

Chapter

1

Core Epidemiologic Questions

Question 1: What are the socio-demographic characteristics of the general population in Indiana?

Question 2: What is the scope of the HIV/AIDS Epidemic in Indiana?

Question 3: What are the indicators of risk for HIV/AIDS in Indiana?

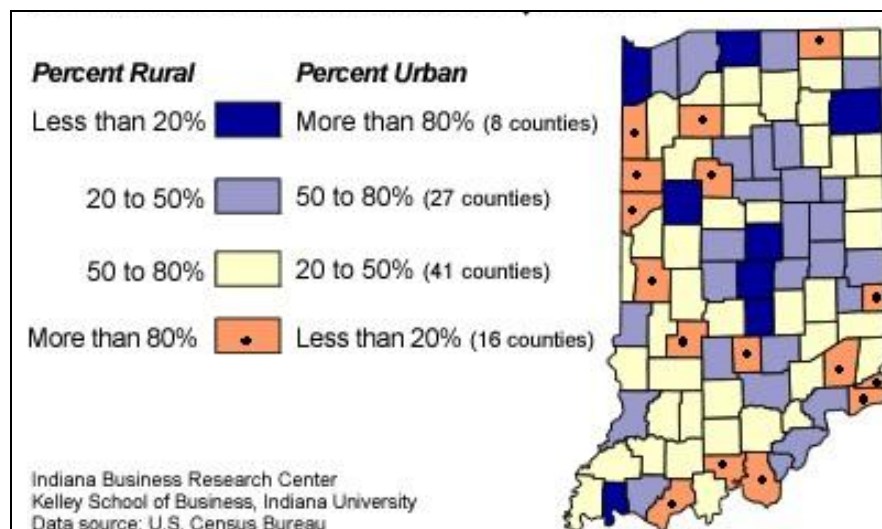
Question 1

What are the socio-demographic characteristics of the general population in Indiana?

Description of Indiana's Population

Indiana is a state dominated by agriculture and manufacturing with a land area of 35,867 square miles. Most of the state's areas are considered rural, with several urban centers located throughout the state (Figure 1).

Figure 1: Indiana's Urban and Rural Areas, 2000



Data Source: U.S. Census Bureau, Indiana Business Research Center, Kelley School of Business, Indiana University

Based on the United States Census 2000, the state of Indiana had a population of 6,080,485, which equated to an average population density of 169.5 people per square mile. That is in comparison to 79.6 persons per square mile for the U.S.⁽¹⁾ Between 1990 and 2000, the state's population increased by over 536,000 people, or 9.7%, compared to a population increase of 13.1% for the nation as a whole.⁽²⁾

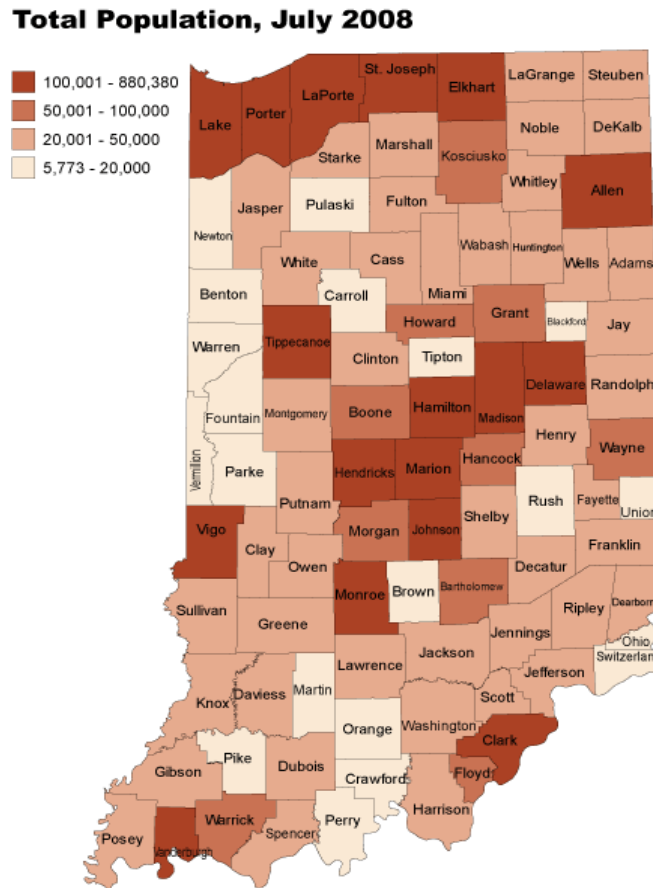
¹ Census 2000, Census Bureau

² Includes the population of the 50 states and the District of Columbia

In 2009, the U.S. Census Bureau⁽³⁾ issued an updated estimate for the state’s population size. Based on this estimate, the state of Indiana had a population of 6,376,792 as of 2008. The state ranked 15th in the nation in population size. Throughout this report, unless otherwise noted, the calculation of rates will use the Census population estimates for 2008 of 6,376,792 people. The 2008 Census estimates are the most current numbers that are detailed enough to allow the calculation of rates by gender, race, ethnicity and other categories.

