Income and Health Insurance Coverage: Comparing the American Community Survey (ACS) and the Current Population Survey (CPS)

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Presentation to the 2010 AAPOR Conference

May 14, 2010

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Portions of this presentation are based on—

Income Data for Policy Analysis:
A Comparative Assessment of Eight Surveys

December 2008

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Survey Descriptions

Survey	Description
CPS	Monthly survey of labor force activity; Annual Social and Economic Supplement (ASEC) is the official source of income and poverty statistics and the most widely cited source of data on health insurance coverage. Interviewed ASEC sample is 78,000 households
ACS	Replacement for the census long form; designed to provide data for detailed levels of geography; rolling sample, interviewed throughout the year Data are collected from 2 million households and a sample of both institutional and noninstitutional group quarters
SIPP	Longitudinal, with households interviewed every four months for three to four years; specifically designed to provide information on income, populations at risk, program participation, and eligibility for means-tested programs Initial samples vary from 30,000 to 40,000 households

SIPP = Survey of Income and Program Participation

Collection of Income Data by Survey

Survey	Data Collected for Each Person
CPS	More than 50 sources and up to 24 annual dollar amounts Data are collected by a mix of CAPI and CATI
ACS	Up to 8 sources and dollar amounts for the previous 12 months (rolling reference period) About half of responses are collected by mail; most of the remainder are collected in person
SIPP	Up to 60 sources and dollar amounts for each month Data are collected by a mix of CAPI and CATI

CAPI = computer-assisted personal interviewing
CATI = computer-assisted telephone interviewing

Aggregate Income

- **There is no gold standard for survey estimates of income, but the CPS is the official source of income and poverty statistics for the U.S.**

- **Because aggregate survey income tends to underestimate administrative totals, the bigger of two survey estimates is generally better**

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Aggregate Income (cont'd.)

- **Aggregate income for a CY 2002 reference period is $6.47 trillion in the CPS and $6.35 trillion in the ACS—a difference of just two percent despite substantial differences in measurement**

- **At $5.77 trillion, the SIPP estimate was 89 percent of the CPS estimate and 91 percent of the ACS estimate**

Aggregate Income as a Percentage of the CPS, by Quintile of Family Income, 2002

Quintile	CPS	ACS	SIPP
All persons	100.0	98.1	89.1
Lowest	100.0	99.5	105.6
Second	100.0	100.6	97.0
Third	100.0	99.7	92.5
Fourth	100.0	97.9	90.3
Highest	100.0	96.7	82.8

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Earned Income as a Percentage of the CPS, by Quintile of Family Income, 2002

Quintile	CPS	ACS	SIPP
All persons	100.0	97.3	88.9
Lowest	100.0	117.3	113.9
Second	100.0	104.1	97.3
Third	100.0	98.8	89.5
Fourth	100.0	97.6	89.1
Highest	100.0	93.6	85.0

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Unearned Income as a Percentage of the CPS, by Quintile of Family Income, 2002

Quintile	CPS	ACS	SIPP
All persons	100.0	102.2	90.3
Lowest	100.0	83.4	98.2
Second	100.0	92.2	96.3
Third	100.0	103.8	106.2
Fourth	100.0	99.7	98.3
Highest	100.0	122.8	64.5

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Nonresponse to Income Questions

- **Income questions produce some of the highest item nonresponse in household surveys**

- **To measure the overall level of nonresponse, we estimate the proportion of total income that is identified in the survey file as "allocated"**

- **If available, partial information—such as bracketed amounts or, for panel surveys, values from prior interviews—can lead to qualitatively better imputation**

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Percentage of Income Allocated, with or Without Partial Information, 2002

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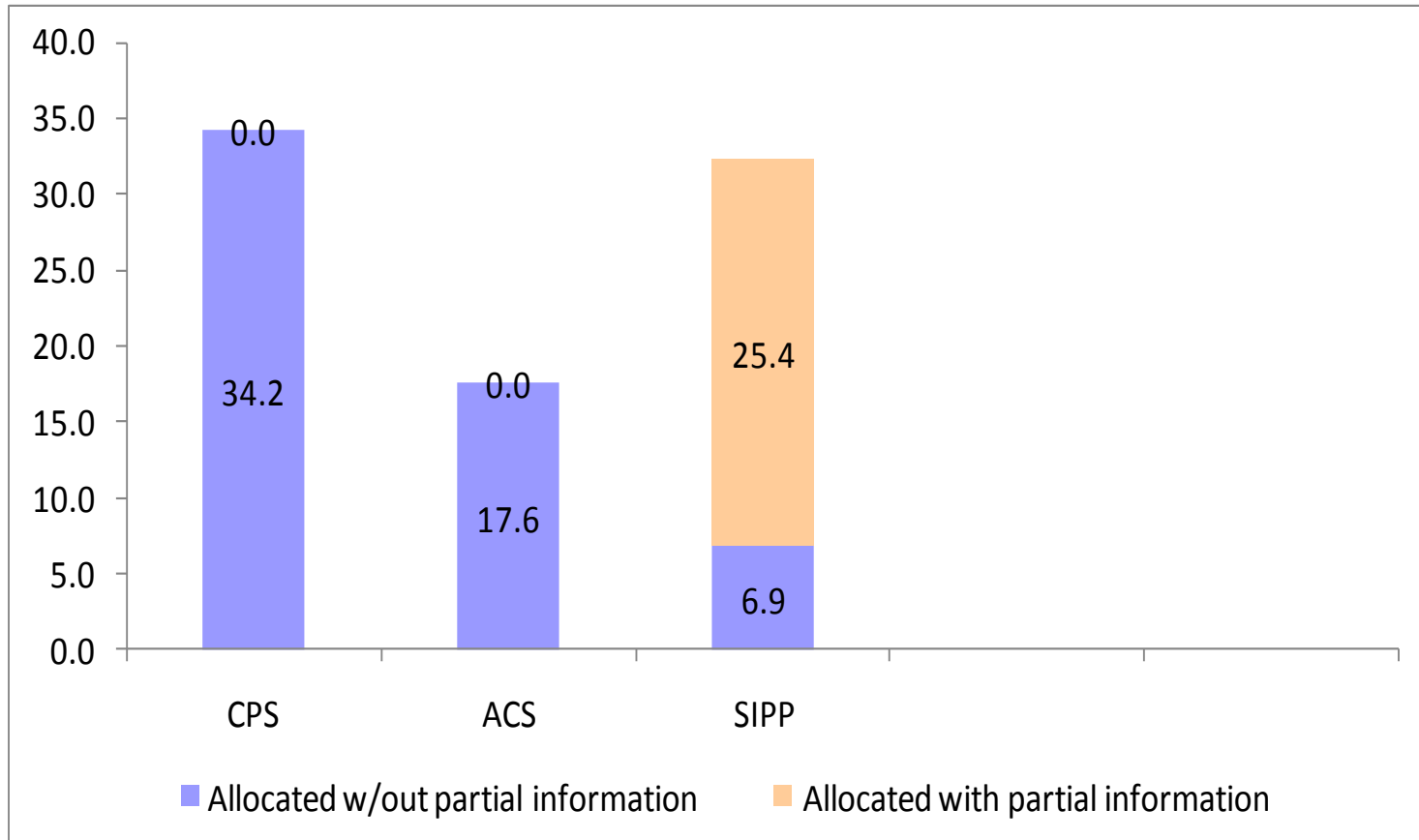
Rounding of Reported Income

