



Polk County Health Chartbook

Measuring the well-being
of Polk County residents



★ HEALTH DEPARTMENT ★

Prepared by the
**Child and Family
Policy Center**

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This Chartbook was created by the Child and Family
Policy Center for the Polk County Health Department



★ HEALTH DEPARTMENT ★

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Introduction and contents

How healthy are Polk County residents? And how can that health be maintained and improved? Good information is needed to answer these questions and to take effective actions to improve health. The Polk County Health Chartbook brings together health information about Polk County residents from a variety of sources to help answer these questions. In some instances, where data on Polk County alone is not available, information is provided for Iowa as a whole. To put Polk County information in context, comparative information from other counties in the Des Moines metro area, Iowa or the U.S. often is provided as well. In addition, where possible, the report pulls out data for the city of Des Moines and balance of Polk County.

The 2013 edition of the Polk County Health Chartbook updates the 2010 edition with more recent data and a new format designed to better communicate trends in health, health care and the well-being of Polk County residents.

CHAPTER 1 **Demographics**

Page 5

The chartbook begins with demographic information on the residents of Polk County and the Des Moines-West Des Moines metropolitan area. It outlines population changes that have taken place in recent decades and projections on how the population is likely to change between now and 2025. An understanding of the region's population trends is critical to help develop actions to maintain and improve health. Three demographic trends are highlighted: (1) the growth dynamics within the metro area and Polk County by geography; (2) the growing racial and ethnic diversity of Polk County residents, led by the child population; and (3) the projected increase in the senior population within Polk County.

CHAPTER 2 **Child Health and Well-Being**

Page 12

The report continues by providing information on the health of Polk County's child population, starting at birth. These include specific child-health indicators and broader measures related to healthy child development. The indicators include: (1) low birthweight; (2) elevated blood lead levels; (3) asthma and obesity; and (4) adolescent smoking and drinking. Broader child well-being indicators include: (1) child abuse; and (2) fourth grade reading proficiency and (3) high-school completion.

CHAPTER 3 **Child Health Services**

Page 24

In this section, the chartbook provides information on health services that contribute to child health and well-being. These include: (1) child public health insurance; (2) early entry into prenatal care; (3) immunization levels; and (4) the share of children covered by public health insurance (Medicaid and hawk-i), a measure that has increased dramatically in recent years.

CHAPTER 4 **Adult Health, Well-Being and Health Services**

Page 27

Next, the chartbook looks at adult health and well-being measures and adult health services. Specific health measures include: (1) premature deaths; (2) obesity and diabetes; (3) smoking; (4) alcohol abuse and drug use; (5) sexually transmitted diseases and HIV/AIDS; (6) mental health; and (7) violent crime. Health service measures include: (1) health insurance coverage; and (2) number of practicing physicians.

CHAPTER 5

**Household and Contextual
Factors**

Page 37

Next the chartbook looks at the environmental factors that play a vital role in the health and well-being of individuals. Household factors include: (1) poverty and low-income status; (2) single parenting; and (3) births to adolescents. Contextual factors include: (1) employment; (2) educational attainment; and (3) home ownership.

CHAPTER 6

Neighborhood Factors

Page 48

Finally, the chartbook looks at neighborhoods within Polk County, highlighting census tracts where the health and well-being of residents are most at risk. This section compares the “urban core” neighborhoods of Des Moines with Polk County and the state as a whole across a series of socio-economic indicators.

CHAPTER 7

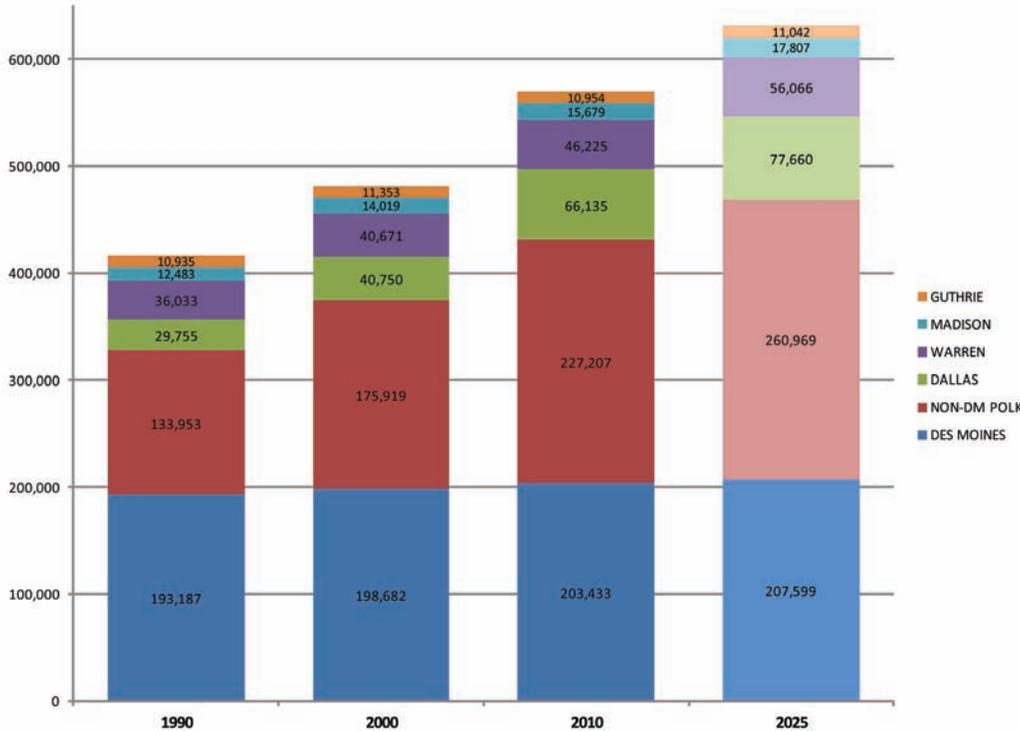
Polk County’s Ranking in Iowa **Page 59**

The last section of the chartbook provides information from the Population Health Institute (PHI) of the University of Wisconsin, which provides county health rankings within each state in the country. According to PHI, Polk County ranks 64th among Iowa’s 99 counties in overall health outcomes. It ranks 12th on clinical care measures and 48th on measures of the physical environment.

Population growth Metro counties, Iowa and U.S.

SOURCE: U.S. CENSUS BUREAU

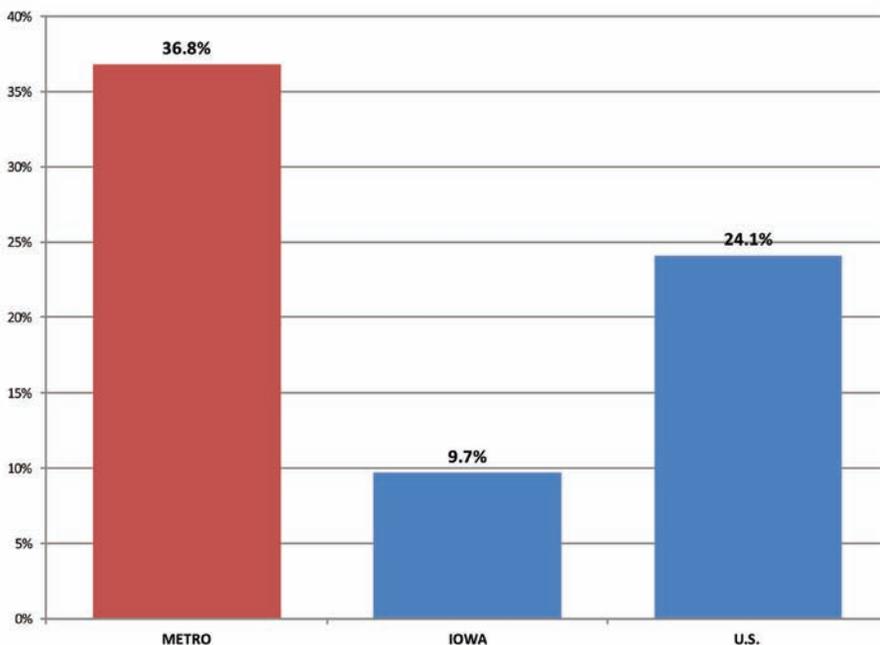
Total metro population by county, city of Des Moines and balance of Polk County, 1990-2025



Polk County is growing and changing. By population, it is the largest county in Iowa, and its growth well outpaces that of the state as a whole. Des Moines is the largest city in Iowa and until 2005 had the majority share of Polk County's population.

Polk County is the core of the Des Moines-West Des Moines metropolitan area, which also includes Dallas, Warren, Madison and Guthrie counties. As a whole, these counties form the largest economic and population growth center in Iowa. Over the last two decades, Iowa's population grew 9.7 percent, while the Des Moines metropolitan population grew 36.8 percent. By comparison, the U.S. grew 24.1 percent. Continued growth in the metropolitan area is projected through 2025.

Percentage change in total population, 1990-2010



With 569,633 residents, the Des Moines metropolitan area comprises 18.7 percent of Iowa's population (up from 15.0 percent in 1990).

The city of Des Moines remains the economic center of the metropolitan area, but the majority of Polk County residents now live outside Des Moines proper. Suburban Polk County continues to experience much higher rates

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Population growth

Des Moines and rest of Polk County

SOURCE: U.S. CENSUS BUREAU

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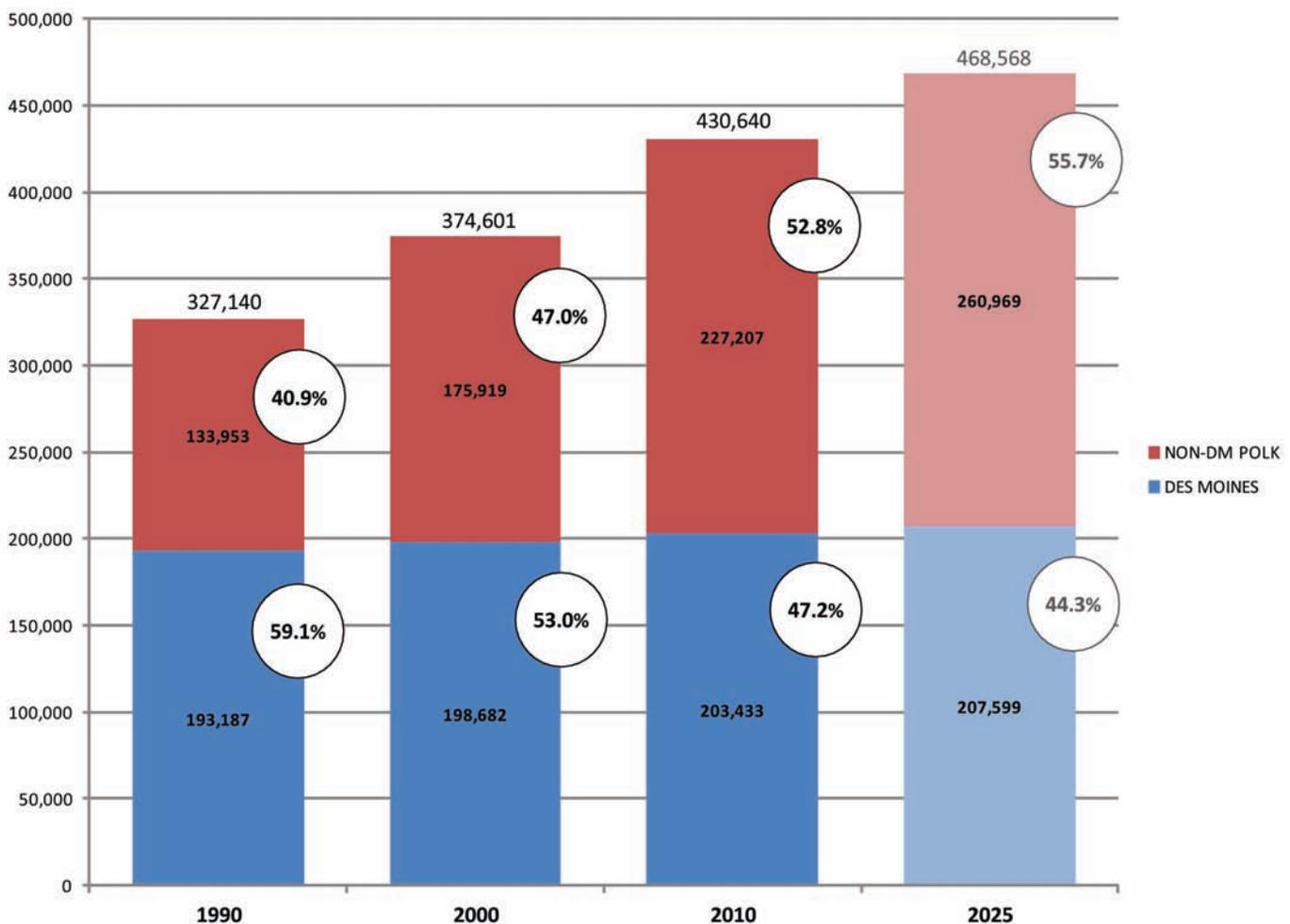
of population growth than the city. Between 1990 and 2010, Des Moines' population grew 5 percent, while the population in the rest of Polk County grew 65 percent. Projections to 2025 show a continuation of differential growth, with communities outside Des Moines expected to represent over 55 percent of Polk County's total population by 2025.

The most rapid growth in the Des Moines area, however, is taking place outside Polk County altogether—in the western suburbs of Dallas County. In fact,

Dallas County is one of the nation's fastest growing counties, growing 122 percent between 1990 and 2010. Warren and Madison counties saw moderate growth in that period, and outlying Guthrie County saw its population remain basically unchanged.

The remainder of this chartbook focuses on Polk County, frequently with comparisons to Iowa and the U.S. Additional information about the metropolitan area as a whole is available in a separate Des Moines Metro Area Chartbook.

Total population in city of Des Moines and balance of Polk County, 1990-2025



Race and ethnicity

Des Moines, rest of Polk County and Polk County (total)

SOURCE: U.S. CENSUS BUREAU

Polk County's population growth and change over the last two decades is really two stories. As highlighted on the previous page, Des Moines itself has experienced very slow population growth, but in the same period has seen dramatic changes in its racial and ethnic composition

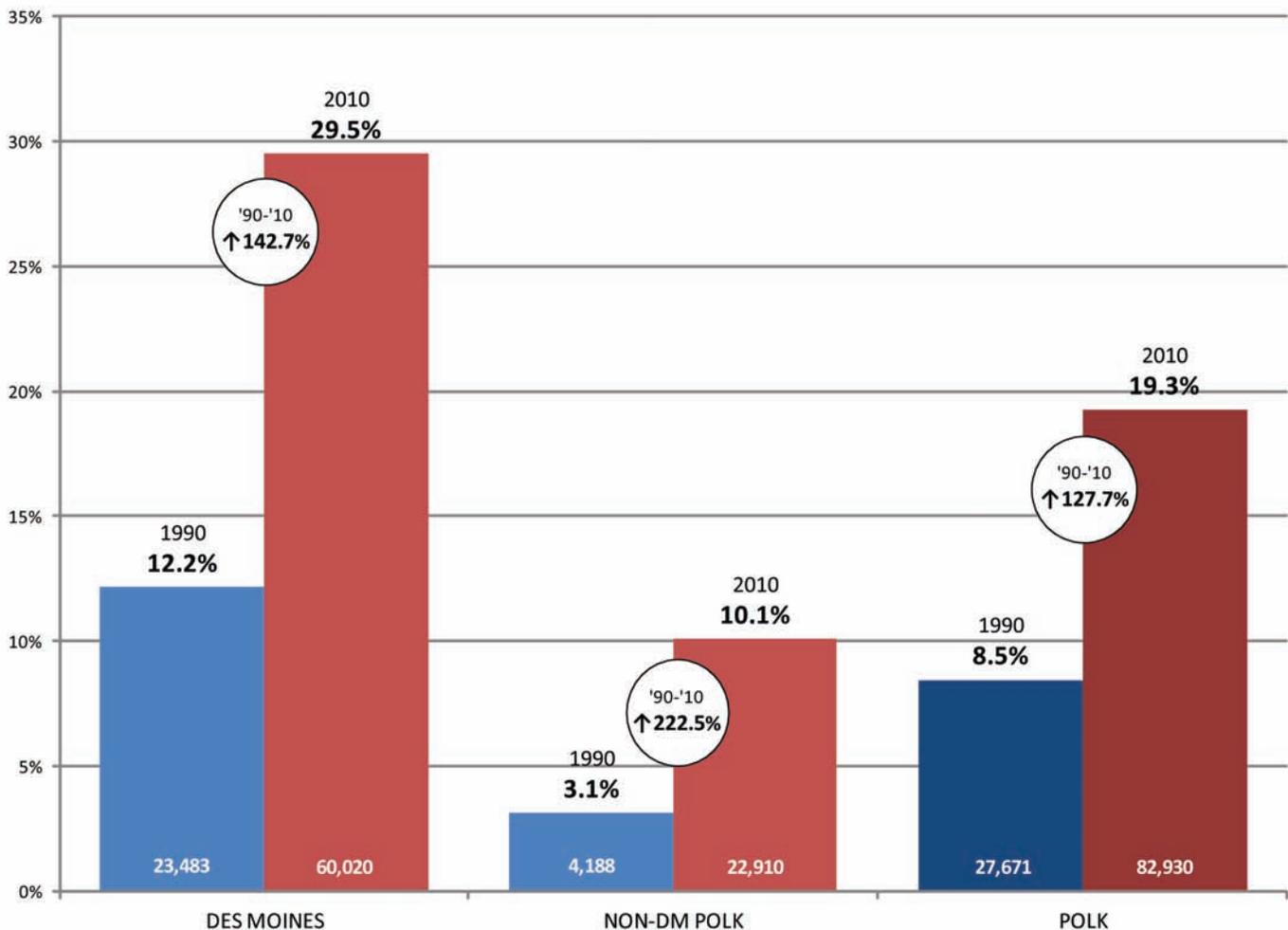
Meanwhile, non-Des Moines Polk has experienced very dramatic increases in population, and the major contributor has been growth in the white, non-Hispanic population (while also becoming more diverse). These trends are expected to continue through 2025.

While Des Moines remains the center of Polk County's commercial and industrial and government operations, economic activity as well as residential living have spread throughout the county as well.

Percent of total Polk County population, 2010	
White, non-Hispanic	80.7%
Hispanic	7.6%
African American or black	6.0%
Other*	5.7%

* Asian, Native American and more than one race.

People of color and/or Hispanic descent as percentage of total population, 1990 and 2010



Race and ethnicity by age

Des Moines and rest of Polk County

SOURCE: U.S. CENSUS BUREAU

Polk County is growing more racially and ethnically diverse, and children are leading the way. Nearly 29 percent of children are of color or Hispanic descent, compared with 17 percent of working-age adults and 7 percent of seniors.

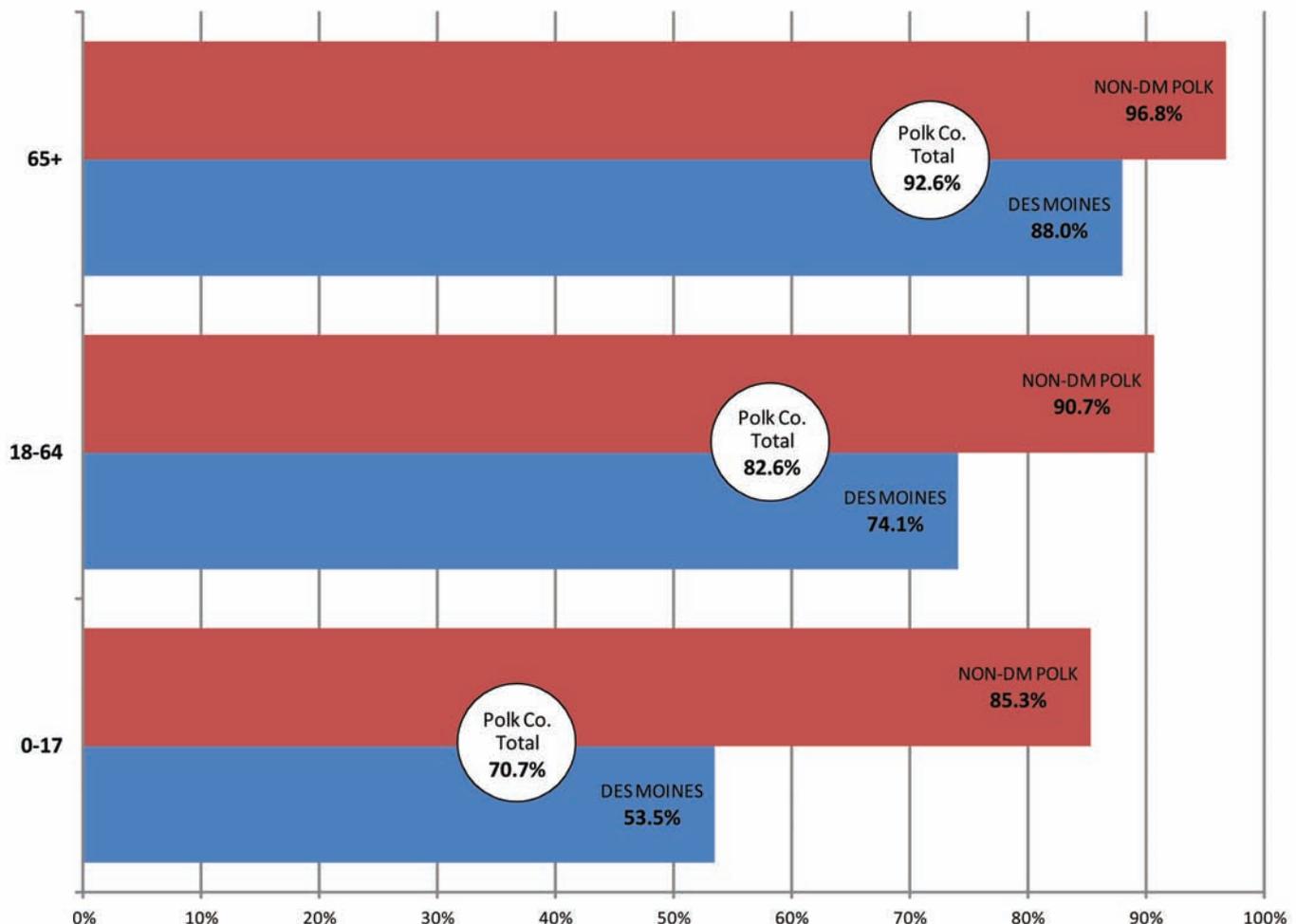
Projections to 2025 show that growth in the child population will be primarily driven by growth in communities of color, particularly among Hispanics, which brings a growing need for culturally competency in the county's health-care and education systems.

Again, the racial and ethnic mix of Des Moines residents is quite different from that in the non-Des Moines parts of Polk County. Nearly 97 percent of seniors in suburban Polk County are white, non-Hispanic, compared with 91 percent of working-age adults and 85 percent of children.

In Des Moines, the differences by age are even greater: 88 percent of seniors and 74 percent of working-age adults are white, while fewer than 54 percent of children are. Well before 2025 there will

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White, non-Hispanic percentage of population by age group, 2010



Race and ethnicity by age

Polk County

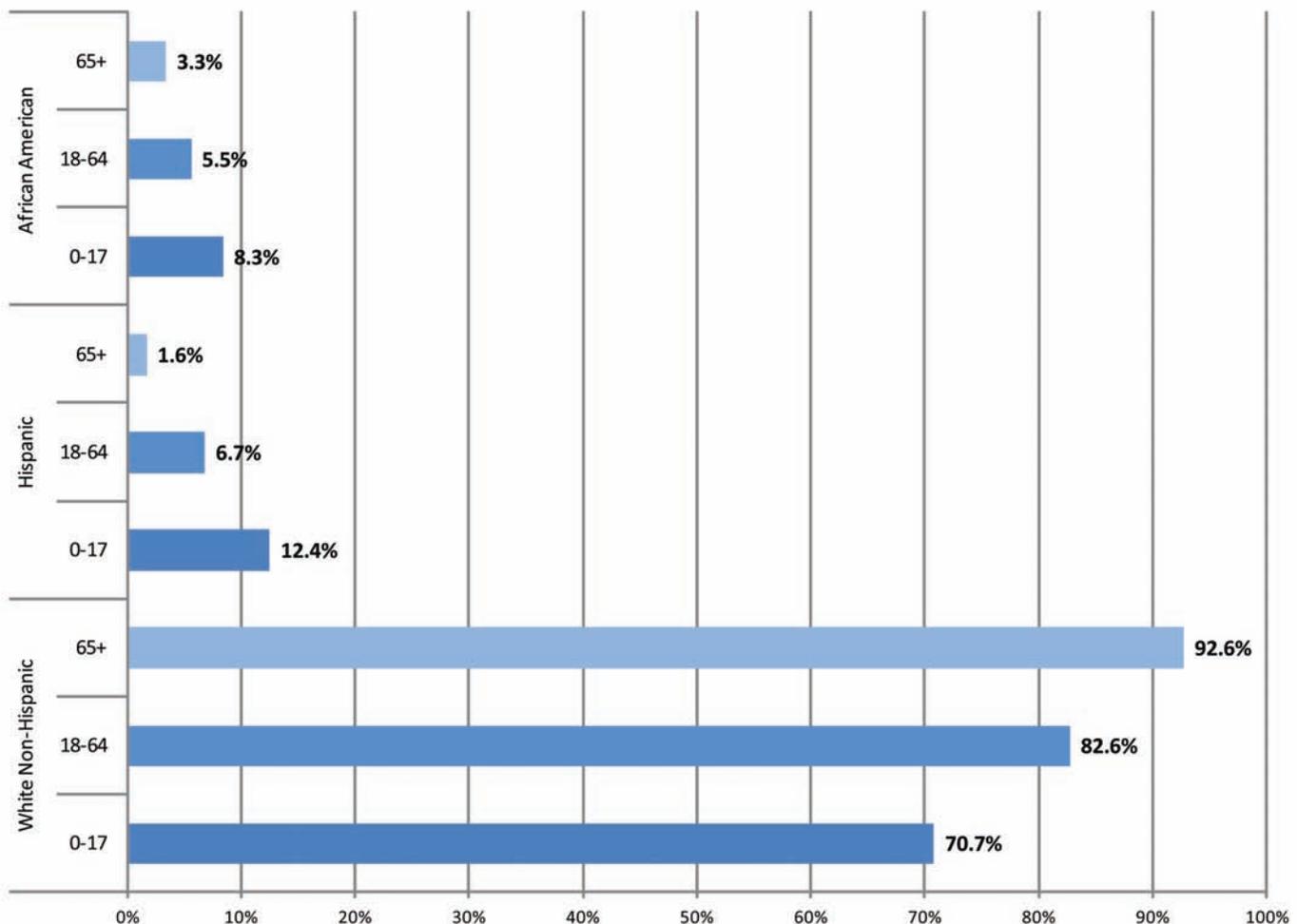
SOURCE: U.S. CENSUS BUREAU

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be no “majority” population among children in Des Moines.

