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# Historical Changes in Current Population Survey Health Insurance Coverage Items for Survey Years 1988 through 2009

## *Introduction*

Health insurance coverage among the U.S. population is estimated through the use of general population surveys. The Annual Social and Economic supplement to the Current Population Survey (CPS) is the most widely used source for estimates of health insurance coverage at both the national and state level<sup>i</sup>, and has included health insurance coverage questions that can be trended since 1988. In this time a number of methodological changes have been applied to the CPS. This brief summarizes the changes to the CPS health insurance questions and data variables for survey years 1988 through 2009 (reflecting calendar years 1987 through 2008).

## *About the Current Population Survey*

The CPS is a monthly survey that the Census Bureau conducts for the Bureau of Labor Statistics to provide data on labor force participation and unemployment. As the official source of government statistics on employment status and income, data on health insurance coverage is collected through the Annual Social and Economic Supplement (formerly referred to as the “March Supplement”), which was initially added to the CPS in March of each year and was expanded to February through April beginning in 2001.

The CPS represents a cross-section of the civilian non-institutionalized population of the U.S. The sample is designed to be representative of each state and the District of Columbia and has included approximately 77,000 households per year since 2000; the 2009 response rate was 86 percent.<sup>ii</sup>

The CPS is designed to provide an estimate of those without any type of health insurance coverage for the entire previous calendar year. The CPS asks respondents to recall their insurance status for the prior calendar year (January through December) at a later point of fielding – during February through April of the following year. The question includes a comprehensive roll of insurance options that include public program names specific to the state in which the interview is conducted. Since 2000, a verification question has been included to confirm that respondents who did not respond that they were enrolled in any insurance programs are, in fact, uninsured.

## *Historical Changes to the CPS*

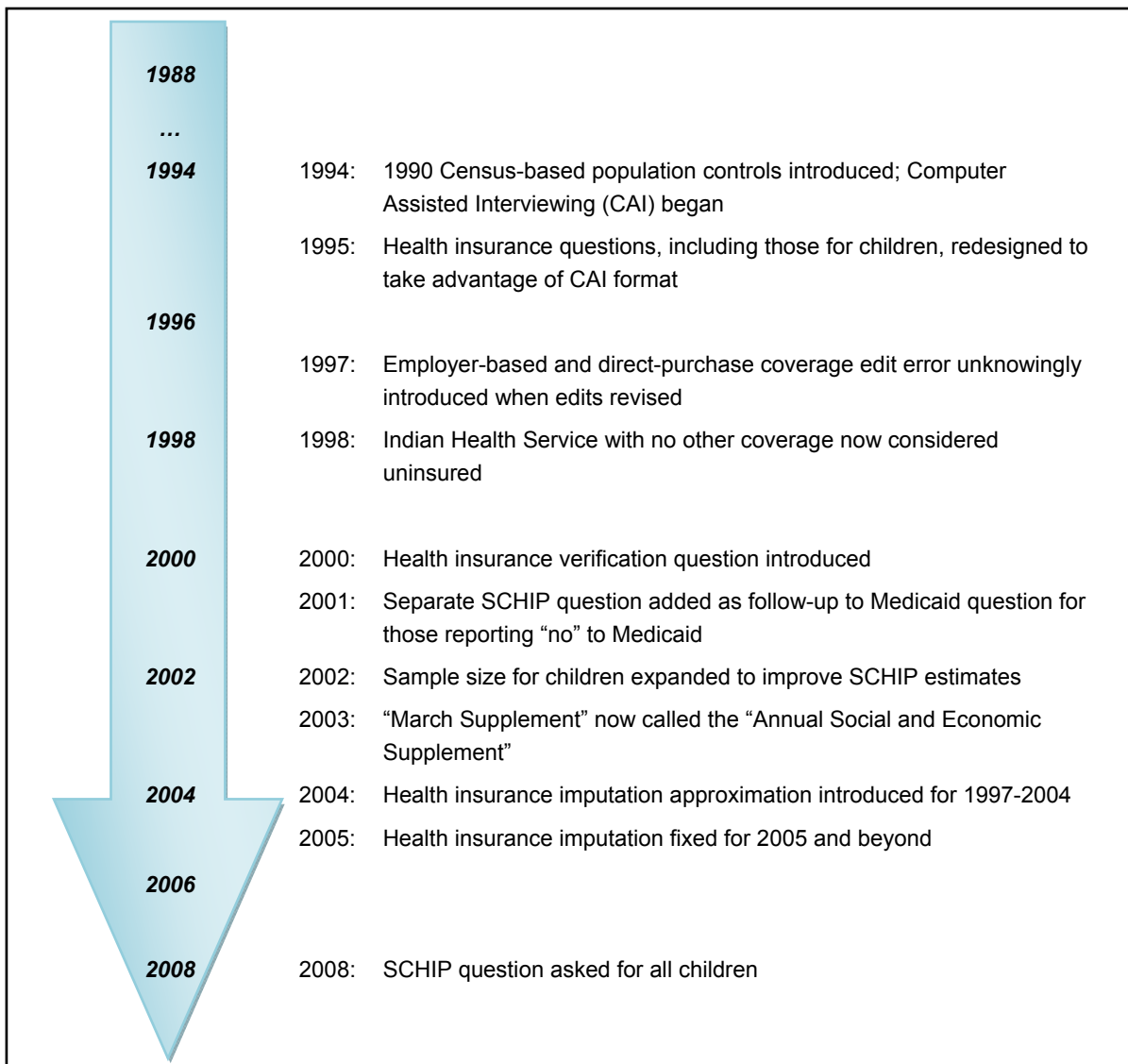
This brief provides a chronological description of the changes to the health insurance questions and fields on the CPS surveys and data files for survey years 1988 through 2009, along with a visual summary representation of the historical changes (see Exhibit 1). Exhibit 2, at the end of this brief, is a table describing the variables used by the Census Bureau to determine if a person had any health insurance coverage in the preceding year.

