JSRI
Statistical Brief No. 16
Cifras Breves No. 16

The Health of American Indians and Latinos in Lansing, Michigan

By

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June 2003

A Publication of

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Dr. Israel Cuéllar, Director
Dr. Cynthia Perez-McCluskey, Editor-in-Chief
Danny Layne, Layout Editor

SUGGESTED CITATION

Foster, Sissi P. and Susan Applegate Krouse. "The Health of American Indians and Latinos in Lansing, Michigan." *Statistical Brief No. 16*, the Julian Samora Research Institute, Michigan State University, East Lansing, Michigan. June 2003.

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The Health of American Indians and Latinos in Lansing, Michigan

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About the Authors

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The Health of American Indians and Latinos in Lansing, Michigan

Sissi P. Foster, R.L.A.
Susan Applegate Krouse, Ph.D.

Abstract

This paper summarizes a study that examined the availability and quality of local data on the health of American Indians and Latinos in the City of Lansing, Mich., and compared these populations to Whites and Blacks. Comprehensive databases on health (specifically morbidity and morality), environment, demographics, and spatial distribution were gathered and analyzed for these populations. Our study found that current local data is inadequate for proper population assessment, specifically in the areas of data quality, data scale, and data storage. Using the existing data with its limitations, we completed descriptions for these two populations and made suggestions for continued research.

The Health of American Indians and Latinos in Lansing, Michigan

Introduction

Nationally, American Indians and Latinos have higher rates of morbidity and mortality than do majority Whites. These health inequalities, along with national health concerns, have caused the federal government to highlight these populations in initiatives, such as Healthy People 2010 (www.health.gov/healthypeople), to reduce racial and ethnic disparities in health. Because the national health picture of these populations is bleak, we undertook this study to examine the local health status of American Indians and Latinos in Lansing, Michigan. Our goals were to create a comprehensive database of existing information, to compare these populations to Whites and Blacks, and to examine the quality of the existing data.

This study examined the health and spatial distribution of American Indians and Latinos in Lansing and in the tri-county area of Clinton, Eaton, and Ingham Counties. Although our primary focus was on residents of the City of Lansing, we collected information on the larger tri-county area to allow for comparisons. This data included census demographics, health statistics and land use maps to assist us in making spatial connections between our populations and their environment.

What we found was that the data regarding the health of these populations was inadequate in both the availability and the quality of the data found. We further attempted to present the best possible descriptions of American Indians and Latinos in Lansing, noting specific limitations and problems with the existing data. Our presentation of the data is both in statistical and in graphic form, to provide for more in-depth comparison and analysis. Since research has long confirmed a strong relationship between land uses and population health - whether beneficial or harmful - (Mutz, Bryner & Kenney, 2002), we added the spatial comparison section. Finally, we make some suggestions for future studies to improve the availability and quality of health statistics.

A brief overview of our study populations as well as general demographic information follows to ascertain the population impacted and to understand their relationship to the majority population. The total population of the United States is 290,361,435. American Indians and Alaskan Native comprise less than 1% of the total U.S. population with 2,475,956 people. Latinos constitute a larger percentage and are the fastest growing population in the U.S. at 12.5% or 35,305,818 people. Whites make up 75.1% of the total with 211,460,626 people. Blacks represent 12.3% of the total with 34,658,190 people, and Asians are 3.6% of the total with 10,242,998 people.

The population of Lansing, according to the 1990 Census, was 127,173. Our populations of concern, American Indians and Latinos, make up small percentages of that total. In 1990, American Indians numbered only 1,535 individuals, or just 1.2% of the total city population. Most of the Indian people in Lansing are Anishinabe, members of the three related tribes of Chippewa or Ojibwe, Odawa or Ottawa, and Potawatomi ("Native American and Hispanic Health Concerns in Ingham County, Michigan," n.d.:6). Latinos contributed a larger percentage, 7.9%, with 10,061 individuals. Most Latinos in Lansing are of Mexican origin (Siles & Rochin, 1998).

Data Sources

In order to best examine the quality of local data for our study populations, we sought to identify all possible sources. What follows are our successes and failures in the data gathering process.

We began by contacting and gathering data from a variety of governmental agencies at the federal, state, and municipal levels. Many federal statistics are available on-line, and we made use of census information from both the 1990 census and, as data became available, from the 2000 census. The Indian Health Service (IHS), the primary health provider for approximately half of the Native American

population in the United States, does not offer services in the Lansing area; however, a study conducted for the IHS did give some insights into the needs of the local urban Indian community (National Council of Urban Indian Health 2001). A complete list of sources we consulted and data we gathered are included in Appendix 1. At the state and municipal levels, we benefited from cooperative agreements maintained by the State of Michigan Department of Community Health and the Ingham County Health Department. We were able to access information about the three counties, Clinton, Eaton, and Ingham, that had already been synthesized by the state for the Ingham County Health Department. This data included live birth and death files for most of the 1990s, and files on communicable diseases. Some information is also summarized on the Capital Area Community Voices website (www.cacvoices.org), an outreach effort by the City of Lansing and the Ingham County Health Department.

Specific information on demographic and environmental variables is maintained by a variety of municipal offices, both city and county. We accessed data ranging from land use to crimes in our effort to collect and synthesize information affecting health.

We had hoped that local community organizations would be an additional source of information on American Indian and Latino health; however, we found that no local groups had attempted a systematic survey of health needs in their particular communities. The Mestizo – Anishinabe Health Project, connected to the Community Voices project and funded by the W. K. Kellogg Foundation, recently (2001) attempted a health survey in the American Indian and Latino communities in Lansing. This resulted in a booklet, *Native American and Hispanic Health Concerns in Ingham County, Michigan* (n.d.), with some general health statistics.

Published information on American Indian and Latino health in Michigan is available only at the state level. Nothing has been published that provides information at the city or county level. Nan E. Johnson's 1995 *Health Profiles of Michigan Populations of Color* is a good example of a state level synthesis, utilizing 1990 census data to provide a picture of minority health in Michigan. It does not, however, address more local communities or issues. A survey of a more limited population, Elizabeth Chapleski's *State of Michigan 1990 Survey of Native American Elders*, again provides information on a state level, and does incorporate urban Indians in its survey population. Lansing was not among the urban locations included in this study. The Julian Samora Research Institute at Michigan State University conducts research on Latinos in the Midwest. JSRI lists 167 research reports, working papers, statistical briefs, and occasional papers on its website (www.jsri.msu.edu); two of those deal specifically with Latinos in Lansing. Lisa M. Topoleski (1997) looked at hospice underutilization by Mexican-Americans in Lansing, and Marcelo E. Siles and Refugio I. Rochin (1998) profiled the Latino community in North Lansing.

Background to Data Problems

As our study focused on the examination of existing data, we first looked at a number of studies that utilized this type of data (i.e., census records and vital statistics) to see what they concluded about the reliability of existing data. Analysis of census data and vital statistics for the investigation of racial and ethnic health is common in morbidity and mortality studies. Problems with data such as census records, state vital records, or other health statistics are widely documented. Two studies in particular summarize the issues involved in using statistical data for racial and ethnic groups.

Morbidity statistics may come from data collected by county and state health departments, from the federal Centers for Disease Control, or from surveys such as the National Health Interview Survey. One study by Parker, Davis, Wingo, Ries, and Heath (1998) discusses the problems associated with using the racial and ethnic categories suggested by two specific surveys. These categories are African Americans, Asians and Pacific Islanders, American Indians, Hispanics, and Whites. Parker, et al. note that there are differences within these five populations, as well as between. For American Indians, the authors point out that this population represents 500 tribes, "each with unique cultural, genetic, and sociodemographic characteristics" and that "it is likely that cancer incidence rates vary considerably among tribes" (1998:43). The Hispanic category, the authors indicate, includes persons from several countries and "every racial group" (1998:45). In addition to these basic problems of categorization, Parker, et al. detail several other limitations of the

available data, including the possible mis-coding of those racial and ethnic categories due to ambiguous definitions, generalizing from too specific data, and limited surveying among some populations, particularly American Indians (1998:47).

Mortality statistics present additional problems. Rosenberg, Maurer, Sorlie, Johnson, MacDorman, Hoyert, Spitler, and Scott (1999) report on the quality and reliability of death rates, by race and Hispanic origin, in mortality statistics produced by the National Center for Health Statistics and other agencies, including the U.S. census. While the reporting of race for Whites and Blacks on death certificates is deemed "highly reliable" (Rosenberg, et al. 1999:8), for other racial and ethnic groups the rate of misclassification on death certificates results in significant undercounting. For American Indians, the rate of undercounting is 20.6 %, for Asians and Pacific Islanders, it is 10.7 %, and for Hispanics, 1.6 %. In addition to the problems already found in existing data, the authors point out different data disparities that will result from new racial and ethnic categorizations used in the 2000 census.

Because of the very real problems with existing statistical data on morbidity and mortality, especially for minority populations, we wanted to identify and evaluate all existing databases that included information on American Indians and Latinos in Lansing. At the beginning of the project, we met with a health analyst from the Ingham County Health Department, which collects data for Ingham, Clinton, and Eaton Counties, and a demographer from the Division for Vital Records and Health Statistics, to discuss how data is gathered, maintained, and synthesized. The demographer had particular insights into the reliability of vital records data, which echoed the concerns expressed by the authors of the studies in our literature review (Parker, et al., 1998; Rosenberg, et al., 1999). Specifically, the demographer noted problems with how information is recorded on birth certificates, which usually links the baby's race with that of the mother; and with death certificates, which consistently underreport American Indians and Latinos, due to misclassification as Whites. The demographer also pointed out that even a staff change in hospital vital records nurses could affect data on birth certificates, and, consequently, population statistics.

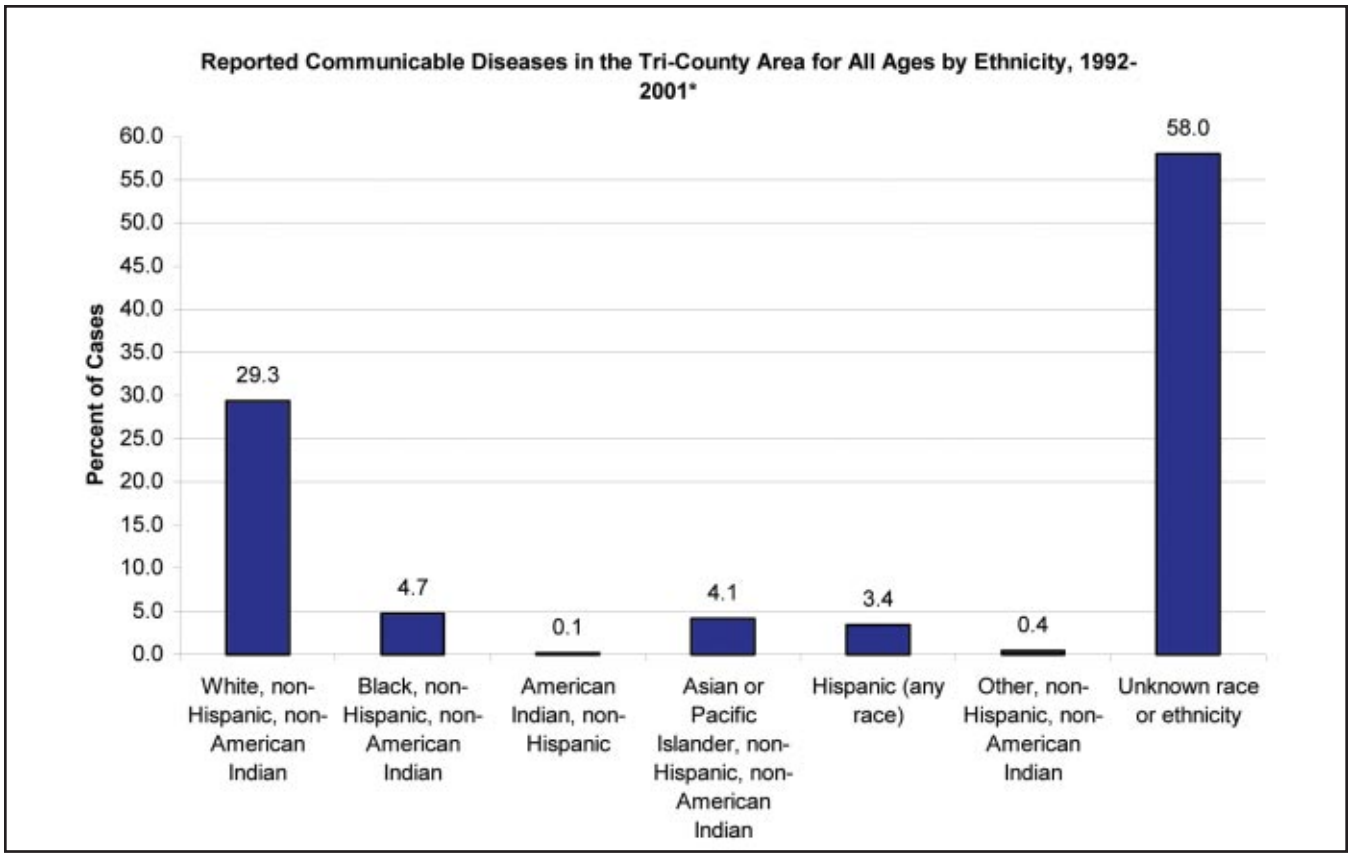


Figure 1 – Communicable Diseases by Cases in Tri-County area by ethnicity (Michigan Department of Community Health, Division of Communicable Diseases and Immunization).

