



Demographics and Health Status of Rural North Carolina

Overview of the Task Force Process

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Overview

- What is rural?
- Race/Ethnicity
- Demographics and Insurance Status
- Health indicators and outcomes
- Quality of care



What makes rural health different?

- Differences in prevalence of illness between rural and urban America is largely explained by differences in age, race/ethnicity, and SES.
- But...rural Americans are more often older, poorer, and of minority race/ethnicity.



Rural health

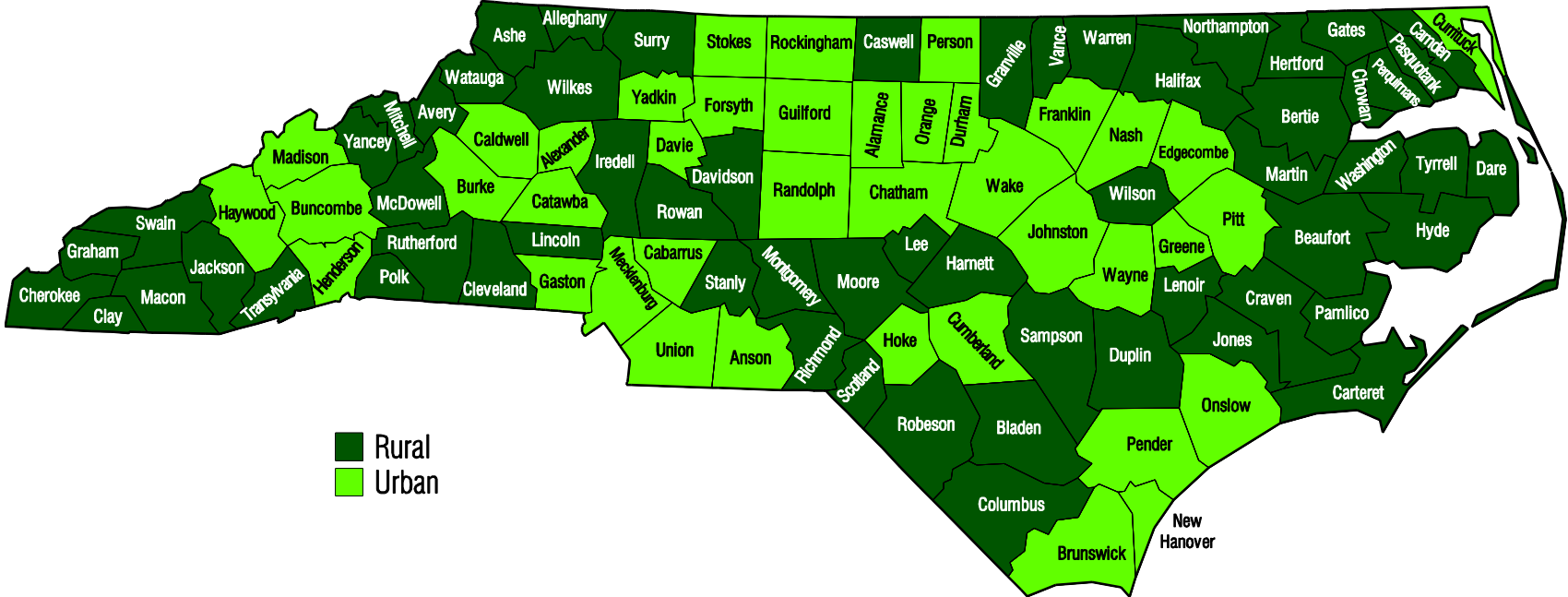
- Not only should be defined by what it is not (too far to doctor, no dentist, no surgeon)
- But also by what it is
 - In some places, rural has distinct racial, ethnic, and cultural compositions. May be defined by strong sense of family, church, and community.
 - Distinct lifestyle differences—diet (in some cases good, some not so good) and recreation.



Rural Defined

- Many definitions of rural used by demographers.
- The task force has selected to use the OMB definition: counties that are non-metropolitan.
- By this definition, NC has 60 rural counties.
- 33 are tier 1 counties, 22 are tier 2 counties (tiers are NC DOC definitions with reference to economic distress).

Rural Map



Economic distress

- Department of commerce has a 3 tier system to categorize economic distress of counties. 40 tier 1 counties (most distressed), 40 tier 2 (next most distressed) and 20 tier 3 counties.
- Of the 60 rural counties in NC, 33 are tier 1 counties, 22 are tier 2 counties.