- **We cannot assess the accuracy of reported incomes directly, but one way in which respondents may introduce inaccuracy is through approximation**

- **When numerous respondents round their reported incomes, this creates spikes in the distribution**

Rounding of Reported Income (cont'd.)

- **The frequency of rounded responses can be quantified**

- **Pervasive rounding distorts the results of policy simulations that use income thresholds to establish eligibility**

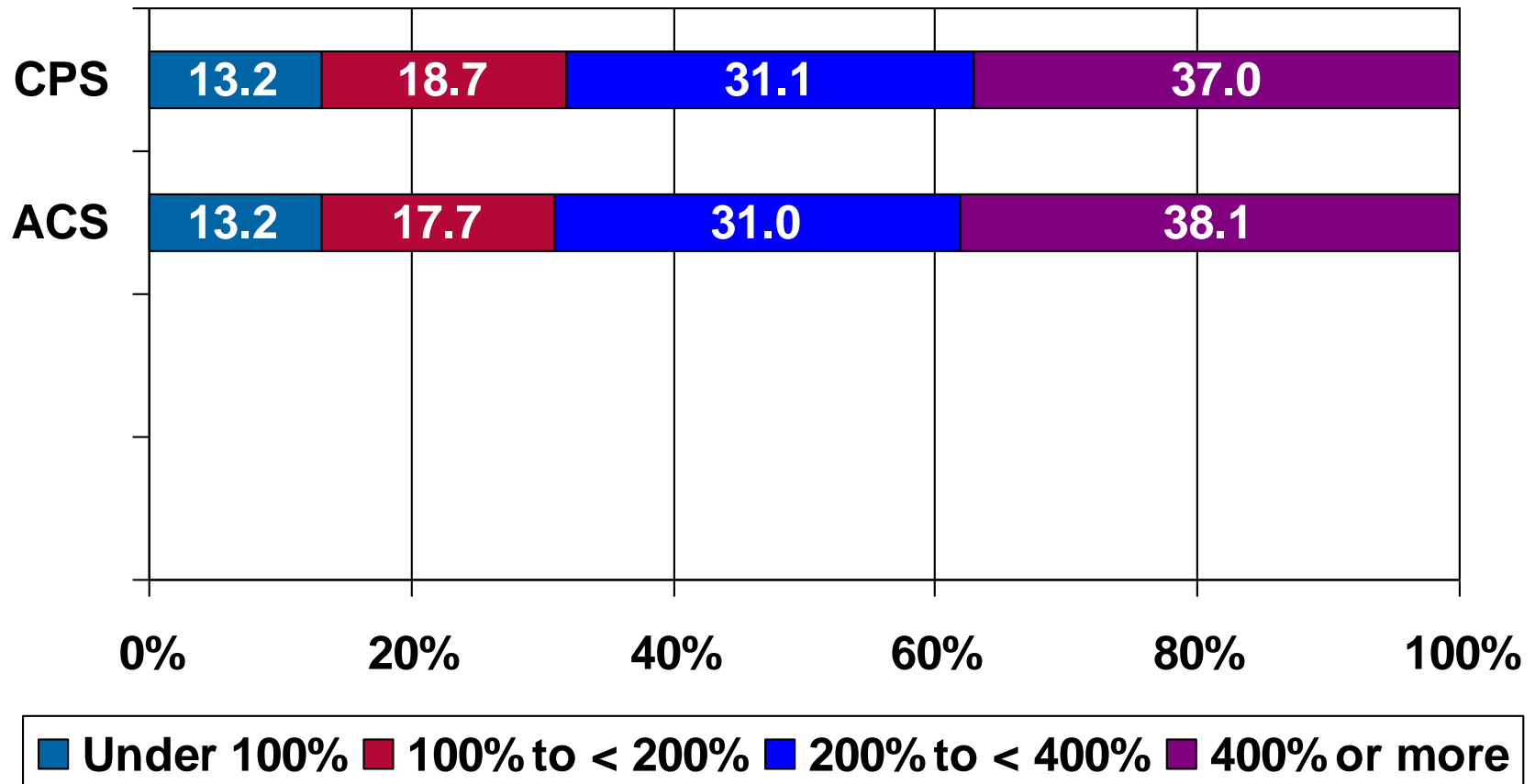# Percentage of Reported Incomes Divisible by $5,000 Among Positive Dollar Amounts Below $52,500

