18%	6.3	35%	7.5	25%
Circulatory system	0.9	10%	0.2	7%	2.8	16%	3.9	13%
Mental disorders	1.1	11%	0.6	28%	3.3	18%	5.0	17%
Neoplasms	4.2	44%	0.4	19%	0.9	5%	5.6	19%
Other	1.5	15%	0.3	15%	2.0	11%	3.8	13%
Nervous system	0.8	8%	0.2	7%	1.6	9%	2.5	8%
Injury or poisoning	0.2	3%	0.1	6%	1.1	6%	1.5	5%
All	9.5	100%	2.3	100%	18.0	100%	29.8	100%

Table 13 further shows the distribution of benefit terminations by termination reason, disability cause, and sex. Differences between the distributions for males and females are observed. For example, there was a greater proportion of female disability beneficiaries (53%) than male beneficiaries (38%) with neoplasms whose benefits were terminated in 2007 as a result of death. For disability beneficiaries who ceased to receive their disability benefits due to recovery, a higher proportion of females (32%) than males (24%) had mental disorders as the cause of disability. For beneficiaries

who reached age 65, there was also a greater proportion of females (40%) than males (30%) with a cause of disability attributed to diseases of the musculoskeletal system and connective tissue.

Table 13 Distribution of Terminated Benefits by Reason, Cause of Disability, and Sex (2007)

			Male	es			·	-
	D	ied				Attainment of Age 65		inations
<b>Causes of Disability</b>	(,000)	%	(,000)	%	(,000)	%	(,000)	%
Musculoskeletal								
system and connective								
tissue	0.5	8%	0.2	19%	2.8	30%	3.6	22%
Circulatory system	0.7	12%	0.1	10%	2.1	22%	2.9	18%
Mental disorders	0.6	11%	0.3	24%	1.4	15%	2.4	15%
Neoplasms	2.1	38%	0.2	16%	0.5	5%	2.8	17%
Other	1.0	18%	0.2	16%	1.1	12%	2.3	14%
Nervous system	0.4	8%	0.1	7%	0.8	9%	1.4	8%
Injury or poisoning	0.2	3%	0.1	8%	0.7	7%	1.0	6%
All	5.6	100%	1.3	100%	9.5	100%	16.3	100%

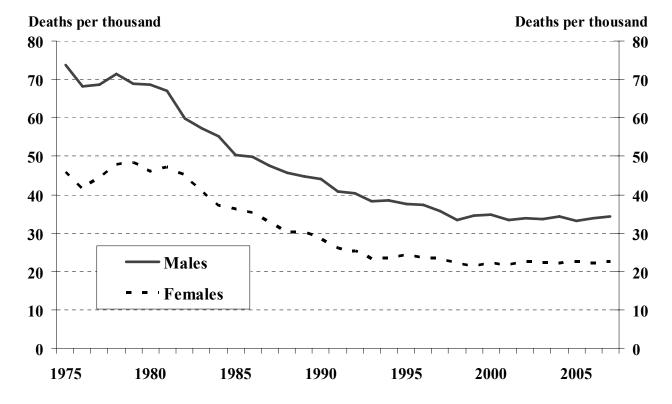
		Females											
	D	Died (,000) %		overed		ment of ge 65	All Terminations						
Causes of Disability	(,000)			%	(,000)	%	(,000)	%					
Musculoskeletal system and connective													
tissue	0.3	8%	0.2	17%	3.4	40%	4.0	29%					
Circulatory system	0.2	6%	0.0	4%	0.8	9%	1.0	8%					
Mental disorders	0.4	11%	0.3	32%	1.8	21%	2.6	19%					
Neoplasms	2.1	53%	0.2	22%	0.5	5%	2.8	20%					
Other	0.5	12%	0.1	13%	0.9	11%	1.5	11%					
Nervous system	0.3	9%	0.1	7%	0.8	9%	1.2	9%					
Injury or poisoning	0.1	1%	0.0	4%	0.4	5%	0.5	4%					
All	3.9	100%	1.1	100%	8.6	100%	13.5	100%					

#### C. Analysis of Mortality

The mortality and recovery termination rates that are derived in this and the following section indicate, for a given age, the probability that a disabled person would cease to be disabled during a coming year from either death or recovery.

Chart 18 shows that for the period up to the year 1997 there was a general decrease in the overall mortality rates among beneficiaries. This decrease was related to both mortality improvements that have been observed in the general population and to a lower observed average age at benefit commencement. The lower average age at benefit commencement has resulted from an increasing proportion of new cases related to mental disorders. In recent years, as the average age at benefit commencement has slightly increased, the overall mortality rates have consequently remained stable at about 35 deaths per thousand beneficiaries for males and about 22 deaths per thousand beneficiaries for females.

There is a mortality differential for beneficiaries by sex as male beneficiaries experience a higher level of mortality than female beneficiaries. In recent years, this gap in mortality rates between the two sexes has remained relatively stable at about 13 deaths per thousand beneficiaries.



**Chart 18 Mortality Rates by Year and Sex** 

Chart 19 shows the mortality experience of beneficiaries in the first year following the start of the benefit. In general, the highest mortality levels are experienced in the year immediately following benefit commencement. In the early years of the program, the mortality rates increased, reflecting both the increase in both the number of new cases and the variety of the causes of disability. From the late 1970s to the early 1990s, mortality rates generally fell as the average age of new beneficiaries

likewise fell. The higher incidence of mental disorders, which have associated lower mortality rates and that occur more at the younger ages, contributed to the lowering of the overall rates.

The increases observed from the early to mid-1990s are attributable to the administrative measures put in place to manage the growing pressure on the disability program. These measures had the effect of eliminating less serious disability cases, while allowing more severe cases instead with associated higher mortality rates. The decrease observed from the mid-1990s onward is related to the continued increase in the number of cases attributable to mental disorders at the younger ages. Lastly and as previously mentioned, continued improvements in mortality have also contributed to lower mortality rates over time.

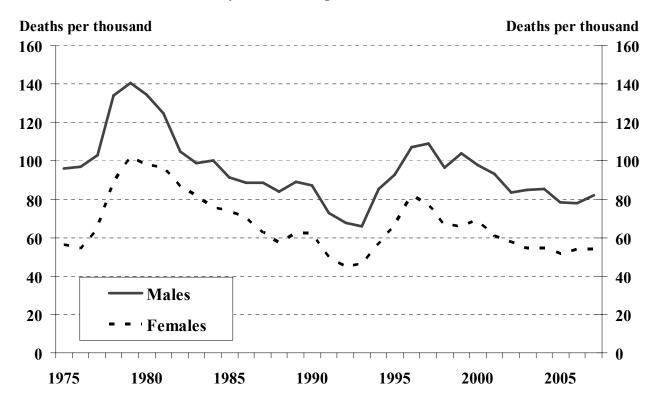


Chart 19 Mortality Rates During First Year After Start of Benefit

#### 1. Mortality by Age and Duration of Benefit Payments

Chart 20 shows the mortality rates for male and female beneficiaries by attained age that were experienced on average during the period from 2005 to 2007. As expected, mortality rates are seen to generally increase with age. The gap between male and female beneficiary attained age mortality rates increases at ages over 42, with male mortality rates being on average about 50% greater than female rates for ages 43 to 64.

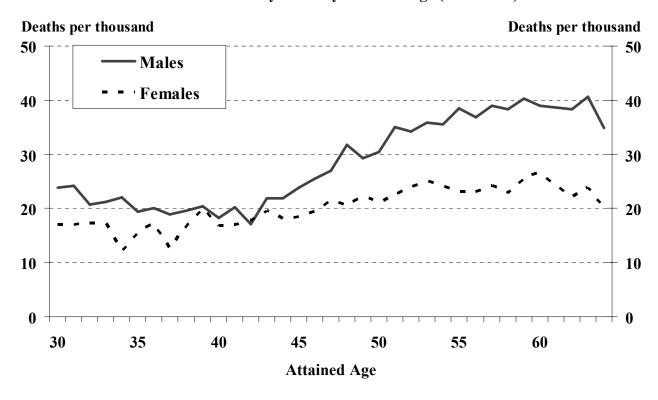


Chart 20 Mortality Rates by Attained Age (2005-2007)

Table 14 shows the mortality rates for beneficiaries by age at benefit commencement and duration of benefit payments in years. Several trends are observed. For each duration, mortality rates generally increase for ages above 30. Higher mortality rates at the youngest ages are likely attributable to more severe disabilities occurring for this group. Mortality rates are also observed to generally decrease as duration increases for any given age, since longer durations are indicative of less acute and severe disabilities and therefore higher probabilities of survival. Lastly, as expected, male mortality rates are observed to be higher than those of females.

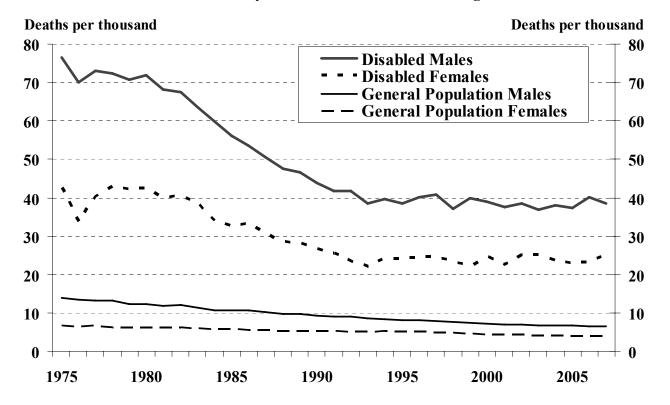
Table 14 Mortality Rates by Age and Duration (1999-2008) (deaths per thousand)

			Males									
Age at Start Duration of Benefit (in years)												
of Benefit	1	2	3	4	5	6+						
20	42.7	47.5	37.3	34.1	38.8	11.2						
30	35.1	23.8	22.4	17.0	21.1	8.8						
40	45.8	32.5	22.7	15.4	13.8	13.4						
50	81.0	63.1	36.6	29.5	29.1	21.9						
60	86.9	67.1	44.7	35.1	34.9	0.0						

	Females												
Age at Start		<b>Duration of Benefit (in years)</b>											
of Benefit	1	1 2 3 4 5 6+											
20	55.5	39.6	36.3	44.5	20.9	10.6							
30	22.6	24.8	16.3	16.5	15.8	7.6							
40	35.6	32.6	18.7	14.2	13.4	8.6							
50	55.8	51.9	28.9	22.1	16.5	12.5							
60	58.4	56.7	32.0	26.8	26.5	0.0							

Chart 21 shows that the mortality rates of male and female beneficiaries aged 55 to 59 are on average five to six times higher than the mortality rates of the general population for that age group and each sex. Similar relationships are observed for other age groups.

Chart 21 Mortality Rates of Males and Females Aged 55-59



#### 2. Mortality by Cause of Disability and Duration of Benefit Payments

Table 15 shows the distribution of beneficiary deaths in 2007 by cause of disability and duration of benefit. Disabilities caused by neoplasms are associated with the highest mortality rates among beneficiaries, and deaths from that cause occur predominantly within two years of benefit commencement. In 2007, of all the beneficiaries who died within 2 years of benefit commencement, 79% were receiving a benefit as a result of neoplasms. Regardless of the duration of benefit payments, 44% of beneficiaries who died in 2007 were receiving a benefit as a result of neoplasms.

**Duration of Benefit (years)** 3-5 1-2 6+ Total Number **%** Number **%** Number % Number % **Causes of Disability** Musculoskeletal system and connective tissue 78 2% 169 8% 558 15% 805 8% Circulatory system 137 4% 232 550 919 10% 11% 15% 2% Mental disorders 91 213 10% 778 21% 1,082 11% Neoplasms 3,006 79% 886 43% 313 9% 4,205 44% Other 340 9% 382 18% 743 20% 1,465 15% Nervous system 103 3% 148 7% 527 14% 778 8% Injury or poisoning 31 1% 35 2% 172 5% 238 3% All 3,786 9,492 100% 2,065 100% 3,641 100% 100%

Table 15 Distribution of Deaths by Cause of Disability and Duration (2007)

#### 3. Mortality by Cause of Disability, Level of Benefit, and Sex

Mortality rates of beneficiaries by cause of disability and level of benefit were analyzed over the five-year period 2004 to 2008. This period covers about 1.4 million life years of exposure and about 41,000 deaths. Since about 44% of the deaths are associated with neoplasms, the mortality experience of beneficiaries was analyzed by two separate broad causes of disability: 1) causes specifically related to neoplasms, and 2) all other causes combined.

Mortality rates for each of these two causes were analyzed by age, sex, and level of benefit. Two different benefit levels were considered for each sex in order to obtain a relatively uniform distribution of exposures across the levels with respect to disabilities caused by neoplasms (about 3% as shown in Table 17). For males, the two benefit levels considered are as follows:

- (1) males with an ER portion of the benefit less than 75% of the maximum ER, and
- (2) males with an ER portion greater than or equal to 75% of the maximum ER.

For females, the two benefit levels correspond to the ER portion being either less than or greater than or equal to 60% of the maximum ER amount.

Tables 16 and 17 show the distributions of deaths and exposures by cause of disability and level of benefit (i.e., the ER portion) over the period 2004 to 2008. Given the uniform distribution of exposures for neoplasms cases by level of benefit, the higher proportion of deaths from that cause at the higher benefit levels (i.e., 24% vs. 13% for males and 28% vs. 24% for females)

indicates that the underlying mortality is higher at the higher benefit levels compared to the lower benefit levels for neoplasm cases.

Table 16 Distribution of Deaths by Cause and Level of Benefit

_	Males					Fer	nales		
		of Maxii	elated Porti mum Earni l Portion		Earnings-Related Portion as % of Maximum Earnings- Related Portion				
_	< 75% ≥ 75%				< 60	)%	≥ 6	0%	
Causes of Disability	(,000)	%	(,000)	%	(,000)	%	(,000)	%	
Neoplasm	3.4	13%	6.0	24%	3.9	24%	4.6	28%	
Other than Neoplasm	7.1	29%	8.3	34%	4.7	29%	3.3	20%	
All Causes	10.5 42% 14.4 58%				8.7	52%	7.9	48%	
All Causes Total		24	1.9 (100%)		16.6 (100%)				

Table 17 Distribution of Exposures by Cause and Level of Benefit

	Males					Females			
		Earnings-Related Portion as % of Maximum Earnings- Related Portion			Earnings-Related Portion as % of Maximum Earnings Related Portion				
_	< 75	< 75% ≥ 75%			< 60%		≥ 60%		
Causes of Disability	(,000)	%	(,000)	%	(,000)	%	(,000)	%	
Neoplasm	13.8	2%	22.6	3%	23.1	3%	22.0	3%	
Other than Neoplasm	307.4	45%	340.1	50%	388.0	54%	279.6	39%	
All Causes	321.3	47%	362.7	53%	411.1	58%	301.6	42%	
All Causes Total		684.0	(100%)			712.	6 (100%)		

Chart 22 Exposures by Cause and Level of Benefit – Males (2005)

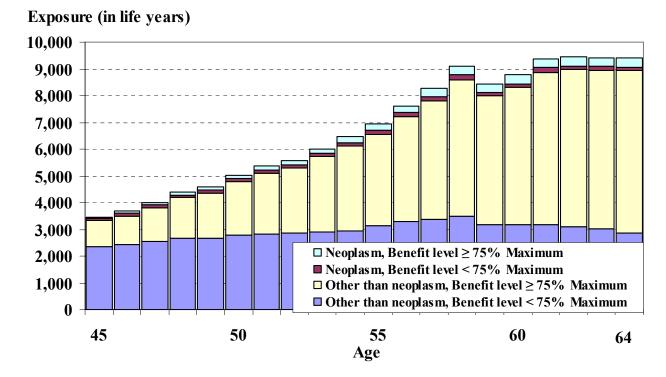


Chart 22 shows that exposures are more heavily distributed toward the lower benefit level (i.e., ER portion less than 75% of the maximum) for younger male beneficiaries, while at older ages exposures are more heavily distributed toward the higher benefit level (i.e., ER portion equal to 75% or more of the maximum). This finding is consistent with the results of a previous mortality study of CPP retirement and survivor beneficiaries<sup>1</sup>, which showed that exposures for male CPP retirement beneficiaries are mostly distributed toward higher pension levels of 75% or more of the maximum pension.

<sup>&</sup>lt;sup>1</sup> Canada Pension Plan Mortality Study - Actuarial Study No. 7, published by the OCA in July 2009.

