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## The Effects of the Great Recession on Health Insurance: Changes in the Uninsured Population from 2007 to 2009

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**SUMMARY:** The economic recession that began in California in 2008 did not affect all counties equally. Using data from several years of the California Health Interview Survey, this policy brief examines the differences between 2007 and 2009 for the populations who were uninsured “for all or part of the prior year.” During this time period, counties with high unemployment and lower household income saw the highest growth

in the uninsured population, due to a large drop in job-based coverage and only a small increase in public coverage. Compared to the uninsured population in California in 2007, Californians who were uninsured for all or part of 2009 were older, more likely to be U.S.-born citizens, had lower household incomes, and were more likely to be unemployed and looking for work.

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Since 2008, California has experienced an economic recession of greater proportions than the rest of the United States. Unemployment in the state has been at least two percentage points higher than in the rest of the country. In mid-2007, California’s unemployment rate stood at 5.5%. By mid-2009, the unemployment rate had more than doubled, to 12.3%.<sup>1</sup> In conjunction with this increase in unemployment, the number of those who were uninsured for all or part of the past year also swelled, increasing from 6.4 million in 2007 to 7.1 million in 2009 (data not shown).<sup>2</sup>

The recession did not affect all counties in California equally. The unemployment rates in different counties in 2009 ranged from 9.5% to over 20%.<sup>3</sup> Additionally, the average and median household income levels in counties varied. Wealthier counties, for example, retained incomes higher than the

figure for the state overall, while some less wealthy counties saw dramatic drops in household income.

### Creating a “Recession Index”

To take account of economic variation among counties in California, we measured the increases in unemployment and the decreases in household income at the county level. For some counties, the changes were less than the state’s average, while other counties saw sizable changes in both indicators. These factors were combined into a “recession index” so that the degree of impact the recession had on a particular county could be measured (see *Methods* for a complete description). “Low impact” counties had 1 or no economic indicators of the recession; “moderate impact” counties had 2 or 3 indicators; “medium impact” counties had 4 indicators; and “high impact” counties had 5 or 6 indicators (Exhibits 1 and 2).

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## Definitions

### Uninsured All or Part of Past Year (“uninsured”)

Had no medical insurance for some or all of the past 12 months prior to their survey interview.

### Employment-Based Coverage All Year

Had medical insurance provided through their own or a family member’s employment for all of the past 12 months prior to their survey interview.

### Medi-Cal or Healthy Families All Year

Had medical insurance through either the Medi-Cal or Healthy Families programs for all of the past 12 months prior to their survey interview.

### Low Recession Impact

Counties had 1 or no economic indicators of the recession.

### Moderate Recession Impact

Counties had 2 or 3 economic indicators of the recession.

### Medium Recession Impact

Counties had 4 economic indicators of the recession.

### High Recession Impact

Counties had 5 or 6 economic indicators of the recession..

## Exhibit 1

### Counties by County-Level Recession Index, California, 2009

County-Level Recession Index	Low Impact	Moderate Impact	Medium Impact	High Impact
County	Alameda Contra Costa El Dorado Marin Napa Orange Placer San Diego San Francisco San Luis Obispo San Mateo Santa Barbara Santa Clara Santa Cruz Sonoma	Alpine Amador Calaveras Inyo Los Angeles Mariposa Mendocino Mono Nevada Riverside Sacramento Shasta Stanislaus Tuolumne Ventura Yolo	Butte Del Norte Humboldt Lake Lassen Madera Modoc Monterey Plumas San Bernardino Sierra Siskiyou Solano Trinity Tulare Yuba	Colusa Fresno Glenn Imperial Kern Kings Merced San Benito San Joaquin Sutter Tehama



This publication contains data from the California Health Interview Survey (CHIS), the nation’s largest state health survey. Conducted by the UCLA Center for Health Policy Research, CHIS data give a detailed picture of the health and health care needs of California’s large and diverse population. Learn more at: [www.chis.ucla.edu](http://www.chis.ucla.edu)

In this policy brief, we examine the differences among the newly uninsured all or part year populations in these four (low, moderate, medium, and high) recession index groups. Of these four groups, the medium recession impact group had the highest growth in uninsured population, resulting from a large drop in job-based coverage and only a small increase in public coverage. The medium group is defined as having

higher increases in unemployment and lower household incomes than the state on average.

Across all four groups, those who were uninsured for all or part of 2009 were older, more likely to be U.S.-born citizens, had lower household incomes, and were more likely to be unemployed and looking for work compared to the uninsured population in 2007.