Detailed descriptions of the health insurance fields available in the CPS Data Dictionary and a facsimile of the survey questionnaire are provided by the Census Bureau yearly. This documentation may be obtained from the following three web sites:

- The U.S. Census Bureau: <http://www.census.gov/aprd/techdoc/cps/cps-main.html>
- The Inter-University Consortium for Political and Social Research (ICPSR): [www.icpsr.umich.edu](http://www.icpsr.umich.edu)
- The National Economic Research (NBER): [www.nber.org](http://www.nber.org)

The Census Bureau web site provides the most up-to-date user notes for any errors or changes to the data that may have occurred after the original data release.

### *Exhibit 1. Historical Timeline for CPS Survey Year Changes*



## *Description of Historical Changes to the CPS*

### **1988 – 1994**

A limited number of questions regarding health insurance were included in the survey from 1988 – 1994. The respondent was asked whether each member of the household was covered by Medicaid, Medicare, Military health care, and/or privately obtained insurance, which included coverage through an employer or union.

### **1990 – 1994**

For the 1994 survey, weights were updated so that they were based on the 1990 Census population controls. Census subsequently re-released 1990 & 1993 data based on the 1990 weights, but did not release new weights for survey years 1991-1992.

### **1994**

A new questionnaire specifically designed for computer-assisted interviewing (Computer Assisted Telephone Interview/Computer Assisted Personal Interview (CATI/CAPI)) was introduced after two years of testing. Health insurance questions were expanded as part of a test comparing the earlier paper survey with the new CATI/CAPI survey. The health insurance survey items for 1994 are equivalent to those for 1988-1993.

### **1995 –1996**

The 1995 survey used a more detailed set of health insurance questions than prior CPS surveys. Previously, employer-sponsored coverage was asked as a subset of private coverage. In the new version, respondents were asked more directly about employer coverage. In addition, children's health insurance recodes were made consistent with other recodes that cover adults and children. The new questions did appear to have an effect on individual types of coverage: more people had military health care and employer-based coverage than the previous year.

However, prior to release of the 1995 public use data set, health insurance variables were made consistent with 1994 data. A file with the detailed 1995 data for the new questions is available from the Census Bureau and may be used to supplement the public use file.

- The file is “mar95ext.dat” and can be downloaded from the Census Bureau web site, <http://www.census.gov/housing/>.

For further details, please refer to the Current Population Survey, March 1995 User Note 3, available at <http://www.census.gov/apcd/techdoc/cps/cpsmar95.pdf>.

Starting with the 1996 survey, Indian Health Service was included as an insurance coverage type. Also, the CPS public use data files began to include the detailed data from the new health insurance questions introduced in the 1995 survey.

