

DISABILITY INFORMATION



SHEET

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Experience with and Access to Technology for Persons with Disabilities

In this sixth edition of **CCSD's Disability Information Sheets**, we provide statistics on persons with disabilities and their access to and use of computers. Overall, persons with disabilities have more limited access to personal computers. This is only partially due to the fact that persons with disabilities tend to be older, on average, than the population without disabilities and older persons generally tend to have more limited access to some types of technology than do younger persons. The primary source of data for this *Information Sheet* is Statistics Canada's General Social Survey, Cycle 14 (Access to and Use of Information Communication Technology, 2000).¹

Access to Personal Computers in the Home

When we think of "new technology" today, we often think of the personal computer. It can be used as an information and communications tool, a labour-saving device, an integral tool for employment purposes, an interface for those with specific types of disabilities, a learning tool, a shopping aide, and a method of staying connected to the outside world. Yet overall, persons with disabilities are much less likely than their non-disabled

¹ The "new" Statistics Canada screening question for disability is used in the GSS 14. Disability is detected through two questions, as follows:

- | | |
|--|---|
| <p>1. Do you have any difficulty hearing, seeing, communicating, walking, climbing stairs, bending, learning, or doing any similar activities?</p> <p>Sometimes
Often
Never
Not stated</p> | <p>2. Does a long term physical or mental condition or health problem reduce the amount or the kind of activity that you can do at home, at school, at work or in other activities? Is it . . .</p> <p>Sometimes
Often
Never
Not stated</p> |
|--|---|

Note: Anyone answering "Sometimes" or "Often" on either question is counted as having a disability. This results in a higher disability rate than was previously detected using the more basic screening questions of the past (which were similar to the second question on its own). It is important to note, however, that we also conducted an analysis using only the second screening question so that the data would be comparable to the question used on previous surveys. The story that resulted from that analysis was almost identical to the current analysis presented here. While the precise numbers may differ somewhat, the relationships and conclusions remained the same.

counterparts to have a computer in their home. In 2000, the majority (57.8%) of persons with disabilities did **not** have a computer in their home, compared with 37.2% among persons without disabilities (see Chart 1).

Persons without disabilities were also more likely to have more than one home computer. As illustrated in Chart 1, 15.5% of those without disabilities had two or more computers at home, compared with 10.3% for those with disabilities.

Age is an important factor

Some, but certainly not all, of these differences are due to age. Persons with disabilities tend to be older than those without disabilities,² and older persons are usually less likely than younger ones to have home computers. Therefore, one would expect to find that persons with disabilities were less likely, overall, to have home computers. Even when we compare individuals within age groups, however, we still find that those without disabilities have greater access to

home computers. Perhaps not surprisingly, this gap is least pronounced among those in the youngest age group. For example, among those aged 15 to 34, 35.7% of persons with disabilities did not have a computer in their home, compared with 32.1% of their non-disabled counterparts. And in this age group, those with and those without disabilities were almost equally likely to have multiple computers at home (18.5% and 17.4%, respectively).

In other age groups, we see greater gaps. Among those aged 35 to 54, 43.1% of those with disabilities did not have a computer in their home, compared with 30.2% among those without disabilities. Similarly, for people aged 55 to 64, 58.5% of those with disabilities did not have a computer in their home, compared with 48.4% among their non-disabled counterparts. We also see a greater likelihood of having multiple computers in the home among those without disabilities in these age groups.

Although there is still a gap in terms of having a home computer among seniors (those aged 65 and older), the differences between those with and those without disabilities is less pronounced. A large majority of both groups of seniors lack a home computer (82.0% and 78.4%, respectively).

Who uses personal computers?

Presumably, having a computer in the home facilitates computer use, and if persons with disabilities are less likely to

² See, for example: *In Unison 2000: Persons with Disabilities in Canada* by the Federal, Provincial and Territorial Ministers Responsible for Social Services, 2000, page 68.