The growth dynamics by age shown on page 7 are related to the composition of the population by race and ethnicity. Fewer than one in 10 seniors in Polk County are of color (not white, non-Hispanic), nearly three in 10 children are. In Polk County, Hispanics and African Americans are the two largest “minority” groups, and they are much younger than the white population as a whole.

Racial and ethnic composition of the population by age group, 2010



Projected population growth by age

Polk County, Iowa and U.S.

SOURCE: U.S. CENSUS BUREAU, WOODS AND POOLE POPULATION PROJECTIONS

Looking ahead, the populations of Polk County and Iowa are expected to grow more slowly than the country as a whole. But, like the country, the fastest-growing part of the growth will be in the senior population. The child population will grow faster than the working-age population, which must become even more productive if it is to support a growing number of children and seniors.

(Overall, Iowa is already older than the country as a whole. About 15 percent of its population is over 65, compared with 13 percent nationally. Polk County,

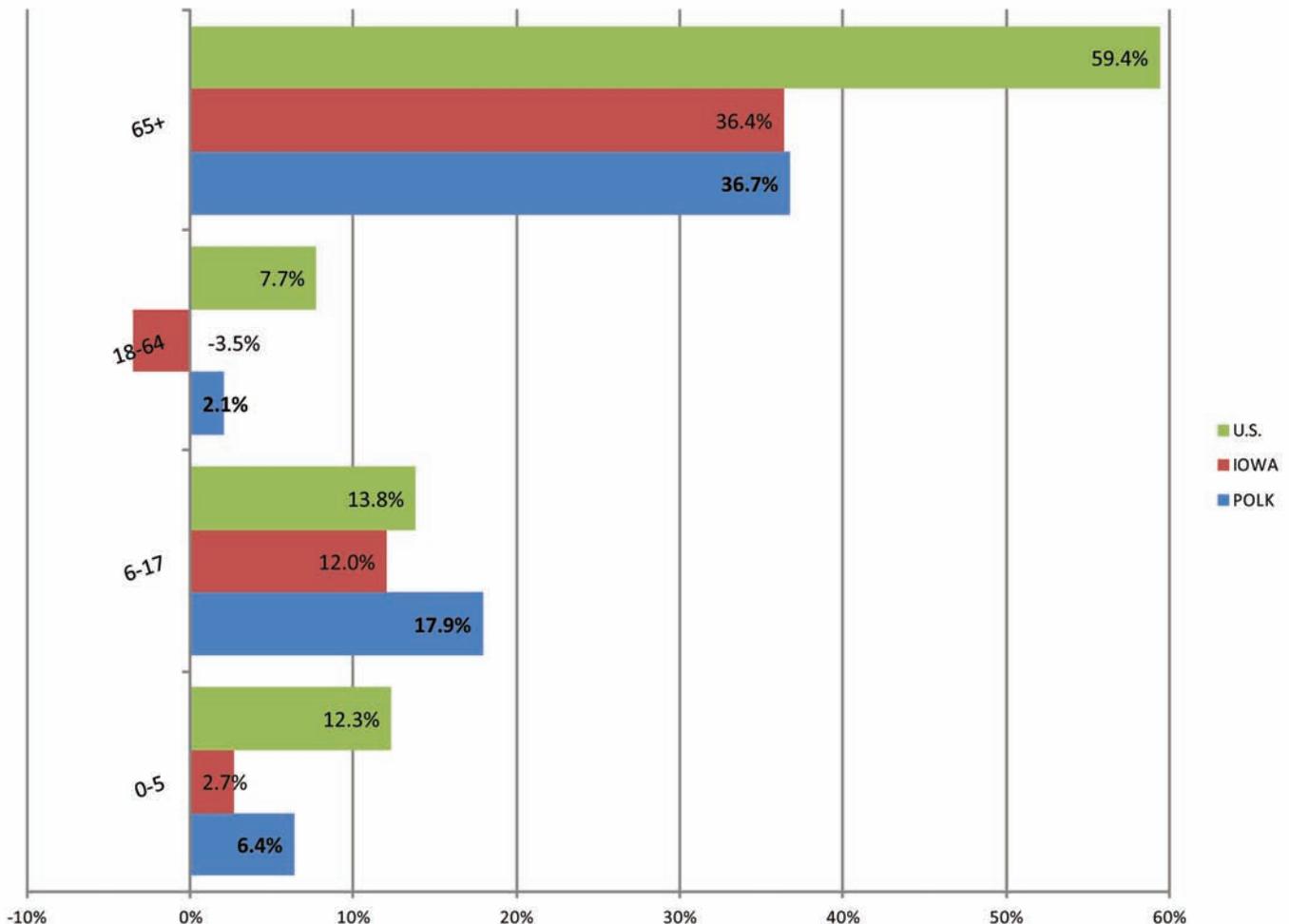
however, is slightly younger than the U.S. as a whole, with 11 percent of the population over 65.)

The aging of the population has profound implications for the health-care system, because, seniors, as a group, have the greatest health-care needs. They assume the bulk of health care costs today, particularly in institutional (hospital, nursing home and other residential) care.

Other age groups have very different health care

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Projected population growth by age group, Polk County, Iowa and U.S., 2010-2025



Projected population growth by age

Des Moines and rest of Polk County

SOURCE: U.S. CENSUS BUREAU, WOODS AND POOLE POPULATION PROJECTIONS

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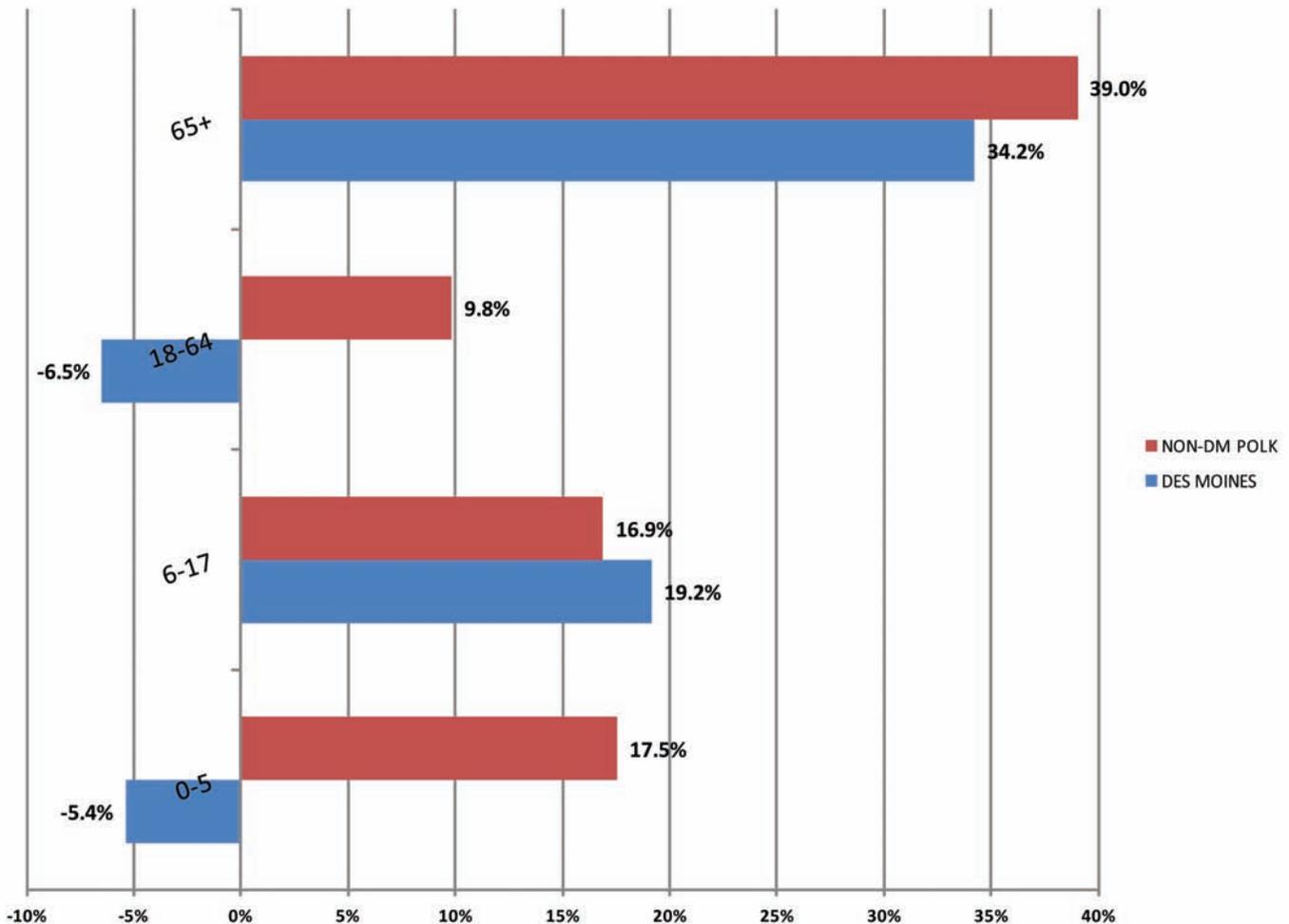
needs. Children need preventive and developmental services that aid in their growth and healthy development. Except at birth, as a group, they are low users of health services, particularly institutional ones.

Working-age adults also need preventive health services, but focused more on health maintenance than development. They are also relatively low users of health services, although chronic health problems can be costly.

In fact, with the dramatic increase in the incidence of chronic diseases like diabetes and obesity among children and working-age adults, these use patterns are likely to change—without intentional interventions to address the social determinants of health.

Looking within Polk County, the city of Des Moines is expected to see net losses in the number of young children and working-age adults and gains in the number of older children and seniors. Population gains in all age groups are expected in suburban Polk County, with the biggest gains among seniors.

Projected population growth by age group, 2010-2025



Low birthweight Polk County, Iowa and U.S.

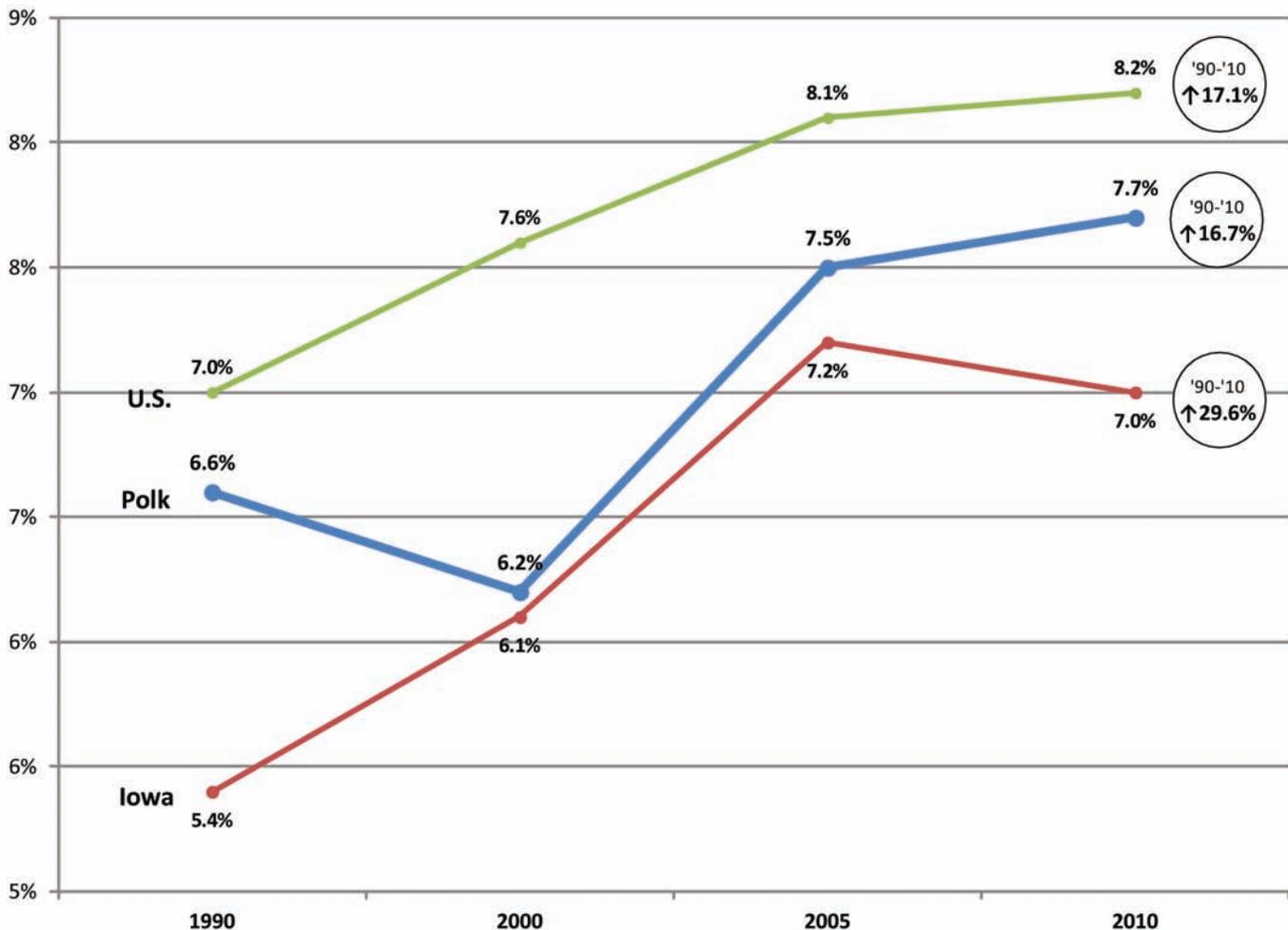
SOURCE: IOWA DEPARTMENT OF PUBLIC HEALTH

Child health starts with a healthy birth. Children born at low birthweight are more likely than those born at higher weights to have health complications and problems, often the result of prematurity. Low birthweight is related to maternal stress and lifestyle issues, including exercise, nutrition and smoking. Like Iowa and the U.S. as a whole, Polk County has experienced some increase in low birthweight over the last 18 years, although at a much lower rate than the state or U.S.

Low birthweight also correlates with both income and race. Low birthweight generally is higher among women with low incomes and women who do not have prenatal care. Like in the U.S. as a whole, in Iowa low birthweight (as well as infant mortality) is much higher among African-American women. These differences exist across socioeconomic and geographic lines.

Children's well-being is important not only for its present effects on society, but because child health is the foundation for healthy development into adulthood. While the vast majority of health expenditures are at the end of the life cycle, investments in children's health, particularly in primary, preventive and developmental services, have the highest long-term benefits in terms of a healthy community and reduced health expenditures.

Percent of births where baby weighs less than 5.5 lbs, 1990-2010



Elevated blood-lead levels

Polk County and Iowa

SOURCE: IOWA DEPARTMENT OF PUBLIC HEALTH

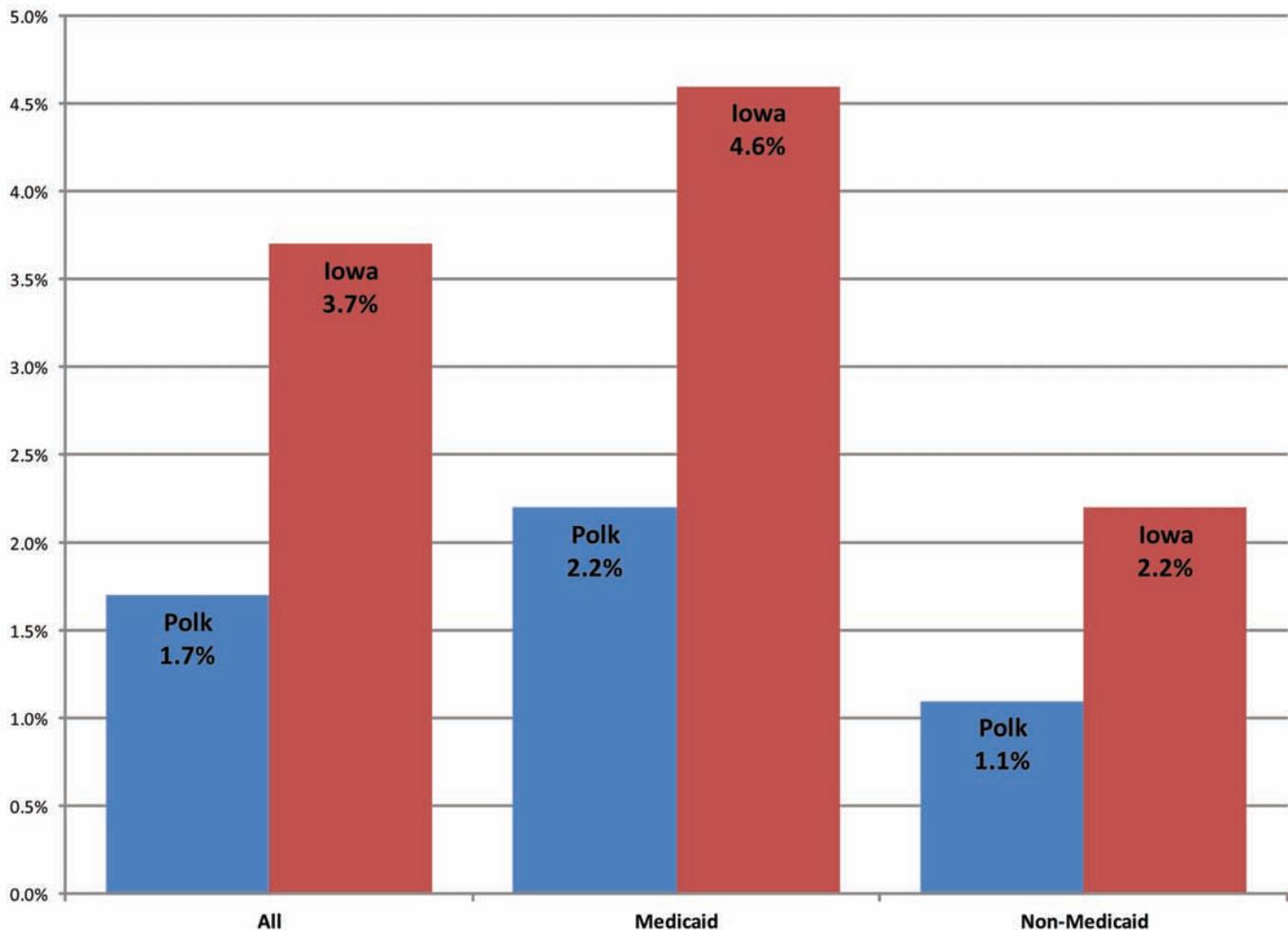
Lead poisoning has devastating effects on children and their development. Very young children are particularly susceptible, and the effects of lead poisoning on brain development cannot be reversed.

Fortunately, lead poisoning can be prevented. It is primarily caused by exposure to lead paint in homes. The danger comes in homes built prior to 1978, when lead paint was banned, and especially in those built before 1960, when paint with a much higher percentage of lead was in wide use (see page 14).

Not every young child is tested for lead poisoning, but of those that are, nearly one in 50 have blood-lead levels that compromise their development, according to the Iowa Department of Public Health. That rate is lower than in the state as a whole, and in some other metropolitan counties.

While there has been a downward trend in the percentage of children with elevated blood-lead levels in Polk County, the state and U.S., continued work needs to be done to reduce these figures to zero.

Percent of children born in 2004 with elevated blood-lead levels by Medicaid status, 2010



Age of housing stock

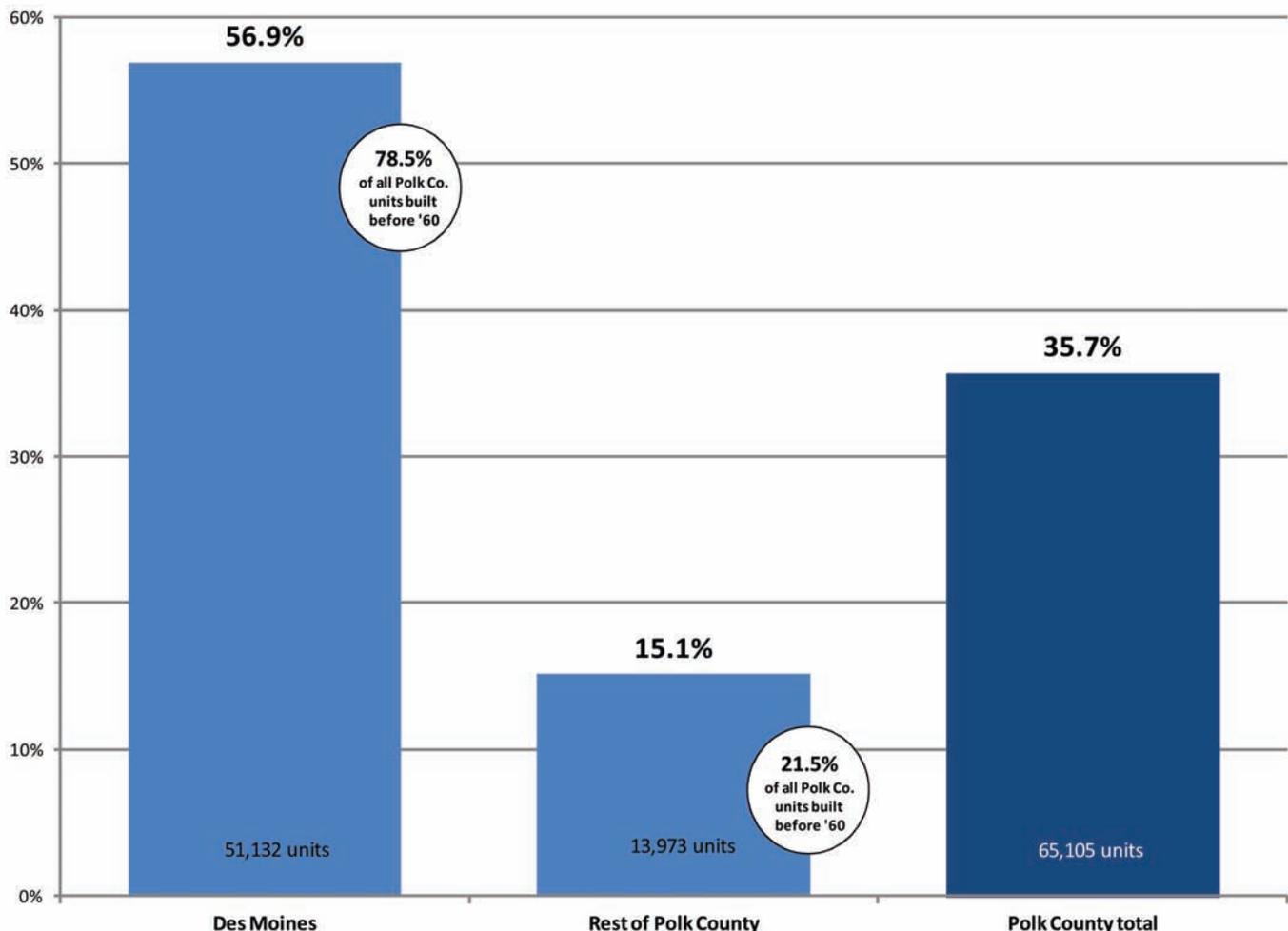
Des Moines and rest of Polk County

SOURCE: U.S. CENSUS BUREAU

The biggest factor contributing to lead poisoning is lead paint, which was used in heaviest use in houses constructed before 1960. Rates of lead poisoning vary dramatically by neighborhood. Most houses constructed before 1960 in Polk County are in Des Moines—and many of those are in the central part of Des Moines, sometimes referred to as the urban core. These are the areas where prior studies have shown rates of positive screens for lead poisoning have been highest.

In addition to lead poisoning, older houses also are most likely to have dust and cockroaches and other airborne environmental contaminants that exacerbate asthma. In the case of both lead poisoning and asthma, the impacts are greatest on very young children developing their immune systems.

Percent of housing units built before 1960, 2010



Asthma Iowa and U.S.