### **1998**

Beginning with the 1998 survey, people with no coverage other than Indian Health Service were no longer considered covered by health insurance; instead, they were considered uninsured. The effect of this change on the overall estimates of health insurance coverage was negligible; however, the decrease in the number of people covered by Medicaid may be partially due to this change. The IHSFLG (Indian Health Service Flag) may be used to update

the MCAID field to include these persons in Medicaid coverage when consistency with previous years recoding is desired. Alternately, this change can be undone in earlier years.

For more information, please refer to SHADAC Issue Brief #11, "Reclassifying Health Insurance Coverage for the Indian Health Service in the Current Population Survey: Impact on State Uninsurance Estimates," available at <http://www.shadac.org/files/IssueBrief11.pdf>.

## 2000

The 2000 survey added a verification component to the health insurance questions, which decreased the national estimate of the uninsured by 7.7%. State estimates of the uninsured decreased at differing rates.

For detailed descriptions of this change please refer to:

- SHADAC's Issue Brief #4, "What is Behind the 8 Percent Drop in Uninsurance?" available at <http://www.shadac.org/files/IssueBrief4.pdf>, or
- The Census Bureau's "The March CPS Health Insurance Verification Question and Its Effect on Estimates of the Uninsured," available at <http://www.census.gov/hhes/www/hlthins/verif.html>.

The data for the verification questions are not available on the public use files in 2000, but a file with only the verification data is available from the Census Bureau may be used to update the public use files.

- This file is "newhlt00.dat" and it is described in "newhlt00.txt". Both files are available at <http://www.census.gov/ftp/pub/housing/hlthins>.

## 2001

The 2001 survey added a question regarding SCHIP coverage (the States' Children's Health Insurance Programs) as a follow-up for children who were reported not to have Medicaid coverage. Data for the verification questions and the SCHIP coverage question are available beginning with the 2001 public use files. Note in Exhibit 2 at the end of this brief that codes for "other" types of insurance and verification type change due to the introduction of SCHIP as an option in the middle of the list.

## 2002

The 2002 survey had an increase in sample size to improve estimates of children's health insurance coverage. The sample expansion included interviewing some households from the February, April, and prior November samples who would not have otherwise been included in the supplement. In addition, the sample size was disproportionately increased for states with high sampling errors for uninsured children.

## 2003

Beginning in January 2003, the CPS weights were updated so that they were based on the 2000 Census population controls. The January 2000-December 2002 time series data were also revised to reflect 2000-based weights.

The Bureau of Labor Statistics produced files with the revised weights that can be used to update the public use file.

- These extract files are available from the NBER web site, [http://www.nber.org/data/cps\\_extract.html](http://www.nber.org/data/cps_extract.html).

For more information, please see “Revisions to the Current Population Survey Effective in January 2003,” available at <http://www.bls.gov/cps/rvcps03.pdf>.

### **1997 – 2006**

During the process of updating the data editing procedures for the 2006 survey data, the Census Bureau discovered an error introduced in 1997 during an earlier editing update. Specifically, if a respondent reported that someone in the household had employment-based or direct-purchase health coverage and then reported that “All” household members were covered under that health insurance policy, CPS editing procedures did not code the other household members as insured. Instead, health insurance coverage was initially missing for other household members and then given a value using the usual imputation procedures. This resulted in some household members being coded as uninsured, when in fact the respondent had said they had insurance. Correcting this error necessitated reprocessing and re-releasing the entire 2005 and 2006 data files.

It was not possible to reprocess every year in which this error occurred. Instead, the Census Bureau released extract files for 1997-2004 with flags that can be used to update the public use file. These flags are called “ALLEMPL” and “ALLPRIV,” for “all have employer-sponsored coverage” and “all have privately-purchased coverage,” respectively.

- The extract files are available on the Census website, <http://www.census.gov/hhes/www/hlthins/usernote/extracts/extracts.html>.
- Instructions on how to merge these data onto the public use data files are available at [http://www.census.gov/hhes/www/hlthins/usernote/extracts/revhlth\\_README.txt](http://www.census.gov/hhes/www/hlthins/usernote/extracts/revhlth_README.txt).

More information about the error and its implications is included in the Census Bureau report, “Health Insurance Estimates from the U.S. Census Bureau: Background for a New Historical Series,” available at [http://www.census.gov/hhes/www/hlthins/usernote/revhlth\\_paper.pdf](http://www.census.gov/hhes/www/hlthins/usernote/revhlth_paper.pdf).