Economic Distress



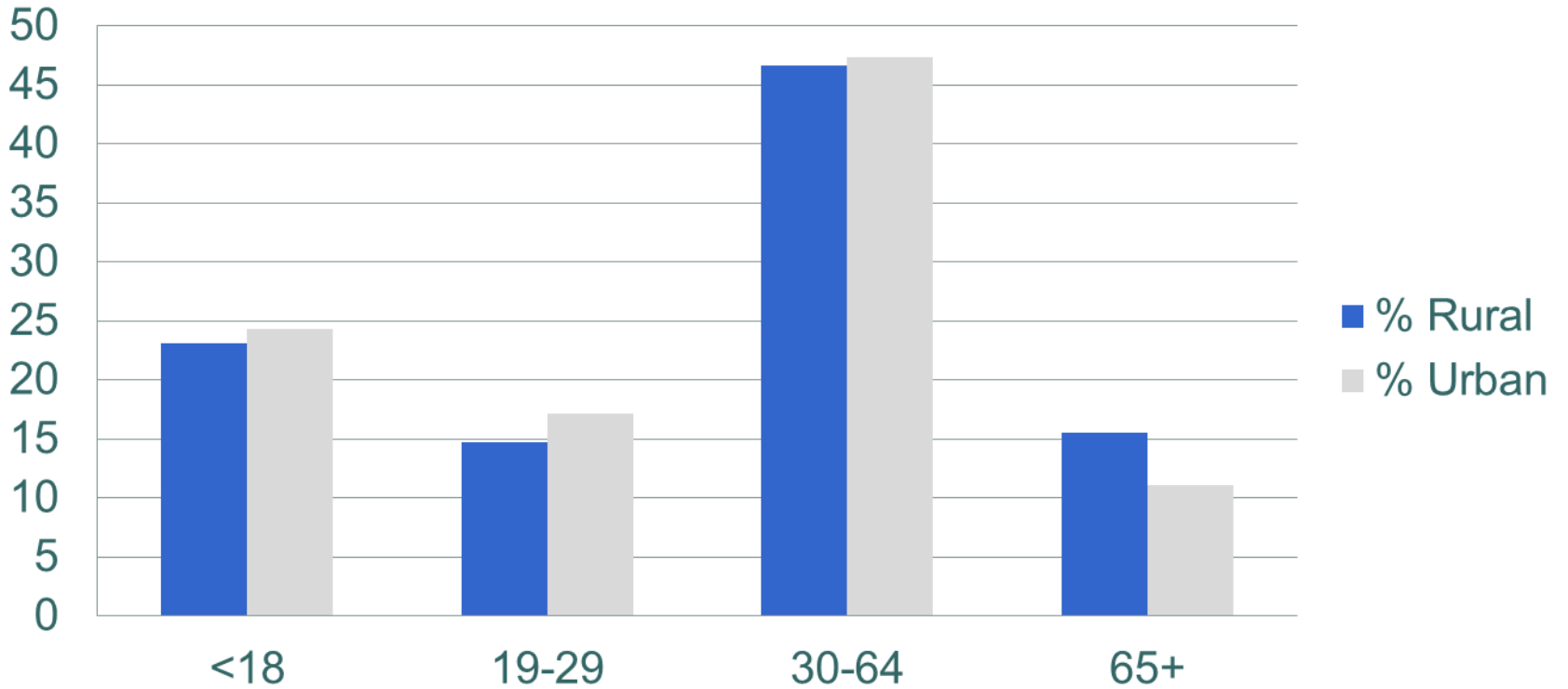


Economics

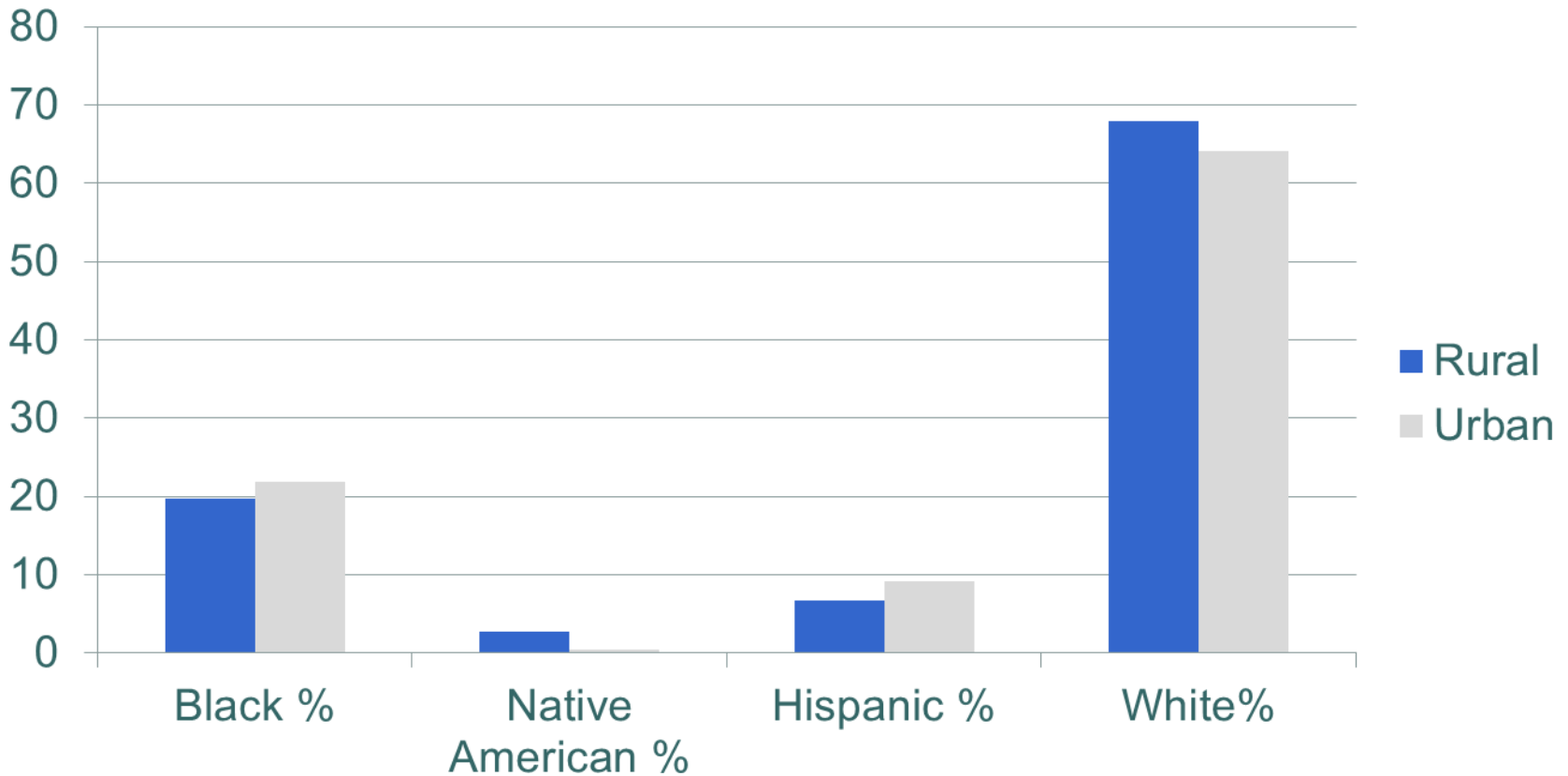
- Job growth: in rural NC ½ of job growth in urban NC from 1990 to 2010
- Median Household income (2010):
 - Rural: \$38,433
 - Urban: \$47,622
- Percent Below Poverty (total):
 - Rural: 20.3% (children: 29.9%)
 - Urban: 16.3% (children: 22.5%)

● ● ● | **Age**

Chart Title



Race/ethnicity



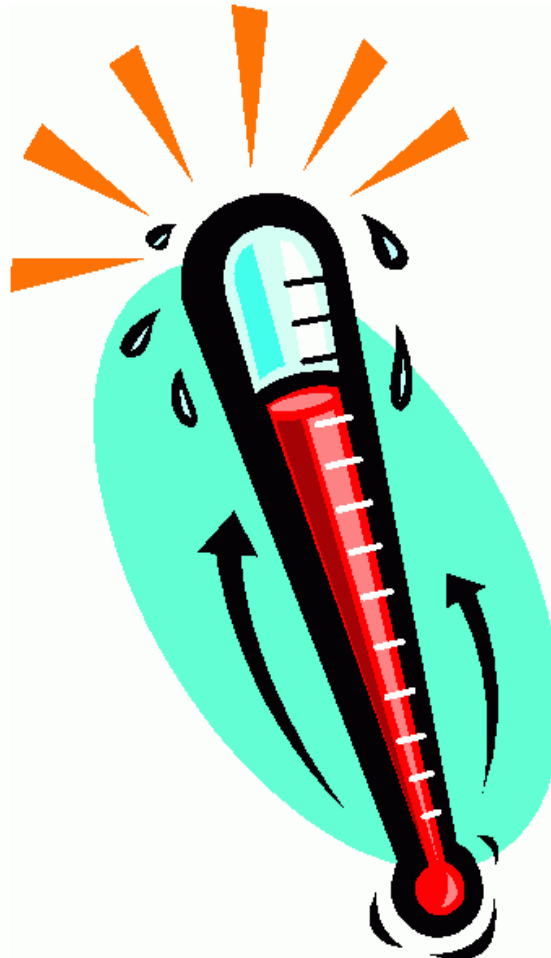


Housing

- Average % substandard
 - Rural: 5.7%
 - Urban: 3.5%
- Mobile Homes
 - Rural: 10.3 mobile homes/100 rural residents
 - Urban: 4.6 mobile homes/100 rural residents

