



# **Estimates of Health Insurance Coverage in Massachusetts from the 2009 Massachusetts Health Insurance Survey**

**Sharon K. Long and Lokendra Phadera  
The Urban Institute**

**October 2009**



Deval L. Patrick, Governor  
Commonwealth of Massachusetts  
Timothy P. Murray  
Lieutenant Governor

JudyAnn Bigby, Secretary  
Executive Office of Health and Human Services  
Sarah Iselin, Commissioner  
Division of Health Care Finance and Policy

## **Table of Contents**

Introduction	1
The Massachusetts Health Insurance Survey and Other Surveys in Massachusetts	1
Uninsurance in Massachusetts	2
Comparing Uninsurance Estimates from the HIS to Other Surveys	4
Discussion	6
Endnotes	8

## **Introduction**

Massachusetts enacted a landmark health care reform bill in April 2006 with the goal of moving to near universal insurance coverage. That initiative, which includes shared individual, employer and government responsibilities, incorporates Medicaid expansions (called MassHealth in Massachusetts), subsidized private insurance coverage, insurance market reforms, a new purchasing pool, requirements for employers, and an individual mandate.<sup>1</sup> Based on the 2008 Massachusetts Health Insurance Survey (HIS), the overall uninsurance rate in the state was estimated to be 2.6%, a historic low for the state and the nation.<sup>2</sup> This policy brief provides an update on the estimates of the uninsurance rate in Massachusetts as of Spring 2009. The primary data source for this work is the 2009 HIS. We also present uninsurance estimates based on other surveys fielded in Massachusetts as a comparison to the estimates from the HIS.

## **The Massachusetts Health Insurance Survey and Other Surveys in Massachusetts**

### **Massachusetts Health Insurance Survey**

The Massachusetts HIS provides information on health insurance coverage and access to and use of health care for the non-institutionalized population in Massachusetts. We provide a general overview of the HIS here; more detailed information is available at [www.mass.gov/dhcfp](http://www.mass.gov/dhcfp).

In order to ensure that the survey covers nearly all residents of Massachusetts (including households without a landline telephone<sup>3</sup>), a dual sample frame was employed, combining a random-digit-dial (RDD) landline telephone sample with an address-based sample. The survey, which is available in English, Spanish, and Portuguese, is conducted via telephone, web, and mail. It takes, on average, about 19 minutes to complete.

In the survey, an adult member of the household responds to questions about health insurance coverage and demographic information for all members of the household. More detailed socioeconomic characteristics and health care information are collected for one randomly selected household member (referred to as the target person in the household) and other members of his or her family who are residing in the household.<sup>4</sup> The tabulations reported here are based on the household target person.

The 2009 survey was fielded between March and June.<sup>5</sup> Surveys were completed with 4,910 Massachusetts households. The margin of error due to sampling at the 95% confidence interval is +/- 1.5 percentage points for estimates based on the full sample. Estimates for subgroups of the total population, as they are based on smaller sample sizes, will have a larger margin of error. The response rate was 50% for the RDD-sample and 37% for the address-based sample, for a combined response rate of 41%. While the response rate for address-based samples tends to be lower than RDD samples, the address-based sample provides more complete coverage of the Massachusetts

population by capturing households without landline telephones (which are largely cell phone-only households).

## **Other Massachusetts Surveys**

Beyond the HIS, estimates of the uninsurance rate in Massachusetts are available from a number of different surveys. These include several national surveys that are conducted annually: the U.S. Census Bureau's Current Population Survey (CPS); the Centers for Disease Control (CDC) and Prevention's Behavioral Risk Factor Surveillance System (BRFSS), conducted by the Massachusetts Department of Public Health in Massachusetts; the CDC's National Health Interview Survey (NHIS); and, as of 2008, the Census Bureau's American Community Survey (ACS); as well as the Massachusetts Health Reform Survey (MHRS). The latter, which is conducted by the Urban Institute and funded jointly by the Blue Cross Blue Shield of Massachusetts Foundation, the Commonwealth Fund, and the Robert Wood Johnson Foundation, has been conducted every year since 2006.