Population Morbidity and Mortality

Morbidity statistics proved difficult to obtain and to analyze. We were not able to obtain information on sexually transmitted diseases (including HIV and AIDS) due to confidentiality considerations and, in addition, the communicable disease data did not include statistics on chicken pox or tuberculosis. We reviewed information on some communicable diseases (Figure 1), but it was available only at the tri-county level (Clinton, Eaton, and Ingham Counties). As our data were so limited we were not able to make comparisons at the national level.

The quality of the communicable disease data for our purposes was poor, with 58% of cases reporting "unknown race or ethnicity." Only 0.1% of cases were attributed to American Indians (a total of four cases over a 10-year period). With a population of 1,535, Indians in Lansing are either extremely healthy, or their ethnicity is not being reported in the communicable disease statistics.

We were able to obtain and to analyze more data at both local and national levels on mortality. Figure 2 graphs American Indian causes of death, comparing the local populations to all American Indians nationally. For heart disease, cancer, cerebrovascular disease, and COPD, American Indians in Lansing and the tri-county area have higher rates than do Indians nationally. Considering the high rates for all Indians, these are very real areas of concern.

Latino causes of death are indicated in Figure 3. The trends are more complex than for Indians, but Latinos in the tri-county area have a comparatively high rate of cancer and Latinos in Lansing have high rates of diabetes and cerebrovascular disease.

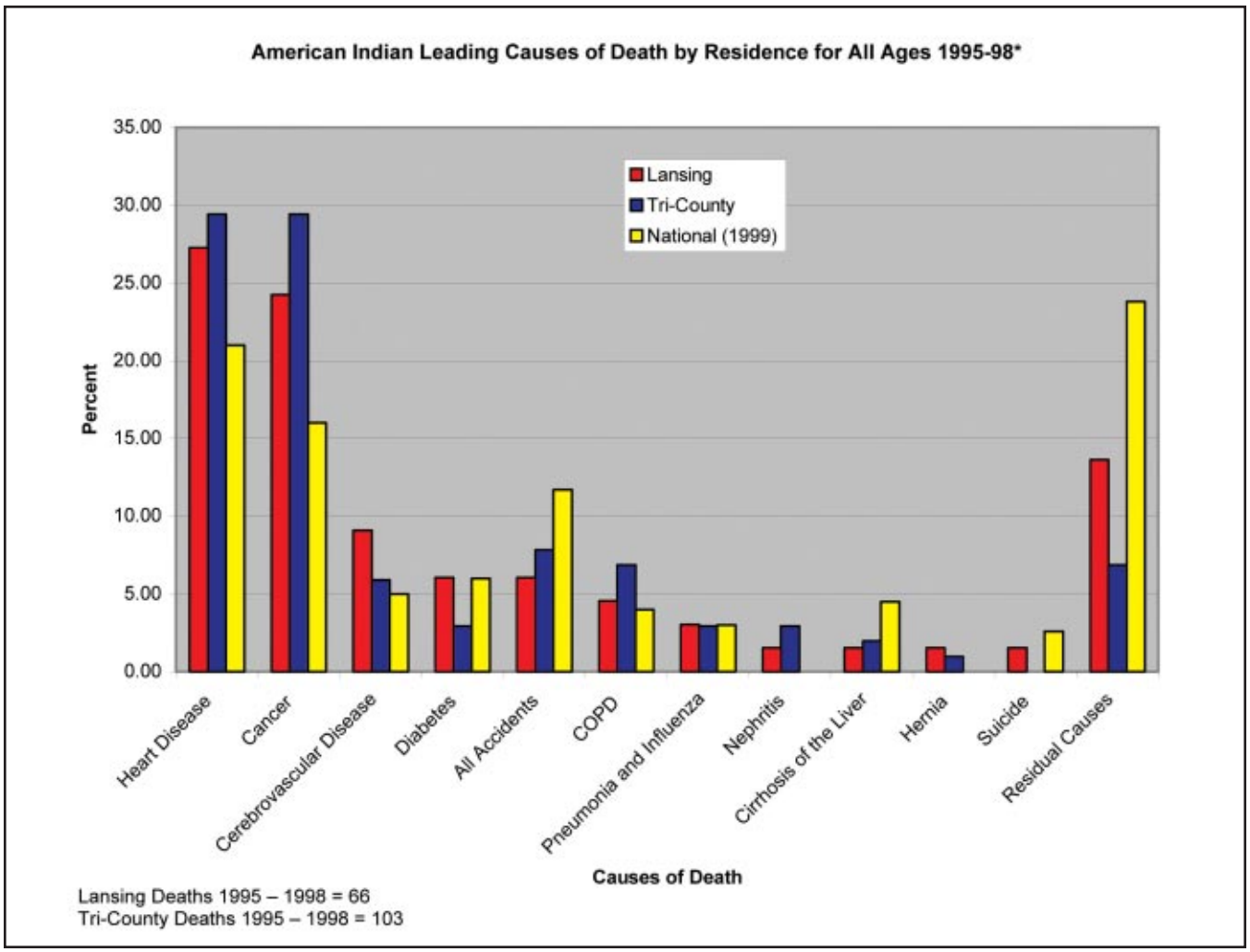


Figure 2 – American Indian leading causes of death (Tri-County area excludes Lansing, County Vital Statistics 1995-1998, National Vital Statistics Report 2001).

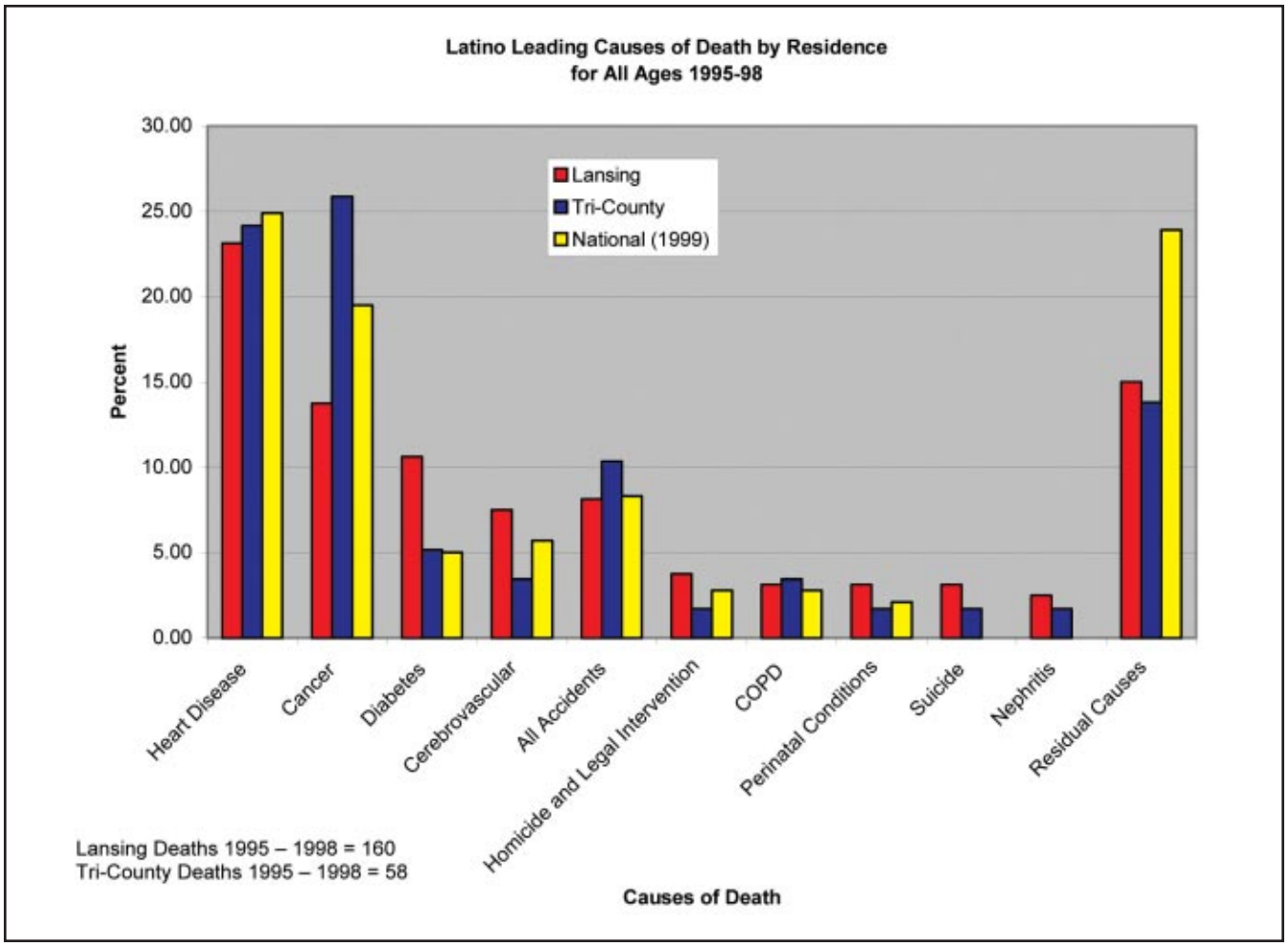


Figure 3 – Latino leading causes of death (Tri-County area excludes Lansing, County Vital Statistics 1995-1998, National Vital Statistics Report 2001).

Locally, mortality statistics indicate some disheartening numbers (Figures 4 and 5). American Indians have the highest percentage of deaths of any population due to cancer and cerebrovascular disease, while Latinos have the highest percentage of diabetes and accidents. Mortality data was only available for the years 1995 through 1998.

The actual numbers, however, may be worse than these figures suggest, due to two factors. The first is the very real possibility of underreporting of American Indian and Latino ethnicity on death certificates, which are often completed by physicians or funeral directors unfamiliar with the individual or the family. The second is that statistics on leading causes of death do not provide information on the accompanying conditions or secondary causes of death that may have contributed to an individual's death; for example, death may be due to a heart attack, but the attack was precipitated by diabetes. Information on age at death (Figures 6 and 7) indicates that for both American Indians and Latinos in Lansing (shown as Urban) there is a spike in death rates between ages 50 and 60. For Latinos in the surrounding tri-county area (shown as Rural), the spike does not appear until ages 60 to 70.

Figures 8 through 10 present age-specific death rates by race and ethnicity for Ingham County. The high death rate for American Indians at every age is statistically problematic, again due to the very low total numbers for this population. For example, in 1990 (U.S. Census Bureau) the male American Indian population ages 0 to 4 was 91. In order to calculate death rates per 1,000 population for American Indians, we expanded the numbers. This results in a graphical and statistical distortion of the number of deaths. For other populations, the numbers are condensed, creating a problem with data scale, resulting in invalid population comparisons.

