Counting people with disabilities: A comparison of estimates in Census 2000 and the Census 2000 Supplementary Survey

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Overview

- Background.
- Population characteristics.
- Deconstruction of disability rate estimates by
  - Elements included in the disability status indicator.
  - Disability rates by survey and mode.
- Conclusions and suggestions for future research.

Terminology

- Census 2000 Supplementary Survey (C2SS) - a national sample of housing units administered using the American Community Survey (ACS) methodology.

- Census 2000 Sample (Census 2000) – A sample of approximately 1-in-6 households with data on detailed housing and population characteristics as collected on the long form.

Population 5 years and over living in housing units.

Approximately 254.6 million people.
12.1 percent - Hispanic or Latino.
11.8 percent - Black or African American, alone.
Median age was 37.

Census 2000	C2SS
19.2 % with a disability.	**15.6 % with a disability.**

Questionnaires

United States Census 2000

U.S. Department of Commerce
Bureau of the Census

This is the official form for all the people at this address. It is quick and easy, and your answers are protected by law. Complete the Census and help your community get what it needs — today and in the future!

Start Here Please use a black or blue pen.

1 **How many people were living or staying in this house, apartment, or mobile home on April 1, 2000?**

Number of people

INCLUDE in this number:

- foster children, roomers, or housemates
- people staying here on April 1, 2000 who have no other permanent place to stay
- people living here most of the time while working, even if they have another place to live

DO NOT INCLUDE in this number:

- college students living away while attending college
- people in a correctional facility, nursing home, or mental hospital on April 1, 2000
- Armed Forces personnel living somewhere else
- people who live or stay at another place most of the time

Please turn the page and print the names of all the people living or staying here on April 1, 2000.

If you need help completing this form, *call 1-800-471-9424 between 8:00 a.m. and 8:00 p.m., 7 days a week. The telephone call is free.*

TDD – *Telephone display device for the hearing impaired. Call 1-800-582-8330 between 8:00 a.m. and 8:00 p.m., 7 days a week. The telephone call is free.*

¿NECESITA AYUDA? *Si usted necesita ayuda para completar este cuestionario llame al 1-800-471-9442 entre las 8:00 a.m. y las 8:00 p.m., 7 días a la semana. La llamada telefónica es gratis.*

The Census Bureau estimates that, for the average household, this form will take about 38 minutes to complete, including the time for reviewing the instructions and answers. Comments about the estimate should be directed to the Associate Director for Finance and Administration, Attn: Paperwork Reduction Project 0607-0856, Room 3104, Federal Building 3, Bureau of the Census, Washington, DC 20233.

Respondents are not required to respond to any information collection unless it displays a valid approval number from the Office of Management and Budget.

Form D-2

OMB No. 0607-0856: Approval Expires 12/31/2000

THE American Community SURVEY

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU

People are our most important resource. This Census Bureau survey collects information about education, employment, income, and housing—information your community uses to plan and fund programs. Your response is important, and we keep your answers confidential.

If you need help or have questions about completing this form, please call **1-800-354-7271**. The telephone call is free.

Telephone Device for the Deaf (TDD): Call 1-800-582-8330. The telephone call is free.

¿NECESITA AYUDA? Si usted habla español y necesita ayuda para completar su cuestionario, llame sin cargo alguno al **1-800-354-7271.**

For more information about the American Community Survey, visit our web site at: http://www.census.gov/acs/www/

FORM **ACS-1(2000)** (5-1-2000)

OMB No. 0607-0810
Approval Expires 10/31/2002

Start Here

This form asks for three types of information:

- basic information about the people who are living or staying at the address on the mailing label above
- specific information about this house, apartment, or mobile home
- more detailed information about each person living or staying here

What is your name? Please PRINT the name of the person who is filling out this form. Include the telephone number so we can contact you if there is a question, and today's date.

Last Name

First Name MI

Area Code + Number

Date (Month/Day/Year)

How many people are living or staying at this address?

Number of people

Please turn to the next page to continue.

