

# Public Health and Prevention

April 2000

To the Citizens of Kent County,  
The Kent County Board of Health,  
and the Kent County Board of Commissioners:

This annual report is our third consecutive report on the health status of Kent County. This year it is being released with a companion report on public health services in our community. Taken together, these two reports paint a compelling and telling picture of the vital role of public health in the Kent County community: what services we deliver, and, throughout this report, the impact of those services on the health of our citizens.

Certainly, with regard to community health status, not all news is good news. Heart disease and cancer - although both are largely preventable - continue to be the leading killers of people in Kent County, while gaps in socioeconomic status result in gaps in access to health care, and disparities in health outcomes.

At the same time, rates of chronic disease are slowly declining, or remain stable, while reductions in accidental deaths and violent deaths demonstrate that prevention and safety efforts really do have a positive impact on our community. Environmental Health programs continue to identify and protect our community from hazards in the environment, providing a standard of disease control that assures a healthy community environment.

Improving and maximizing community health requires a coordinated and ongoing effort. The Kent County Health Department is committed to assuring a healthy community, and gratefully acknowledges the efforts and collaboration of all our partners in the community toward that end. It is my pleasure to present the 1999 Health of Kent County Annual Report to the Community.

Sincerely,



Douglas A. Mack, M.D., M.P.H.  
Public Health Director



# Public Health and Community

## Synthesizing Privacy Protections and Public Health

Kent County Health Department is one of nearly 3,000 local health departments, 50 state community health agencies and numerous national nonprofit and governmental organizations whose mission is to enrich the quality of life and increase longevity through public health interventions. Citizen investments in this multilayered structure of prevention, promotion and protection services traditionally constitutes less than one percent (1%) of annual governmental expenditures.

With the advent of managed care, public health has continued to reinvent itself in terms of its three core public health functions; assessment, policy and assurance. Invigorating this ongoing reexamination was a landmark national study by the Institute of Medicine during the late 1980's. Today that process continues with even stronger language regarding the newly defined roles among public health, managed care, family medicine and personal responsibilities for behaviors that influence your health.

Nowhere is that dialogue more firmly reinforced than in defining the role of public health in dealing with the privacy of patient medical records. However, there is a wealth of information related to many of the factors, which should help drive our planning effort to meet future health care need. Aggregating individual level data across health care systems assures complete anonymity for the individual, and has been used to aid in documenting morbidity of disease.

Encompassed in a 1996 federal law called the Health Insurance Portability and Accountability Act (HIPAA) are strong provisions that address how medical records must be given even more protection. Today those protections are taking on new meaning as final rules are approved and deadlines are being set to assure full enforcement among public health agencies, health care professionals, governmental units, health corporations and private employers.

## Environmental Health, Food Safety, and Personal Health

Your family's personal health is all too often impacted by the efforts of public health environmental health personnel. As our community takes advantage of greater variety in the many foods prepared outside the home, your environmental food sanitarian becomes an even more important source of protection for your family.

Vigorous inspection and enforcement programs for food sanitation are a constant, yet often hidden protection factor in your eating habits. Food handler training, licensing, review of commercial kitchen designs, inspections, civil citations and other enforcement activities are several ways your investment in your local public health department pays dividends.

Collaborations among local public health officials and state agencies are part of the multidisciplinary team of food professionals that keep you safe. Whether its investigating the cause of a food poisoning outbreak, issuing public food recall notices, tracking the source of food contamination, or bringing the latest information to food handlers, your local environmental sanitarians are at the front lines of information, prevention and protection of the food you eat.

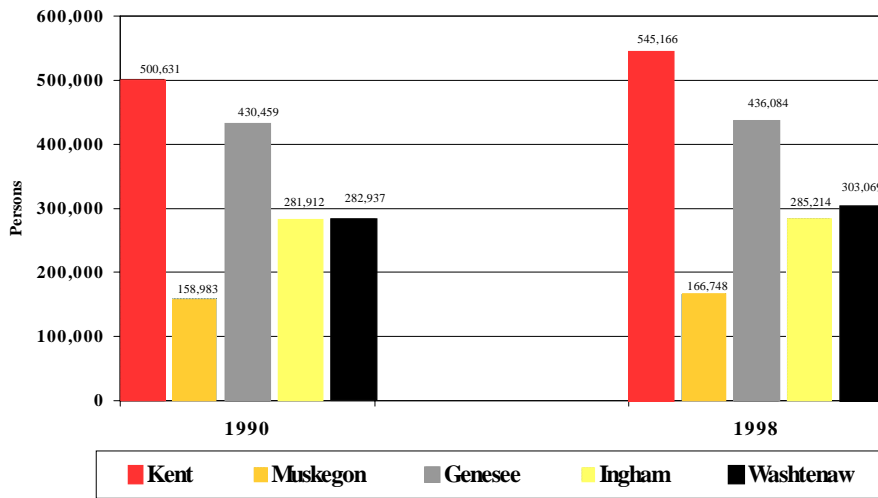
# Demographics

## Growth in West Michigan

Figures from the U.S. Census Bureau estimate that the West-Michigan area was growing at a pace that was near the 10% level for the decade of the 1990's. This translates into regional population growth in excess of 124,000 new residents. Residents in West-Michigan's eight counties comprised in excess of one and one-quarter million persons as of 1999; out of over 9.8 million Michigan residents.

Since 1990, Kent County added an estimated 44,535 new residents. The remaining six counties adjacent to Kent generated over 53,000 new residents, which represented just under half the areas growth. Nearly double-digit population increases among Michigan counties indicate likely changes in the amount of care to be delivered by health care professionals in the coming decade.

## Population of Kent and Selected Counties, 1990 and 1998



professionals in the coming decade.

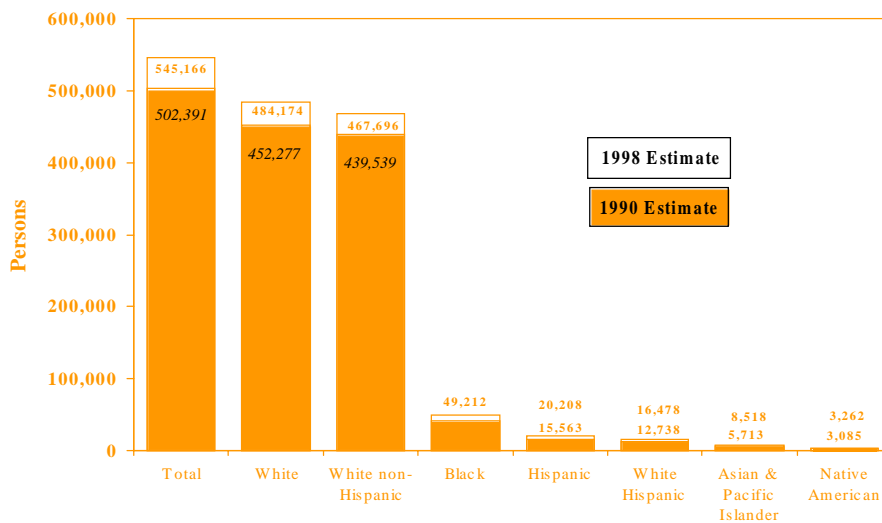
When comparing growth in counties that are more similar to Kent demographically -- those that have a minority population in excess of 10% of the total population -- Kent County grew at a greater rate. Specifically, Genesee, Ingham and Washtenaw counties grew by 1.3%, 1.2% and 7.1%, respectively, over the same time.