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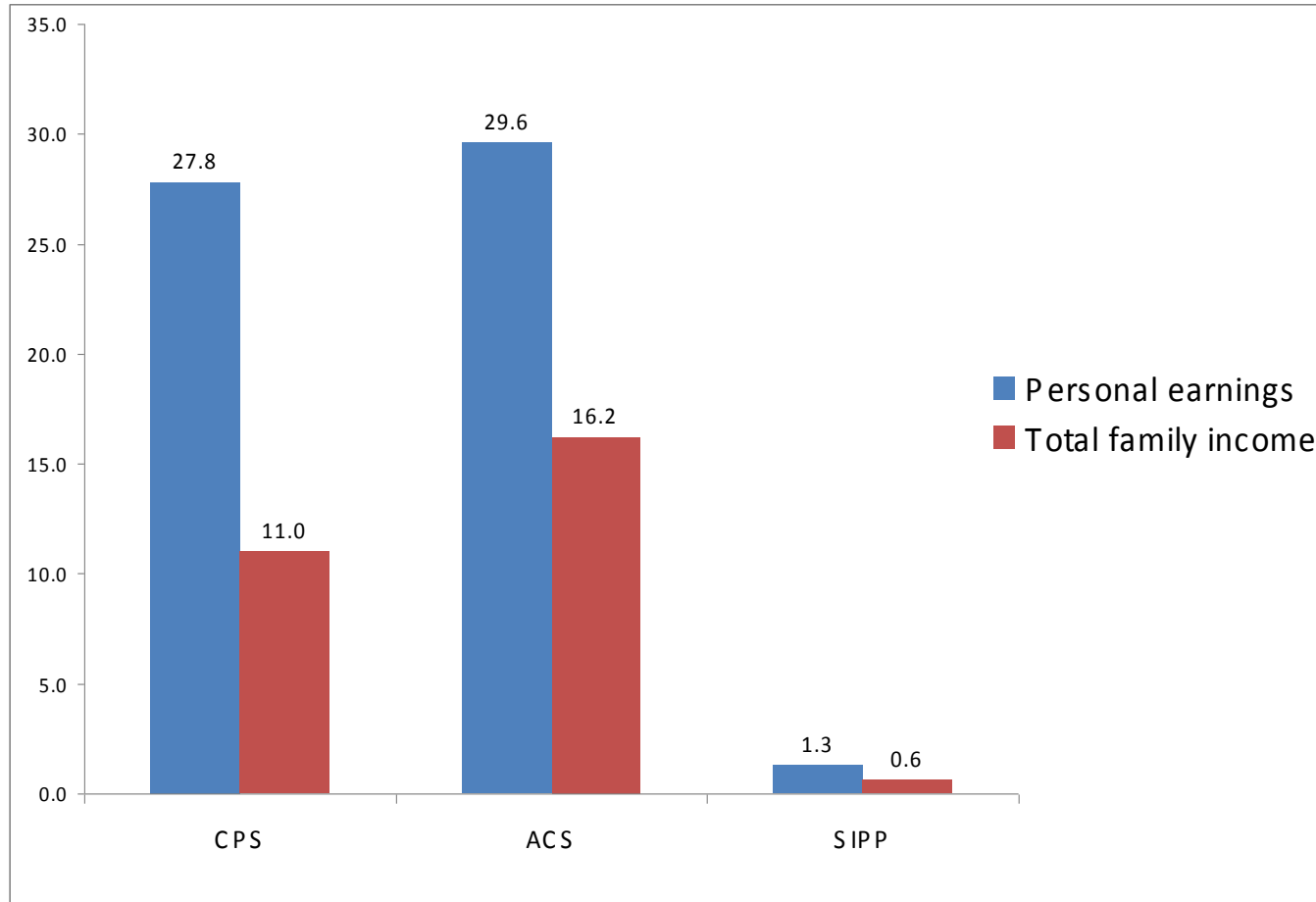
Current Estimates for the CPS and ACS
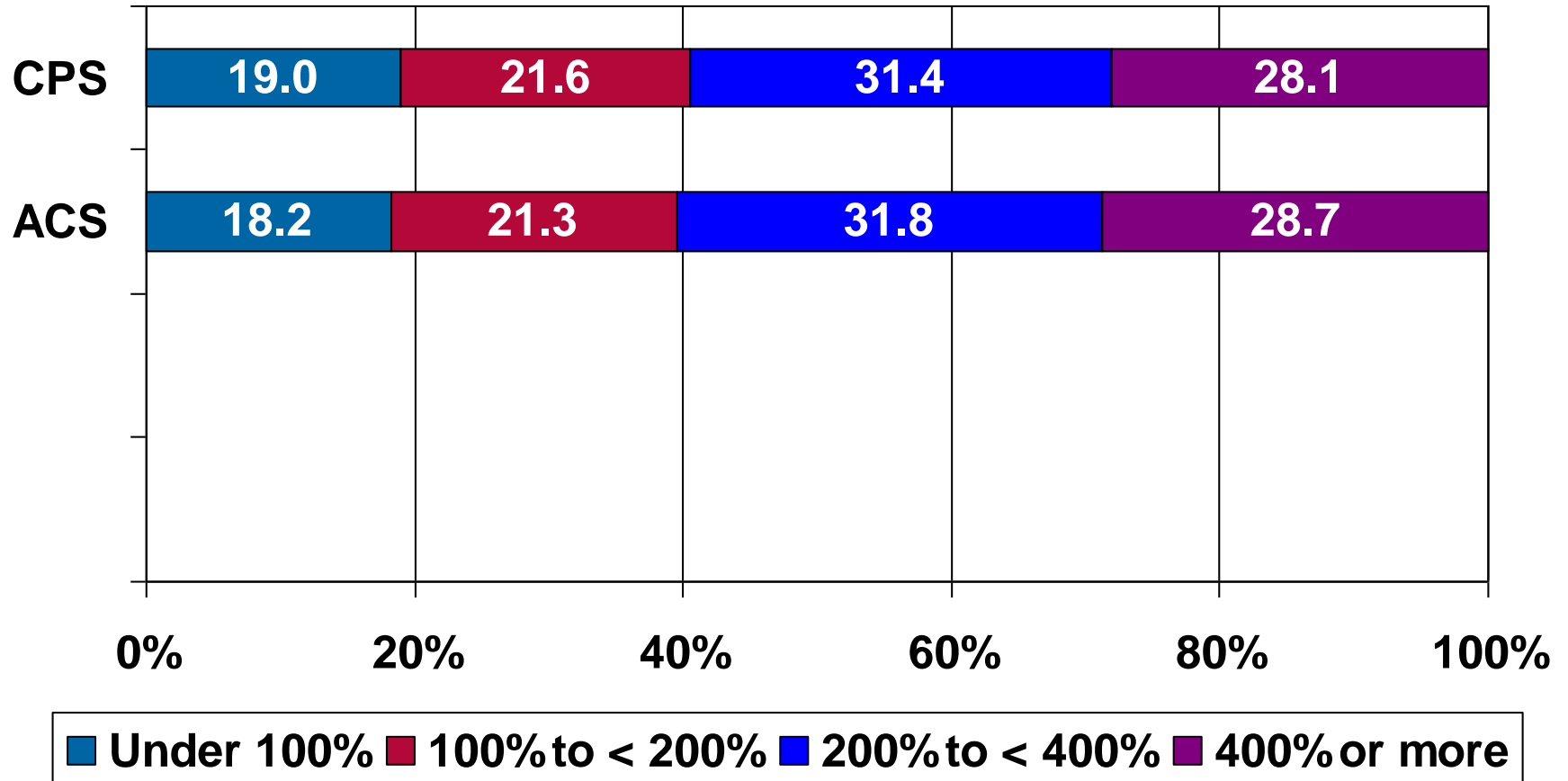
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Measurement of Poverty