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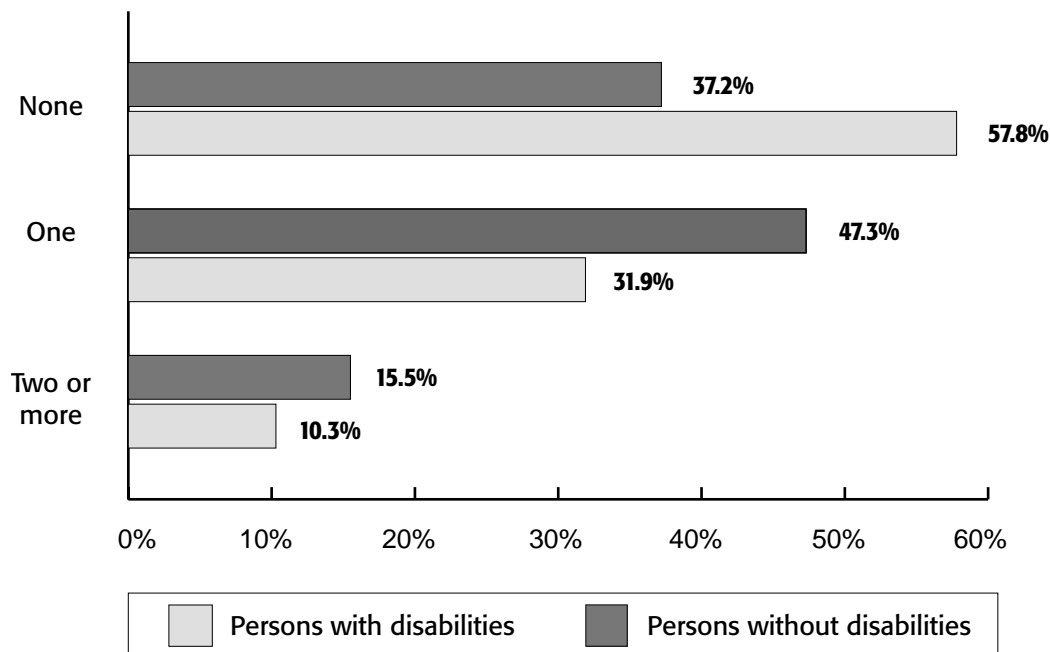


have a home computer, does this necessarily mean they are less likely to use a computer? Overall, the answer is "yes." In fact, for persons with disabilities, the rate of having a home computer is

almost the same as their rate of computer use (42.2% and 43.0%, respectively). Among persons without disabilities, 62.8% had one or more computers in their homes, but 71.8%

Chart 1

Number of Computers in the Home, Persons with and without Disabilities, Canada, 2000



Source: Calculations by the Canadian Council on Social Development using Statistics Canada's General Social Survey, Cycle 14, 2000.

Table 1

Number of Computers in the Home, Persons with and without Disabilities, by Age Group, Canada, 2000

Age Group	No. of home computers	Persons with disabilities	Persons without disabilities
15-34 yrs	none	35.7%	32.1%
	one	45.8%	50.5%
	two or more	18.5%	17.4%
35-54 yrs	none	43.1%	30.2%
	one	42.2%	52.6%
	two or more	14.7%	17.2%
55-64 yrs	none	58.5%	48.4%
	one	34.2%	40.0%
	two or more	7.3%	11.5%
65+ yrs	none	82.0%	78.4%
	one	14.5%	17.6%
	two or more	3.5%	4.0%

Source: Calculations by the Canadian Council on Social Development using Statistics Canada's General Social Survey, Cycle 14, 2000.

had used a computer in the last 12 months (see Table 2). To better understand the important patterns, we must again look at these data within different age groups.

Again, age is important

The younger you are, the more likely you are to have access to and use a computer – even if it isn't in your home. The older you are, the less likely you are to use a computer, even if there is one in your home. This applies to both persons with and those without disabilities.