## Changes in Race and Ethnicity

The U.S. Census Bureau makes intercensal estimates of race and ethnicity; the most current data represents 1998. Based upon these estimates minority populations represent 14.8 % of residents of Kent

County, a slight increase from the 1990 Census figure of 12.5%. By the year 2050, the Census Bureau estimates that people of color will represent 1 in 3 Americans. With respect to gains by population group, Asian/Pacific Islanders experienced a 49% increase in growth, and the African American population grew by nineteen percent over the past decade. Estimates for the Hispanic population are considered less valid due to the large population of migrant workers who support area agriculture many of whom are choosing to make West Michigan their permanent homes. Current estimates are considered to under-count Hispanic residents, but still represent a 29.8% increase since 1990.

## Race and Ethnicity in Kent County, 1990 and 1998



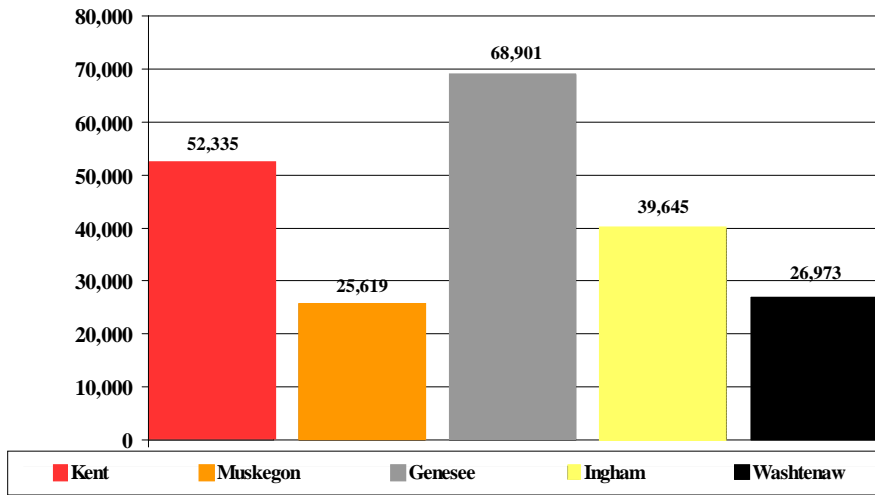
## Poverty Status in Michigan

Current estimates suggest that 9.6% of Kent County residents live in poverty, this represents 52,335 persons, of which 26,793 are children. Of demographically similar counties, only Washtenaw had a smaller percent of its population in poverty at 8.9%. Muskegon, Genesee and Ingham counties all have double-digit poverty rates at 15.4%, 15.8%, and 13.9% respectively.

According to the Kaiser Foundation, "Minority Americans, on average, are poorer than whites. While more than 20% of whites are poor or near poor (i.e., incomes below 200% of poverty), at least one-half of African

# Demographics

People in Poverty in Select Counties, All Ages, 1995



Americans, Hispanics, and Native Americans are poor or near poor." (Key Facts: Race, Ethnicity and Medical Care, October 1999, The Henry J. Kaiser Family Foundation)

Most researchers believe that socioeconomic status may be a better indicator of overall health status than race or ethnicity. That is, current disparities in health status between minority populations and whites are more a product of disparities in socioeconomic status than of race.

## Public Assistance

State public assistance data indicated that nearly 5% of all Kent County residents received some form of temporary help during 1998.

Data reported from Kent County food pantries indicated a slight reduction (5%) in food assistance requests in 1998. This decrease was countered by more demand at two God's Kitchen programs (Capital Lunch and Special Delivery Meals).

Poverty and Public Assistance in Selected Counties, 1998

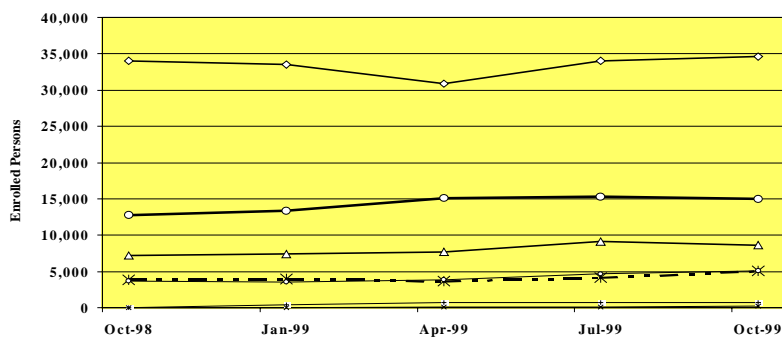
County	Percent Poverty	FIA Clients Total	FIA Clients (As % of total population)	FIP Clients (Cash Assistance)	Food Stamp Clients
Genesee	15.8%	41,860	9.6%	18,937	41,777
Muskegon	15.4%	14,192	8.5%	5,529	14,211
Ingham	13.9%	18,611	6.5%	7,054	18,133
Kent	9.6%	26,472	4.9%	7,564	26,268
Washtenaw	8.9%	8,601	2.8%	2,905	8,383

## Medicaid Enrollment

Conversion of Kent County Medicaid clients from fee-for-service to capitated health plans was completed during 1999. While many other Michigan counties saw total Medicaid enrollment decline, Kent County continued to see a steady rise in enrollments, due in part to intense outreach efforts (Healthy Kids and MI-Child). There are six (6) Qualified Health Plans in Kent County that are responsible for the care of the Medicaid population. Continued declines in reimbursement have resulted in enrollment caps for some plans.

Reductions in adult Medicaid enrollments (especially among women) were offset by new child entries, which resulted in a small increase in total Kent County enrollments.