- **The income measures most often used in policy-related analyses focus on the lower end of the income distribution**

- **The most widely used measures compare family income to official poverty thresholds, which vary by family size**

- **Differences in survey estimates of the poor and near-poor may reflect differences in definitions as well as data quality**
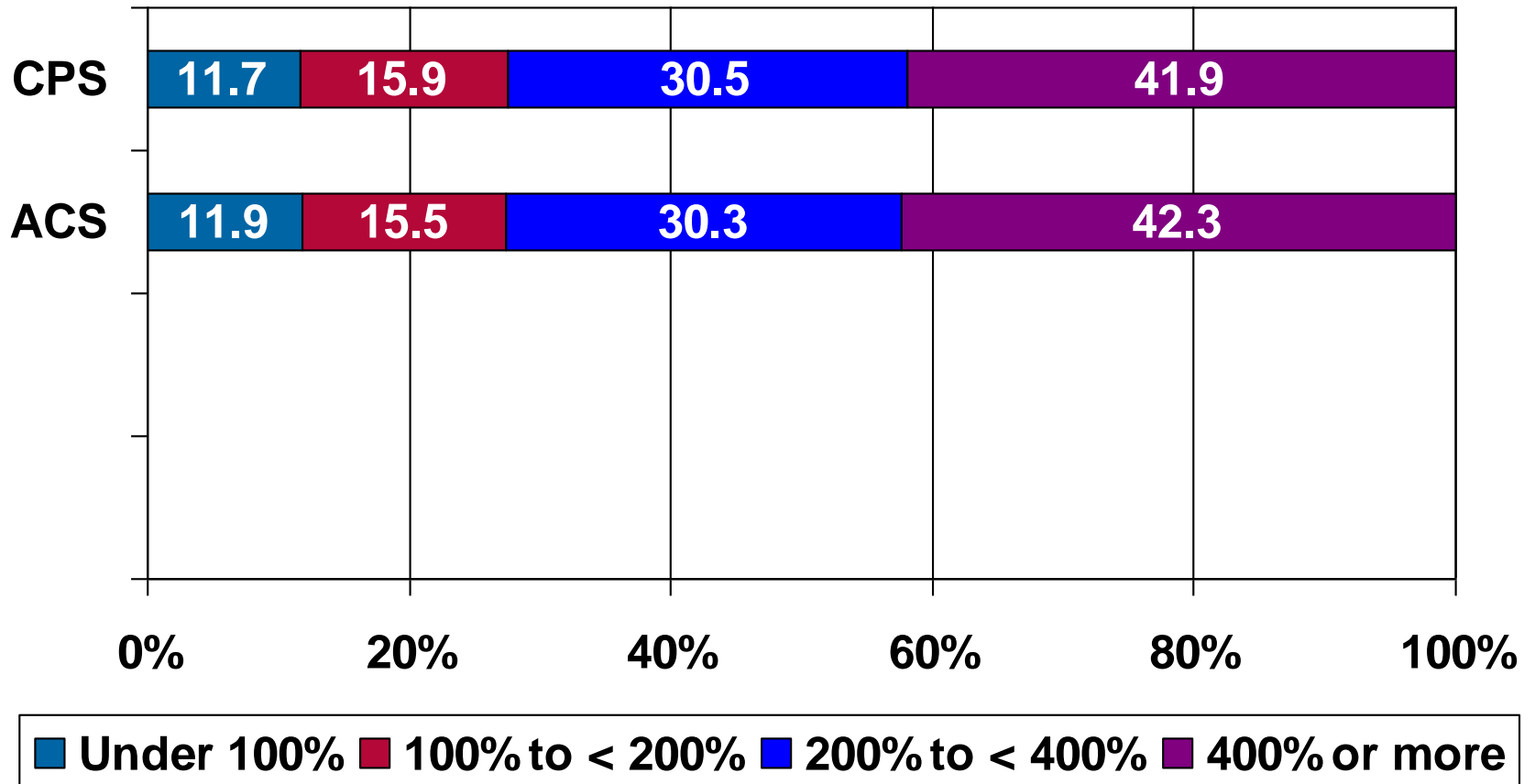
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Distribution of Population by Income Relative to Poverty: All Persons, CPS and ACS, 2008