Among the youngest group (those aged 15 to 34), the rate of computer use is higher than the rate of having a home computer, both for those with and those without disabilities. For example, 67.9% of young adults without disabilities have one or more computers in their home, but 86.8% report having used a computer in the last year. This suggests that a fairly high proportion of these young people have acquired computer access outside their homes. Young people with disabilities also go outside their homes to gain access to computers: among this age group, 64.3% have one or more computers in the home, yet

80.1% report computer usage in the last year (see Table 2).

While young computer users gain access to computers outside their homes, some older individuals who have computers aren't using them. This applies to both those with and those without disabilities. For example, among persons aged 65 and older with a disability, 18.0% had at least one computer in their home, yet only 10.2% had actually used a computer in the last 12 months. Similarly, 21.6% of seniors without disabilities had at least one computer in their home, yet only 16.9% had used one over the last 12 months.

Where do People Use Computers Outside the Home?

Friends and Relatives:

Many young people use a computer at the home of a friend or relative.³ Among those aged 15 to 34, persons with and those without disabilities are almost equally likely to have used a friend's computer in the previous month (36.4% and 35.3%, respectively; see Table 3).

Table 2

Computer Use in Past 12 Months and % with at least One Home Computer, by Age Group, Persons with and without Disabilities, Canada, 2000

Age Group	Persons with disabilities		Persons without disabilities	
	Had at least one home computer	Used computer in the past 12 months	Had at least one home computer	Used computer in the past 12 months
15-34 yrs	64.3%	80.1%	67.9%	86.8%
35-54 yrs	56.9%	61.1%	69.8%	75.3%
55-64 yrs	41.5%	36.7%	51.5%	49.8%
65+ yrs	18.0%	10.2%	21.6%	16.9%
Overall: aged 15+	42.2%	43.0%	62.8%	71.8%

Source: Calculations by the Canadian Council on Social Development using Statistics Canada's General Social Survey, Cycle 14, 2000.

Similarly, they are almost equally likely to have used a computer at a relative's home (22.9% and 20.5%, respectively).

Among persons aged 35 to 54, however, those with disabilities are slightly more likely to have used a friend's computer than are their non-disabled counterparts (16.6%, compared with 12%). They are also slightly more likely than their non-disabled counterparts to have used a computer at a relative's home (13.7%, compared with 8.9%).

Similarly for people aged 55 to 64. Among those with disabilities, 8.9% went to a friend's home and 12.6% went to a relative's home to use a computer; among those without disabilities, the figures are 6.1% and 8.7%. Even among

seniors, those with disabilities are slightly more likely than those without disabilities to have used a computer at the home of a relative (15% and 11.9%, respectively).

School:

School is another important venue for computer use. Among students, the majority of those with and those without disabilities accessed a computer at school. For students with disabilities, 78.3% reported using a computer at school, compared with 77.6% of those without disabilities.

Even if you have a computer at home?

Among students without disabilities, those who had a computer at home were very slightly more likely than those who did not have a home computer to use one at school (78.0%, compared

Table 3

Used a Computer in the Past 12 Months at the Home of a Friend or Relative, Persons with and without Disabilities, by Age Group, Canada, 2000

Age Group	Persons with disabilities		Persons without disabilities	
	Friend's computer	Relative's computer	Friend's computer	Relative's computer
15-34 yrs	36.4%	22.9%	35.3%	20.5%
35-54 yrs	16.6%	13.7%	12.0%	8.9%
55-64 yrs	8.9%	12.6%	6.1%	8.7%
65+ yrs	7.4%	15.0%	5.2%	11.9%

Source: Calculations by the Canadian Council on Social Development using Statistics Canada's General Social Survey, Cycle 14, 2000.

³ Some people use a computer at the home of a friend or relative, despite having at least one computer in their own home. However, those without a computer at home are more likely to use one at the home of a friend or relative.

Among persons with disabilities, 20.2% of those who had a home computer also used a friend's computer, but for those who had no computer at home, 26.6% accessed one at a friend's place; 14.5% of persons with disabilities who had a home computer also used one at a relative's place, but for those without a home computer, 24.8% reported accessing one at a relative's.