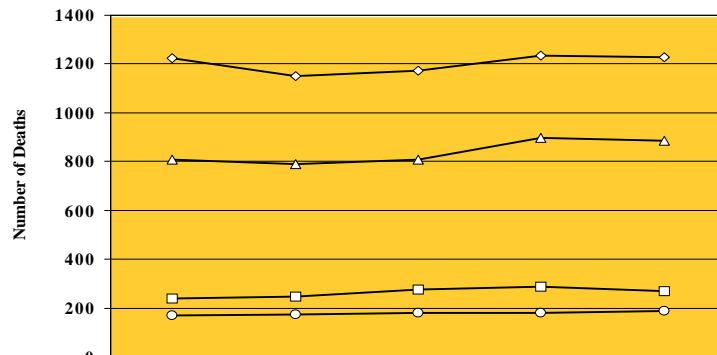
Kent County Medicaid Enrollment by Health Plan, October 1998 - October 1999



Health Plan	Oct-98	Jan-99	Apr-99	Jul-99	Oct-99
Total Enrollment	34,070	33,559	30,919	34,019	34,626
Priority Health	12,744	13,359	15,079	15,275	15,002
Community Care Plan	7,239	7,399	7,654	9,147	8,606
Care Choices	3,897	3,900	3,608	4,135	5,071
Community Choice MI	3,612	3,513	3,803	4,685	5,061
Good Health	4	421	689	672	698
Pro Care Health Plan	0	0	86	102	188

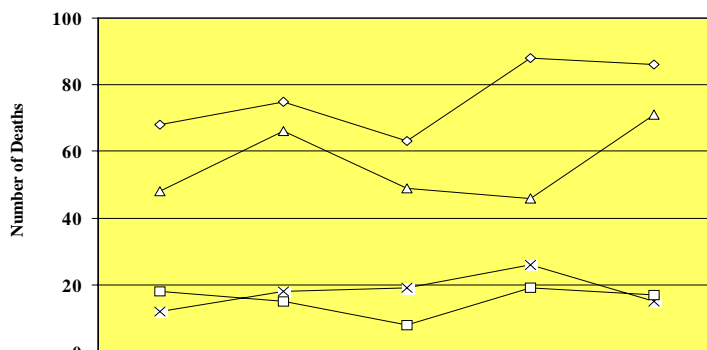
# Mortality

## Leading Causes of Mortality, Kent County



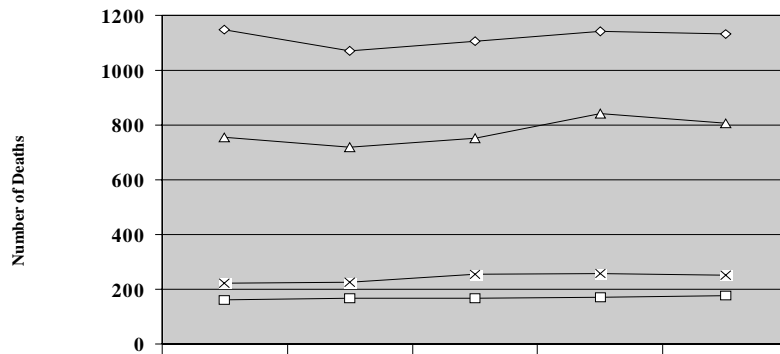
Year	Heart Disease	Cancer	Cerebro-vascular Diseases	Pneumonia/Flu
1994	1222	810	239	170
1995	1150	790	245	172
1996	1172	809	277	180
1997	1236	896	288	180
1998	1227	884	270	187

## Leading Causes of Mortality for African Americans, Kent County



Year	Heart Disease	Cancer	Cerebrovascular Diseases	Homicide
1994	68	48	12	18
1995	75	66	18	15
1996	63	49	19	8
1997	88	46	26	19
1998	86	71	15	17

## Leading Causes of Mortality for Whites, Kent County



Year	Heart Disease	Cancer	Cerebrovascular Diseases	Pneumonia/Flu
1994	1150	754	224	161
1995	1070	720	225	168
1996	1105	753	256	168
1997	1143	842	259	170
1998	1133	807	252	177

## Leading Causes of Mortality

The Michigan Department of Community Health, Division for Vital Records and Health Statistics collects mortality data from death certificates. A physician is responsible for listing a primary cause of death, and may elect to list additional "related" causes of death. Related causes of death are listed when the physician believes they were a significant factor in causing the death. As an example, the primary cause of death may have been coded as pneumonia, but diabetes may be listed as a related cause if this played a significant role in the death.

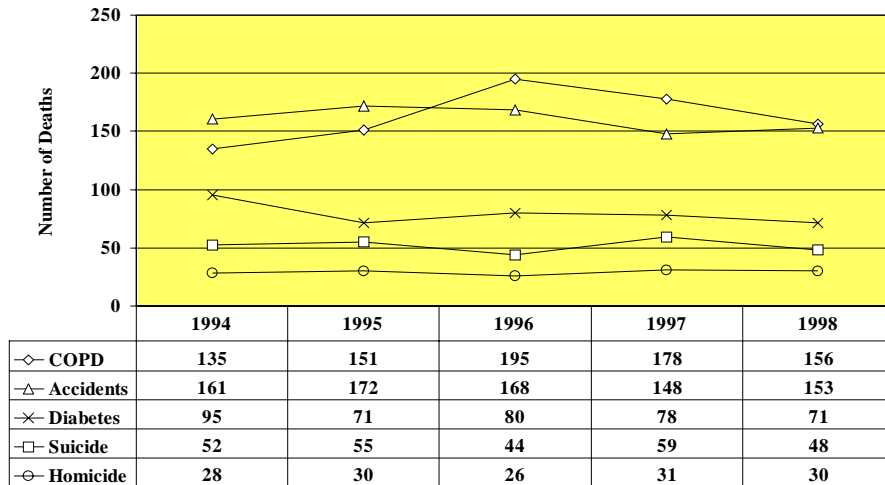
These data represent the primary cause of death, and exhibit little change since 1994. Heart disease, cancer, and stroke (cerebrovascular disease) still account for the greatest proportion of deaths in all Kent County populations.

However, due to limited occurrences, there is still a great deal of yearly variability in the ranking for some of the leading causes of death in the African American population. Although the number of deaths due to homicide fell by two in 1998, a larger decrease in deaths due to stroke made homicide the third leading cause of death for African Americans in Kent County.

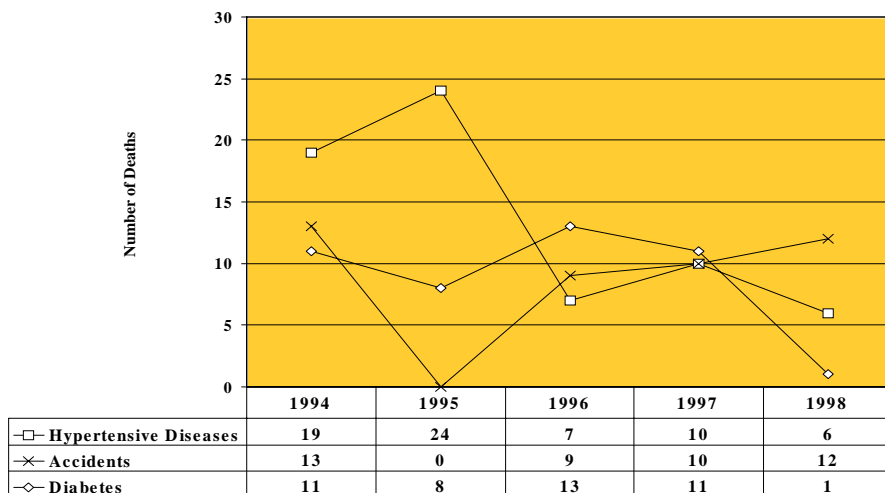
In general, the gross rate of death for each of the leading causes of death is higher in the white residents of Kent County. However, age-adjusted rates provide a more valid picture of comparison between the two populations. Age adjusted rates account for differences in the population spread (e.g., size and age distribution of the population), and allow for comparisons between populations over time. Yearly age-adjusted rates can only be computed for African Americans in Kent County for heart disease and cancer where there are sufficient numbers of death spread throughout the life-span.

