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# Disabled workers

*Gary L. Cohen*

In recent years, the role of disabled workers in the Canadian labour market has increased: they have become more accepted, technology has improved the aids they may require to participate, and special training programmes have become more readily available.

In June 1986, one out of every 30 workers in Canada had a disability that limited the kind or amount of work he or she could do. Nationwide, there were almost 380,000 such workers.

Like their non-disabled counterparts, disabled persons work at a wide variety of occupations, in many different industries, and in all provinces and territories. They also possess a wide range of employment-related qualifications. This article examines the characteristics of disabled workers and compares their employment situation to that of the non-disabled.

## Who are the disabled workers?

In June 1986, the number of disabled men aged 15-64 was slightly smaller than the number of women: 616,000 compared with 640,000. However, the number of employed disabled men (236,000) was much greater than the number of women (142,000). Thus, almost two-fifths of disabled men were employed compared with only one-fifth of disabled women. For both sexes combined, the employment ratio [\(1\)](#) was 30%. In comparison, the employment ratio for the non-disabled population was 70% ([Table 1](#)).



**Table 1 Employment by age and sex, June 1986**

*Source: Health and Activity Limitation Survey*

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Not surprisingly, the disabled population is older on average than the non-disabled population. In 1986, fewer than 10% of disabled persons were aged 15-24 while almost 40% were aged 55-64; the comparable proportions for the non-disabled population were 26% and 11% respectively.

Employment ratios for disabled persons, like those of their non-disabled counterparts, vary considerably by age. The highest rate (44%) occurred among those aged 25-44. The ratio for youth was considerably lower (31%), probably because many were still attending school and were not active in the labour market. Only one of every six disabled persons aged 55-64 was employed. For each age group, the employment ratio for disabled men substantially exceeded that for disabled women.

About 45% of disabled workers had a single disability only; the remainder had multiple disabilities. The employment ratio for those with a single disability was 37%, compared with 27% for those with multiple disabilities. There was not much difference in employment ratios by nature of disability; persons with seeing disabilities were least likely to be employed. [\(2\)](#)



## Figure 1 Disabled persons, June 1986

*Source: Health and Activity Limitation Survey*

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## Where do they work?

Across Canada, employment ratios for disabled persons varied substantially. In Eastern Canada, especially Newfoundland and Quebec, rates were much lower than the national average, whereas rates in the Prairie provinces and the territories far exceeded the average. The employment ratios for disabled women in Newfoundland and Quebec were particularly low: barely one in eight were employed ([Table 2](#)).



## Chart A Employment ratio, June 1986

*Source: Health and Activity Limitation Survey*

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## Table 2 **Employment ratios by province and territory, June 1986**

*Source: Health and Activity Limitation Survey*

This pattern is essentially similar to that of provincial and territorial employment for the non-disabled population. It suggests that for disabled persons, as for the population at large, the likelihood of employment may be closely related to the level of employment opportunity in any specific locale.

The majority of disabled workers lived in urban areas, mainly in metropolitan centres. However, there was little difference between the employment ratios for disabled persons in urban and rural areas.

## How well educated are they?

Disabled persons tend to have lower educational attainment than the non-disabled population. In 1986, one in three disabled persons had no more than a primary school education (less than Grade 9) and 61% had not completed high school - proportions well above those for the non-disabled population. Similarly, only 4% of disabled persons had a university degree compared with 11 % of the non-disabled ([Table 3](#)).



## Table 3 **Educational attainment, June 1986**

*Source: Health and Activity Limitation Survey*

In part these differences may reflect the fact that the disabled population is older on average than the non-disabled population, and older persons tend to have less formal education. But for each age group, a higher proportion of persons with disabilities had only a primary school education.

How does education affect their employment? For both disabled and non-disabled Canadians, the employment ratio rose substantially as educational attainment increased, but this pattern was more pronounced for persons with disabilities. Among the disabled population, 17% of persons with only primary schooling were employed, compared with 50% of those with university degrees; the comparable figures for non-disabled persons were 55% and 87% ([Table 4](#)).



## Table 4 **Education and employment, June 1986**

*Source: Health and Activity Limitation Survey*

Persons who became disabled before completing their education were more likely to be employed (37%) than those disabled after they had completed their education (28%). As well, workers disabled before completing their education tended to have higher levels of educational attainment than those disabled after completing their education. This raises some interesting, but as yet unanswered, questions about the relationship between disability and the pursuit of higher education.