For persons without disabilities, 20.7% of those who had a home computer also used a friend's computer, but among those without a home computer, 29.3% reported using a friend's computer; 12.3% of persons without disabilities who had a home computer also accessed their relative's computer, but for those without a computer at home, 22.7% reported using one at a relative's place.

with 75.2%). Similarly among disabled students, those with a home computer were more likely than those without a home computer to utilize one at school (79.9% and 71.1%, respectively).

The Workplace:

Among those working in the paid labour force, younger persons (aged 15 to 34) with or without disabilities were almost equally likely to use a computer on the job. With older age groups, however, there were gaps. Among persons aged 35 to 54, 69.8% of those with disabilities and 78.2% of those without disabilities used a computer on the job. Similarly, among persons aged 55 to 64, 68.6% of those with disabilities and 78.7% of those without disabilities used computers on the job (see Chart 3). These findings suggest that among workers over age 35,

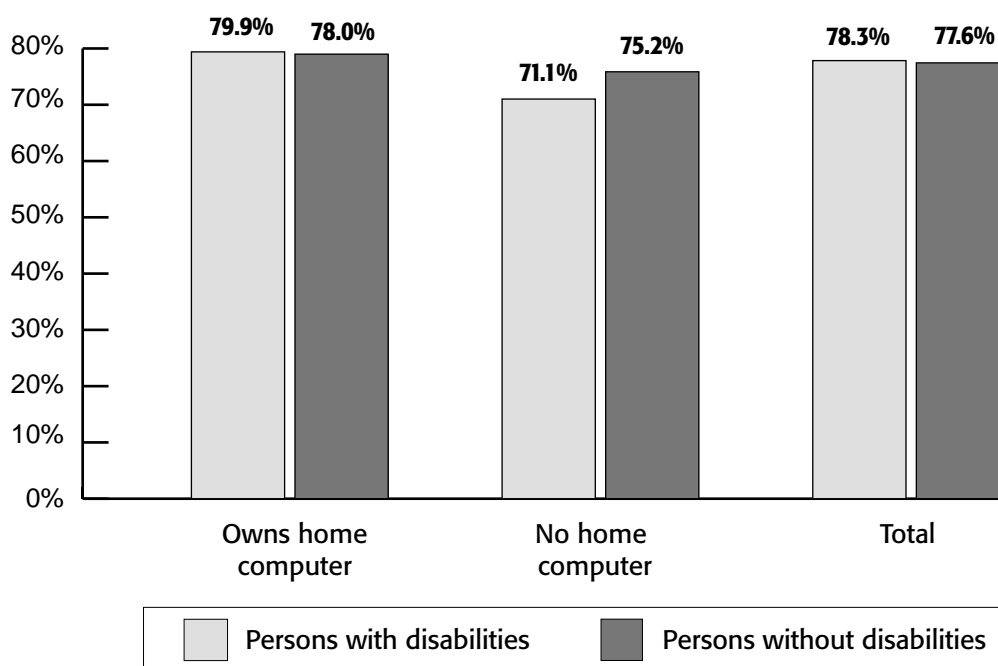
there are notable differences in the types of work performed.

With a computer at home?

People with a home computer were slightly more likely to have a job that required computer use, and this was true both for persons with and for those without disabilities. However, the differences were very slight. Among employed persons with disabilities who had a computer in their home, 65.5% used one on the job as well, compared with 62.8% of those who did not have a home computer. For employed persons without disabilities, these figures were 69.2% and 66.7%, respectively (see Chart 4). These data suggest that for employed persons, regardless of disability, the presence of a computer in the home does not really have a great