# Mortality

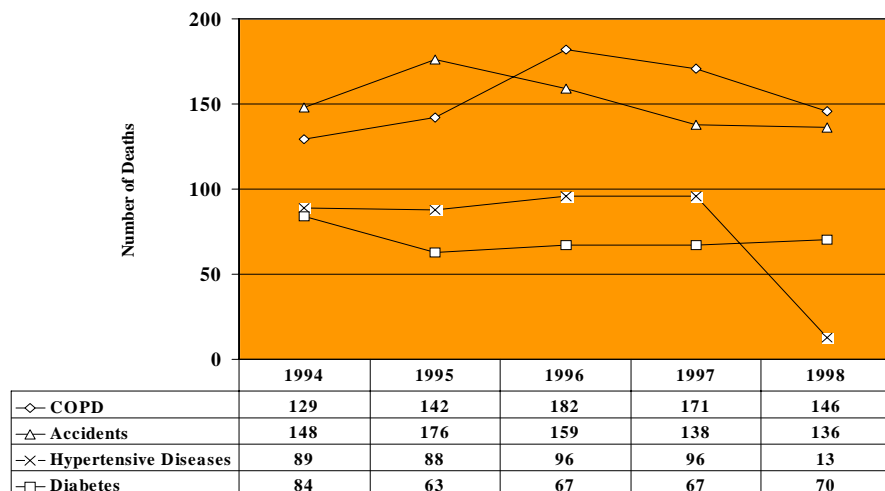
## Significant Causes of Mortality, Kent County



## Significant Causes of Mortality for African Americans, Kent County



## Significant Causes of Mortality for Whites, Kent County



The current age-adjusted rate for deaths due to heart disease for Kent County African Americans is 201.7 per 100,000, significantly higher than the white rate of 120.7 per 100,000. Deaths due to cancer show a similar pattern, the current age-adjusted rate for African Americans is 178.0 per 100,000, and 114.8 per 100,000 for white Kent County residents.

When comparing African Americans in Kent County to Michigan African American residents similar trends are noted. That is, higher age-adjusted rates for African American residents of Kent County. (Deaths due to heart disease for Michigan African Americans was 194.0 per 100,000 in 1998; and for deaths due to cancer the Michigan rate was 159.0 per 100,000).

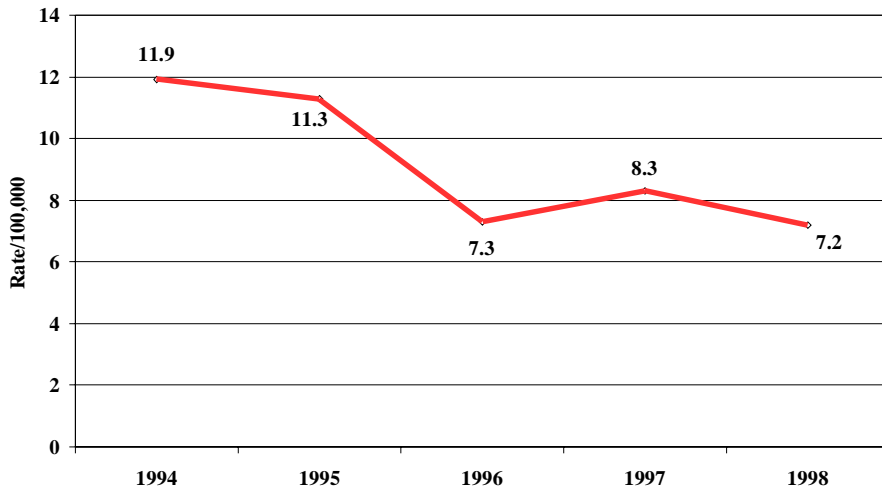
Kent County whites fared significantly better when compared to Michigan white residents for the leading causes of death. That is, generally lower age-adjusted rates for white residents of Kent County than white Michigan residents. (Deaths due to heart disease for white Michigan residents was 132.4 per 100,000, and for deaths due to cancer the Michigan rate was 122.0 per 100,000). This held true for all of the leading causes of death except deaths due to pneumonia/influenza where the Kent County rate was slightly higher than the state rate (14.5 per 100,000 in Kent County, and 12.3 per 100,000 for Michigan).

Kent County can surpass the U.S. *Health People 2010* goals for Chronic Obstructive Pulmonary Disease deaths if the 1996-98 trend continues through the year 2002.

Kent County has already achieved the national *Healthy People 2010* goal for unintentional injury death rate (25.9 per 100,000 population by 2010). Kent County's accidental death rate per 100,000 persons was 25.0 in 1998, and if the trend of the last four years continues, this could drop below 20 deaths per 100,000 in 2000.

# Sexually Transmitted Infections

**AIDS, Rate of New Cases, Kent County**

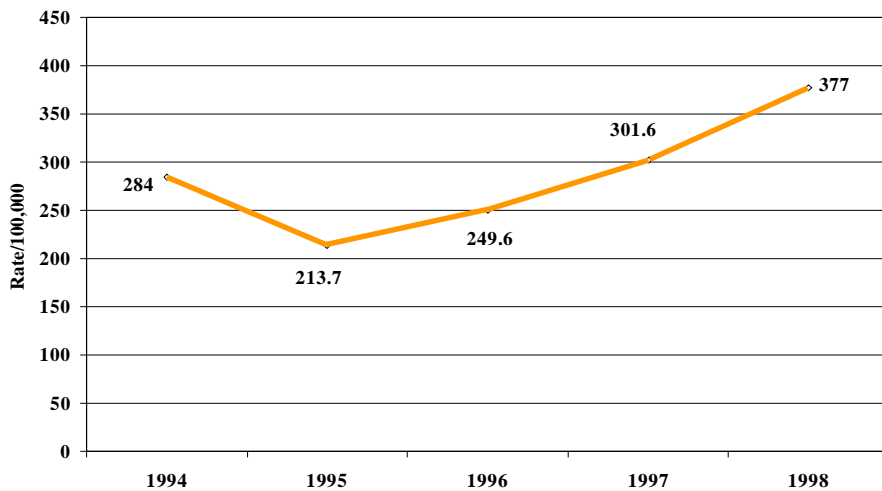


## AIDS and HIV

New cases of AIDS continued to decline in 1998, continuing a four-year trend. Effective prevention messages, appropriate health insurance coverage, and improved medical treatments have all had a positive influence on reducing this rate.

