



KANSAS  
HEALTH  
INSTITUTE

Informing Policy. Improving Health.

# ***Health Disparities in Kansas: Where Are We Now, and Where (may) We Be Headed?***

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May 11, 2018

Robert St. Peter, M.D.

# What is Health?

Health is a state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity.

World Health Organization

# What is Population Health?

The health outcomes of a group of individuals, including the distribution of such outcomes within the group.

Kindig, Stoddart 2003

# Whose Population Are We Talking About?

- Employer
- Physician practice
- Hospital/health system
- Insurer
- Community
- State
- Nation

# Definitions

- **Health Disparity**: *differences in health status and mortality rates across population groups, which can sometimes be expected.*  
(e.g. cancer rates in the elderly vs. children)
- **Health Inequity**: *differences in health status and mortality rates across population groups that are systemic, avoidable, unfair and unjust.*  
(e.g. cancer mortality for low-income vs. high-income people)

# Types of health disparities

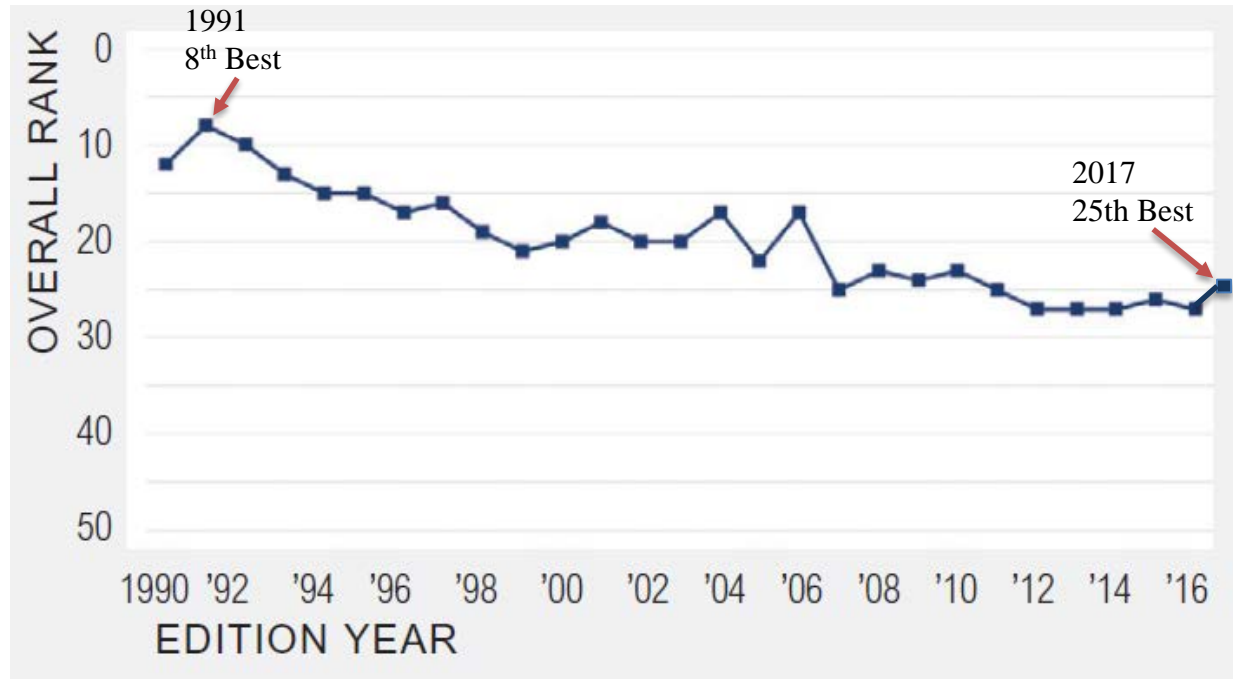
Differences in health status by:

- Age
- Gender
- Geography
- Income
- Education
- Race/ethnicity



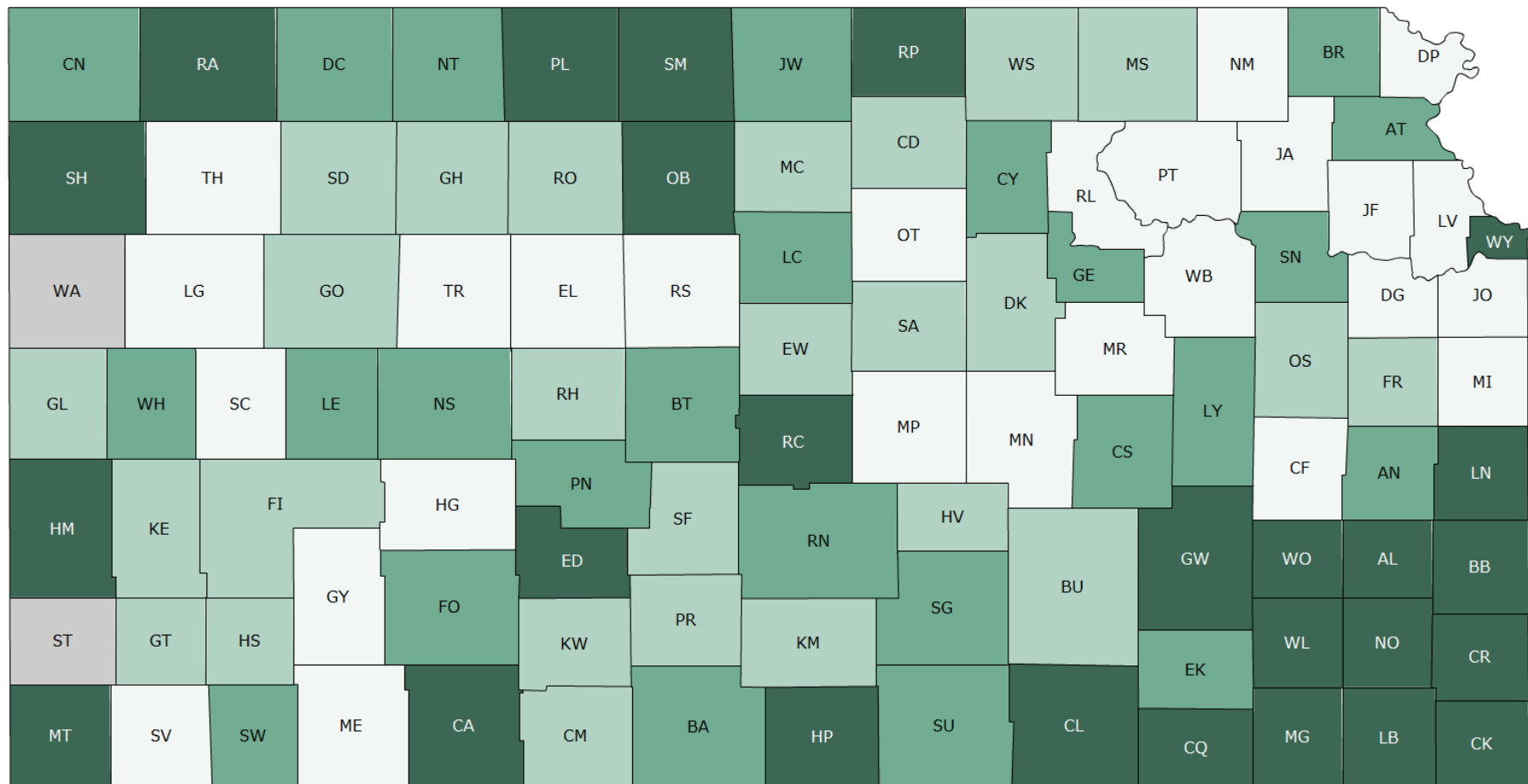
# HOW HEALTHY ARE WE?

# United Health Foundation Health Ranking for Kansas





# Health Outcomes – 2018



Rank 1-26   Rank 27-52   Rank 53-77   Rank 78-103   Not Ranked

# CHR DISPARITIES IN KANSAS, 2017

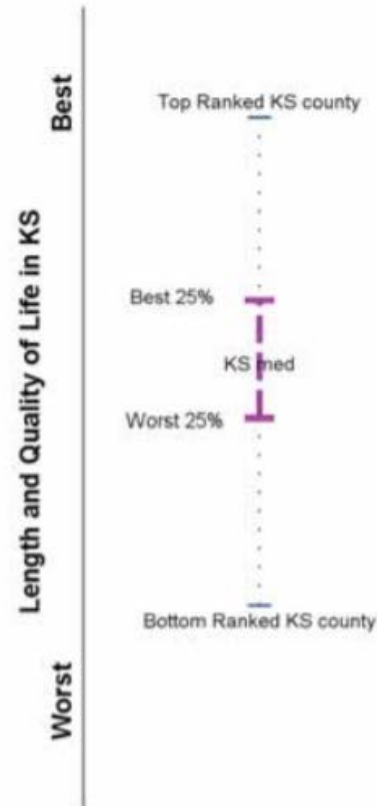
Measure	Kansas	Worst County Value	Best County Value
Adult Smoking	<b>18%</b>	<b>22%</b> Geary	<b>11%</b> Johnson
STIs	<b>384.1</b>	<b>726.4</b> Wyandotte	<b>71.1</b> Norton
Teen Birth rate	<b>36</b>	<b>83</b> Seward	<b>12</b> Douglas
Children with single parent	<b>29%</b>	<b>46%</b> Wyandotte	<b>6.3%</b> Scott

## Health Outcomes in Kansas

Differences by:

Place

KS

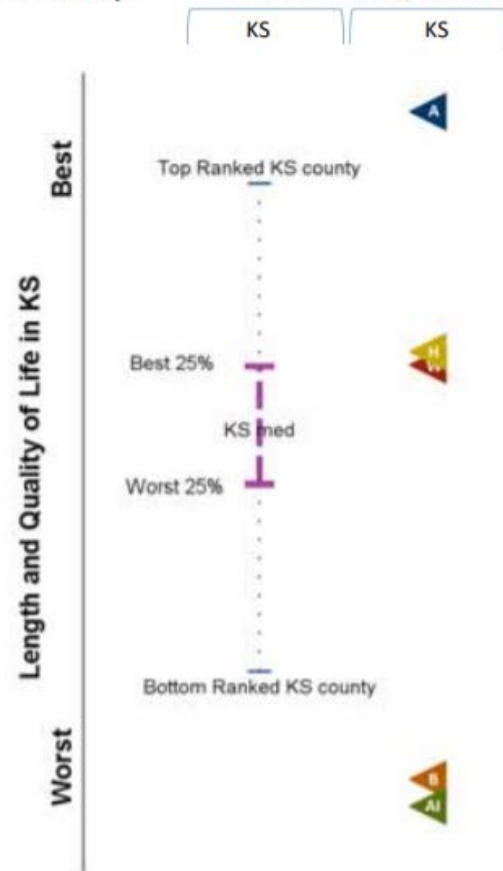


## Health Outcomes in Kansas

Differences by:

Place

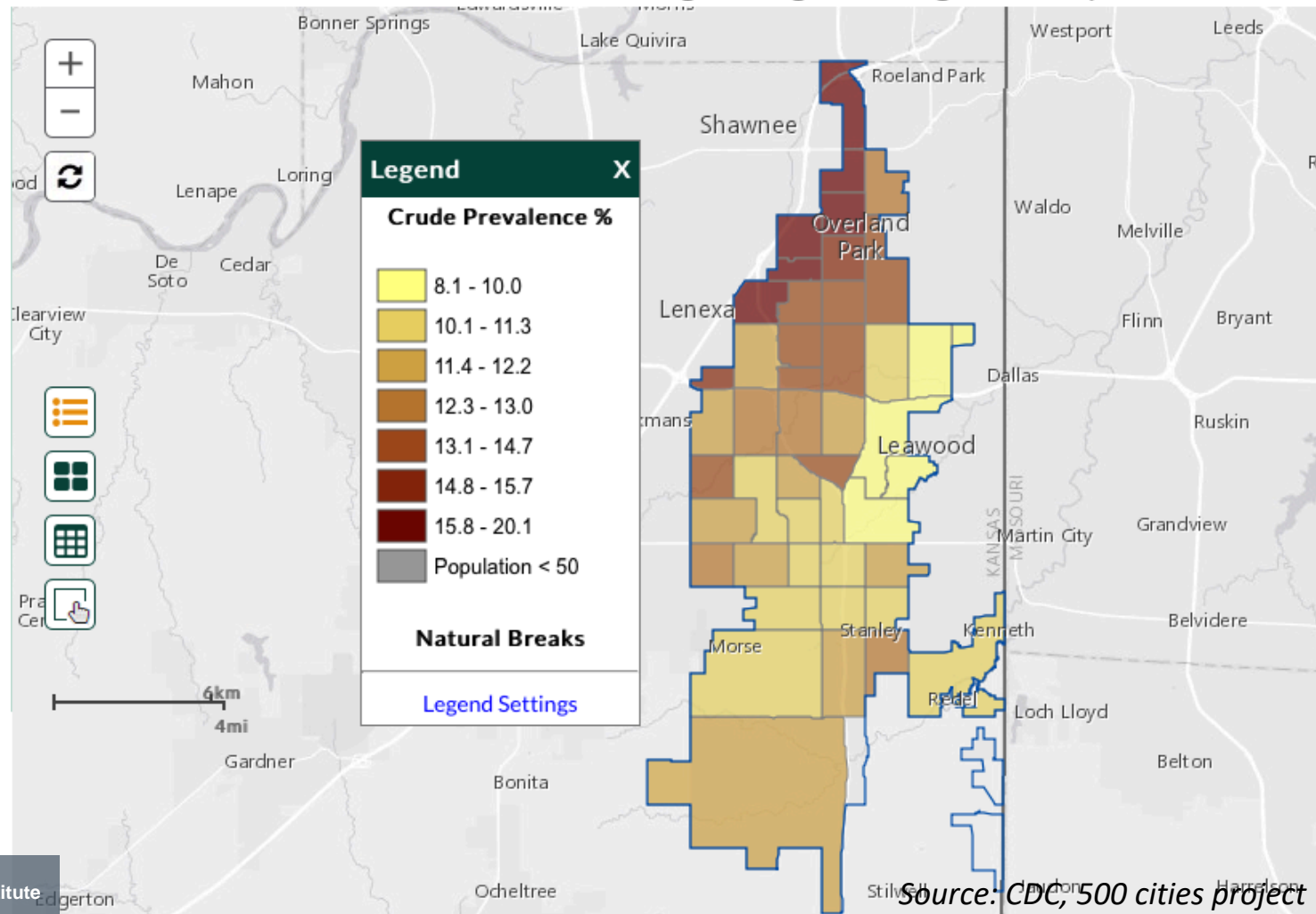
Race/Ethnicity



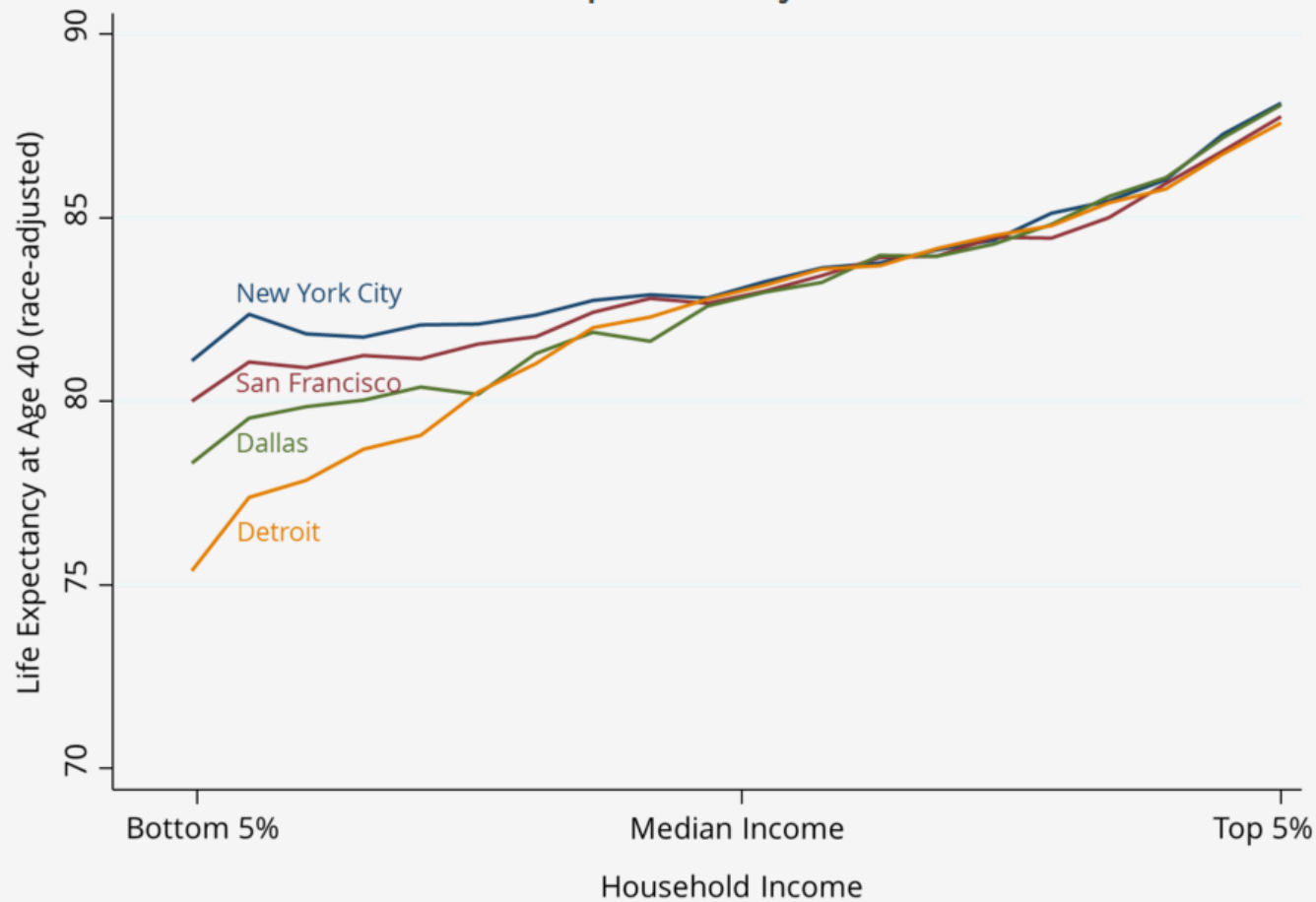
AI/AN Asian/PI Black Hispanic White

Data for every racial/ethnic group may not be available due to small numbers.

# Model-based estimates for current smoking among adults aged $\geq 18$ years – 2014



## Local Life Expectancies by Income





# WHAT MAKES US HEALTHY?

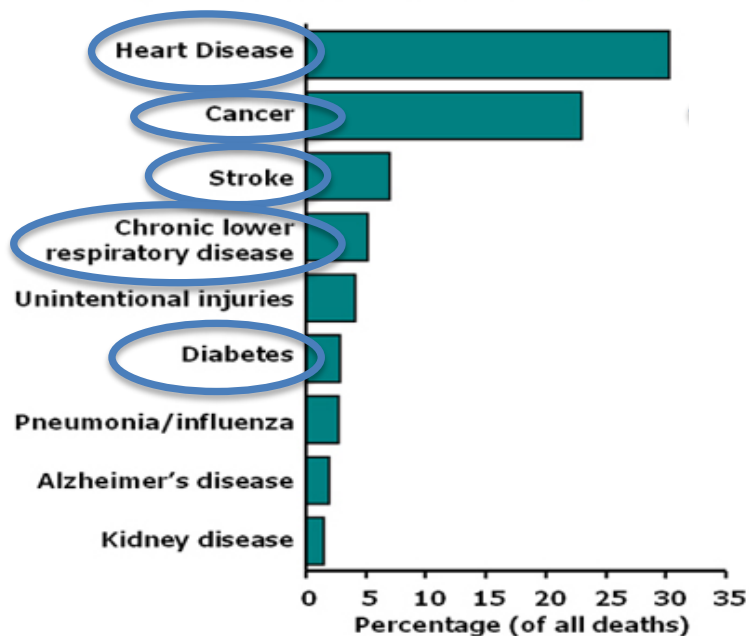
# WHAT DO PEOPLE DIE FROM?

## “LEADING CAUSE” MODEL



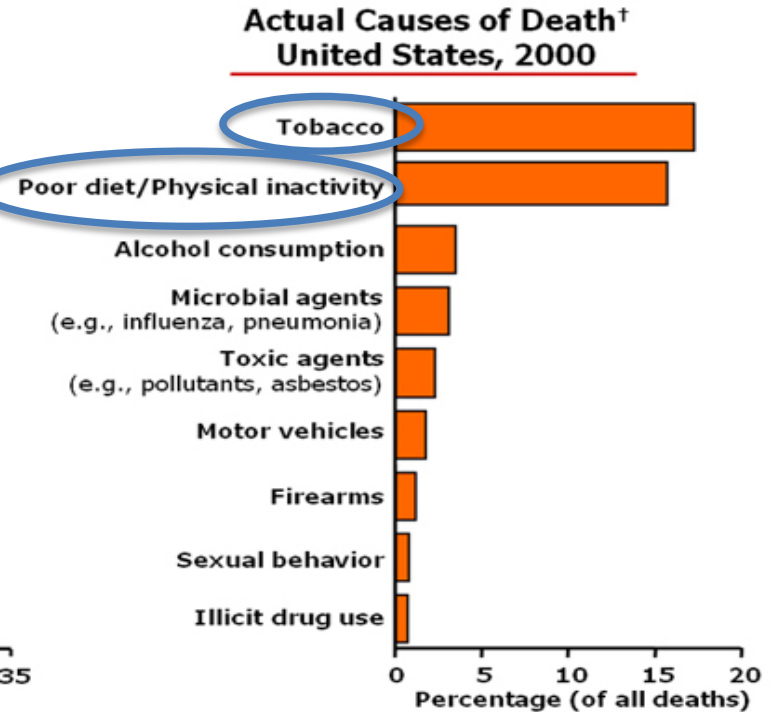
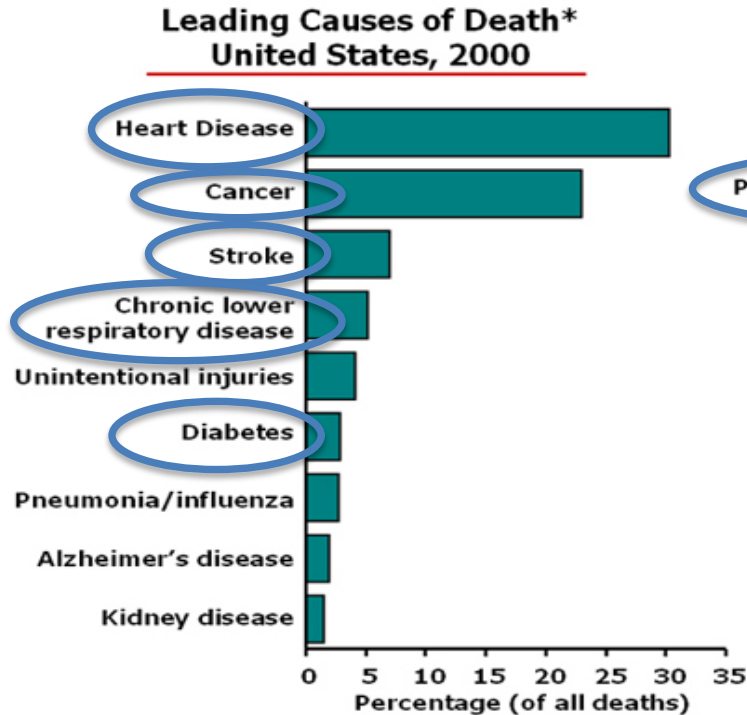


### Leading Causes of Death\* United States, 2000



\* Miniño AM, Arias E, Kochanek KD, Murphy SL, Smith BL. Deaths: final data for 2000. National Vital Statistics Reports 2002; 50(15):1-120.

† Mokdad AH, Marks JS, Stroup DF, Gerberding JL. Actual causes of death in the United States, 2000. JAMA. 2004;291(10):1238-1246.

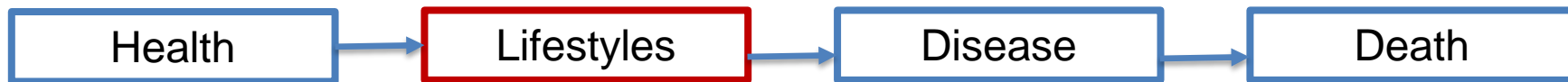


\* Miniño AM, Arias E, Kochanek KD, Murphy SL, Smith BL. Deaths: final data for 2000. National Vital Statistics Reports 2002; 50(15):1-120.

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# WHAT DO PEOPLE DIE FROM?

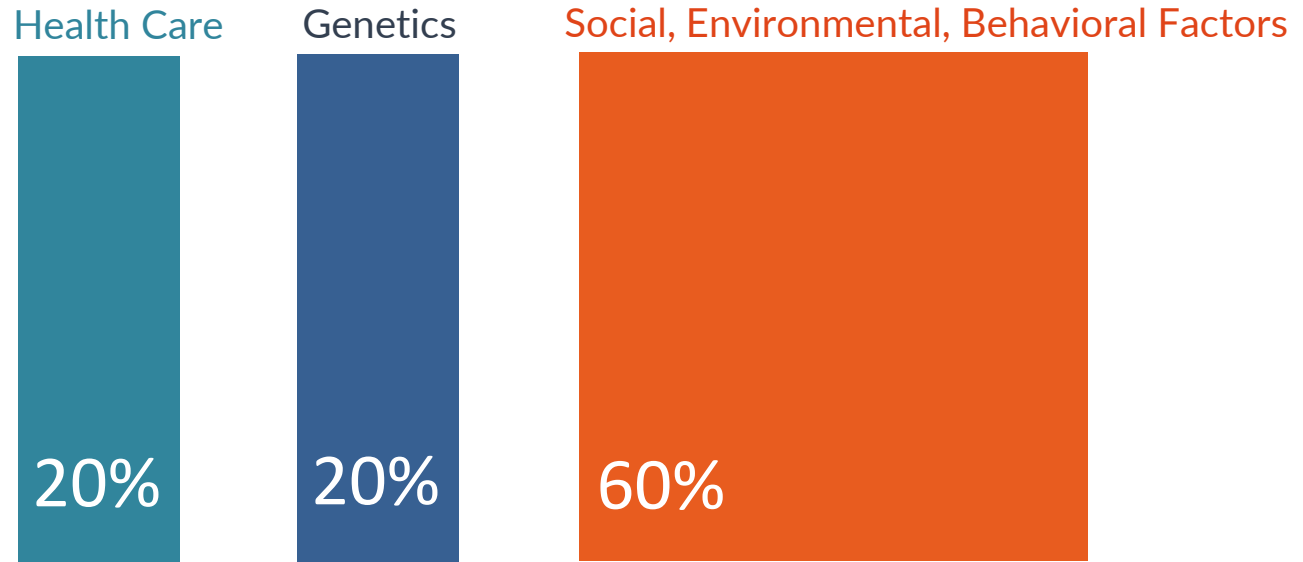
## “ACTUAL CAUSE” MODEL



# THE ROOT CAUSES

- Why do people adopt unhealthy lifestyles?
- What drives individual decisions about personal health?
- Are there other factors that affect health outcomes?

# WHAT DETERMINES HEALTH?

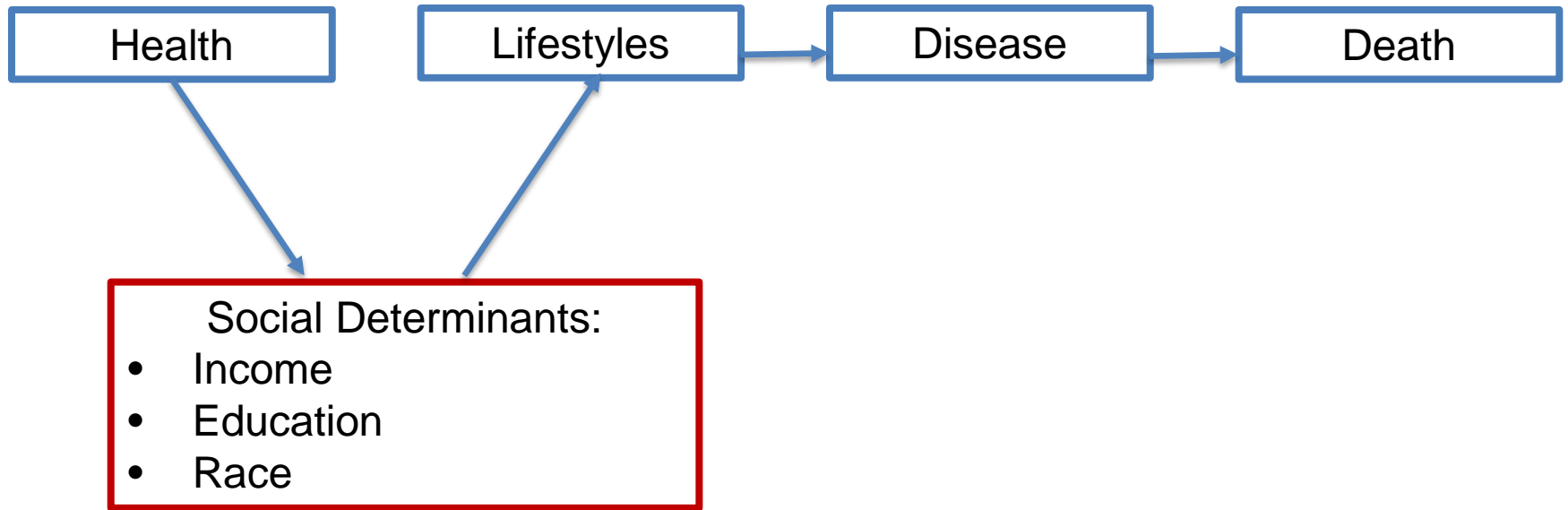


# DETERMINANTS OF HEALTH

- **SOCIAL AND ECONOMIC CONDITIONS**
- **PHYSICAL AND BUILT ENVIRONMENTS**
- **HEALTH BEHAVIORS AND COPING SKILLS**
- **GENES AND BIOLOGY**
- **HEALTH CARE SERVICES**