	Under 100%	100% to < 200%	200% to < 400%	400% or more
CPS	13.2	18.7	31.1	37.0
ACS	13.2	17.7	31.0	38.1

0%   20%   40%   60%   80%   100%

Legend: ■ Under 100% ■ 100% to < 200% ■ 200% to < 400% ■ 400% or more

Distribution of Population by Income Relative to Poverty: Children Under 18, CPS and ACS, 2008

	Under 100%	100% to < 200%	200% to < 400%	400% or more
CPS	19.0	21.6	31.4	28.1
ACS	18.2	21.3	31.8	28.7

0%   20%   40%   60%   80%   100%

■ Under 100% ■ 100% to < 200% ■ 200% to < 400% ■ 400% or more

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Distribution of Population by Income Relative to Poverty: Non-Elderly Adults, CPS and ACS, 2008

CPS	11.7	15.9	30.5	41.9
ACS	11.9	15.5	30.3	42.3

0%　　　　20%　　　　40%　　　　60%　　　　80%　　　　100%

■ Under 100%　■ 100% to < 200%　■ 200% to < 400%　■ 400% or more

Distribution of Population by Income Relative to Poverty: Elderly Persons 65+, CPS and ACS, 2008

|	Under 100%	100% to < 200%	200% to < 400%	400% or more
CPS	9.7	26.6	33.5	30.3
ACS	9.9	21.9	33.0	35.2
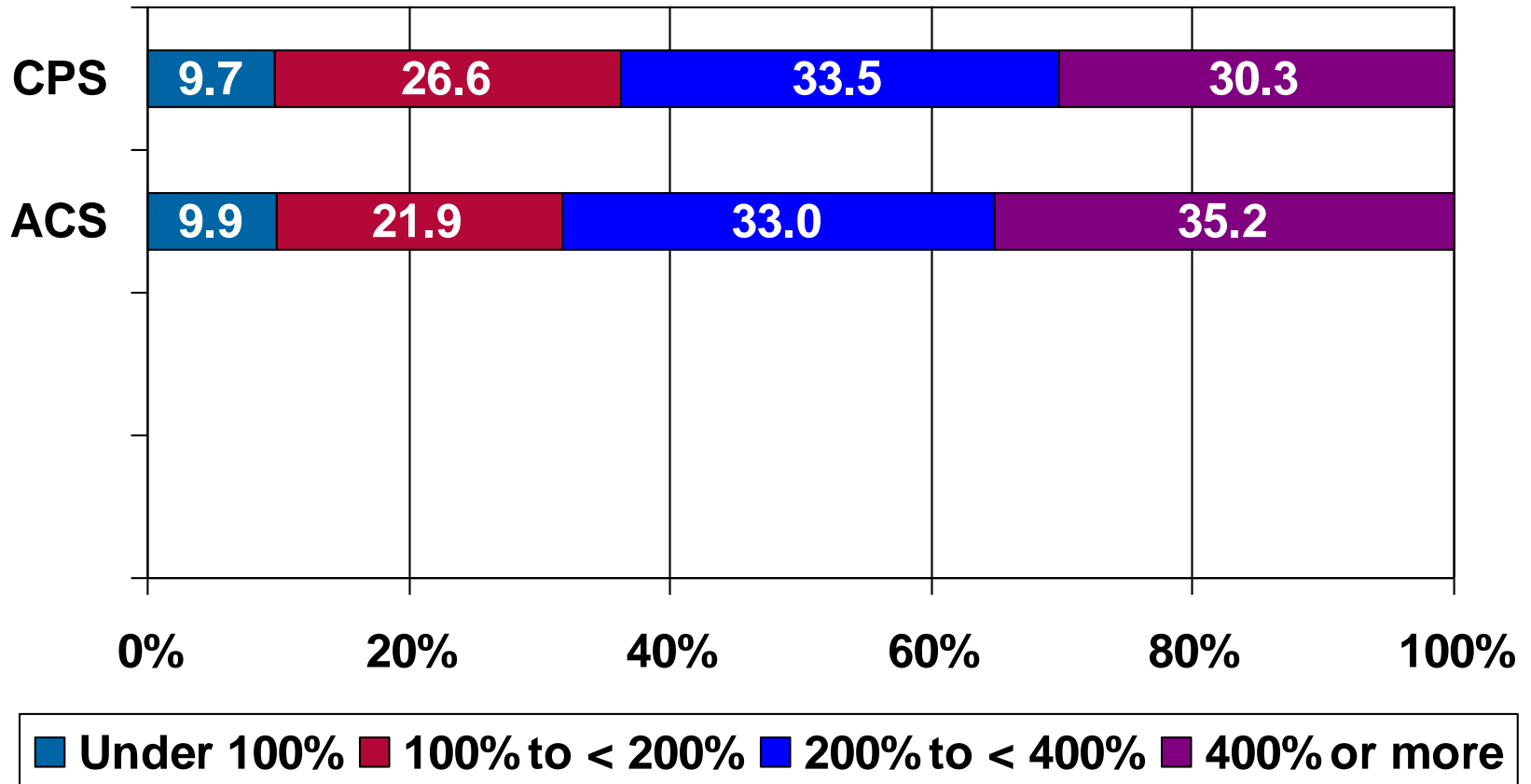
Measurement of Health Insurance Coverage