### **2008**

The 2008 survey began to ask directly whether any child in the household was covered during the previous year by the state’s Children’s Health Insurance Program (CHIP). Previously, the CHIP question was asked as a follow up only for children who were initially said not to have Medicaid coverage. Despite CHIP coverage now being asked for all children, it is not advisable to use this as an independent measure of CHIP insurance rates. Rather, SHADAC recommends that CHIP coverage be combined with Medicaid coverage for a more complete measure of whether the child has public insurance coverage.<sup>iii</sup>

## Exhibit 2. CPS Variables Used to Determine Whether a Person has Health Insurance

This exhibit provides the variables that are used to determine if a person is insured. For example, in 2005 a person is insured if COV\_HI = 1 or MCAID = 1 or MCARE = 1 or CHAMP = 1. These fields may be recodes of other fields. Where possible the fields used in the recode process with their appropriate values are included in the cell below the recode field. In addition, from 1997-2004, the flags ALLEMP and ALLPRIV correct an error in the originally-released data affecting private health insurance coverage.

### Health Insurance Coverage Descriptions

Private Health Insurance	Covered by private insurance
Medicaid	Covered by Medicaid or other government program except Military
Medicare	Covered by Medicare
Military Health Care	Covered by Military insurance such as VA, Tricare, etc

Type of Coverage: 1988-1994				
Survey year(s)	Private Health Insurance*	Medicaid	Medicare	Military Health Care
1988-1994	COV_HI = 1 or CH_HI = 1 or 2	MCAID=1 or CH_MC=1	MCARE=1	CHAMP = 1

Type of Coverage: 1994-2008				
Recode	Private Health Insurance*	Medicaid	Medicare	Military Health Care
	COV_HI = 1	MCAID = 1	MCAID = 1	CHAMP = 1
<b>Survey year recode fields:</b>				
1995	HI_YN = 1 CH_HI = 1 or 2			
1996	HI = 1 DEPHI = 1 PRIV = 1 DEPRIV = 1 OUT = 1 OTHSTYP(1-6) = 9, 10, 11, 12 or 13	CAID = 1 OTYP4 = 1 OTHSTYP(1-6) = 2, 7, 8 or 14	CARE = 1 OTHSTYP(1-6) = 1	OTYP(1-3) or OTYP5 = 1 OTHSTYP(1-6) = 3,4,5 or 6
<i>(table continues)</i>				

Type of Coverage: 1994-2008				
Recode	Private Health Insurance* COV_HI = 1	Medicaid MCAID = 1	Medicare MCAID = 1	Military Health Care CHAMP = 1
<b>Survey year recode fields:</b>				
<b>1997</b>	HI = 1 DEPHI = 1 PRIV = 1 DEPRIV = 1 OUT = 1 OTHSTYP(1-6) = 9, 10, 11, 12 or 13  <b>ALLEMPL = 1</b> <b>ALLPRIV = 1</b> (Flag to correct error in assigning coverage for household members in 1997-2004)	CAID = 1 OTYP4 = 1 OTHSTYP(1-6) = 2, 7, 8 or 14	CARE = 1 OTHSTYP(1-6) = 1	OTYP(1-3) or OTYP5 = 1 OTHSTYP(1-6) = 3, 4, 5 or 6
<b>1998-1999</b>	HI = 1 DEPHI = 1 PRIV = 1 DEPRIV = 1 OUT = 1 OTHSTYP(1-6) = 9, 10, 11, 12, or 13  <b>ALLEMPL = 1</b> <b>ALLPRIV = 1</b> (Flag to correct error in assigning coverage for household members in 1997-2004)	CAID = 1 OTHSTYP(1-6) = 2, 8 or 14	CARE = 1 OTHSTYP(1-6) = 1	OTYP(1-3) or OTYP5 = 1 OTHSTYP(1-6) = 3, 4, 5 or 6
Note: Beginning in 1998 Indian Health Service is no longer in Medicaid recode field MCAID. Therefore, after 1998 a person with only Indian Health Service is considered uninsured. The IHSFLG can be used to update the MCAID flag.				
<b>2000</b>	HI = 1 DEPHI = 1 PRIV = 1 DEPRIV = 1 OUT = 1 OTHSTYP(1-6) = 9, 10, 11, 12, or 13 AHITYP(1-6) = 9, 10, 11, 12, 13 or 14  <b>ALLEMPL = 1</b> <b>ALLPRIV = 1</b> (Flag to correct error in assigning coverage for household members in 1997-2004)	CAID = 1 OTHSTYP(1-6) = 2, 8 or 14 AHITYP(1-6) = 2 or 8	CARE = 1 OTHSTYP(1-6) = 1 AHITYP(1-6) = 1	OTYP(1-3) or OTYP5 = 1 OTHSTYP(1-6) = 3, 4, 5 or 6 AHITYP(1-6) = 3, 4, 5 or 6
<i>(table continues)</i>				