While new AIDS cases are declining, the rate of new cases of HIV, the virus that causes AIDS, is still increasing, even though the rate of increase has slowed. New "cocktail" drug treatments are reducing the number of HIV infected persons who develop symptomatic AIDS.

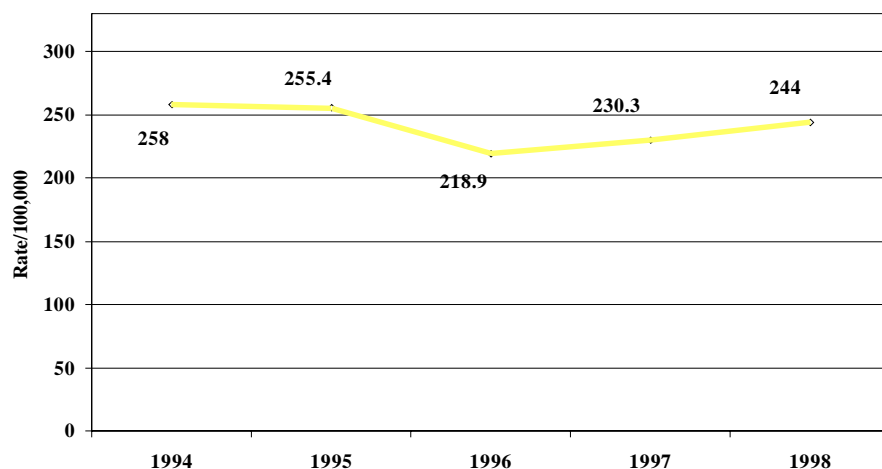
**Chlamydia, Rate of New Cases, Kent County**



## Chlamydia Case Rate

The rate of new cases of chlamydia has increased during each of the last four years. This trend may be partially explained by several factors: recognition in medical research of the widespread nature of this disease, significant new public awareness of the medical complications of untreated Chlamydia, and the availability of more testing sites that are raising reporting levels. Improvements in the sensitivity of the testing procedures have also led to an increase in the number of cases detected.

**Gonorrhea, Rate of New Cases, Kent County**

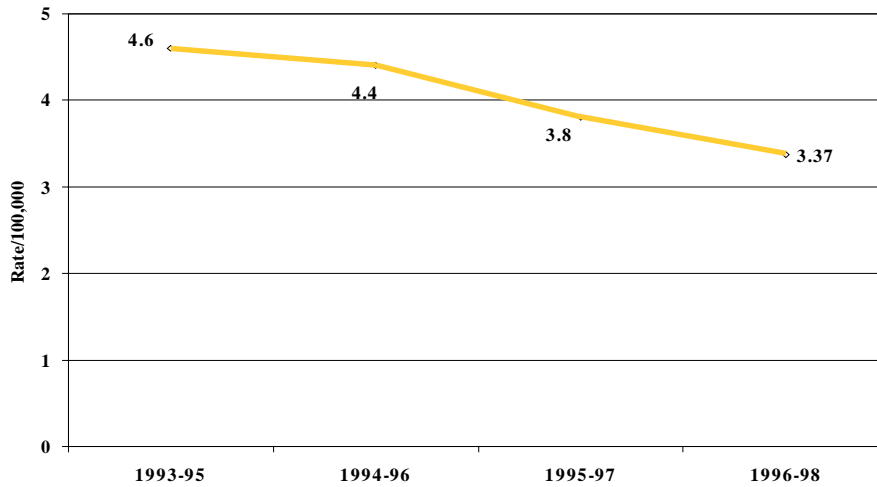


## Gonorrhea Case Rate

The rate of new cases of Gonorrhea has remained relatively stable during the past five years. General awareness of this disease coupled with increased education about sexually transmitted infections have likely contributed to this trend.

# Injury and Violence

Alcohol-Related Motor Vehicle Crash Death Rate, Kent County

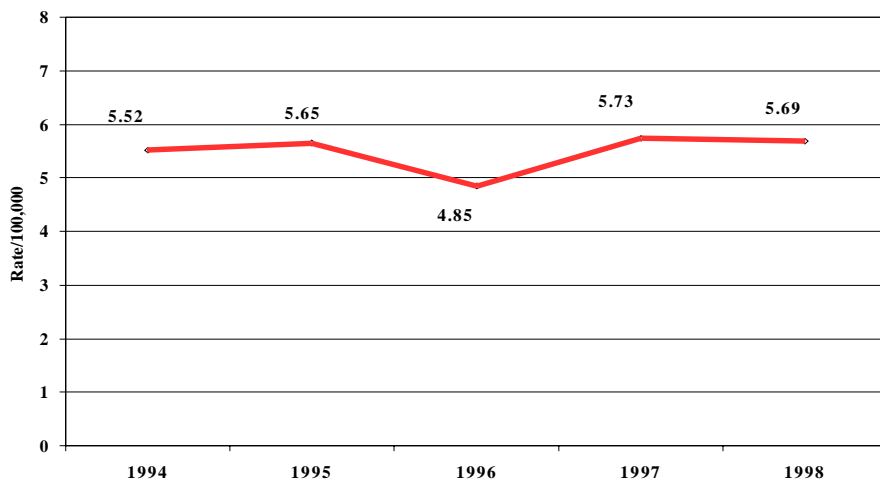


## Alcohol-Related Motor Vehicle Crash Deaths

Three year “running” averages show a steadily declining level of alcohol-related motor vehicle crash deaths. This decline may be attributed to a number of factors including the passage and enforcement of new laws, stiffer penalties, and reduced public tolerance for irresponsible and alcohol-impaired driving. In addition, improved safety features on newer model cars (e.g., airbags and antilock brakes) also account for a decrease in motor vehicle crash death and injury.

Continuing this downward trend would see the crash death rate fall below 2.0 within four years (1.75 crash death rate in 2000-2002). This would represent a decrease of over 50% in less than a decade.

Homicide Death Rate, Kent County



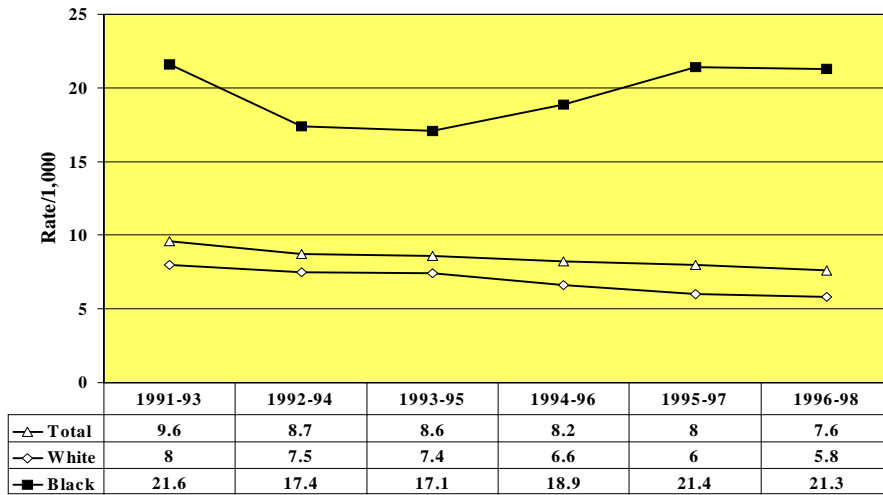
## Homicide Death Rate

Kent County has maintained an almost flat homicide death rate over the past five years (average  $5.5 \pm 0.45$ ). This Kent County rate is already below the national *Healthy People* homicide death rate goal of 7.2 by the year 2010. However, as noted earlier, African Americans in Kent County are much more likely to be a victim of homicide than whites.

