

Alabama Rural Health Report

Vol. 3 No. 1

March 2003

Selected Indicators of Rural Health Status in Alabama



Alabama Rural Health Association
Post Office Box 4509
Montgomery, Alabama 36103

Dear Readers:

Knowing that quality health care is and will continue to be available when it is needed is an assurance that many Alabamians take for granted. Unfortunately, this assurance does not exist in many of Alabama's rural areas and is in danger of being lost in many others. Important components of the rural health care industry have been lost and others are struggling to survive. This concern is clearly revealed through the fact that women in 26 of Alabama's 45 rural counties must travel to another county to deliver their babies. This lack of stability in rural health care can ill be afforded by a high-risk and vulnerable rural population.

This publication presents information on several of the major factors which are related to rural health care in Alabama. It attempts to paint a picture of the current and future rural population and the greater health care needs of our rural residents. The long-term economic struggles of Alabama's rural counties are documented. The severity of these economic struggles have placed many of our rural counties at great disadvantage when attempting to attract health care practitioners and in maintaining a local health care system. This critical shortage of health care practitioners in Alabama's rural counties is described along with current inadequacies of rural emergency medical services. This report hopefully will identify many of the inter-related factors influencing rural health care, stimulate reflection, discussion, and action in responding to the needs of Alabama's rural health care industry and improving the health status of our rural residents.

We must all realize that our rural areas greatly contribute to the livelihood of all Alabamians. Several of our primarily rural industries are among the greatest contributors to Alabama's economy. Every day we use products which can only come from rural areas. Many of our favorite recreational activities are only available in our rural areas. In our highly mobile society, anyone from anywhere can find themselves in need of health care through our rural health care system. **Having quality health care in rural Alabama is everyone's concern.**

The Alabama Rural Health Association is a non-profit organization devoted to bringing rural health issues before policy makers and the general public. Association dues are minimal and membership is open to anyone interested in improving rural Alabama's access to health care and its health status. Its mission of communication, education and advocacy provides a common forum for a great diversity of organizations and individuals. We invite you to join us in these efforts by completing and submitting a membership application which can found on the inside of the last page of this report.

Sincerely,

Clyde Barganier, President

SELECTED INDICATORS OF RURAL HEALTH STATUS IN ALABAMA

The major health status concerns or issues confronting rural Alabamians tend to be created or defined by the interaction of several factors including health status risks which are present among Alabama's rural population, the rural environment itself, the trends in access to rural health care, and the economics of Rural Alabama. This study looks at selected factors which are related to major health care concerns which Rural Alabamians must confront. The goal is to increase public awareness of the trends in health care among Alabama's vulnerable rural residents and to promote thought about the future of health care in Rural Alabama along with possible solutions to these concerns.

When looking at the characteristics and experiences of Alabama residents, there can be great variation by place of residence. Alabama's rural population can vary considerably when compared to its urban population for many characteristics. There can also be great diversity among Alabama's rural residents, especially when comparing the characteristics or experiences of residents in the rural counties of North Alabama and those in the rural counties of South Alabama.

For this reason, this study will group Alabama residents into five areas for comparative analysis: Alabama, urban county residents, rural county residents, residents of rural counties in North Alabama, and residents in rural counties of South Alabama. When possible, national data will be included. Rural counties include the 45 counties which are not currently included in Metropolitan Statistical Areas (MSAs) as defined by the federal Office of Management and Budget. The 21 non-MSA counties in North Alabama which are also in the Appalachian Region comprise Rural North Alabama. The 24 non-MSA counties of South Alabama which are not within the Appalachian Region comprise Rural South Alabama. The 22 counties which are within Metropolitan Statistical Areas are considered to be urban counties. Specific counties included in each of these groups are listed in the appendix of this publication.

The rural environment itself naturally produces variation in health status risks. Agricultural and recreational accidents occur with much greater frequency in rural areas where such activity abounds. Injuries in rural motor vehicle accidents tend to be greater because of the presence of higher speed in such accidents. The time required in getting rural residents needing medical attention from their residences or scenes of accidents to adequate medical attention is increased because of greater distance that usually must be covered and the fact that emergency medical services in rural areas tends to involve greater reliance upon volunteers, the use of inferior equipment, and less stable funding.

Current trends in access to health care pose serious threats to the rural health care industry and the health care status of rural Alabamians. One obvious access to health care problem involves getting health care practitioners to locate and keep their practices in rural areas which have critical shortages or no such care. Another access to health care problem involves transporting patients to the sites where such care can be received. Greater barriers are encountered in getting rural patients transported for health care. Another concern involving access to health care is being encountered where transportation is not a problem. Many rural residents with adequate transportation are bypassing rural health care facilities and going greater distances to receive health care services which are perceived to be of higher quality in urban settings. There is a greater tendency for such patients to be those with insurance coverage. A greater proportion of paying patients with insurance coverage is sorely needed by Alabama's rural health care industry.

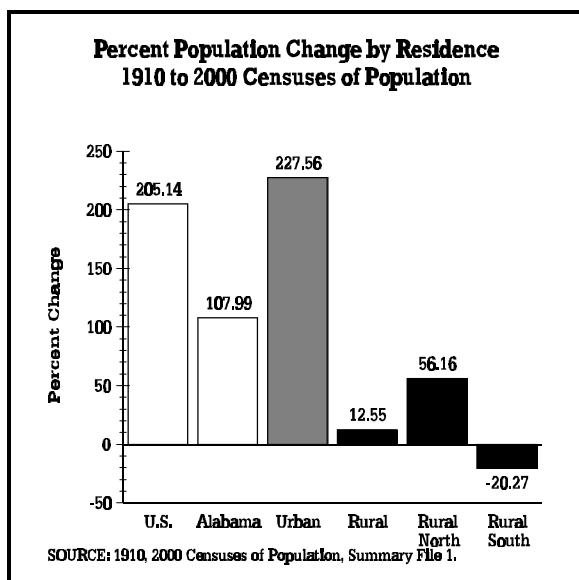
Health care, like other commodities, is directly related to economic wealth. The economic struggles

of Rural Alabama have resulted in a rural population which lacks the wealth required to assure an adequate health care status and a rural health care industry which is committed to provide quality service to a population in need, but which lacks the sound financial basis to assure survival.

ALABAMA'S RURAL POPULATION IS NOT EXPERIENCING HEALTHY GROWTH:

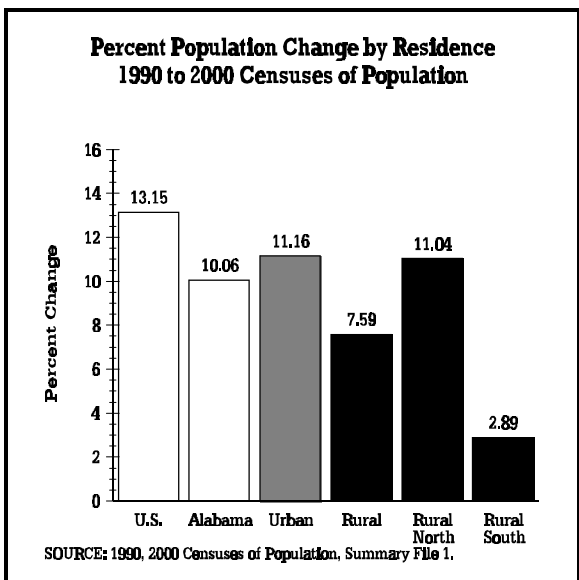
Rural Population Growth Rate Between 1910 and 2000: 12.55%
Urban Population Growth Rate Between 1910 and 2000: 227.56%

The population in Alabama's 45 rural counties increased by only 12.55 percent between the 1910 and 2000 Censuses. During this same time period, the population in Alabama's 22 urban counties increased by 227.56 percent. The rate of growth was more than 18 times greater in the urban counties.



The lack of healthy population growth in rural areas is evident by the fact that the population in more than one-half of the rural counties actually decreased during a period when the state's population more than doubled. Between 1910 and 2000 the population decreased in 26 of the 45 rural counties. The greatest decreases were in Perry, Bullock, Wilcox, Lowndes, and Greene counties where the 2000 population was just over one-third of what the population had been in 1910.

Several rural counties did experience growth similar to that for the state as a whole. The populations in Marshall, Cullman, DeKalb, Talladega, and Escambia counties more than doubled between 1910 and 2000.



None of the 22 urban counties suffered decreases in population between 1910 and 2000. Of the urban counties, only Lawrence and Russell had populations which did not at least double. Baldwin County had the highest rate of growth among all counties with a 672.44 percent increase.