**Chart 23 Exposures by Cause and Level of Benefit – Females (2005)** 

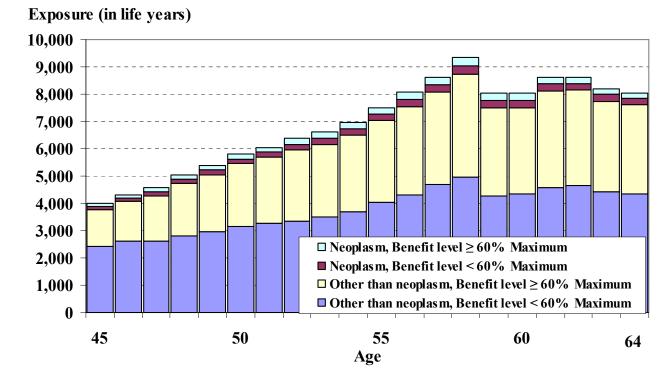


Chart 23 shows that exposures for females are generally more concentrated at the lower benefit level (i.e., ER portion less than 60% of the maximum) for all ages, but that exposures pertaining to the higher benefit level (i.e., ER portion equal to 60% or more of the maximum) generally increase with age.

When different types of neoplasms are examined, it is observed that the distribution of exposures is similar between benefit levels. Neoplasms originating from the mouth region, digestive organs, bone, tissue and breast, genitourinary organs, as well as benign neoplasms all show very similar distributions of exposures by benefit level for both males and females. However, for males, the distributions show a slight difference for respiratory and circulatory neoplasms, such that exposures are slightly more distributed toward the lower benefit level for respiratory neoplasms, whereas the opposite is observed is for circulatory neoplasms. For females, the differences by level of benefit are smaller than observed for males. For females, the differences between the two benefit level categories for all neoplasm types are less than one percentage point.

Table 18 Distribution of Other than Neoplasm Exposures by Type and Level of Benefit

	M	ales	Fei	nales	
Causes of Disability Other	as % of Maxin	lated Portion num Earnings- Portion	Earnings-Related Portion as % of Maximum Earnings- Related Portion		
than Neoplasms	< 75%	≥ 75%	< 60%	≥ 60%	
Mental	29%	20%	30%	31%	
Musculoskeletal and	24%	27%	34%	31%	
connective tissue					
Circulatory	12%	18%	7%	7%	
Nervous system	10%	12%	11%	15%	
Injury	10%	9%	5%	4%	
Other	15%	14%	13%	12%	
All	100%	100%	100%	100%	

Table 18 shows the distribution of exposures for other than neoplasm causes of disability by level of benefit. For males, the proportion of exposures pertaining to mental disorders is significantly higher at the lower benefit level (29% vs. 20%), whereas higher proportions of exposures are observed for musculoskeletal system and connective tissue diseases and circulatory disorders at the higher benefit level (27% vs. 24% and 18% vs. 12%, respectively).

For females, the proportion of exposures pertaining to musculoskeletal system and connective tissue diseases is higher at the lower benefit level (34% vs. 31%), whereas the reverse is observed for nervous system diseases (15% vs. 11%).

#### 4. Mortality by Cause of Disability, Level of Benefit, Age and Sex

Table 19 reveals that mortality rates (i.e., the ratio of deaths to exposures at a given age) pertaining to neoplasms as the cause of disability are much greater than the mortality rates associated with causes other than neoplasms for both sexes. For example, at age 50 the mortality rate for males with neoplasm as the cause of disability is 269 per thousand for those at the higher benefit level, compared to 18 per thousand for those at the same benefit level but with a cause of disability other than neoplasm.

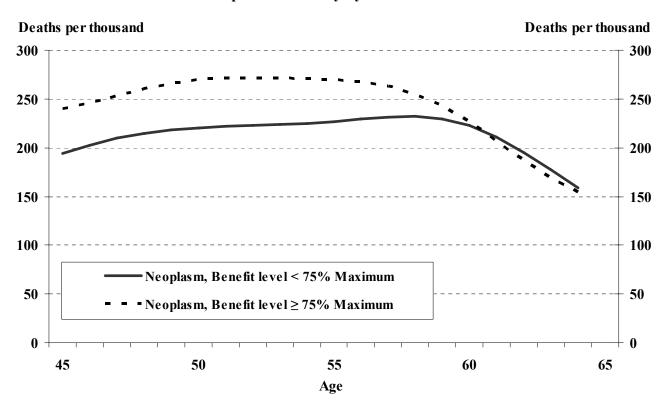
For males, neoplasm-related mortality rates at the higher benefit level exceed the rates at the lower benefit level by about 20% up to age 60, after which the rates at the two levels are similar, as shown in Chart 24. The mortality rates for males for each benefit level decline after about age 58, as the duration since onset of disability increases (as shown in Table 20), and the associated probability of surviving also increases.

For males with other than neoplasm cases, slightly higher mortality rates are observed for all ages between 45 and 54 for the higher benefit level as compared to the lower level. The reverse is observed at ages 55 to 64 with the difference most pronounced at age 64, as shown in Chart 25. The mortality rates are also seen to increase by age for both benefit levels.

Table 19 Mortality Rates by Cause and Level of Benefit (deaths per thousand)

		Ma	les	Fem	ales	
C A		Earnings-Rel	um Earnings-	Earnings-Related Portion as % of Maximum Earnings-		
Causes of Disability	Attained   Age	Related < 75%	Portion ≥ 75%	Related < 60%	Portion ≥60%	
Neoplasms	45	194	239	166	190	
•	50	220	269	172	207	
	55	227	270	168	207	
	60	223	226	151	175	
	64	159	154	104	130	
Other than	45	13	13	7	6	
Neoplasms	50	17	18	10	9	
	55	22	22	11	10	
	60	28	26	14	14	
	64	34	30	18	16	

Chart 24 Neoplasm Mortality by Level of Benefit - Males



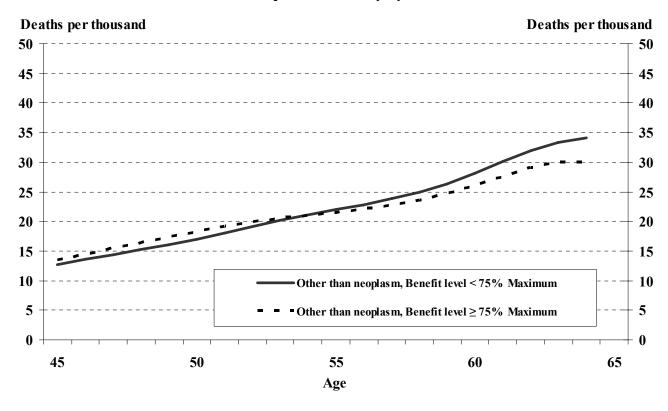
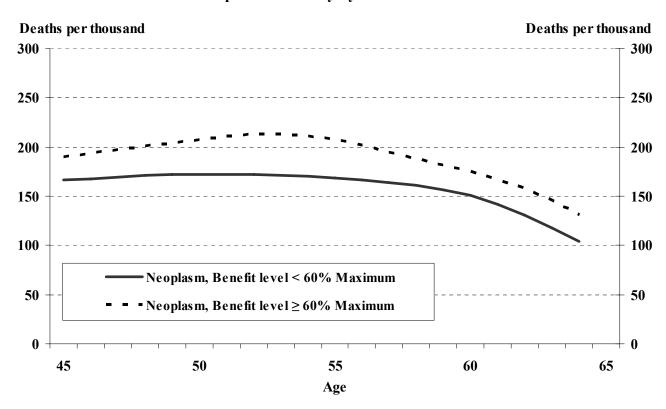


Chart 25 Other than Neoplasm Mortality by Level of Benefit - Males

Table 20 shows that males prior to age 60 and females at all ages above 45 with a higher benefit have, on average, a lower duration of benefit payments when compared to those at the lower benefit level, which results in the higher level of mortality for neoplasm cases observed at the higher benefit level. For males aged 60 and over, the difference in the average duration since benefit commencement is much smaller, which explains why the mortality rates by level of benefit experienced by males in this age group are relatively the same.

**Table 20 Average Duration of Benefit for Disabilities Caused by Neoplasms** (in years)

	-	Male	s	Females			
	Level of I	Benefit as '	% of Maximum	Level of	Benefit as %	% of Maximum	
Age Group	< 75%	≥ 75%	Difference	< 60%	≥ 60%	Difference	
45-49	4.8	4.0	0.8	4.3	4.0	0.3	
50-54	4.6	4.0	0.6	4.7	4.4	0.3	
55-59	4.6	4.0	0.6	5.2	4.5	0.7	
60-64	5.0	5.1	(0.1)	6.5	6.1	0.4	



**Chart 26 Neoplasm Mortality by Level of Benefit – Females** 

Chart 26 shows that neoplasm mortality rates for females exceed the rates at the lower benefit level by about 20% at all ages 45 to 64. As for males, mortality with a higher benefit rates for females decline for each benefit level after age 58. However, the female mortality rate differential between the two benefit levels is smaller than for males. In addition, the differential remains for females, whereas it disappears for males at the older ages. The continuing differential observed for females results from the group in the higher benefit level having shorter durations of benefits (see Table 20) and thus having higher mortality rates at all ages compared to females in the lower benefit level.

As shown in Chart 27, for other than neoplasm causes of disability, mortality rates for females for each benefit level increase continuously by age and are similar between benefit levels. This is a similar trend observed for males. However, unlike for males, higher mortality rates for females are observed at the lower benefit level up to about age 54. Between the ages 54 and 62, the rates are relatively similar between the higher and lower benefit levels, and after age 62 the mortality rates are higher at the lower benefit level.

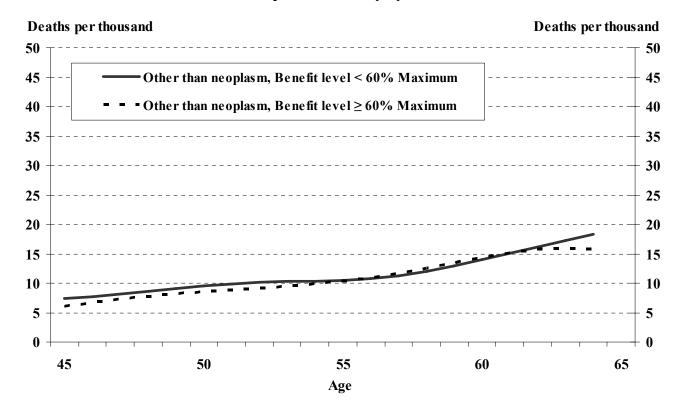
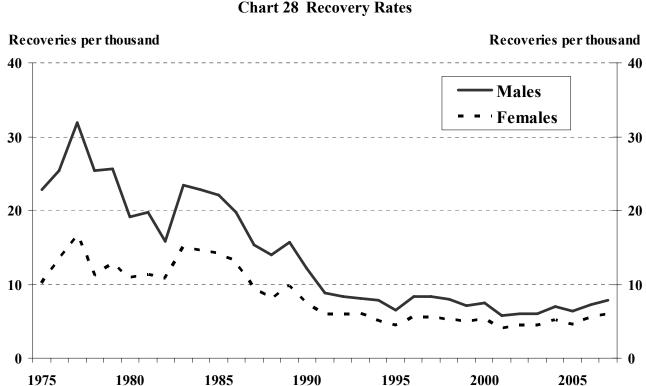


Chart 27 Other than Neoplasm Mortality by Level of Benefit – Females

#### D. Analysis of Recovery

In terms of the recovery differential by sex, males have an overall higher level of recovery than females, but the gap between the recovery rates has narrowed over time. On an aggregate basis (considering all durations of benefit payments) there was an overall decrease in recovery rates up to 1995, with males experiencing up to that time a more significant decrease than females. Since 1995, recovery rates have stabilized for both sexes, as shown in Chart 28. In 2007, there were about eight recoveries per thousand eligible male disability beneficiaries and six recoveries per thousand eligible female beneficiaries.



1. Recovery by Age and Duration since Benefit Commencement

Both sexes have experienced a similar pattern in recovery rates by age and duration. Chart 29 shows that higher recovery rates are associated with the youngest age group, under age 40, whereas lower recovery rates are associated with oldest age group of 55 and over. The peak at duration 2 can be attributed to reassessment measures of the disability program. Chart 29 also reveals the general trend of longer durations of disability corresponding to lower recovery rates; i.e., the longer an individual remains a beneficiary, the less likely that he or she will recover. Chart 30 further emphasizes the higher recovery rates at the younger ages for both sexes.

Table 21 shows the recovery rates for beneficiaries by age at benefit commencement and duration of benefit payments in years for each sex. For each duration, the recovery rates fall as age at benefit commencement increases, indicating again that younger beneficiaries are more likely to recover. This trend is observed for both sexes. Similarly, for the younger ages, recovery rates also increase with duration, for durations up to five years. For durations of six years or more, the effect wears off as those still receiving benefits at extended durations are less likely to recover. As age increases, recovery rates also increase with duration, but only up to shorter durations before the rates then start to fall. Lastly, recovery rates for males are observed to be generally higher than for females.

# Chart 29 Recovery Rates by Age Group and Duration (2005 to 2007)

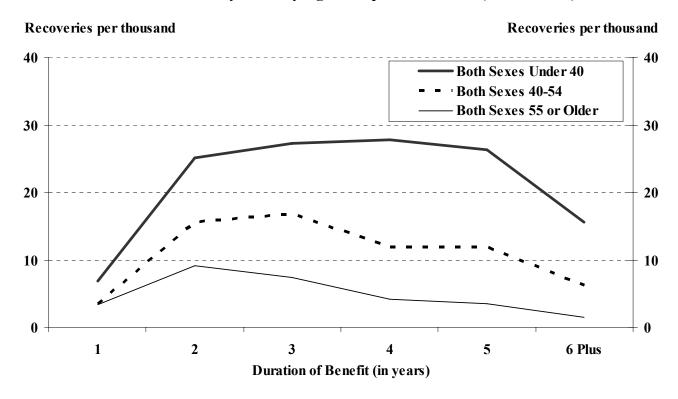


Table 21 Recovery Rates by Age and Duration (1999-2008) (recoveries per thousand)

		Ma	les			
		D	uration of	Benefit (ye	ears)	
Age at						
Start of Benefit	1	2	3	4	5	6+
20	45.5	89.2	67.1	72.2	89.6	51.4
30	19.4	36.4	39.7	32.7	36.0	15.0
40	7.3	17.5	23.1	14.6	17.1	8.7
50	3.5	15.3	15.7	9.4	8.1	2.9
60	4.1	11.4	6.1	3.9	3.8	0.0
		Fem	ales			
		D	uration of	Benefit (ye	ears)	
Age at						
Start of Benefit	1	2	3	4	5	6+
20	11.2	54.7	63.5	72.2	106.8	47.5
30	6.9	22.3	25.3	24.7	28.4	16.5
40	3.9	15.4	17.1	13.2	11.9	8.1
50	2.9	13.3	13.4	6.8	5.8	2.4
60	1.7	6.6	3.4	4.0	3.6	0.0

Recoveries per thousand Recoveries per thousand 50 **50** - Males Females 40 40 30 30 20 20 10 10 30 35 40 **50** 55 65 45 60 Age at Start of Benefit

Chart 30 Recovery Rates by Age and Sex (2005 to 2007)

#### 2. Recovery by Cause of Disability and Duration of Benefit

Table 22 shows the distribution of recoveries by cause of disability and duration since benefit commencement. Neoplasms are the only cause of disability for which recovery is more likely in the first two years after the start of the benefit, as 61% of all beneficiaries with neoplasm-related disabilities recovered in that period. In general, all the other causes of disability show higher likelihoods of recovery at durations greater than two years after benefit commencement.