Chart 2

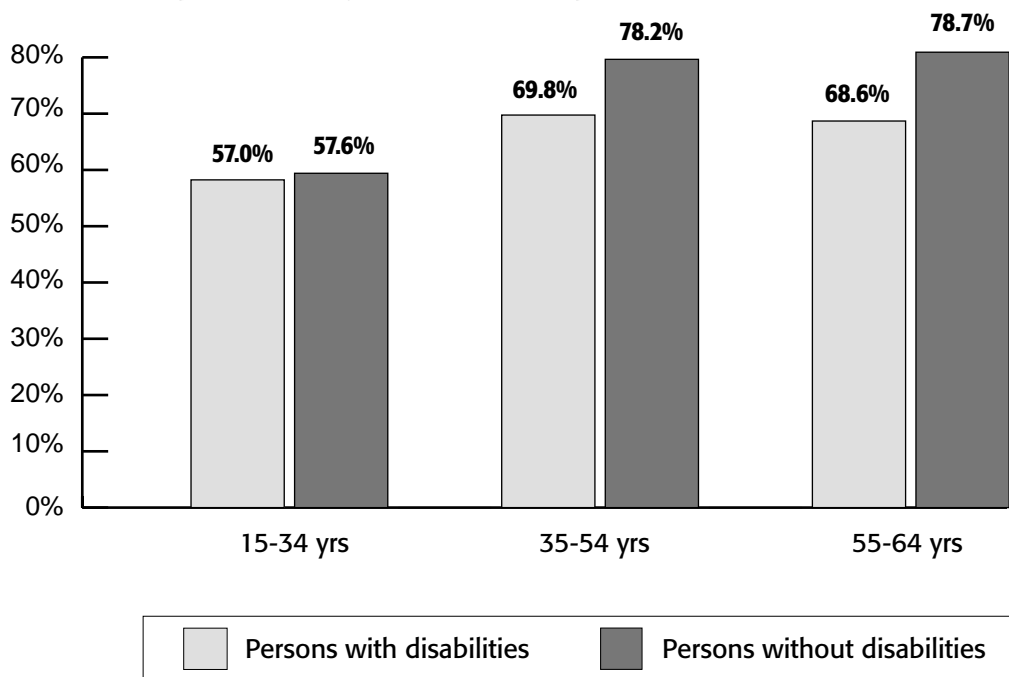
Used a Computer at School in the Past 12 Months, by Computer Ownership and Disability Status, Canada, 2000



Source: Calculations by the Canadian Council on Social Development using Statistics Canada's General Social Survey, Cycle 14, 2000.

Chart 3

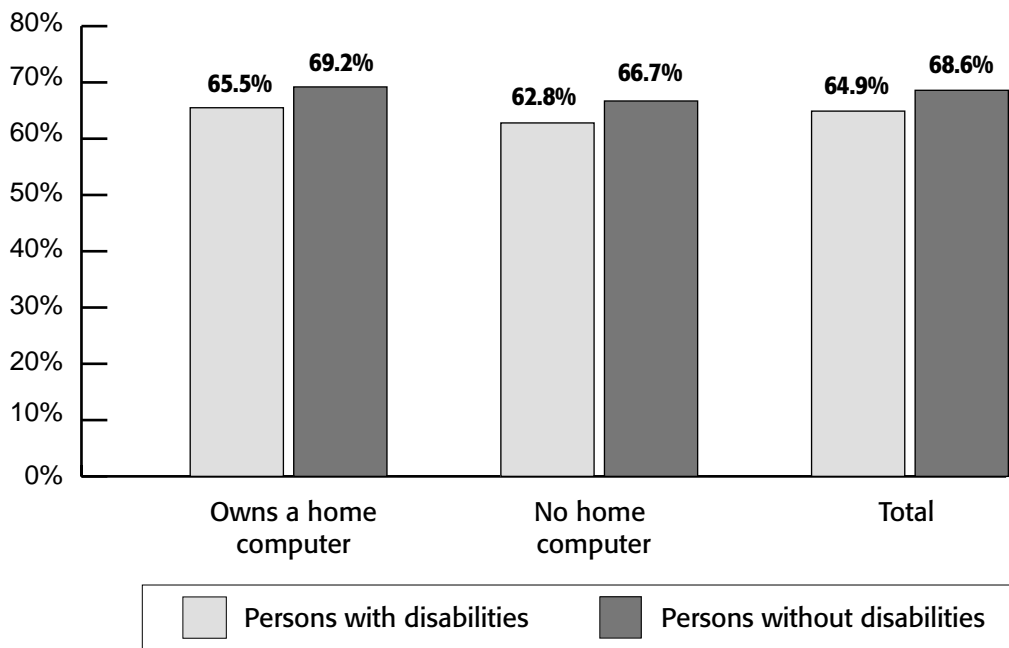
**Used a Computer on the Job in the Past 12 Months,
by Age Group and Disability Status, Canada, 2000**