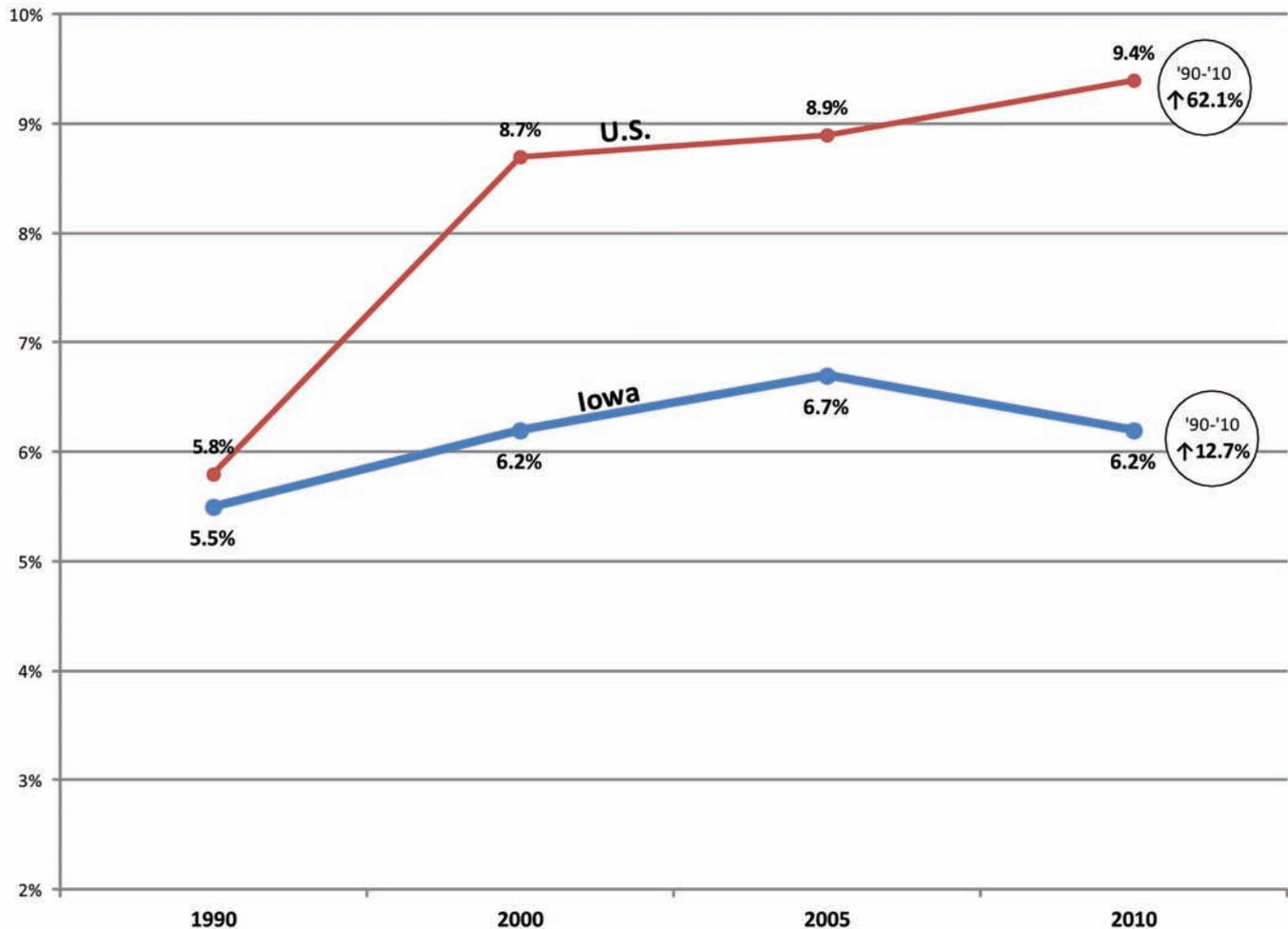
SOURCE: IOWA DEPARTMENT OF PUBLIC HEALTH, BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

Asthma has been on the rise in this country. It is not only a childhood concern, but one with long-term health implications for society. Early identification and treatment of asthma—including actions to improve the child’s environment as well as the asthma itself—dramatically improves children’s health and development.

While there is not an information source at the county level on the prevalence of asthma among children, state and national data indicate the growing nature of the concern. A survey of residents in Des

Moines’ core Making Connections neighborhoods also showed that the prevalence of asthma in Des Moines’ poorest neighborhoods is twice the rate for the state as a whole, potentially the result of older housing and air quality.

Percent of children with asthma, 1990-2010



Child obesity Iowa and U.S.

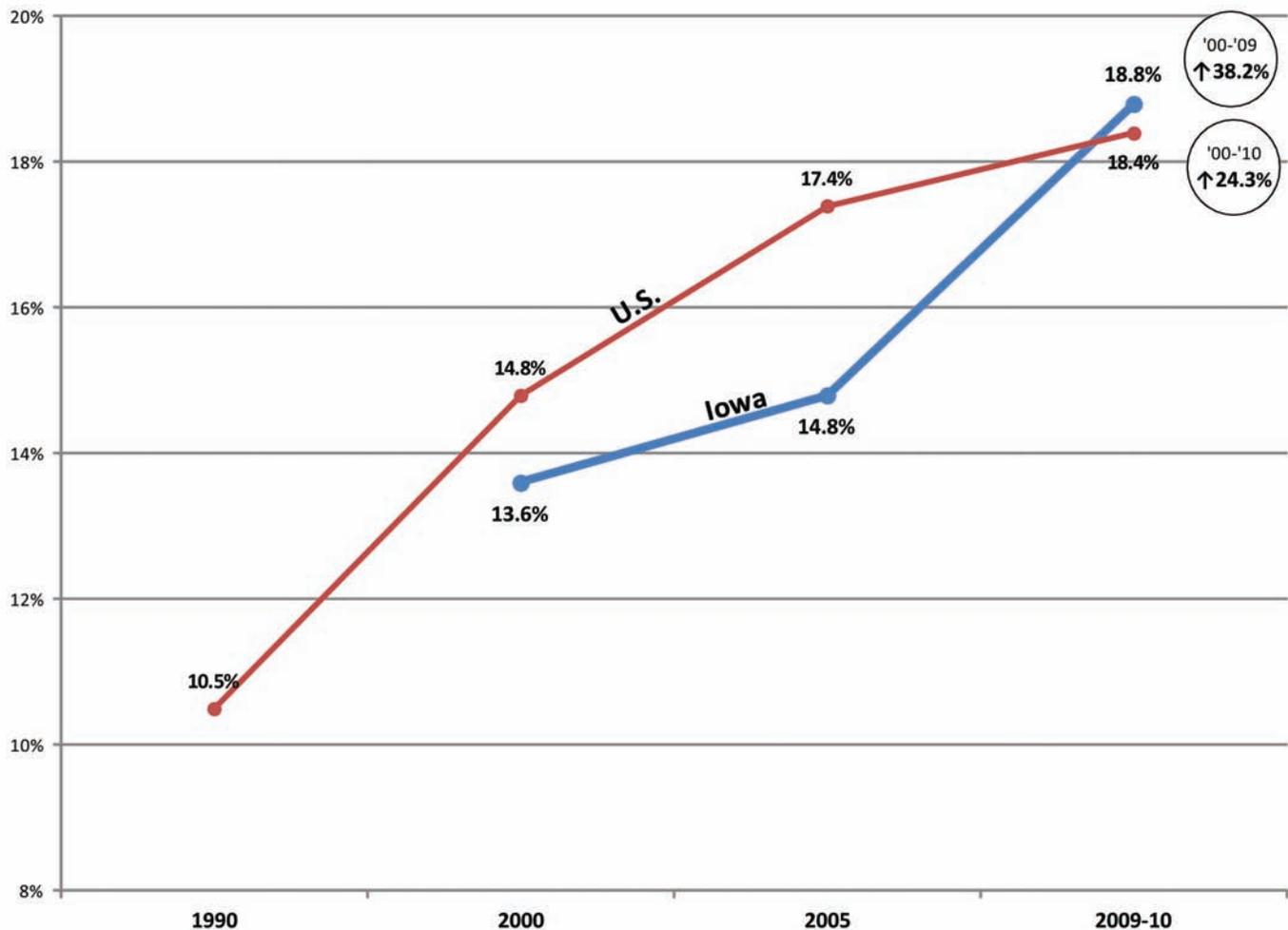
SOURCE: IOWA DEPARTMENT OF PUBLIC HEALTH, NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY

The rise in obesity across all age groups is considered a national epidemic, with profound long-term health consequences. Obesity is related to heart disease, diabetes and a host of chronic health conditions.

Over the last decade, obesity among children in Iowa has increased by 38 percent—much faster than the national rate. Iowa now has higher obesity levels than the country as a whole. Almost one in five Iowa children meets the definition of obesity. Obesity in children is defined as having a weight in at the 95th percentile or higher. Even being overweight (defined

as a weight between the 85th and 95th percentiles) has negative health consequences, and another 16.9 percent of Iowa children fall into that category.

Percentage of children who are obese, 1990-2010



Adolescent smoking

Polk County, Iowa and U.S.

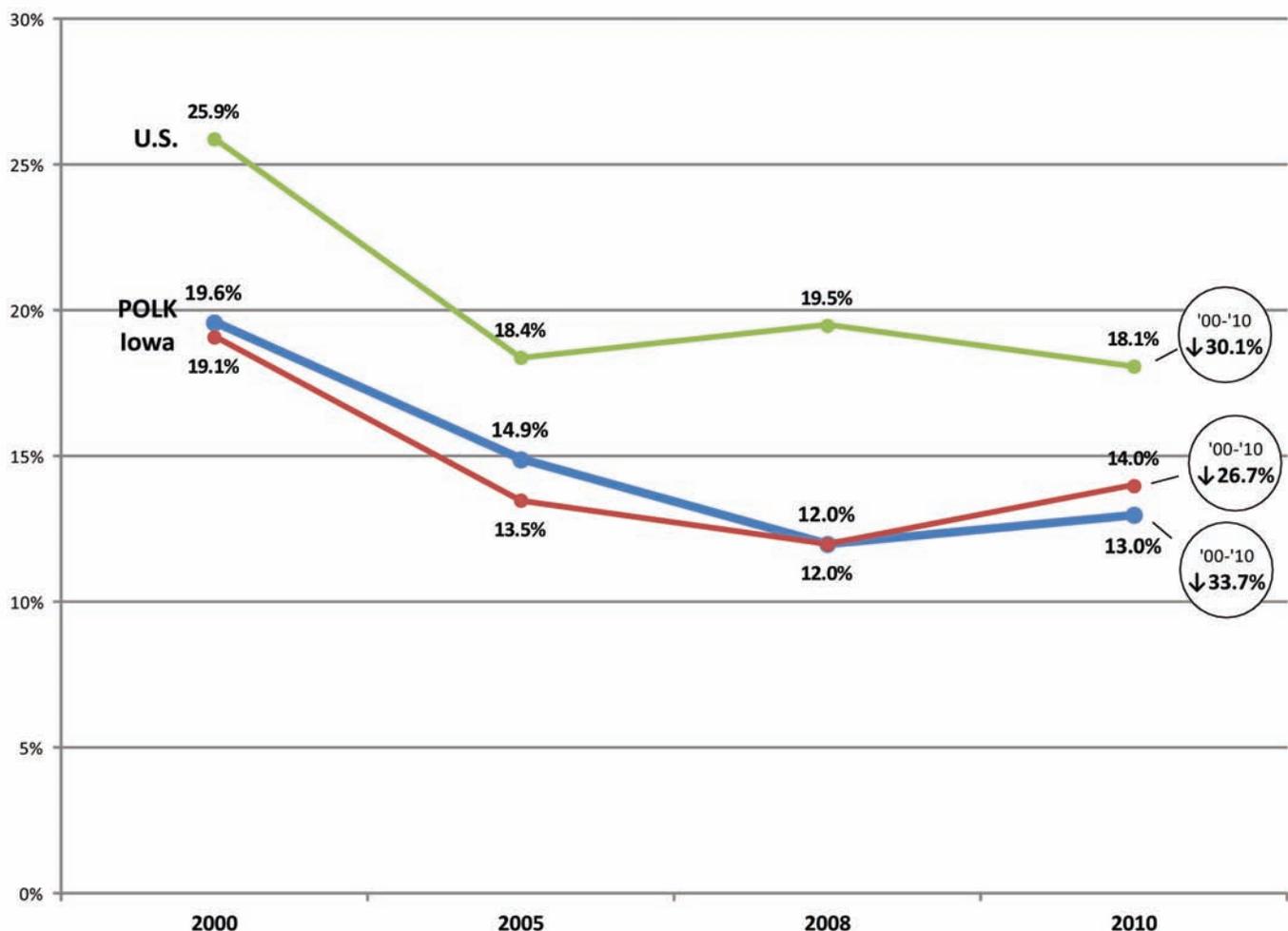
SOURCE: IOWA YOUTH SURVEY

Many Iowa schools administer the Iowa Youth Survey every three years in order to gather important information directly from youth on a variety of educational and social issues. The Youth Survey asks about two behaviors that are very related to health—smoking and underage drinking. Most school districts in Polk County administer the survey and their reports are combined to provide the information here on both: smoking in the last 30 days and drinking in the last 30 days (see page 18).

substantially in Polk County over the last six years, and Polk County students are well below the national average for smoking. Even so, one in eight students are at least experimenting with cigarettes.

As the figures show, student smoking has declined

Percentage of adolescents who smoked in last 30 days, 2000-2010



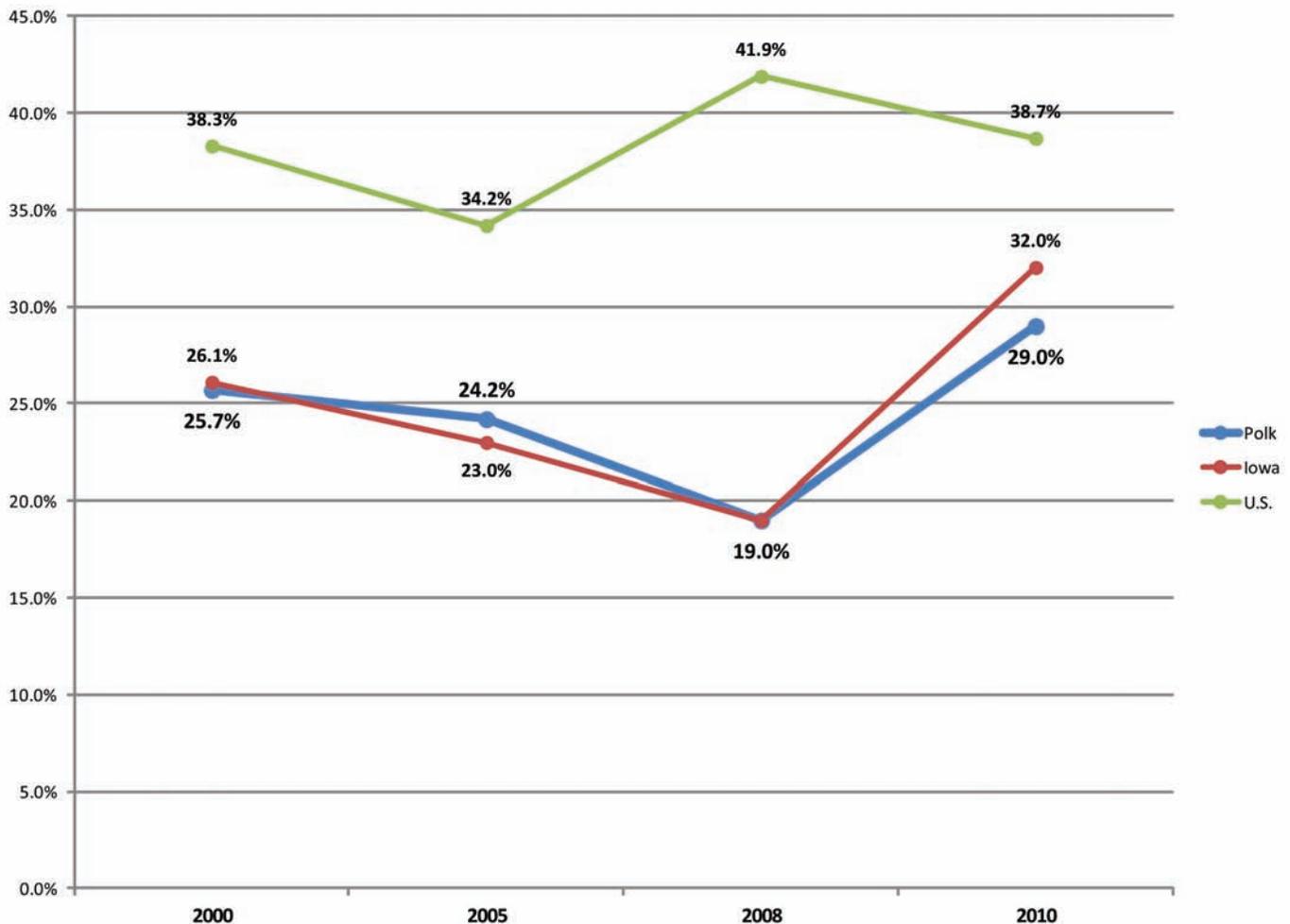
Adolescent drinking

Polk County, Iowa and U.S.

SOURCE: IOWA YOUTH SURVEY

Alcohol abuse remains one of the major contributors to poor health, as well as to preventable injuries. Children who experiment with drinking before they reach legal age are much more likely to develop drinking problems as adults. While reported experimentation with drinking among 11th graders in Polk County and Iowa remains slightly below the national rate, nearly one in three reported drinking in the last 30 days.

Percentage of 11th graders who drank alcohol in last 30 days, 2000-2010



Suicide risk avoidance

Polk County, Iowa and U.S.

SOURCE: IOWA YOUTH SURVEY

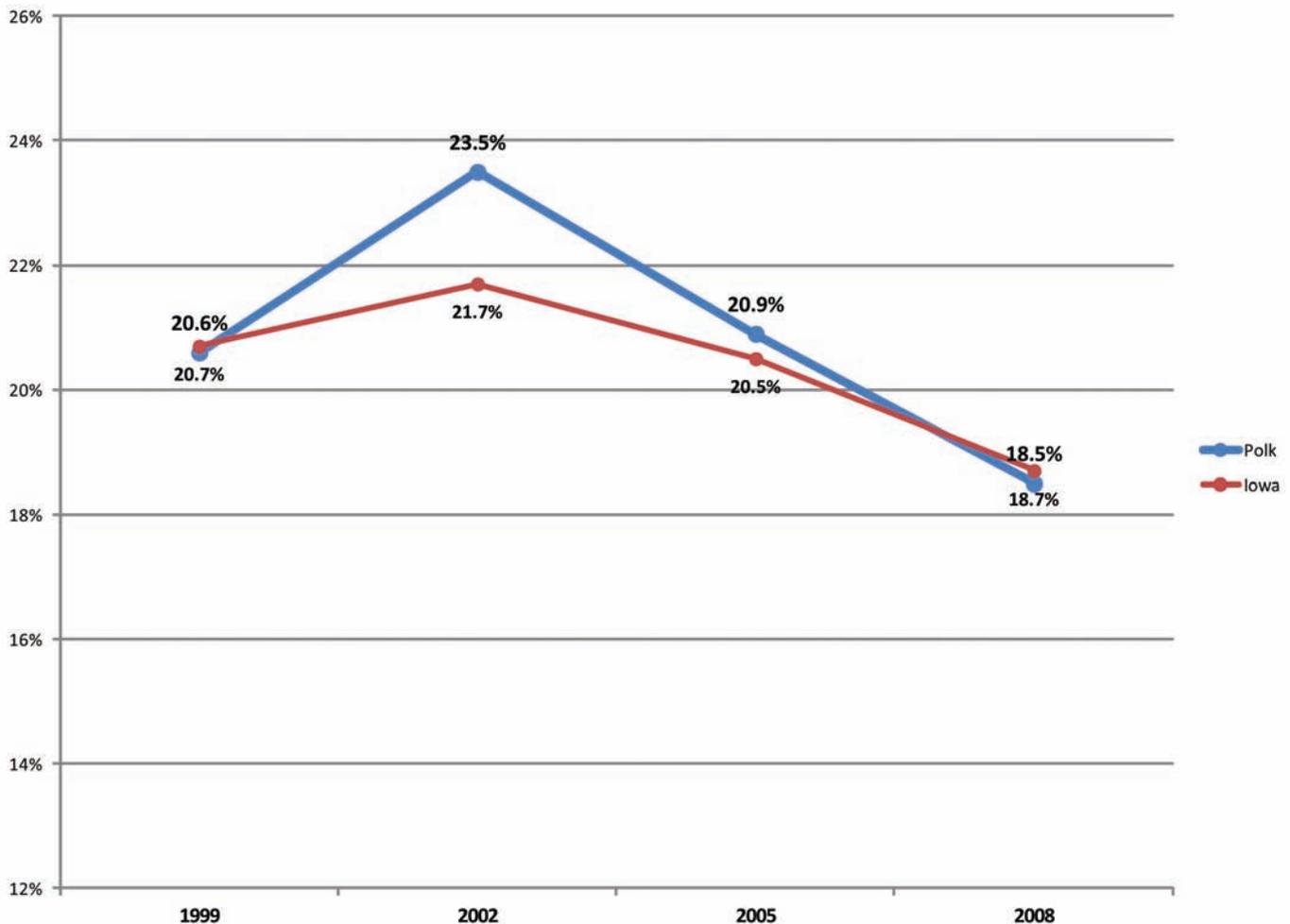
Also on the Youth Survey are questions related to suicide: "In the last twelve months, did you make a plan about how you would attempt suicide? Have you ever tried to kill yourself?"

Suicide is the second leading cause of death to 10- to 24-year-olds. While the number of actual suicides among young people is very small, suicide ideation is often a sign of other mental and social concerns, including isolation from positive supports.

In Polk County and in Iowa, about one in five 11th graders has consistently responded "yes" to the

question about suicide risk. From an individual perspective, counseling often is needed to help these youth address their thoughts about suicide and about other mental health conditions that give rise to these thoughts. From a community perspective, positive youth development activities and opportunities can reduce adolescent isolation and depression that contributes to suicide risk.

Percent of 11th graders who planned or attempted suicide in last year, 1999-2008



Child abuse

Polk County, Iowa and U.S.

SOURCE: IOWA DEPARTMENT OF HUMAN SERVICES

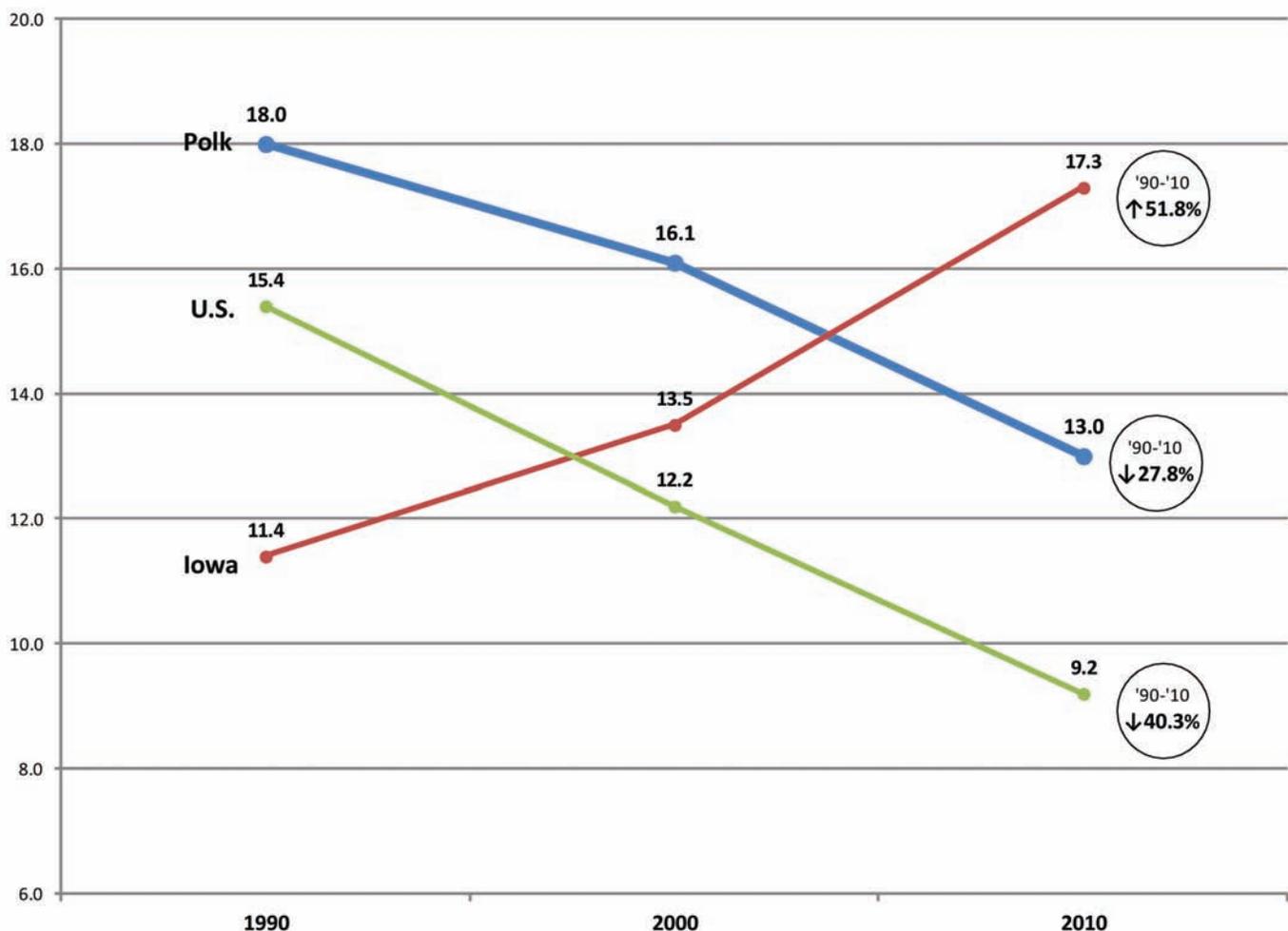
Child abuse threatens a child’s health and well-being in a number of ways—ways that include, but extend well beyond, direct physical health concerns. Children who are abused have higher rates of school difficulties, depression, aggressive behaviors, and later social problems, including mental illness, homelessness and substance abuse.

Confirmed cases of child abuse occur for a very small percentage of children. There is wide variation across counties and across the country in confirmed cases of child abused, which are related both to underlying

conditions and to local enforcement practices.

Recently, confirmed rates have declined very substantially in Polk County, following a national trend. Iowa’s overall rates have increased however, and, as a result, Polk County has moved from being well above the Iowa average to below the Iowa average.