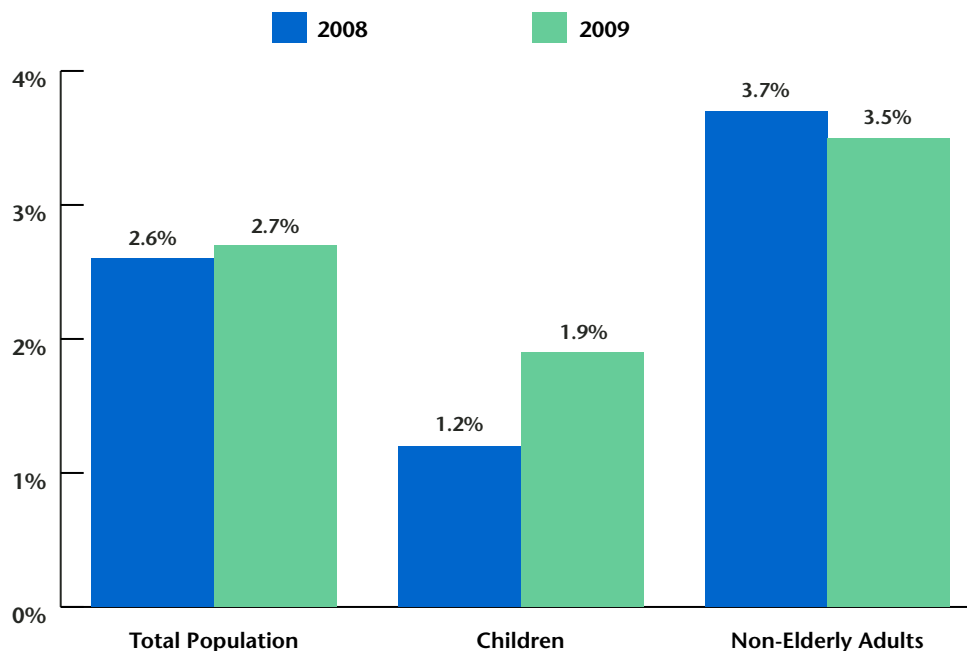
A number of studies have compared the relative strengths and weaknesses of the national surveys for estimating state uninsurance rates in general,<sup>6</sup> while a recent DHCFP policy brief focused more specifically on the issues in estimating uninsurance rates in Massachusetts using national surveys, the HIS and the MHRS.<sup>7</sup> DHCFP revised the HIS in 2008 to address many of the limitations of other surveys (including an earlier version of the HIS) in estimating uninsurance rates in Massachusetts. Key changes included expanding the survey to include all residential households (not just those with a landline telephone) and modifying the survey instrument to capture more of the health insurance and health care options in the state.

## **Uninsurance in Massachusetts**

In 2009, the uninsurance rate in Massachusetts was, at 2.7% (95% CI:  $\pm 0.6$  percentage points), virtually unchanged from the historically low level of 2.6% (95% CI:  $\pm 0.8$  percentage points), that was reported last year (Figure 1).<sup>8</sup> Uninsurance remained quite low among children. The uninsurance rate for children in 2009 (defined as persons under the age of 19) was at 1.9% (95% CI:  $\pm 1.2$  percentage points), which is not significantly different from last year's estimate of 1.2% (95% CI:  $\pm 1.2$  percentage points). As was true last year, all of the elderly adults included in the HIS reported having insurance coverage in 2009.

Although uninsurance was higher among non-elderly adults than others in the state, at 3.5% (95% CI:  $\pm 0.8$  percentage points) in 2009, that level was also comparable to the uninsurance rate for non-elderly adults in 2008 at 3.7% (95% CI:  $\pm 1.1$  percentage points). Despite the recent economic downturn, which led to an increase in the unemployment rate in the state from 5.1% in June 2008 to 8.6% in June 2009,<sup>9</sup> we do not yet see evidence of a loss of insurance coverage among working-age adults in Massachusetts.<sup>10</sup> There is considerable consistency in the uninsurance rate between 2008 and 2009 for non-elderly adults by family income level, work status, and education (Figure 2). As shown, we find no significant differences in the uninsurance rates across subgroups of non-elderly adults between 2008 and 2009.