# WHAT DO PEOPLE DIE FROM?

## “SOCIAL DETERMINANTS” MODEL





# STRESS



# Types of stress responses

## POSITIVE



A normal and essential part of healthy development

### EXAMPLES

*getting a vaccine,  
first day of school*

## TOLERABLE



Response to a more severe stressor, limited in duration

### EXAMPLES

*loss of a loved one,  
a broken bone*

## TOXIC

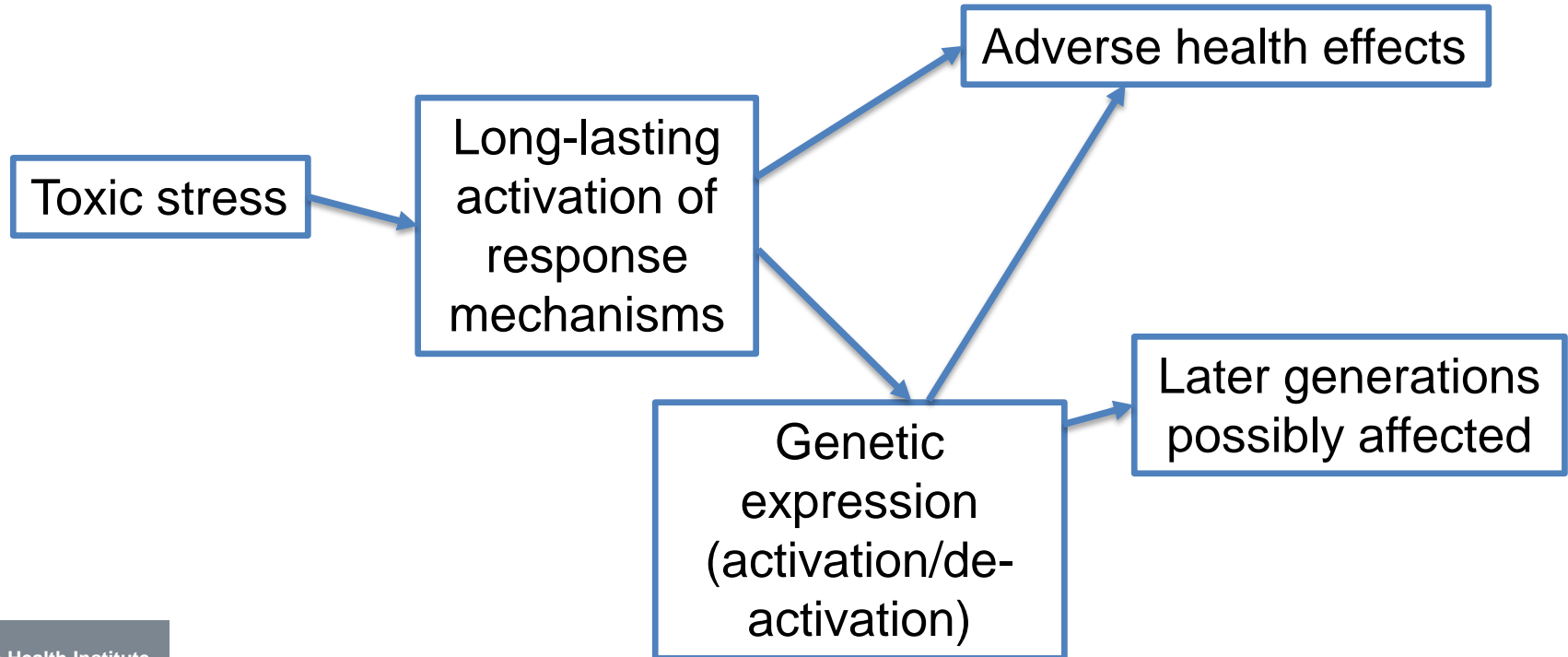


Experiencing strong, frequent, and/or prolonged adversity

### EXAMPLES

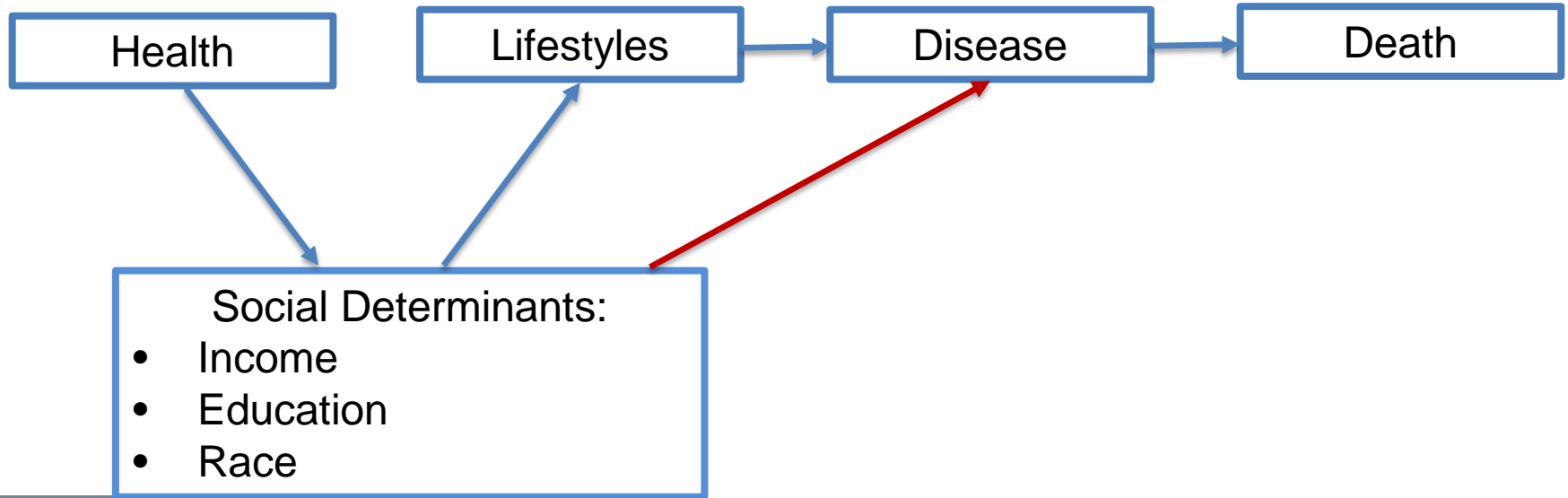
*physical or emotional abuse,  
exposure to violence*

# TOXIC STRESS CONSEQUENCES



# WHAT DO PEOPLE DIE FROM?

## “SOCIAL DETERMINANTS” MODEL, REVISITED





# **RACE, ETHNICITY AND HEALTH IN KANSAS**

**Figure 67. Percent of Adults Age 25 and Over with Less Than High School Education by Race/Ethnicity in Kansas, 2015**

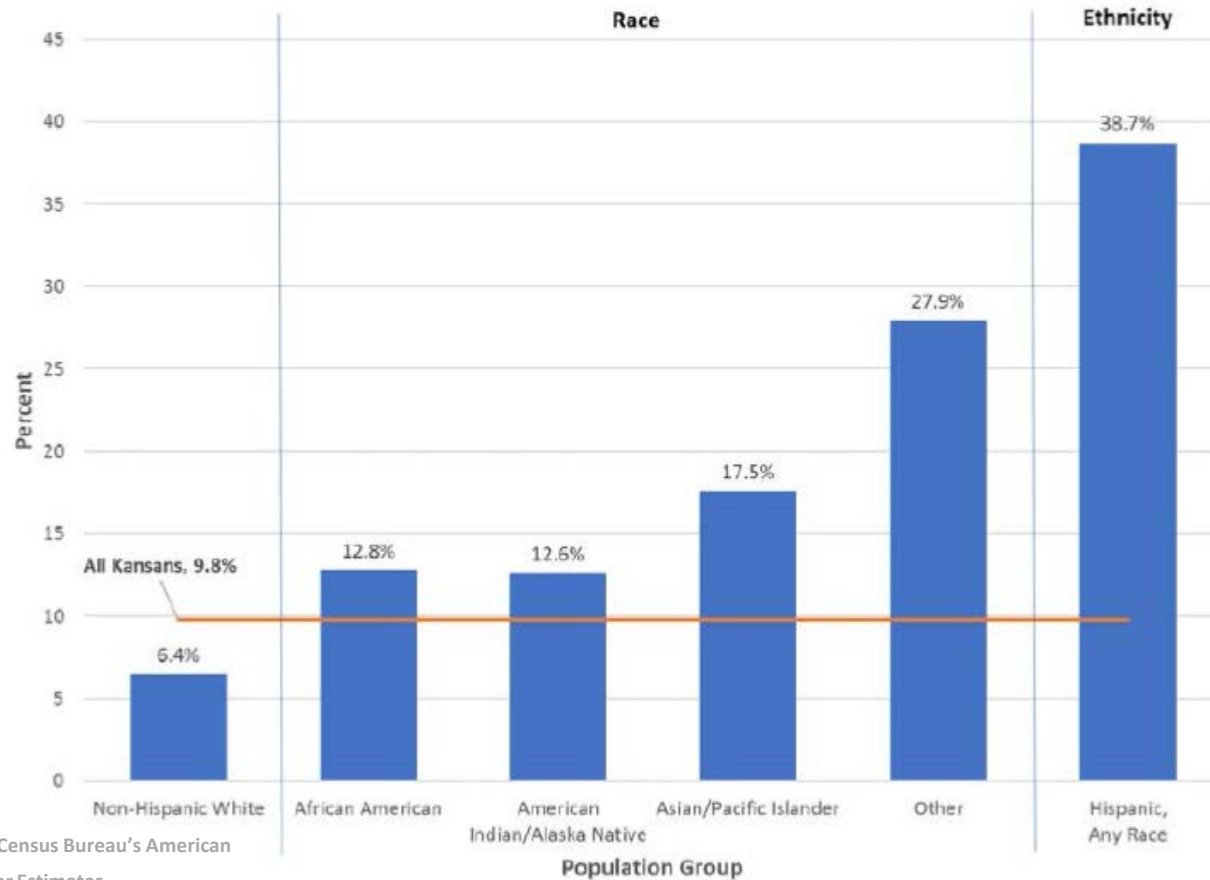
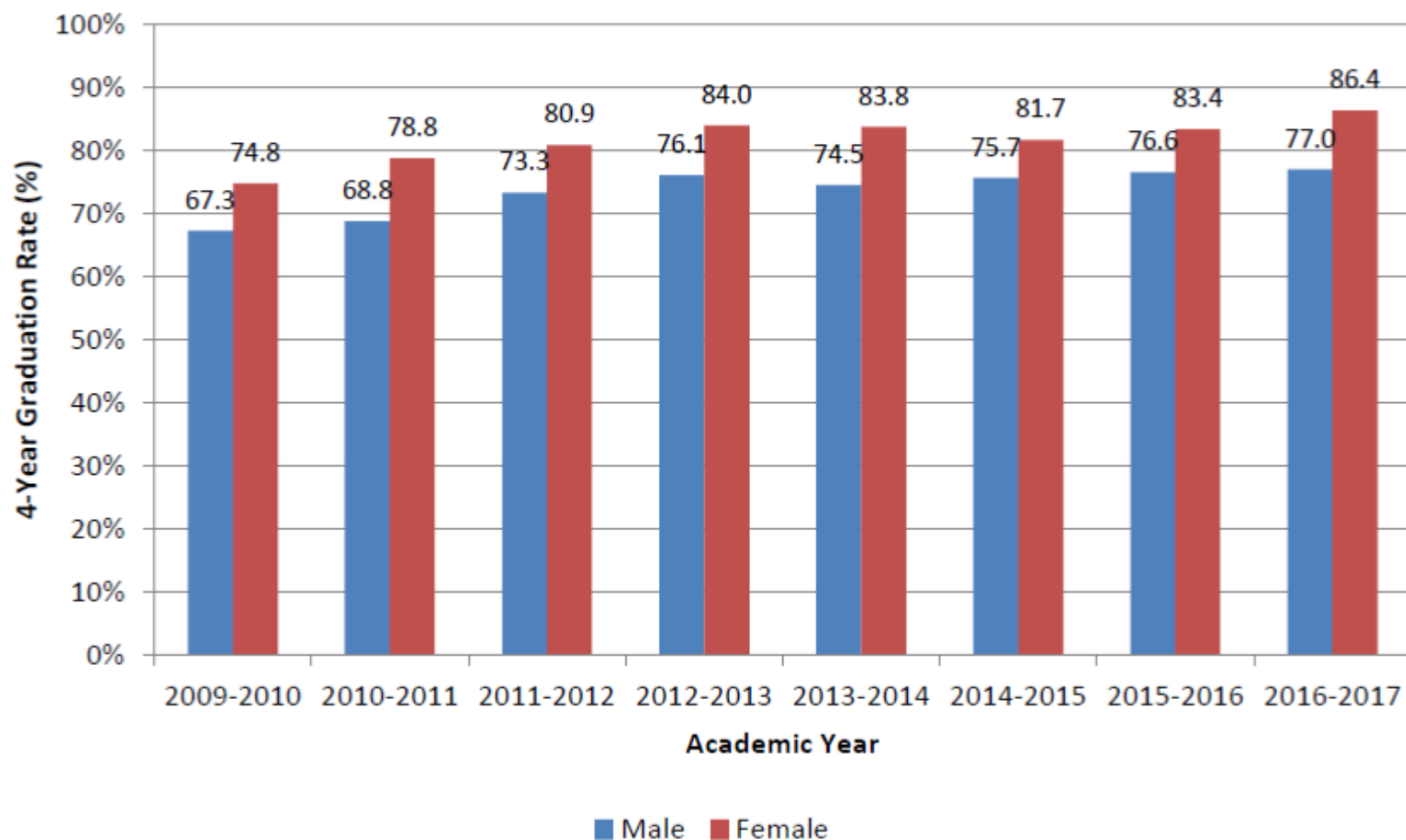
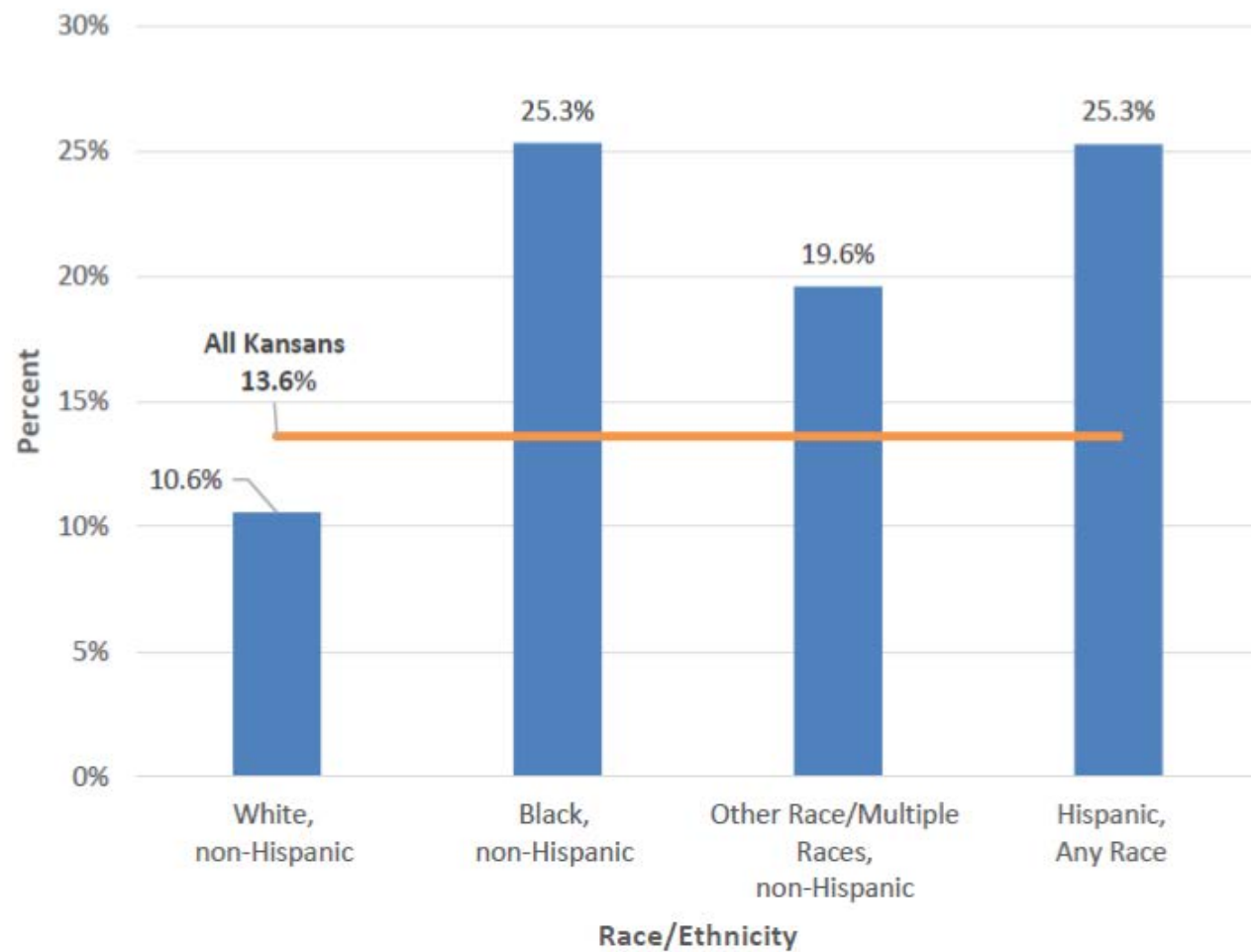