Indiana is comprised of 92 counties (Figure 2). The least populated county in the state is Ohio County in Southeastern Indiana, with 5,773 residents. The most populated one is Marion County in Central Indiana with 880,380 residents. The five largest cities in the state are Indianapolis, Fort Wayne, Evansville, South Bend and Gary. Figure 2 shows counties by population category. Half of the counties (46) have populations between 20,000 and 50,000.

Figure 2: Indiana’s Most Populous Counties, Total Population, 2008



Source: U.S. Census Bureau
Indiana Business Research Center, March 2009

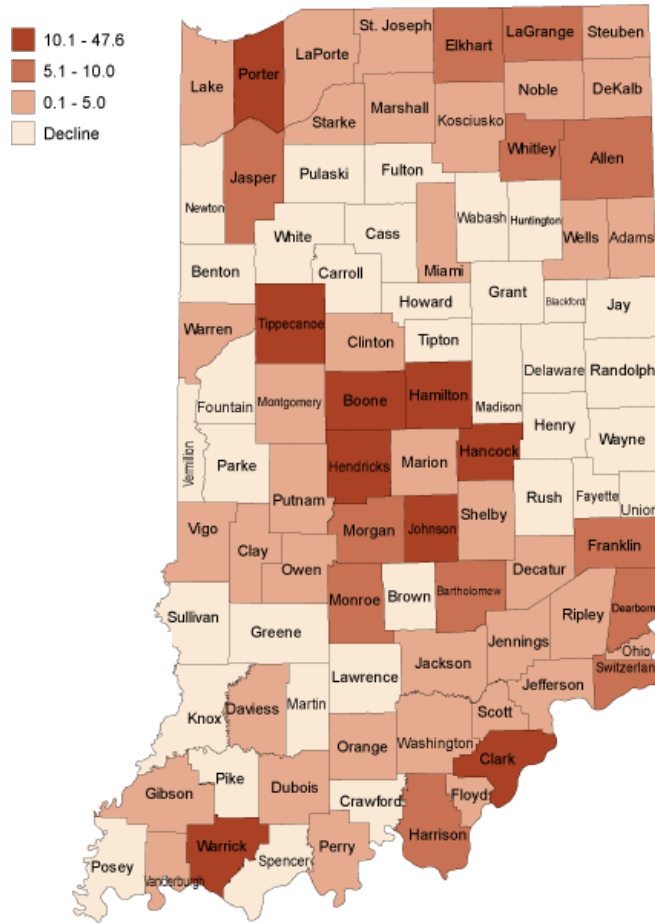
Data Source: U.S. Census Bureau, Indiana Business Research Center, March 2009

³ American Community Profile Survey, Census Bureau, 2009

The percent change in population by county from 2000 to 2008 is displayed in Figure 3. Only 21 counties experienced an increase in population of 5% or more. In contrast, 35 counties declined in population during this time period.

Figure 3: Percent Change in Indiana’s Population, 2000 to 2008

**Percent Change in Population
April 2000 to July 2008**



Source: U.S. Census Bureau
Indiana Business Research Center, March 2009

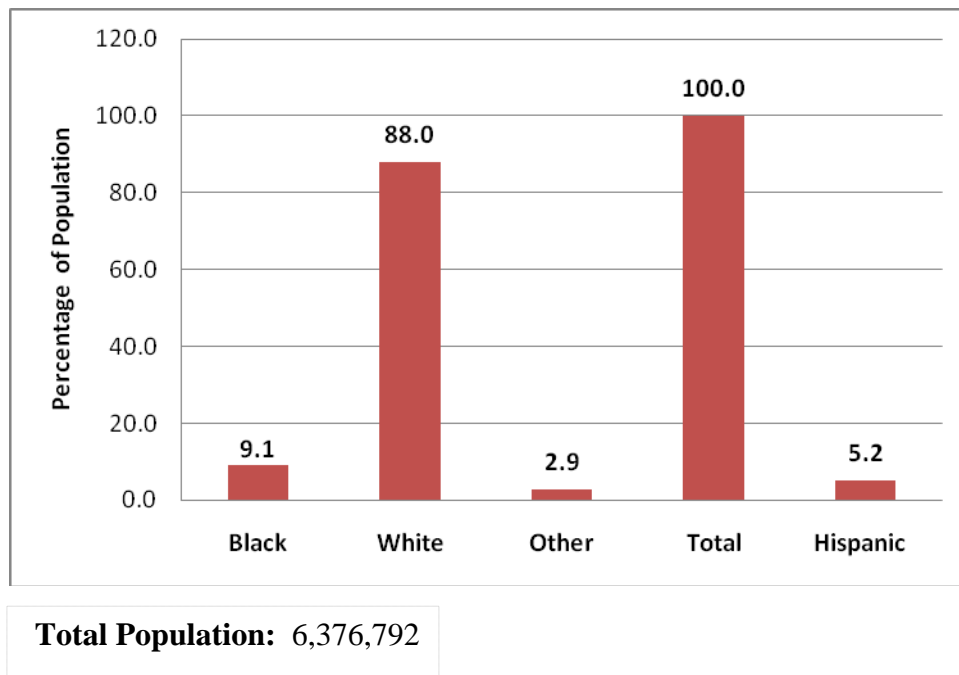
Data Source: U.S. Census Bureau, Indiana Business Research Center, March 2009