## What kind of work do they do?

Disabled workers' share of total employment [\(3\)](#) was largest in agriculture, health and welfare services, and other primary industries (fishing, forestry and mining). They were least prevalent in the finance, insurance and real estate industry, especially in banks, trust companies and insurance carriers ([Table 5](#)).



## Table 5 **Employed disabled persons by industry, June 1986**

*Source: Health and Activity Limitation Survey*

The prevalence of disabled workers in agriculture is perhaps related to the high proportion of self-employment in that industry, that is, persons who work for themselves may find it somewhat easier to continue being employed after becoming disabled. (Disabled workers are somewhat over-represented among the ranks of the self-employed.)

Disabled workers were also active in most occupations. They represented a smaller than average share of total employment among senior and middle managers, and professionals. [\(4\)](#) On the other hand, disabled workers were somewhat over-represented among the ranks of skilled artisans, semi-skilled workers and other manual workers. They also made up a larger than average share of the semi-professional and technicians group ([Table 6](#)).



## Table 6 **Employed disabled persons by occupation, June 1986**

**Source:** *Health and Activity Limitation Survey*

\* \* Includes some workers who were not coded to a specific occupation. Occupation coding was based on "job equity concepts"(see [note 4](#)).

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These differences between the occupational distribution of disabled workers and their non-disabled counterparts perhaps reflect, in part, differences in educational attainment. However, even highly educated disabled workers, that is, those with a postsecondary certificate or diploma or a university degree, were less likely to be employed as managers or professionals than similarly educated non-disabled workers.

## How much do they earn?

Disabled workers were more likely to have lower employment income than their nondisabled counterparts. More than two-fifths of disabled workers earned less than \$10,000 in 1985, compared with only one-third of non-disabled workers. As well, only 16% of disabled workers earned \$30,000 or more, compared with 22% of the non-disabled. ([5](#))



### Table 7 1985 earnings distribution

**Source:** *Health and Activity Limitation Survey*



### Chart B Average 1985 earnings

**Source:** *Health and Activity Limitation Survey*

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Average employment income for persons with disabilities (\$15,900) was some 19% lower than the average of \$19,600 earned by non-disabled workers. The difference was more pronounced for men (in excess of \$6,000) than for women (less than \$2,000).

In part, this inequality likely reflects the educational and occupational differences between disabled and non-disabled workers. The gap in earnings narrows substantially for more highly educated disabled workers. In fact, 1985 average earnings for disabled women with a university degree were higher than those of similarly educated non-disabled women.

However, another factor in the determination of average earnings is work schedule. Non-disabled workers were more likely than disabled workers to be employed on a full-time, full-year basis [\(6\)](#) (59% compared with 49%) and such workers typically have higher levels of earnings than part-year or part-time workers.

## Conclusion

The participation of disabled persons in the work force will likely expand in the future if the equality of social and economic opportunity continues to rise. And for disabled persons, as for the population at large, education will undoubtedly continue to be a key factor for success in the labour market.

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## The Health and Activity Limitation Survey

In May 1980, the Special Parliamentary Committee on the Disabled and the Handicapped was formed to report to the House of Commons on the needs and concerns of disabled persons in Canada. One of the recommendations in the Committee's report, [Obstacles](#) (1981), was that Statistics Canada develop a national data base on disability. Statistics Canada has since undertaken major data collection activities to support this goal: the most recent, the Health and Activity Limitation Survey (HALS), was conducted as a follow-up to the 1986 Census.

The World Health Organization defines disability as "any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being" (1980). In practice, HALS used a functional limitation approach for the adult population; it defined disability in terms of difficulties in performing routine tasks of daily living such as walking, climbing stairs, feeding oneself or reading a newspaper. In addition, the limitation must have lasted (or be expected to last) a minimum of six months. Individuals were not considered disabled if they used a technical aid that completely eliminated the limitation.

HALS asked all disabled persons whether they were limited in the kind or amount of work they could perform because of their health problem or condition. Only those who responded "yes" were defined as being limited at work and are the subjects of this article. While the data in this study relate only to disabled persons with work limitations, the phrase "disabled persons" is generally used instead for brevity.