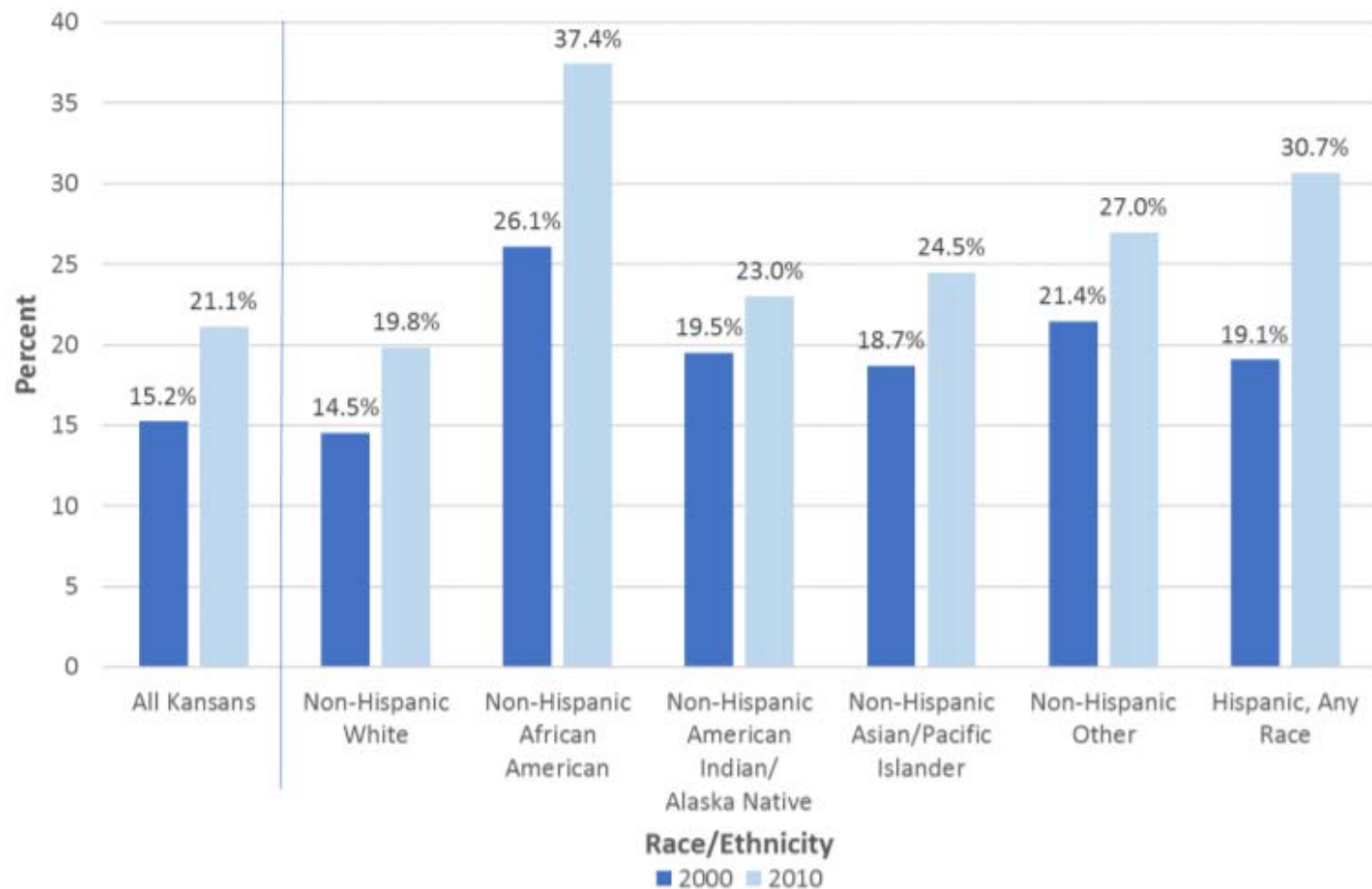
Figure 77. Four-Year Graduation Rate Among Hispanics by Academic Year and Gender in Kansas, 2009-2010 to 2016-2017



## Poverty Rate by Race/Ethnicity in Kansas, 2015

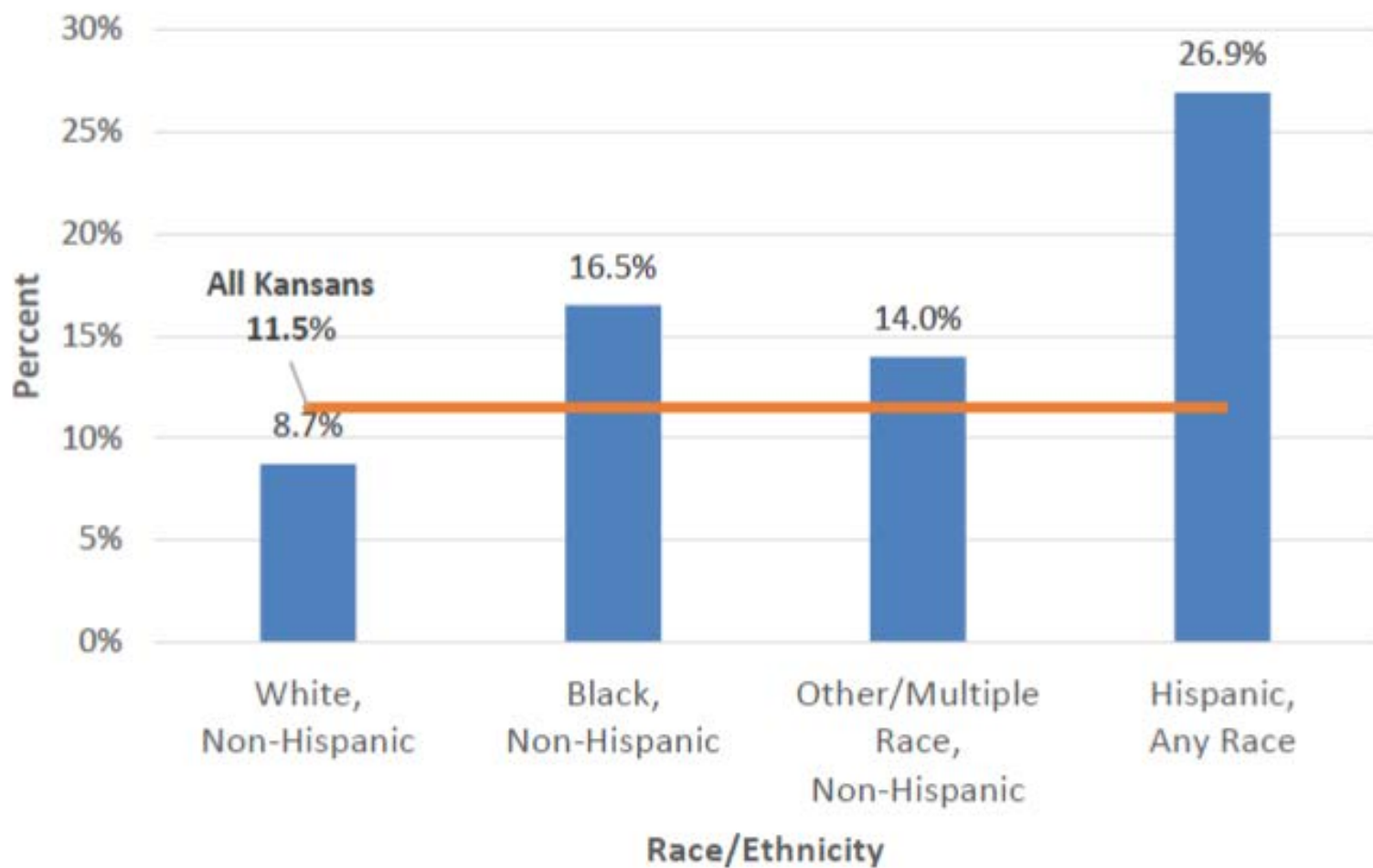


**Figure 25. Percent of Owner-Occupied Households with Select Monthly Costs as 30 Percent (or Greater) of Their Income by Race/Ethnicity in Kansas, 2000 and 2010**

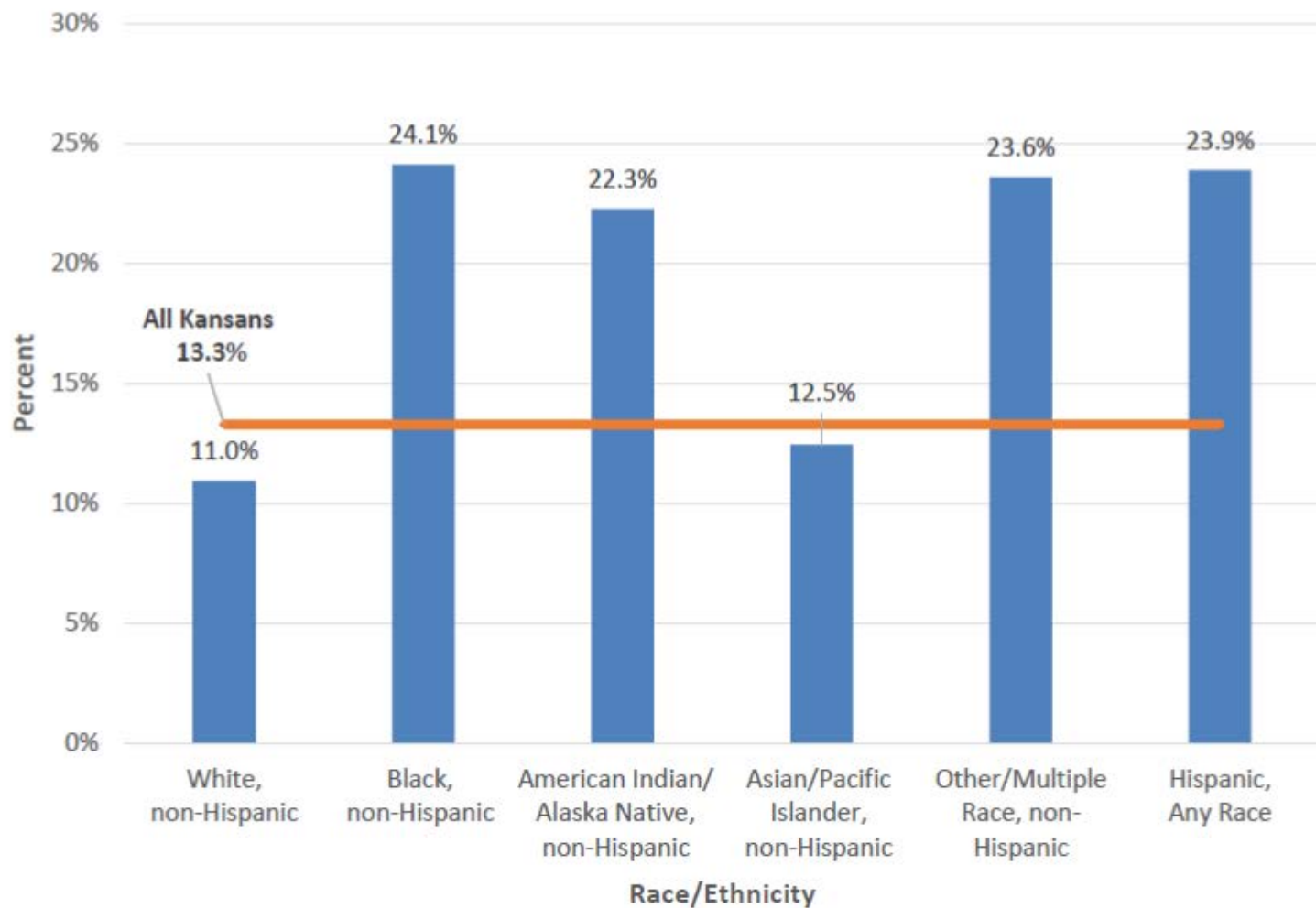




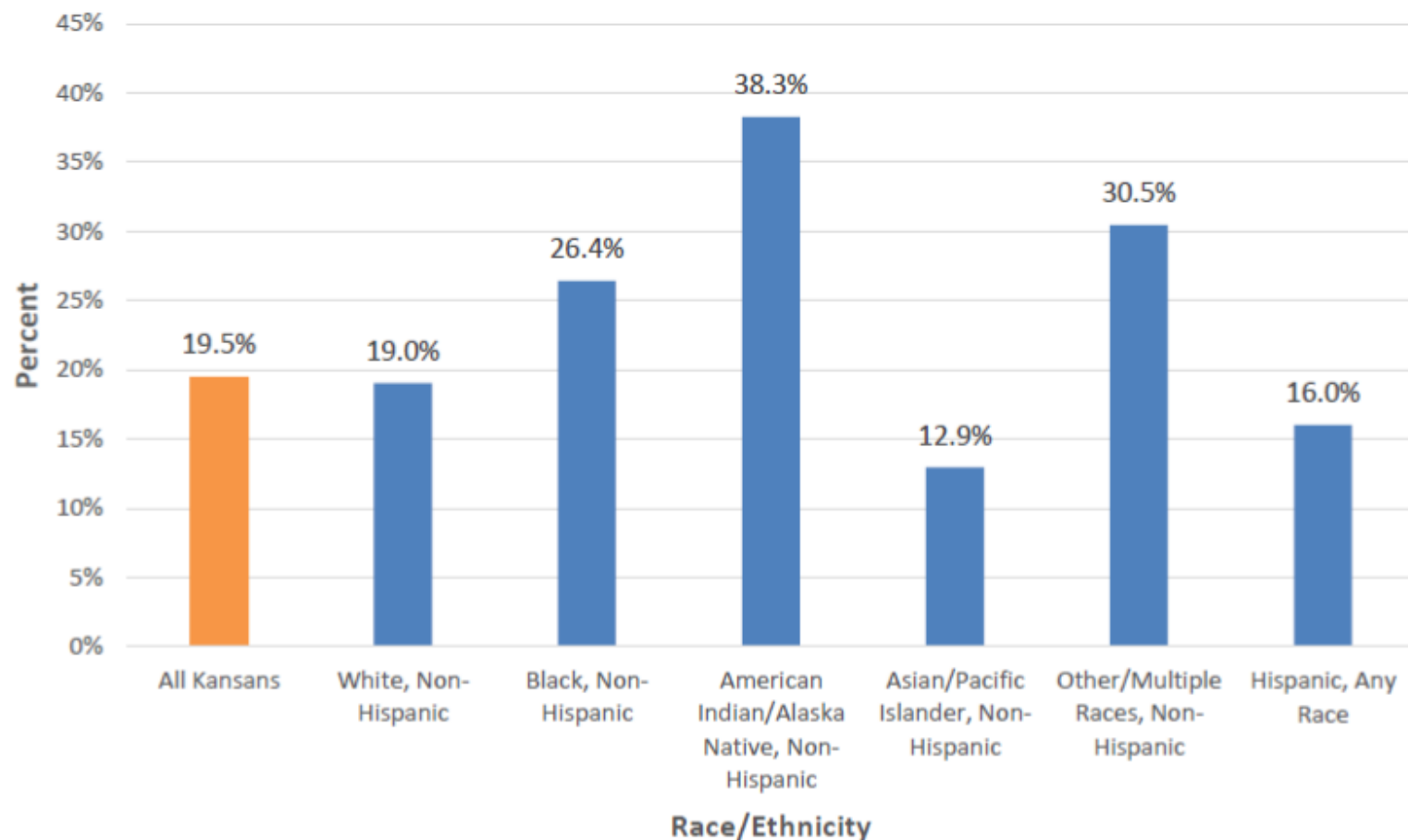
## Percent Uninsured by Race/Ethnicity in Kansas, 2015



