

Studying Disability in Households Using Multiple Years of the National Health Interview Survey

Debbie Blackwell, NCHS/Division of Health Interview Statistics and Barbara Altman, NCHS/Office of Analysis and Epidemiology

National Conference on Health Statistics, Washington, DC, August, 2012



Today's Objective

- Identify a gap in recent disability research
- Review important definitions
- Versatility of NHIS data
 - **Moving from person-level to household-level**
 - **A look at the Family Health Status (FHS) section**
- Creating age-specific counters
- Analytic examples



Previous Research

Most previous disability studies have focused on individual-level data. Two important exceptions are:

- **1996 National Institute on Disability and Rehabilitation Research (NIDRR) family-level report based on the 1990 National Health Interview Survey (NHIS) found that**
20.3 million U.S. families (29% of all families) had at least one member with a disability.
- **2005 family-level report based on the 2000 U.S. Census found that**
20.9 million U.S. families (28.9%) had at least one member with a disability.



What's the problem?

These reports are based on a traditional and narrow definition of the family –

Two or more persons who are related by birth, marriage, and/or adoption and are sharing the same residence.

Using this definition results in the omission of roughly 32% of households from these analyses...



Why is this important?

Living arrangements may represent strategies for coping with disability, especially among older adults.

Persons living alone may not have such strategies. They are also more likely

- **to be older and**
- **to have lower self-assessed health status**

than persons living with related family members.

Thus, persons living alone may have unmet health care needs, something that could be easily overlooked in a family-level analysis.



How to resolve problem?

Use NHIS Family file?

- Counts persons living alone and cohabiting couples as distinct families, which is a plus.
- But this file will not yield estimates that compare with previously published studies, which is not desirable.

Solution: bypass family definition issues and use multiple years of the NHIS to do a household-level analysis



Definitions for Household Analysis

In the NHIS, children are defined as family members who are 0-17 years of age; adults are family members who are 18 years or older.

Adult children (those aged 18+) are considered related adults regardless of their relationship (biological/adoptive, step, or foster) to their parents.

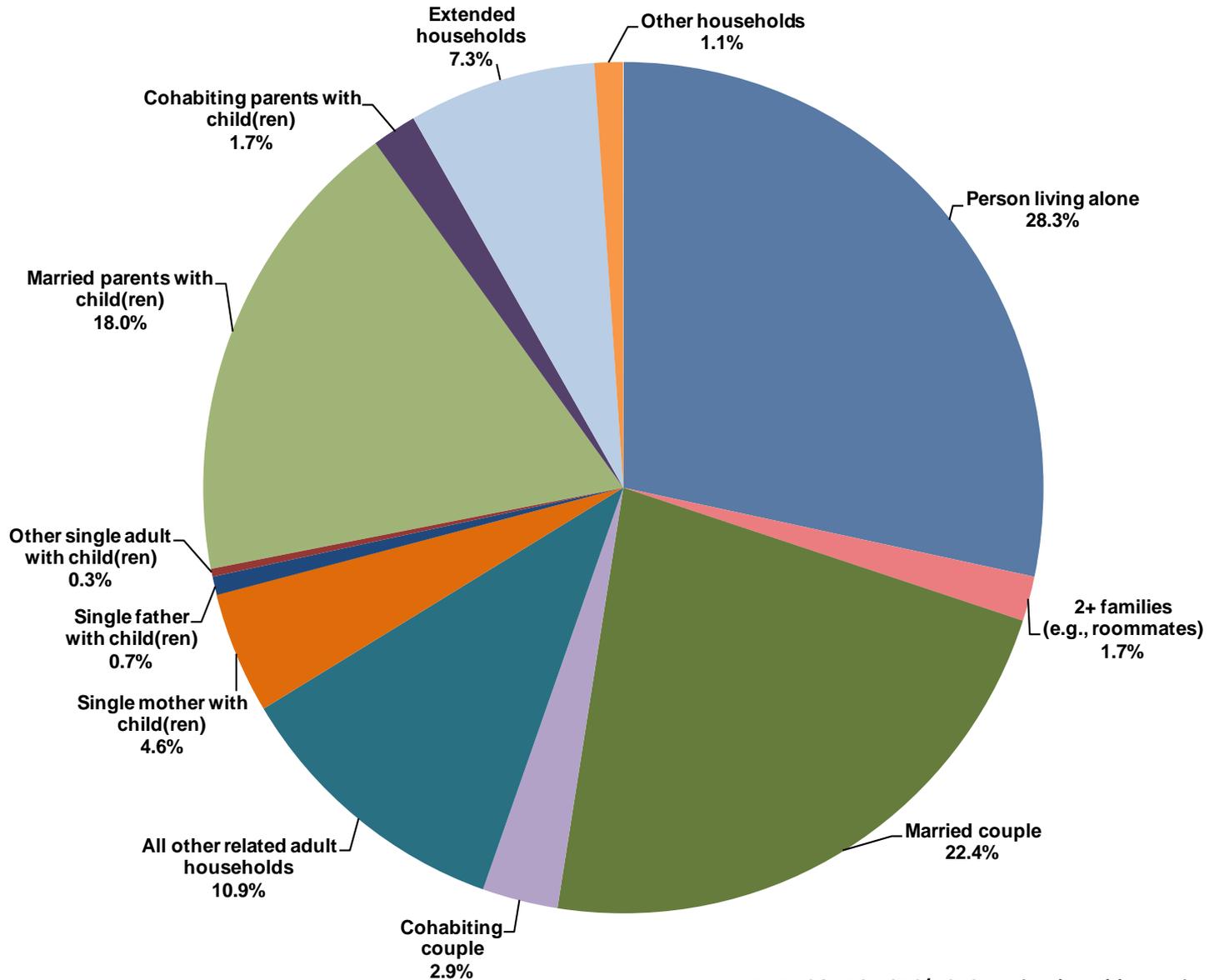
A household contains one or more people who may or may not be related to one another. According to Census,