Racial and Ethnic Distribution

Racial and ethnic backgrounds are separate designations under which U.S. citizens, resident aliens and other eligible non-citizens are categorized. Ethnicity includes Hispanic/Latino or Not Hispanic/Latino. Racial categories include American Indian/Alaska Native, Asian, Black/African American, Native Hawaiian/Other Pacific Islander and White. For a complete definition for each racial and ethnic category see Appendix D.

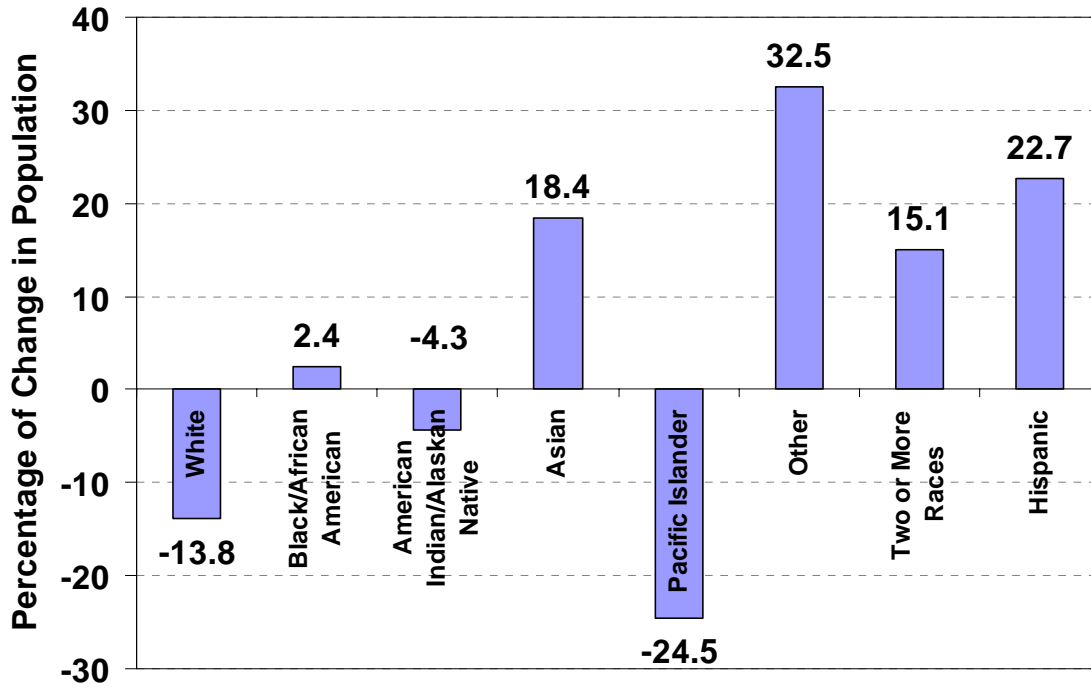
The majority of Indiana's population is white (88.0%), followed by Black/African-Americans (9.1%), and Other (2.9%). The state's population is overwhelmingly Non-Hispanic (94.8%) with a small, but growing, Hispanic minority (5.2%).

Figure 4: Racial Composition of Indiana's Population, Census Estimates 2008



The expected growth among Indiana's population will lead to a more diverse population in the future. Figure 5 shows the changes in percent that the various racial and ethnic groups experienced in the five-year period from 2000 to 2006.