Mailback Questionnaires

Census 2000

Did this person live inside the limits of the city or town?
- ☐ Yes
- ☐ No, outside the city/town limits

Name of county

Name of state

ZIP Code

16 Does this person have any of the following long-lasting conditions:

	Yes	No
a. Blindness, deafness, or a severe vision or hearing impairment?	☐	☐
b. A condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying?	☐	☐

17 Because of a physical, mental, or emotional condition lasting 6 months or more, does this person have any difficulty in doing any of the following activities:

	Yes	No
a. Learning, remembering, or concentrating?	☐	☐
b. Dressing, bathing, or getting around inside the home?	☐	☐
c. (Answer if this person is 16 YEARS OLD OR OVER.) Going outside the home alone to shop or visit a doctor's office?	☐	☐
d. (Answer if this person is 16 YEARS OLD OR OVER.) Working at a job or business?	☐	☐

18 Was this person under 15 years of age on April 1, 2000?
- ☐ Yes → *Skip to 33*
- ☐ No

this person have any of his/her own ildren under the age of 18 living in this house or apartment?
- ☐ Yes
- ☐ No → *Skip to 20a*

b. Is this grandparent currently responsible for most of the basic needs of any grandchild(ren) under the age of 18 who live(s) in this house or apartment?
- ☐ Yes
- ☐ No → *Skip to 20a*

c. How long has this grandparent been responsible for the(se) grandchild(ren)? *If the grandparent is financially responsible for more than one grandchild, answer the question for the grandchild for whom the grandparent has been responsible for the longest period of time.*
- ☐ Less than 6 months
- ☐ 6 to 11 months
- ☐ 1 or 2 years
- ☐ 3 or 4 years
- ☐ 5 years or more

20 **a. Has this person ever served on active duty in the U.S. Armed Forces, military Reserves, or National Guard?** *Active duty does not include training for the Reserves or National Guard, but DOES include activation, for example, for the Persian Gulf War.*
- ☐ Yes, now on active duty
- ☐ Yes, on active duty in past, but not now
- ☐ No, training for Reserves or National Guard only → *Skip to 21*
- ☐ No, never served in the military → *Skip to 21*

b. When did this person serve on active duty in the U.S. Armed Forces? *Mark ☒ a box for EACH period in which this person served.*
- ☐ April 1995 or later
- ☐ August 1990 to March 1995 (including Persian Gulf War)
- ☐ September 1980 to July 1990
- ☐ May 1975 to August 1980
- ☐ Vietnam era (August 1964—April 1975)
- ☐ February 1955 to July 1964
- ☐ Korean conflict (June 1950—January 1955)
- ☐ World War II (September 1940—July 1947)
- ☐ Some other time

c. In total, how many years of active-duty military service has this person had?
- ☐ Less than 2 years
- ☐ 2 years or more

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C2SS

Person 1

Your answers are important! Every person in the American Community Survey counts.

Please copy the name of Person 1 from the List of Residents on page 2, then continue answering questions below.
Last Name
First Name MI

7 Where was this person born?
- ☐ In the United States – *Print name of state.*
- ☐ Outside the United States – *Print name of foreign country, or Puerto Rico, Guam, etc.*

8 Is this person a CITIZEN of the United States?
- ☐ Yes, born in the United States → *Skip to 10a*
- ☐ Yes, born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas
- ☐ Yes, born abroad of American parent or parents
- ☐ Yes, U.S. citizen by naturalization
- ☐ No, not a citizen of the United States

9 When did this person come to live in the United States? *Print numbers in boxes.*
Year

10 **a. At any time IN THE LAST 3 MONTHS, has this person attended regular school or college?** *Include only nursery or preschool, kindergarten, elementary school, and schooling which leads to a high school diploma or a college degree.*
- ☐ No, has not attended in the last 3 months → *SKIP to question 11*
- ☐ Yes, public school, public college
- ☐ Yes, private school, private college

b. What grade or level was this person attending? *Mark ☒ ONE box.*
- ☐ Nursery school, preschool
- ☐ Kindergarten
- ☐ Grade 1 to grade 4
- ☐ Grade 5 to grade 8
- ☐ Grade 9 to grade 12
- ☐ College undergraduate years (freshman to senior)
- ☐ Graduate or professional school (*for example: medical, dental, or law school*)