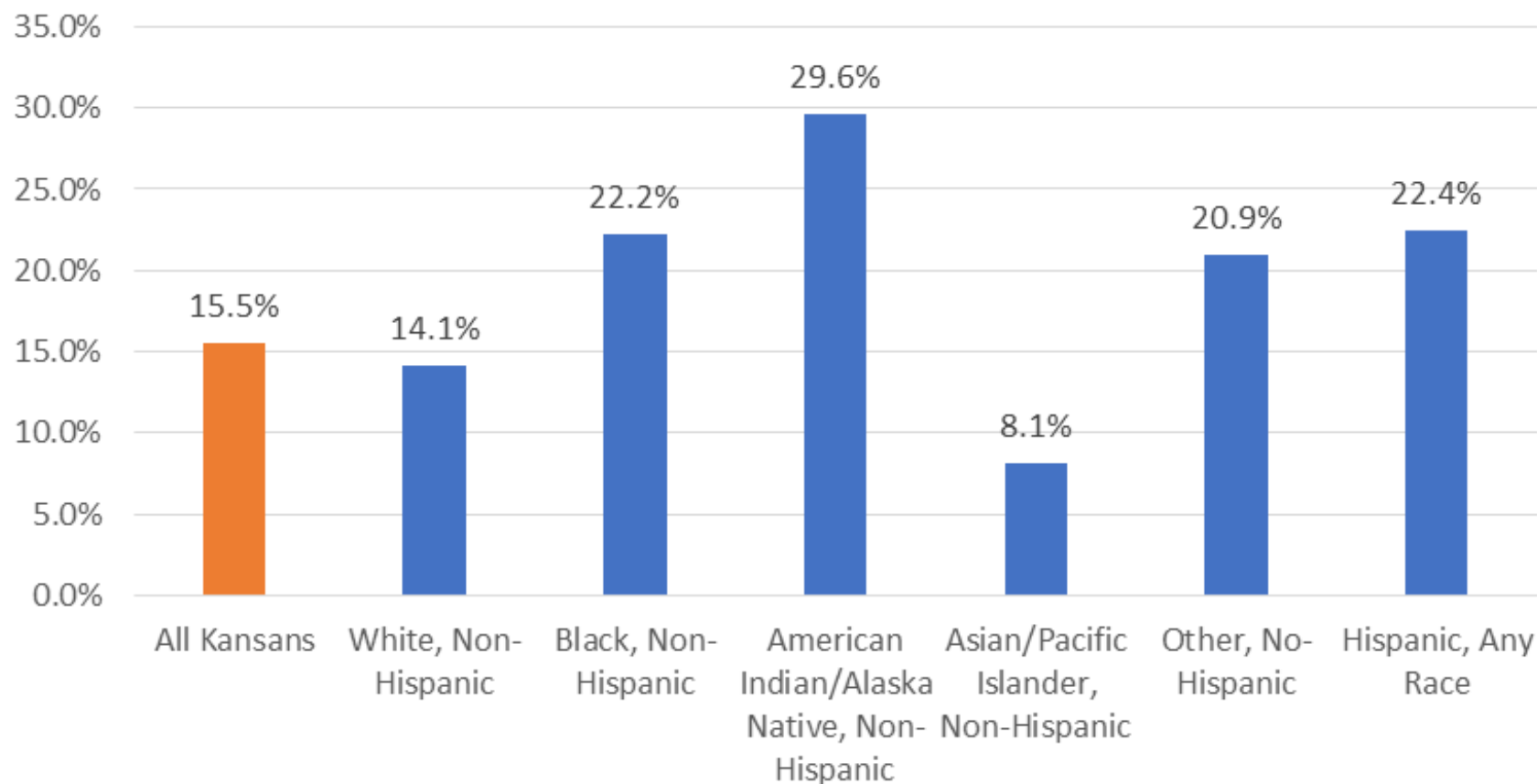
**Figure 82. Percent Avoiding Medical Care Due to Cost in Kansas, 2011–2015 (Combined)**



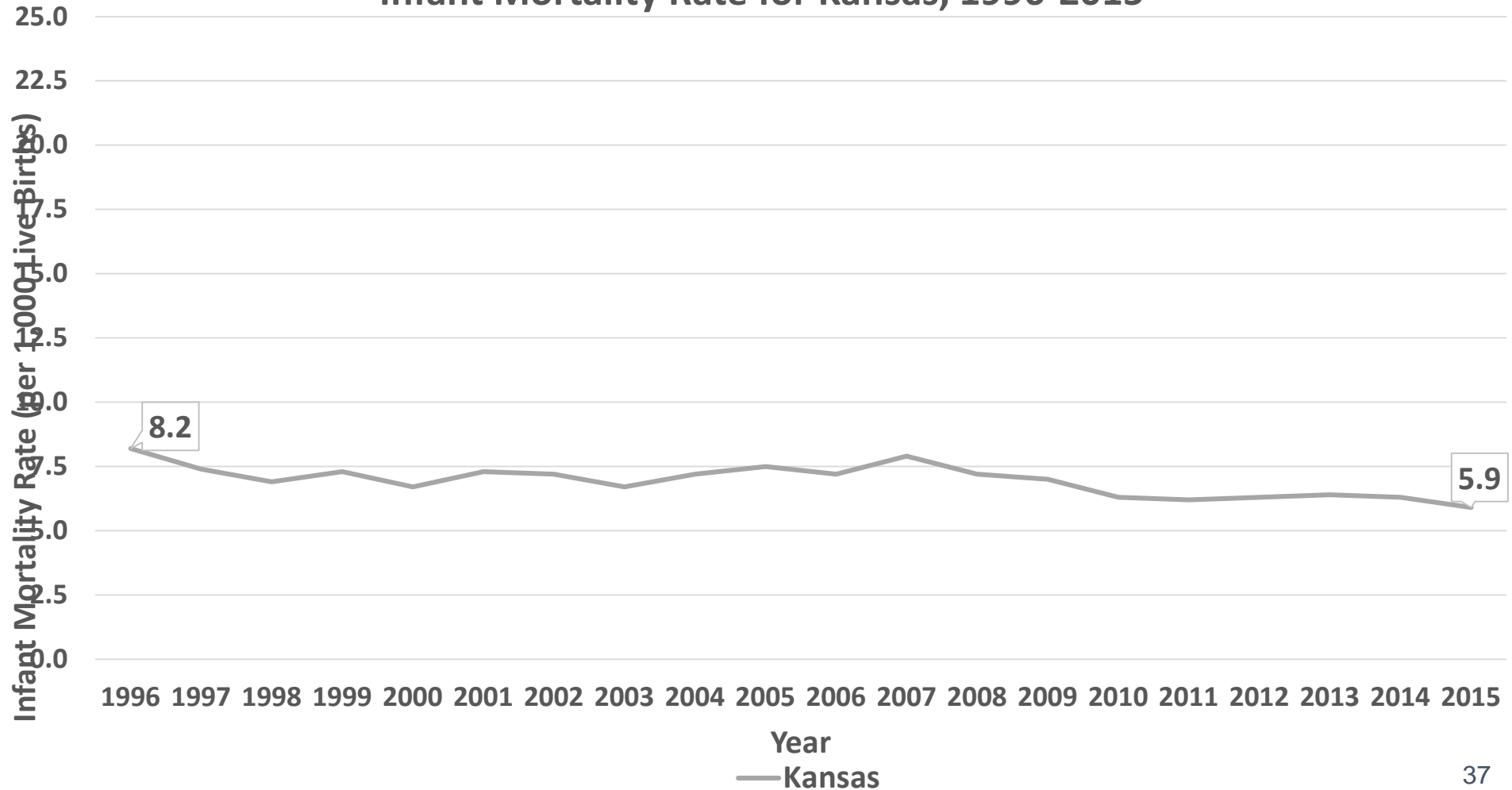
**Figure 87. Percent of Adults Reporting Current Smoking by Race/Ethnicity in Kansas, 2011–2015 (Combined)**



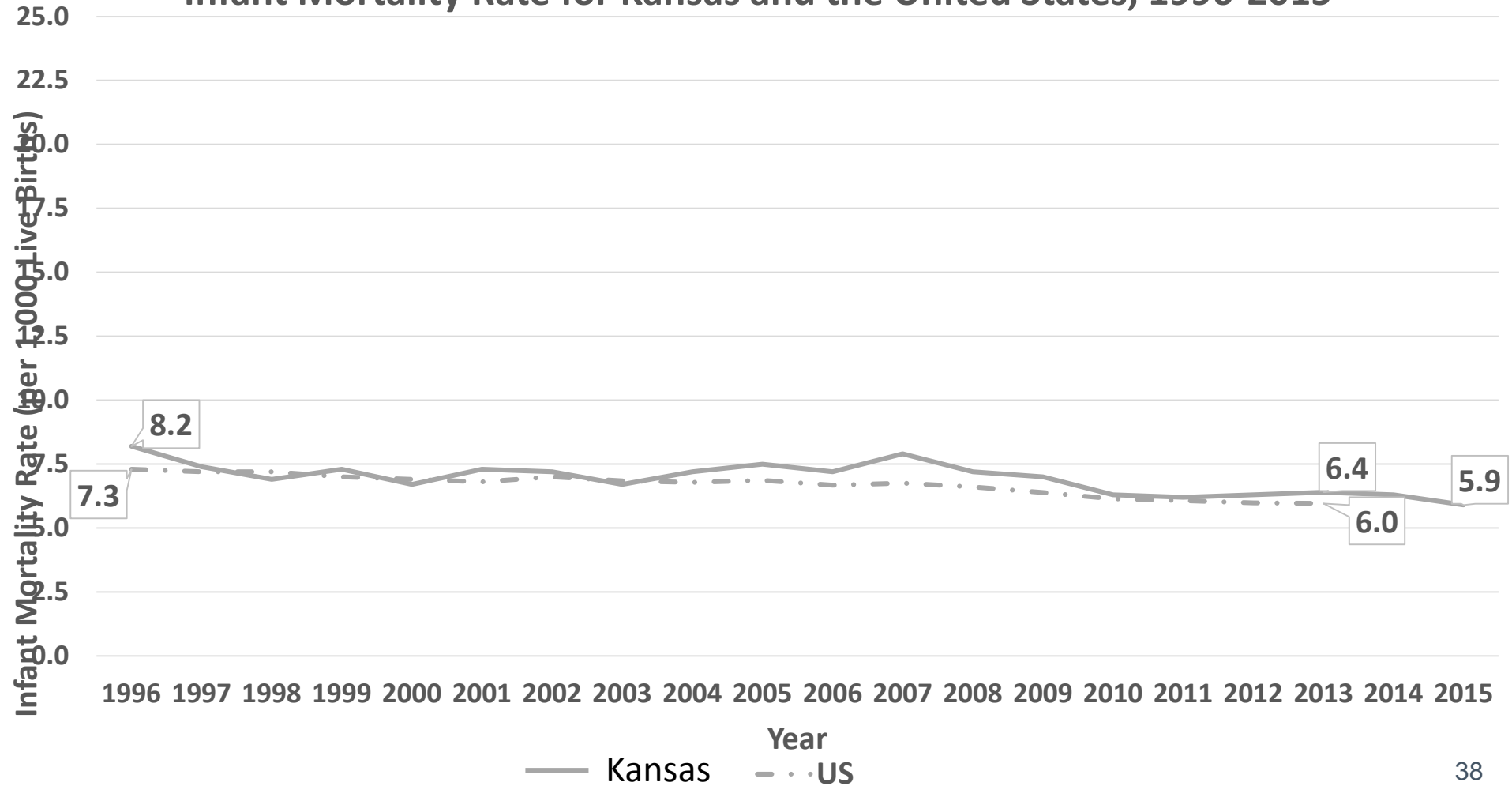
## Percent of Adults Reporting Their Health as Fair or Poor by Race/Ethnicity in Kansas, 2011-2015 (Combined)



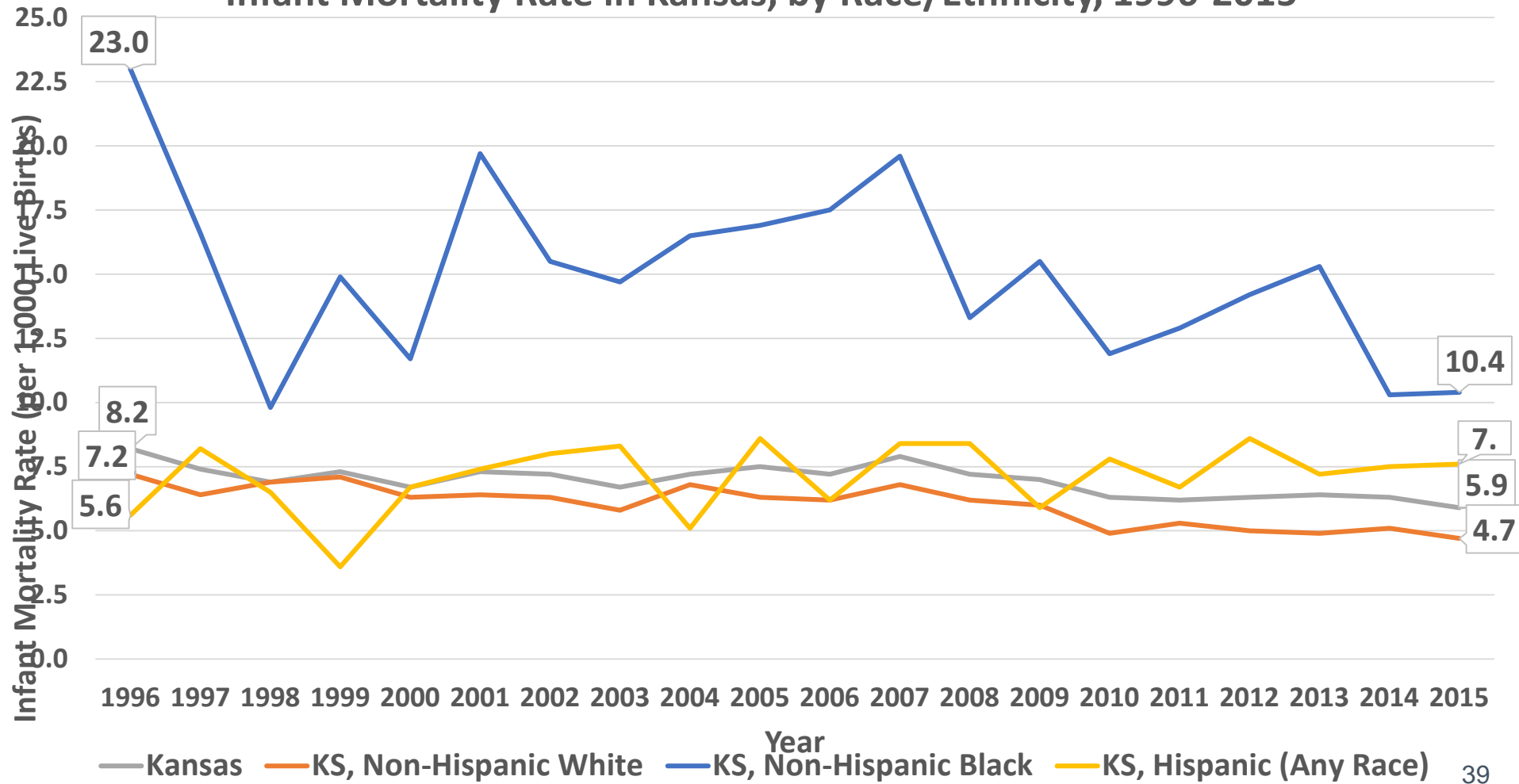
## Infant Mortality Rate for Kansas, 1996-2015