HALS also collected data on disabled children and senior citizens, and disabled persons residing in institutions. For further information about HALS, see: [The Health and Activity Limitation Survey User's](#)

**Guide** (1988) or contact the Disability Database Program, Statistics Canada, (613) 951-0025.

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## Disabled workers not limited at work

The Health and Activity Limitation Survey, in addition to identifying 1.3 million disabled persons who were limited in their capacity to work, also identified 512,000 disabled Canadians who reported that their disability did *not* limit their work.

This "disabled but not limited at work" population tended to be younger than the "disabled and limited" group: less than one-quarter were aged 55-64 compared with almost 40%. As well, there were more men than women among the disabled but not limited group, the opposite of the disabled and limited population.

Persons disabled but not limited at work were more likely to be employed than their disabled and limited counterparts. In fact, the employment ratios for this group, 75% for men and 53% for women, were similar to the ratios for the non-disabled population.

Two-thirds of the disabled but not limited at work population had a single disability only, compared with one-third of persons disabled and limited. The employment ratios for both the single-disability and the multiple-disability groups were some 30 percentage points higher for the disabled but not limited population.

Educational characteristics of persons who were disabled but not limited at work tended to resemble those of the non-disabled population. Employment ratios for disabled workers who did not report work limitations, like those for the non-disabled and the disabled but limited populations, rose rapidly as the level of educational attainment increased.

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## Notes

### *Note 1*

The employment ratio, also known as the employment/population ratio, measures the number of employed persons as a percentage of the population.

### *Note 2*



The following are the types of disability as defined by HALS:

<b>Mobility:</b>	limited inability to walk, move from room to room, carry an object for 10 metres, or stand for long periods
<b>Agility:</b>	limited in ability to bend, dress or undress oneself, get in and out of bed, cut toenails, use fingers to grasp or handle objects, reach, or cut own food
<b>Seeing:</b>	limited in ability to read ordinary newsprint or to see someone from four metres, even when wearing glasses
<b>Hearing:</b>	limited in ability to hear what is being said in conversation with one other person or two or more persons, even when wearing a hearing aid
<b>Speaking:</b>	limited in ability to speak and be understood
<b>Other:</b>	limited because of learning disability or emotional or psychiatric disability, or because of developmental delay
<b>Unknown:</b>	limited but nature not specified

**Note 3**

Total employment includes all disabled workers, both with and without work limitations, as well as the non-disabled.

**Note 4**

Occupational coding is based on Canadian Job Equity concepts. Groupings were determined on the basis of three factors: the nature and scope of the duties and responsibilities of each occupation; the average weighted level of the workers' education in each occupational group; and a score related to the general training and professional requirements of each occupation according to the Canadian Classification and Dictionary of Occupations. For further information, see: [\*\*Employment Equity Availability Data Report on Designated Groups\*\*](#) (technical appendix).

**Note 5**

Since HALS was conducted in June 1986, its income data relate to the 1985 calendar year.

**Note 6**

Full-time workers are those who usually work 30 or more hours per week. Full-year workers are those employed for 49 or more weeks per year.



# References

- "*Obstacles.*" Report of the Special Parliamentary Committee on the Disabled and the Handicapped, February 1981.
- World Health Organization. "*International Classification of Impairments, Disabilities, and Handicaps.*" 1980.
- Statistics Canada. "*The Health and Activity Limitation Survey: User's Guide.*" (82-602E), June 1988.
- Cohen, G. L. "*Disability and the Labour Force: An Analysis of Disabled Persons Not in the Labour Force.*" Statistics Canada. October 1989.
- Employment and Immigration Canada. "*Employment Equity Availability Data Report on Designated Groups.*" December 1986.