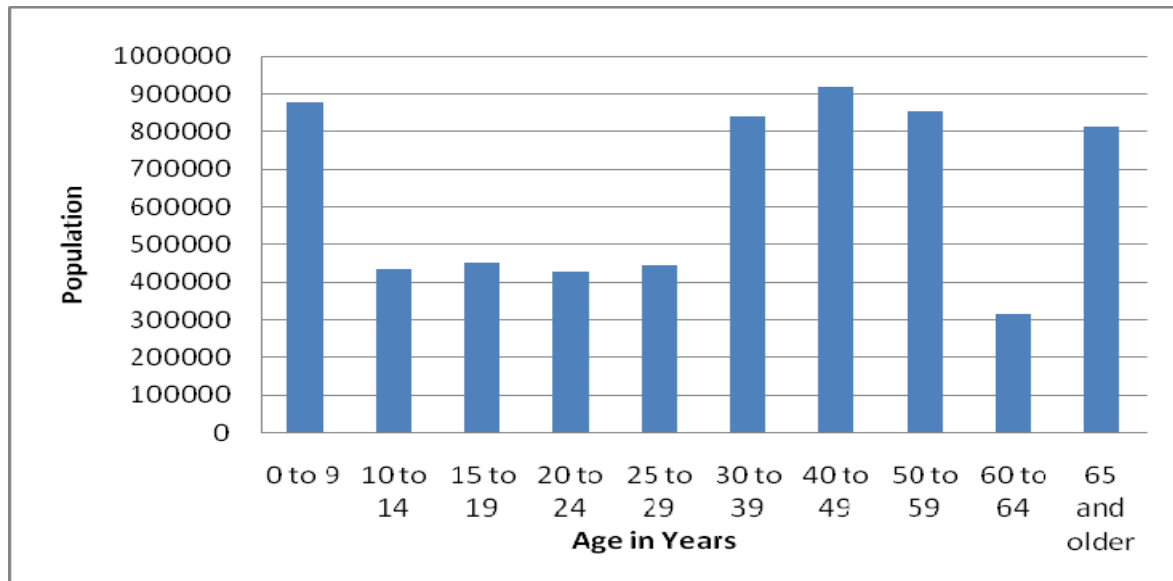
Figure 5: Indiana's Population Growth by Race and Hispanic Origin, 2000 to 2006



Age Distribution

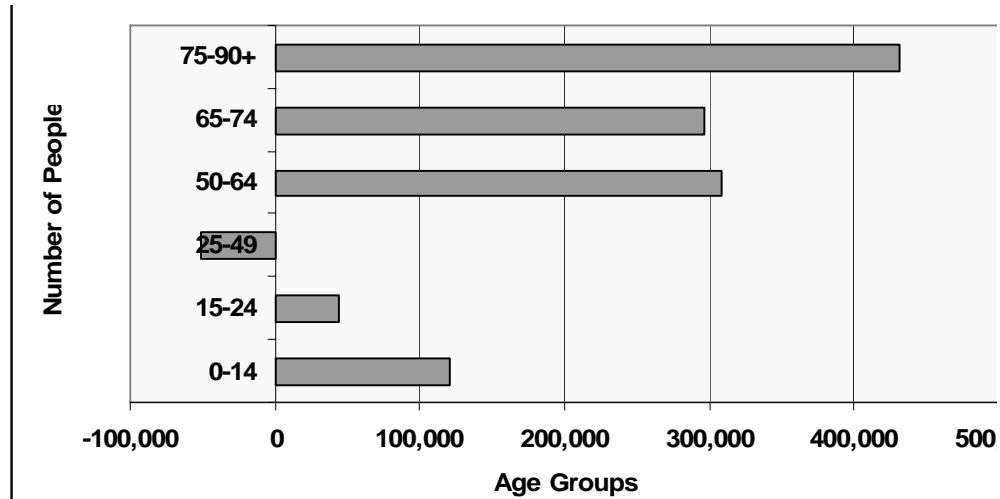
Similar to the national population, the average age of Indiana's population has increased over recent decades. The state's median age in 2000 was 36.1 years, up from 32.8 in 1990 and 29.2 in 1980. Figure 6 shows the age distribution of Indiana's population in 2008.

Figure 6: Indiana Population by Age Range, 2008



This snapshot in time of Indiana's population by age does not reveal the dynamic forces that are at work to reshape the age structure of our state's population. A look at the expected changes over the next decades will reveal what trends are currently at work.

Figure 7 shows the projected changes, based on the changes between the Census 1990 and Census 2000 population age data, in the different age groups for the next forty years.

Figure 7: Population Changes by Age Groups, 2000-2040

The advancement of the Baby boom generation in the upper age brackets will lead to the predicted negative changes in the 25 – 49 age bracket. For example, the population age 25 to 64 equaled 52% in 2000, a rate that will fall to 47% in 2040.

Currently, Indiana's population consists of 50.7% females and 49.3% males. The number of males has increased compared to females during the previous decade. In 2000, there were 96.3 males for every 100 females, which was an increase from 94.1 in the 1990 Census.

Socio-Economic Facts for Indiana

The socio-economic facts for Indiana contained in this section include information on labor force, income, educational attainment, housing, poverty and health insurance coverage.