- ● ●

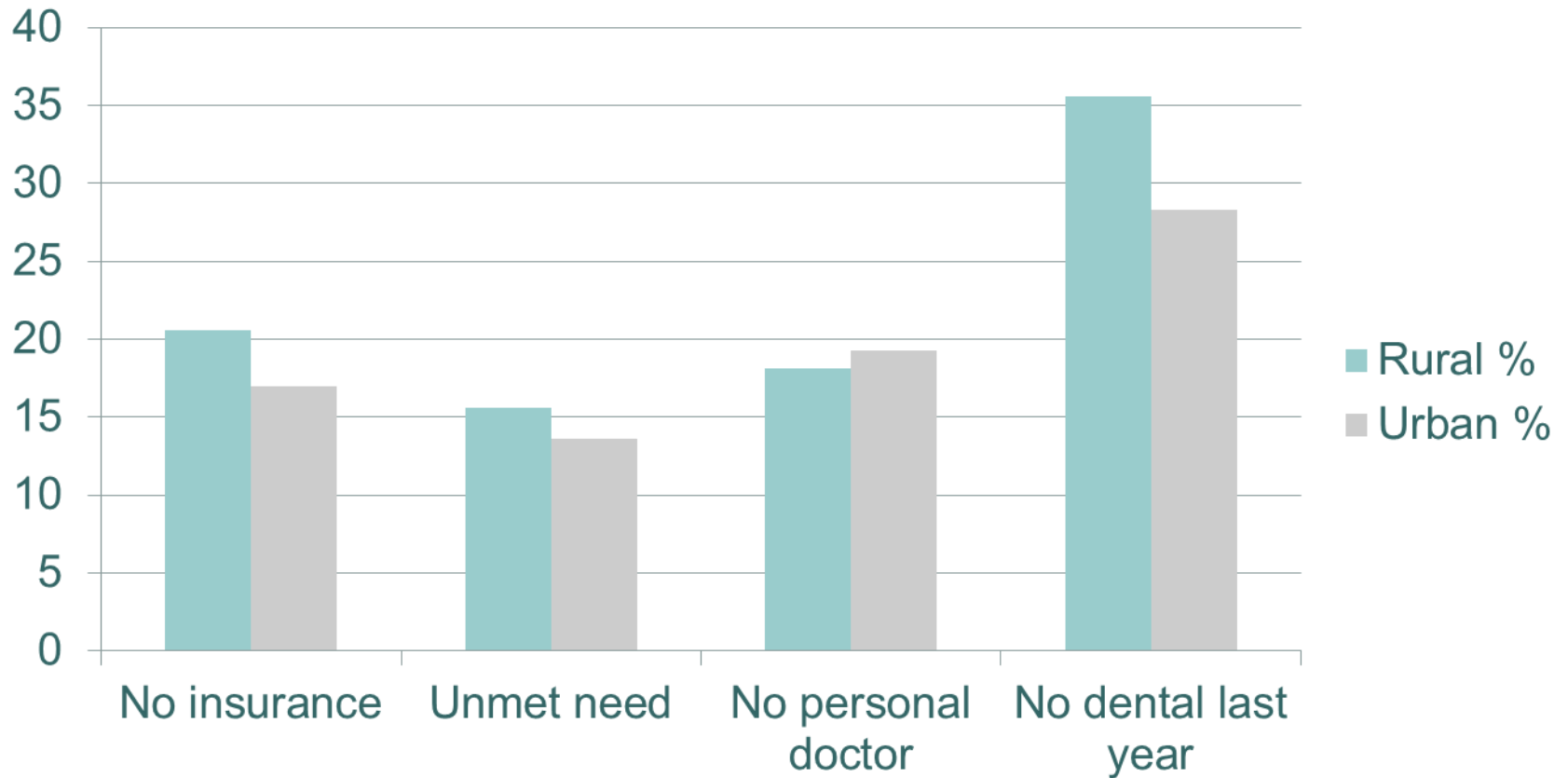
Health indicators



Health Access

BRFSS 2008, Sheps Rural Health

Snapshot 2010





HEALTHY NORTH CAROLINA 2020: A Better State of Health



Healthy NC 2020

Development Process: Three Main Steps

- Three main steps in developing the HNC 2020 objectives and targets:

Step 1: Identify appropriate focus areas (e.g., tobacco use, injury, substance abuse) in which to develop objectives.

Step 2: Identify a limited number of objectives (e.g., reduce the percentage of adults who smoke).

Step 3: Identify an appropriate target for each objective (e.g., reduce the percentage of adults who smoke by XX% by the year 2020).



Healthy NC 2020 Development Process: Focus Areas

1. Tobacco use
2. Nutrition and physical activity
3. Sexually transmitted disease and unintended pregnancy
4. Substance abuse
5. Environmental risks
6. Injury (*and violence*)
7. Infectious disease and foodborne illness
8. Mental health
9. Social determinants of health
10. **Oral health**
11. **Maternal and infant health**
12. **Chronic disease**
13. **Cross-cutting measures**



Healthy NC 2020 Development Process: Objectives & Targets

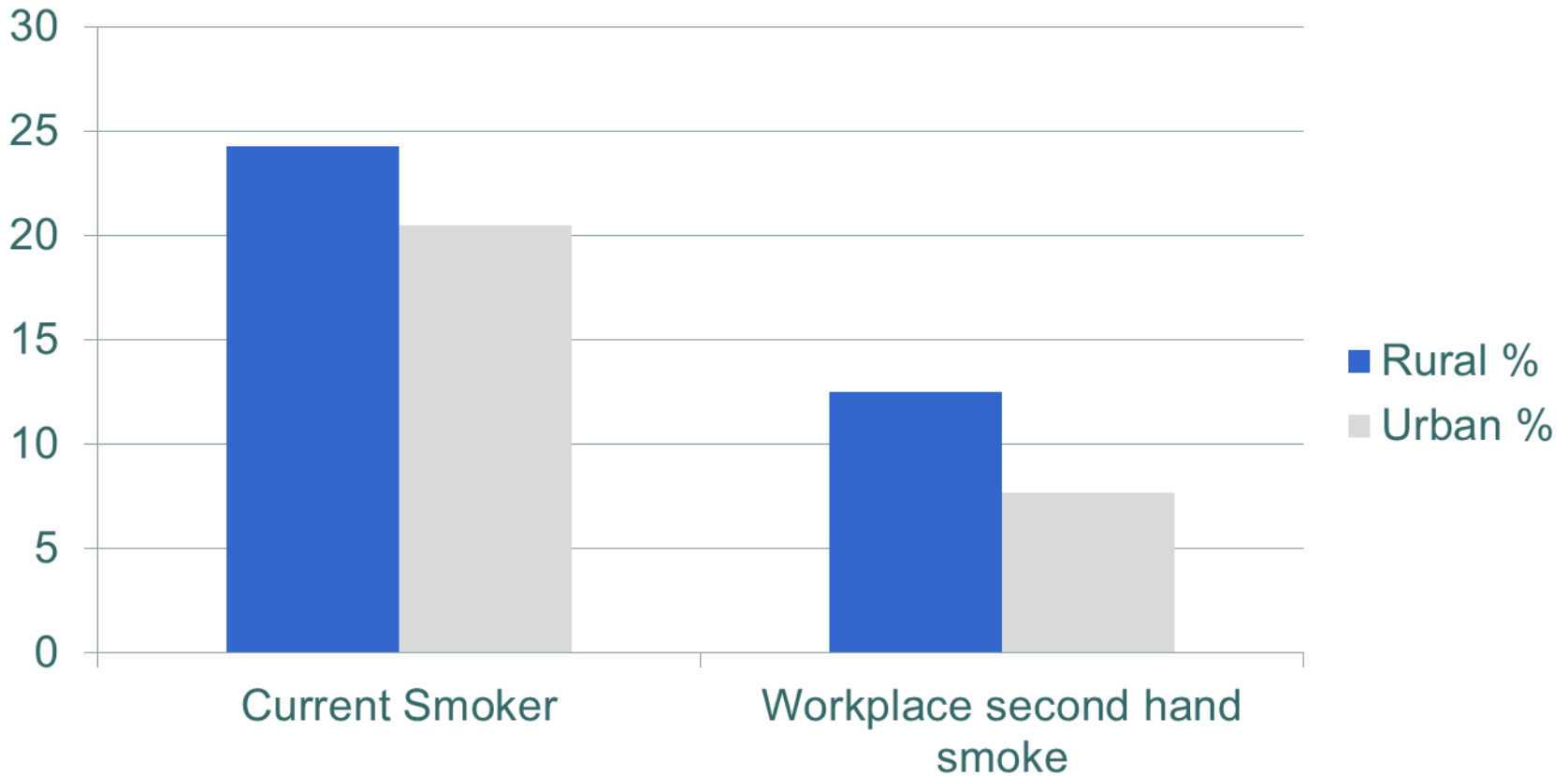
- Subcommittees asked to identify three objectives* per focus area (with one *key performance indicator* per focus area).
 - Important in consideration of objectives:
 - Data available at county-level and for race, age, and gender
 - “Transparency” of data
- Subcommittees asked to identify one target for each objective.
 - Criteria for targets:
 - Aspirational
 - Achievable
 - Measurable in 10 years
 - Selected using prescribed methods