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# Source

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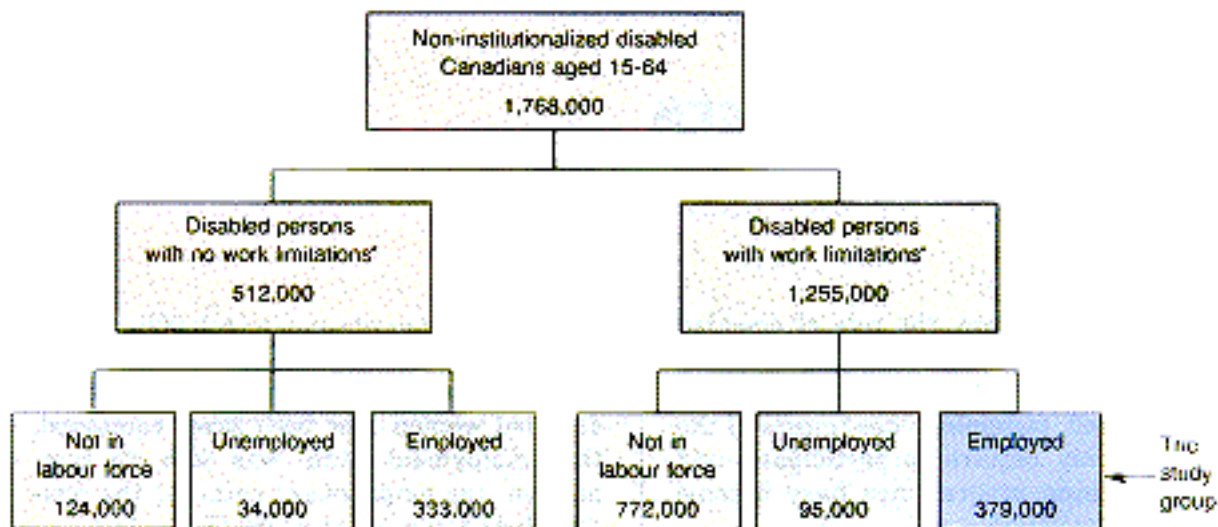
Table 1

**Employment by age and sex, June 1986**

	Disabled persons		Non-disabled persons	
	Number	Employment ratio	Number	Employment ratio
	'000	%	'000	%
<b>Both sexes</b>				
15-64 years	379	30	10,641	70
15-24	33	31	2,228	57
25-34	83	45	3,163	76
35-44	95	43	2,674	81
45-54	91	34	1,627	76
55-64	77	16	949	55
<b>Men</b>				
15-64 years	236	38	6,041	80
15-24	18	36	1,147	58
25-34	47	49	1,799	88
35-44	56	53	1,523	92
45-54	61	45	946	90
55-64	55	24	627	75
<b>Women</b>				
15-64 years	142	22	4,600	60
15-24	15	26	1,081	56
25-34	36	40	1,364	65
35-44	39	33	1,151	70
45-54	30	23	681	63
55-64	23	9	322	36

*Source: Health and Activity Limitation Survey*

## Disabled persons, June 1986

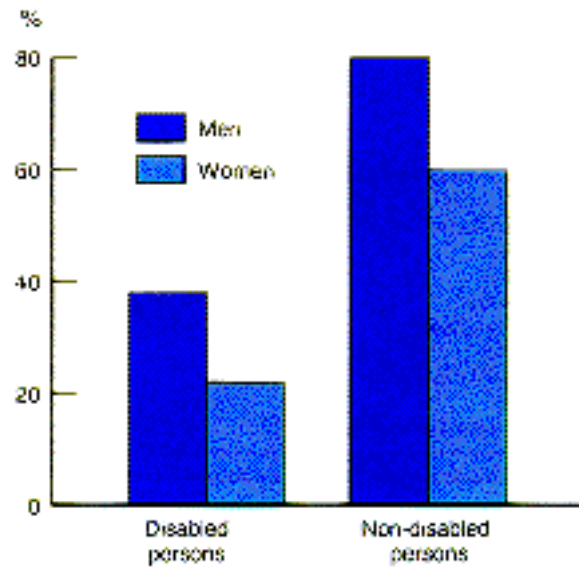


\* About 9,000 persons with work limitations and 22,000 without work limitations did not report their labour force status

Source: Health and Activity Limitation Survey.

### Employment ratio, June 1986

For both the disabled and the non-disabled populations, men were more likely to be employed than women.



Source: Health and Activity Limitation Survey.