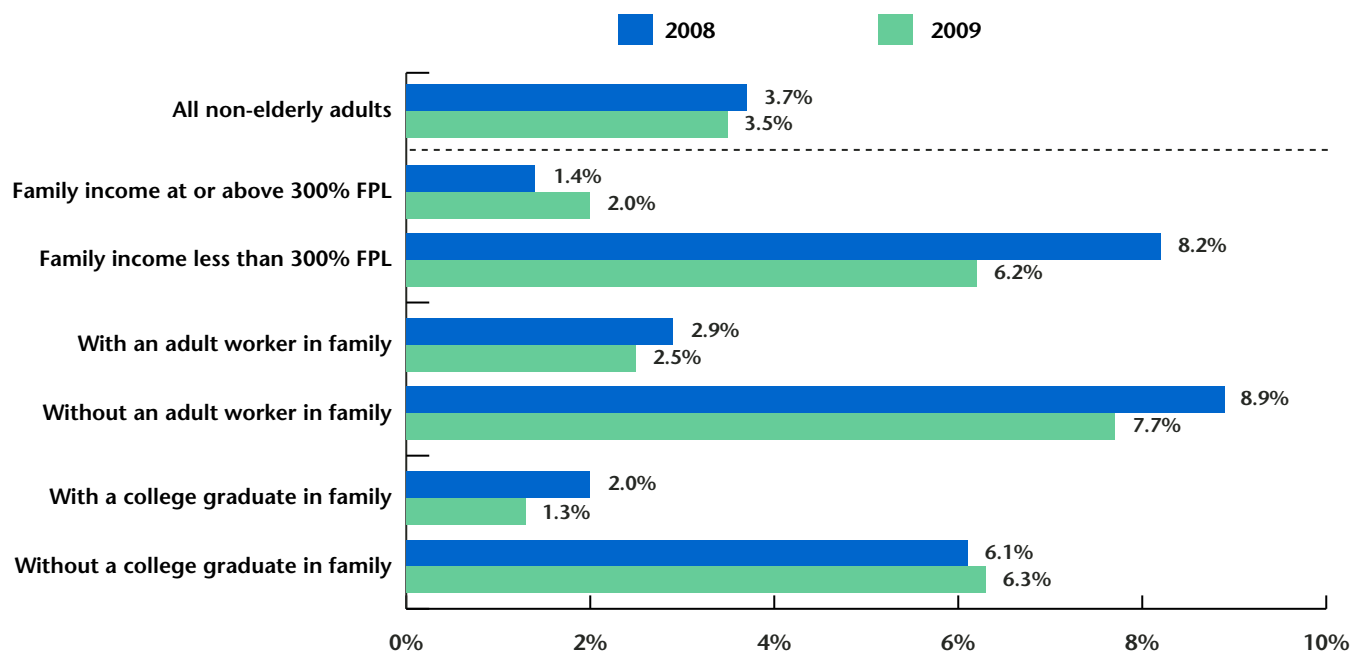
**Figure 1: Uninsurance Rates in Massachusetts, 2008 and 2009**



Source: 2008 and 2009 Massachusetts Health Insurance Surveys

Note: The 2008-2009 differences are not significantly different from zero at the 10% level, two-tailed tests.