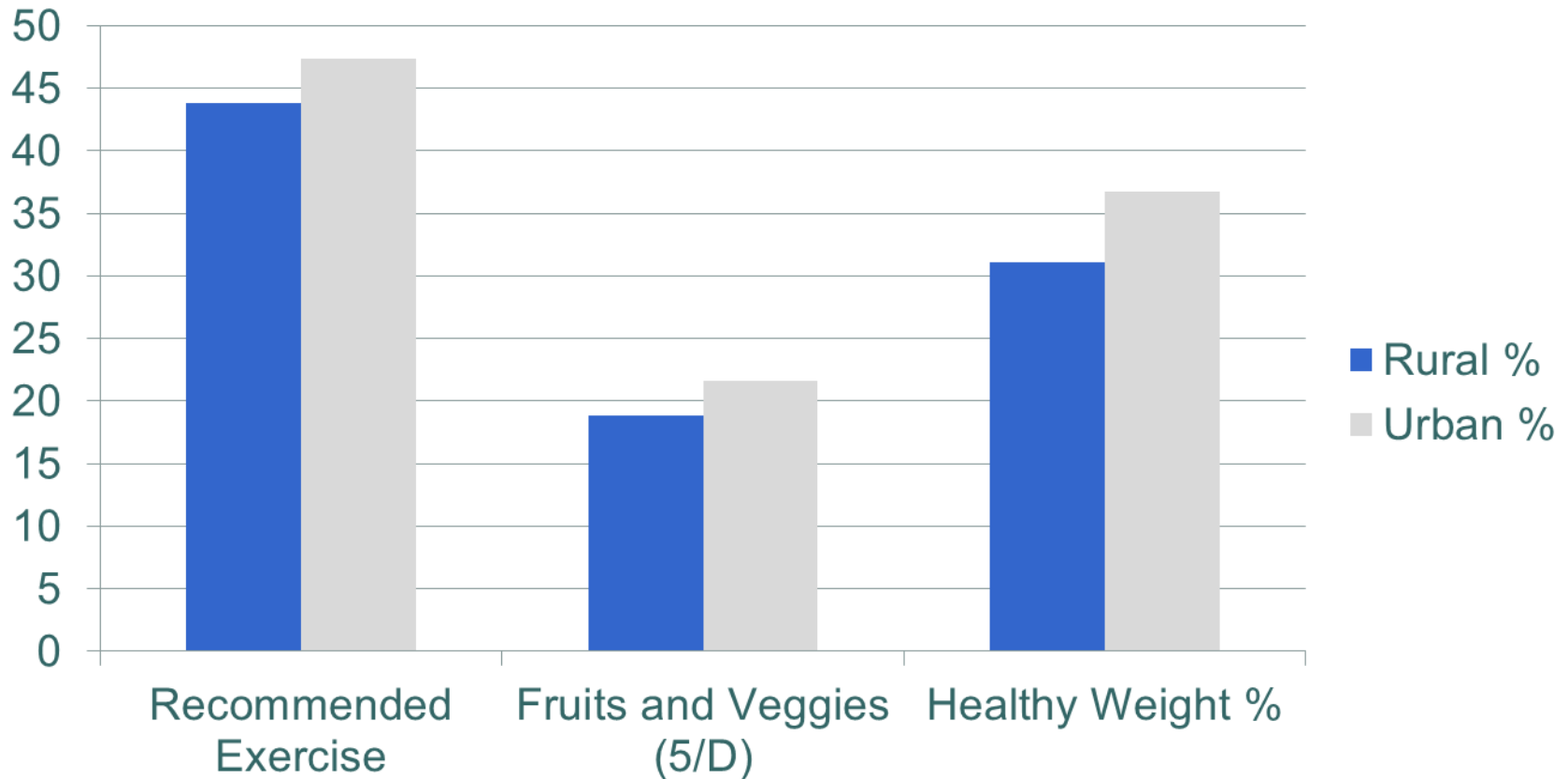
Healthy NC 2020 Development Process

- Development of the 2020 objectives and targets has been an inclusive process and has included input from various stakeholder groups and **more than 150** people representing:
 - Governor's Task Force for Healthy Carolinians
 - Division of Public Health
 - Other state departments and divisions
 - Local health departments
 - Healthy Carolinians partnerships
 - Advocacy groups
 - Academic institutions

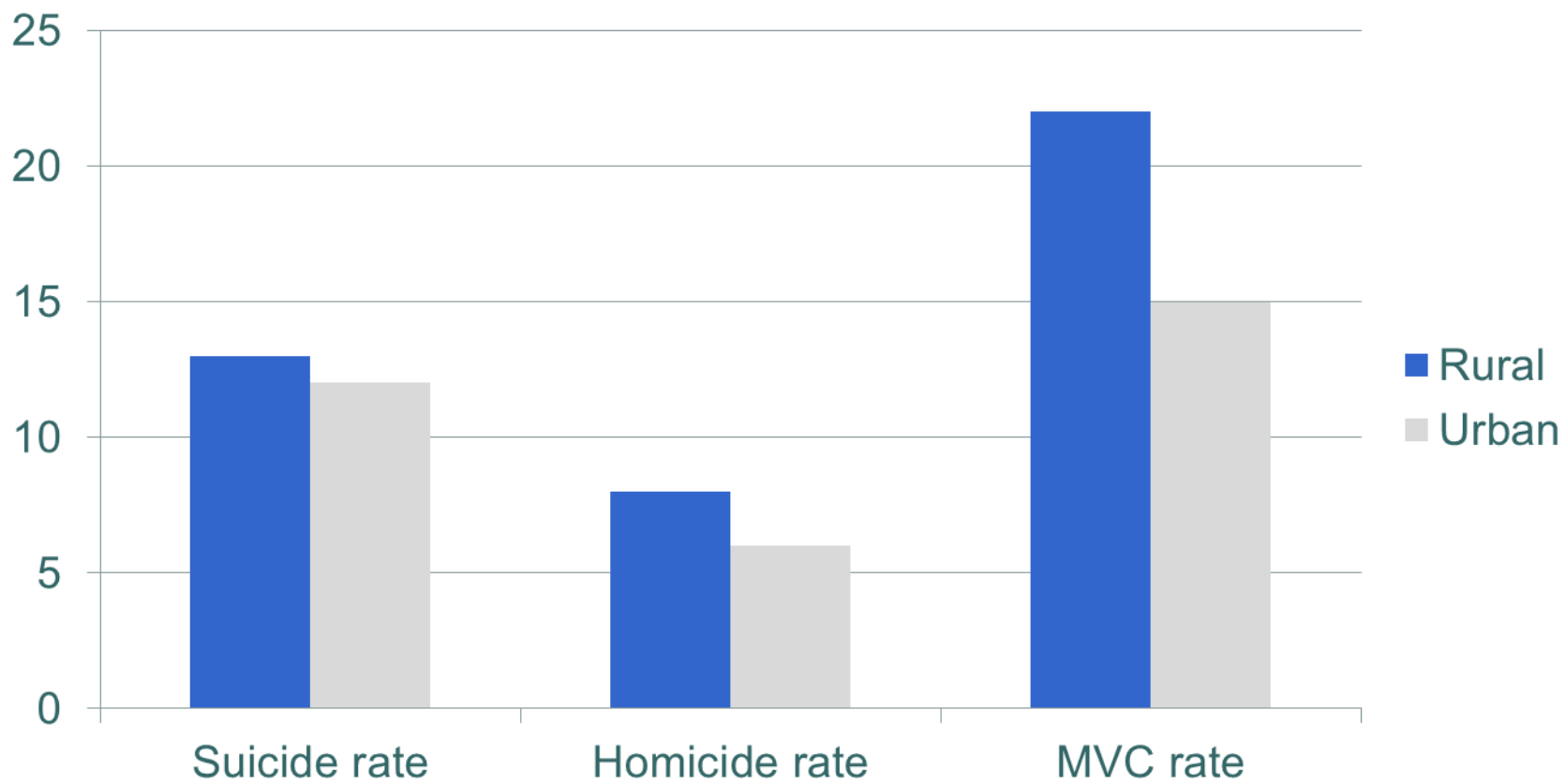
Tobacco (2011, brfss)



Physical Activity and Nutrition and Healthy Weight (brfss 2009)