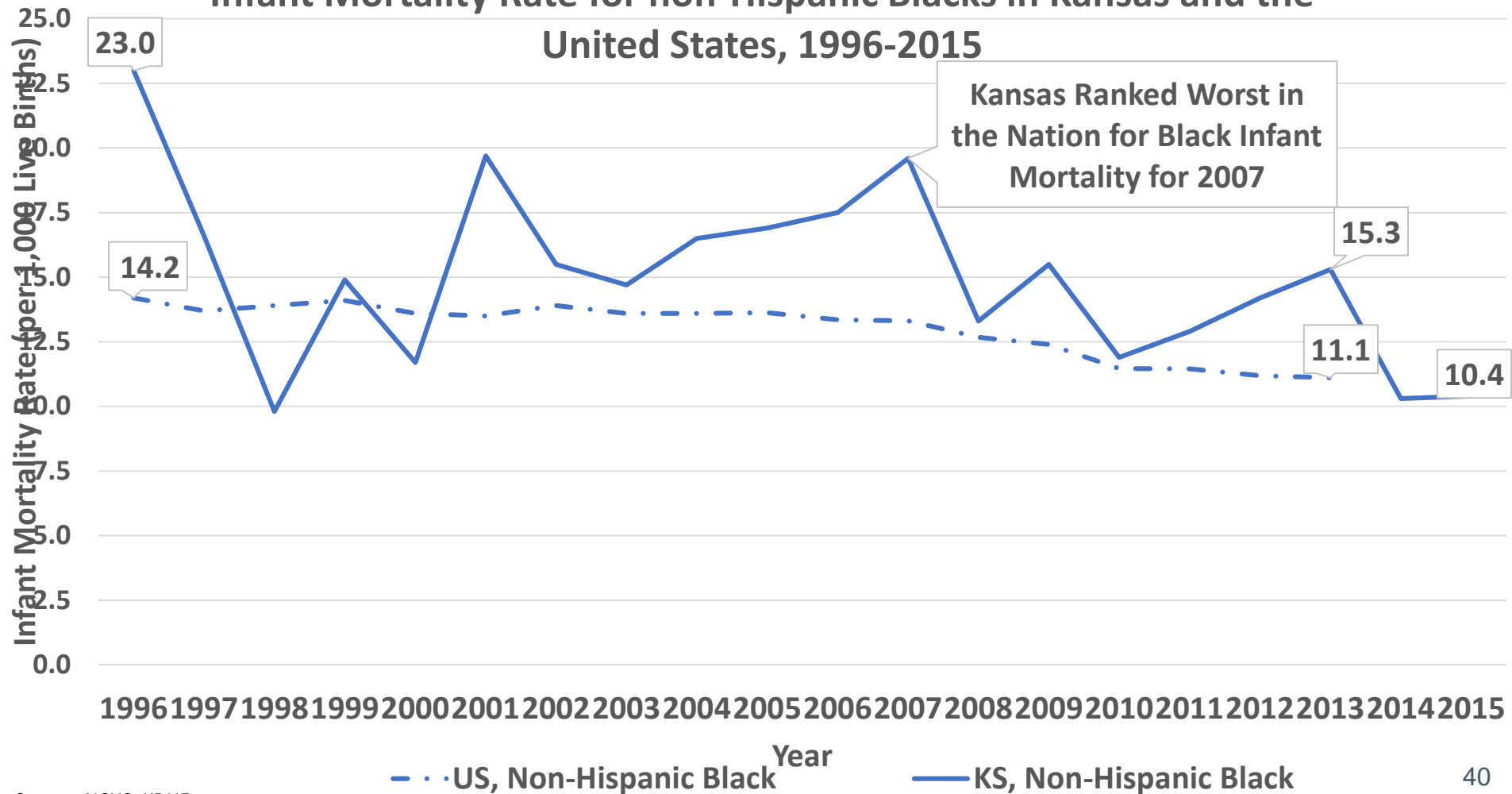
# Infant Mortality Rate for Kansas and the United States, 1996-2015



# Infant Mortality Rate in Kansas, by Race/Ethnicity, 1996-2015



# Infant Mortality Rate for non-Hispanic Blacks in Kansas and the United States, 1996-2015







# POPULATION IN KANSAS: RECENT CHANGES AND FUTURE PROJECTIONS

PARTNERS: KANSAS HEALTH FOUNDATION  
CENTER FOR ECONOMIC DEVELOPMENT AND BUSINESS RESEARCH,  
WICHITA STATE UNIVERSITY

# Population Change in Kansas by Race/Ethnicity, between 2000 and 2016

			Population	Population		
			2000	2016	Change in Pop.	% Change
All Kansans			2,688,418	2,907,289	218,871.00	8.1%

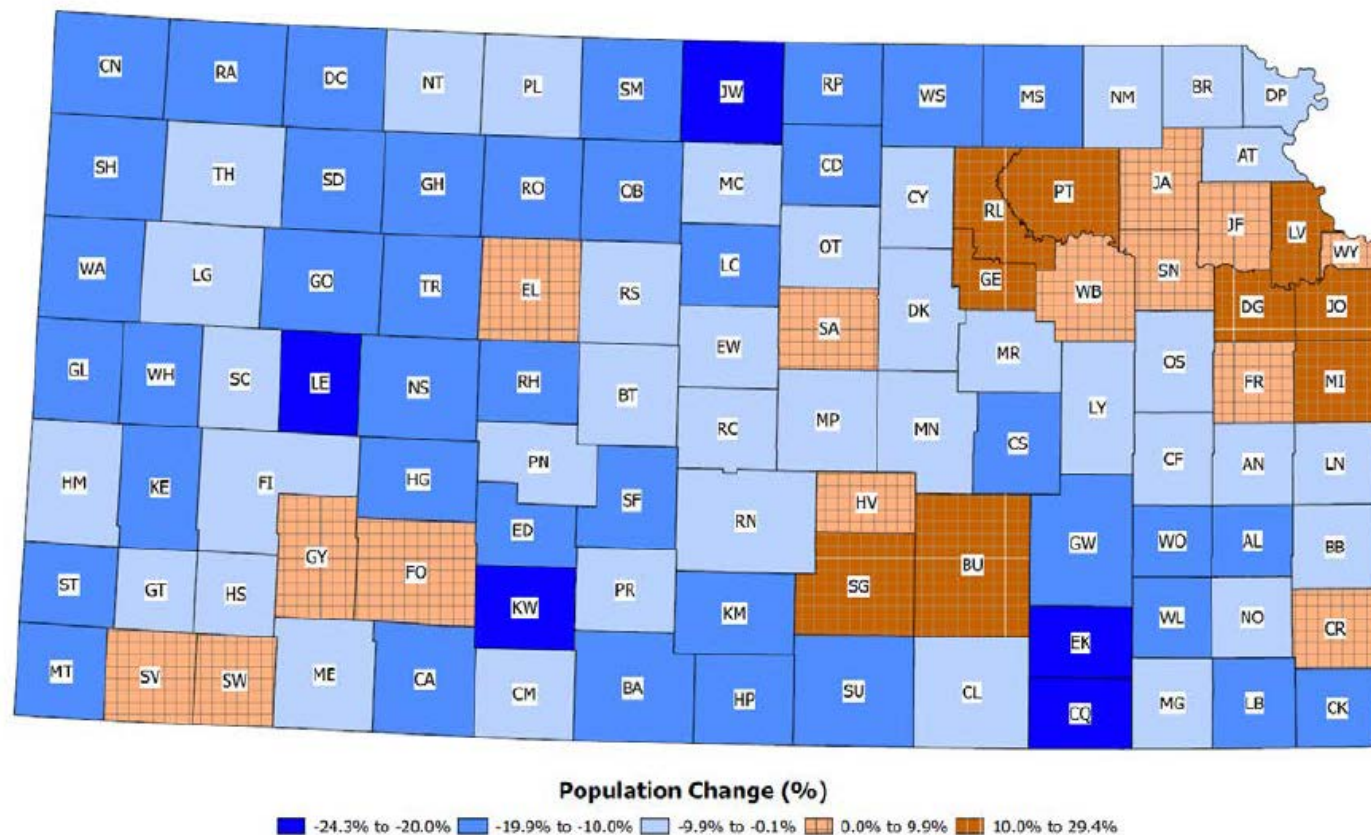
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			2000	2016	Change in Pop.	% Change
All Kansans			2,688,418	2,907,289	218,871.00	8.1%
Non-Hispanic White			2,260,288	2,254,581	(5,707.00)	-0.3%
All Minorities			428,130	652,708	224,578.00	52.5%

# Population Change in Kansas by Race/Ethnicity, between 2000 and 2016

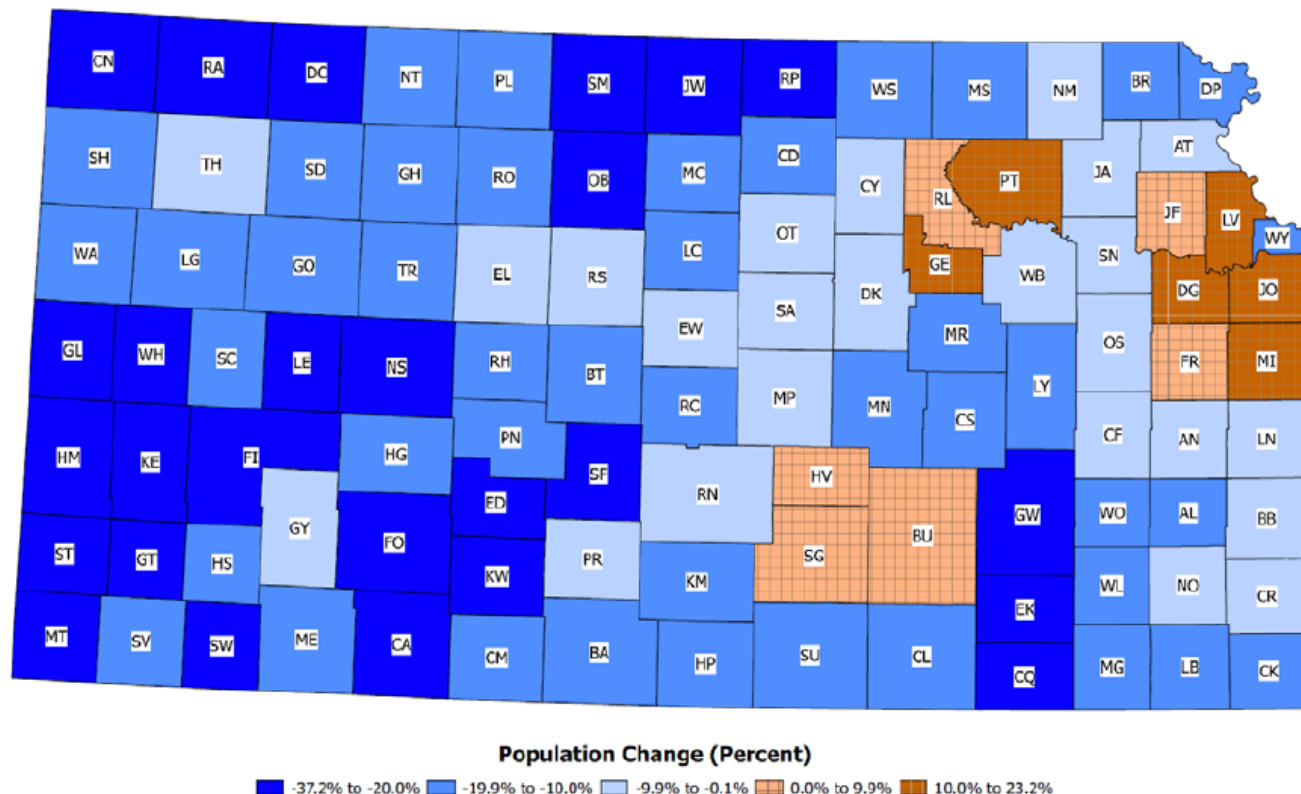
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All Kansans		2,688,418	2,907,289	218,871.00	8.1%
Non-Hispanic White		2,260,288	2,254,581	(5,707.00)	-0.3%
All Minorities		428,130	652,708	224,578.00	52.5%
Non-Hispanic Black		161,766	192,710	30,944.00	19.1%
Non-Hispanic AI/AN		26,757	28,896	2,139.00	8.0%
Non-Hispanic Asian/PI		51,355	92,621	41,266.00	80.4%
Hispanic, Any Race		188,252	338,481	150,229.00	79.8%

Figure 12. Population Change (Percent) for All Kansans by County, Between 2000 and 2016



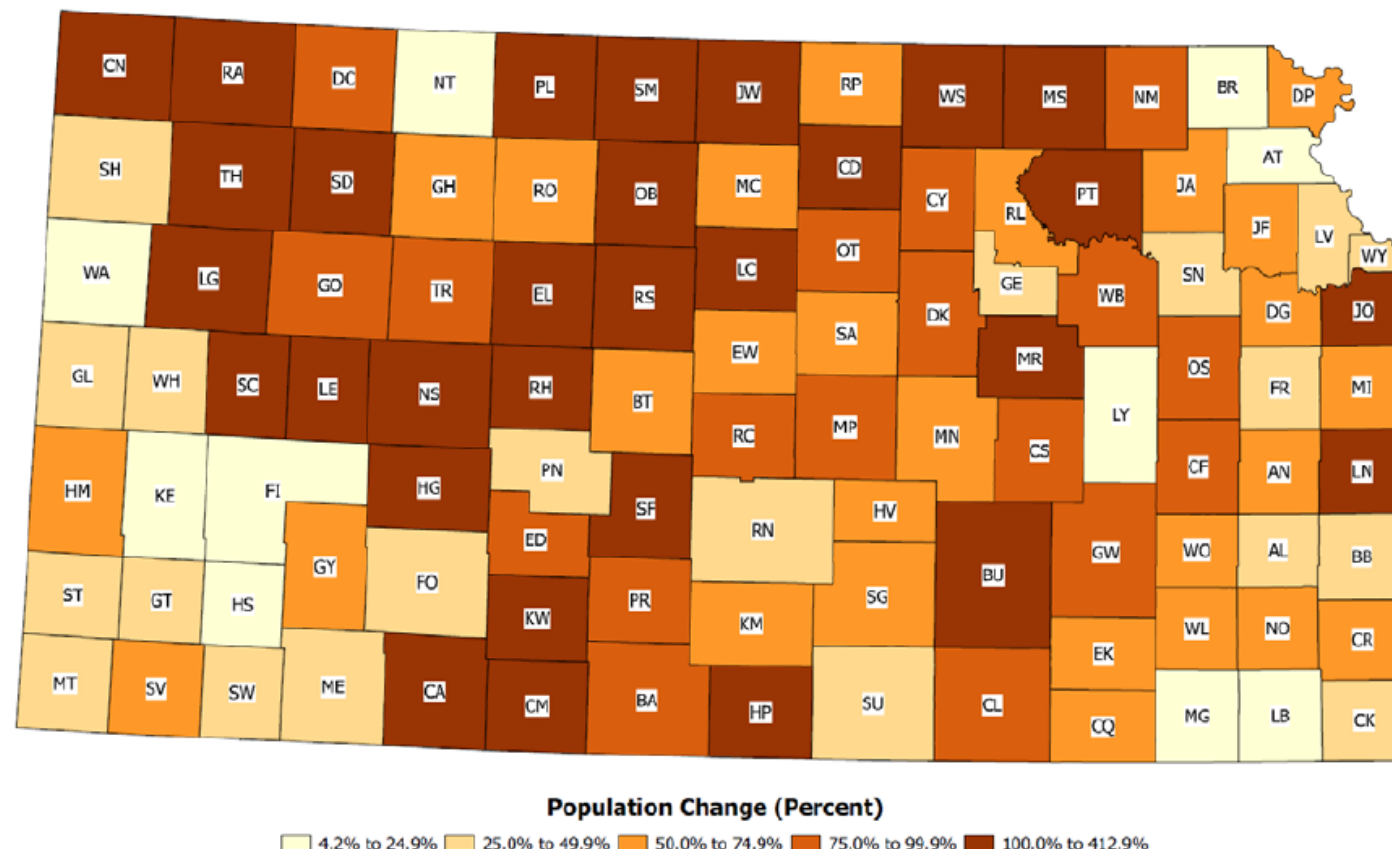
Source: KHI analysis of data from the National Center for Health Statistics' (NCHS) April 1, 2000 bridged-race population estimates and the NCHS's June 2017 Vintage July 1, 2016 bridged-race population estimates.