11 What is the highest degree or level of school this person has COMPLETED? *Mark ☒ ONE box. If currently enrolled, mark the previous grade or highest degree received.*
- ☐ No schooling completed
- ☐ Nursery school to 4th grade
- ☐ 5th grade or 6th grade
- ☐ 7th grade or 8th grade
- ☐ 9th grade
- ☐ 10th grade
- ☐ 11th grade
- ☐ 12th grade – **NO DIPLOMA**
- ☐ **HIGH SCHOOL GRADUATE** – high school DIPLOMA or the equivalent (*for example: GED*)
- ☐ Some college credit, but less than 1 year
- ☐ 1 or more years of college, no degree
- ☐ Associate degree (*for example: AA, AS*)
- ☐ Bachelor's degree (*for example: BA, AB, BS*)
- ☐ Master's degree (*for example: MA, MS, MEng, MEd, MSW, MBA*)
- ☐ Professional degree (*for example: MD, DDS, DVM, LLB, JD*)
- ☐ Doctorate degree (*for example: PhD, EdD*)

12 What is this person's ancestry or ethnic origin?

(*For example: Italian, Jamaican, African Am, Cambodian, Cape Verdean, Norwegian, Dominican, French Canadian, Haitian, Korean, Lebanese, Polish, Nigerian, Mexican, Taiwanese, Ukrainian, and so on.*)

13 **a. Did this person live in this house or apartment 1 year ago?**
- ☐ Person is under 1 year old → *SKIP to the questions for Person 2 on page 10.*
- ☐ Yes, this house → *SKIP to ⓕ in the next column*
- ☐ No, outside the United States – *Print name of foreign country, or Puerto Rico, Guam, etc., below; then SKIP to ⓕ in next column.*
- ☐ No, different house in the United States

b. Where did this person live 1 year ago?
Name of city, town, or post office

c. Did this person live inside the limits of the city or town?
- ☐ Yes
- ☐ No, outside the city/town limits

Name of county

Name of state ZIP Code

ⓕ *If this person is UNDER 5 years of age, SKIP to the questions for PERSON 2 on page 10. Otherwise, continue with question 14.*

14 **a. Does this person speak a language other than English at home?**
- ☐ Yes
- ☐ No → *SKIP to question 15*

b. What is this language?

For example: Korean, Italian, Spanish, Vietnamese

c. How well does this person speak English?
- ☐ Very well
- ☐ Not well
- ☐ Well
- ☐ Not at all

15 Does this person have any of the following long-lasting conditions:

	Yes	No
a. Blindness, deafness, or a severe vision or hearing impairment?	☐	☐
b. A condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying?	☐	☐

16 Because of a physical, mental, or emotional condition lasting 6 months or more, does this person have any difficulty in doing any of the following activities:

	Yes	No
a. Learning, remembering, or concentrating?	☐	☐
b. Dressing, bathing, or getting around inside the home?	☐	☐
c. (Answer if this person is 16 YEARS OLD OR OVER.) Going outside the home alone to shop or visit a doctor's office?	☐	☐
d. (Answer if this person is 16 YEARS OLD OR OVER.) Working at a job or business?	☐	☐

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Mailback Questionnaires – Disability Items

Census 2000

16 Does this person have any of the following long-lasting conditions:

	Yes	No
a. Blindness, deafness, or a severe vision or hearing impairment?	☐	☐
b. A condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying?	☐	☐

17 Because of a physical, mental, or emotional condition lasting 6 months or more, does this person have any difficulty in doing any of the following activities:

	Yes	No
a. Learning, remembering, or concentrating?	☐	☐
b. Dressing, bathing, or getting around inside the home?	☐	☐
c. (Answer if this person is 16 YEARS OLD OR OVER.) Going outside the home alone to shop or visit a doctor's office?	☐	☐
d. (Answer if this person is 16 YEARS OLD OR OVER.) Working at a job or business?	☐	☐