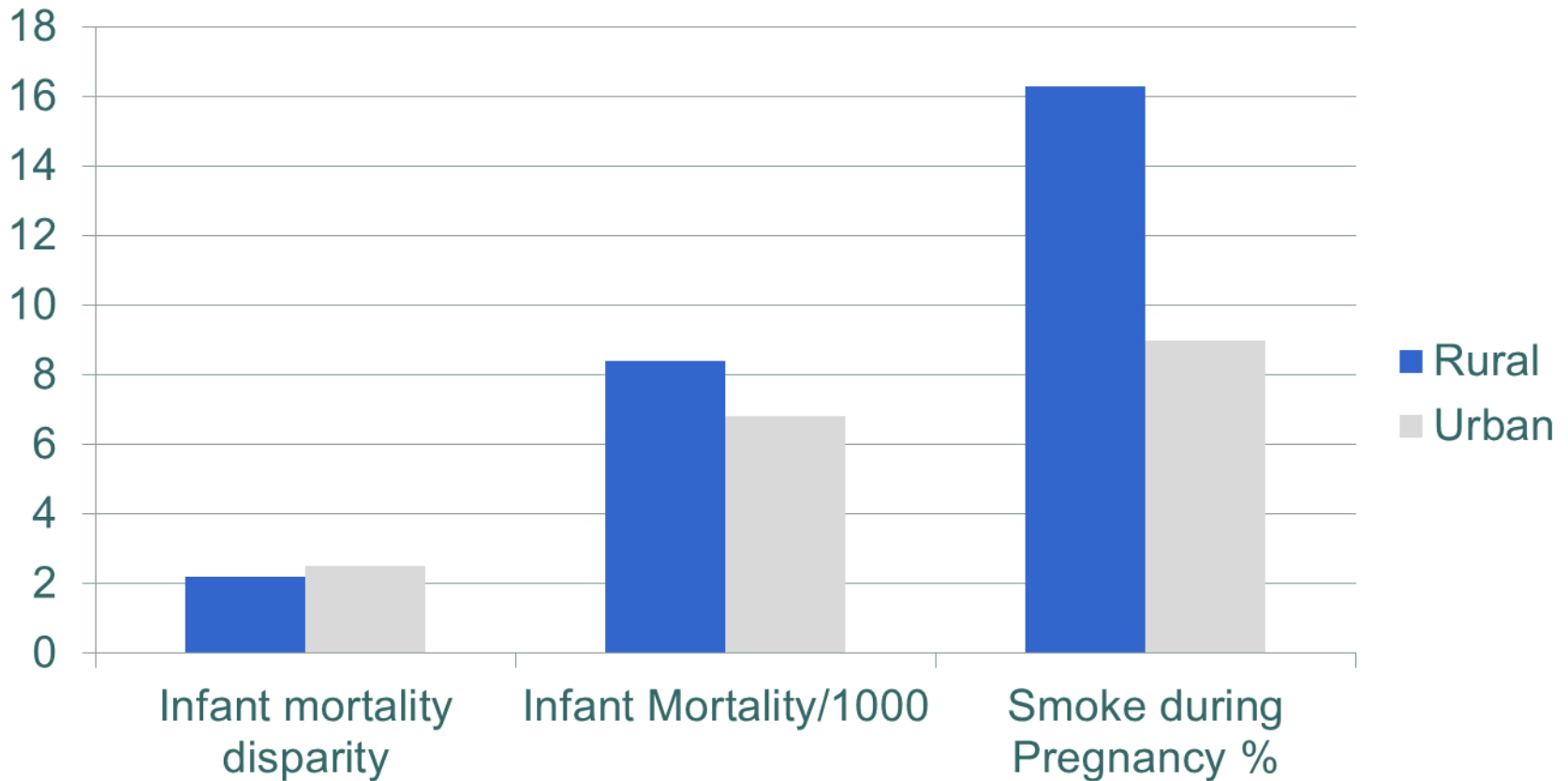


Injury and Violence (Death data 2011)