Map of Counties by County-Level Recession Index, California, 2009

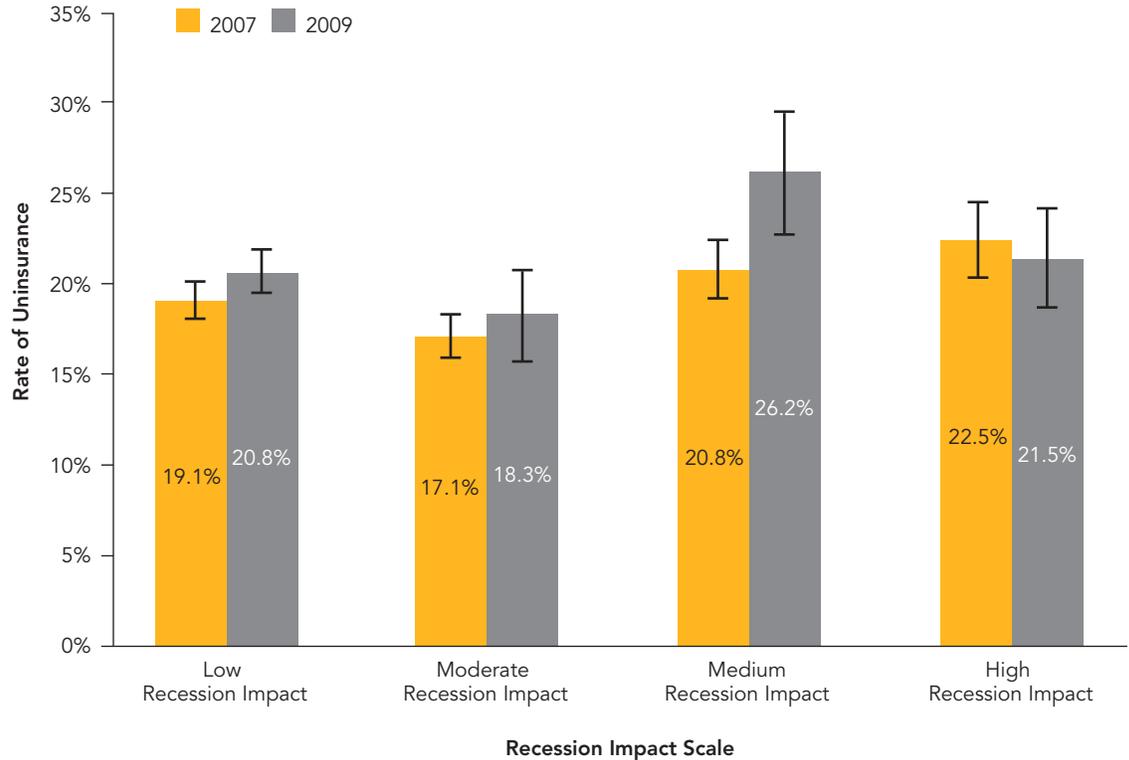
Exhibit 2



Source: 2009 California Health Interview Survey

## Exhibit 3

### Rates of Uninsurance for All or Part of the Past Year by County-Level Recession Index, Ages 0-64, California, 2007 and 2009



Source: 2007 and 2009 California Health Interview Surveys

#### Medium Recession Impact Counties Had Highest Growth in Uninsured

Counties most affected by the recession did not necessarily experience the greatest increase in uninsurance. Due to increases in public coverage – both Medi-Cal and Healthy Families – the “high recession impact” counties expanded their public coverage programs, while the rest of the county groups had a smaller increase or no increase at all. As a result, while the three lower impact groups all had some increase in the rate of uninsured (and a statistically significant increase for the medium impact group), the highest impact group actually saw a slight drop in the percentage of uninsured (Exhibit 3).

All four groups experienced at least some decline in the rates of employment-based coverage (data not shown). For the least affected counties (low and moderate), these declines were smaller; for the moderate impact

group, the declines were not statistically significantly different from 2007. The medium impact group experienced the highest drop in job-based health insurance from 2007 to 2009 (data not shown).