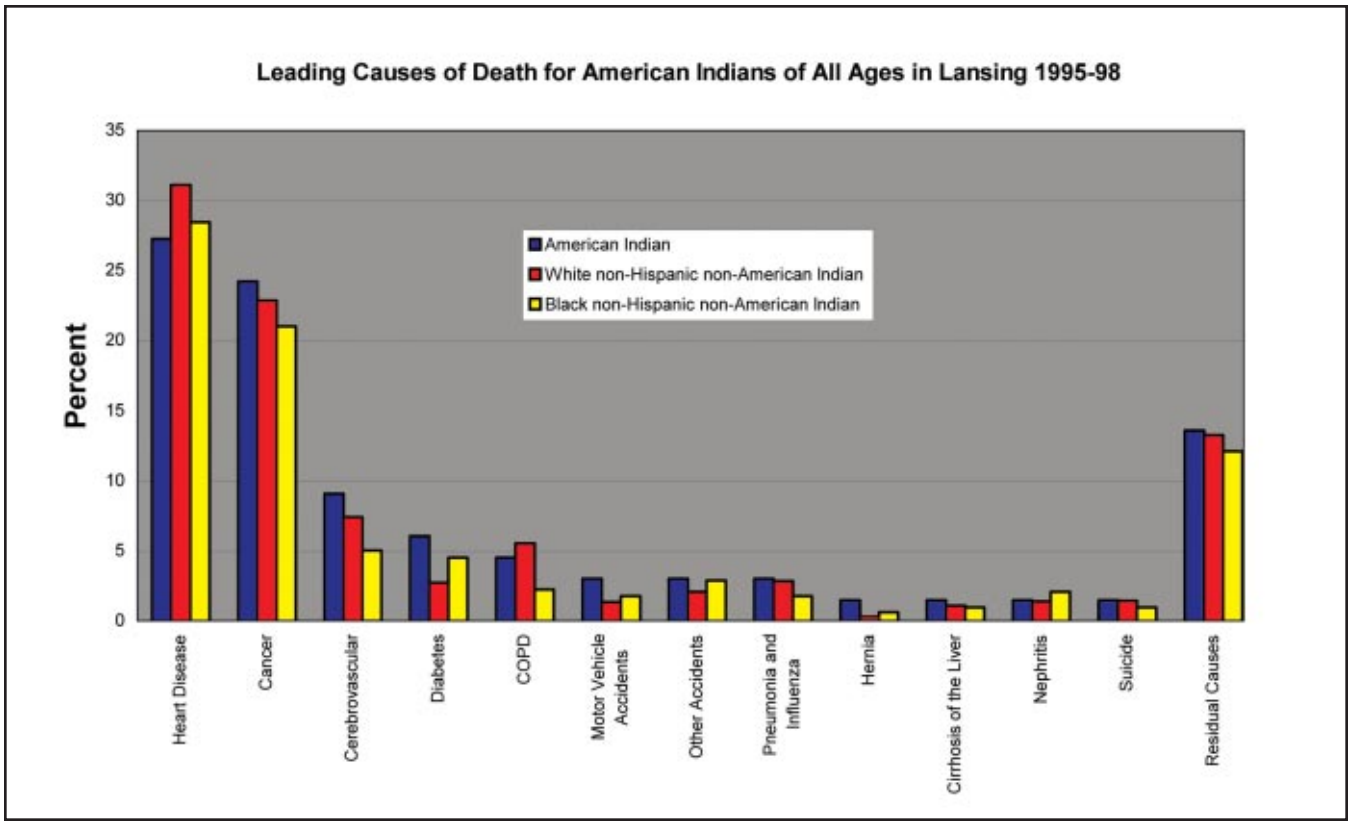


Figure 4 – Leading causes of death for American Indians (n=66) of all ages compared to Whites and Blacks in Lansing (County vital statistics, 1995-1998).

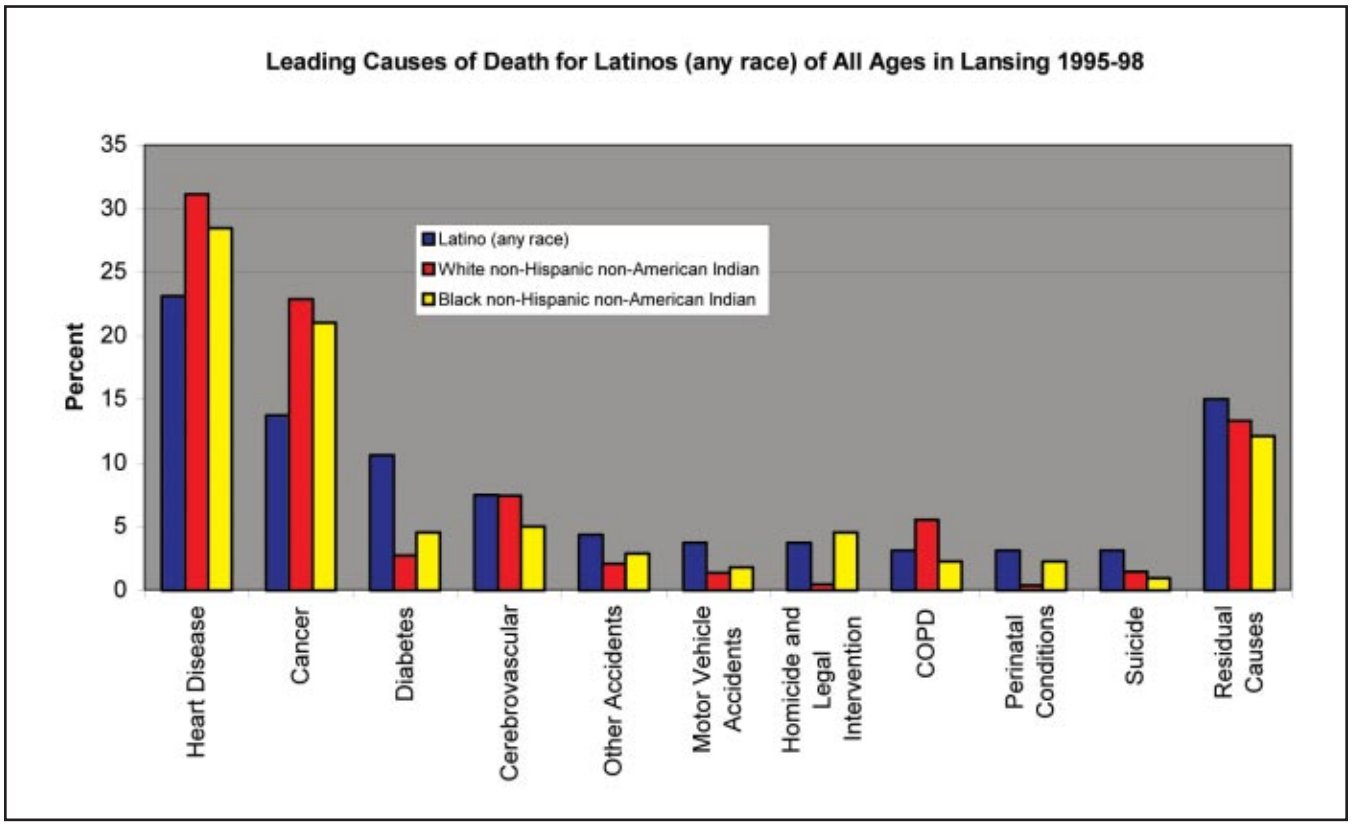


Figure 5 – Leading causes of death for Latinos (n=160) of all ages compared to Whites and Blacks in Lansing (County vital statistics, 1995-1998).

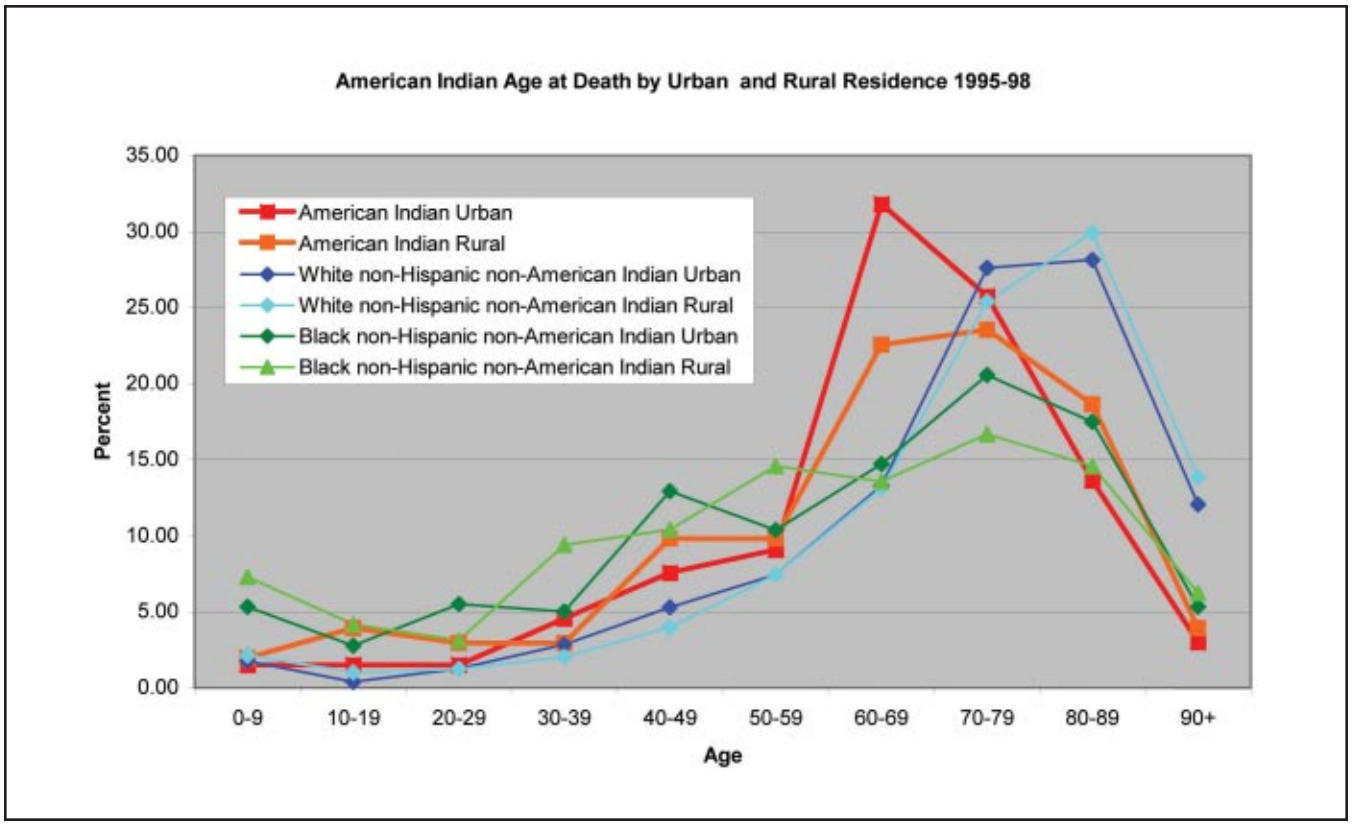


Figure 6 – American Indian/Age at death as compared with Whites and Blacks (County vital statistics, 1995-1998).

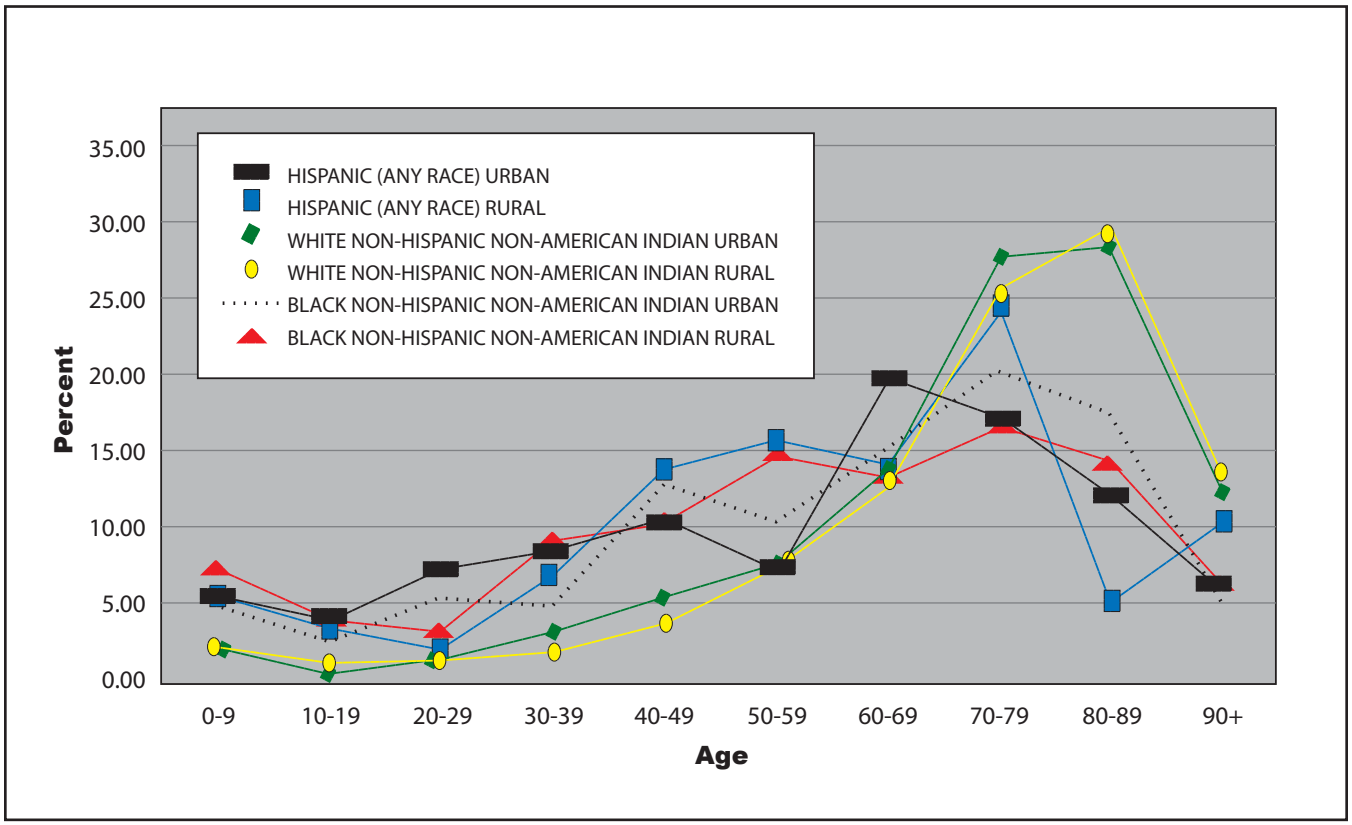


Figure 7 – Latino/Age at death as compared to Whites and Blacks (County vital statistics, 1995-1998).