C2SS

15 Does this person have any of the following long-lasting conditions:

	Yes	No
a. Blindness, deafness, or a severe vision or hearing impairment?	☐	☐
b. A condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying?	☐	☐

16 Because of a physical, mental, or emotional condition lasting 6 months or more, does this person have any difficulty in doing any of the following activities:

	Yes	No
a. Learning, remembering, or concentrating?	☐	☐
b. Dressing, bathing, or getting around inside the home?	☐	☐
c. (Answer if this person is 16 YEARS OLD OR OVER.) Going outside the home alone to shop or visit a doctor's office?	☐	☐
d. (Answer if this person is 16 YEARS OLD OR OVER.) Working at a job or business?	☐	☐

Census 2000 Enumerator Questionnaire

Person 1 (continued)

13. **Where (were you/was . . .) born?**
- ☐ In the United States – *Print name of state.*
- ☐ Outside the United States – *Print name of foreign country, or Puerto Rico, Guam, etc.*

14. **(Are you/Is . . .) a CITIZEN of the United States?**
- ☐ Yes, born in the United States → *Skip to 16a*
- ☐ Yes, born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas
- ☐ Yes, born abroad of American parent or parents
- ☐ Yes, U.S. citizen by naturalization
- ☐ No, not a citizen of the United States

15. **What year did (you/. . .) come to live in the United States?**
Year

16a. **Did (you/. . .) live in this (house/apartment) 5 years ago (on April 1, 1995)?**
- ☐ Person is under 5 years old → *Skip to 34*
- ☐ Yes, this house → *Skip to 17*
- ☐ No, outside the United States – *Print name of foreign country, or Puerto Rico, Guam, etc. below; then skip to 17.*
- ☐ No, different house in the United States

16b. **Where did (you/. . .) live 5 years ago?**

Name of city, town, or post office?

Did (you/. . .) live inside the limits of that city or town?
☐ Yes ☐ No, outside the city/town limits

Name of county?

Name of state?

What was the ZIP Code?

17. **(Do you/Does . . .) have any of the following long-lasting conditions:**

17a. **Blindness, deafness, or a severe vision or hearing impairment?**
☐ Yes ☐ No

17b. **A condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying?**
☐ Yes ☐ No

18. **Because of a physical, mental, or emotional condition lasting 6 months or more, (do you/does . . .) have any difficulty in doing any of the following activities:**

18a. **Learning, remembering, or concentrating?**
☐ Yes ☐ No

18b. **Dressing, bathing, or getting around inside the home?**
☐ Yes ☐ No

18c. *ASK if this person is 16 YEARS OLD OR OVER.*
Going outside the home alone to shop or visit a doctor's office?
☐ Yes ☐ No

18d. *ASK if this person is 16 YEARS OLD OR OVER.*
Working at a job or business?
☐ Yes ☐ No

19. INTERVIEWER INSTRUCTION – *Refer to question 4 on page 3 to mark a response box below.*
- ☐ Born on or before April 1, 1985 or at least age 15 by April 1, 2000 – *Ask 20a*
- ☐ Born after April 1, 1985 → *Skip to 34*

If question 4 is blank, ASK –
(Were you/Was . . .) under 15 years of age on April 1, 2000?
☐ Yes → *Skip to 34* ☐ No – *Ask 20a*

20a. **(Do you/Does . . .) have any of (your/his/her) own grandchildren under the age of 18 living in this (house/apartment)?**
☐ Yes ☐ No → *Skip to 21a*

20b. **(Are you/Is . . .) currently responsible for most of the basic needs of any grandchild(ren) under the age of 18 who live(s) in this (house/apartment)?**
☐ Yes ☐ No → *Skip to 21a*

20c. **How long (have you/has . . .) been responsible for the(se) grandchild(ren)? If more than one grandchild lives with (you/. . .), answer the question for the grandchild for whom (you have/. . . has) been financially responsible for the longest period of time.**
- ☐ Less than 6 months
- ☐ 6 to 11 months
- ☐ 1 or 2 years
- ☐ 3 or 4 years
- ☐ 5 years or more

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Enumerator Questionnaire – Person 1

17. (Do you/Does . . .) have any of the following long-lasting conditions:

17a. Blindness, deafness, or a severe vision or hearing impairment?