Family households consist of at least two members who are related by birth, marriage, and/or adoption.

A nonfamily household can be either a person living alone or nonrelatives sharing the same household.

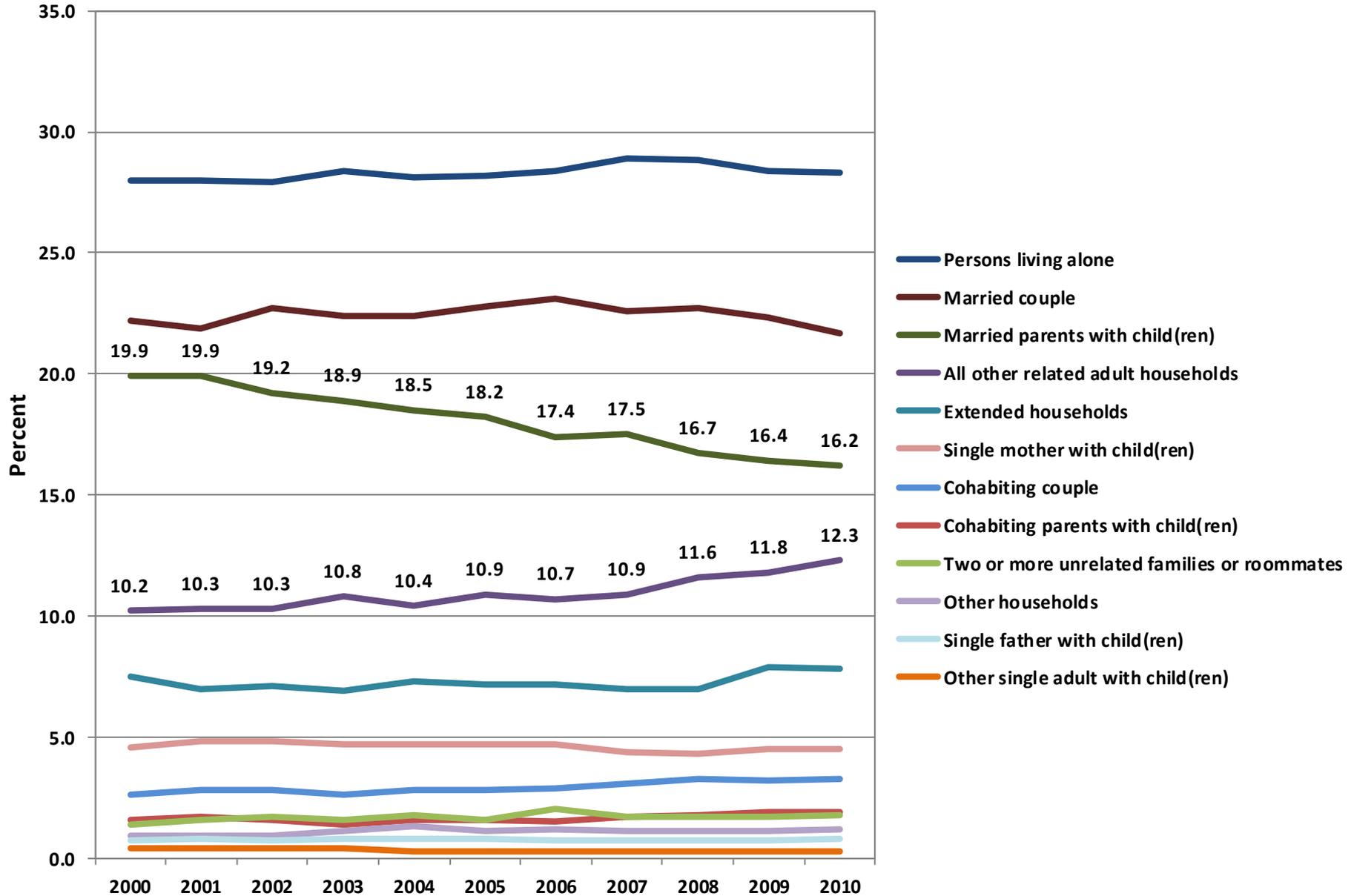


Percent distribution of households by household type: United States, 2000-2010



DATA SOURCE: CDC/NCHS, National Health Interview Survey, 2000-2010.

Percentages of all households by household type: United States, 2000-2010



Disability Indicators??

Need questions on disability that were asked of all household members...



Use questions from the “Family Core” of the NHIS, aka the Person data file. The Family Health Status (FHS) section of the Person file contains variables measuring

- Play and work limitations;
- Receipt of special education or early intervention services;
- Personal care (ADLs) and routine care (IADLs) needs;
- Difficulty walking without special equipment;
- Difficulty remembering or periods of confusion.



Two analytic examples for today

FHS.220 or PLAWALK

Because of a health problem, {do you/does anyone in the family} have difficulty walking without using any special equipment?