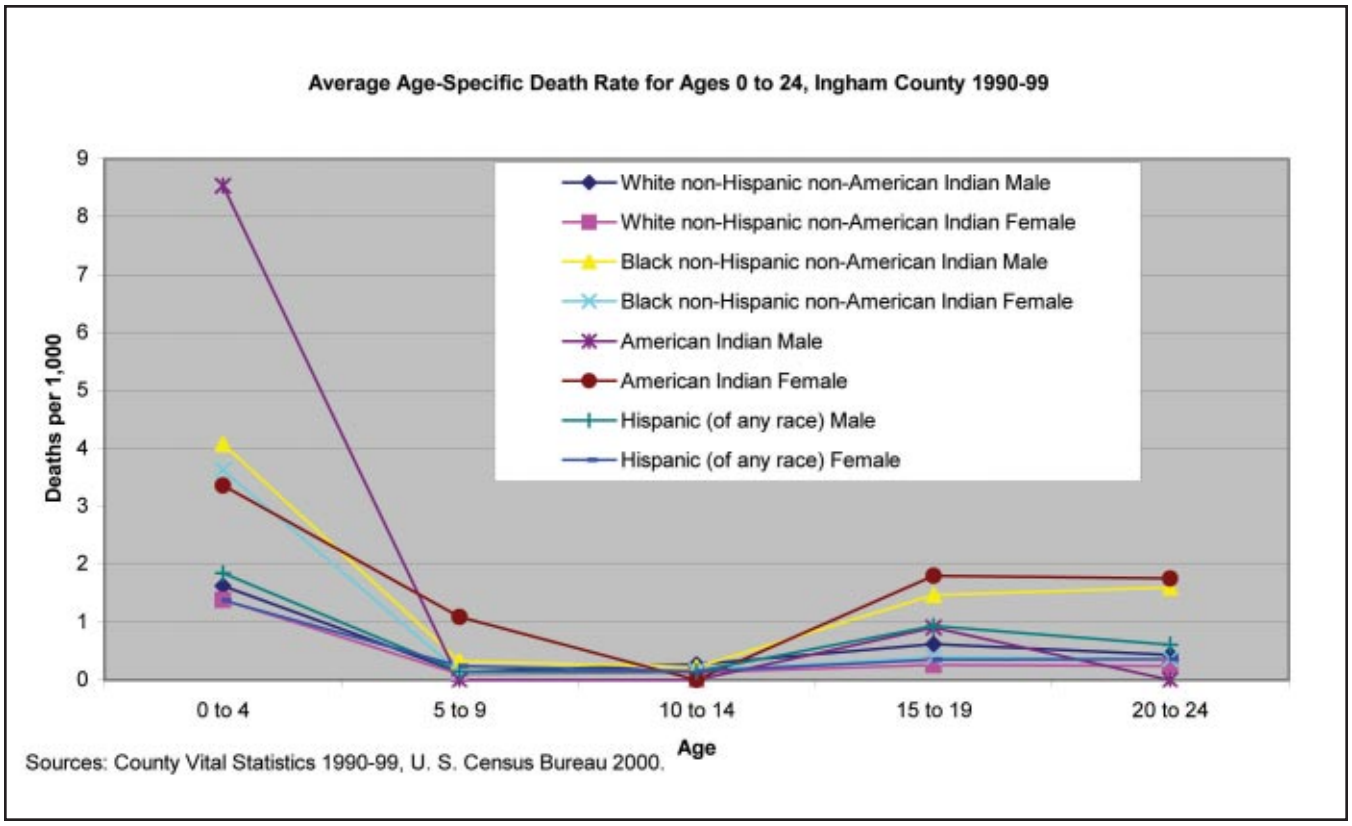


Figure 8 – Average age-specific death rate for ages 0 to 24. (County vital statistics, 1995-1998, U.S. Census Bureau 2000).

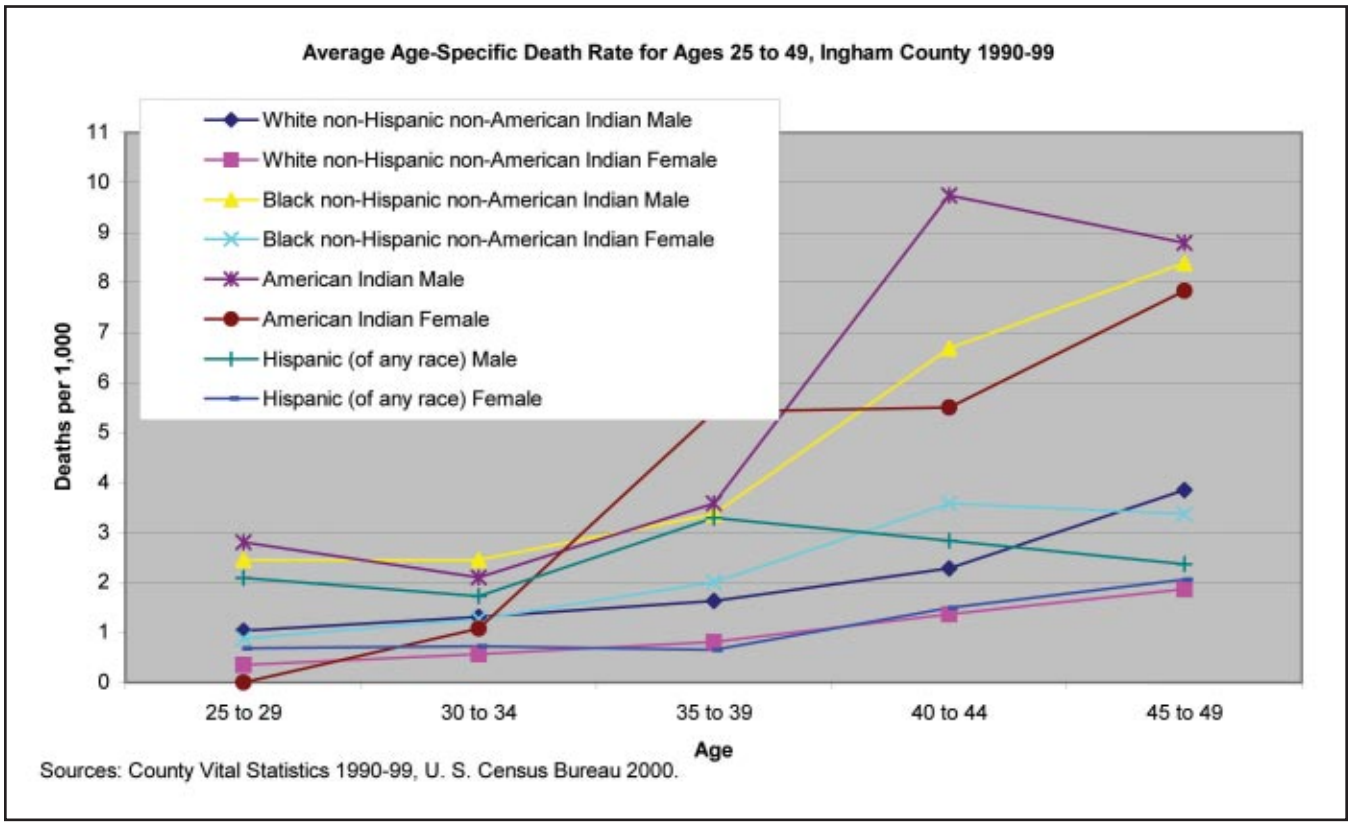


Figure 9 – Average age-specific death rate for ages 25 to 49. (County vital statistics, 1995-1998, U.S. Census Bureau 2000).

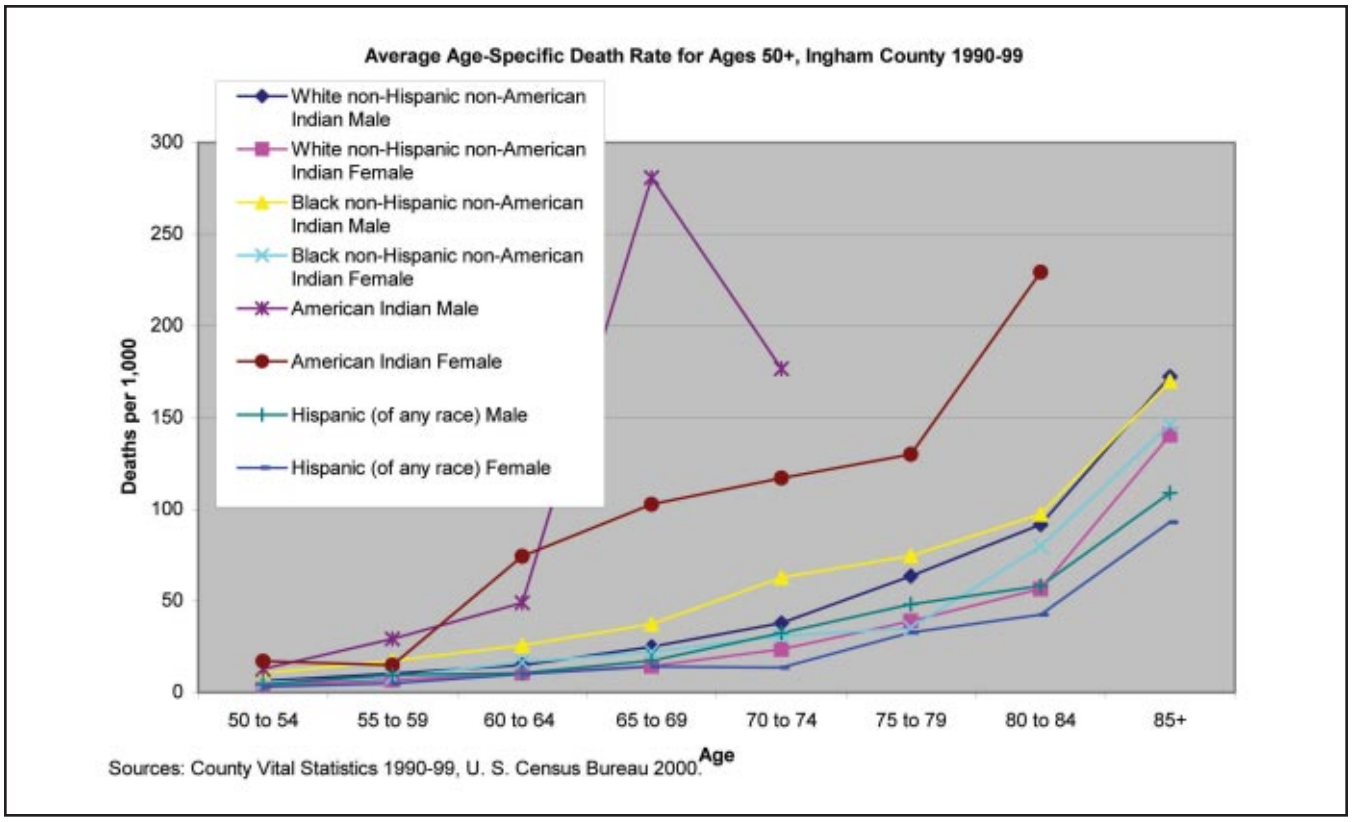


Figure 10 – Average age-specific death rate for ages 50+ (County vital statistics, 1995-1998, U.S. Census Bureau 2000).