Much of this population change has been due to the continuing out migration from rural to urbanized areas, prompted to a great extent by agricultural mechanization, and the out migration of the African American population. Several of the counties with large population decreases are in the Black Belt region which has higher percentages of African

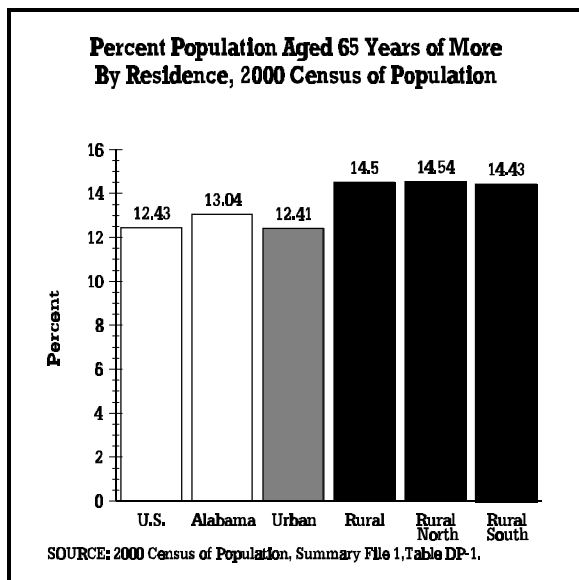
American population. However, several of the counties with decreasing populations do not have large African American populations.

1910 was selected for the long-term population analysis since that was the first Census to be completed when all 67 of Alabama's current counties had been established. Much of the same trend is evident when looking at population change between the two most current Censuses, 1990 and 2000. The urban population increased by 11.16 percent between 1990 and 2000 while the rural population increased by only 7.59 percent. The rural counties in North Alabama increased by 11.04 percent while those in South Alabama experienced substantially less growth at 2.89 percent. Nine rural counties (Sumter, Perry, Dallas, Macon, Wilcox, Butler, Greene, Chambers, and Choctaw) and two urban counties (Calhoun and Dale) suffered decreases in population between 1990 and 2000. Sumter County had the largest population decrease at 8.51 percent.

ALABAMA'S RURAL POPULATION IS OLDER:

Percent of Rural Residents Aged 65 Years or More in 2000: 14.50%
Percent of Urban Residents Aged 65 Years or More in 2000: 12.41%

Alabama's rural population is older than its urban population. According to the 2000 Census, 14.50 percent of all Rural Alabama residents were 65 or more years in age compared to 12.41 percent in urban counties. This difference is projected to become even greater. By 2025, over one in every five rural residents (20.33 percent) will be aged 65 years or more.¹

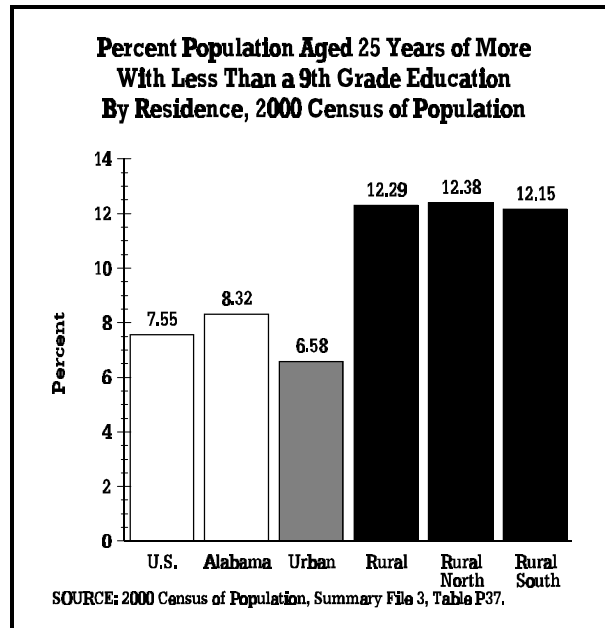
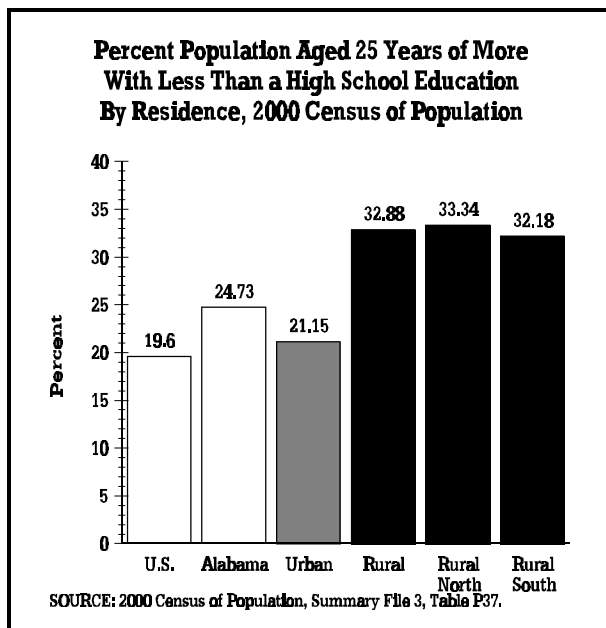


Given the natural change in health care status and needs as age increases, the demands for an adequate rural health care system can only be expected to increase. The health care needs of Alabama's rural elderly population not only reflect the needs of the elderly population nationally, but these needs may be even greater because of the persistent poverty among these especially vulnerable rural Alabama residents. Assuring that there is health care available in their community, that they have the means for getting to this health care, that this care can be afforded, and controlling the cost of prescription drugs are great concerns among elderly rural Alabamians.

ALABAMA'S RURAL POPULATION HAS LESS FORMAL EDUCATION:

Rural Residents Aged 25 Years or More With Less Than a High School Education: 32.88%
Urban Residents Aged 25 Years or More With Less Than a High School Education: 21.15%

There is a strong relationship between educational attainment and health status. Alabama's rural population has less formal education than the urban population. According to the 2000 Census, nearly one-third (32.88 percent) of all rural Alabama residents aged 25 years or more had less than a high school education. This far exceeds the 21.15 percent of urban county residents aged 25 years or more who had not graduated from high school. The difference in educational attainment is even greater when looking at the percentage of population with less than a 9th grade education. More than one in every 10 Rural Alabama residents (12.29 percent) aged 25 years or more have less than a 9th



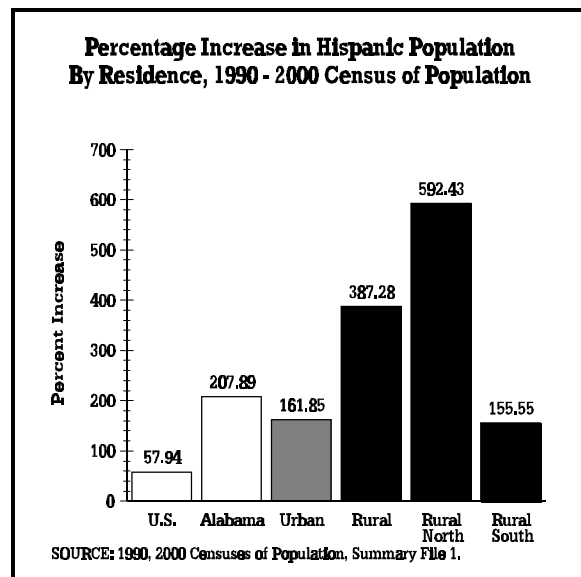
grade education - nearly double the 6.58 percent for urban residents. A strong educational system producing well educated rural residents is vital to improving the long-term health status of Alabama's rural residents, reversing the economic struggles of Rural Alabama, and to the survival of Alabama's rural health care system.

