

Louisiana's Uninsured Population

A Report from the 2005 Louisiana Health Insurance Survey

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INTRODUCTION

To be successful, policy must be well grounded in accurate and timely information. Efforts to reduce the state's uninsured populations, for example, need be firmly rooted in an understanding of who is uninsured, where these uninsured persons are located, where and how they receive their medical care, and the best mechanisms for communicating eligibility for state programs or policy change. With this in mind, the Louisiana Department of Health & Hospitals commissioned the 2003 Louisiana Health Insurance Survey (LHIS). Based on interviews with over 10,000 households representing over 27,000 individuals, the 2003 Louisiana Health Insurance Survey was - at the time - the most comprehensive examination of the state's uninsured populations ever conducted, and provided invaluable information on the state's uninsured populations. Results from the study were used to develop small area estimates of uninsured populations and to target administrative outreach efforts aimed at increasing enrollment in the state's LaChip program and - subsequently - reducing the number of uninsured children in Louisiana.

The 2005 Louisiana Health Insurance Survey was designed to assess progress and regressions in these efforts. Designed in consultation with the State Health Access Data Assistance Center (SHADAC) at the University of Minnesota, the 2005 LHIS is based on 10,099 Louisiana households and represents health insurance status on 27,126 individuals. Respondents were randomly sampled using a stratified random sampling design to assure representation in each of Louisiana's parishes and a minimum of 800 respondents in each of nine Department of Health and Hospitals regions. The survey was conducted from March 2005 through August 2005. Recognizing some of the limitations of the 2003 LHIS, the 2005 LHIS improves on prior research in the following ways:

- (1) Utilizing information about familiar relationships (e.g., stepchildren) and more precise estimates of family income, child support payments, and child care expenses, the 2005 LHIS better captures Medicaid eligible populations as defined by state of Louisiana eligibility guidelines. Previous studies (including the 2003 LHIS and census estimates) have relied primarily on household income to identify Medicaid eligible households by whether they are at or below 200% of federal poverty. One consequence of this difference in measurement is an incongruence in survey and administrative data: Survey-based estimates of Medicaid eligible populations are often significantly less than the number of people enrolled in Medicaid programs as indicated by state administrative data. By accounting for a wider range of households, the 2005 LHIS provides more accurate estimates of Medicaid eligible populations. Our estimates of the Medicaid eligible population based on household income alone are roughly 648,598 eligible children, while our estimates based on a wider, more expansive definition of eligibility this number increases to 811,989.
- (2) In consultation with SHADAC, a procedure (hotdecking) was employed for imputing missing income data for the 2005 LHIS. The hotdecking procedure

randomly assigns income within a set of characteristics known to be associated with household income (e.g., education, age, and geographic location). In the absence of income imputation (as was the case with 2003 LHIS), research implicitly assumes that respondents who report income are no different than respondents who refuse to report income. Results from the 2003 and 2005 indicate that this is not the case, and that people who refuse to report income are less likely to be insured. As a consequence, estimates (including those from the 2003 LHIS) run the risk of underestimating uninsured populations, especially Medicaid eligible populations and uninsured rates for households below 200% of poverty.

- (3) Improved post-stratification weighting schemes based on the most recent census data available (the 2004 American Community Survey) assure estimates that better reflect contemporary Louisiana population characteristics. This is especially important in terms of representing lower income populations who are least likely to be insured. The 2003 LHIS relied primarily on sampling weights and on 2000 Census data as the point of comparison for survey versus population demographics.
- (4) Based on existing research and in consultation with SHADAC, the current study included a survey of Medicaid enrollees to estimate the Medicaid undercount and to adjust subsequent estimates uninsured populations. Health researchers have long known that a substantial proportion of Medicaid enrollees misreport their insurance status, often reporting themselves (or their families) as uninsured or as having private insurance. The consequence of this undercount is that survey-based estimates of the uninsured often include respondents who are actually covered through Medicaid or LaChip. That is, they overstate uninsured rates. Because Louisiana has a high proportion of respondents on Medicaid - particularly children on LaChip - the consequence of the Medicaid undercount are likely to be more substantial than in Louisiana (and in other Southern states) than has been reported in the existing literature. To estimate the Medicaid bias, we conducted a separate survey of known Medicaid households to develop baseline estimates of how Medicaid enrollees report their insurance status. Approximately 80% of children are correctly reported as being covered by LaChip, 6% report being uninsured, and 8% report being insured through an employer. For adults, the proportions are more staggering: Just over half of adults (51%) report being enrolled in Medicaid, 21% report being uninsured, 8% report having private insurance, and 10% report being insured through Medicare. Adjusting for the Medicaid undercount means discounting our estimate of "false positives" from reported uninsured rates. This discount is based on: (1) The proportion of the population on Medicaid or LaChip; and (2) The estimate of the proportion of respondents misreporting as uninsured.

Given the changes in the survey methodology, one should be extremely cautious in making direct comparisons between the 2003 and 2005 results. Differences may reflect real changes in uninsured rates reflecting administrative outreach, changes in real world conditions (e.g., increases in unemployment or poverty), or changes in survey

methodology. Throughout the report, we attempt to parcel out these differences in terms of "real" changes over time versus changes due to methodological improvements in measurement and evaluation. To enhance comparability, we have - where appropriate - computed estimates comparable in methodology to the 2003 estimates. It is important to keep in mind that these estimates are not the "best" estimates from the 2005 survey; and while they provide better comparability, they do so at the price of reduced accuracy. Finally, we have also adjusted estimates from the 2003 survey of the number of respondents within a particular group (e.g., the number of children under 19) to better reflect population estimates from the 2004 American Community Survey. Prior to these adjustments, the 2003 estimates were based on 2000 Census data.

SUMMARY OF KEY FINDINGS

- *Since 2003, there has been a substantial reduction in the number of uninsured children (under 19) in Louisiana.* Our best available estimate is that there are approximately 97,403 uninsured children in Louisiana, representing 7.6% of all Louisiana children. This is down from approximately 143,173 children (11.1%) estimated as uninsured in 2003,¹ with a 45,770 reduction in the estimated number of uninsured children. As noted previously, because of changes in methodology the estimates from 2003 and 2005 are not directly comparable. Looking at more comparable estimates using very similar methodologies across the two surveys indicates that the number of uninsured children declined by approximately 28,000 children. Overall, there is consistent and compelling evidence that the number of uninsured children in Louisiana has declined significantly.

Declines in the estimates number of uninsured children were largest in Northwest (Region 7) and Southwest (Region 5), both of which experienced corresponding increases in estimated number of children enrolled in LaChip (detailed below). In the Northwest Region, there was an estimated 15-point increase in LaChip enrollment (prior to Medicaid bias adjustments), while in the Southwest Region there was more modest (but still substantial) 6-point increase. Only in Region 6 (Central Louisiana) was there an increase in the number of uninsured children, and here the difference reflects primarily on methodological changes (as opposed to a real increase in the percent of uninsured children): The 2003 LHis underrepresented poverty in Central Louisiana and subsequently underestimated the number of uninsured children.

¹ To provide the most comparable estimate possible, we utilize estimates for populations using the 2004 American Community Survey to compute the number of uninsured residents within a given category. For example, our estimate of uninsured children, 135,400, in the 2003 survey was based on census estimates of the number of children multiplied by our estimate of the percent of uninsured children (11.1%). For the most comparable estimate to our current results we utilize the estimated proportion of uninsured children from the previous survey but the estimated number of children statewide from our estimates of the uninsured population. Adjusting the estimates based on current population estimates places the number of uninsured children from 2003 survey at 143,173.

Uninsured Estimates for Children (Under 19) by Region, 2003 & 2005

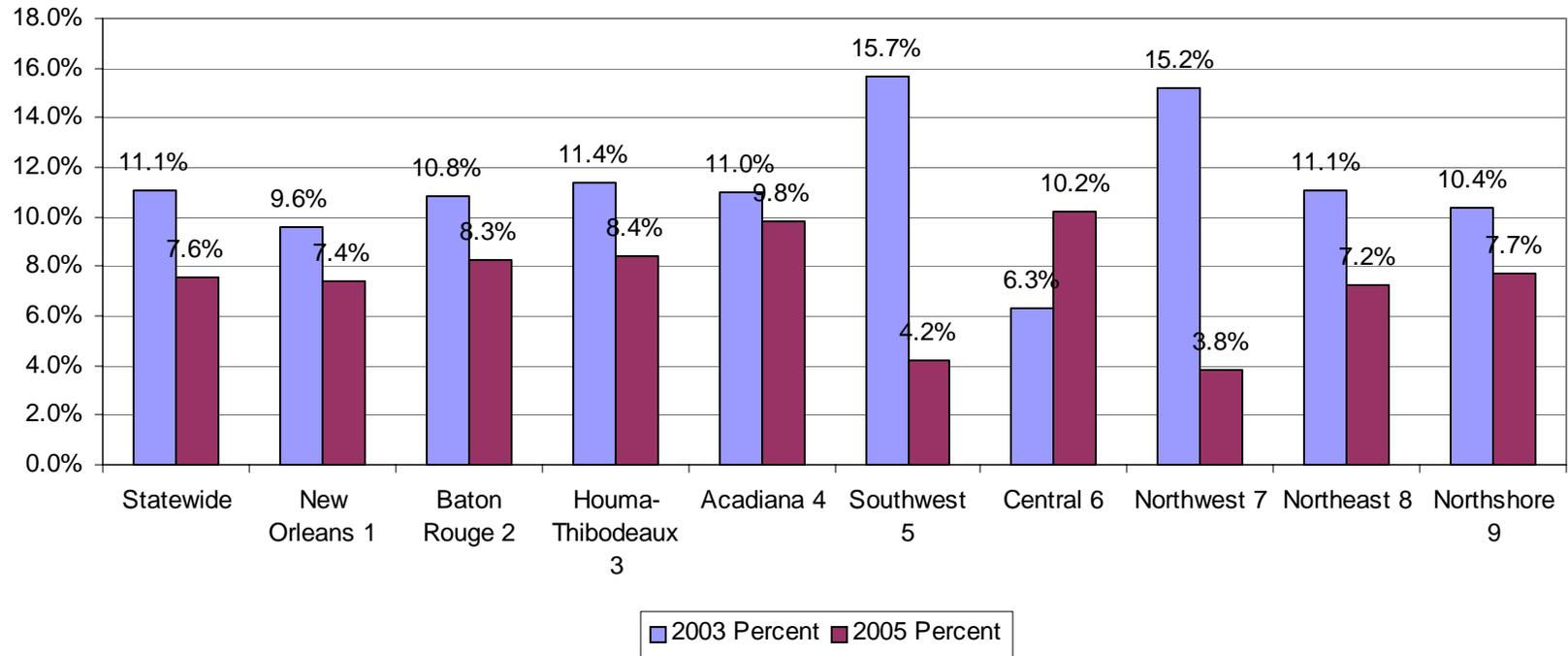


Table 1: Estimates of Uninsured Children by Region

	2003 Percent	2003 Number	2005 Percent	2005 Number
Statewide	11.1%	143,173	7.6%	97,403
New Orleans 1	9.6%	25,169	7.4%	19,376
Baton Rouge 2	10.8%	17,862	8.3%	13,705
Houma-Thibodeaux 3	11.4%	14,070	8.4%	10,353
Acadiana 4	11.0%	19,056	9.8%	16,985
Southwest 5	15.7%	12,009	4.2%	3,194
Central 6	6.3%	6,220	10.2%	10,107
Northwest 7	15.2%	22,991	3.8%	5,764
Northeast 8	11.1%	12,096	7.2%	7,865
Northshore 9	10.4%	13,538	7.7%	10,055

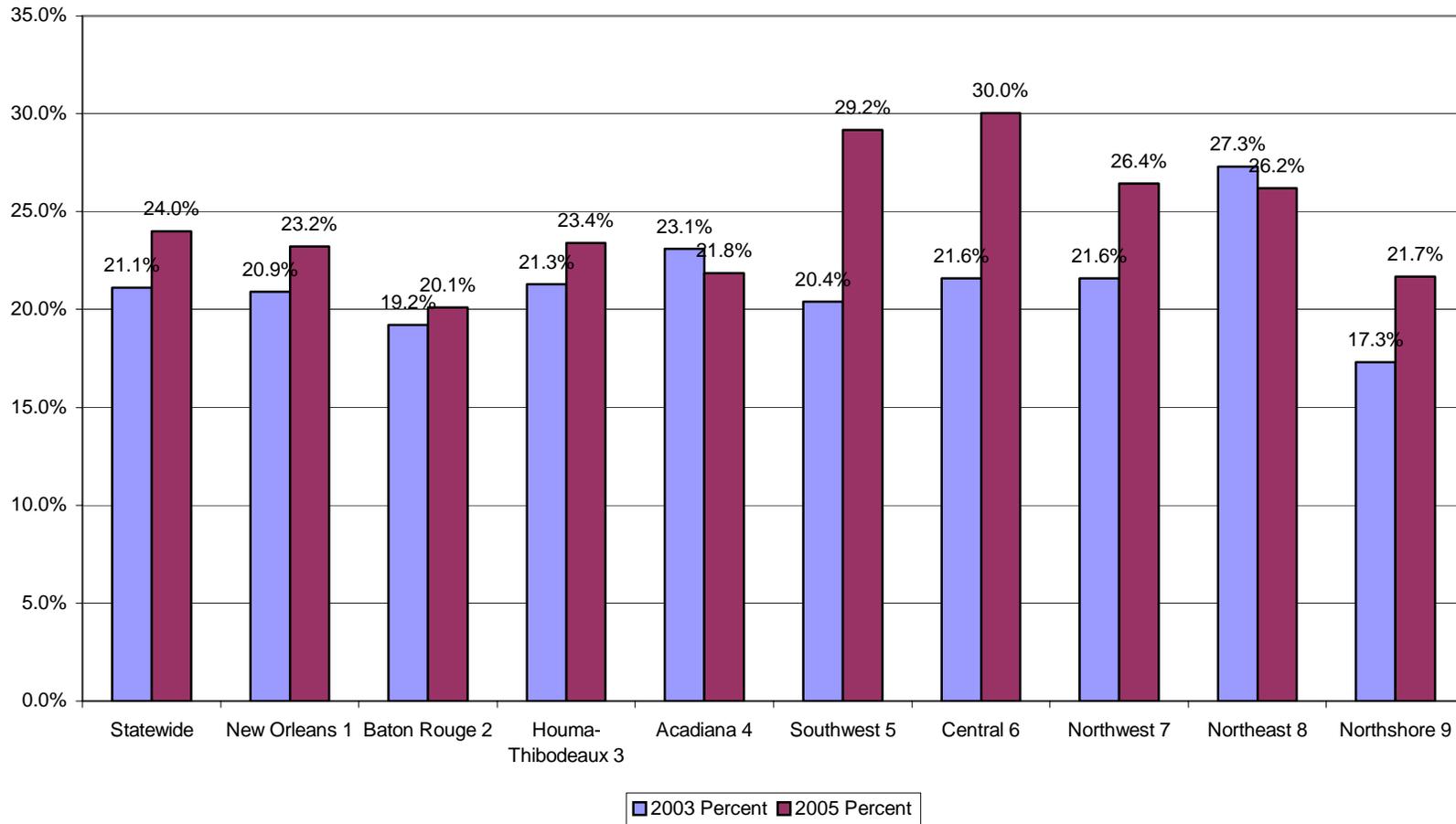
- Since 2003, the number of uninsured non-elderly adults has held steady or slightly increased. The findings for children are more remarkable when one considers that the number of non-elderly uninsured adults has either increased slightly or held steady. According to our estimates, approximately 23.4% of adults are uninsured, representing approximately 655,000 Louisiana adults. While this is a substantial increase relative to our estimates from 2003, examining comparable estimates across the two years indicates that the number of uninsured adults has held relatively steady - with a slight increase across the two years. Substantively, the large differences (presented in Table 2) are more reflective of changes in survey methodology (particularly in terms of weighting and income imputation) than in real changes in the number of uninsured Louisiana residents. These changes (particularly in terms of weighting and income imputation) mean that the 2005 results more accurately reflect lower income populations throughout the state.