**Figure 2: Uninsurance Rates in Massachusetts for Non-Elderly Adults, by Economic Circumstances, 2008 and 2009**



Source: 2008 and 2009 Massachusetts Health Insurance Surveys

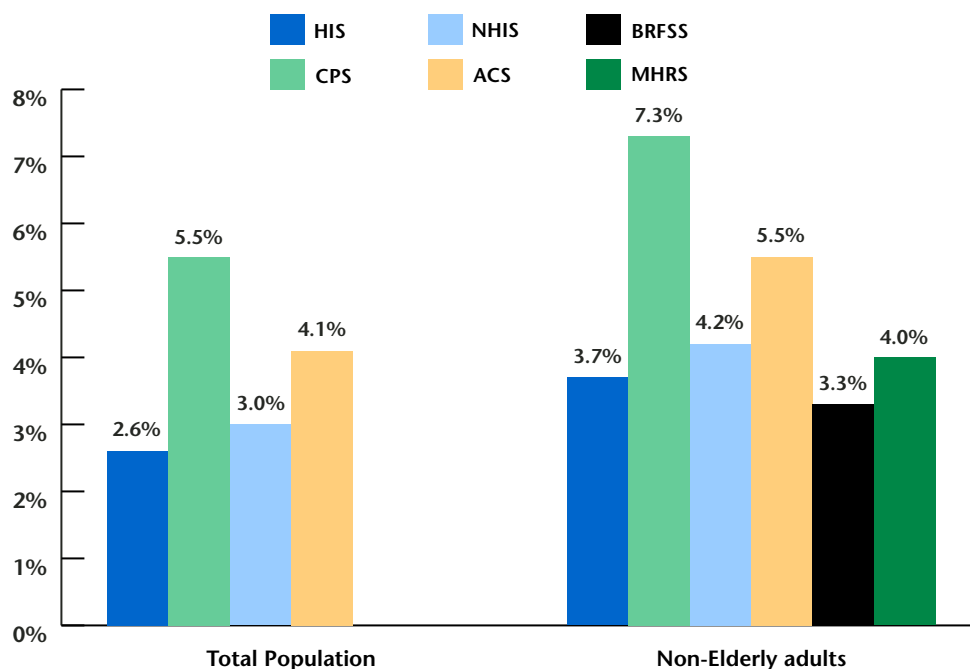
Note: The 2008-2009 differences are not significantly different from zero at the 10% level, two-tailed tests.

The finding of little impact of the economic recession on insurance coverage between the surveys in 2008 and 2009 is not necessarily surprising. Not all workers with employer-sponsored insurance (ESI) coverage who lose their jobs become uninsured immediately. Some will temporarily extend their ESI coverage,<sup>11</sup> others will obtain coverage through a spouse or directly purchase coverage on their own, and others will enroll in public programs. Similarly, the impact of the recession on employers' offering coverage will lag, as employers typically first search for ways to reduce costs rather than eliminating coverage altogether.

## Comparing Uninsurance Estimates from the HIS to Other Surveys

There are no estimates of the uninsurance rate in Massachusetts for 2009 from any other surveys, however, we can compare the uninsurance estimates from the HIS in 2008 to estimates from other surveys for that year. As shown in Figure 3, estimates of the uninsurance rate in 2008 in Massachusetts from the HIS were generally similar to those obtained from most other surveys. For the total population, this comparison is currently limited to the ACS, CPS and NHIS, where estimates of the uninsurance rate ranged from 3.0% to 5.5%, as compared to 2.6% in the HIS. For

**Figure 3: Comparison of Estimates of the Uninsurance Rates in Massachusetts from the Health Insurance Survey and Other Surveys, 2008**



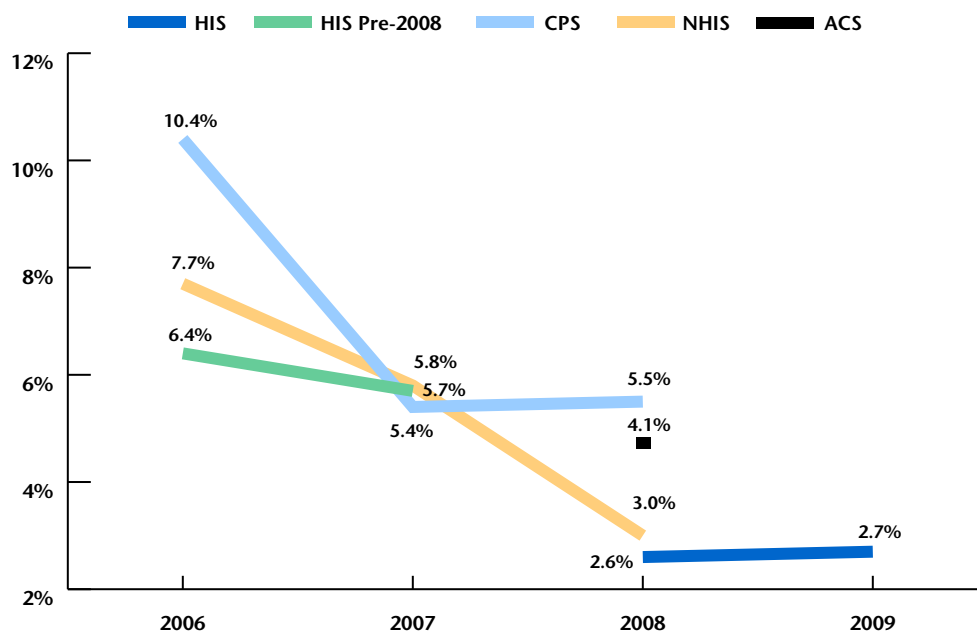
Source: 2008 Massachusetts Health Insurance Survey, 2009 Current Population Survey, 2008 National Health Interview Survey, 2008 Behavioral Risk Factor Surveillance System, and 2008 Massachusetts Health Reform Survey. Data for the total population are not available from the BRFSS and MHRS.