Confirmed cases of child abuse or neglect per 1,000 children 0-17, 1990-2010



4th grade reading proficiency

Des Moines, rest of Polk County and Iowa

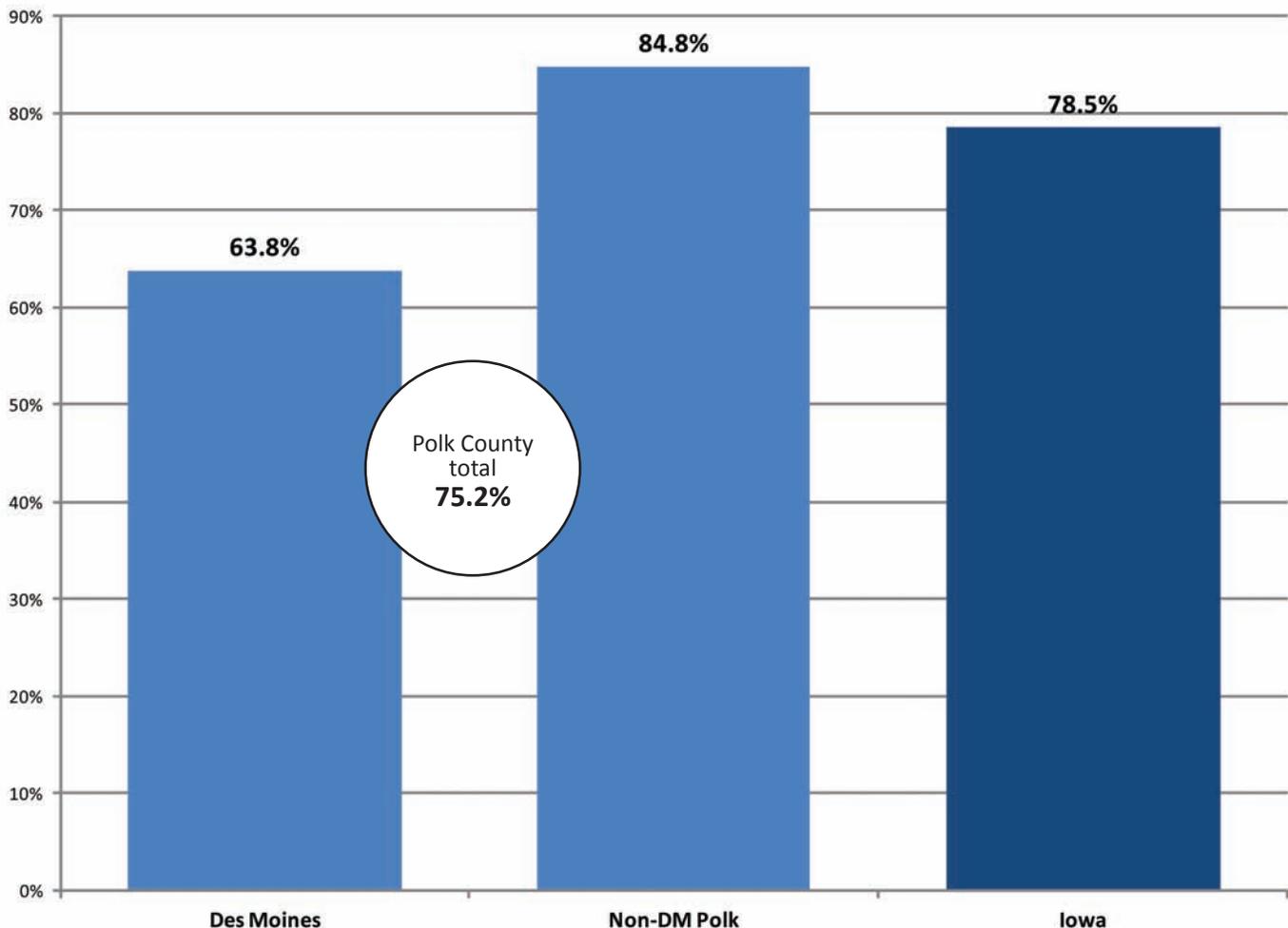
SOURCE: IOWA DEPARTMENT OF EDUCATION

Child health and development is integrally related to educational success. Untreated health conditions are a significant factor in school difficulties, and children who are not successful in school are more likely to engage in risky behaviors that jeopardize health.

Fourth-grade reading is a sentinel measure of educational success because students not proficient in reading by fourth grade will have difficulty in other aspects of learning, as reading becomes fundamental to success in all subjects after that point.

Iowans take pride in having an educated population. Three of four fourth graders in Polk County tested proficient on reading in 2010, just slightly lower than the statewide rate of 78.5 percent. Like other measures of well-being, though, there were significant differences in reading proficiency rates in the city of Des Moines and surrounding areas of Polk County. Rates in those areas were more than 20 points higher than those in Des Moines proper.

Percent of 4th graders proficient in reading on Iowa Tests of Basic Skills or Iowa Alternate Assessment, 2010



4th grade reading proficiency

Des Moines, Polk County (total) and Iowa

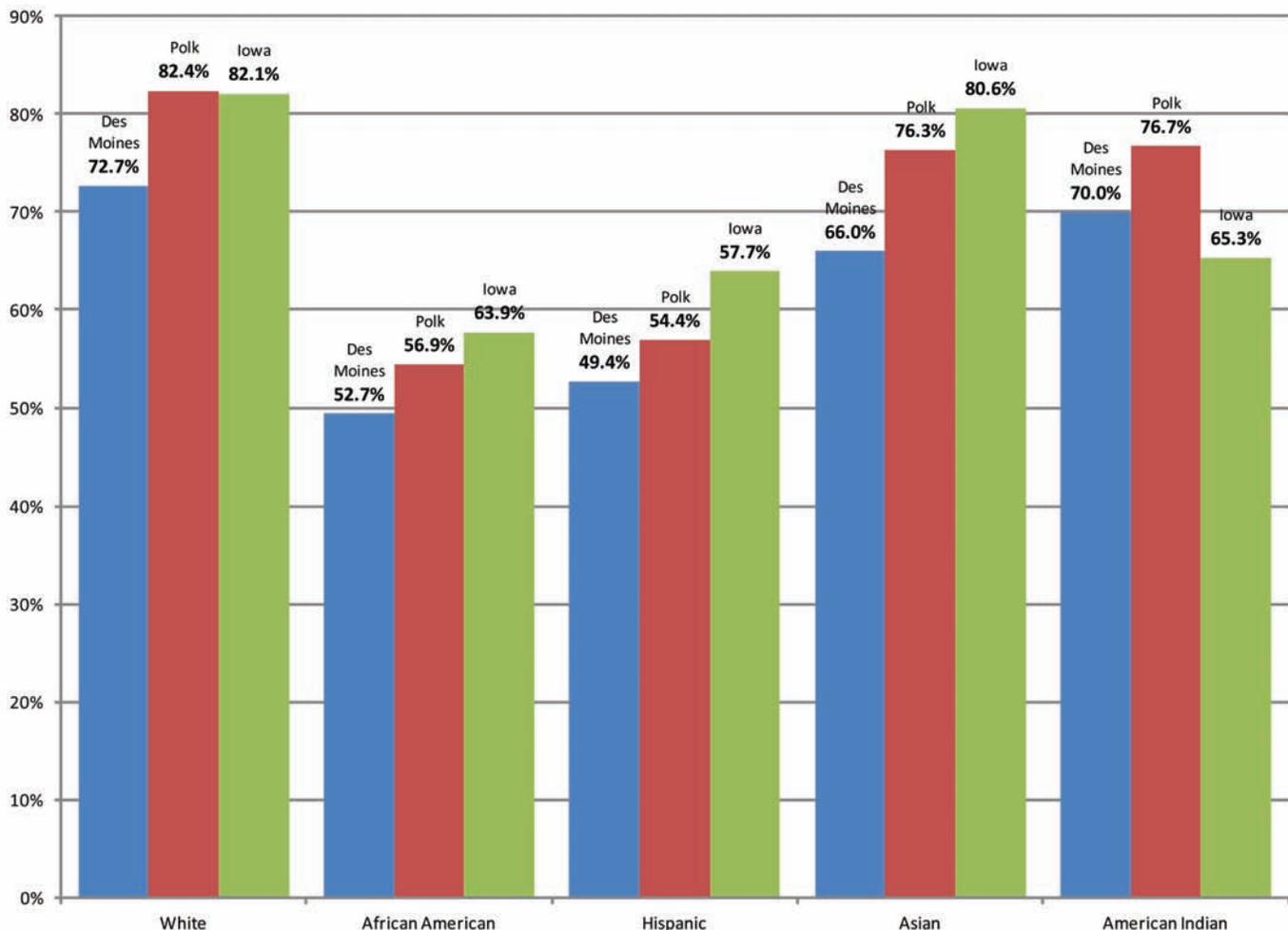
SOURCE: IOWA DEPARTMENT OF EDUCATION

Major differences in reading proficiency levels in Des Moines, Polk County and the state remain when results are broken down by race and ethnicity.

Polk County fourth grade proficiency rates for white, non-Hispanic students are equivalent to those of Iowa as a whole. The same does not hold for the three largest minority populations—African-American, Hispanic and Asian. Since Polk County has higher proportions of those populations than the state as a whole, its overall fourth grade proficiency rate is below that of the state.

When compared to the U.S. as whole, Iowa's educational performance raises concerns. According the National Assessment of Education Progress, Iowa scores only average among states overall in fourth grade reading proficiency (26th), and well below national average among white, non-Hispanic students (47th).

Percent of 4th graders proficient in reading on Iowa Tests of Basic Skills or Iowa Alternate Assessment by race, 2009



High school graduation

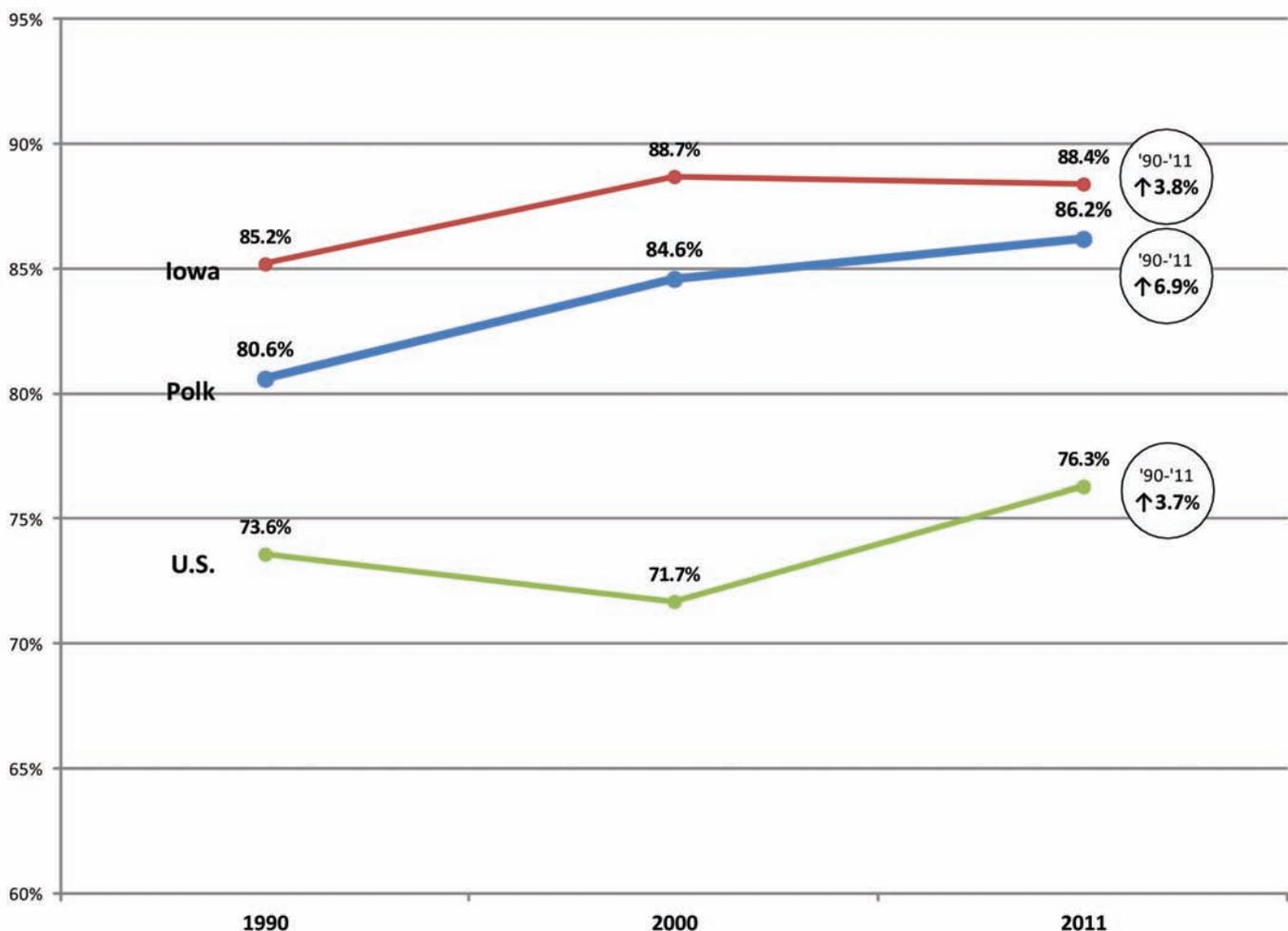
Polk County, Iowa and U.S.

SOURCE: IOWA DEPARTMENT OF EDUCATION

High school graduation rates can be calculated in a number of ways. The U.S. Department of Education may require specific reporting standards. Currently, Iowa schools use a calculation based on the number and percentage of public students entering ninth grade who graduate with their class four years later. Other calculations have been employed, which typically lower the percentages. The calculation currently used in Iowa is comparable across school districts and over time, however.

As shown, high school graduation rates in Polk County currently are below the state average and above the United States average. Again, Des Moines graduation rates are much below those in the rest of Polk County.

Percent of ninth graders who graduated with their class four years later, 1990-2011



Entry into prenatal care

Polk County

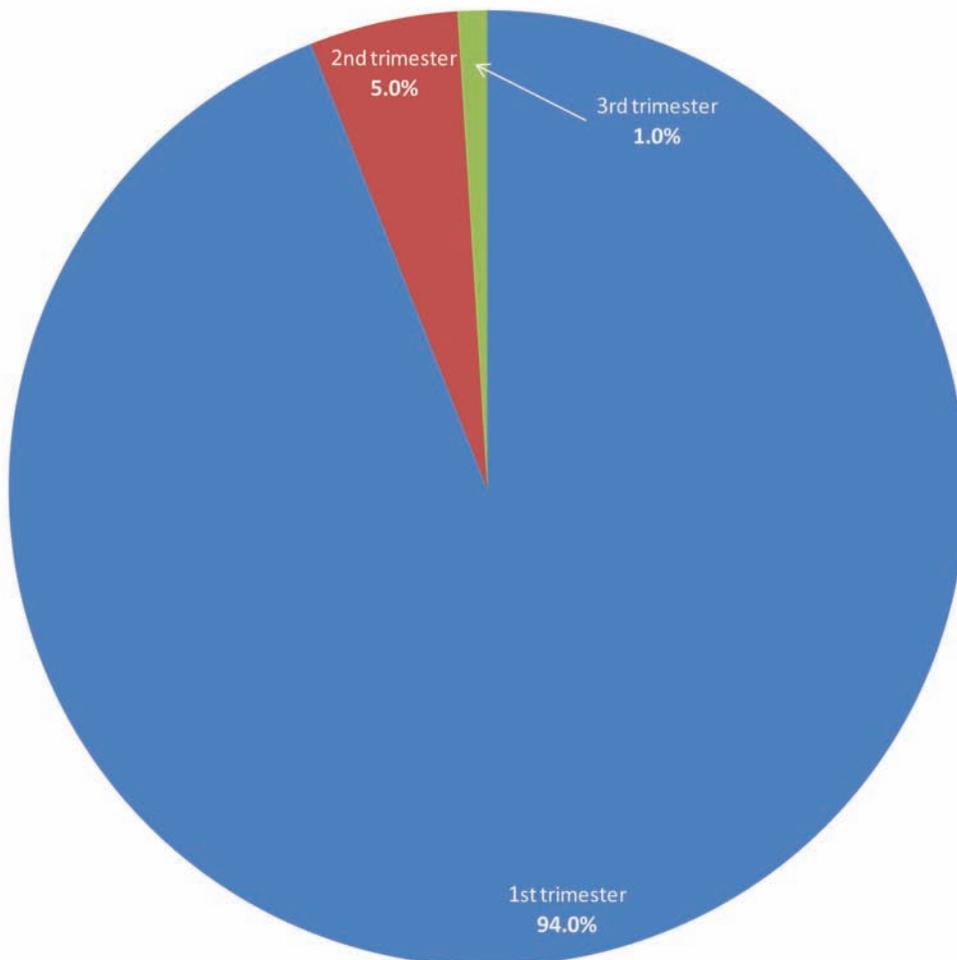
SOURCE: IOWA DEPARTMENT OF PUBLIC HEALTH

Prenatal care is critical to identifying and addressing medical conditions that compromise pregnancy and healthy births. It is also an avenue for addressing lifestyle and stress issues that can affect healthy births. Early entry into regular prenatal care contributes to healthy births and a reduction in low birthweight. Prenatal care is also a source of support for parents (continued in regular infant check-ups) that helps them develop nurturing home environments.

The overwhelming majority of pregnant women in Polk County—94 percent—begin prenatal care in the first trimester. Only 1 percent receive no prenatal care until their third trimester.

Health care services play an important role in supporting children's healthy development. Health providers respond to illness and injury and, through primary and preventive health services, can make referrals to other supportive services. They also promote healthy lifestyles through information and advice to children and their families about healthy behaviors.

Time of entry into prenatal care, 2010

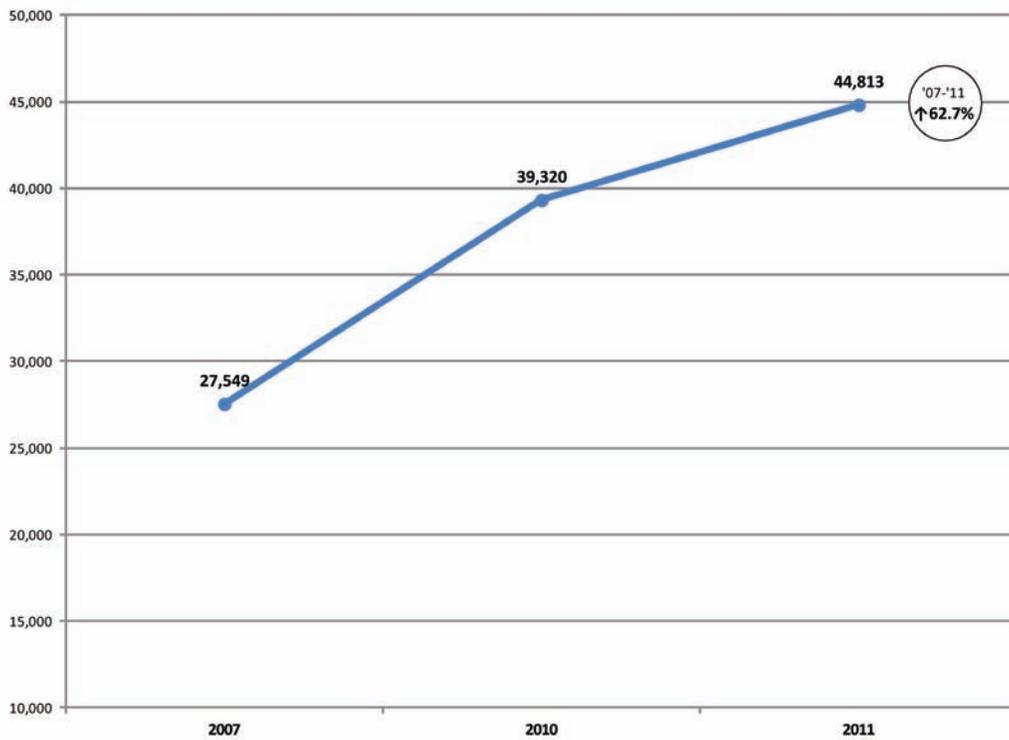


Public child health insurance

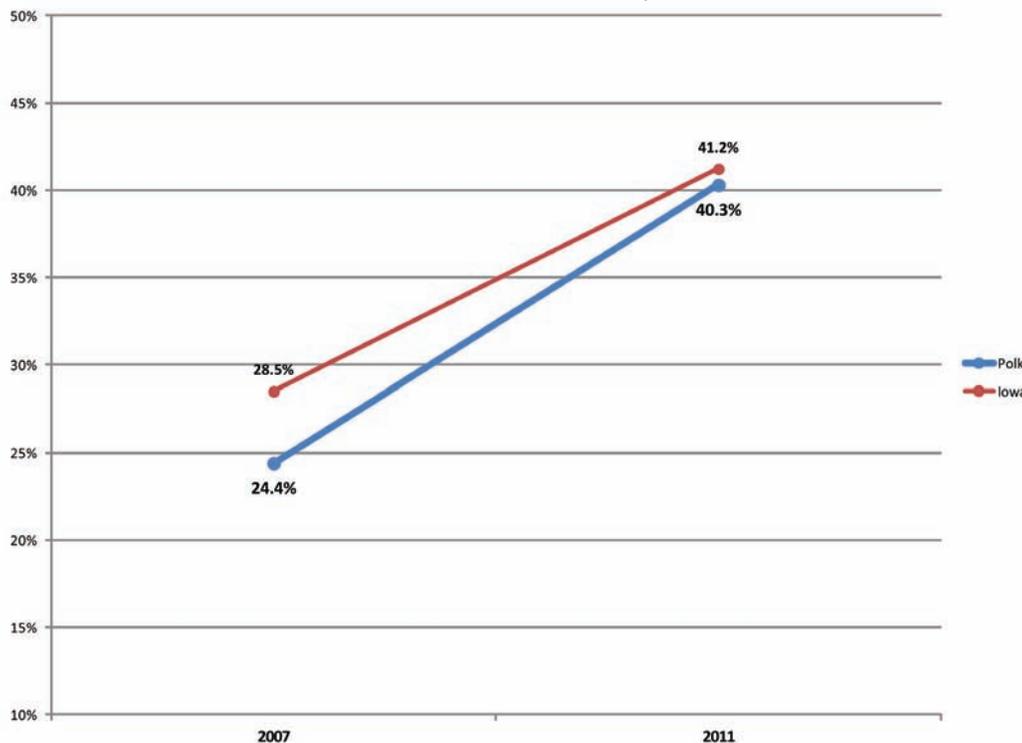
Polk County and U.S.

SOURCE: IOWA DEPARTMENT OF HUMAN SERVICES

Number of Polk County children on Medicaid or hawk-i, 2007-2011



Percent of children on Medicaid or hawk-i, 2007-2011



Between 2007 and 2011, the state and federal governments enacted major provisions to increase child health insurance coverage under Medicaid and hawk-i. Iowa expanded coverage of children under hawk-i to 300 percent of poverty and instituted presumptive and continuous eligibility for all children in both programs. Iowa also took advantage of options under the federal Child Health Insurance Reauthorization Act to cover legally residing immigrant children, provide a dental benefit under hawk-i for children covered under private insurance but income-eligible for hawk-i, and streamline enrollment and re-enrollment practices.

Since 2007, the enrollment of children in Medicaid and hawk-i in Polk County has grown 63.7 percent, with two of five Polk County children now covered by one of the two programs. State-wide, the vast majority of children covered by these public health plans—88 percent—are covered by Medicaid.

The result is a drop in the number of uninsured children in Iowa, despite a drop in employer-sponsored health coverage and a rise in adults uninsurance in that period.

Immunization rates

Polk County and Iowa

SOURCE: IOWA DEPARTMENT OF PUBLIC HEALTH, IMMUNIZATION ANNUAL REPORTS, 2010 AND 2011

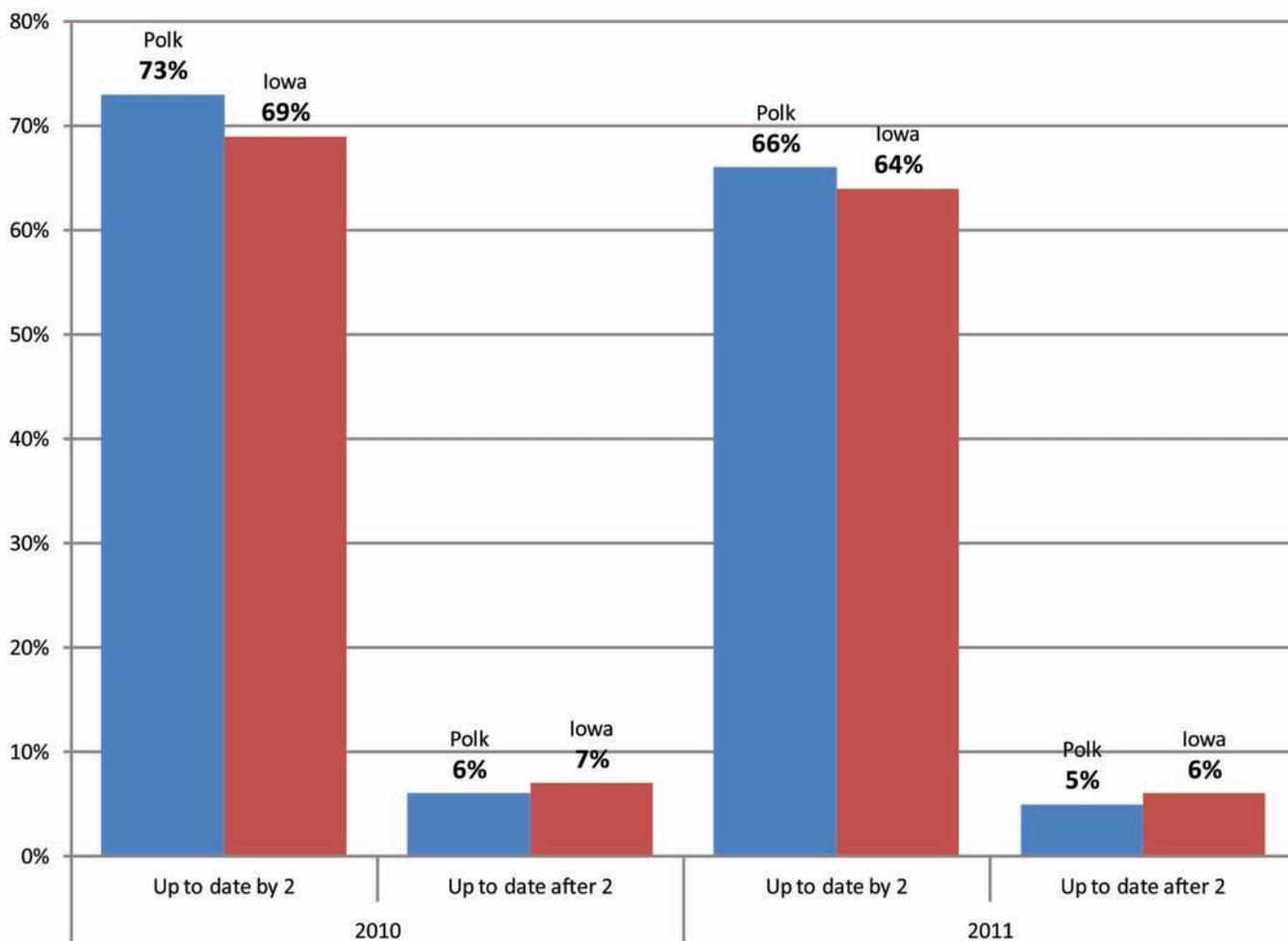
All children should be immunized for infectious diseases according to recognized guidelines. When immunization rates trend downward, there is a much greater likelihood for outbreaks or epidemics of these transmittable diseases.