Looking across regions, the number of uninsured adults has increased in seven of the nine DHH regions, with substantial increases in the Southwest (Region 5), Central (Region 6), and Northwest (Region 7). In Regions 4 (Acadiana) and 8 (Northeast), there were slight declines in the estimated number of uninsured adults, though these declines were well within the range of differences one might expect based on chance alone.

Table 2: Uninsured Estimates for Nonelderly Adults (19-64)
by Region, 2003 & 2005

	2003	2003	2005	2005
	Percent	Number	Percent	Number
Statewide	21.1%	579694	24.0%	654729
New Orleans 1	20.9%	128240	23.2%	142414
Baton Rouge 2	19.2%	65778	20.1%	68822
Houma- Thibodeaux 3	21.3%	51493	23.4%	56578
Acadiana 4	23.1%	78624	21.8%	74360
Southwest 5	20.4%	37147	29.2%	53097
Central 6	21.6%	40220	30.0%	55946
Northwest 7	21.6%	70219	26.4%	85929
Northeast 8	27.3%	60399	26.2%	57979
Northshore 9	17.3%	47573	21.7%	59604

Uninsured Rates of Nonelderly Adults (19-65) by Region, 2003 & 2005



- *There are substantially fewer uninsured Medicaid eligible children than has been previously reported.* Broadening the definition of Medicaid eligibility to more accurately reflect state guidelines leads to a substantial reduction in the estimated number of Medicaid eligible children who are uninsured. According to estimates from the 2005 LHIS, approximately 8.9% of Medicaid eligible children are currently uninsured, translating into approximately 72,000 Louisiana children. Most of the apparent decline across the two years of the survey reflects methodological changes, including more accurate identification of the Medicaid eligible population and statistical adjustments for the Medicaid undercount. However, there is also evidence that increased LaChip enrollments have led to a reduction in the number of uninsured Medicaid eligible children.

Looking across regions, we see considerable evidence that state efforts to reduce the number of uninsured children have yielded significant gains. In Region 7, for example, our estimate of the uninsured Medicaid eligible children was over 24% in 2003. In 2005, the estimated proportion of uninsured Medicaid eligible children dropped dramatically to just 3.4%. Such a change might seem incredible, but (as noted earlier) the data also reveal a substantial increase (15-points) in LaChip enrollment - even before adjusting for the Medicaid undercount. Adjusting the regional estimates for the Medicaid the undercount, the differences in estimated LaChip enrollment in the Northwest (Region 7) from 2003 to 2005 are even more substantial. While the changes are not nearly as dramatic, in Southwest Louisiana (Region 5), a 5-point increase in LaChip enrollment (prior to adjusting for the Medicaid undercount) is associated with a corresponding decline in the number of uninsured Medicaid eligible children.

Central Louisiana (Region 6) and Acadiana (Region 4) experienced increases in the proportion of uninsured Medicaid eligible children. In Central Louisiana (Region 6), the explanation for the increase results from underestimating the level of poverty in the region in the 2003 LHIS and, subsequently, underestimating the number of uninsured Medicaid eligible children. The increase in Acadiana appears to reflect a combination of factors, but primarily reflect relatively high rates of uninsured children in St. Martin and St. Landry parishes.

Comparison of Uninsured Rates for Medicaid Eligible Children (Under 19) by Region

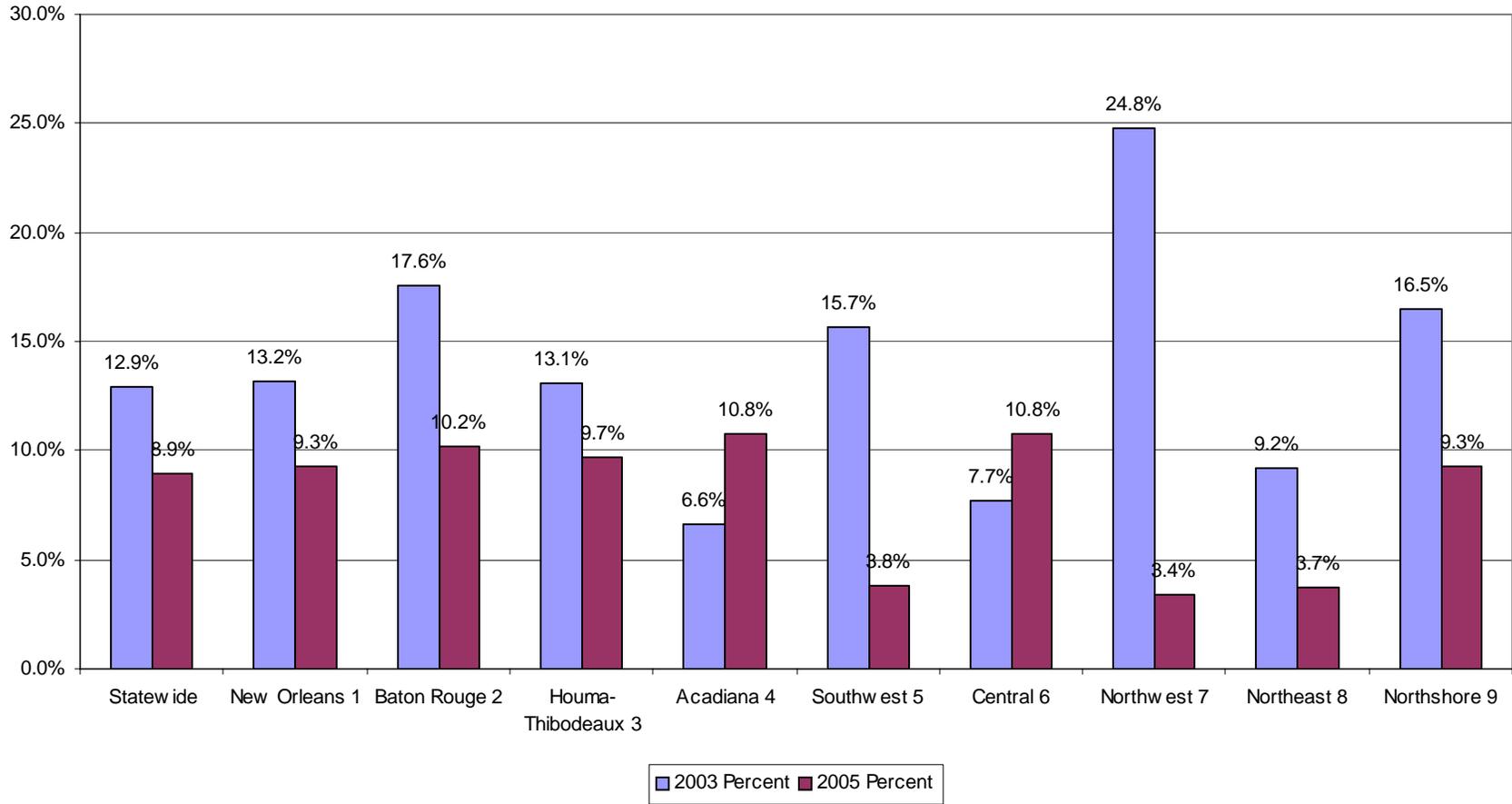


Table 3 Comparison of Uninsured Rates for Children Eligible for Medicaid, 2003 & 2005

	2003 Percent	2003 Number	2005 Percent	2005 Number
Statewide	12.9%	83669	8.9%	72429
New Orleans 1	13.2%	16337	9.3%	16320
Baton Rouge 2	17.6%	14616	10.2%	9958
Houma-Thibodeaux 3	13.1%	6736	9.7%	6849
Acadiana 4	6.6%	6064	10.8%	11641
Southwest 5	15.7%	5835	3.8%	1670
Central 6	7.7%	4139	10.8%	7109
Northwest 7	24.8%	24144	3.4%	3647
Northeast 8	9.2%	5587	3.7%	2728
Northshore 9	16.5%	8164	9.3%	6383

- *The number of uninsured adults under 200% of poverty has declined significantly, but most of the change reflects adjustments based on the Medicaid undercount. Marginal declines in the estimated percent of uninsured adults under 200% of poverty reflect adjustments to the estimates to account for Medicaid bias. Increases in Southwest (Region 5) and Central Louisiana (Region 6), however, likely reflect increases in poverty levels. These marginal declines generally reflect adjustments to the data to account for the Medicaid undercount. Because our estimated proportion of false reports of uninsured status (21%) and the large proportion of respondents reporting on Medicaid, the effects of the adjustments are often substantial. For example, in the New Orleans area (Region 1), estimates of uninsured adults under 200% of poverty drop 51% prior to any Medicaid bias adjustment to 45% after adjusting the results. The adjustments across regions range from 4-6 percentage points, with each adjustment lowering our estimate of the uninsured adult under 200% population.*
- *There is considerable movement from insured to uninsured status, as such, estimates of the uninsured are in a constant state of flux. 6.3% of insured respondents report having been uninsured at some point in the past twelve months, while a more substantial 19.4% of uninsured respondents report having had some form of coverage for at least some time during the past year.*

Comparison of Unisured Adults (19-65) Under 200% Federal Poverty

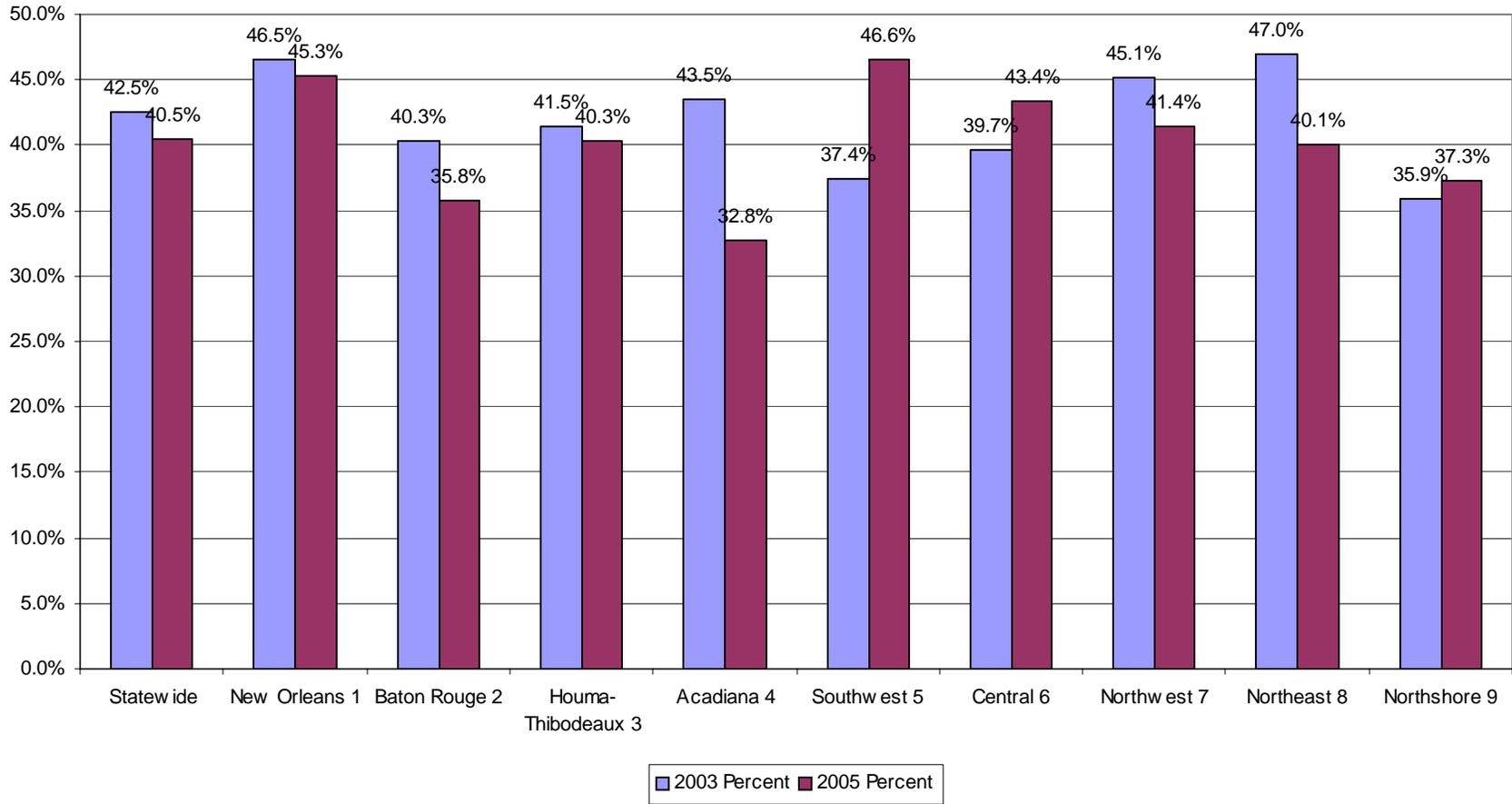


Table 5: Comparison of Uninsured Adults (19-65) Under 200% Federal Poverty, 2003 & 2005

	2003 Percent	2003 Number	2005 Percent	2005 Number
Statewide	42.50%	464,338	40.50%	438,921
New Orleans 1	46.50%	117,480	45.30%	114,649
Baton Rouge 2	40.30%	47,192	35.80%	41,956
Houma- Thibodeaux 3	41.50%	38,482	40.30%	37,439
Acadiana 4	43.50%	62,914	32.80%	47,451
Southwest 5	37.40%	27,337	46.60%	34,073
Central 6	39.70%	30,915	43.40%	33,832
Northwest 7	45.10%	65,176	41.40%	59,842
Northeast 8	47.00%	43,700	40.10%	37,294
Northshore 9	35.90%	31,143	37.30%	32,385

- *There has been a significant decrease in the percent of Louisiana residents covered through employer provided insurance.* Part of this difference reflects methodological changes in the survey, specifically adjustments to the data related to the Medicaid undercount. Even before adjusting these estimates, however, the percent of respondents reporting they had employer provided insurance dropped significantly. The percent of adults with employer provided insurance dropped from an estimated 53% in 2003 to 49% in 2005. For children, there is an even more substantial drop as just under half of children (47.4%) were reported as covered by employer provided insurance in 2003 to under a third (35.6%) in 2005. For children especially, this has translated into a larger role for state government in covering children through the LaChip program.