HEALTH STATUS DISPARITY HAS GREATER REPRESENTATION IN RURAL AREAS:

Percent Increase in the Rural Hispanic Population, 1990 - 2000: 387.28%

Percent Increase in the Urban Hispanic Population, 1990 - 2000: 161.85%

Alabama's rural population has greater racial/ethnic diversity than is seen in the urban counties. Disparity in the health status of Alabama's various racial and ethnic populations is known to exist,

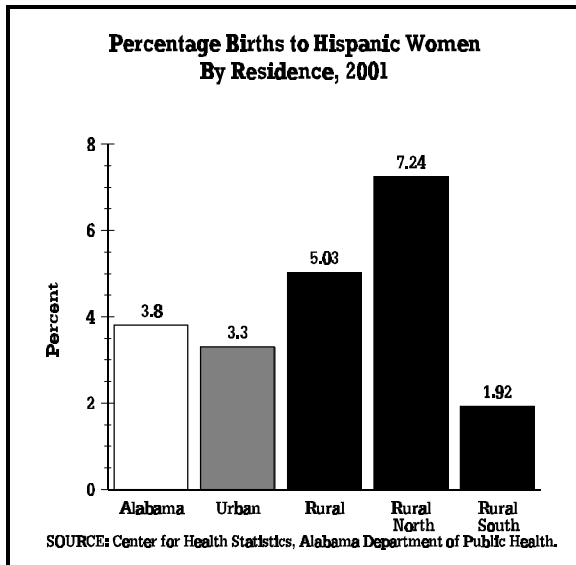


with this disparity being substantial for many conditions. A relatively sudden and increasing health care challenge involves Alabama's growing Hispanic population. Alabama's Hispanic population increased by 207.89 percent between 1990 and 2000, the seventh greatest percentage increase among all 50 states. This increase was significantly higher (592.43 percent) in the rural counties in North Alabama. According to Census figures, Alabama's Hispanic population was 75,830 in 2000, up from 24,629 in 1990. Alabama's 2000 Hispanic population, as reported by the Census, is greater than the total populations of Sumter, Greene, Hale, Perry, and Bibb counties combined. In spite of this tremendous growth, it is known that the Hispanic population was undercounted in the 2000 Census. Research indicates that the actual

Hispanic population in Alabama may be closer to 130,000².

The provision of adequate health care for Alabama's growing rural Hispanic community can be complicated by several factors. There may be a communication problem between the patient and the provider, requiring the services of a translator which may or may not be available. Many Hispanic patients are not familiar with the system of health care in this country and, unfortunately, delay seeking care until conditions become more serious. Health insurance coverage is not widespread among Alabama's rural Hispanic community placing a greater financial burden upon the rural health care system. The demands of providing adequate health care to Alabama's growing Hispanic population is taxing the health care systems in several areas which have larger Hispanic populations.

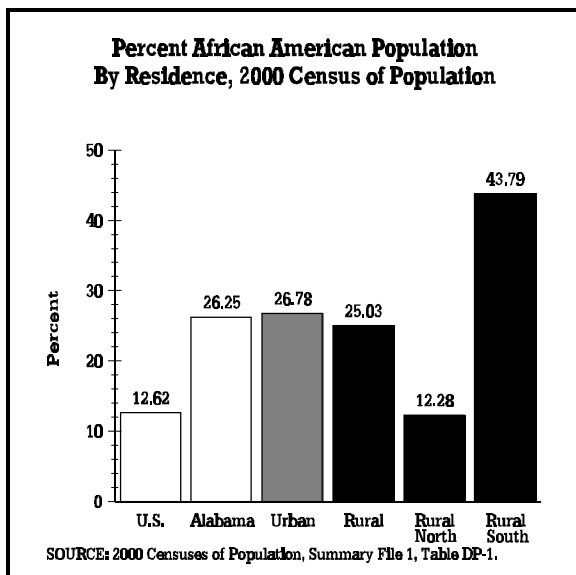
The health care systems in these areas need support from governmental and private sources in providing these services.



Another source which can be used to indicate the growth of Alabama's Hispanic population is data on births. This source is considered to be more complete since the benefits from reporting are much greater. All babies born within the United States are citizens of this country, regardless of the residence of the parents. In 2001, 3.80 percent of all births to Alabama residents were of Hispanic origin. Hispanic women accounted for 5.03 percent of all births to rural residents, compared to 3.30 percent of all births to urban residents. 7.24 percent of all births to residents of the rural counties of North Alabama were of Hispanic origin.

Nationally, 21.16 percent of all births were to women of Hispanic origin³.

Percentages of births to women of Hispanic origin reflected great variation among Alabama counties, accounting for at least 10 percent of all resident births in the following seven counties: DeKalb (23.1%), Marshall (19.9%), Franklin (18.8%), St. Clair (18.1%), Bullock (15.7%), Blount (13.1%), and Morgan (10.0%).



While the percentage of total population comprised by African Americans is slightly higher in Alabama's urban counties (26.78 percent) when compared to the rural counties (25.03 percent), African Americans comprise just under one-half (43.79 percent) of the total population in the rural counties of South Alabama. Eliminating health disparities among the African American population poses a challenge which these counties cannot adequately address without considerable assistance. Alabama's African American population does not compare favorably to its White population on most health related factors. The following are just a few

examples of health related disparities involving Alabama's African American population.

African Americans in Alabama have a death rate from all causes which is approximately 25 percent higher than that for whites. The death rate for heart disease is approximately 15 percent higher among African Americans. In Alabama, African Americans are four times as likely as Whites to die from homicide; three times as likely to die of diabetes, prostate cancer, or cervical cancer; and twice as likely to die of asthma or kidney diseases. All of these comparisons use age-adjusted rates which remove age differences as a factor. Death rates for Alabama's African American population are greater than those for Whites in all age groups except for persons aged 85 or more years. The percentage of low weight births and the percentage of births where less than adequate prenatal care is received among African American women is nearly twice that for White women. The infant mortality rate for African American babies is more than twice that for Whites. African Americans are at greater risk of becoming victims of sexually transmitted diseases, including AIDS and HIV.

To reverse health related disparities among the African American population, several known contributors must be modified. These include lifestyle behaviors such as diet, lack of exercise, obesity, alcohol and drug usage, and sexual behavior; access barriers such as poverty, inadequate health insurance coverage, lack of awareness, availability of care, and transportation problems; stress; cultural influences; and environmental factors.

ALABAMA'S RURAL POPULATION IS POORER:

Percent of 2000 Rural Population Below Poverty Level: 19.61%

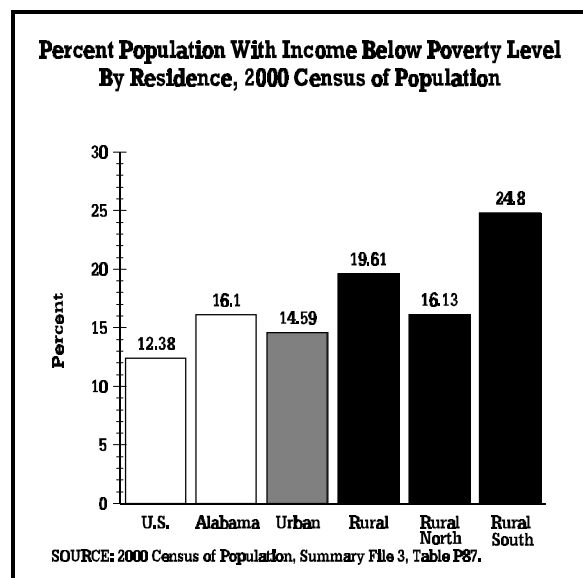
Percent of 2000 Urban Population Below Poverty Level: 14.59%

2000 Per Capita Personal Income for Rural Residents: \$19,561

2000 Per Capita Personal Income for Urban Residents: \$25,223

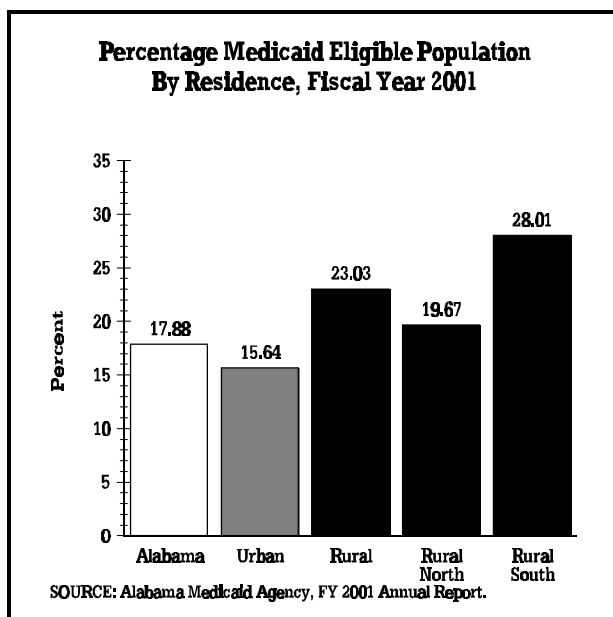
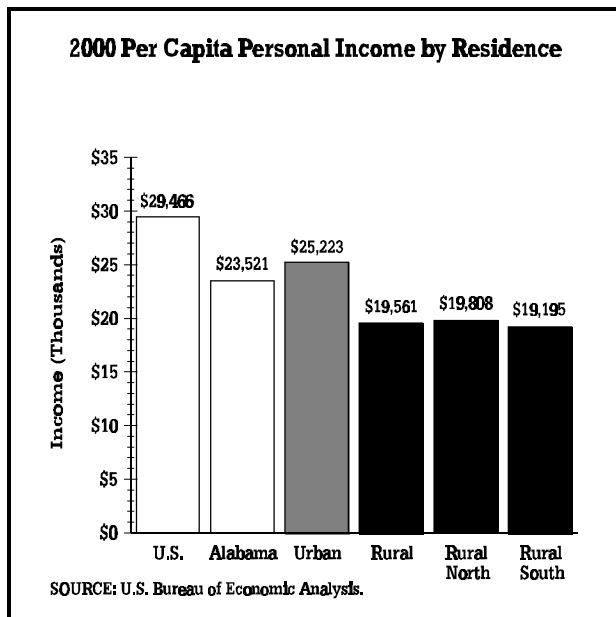
There is a direct connection between wealth and health status. Nearly one in every five rural Alabama residents is attempting to survive on an income which is below the federal poverty level. High and prolonged poverty can be devastating for the health status of individuals. However, an entire area

which has high and prolonged poverty can create a health care market which is not as desirable to health care providers. The ability of local consumers to pay for health care is closely related to the availability of such care.