Table 22	Distribution	of Recoveri	es hy Cause	e and Duration	(2007)
I able 44	Distribution	of Mecoveri	es dy Caust	t anu Duranoi	1 (400/)

		Duration of Benefit (years)								
	1-2		3-5	3-5		6+		Total		
<b>Causes of Disability</b>	Number	%	Number	%	Number	%	Number	%		
Musculoskeletal system and										
Connective tissue	65	15%	152	36%	204	48%	421	100%		
Circulatory system	57	34%	58	35%	52	31%	167	100%		
Mental disorders	84	13%	269	42%	292	45%	645	100%		
Neoplasms	265	61%	139	32%	34	8%	438	100%		
Other	63	19%	138	41%	138	41%	339	100%		
Nervous system	23	14%	52	31%	92	55%	167	100%		
Injury or poisoning	20	14%	54	38%	68	48%	142	100%		
All	577	25%	862	37%	880	38%	2,319	100%		

# VII. Appendices

# A. Supplementary Tables

Table 23 Population of Canada less Québec Eligible (Aged 18 to 64)

		Males		F	emales		Bo	th Sexes	
	Number of Eligible	Population	% of	Number of Eligible	Population	% of	Number of Eligible	Population	% of
Year	Contributors	18-64	Pop.	Contributors	18-64	Pop.	Contributors	18-64	Pop.
	(,000)	(,000)		(,000)	(000)		(,000)	(,000)	
1970	2,937	4,421	66%	938	4,301	22%	3,875	8,722	44%
1971	3,264	4,508	72%	1,184	4,394	27%	4,448	8,902	50%
1972	3,461	4,609	75%	1,387	4,505	31%	4,848	9,114	53%
1973	3,631	4,723	77%	1,584	4,625	34%	5,215	9,349	56%
1974	3,781	4,852	78%	1,773	4,757	37%	5,554	9,609	58%
1975	3,869	4,974	78%	1,962	4,889	40%	5,831	9,864	59%
1976	3,996	5,086	79%	2,106	5,010	42%	6,101	10,096	60%
1977	4,125	5,200	79%	2,254	5,130	44%	6,379	10,330	62%
1978	4,250	5,317	80%	2,411	5,253	46%	6,661	10,570	63%
1979	4,367	5,431	80%	2,562	5,370	48%	6,929	10,800	64%
1980	4,406	5,562	79%	2,540	5,500	46%	6,947	11,062	63%
1981	4,511	5,698	79%	2,686	5,631	48%	7,197	11,329	64%
1982	4,595	5,832	79%	2,819	5,761	49%	7,413	11,593	64%
1983	4,581	5,946	77%	2,795	5,874	48%	7,376	11,820	62%
1984	4,628	6,038	77%	2,903	5,967	49%	7,531	12,006	63%
1985	4,665	6,109	76%	3,001	6,035	50%	7,666	12,144	63%
1986	4,588	6,186	74%	2,952	6,103	48%	7,540	12,289	61%
1987	5,483	6,275	87%	4,202	6,181	68%	9,685	12,456	78%
1988	5,528	6,370	87%	4,312	6,279	69%	9,840	12,649	78%
1989	5,613	6,503	86%	4,465	6,419	70%	10,079	12,922	78%
1990	5,705	6,599	86%	4,608	6,525	71%	10,313	13,124	79%
1991	5,730	6,694	86%	4,688	6,585	71%	10,418	13,278	78%
1992	5,696	6,761	84%	4,701	6,676	70%	10,398	13,437	77%
1993	5,665	6,837	83%	4,694	6,762	69%	10,358	13,599	76%
1994	5,678	6,922	82%	4,712	6,858	69%	10,391	13,780	75%
1995	5,722	7,006	82%	4,761	6,951	69%	10,484	13,957	75%
1996	5,761	7,092	81%	4,818	7,046	68%	10,579	14,138	75%
1997	5,809	7,192	81%	4,877	7,138	68%	10,686	14,329	75%
1998	5,057	7,273	70%	4,083	7,223	57%	9,141	14,496	63%
1999	5,137	7,364	70%	4,168	7,313	57%	9,305	14,678	63%
2000	5,241	7,468	70%	4,287	7,413	58%	9,528	14,881	64%
2001	5,344	7,594	70%	4,418	7,531	59%	9,762	15,124	65%
2002	5,442	7,718	71%	4,551	7,658	59%	9,993	15,375	65%
2003	5,528	7,825	71%	4,675	7,768	60%	10,203	15,593	65%
2004	5,601	7,931	71%	4,782	7,877	61%	10,382	15,808	66%
2005	5,673	8,038	71%	4,878	7,986	61%	10,550	16,023	66%
2006	5,740	8,144	70%	4,963	8,093	61%	10,703	16,236	66%
2007	5,827	8,265	71%	5,067	8,215	62%	10,894	16,480	66%

**Table 24 Number of New Beneficiaries** 

	Ma	les	Fem	ales	Both Sexes
Year	(,000)	%	(,000)	%	(,000)
1970	7.3	87%	1.1	13%	8.4
1971	10.5	83%	2.1	17%	12.7
1972	11.7	80%	3.0	20%	14.6
1973	11.8	77%	3.5	23%	15.3
1974	14.1	74%	4.8	26%	18.9
1975	16.0	74%	5.6	26%	21.7
1976	17.9	73%	6.5	27%	24.4
1977	17.3	72%	6.7	28%	24.0
1978	16.3	72%	6.4	28%	22.7
1979	16.6	71%	6.7	29%	23.3
1980	17.5	71%	7.1	29%	24.6
1981	18.8	70%	8.0	30%	26.7
1982	23.4	71%	9.4	29%	32.8
1983	24.1	69%	10.6	31%	34.7
1984	25.4	69%	11.3	31%	36.7
1985	26.0	67%	12.6	33%	38.6
1986	27.3	67%	13.6	33%	41.0
1987	26.4	63%	15.5	37%	41.9
1988	26.8	62%	16.1	38%	42.8
1989	25.6	62%	15.8	38%	41.3
1990	27.7	61%	17.3	39%	45.0
1991	32.9	60%	22.2	40%	55.1
1992	34.1	58%	24.3	42%	58.4
1993	28.8	57%	21.7	43%	50.5
1994	24.2	56%	19.1	44%	43.3
1995	19.4	55%	15.6	45%	35.0
1996	16.4	54%	13.8	46%	30.1
1997	16.3	54%	14.0	46%	30.3
1998	14.3	53%	12.9	47%	27.3
1999	13.4	53%	12.1	47%	25.5
2000	14.0	52%	13.0	48%	27.0
2001	15.1	52%	14.1	48%	29.2
2002	16.3	51%	15.4	49%	31.6
2003	16.8	52%	15.8	48%	32.6
2004	17.2	50%	17.0	50%	34.2
2005	17.0	49%	17.4	51%	34.4
2006	16.5	49%	17.0	51%	33.6
2007	16.3	50%	16.3	50%	32.6

Table 25 Average Age of New Beneficiaries

Year	Males	Females	Both Sexes
1970	55.1	55.4	55.2
1971	55.3	55.6	55.4
1972	55.2	55.4	55.2
1973	55.6	55.9	55.7
1974	55.3	55.6	55.4
1975	55.0	55.3	55.1
1976	55.3	55.3	55.3
1977	55.1	55.1	55.1
1978	55.1	54.9	55.0
1979	55.0	54.6	54.9
1980	54.5	54.2	54.4
1981	54.1	53.7	54.0
1982	53.2	52.8	53.1
1983	53.7	52.8	53.4
1984	54.1	53.1	53.8
1985	54.3	53.0	53.9
1986	53.9	52.2	53.4
1987	53.0	51.2	52.3
1988	52.9	51.2	52.3
1989	52.4	50.6	51.7
1990	52.0	50.0	51.2
1991	51.5	49.6	50.7
1992	50.8	49.2	50.1
1993	51.0	49.2	50.2
1994	50.8	49.1	50.0
1995	50.5	48.6	49.6
1996	50.0	48.1	49.1
1997	49.6	48.0	48.9
1998	50.4	48.6	49.6
1999	50.6	48.7	49.7
2000	50.9	49.0	50.0
2001	51.1	49.4	50.3
2002	51.0	49.4	50.2
2003	51.0	49.7	50.3
2004	51.1	49.9	50.5
2005	51.2	49.8	50.5
2006	51.4	50.1	50.8
2007	51.5	50.5	51.0

**Table 26 Age-Adjusted Disability Incidence Rates\*** (per 1,000 eligible)

Year	Males	Females	<b>Both Sexes</b>
1970	2.6	1.2	1.9
1971	3.3	1.8	2.6
1972	3.4	2.2	2.8
1973	3.2	2.3	2.8
1974	3.7	3.0	3.4
1975	4.2	3.2	3.8
1976	4.6	3.5	4.1
1977	4.4	3.5	4.0
1978	4.1	3.2	3.7
1979	4.1	3.3	3.7
1980	4.4	3.6	4.0
1981	4.7	3.9	4.3
1982	5.7	4.4	5.1
1983	6.0	5.2	5.6
1984	6.2	5.3	5.8
1985	6.4	5.8	6.1
1986	7.1	6.8	7.0
1987	6.1	5.5	5.8
1988	6.5	5.7	6.1
1989	6.1	5.5	5.8
1990	6.6	5.7	6.2
1991	7.8	7.1	7.5
1992	8.0	7.5	7.7
1993	6.7	6.5	6.6
1994	5.6	5.6	5.6
1995	4.4	4.4	4.4
1996	3.6	3.7	3.7
1997	3.5	3.6	3.5
1998	3.4	3.8	3.6
1999	3.1	3.4	3.3
2000	3.1	3.5	3.3
2001	3.2	3.7	3.4
2002	3.3	3.8	3.5
2003	3.3	3.7	3.5
2004	3.3	3.8	3.5
2005	3.1	3.8	3.4
2006	3.0	3.6	3.2
2007	2.9	3.5	3.1

<sup>\*</sup> Disability incidence rates shown are age-adjusted, which means that the eligible population used to calculate the overall DIR for all ages is constant throughout the years (in this case, 2009), thereby eliminating the aging effect of the population and allowing a better comparison basis between years.

**Table 27 Disability Incidence Rates by Age – Males** (per 1,000 eligible)

Age	1975	1985	1995	2007	CPP 25th 2015+
18	-	-	-	-	0.0
19	_	_	0.1	-	0.0
20	_	<u>-</u>	0.2	0.1	0.2
21	_	0.1	0.2	0.1	0.2
22	0.1	0.1	0.2	0.3	0.3
23	0.2	0.3	0.2	0.3	0.4
24	0.2	0.3	0.4	0.3	0.4
25	0.2	0.4	0.3	0.4	0.4
26	0.2	0.5	0.5	0.4	0.5
27	0.4	0.5	0.6	0.5	0.5
28	0.4	0.7	0.7	0.3	0.5
29	0.4	0.7	0.7	0.4	0.0
30	0.4	0.7	1.0	0.5	0.7
31	0.6	1.0	1.1	0.8	0.8
32	0.5	0.9	1.3	0.8	0.9
33	0.7	1.0	1.1	0.8	1.0
34	0.6	1.4	1.2	1.0	1.0
35	0.9	1.4	1.5	1.0	1.1
36	0.9	1.4	1.6	1.3	1.2
37	1.0	1.5	1.7	1.2	1.3
38	1.2	1.7	1.8	1.1	1.4
39	1.3	1.9	1.9	1.4	1.5
40	1.5	2.2	2.0	1.7	1.6
41	1.4	2.4	2.2	1.7	1.7
42	1.6	2.6	2.3	1.7	1.9
43	1.8	3.0	2.5	1.8	2.1
44	2.2	3.0	3.0	2.0	2.3
45	2.3	3.4	3.2	2.2	2.5
46	2.7	3.9	3.3	2.5	2.8
47	3.0	4.5	3.6	2.7	3.0
48	3.6	5.5	4.0	3.1	3.3
49	3.8	5.6	4.5	3.1	3.6
50	4.5	6.9	5.3	3.5	3.9
51	5.3	7.6	6.2	4.2	4.3
52	6.0	8.8	6.4	4.3	4.8
53	8.0	10.3	7.6	5.2	5.5
54	7.6	13.0	8.5	5.8	6.2
55	8.7	14.6	9.8	6.3	7.2
56	11.0	18.0	11.0	6.2	8.2
57	12.6	19.4	12.4	7.6	9.3
58	15.7	23.0	14.6	9.2	10.4
59	19.0	29.2	16.8	10.5	11.2
60	20.9	32.0	18.8	9.2	11.8
61	23.5	34.7	19.9	11.5	12.2
62	25.7	37.4	20.8	12.1	12.5
63	28.5	38.9	19.6	12.0	12.9
64	37.8	44.2	20.6	13.9	13.3
All Ages*	4.2	6.4	4.4	2.9	3.3

<sup>\* &</sup>quot;All Ages" disability incidence rates shown are age-adjusted, which means that the eligible population used to calculate the overall DIR for all ages is constant throughout the years (in this case, 2009), thereby eliminating the aging effect of the population and allowing a better comparison basis between years.

**Table 28 Disability Incidence Rates by Age – Females** (per 1,000 eligible)

					CPP 25th
Age	1975	1985	1995	2007	2015+
18	-	-	-	-	0.0
19	-	-	0.0	-	0.0
20	-	-	0.0	0.0	0.0
21	-	-	0.2	0.1	0.1
22	0.1	0.1	0.2	0.1	0.1
23	0.1	0.1	0.2	0.1	0.2
24	0.1	0.2	0.3	0.2	0.3
25	0.1	0.2	0.4	0.4	0.4
26	0.1	0.3	0.5	0.5	0.5
27	0.2	0.4	0.6	0.8	0.6
28	0.2	0.5	0.7	0.8	0.8
29	0.3	0.5	0.9	0.8	0.9
30	0.4	0.6	1.0	1.1	1.0
31	0.3	0.8	1.2	1.1	1.1
32	0.5	1.0	1.3	1.2	1.2
33	0.3	1.1	1.6	1.2	1.3
34	0.6	1.3	1.5	1.4	1.4
35	0.5	1.5	1.7	1.4	1.6
36	0.4	1.5	1.9	1.5	
36 37		1.7	2.0	1.5	1.7
	0.6				1.9
38	0.9	1.7	2.1	1.8	2.0
39	0.8	1.9	2.4	2.1	2.2
40	1.1	2.4	2.6	2.3	2.4
41	1.1	2.9	2.9	2.4	2.6
42	1.0	2.9	3.2	2.7	2.7
43	1.7	2.8	2.8	2.6	2.9
44	1.4	3.4	3.3	2.8	3.1
45	1.9	4.2	3.7	3.4	3.3
46	1.9	4.2	4.0	3.1	3.5
47	2.4	4.4	4.3	3.5	3.8
48	2.4	5.8	4.8	3.8	4.1
49	2.8	6.9	5.4	4.0	4.5
50	3.3	6.9	5.9	4.6	4.9
51	3.8	8.2	6.8	5.1	5.4
52	4.8	8.5	7.1	5.4	5.8
53	5.6	10.2	7.7	5.4	6.4
54	6.0	11.8	8.5	6.2	7.0
55	6.3	13.4	10.0	6.3	7.7
56	8.5	15.4	11.0	6.8	8.5
57	9.3	17.2	10.8	8.1	9.3
58	12.2	21.2	14.0	9.6	10.0
59	16.1	23.9	13.0	10.2	10.6
60	17.3	27.9	14.4	8.6	11.0
61	20.5	28.7	15.2	10.7	11.1
62	21.3	30.8	15.7	11.5	11.3
63	22.3	30.5	17.1	11.3	11.5
64	25.8	37.6	15.4	9.8	11.6
All Ages*	3.2	5.8	4.4	3.5	3.6

<sup>\* &</sup>quot;All Ages" disability incidence rates shown are age-adjusted, which means that the eligible population used to calculate the overall DIR for all ages is constant throughout the years (in this case, 2009), thereby eliminating the aging effect of the population and allowing a better comparison basis between years.