Source of Coverage for Children (Under 19) and Adults (19-65)

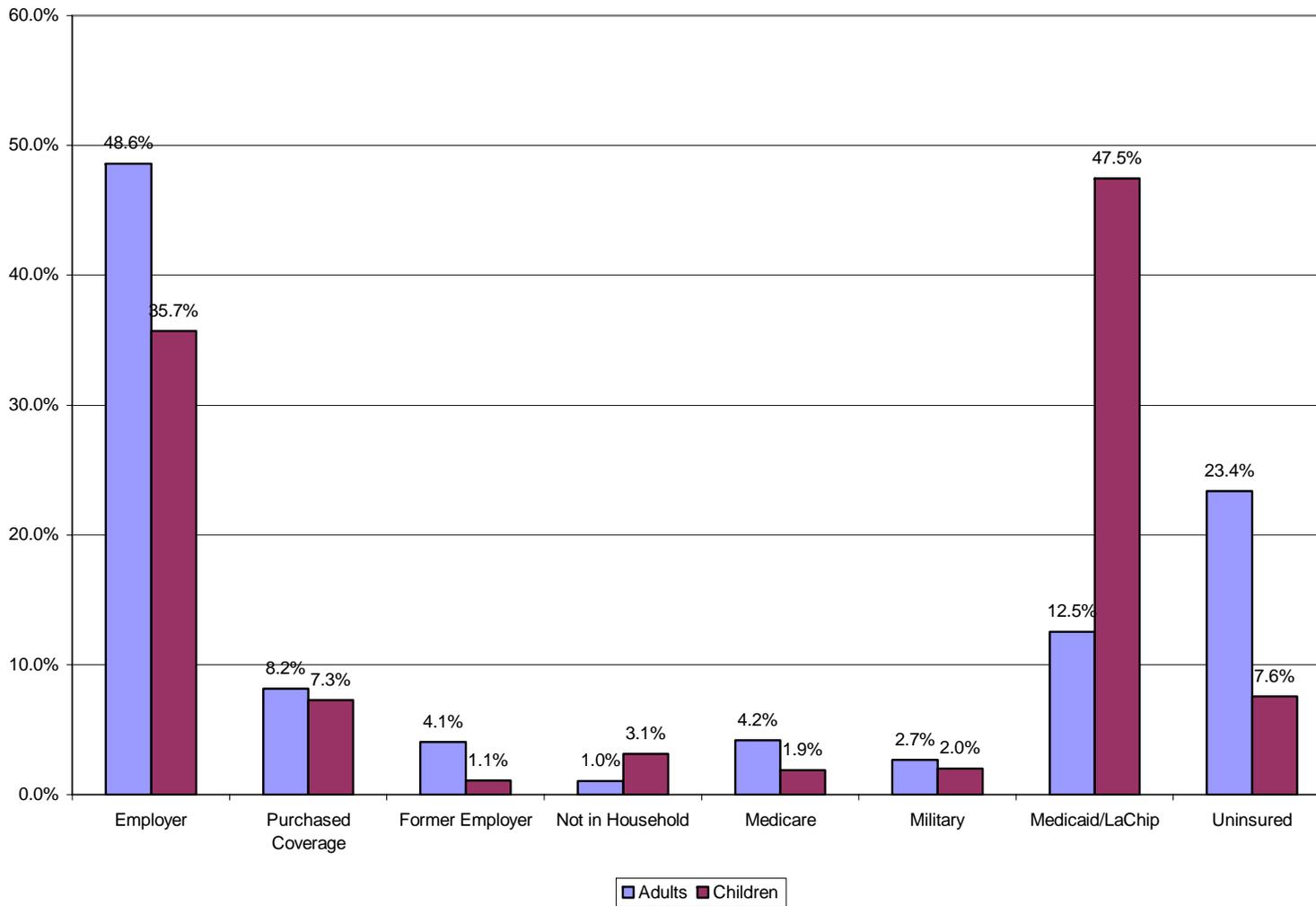


Table 6: Sources of Coverage for Children (Under 19) by Region

	Employer		Purchased Coverage		Former Employer		Not in Household		Medicare	
	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number
Statewide	35.7%	460611	7.3%	93,799	1.1%	14,108	3.1%	40,616	1.9%	24,255
New Orleans 1	33.4%	87472	8.4%	22,095	1.4%	3,616	2.7%	7,135	3.0%	7,774
Baton Rouge 2	38.6%	63807	6.2%	10,297	0.4%	590	2.3%	3,858	1.6%	2,644
Houma-Thibodeaux 3	41.3%	50973	6.3%	7,756	1.6%	2,031	4.4%	5,379	2.3%	2,846
Acadiana 4	37.5%	65031	7.9%	13,744	0.8%	1,356	1.9%	3,266	0.8%	1,306
Southwest 5	41.1%	31472	5.6%	4,270	2.1%	1,644	2.5%	1,892	1.1%	827
Central 6	29.2%	28831	5.5%	5,425	1.0%	954	3.7%	3,652	3.2%	3,114
Northwest 7	27.5%	41617	7.8%	11,769	0.9%	1,365	7.0%	10,578	2.0%	3,099
Northeast 8	34.6%	37666	6.5%	7,095	0.5%	497	2.0%	2,215	1.7%	1,872
Northshore 9	41.3%	53741	8.7%	11,348	1.6%	2,056	2.0%	2,640	0.6%	774

	Military		LaChip		Uninsured	
	Percent	Number	Percent	Number	Percent	Number
Statewide	2.0%	25,857	47.5%	612,482	7.6%	97,460
New Orleans 1	2.5%	6,488	46.3%	121,433	7.4%	19,388
Baton Rouge 2	0.6%	1,010	46.2%	76,386	8.3%	13,712
Houma-Thibodeaux 3	1.3%	1,577	42.9%	52,989	8.4%	10,358
Acadiana 4	0.9%	1,609	46.0%	79,736	9.8%	16,993
Southwest 5	1.8%	1,353	47.6%	36,430	4.2%	3,198
Central 6	6.7%	6,592	51.2%	50,598	10.2%	10,112
Northwest 7	2.6%	3,996	59.0%	89,288	3.8%	5,773
Northeast 8	1.1%	1,153	53.1%	57,838	7.2%	7,871
Northshore 9	1.6%	2,078	36.7%	47,707	7.7%	10,060

Table 7: Source of Coverage for Adults (19-65) By Region

	Employer		Purchased Coverage		Former Employer		Not in Household		Medicare	
	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number
Statewide	48.6%	1,325,912	8.2%	222,955	4.1%	110,944	1.0%	28,568	4.2%	114,356
New Orleans 1	47.5%	291,725	8.2%	50,390	3.5%	21,673	1.1%	6,448	4.8%	29,730
Baton Rouge 2	55.1%	188,659	8.3%	28,532	5.3%	18,318	1.7%	5,936	2.3%	7,891
Houma- Thibodeaux 3	52.7%	127,316	6.0%	14,473	4.0%	9,753	0.5%	1,319	5.0%	12,088
Acadiana 4	49.2%	167,542	9.5%	32,258	3.0%	10,347	0.7%	2,272	4.1%	14,039
Southwest 5	48.0%	87,462	6.6%	11,948	4.5%	8,246	0.6%	1,085	4.3%	7,807
Central 6	38.8%	72,280	6.7%	12,519	4.0%	7,394	1.3%	2,493	3.6%	6,755
Northwest 7	44.7%	145,447	8.4%	27,355	4.7%	15,421	1.7%	5,466	4.5%	14,540
Northeast 8	46.5%	102,970	8.9%	19,750	3.6%	8,054	0.4%	967	5.2%	11,517
Northshore 9	51.8%	142,510	9.4%	25,728	4.3%	11,738	0.9%	2,582	3.6%	9,989

	Military		Medicaid		Uninsured	
	Percent	Number	Percent	Number	Percent	Number
Statewide	2.7%	72,892	12.5%	350,676	24.0%	654,730
New Orleans 1	2.8%	17,199	16.8%	103,173	23.2%	142,414
Baton Rouge 2	1.5%	5,094	10.5%	35,893	20.1%	68,822
Houma- Thibodeaux 3	1.2%	2,862	9.9%	24,054	23.4%	56,578
Acadiana 4	1.6%	5,443	13.2%	44,881	21.8%	74,360
Southwest 5	2.1%	3,830	9.0%	16,410	29.2%	53,097
Central 6	7.7%	14,366	13.1%	24,381	30.0%	55,946
Northwest 7	4.2%	13,676	12.6%	41,078	26.4%	85,929
Northeast 8	2.0%	4,322	12.8%	28,404	26.2%	57,979
Northshore 9	2.2%	6,100	11.8%	32,403	21.7%	59,604

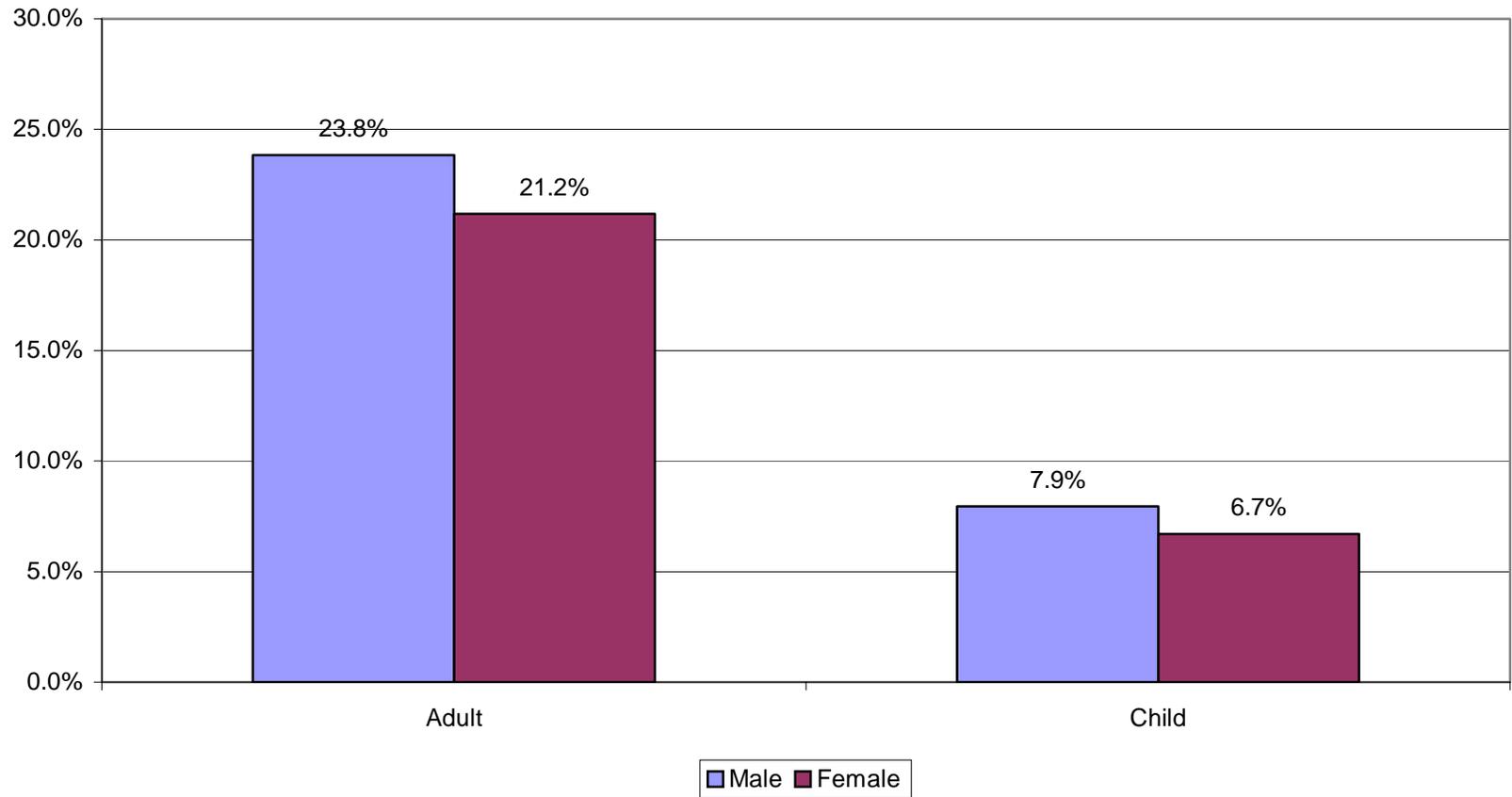
- *Uninsured status is correlated with race, income, poverty, and age, such that the uninsured are more likely to be African American, poorer, and younger.* There are some minor differences in insurance status depending on gender with males (both adults and children) more likely to be uninsured. The gender-based differences in insured status for both adults and children, however, are fairly small (less than 2 percentage points).

Considerably larger differences emerge when we examine race, and particularly among adults. Nearly a third of African-Americans (32.6%) are uninsured compared to 21.6% of Caucasians. These differences are more muted among children as 7.9% of African American children and 6.5% of Caucasians are uninsured. The smaller difference for children reflects the success of the LaChip program in that state coverage limits some of the consequences of inequality that serve to disadvantage minority children.