☐ Yes ☐ No

17b. A condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying?

☐ Yes ☐ No

18. Because of a physical, mental, or emotional condition lasting 6 months or more, (do you/does . . .) have any difficulty in doing any of the following activities:

18a. Learning, remembering, or concentrating?

☐ Yes ☐ No

18b. Dressing, bathing, or getting around inside the home?

☐ Yes ☐ No

18c. *ASK if this person is 16 YEARS OLD OR OVER.* Going outside the home alone to shop or visit a doctor's office?

☐ Yes ☐ No

18d. *ASK if this person is 16 YEARS OLD OR OVER.* Working at a job or business?

☐ Yes ☐ No

Enumerator Questionnaire – Person 2

17. **(Do you/Does . . .) have any of the following long-lasting conditions:**

17a. **Blindness, deafness, or a severe vision or hearing impairment?**

- ☐ Yes
- ☐ No

17b. **A condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying?**

- ☐ Yes
- ☐ No

18. **Because of a physical, mental, or emotional condition lasting 6 months or more, (do you/does . . .) have any difficulty in doing any of the following activities:**

18a. **Learning, remembering, or concentrating?**

- ☐ Yes
- ☐ No

18b. **Dressing, bathing, or getting around inside the home?**

- ☐ Yes
- ☐ No

18c. *ASK if this person is 16 YEARS OLD OR OVER.* **Going outside the home alone to shop or visit a doctor's office?**

- ☐ Yes
- ☐ No

18d. *ASK if this person is 16 YEARS OLD OR OVER.* **Working at a job or business?**

- ☐ Yes
- ☐ No

C2SS CATI/CAPI - Screen 1

```
C:\WINNT\System32\cmd.exe
Caseid: 00000031
Item: P15@a

I am now going to ask some questions about long-lasting
conditions...

Do you have any blindness, deafness, or
a severe vision or hearing impairment?

    (1) Yes
    (2) No

Any condition that substantially limits one or more
basic physical activities such as walking, climbing stairs,
reaching, lifting or carrying?

    (1) Yes
    (2) No
```

C2SS CATI/CAPI - Screen 2

```
C:\WINNT\System32\cmd.exe
Caseid: 00000031
Item: P16@a

Do you have a physical, mental or
emotional condition lasting 6 months or more,
that causes you difficulty in doing
any of the following activities -- learning,
remembering or concentrating?

    (1)  Yes
    (2)  No

Dressing, bathing or getting around inside the home?

    (1)  Yes
    (2)  No
```