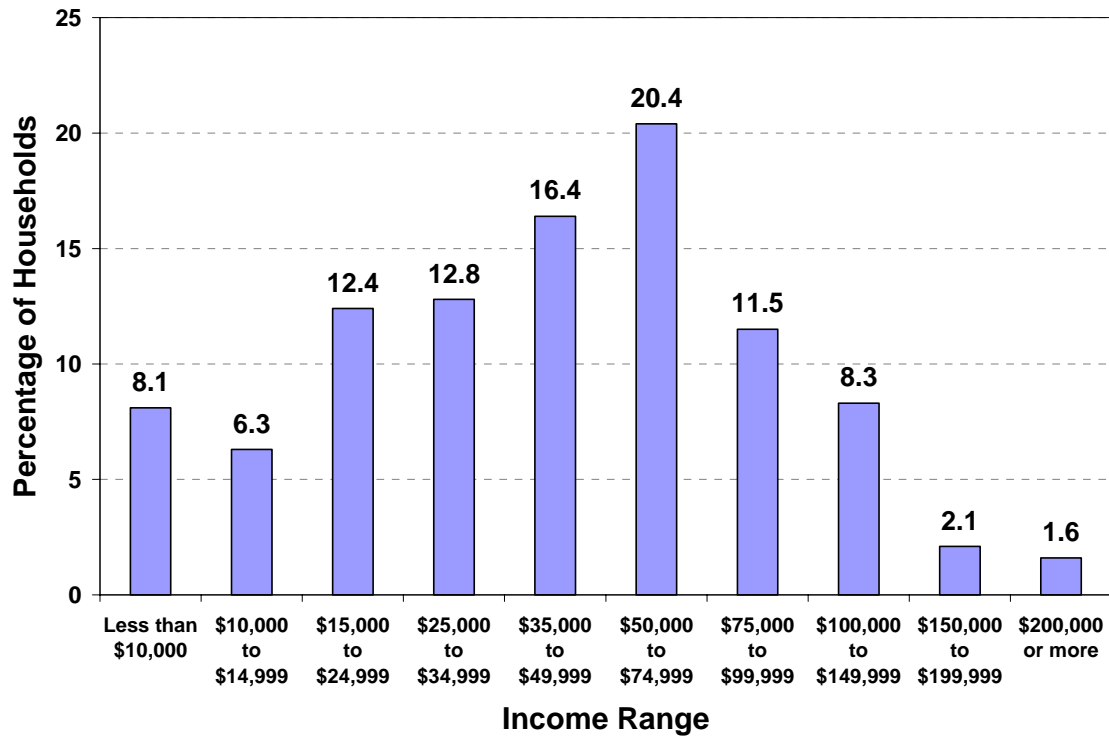
As presented in Table 1, of the 3,230,367 individuals in Indiana's labor force, 5.9% were unemployed in 2008. This is a .8% increase since 2005, when the unemployment rate was 5.1%.

Table 1: Total Number of Labor Force in 2008 by Employment Status and Unemployment Rate

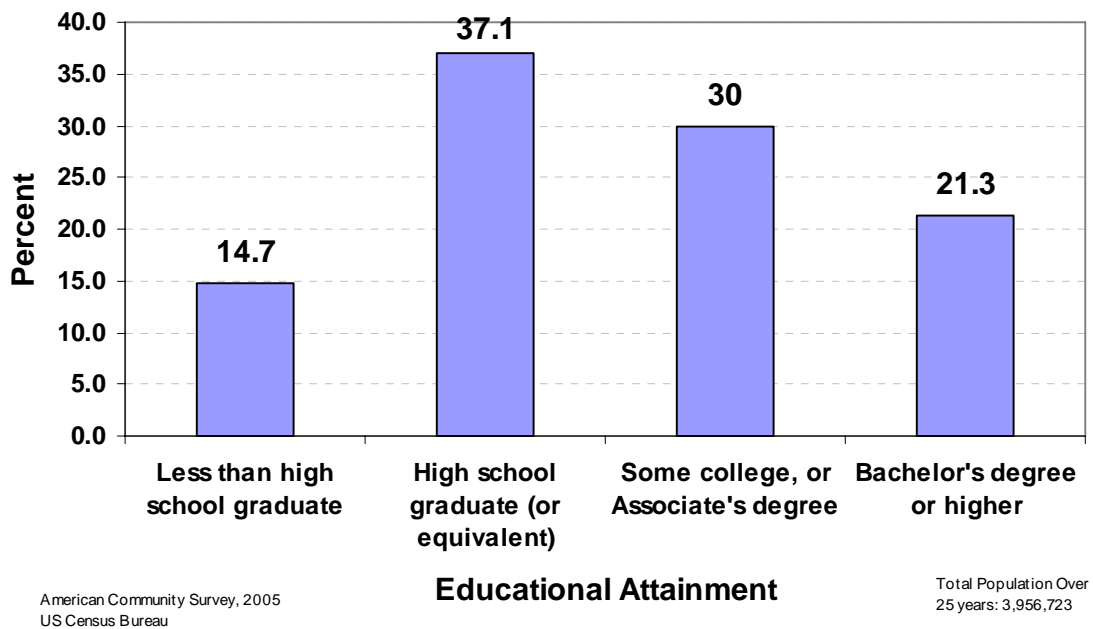
Labor Force in 2008	Number
Employed	3,039,795
Unemployed	190,572
Total Resident Labor Force	3,230,367
Unemployment Rate	5.9%

Source: Bureau of Labor Statistics

The median household income in Indiana was \$47,422 according to the US Census Bureau.