- **The CPS asks respondents if they had health insurance at any time during the preceding calendar year**

- **Respondents indicating no coverage were presumably uninsured the entire year**

- **Yet CPS estimates of the uninsured compare to other surveys' estimates of persons uninsured at a point in time**
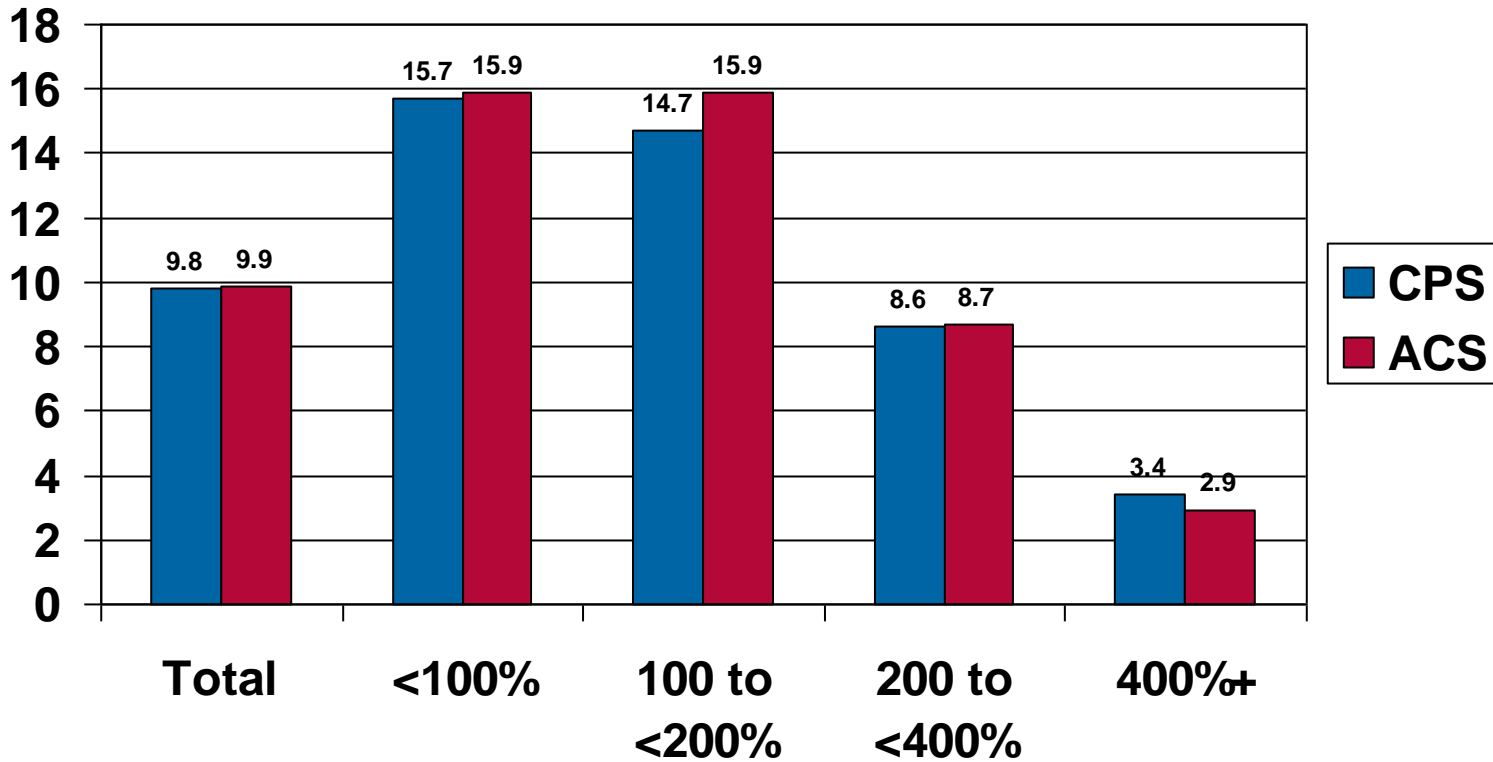
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Measurement of Health Insurance Coverage (cont'd.)