#### Middle-aged, Lower-income Workers Lost Coverage

Although the size of the uninsured populations in each county group differed, the patterns of changing demographics among them were markedly similar. For all four of the county “recession impact” groups, the uninsured populations from 2007 to 2009 shifted slightly toward an older population, with growth in the number of uninsured among those ages 45-64 in three county groups and among those ages 26-44 in the lowest recession impact group (Exhibit 4). The uninsured population in the high recession impact group had the largest shift to older people from 2007 to 2009, but it should be

## Uninsured Population in County-Level Recession Index Group by Age, Household Income, Work Status, and Citizenship/Immigration Status, Ages 0-64, California, 2009

Exhibit 4

County-Level Recession Index	Low Recession Impact		Moderate Recession Impact		Medium Recession Impact		High Recession Impact	
	2007	2009	2007	2009	2007	2009	2007	2009
<b>Age Group</b>								
0-18	15.4	13.8	17.2	14.4	20.0	19.2	16.2	13.6
19-25	22.0	19.6	18.4	19.7	23.9	24.0	23.7	21.1
26-44	39.2	43.2	42.0	41.6	35.4	33.3	42.4	41.9
45-64	23.4	23.4	22.4	24.4	20.7	23.5	17.8	23.4
Total	100%	100%	100%	100%	100%	100%	100%	100%
<b>Federal Poverty Level</b>								
0-133% FPL	37.3	42.0	44.3	47.9	38.2	41.1	50.0	53.6
134-400% FPL	42.0	37.2	41.7	39.7	48.4	45.6	40.0	33.8
401%+ FPL	20.8	20.8	14.0	12.4	13.3	13.4	10.0	12.7
Total	100%	100%	100%	100%	100%	100%	100%	100%
<b>Work Status</b>								
Full-Time	63.3	48.8	61.9	46.0	64.4	47.9	64.7	47.6
Part-Time	11.2	10.6	8.1	13.1	9.0	11.9	7.7	9.3
Employed, Not at Work	–	–	–	–	–	–	–	–
Unemployed, Looking for Work	8.1	18.2	8.8	21.2	6.6	21.9	9.1	20.5
Unemployed, Not Looking for Work	16.4	21.6	20.4	18.7	19.3	18.0	18.2	20.3
Total	100%	100%	100%	100%	100%	100%	100%	100%
<b>Citizenship and Immigration Status</b>								
U.S.-Born or Naturalized Citizen	67.4	71.4	62.7	67.5	71.6	79.5	71.8	66.3
Noncitizen with Green Card	13.1	14.4	16.3	14.2	13.3	10.4	12.1	15.3
Noncitizen without Green Card	19.5	14.2	21.0	18.3	15.1	10.1	16.1	18.4
Total	100%	100%	100%	100%	100%	100%	100%	100%

Source: 2007 and 2009 California Health Interview Surveys

– Data are unstable due to coefficient of variation above 30%.

\* Numbers are rates and will not add to 100%.

noted that they did have a slight decline in the overall population of uninsured. This age shift is consistent with the loss of employment among lower-income, middle-aged workers during this time period, although it remained true that younger workers were less likely to have coverage in the first place.

In each county group, the uninsured population shifted downward in household

income. In 2009, more people overall were living in poverty, and those who had lower incomes due to job loss were also more likely to have lost their health insurance. In every recession index group, the uninsured population in 2009 was poorer than its counterpart in 2007 (Exhibit 4). The group with incomes below 133% of the federal poverty level (FPL)—the income level that will be included under the Medi-Cal

expansion in 2014—grew, while the next income group (below 400%, or eligible for subsidies in the new Exchanges) shrank.<sup>4</sup>

For all but the highest impact recession group, the proportions of U.S.-born or naturalized citizens among the uninsured grew from 2007 to 2009. Ranging from an increase of 4 percentage points in the low impact group to 7.9 percentage points in the medium impact group, this trend clearly shows how the composition of the uninsured population changed because of the loss of job-based coverage during the recession (Exhibit 4). The high recession impact counties are also mainly counties in which the noncitizen populations (both with and without “green cards”) comprise a substantial proportion of the residents.

The work status of the uninsured population underwent the most dramatic shift from 2007 to 2009, as the state absorbed an increase in the unemployment rate of 6.8 percentage points (more than doubling the 2007 rate). This dramatic shift occurred in every county group, with drops in the proportion of the uninsured who were working full time ranging from 14.5 percentage points (low impact) to 17.1 percentage points (high impact; Exhibit 4). While some of these newly uninsured dropped entirely out of the work force, the largest increases were among the uninsured who were unemployed and looking for work (Exhibit 4).