Figure 8: Income Range by Percentage of Households, 2006

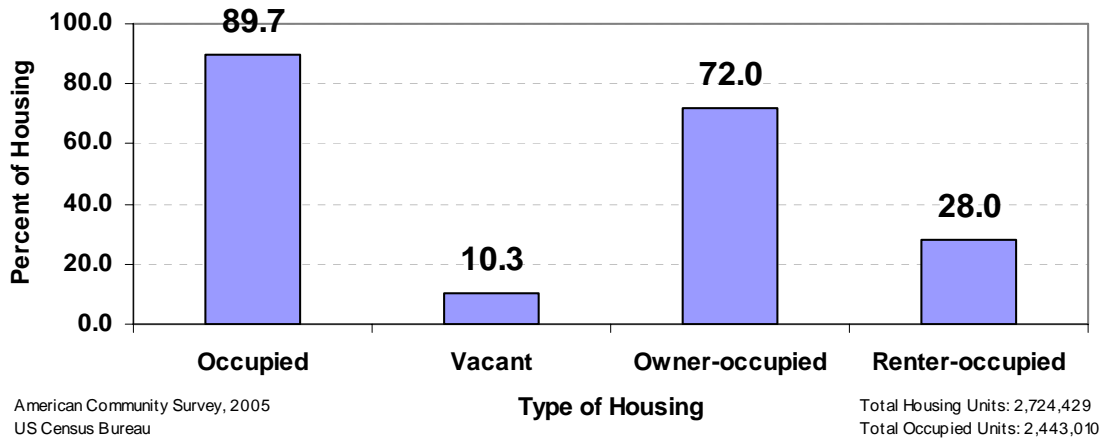
Considering the educational attainment of individuals 25 years and older (see Figure 9), more than a third (37.1%) have earned a high school diploma (or equivalent) and another 30% have earned an associate's degree or have some college experience. Twenty-one percent of those over the age of 25 have earned a bachelor's degree or higher. In contrast, 14.7% of individuals 25 years and older have not earned a high school diploma (or equivalent).

Figure 9: Educational Attainment for Individuals 25 years and older, 2005

In terms of housing the American Community Survey, 2005 (conducted by the US Census Bureau) reported a total of 2,724,429 housing units. Figure 10 shows whether these units were occupied and whether they were owner- or renter-occupied.

Nearly all (89.7%) housing units in Indiana were occupied. Of those units that were inhabited, more than two-thirds (72%) were occupied by the owner, and the remaining units were renter-occupied.

Figure 10: Percent of Occupied and Vacant Housing Units and Percent of Owner- and Renter-Occupied Housing Units, 2005



The percent of owner-occupied housing units is one indicator of poverty rates in Indiana. However, a more precise indicator of poverty rates is household income. Federal poverty guidelines are based on all income before taxes, except capital gains and losses. These guidelines are adjusted each year, and they differ depending on family size. For example, the 2006 poverty threshold was \$10,210 for a single person and \$34,570 for a family of 8 or more (see Table 2).

Table 2: Department of Health and Human Services (HHS) Poverty Guidelines, 2006

Size of Family Unit	48 Contiguous States and D.C.	Alaska	Hawaii
1	\$10,210	\$12,770	\$11,750
2	\$13,690	\$17,120	\$15,750
3	\$17,170	\$21,470	\$19,750
4	\$20,650	\$25,820	\$23,750
5	\$24,130	\$30,170	\$27,750
6	\$27,610	\$34,520	\$31,750
7	\$31,090	\$38,870	\$35,750
8	\$34,570	\$43,220	\$39,750
For each additional person, add	\$3,480	\$4,350	\$4,000

Source: *Federal Register*, Vol. 72, No. 15, January 24, 2007, pp. 3147-3148.

According to federal poverty guidelines for 2004, 12.2% of people in Indiana were living in poverty. In particular, 16.7% of related children 18 years of age and younger were living below the poverty level, and 8.0% of people 65 years old and over met the poverty guidelines. Of families, 9.0% have incomes below the poverty level. In comparison, 30.3% of families with a female householder and no husband present had incomes below the poverty level (American Community Survey, 2005, U.S. Census Bureau).