Table 29 Distribution of New Beneficiaries by Cause

	Musculo													
	and Con		G. 1					_					Injury	
	Tiss		Circula		Mei		Neop		-	her	Nerv		(,000)	
Year	(,000)	%	(,000)	%	(,000)	%	(,000)	%	(,000)	%	(,000)	· /		<b>%</b>
1970	1.1	13%	3.2	39%	0.7	8%	1.0	12%	1.4	17%	0.7	8%	0.3	4%
1971	1.9	15%	4.8	38%	1.0	8%	1.4	11%	2.2	17%	0.9	7%	0.5	4%
1972	2.4	16%	5.2	35%	1.2	8%	1.7	12%	2.6	18%	1.0	7%	0.6	4%
1973	2.7	18%	5.4	35%	1.2	8%	1.8	11%	2.6	17%	1.0	6%	0.6	4%
1974	3.8	20%	6.3	33%	1.6	8%	1.9	10%	3.4	18%	1.1	6%	0.9	5%
1975	4.8	22%	6.9	32%	1.8	8%	2.1	10%	3.6	17%	1.3	6%	1.2	6%
1976	5.6	23%	7.8	32%	1.9	8%	2.5	10%	4.0	16%	1.4	6%	1.2	5%
1977	5.3	22%	7.6	32%	2.0	8%	2.7	11%	4.0	16%	1.3	6%	1.2	5%
1978	5.0	22%	7.0	31%	1.8	8%	3.0	13%	3.7	16%	1.3	6%	1.0	5%
1979	5.2	22%	7.1	30%	1.8	8%	3.1	13%	3.8	16%	1.3	6%	1.0	4%
1980	5.7	23%	7.1	29%	2.0	8%	3.5	14%	3.6	15%	1.4	6%	1.2	5%
1981	6.7	25%	7.3	27%	2.2	8%	3.6	13%	3.8	14%	1.5	6%	1.7	6%
1982	8.8	27%	8.4	26%	2.5	8%	4.1	12%	4.3	13%	1.9	6%	2.8	8%
1983	9.3	27%	8.8	25%	2.5	7%	4.3	12%	4.9	14%	2.0	6%	2.8	8%
1984	10.2	28%	9.2	25%	2.7	7%	4.5	12%	5.1	14%	2.2	6%	2.7	7%
1985	11.2	29%	9.5	24%	2.9	8%	4.9	13%	5.2	14%	2.3	6%	2.7	7%
1986	12.1	30%	9.4	23%	3.5	8%	5.0	12%	5.6	14%	2.6	6%	2.8	7%
1987	13.0	31%	8.7	21%	3.7	9%	5.1	12%	5.7	14%	2.8	7%	2.9	7%
1988	13.7	32%	8.3	19%	3.9	9%	5.3	12%	5.8	14%	2.8	7%	3.0	7%
1989	13.2	32%	7.5	18%	4.2	10%	5.1	12%	5.5	13%	2.9	7%	2.9	7%
1990	14.9	33%	7.6	17%	5.1	11%	5.5	12%	5.6	12%	3.1	7%	3.4	7%
1991	18.1	33%	8.5	15%	7.6	14%	5.7	10%	7.2	13%	4.1	7%	3.9	7%
1992	18.1	31%	8.4	14%	9.7	17%	6.1	10%	8.0	14%	4.3	7%	3.7	6%
1993	15.1	30%	7.2	14%	8.5	17%	5.9	12%	6.9	14%	3.9	8%	3.0	6%
1994	11.9	27%	6.2	14%	7.8	18%	5.7	13%	5.9	14%	3.6	8%	2.1	5%
1995	8.2	23%	5.0	14%	6.8	20%	5.5	16%	4.9	14%	3.1	9%	1.5	4%
1996	6.2	21%	4.0	13%	6.5	22%	5.3	18%	4.1	13%	2.8	9%	1.3	4%
1997	5.9	20%	3.7	12%	7.9	26%	4.9	16%	3.9	13%	2.8	9%	1.2	4%
1998	5.4	20%	3.4	13%	6.2	23%	5.0	18%	3.6	13%	2.7	10%	1.0	4%
1999	4.9	19%	3.3	13%	5.4	21%	4.8	19%	3.7	14%	2.5	10%	1.0	4%
2000	5.3	20%	3.2	12%	5.8	21%	5.0	18%	3.9	15%	2.7	10%	1.1	4%
2001	6.2	21%	3.4	12%	6.1	21%	5.3	18%	4.1	14%	2.8	10%	1.3	4%
2002	6.8	22%	3.7	12%	6.8	21%	5.4	17%	4.4	14%	3.1	10%	1.5	5%
2003	7.0	21%	3.7	11%	7.2	22%	5.7	18%	4.5	14%	3.0	9%	1.6	5%
2004	7.7	23%	3.6	10%	7.6	22%	6.0	18%	4.6	14%	3.1	9%	1.5	4%
2005	7.4	22%	3.3	10%	7.8	23%	6.3	18%	4.7	14%	3.2	9%	1.6	5%
2006	7.3	22%	3.3	10%	7.5	22%	6.2	19%	4.7	14%	3.1	9%	1.5	5%
2007	6.7	21%	3.3	10%	7.2	22%	6.2	19%	4.7	14%	3.0	9%	1.5	5%

Table 30 Distribution of New Beneficiaries by Cause – Ages under 40

	Musculosk													
	and Conno		C:	.4	Mass	.4.1	Maani	l	041		Name		T	
Voor	(,000)	<u>e</u> %	(,000)	atory %	(,000)	11a1 %	Neopl (,000)	asm %	Otl	ier %	Nerv (,000)	ous %	Inju (,000)	%
Year 1970	0.0	9%	0.1	11%	0.1	12%	0.1	17%	0.1	12%	0.1	22%	0.1	17%
1970	0.0	9%	0.1	12%	0.1	12%	0.1	14%	0.1	14%	0.1	20%	0.1	19%
1971	0.1	10%	0.1	9%	0.1	16%	0.1	13%	0.1	15%	0.1	17%	0.1	20%
1973	0.1	13%	0.1	9%	0.1	14%	0.1	14%	0.1	14%	0.2	18%	0.2	19%
1974	0.1	16%	0.1	9%	0.1	16%	0.1	10%	0.1	15%	0.1	13%	0.1	21%
1975	0.2	20%	0.1	8%	0.2	15%	0.1	11%	0.2	12%	0.1	13%	0.2	20%
1976	0.3	21%	0.1	8%	0.2	14%	0.2	10%	0.2	15%	0.2	14%	0.3	19%
1977	0.3	18%	0.1	8%	0.2	15%	0.2	14%	0.2	15%	0.2	13%	0.3	17%
1978	0.3	19%	0.1	8%	0.2	14%	0.2	15%	0.2	14%	0.2	13%	0.3	18%
1979	0.3	18%	0.1	9%	0.2	14%	0.2	14%	0.3	15%	0.2	13%	0.3	18%
1980	0.4	19%	0.2	8%	0.3	15%	0.3	12%	0.3	13%	0.3	14%	0.4	17%
1981	0.6	23%	0.2	7%	0.4	14%	0.3	12%	0.3	12%	0.3	12%	0.5	20%
1982	1.0	26%	0.2	6%	0.5	13%	0.4	10%	0.4	11%	0.5	12%	0.9	23%
1983	0.9	24%	0.3	7%	0.5	14%	0.4	10%	0.5	12%	0.5	12%	0.8	20%
1984	0.9	24%	0.3	7%	0.6	15%	0.4	11%	0.4	12%	0.5	14%	0.7	18%
1985	0.9	23%	0.3	7%	0.6	15%	0.5	12%	0.5	12%	0.5	13%	0.7	18%
1986	1.1	23%	0.3	6%	0.8	17%	0.5	11%	0.6	12%	0.7	14%	0.7	16%
1987	1.2	23%	0.3	6%	0.9	17%	0.6	12%	0.8	15%	0.7	14%	0.8	15%
1988	1.2	22%	0.3	5%	0.9	18%	0.6	11%	0.9	17%	0.7	13%	0.8	15%
1989	1.2	22%	0.3	5%	1.0	18%	0.6	11%	1.0	18%	0.8	13%	0.7	13%
1990	1.4	22%	0.3	4%	1.3	20%	0.7	10%	1.1	17%	0.8	13%	0.8	13%
1991	1.8	21%	0.3	4%	2.0	24%	0.7	8%	1.5	18%	1.0	12%	1.0	12%
1992	1.7	17%	0.4	4%	3.0	30%	0.8	8%	1.9	19%	1.2	12%	0.9	10%
1993	1.4	17%	0.3	4%	2.4	29%	0.7	9%	1.6	19%	1.0	12%	0.8	9%
1994	1.1	15%	0.3	4%	2.3	31%	0.7	9%	1.4	19%	0.9	13%	0.6	8%
1995	0.8	13%	0.3	4%	2.0	32%	0.7	11%	1.1	18%	0.8	14%	0.4	7%
1996	0.7	14%	0.2	4%	1.8	34%	0.7	13%	0.9	16%	0.7	13%	0.4	7%
1997	0.7	13%	0.2	3%	2.1	39%	0.6	11%	0.8	14%	0.7	13%	0.4	7%
1998	0.6	13%	0.1	3%	1.5	34%	0.6	13%	0.7	15%	0.6	14%	0.3	7%
1999	0.5	13%	0.1	4%	1.3	33%	0.6	14%	0.6	15%	0.6	14%	0.3	7%
2000	0.5	12%	0.1	4%	1.4	36%	0.5	14%	0.6	15%	0.5	14%	0.3	6%
2001	0.6	14%	0.1	4%	1.3	34%	0.5	13%	0.6	15%	0.5	13%	0.3	7%
2002	0.6	14%	0.2	4%	1.6	36%	0.5	12%	0.7	15%	0.6	13%	0.3	7%
2003	0.6	14%	0.2	4%	1.5	36%	0.5	12%	0.6	14%	0.6	13%	0.3	7%
2004	0.6	14%	0.2	4%	1.6	38%	0.5	12%	0.6	15%	0.5	12%	0.3	6%
2005	0.5	12%	0.1	3%	1.7	39%	0.5	12%	0.6	14%	0.5	13%	0.3	6%
2006	0.5	12%	0.2	4%	1.6	40%	0.5	12%	0.5	13%	0.5	12%	0.3	7%
2007	0.4	11%	0.1	4%	1.4	38%	0.5	14%	0.5	14%	0.5	12%	0.3	7%

Table 31 Distribution of New Beneficiaries by Cause – Ages 40 to 54

	Musculos and Conr	nective						W1111 M1111 M111 M1111 M111						
_	Tissu		Circul		Mei		Neop		Ot		Nerv		Inju	_
Year	(000)	%	(,000)	<b>%</b>	(,000)	%	(,000)	%	(,000)	%	(,000)	<b>%</b>	(,000)	%
1970	0.3	11%	0.8	34%	0.3	11%	0.3	14%	0.4	15%	0.3	11%	0.1	4%
1971	0.4	13%	1.2	34%	0.4	11%	0.5	13%	0.6	16%	0.3	9%	0.2	4%
1972	0.6	14%	1.3	32%	0.5	11%	0.6	14%	0.7	17%	0.3	8%	0.2	4%
1973	0.7	16%	1.2	30%	0.4	11%	0.6	15%	0.7	16%	0.3	7%	0.2	5%
1974	1.0	18%	1.5	28%	0.6	12%	0.7	12%	0.9	17%	0.4	7%	0.3	6%
1975	1.3	20%	1.7	27%	0.7	12%	0.7	12%	1.0	15%	0.5	7%	0.4	6%
1976	1.4	21%	1.8	26%	0.8	12%	0.9	13%	1.0	15%	0.5	7%	0.4	6%
1977	1.4	21%	1.8	26%	0.8	12%	1.0	14%	1.0	15%	0.4	7%	0.4	5%
1978	1.3	20%	1.6	25%	0.7	11%	1.0	16%	1.0	16%	0.4	6%	0.3	5%
1979	1.3	21%	1.7	25%	0.7	10%	1.0	16%	1.0	16%	0.4	7%	0.4	5%
1980	1.5	22%	1.7	24%	0.7	10%	1.3	18%	1.0	14%	0.5	7%	0.4	6%
1981	1.9	25%	1.7	22%	0.8	11%	1.2	16%	1.0	13%	0.5	7%	0.6	7%
1982	2.8	28%	2.2	22%	1.0	10%	1.3	13%	1.3	12%	0.6	6%	0.9	9%
1983	2.8	27%	2.2	21%	1.0	10%	1.5	14%	1.4	14%	0.7	6%	0.9	9%
1984	3.0	28%	2.2	21%	1.0	10%	1.5	14%	1.4	13%	0.7	7%	0.8	8%
1985	3.1	28%	2.3	21%	1.1	10%	1.6	15%	1.5	13%	0.8	7%	0.8	7%
1986	3.6	29%	2.3	19%	1.4	12%	1.7	14%	1.6	13%	0.8	7%	0.9	7%
1987	4.4	31%	2.4	17%	1.6	12%	1.9	13%	1.8	13%	1.0	7%	1.0	7%
1988	4.6	31%	2.3	16%	1.7	12%	2.1	14%	1.9	13%	1.1	7%	1.1	7%
1989	4.7	31%	2.2	15%	1.9	13%	2.1	14%	1.8	12%	1.1	7%	1.1	7%
1990	5.5	32%	2.3	14%	2.4	14%	2.2	13%	2.0	12%	1.2	7%	1.3	8%
1991	7.1	32%	2.9	13%	3.7	17%	2.4	11%	2.7	12%	1.8	8%	1.7	8%
1992	7.0	30%	2.7	12%	4.7	20%	2.6	11%	3.1	13%	1.8	8%	1.6	7%
1993	5.7	28%	2.4	12%	4.2	20%	2.6	13%	2.7	13%	1.7	8%	1.2	6%
1994	4.5	25%	2.2	12%	4.0	22%	2.6	14%	2.4	13%	1.7	9%	0.8	5%
1995	3.3	22%	1.8	12%	3.5	23%	2.6	17%	2.1	13%	1.5	9%	0.6	4%
1996	2.8	20%	1.6	11%	3.5	25%	2.6	18%	1.8	13%	1.3	9%	0.6	4%
1997	2.7	19%	1.5	10%	4.4	30%	2.4	16%	1.8	12%	1.4	9%	0.5	3%
1998	2.5	19%	1.3	10%	3.4	26%	2.5	19%	1.7	13%	1.3	10%	0.5	4%
1999	2.2	18%	1.3	10%	2.9	24%	2.3	19%	1.8	15%	1.3	11%	0.4	4%
2000	2.4	18%	1.3	10%	3.2	24%	2.4	18%	1.9	15%	1.4	11%	0.5	4%
2001	2.7	19%	1.3	9%	3.4	24%	2.6	19%	2.0	14%	1.5	10%	0.6	4%
2002	3.0	20%	1.4	9%	3.8	25%	2.6	17%	2.1	14%	1.6	10%	0.7	5%
2003	3.1	20%	1.3	8%	4.0	26%	2.7	17%	2.2	14%	1.5	10%	0.7	5%
2004	3.4	21%	1.3	8%	4.2	26%	2.8	17%	2.2	14%	1.6	10%	0.7	5%
2005	3.2	20%	1.2	7%	4.3	26%	3.0	18%	2.2	13%	1.6	10%	0.8	5%
2006	3.2	20%	1.2	8%	4.0	26%	2.9	19%	2.3	14%	1.5	9%	0.7	4%
2007	2.7	18%	1.2	8%	3.9	26%	2.9	19%	2.1	14%	1.4	10%	0.7	5%