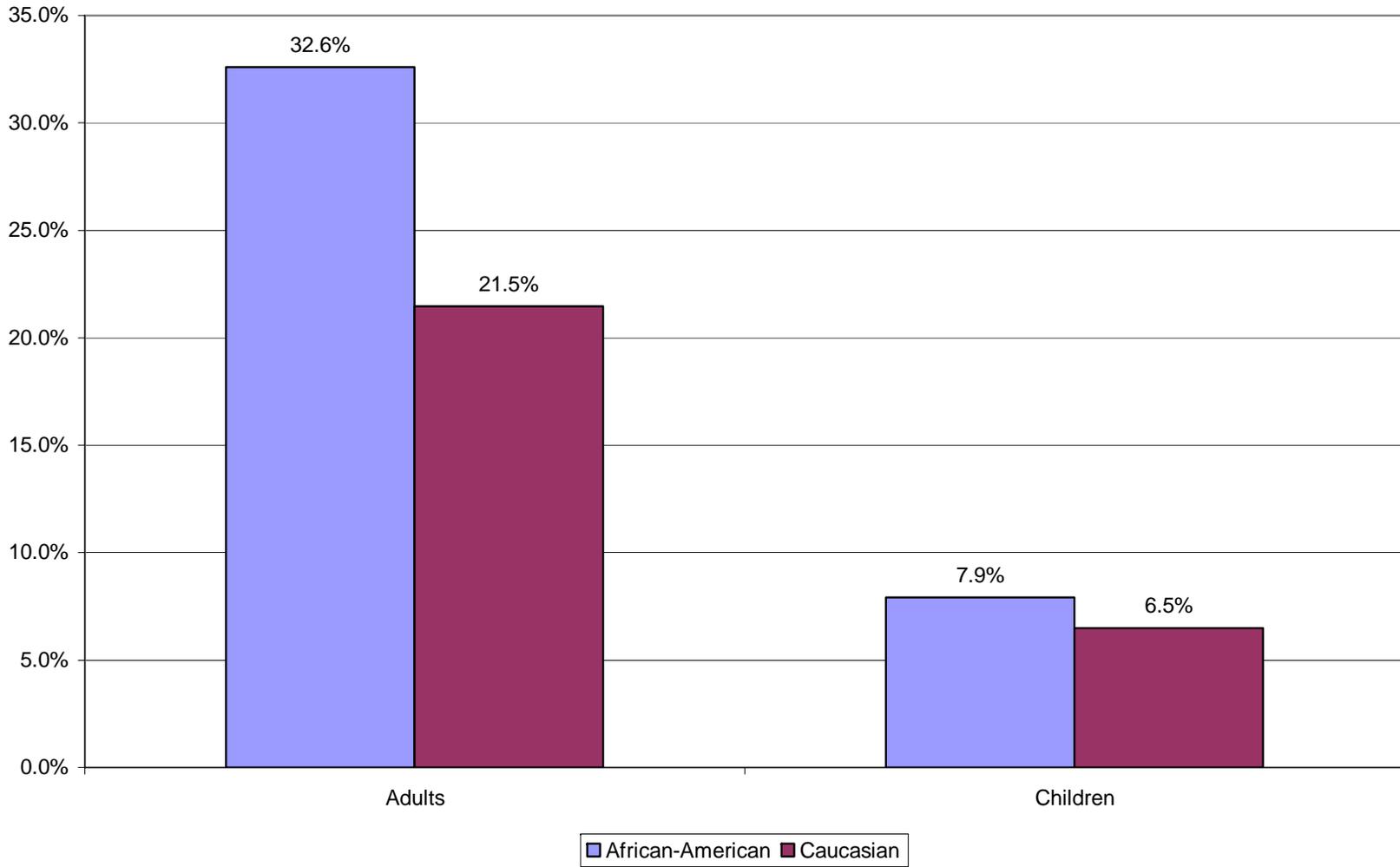
Income is also an important predictor of uninsured status, either when measured as household income or in terms of poverty. The effects of poverty are most pronounced for adults as children are at least partially protected by the availability of LaChip. As in 2003, for children, we find a curvilinear relationship between poverty and insurance status with households in low-to-middle income ranges most likely to be uninsured. For adults, there is clear linear connection between poverty and uninsured status, as income increases uninsured rates drop.

Age is also associated with uninsured status with younger adults (18-34) least likely to be insured. Overall, the pattern looks similar to the results from the 2003 LHIS, however, uninsured rates among older Louisiana residents (35-44, and 45-55) appear to have increased since 2003. For example, 18% of 45-55 year olds in the 2003 LHIS were uninsured compared to 21.9% in 2005. For 55-64 year olds uninsured rates tapered off to 13% in 2003 but remained steady 20.7% in 2005. Education is likewise associated with uninsured status as less educated respondents are considerably less likely to report being insured. Unlike in 2003, we see a steady, linear decline in uninsured rates as education increases. In 2003, respondents with less than a high school education were slightly less likely to report being uninsured than respondents with a high school degree.

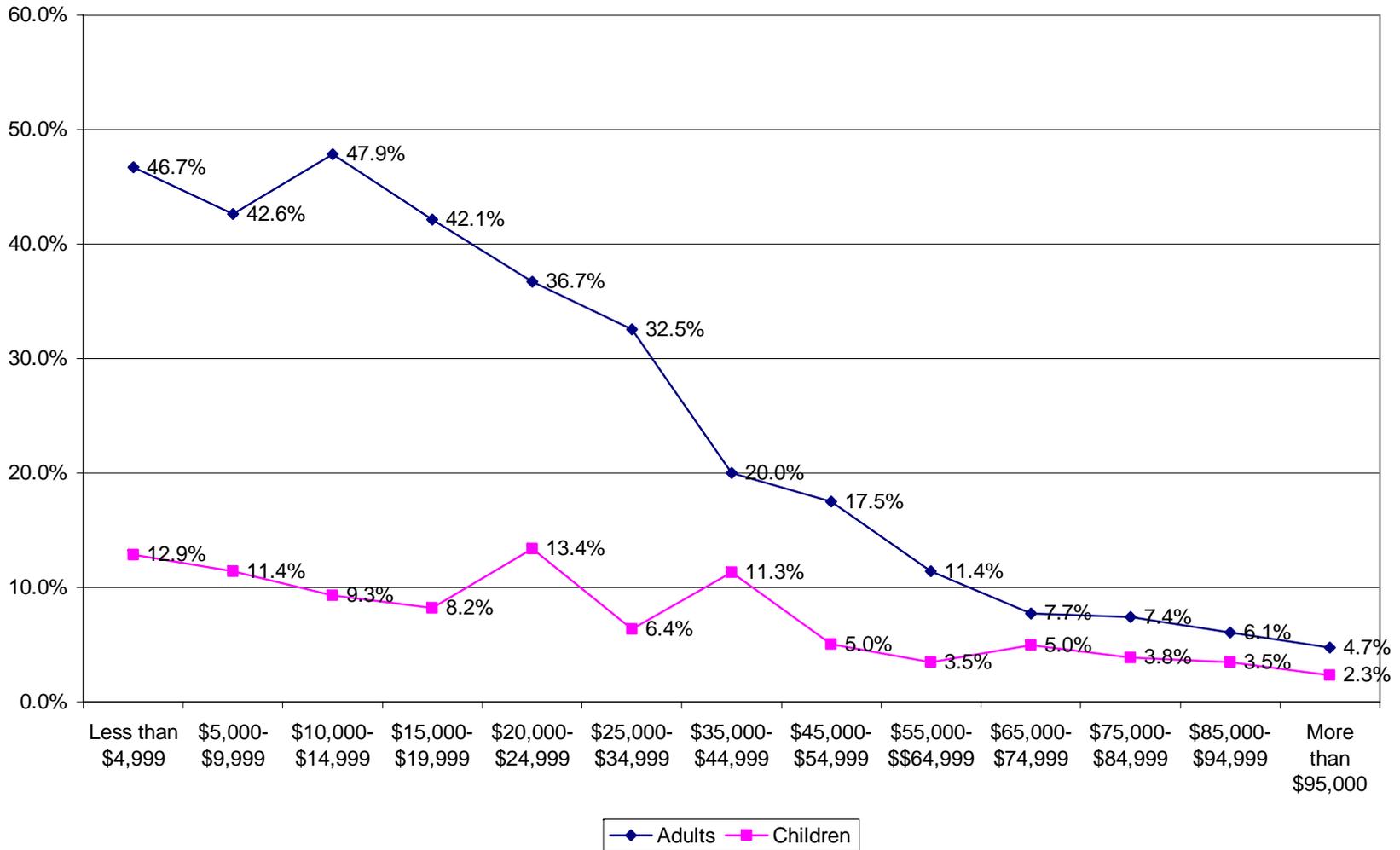
Uninsured Rates By Gender for Adults (19-65) and Children (Under 19)



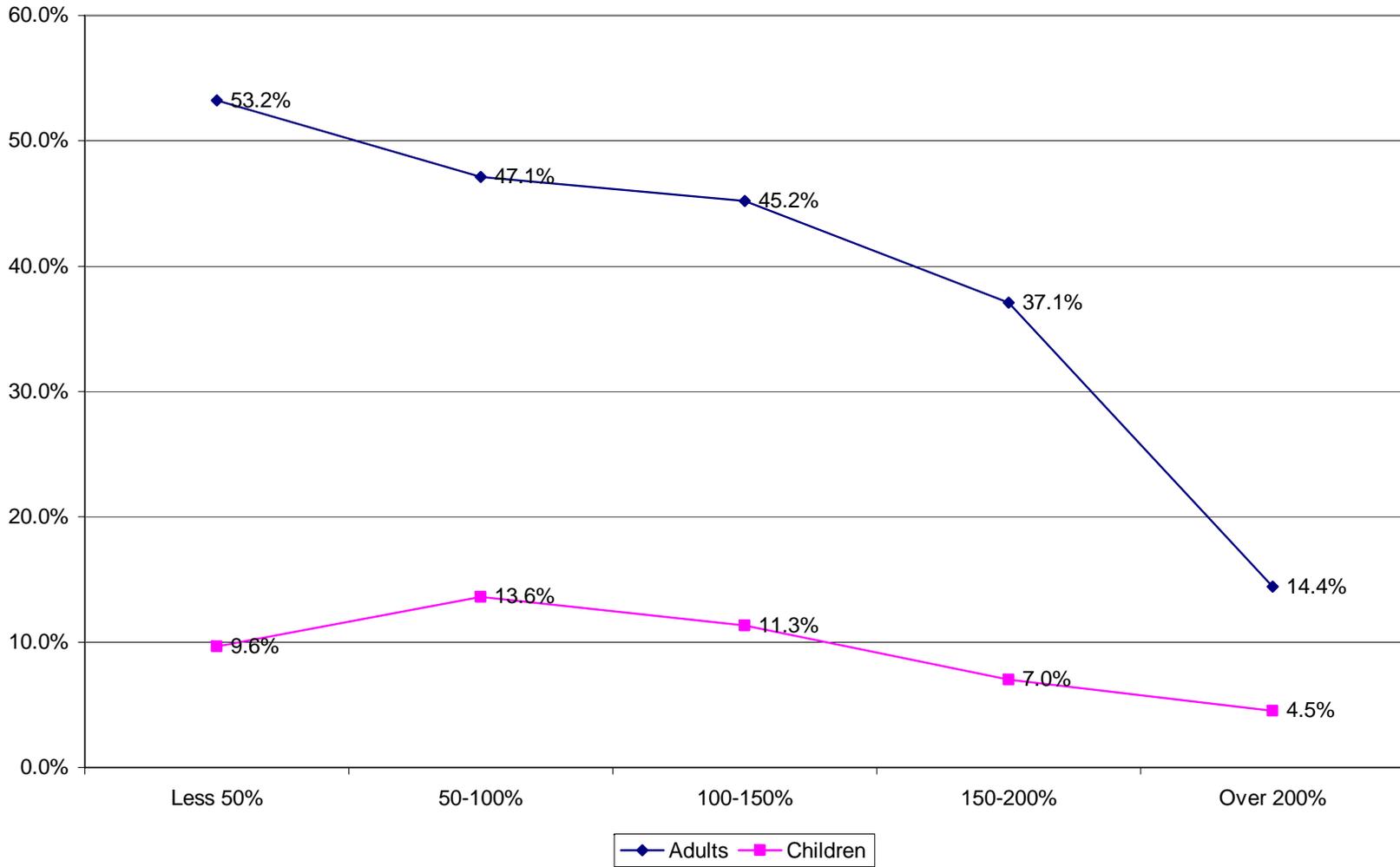
Uninsured Rates by Race for Adults (19-65) and Children (Under 19)



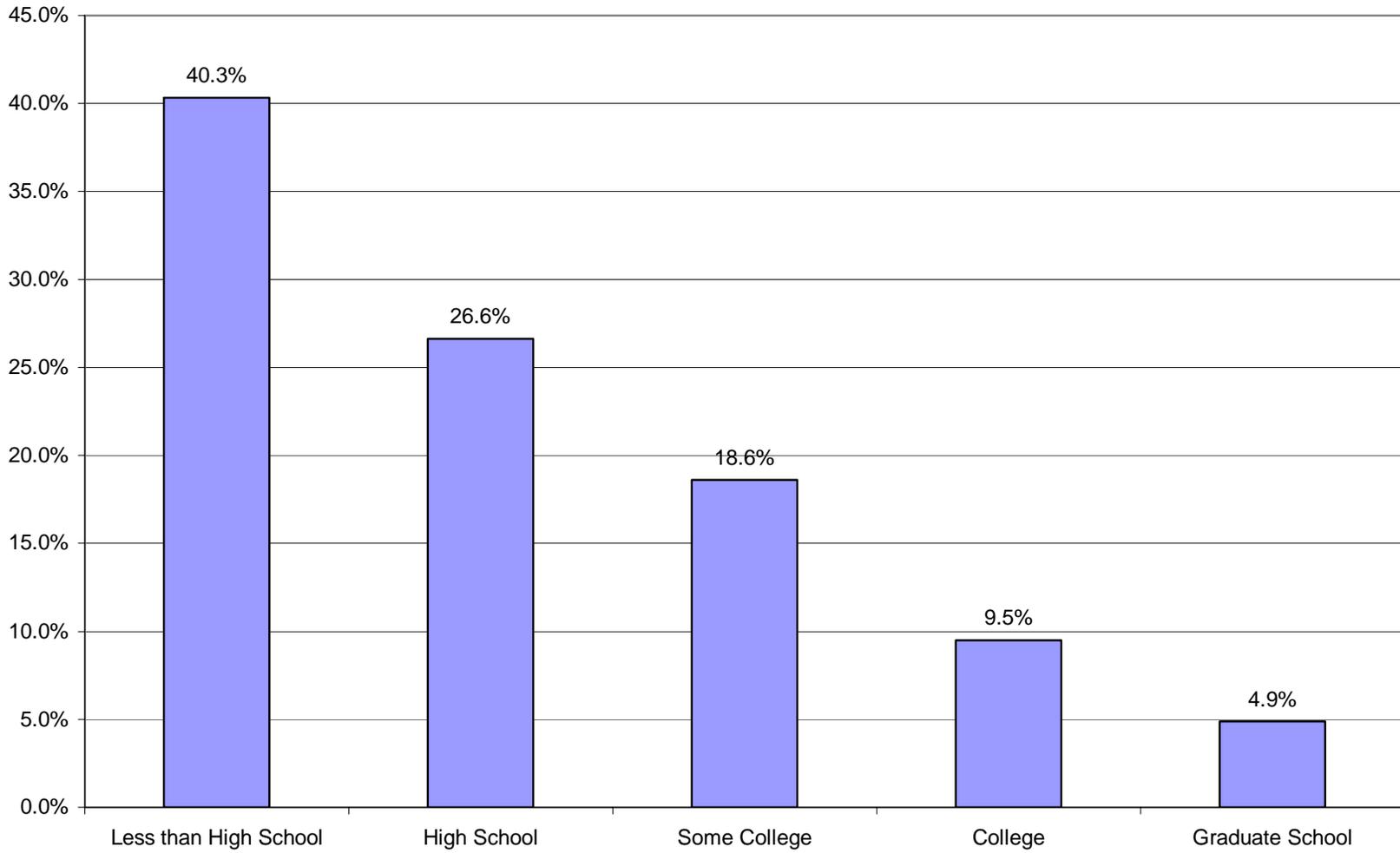
Uninsured Rates by Household Income for Adults (19-65) and Children (Under 19)