Another measure of economic wealth is the "Per Capita Personal Income." This is the amount of personal income available to be expended for each resident of the county. The income available to each rural Alabama resident in 2000 was nearly 29 percent less than that for urban residents and nearly 51 percent below that for the nation. Six rural Alabama counties had per capita personal income levels which placed them among the lowest 250 counties in the nation. These counties are: Macon (\$15,678), Wilcox (\$15,754), Greene (\$16,035),

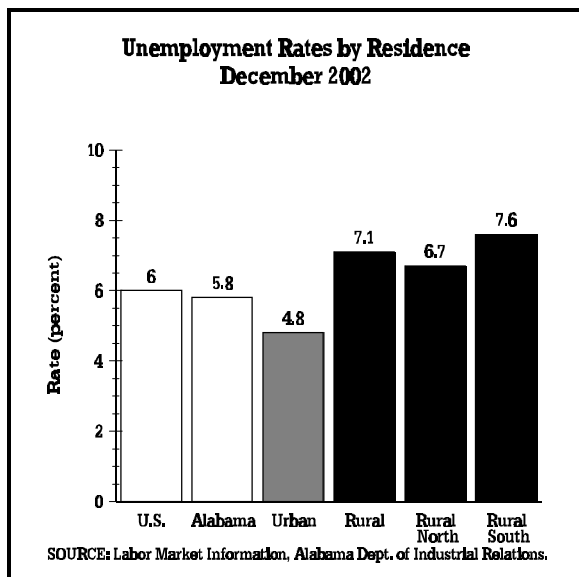
Bullock (\$16,164), Lowndes (\$16,329), and Perry (\$16,476).



Medicaid could be described as being Rural Alabama’s health care insurance. Nearly one in every four rural Alabama residents (23.03 percent) are eligible for Medicaid coverage. A strong and well financed Medicaid system is of vital importance to the health care status of rural Alabamians and for the stability and perhaps even the survival of many rural health care systems. A permanent solution to the issue of Alabama’s matching share for Medicaid funding must be established.

ECONOMIC STATUS OF RURAL ALABAMA POSES A HEALTH CARE CHALLENGE:

December 2000 Unemployment rate for Rural Counties: 7.1%
December 2000 Unemployment rate for Urban Counties: 4.8%

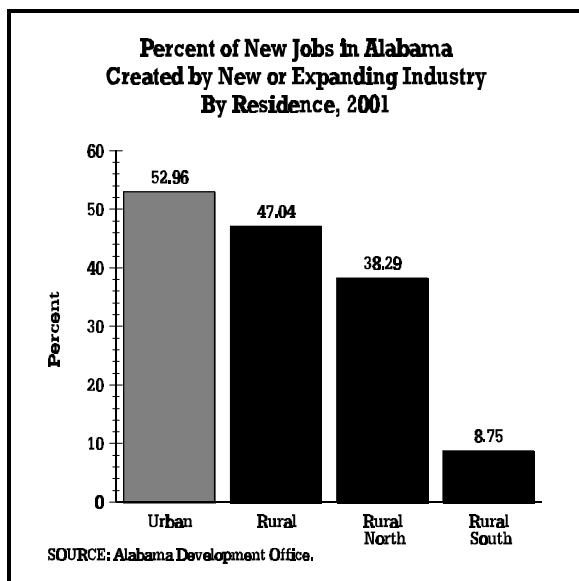


Rural Alabama has been economically challenged for decades. The loss of population noted earlier serves as a testimony to the lack of economic opportunity which has been and is still being faced by Rural Alabama. Residents do not leave areas with great economic opportunity and wealth. Several complex and interrelated factors have contributed to this economic plight. The adverse economic plight of many rural counties has placed great strain on the rural health care industry. Unfortunately, the health status of rural Alabamians is reflected in this lack of economic opportunity.

In response to the serious lack of successful economic development activity and job opportunities in several of Alabama’s rural counties,

former Governor Don Siegelman signed Executive Order 15 in January 2000 which established a Task Force on the Development of Economically Distressed Counties. The seventeen rural counties certified as being the most economically distressed by this task force were: Bullock, Butler, Clarke, Conecuh, Crenshaw, Dallas, Escambia, Greene, Hale, Lowndes, Macon, Monroe, Perry, Pickens, Sumter, Washington, and Wilcox.

Besides population loss, the lack of economic opportunity in many of Alabama’s rural counties can be seen in unemployment figures. The most current unemployment rate is nearly 48 percent higher for residents of Alabama’s rural counties compared to urban county residents.



The Alabama Development Offices’s report on *2001 New and Expanding Industries by County* identifies 13,011 new jobs which were announced by new or expanding mining and manufacturing companies in Alabama during 2001. Of these new jobs, 6,120 or 47.04 percent were in rural counties and 6,891 or 52.96 percent were in urban counties. No new jobs from new or expanding mining and manufacturing companies were announced for fourteen counties. All fourteen of these counties were rural.

The economic struggles of the counties in Rural South Alabama are also evidenced in these figures. While 4,982 or 38.29 percent of all new jobs announced by new or expanding mining and manufacturing companies were in the rural counties

of North Alabama, only 1,138 or only 8.75 percent were in the rural counties of South Alabama.

ACCESS TO HEALTHCARE POSES A CHALLENGE IN RURAL ALABAMA:

Percent of Rural Households With No Automobile: 9.63%

Percent of Urban Households With No Automobile: 7.68%

Percent of Rural Residents Aged 65+ Years with a “Go-Outside-Home Disability”: 26.12%

Percent of Urban Residents Aged 65+ Years with a “Go-Outside-Home Disability”: 23.00%

Physicians (All Specialties) Per 10,000 Rural Alabama Residents: 8.9

Physicians (All Specialties) Per 10,000 Urban Alabama Residents: 24.4

Primary Care Physicians Per 10,000 Rural Alabama Residents: 5.74

Primary Care Physicians Per 10,000 Urban Alabama Residents: 11.01

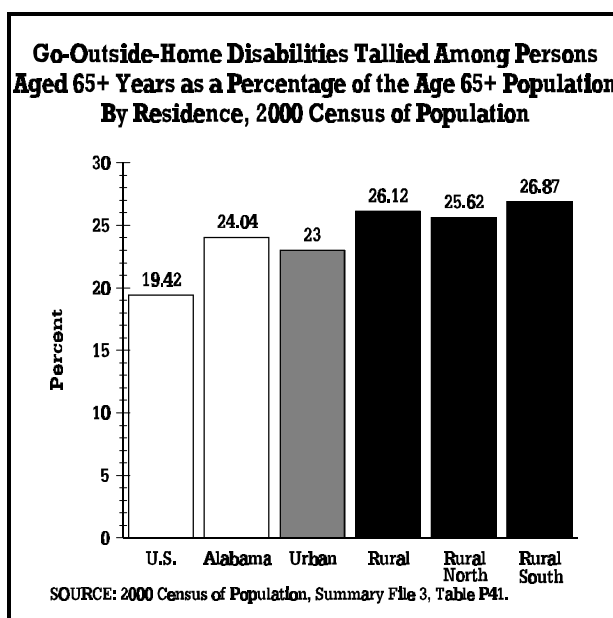
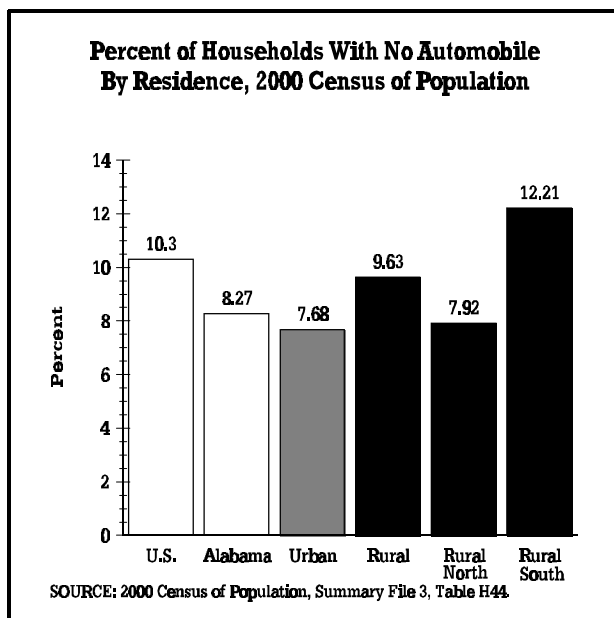
Dentists Per 10,000 Rural Alabama Residents: 2.50