Figure 13. Population Change (Percent) for Non-Hispanic White Kansans by County, Between 2000 and 2016



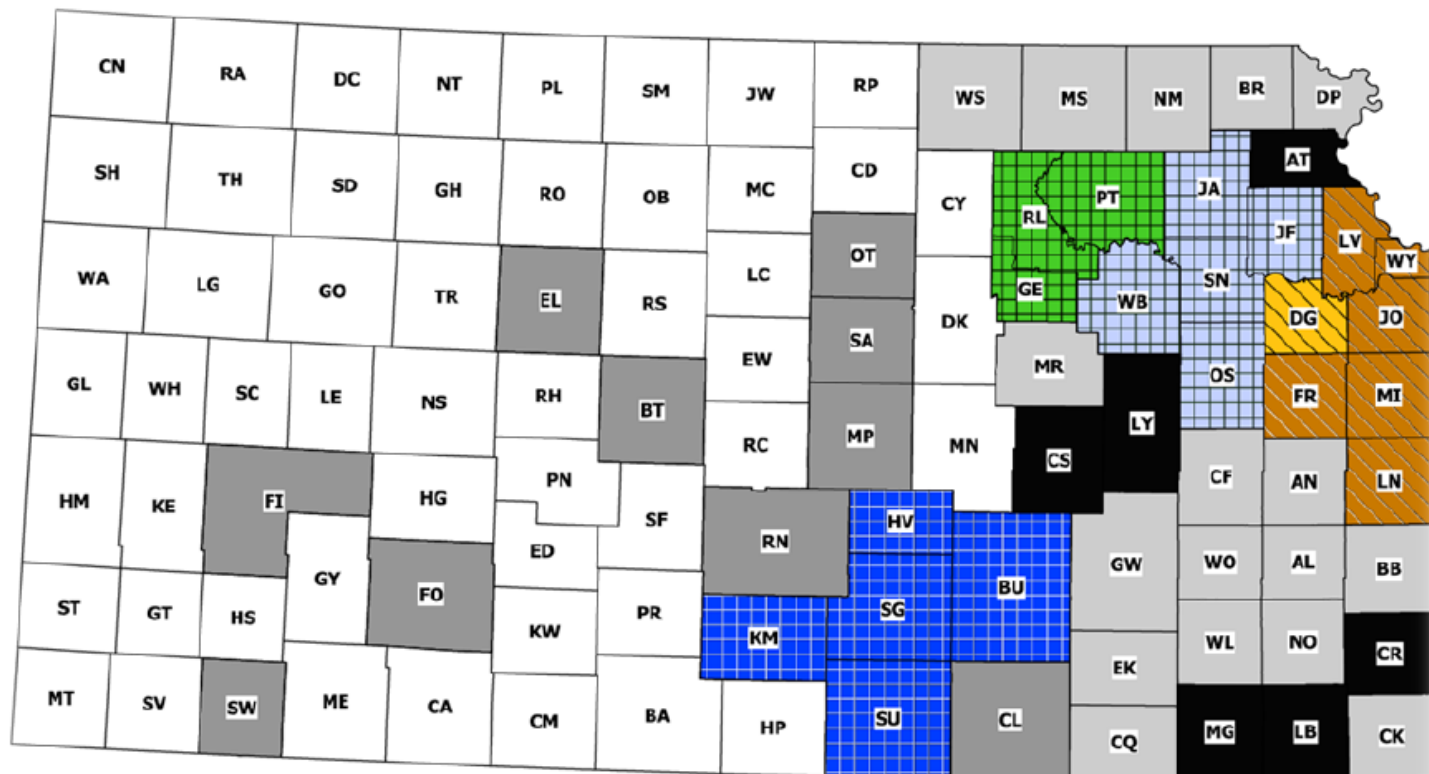
Source: KHI analysis of data from the National Center for Health Statistics' (NCHS) April 1, 2000 bridged-race population estimates and the NCHS's June 2017 Vintage July 1, 2016 bridged-race population estimates.

Figure 14. Population Change (Percent) for All Minorities by County, Between 2000 and 2016



Source: KHI analysis of data from the National Center for Health Statistics' (NCHS) April 1, 2000 bridged-race population estimates and the NCHS's June 2017 Vintage July 1, 2016 bridged-race population estimates.

Figure 15. Kansas Population Projection Regions



Projection Regions

East Micropolitan
  Kansas City MSA
  Manhattan MSA
  West Micropolitan
  Wichita MSA
  East Rural
  Lawrence MSA
  Topeka MSA
  West Rural



Figure 22. Population Projections by Age Group in Kansas, 2016–2066

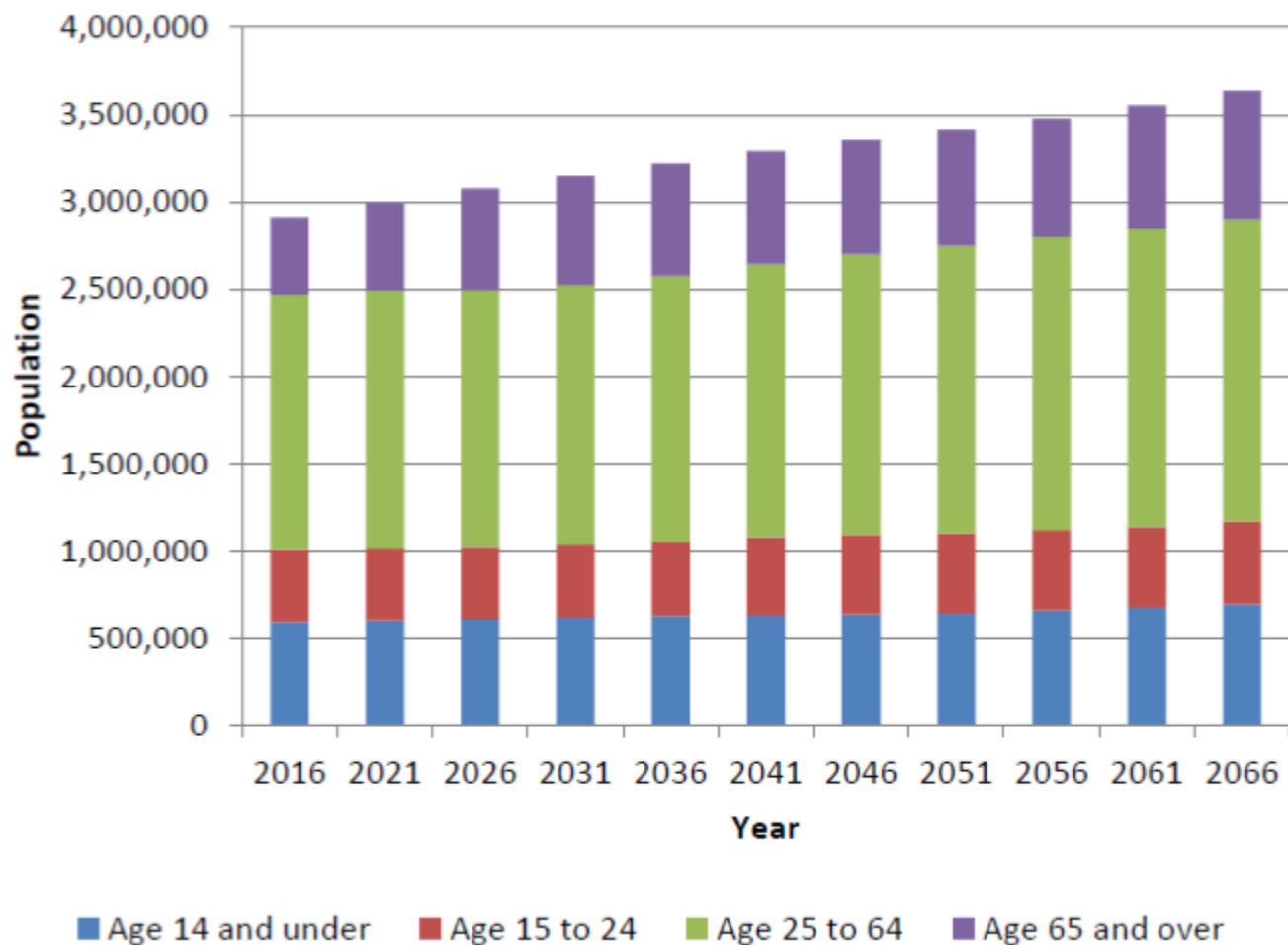


Figure 23. Population Projections by Race/Ethnicity in Kansas, 2016–2066

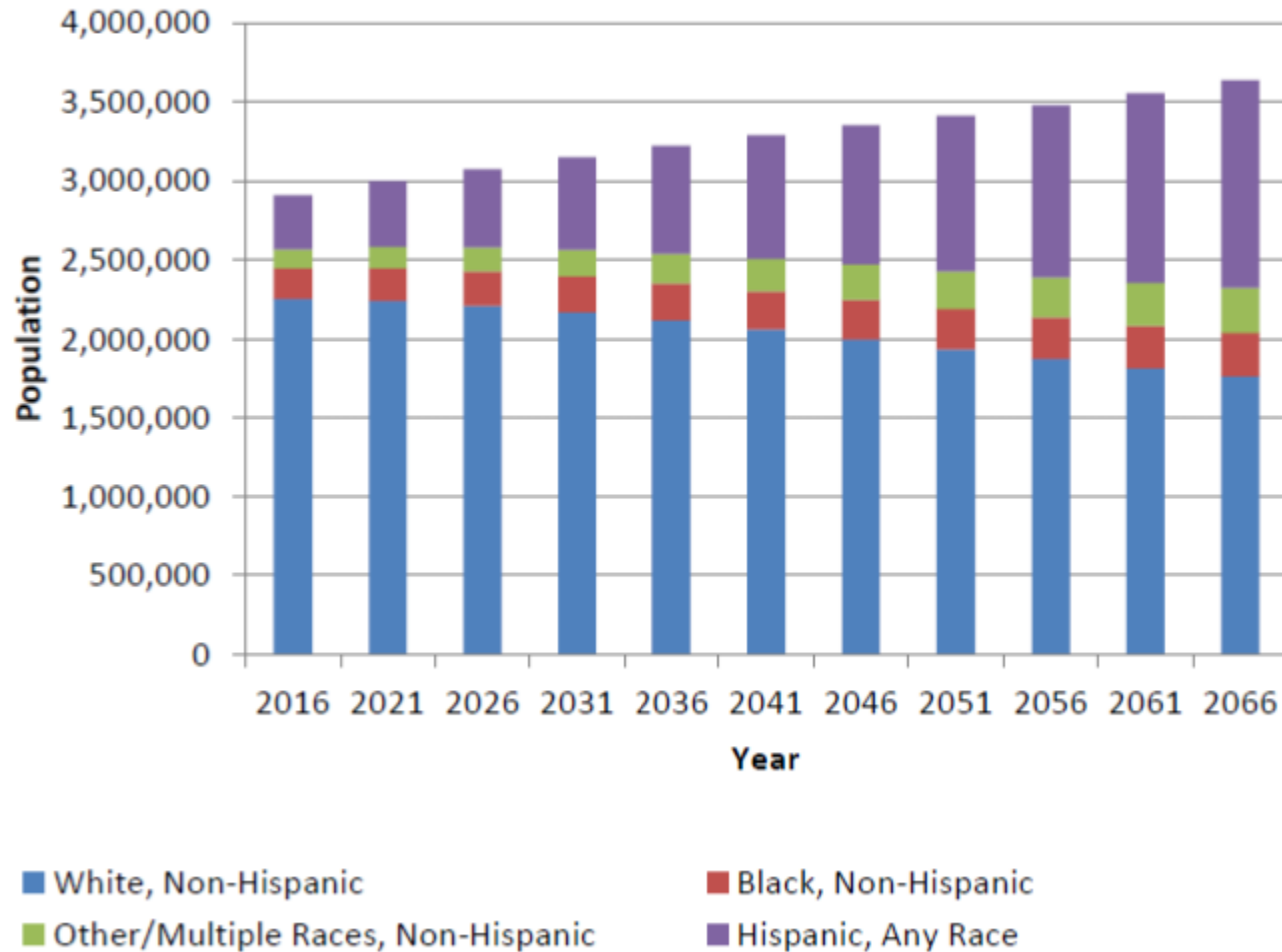
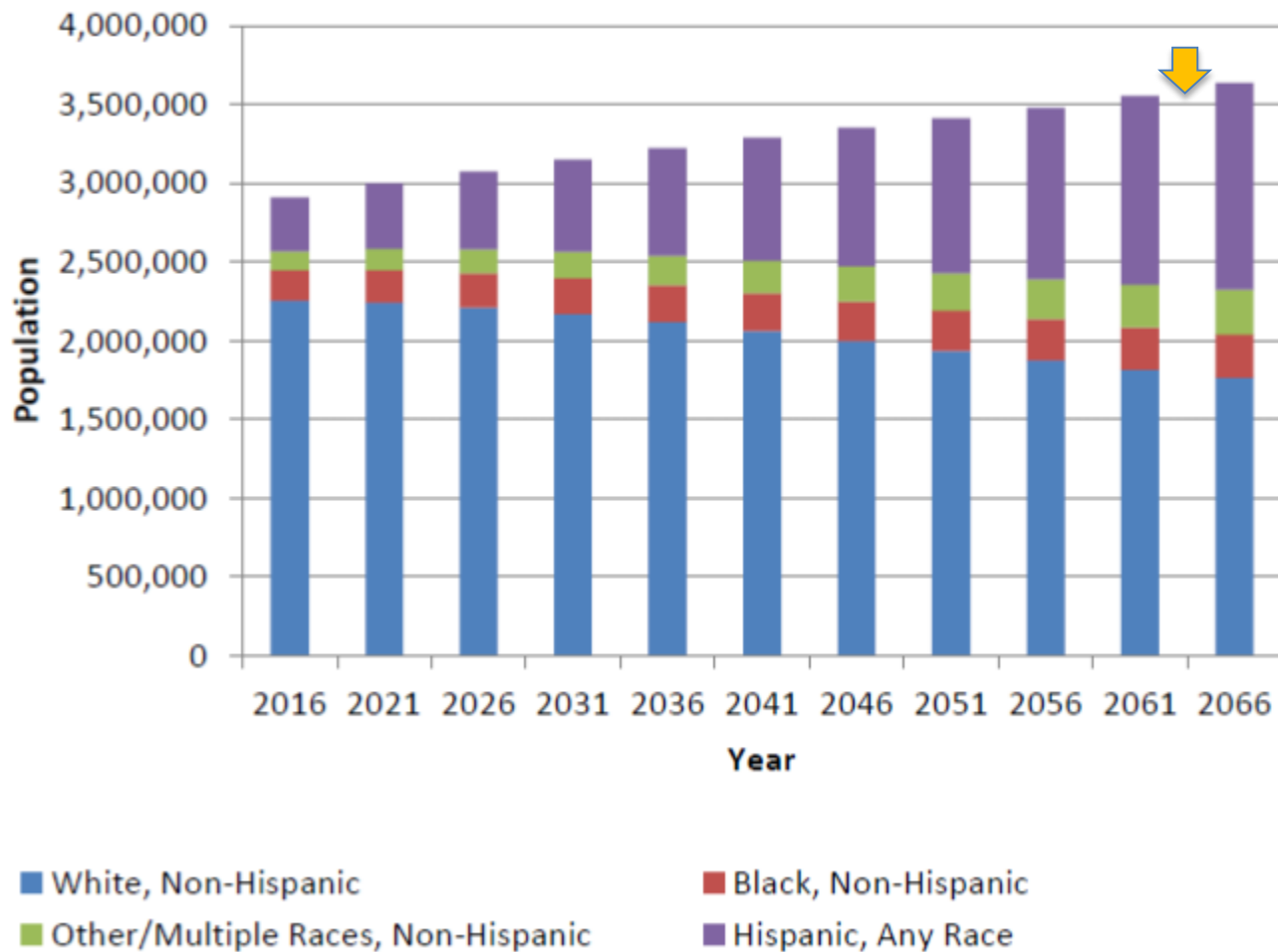