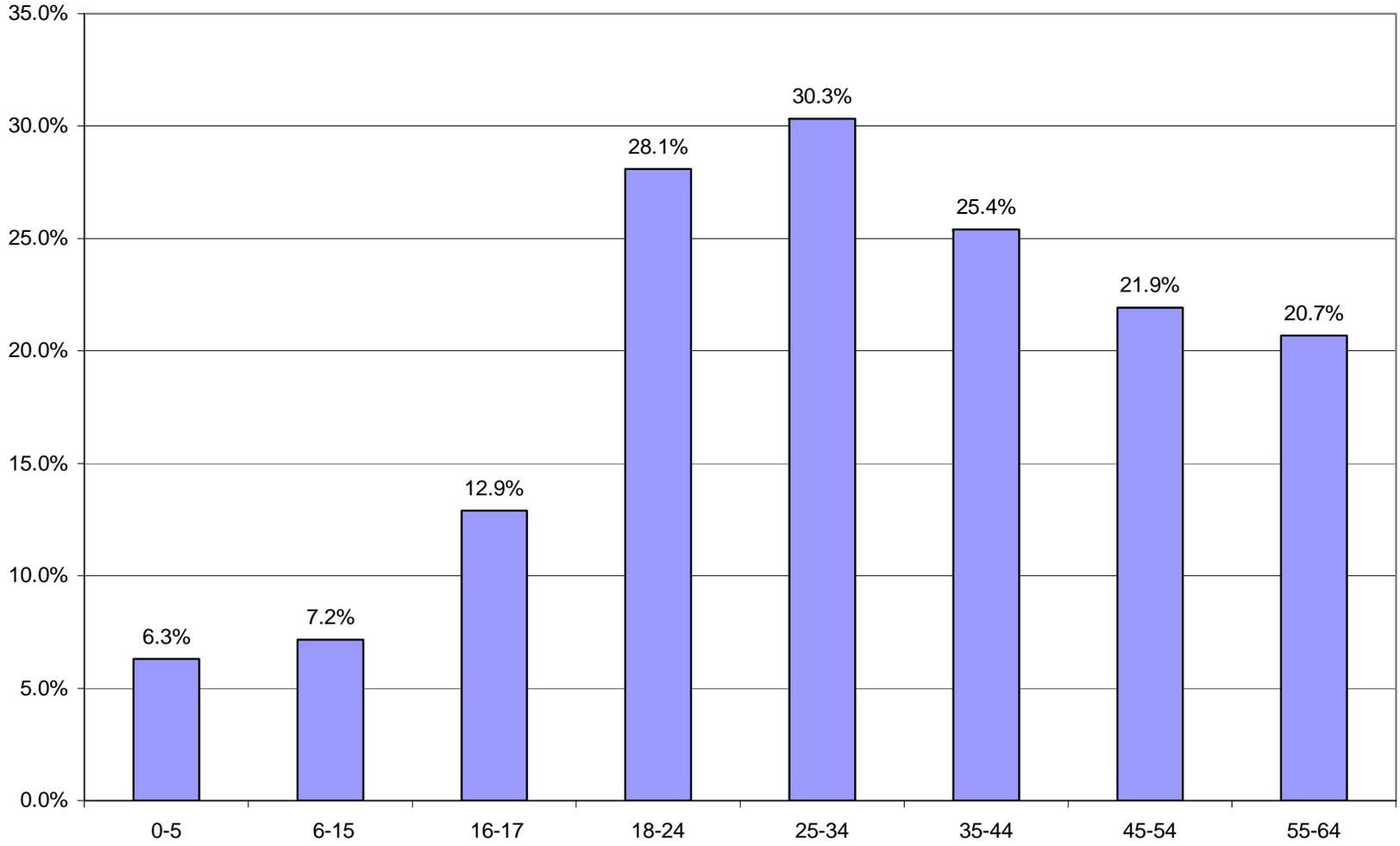
Uninsured Rates by Level of Poverty for Adults (19-65) and Children (Under 19)



Uninsured Rates by Education for Adults (19-65)

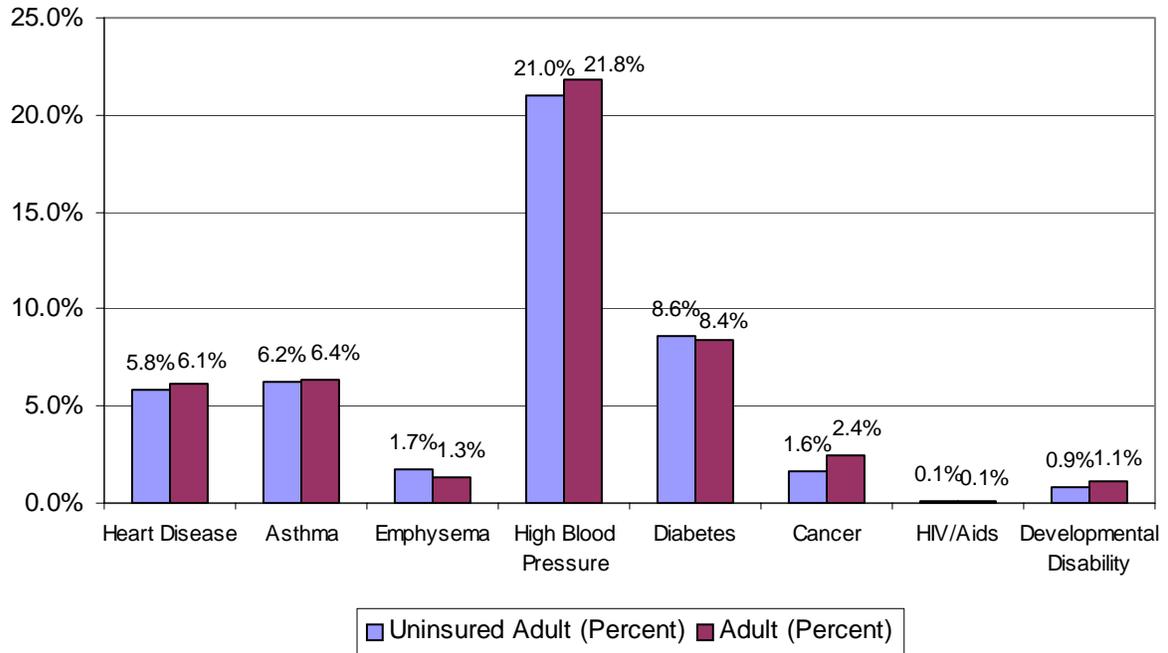


Uninsured Rates by Age

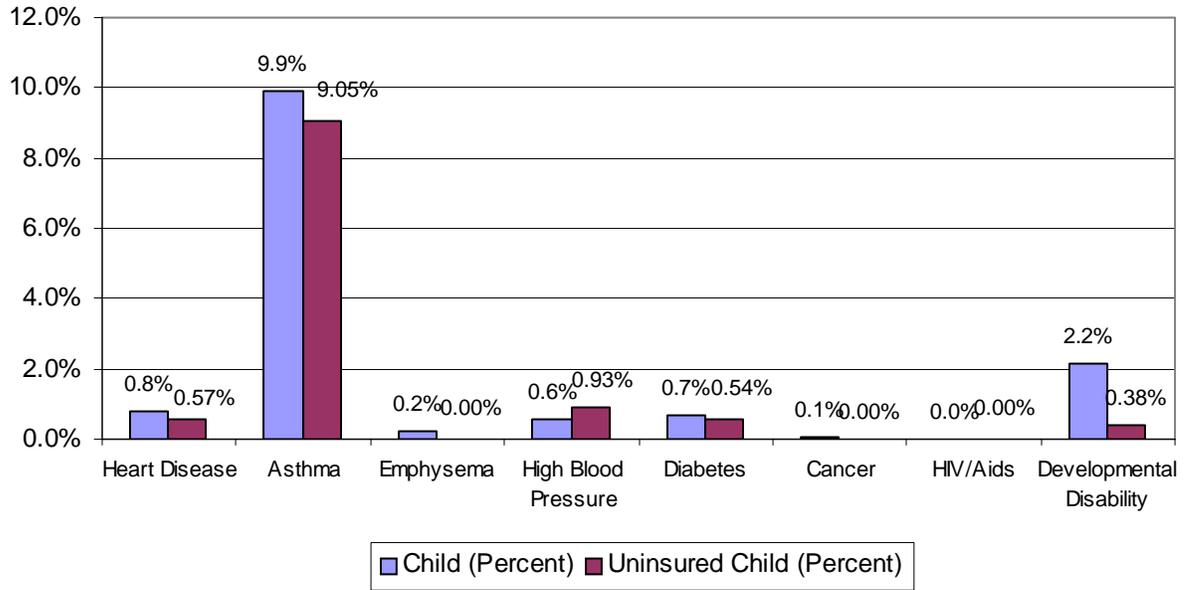


- There is little apparent connection between having a chronic disease and being uninsured.* While most people recognize the important role of one's health on one's ability to secure and maintain health insurance, we find little evidence of a systemic connection between having a chronic condition/disease and uninsured status for either adults or children. Louisiana residents with heart disease, asthma, emphysema, etc., were only marginally more likely to be uninsured than their counterparts without a chronic condition. When we aggregate across each of these conditions, uninsured residents do appear to be more likely to have some chronic disease: 32% of uninsured respondents report having some chronic disease or condition compared to 27% for all respondents.

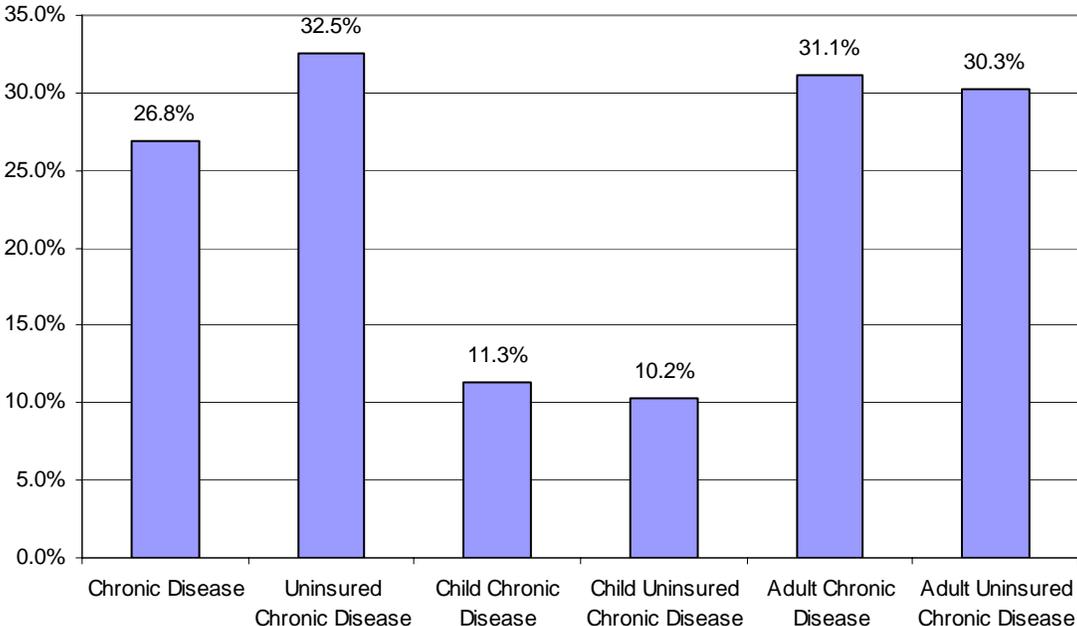
Percent of Adults with Chronic Diseases/Conditions by Insurance Status



Percent of Children with Chronic Diseases/Conditions by Uninsured Status

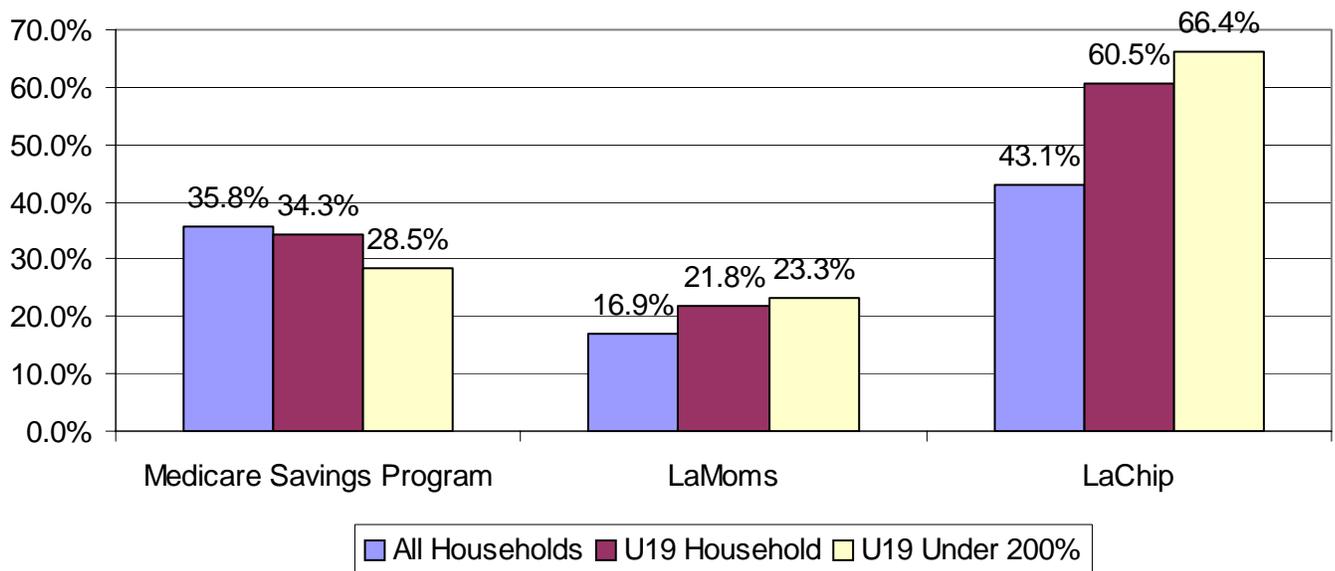


Chronic Disease by Insurance States



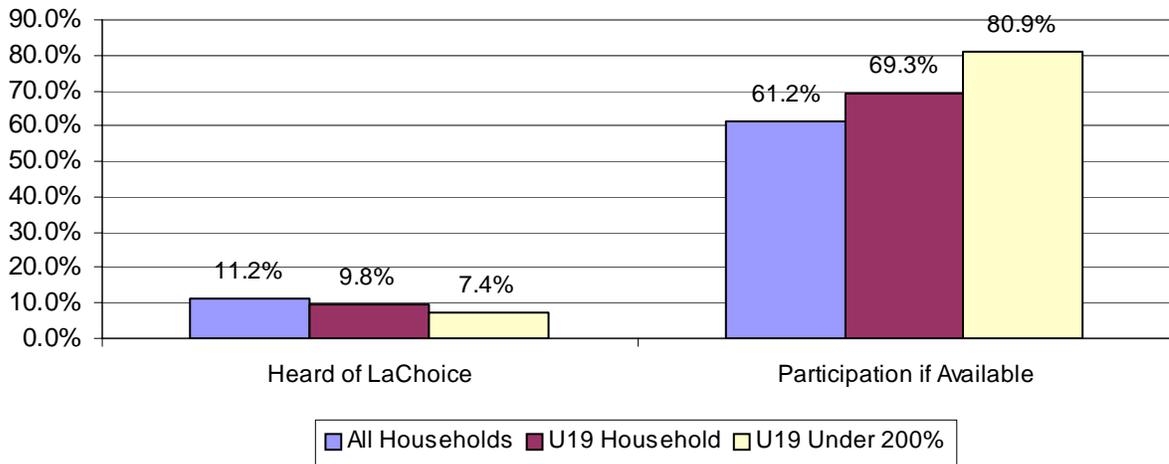
- Awareness of LaChip among households with children present and under 200% of poverty has significantly increased since 2003. In 2003, 55.8% of respondents from households with children present and under 200% of poverty reported that they had heard of the LaChip program. In 2005, roughly two-thirds of respondents from similarly situated households reported they had heard of LaChip. Notably, awareness among all households remained relatively stable (44.9 in 2003 compared to 43.1 in 2005), indicating that this is the likely result of targeted communications rather than broader exposure to the program. Similarly, awareness of LaMoms among households with children present and under 200% increased from 17.8% in 2003 to 23.3% in 2005. As with LaChip, awareness among all households declined slightly across the two years. In contrast to LaChip and LaMoms, awareness of the Medicaid Savings Program declined among all household types.*