non-elderly adults, where there are more data sources available for comparison, the estimates of the uninsurance rate ranged from 3.3% to 7.3%, with the HIS at 3.7%. (One factor that will create some differences in the latter estimates: The HIS defines non-elderly adults as persons ages 19 to 64, while the other surveys include 18 year-olds in the non-elderly adult category.)

Differences in estimates of the uninsurance rate across surveys are not unusual as surveys differ on many dimensions including the questions that are asked, survey design and fielding strategies, data processing, and survey time frames.<sup>12</sup> In addition, surveys are based on samples of the Massachusetts population, which, by definition, are subject to error. Consequently, we would not expect different surveys to yield identical estimates of the uninsurance rate. As is true for 2008, a range of estimates of the uninsurance rate in Massachusetts have been reported from the different surveys in earlier years, as shown in Figure 4 for the overall population and in Figure 5 for non-elderly adults.

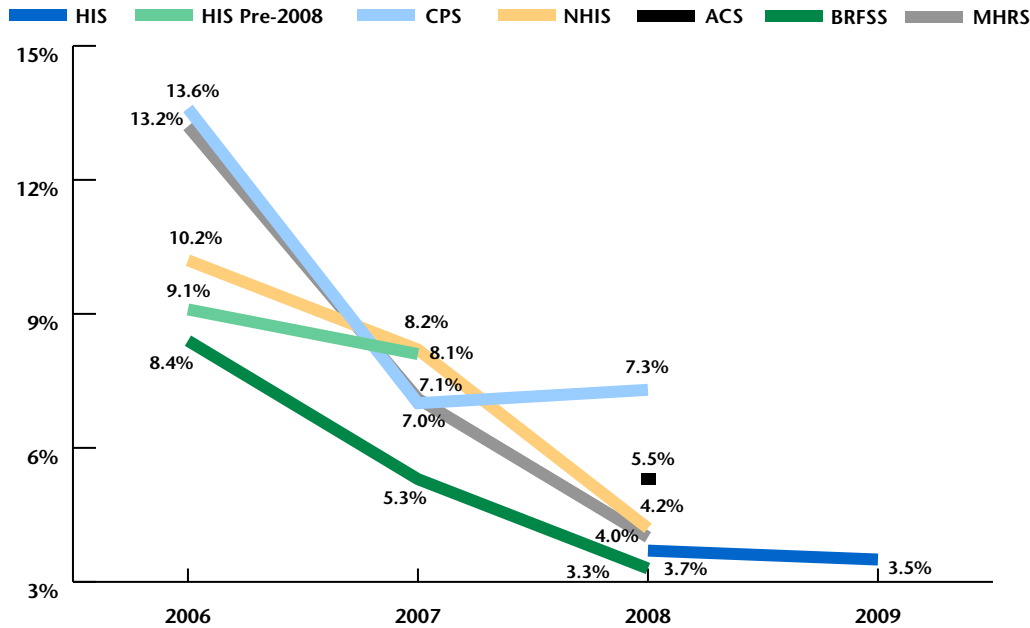
Over time, estimates of the uninsurance rate based on the CPS have tended to be higher than those of other surveys in Massachusetts. This pattern is consistent with studies for other states, which generally find uninsurance estimates higher in the CPS than in state-specific surveys.<sup>13</sup> A key difference between the CPS and the other surveys reported here is in the insurance question that is used. The CPS, which is fielded in March of each year, asks about insurance coverage over the prior calendar year, while the other surveys ask about insurance coverage at the time of the survey. However, the available evidence suggests that respondents are not reporting coverage for the prior