Figure 23. Population Projections by Race/Ethnicity in Kansas, 2016–2066



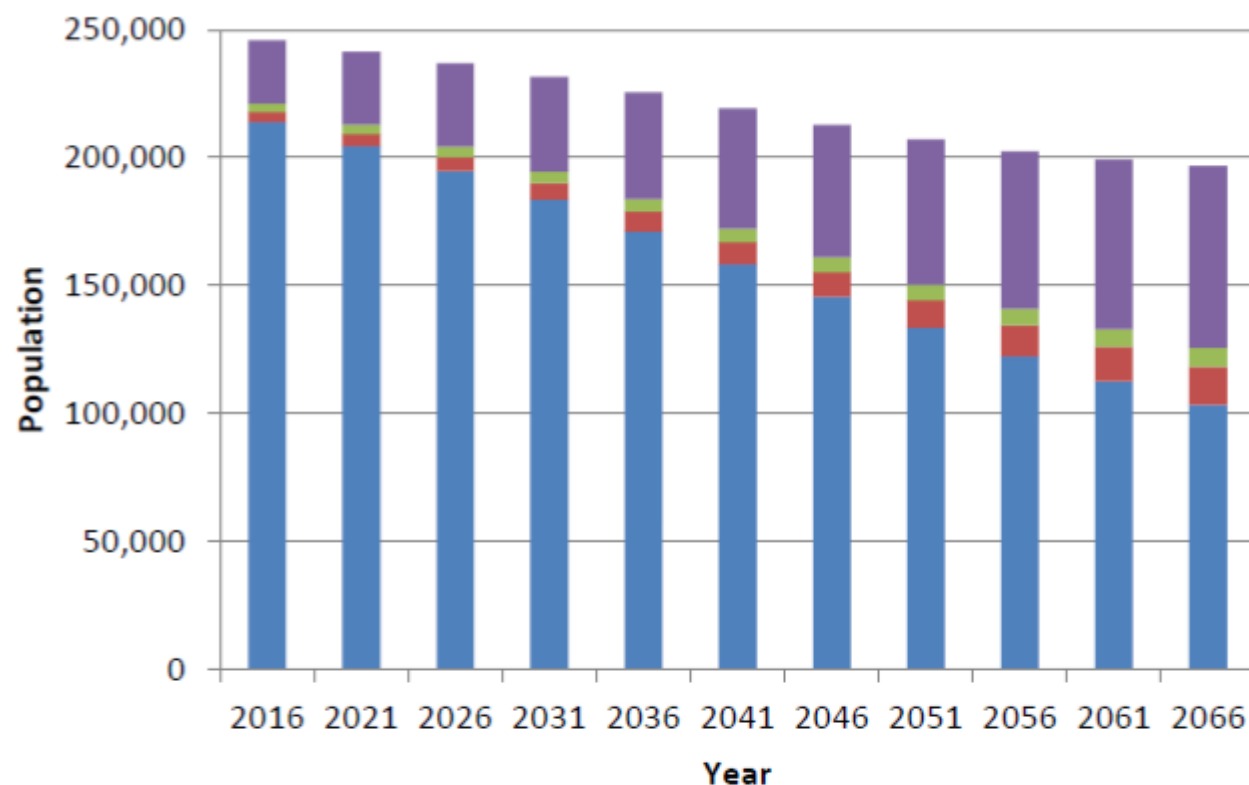
## State-Level Projections

Figure 21. Population Projections by Total Population, Age Group and Race/Ethnicity in Kansas, 2016–2066

Kansas	2016	2036	2016–2036 % Change	2066	2016–2066 % Change
<b>Total Population</b>	2,907,289	3,220,161	10.8%	3,637,037	25.1%
<b>Age Group</b>					
Age 14 and under	595,053	627,855	5.5%	694,996	16.8%
Age 15 to 24	417,031	424,321	1.7%	472,809	13.4%
Age 25 to 64	1,458,212	1,523,208	4.5%	1,728,517	18.5%
Age 65 and over	436,993	644,778	47.5%	740,715	69.5%
<b>Race/Ethnicity</b>					
White, Non-Hispanic	2,254,581	2,118,722	-6.0%	1,765,981	-21.7%
Black, Non-Hispanic	192,710	235,597	22.3%	271,921	41.1%
Other/Multiple Races, Non-Hispanic	121,517	185,141	52.4%	289,622	138.3%
Hispanic, Any Race	338,481	680,701	101.1%	1,309,513	286.9%

Source: 2016 Kansas Population Projections by Race and Ethnicity, Center for Economic Development and Business Research at Wichita State University.

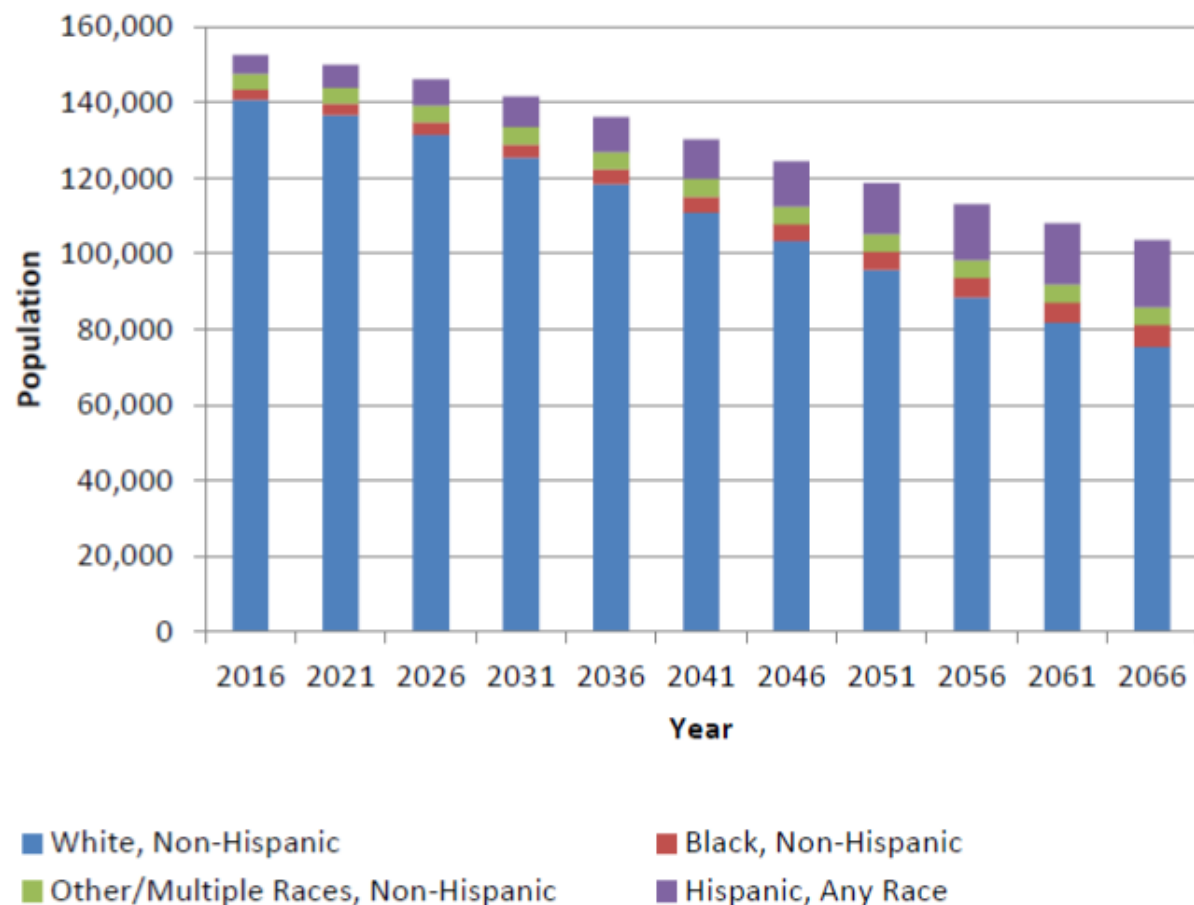
**Figure 59. Population Projections by Race/Ethnicity in the Western Rural Region, 2016–2066**



Note: The Western Rural Region consists of the following counties: BA, CN, CA, CY, CD, CM, DC, DK, ED, EW, GO, GH, GT, GY, GL, HM, HP, HS, HG, JW, KE, KW, LE, LC, LG, MN, ME, MC, MT, NS, NT, OB, PN, PL, PR, RA, RP, RC, RO, RH, RS, SC, SD, SH, SM, SF, ST, SV, TH, TR, WA and WH.

Source: 2016 Kansas Population Projections by Race and Ethnicity, Center for Economic Development and Business Research at Wichita State University.

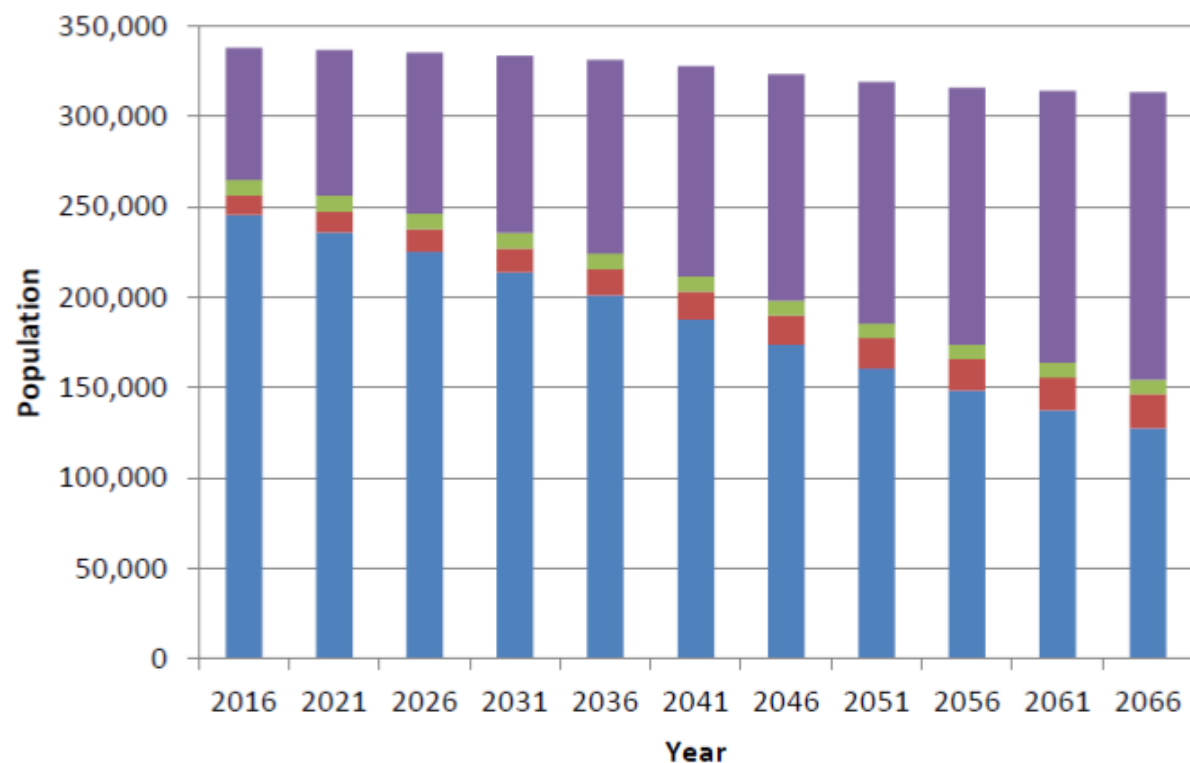
**Figure 56. Population Projections by Race/Ethnicity in the Eastern Rural Region, 2016–2066**



Note: The Eastern Rural Region consists of the following counties: AL, AN, BB, BR, CQ, CK, CF, DP, EK, GW, MS, MR, NM, NO, WS, WL and WO.

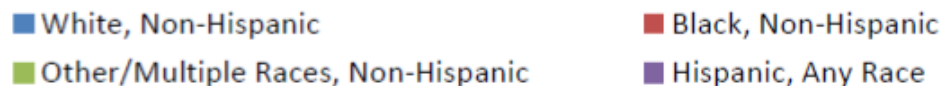
Source: 2016 Kansas Population Projections by Race and Ethnicity, Center for Economic Development and Business Research at Wichita State University.

**Figure 53. Population Projections by Race/Ethnicity in the Western Micropolitan Region, 2016–2066**

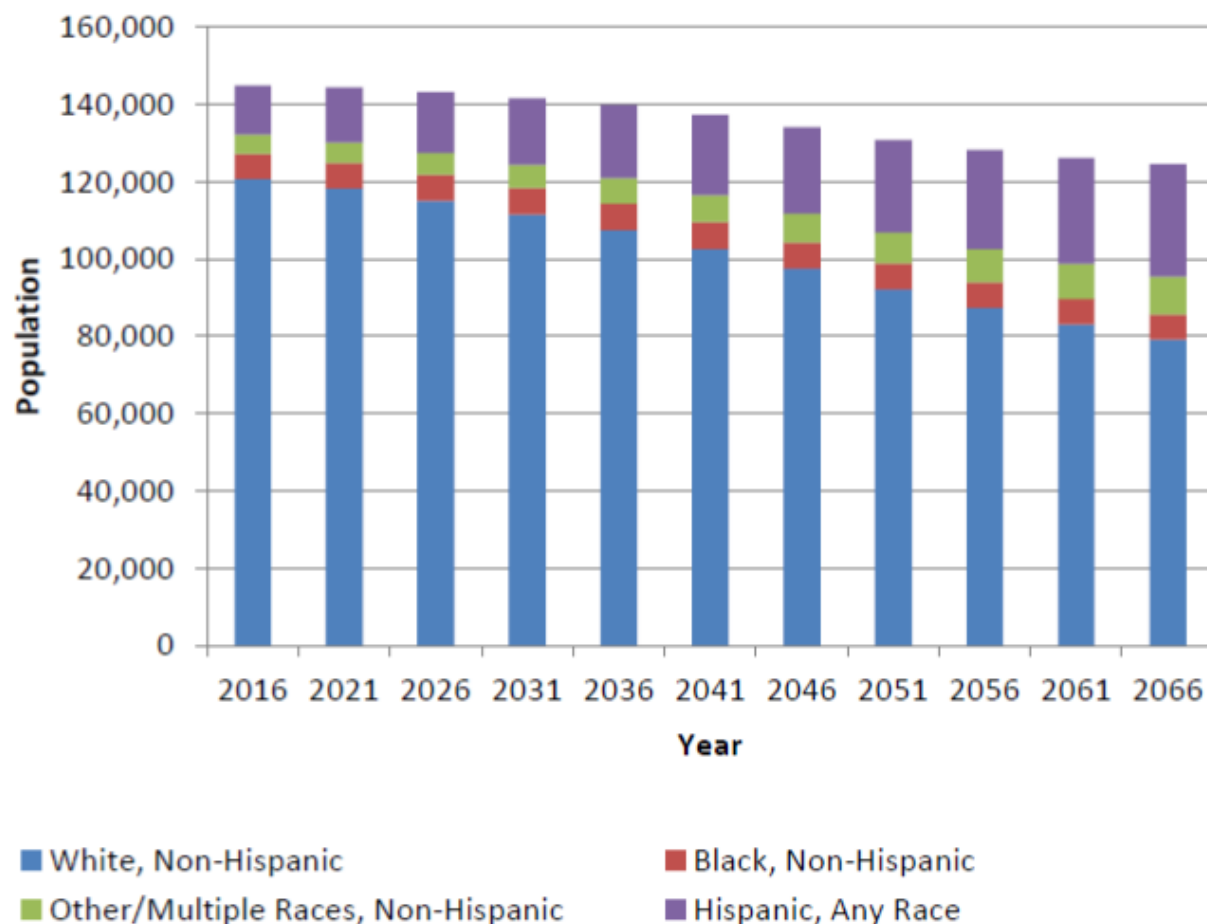


Note: The Western Micropolitan Region consists of the following counties: Barton, Cowley, Ellis, Finney, Ford, McPherson, Ottawa, Reno, Saline and Seward.

Source: 2016 Kansas Population Projections by Race and Ethnicity, Center for Economic Development and Business Research at Wichita State University.



**Figure 50. Projection Projections by Race/Ethnicity in the Eastern Micropolitan Region, 2016–2066**



The Eastern Micropolitan Region consists of the following counties: Atchison, Chase, Crawford, Labette, Lyon and Montgomery. Chase County was included until January 2012.

Source: 2016 Kansas Population Projections by Race and Ethnicity, Center for Economic Development and Business Research at Wichita State University.



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