Table 32 Distribution of New Beneficiaries by Cause – Ages 55 and Older

1970		Musculoskeletal													
Year         (,000)         %         (,000) <th< th=""><th></th><th>and Conne</th><th>ctive</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th colspan="2"></th></th<>		and Conne	ctive												
1970	_	Tissue	;	Circul	atory	Me	ntal	Neop	lasm	Ot	her	Nerv	ous	Inju	ry
1971	Year	(,000)	%	(,000)	%	(,000)	%	(,000)	%	(,000)	%	(,000)	%	(,000)	%
1972	1970	0.8	14%	2.4	43%	0.4	6%	0.6	10%	1.0	18%	0.3	6%	0.1	2%
1973         2.0         19%         4.1         39%         0.7         7%         1.0         10%         1.9         18%         0.5         5%         0.3         3           1974         2.6         21%         4.7         37%         0.8         6%         1.1         9%         2.3         19%         0.6         4%         0.4         3           1975         3.2         23%         5.1         36%         0.8         6%         1.3         9%         2.5         18%         0.6         5%         0.6         4           1976         3.9         24%         6.0         37%         0.9         6%         1.5         9%         2.7         17%         0.7         4%         0.5         3           1977         3.6         23%         5.6         36%         0.9         6%         1.5         10%         2.7         17%         0.7         4%         0.5         3           1978         3.4         23%         5.3         35%         0.9         6%         1.8         12%         2.5         17%         0.6         4%         0.4         3           1981         4.2         <	1971	1.3	16%	3.6	42%	0.5	6%	0.9	10%	1.5	18%	0.4	5%	0.2	3%
1974         2.6         21%         4.7         37%         0.8         6%         1.1         9%         2.3         19%         0.6         4%         0.4         3           1975         3.2         23%         5.1         36%         0.8         6%         1.3         9%         2.5         18%         0.6         5%         0.6         4%           1976         3.9         24%         6.0         37%         0.9         6%         1.5         10%         2.7         17%         0.7         4%         0.5         3           1978         3.4         23%         5.3         35%         0.9         6%         1.8         12%         2.5         17%         0.7         4%         0.5         3           1979         3.5         23%         5.3         35%         0.9         6%         1.8         12%         2.5         17%         0.6         4%         0.4         3           1980         3.7         24%         5.2         34%         1.0         6%         2.0         13%         2.4         16%         0.7         4%         0.5           1981         4.2         25%				3.8		i	7%	i							3%
1975         3.2         23%         5.1         36%         0.8         6%         1.3         9%         2.5         18%         0.6         5%         0.6         4           1976         3.9         24%         6.0         37%         0.9         6%         1.5         9%         2.7         17%         0.7         4%         0.5         3           1978         3.4         23%         5.3         35%         0.9         6%         1.8         12%         2.5         17%         0.7         4%         0.4         3           1980         3.7         24%         5.2         34%         1.0         6%         2.0         13%         2.4         16%         0.7         4%         0.5         3           1981         4.2         25%         5.4         33%         1.0         6%         2.1         13%         2.4         16%         0.7         4%         0.6         4           1982         5.0         27%         6.0         32%         1.0         6%         2.1         13%         2.6         14%         0.8         4%         1.0         5           1983         5.6							7%					0.5		0.3	3%
1976         3.9         24%         6.0         37%         0.9         6%         1.5         9%         2.7         17%         0.7         4%         0.5         3           1977         3.6         23%         5.6         36%         0.9         6%         1.5         10%         2.7         17%         0.7         4%         0.5         3           1978         3.4         23%         5.3         35%         0.9         6%         1.8         12%         2.5         17%         0.7         4%         0.4         3           1980         3.7         24%         5.2         34%         1.0         6%         2.0         13%         2.4         16%         0.7         4%         0.5         3           1981         4.2         25%         5.4         33%         1.0         6%         2.1         13%         2.5         15%         0.7         4%         0.6         4           1982         5.0         27%         6.0         32%         1.0         6%         2.4         13%         2.6         14%         0.8         4%         1.0         5           1983         5.6				,								,		,	3%
1977       3.6       23%       5.6       36%       0.9       6%       1.5       10%       2.7       17%       0.7       4%       0.5       3         1978       3.4       23%       5.3       35%       0.9       6%       1.8       12%       2.5       17%       0.7       4%       0.4       3         1980       3.7       24%       5.2       34%       1.0       6%       2.0       13%       2.4       16%       0.7       4%       0.5       3         1981       4.2       25%       5.4       33%       1.0       6%       2.1       13%       2.5       15%       0.7       4%       0.6       4         1982       5.0       27%       6.0       32%       1.0       6%       2.4       13%       2.6       14%       0.8       4%       1.0       5         1983       5.6       27%       6.7       30%       1.1       5%       2.5       12%       3.1       15%       0.9       4%       1.1       5         1984       6.3       29%       1.2       5%       2.6       12%       3.2       15%       1.0       4%       1				,			6%							i	4%
1978       3.4       23%       5.3       35%       0.9       6%       1.8       12%       2.5       17%       0.7       4%       0.4       3         1979       3.5       23%       5.3       35%       0.9       6%       1.8       12%       2.5       17%       0.6       4%       0.4       3         1980       3.7       24%       5.2       34%       1.0       6%       2.0       13%       2.4       16%       0.7       4%       0.5       3         1981       4.2       225%       5.4       33%       1.0       6%       2.1       13%       2.6       14%       0.8       4%       1.0       5         1983       5.6       27%       6.4       31%       1.0       5%       2.5       12%       3.1       15%       0.9       4%       1.1       5         1984       6.3       29%       6.7       30%       1.1       5%       2.6       12%       3.2       15%       1.0       4%       1.2       5         1985       7.1       30%       6.8       28%       1.2       5%       2.6       12%       3.2       15% <td< th=""><th></th><th></th><th></th><th></th><th></th><th>1</th><th>6%</th><th></th><th></th><th></th><th></th><th>0.7</th><th></th><th></th><th>3%</th></td<>						1	6%					0.7			3%
1979       3.5       23%       5.3       35%       0.9       6%       1.8       12%       2.5       17%       0.6       4%       0.4       3         1980       3.7       24%       5.2       34%       1.0       6%       2.0       13%       2.4       16%       0.7       4%       0.5       3         1981       4.2       25%       5.4       33%       1.0       6%       2.1       13%       2.5       15%       0.7       4%       0.6       4         1982       5.0       27%       6.4       31%       1.0       6%       2.4       13%       2.6       14%       0.8       4%       1.0       5         1983       5.6       27%       6.4       31%       1.0       5%       2.5       12%       3.1       15%       0.9       4%       1.1       5         1984       6.3       29%       6.7       30%       1.1       5%       2.6       12%       3.2       15%       1.0       4%       1.2       5         1985       7.1       30%       6.9       29%       1.2       5%       2.8       12%       3.3       14%							6%							0.5	3%
1980         3.7         24%         5.2         34%         1.0         6%         2.0         13%         2.4         16%         0.7         4%         0.5         3           1981         4.2         25%         5.4         33%         1.0         6%         2.1         13%         2.5         15%         0.7         4%         0.6         4           1982         5.0         27%         6.0         32%         1.0         6%         2.4         13%         2.6         14%         0.8         4%         1.0         5           1983         5.6         27%         6.4         31%         1.0         5%         2.5         12%         3.1         15%         0.9         4%         1.1         5           1984         6.3         29%         6.7         30%         1.1         5%         2.6         12%         3.2         15%         1.0         4%         1.2         5           1985         7.1         30%         6.9         29%         1.2         5%         2.6         11%         3.1         14%         1.1         5%         1.2         5           1986         7.5						1									3%
1981       4.2       25%       5.4       33%       1.0       6%       2.1       13%       2.5       15%       0.7       4%       0.6       4         1982       5.0       27%       6.0       32%       1.0       6%       2.4       13%       2.6       14%       0.8       4%       1.0       5         1983       5.6       27%       6.4       31%       1.0       5%       2.5       12%       3.1       15%       0.9       4%       1.1       5         1984       6.3       29%       6.7       30%       1.1       5%       2.6       12%       3.2       15%       1.0       4%       1.2       5         1985       7.1       30%       6.9       29%       1.2       5%       2.7       12%       3.3       14%       1.0       4%       1.2       5         1986       7.5       31%       6.8       28%       1.2       5%       2.8       12%       3.4       14%       1.1       5%       1.2       5         1987       7.4       33%       6.0       27%       1.2       5%       2.6       11%       3.1       14%															3%
1982         5.0         27%         6.0         32%         1.0         6%         2.4         13%         2.6         14%         0.8         4%         1.0         5           1983         5.6         27%         6.4         31%         1.0         5%         2.5         12%         3.1         15%         0.9         4%         1.1         5           1984         6.3         29%         6.7         30%         1.1         5%         2.6         12%         3.2         15%         1.0         4%         1.2         5           1985         7.1         30%         6.9         29%         1.2         5%         2.7         12%         3.3         14%         1.0         4%         1.2         5           1986         7.5         31%         6.8         28%         1.2         5%         2.8         12%         3.4         14%         1.1         5%         1.2         5           1987         7.4         33%         6.0         27%         1.2         5%         2.6         11%         3.1         14%         1.1         5%         1.2         5           1988         8.0															3%
1983         5.6         27%         6.4         31%         1.0         5%         2.5         12%         3.1         15%         0.9         4%         1.1         5           1984         6.3         29%         6.7         30%         1.1         5%         2.6         12%         3.2         15%         1.0         4%         1.2         5           1985         7.1         30%         6.9         29%         1.2         5%         2.7         12%         3.3         14%         1.0         4%         1.2         5           1986         7.5         31%         6.8         28%         1.2         5%         2.8         12%         3.4         14%         1.1         5%         1.2         5           1987         7.4         33%         6.0         27%         1.2         5%         2.6         11%         3.1         14%         1.1         5%         1.2         5           1988         8.0         35%         5.7         25%         1.3         6%         2.6         12%         3.1         13%         1.1         5%         1.2         5           1989         7.3				1				1		1					4%
1984         6.3         29%         6.7         30%         1.1         5%         2.6         12%         3.2         15%         1.0         4%         1.2         5           1985         7.1         30%         6.9         29%         1.2         5%         2.7         12%         3.3         14%         1.0         4%         1.2         5           1986         7.5         31%         6.8         28%         1.2         5%         2.8         12%         3.4         14%         1.1         5%         1.2         5           1987         7.4         33%         6.0         27%         1.2         5%         2.6         11%         3.1         14%         1.1         5%         1.2         5           1988         8.0         35%         5.7         25%         1.3         6%         2.6         12%         3.1         13%         1.1         5%         1.2         5           1989         7.3         35%         5.0         23%         1.4         6%         2.6         12%         2.7         13%         1.1         5%         1.2         5           1990         7.9				i		i						i		i	5%
1985         7.1         30%         6.9         29%         1.2         5%         2.7         12%         3.3         14%         1.0         4%         1.2         5           1986         7.5         31%         6.8         28%         1.2         5%         2.8         12%         3.4         14%         1.1         5%         1.2         5           1987         7.4         33%         6.0         27%         1.2         5%         2.6         11%         3.1         14%         1.1         5%         1.2         5           1988         8.0         35%         5.7         25%         1.3         6%         2.6         12%         3.1         13%         1.1         5%         1.2         5           1989         7.3         35%         5.0         24%         1.3         6%         2.4         12%         2.7         13%         1.1         5%         1.2         5           1990         7.9         37%         5.0         23%         1.4         6%         2.6         12%         2.5         12%         1.0         5%         1.1         5           1991         9.2															5%
1986         7.5         31%         6.8         28%         1.2         5%         2.8         12%         3.4         14%         1.1         5%         1.2         5           1987         7.4         33%         6.0         27%         1.2         5%         2.6         11%         3.1         14%         1.1         5%         1.2         5           1988         8.0         35%         5.7         25%         1.3         6%         2.6         12%         3.1         13%         1.1         5%         1.2         5           1989         7.3         35%         5.0         24%         1.3         6%         2.4         12%         2.7         13%         1.1         5%         1.2         5           1990         7.9         37%         5.0         23%         1.4         6%         2.6         12%         2.5         12%         1.0         5%         1.2         5           1991         9.2         37%         5.3         22%         1.9         8%         2.7         11%         3.0         12%         1.3         5%         1.3         5           1992         9.4				1				1				1		1	5%
1987       7.4       33%       6.0       27%       1.2       5%       2.6       11%       3.1       14%       1.1       5%       1.2       5         1988       8.0       35%       5.7       25%       1.3       6%       2.6       12%       3.1       13%       1.1       5%       1.2       5         1989       7.3       35%       5.0       24%       1.3       6%       2.4       12%       2.7       13%       1.1       5%       1.1       5         1990       7.9       37%       5.0       23%       1.4       6%       2.6       12%       2.5       12%       1.0       5%       1.2       5         1991       9.2       37%       5.3       22%       1.9       8%       2.7       11%       3.0       12%       1.3       5%       1.3       5         1991       9.2       37%       5.3       22%       1.9       8%       2.7       11%       3.0       12%       1.3       5%       1.3       5         1991       9.2       37%       4.5       21%       2.0       8%       2.8       11%       3.0       12%				1											5%
1988       8.0       35%       5.7       25%       1.3       6%       2.6       12%       3.1       13%       1.1       5%       1.2       5         1989       7.3       35%       5.0       24%       1.3       6%       2.4       12%       2.7       13%       1.1       5%       1.1       5         1990       7.9       37%       5.0       23%       1.4       6%       2.6       12%       2.5       12%       1.0       5%       1.2       5         1991       9.2       37%       5.3       22%       1.9       8%       2.7       11%       3.0       12%       1.3       5%       1.3       5         1992       9.4       38%       5.4       21%       2.0       8%       2.8       11%       3.0       12%       1.3       5%       1.3       5         1993       8.0       37%       4.5       21%       1.8       9%       2.5       12%       2.6       12%       1.2       6%       1.0       4         1994       6.3       35%       3.8       21%       1.5       9%       2.4       13%       2.2       12%				,											5%
1989       7.3       35%       5.0       24%       1.3       6%       2.4       12%       2.7       13%       1.1       5%       1.1       5         1990       7.9       37%       5.0       23%       1.4       6%       2.6       12%       2.5       12%       1.0       5%       1.2       5         1991       9.2       37%       5.3       22%       1.9       8%       2.7       11%       3.0       12%       1.3       5%       1.3       5         1992       9.4       38%       5.4       21%       2.0       8%       2.8       11%       3.0       12%       1.3       5%       1.1       5         1993       8.0       37%       4.5       21%       1.8       9%       2.5       12%       2.6       12%       1.2       6%       1.0       4         1994       6.3       35%       3.8       21%       1.5       9%       2.4       13%       2.2       12%       1.0       6%       0.7       4         1995       4.0       30%       3.0       22%       1.3       10%       2.2       17%       1.7       12% <td< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>1</th><th></th><th>1</th><th></th><th></th><th>5%</th></td<>										1		1			5%
1990       7.9       37%       5.0       23%       1.4       6%       2.6       12%       2.5       12%       1.0       5%       1.2       5         1991       9.2       37%       5.3       22%       1.9       8%       2.7       11%       3.0       12%       1.3       5%       1.3       5         1992       9.4       38%       5.4       21%       2.0       8%       2.8       11%       3.0       12%       1.3       5%       1.1       5         1993       8.0       37%       4.5       21%       1.8       9%       2.5       12%       2.6       12%       1.2       6%       1.0       4         1994       6.3       35%       3.8       21%       1.5       9%       2.4       13%       2.2       12%       1.0       6%       0.7       4         1995       4.0       30%       3.0       22%       1.3       10%       2.2       17%       1.7       12%       0.9       6%       0.5       3         1996       2.7       25%       2.2       21%       1.2       11%       2.1       19%       1.4       13% <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>5%</th></t<>															5%
1991       9.2       37%       5.3       22%       1.9       8%       2.7       11%       3.0       12%       1.3       5%       1.3       5         1992       9.4       38%       5.4       21%       2.0       8%       2.8       11%       3.0       12%       1.3       5%       1.1       5         1993       8.0       37%       4.5       21%       1.8       9%       2.5       12%       2.6       12%       1.2       6%       1.0       4         1994       6.3       35%       3.8       21%       1.5       9%       2.4       13%       2.2       12%       1.0       6%       0.7       4         1995       4.0       30%       3.0       22%       1.3       10%       2.2       17%       1.7       12%       0.9       6%       0.5       3         1996       2.7       25%       2.2       21%       1.2       11%       2.1       19%       1.4       13%       0.8       7%       0.3       3         1997       2.5       24%       2.0       20%       1.3       13%       1.9       19%       1.3       13%       <								i				i			5%
1992       9.4       38%       5.4       21%       2.0       8%       2.8       11%       3.0       12%       1.3       5%       1.1       5         1993       8.0       37%       4.5       21%       1.8       9%       2.5       12%       2.6       12%       1.2       6%       1.0       4         1994       6.3       35%       3.8       21%       1.5       9%       2.4       13%       2.2       12%       1.0       6%       0.7       4         1995       4.0       30%       3.0       22%       1.3       10%       2.2       17%       1.7       12%       0.9       6%       0.5       3         1996       2.7       25%       2.2       21%       1.2       11%       2.1       19%       1.4       13%       0.8       7%       0.3       3         1997       2.5       24%       2.0       20%       1.4       13%       1.9       19%       1.3       13%       0.7       7%       0.3       3         1998       2.4       25%       1.9       20%       1.3       13%       1.9       19%       1.2       12%								1							5%
1993       8.0       37%       4.5       21%       1.8       9%       2.5       12%       2.6       12%       1.2       6%       1.0       4         1994       6.3       35%       3.8       21%       1.5       9%       2.4       13%       2.2       12%       1.0       6%       0.7       4         1995       4.0       30%       3.0       22%       1.3       10%       2.2       17%       1.7       12%       0.9       6%       0.5       3         1996       2.7       25%       2.2       21%       1.2       11%       2.1       19%       1.4       13%       0.8       7%       0.3       3         1997       2.5       24%       2.0       20%       1.4       13%       1.9       19%       1.3       13%       0.7       7%       0.3       3         1998       2.4       25%       1.9       20%       1.3       13%       1.9       19%       1.2       12%       0.7       8%       0.3       3         1999       2.1       23%       1.9       20%       1.1       12%       1.9       20%       1.3       14%				1		1						1		1	5%
1994       6.3       35%       3.8       21%       1.5       9%       2.4       13%       2.2       12%       1.0       6%       0.7       4         1995       4.0       30%       3.0       22%       1.3       10%       2.2       17%       1.7       12%       0.9       6%       0.5       3         1996       2.7       25%       2.2       21%       1.2       11%       2.1       19%       1.4       13%       0.8       7%       0.3       3         1997       2.5       24%       2.0       20%       1.4       13%       1.9       19%       1.3       13%       0.7       7%       0.3       3         1998       2.4       25%       1.9       20%       1.3       13%       1.9       19%       1.2       12%       0.7       8%       0.3       3         1999       2.1       23%       1.9       20%       1.1       12%       1.9       20%       1.3       14%       0.7       7%       0.3       3         2000       2.4       24%       1.8       18%       1.2       12%       2.0       20%       1.4       14%				i .		i				i				i	5%
1995       4.0       30%       3.0       22%       1.3       10%       2.2       17%       1.7       12%       0.9       6%       0.5       3         1996       2.7       25%       2.2       21%       1.2       11%       2.1       19%       1.4       13%       0.8       7%       0.3       3         1997       2.5       24%       2.0       20%       1.4       13%       1.9       19%       1.3       13%       0.7       7%       0.3       3         1998       2.4       25%       1.9       20%       1.3       13%       1.9       19%       1.2       12%       0.7       8%       0.3       3         1999       2.1       23%       1.9       20%       1.1       12%       1.9       20%       1.3       14%       0.7       7%       0.3       3         2000       2.4       24%       1.8       18%       1.2       12%       2.0       20%       1.4       14%       0.8       8%       0.4       4         2001       2.9       26%       2.0       18%       1.3       12%       2.1       19%       1.5       14%								1							4%
1996       2.7       25%       2.2       21%       1.2       11%       2.1       19%       1.4       13%       0.8       7%       0.3       3         1997       2.5       24%       2.0       20%       1.4       13%       1.9       19%       1.3       13%       0.7       7%       0.3       3         1998       2.4       25%       1.9       20%       1.3       13%       1.9       19%       1.2       12%       0.7       8%       0.3       3         1999       2.1       23%       1.9       20%       1.1       12%       1.9       20%       1.3       14%       0.7       7%       0.3       3         2000       2.4       24%       1.8       18%       1.2       12%       2.0       20%       1.4       14%       0.8       8%       0.4       4         2001       2.9       26%       2.0       18%       1.3       12%       2.1       19%       1.5       14%       0.8       8%       0.4       4         2002       3.3       27%       2.1       17%       1.5       12%       2.3       19%       1.6       13%						!		į.		!		1		1	4%
1997       2.5       24%       2.0       20%       1.4       13%       1.9       19%       1.3       13%       0.7       7%       0.3       3         1998       2.4       25%       1.9       20%       1.3       13%       1.9       19%       1.2       12%       0.7       8%       0.3       3         1999       2.1       23%       1.9       20%       1.1       12%       1.9       20%       1.3       14%       0.7       7%       0.3       3         2000       2.4       24%       1.8       18%       1.2       12%       2.0       20%       1.4       14%       0.8       8%       0.4       4         2001       2.9       26%       2.0       18%       1.3       12%       2.1       19%       1.5       14%       0.8       8%       0.4       4         2002       3.3       27%       2.1       17%       1.5       12%       2.3       19%       1.6       13%       0.9       7%       0.5       4														ž.	3%
1998       2.4       25%       1.9       20%       1.3       13%       1.9       19%       1.2       12%       0.7       8%       0.3       3         1999       2.1       23%       1.9       20%       1.1       12%       1.9       20%       1.3       14%       0.7       7%       0.3       3         2000       2.4       24%       1.8       18%       1.2       12%       2.0       20%       1.4       14%       0.8       8%       0.4       4         2001       2.9       26%       2.0       18%       1.3       12%       2.1       19%       1.5       14%       0.8       8%       0.4       4         2002       3.3       27%       2.1       17%       1.5       12%       2.3       19%       1.6       13%       0.9       7%       0.5       4						1				1					3%
1999       2.1       23%       1.9       20%       1.1       12%       1.9       20%       1.3       14%       0.7       7%       0.3       3         2000       2.4       24%       1.8       18%       1.2       12%       2.0       20%       1.4       14%       0.8       8%       0.4       4         2001       2.9       26%       2.0       18%       1.3       12%       2.1       19%       1.5       14%       0.8       8%       0.4       4         2002       3.3       27%       2.1       17%       1.5       12%       2.3       19%       1.6       13%       0.9       7%       0.5       4				7											3%
2000       2.4       24%       1.8       18%       1.2       12%       2.0       20%       1.4       14%       0.8       8%       0.4       4         2001       2.9       26%       2.0       18%       1.3       12%       2.1       19%       1.5       14%       0.8       8%       0.4       4         2002       3.3       27%       2.1       17%       1.5       12%       2.3       19%       1.6       13%       0.9       7%       0.5       4						=									3% 3%
2001       2.9       26%       2.0       18%       1.3       12%       2.1       19%       1.5       14%       0.8       8%       0.4       4         2002       3.3       27%       2.1       17%       1.5       12%       2.3       19%       1.6       13%       0.9       7%       0.5       4						1						1			5% 4%
<b>2002</b> 3.3 27% 2.1 17% 1.5 12% 2.3 19% 1.6 13% 0.9 7% 0.5 4												1		Ē	
				-		=									4% 4%
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**Table 33 Average Monthly Benefit for New Beneficiaries** 