**Figure 4: Trends in Uninsurance in Massachusetts for All Ages, 2006 to 2009**



Source: 2006-2008 Massachusetts Health Insurance Survey, 2007-2008 Current Population Survey, and 2006-2008 National Health Interview Survey.

**Figure 5: Trends in Uninsurance for Non-Elderly Adults in Massachusetts, 2006 to 2009**



Source: 2006-2009 Massachusetts Health Insurance Survey, 2006-2008 National Health Interview Survey, 2006-2008 Behavioral Risk Factor Surveillance System, 2007-2008 Current Population Survey and 2006-2008 Massachusetts Health Reform Survey.

calendar year accurately in the CPS, raising questions about the appropriate interpretation of the insurance measure in the CPS.

While the specific estimate of the change in uninsurance between 2006 and 2008 varies depending on the survey, all of the available surveys show evidence of a substantial drop in uninsurance in Massachusetts since health reform began in 2006. For the overall population, both the NHIS and CPS show a 5 percentage point drop in the uninsurance rate from 2006. For non-elderly adults, the estimate of the drop in the uninsurance rate ranges from 5 percentage points (BRFSS) to 9 percentage points (MHRs), with the NHIS and CPS both showing a 6 percentage point drop. These findings stand in contrast to trends in the nation as a whole, where there was little change between 2006 and 2008 in the high levels of uninsurance. Based on tabulations from the NHIS and the CPS, uninsurance for the total US population remained steady at about 15% between 2006 and 2008, with uninsurance at 20% for non-elderly adults over the period.<sup>14</sup>

## Discussion

Massachusetts is now in the beginning of the fourth year of its ambitious health reform initiative, with evidence of strong and continuing gains in insurance coverage from the HIS and the other surveys that have been conducted in Massachusetts. The 2009 HIS shows uninsurance in Massachusetts continuing at historically low levels—at 2.7% for the overall population, 1.9% for



children, and 3.5% for non-elderly adults. The findings from the 2008 and 2009 HIS suggest that the recession had limited impact on health insurance coverage as of spring of this year.

Estimates of the 2009 uninsurance rate in Massachusetts from other sources will not be available until 2010. However, estimates of the uninsurance rate for 2008 are generally similar in the HIS and other available surveys, with the CPS somewhat above the estimates from HIS and other surveys. While the specific value of the estimate of the uninsurance rate for Massachusetts varies across data sources, both the CPS and ACS show the uninsurance rate in Massachusetts below that of the other 49 states and the District of Columbia.