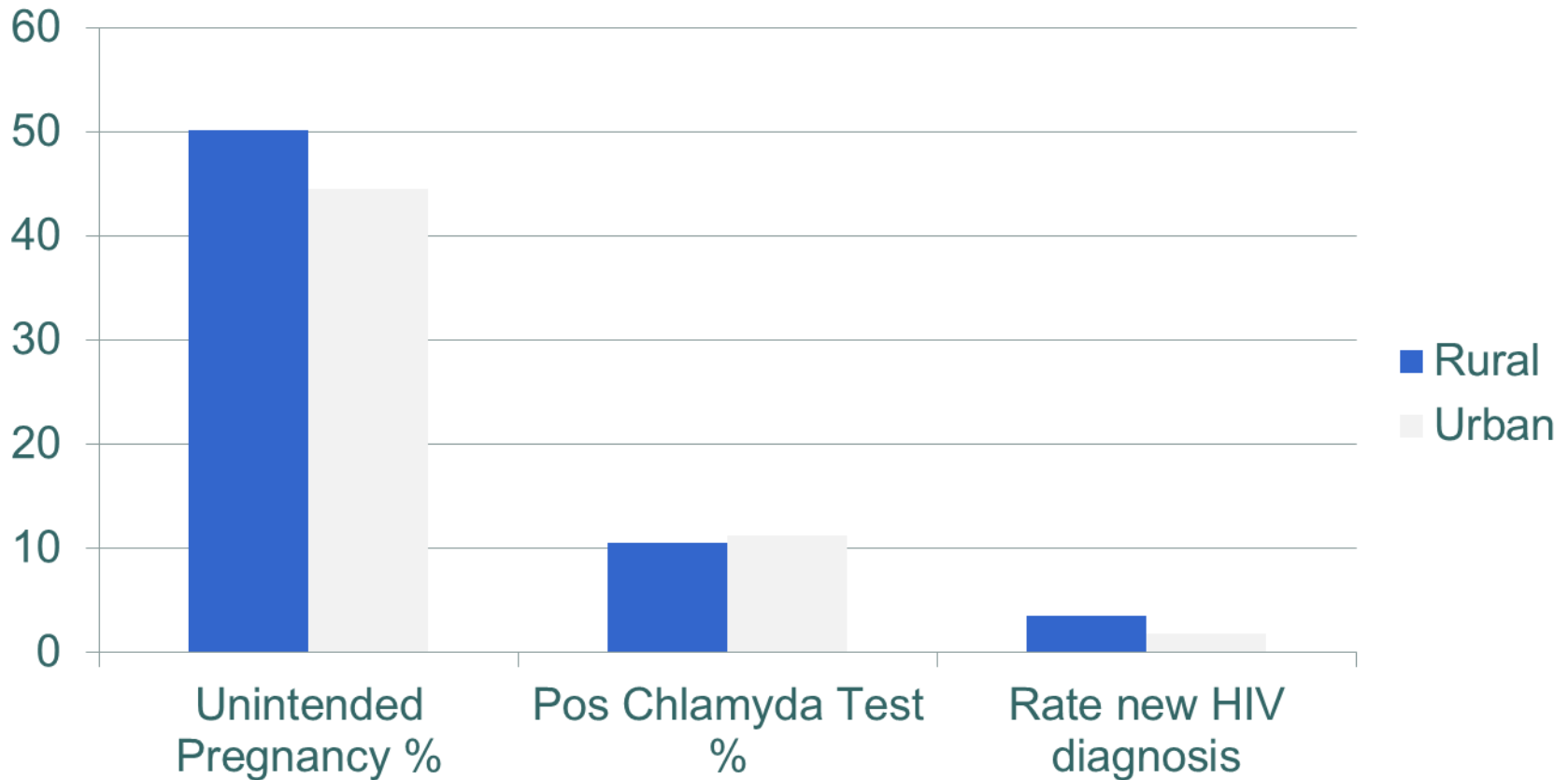


Maternal and infant health

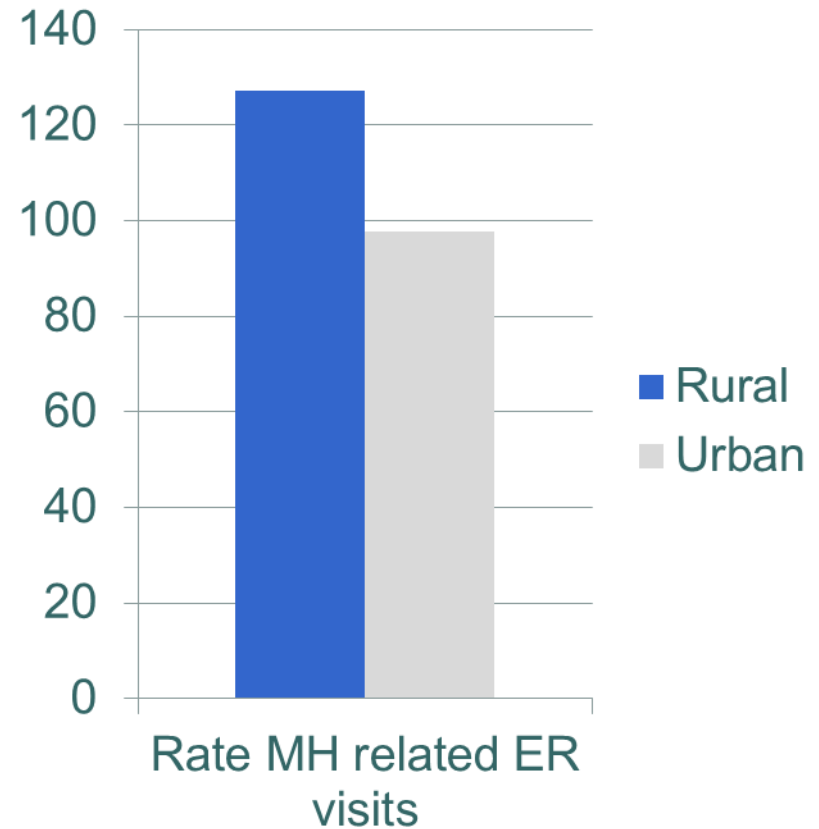
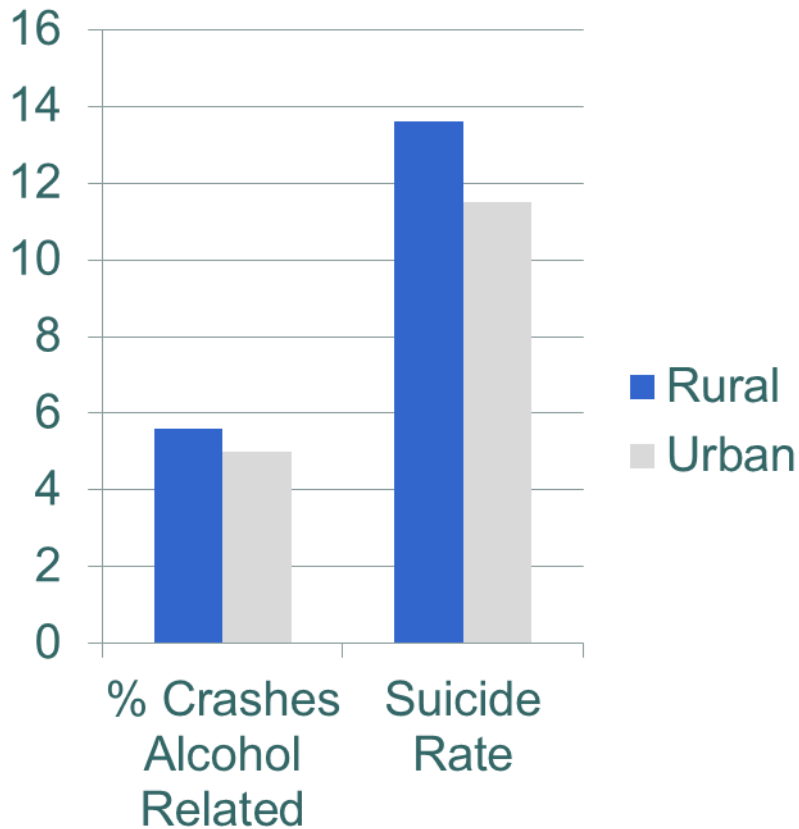
(vital statistics 2011)