Dentists Per 10,000 Urban Alabama Residents: 5.01

A task force assembled by former Governor Jim Folsom, Jr. reached the conclusion that the greatest problem involving access to rural health care was transportation. Transportation poses two different

problems for Alabama’s rural health care industry. First, there is a portion of the rural population which does not have a reliable means for getting to health care providers. Second, there is a portion of the rural population which does not have a problem with transportation. This group tends to include more persons with health insurance coverage who are needed as paying patients in the struggling rural health care system. Unfortunately, many of these potential patients commute greater distances to seek health care from urban providers which they perceive as being of higher quality.

There are many factors which can make it difficult for a patient to get to a health care provider. The longer distance which many times must be traveled in rural areas is one such factor. Another important factor can include having access to an automobile or other transportation which has the flexibility to transport a patient when they need to be transported. The condition of the patient also impacts on access to health care. Some patients have disabilities or conditions which prohibit just anyone from being able to transport them to their provider. Information from the 2000 Census points out that nearly one in every 10 Rural Alabama households (9.63 percent) do not have an automobile and a greater percentage of rural residents aged 65 or more reported having a disability which makes



it difficult for them to leave their homes for health care and other services. More than one in every four rural Alabama residents aged 65 or more (26.12 percent) reported having a disability which made it difficult for them to leave the confines of their home.

While transportation is a very important factor influencing access to rural health care, the greatest concern today may involve getting practitioners to locate in rural areas and keeping them once they are there. A number of factors influence the recruitment and retention of physicians into rural areas. Factors noted by physicians, themselves, include the appeal of the community as a place to work and raise a family, technological isolation from other health care professionals, getting work load relief and time off, local entertainment/shopping, the need for greater management skills in a rural practice, and potential income, especially as income relates to professional school debts.

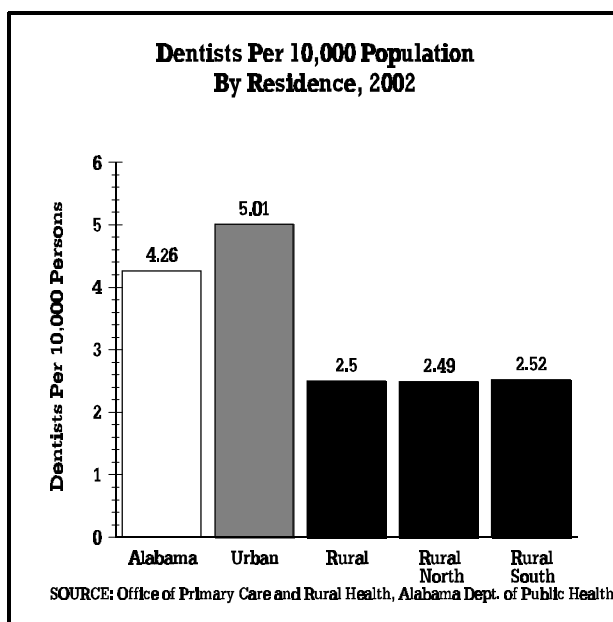
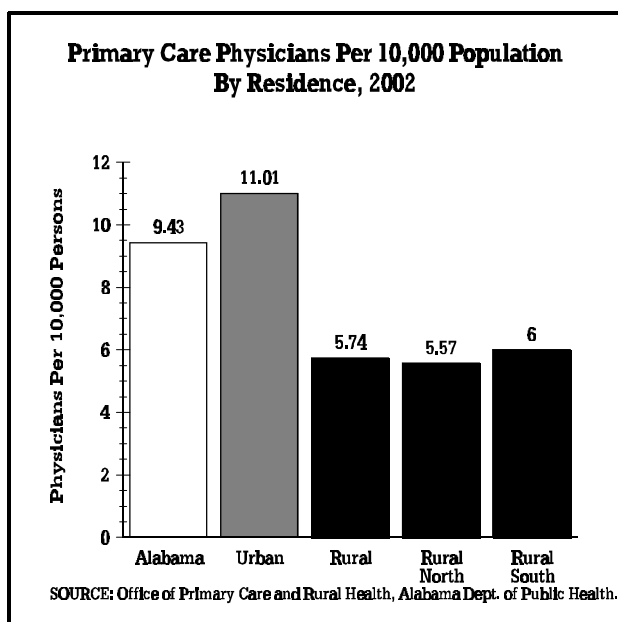
The Department of Health and Human Services, Bureau of Primary health Care has developed a

system for designating areas as “Health Professional Shortage Areas” (HPSAs) in primary care, dentistry, or mental health. This system of designation is the most widely accepted measurement for determining whether an area has an adequate number of health care professionals. Shortage areas are designated according to the patients being served. A “geographical” designation of a shortage area is made when the number of professionals is not adequate to service the entire population. A “low-income designation” is made when the number of professionals who provide service to the low-income population is not adequate. Low-income is defined as persons with an income below 200 percent of the federal poverty level.

All rural counties except for Dallas , Marengo, and Pike and all urban counties except for Calhoun, Houston, and Shelby are currently classified as shortage areas for primary care practitioners who provide health care for the low-income population. Primary care includes the medical disciplines of family practice, internal medicine, obstetrics/gynecology, and pediatrics. Marengo County is expected to soon be re-classified as a primary care shortage area. To eliminate all shortage designations for primary care, Alabama would need to strategically place 237 primary care physicians according to area service needs. Alabama medical schools are producing approximately 220 new physicians (primary care and other specialists combined) each year.

All Alabama counties are currently classified as shortage areas for dentists who provide health care for the low-income population. To eliminate all shortage designations for dentistry, Alabama would need to strategically place 349 dentists according to area service needs. Alabama’s only dental school is producing approximately 55 new dentists each year.

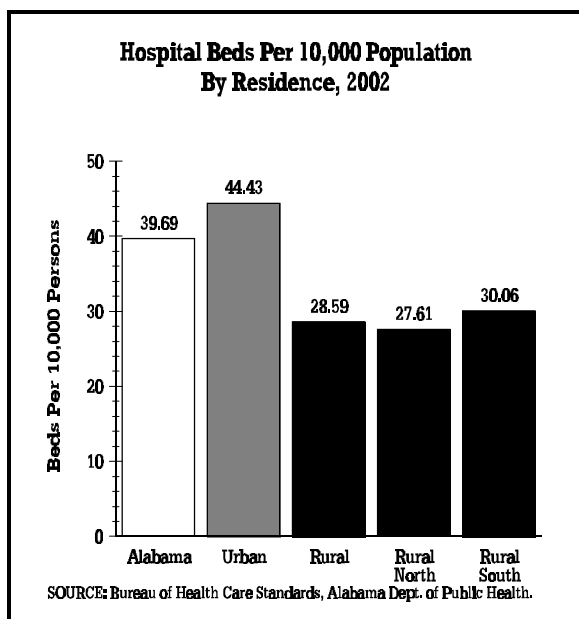
All rural counties and all urban counties with the exception of Blount, Jefferson, Lawrence, Limestone, Madison, Morgan, and St. Clair are currently classified as shortage areas for mental health practitioners who provide health care for the low-income population. To eliminate all shortage designations for mental health, Alabama would need to strategically place 46 mental health professionals according to service needs.



The preceding graphics illustrate the shortage or inadequate geographical distribution of primary care physicians and dentists in Alabama. Potential health care access for urban county residents compared with that for rural residents is nearly twice greater for primary care physicians and twice greater for dentists.