Type of Coverage: 1994-2008				
Recode	Private Health Insurance* COV_HI = 1	Medicaid MCAID = 1	Medicare MCAID = 1	Military Health Care CHAMP = 1
<b>Survey year recode fields:</b>				
<b>2001-2004</b>	HI = 1 DEPHI = 1 PRIV = 1 DEPRIV = 1 OUT = 1 OTHSTYP(1-6) = 10, 11, 12, 13 or 14 AHITYP(1-6) = 10, 11, 12, 13, 14 or 15  <b>ALLEMPL = 1</b> <b>ALLPRIV = 1</b> (Flag to correct error in assigning coverage for household members in 1997-2004)	CAID = 1 PCHIP = 1 OTHSTYP(1-6) = 2, 7, 9 or 15 AHITYP(1-6) = 2, 7~ or 9	CARE = 1 OTHSTYP(1-6) = 1 AHITYP(1-6) = 1	OTYP(1-3) or OTYP5 = 1 OTHSTYP(1-6) = 3, 4, 5 or 6 AHITYP(1-6) = 3, 4, 5 or 6
~ Note: AHITYP(1-6) = 7 is CHIP. In 2001, when AHITYP(1-6) = 7 the Census Bureau coded COV_HI=1, rather than MCAID=1. Beginning with 2002 data the Census Bureau corrected this error.				
<b>2005-2008</b>	HI = 1 DEPHI = 1 PRIV = 1 DEPRIV = 1 OUT = 1 OTHSTYP(1-6) = 10, 11, 12, 13 or 14 AHITYP(1-6) = 10, 11, 12, 13, 14 or 15	CAID = 1 PCHIP = 1 OTHSTYP(1-6) = 2, 7, 9 or 15 AHITYP(1-6) = 2, 7 or 9	CARE = 1 OTHSTYP(1-6) = 1 AHITYP(1-6) = 1	OTYP(1-3) or OTYP5 = 1 OTHSTYP(1-6) = 3, 4, 5 or 6 AHITYP(1-6) = 3, 4, 5 or 6
* Private Health Insurance coverage that is considered employment-based are those persons with COV_GH = 1 or CH_HI = 2 for 1989 –1996 and 2005-2008 data. Use COV_GH = 1 or CH_HI = 2 or ALLEMPL=1 for 1997-2004 data.				

### Suggested Citation

State Health Access Data Assistance Center. 2009. "Historical Changes in Current Population Survey Health Insurance Coverage Items for Survey Years 1988 through 2008." Issue Brief #19. Minneapolis, MN: University of Minnesota.

### Endnotes

<sup>i</sup> Blewett, L.A., M.B. Good, K.T. Call, and M. Davern. 2004. "Monitoring the Uninsured: A State Policy Perspective." *Journal of Health Politics, Policy and Law* 29(1):107-145.

<sup>ii</sup> U.S. Census Bureau. 2009. "Source of the Data and Accuracy of the Estimates for Income, Poverty, and Health Insurance Coverage in the United States: 2008." Available at: [http://www.census.gov/hhes/www/p60\\_236sa.pdf](http://www.census.gov/hhes/www/p60_236sa.pdf); Davern M., T.J. Beebe, L.A. Blewett, and K.T. Call. 2003. "Recent changes to the Current Population Survey: Sample expansion, health insurance verification and state health insurance coverage estimates." *Public Opinion Quarterly* 67(4):603-26.

<sup>iii</sup> SHADAC. 2008. "Summary of SHADAC Conference Call to Discuss the 2007 CPS Health Insurance Estimates." Minneapolis, MN: University of Minnesota. Available at: [http://www.shadac.org/files/CPS2007Summary\\_Sep2008.pdf](http://www.shadac.org/files/CPS2007Summary_Sep2008.pdf).