Awareness of Medicaid Programs by Household Type



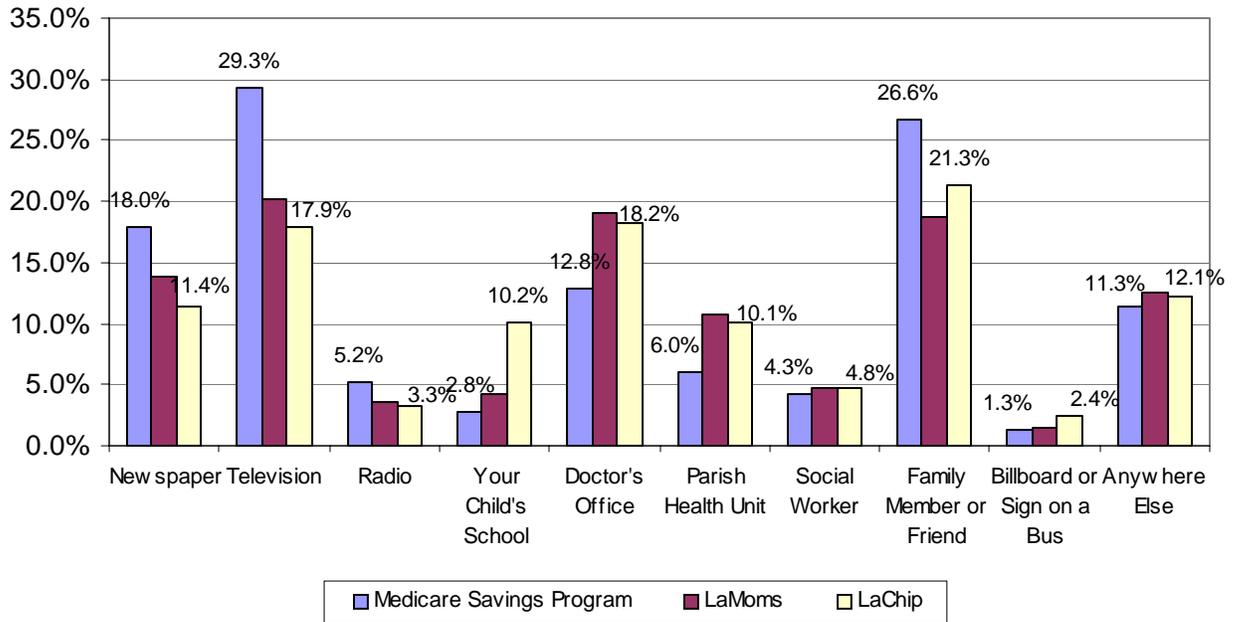
- Awareness and Intended Use of LaChoice:* While respondents have generally not heard of the LaChoice program - only approximately 1 in 10 report having heard of the program - substantial majorities would consider participating in such a program if it were made available. Respondents in households with children and under 200% of poverty were most likely to say that they would consider participating in a LaChoice type of program.

Awareness and State Intended Use of LaChoice by Household Type



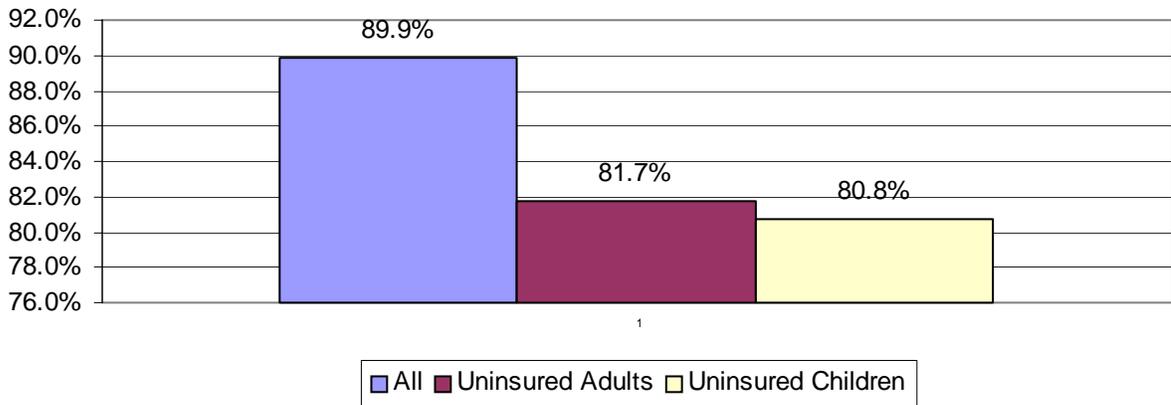
- Sources of Information for Respondents Who Have Heard of Medicaid Programs:* Respondents learn about programs through a variety of sources. For the Medicaid Savings Program (which respondents were least likely to be aware of), television, family or friends, and newspapers were the most commonly cited sources of information. For LaMoms, television and family and friends remained important, but institutional sources of information became important as well, particularly the doctor's office and parish health unit. LaChip follows a similar pattern with the exception that public schools are also an important source of information about LaChip. The higher levels of awareness of LaChip and LaMoms (relative to the Medicaid Savings Program) indicate that - while mass communication might help to increase awareness - institutional sources are important for raising awareness among targeted populations.

Source of Information for Medicaid Programs

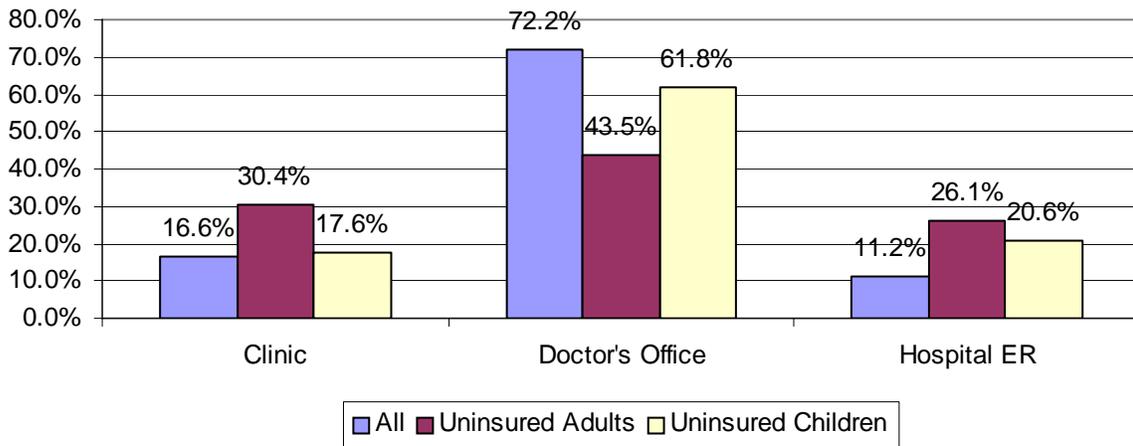


- *Differences in Medical Care & Use for Insured Versus Uninsured Residents:* Being uninsured matters because it affects patterns of how (and where) respondents seek medical care and the tradeoffs they made in terms of care versus expense.
 - Uninsured residents are less likely to have a usual place of care: 89% of all respondents said they had a usual place of care to go to if sick or in need of medical care. 80% of uninsured residents said they had a usual place to go. Percents reporting a usual place of care has increased over 2003, but the gap between insured and uninsured has remained.

Percent of Respondents Reporting Usual Place of Care by Insurance Status



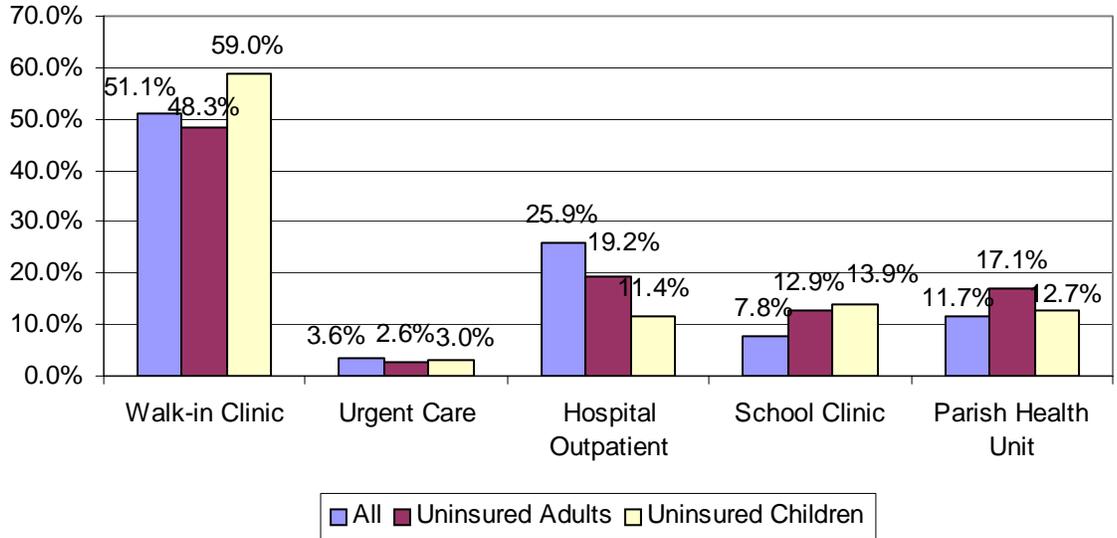
Place of Care by Uninsured Status



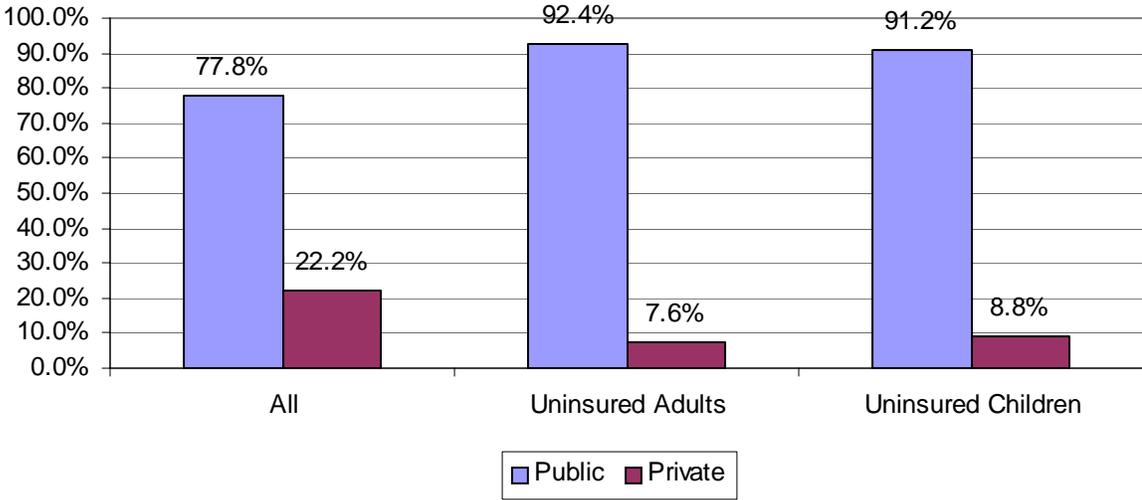
- Among respondents who report having a usual place of care, the vast majority (72%) report that the place they receive care is a doctor's office. There is a sharp difference among uninsured adults, as only 44% of uninsured adults report receiving care from a doctor's office, while over a quarter (26%) report using an emergency room as their usual source of care. Uninsured adults were also more likely to list their usual source of care as a clinic. Differences among uninsured children are less severe though still notable as 62% report going to a doctor's office as their usual source of care and a fifth (20%) reported using emergency rooms.

- Among respondents who reported using a clinic, a majority of respondents reported using a walk-in clinic followed by a hospital outpatient clinic. And while a majority of respondents (77%) reported using a public clinic, uninsured respondents were more likely to use public as opposed to private clinics. Approximately 92% of uninsured adults and children reported using public clinics compared to 78% for all respondents.