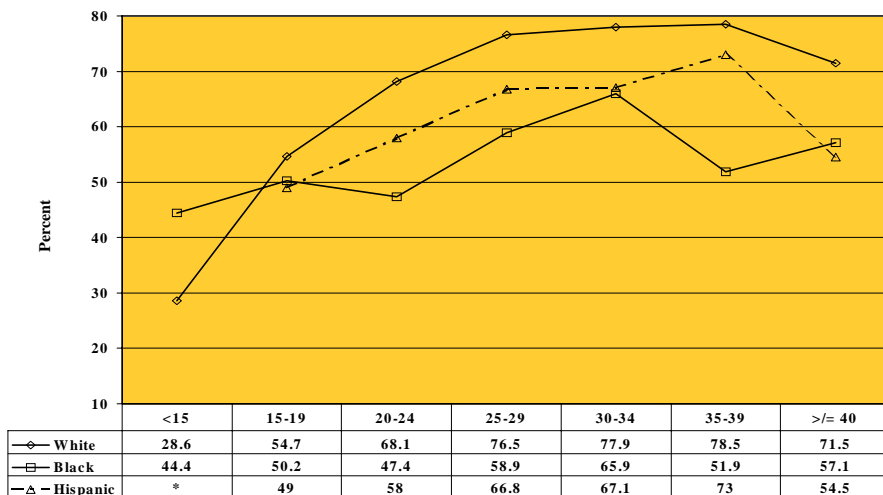


# Maternal and Child Health

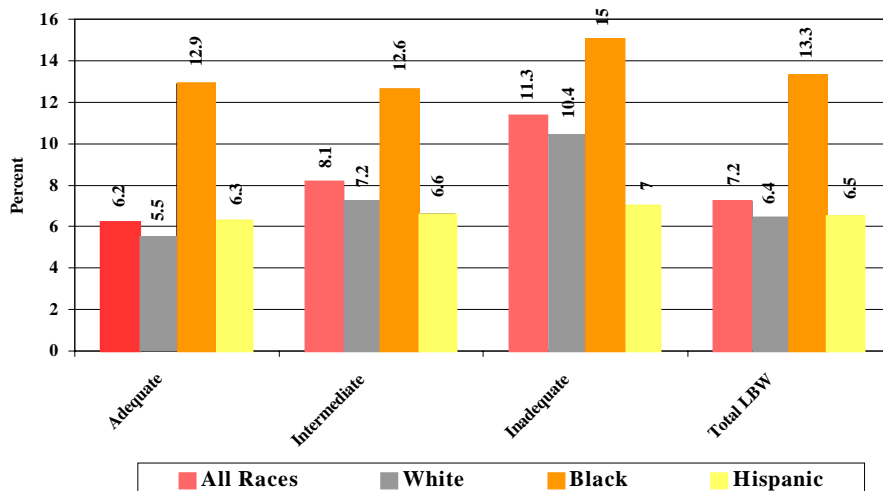
Infant Death Rates, Kent County



Percentage of Live Births with Prenatal Care Beginning in the First Trimester by Age, Race, and Ancestry, Kent County



Percentage of Low Birthweight by Level of Prenatal Care and Race/Ethnicity



## Infant Mortality

Multiple factors influence healthy birth outcomes, and survival over the first year of life. Access to early and ongoing prenatal care, a diet rich in nutrients that support healthy development, and cessation of behaviors that may affect both neural and physical development of the fetus (e.g., smoking and other substance abuse), have been linked with positive birth outcomes. After birth, access to primary care, a maternal support system (either formal assistance or informal family support), and a diet that promotes infant growth can impact survival over the first year of life.

While the total infant mortality rate (deaths to children less than one year old per 1,000 live births) has steadily declined over the past eight years, there is still a significant disparity in the rates between African Americans and whites. Socioeconomic status plays a crucial role in access to health care and other services, and therefore plays a significant role in creating this disparity.

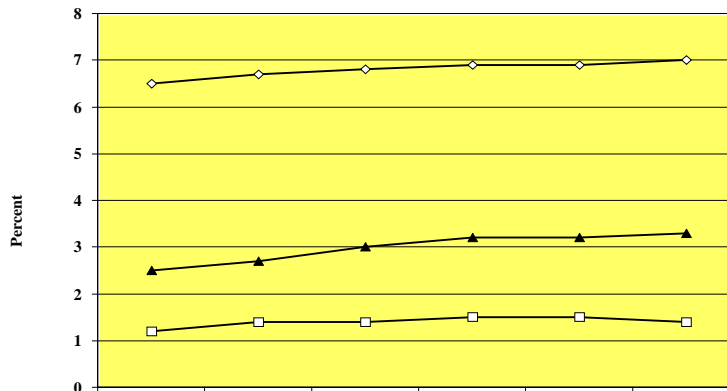
The Kessner Index is the most widely used indicator of access to prenatal care. The index is based upon when the mother entered prenatal care (1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup> Trimester), and the total number of prenatal visits.

In Kent County, examining when mothers entered care by age, race and ancestry demonstrates differences in when care is initiated. For all ages, except less than 15 years old, white mothers are more likely to enter care in their first trimester of pregnancy than either African American or Hispanic women; and in general Hispanic females are more likely than African Americans to access early prenatal care.

Low birth weight (less than 2500 grams or 5 pounds, 8 ounces) is one of the poor outcomes that may be a product of inadequate prenatal care. When comparing low birth weight by level of prenatal care and ancestry,

# Maternal and Child Health

**Percentage of Low and Very Low Birthweights, and Multiple Births, Kent County**



	1991-93	1992-94	1993-95	1994-96	1995-97	1996-98
Birthweight < 2500 grams	6.5	6.7	6.8	6.9	6.9	7
Birthweight < 1500 grams	1.2	1.4	1.4	1.5	1.5	1.4
Multiple Births	2.5	2.7	3	3.2	3.2	3.3

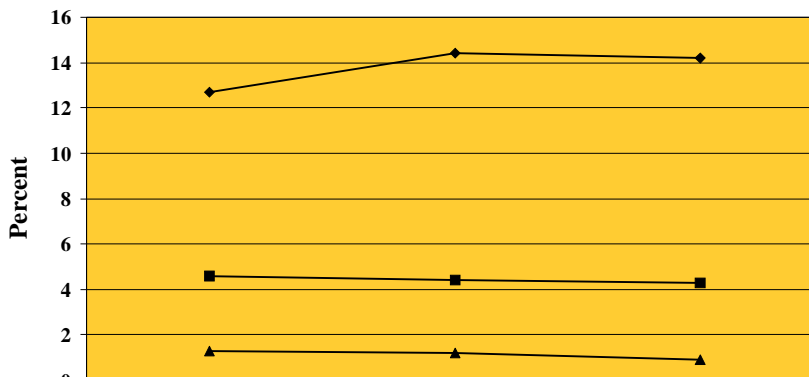
African American mothers are more likely to deliver low birth weight babies, regardless of level of prenatal care, than either whites or Hispanics in Kent County.