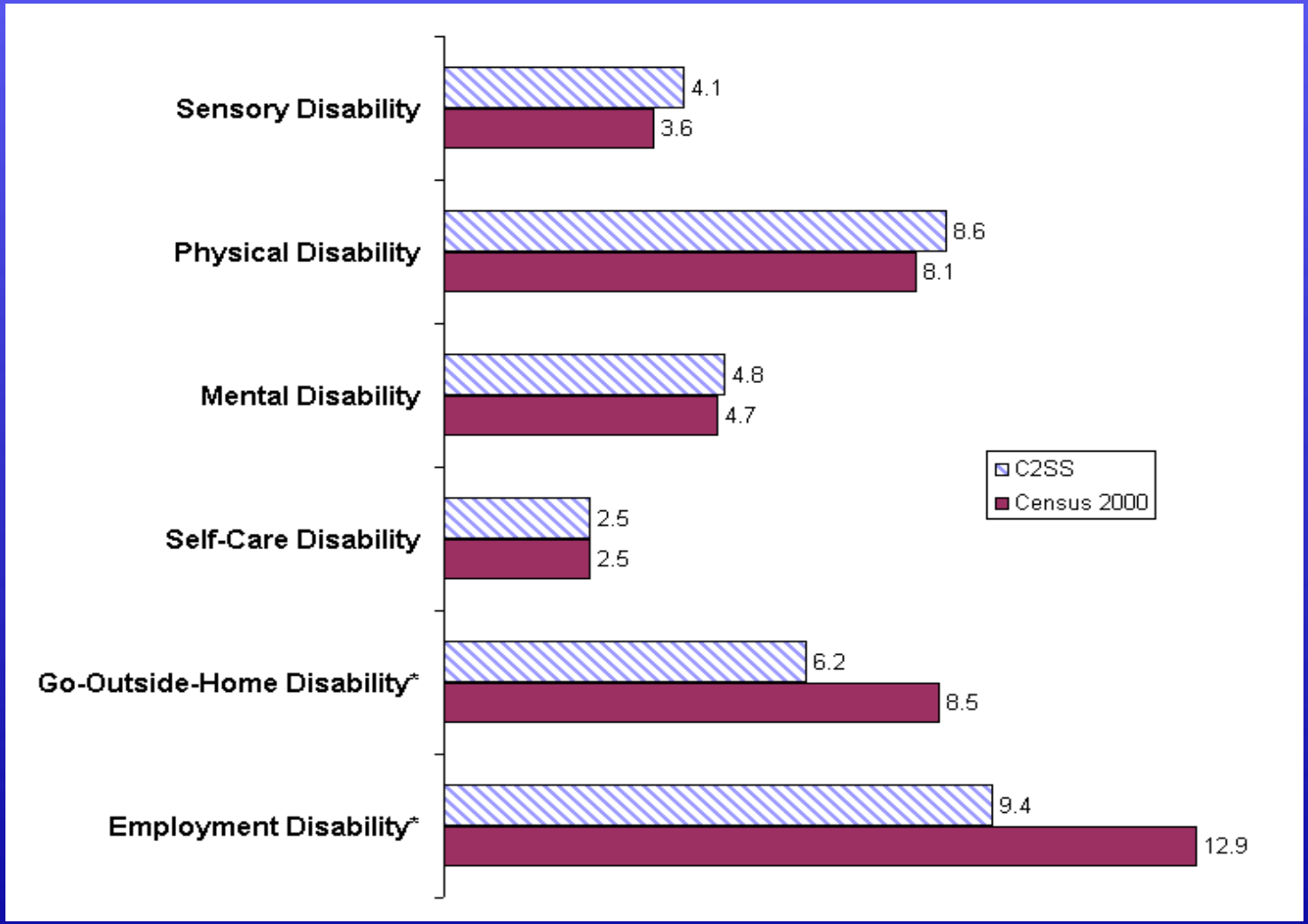
C2SS CATI/CAPI - Screen 3

```
C:\WINNT\System32\cmd.exe
Caseid: 00000031
Item: P16C@1

        Going outside the home alone to shop or
        visit a doctor's office?

            (1)  Yes
            (2)  No

        Working at a job or business?

            (1)  Yes
            (2)  No
```

Possible effects of question presentation

- Respondents forget the context.
- Long lead-ins include too many complicated elements.
- Respondents misunderstand the skip instructions.
- Enumerators/interviewers misplace the emphasis when asking the questions.