	Flat-Rate Portion	Related	Earnings- Portion \$)	Be	ge Total nefit (\$)	Maximum Total Benefit	Related as a Max Earning	Earnings- l Portion % of imum s-Related
Year	(\$)	Males	Females	Males	Females	(\$)	Males	Females
1970	26.53	58.68	48.91	85.21	75.44	106.43	73%	61%
1971	27.06	65.05	50.95	92.11	78.01	109.88	79%	62%
1972	27.60	65.05	49.68	92.65	77.28	111.98	77%	59%
1973	28.15	66.62	49.42	94.77	77.57	114.09	78%	58%
1974	33.76	69.88	50.85	103.64	84.61	125.95	76%	55%
1975	37.27	77.31	54.57	114.58	91.84	139.35	76%	53%
1976	41.44	91.65	65.62	133.09	107.06	157.59	79%	56%
1977	44.84	107.33	78.22	152.17	123.06	175.05	82%	60%
1978	48.19	122.10	89.05	170.29	137.24	194.02	84%	61%
1979 1980	52.51 57.25	137.85 156.05	99.68 114.67	190.36 213.30	152.19 171.92	216.06 240.58	84% 85%	61% 63%
1980	62.91	136.03	127.32	238.32	171.92	240.38 268.04	85% 86%	62%
1982	70.68	196.31	140.37	266.99	211.05	301.42	85%	61%
1983	78.60	220.80	154.15	299.40	232.75	337.46	85%	60%
1984	83.87	248.30	172.26	332.17	256.13	374.50	85%	59%
1985	87.56	278.39	192.66	365.95	280.22	414.13	85%	59%
1986	91.06	310.62	213.94	401.68	305.00	455.64	85%	59%
1987	242.95	326.29	208.79	569.24	451.74	634.09	83%	53%
1988	253.64	338.99	222.48	592.63	476.12	660.94	83%	55%
1989	264.04	342.13	232.03	606.17	496.07	681.23	82%	56%
1990	276.71	351.21	236.39	627.92	513.10	709.52	81%	55%
1991	289.99	346.82	226.90	636.81	516.89	743.64	76%	50%
1992	306.81	345.72	228.29	652.53	535.10	783.89	72%	48%
1993	312.33	372.07	250.36	684.40	562.69	812.85	74%	50%
1994	318.26	383.80	266.78	702.06	585.04	839.09	74%	51%
1995	319.85	392.68	276.75	712.53	596.60	854.74	73%	52%
1996	325.61	396.71	278.50	722.32	604.11	870.92	73%	51%
1997	330.49	371.58	272.49	702.07	602.98	883.10	67%	49%
1998	336.77 339.80	401.55 404.90	287.51 297.21	738.32 744.70	624.28 637.01	895.36 903.55	72% 72%	51% 53%
1999	345.24	404.90	304.78	756.61	650.02	903.33	72%	53%
2000 2001	353.87	411.37	304.78	770.58	658.01	935.12	72%	52%
2001	364.49	410.71	301.40	774.99	665.89	956.05	69%	51%
2002	370.32	404.47	302.50	774.79	672.82	971.26	67%	50%
2004	382.17	406.12	306.85	788.29	689.02	992.80	67%	50%
2005	388.67	406.64	308.81	795.31	697.48	1,010.23	65%	50%
2006	397.61	415.77	318.24	813.38	715.85	1,031.05	66%	50%
2007	405.96	423.79	326.19	829.75	732.15	1,053.77	65%	50%

Table 34 Average Age of Beneficiaries in Pay

Year	Males	Females	<b>Both Sexes</b>
1970	55.1	55.2	55.2
1971	55.3	55.6	55.4
1972	55.5	55.7	55.5
1973	55.7	55.9	55.7
1974	55.8	56.0	55.9
1975	55.8	55.9	55.8
1976	55.7	56.0	55.8
1977	55.8	56.0	55.8
1978	55.8	55.9	55.8
1979	55.8	55.8	55.8
1980	55.7	55.7	55.7
1981	55.5	55.5	55.5
1982	55.1	55.2	55.2
1983	54.9	54.9	54.9
1984	54.9	54.7	54.8
1985	54.9	54.6	54.8
1986	55.0	54.3	54.8
1987	54.8	53.9	54.5
1988	54.7	53.6	54.3
1989	54.5	53.3	54.1
1990	54.3	53.0	53.8
1991	54.0	52.7	53.5
1992	53.7	52.3	53.2
1993	53.4	52.1	52.9
1994	53.3	52.0	52.8
1995	53.3	52.0	52.7
1996	53.2	52.0	52.7
1997	53.1	51.9	52.6
1998	53.0	52.0	52.5
1999	53.0	52.1	52.6
2000	53.1	52.1	52.6
2001	53.1	52.2	52.7
2002	53.1	52.3	52.7
2003	53.2	52.4	52.8
2004	53.2	52.6	52.9
2005	53.3	52.7	53.0
2006	53.4	52.8	53.1
2007	53.6	53.0	53.3

Table 35 Distribution of Beneficiaries in Pay by Cause – Males

	Musculosk														
	and Conn														
	Tissu		Circul	•	Men		Neop		Otl		Nerv		Inju	ıry	Total
Year	(000)	<b>%</b>	(,000)	<b>%</b>	(,000)	00) % (,		%	(,000)	%	(,000)	%	(,000)	<b>%</b>	(,000)
1970	0.4	12%	1.5	41%	0.3	7%	0.3	10%	0.6	17%	0.3	9%	0.1	4%	3.6
1971	1.6	14%	4.7	40%	0.9	8%	0.9	8%	2.1	18%	0.9	8%	0.5	4%	11.7
1972	3.0	15%	8.0	40%	1.7	8%	1.3	6%	3.8	19%	1.5	7%	1.0	5%	20.2
1973	4.3	16%	10.6	39%	2.3	9%	1.6	6%	5.2	19%	2.1	8%	1.3	5%	27.4
1974	5.8	17%	13.0	38%	3.0	9%	1.8	5%	6.5	19%	2.5	7%	1.7	5%	34.4
1975	7.8	18%	15.4	36%	3.8	9%	2.0	5%	7.9	19%	3.1	7%	2.4	6%	42.5
1976	10.1	20%	18.0	35%	4.6	9%	2.4	5%	9.2	18%	3.7	7%	3.0	6%	50.9
1977	12.0	21%	20.2	35%	5.3	9%	2.6	5%	10.4	18%	4.1	7%	3.5	6%	58.2
1978	13.2	21%	21.6	34%	5.8	9%	2.9	5%	11.1	18%	4.5	7%	3.8	6%	63.0
1979	14.1	21%	22.7	34%	6.4	10%	3.1	5%	11.6	17%	4.8	7%	4.0	6%	66.6
1980	15.2	22%	23.7	34%	6.9	10%	3.3	5%	11.9	17%	5.1	7%	4.2	6%	70.5
1981	16.7	22%	24.6	33%	7.6	10%	3.6	5%	12.3	16%	5.5	7%	4.9	6%	75.1
1982	19.2	23%	26.1	32%	8.3	10%	3.9	5%	12.9	16%	6.0	7%	6.1	7%	82.6
1983	22.6	24%	28.1	30%	9.2	10%	4.4	5%	14.1	15%	6.7	7%	7.6	8%	92.6
1984	25.6	25%	30.0	30%	9.9	10%	4.7	5%	15.2	15%	7.4	7%	8.7	9%	101.5
1985	28.7	26%	31.8	29%	10.6	10%	5.1	5%	16.2	15%	8.1	7%	9.6	9%	110.1
1986	32.0	27%	33.4	28%	11.4	10%	5.5	5%	17.3	15%	8.8	7%	10.5	9%	118.9
1987	35.0	28%	34.3	27%	12.2	10%	5.9	5%	18.0	14%	9.4	7%	11.3	9%	126.1
1988	38.3	29%	34.9	26%	13.1	10%	6.1	5%	18.8	14%	10.1	8%	12.2	9%	133.5
1989	41.0	29%	35.1	25%	14.1	10%	6.3	5%	19.4	14%	10.7	8%	12.9	9%	139.5
1990	43.9	30%	35.2	24%	15.2	10%	6.5	4%	20.0	14%	11.3	8%	13.9	10%	146.0
1991	48.2	31%	35.9	23%	17.0	11%	6.8	4%	21.2	14%	12.2	8%	15.4	10%	156.6
1992	53.2	31%	36.8	22%	19.8	12%	7.2	4%	23.0	13%	13.3	8%	16.8	10%	170.2
1993	56.7	31%	37.2	21%	23.4	13%	7.5	4%	24.4	13%	14.4	8%	17.8	10%	181.4
1994	57.8	31%	36.8	20%	25.8	14%	7.6	4%	25.0	13%	15.2	8%	18.2	10%	186.4
1995	56.8	31%	35.5	19%	27.7	15%	7.5	4%	24.8	13%	15.7	8%	18.1	10%	186.1
1996	54.2	30%	33.5	18%	29.1	16%	7.4	4%	24.1	13%	15.9	9%	17.7	10%	181.9
1997	51.2	29%	31.1	18%	30.8	17%	7.1	4%	23.4	13%	16.0	9%	17.2	10%	176.9
1998	48.1	28%	29.0	17%	32.4	19%	7.1	4%	22.7	13%	16.2	9%	16.7	10%	172.2
1999	45.1	27%	27.1	16%	33.1	20%	6.9	4%	22.1	13%	16.3	10%	16.2	10%	166.8
2000	42.4	26%	25.5	16%	33.7	21%	6.9	4%	21.5	13%	16.3	10%	15.7	10%	162.1
2001	40.3	25%	24.2	15%	34.5	22%	6.9	4%	21.3	13%	16.4	10%	15.4	10%	159.0
2002	39.0	25%	23.3	15%	35.5	22%	7.2	5%	21.5	14%	16.6	10%	15.3	10%	158.5
2003	38.1	24%	22.7	14%	36.5	23%	7.5	5%	21.8	14%	16.8	11%	15.2	10%	158.8
2004	37.6	24%	22.2	14%	37.8	24%	7.8	5%	22.0	14%	17.1	11%	15.2	9%	159.8
2005	37.1	23%	21.7	13%	39.2	24%	8.2	5%	22.4	14%	17.4	11%	15.2	9%	161.1
2006	36.6	23%	21.1	13%	40.4	25%	8.5	5%	22.6	14%	17.6	11%	15.2	9%	162.0
2007	36.1	22%	20.4	13%	41.2	25%	8.7	5%	23.0	14%	17.8	11%	15.2	9%	162.3