A third component involved in access to rural health care concerns the plight of Alabama's rural hospitals and clinics. Rural hospitals/clinics are being reimbursed at lower rates than urban counterparts for identical services which are being rendered through some federal programs. There is an under utilization of services by insurance-covered patients who opt for health care at urban hospitals/clinics. There is a critical national shortage of physicians, nurses, technicians, pharmacists, and other health-related professionals. This has made it extremely difficult for many rural hospitals/clinics to employ the needed health care professionals and other health care staff. Several Alabama hospitals/clinics are currently operating at a loss. The survival of many of these vital sources of rural health care is under serious threat.

The following graphic, presenting the number of hospital beds per 10,000 population in rural and



urban counties, illustrates the current magnitude of this problem. These figures do not include Veteran's Administration Hospitals, the Eye Foundation Hospital, or psychiatric/rehabilitation beds in hospitals. The current availability of beds in urban hospitals is more than one and one-half times greater than that for rural counties.

Another indicator of the struggling plight of Alabama's rural hospitals and clinics is the fact that 26, or nearly 60 percent, of Alabama's 45 rural counties do not have hospitals/clinics performing delivery services. Residents of these counties must commute to other counties to deliver their babies. Rural counties without delivery services include the following: Barbour, Bibb, Bullock, Butler, Cherokee, Chilton, Choctaw, Clay, Cleburne, Conecuh, Coosa, Fayette, Geneva, Greene, Hale, Henry, Lamar, Lowndes, Macon, Perry, Pickens,

Randolph, Sumter, Washington, Wilcox, and Winston.

EMERGENCY MEDICAL SERVICE POSES A HEALTHCARE CHALLENGE IN RURAL ALABAMA:

The provision of emergency medical service (EMS) in Rural Alabama is currently a loose system, consisting largely of volunteers, which has inadequate financial support. Since a large portion of rural EMS is provided using volunteer staffing, the retention of trained volunteers is very difficult to accomplish. Local financial subsidizing for voluntary EMS provision is becoming more difficult to secure as local governments face difficult financial situations. Inadequate funding can result in having to sacrifice on operating or life supporting equipment. The survival of insufficiently financed EMS staffed by volunteers is at best an uncertainty.

EMS in rural Alabama is confronted with the issue of cost effectiveness versus need in relation to other needs. The smaller population in rural areas naturally produces less demand for EMS service; however, when this service is required, the situation can involve greater severity of injury. The nature of human behavior and the activities typically being performed in rural areas can contribute greatly to the severity of injury. The remoteness of many rural areas can become a serious problem in the timely provision of EMS services.

The following information on motor vehicle accident mortality reveals the critical need for the provision of adequate EMS service in Rural Alabama. The motor vehicle accident mortality rate in Alabama's urban counties slightly exceeds the national rate; however, the rate for rural Alabamians is nearly double the national rate. A report on accidental mortality in Alabama published by the Alabama Rural Health Association in December 2001 identified the very high risk that rural Alabamians are experiencing. In addition to motor vehicle accidents, mortality from suffocation, fires, and machinery accidents are very high in Rural Alabama.

Motor Vehicle Accident Mortality Rates - Rural County Residents:

31.3 deaths per 100,000 population

Motor Vehicle Accident Mortality Rates - Urban County Residents:

18.5 deaths per 100,000 population

(Source: Center for Health Statistics, Alabama Department of Public Health)

The potential remoteness of rural areas and the heavy reliance upon volunteer systems produces a natural delay in response time. The following information on the average time lapse between receiving the initial call to arrival at the scene of an emergency reveals that this time was on the average almost four minutes longer in rural counties than in urban counties during 1999. Only runs identified as emergencies were considered in this calculation. Looking at these average times by county, the range was from 9.6 to 28.3 minutes among Alabama's rural counties and from 10.2 to 21.0 minutes among urban counties.

Average Time From Call To EMS Arrival In 1999, Rural Counties: 16.4 minutes

Average Time From Call To EMS Arrival In 1999, Urban Counties: 12.9 minutes

(Source: Emergency Medical Services Division, Alabama Department of Public Health)

The need for EMS service in rural counties is not confined to rural residents. In our highly mobile society, anyone from anywhere can find themselves in need of this service while they are within a rural county. Rural and urban Alabamians need to be assured that they will have access to EMS that will be adequately trained, staffed, and funded, regardless of where in Alabama this need occurs. In addition, a statewide EMS Critical Care System which can manage and control EMS service to and delivery of victims is needed to maximize the likelihood of survival when seconds can be of critical importance. The Alabama Department of Public Health has established a committee to study and make recommendations on the development of such a system.

OTHER SELECTED HEALTH STATUS INDICATORS:

<u>INDICATOR</u>	<u>RURAL RESIDENTS</u>	<u>URBAN RESIDENTS</u>
Life Expectancy (2002)	73.1 years	74.5 years
2000 Crude Mortality Rates: (per 100,000 population)		
All Causes	1129.9	948.0
Heart Disease	372.4	265.7
Cancer	239.4	208.7
Stroke	81.9	66.1
Accidents	58.9	41.5
Diabetes	29.4	29.3
Alzheimer's Disease	21.8	19.0
Suicide	13.7	12.6
Homicide	8.5	10.4
2001 Natality Indicators:		
Pct. Births Where Mother Received Less Than Adequate Prenatal Care	24.1%	21.4%
Pct. Births of Low Weight	10.1%	9.4%
Pct. Births With Maternal Tobacco Usage	15.0%	11.4%

REFERENCES

1. *Population Estimates and Projections*. Alabama State Data Center, University of Alabama, Tuscaloosa. 23 Feb. 2003
<http://cber.cba.ua.edu/edata/est_prj/alpop20012005.prn>
2. *Demographics*. Alabama Latin American Association. 24 Feb. 2003
<<http://www.alasweb.org/demographicsmap.htm>>
3. *Revised Birth and Fertility Rates, 2000 and 2001*. National Center for Health Statistics, Hyattsville, Maryland. February 2003. 23 Feb. 2003
<http://www.cdc.gov/nchs/data/nvsr/nvsr51/nvsr51_04.pdf>

Permission is granted to reproduce all or any portion of this publication. Dale E. Quinney, M.P.H., Program Manager, Alabama Rural Health Association

The Alabama Rural Health Association would like to thank our sponsoring organizational members:

Alabama Academy of Family Physicians

Alabama Chapter,

American College of Physicians -American Society of Internal Medicine Health Services

APPENDIX

DEFINITIONS OF RESIDENCY

Counties identified as “rural” in this study include the 45 Alabama counties which are not included as parts of Metropolitan Statistical Areas, as designated by the federal Office of Management and Budget, as of March 2003. These 45 rural counties were further divided into those within the Appalachian Region of North Alabama which includes 21 counties and those within South Alabama which includes 24 counties.

Rural includes Barbour, Bibb, Bullock, Butler, Chambers, Cherokee, Chilton, Choctaw, Clarke, Clay, Cleburne, Coffee, Conecuh, Coosa, Covington, Crenshaw, Cullman, Dallas, DeKalb, Escambia, Fayette, Franklin, Geneva, Greene, Hale, Henry, Jackson, Lamar, Lowndes, Macon, Marengo, Marion, Marshall, Monroe, Perry, Pickens, Pike, Randolph, Sumter, Talladega, Tallapoosa, Walker, Washington, Wilcox, and Winston counties.

Rural North Alabama includes Bibb, Chambers, Cherokee, Chilton, Clay, Cleburne, Coosa, Cullman, DeKalb, Fayette, Franklin, Jackson, Lamar, Marion, Marshall, Pickens, Randolph, Talladega, Tallapoosa, Walker, and Winston counties.

Rural South Alabama includes Barbour, Bullock, Butler, Choctaw, Clarke, Coffee, Conecuh, Covington, Crenshaw, Dallas, Escambia, Geneva, Greene, Hale, Henry, Lowndes, Macon, Marengo, Monroe, Perry, Pike, Sumter, Washington, and Wilcox counties.

Urban includes Autauga, Baldwin, Blount, Calhoun, Colbert, Dale, Elmore, Etowah, Houston, Jefferson, Lauderdale, Lawrence, Lee, Limestone, Madison, Mobile, Montgomery, Morgan, Russell, St. Clair, Shelby, and Tuscaloosa counties.