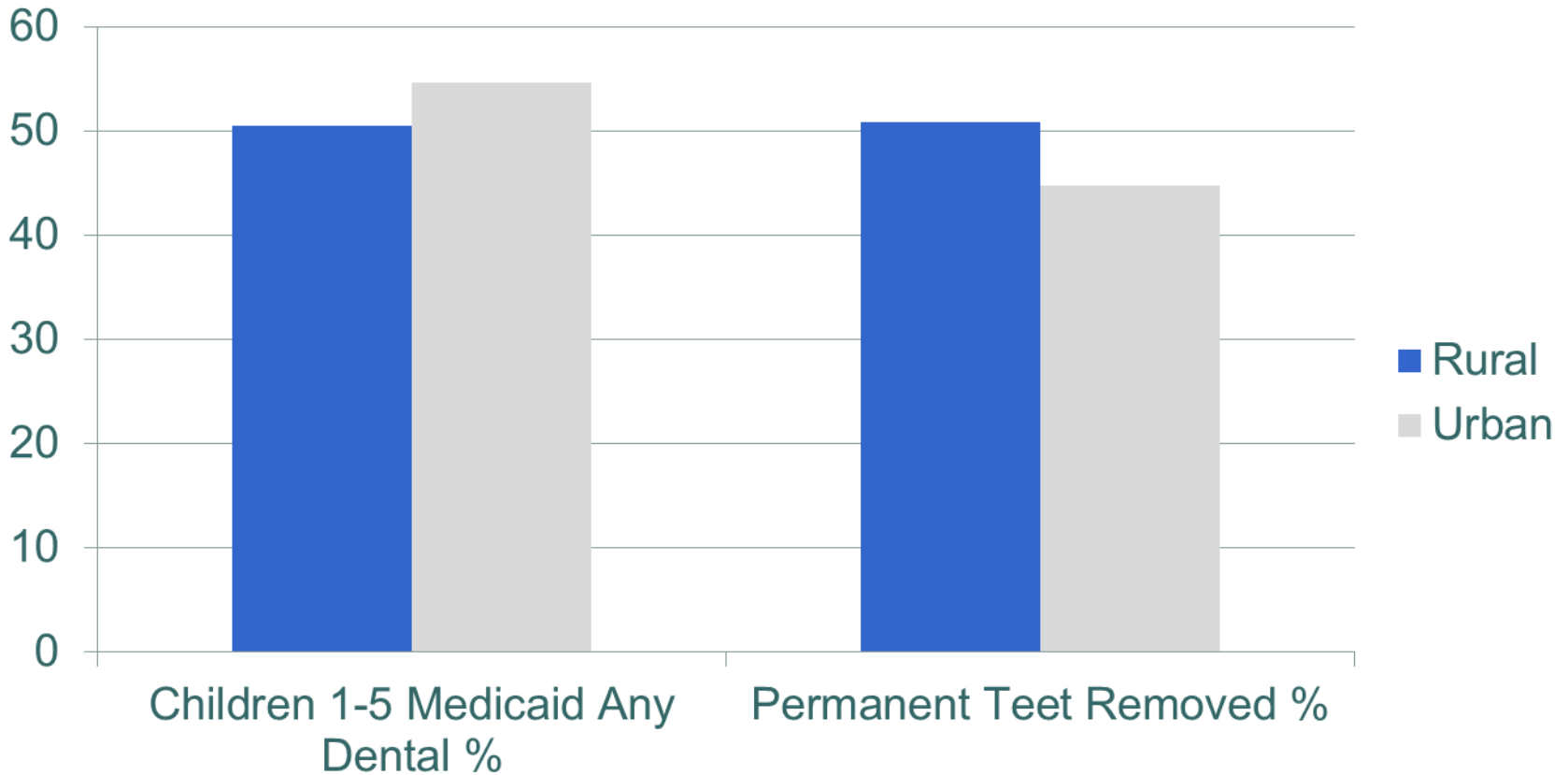
Std and Unintended Pregnancy



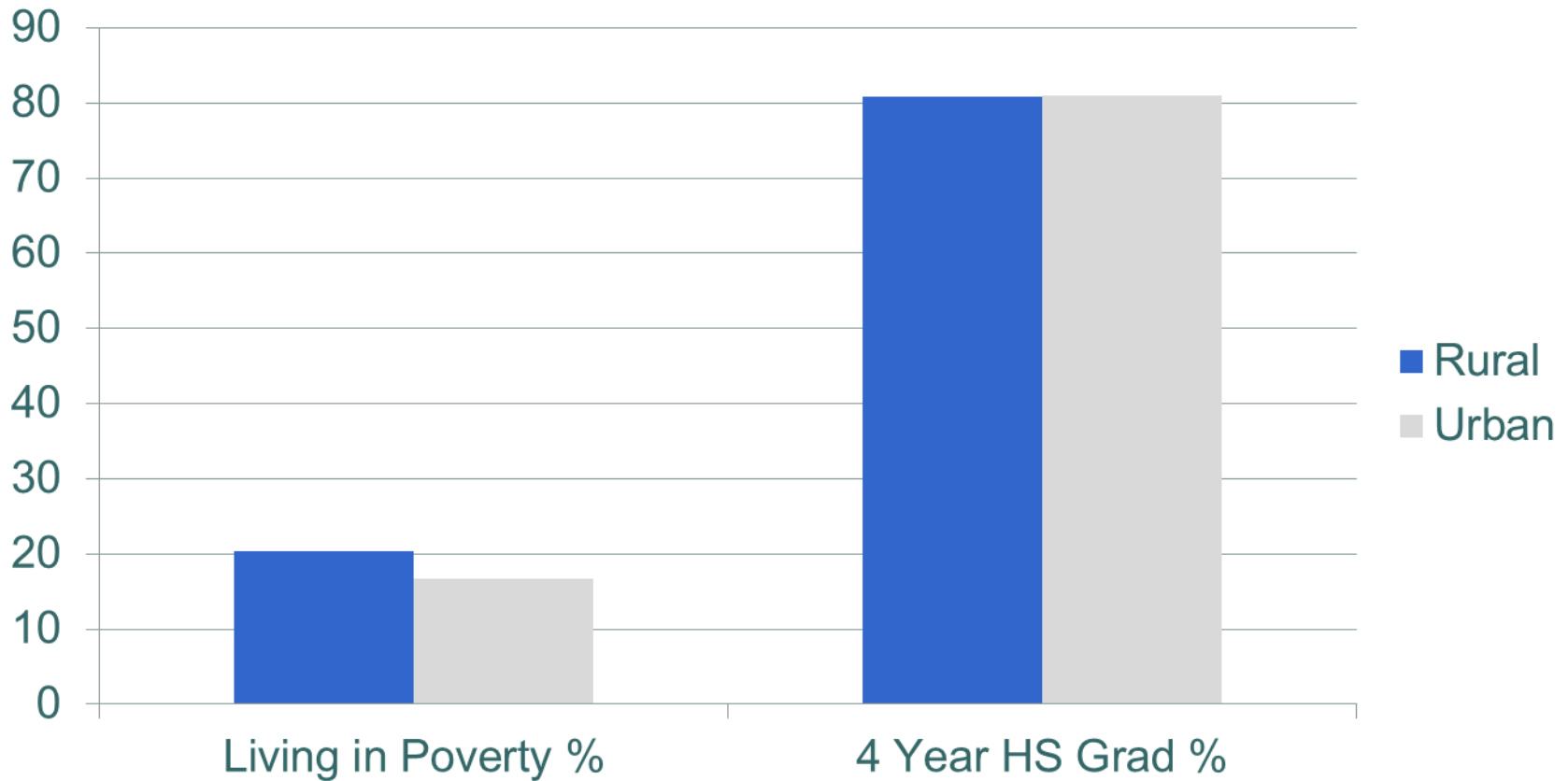
Substance Abuse and Mental Health



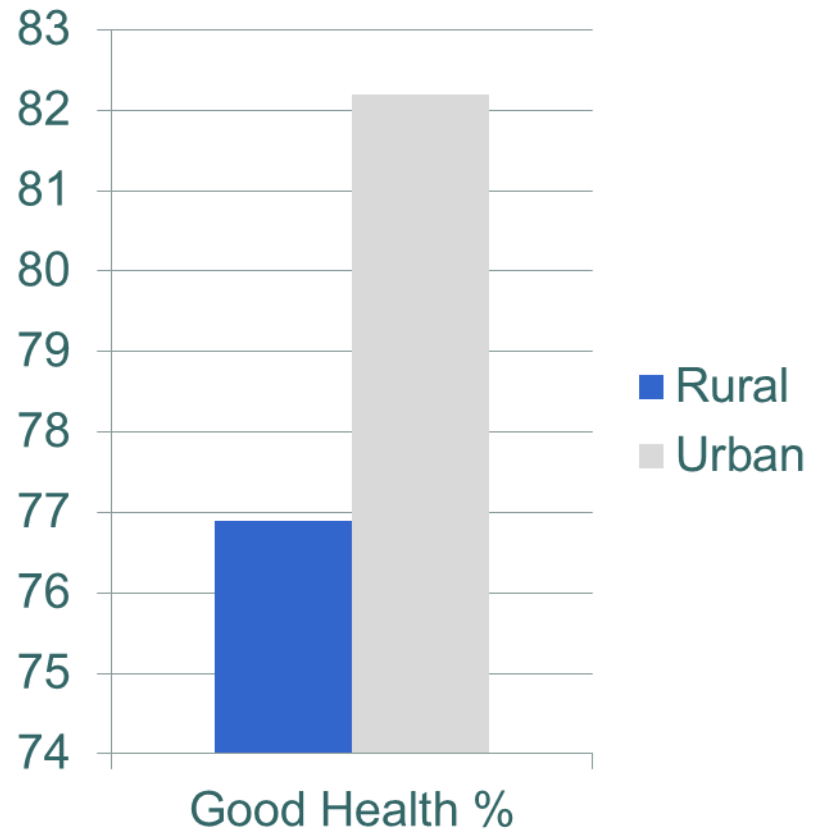
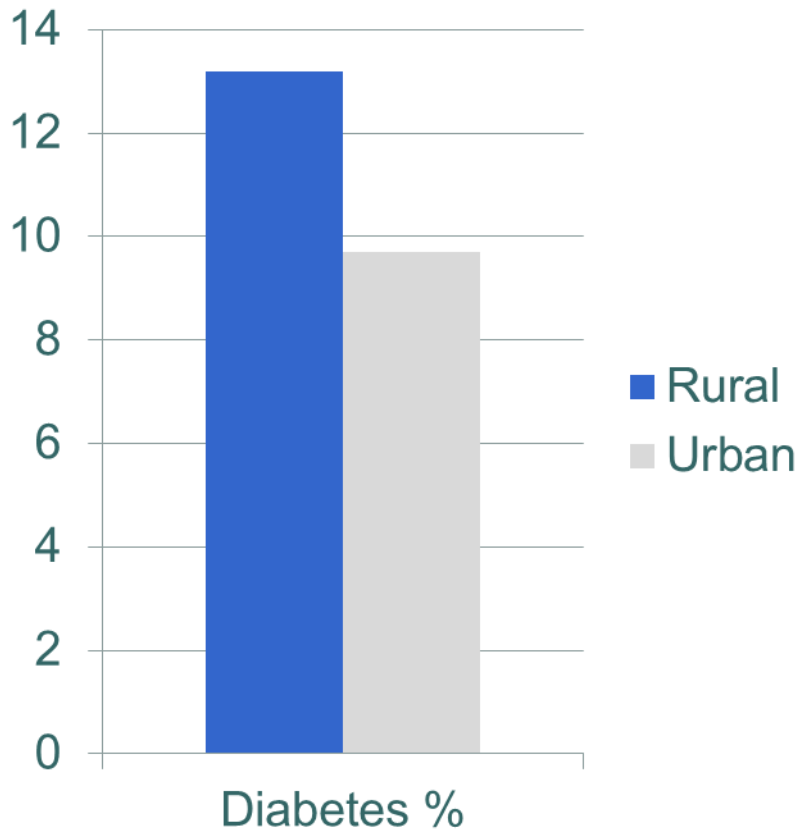
Oral Health