**Table 36** Distribution of Beneficiaries in Pay by Cause – Females

	Musculosk	keletal													
	and Conn	ective													
	Tissu	e	Circul	atory	Mei	ıtal	Neopl	lasm	Oth	er	Nerv	ous	Inju	ry	Total
Year	(,000)	%	(,000)	%	(,000)	%	(,000)	%	(,000)	%	(,000)	%	(,000)	%	(,000)
1970	0.1	18%	0.2	32%	0.1	13%	0.1	13%	0.1	11%	0.1	10%	0.0	3%	0.5
1971	0.4	20%	0.7	32%	0.3	12%	0.2	11%	0.3	13%	0.2	9%	0.0	2%	2.1
1972	0.9	21%	1.3	31%	0.5	13%	0.4	10%	0.6	13%	0.4	9%	0.1	2%	4.2
1973	1.6	23%	2.0	30%	0.8	13%	0.6	9%	0.9	14%	0.6	9%	0.2	3%	6.7
1974	2.4	25%	2.8	29%	1.2	13%	0.7	7%	1.4	15%	0.8	8%	0.3	3%	9.7
1975	3.6	26%	3.8	28%	1.7	12%	0.9	7%	2.0	15%	1.0	8%	0.4	3%	13.5
1976	4.9	28%	4.8	28%	2.1	12%	1.1	7%	2.6	15%	1.3	8%	0.6	3%	17.5
1977	6.2	29%	5.8	27%	2.6	12%	1.4	7%	3.2	15%	1.6	7%	0.7	3%	21.4
1978	7.3	30%	6.4	26%	3.0	12%	1.6	7%	3.6	15%	1.8	7%	0.8	3%	24.6
1979	8.3	31%	6.7	25%	3.3	12%	1.8	7%	4.0	15%	2.1	8%	0.9	3%	27.2
1980	9.3	31%	7.1	24%	3.7	12%	1.9	7%	4.4	15%	2.4	8%	1.0	3%	29.7
1981	10.4	32%	7.4	23%	4.0	12%	2.2	7%	4.8	15%	2.7	8%	1.1	3%	32.6
1982	11.9	33%	7.8	22%	4.6	13%	2.4	7%	5.2	14%	3.0	8%	1.4	4%	36.2
1983	13.9	34%	8.4	21%	5.1	12%	2.7	7%	5.9	14%	3.3	8%	1.8	4%	41.2
1984	16.0	34%	9.1	20%	5.7	12%	3.0	7%	6.6	14%	3.7	8%	2.2	5%	46.4
1985	18.5	36%	9.7	19%	6.4	12%	3.4	7%	7.1	14%	4.3	8%	2.6	5%	52.0
1986	21.1	36%	10.2	18%	7.2	12%	3.8	7%	7.9	14%	4.9	8%	3.0	5%	58.2
1987	24.1	37%	10.6	16%	8.2	13%	4.1	6%	8.7	13%	5.6	9%	3.5	5%	64.8
1988	27.6	38%	11.0	15%	9.4	13%	4.5	6%	9.8	13%	6.4	9%	4.0	5%	72.7
1989	31.0	39%	11.3	14%	10.7	13%	4.9	6%	10.5	13%	7.3	9%	4.5	6%	80.0
1990	34.6	39%	11.4	13%	12.2	14%	5.2	6%	11.1	13%	8.1	9%	5.1	6%	87.6
1991	39.4	40%	11.8	12%	14.7	15%	5.6	6%	12.0	12%	9.3	9%	5.8	6%	98.6
1992	44.9	40%	12.4	11%	18.3	16%	6.2	6%	13.4	12%	10.8	10%	6.6	6%	112.6
1993	49.8	39%	12.9	10%	22.3	18%	6.7	5%	15.0	12%	12.3	10%	7.3	6%	126.4
1994	53.2	39%	13.2	10%	25.5	19%	7.1	5%	16.0	12%	13.6	10%	7.7	6%	136.3
1995	54.5	38%	13.1	9%	28.3	20%	7.3	5%	16.6	12%	14.6	10%	7.9	6%	142.3
1996	54.1	37%	12.7	9%	30.5	21%	7.5	5%	16.8	12%	15.3	11%	7.9	5%	144.9
1997	53.1	36%	12.2	8%	33.2	23%	7.4	5%	17.1	12%	15.9	11%	7.8	5%	146.7
1998	51.9	35%	11.7	8%	35.6	24%	7.6	5%	17.3	12%	16.5	11%	7.6	5%	148.2
1999	50.2	34%	11.3	8%	37.3	25%	7.7	5%	17.5	12%	17.0	11%	7.4	5%	148.5
2000	48.7	33%	10.9	7%	38.8	26%	8.0	5%	17.9	12%	17.5	12%	7.2	5%	149.1
2001	47.6	32%	10.7	7%	40.5	27%	8.3	5%	18.3	12%	18.1	12%	7.2	5%	150.6
2002	47.4	31%	10.5	7%	42.6	28%	8.7	6%	18.7	12%	18.7	12%	7.2	5%	153.9
2003	47.4	30%	10.4	7%	44.8	28%	9.2	6%	19.1	12%	19.4	12%	7.3	5%	157.6
2004	47.8	30%	10.3	6%	47.1	29%	9.6	6%	19.6	12%	20.1	12%	7.4	5%	161.9
2005	48.3	29%	10.2	6%	49.4	30%	10.2	6%	20.3	12%	20.8	12%	7.5	4%	166.8
2006	48.8	28%	10.3	6%	51.5	30%	10.8	6%	20.9	12%	21.4	12%	7.5	4%	171.3
2007	48.9	28%	10.3	6%	53.3	31%	11.3	6%	21.6	12%	21.8	12%	7.6	4%	174.8

**Table 37 Average Duration of Payments for Terminated Benefits** 

Year of	Average Dura	ntion in Months	Proportion of B	enefits Terminated
Start of Benefit*	Males	Females	Males	Females
1970	65	76	100%	100%
1971	65	73	100%	100%
1972	65	74	100%	100%
1973	63	73	100%	100%
1974	64	77	100%	100%
1975	66	80	100%	100%
1976	64	78	100%	99%
1977	65	79	99%	99%
1978	63	78	99%	99%
1979	65	78	99%	99%
1980	68	79	99%	98%
1981	71	83	98%	97%
1982	72	87	98%	97%
1983	70	86	97%	96%
1984	70	82	97%	95%
1985	69	84	97%	95%
1986	71	87	96%	92%
1987	75	94	94%	91%
1988	76	92	94%	90%
1989	75	94	92%	87%
1990	77	94	90%	83%

<sup>\*</sup> Data after 1990 are considered incomplete and therefore are not shown.

**Table 38 Distribution of Terminated Benefits by Duration – Males** 

Year of				Duration			
Start of	Less than	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 years or
Benefit*	1 Year	years	years	years	years	years	more
1970	15%	14%	12%	10%	8%	7%	33%
1971	15%	16%	12%	10%	8%	7%	31%
1972	16%	16%	12%	10%	8%	7%	31%
1973	17%	16%	12%	10%	8%	7%	30%
1974	16%	16%	12%	9%	8%	7%	31%
1975	16%	16%	12%	10%	8%	7%	32%
1976	17%	17%	12%	10%	8%	6%	31%
1977	18%	15%	11%	9%	8%	6%	32%
1978	19%	16%	12%	9%	7%	6%	31%
1979	19%	15%	10%	9%	7%	7%	33%
1980	18%	14%	10%	8%	8%	7%	35%
1981	17%	13%	10%	9%	8%	6%	36%
1982	16%	14%	11%	9%	8%	6%	37%
1983	16%	14%	10%	9%	7%	7%	36%
1984	15%	14%	11%	9%	8%	7%	36%
1985	16%	13%	11%	9%	8%	7%	36%
1986	14%	13%	11%	9%	8%	7%	38%
1987	13%	12%	9%	9%	8%	7%	42%
1988	13%	11%	9%	8%	8%	8%	44%
1989	13%	11%	9%	8%	8%	8%	43%
1990	12%	10%	9%	8%	8%	8%	45%

<sup>\*</sup> Data after 1990 are considered incomplete and therefore are not shown.

**Table 39 Distribution of Terminated Benefits by Duration – Females** 

Year of				Duration			
Start of Benefit*	Less than 1 Year	1 to 2 years	2 to 3	3 to 4	4 to 5	5 to 6	6 years or more
			years	years	years	years	
1970	12%	13%	11%	9%	8%	7%	40%
1971	13%	13%	12%	9%	9%	7%	37%
1972	13%	14%	11%	8%	9%	7%	37%
1973	12%	13%	11%	10%	10%	8%	38%
1974	10%	13%	11%	9%	10%	8%	39%
1975	10%	13%	10%	10%	9%	8%	41%
1976	10%	12%	12%	9%	9%	8%	40%
1977	12%	12%	10%	9%	8%	7%	41%
1978	14%	13%	9%	8%	8%	7%	41%
1979	14%	12%	10%	8%	8%	7%	40%
1980	13%	13%	9%	8%	9%	8%	41%
1981	12%	11%	9%	9%	8%	7%	43%
1982	13%	10%	9%	8%	7%	7%	46%
1983	12%	11%	9%	8%	7%	7%	45%
1984	12%	12%	9%	8%	8%	7%	44%
1985	12%	11%	9%	8%	8%	7%	45%
1986	11%	10%	9%	8%	8%	6%	48%
1987	9%	9%	8%	7%	6%	7%	54%
1988	9%	8%	7%	6%	7%	7%	54%
1989	9%	9%	7%	6%	7%	7%	56%
1990	9%	8%	6%	6%	7%	7%	57%

<sup>\*</sup> Data after 1990 are considered incomplete and therefore are not shown.

Table 40 Distribution of Terminated Benefits by Reason and Year of Termination

	Die	d	Recov	ered	Attainn of Age		Total
Year of Termination	(,000)	%	(,000)	<b>%</b>	(,000)	0/0	(,000)
1970	· /		. ,		· /		
1970 1971	0.4	86%	0.0	2%	0.1	12%	0.5
1971	1.4	67%	0.1	5%	0.6	28%	2.0
1972	2.2	53%	0.3	8%	1.6	39%	4.1
1974	2.9	47%	0.6	10%	2.6	43%	6.1
1975	3.4	43%	0.7	9%	3.7	48%	7.7
1976	3.7	38%	0.9	9%	5.1	53%	9.7
1976	4.2	36%	1.2	11%	6.2	53%	11.6
1978	4.8	34%	1.8	12%	7.8	54%	14.5
1978	5.5	34%	1.5	9%	9.0	56%	16.0
1980	5.8	33%	1.6	9%	9.9	57%	17.3
1981	6.0 6.4	34%   34%	1.3 1.5	8%   8%	10.3 10.8	58%   58%	17.6 18.7
1982	6.5	35%	1.3	8%	10.6	57%	18.6
1983	6.9	33%	2.5	12%	11.3	55%	20.6
1984	7.3	33%	2.7	12%	12.0	55%	21.9
1985	7.3 7.4	29%	2.7	11%	14.9	59%	25.2
1986	7. <del>4</del> 7.9	30%	2.8	11%	15.6	59%	26.4
1987	8.1	30%	2.4	9%	16.7	61%	27.1
1988	8.3	30%	2.4	9%	16.8	61%	27.4
1989	8.7	30%	2.9	10%	17.4	60%	29.0
1990	8.9	31%	2.4	8%	17.4	61%	28.8
1991	9.0	31%	2.0	7%	17.5	61%	28.5
1992	9.8	33%	2.2	7%	18.0	60%	29.9
1993	9.9	32%	2.4	8%	19.1	61%	31.4
1994	10.4	32%	2.3	7%	19.4	60%	32.2
1995	10.4	31%	2.0	6%	21.0	63%	33.4
1996	10.1	30%	2.6	8%	21.0	62%	33.7
1997	9.6	29%	2.5	8%	20.8	63%	32.9
1998	8.9	28%	2.4	8%	20.1	64%	31.4
1999	8.8	29%	2.1	7%	19.7	64%	30.6
2000	8.8	29%	2.2	7%	19.3	64%	30.3
2001	8.5	30%	1.6	6%	18.5	65%	28.6
2002	8.7	31%	1.7	6%	17.5	63%	28.0
2003	8.7	31%	1.7	6%	17.7	63%	28.2
2004	9.0	32%	2.0	7%	17.2	61%	28.2
2005	9.0	32%	1.8	7%	17.4	61%	28.3
2006	9.2	32%	2.2	8%	17.3	60%	28.7
2007	9.5	32%	2.3	8%	18.0	60%	29.8

Table 41 Mortality Rates by Year (deaths per thousand)

Year	Males	Females
1975	73.9	45.9
1976	68.3	41.4
1977	68.7	44.5
1978	71.4	47.7
1979	68.8	48.1
1980	68.7	45.9
1981	67.0	47.0
1982	59.7	45.0
1983	57.2	40.9
1984	55.2	37.0
1985	50.3	36.3
1986	49.9	35.2
1987	47.4	32.9
1988	45.6	30.0
1989	44.8	30.2
1990	44.1	28.5
1991	40.7	26.0
1992	40.4	25.3
1993	38.2	23.1
1994	38.5	23.5
1995	37.6	24.1
1996	37.2	23.6
1997	35.7	23.1
1998	33.3	22.0
1999	34.6	21.3
2000	34.7	21.9
2001	33.5	21.7
2002	33.9	22.5
2003	33.6	22.3
2004	34.3	22.0
2005	33.3	22.5
2006	33.9	21.9
2007	34.3	22.5

Table 42 Mortality Rates During First Year After Benefit Commencement (deaths per thousand)

Year	Males	Females
1975	95.8	56.1
1976	97.1	54.2
1977	102.9	65.0
1978	134.2	88.9
1979	140.4	102.1
1980	134.3	97.6
1981	124.7	97.0
1982	104.8	86.7
1983	98.9	81.6
1984	100.3	75.5
1985	91.3	73.7
1986	88.8	70.2
1987	88.7	62.8
1988	84.0	57.0
1989	89.0	62.1
1990	87.0	62.3
1991	72.6	50.1
1992	67.8	44.7
1993	65.9	46.5
1994	85.4	57.0
1995	92.8	67.0
1996	107.0	81.5
1997	109.2	77.6
1998	96.7	66.7
1999	103.8	65.8
2000	97.9	69.2
2001	93.4	60.7
2002	83.6	57.3
2003	85.0	54.2
2004	85.3	54.4
2005	78.4	51.5
2006	78.1	54.0
2007	81.9	53.7

Table 43 Mortality Rates by Age (2005-2007) (deaths per thousand)

Year	Males	Females
20	-	413.7
21	-	39.2
22	74.3	15.6
23	83.8	46.0
24	24.7	38.5
25	20.6	17.6
26	21.3	23.4
27	28.0	20.2
28	17.2	24.0
29	18.8	11.3
30	23.9	16.9
31	24.1	16.9
32	20.8	17.3
33	21.2	17.2
34	22.1	12.2
35	19.4	15.5
36	20.1	17.2
37	18.9	12.7
38	19.6	16.5
39	20.3	20.0
40	18.3	16.8
41	20.2	16.9
42	17.0	17.7
43	21.8	19.6
44	22.0	18.1
45	23.9	18.4
46	25.5	19.3
47	27.0	21.6
48	31.7	20.6
49	29.3	22.2
50	30.4	21.1
51	35.0	22.6
52	34.3	23.8
53	35.9	25.0
54	35.5	24.1
55	38.5	23.0
56	36.8	23.1
57	39.0	24.1
58	38.3	22.9
59	40.3	25.4
60	38.9	26.7
61	38.7	24.4
62	38.4	22.1
63	40.5	23.9
64	34.8	20.3

Table 44 Mortality Rates of Males and Females Aged 55-59 (deaths per thousand)

			General	General
	Disabled	Disabled	Population	Population
Year	Males	<b>Females</b>	Males	<b>Females</b>
1975	76.5	42.6	13.8	6.8
1976	70.0	33.8	13.3	6.6
1977	72.9	40.4	13.2	6.6
1978	72.4	42.8	13.3	6.2
1979	70.7	42.3	12.4	6.4
1980	71.8	42.3	12.4	6.3
1981	68.2	40.1	11.8	6.2
1982	67.4	40.3	12.0	6.3
1983	63.4	38.8	11.3	6.0
1984	59.7	34.1	10.8	5.9
1985	56.1	32.5	10.7	5.9
1986	53.7	33.3	10.6	5.5
1987	50.5	30.6	10.1	5.6
1988	47.6	28.6	9.7	5.4
1989	46.7	28.1	9.8	5.3
1990	43.9	26.6	9.3	5.3
1991	41.8	25.6	9.0	5.3
1992	41.6	23.5	9.0	5.2
1993	38.5	22.0	8.7	5.1
1994	39.5	24.1	8.4	5.3
1995	38.5	24.1	8.1	5.1
1996	40.1	24.6	8.0	5.1
1997	40.8	24.5	7.9	4.8
1998	37.1	23.4	7.6	4.8
1999	40.0	22.0	7.4	4.6
2000	38.9	24.6	7.3	4.5
2001	37.6	22.5	7.0	4.3
2002	38.5	25.1	6.9	4.5
2003	36.9	25.1	6.7	4.2
2004	38.0	23.6	6.6	4.2
2005	37.3	22.9	6.7	4.1
2006	40.2	23.1	6.4	3.9
2007	38.5	25.1	6.6	4.0