FHS.240 or PLAREMEM

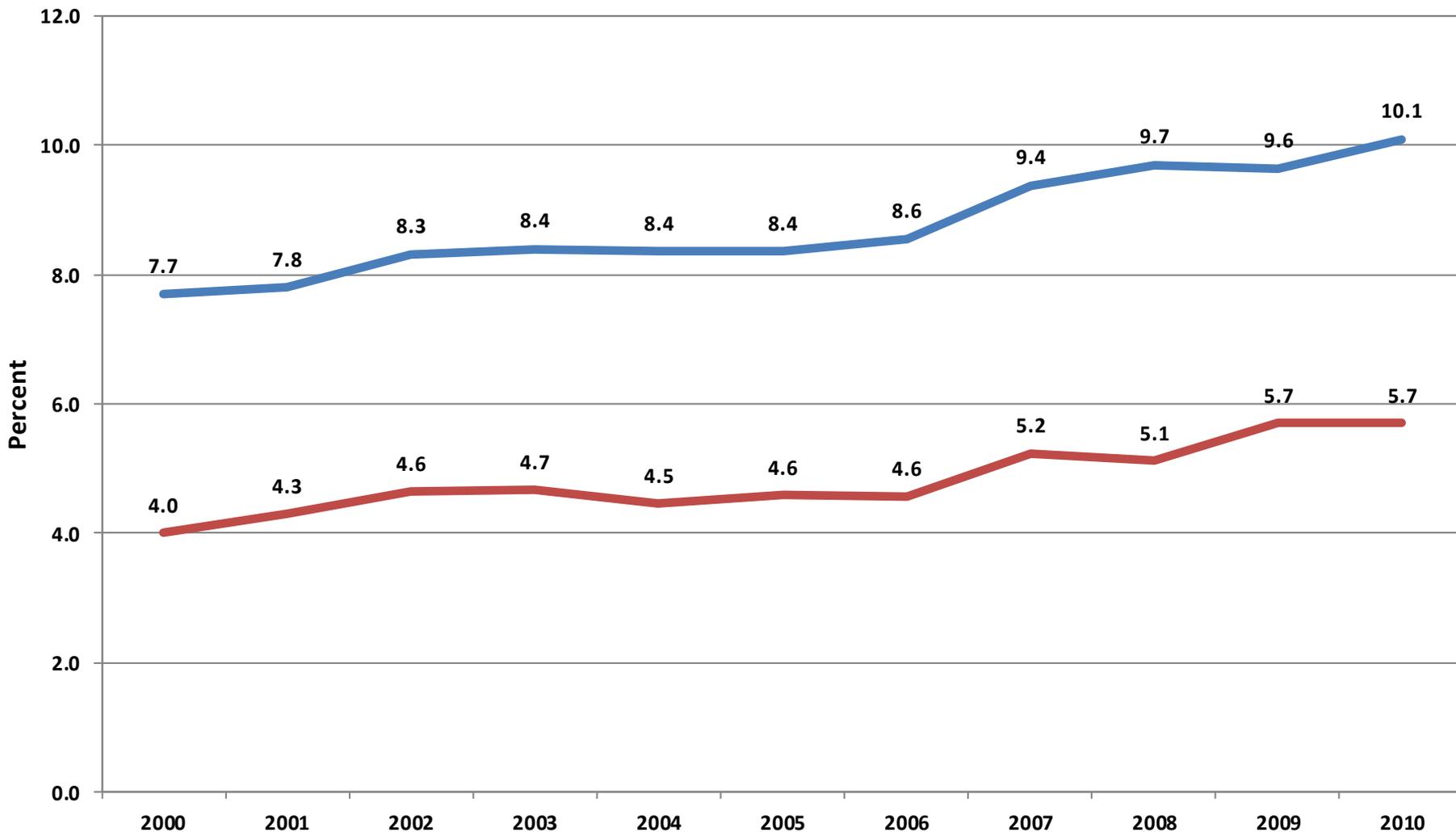
{Are you/Is anyone in the family} limited in any way because of difficulty remembering or because {you/they} experience periods of confusion?

- **Universe for both: All Persons, all ages**
- **Response categories: 1) Yes 2) No 7) Ref 8) NA 9) DK**
- **In FHS section since the NHIS redesign in 1997**