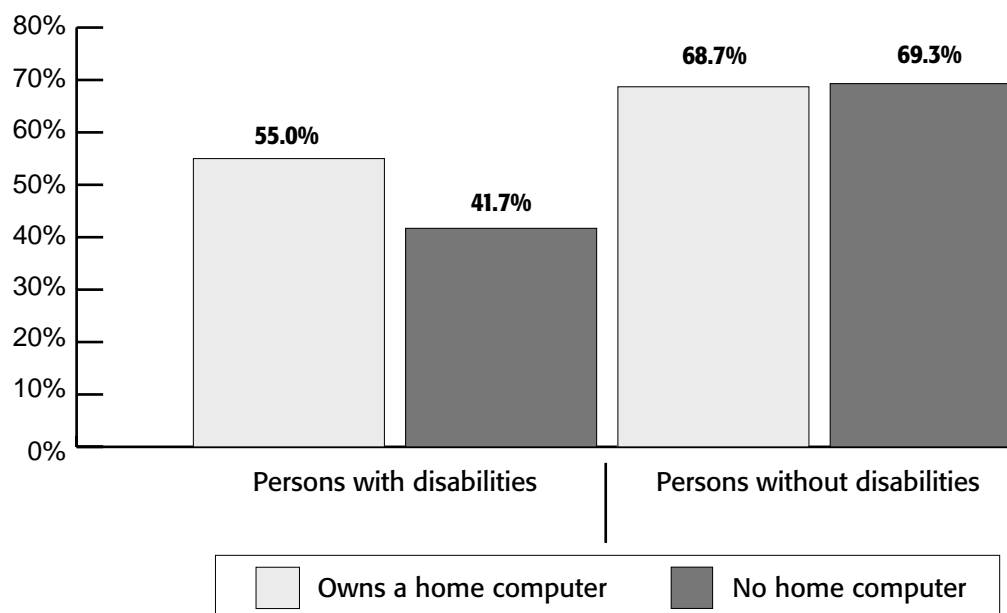
Source: Calculations by the Canadian Council on Social Development using Statistics Canada's General Social Survey, Cycle 14, 2000.

Chart 4

**Used a Computer at Work in the Past 12 Months,
by Computer Ownership and Disability Status, Canada, 2000**



Source: Calculations by the Canadian Council on Social Development using Statistics Canada's General Social Survey, Cycle 14, 2000.

Chart 5**Working in the Paid Labour Force,
by Computer Ownership and Disability Status, Canada, 2000**

Source: Calculations by the Canadian Council on Social Development using Statistics Canada's General Social Survey, Cycle 14, 2000.

impact on whether or not a computer is used on the job.

And while there may be little evidence to suggest that the absence of a home computer strongly directs people away from jobs requiring computer use, regardless of the presence of a disability, there is evidence to suggest that for persons with disabilities, having a home computer is related to whether or not they *have* a job. For persons without disabilities, those with and those without a home computer are equally likely to be working at a paid job (68.7% and 69.3%, respectively). However, among persons with disabilities, those who have a home computer are much more likely to be

working at a paid job (55.0%) than are those without a computer in their home (41.7%).

Unfortunately, with these data, we are unable to determine the temporal sequence in this relationship. Does the absence of a home computer place persons with disabilities at a disadvantage in the labour market, leaving them less likely to obtain paid employment? Or, does having paid employment simply facilitate the purchase of a home computer or make the person more likely to require a home computer? More research needs to be done to sort out the causality in this relationship.

Next issue: **Disability Research Information Sheet No. 7** will continue our examination of access to technology and how this affects persons with disabilities, using data from the General Social Survey, Cycle 14.