Table 45 Mortality Rates by Age and Duration – Males (1999-2008) (deaths per thousand)

Age at		Du	ration of F	Benefit (yea	ırs)		
Start of				•	,		Attained
Benefit	1	2	3	4	5	Ultimate	Age
18	46.2	55.6	41.8	39.2	43.0	12.5	23
19	44.3	51.4	39.5	36.6	40.9	11.8	24
20	42.7	47.5	37.3	34.1	38.8	11.2	25
21	41.2	43.9	35.2	31.8	36.8	10.6	26
22	39.8	40.6	33.3	29.6	34.8	10.1	27
23	38.7	37.5	31.5	27.6	32.9	9.7	28
24	37.7	34.7	29.8	25.7	31.0	9.3	29
25	36.8	32.2	28.3	23.9	29.2	9.1	30
26	36.1	30.0	26.8	22.2	27.5	8.9	31
27	35.6	28.0	25.5	20.7	25.8	8.7	32
28	35.3	26.3	24.3	19.3	24.2	8.7	33
29	35.1	24.9	23.3	18.1	22.6	8.7	34
30	35.1	23.8	22.4	17.0	21.1	8.8	35
31	35.3	23.1	21.7	16.0	19.7	9.0	36
32	35.6	22.6	21.1	15.2	18.4	9.2	37
33	36.1	22.5	20.6	14.6	17.2	9.5	38
34	36.8	22.7	20.4	14.1	16.1	9.9	39
35	37.6	23.3	20.3	13.8	15.1	10.3	40
36	38.7	24.4	20.4	13.7	14.4	10.9	41
37	40.0	25.8	20.6	13.9	13.8	11.4	42
38	41.6	27.6	21.1	14.2	13.5	12.1	43
39	43.5	29.9	21.8	14.7	13.5	12.8	44
40	45.8	32.5	22.7	15.4	13.8	13.4	45
41	48.4	35.5	23.7	16.3	14.4	14.1	46
42	51.4	38.8	25.0	17.4	15.4	14.8	47
43	54.9	42.3	26.4	18.7	16.6	15.6	48
44	58.6	45.9	27.9	20.1	18.1	16.3	49
45	62.6	49.4	29.4	21.6	19.8	17.2	50
46	66.7	52.8	31.0	23.2	21.6	18.0	51
47	70.7	56.0	32.6	24.8	23.6	19.0	52
48	74.6	58.8	34.0	26.5	25.5	19.9	53
49	78.0	61.2	35.4	28.1	27.4	20.9	54
50	81.0	63.1	36.6	29.5	29.1	21.9	55 56
51	83.3	64.6	37.7	30.9	30.6	23.0	56
52 53	84.9	65.7	38.6	32.0	31.9	24.2	57
53	85.9	66.4	39.4	32.9	33.0	25.5	58
54	86.4	66.8	40.2	33.6	33.8	26.9	59
55 56	86.5	66.9	40.9	34.1	34.4	28.4	60
56 57	86.6	66.9	41.6	34.5	34.7	29.9	61 62
57 58	86.7 86.8	67.0	42.3 43.0	34.8 35.0	34.8	31.3 32.7	62 63
58 59	86.8 86.8	67.0	43.0		34.8 34.8	34.0	63 64
59 60	86.8 86.9	67.1		35.1 35.1			64 65
61	86.9 87.0	67.1 67.2	44.7 45.6	35.1 35.1	34.9 0.0	0.0 0.0	65 66
62	87.0 87.1	67.2 67.3	45.6 46.6	0.0	0.0	0.0	67
63	87.1	67.3	0.0	0.0	0.0	0.0	68
64	87.2 87.3	0.0	0.0	0.0	0.0	0.0	69

Table 46 Mortality Rates by Age and Duration – Females (1999-2008) (deaths per thousand)

A go of		D	unation of	Donofit (vo	awa)		
Age at		<u> </u>	uration of	benem (ye	ars)		Attained
Start of Benefit	1	2	3	4	5	Ultimate	Age
18	67.8	45.4	42.7	53.4	22.1	11.6	23
19	61.4	43.4	39.4	48.8	21.5	11.0	23 24
20	55.5	39.6	36.3	44.5	20.9	10.6	25
21	50.1	37.0	33.3	40.5	20.3	10.1	26
22	45.1	34.7	30.6	36.7	19.7	9.7	27
23	40.7	32.6	28.1	33.2	19.2	9.3	28
24	36.6	30.7	25.8	30.0	18.6	8.9	29
2 <del>5</del>	33.1	29.1	23.7	27.1	18.1	8.6	30
26	30.1	27.8	21.8	24.4	17.6	8.3	31
27	27.5	26.7	20.1	22.0	17.0	8.1	32
28	25.4	25.8	18.6	19.9	16.7	7.9	33
29	23.7	25.2	17.3	18.0	16.2	7.7	34
30	22.6	24.8	16.3	16.5	15.8	7.6	35
31	22.0	24.6	15.5	15.2	15.4	7.5 7.5	36
32	21.8	24.7	14.9	14.1	15.0	7.4	37
33	22.2	25.0	14.5	13.3	14.7	7. <del>4</del> 7.4	38
34	23.0	25.5	14.4	12.8	14.4	7.4	39
35	24.3	26.2	14.6	12.5	14.1	7.5	40
<b>36</b>	26.0	27.2	15.0	12.5	13.8	7.6	41
37	28.0	28.3	15.6	12.7	13.6	7.0 7.7	42
38	30.4	29.5	16.5	13.0	13.5	7.7 7.9	43
39	32.9	31.0	17.5	13.5	13.4	8.3	44
40	35.6	32.6	18.7	14.2	13.4	8.6	45
41	38.3	34.3	20.0	15.0	13.5	9.1	46
42	41.1	36.3	21.3	15.9	13.7	9.5	47
43	43.8	38.3	22.6	16.8	13.7	10.0	48
44	46.3	40.4	23.8	17.7	14.2	10.4	49
45	48.7	42.6	24.9	18.6	14.5	10.4	50
46	50.8	44.7	25.9	19.4	14.8	11.1	51
47	52.6	46.7	26.8	20.2	15.2	11.4	52
48	54.0	48.6	27.6	20.9	15.5	11.7	53
49	55.1	50.4	28.3	21.5	16.0	12.0	54
50	55.8	51.9	28.9	22.1	16.5	12.5	55
51	56.3	53.2	29.4	22.7	17.1	13.1	56
52	56.5	54.1	29.8	23.1	17.9	13.9	57
53	56.6	54.7	30.1	23.6	18.7	14.8	58
54	56.6	55.0	30.5	24.0	19.6	15.7	59
55	56.7	55.3	30.8	24.4	20.6	16.6	60
<b>56</b>	56.7	55.6	31.1	24.8	21.7	17.4	61
57	56.8	55.9	31.4	25.2	22.8	18.0	62
58	56.8	56.2	31.6	25.7	24.0	18.4	63
59	57.4	56.4	31.8	26.2	25.2	18.6	64
60	58.4	56.7	32.0	26.8	26.5	0.0	65
61	59.8	57.0	32.1	27.4	0.0	0.0	66
62	61.5	57.3	32.2	0.0	0.0	0.0	67
63	63.7	57.6	0.0	0.0	0.0	0.0	68
64	66.3	0.0	0.0	0.0	0.0	0.0	69

Table 47 Recovery Rates by Sex (recoveries per thousand)

Year	Males	Females
1975	22.8	10.2
1976	25.4	13.6
1977	31.9	16.7
1978	25.4	11.2
1979	25.7	12.9
1980	19.2	11.0
1981	19.7	11.2
1982	15.8	10.8
1983	23.4	15.1
1984	22.8	14.6
1985	22.0	14.2
1986	19.8	13.0
1987	15.4	9.4
1988	14.0	8.1
1989	15.7	9.8
1990	12.1	7.5
1991	8.9	5.9
1992	8.3	5.9
1993	8.1	6.1
1994	7.9	5.0
1995	6.5	4.4
1996	8.3	5.7
1997	8.4	5.5
1998	7.9	5.3
1999	7.1	4.9
2000	7.5	5.3
2001	5.8	4.1
2002	6.0	4.4
2003	6.0	4.4
2004	7.0	5.2
2005	6.3	4.6
2006	7.3	5.6
2007	7.8	6.0

Table 48 Recovery Rates by Age and Sex (2005-2007) (recoveries per thousand)

Year	Males	Females
20	-	-
21	-	=
22	27.9	-
23	24.7	27.6
24	35.2	38.5
25	33.4	42.3
26	56.1	21.1
27	37.3	18.5
28	43.6	25.4
29	31.3	36.1
30	43.5	15.1
31	29.1	15.5
32	30.0	12.1
33	29.0	16.3
34	25.6	17.9
35	24.3	15.2
36	20.1	14.9
37	15.4	10.2
38	13.7	15.0
39	15.1	13.3
40	16.5	13.1
41	15.0	10.3
42	13.8	10.1
43	11.3	11.9
44	13.4	11.2
45	11.8	8.7
46	11.2	10.4
47	11.7	7.4
48	11.0	9.2
49	8.2	7.8
50	7.5	7.1
51	7.1	5.7
52	6.1	5.3
53	5.6	4.8
54	5.6	4.2
55	5.5	3.9
56	5.4	3.3
57	4.6	2.3
58	3.7	2.8
59	3.5	1.6
60	3.6	1.8
61	3.4	1.5
62	3.6	1.7
63	2.1	1.1
64	1.8	0.4

Table 49 Recovery Rates by Age and Duration – Males (1999-2008) (recoveries per thousand)

Age at	Duration of Benefit (years)									
Start of	W y									
Benefit	1	2	3	4	5	Ultimate	Age			
18	52.6	103.9	73.4	82.5	104.9	64.0	23			
19	49.0	96.4	70.2	77.3	97.1	57.5	24			
20	45.5	89.2	67.1	72.2	89.6	51.4	25			
21	42.2	82.3	64.1	67.3	82.5	45.8	26			
22	39.1	75.8	61.1	62.6	75.8	40.6	27			
23	36.1	69.6	58.2	58.2	69.4	35.9	28			
24	33.3	63.8	55.4	53.9	63.5	31.6	29			
25	30.6	58.4	52.6	49.9	58.0	27.7	30			
26	28.0	53.3	49.9	46.0	52.8	24.3	31			
27	25.7	48.6	47.2	42.4	48.1	21.4	32			
28	23.4	44.2	44.7	38.9	43.7	18.9	33			
29	21.4	40.1	42.2	35.7	39.7	16.8	34			
30	19.4	36.4	39.7	32.7	36.0	15.0	35			
31	17.6	33.1	37.4	29.8	32.8	13.7	36			
32	16.0	30.1	35.2	27.2	29.9	12.7	37			
33	14.4	27.5	33.1	24.8	27.3	11.9	38			
34	13.1	25.2	31.1	22.6	25.1	11.4	39			
35	11.8	23.2	29.3	20.7	23.2	10.9	40			
36	10.6	21.5	27.7	19.0	21.6	10.6	41			
37	9.6	20.2	26.3	17.6	20.2	10.2	42			
38	8.7	19.1	25.0	16.4	19.0	9.8	43			
39	8.0	18.2	24.0	15.4	18.0	9.3	44			
40	7.3	17.5	23.1	14.6	17.1	8.7	45			
41	6.8	17.1	22.4	14.0	16.2	8.0	46			
42	6.3	16.8	21.8	13.5	15.4	7.3	47			
43	5.9	16.6	21.3	13.1	14.6	6.5	48			
44	5.5	16.5	20.8	12.6	13.8	5.7	49			
45	5.1	16.4	20.2	12.2	12.9	5.0	50			
46	4.8	16.3	19.6	11.8	12.0	4.4	51			
47	4.4	16.2	18.8	11.2	11.0	3.9	52			
48	4.1	15.9	17.9	10.7	10.0	3.5	53			
49	3.8	15.6	16.9	10.0	9.0	3.2	54			
50	3.5	15.3	15.7	9.4	8.1	2.9	55			
51	3.3	14.9	14.6	8.6	7.1	2.7	56			
52	3.1	14.4	13.4	7.9	6.3	2.4	57			
53	3.1	14.0	12.2	7.2	5.5	2.2	58			
54	3.0	13.5	11.0	6.6	4.9	1.9	59			
55	3.1	13.1	9.9	5.9	4.4	1.6	60			
56	3.2	12.7	8.9	5.4	4.0	1.4	61			
57	3.3	12.3	8.0	4.9	3.7	1.1	62			
58	3.5	11.9	7.3	4.5	3.6	0.9	63			
59	3.8	11.7	6.6	4.2	3.6	0.6	64			
60	4.1	11.4	6.1	3.9	3.8	0.0	65			
61	4.4	11.3	5.6	3.8	0.0	0.0	66			
62	4.7	11.1	5.4	0.0	0.0	0.0	67			
63	5.1	11.1	0.0	0.0	0.0	0.0	68			
64	5.5	0.0	0.0	0.0	0.0	0.0	69			

Table 50 Recovery Rates by Age and Duration – Females (1999-2008) (recoveries per thousand)

Age at	Duration of Benefit (years)							
Start of	z minor of zonom (jours)							
Benefit	1	2	3	4	5	Ultimate	Age	
18	12.3	64.1	75.4	86.6	131.4	57.2	23	
19	11.7	59.3	69.3	79.2	118.7	52.2	24	
20	11.2	54.7	63.5	72.2	106.8	47.5	25	
21	10.7	50.4	58.1	65.6	95.6	43.0	26	
22	10.2	46.3	53.1	59.4	85.1	38.9	27	
23	9.8	42.4	48.4	53.6	75.4	35.1	28	
24	9.3	38.8	44.1	48.2	66.5	31.5	29	
25	8.9	35.5	40.1	43.3	58.3	28.3	30	
26	8.4	32.3	36.4	38.8	50.9	25.3	31	
27	8.0	29.4	33.2	34.6	44.2	22.7	32	
28	7.6	26.8	30.2	30.9	38.2	20.3	33	
29	7.2	24.4	27.6	27.6	33.0	18.3	34	
30	6.9	22.3	25.3	24.7	28.4	16.5	35	
31	6.5	20.4	23.4	22.2	24.6	14.9	36	
32	6.2	18.8	21.7	20.0	21.4	13.6	37	
33	5.8	17.5	20.4	18.2	18.8	12.5	38	
34	5.5	16.4	19.3	16.8	16.8	11.6	39	
35	5.2	15.7	18.4	15.7	15.2	10.8	40	
36	4.9	15.2	17.8	14.8	14.0	10.2	41	
37	4.6	15.0	17.4	14.2	13.2	9.6	42	
38	4.4	15.0	17.2	13.8	12.6	9.1	43	
39	4.2	15.1	17.1	13.5	12.2	8.6	44	
40	3.9	15.4	17.1	13.2	11.9	8.1	45	
41	3.8	15.8	17.2	13.0	11.6	7.5	46	
42	3.6	16.1	17.3	12.7	11.2	6.9	47	
43	3.5	16.4	17.4	12.4	10.8	6.2	48	
44	3.3	16.5	17.3	11.9	10.3	5.5	49	
45	3.2	16.4	17.1	11.3	9.7	4.9	50	
46	3.2	16.2	16.8	10.6	9.0	4.3	51	
47	3.1	15.7	16.2	9.8	8.3	3.7	52	
48	3.0	15.0	15.5	8.8	7.4	3.2	53	
49	3.0	14.2	14.5	7.8	6.6	2.8	54	
50	2.9	13.3	13.4	6.8	5.8	2.4	55	
51	2.8	12.2	12.2	5.8	5.1	2.0	56	
52	2.7	11.2	10.9	5.0	4.5	1.6	57	
53	2.6	10.1	9.6	4.2	3.9	1.3	58	
54	2.5	9.1	8.4	3.6	3.5	1.0	59	
55	2.4	8.3	7.2	3.2	3.2	0.8	60	
<b>56</b>	2.2	7.6	6.2	3.0	3.0	0.7	61	
57	2.1	7.0	5.3	2.9	3.0	0.5	62	
58	2.0	6.7	4.5	3.1	3.1	0.5	63	
59	1.8	6.6	3.9	3.5	3.3	0.4	64	
60	1.7	6.6	3.4	4.0	3.6	0.0	65	
61	1.6	6.9	3.1	4.8	0.0	0.0	66	
62	1.6	7.4	3.0	0.0	0.0	0.0	67	
63	1.5	8.1	0.0	0.0	0.0	0.0	68	
64	1.5	0.0	0.0	0.0	0.0	0.0	69	

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