The 3-year average (2003-2005) for medical insurance coverage (see Table 3) shows that the majority of Indiana residents ages 19 to 64 were covered by some form of medical insurance. For this time period, an average of 14.2% did not have some form of health insurance. This rate is lower than the national average (15.7%) of uninsured residents for the same time period.

Table 3: Percentage of People without Health Insurance Coverage for the United States, Indiana, and Neighboring States using 3-Year Averages

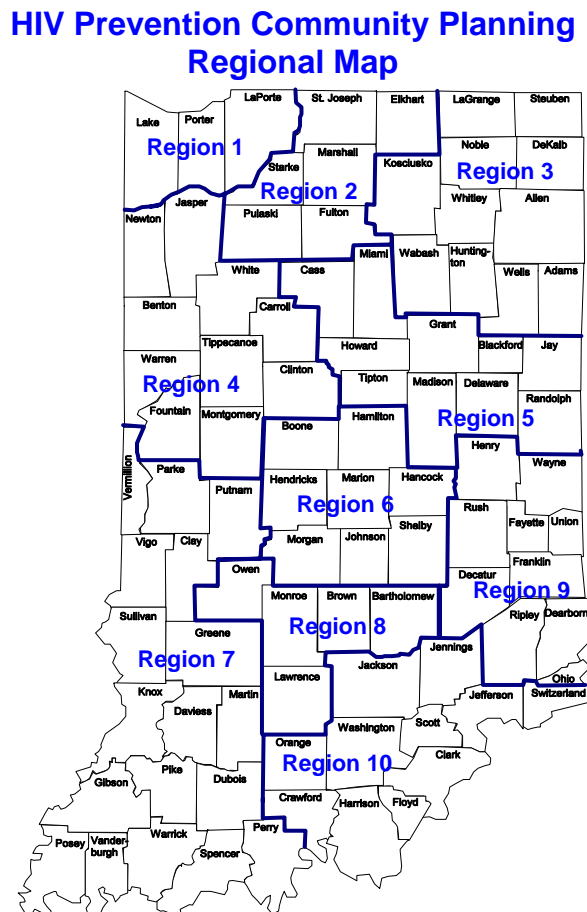
State	3-Year Average (2003-2005)		Change in percentage points (2004–2005 average less 2003–2004 average)	
	Percentage	90-percent C.I. (+/-) ³	Percentage	90-percent C.I. (+/-) ³
United States	15.7	0.1	0.1	0.1
Indiana	14.2	0.8	0.2	0.8
Illinois	14.2	0.6	0.0	0.6
Kentucky	13.6	1.1	-0.6	1.0
Michigan	11.3	0.6	0.2	0.6
Ohio	12.0	0.6	0.1	0.6

Health Regions

In order to distribute federal funds that were made available for the prevention of and education about HIV, the state health department, in cooperation with community groups throughout the state of Indiana, created ten health regions. The geographic boundaries of those regions were based on the availability of either community based organizations that provide counseling and testing services or regional health departments that offer these services, as well as epidemiologic facts for these regions.

Figure 11 shows the current configuration of the ten regions. The boundaries of the regions will change if epidemiologic fundamentals warrant re-arranging the regional boundaries. Throughout this report, mentioning of health regions will refer to the regions as defined in Figure 11. A larger copy of this map can be found in Appendix C.

Figure 11: Health Regions in Indiana



9/2002

Based on the Census 2000 findings, Table 4 shows the estimated number of people for each Health Region by race/ethnicity. Additionally, the last column contains the 2008 population estimates for each of the ten regions.