COUNTY DATA FOR VARIABLES PRESENTED IN THIS REPORT

County	1910 Population	1990 Population	2000 Population	Population 65+ Yrs. Of Age	Population Aged 25+Yrs. - Less Than 12 th Grade Ed.	Population Aged 25+Yrs. - Less Than 9 th Grade Ed.	1990 Hispanic Population	2000 Hispanic Population	2001 Births to Women of Hispanic Origin	2000 African American Population
Alabama	2,138,093	4,040,587	4,447,100	579,798	714,081	240,333	24,629	75,830	2,293	1,155,930
Autauga	20,038	34,222	43,671	4,451	5,872	1,588	230	610	6	7,473
Baldwin	18,178	98,280	140,415	21,703	17,258	4,197	1022	2,466	46	14,444
Barbour	32,728	25,417	29,038	3,873	6,679	2,442	124	478	36	13,451
Bibb	22,791	16,576	20,826	2,413	4,984	1,783	39	210	3	4,624
Blount	21,456	39,248	51,024	6,558	9,960	3,726	286	2,718	87	606
Bullock	30,196	11,042	11,714	1,543	2,992	1,145	65	322	26	8,564
Butler	29,030	21,892	21,399	3,506	4,439	1,747	65	143	0	8,732
Calhoun	39,115	116,034	112,249	15,872	19,318	6,158	1282	1,753	44	20,810
Chambers	36,056	36,876	36,583	5,928	8,778	3,057	127	280	3	13,943
Cherokee	20,226	19,543	23,988	3,818	6,138	2,322	57	204	4	1,330
Chilton	23,187	32,458	39,593	5,097	8,757	3,145	116	1,152	35	4,200
Choctaw	18,483	16,018	15,922	2,332	3,704	1,648	53	107	0	7,027
Clarke	30,987	27,240	27,867	3,764	5,165	1,734	103	180	1	11,989
Clay	21,006	13,252	14,254	2,359	3,322	1,197	27	253	6	2,238
Cleburne	13,385	12,730	14,123	1,933	3,536	1,242	38	198	6	523
Coffee	26,119	40,240	43,615	6,171	7,755	2,928	471	1,183	38	8,013
Colbert	24,802	51,666	54,984	8,493	9,972	3,156	187	618	10	9,137
Conecuh	21,433	14,054	14,089	2,223	2,984	1,133	82	102	0	6,136
Coosa	16,634	11,063	12,202	1,761	2,831	844	18	158	0	4,172
Covington	32,124	36,478	37,631	6,740	8,115	3,474	130	292	5	4,648
Crenshaw	23,313	13,635	13,665	2,338	3,700	1,504	30	87	0	3,388
Cullman	28,321	67,613	77,483	11,342	15,322	5,790	272	1,688	58	743
Dale	21,608	49,633	49,129	5,807	6,976	2,393	1215	1,642	39	10,002
Dallas	53,401	48,130	46,365	6,428	8,524	3,096	131	290	1	29,332
DeKalb	28,261	54,651	64,452	8,882	15,469	6,157	215	3,578	222	1,083
Elmore	28,245	49,210	65,874	7,071	9,679	2,740	270	805	19	13,597
Escambia	18,889	35,518	38,440	5,236	8,030	2,569	169	379	1	11,837
Etowah	39,109	99,840	103,459	16,560	18,115	6,023	331	1,763	71	15,191
Fayette	16,248	17,962	18,495	2,976	4,265	1,699	78	152	0	2,207
Franklin	19,369	27,814	31,223	4,637	7,904	3,156	101	2,316	81	1,314
Geneva	26,230	23,647	25,764	4,203	6,046	2,334	121	453	5	2,743
Greene	22,717	10,153	9,974	1,470	2,182	955	24	58	0	8,013
Hale	27,883	15,498	17,185	2,316	3,683	1,412	57	157	1	10,131
Henry	20,943	15,374	16,310	2,668	3,654	1,337	92	249	9	5,268
Houston	32,414	81,331	88,787	12,162	13,771	4,897	464	1,122	20	21,840
Jackson	32,918	47,796	53,926	7,210	12,006	4,762	208	610	21	2,019
Jefferson	226,476	651,525	662,047	90,285	82,950	24,300	2745	10,284	299	260,608
Lamar	17,487	15,715	15,904	2,528	3,759	1,417	71	207	3	1,906
Lauderdale	30,936	79,661	87,966	13,241	13,915	5,058	313	894	28	8,663
Lawrence	21,984	31,513	34,803	4,195	7,872	2,838	102	367	5	4,648
Lee	32,867	87,146	115,092	9,337	11,557	3,600	552	1,645	38	26,071
Limestone	26,880	54,135	65,676	7,271	11,081	3,976	261	1,740	84	8,752
Lowndes	31,894	12,658	13,473	1,646	2,925	1,176	60	85	0	9,885
Macon	26,049	24,928	24,105	3,367	4,188	1,545	103	173	1	20,403
Madison	47,041	238,912	276,700	30,015	26,308	8,389	2984	5,226	92	63,025
Marengo	39,923	23,084	22,539	3,287	4,020	1,429	75	219	4	11,655
Marion	17,495	29,830	31,214	4,934	7,962	3,265	65	360	12	1,134
Marshall	28,553	70,832	82,231	11,717	16,845	6,492	289	4,656	237	1,207
Mobile	80,854	378,643	399,843	47,919	58,223	16,722	3164	4,887	57	133,465
Monroe	27,155	23,968	24,324	3,363	4,939	1,716	94	190	2	9,747
Montgomery	82,178	209,085	223,510	26,307	27,905	8,357	1624	2,665	79	108,583
Morgan	33,781	100,043	111,064	13,708	17,347	5,958	584	3,645	146	12,485
Perry	31,222	12,759	11,861	1,762	2,625	990	36	102	0	8,111
Pickens	25,055	20,699	20,949	3,293	4,108	1,510	50	147	1	8,999
Pike	30,815	27,595	29,605	3,727	5,472	2,095	108	365	8	10,835
Randolph	24,659	19,881	22,380	3,564	5,618	2,009	53	272	5	4,977
Russell	25,937	46,860	49,756	6,541	10,749	3,774	301	744	28	20,319
Shelby	26,949	99,358	143,293	12,179	12,386	3,868	525	2,910	14	10,606
St. Clair	20,715	50,009	64,742	7,578	12,353	4,003	209	686	151	5,263
Sumter	28,699	16,174	14,798	2,056	3,077	1,287	78	165	0	10,827
Talladega	37,921	74,107	80,321	10,655	16,102	5,308	490	812	10	25,339
Tallapoosa	31,034	38,826	41,475	6,872	8,489	2,729	71	242	11	10,518
Tuscaloosa	47,559	150,522	164,875	18,565	20,981	6,418	948	2,130	51	48,327
Walker	37,013	67,670	70,713	10,453	15,713	5,603	224	607	16	4,364
Washington	14,454	16,694	18,097	2,246	3,112	1,213	51	160	0	4,867
Wilcox	33,810	13,568	13,183	1,810	3,228	1,098	40	97	1	9,479
Winston	12,855	22,053	24,843	3,533	6,387	2,700	59	372	6	94