- **The ACS asks respondents about their coverage at the time of the interview**

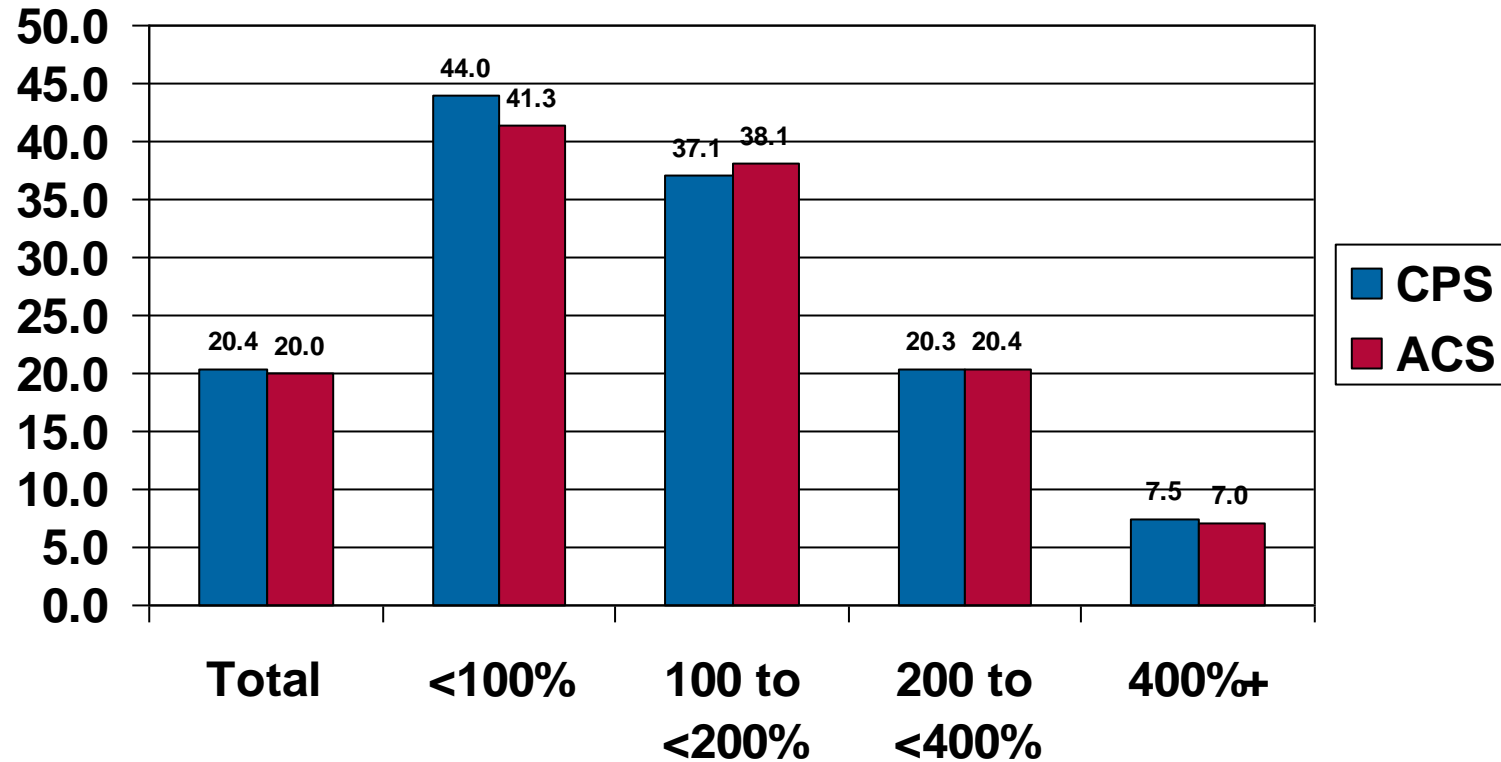- **Respondents who report no coverage are uninsured at that point in time**

Percentage Uninsured by Income Relative to Poverty: All Persons, CPS and ACS, 2008
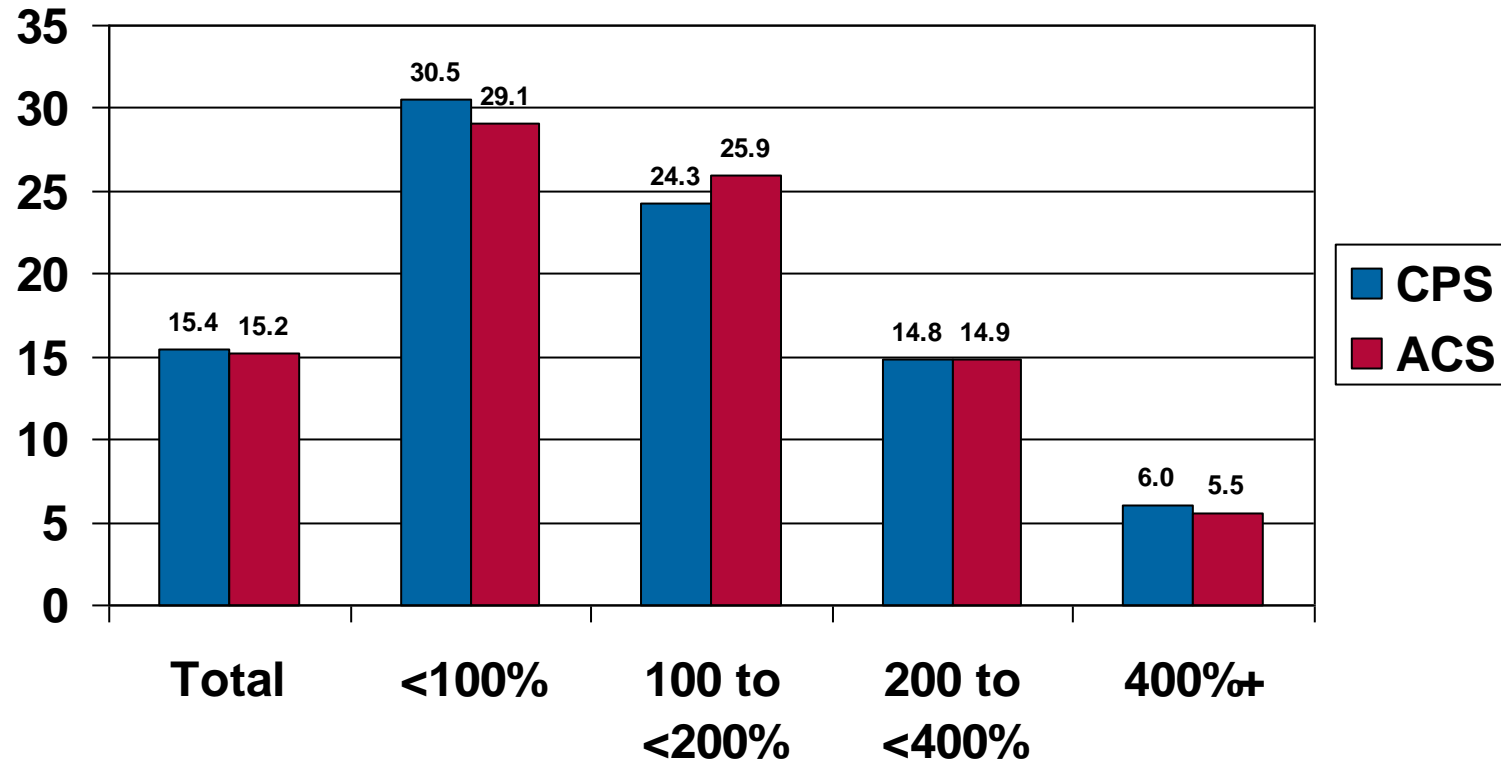
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Percentage Uninsured by Income Relative to Poverty: Children Under 18, CPS and ACS, 2008