According to the Iowa Department of Health's annual immunization reports, the share of children in Polk County who received all indicated vaccinations by age 2 in 2011 was slightly higher than the statewide rate, but reflected a slight drop from the previous year.

Up-to-date children are those who completed four DTaP, three polio, one MMR, three Hib, three Hep B, one varicella and four PCB by 24 months of age. Late up-to-date children completed that series, but after 24 months of age. Polk County is just slightly below the state average in that group.

The big key to ensuring high immunization rates is ensuring that children have a regular source of primary and preventive care, what is often referred to as a "medical home."

Percentage of 2-year-olds up to date on immunizations, 2010 and 2011



Premature death

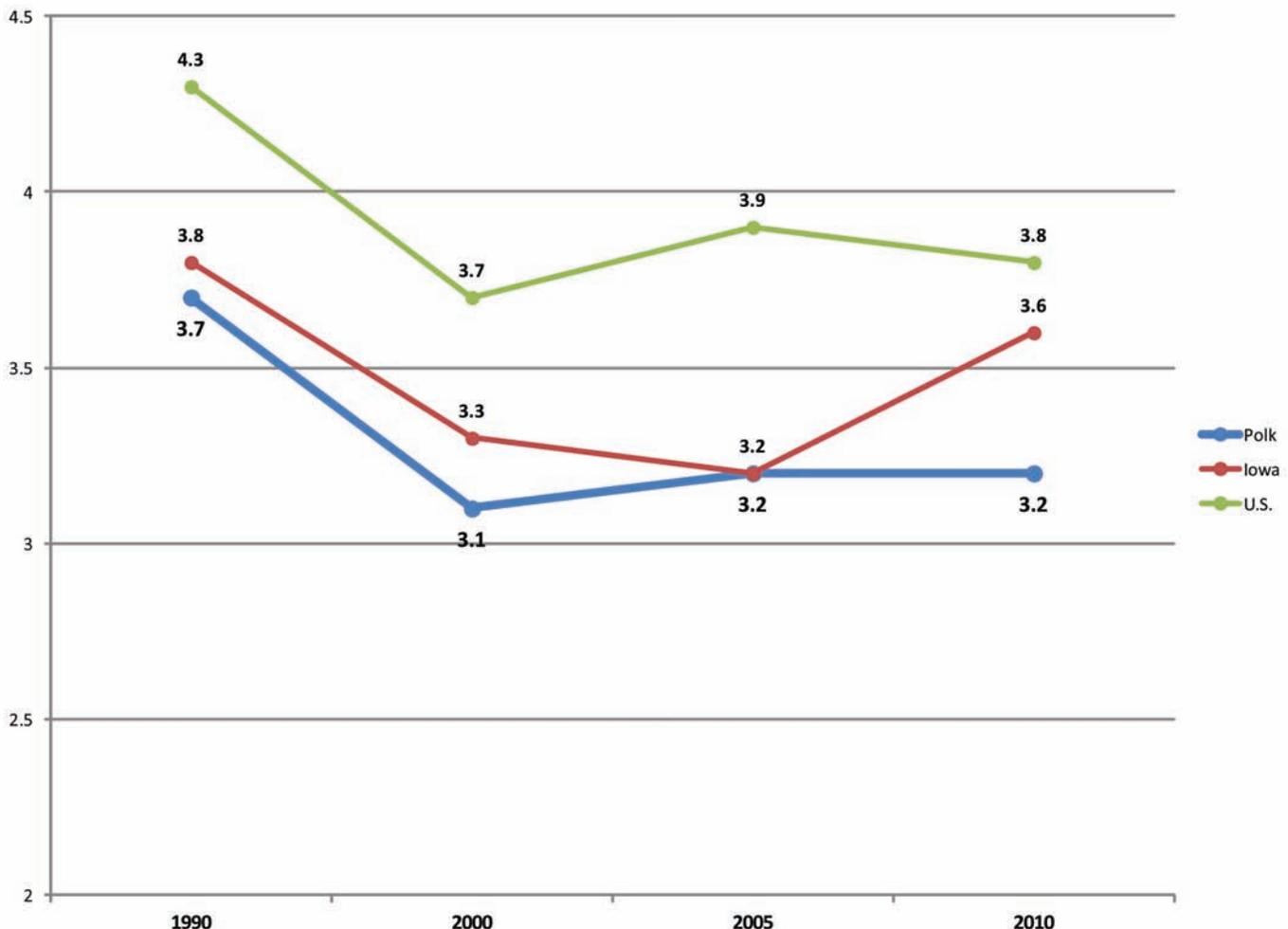
Polk County, Iowa and U.S.

SOURCE: IOWA DEPARTMENT OF PUBLIC HEALTH

Longevity is one measure of overall health, and the premature death rate (or deaths to people under 75 years of age) is an important adult health measure. Maintaining healthy lifestyles, and ensuring environmental safety are critical to keeping the premature death rate low. There has been a decline in premature deaths in Polk County since 1990, and Polk County's rates are lower than for the state or country as a whole as well.

Healthy child development is important to maintaining health during the adult years, where most of health costs occur. Maintaining the health and improving the health status of the adult population is critical to societal productivity and to containing health costs. There are multiple measures for the health of the adult population, from morbidity and mortality to lifestyle conditions known to affect health.

Premature deaths (before age 75) per 1,000 population, Polk County, Iowa and U.S., 1990-2010

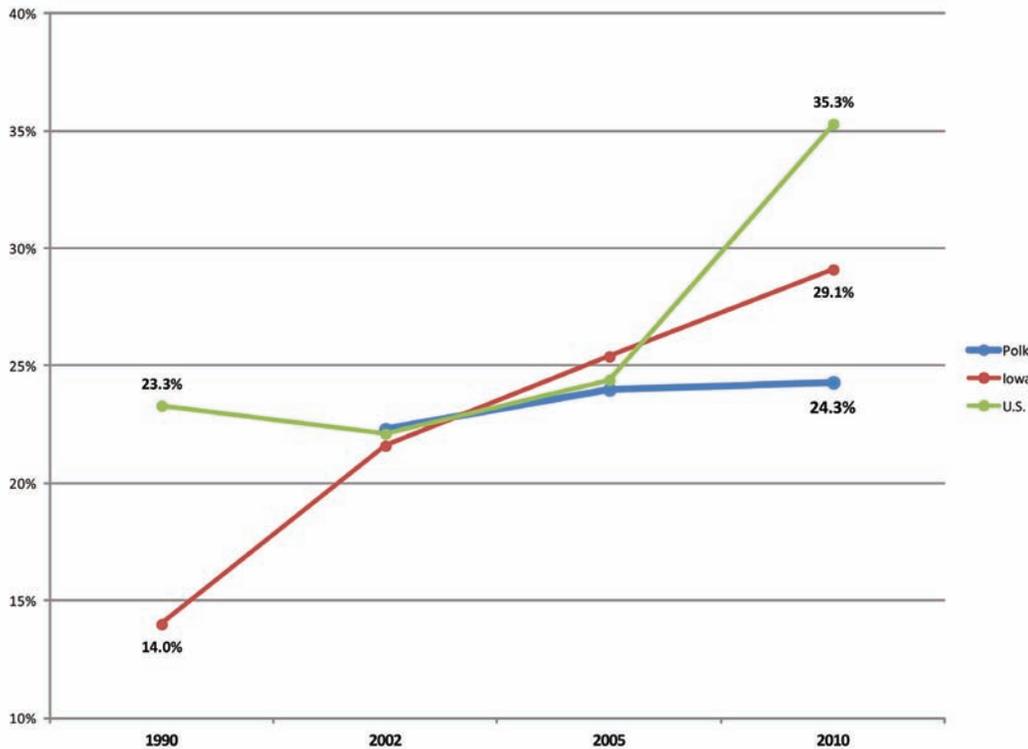


Adult obesity and diabetes

Polk County, Iowa and U.S.

SOURCE: IOWA DEPARTMENT OF PUBLIC HEALTH, BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

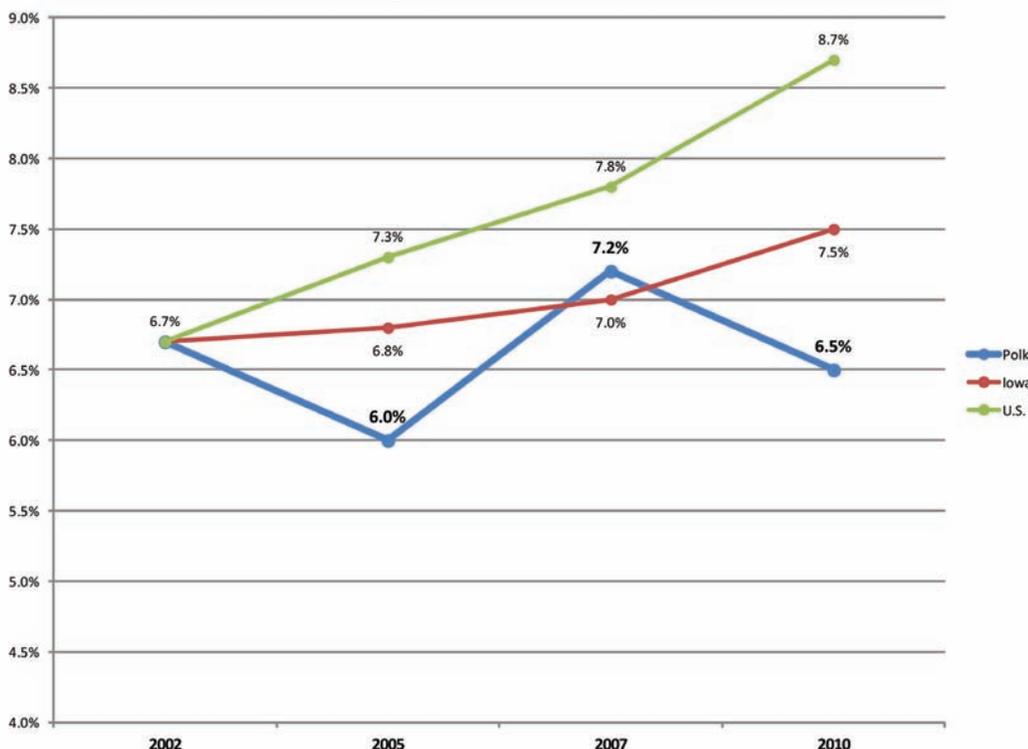
Obesity rate, Polk County, Iowa and U.S., 1990-2010



America is experiencing an obesity epidemic that represents one of the greatest threats to the future well-being of society. Obesity is a leading cause of heart disease, diabetes and other debilitating and life-threatening conditions.

Obesity (defined as having a body mass index of 30.0 or above) affects one in four of Polk County adults, a slight increase since 2002. Moreover, the increase in child obesity (see page 16) suggests that this will be an increasing concern in Polk County, with explicit actions needed to promote good nutrition and exercise.

Diabetes rate, Polk County, Iowa and U.S., 2002-2010



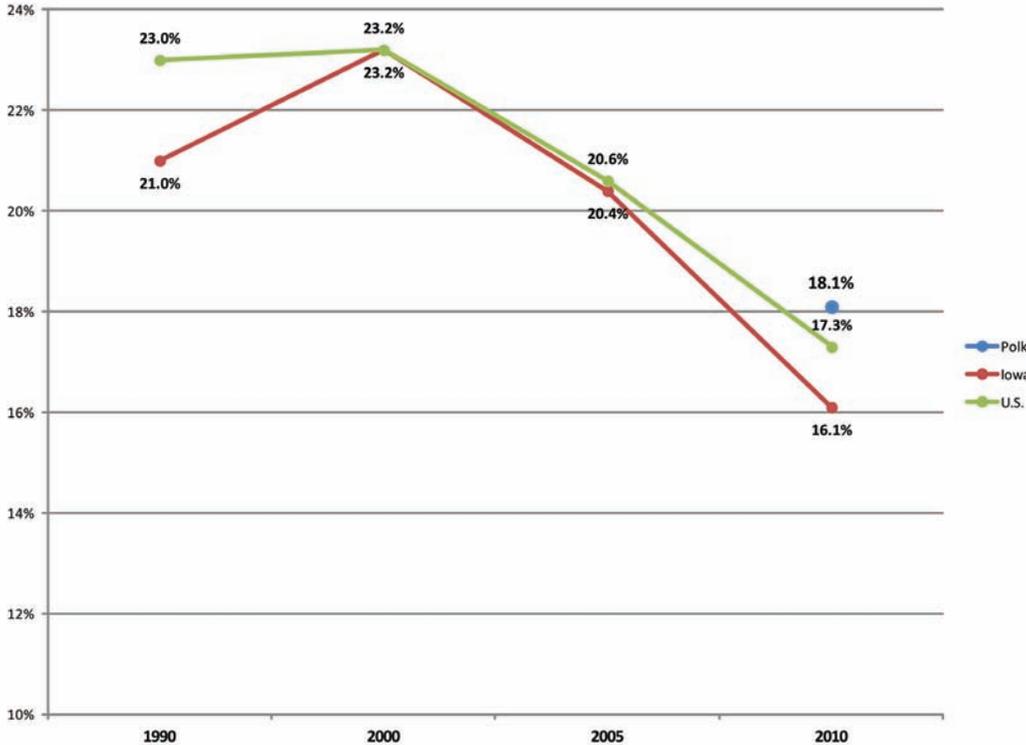
Diabetes often is a very debilitating disease and one which requires continuous medical attention for its control. While the figures do not show an increase in diabetes in Polk County, the national trends are very sobering.

Smoking

Polk County, Iowa and U.S.

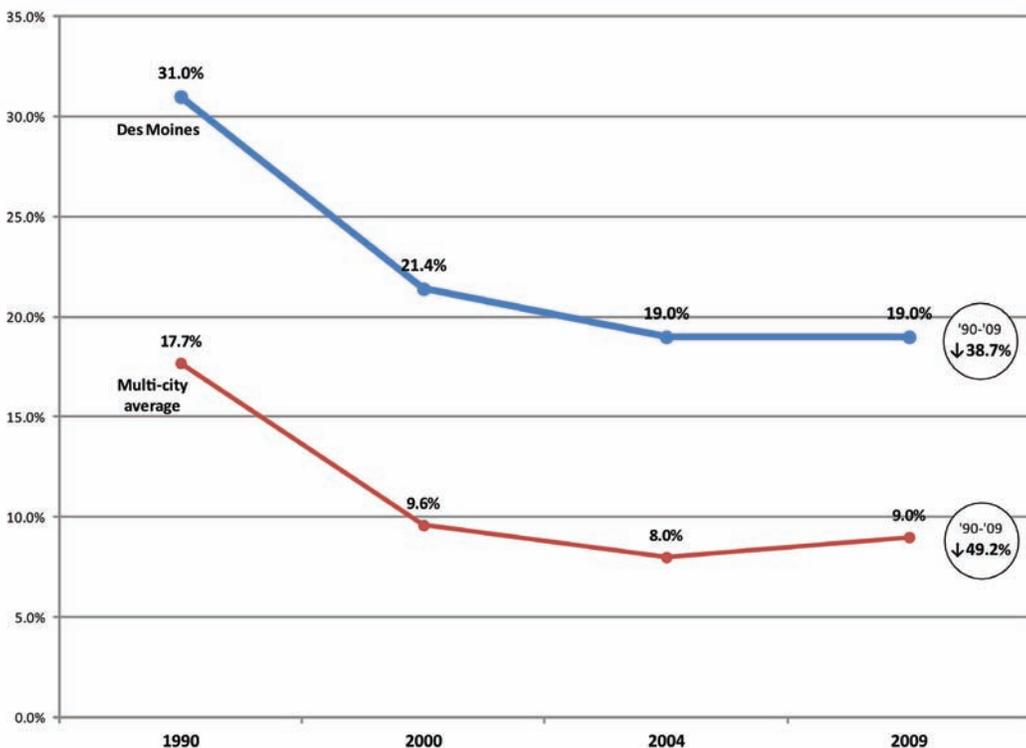
SOURCES: IOWA DEPARTMENT OF PUBLIC HEALTH, BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM AND CHILD TRENDS KIDS COUNT SPECIAL REPORT

Adult smoking rate, Polk County, Iowa and U.S., 1990-2010



Smoking is another leading cause of a variety of health disorders, including emphysema, cancer and other respiratory diseases. While there has been a dramatic reduction of smoking among Iowa youth, there has been a much more modest reduction in smoking among Iowa adults. As the chart shows, in 2010 Polk County's rate was slightly above that for both Iowa and the United States.

Smoking rate during pregnancy, 1990-2009



Nationally, Kids Count has reported on birth outcomes in the 50 largest cities in the country, plus several additional cities that include Des Moines. Des Moines ranks at the top of these cities in reported smoking during pregnancy, at nearly twice the average for these cities. The most recent report, for 2009, shows that almost one in five women giving birth in Des Moines reported smoking during pregnancy. The reasons for this high rate, given the adult smoking rate overall, is not apparent, but clearly deserves explanation and action.

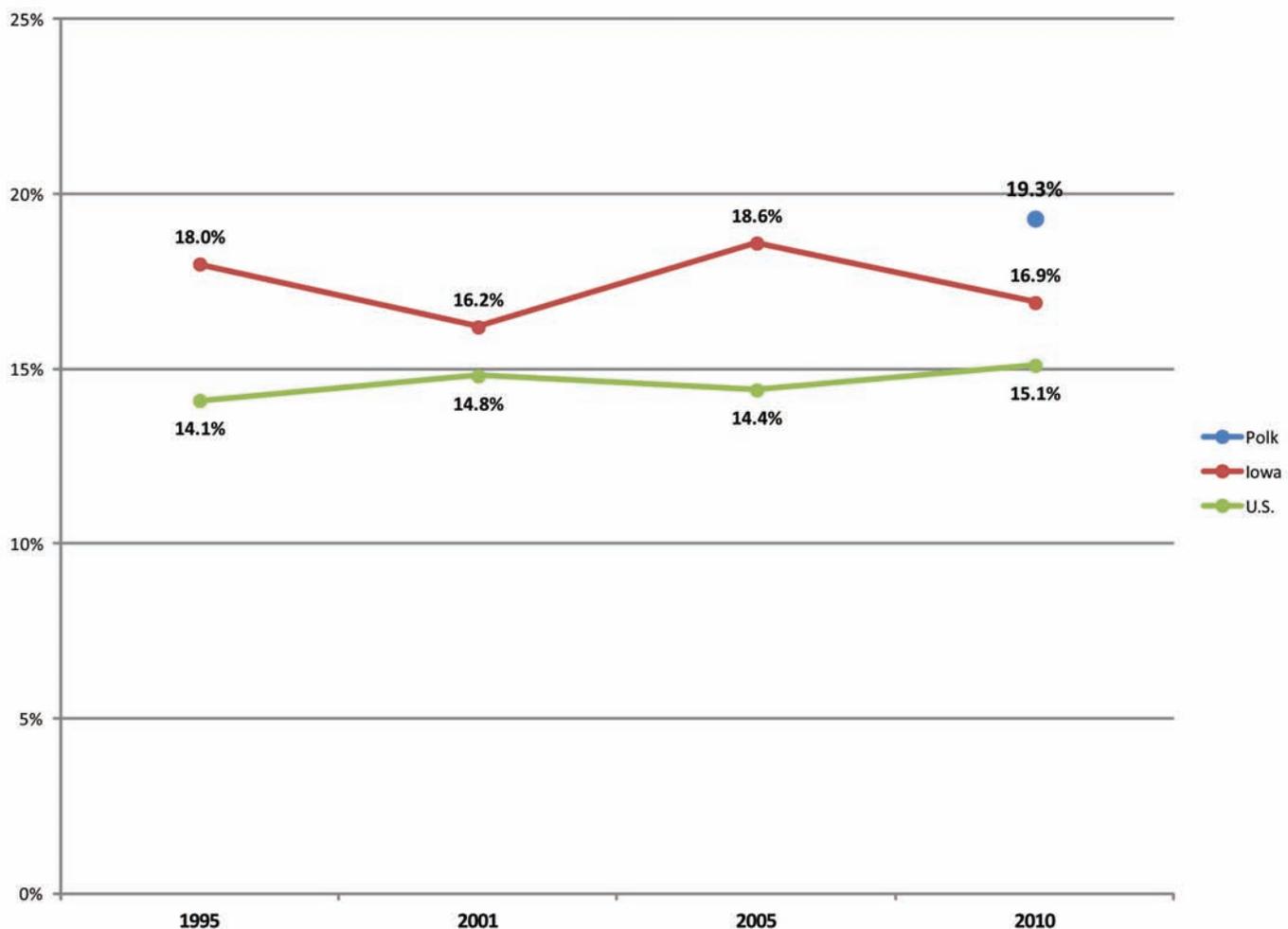
Alcohol (binge drinking)/drug use

Polk County, Iowa and U.S.

SOURCE: IOWA DEPARTMENT OF PUBLIC HEALTH, BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

As with smoking, alcohol and drug use affects health in multiple adverse ways. Information from the Centers for Disease Control and the Iowa Department of Public Health show that alcohol abuse, as measured by reported binge drinking among adults, is substantially higher in Iowa than the country as a whole. In 2010 (the year for which independent Polk County data is available), the data show that one in five Polk County adults has engaged in binge drinking in the past 30 days, and that risky behavior around alcohol remains a major health threat in society.

Rate of alcohol or drug abuse, 1995-2010



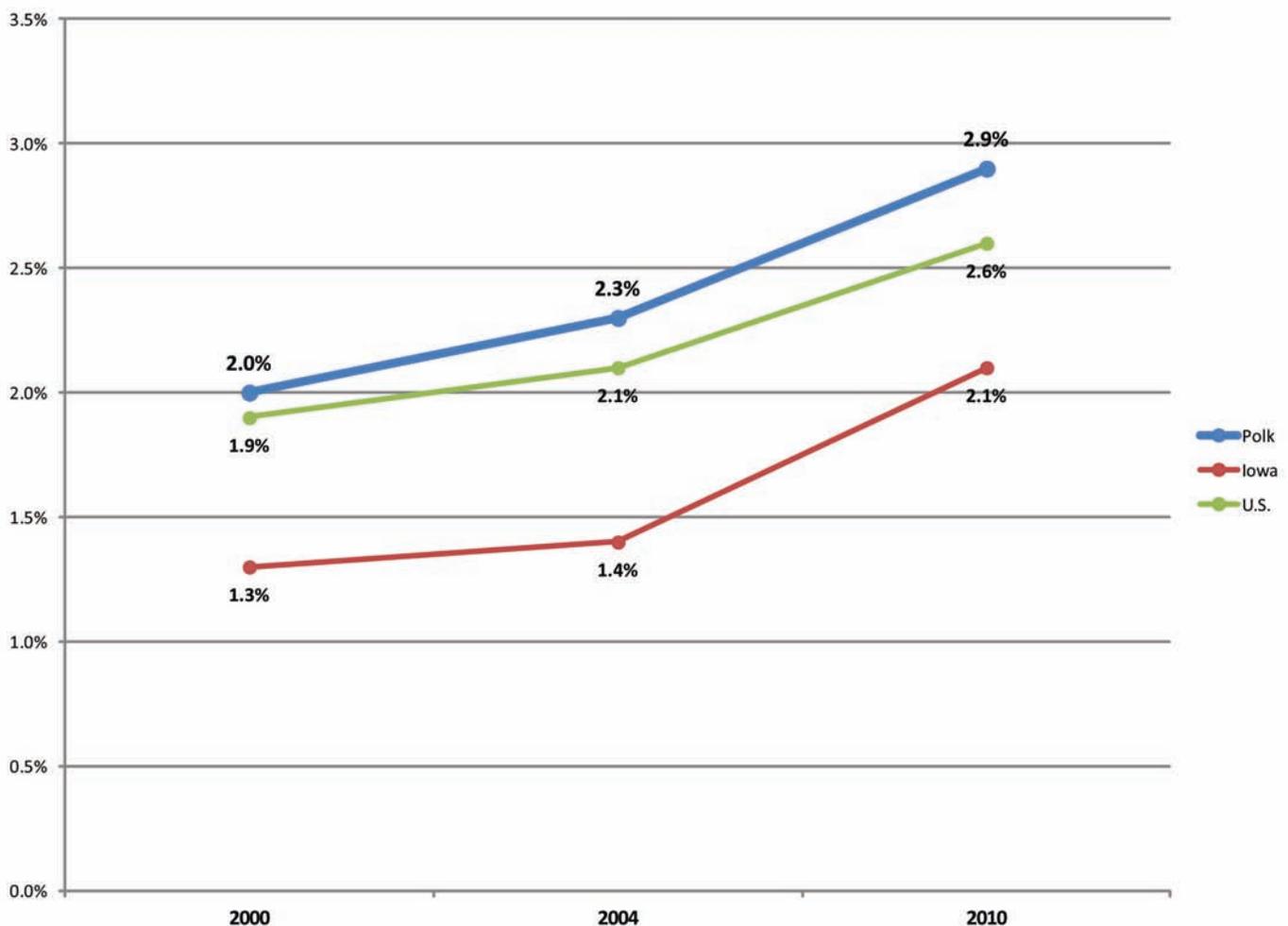
Sexually transmitted diseases

Polk County, Iowa and U.S.

SOURCE: IOWA DEPARTMENT OF PUBLIC HEALTH AND CENTERS FOR DISEASE CONTROL AND PREVENTION

The prevalence of sexually transmitted diseases among youth and young adults (15-24) is much higher in Polk County than the state of Iowa or the nation as a whole. In 2008, one in 30 young adults had a sexually transmitted disease in Polk County. National statistics indicate that the prevalence of sexually transmitted diseases has been on the increase, although STDs are truly preventable. The Polk County figures are a particular cause for concern.