We had hoped to be able to do inferential statistical analysis of both morbidity and mortality data for American Indians and Latinos in Lansing. The very low numbers of cases of communicable diseases, particularly for American Indians, and the non-availability of data on sexually transmitted diseases, have limited our ability to do more than descriptive statistics for morbidity. For mortality, we are able to look at some patterns, and make some comparisons between our two populations in Lansing, in the surrounding tri-county area, and nationally. However, these figures must be used with caution, due to the very small total number of American Indians, in particular.

Spatial Comparisons

Figure 11 demarcates the census blocks groups used in 1990 within the boundaries of the City of Lansing with major highways, roads, and rivers shown for orientation. Figure 12 provides a look at the population distribution of American Indians, Latinos, Whites, and Blacks in the City of Lansing, by census block groups. We chose to use census blocks as our unit of analysis, as privacy considerations restrict more specific information being made available from the Census Bureau. All data displayed in the graphics were classified using the Jenk's optimization method of natural breaks. This method identifies breakpoints in the data by placing it into categories that minimize the sum of the variance within each group. Jenk's method finds groupings and patterns inherent in the data (www.dartmouth.edu/~dbkarnes/jenks/jenks.html).

Major highways, roads, and rivers are shown for orientation (U.S. Census Bureau 1990 – spatial data from MI DNR Spatial Data Library and MSU Center for Remote Sensing).

Once we had gathered all the data we were able to find, we began to analyze it. We combined different data sets relating to population trends and distribution, and also to factors affecting the health of American Indians and Latinos in Lansing. We hope that by mixing these various data sets and showing them spatially, we might be able to understand the relationship of these populations to the local environment. Previous studies have shown that environmental injustice is prevalent in minority populations and have gone so far as to indicate that race alone is the single most significant predictor of locating hazardous waste sites (Mutz, Bryner, & Kenney, 2000).

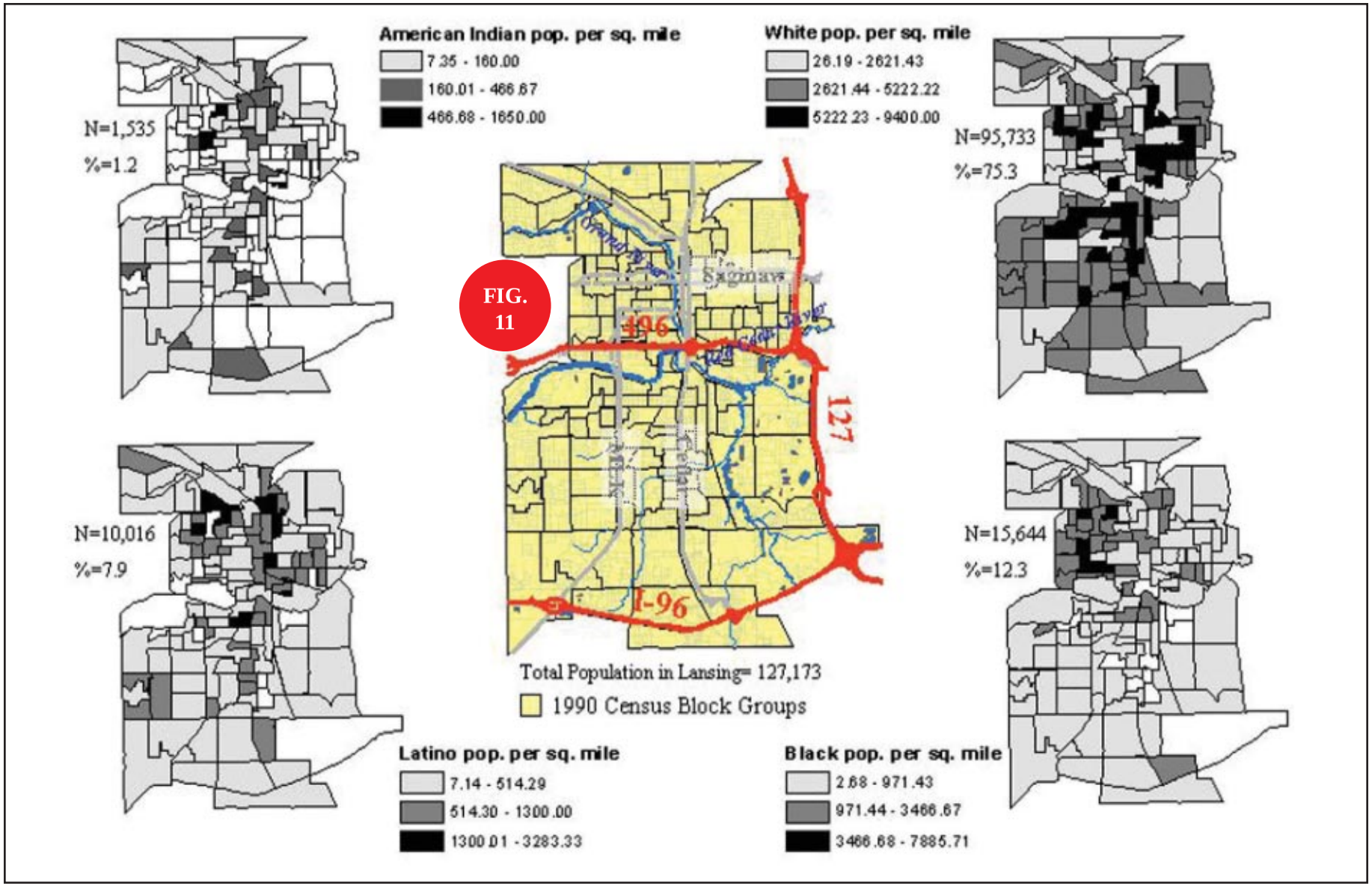


Figure 11 (inset) – Census blocks groups used in 1990 within the boundaries of the City of Lansing.

Figure 12 – 1990 census block group boundaries for Lansing and corresponding distributions of major populations (U.S. Census Bureau 1990 - spatial data from MI DNR Spatial Data Library and MSU Center for Remote Sensing).

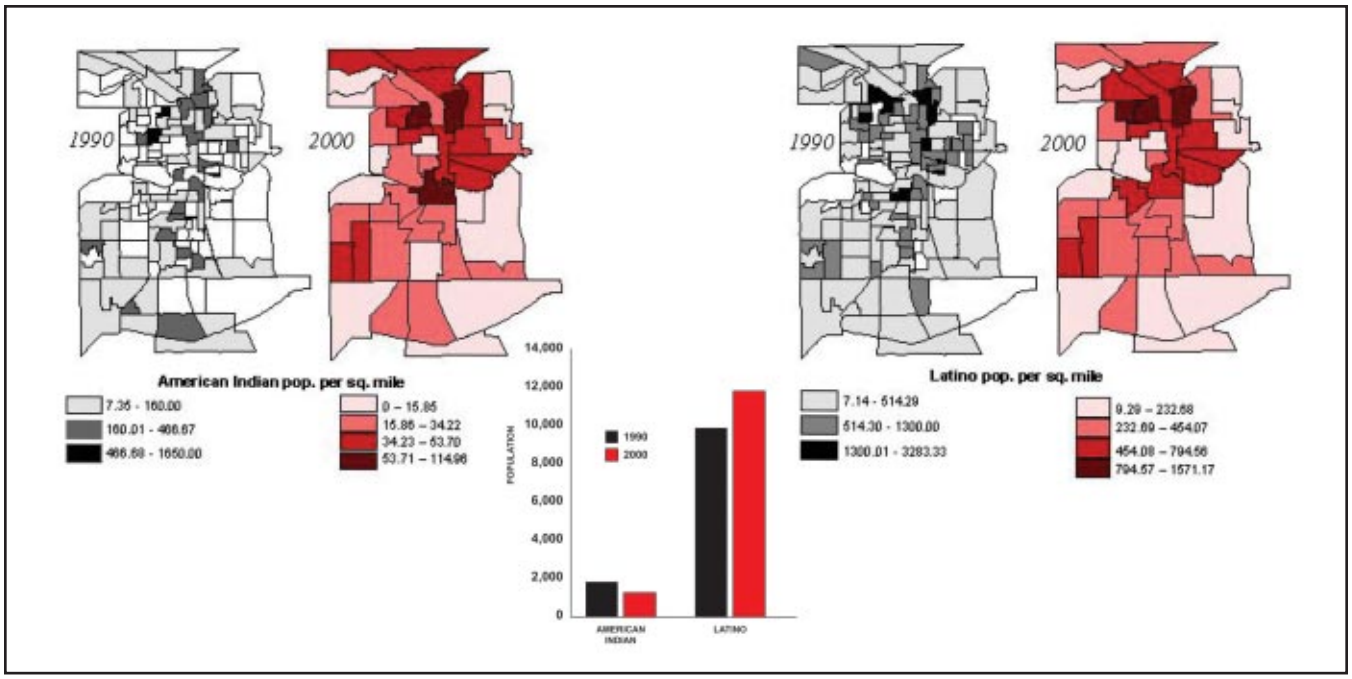


Figure 13 – American Indian and Latino population distributions (1990 census block groups compared to 2000 census tracts – MI DNR Spatial Data Library).

Figures 13 and 14 illustrate population trends for American Indians, Latinos, Whites, and Blacks in Lansing for 1990 and 2000. Declines in population can be seen for American Indians and Whites, while increases in population show up in both the Latino and the Black populations. American Indians, Latinos and Black appear to concentrate in the urban core, while Whites are more evenly distributed throughout the city. Data for 2000 was not available at the census block level during this study, but only at the census tract level. This may create some misrepresentations of population densities in these figures. For example, population concentrations that are apparent in 1990 in census blocks appear less concentrated in 2000, possibly due to the larger size of the census tracts.

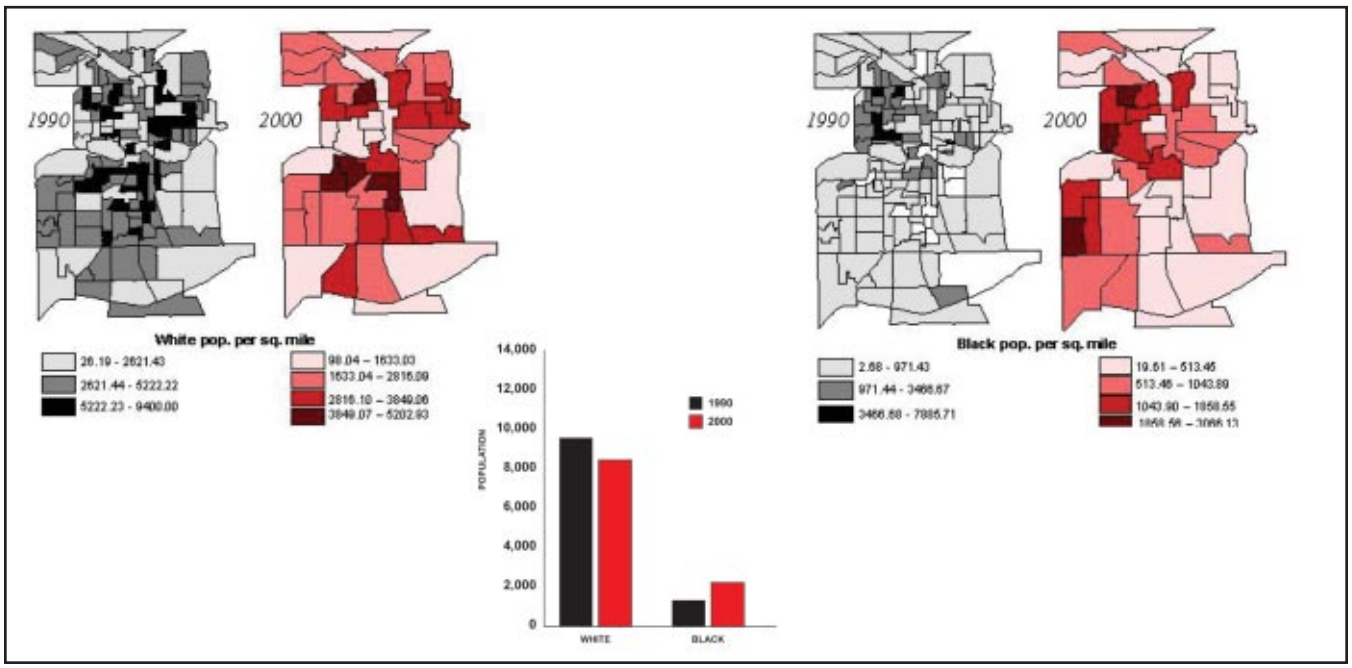


Figure 14 – White and Black population distributions (1990 census block group compared to 2000 census tracts – MI DNR Spatial Data Library).