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Percentage Uninsured by Income Relative to Poverty: Non-Elderly Adults, CPS and ACS, 2008

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Percentage Uninsured by Income Relative to Poverty: Elderly Persons 65+, CPS and ACS, 2008

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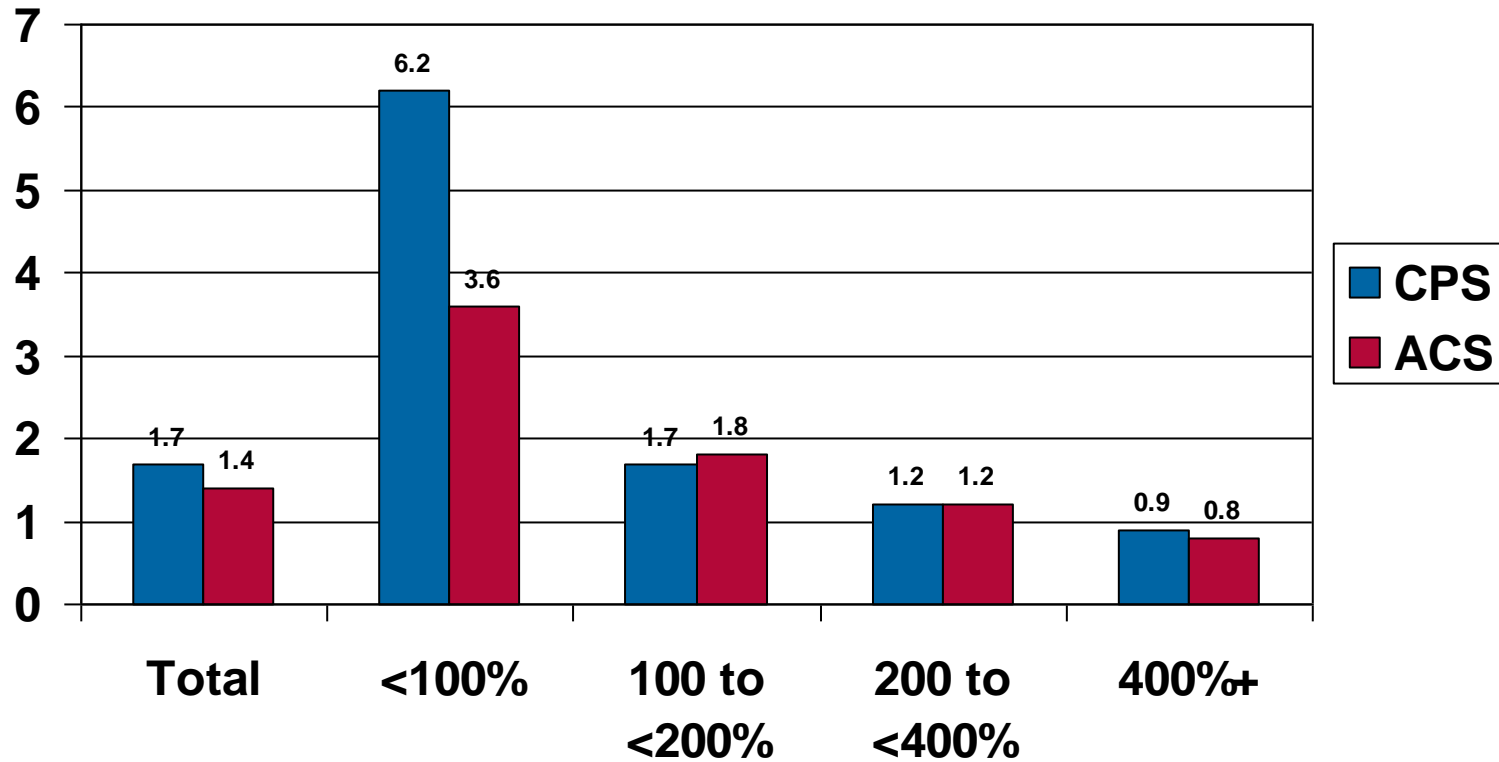
Considerations in Using the ACS for Health Policy Analysis

- **Point-in-time measurement of health insurance coverage in the ACS provides an important advantage over the CPS; despite this, the uninsured estimates are very similar**

- **Similarity of total family income between the ACS and the CPS greatly enhances the value of the ACS for policy analysis**

- **Lower levels of nonresponse to income questions in the ACS is a significant plus**

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Considerations in Using the ACS for Health Policy Analysis (cont'd.)

- **More frequent rounding in the ACS is evidence of lower quality, but the differences are not as great as for nonresponse**

- **Implications of the rolling reference period for ACS income estimates are not fully understood; furthermore, the impact could vary with the business cycle (but we see little evidence of this)**

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For More Information

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