Rate of sexually transmitted diseases among 15-24 year-olds, 2000-2010



HIV/AIDS

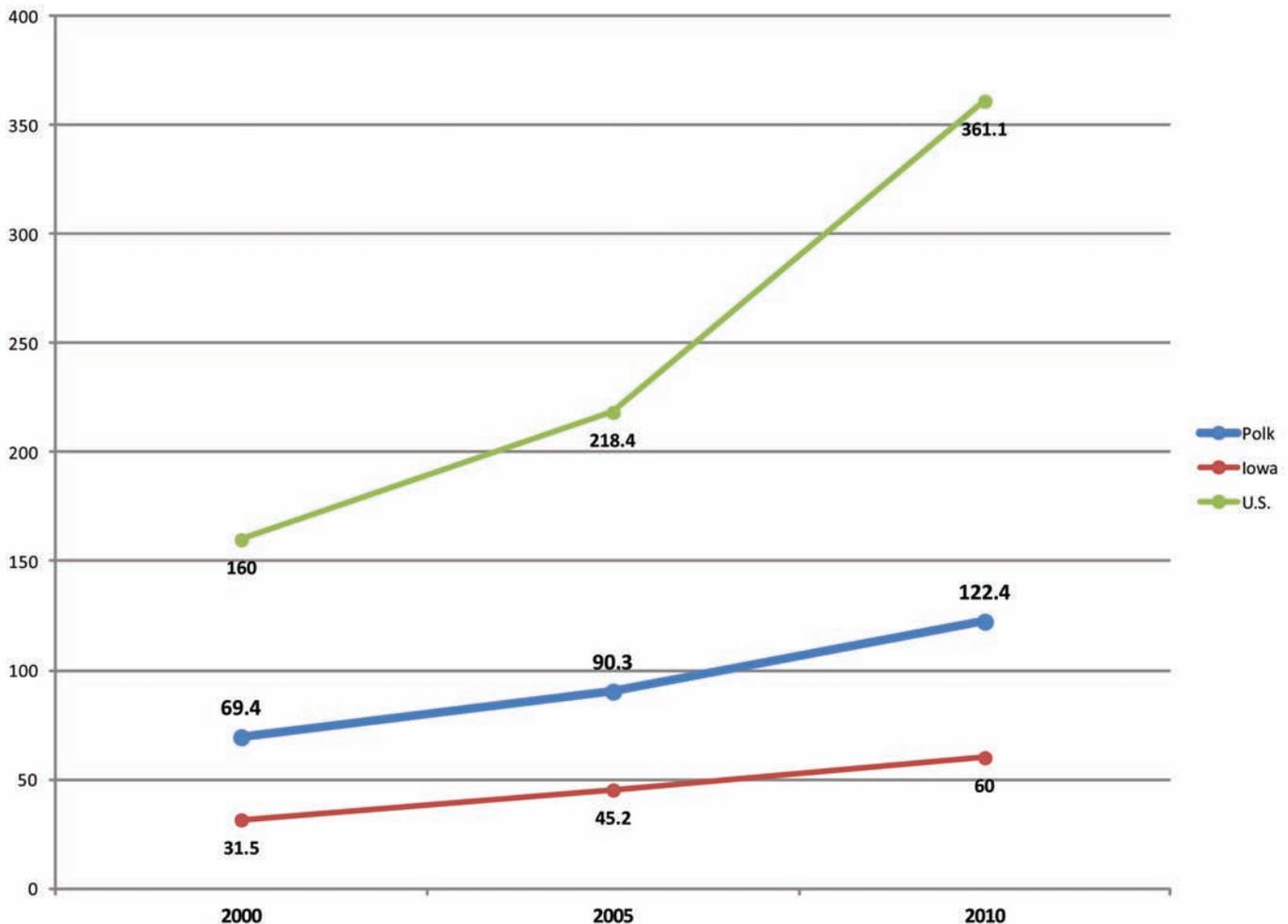
Polk County, Iowa and U.S.

SOURCES: IOWA DEPARTMENT OF PUBLIC HEALTH AND CENTERS FOR DISEASE CONTROL AND PREVENTION

Compared with other states, Iowa has few disease registries that track the prevalence of specific illnesses or health conditions. Iowa does have such a registry for HIV/AIDS, however, that includes county-level data.

While Iowa has much lower rates of HIV/AIDS than the country as a whole, there has been continued growth in the prevalence of HIV/AIDS in Polk County and Iowa that requires response. Between 2000 and 2010, HIV/AIDS grew by more than 50 percent in Polk County. Its rate in 2010 was double the rate in the state as a whole.

Cases of HIV/AIDS per 100,000 population, Polk County, Iowa and U.S., 1995-2010



Mental health Iowa and U.S.

SOURCE: CENTERS FOR DISEASE CONTROL AND PREVENTION, BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

Despite a lack of plentiful data available on the mental-health status of the population, mental illness is a major health concern that affects both the afflicted individual and that individual’s family. Maternal depression has been shown to have profound effects on children’s health and development.

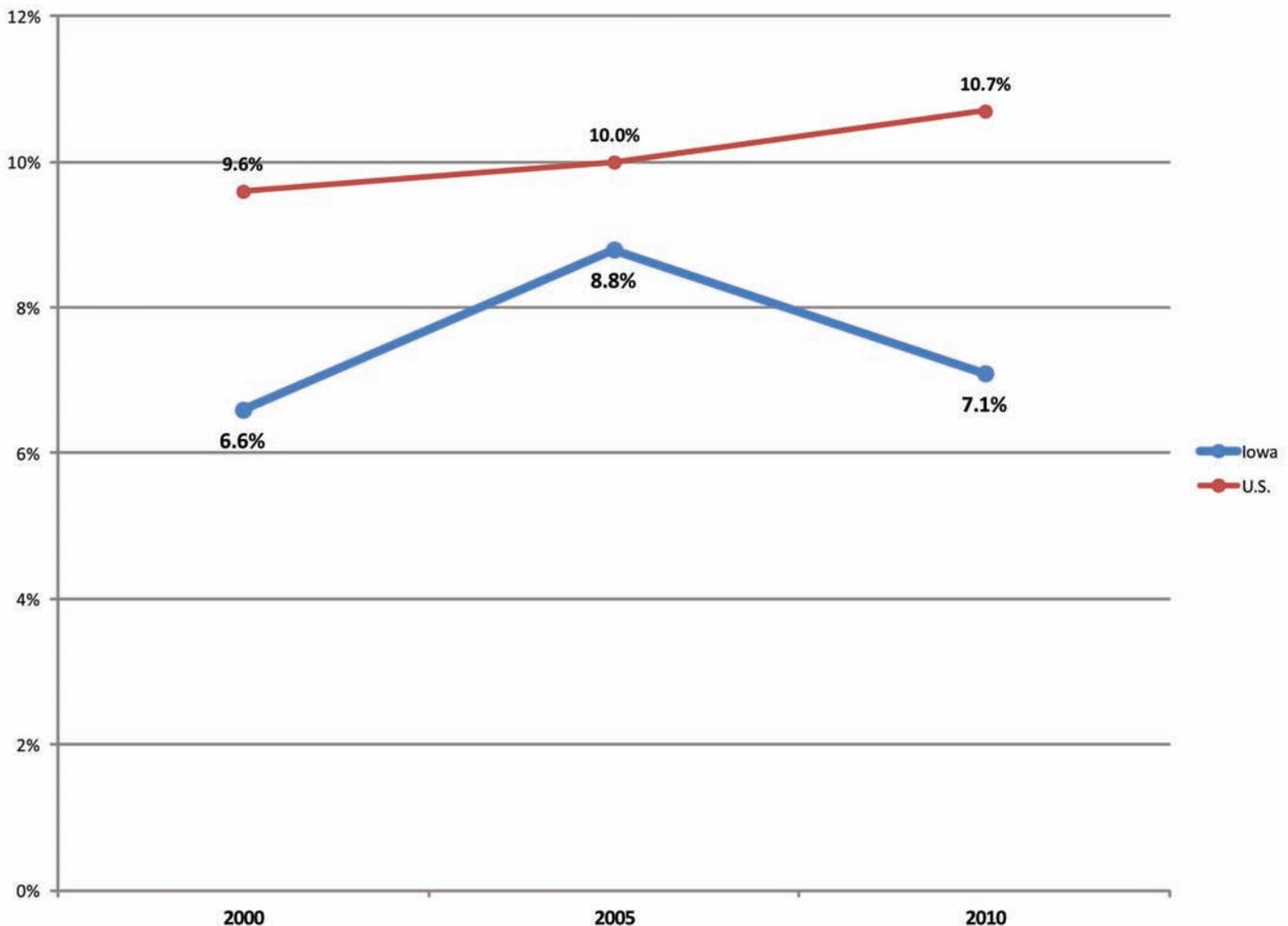
National survey data show that the prevalence of mental conditions—whether organic or situational—affects a large share of the Iowa population, although somewhat below that found nationally.

On the BRFSS survey, conducted by the Iowa Depart-

ment of Health in conjunction with the Centers for Disease Control and Prevention, respondents are asked, “Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?”

In 2010, over 7 percent of Iowa adults reported 14 or more mentally unhealthy days in the previous month. This survey question is indicative of mental health problems that can require attention and treatment.

Adults with 14 or more mentally unhealthy days in previous month, 2000-2010



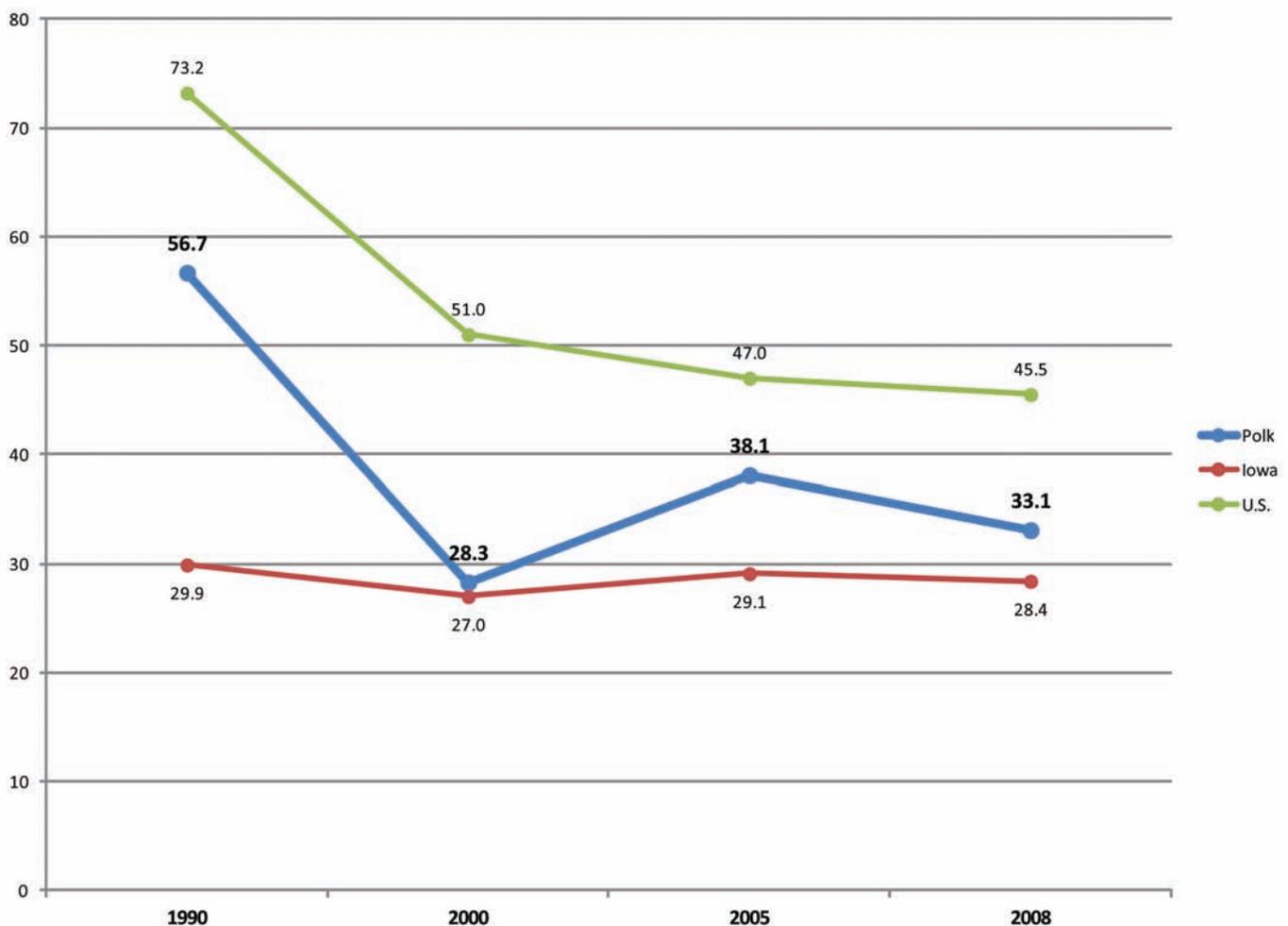
Violent crime

Polk County, Iowa and U.S.

SOURCE: NATIONAL ARCHIVE OF CRIMINAL JUSTICE, UNIFORM CRIME REPORTING PROGRAM AND FEDERAL BUREAU OF INVESTIGATION, UNIFORM CRIME REPORTS

Violent crimes represent a violation of personal and community health and safety. Perpetrators of violent crime themselves often have significant mental-health or substance-abuse problems. Violent crime reports declined in Polk County from 1990 to 2000, but have shown some increase since that period. They remain above the overall crime rate in Iowa, but well below the national level.

Violent crime reports per 10,000 population, 1990-2008



Health insurance coverage

Polk County, Iowa and U.S.

SOURCE: U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY

As with child health insurance coverage, until 2010, information on health coverage for adults was only available at the state and national levels. Data from 2010 shows the rate of coverage in Polk County to be very near the statewide average of 13.5 percent.

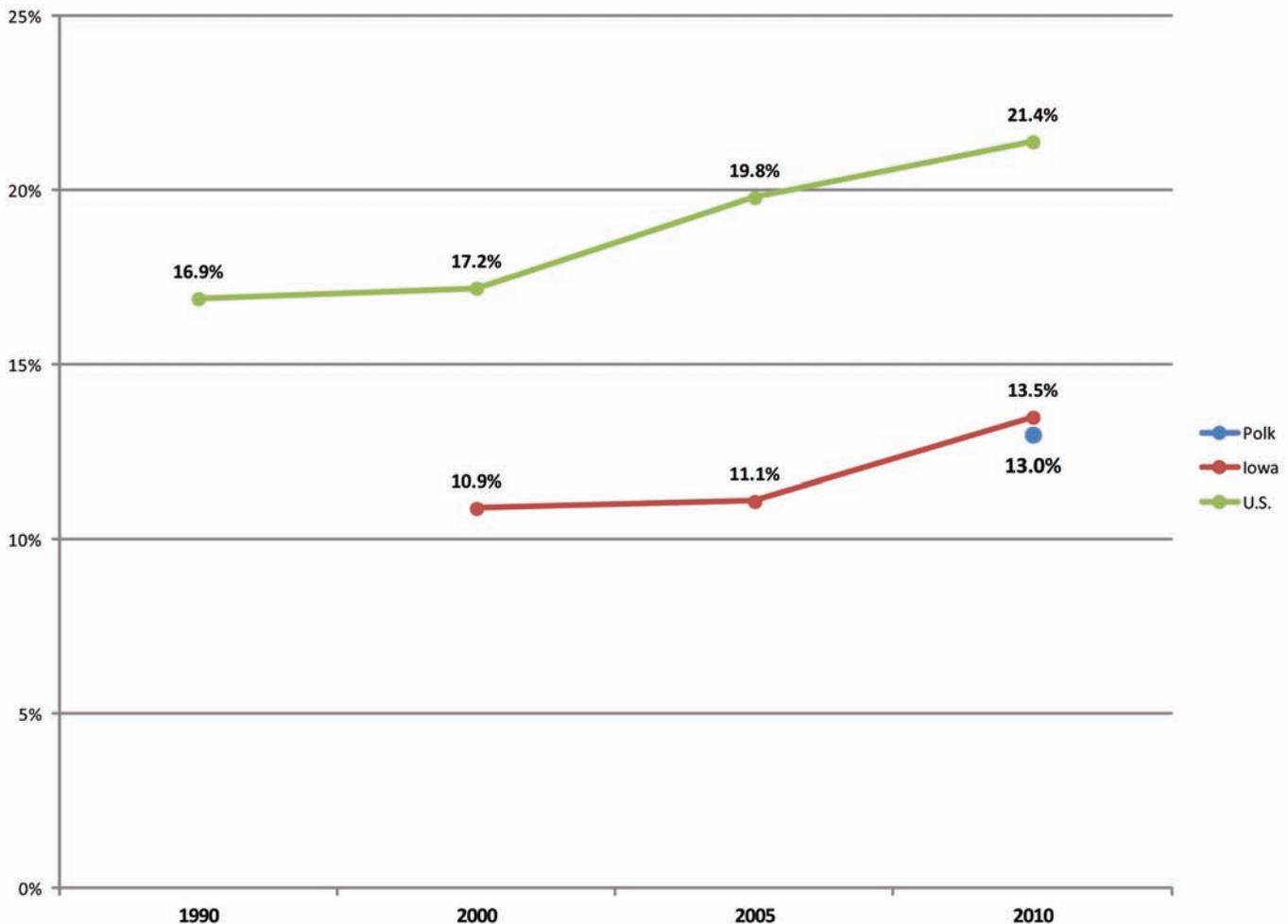
By comparison, health coverage for those over age 65 is near universal, due to Medicare and Medicaid. Due to gains in public health insurance programs for children (see page 25), only 4 percent of Iowa kids are uninsured.

The adult rate reflects the fact that fewer policy changes for adults have gone into effect, although

most elements of federal health reform, including provisions to cover more adults, are set to begin in 2014. Recently young adults became eligible for coverage under parents' family policies.

The figures below show the share of uninsured people, but not the share of Iowans who are underinsured or have high health expenditures even though insured.

Percent of adults 18-64 uninsured, 1990-2010



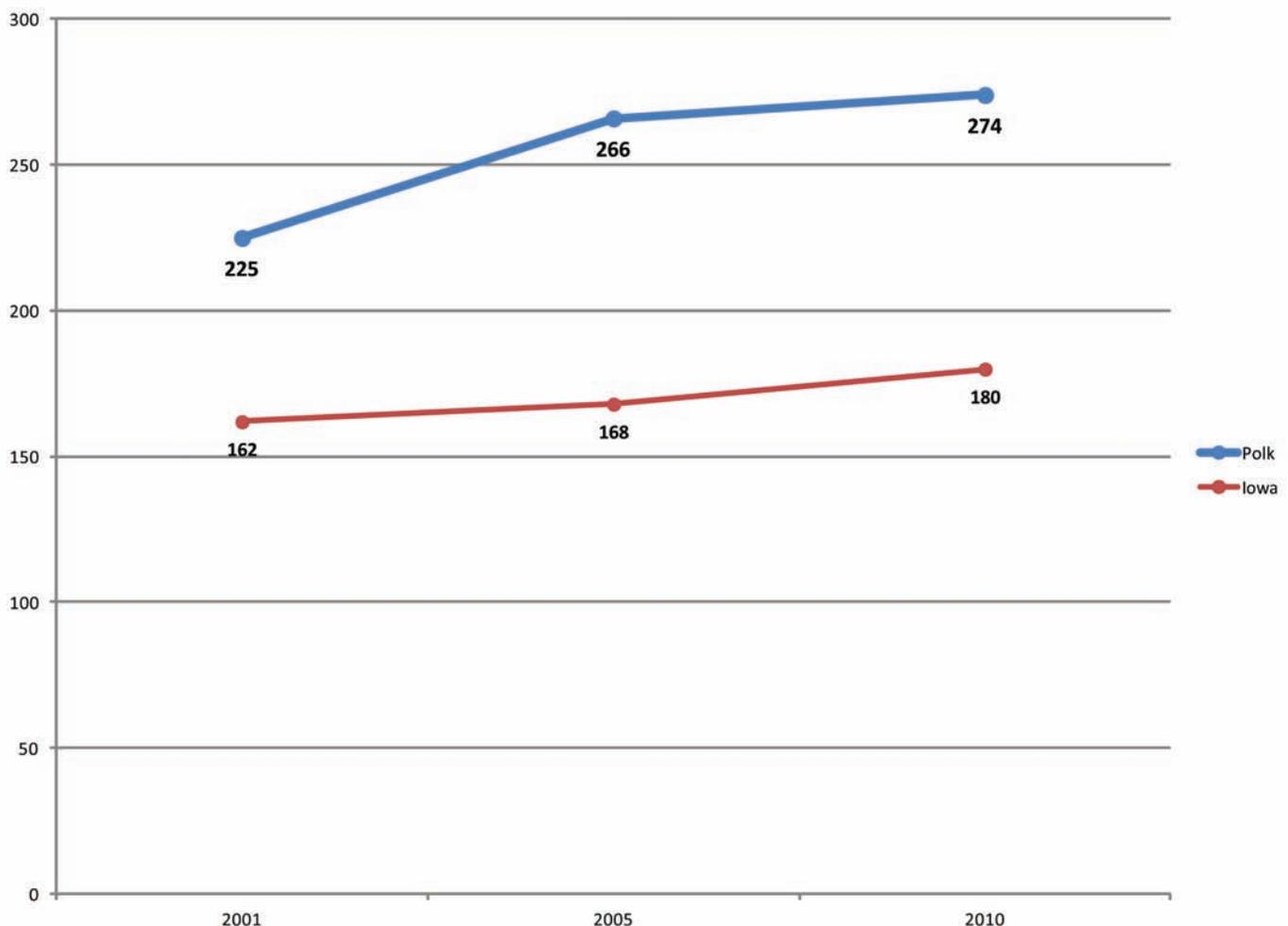
Number of health practitioners

Polk County and Iowa

SOURCE: IOWA HEALTH FACT BOOK

One further measure of the availability of health services relates to the number of practicing physicians per 100,000 population. Polk County fares well compared to the state as a whole on the availability of practicing physicians, and the proportion has grown over the last eight years. Polk County could face challenges in the future in maintaining the needed practicing physician base, however, as the Polk County population ages.

Practicing physicians per 100,000 population, Polk County and Iowa, 2001-2010



Poverty by age group

Polk County

SOURCE: U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY

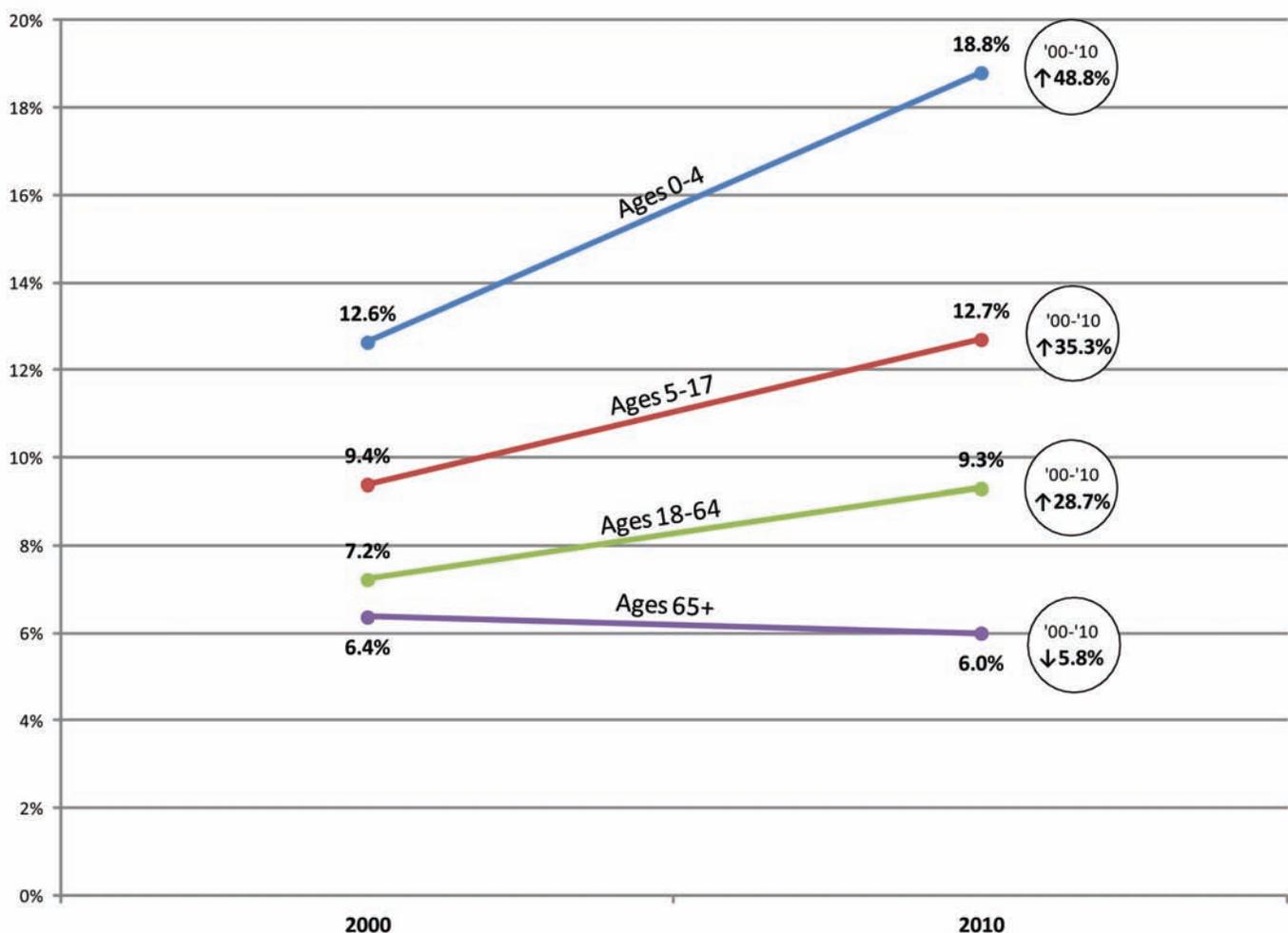
Individuals and families need sufficient resources to meet their basic needs—food, shelter, and access to needed services, including health services. Generally, individuals living at or below the poverty level are dependent on government services and supports (food stamps, medical benefits and other income supports) or equivalent supports from family and community simply to get by and meet essential needs. They have no margin for error.