Type of Clinic Used for Usual Care

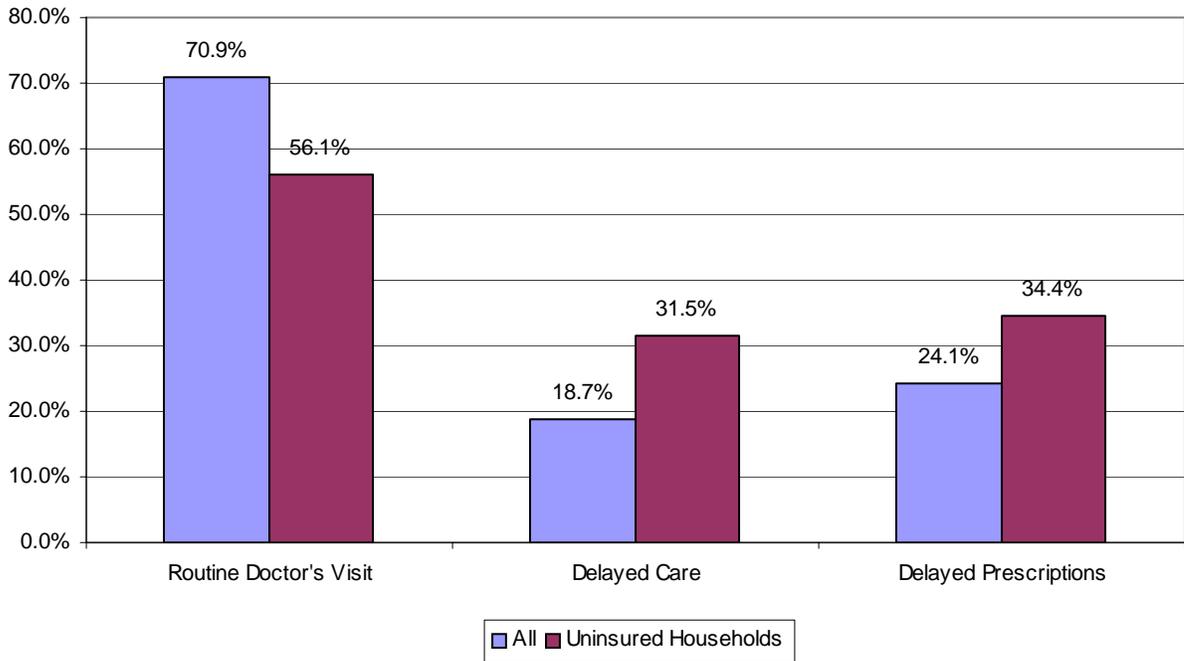


Type of Clinic (Public v. Private) by Uninsured Status



- Insurance status is also associated with whether a respondent seeks out routine care for physicals and checkups, or delays care or prescription medications because of the costs: 71% of all respondents reported visiting the doctor in the past twelve months for routine care compared to 56% of uninsured respondents. Likewise, uninsured respondents were more likely to report having delayed care or prescription medications. 19% of all respondents delayed care because of the expense compared to 32% of uninsured residents, and 24% of respondents delayed prescription medication compared to 39% of the uninsured.

Medical Care & Uninsured Status



TECHNICAL APPENDIX: SAMPLING, WEIGHTING, AND ADJUSTMENT FOR THE MEDICAID UNDERCOUNT

In 2003, the Public Policy Research Lab at Louisiana State University conducted the largest and most comprehensive study of the state's uninsured populations ever undertaken. While the study focused on the uninsured more generally and included questions on medical care and utilization, the primary focus of the work was to estimate the number of uninsured children statewide and at the regional level to better target state outreach efforts.

Prior to this study, estimates of the number of non-elderly uninsured in Louisiana were based on Current Population Survey's March Supplement. The CPS estimates have been invaluable as the only consistent overtime, statewide estimates of the uninsured, but have historically been limited both in terms of the overall sample size for any given state and the geographic distribution of respondents. Recently, the CPS has addressed some of these concerns by increasing the number of households included in the sample, and diversifying the strata from which these households are drawn. CPS currently includes 2186 households from Louisiana.² While the increase in sample size makes the CPS a better estimate of statewide uninsured populations, it remains limited in its capacity to generate regional and parish-level estimates.

The 2003 Louisiana Health Insurance Survey (LHIS) sought to remedy this shortcoming in existing data by collecting insurance status from over 10,000 Louisiana households representing over 27,000 individuals. Results from this study were reported in April 2004, and provided detailed estimates of uninsured populations by region and key demographic characteristics, including race, income, and education. A follow-up study used these data to generate parish-level estimates of the uninsured adults and children. These estimates, however, were limited in several ways. First, the sampling design - which was based on health insurance surveys conducted in Florida - was crafted to ensure adequate representation of relatively poor, minority Louisianans by over sampling from telephone prefixes below statewide median income and above the statewide percent of African-American residents. Such a sampling design was appropriate for statewide and regional estimates, but left several parishes with very few households for estimating parish-level uninsured rates. There were also significant disparities across regions in the number of households included in the sample, and particularly in the number of households with children. In Tables 1 & 2, we present the sample distributions for households and individuals for the 2003 and 2005 Louisiana Health Insurance Survey by Department of Health & Hospital region. In 2003 regions 6, 7, and 8 (Central Louisiana, Northwest, and Northeast Louisiana), there were fewer than 300 households with children present, and in region 9 there were only 340 households with children present.

² Technical Paper 63RV: Design and Methodology. Current Population Survey.

Table 1: Comparison of Households Sampled by Region

<u>Region</u>	<u>2005 Total Households</u>	<u>2003 Total Households</u>	<u>2005 U19 Households</u>	<u>2003 U19 Households</u>
New Orleans 1	1,292	1880	471	691
Baton Rouge 2	1,097	1636	446	739
Houma-Thibodeaux 3	893	1381	427	611
Acadiana 4	1,463	1581	645	687
Southwest 5	1,019	926	425	420
Central 6	988	624	452	283
Northwest 7	1,242	592	476	240
Northeast 8	1,018	622	417	263
Northshore 9	1,087	787	476	339
Statewide	10,099	10,029	4,235	4,273

Table 2: Comparison of Individuals Included in Sample by Region

<u>Region</u>	<u>2005 Total Individuals</u>	<u>2003 Total Individuals</u>	<u>2005 U19 Individuals</u>	<u>2003 U19 Individuals</u>
New Orleans 1	3,287	4680	849	1190
Baton Rouge 2	2,896	4401	822	1291
Houma-Thibodeaux 3	2576	4059	755	1236
Acadiana 4	3,988	4412	1183	1368
Southwest 5	2,753	2515	769	722
Central 6	2715	1656	829	452
Northwest 7	3,204	1574	855	430
Northeast 8	2,707	1630	767	455
Northshore 9	3,003	2199	851	650
Statewide	27,129	27,126	7,680	7,794

In response to concerns about the distribution of the 2003 sample, the 2005 Louisiana Health Insurance Survey utilized a sampling strategy based on assuring minimal households within each parish and within each region. The sampling design was similar in structure to a survey conducted in Missouri by the University of Minnesota's State Health Access Data Assistance Center. The initial sampling target was to generate at least 65 households from each parish and 800 households from each DHH region. To assure adequate sampling of minority and poor residents, an over sample 1000 respondents from telephone prefixes where the median income was below the statewide median was also conducted. The results - as can be seen in Tables 1 & 2 - are a more even distribution of households and individuals across region, and a corresponding increase in confidence in estimates from regions where sample size has increased

(regions 5-9). While there is some decline in confidence in regions with fewer households sampled in 2005 (regions 1, 2, 3, 4), the sample sizes are generally large enough to provide reasonably accurate estimates of uninsured populations.

Second, in the 2003 survey, we utilized income data from a categorical, omnibus measure of household income. For estimating uninsured populations for various income and poverty levels, we used only those cases with valid income data. Practically speaking, this meant relying on fewer households to generate parish and regional estimates (with resulting decreases in the confidence of our estimates). In Table 3, we illustrate the number of households with valid data on this omnibus measure for both the 2003 and 2005 surveys. By eliminating those cases without valid income data, we limited our sample sizes to under 200 households in regions 6,7, and 8, and to 268 in region 5 and 227 households in region 9.

Table 3: Comparison of Percent of Households with Valid Income Data, 2003-2005

2003 Households With Valid Income Data	2005 Households With Valid Income Data					
	U19 HH			U19 HH		
Region	U19 HH	W Income	Percent	U19 HH	W Income	Percent
New Orleans 1	682	410	60.1%	471	333	70.7%
Baton Rouge 2	712	496	69.7%	446	342	76.7%
Houma-Thibodeaux 3	671	404	60.2%	427	295	69.1%
Acadiana 4	696	432	62.1%	645	432	67.0%
Southwest 5	396	268	67.7%	425	316	74.4%
Central 6	245	187	76.3%	452	322	71.2%
Northwest 7	246	165	67.1%	476	314	66.0%
Northeast 8	267	160	59.9%	417	315	75.5%
Northshore 9	359	227	63.2%	476	337	70.8%

*Comparisons are based on responses to categorical, omnibus income question.

Limiting the analysis to only those households with valid income data also meant making an implicit assumption that respondents who report income are relatively similar to respondents who did not report income. This turns out not to be the case as can be seen in Table 3. In Table 3, we present the estimates of uninsured children by region and missing income status for the 2005 Louisiana Health Insurance Survey. Households with reported income were much more likely to also report that children in the household were also insured.

Table 3: Comparison of Uninsured Rates for Respondents with Valid and Missing Income Data, 2005

<u>Region</u>	<u>U19 Uninsured All Respondents</u>	<u>U19 Uninsured W/Valid Income</u>	<u>U19 Uninsured W/Missing Income</u>
New Orleans 1	9.8%	8.2%	13.1%
Baton Rouge 2	11.3%	8.8%	21.5%
Houma-Thibodeaux 3	10.0%	9.4%	11.4%
Acadiana 4	12.1%	11.6%	13.4%
Southwest 5	6.9%	5.9%	9.8%
Central 6	13.3%	10.8%	18.4%
Northwest 7	7.4%	5.7%	10.4%
Northeast 8	8.6%	7.0%	13.4%
Northshore 9	10.1%	9.5%	11.8%

One consequence of this finding is that estimates of the uninsured by income level or poverty status in the 2003 Louisiana Health Insurance Survey are likely to be understated as they exclude households with missing data. To address this shortcoming, the 2003 Louisiana Health Insurance Survey used "hotdecking" to impute values for households with missing income. Hotdecking matches respondents based on similar, known characteristics (e.g., race, education, uninsured status, age) and then randomly selects income values for respondents with missing data from a group or "deck" of similarly situated respondents. For example, a Caucasian, less than a high school education, insured, and between 45-54 years old respondent would be matched with all respondents matching this description and randomly ascribed an income value. These imputed income values are then used in estimates of uninsured status by income and poverty levels.

The effect of imputing missing values on estimates on the uninsured are nontrivial and generally increase the proportion of respondents reported as uninsured. In Table 4, we present estimates of the uninsured children under 200 percent of poverty for all respondents and for respondents with valid income data on the categorical, omnibus question. Our statewide estimate of uninsured children increased by over two percentage points when missing income data are replaced with imputed values. Looking across regions, estimates of uninsured children under 200 percent of poverty increased by as much as 4 percentage points in region 3, while only decreasing in region 9 and then by less than a percentage point. *Importantly, the impact of imputation on uninsured rates is not consistent across region and affects some regions more than others.*

Table 4: Comparison of Estimates of Uninsured Children Under 200% Federal Poverty Level Using Imputed Income Data

<u>Region</u>	<u>2005 Estimate W/Imputed Income</u>	<u>2005 Estimate W/Valid Income Only</u>
New Orleans 1	18.2%	15.1%
Baton Rouge 2	16.0%	12.2%
Houma-Thibidoux 3	14.2%	9.9%
Acadiana 4	17.4%	14.5%
Southwest 5	10.1%	8.7%
Central 6	16.9%	14.2%
Northwest 7	9.2%	6.8%
Northeast 8	7.8%	6.8%
Northshore 9	17.3%	17.9%
Statewide	14.5%	12.1%

Third, we also made changes in how post-stratification weights were applied to the data. In the 2003 LHIS, the weighting strategy was developed by James Geaghan, a Professor of Experimental Statistics at Louisiana State University. Professor Geaghan developed the weighting strategy based on previous studies conducted at the University of Florida, and focused primarily on developing sampling weights consistent with a series of Florida Health Insurance Surveys. In the 2005 LHIS, sampling weights were constructed based on the number of households interviewed in a given prefix, the population prefix, and the size of the household. Post-stratification weights were further developed based on comparisons between sample respondent education, race, and age compared estimates from the Census Bureau's 2004 American Community Survey. The 2004 American Community Survey provides the most recent and reliable estimate of population demographics available. As is often the case with survey data, the initial sample was more highly educated, wealthier, and slightly more Caucasian than the general population. A comparison of the weighted survey estimates of key demographic characteristics with the American Community Survey is provided in Table 5. As can be seen in Table 5, the weighted 2005 LHIS sample characteristics nicely mirror estimates of the best available estimates of these population characteristics. This is particularly true in terms of estimates of the percent of respondents under the federal poverty line, and under 200% of poverty.

Table 5: Demographic Comparisons of 2005 LHS to the 2004 American Community Survey

	2004 America Community Survey		2005 Louisiana Health Insurance Survey Weighted Estimates	
	<u>Population Estimate</u>	<u>Proportion Estimate</u>	<u>LHS Weighted Estimate</u>	<u>LHS Population Estimate</u>
	Population	4,383,224		
Sex				
Male	2,102,485	48.0	46.6	2,032,336
Female	2,280,739	52.0	53.3	2,325,097
Age				
Under 19	1,284,806	29.3	28.4	1,242,579
19-65	2,662,957	60.8	67.1	2,932,012
Under 18	1,160,909	28.0	28.3	1,170,377
18-24	458,325	9.0	10.6	440,496
25-34	565,386	12.9	12.3	508,094
35-44	631,655	14.4	15.7	651,376
45-54	638,923	14.6	17.6	729,929
55-64	433,750	9.9	15.5	640,979
65 and over	494,276	11.3		181,471
Education				
Less than High School	629,172	19.9	19.3	603,771
High School Graduate	1,070,975	33.9	36.7	1,149,754
Some College/Associates	829,436	26.3	24.4	763,194
College	428,984	13.6	15.3	480,324
Graduate Degree	198,666	6.3	4.4	136,479
Household Income				
Less than \$4,999	89,579	5.2	4.7	78,152
\$5,000-\$9,999	144,349	8.4	7.9	130,450
\$10,000-\$14,999	146,310	8.5	11.0	181,454
\$15,000-\$19,999	129,574	7.6	6.8	112,091
\$20,000-\$24,999	129,213	7.5	7.4	122,603
\$25,000-\$34,999	223,318	13.0	11.4	187,449
\$35,000-\$44,999	184,648	10.8	10.2	168,098
\$45,000-\$54,999	138,113	8.1	9.7	159,707
\$55,000-\$64,999	112,370	6.6	6.1	101,137
\$65,000-\$74,999	96,245	5.6	5.0	82,957
\$75,000-\$84,999	72,341	4.2	4.7	76,694
\$85,000-\$94,999	60,787	3.5	3.1	51,025
\$95,000	187,286	10.9	11.9	196,614
Poverty				
Less than 100%	844,235	19.3	18.5	830,743
Less than 200%	1,782,964	40.7	42.2	1,882,921
Over 200%	2,585,002	59.2	57.8	2,485,918

In the 2003 LHIS, for example, 31% of respondents were under 200% of poverty compared to approximately 41% in the American Community Survey and 42 percent in the 2005 LHIS. As with imputation, the effect of more accurate weighting procedures is to drive up estimates of the uninsured. Using the raw (unweighted) data, we would estimate that 9.6% of children under 19 are uninsured. Applying the sampling weights only (a rough equivalent to the weighting strategy employed in the 2003 LHIS), the estimate of uninsured children would actually drop slightly to 8.9 percent. Applying the sampling and post-stratification weights, the estimate increases to 10.1 percent. In Table 6, we present the estimates according to weighting procedure: (1) raw (unweighted) estimates; (2) Estimates with sample weights only; and (3) Estimates with sample and post-stratification weights.