## Endnotes

- <sup>1</sup> A detailed description of the elements of Massachusetts' health reform initiative is provided elsewhere, see, for example, J.E. McDonough et al. "The Third Wave of Massachusetts Health Care Access Reform" *Health Affairs* 25 (2006): w420-w431 (published on-line 14 September 2006; 10.1377/hlthaff.25.w420).
- <sup>2</sup> Long, SK, A Cook, and K Stockley. "Health Insurance Coverage in Massachusetts: Estimates from the 2008 Massachusetts Health Insurance Survey," March 2009 (Available at [www.mass.gov/dhcfp](http://www.mass.gov/dhcfp)).
- <sup>3</sup> These households, which include cell phone-only households and non-telephone households, are increasing rapidly in the United States, with 20.2% of households estimated to be cell phone-only in the second half of 2008, as compared to 14.7% in 2007. See Blumberg, SJ, et al. "Wireless Substitution: State-level Estimates from the National Health Interview Survey, January-December 2007." National Center for Health Statistics, March 11, 2009.
- <sup>4</sup> While most households are single-family households, some households include multiple families and/or families and unrelated individuals.
- <sup>5</sup> This is a bit earlier than the 2008 HIS, which was fielded between June and August 2008.
- <sup>6</sup> For an overview of work on this issue, see [www.shadac.org/category/topic/measures-insurance-coverage](http://www.shadac.org/category/topic/measures-insurance-coverage).
- <sup>7</sup> Long, SK, S Zuckerman, T Triplett, A Cook, K Nordahl, T Siegrist and C Wacks. "Estimates of the Uninsurance Rate in Massachusetts from Survey Data: Why Are They So Different? August 28, 2008 (Available at [www.mass.gov/dhcfp](http://www.mass.gov/dhcfp)). This policy brief did not include information on the NHIS and ACS. The NHIS (<http://www.cdc.gov/nchs/nhis.htm>) provides a representative sample of the civilian, non-institutionalized population in the U.S., with representative samples drawn from every state. While the survey is not designed to produce direct state-specific estimates, the sample designs of the surveys provide representative samples for large states, including Massachusetts. The ACS ([www.census.gov/acs/www/](http://www.census.gov/acs/www/)) is part of the Census Bureau's reengineered decennial census program, collecting information every year instead of every ten years. It is a mail survey that collects and produces population and housing information. A question on health insurance coverage was added in 2008. The ACS is designed to provide annual information for the nation, 50 states and the District of Columbia, congressional district and counties, and places and metropolitan areas with populations of 65,000 or more, as well as data for smaller areas using multiple years of data.
- <sup>8</sup> Administrative data on the number of non-elderly people with insurance coverage from DHCFP's August 2009 "Health Care in Massachusetts: Key Indicators" (available at [www.mass.gov/dhcfp](http://www.mass.gov/dhcfp)) shows a decrease of 19,000 from 5,503,000 to 5,484,000 between June 2008 and March 2009. This level of change would translate into a change in the uninsurance rate that is well within the margin of error for the HIS survey estimates.
- <sup>9</sup> Data available at [http://lmi2.detma.org/lmi/lmi\\_lur\\_a.asp](http://lmi2.detma.org/lmi/lmi_lur_a.asp)
- <sup>10</sup> The economic downturn should have little impact on the insurance coverage of the elderly since nearly all are covered by Medicare.
- <sup>11</sup> In an effort to provide support for continuing ESI coverage in the recession, the American Recovery and Reinvestment Act of 2009 (ARRA) provides for premium reductions under the Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA). Eligible individuals pay 35 percent of their COBRA premiums, with the remaining 65 percent is reimbursed to the coverage provider through a tax credit. See <http://www.dol.gov/ebsa/cobra.html> for additional information on this program. In addition to that program, Massachusetts' Medical Security Program (MSP) provides assistance paying COBRA premiums or transitional private insurance coverage for newly unemployed workers collecting unemployment benefits.
- <sup>12</sup> Long, SK, S Zuckerman, T Triplett, A Cook, K Nordahl, T Siegrist and C Wacks. "Estimates of the Uninsurance Rate in Massachusetts from Survey Data: Why Are They So Different? August 28, 2008 (Available at [www.mass.gov/dhcfp](http://www.mass.gov/dhcfp)).
- <sup>13</sup> State Health Access Data Assistance Center. "State Health Insurance Coverage Estimates: A Fresh Look at Why State Survey Estimates Differ from the CPS," Issue Brief #12, November 2007.
- <sup>14</sup> Cohen, RA and ME Martinez. "Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, 2008," National Center for Health Statistics, June 2009. Available at [www.cdc.gov/nchs/nhis.htm](http://www.cdc.gov/nchs/nhis.htm).

Division of Health Care Finance and Policy  
Two Boylston Street  
Boston, Massachusetts 02116

Phone: (617) 988-3100  
Fax: (617) 727-7662

Website: [www.mass.gov/dhcfp](http://www.mass.gov/dhcfp)

Publication Number: 10-287-HCF-02  
Authorized by Ellen Bickelman, State Purchasing Agent

Printed on Recycled Paper