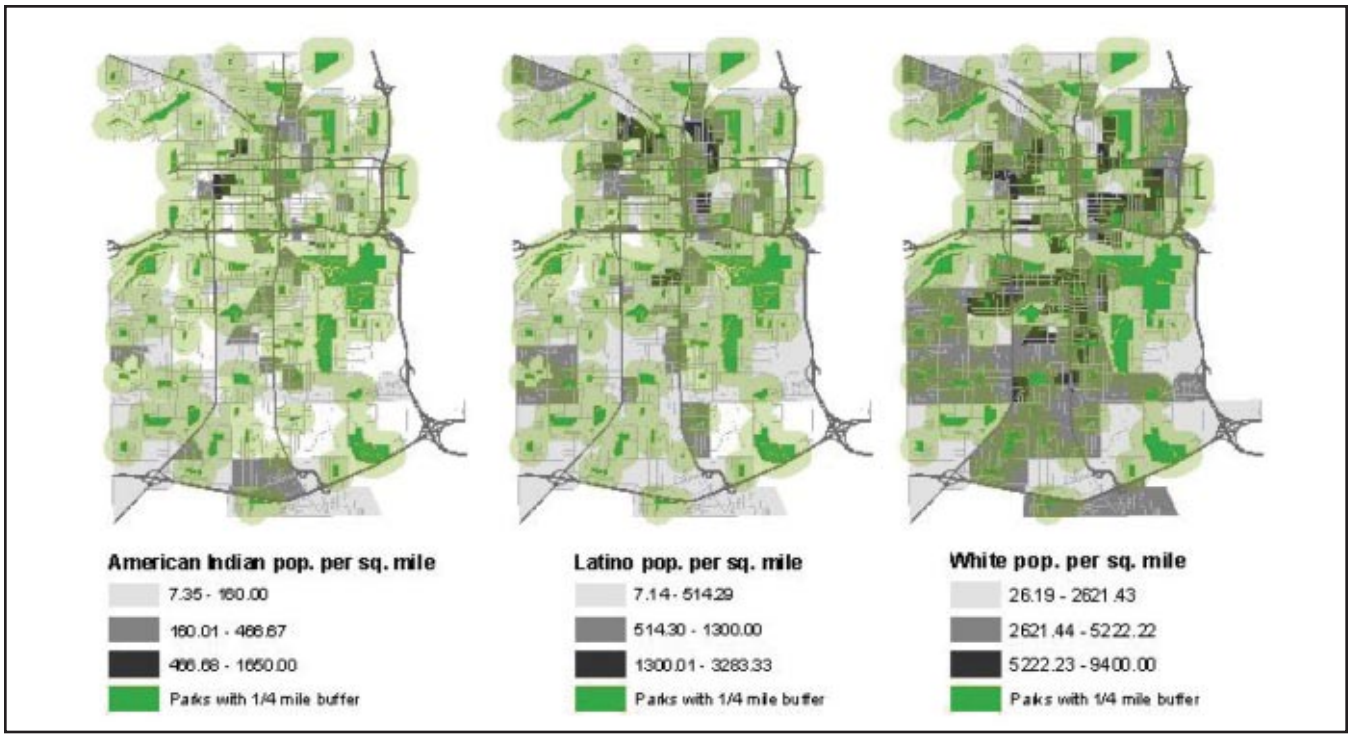


Figure 15 – City parks in relation to American Indian, Latino, and White population distribution (U.S. Census Bureau 1990- spatial data from MI DNR Spatial Data Library).

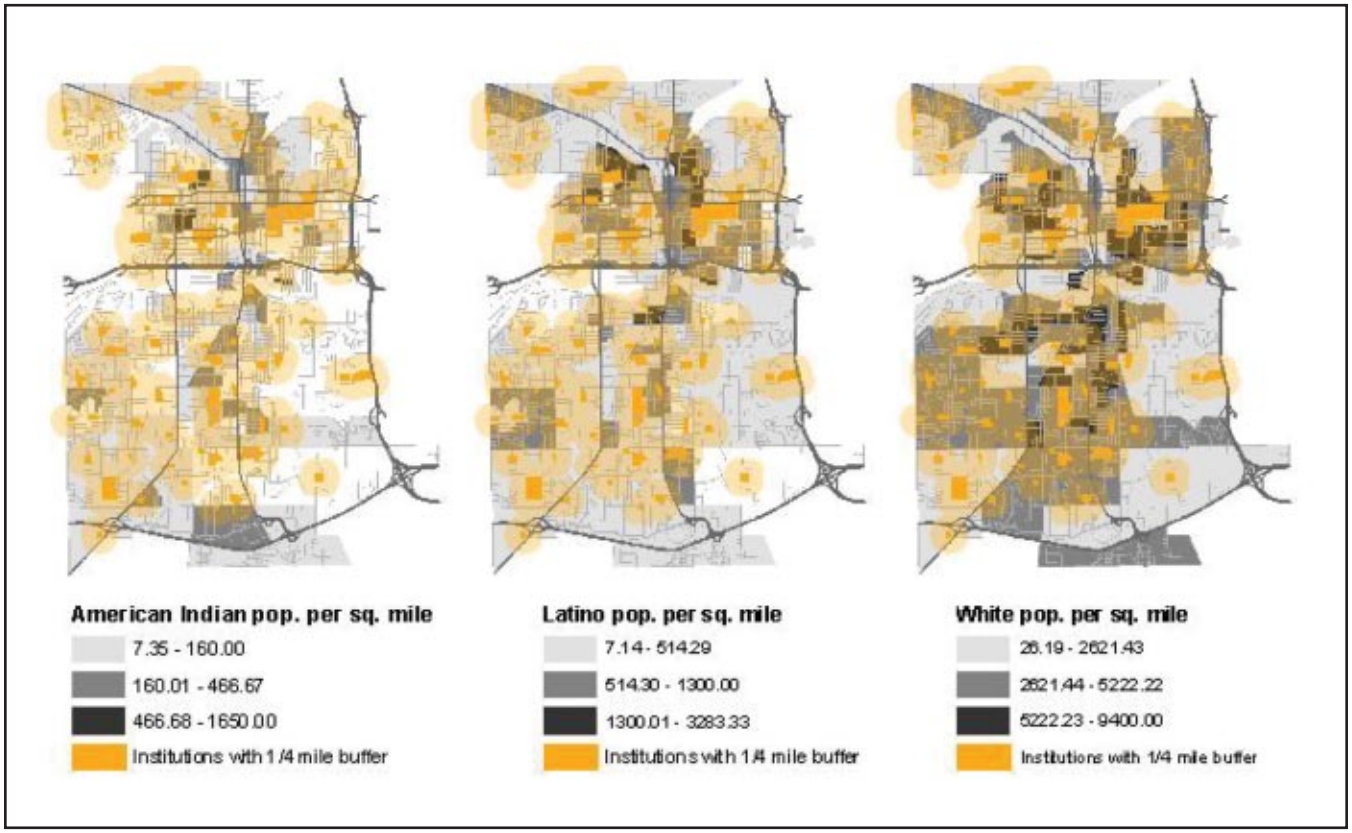
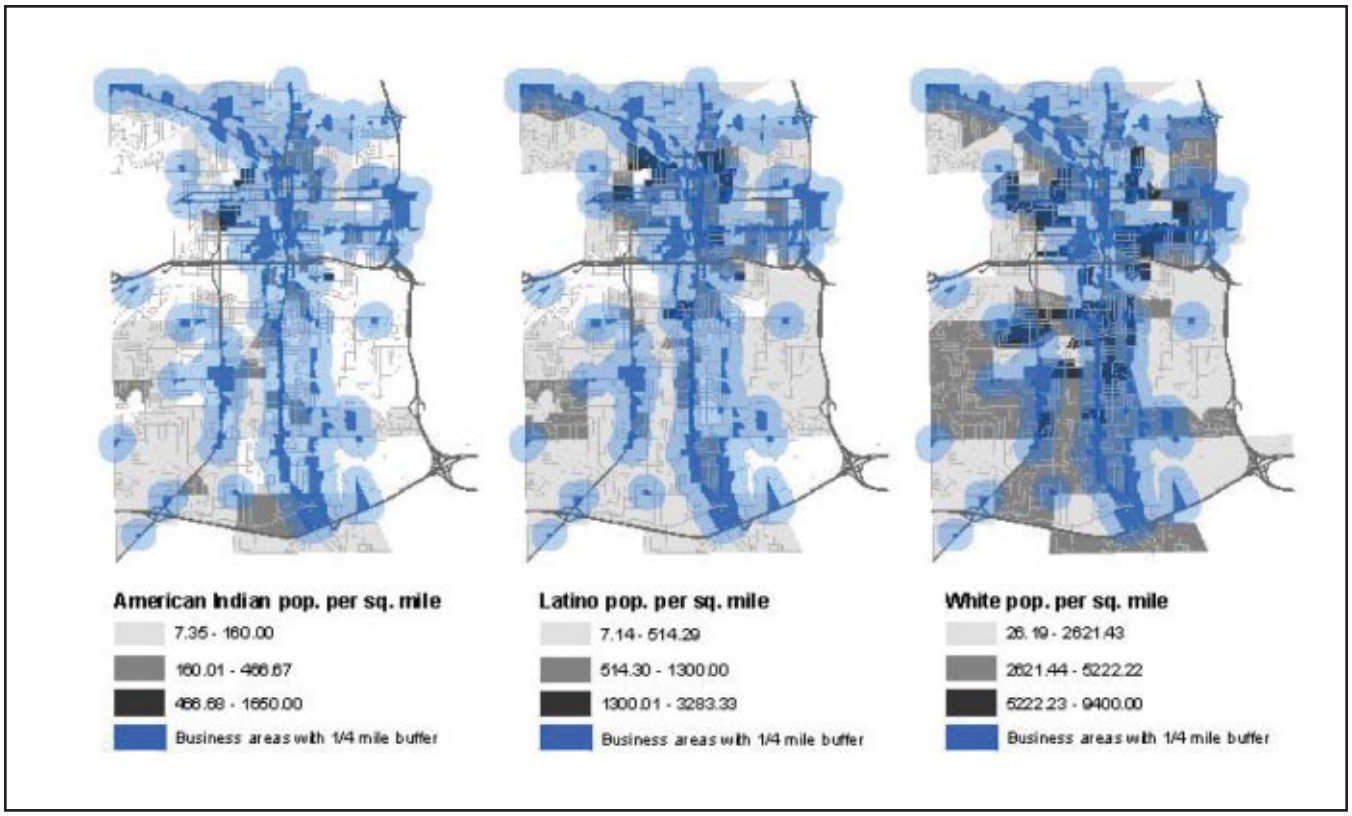


Figure 16 – Institutions in relation to American Indian, Latino, and White population distribution (U.S. Census Bureau 1990- spatial data from MI DNR Spatial Data Library).