The most common measure of poverty is the federal poverty level, \$22,050 for a family of four in 2010.

Currently, children in Polk County are much more likely to live in poverty than either working-age adults or seniors, and the youngest children are most likely of all.

In addition, the poverty rate among children, especially the youngest children, grew significantly between 2000 and 2010, faster than the increase for working-age adults. There was actually a decline in the share of seniors living in poverty, despite the Great Recession.

Percentage of population below 100 percent of poverty by age group, 2000-2010



Families below 185% of poverty

Polk County, Iowa and U.S.

SOURCE: U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY

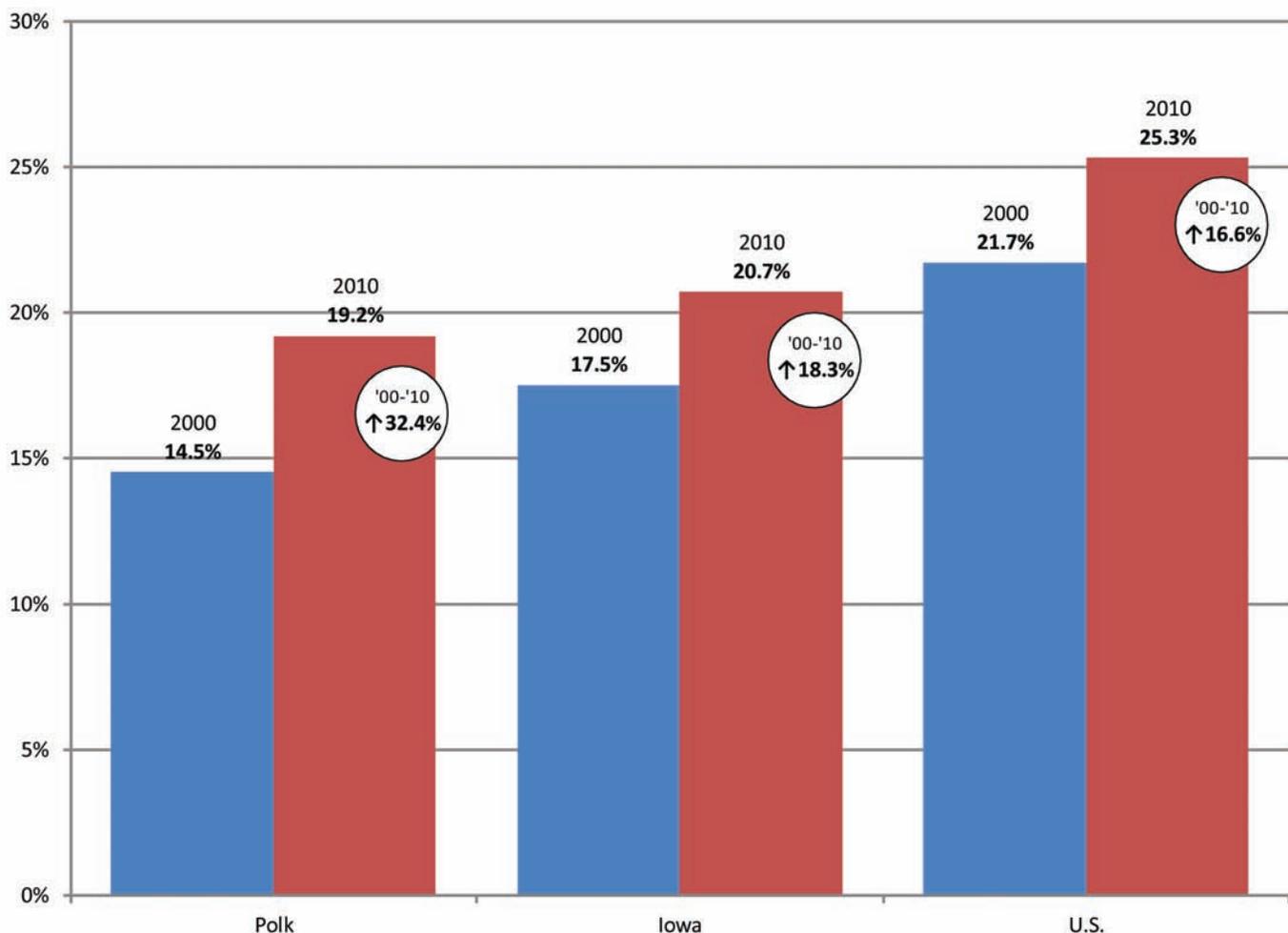
The most common measure of poverty is the federal poverty level (highlighted on page 37). However, self-sufficiency studies show that that level is actually far too low for households to meet basic needs, and that 185 percent of the federal poverty level is a more realistic measure of the resources it takes to support a household.

An examination of households with children shows an increase in the sharing living below 185 percent of the federal poverty level from 2000 to 2010, with more nearly one in five Polk County households—

households home to 33 percent of Polk County children—falling in this category in 2010.

Seniors are less likely to live in poverty than children or working-age adults during times of recession, as Social Security and other retirement income is less affected than adult- and parent-wage income.

Percent of families below 185 percent of poverty, 2000-2010

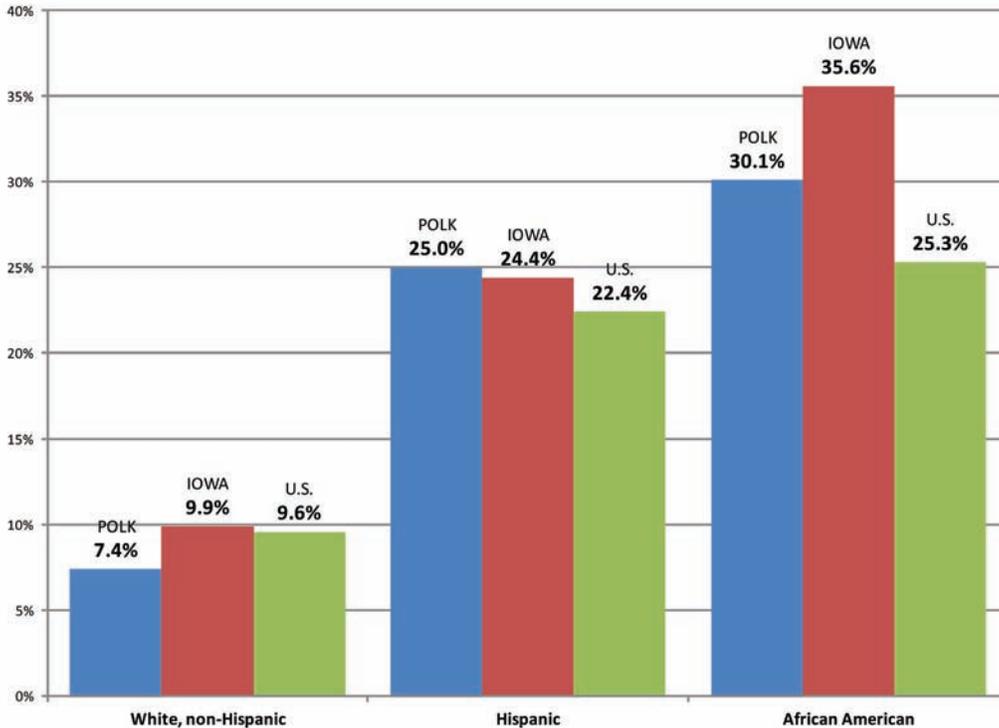


Poverty rate by race/ethnicity

Polk County, Iowa, U.S., Des Moines and rest of Polk

SOURCE: U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY

Percent of total population below 100 percent of poverty by race/ethnicity, 2010

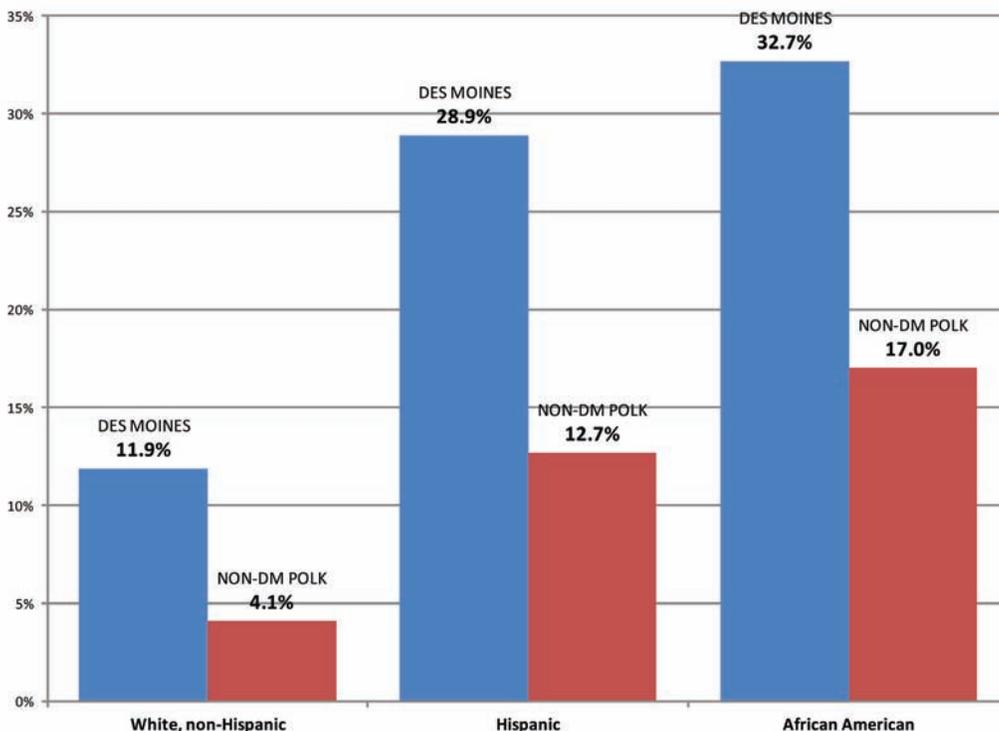


In addition to disparities in poverty rates by age, disparities also exist when poverty rates are broken down by race and ethnicity.

Currently, children in Polk County of any race or ethnicity are much more likely to live in poverty than either working-age adults or seniors. While declining between 1990 and 2000, the poverty rate among children increased significantly in the subsequent decade.

Poverty varies dramatically by race and ethnicity. While the poverty rate for white, non-Hispanics in Polk County is below the Iowa and U.S. average, the rates for African Americans and Hispanics are higher, meaning great disparities in Polk County and Iowa than the rest of the country on this important indicator of well-being.

Poverty rates also are much higher in Des Moines than the rest of Polk County. Although similar disparities exist by race and ethnicity, Des Moines residents of all races and ethnicities generally are twice as likely or more to be in poverty than those in non-Des Moines Polk County.



Poverty by race/ethnicity and age

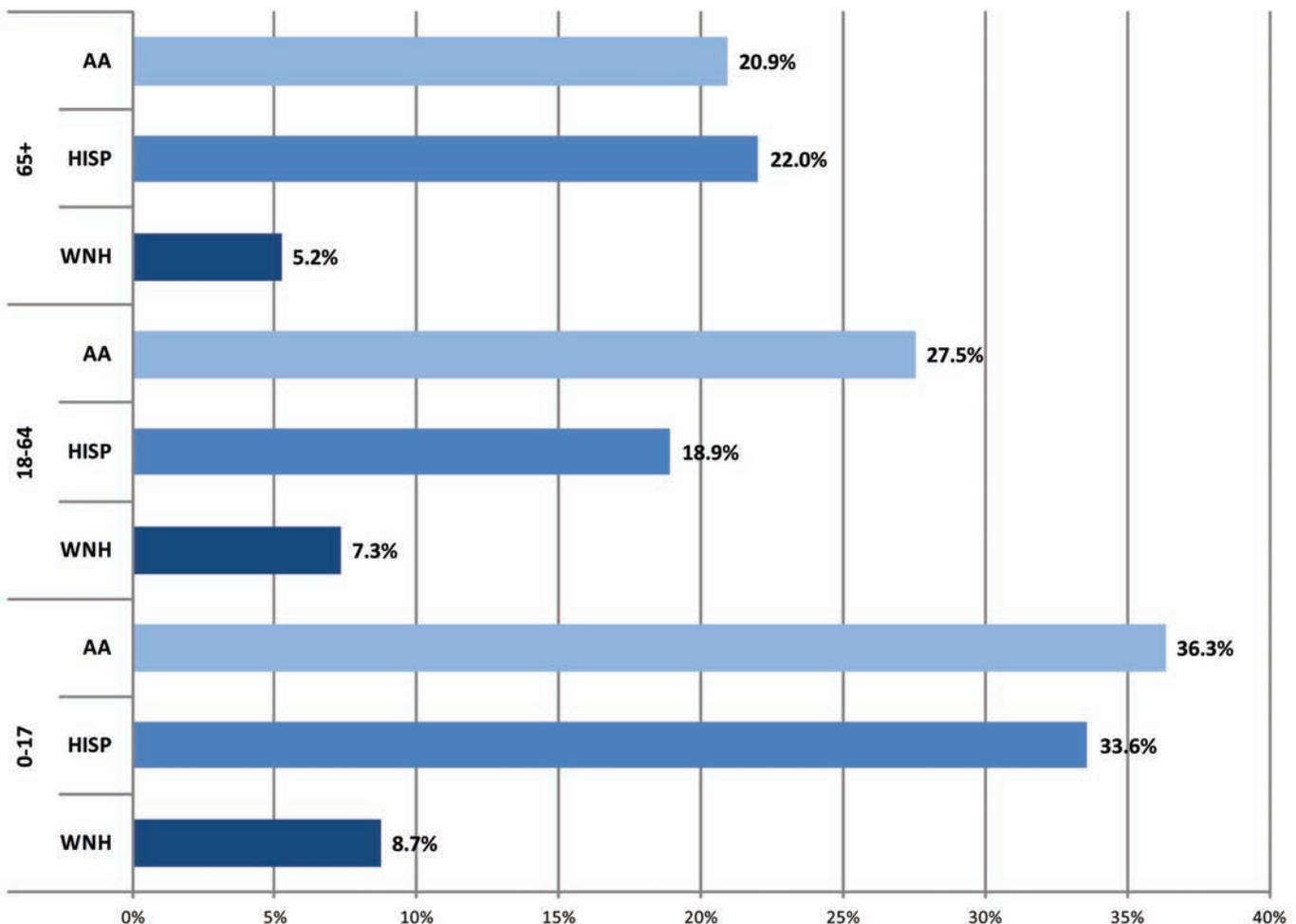
Polk County

SOURCE: U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY

In addition to disparities in poverty rates by ethnicity and race, disparities also exist when those poverty rates are further broken down by age. African-American and Hispanic children and seniors being about four times as likely to live in poverty than white, non-Hispanic children.

Poverty rate disparities, although somewhat less for the working-age population, are still profound.

Percent of population below 100 percent of poverty by race/ethnicity and age, 2010



Unemployment

Polk County, Iowa and U.S.

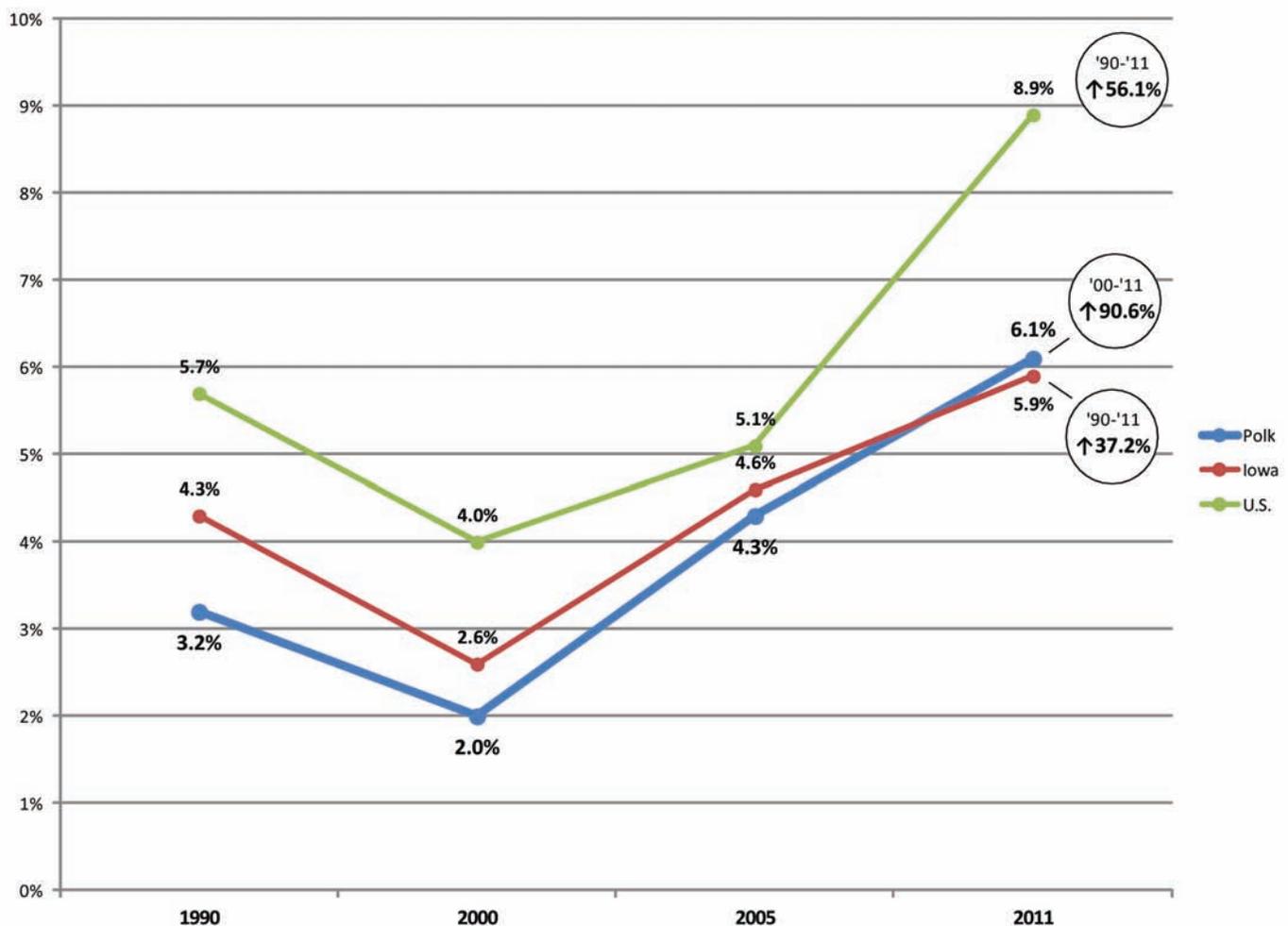
SOURCE: IOWA WORKFORCE DEVELOPMENT

Among adults, work is related to health and well-being, in the ability to economically provide for oneself and one's family and for the ability to socially and emotionally establish connections to the community. Persons actively seeking but unable to find work (what unemployment figures measure) are less likely to be able to secure health services and more likely to need them.

Historically, Polk County has had relatively low rates of unemployment, compared with Iowa and the country. The current recession has raised

Polk County's unemployment rate above the state average, nearly doubling the rate since 1990. Polk County and Iowa still have overall unemployment rates below the national average.

Unemployment rate, 1990-2011

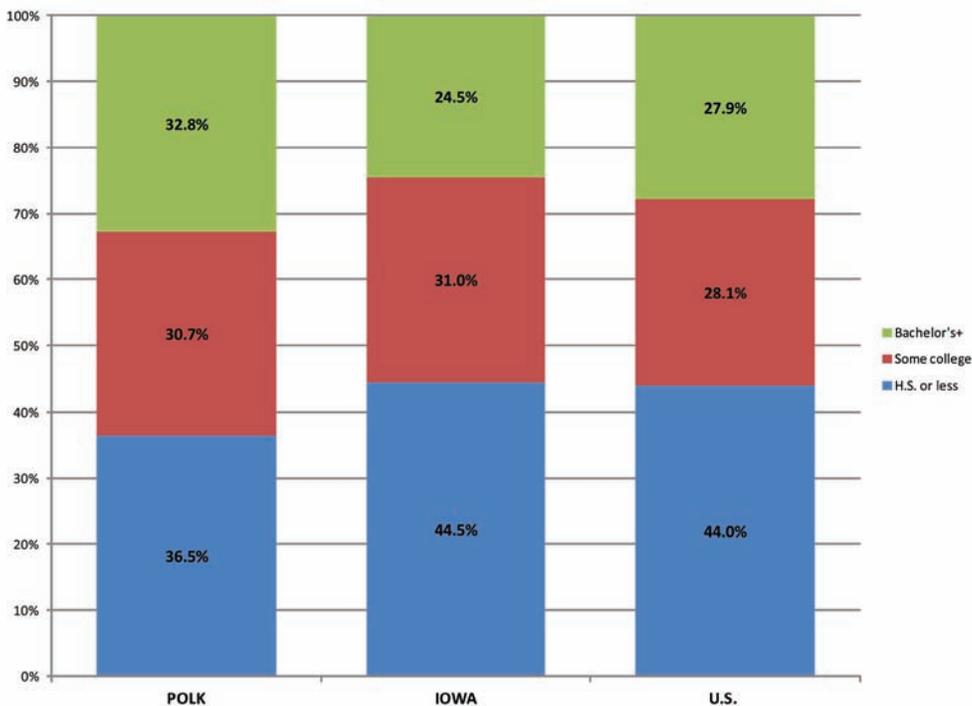


Educational attainment

Polk County, Iowa, U.S., Des Moines and rest of Polk

SOURCE: U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY

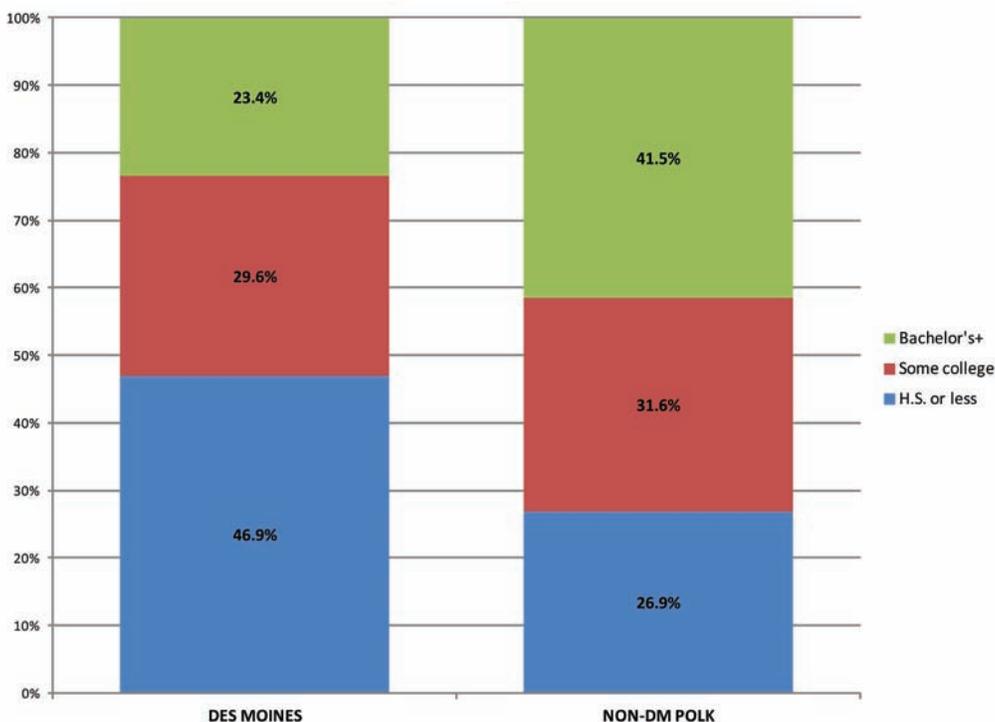
Adult (age 25+) educational attainment, 2010



High levels of education and skills are increasingly important in the 21st century economy. While Iowa leads the nation in the proportion of its adult population with at least a high school diploma, it lags the country as a whole in college-educated adults.

The information here shows that nearly one-third of Polk County's adult population has at least a bachelor's degree, which is above the state and national figures as a whole. While this bodes well, for Polk County to continue to grow and be a healthy and vibrant community, this percentage will need to continue to grow.

The adult population in Des Moines is far less likely than the suburban adult population to have a bachelor's degree or higher and far more likely to have a high school diploma or less.