Trends for low birth weight and very low birth weight (less than 1500 grams, or 3 pounds 5 ounces) for all births in Kent County have remained relatively stable over the past decade. A slight increase in the trends for low birth weight is probably the result of an increase in the number of multiple births experienced over the same time.

As noted earlier, the use of tobacco or alcohol during pregnancy can also have adverse effects on fetal development. Trends for self-reported alcohol or tobacco use during pregnancy over the past three years show a slight increase in the number of mothers reporting tobacco use, and a decrease in those reporting use of alcohol. When comparing by race and ancestry, African American mothers are more likely to report alcohol and tobacco use than either white or Hispanic females in Kent County.

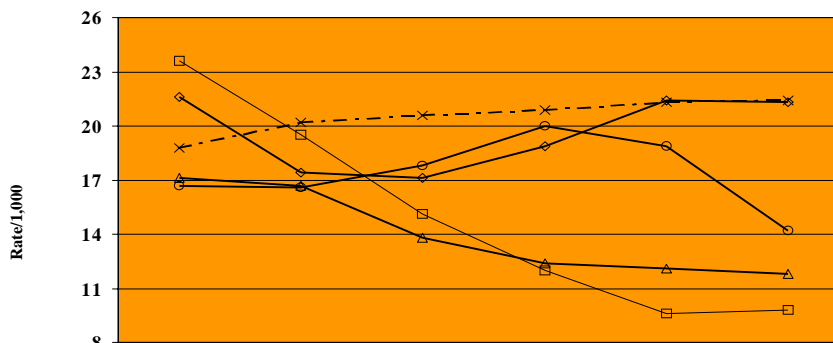
Finally, comparing African American infant death rates to demographically similar counties suggests that there are areas of the state where there have been dramatic changes in these rates. Most notably, Muskegon County, has attained a rate of 9.8 deaths per 1,000 live births, while Ingham County's most current rate is 14.2/1,000. Each of these counties has developed an insurance product that extends health insurance to uninsured and underinsured low-income residents that do not qualify for Medicaid or other government sponsored programs. The Kent County Health Department is supportive of community efforts to positively impact the infant death rate.

**Live Births, Selected Indicators, Kent County**



	1996	1997	1998
Mom Smoke	12.7	14.4	14.2
Mom < 18 yrs.	4.6	4.4	4.3
Use Alcohol	1.3	1.2	0.9

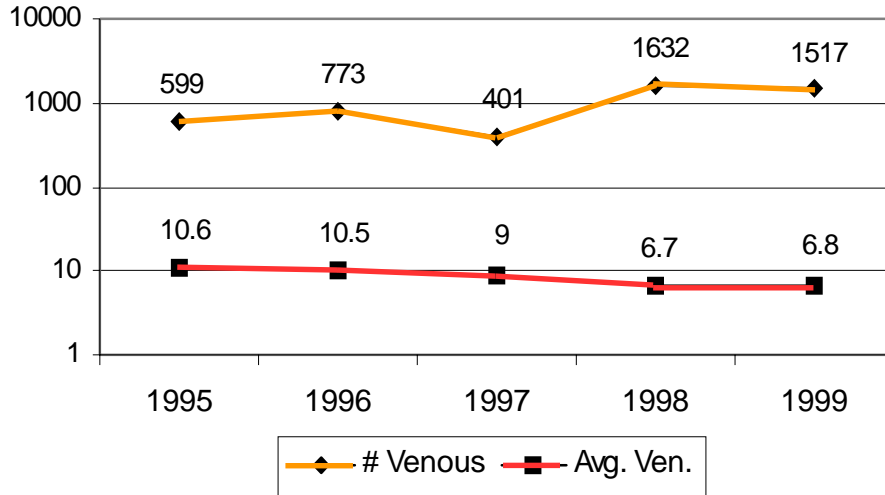
**Black Infant Death Rates in Counties Demographically Similar to Kent County**



	1991-93	1992-94	1993-95	1994-96	1995-97	1996-98
Kent	21.6	17.4	17.1	18.9	21.4	21.3
Muskegon	23.6	19.5	15.1	12	9.6	9.8
Genesee	18.8	20.2	20.6	20.9	21.3	21.4
Ingham	16.7	16.6	17.8	20	18.9	14.2
Washtenaw	17.1	16.7	13.8	12.4	12.1	11.8

# Environmental Health

Number of Lead Screenings and Average Blood Lead Level, Kent County

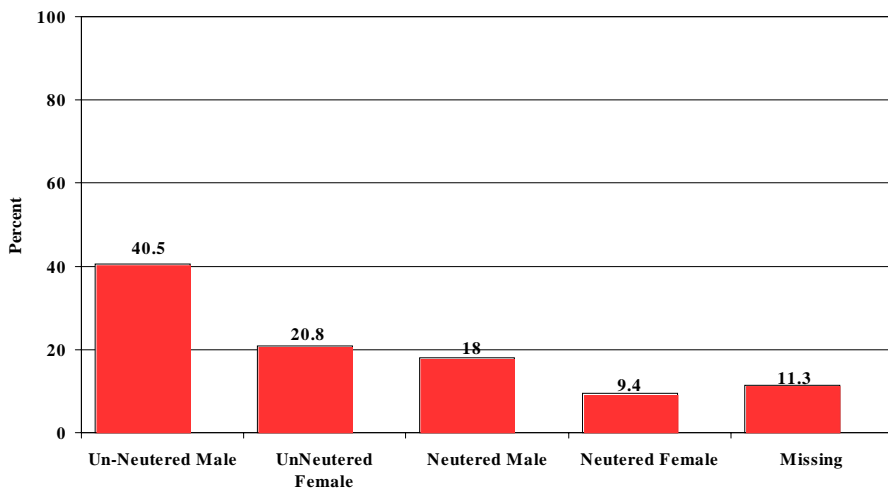


## Lead Poisoning

Although racial/ethnic minority populations make up less than 15% of the total Kent County population, they account for 46% of all children tested for lead over the past five years. This is the result of a targeted screening initiative which identifies areas in Kent County with older housing stock which are more likely, because of their age, to pose lead hazards. Children who reside in an identified high-risk area are tested for lead when receiving other Health Department services such as WIC or Child Health Screening. Children with elevated blood lead levels are referred for medical case management from the Health Department's Community Nursing Division, and medical treatment at Spectrum Health.