### **Discussion and Policy Implications**

This policy brief presents data on the disparate impact of the economic recession on county groups within California and on the health insurance types and coverage status of their residents. We found that counties with the highest impact from the recession did not have the highest rate of growth in the uninsured population. This result was mainly because of the smaller decline in an already low rate of job-based coverage and an increase in the rate of public coverage, likely due to the very low household incomes of the uninsured. The

decline in employer-based insurance was offset by increases in public coverage, demonstrating the importance of public programs during economic downturns. We also found that the uninsured population overall, with some variation among county groups, changed in composition. In 2009, those in the uninsured population were older, had lower household incomes, were more likely to have U.S. citizenship, and were less likely to have full-time employment compared to the 2007 uninsured population.

This shift has policy implications for the implementation of both the Medi-Cal expansion and Covered California (the California Health Benefit Exchange) in January 2014 under the Affordable Care Act of 2010 (ACA). With a population that has dropping household incomes, expanding Medi-Cal to nonelderly adults with household incomes at or below 133% of the poverty level may encompass a larger number of people than was anticipated before the enactment of the ACA.<sup>5</sup> Data from CHIS 2011 have shown a considerable increase in the current Medi-Cal population, illustrating the results of the income shift as the uninsured began to take advantage of the public coverage for which they were eligible.<sup>6</sup> Since even a worker with wages at or near minimum wage working full time may be eligible for Medi-Cal under the expansion (depending on family size), enrollment in public health insurance programs is likely to grow even as jobs return and California climbs out of the recession.

It remains to be seen whether the composition of the uninsured population has changed permanently, or whether these shifts will revert to trends seen earlier in the decade (exemplified in the 2007 population). Still, it continues to be important for policymakers to note the differences among county groups and to target outreach and resources to those areas hardest hit by the continuing difficult economic times.

## Methods

This policy brief presents data from the 2007 and 2009 California Health Interview Surveys (CHIS). CHIS 2007 and 2009 each provide a detailed snapshot of health insurance in California immediately prior to and in the early depths of the economic recession that began in late 2008. The survey was administered for each year as a single panel and is not longitudinal. Respondents were asked about their current health insurance coverage and their coverage for the 12 months prior to their CHIS interviews, which were administered from September 2009 to April 2010. For more information about CHIS, please visit [www.chis.ucla.edu](http://www.chis.ucla.edu).

Calculation of the county-level recession index included data from CHIS 2007 and 2009, as well as from the California Employment Development Department (EDD). Six county-level measures were incorporated into the recession index: (1) 2009 unemployment rate higher than state average; (2) 2009 mean household income lower than state average; (3) whether there was a decrease in mean household income from 2007 to 2009; (4) 2009 median household income lower than state average; (5) whether there was a decrease in median household income from 2007 to 2009; and (6) whether the increase in the unemployment rate from 2007 to 2009 was higher than the state average. Counties were then divided into four different groups based on the number of factors that were either true for the average of their sampled population in the CHIS (household income indicators) or for the county as a whole according to the EDD data.

“Low impact” counties had either 1 or no indicators. “Moderate impact” counties had either 2 or 3 indicators. “Medium impact” counties had 4 indicators, and “high impact” counties had either 5 or 6 indicators. There are 44 total county-level strata in the CHIS survey. The final groupings are as follows: 15 counties fell into the low-impact category, 10 were in each of the moderate impact and medium impact categories, and 9 were in the category of highest recession impact (see Exhibits 1 and 2).

## Author Information

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### Endnotes

- 1 California Employment Development Department data, 2010.
- 2 Lavarreda SA, Cabezas L, Jacobs K, Roby DH, Pourat N, Kominski GE. *The State of Health Insurance in California: Findings from the 2009 California Health Interview Survey*. Los Angeles, CA: UCLA Center for Health Policy Research, February 2012.
- 3 California Employment Development Department data, 2010.
- 4 The Federal Poverty Level (FPL) in 2009 was \$10,830 for one person, \$14,570 for a two-person family, \$18,310 for a three-person family, etc.
- 5 Lucia L, Jacobs K, Watson G, Dietz M, Roby DH. *Medi-Cal Expansion Under the Affordable Care Act: Significant Increase in Coverage with Minimal Cost to the State*. Berkeley, CA: UC Berkeley Center for Labor Research and Education, 2013.
- 6 Lavarreda SA, Snyder S. *Job-Based Coverage Insures Less Than Half of Nonelderly Californians in 2011*. Los Angeles: UCLA Center for Health Policy Research, October 2012.

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