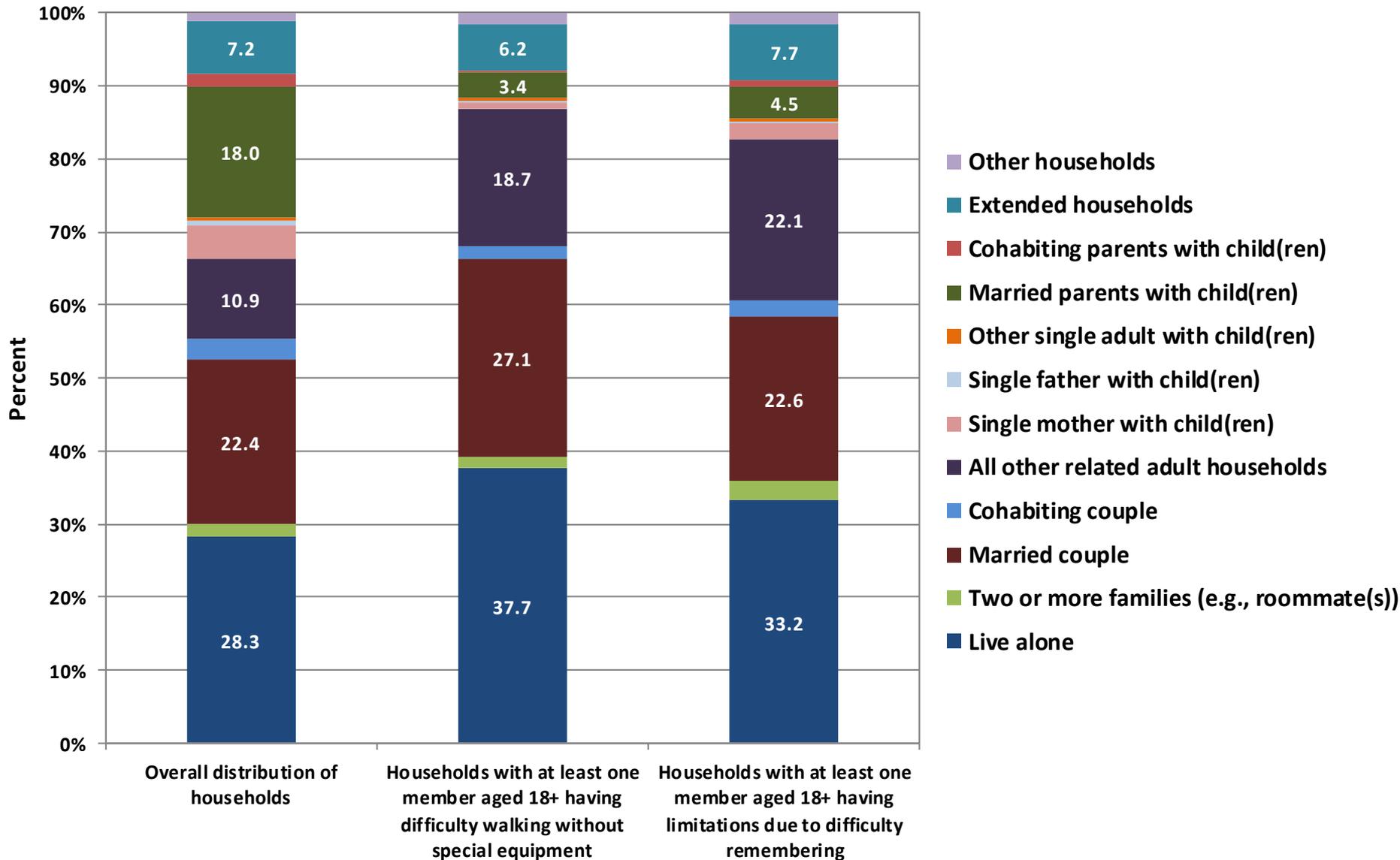


Percentages of all households with adults aged 18 or older having difficulty walking without special equipment and having limitations due to difficulty remembering: United States, 2000-2010

- Household has at least one adult aged 18+ having difficulty walking without special equipment
- Household has at least one adult aged 18+ having limitations due to difficulty remembering



Percent distributions of household type for all households, for households with one or more members aged 18 or older having difficulty walking without using any special equipment, and for households having one or more members aged 18 or older with limitations due to difficulty remembering or periods of confusion: United States, 2000-2010



Summary of findings: Households with adults

- Persons living alone and all other related adult households were **OVER** represented in the distributions of households with 1+ adult member(s) having difficulty walking or difficulty remembering;
- Married couple households were **OVER** represented in the distribution of households with 1+ adult member(s) having difficulty walking, but not difficulty remembering;
- Cohabiting couples and, with one exception, all households with children were **UNDER** represented in the distributions of households with 1+ adult member(s) having difficulty walking or difficulty remembering. The exception was extended households: these were **OVER** represented in the distribution of households with 1+ adult member(s) having difficulty remembering, but not difficulty walking.



Take-home message

Our research shows that living arrangements (i.e., household type) are associated with disability.

Generally speaking, households consisting of persons living alone as well as related adults are more likely to have these disabilities than what we would expect given their proportion in the overall distribution of households.

The living arrangements of persons living alone may increase the likelihood that they have unmet health care needs, a possibility that could be easily overlooked in a family-level analysis that omits them.

As for related adult households, do these households represent a disability coping strategy of sorts? A multivariate analysis would be needed to tease this out.



And don't forget the flexibility of the NHIS!

If you haven't already, check out the variety of recodes on the Family file, including family structure and living arrangements.

Think “outside the box” when using the Person file, especially when doing family- or household-level analyses.



Contact Info

Debbie Blackwell (DHIS): dblackwell@cdc.gov

Barbara Altman (OAE): b.altman@verizon.net