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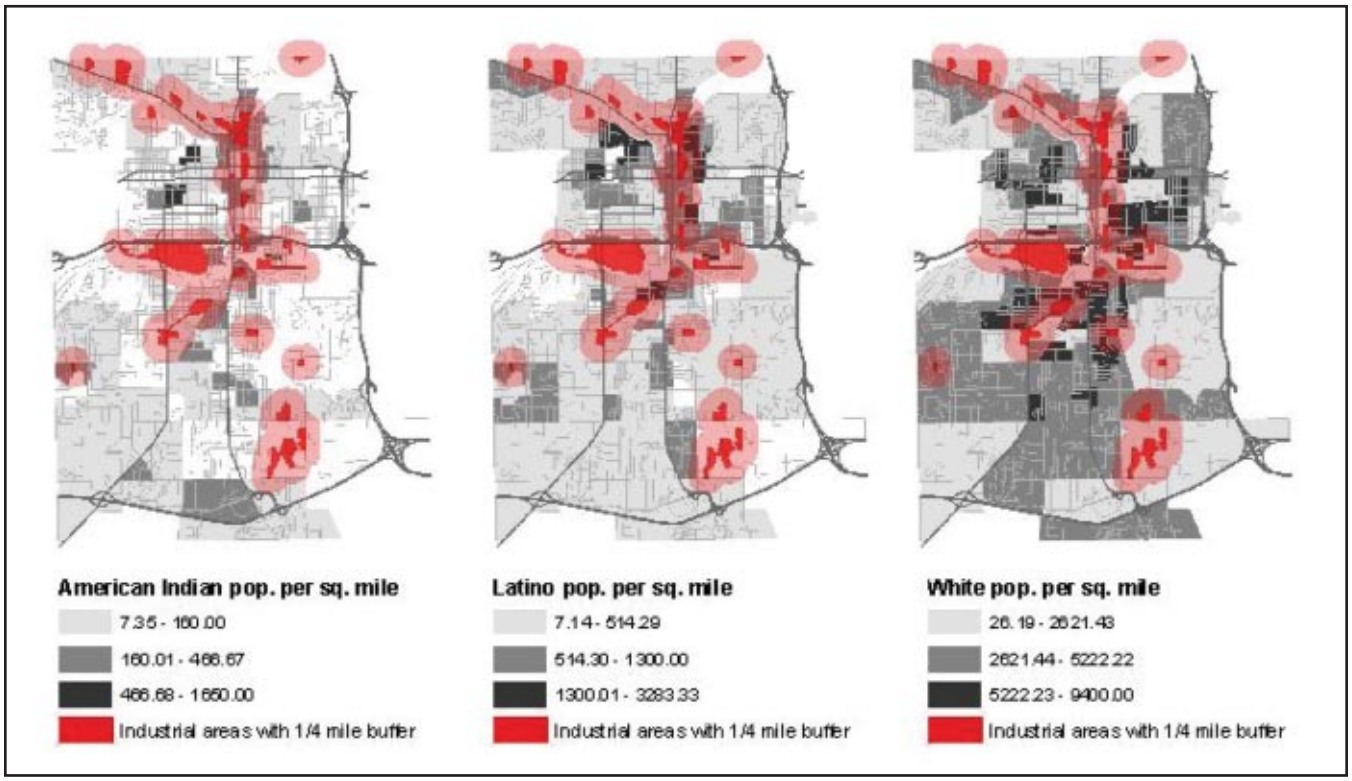

Figure 18 – Industrial areas in relation to American Indian, Latino, and White population distributions (U.S. Census Bureau 1990 – spatial data from MI DNR Spatial Data Library).

Figure 19 – Polluted sites in relation to American Indian, Latino, and White population distributions (U.S. Census Bureau 1990 – spatial data from MI DNR Spatial Data Library).

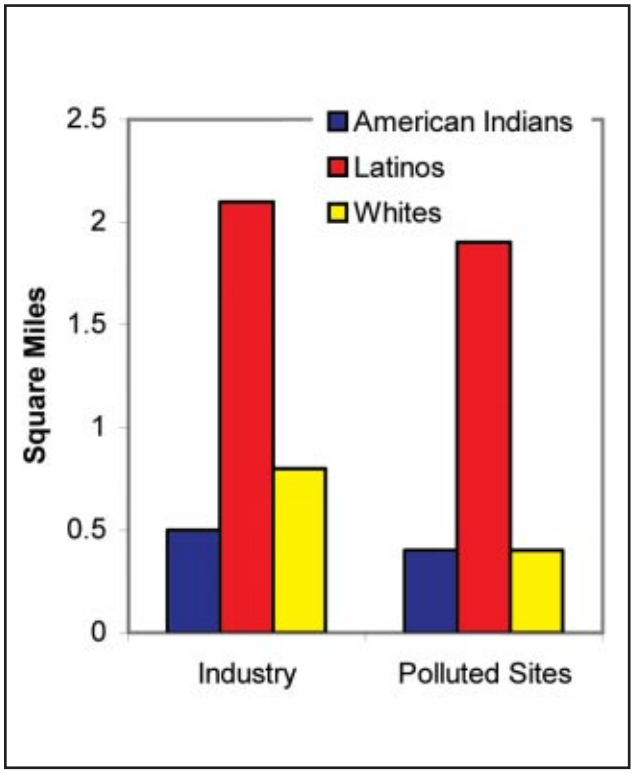

Figure 20 - Population densities within one-quarter mile buffer surrounding industry and polluted sites.

In assessing the impact of the environment on health, we combined population densities with specific land uses. We looked first at the distribution of American Indians and Latinos in relation to what we grouped as factors having a positive impact on health and urban life, specifically parks, institutions (health, educational, religious, and governmental facilities), and neighborhood businesses (non-industrial). Figures 15, 16 and 17 show population distributions in relation to buffers of one-quarter mile surrounding these positive factors. These figures indicate that Whites enjoy greater proximity to all these factors, with the exception of neighborhood businesses, where Latinos live in greater densities.

More negative aspects of the urban setting include living near industries and polluted sites. Figures 18 and 19 map these sites and the distribution of American Indians and Latinos in relation to them.

Table 1 – Regression results combining population densities and environmental factors			
Environmental Factor	*American Indians – 'P'*	*Latinos – 'P'*	*Whites – 'P'*
Industry	0.008	0.000	0.000
Institution	0.813	0.509	0.558
Business	0.011	0.000	0.000
Polluted sites	0.000	0.000	0.000
Parks	0.000	0.000	0.000

Figure 20 provides a table comparing census block areas with population numbers of American Indians, Latinos, and Whites who live within one-quarter mile buffers of industrial sites or polluted sites (hazardous waste management zones, solid waste management sites, and sites of environmental contamination). While this spatial analysis does not indicate statistical significance and uses population counts rather than densities, it clearly shows a pattern. Latinos are more concentrated around industrial and polluted sites than Whites, and both the Latino and White populations are more concentrated around these sites than the American Indian population. The Indian population may be too small to establish a trend. Further analysis is needed to establish the statistical significance of this data.

In order to examine the relation between population and land use, we ran a regression analysis for American Indians and Latinos. We used 100 meter buffers from identified environmental factors and population densities surrounding these factors. Table 1 provides the results. Although these preliminary numbers do not indicate specific relationships, they do indicate that there is an overall significance in the relationship between population distributions and environmental factors. The lower the probability ('P'), the higher the significance of the relationship between the population and the land use.

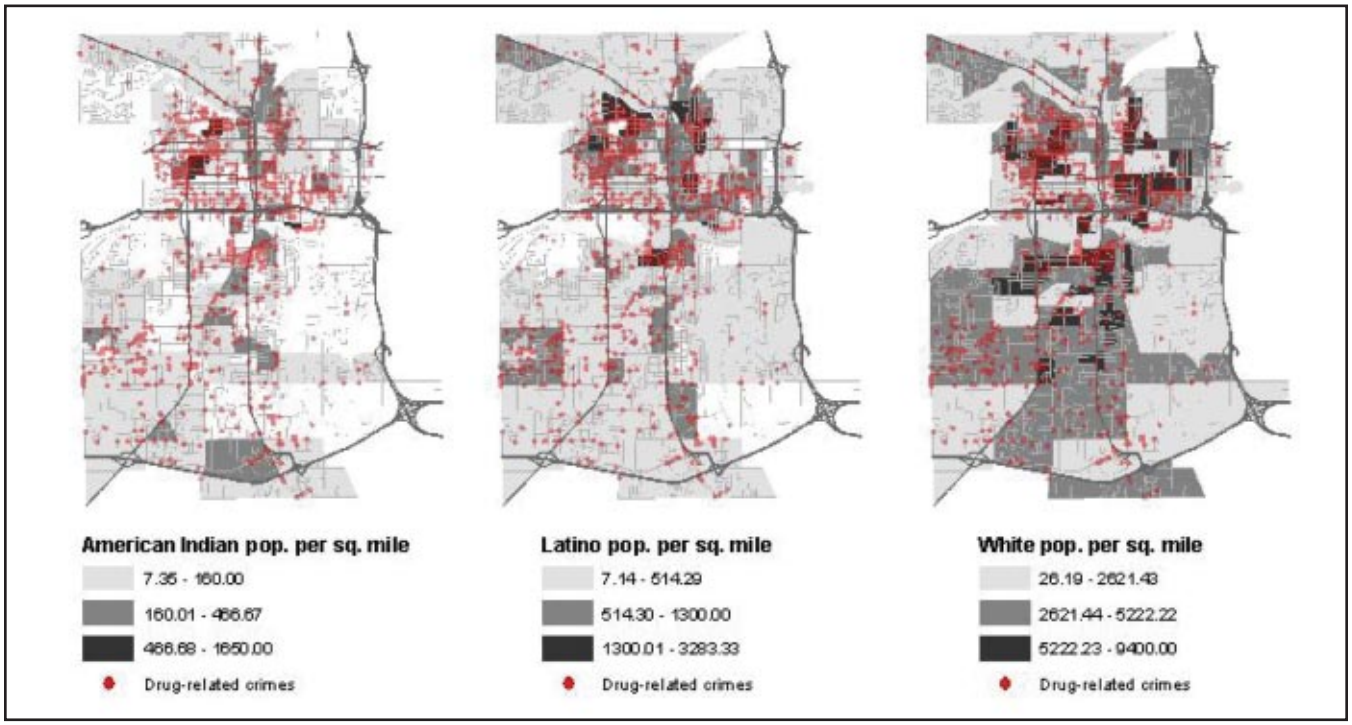

Figure 21 – Drug-related crimes in relation to American Indian, Latino, and White population distributions (City of Lansing Police Dept. – spatial data from MI DNR Spatial Data Library).

Figure 22 – Weapon-related crimes in relation to American Indian, Latino, and White population distributions (City of Lansing Police Department – spatial data from MI DNR Spatial Data Library).

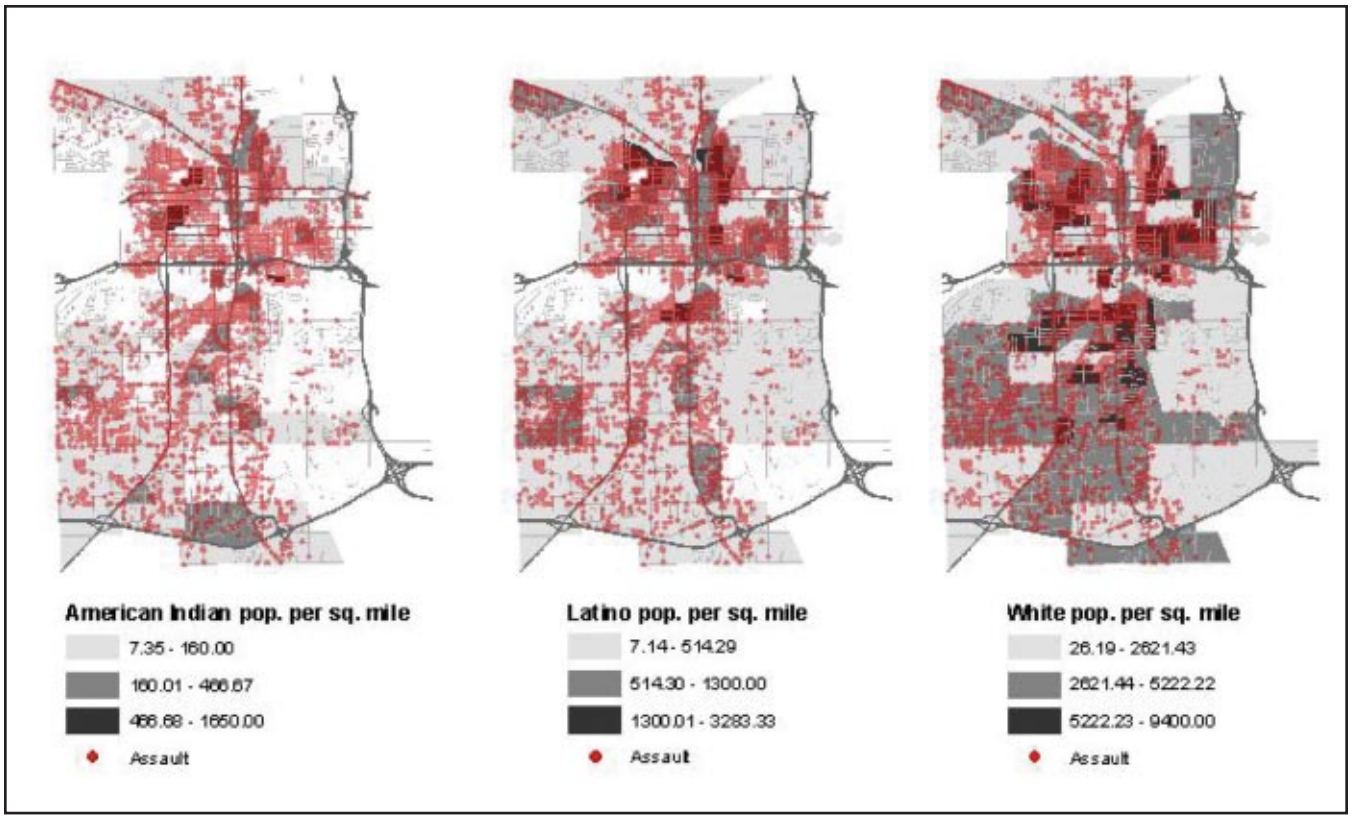

Figure 23 – Assault in relation to American Indian, Latino, and White population distributions (City of Lansing Police Dept. – spatial data from MI DNR Spatial Data Library).