As a result of targeted screening, the number children receiving venous blood lead tests has increased. However, the level of blood lead among children tested (shown here since 1995) has steadily decreased suggesting that prevention efforts have been effective in reducing lead hazards in the community.

Sex of Biting Dogs, 1999, Kent County

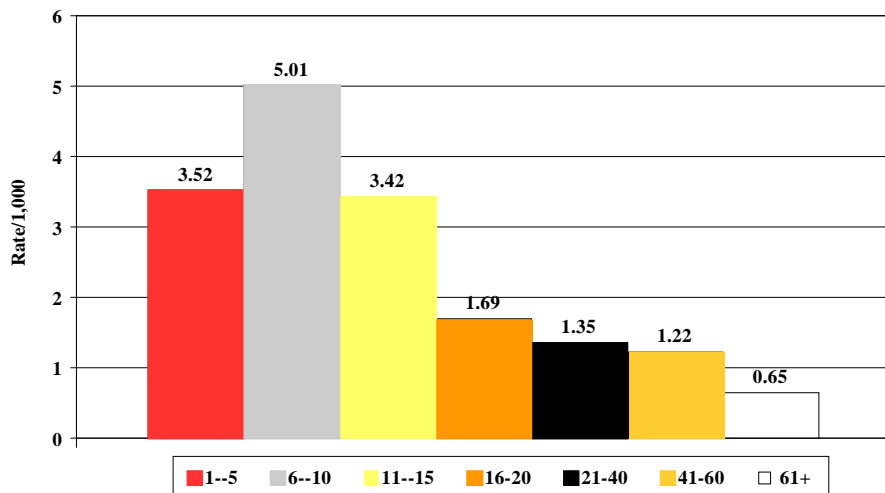


## Animal Control

Unneutered dogs account for over 60% of all dogs reported as having bitten a person. Out of all unneutered dogs, male dogs represent two-thirds of that total.

In addition to reducing the risk of biting and associated owner liability, other benefits of neutering dogs include eliminating unwanted litters of pups, and reducing pet overpopulation.

Dog Bites by Age of Victim, 1999, Kent County

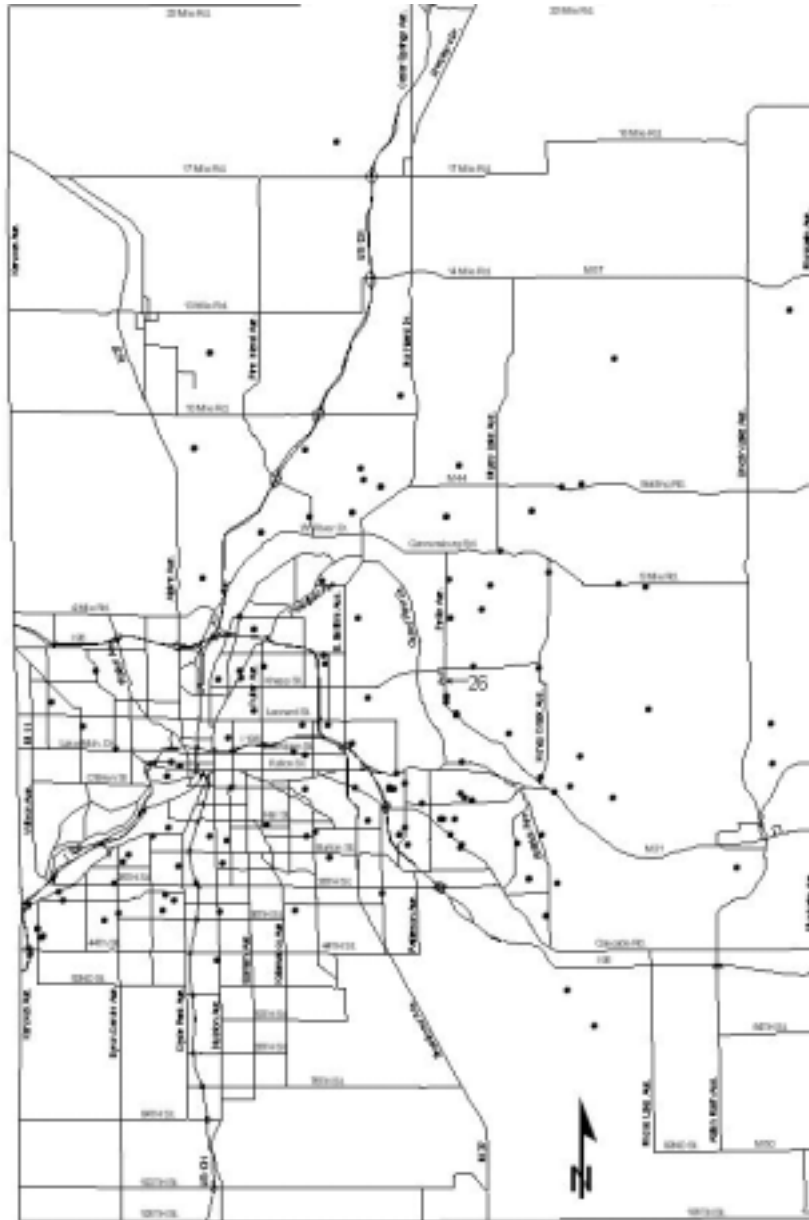


## Dog Bites

Children, especially those between the ages of six and ten years old, are the most likely to be bitten by a dog. Children from ages one through fifteen are nearly four times more likely to be bitten than all other age groups.

# Environmental Health

Radon Map of Kent County for Home Test Results  $>4$  pCi/l



## Kent County Health Department

700 Fuller N.E.  
Grand Rapids, Michigan 49503  
(616) 336-2220  
[www.co.kent.mi.us/health](http://www.co.kent.mi.us/health)

## The Health of Kent County 1999

© 2000 Kent County Health Department  
Grand Rapids, Michigan

This publication may be reproduced, in whole or in part, without permission.

Copies of this publication are available on the World Wide Web at:  
[www.co.kent.mi.us/health/publications.htm](http://www.co.kent.mi.us/health/publications.htm)

Written by  
Robert Schirado, Tim Bolen  
Assessment and Assurance Section  
Kent County Health Department

Design and Layout  
Michael Mullet  
Community Relations Coordinator  
Kent County Health Department

## Notes on this PDF publication

The report contained in this PDF file was published in print by the Kent County Health Department in April 2000. The colors and fonts used in this PDF file vary slightly from those used in the printed version, however the content is identical, with the exception of this paragraph. This page is the inside of the back cover of the printed version of this report. The last page of this PDF file, page 14, is the cover of the report. The content of this report is public information and may be downloaded, stored, printed, copied, and distributed, in print or via e-mail or other electronic means, without permission.

*The Health of Kent County 1999* printed and electronic versions  
© 2000 Kent County Health Department, Grand Rapids, MI.

The  
Health  
of  
Kent  
County  
1999