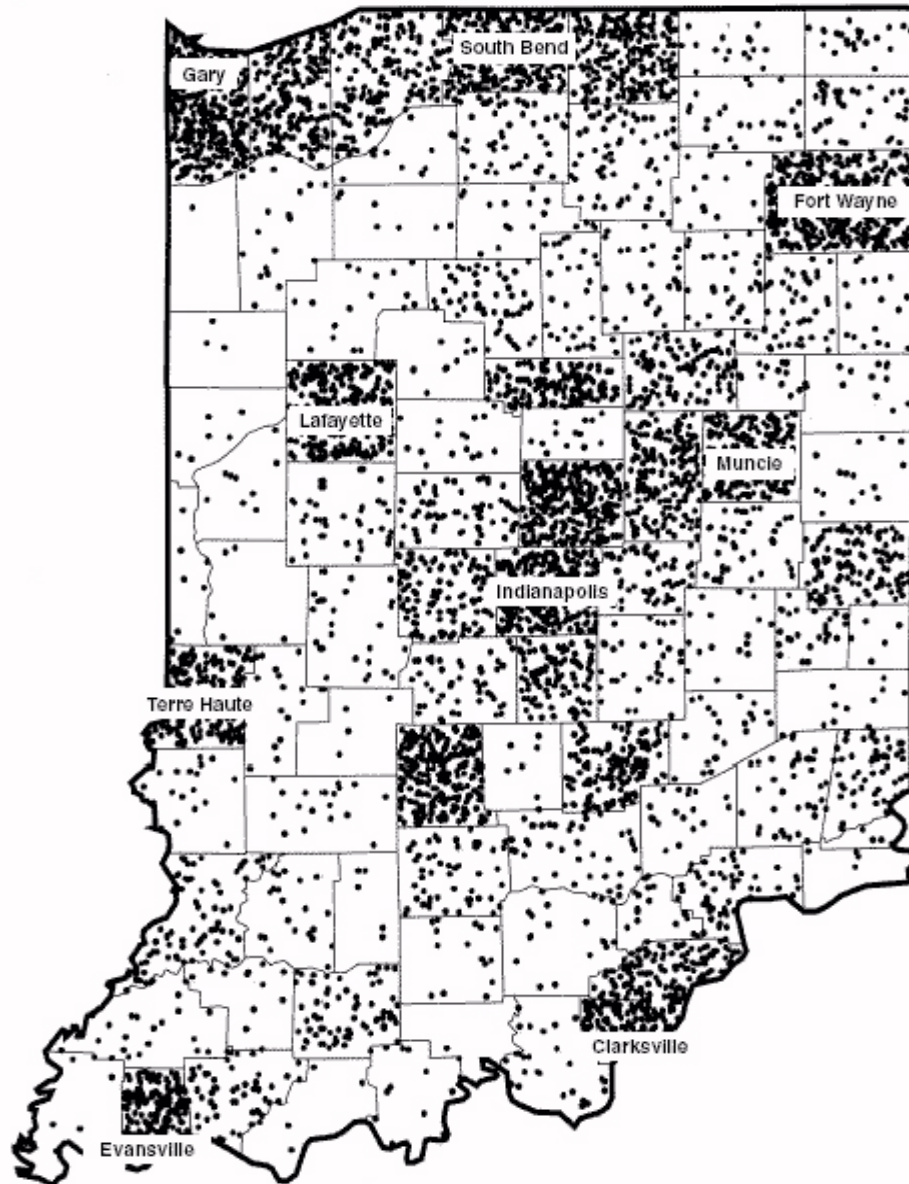
Table 4: Percentages of Race/Ethnicity Categories by Health Region in 2000 and Population Totals by Health Region in 2000 and 2008

Region	African American (%)	Native American (%)	Asian/Pacific Islander (%)	White (%)	Other (%)	Hispanic (%)	2000 Total Population	2008 Total Population
1	18.9	0.3	1.1	78.7	0.9	10.9	747,803	766,869
2	7.7	0.3	1.3	89.2	1.5	8.4	556,611	570,215
3	5.7	0.3	1.2	91.6	1.1	4.7	734,412	751,715
4	1.7	0.3	2.6	94.6	0.8	5.9	349,970	360,609
5	5.6	0.4	0.7	92.1	1.2	2.5	563,403	549,747
6	15.1	0.3	1.8	81.6	1.2	4.5	1,523,029	1,663,726
7	3.8	0.2	0.8	94.2	0.9	1.4	712,419	719,506
8	26.4	0.3	3.1	93.4	1.2	2.3	276,714	287,190
9	1.7	0.2	0.6	96.7	0.8	1.0	296,899	295,175
10	3.1	0.3	0.6	95.1	1.0	2.0	397,808	412,040
Total							6,159,068	6,376,792

Source: US Census Bureau, 2000, American Community Profile Survey, 2008

Finally, Figure 12 shows the relative density of active physicians with an Indiana license in 2001. As shown, physicians are concentrated in urban areas.

Figure 12: Active Physicians with an Indiana License, by County of Principal Practice Location, 2001*



This dot density map depicts the relative density of physicians in a particular county, not the precise location of each physician. Physicians may have additional practice locations and /or draw their patients from multiple counties.

*Source: Indiana Health Care, Professional Development Commission, Indiana Physician Survey, 2001

Endnotes:

The 2003 American Community Survey universe is limited to the household population and excludes the population living in institutions, college dormitories and other group quarters. Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate is represented through the use of a confidence interval. The confidence interval computed here is a 90 percent confidence interval and can be interpreted roughly as providing 90 percent certainty that the true number falls between the lower and upper bounds.

(Note: Table 1,2,3,4)

The number of householders does not necessarily equal the number of households because of differences in the weighting schemes for the population and occupied housing units.

(Note: Table 1,3)

Employment and unemployment estimates may vary from the official labor force data released by the Bureau of Labor Statistics because of differences in survey design and data collection.

(Note: Table 3)

Industry codes are 4 digit codes and are based on the North American Industry Classification System 2002. However, the Industry categories adhere to the guidelines issued in Clarification Memorandum No. 2, "NAICS Alternate Aggregation Structure for Use By U. S. Statistical Agencies," issued by the Office of Management and Budget.

(Note: Table 3)