Table 6: Comparison of Unweighted and Weighted Sample Estimates, 2005 LHIS

	Raw (Unweighted)	Sample Weights Only	Sample & Post-Stratification Weights
New Orleans 1	9.7%	8.5%	9.8%
Baton Rouge 2	8.9%	8.2%	11.3%
Houma-Thibodeaux 3	10.3%	10.4%	10.0%
Acadiana 4	11.2%	10.0%	12.1%
Southwest 5	6.4%	6.0%	6.9%
Central 6	11.5%	11.6%	13.3%
Northwest 7	8.5%	7.5%	7.4%
Northeast 8	9.9%	9.8%	8.6%
Northshore 9	8.9%	8.7%	10.1%
Statewide	9.6%	8.9%	10.1%

In terms of methodology, the 2005 Louisiana Health Insurance Survey improves upon work from the 2003 Louisiana Health Insurance Survey. The net effect of these changes is to provide more conservative (higher) and more accurate initial estimates of the uninsured. Including imputed income and changing the weighting schemes to better reflect the overall population clearly have the effect of increasing our estimates of the number of uninsured children and adults. As part of the survey, we are currently grappling with yet another methodological issue - the Medicaid undercount - in which respondents with Medicaid and LaChip coverage incorrectly report being uninsured or being covered by private insurance. Taking into the Medicaid undercount will effectively reduce our estimates of the uninsured by reducing the number of false positives in the uninsured category.

A second implication of these changes is that comparisons between surveys are - unfortunately - unlikely to be very meaningful. For example, our best comparison for the change in the number of uninsured children would be between the 2003 LHIS estimate - which placed the percent of uninsured children at 11.1% - and the 2005 LHIS estimate that includes only sample weights - which place the percent of uninsured children at 8.9%. If we were to calculate changes in the number of children without insurance, we

would estimate that the number of uninsured children decreased from roughly 143,000 in 2003 to 115,000 in 2005.³ However, it is important to keep in mind that the better estimate for uninsured children is from the estimates that include both the sampling and post-stratification weights, but that this estimate is not directly comparable to the 2003 estimate. Though notably, even with the changes in methodology (which places the percent of uninsured children at 10.1%), we would estimate that the number of uninsured children has decreased by approximately 14,000 children.

Looking more specifically at the percent of children uninsured under 200% of poverty and approximating the methodology of the 2003 survey (which would include only sampling weights and would not include imputed income), we would estimate a decrease from 12.9% in 2003 to 12.1% in 2005. According to these estimates, the number of uninsured children under 200% of poverty has declined by approximately 5000 children. As was the case with uninsured children more generally, the best estimate of uninsured children under 200% of poverty is 14.5% but there is currently no comparable estimate from the 2003 survey.

Medicaid Eligibility: A further improvement in the 2005 Louisiana Health Insurance Survey involves identifying the Medicaid eligible population. Medicaid eligibility for uninsured children is often determined by a fairly simple means test - if household income is under 200% of federal poverty they are considered eligible, otherwise they are ineligible. Yet, such a calculation ignores the fact that many households over 200% of poverty include Medicaid eligible children. In the 2005 Louisiana Health Insurance Survey, we have worked to better identify these children by more fully accounting for family relationships and income deductions. Here we briefly outline the procedure for identifying Medicaid eligible households and illustrating differences in uninsured status for children under 200% of federal poverty and Medicaid eligibility.

- All children under 200% of poverty are considered eligible for Medicaid. According to the estimates from the 2003 Louisiana Health Insurance Survey, this would include 625,483 Louisiana children (or roughly 1/2 of Louisiana's children);
- All children over 200% of the federal poverty level but reported as covered by Medicaid or LaChip. This adds an additional 100,923 children to the Medicaid eligible category, all of whom are reported as insured. This assumes that none of this reports are "false positives," that is respondents who might report LaChip coverage but who are uninsured or covered by private insurance. Because income is imputed for many of these household, it may be that respondent income is overestimated through the "hotdecking" procedure. These may also be respondents whose income falls close to 200% but are made eligible because of family or income deductions.
- Foster children and children living with grandparents or other relatives were counted as Medicaid eligible. According to our estimates, this would

³ To assure the best comparison, we relied on population estimates from the 2004 American Community Survey. As such, these estimates is slightly different from what appeared in the 2003 Louisiana Health Insurance Survey Report.

represent roughly 959 foster children and 110,531 children living grandparents or other relatives. Of the 110,531 children living with grandparents or other relatives, 24,176 were not currently covered by LaChip or living under 200% of poverty, meaning that these additional cases were captured as Medicaid eligible.

- For children living with stepparents, income was recalculated based only on the biological parents estimated income. If the income was less than 200% of poverty, children in the household were counted as eligible. A couple of problems emerge with this measure. One, we can only determine stepchild status for the respondents and not for other members of the household. Second, since adopted children and own child are treated as separate categories, many "stepchildren" are likely to be missing from these calculations. Overall, there are an estimated 17,212 children living with stepparents. Of these, roughly 3,301 are now classified as Medicaid eligible who otherwise would have not been included.
- Finally, we deduct standard deductions from income and recalculate respondent income. Included deductions are: (1) \$90 per month for each working parent; (2) Child support payments; and (3) Child care expenses. With these income adjustments an additional 29,942 children are included as Medicaid eligible.

Taking into account all of these factors, we would estimate that the Medicaid eligible population in Louisiana is 783,826. Or perhaps stated differently, an additional 158,343 children would be considered Medicaid eligible using these more specific criteria than would be considered had we simply considered income under 200% of federal poverty. Moreover, our estimates of uninsured rates for the Medicaid eligible are substantially lower than our estimates for under 200% poverty. Statewide the Medicaid eligible estimate is 2.2 percentage points lower, though difference ranges from 0.7 percentage points in region 7 to 5.4 percentage points in region 1.

Table 7: Comparison of Medicaid Eligible to Under 200% of Poverty for Uninsured Children

Region	<u>Uninsured U19 Under 200% Proportion</u>	<u>Uninsured U19 Under 200% Population</u>	<u>Medicaid Eligible U19 Uninsured Estimate</u>	<u>Medicaid Eligible U19 Population Estimate</u>
New Orleans 1	18.2	21729	12.8	21874
Baton Rouge 2	16.0	12837	14.8	14092
Houma-Thibodeaux 3	14.2	6747	12.7	8249
Acadiana 4	17.4	15536	15.0	15798
Southwest 5	10.1	3632	8.9	3831
Central 6	16.9	8830	15.2	9660
Northwest 7	9.2	8935	8.5	9093
Northeast 8	7.8	4512	7.1	4896
Northshore 9	17.3	8136	13.9	9079
Statewide	14.5	90894	12.3	96572

Comparison of Estimates Across Years: With all these caveats in place, we begin examining differences in estimates across the two surveys at the regional level. We begin looking at adult uninsured rates. According to the Kaiser Family Foundation, the adult uninsured rate is 26%, our estimate nicely mirrors this estimate at 26.9%. Notably, however, it is considerable higher than estimates from the 2003 Louisiana Health Insurance Survey. The differences reflect changes in sampling design and weighting strategies, and the better consistency with other statewide estimates is indicative of the improvement in methodology. Looking across regions, our estimates of uninsured adults range from a low of 24.3% in region 9 (Northshore) to a high of 33.2% in region 7 (Northwest).

Table 8: Comparison of Adult Uninsured Rates

Region	2005 Adult Uninsured Estimate (Proportion)	2005 Adult Uninsured Estimate (Population)	2003 Adult Uninsured Estimate (Proportion)	2003 Adult Uninsured Estimate (Population)
New Orleans 1	27.2	179,823	20.9	131,000
Baton Rouge 2	22.5	82,644	19.2	71,400
Houma-Thibodeaux 3	25.4	65,551	21.3	48,300
Acadiana 4	24.5	89,737	23.1	73,800
Southwest 5	31.3	61,885	20.4	34,200
Central 6	33.2	66,389	21.6	38,100
Northwest 7	29.6	103,224	21.6	65,300
Northeast 8	29.1	68,759	27.3	56,000
Northshore 9	24.3	71,860	17.3	45,300
Statewide	26.9	789,872	21.1	576,500

Moving to uninsured children, we see greater variability in the estimates over the years, but particularly in regions 5, 6, and 7. This is partly to be expected given that the number of households with children is a subset of total households. As such, our margin of error is always larger when we examine uninsured children. Three regions, however, stand out as having unexpectedly large variation across the two years - regions 5, 6, and 7. Regions 6 and 7 were noteworthy as having relatively few households included in the 2003 survey (only 283 were included in region 6 in 2003 and only 240 in region 7), and as such estimates of uninsured children had a larger confidence interval. In the 2003 report, the approximate margin of error for these three regions were respectively, 3.7% in region 5, 4.7% in region 6, and 4.8% in region 8. The changes in the estimates, however, were beyond what one would expect on the basis of sampling error alone.

Other changes in the survey might also account for these differences. However, as noted throughout the report, most of these changes are likely to result in higher estimates of the uninsured. Yet, regions 5 and 7 experienced comparable declines - 7.9 and 6.8 percentage points - in the estimated percent of insured children, while region 6 experiences a comparable increase (7.0 percentage points). The variability across regions suggests random as opposed to systematic bias in the estimates, and points to sampling

factors as likely culprits in the differences across years. Unlike the adult estimates (presented in Table 8), there is no consistent upward trend in the estimates (which one might expect), but instead substantial differences across regions with the largest differences in regions where we have the least confidence in the 2003 estimates. As we illustrate below, this is an even greater problem with estimates of uninsured children under 200% poverty.

Table 9: Comparison of Uninsured Children

Region	2005 Children Uninsured Estimate (Proportion)	2005 Children Uninsured Estimate (Population)	2003 Children Uninsured Estimate (Proportion)	2003 Children Uninsured Estimate (Population)
New Orleans 1	9.8	24,930	9.6	27400
Baton Rouge 2	11.3	17660	10.8	18700
Houma-Thibodeaux 3	10.0	11753	11.4	13500
Acadiana 4	12.1	20469	11.0	18300
Southwest 5	6.8	5113	15.7	12900
Central 6	13.3	12659	6.3	5500
Northwest 7	7.4	10947	15.2	22700
Northeast 8	8.6	8865	11.1	11400
Northshore 9	10.1	12647	10.4	13600
Statewide	10.1	125,043	11.1	135,400

As with estimates of uninsured adults overall, estimates of uninsured adults under 200% federal poverty are generally higher in 2005. The notable exceptions are region 4 (Acadiana) which experienced a drop in estimated uninsured rates of roughly 5 percentage points and region 8 which witnessed a more modest 2.3 percentage point drop. All the other regions increased, generally quite modestly, and generally within the realm of what one would expect given changes in sampling design, weighting, and income imputation. The one notable jump beyond what one would expect is region 5 where the estimated adult uninsured under 200% of poverty increased from 37% to 51%. This is particularly puzzling given that the percent of uninsured children in the region declined.

Table 10: Comparison of Uninsured Adults Under 200% Federal Poverty Level

Region	2005 Adult Uninsured Estimate (Proportion)	2005 Adult Uninsured Estimate (Population)	2003 Adult Uninsured Estimate (Proportion)	2003 Adult Uninsured Estimate (Population)
New Orleans 1	51.2	141,190	46.5	103,800
Baton Rouge 2	41.4	52,252	40.3	47,200
Houma-Thibodeaux 3	44.4	43,570	41.5	31,700
Acadiana 4	38.0	59,420	43.5	54,900
Southwest 5	50.9	40,167	37.4	26,700
Central 6	48.6	40,493	39.7	27,600
Northwest 7	47.2	73,543	45.1	50,000
Northeast 8	44.7	44,035	47.0	38,500
Northshore 9	43.1	40,460	35.9	28,400
Statewide	45.9	535,130	42.5	400,000

As with children overall, there is considerably more variation when looking at uninsured children under 200% of poverty. We generally would expect consistent increases across regions, though regions 2, 5, and 7 defy this expectation. In region 2, the difference is slight, in region 4 the difference is more modest, and in region 7 the difference is much more substantial. Sampling error undoubtedly plays an important role in this variation. When we consider only households with children under 19 and income under 200% of poverty we are greatly limited our sample. For example, in 2003 in region 7, we are limited to 160 households with children and under 200% of federal poverty, while in region 6 our estimates are limited to 165 households.

Our poverty estimates are also more limited, estimating the number of children under 200% at 34% in 2003 as opposed 48% in 2005. It is not clear that the smaller estimate of children in poverty in 2003 would increase estimates of the uninsured, but the smaller the estimate of the under 200% of poverty the less confidence we have in our estimates. Also, the difference appears to be primarily in the 100% - 200% group as the percentages reporting as under 100% poverty are roughly equivalent across the two years (19% in 2003 and 22% in 2005), but the percentage reporting between 100%-200% is considerable large (15% in 2003 and 25% in 2005). Collectively, this may means that the estimate for the uninsured in region 7 was weighted more heavily toward the very poor in 2003.

While the difference in region 6 is also significant, it appears to reflect an increase in uninsured estimates across groups (uninsured adults, uninsured children, uninsured adults under 200%, and uninsured children under 200%). The estimates for Acadiana are more troubling, as they do not appear to reflect a more general pattern, or a relatively small sample size. Early we did observe an increase in these estimates due to both changes in weighting procedures and imputing income - though the changes were relatively modest (approximately 2% due to imputation and 1% due to weighting). This leaves a substantial gap - approximately 7-8% - to explain.

Table 11: Comparison of Uninsured Children Under 200% of Federal Poverty

Region	2005 Children Uninsured Estimate (Proportion)	2005 Children Uninsured Estimate (Population)	2003 Children Uninsured Estimate (Proportion)	2003 Children Uninsured Estimate (Population)
New Orleans 1	18.2	21,729	13.2	19832
Baton Rouge 2	16.0	12,837	17.6	13437
Houma-Thibodeaux 3	14.2	6,747	13.1	7190
Acadiana 4	17.4	15,536	6.6	5735
Southwest 5	10.1	3,632	15.7	5877
Central 6	16.9	8,830	7.7	3723
Northwest 7	9.2	8,935	24.8	20026
Northeast 8	7.8	4,512	9.2	5470
Northshore 9	17.3	8,136	16.5	8726
Statewide	14.5	90,894	12.9	83494