Table 2

**Employment ratios by province and territory, June 1986**

	Employment ratio					
	Disabled persons			Non-disabled persons		
	Both sexes	Men	Women	Both sexes	Men	Women
	%					
Canada	30	38	22	70	80	60
Newfoundland	18	24	12	53	64	42
Prince Edward Island	29	38	19	67	75	58
Nova Scotia	30	37	22	62	75	51
New Brunswick	26	34	17	64	73	55
Quebec	20	28	12	64	74	54
Ontario	31	40	23	75	85	66
Manitoba	44	57	33	75	85	65
Saskatchewan	43	52	33	73	85	61
Alberta	40	46	35	74	83	65
British Columbia	34	41	27	67	76	57
Yukon	41	40	41	78	82	74
Northwest Territories	43	50	35	79	84	72

*Source: Health and Activity Limitation Survey*

Table 3

**Educational attainment, June 1986**

	Disabled persons	Non-disabled persons
	%	
All levels of education	100	100
Primary only (0-8 years)	33	11
Some high school	27	27
High school graduation	8	14
Trades certificate	10	11
Some postsecondary	8	12
Postsecondary certificate or diploma	9	14
University degree	4	11

*Source: Health and Activity Limitation Survey*

Table 4

**Education and employment, June 1986**

	Employment ratio	
	Disabled persons	Non-disabled persons
	%	
All levels of education	30	70
Primary only (0-8 years)	17	55
Some high school	30	57
High school graduation	34	69
Trades certificate	41	82
Some postsecondary	39	75
Postsecondary certificate or diploma	46	80
University degree	50	87

*Source: Health and Activity Limitation Survey*



Table 5

**Employed disabled persons by industry, June 1986**

	Number	Share of total employment
	'000	%
All industries*	379	3.3
Agriculture	19	4.7
Other primary industries	12	4.1
Manufacturing	66	3.5
Construction	24	3.4
Transportation, communication and other utilities	22	2.4
Wholesale trade	15	2.8
Retail trade	43	3.0
Finance, insurance and real estate	14	2.2
Education and related services	17	2.3
Health and welfare services	37	4.3
Services to business management	14	2.6
Accommodation and food services	18	2.7
Other services†	22	3.4
Public administration and defence	27	3.4

*Source: Health and Activity Limitation Survey*

*\* Includes some workers who were not coded to a specific industry. Industry coding was based on the 1970 Standard Industrial Classification.*

*† Religious organizations, amusement and recreation services, personal services (including private households) and miscellaneous services.*

Table 6

**Employed disabled persons by occupation, June 1986**

	Number	Share of total employment
	'000	%
All occupations*	379	3.3
Senior managers	3	1.5
Middle managers	19	2.2
Professionals	33	2.2
Semi-professionals and technicians	20	3.8
Supervisors	9	2.9
Foremen/forewomen	10	2.9
Clerical workers	49	2.6
Sales workers	29	3.1
Service workers	31	3.0
Skilled crafts and trades persons	37	4.0
Semi-skilled workers	38	4.1
Other manual workers	68	4.3

*Source: Health and Activity Limitation Survey*

*\* Includes some workers who were not coded to a specific occupation. Occupation coding was based on "job equity concepts"(see note 4).*

Table 7

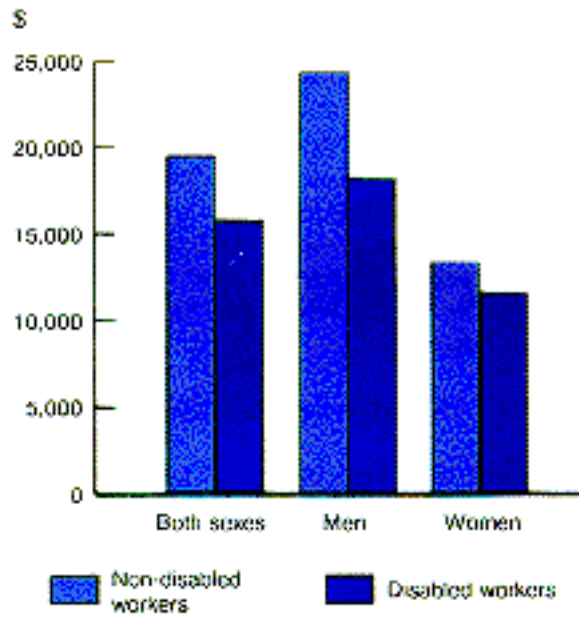
**1985 earnings distribution**

	Disabled workers	Non-disabled workers
	%	
All levels	100	100
Less than \$10,000	41	33
\$10,000 - \$19,999	24	25
\$20,000 - \$29,999	19	21
\$30,000 and over	16	22

*Source: Health and Activity Limitation Survey*

## Average 1985 earnings

The earnings gap between disabled and non-disabled workers was much larger for men than women.



Source: Health and Activity Limitation Survey