COUNTY DATA FOR VARIABLES PRESENTED IN THIS REPORT

County	2000 Pop. Below Poverty Level	2000 Per Capita Income	FY 2001 Medicaid Eligible Population	Dec. 2002 Unemploy- ment Rates	2001 New Jobs - New or Expanding Industry	1999 Households With No Automobile	Tally of "Go Outside Home" Disabilities - Age 65+ Population	2002 Primary Care Phys. Per 10,000 Persons	2002 Dentists Per 10,000 Persons	2002 Hosp. Beds Per 10,000 Persons
Alabama	698,097	23,521	802,215	5.8	13,011	143,594	139,401	9.4	4.3	39.7
Autauga	4,738	22,719	6,295	4.4	165	832	1,115	4.4	2.6	10.3
Baldwin	14,018	25,433	16,106	4.4	105	2,340	3,913	8.5	4.5	20.9
Barbour	7,032	20,264	7,072	5.1	15	1,303	1,106	5.1	3.0	25.0
Bibb	4,091	18,033	4,009	7.9	12	721	680	4.2	2.8	12.9
Blount	5,930	20,142	7,066	4.6	7	1,045	1,616	3.7	1.3	7.5
Bullock	3,405	16,164	3,920	11.4	13	702	450	5.9	1.7	25.4
Butler	5,205	18,283	6,523	9.9	97	1,013	1,029	5.2	2.4	44.2
Calhoun	17,695	21,232	23,039	5.1	265	3,566	3,758	8.8	4.2	49.9
Chambers	6,134	20,394	7,376	6.6	18	1,477	1,348	7.4	2.2	31.5
Cherokee	3,672	17,255	4,461	3.8	227	580	843	4.0	1.6	24.1
Chilton	6,152	20,081	6,476	4.2	305	1,076	1,455	4.1	2.2	7.3
Choctaw	3,858	18,512	4,147	11.5	0	697	661	5.7	3.1	0.0
Clarke	6,207	20,309	7,993	8.0	0	1,192	1,005	6.8	3.2	47.9
Clay	2,392	19,388	2,996	7.1	20	485	556	3.5	1.4	31.1
Cleburne	1,953	19,140	2,841	2.9	0	343	445	2.8	0.0	0.0
Coffee	6,285	22,631	8,227	3.4	95	1,308	1,556	6.8	4.1	34.2
Colbert	7,592	22,299	10,447	7.8	214	1,441	1,894	7.2	3.8	53.0
Conecuh	3,719	18,638	4,256	7.7	14	670	610	6.4	1.4	41.2
Coosa	1,760	17,559	2,266	9.3	0	378	518	1.6	0.8	0.0
Covington	6,838	19,657	8,917	5.1	102	1,372	1,793	7.7	2.9	59.1
Crenshaw	2,964	21,066	3,617	6.0	0	640	741	2.9	2.2	38.0
Cullman	9,935	21,103	13,681	5.5	269	1,944	2,996	5.8	2.6	27.1
Dale	7,140	20,680	9,700	4.1	255	1,198	1,263	4.7	2.4	18.0
Dallas	14,243	19,949	17,925	12.2	248	2,884	1,843	9.6	3.0	35.4
DeKalb	9,791	20,476	12,604	4.6	188	1,533	2,273	5.0	2.4	20.1
Elmore	6,187	22,439	9,116	4.4	203	940	1,550	3.8	1.3	20.0
Escambia	7,579	18,761	8,347	7.9	0	1,314	1,328	7.7	2.8	36.5
Etowah	15,938	21,486	19,549	5.7	216	3,144	4,078	9.5	4.6	66.8
Fayette	3,144	18,887	3,639	8.8	146	610	904	6.5	2.2	32.9
Franklin	5,814	19,723	6,819	11.7	385	1,021	1,190	5.6	2.5	41.7
Geneva	5,010	18,870	5,933	4.0	313	827	1,025	3.4	1.5	31.8
Greene	3,391	16,035	3,483	11.7	33	641	454	7.1	1.0	20.2
Hale	4,531	17,328	5,432	9.2	20	1,003	672	4.6	0.6	22.2
Henry	3,070	19,910	3,775	5.4	0	597	714	2.4	3.0	0.0
Houston	13,146	24,587	18,486	3.8	271	2,958	2,787	10.7	6.1	70.6
Jackson	7,293	21,441	9,383	6.8	151	1,554	2,025	6.2	2.7	30.9
Jefferson	95,674	29,895	101,419	4.5	526	26,148	21,079	19.5	8.7	74.7
Lamar	2,521	18,789	3,299	11.6	0	528	591	1.9	1.9	0.0
Lauderdale	12,442	20,832	13,634	8.6	331	2,164	2,953	8.5	5.7	36.7
Lawrence	5,271	19,716	5,654	5.8	15	1,045	1,099	3.4	0.8	27.7
Lee	24,119	18,484	15,032	3.7	485	3,104	1,967	6.4	3.0	22.9
Limestone	7,771	21,592	8,974	5.3	437	1,627	1,889	4.7	2.2	14.9
Lowndes	4,209	16,329	4,556	11.0	30	743	463	2.2	0.0	0.0
Macon	7,139	15,678	6,469	5.3	0	1,684	925	6.7	1.7	0.0
Madison	28,408	28,995	30,489	3.8	817	6,133	6,141	11.0	5.6	36.0
Marengo	5,805	21,616	6,412	4.4	0	1,259	766	5.4	1.8	44.2
Marion	4,731	18,612	5,739	10.6	630	1,129	1,329	7.3	2.5	40.7
Marshall	11,895	19,783	15,924	5.8	1030	2,257	2,572	7.1	3.7	28.4
Mobile	72,549	21,703	76,535	6.0	875	13,410	11,669	10.5	4.1	49.3
Monroe	5,131	19,439	5,757	9.3	4	989	877	6.2	2.9	38.6
Montgomery	36,809	27,313	46,412	4.7	296	8,426	6,156	13.6	5.3	38.3
Morgan	13,476	25,486	15,803	6.5	489	2,726	3,434	8.5	4.4	48.8
Perry	4,026	16,476	4,939	10.0	0	720	469	4.3	1.7	0.0
Pickens	5,161	18,503	5,845	8.5	95	958	782	6.2	1.0	22.9
Pike	6,562	20,509	8,243	6.4	107	1,362	955	7.3	3.3	32.3
Randolph	3,695	17,361	4,943	8.6	0	679	739	6.1	2.2	51.2
Russell	9,743	19,582	10,925	6.9	102	2,489	1,844	4.6	1.2	0.0
Shelby	8,932	31,940	8,188	2.5	98	1,860	2,398	5.2	0.9	12.6
St. Clair	7,584	21,142	9,449	4.3	459	1,169	1,677	2.7	5.9	12.1
Sumter	5,611	17,284	5,537	9.8	47	1,105	621	4.8	2.7	22.6
Talladega	13,501	18,779	17,163	7.7	1059	3,141	2,891	5.4	2.3	33.2
Tallapoosa	6,711	21,192	8,568	6.3	64	1,559	1,702	7.2	3.3	24.1
Tuscaloosa	26,633	23,652	28,640	3.2	260	5,405	4,452	11.1	4.5	48.3
Walker	11,478	21,075	15,058	6.2	28	2,135	2,913	5.3	3.2	37.5
Washington	3,329	18,689	4,220	14.4	0	550	508	3.8	1.6	8.2
Wilcox	5,133	15,754	6,146	12.2	0	959	405	3.0	2.3	24.4
Winston	4,196	18,634	5,268	9.4	355	782	941	4.1	1.2	32.4

Publication of *Alabama Rural Health Report* is made possible through a grant provided by the National Rural Health Association.

Researchers, faculty members, students, and others are encouraged to submit articles on subjects of rural health interest for possible publication as an *Alabama Rural Health Report*. A copy of the article should be mailed to the ARHA Publications Review Committee, P. O. Box 4509, Montgomery, AL 36103.

**You're Invited to Become a Part of
The Alabama Rural Health Association,
a Growing Organization with a Very Important
Mission • • • "To preserve and enhance the
health for rural citizens of Alabama through
communication, education, and advocacy"**

Membership Benefits:

- Be an active participant in helping to shape the future of rural health in Alabama.
- Participation in the ARHA list-serve, receiving information on rural health issues by E-mail or paper copy.
- Receive ARHA publications including the quarterly *Rural Remedy* newsletter and the *Alabama Rural Health Report*.
- Attend ARHA-sponsored training on selected subjects at various locations.
- Receive assistance in locating information needed for rural health projects including grant applications.
- Receive member-only privileges on the ARHA Web site which is under development.
- Vote on ARHA matters (except for Student membership).

Organizational memberships are available to any legally constituted organization. This membership consists of one membership and three votes in ARHA matters.

Organizational memberships making an annual contribution of at least \$400 will be given the special designation of a sponsor. Sponsors will receive appropriate recognition in the ARHA newsletter, web site, and at events sponsored by ARHA.

Alabama Rural Health Association
Post Office Box 4509
Montgomery, Alabama 36103

Telephone: (334) 206-5396
Facsimile: (334) 206-5434
E-mail: arhaquinney@mindspring.com

President:

Clyde Barganier, Dr.PH, Director,
Office of Primary Care and Rural Health
Alabama Department of Public Health

Vice-President:

Sara Barger, DPA, RN, FAAN
Dean and Professor
Capstone College of Nursing
the University of Alabama

Secretary/Treasurer:

Myra Crawford, Ph.D., MPH
University of Alabama at Birmingham

Program Manager:

Dale E. Quinney, MPH

APPLICATION FOR MEMBERSHIP - ALABAMA RURAL HEALTH ASSOCIATION

Name: _____

Organization: _____

Address: _____

Address: _____

City: _____ State: _____ Zip: _____

E-Mail: _____

Telephone: _____ Fax: _____

Individual Membership (\$20.00)

Student Membership (\$10.00)

Organizational Membership (\$150.00)

Sponsorship (\$400.00 or more)

Return application to:
Alabama Rural Health Association
P. O. Box 4509
Montgomery, AL 36103

Make check payable to:
Alabama Rural Health Association