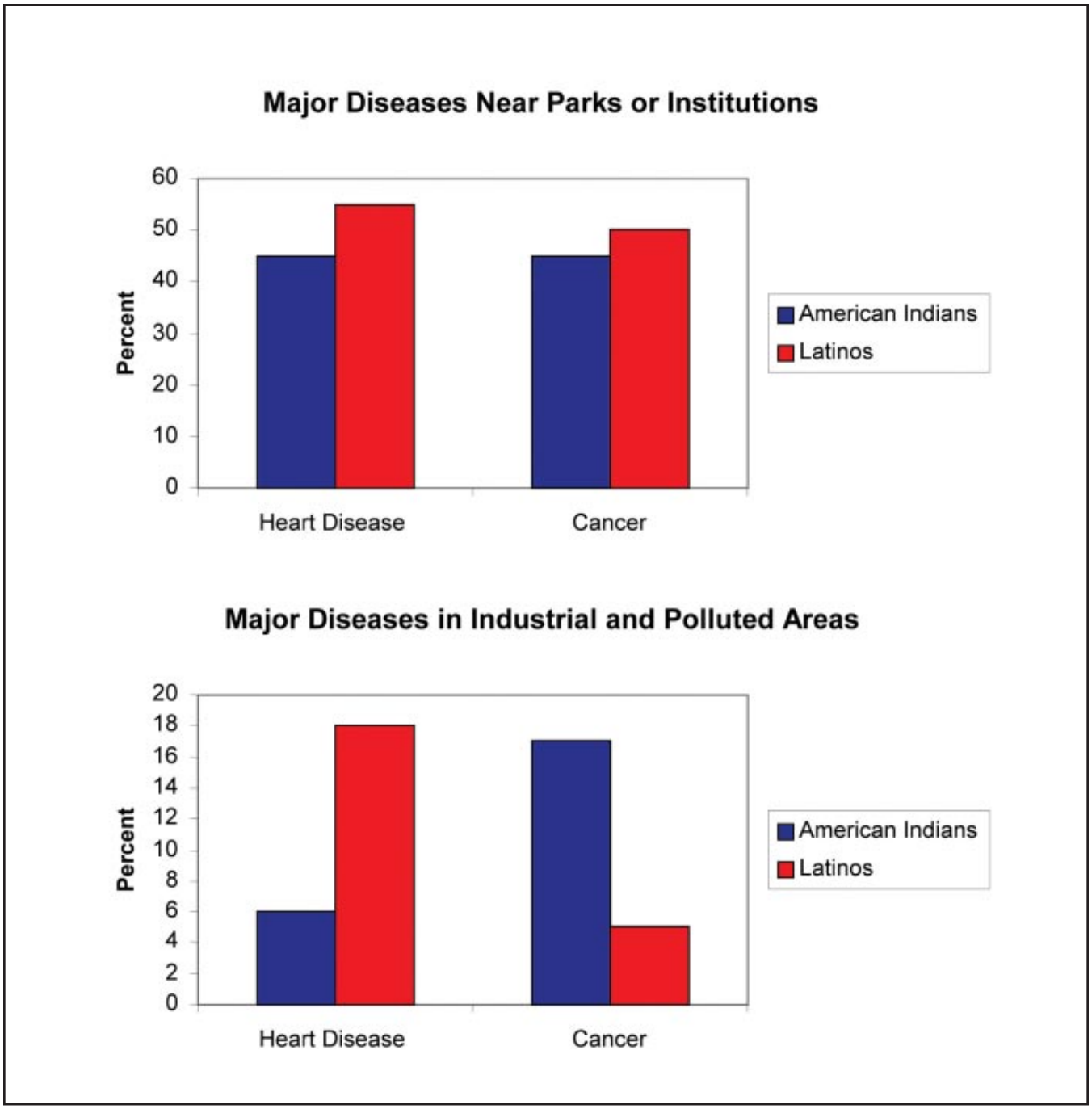

Figure 24 – Major diseases near parks, institutions, and in industrial and polluted areas.

Because American Indians and Latinos live closer to the inner city, they are also more heavily impacted by crime, which tends to cluster toward the center of town. Drug-related crimes (Figure 21) and weapons-related crimes (Figure 22) seem to impact American Indian and Latino population concentrations more than White population, while assaults (Figure 23) are distributed more evenly across the entire Lansing area. Murders are not included here for analysis due to their relatively rare occurrence in Lansing.

Figure 24 explores the question of environmental justice for these populations. We graphed the percentage of American Indians and Latinos who died from heart disease and cancer and who were also located within one-quarter mile buffer of industrial and polluted sites, and of parks and institutions (schools, hospitals, government buildings). Near industrial and polluted sites, heart disease is far more prevalent for Latinos and cancer for American Indians. While this increase may not be attributable to industry or pollution, it does raise questions and

calls for further study, including analysis for statistical significance. Near parks and institutions, the differences in rates for the two populations are not nearly so dramatic. The small population numbers, especially for American Indians, may also impact these potential relationships and should be taken into account.

Discussion

American Indians and Latinos represent small portions of the total Lansing population, and data on their health is not always accurate. For morbidity, the data are so inadequate, we cannot make good predictions about the health status of these two populations. For mortality, the data are more complete and we can see that they are disproportionally affected by cancer, cerebrovasuclar heart disease, diabetes, and accidents. It is clear from our collection of existing data that there are numerous problems with the data and its utility for making predictions concerning the health status of American Indians and Latinos. The problems can be broken into three categories: data shortages, data scale, and data quality.

Data Shortages

For many kinds of information, the data are simply not available, or have such restricted access that we did not attempt to incorporate them into our database. Some of the 2000 census statistics are not yet available on health, and are not expected to be released until 2003. This limited our ability to make comparisons over time, and particularly limited our ability to discuss current health status.

Local community organizations have not collected health statistics, nor conducted community surveys on the health of their members. We had hoped that more locally controlled data would provide a counterpoint to state vital records and federal census data, and allow us to evaluate the quality of existing data.

We did not attempt to access hospitalization data, as we were advised this would be a challenge, due to patient confidentiality concerns. Time limitations also precluded a lengthy attempt to access this data. Concerns with patient / client confidentiality also limited access to specifics on sexually transmitted diseases as well as mental health.

Data Scale

Statistics concerning the health of minority populations are collected by numerous agencies. Our first problem with data scale came with trying to find data specific to the City of Lansing, or the tri-counties of Clinton, Eaton, and Ingham. Census data and much of the health data is collected and analyzed at the state and federal levels. While the local counties collect data, much of it becomes synthesized within the State of Michigan's Department of Community Health.

Our second problem with data scale was a result of the populations we had chosen to study. Because these two populations, particularly American Indians, are such small portions of the total population of Lansing, making statistical inferences based on these numbers is not always valid. Compounded with the problem of misreporting or underreporting of American Indians and Latinos in vital statistics, the data become even more problematic. Qualitative studies would be one way to mitigate the problems with low numbers of individuals. Studies at a larger scale, such as the state level, would include a much larger number of people and be another way that inferences could then be made to specific city or county populations.

Data Quality

The quality of the data is also affected by data scale, and particularly by misreporting and underreporting. Studies at the national level (Parker et al. 1998; Rosenberg et al. 1999) suggest that the reliability and veracity of existing data on morbidity and mortality of American Indians and Latinos is questionable; our research at the local level confirmed these problems. Existing data on communicable diseases over a 10-year period indicated that only four American Indians out of a population of more than 1,500 were impacted by these diseases. This represents a gross underreporting, and a consequent concern with that data set.

Our objectives in this project were to gather and examine data on health of American Indians and Latinos in the City of Lansing, and to compare these populations to the larger populations. While we found numerous problems in the existing data, we did produce a number of statistical and graphical figures that attempt to describe our specific populations, in relation to other populations in Lansing, and to their natural and social environment. This provides a base for future research that will increase the quantity and quality of data concerning minority health.

Future research should address the concerns we identified with existing data. There is a need for more locally specific studies of American Indians and Latinos in Lansing, perhaps conducted in cooperation with local community organizations. Future studies should include more comprehensive health data, including information on sexually transmitted diseases and on hospitalizations. Data reporting needs more rigorous controls and training for those persons responsible for reporting, particularly more awareness of specific populations and the problems with undercounting. In particular, qualitative studies would provide actual individual and community data to complement the existing aggregate data on American Indians and Latinos in Lansing.

Acknowledgements

Our thanks to the College of Social Sciences, the Michigan Agricultural Experiment Station, and the Julian Samora Research Institute for funding this project, and for the opportunity we had to work together as a team and to grow as individual researchers. In addition, we would like to thank Jon Burley, from the Landscape Architecture Program and George Sirbu, from the Statistical Consulting Services at MSU, for their help in the regression analysis found in this report. And finally, we could not have completed this project without the cheerful and highly competent help of our graduate research assistants, Robert Cook and Mira Hidajat.

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APPENDIX – *LIST OF SOURCES*

SOURCE	*CONTACT OR LOCATION*	*DATA OR INFORMATION*
FEDERAL		
Bureau of the Census	On-Line	1990 public use micro sample, Clinton, Eaton, Ingham counties, 2000 public use microsample
Indian Health Service	Barbara Lahr, Bemidji Area Office	"A Feasibility Study of Three New Urban Indian Health Sites"
National Center for Health Statistics	On-line	Mortality, vital statistics report, ICD codes
STATE		
Department of Community Health, Division for Vital Records & Health Statistics	Cathy Humphreys; Marcus Cheatham, Ingham County Health Department	Live birth and death files, Clinton, Eaton, and Ingham County Residents, 1990-1999
Department of Natural Resources	Spatial data library	Parks, 1990 census blocks and data, 2000 census tracts and data, hazardous waste, solid waste, and environmental contaminations
Department of Civil Rights	Donna Budnick, American Indian Specialist	Contacts for Indian Health Service
Department of Community Health, Division of Communicable Disease & Immunization	Joe Blostein	Communicable disease statistics
Division for Vital Records & Health Statistics	Kenneth Darga, State Demographer	Information on vital statistics
MUNICIPAL		
City of Lansing, Forestry	Paul Dykema	Tree data
City of Lansing, Planning Department	Sam Quan	Zoning and aerials of Lansing
City of Lansing, Ingham County	On-line, www.cacvoices.org	Community health data
Community Mental Health	Richard Coehlo	Clinton, Eaton, Ingham County Mental health statistics
Ingham County, Health Department	Marcus Cheatham	Tri-County birth and death data
Lansing School District	Robert Killips	Educational statistics
Tri-County Planning Department	Jennifer Osborn	Schools, zoning, housing, land use
City of Lansing, Police Department	Craig Anderson	Information on crime statistics
Greater Lansing Housing Coalition		Info on housing & homelessness
PRIVATE ORGANIZATIONS		
Woodlands Indian Center	Patricia Dyer-Deckrow	American Indian community health information
MICHIGAN STATE UNIVERSITY		
Aerial Imagery Archive, Center for Remote Sensing & GIS	Robert F. Goodwin, Research Assistant	Information on Lansing area data
Criminal Justice Department	Chris Maxwell	City of Lansing crime data
College of Human Medicine	William Humphrey, Senior Research Administrator	Information on on-going MSU projects on American Indian health
MSU Library	Shawn Nicholson, State Documents & Social Sciences Librarian	Published sources on health and community maps
Native American Institute	George Cornell, Director	Published sources on American Indian health
Julian Samora Research Institute	Israél Cuéllar, Director	Information on on-going MSU projects regarding Latino health