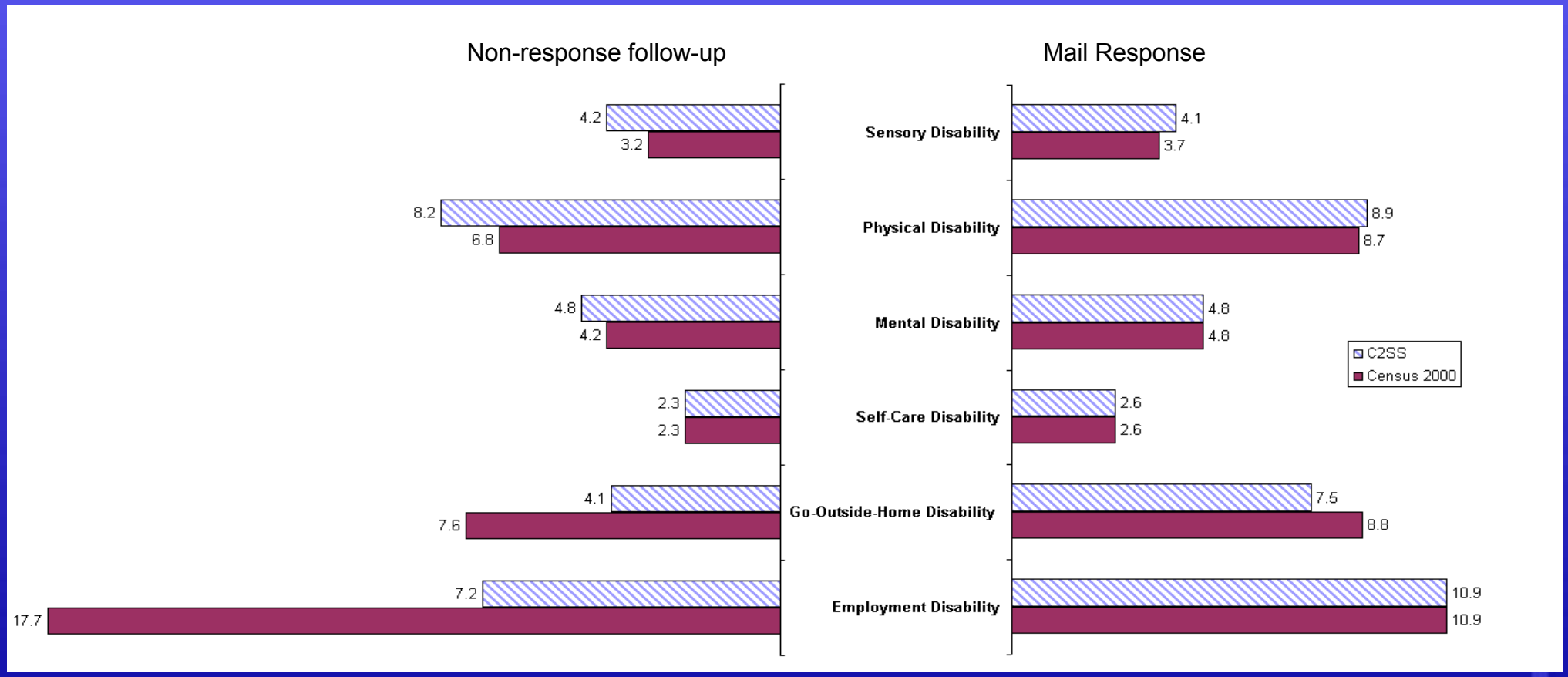
Disability Rates by Survey



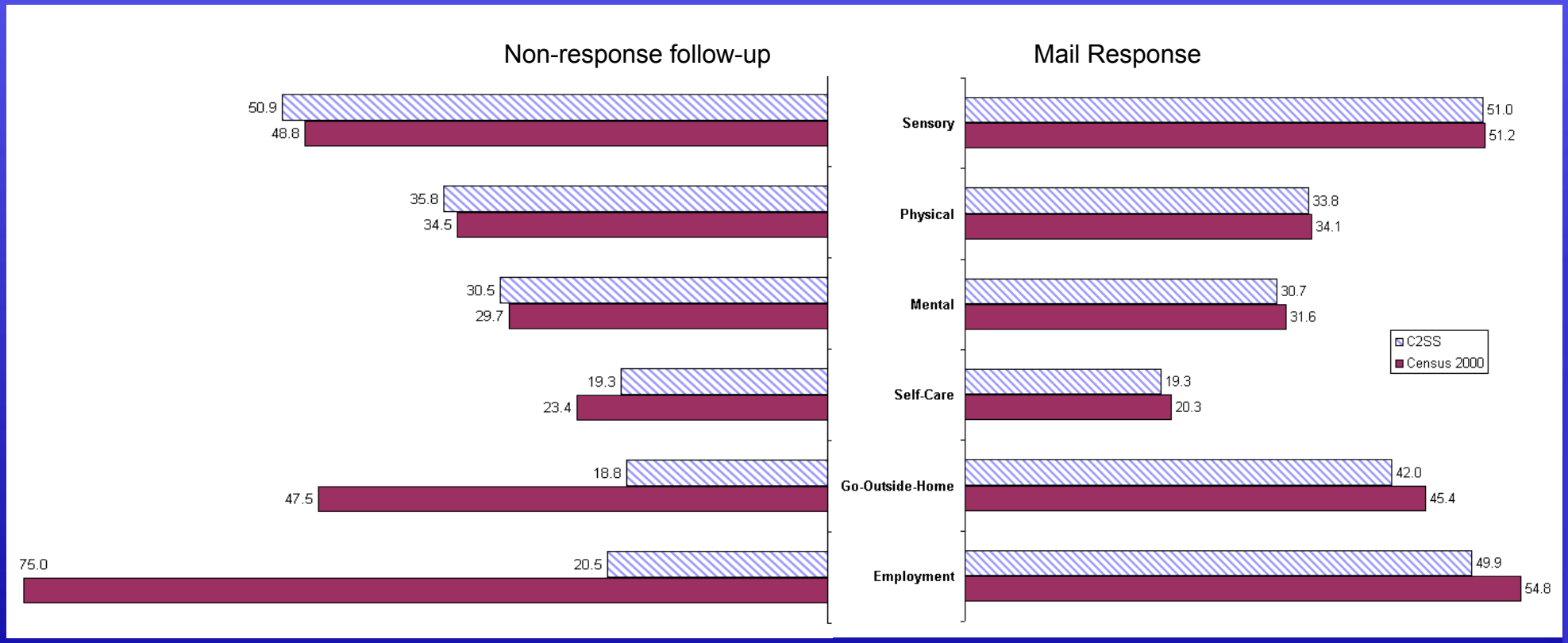
Proportion of the population by mode

Census 2000	C2SS
• Mail-response = 71%	• Mail-response = 59%
• Enumerator response = 29%	• Interviewer response = 41%

Disability Rates by Survey and Mode



Employment Rates by Type of Disability by Survey and Mode (People 21-64 Years Old)



Conclusions

- Divergent disability rates demonstrate sensitivity in measurement.
- Sensory, physical, mental, and self-care disability has similar prevalence.
- People may have misunderstood the skip instructions on the paper forms.
- High employment disability and employment rates for people with an employment disability suggest possible problem with Census 2000 enumerator interview and instrument.
- More research needed.

Future Research

- Analysis of data available now.
  - ACS sites.
  - ACS 2001, 2002.
- Testing and validating of new questions optimized for the data collection mode.
- ACS 2003

ACS 2003 Questionnaire

F *Answer questions 15 and 16 ONLY IF this person is 5 years old or over. Otherwise, SKIP to the questions for PERSON 2 on page 10.*

15 **Does this person have any of the following long-lasting conditions:**

	Yes	No
a. Blindness, deafness, or a severe vision or hearing impairment?	☐	☐
b. A condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying?	☐	☐

16 **Because of a physical, mental, or emotional condition lasting 6 months or more, does this person have any difficulty in doing any of the following activities:**

	Yes	No
a. Learning, remembering, or concentrating?	☐	☐
b. Dressing, bathing, or getting around inside the home?	☐	☐

G *Answer question 17 ONLY IF this person is 15 years old or over. Otherwise, SKIP to the questions for PERSON 2 on page 10.*

17 **Because of a physical, mental, or emotional condition lasting 6 months or more, does this person have any difficulty in doing any of the following activities:**

	Yes	No
a. Going outside the home alone to shop or visit a doctor's office?	☐	☐
b. Working at a job or business?	☐	☐

Thank you

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