Single parenting

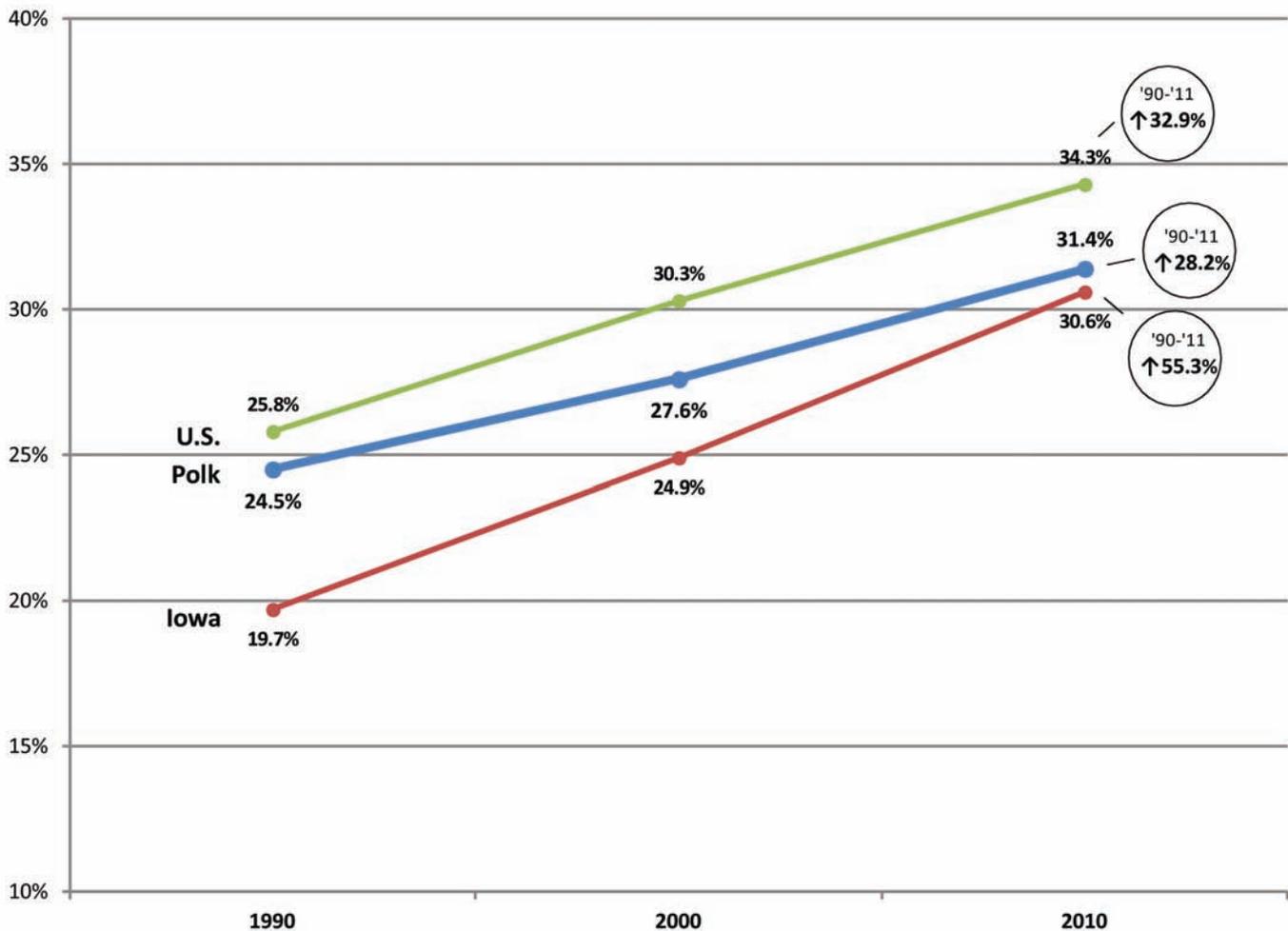
Polk County, Iowa and U.S.

SOURCE: U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY

On average, children do best in households where there are at least two adult sources of social and emotional support. Further, it often requires two adult sources of income to raise a family. While many single parents do an excellent job raising their children, others struggle, and the growth and high level of single parenting in America is a source of concern.

As with Iowa and the country as a whole, three in 10 Polk County families with children are headed by a single parent, and more children than that will live in a single-parent home for at least part of their developing years.

Percent of families with children headed by single parent, 2010



Grandparents raising grandchildren

Polk County, Iowa and U.S.

SOURCE: U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY

The rate of single parenting tells only part of the story of changes in households. In addition to single parenting, there also has been a dramatic increase in the proportion of households where grandparents are raising their grandchildren. This has caused the U.S. Census Bureau to begin collecting information on grandparents living in households with children and grandparents responsible for raising their grandchildren in those households.

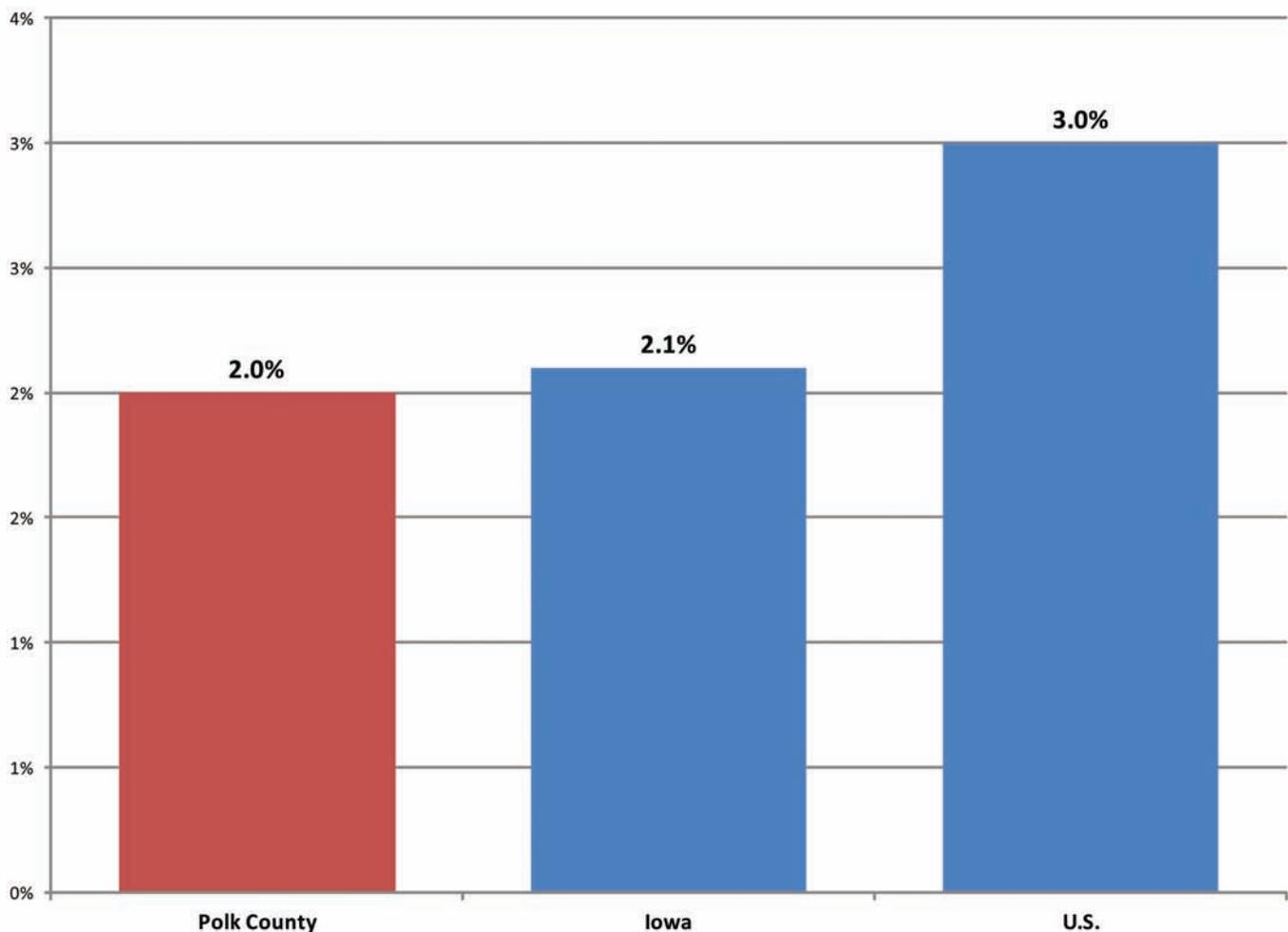
Programs and services often are designed primarily for parents and their children; increasing attention

needs to be given to providing supports for grandparents who are the primary caregivers for their grandchildren, as well.

In Polk County, over 2,500 children were being raised by their grandparents in 2010. The health needs of those grandparents also need to be given consideration.

	Polk County	Iowa	U.S.
Children under 18 living with grandparent	6,539	36,216	7,010,181
Children under 18 with grandparent responsible for grandchildren	2,533	17,815	2,738,300

Percent of all children living with a grandparent responsible for grandchildren, 2010



Births to adolescents

Polk County, Iowa and U.S.

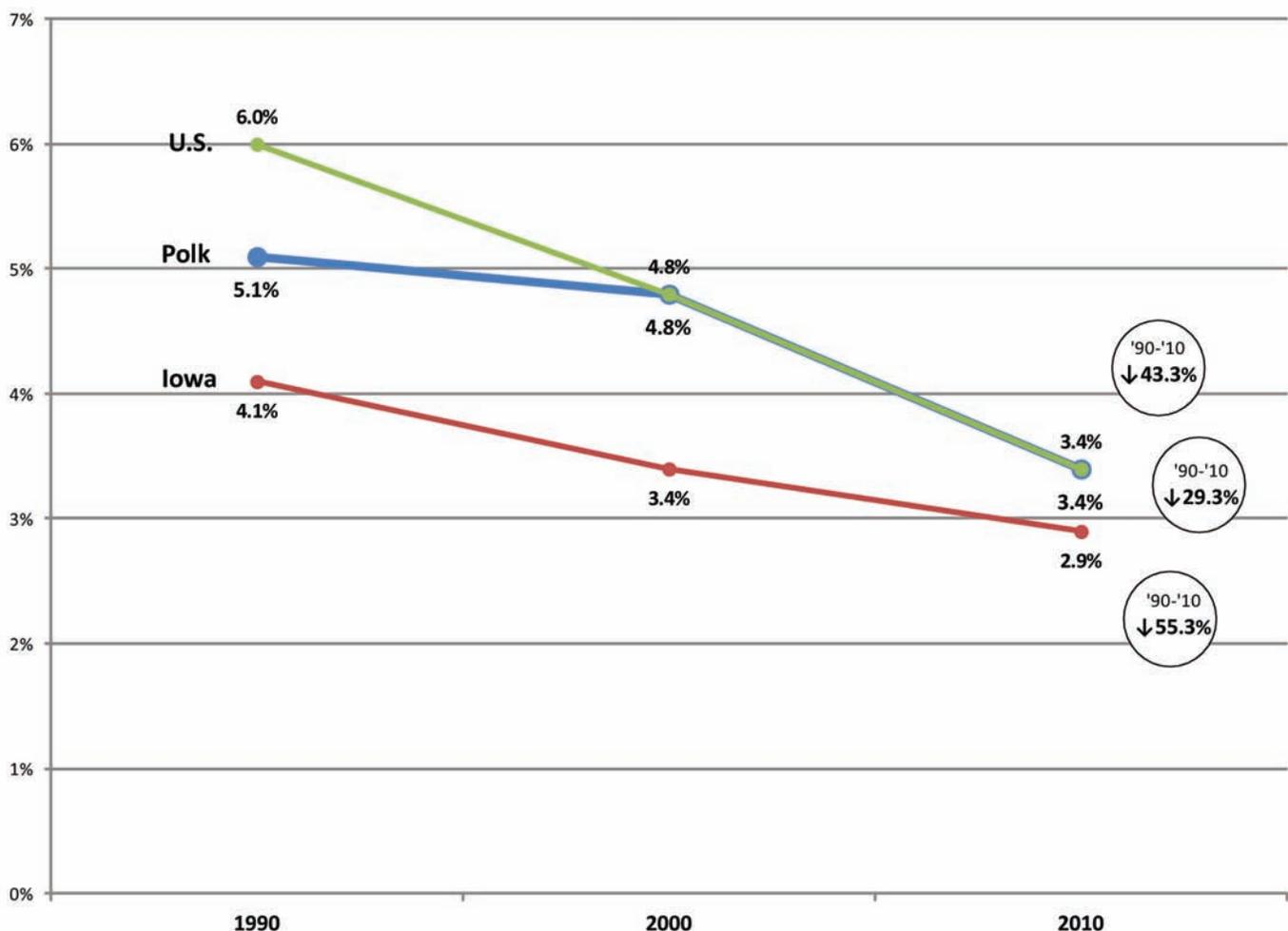
SOURCE: IOWA DEPARTMENT OF PUBLIC HEALTH

When adolescents (15- to 19-year-olds) have children, their own educational and maturational needs are disrupted. They generally are not prepared for parenthood. Even if married, these relationships often are not stable. Adolescent parents face many challenges, and their children's healthy development often is very much jeopardized, as a result.

percent in 2010) has mirrored that of the country as a whole, while slightly exceeding Iowa's rate.

Fortunately, the rate of adolescent parenting has been declining in Polk County, in Iowa, and in the U.S. Since 2000, Polk County's adolescent birthrate (3.4

Percent of births to teens (ages 15-19), 1990-2010

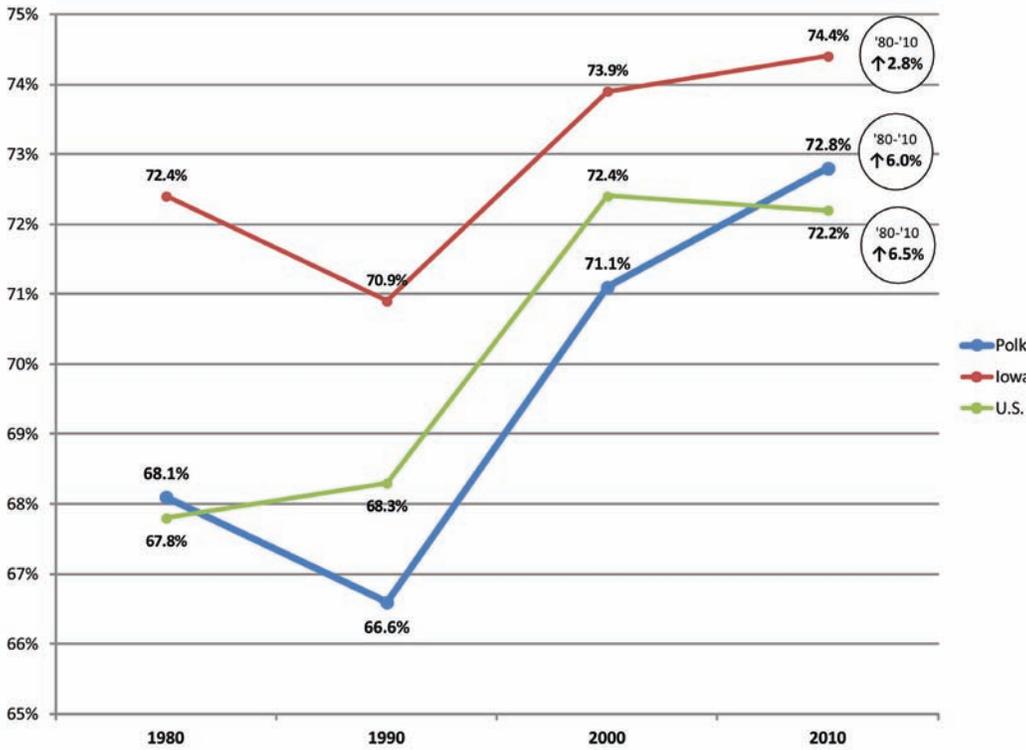


Homeownership

Polk County, Iowa and U.S.

SOURCE: U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY

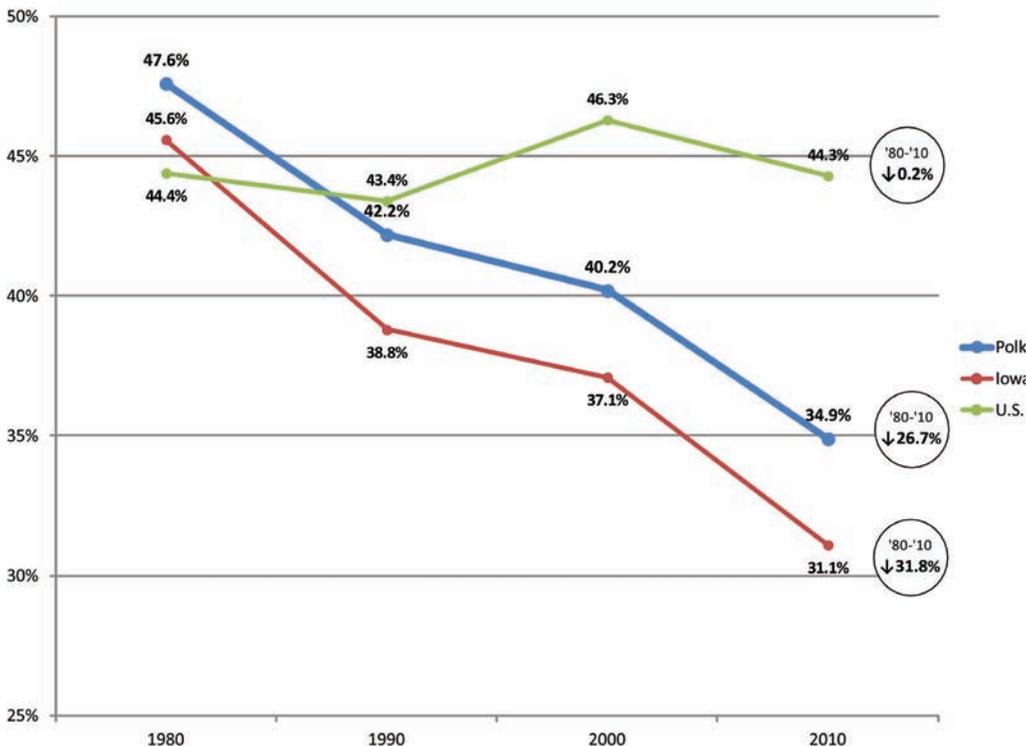
Homeownership rate among white, non-Hispanics, 1980-2010



In general, home ownership is a sign of stability and connectedness. It has been a primary means for households to establish roots, acquire wealth, and maintain a good credit status. The recent mortgage crisis again called attention to the fact that lower-income families have the most challenges in securing housing and home ownership as a means toward economic security.

In general, home ownership in Polk County, as measured by the percentage of owner-occupied households, has been at or above national rates, but trends over the three decades (1980-2010) show that home ownership among African-American and Hispanic households has been on the sharp decline, which is not at all reflective of national trends.

Homeownership rate among African Americans, 1980-2010



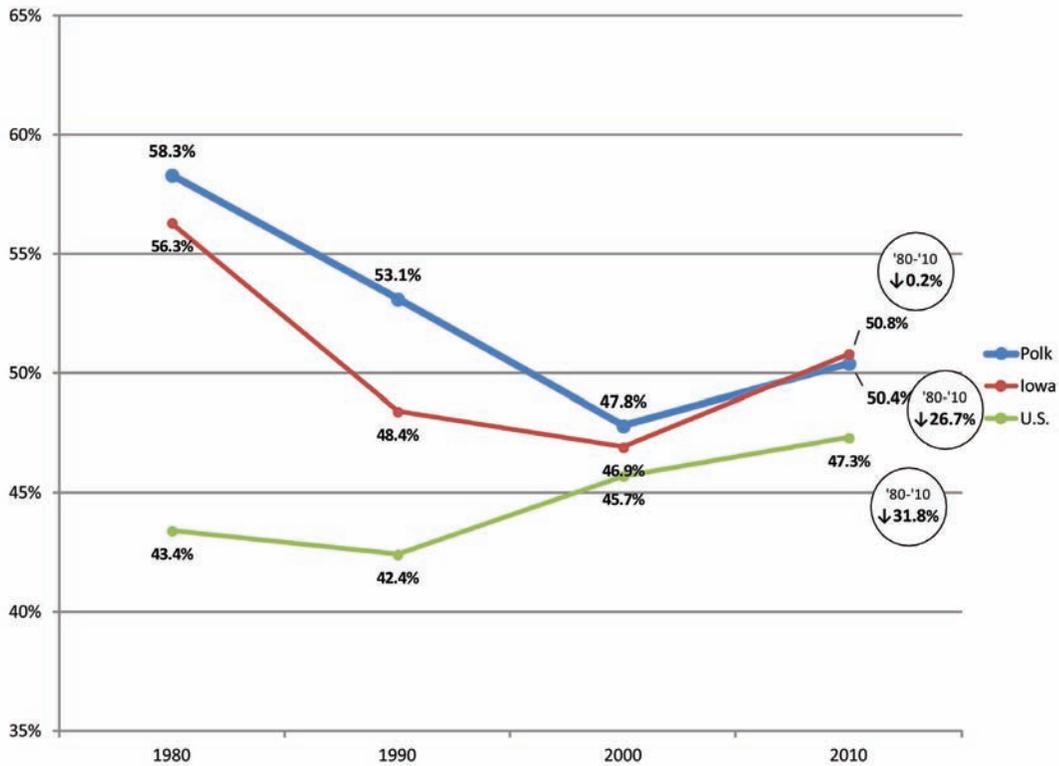
The subprime mortgage crisis likely exacerbated this overall trend. One of the most immediate challenges Polk County faces in providing healthy environments for its residents is likely to be in addressing housing needs, particularly among lower- and moderate-income families.

Homeownership

Polk County, Iowa and U.S.

SOURCE: U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY

Homeownership rate among Hispanics, 1980-2010



Socio-economic measures

Urban Core, Polk County and Iowa

The chartbook has shown the very different health and social patterns in the city of Des Moines and suburban Polk County. But there are also distinct patterns within the city itself. Des Moines has approximately 8 percent of the state's population, but about 22 percent of the non-student, high-poverty census tracts (poverty above 30 percent) in the state.

The neighborhoods, concentrated in the central part of the city (sometimes called the "urban core"), are the most diverse and the poorest of the neighborhoods in the city and the state, and deserve attention in their own right. Improving health in these areas requires community-building as well as individual service strategies.

	Urban Core	Polk County	Iowa
Population by race/ethnicity			
Total Population			
White, non-Hispanic	35.2%	80.7%	88.7%
Black or African American	27.2%	6.0%	2.9%
Asian/Pacific Islander	7.8%	3.5%	1.7%
Hispanic	25.9%	7.6%	5.0%
0-17 Population			
White, non-Hispanic	17.4%	70.7%	81.5%
Black or African American	32.2%	8.3%	4.3%
Asian/Pacific Islander	6.8%	3.8%	1.8%
Hispanic	36.4%	12.4%	8.7%
Family structure			
Families with both parents	45.0%	68.8%	70.1%
With one parent	44.9%	26.2%	25.3%
Live with grandparent(s)	10.2%	5.0%	4.6%
Housing tenure			
Owner-occupied units	42.0%	69.1%	72.1%

	Urban Core	Polk County
Poverty rates by age		
Ages 0-4	53.7%	18.8%
Ages 5-17	29.9%	9.3%
Ages 18-64	29.9%	9.3%
Ages 65+	17.7%	6.0%
Household income		
\$0-24,999	46.5%	20.1%
\$25,000-\$74,999	45.6%	44.8%
\$75,000+	7.9%	35.2%
Educational attainment		
Less than H.S.	31.2%	9.1%
H.S. or equiv.	34.1%	27.3%
Some college	25.9%	30.7%
Bachelor's	6.5%	23.4%
Grad degree	2.3%	9.5%

Polk County health rank

Metro counties and Iowa

With support from the Robert Wood Johnson Foundation, the Population Health Institute at the University of Wisconsin provides county health rankings for all states as part of a Roadmaps to Health Initiative (www.countyhealthrankings.org). The Polk County Health Chartbook has drawn from many of the same data sources as the Roadmaps to Health, but gone into much more detail in describing many of the indicators used, as well as providing additional indicators.

What Roadmaps to Health does that the Chartbook has not done is provide an overall county ranking, in comparison with all 99 Iowa counties.

According to the Population Health Institute, in 2012 Polk County ranked 64th among Iowa's 99 counties on overall community health. Using a framework that included 28 factors, Polk County scored well on clinical care (16) and health behaviors (38); average on social and economic factors (51); and poorly on physical environment (48), mortality (56), and morbidity (69).

The Institute used the following framework to describe needed conditions for good health outcomes:

	Physical Environment	10%
+	Social and Economic Factors	40%
+	Clinical Care	20%
+	<u>Health Behaviors</u>	<u>30%</u>
=	Health Outcomes	100%

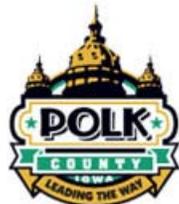
See next page for full ranking for Iowa and the five Des Moines-West Des Moines metropolitan area counties.

County health rankings

Metro counties and Iowa

SOURCE: POPULATION HEALTH INSTITUTE

	Iowa	Dallas	Guthrie	Madison	Polk	Warren
Health Outcomes Ranking		22	39	34	64	46
Mortality (ranking)		7	42	27	56	32
Premature death	6,012	4,591	5,935	5,288	6,258	5,390
Morbidity (ranking)		66	36	58	69	76
Poor or fair health	12%	10%	9%	10%	11%	14%
Poor physical health days	2.8	3.1	3.0	2.8	2.8	3.5
Poor mental health days	2.7	2.8	1.2	3.3	2.9	2.9
Low birthweight	6.8%	7.0%	7.0%	6.6%	7.1%	6.4%
Health Factors Ranking		5	27	24	40	22
Health Behaviors (ranking)		12	14	8	38	57
Adult smoking	19%	14%	12%	15%	20%	17%
Adult obesity	29%	30%	30%	29%	28%	35%
Physical inactivity	25%	23%	28%	22%	24%	27%
Excessive drinking	20%	20%	12%	15%	20%	17%
Motor vehicle crash death rate	15	12	29		11	13
Sexually transmitted infections	313	82	91	116	384	129
Teen birth rate	33	24	24	28	44	22
Clinical Care (ranking)		22	75	86	16	24
Uninsured	10%	8%	11%	10%	9%	8%
Primary care physicians	1,492:1	5,998:1	3,661:1	15,454:1	1,251:1	4,479:1
Preventable hospital stays	63	50	56	94	53	52
Diabetic screening	88%	88%	83%	91%	88%	87%
Mammography screening	71%	68%	59%	67%	70%	70%
Social & Economic Factors (ranking)		2	25	32	51	12
High school graduation	89%	95%	96%	97%	88%	94%
Some college	67%	79%	70%	61%	71%	73%
Unemployment	6.1%	5.1%	6.8%	7.0%	6.1%	6.0%
Children in poverty	16%	8%	15%	11%	15%	9%
Inadequate social support	16%	15%	11%	17%	16%	15%
Children in single-parent HHs	27%	20%	20%	23%	29%	21%
Violent crime rate	291	146	12	64	397	159
Physical Environment (ranking)		55	97	64	48	59
Air pollution-ozone days	0	0	0	0	0	0
Access to recreational facilities	11	13	0	6	15	13
Limited access to healthy foods	6%	10%	19%	11%	7%	10%
Fast food restaurants	44%	43%	50%	40%	48%	49%



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