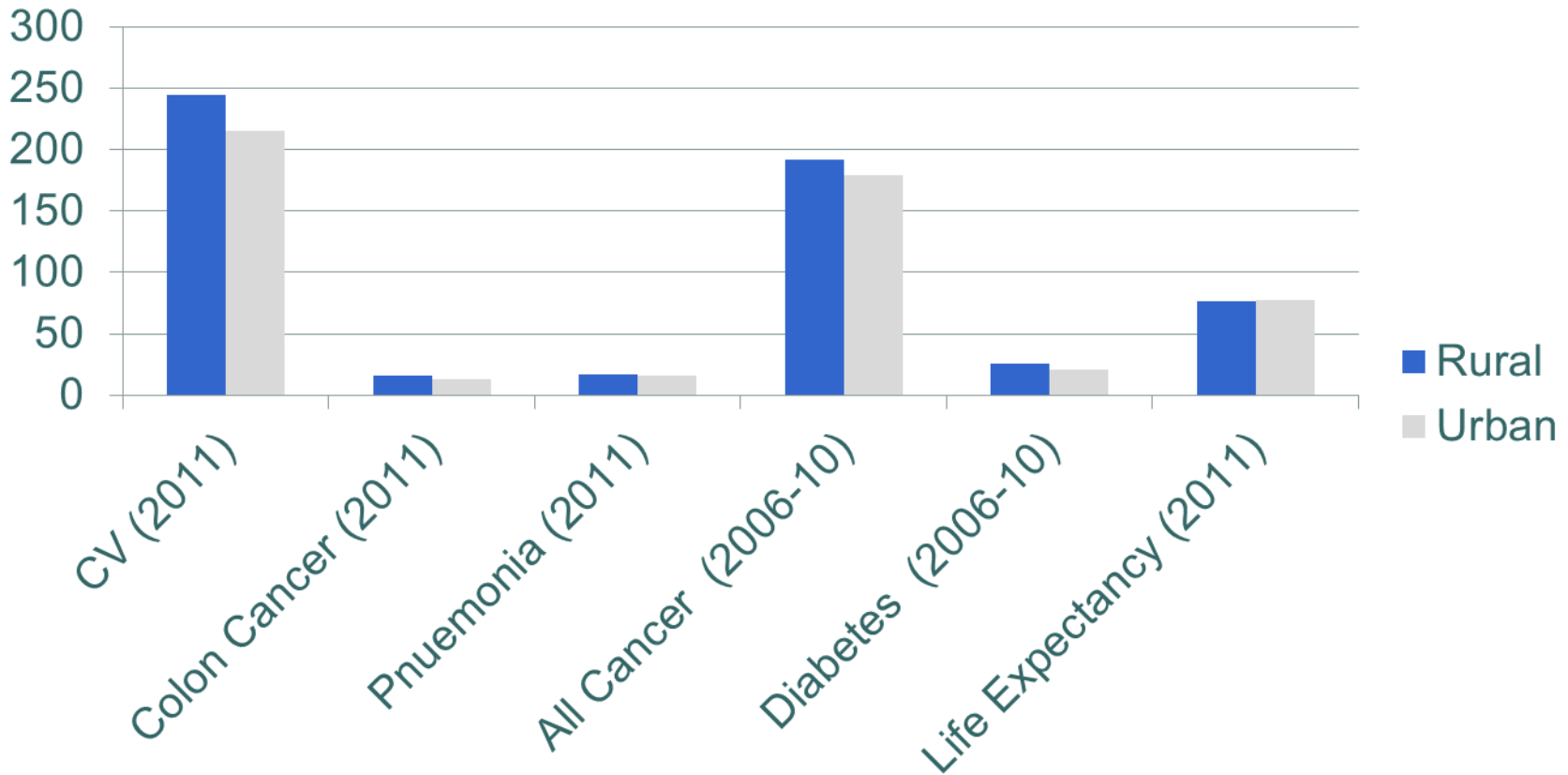
Social Determinants



Diabetes // Good health

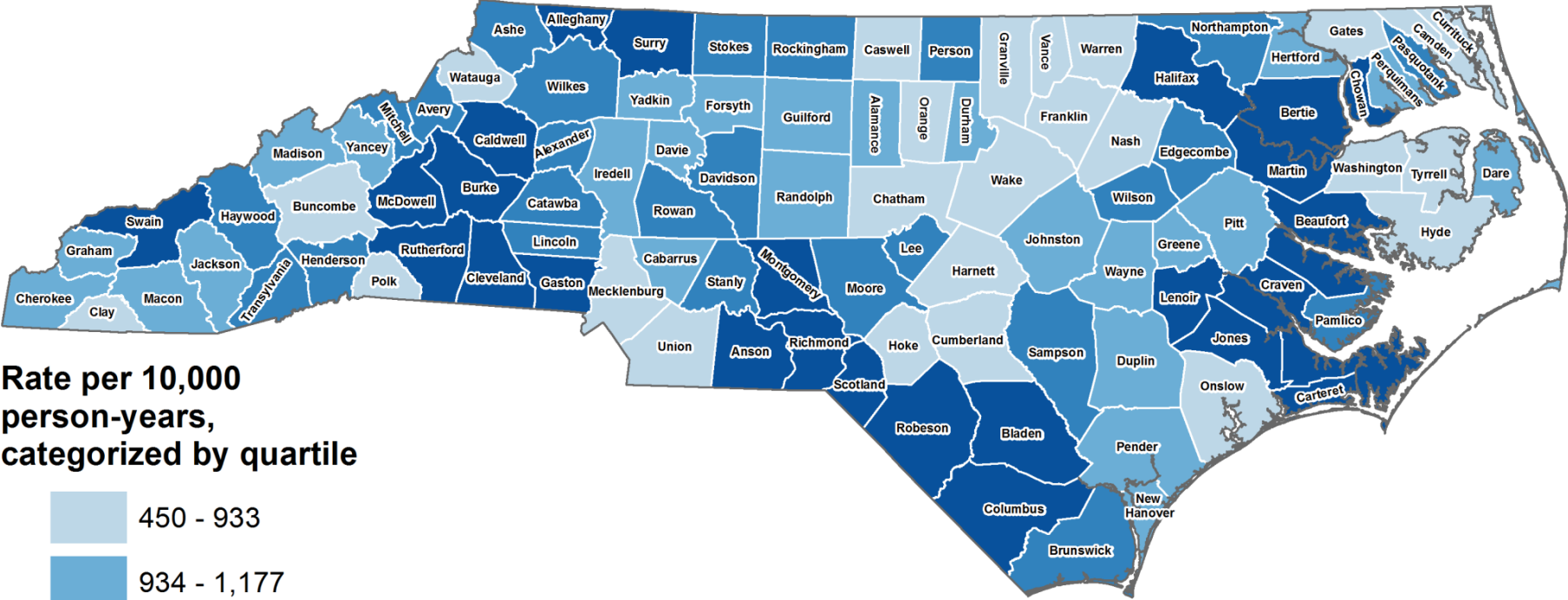


Disease Specific Mortality Rates



Emergency Department (ED) Visit Rates for All Injuries by County of Residence: North Carolina, 2010

Unadjusted rate for North Carolina: 1,091 ED visits per 10,000 person-years



Definition: An ED visit with an ICD-9-CM code of 800-999 and/or an E-code of E800-E999 in any position.

Analyses were limited to NC residents with a valid NC county of residence. In 2010, there were 1,040,316 injury-related ED visits by NC residents to a 24/7 civilian acute care hospital-based ED.

Source:
Injury data: NC DETECT ED surveillance data, North Carolina Division of Public Health
Population: 2010 NC county population, United States Census data
Created by: Katherine J. Harmon, October 1, 2012, Injury Prevention Research Center, UNC Chapel Hill
Disclaimer: The NC DETECT Data Oversight Committee and NC DETECT do not take responsibility for the scientific validity or accuracy of the methodology, statistical analyses, results, or conclusions presented.
Questions? Contact Katherine Harmon at kjharmon@live.unc.edu.



Summary

○ Rural North Carolina:

- Is more poor
- Is older
- Lives in poor housing conditions
- Has poorer health access and is less often insured (noted exception, more often has personal doctor)
- Has worse health behaviors
- Has higher rates for many illnesses, illness related mortality rates, and injuries

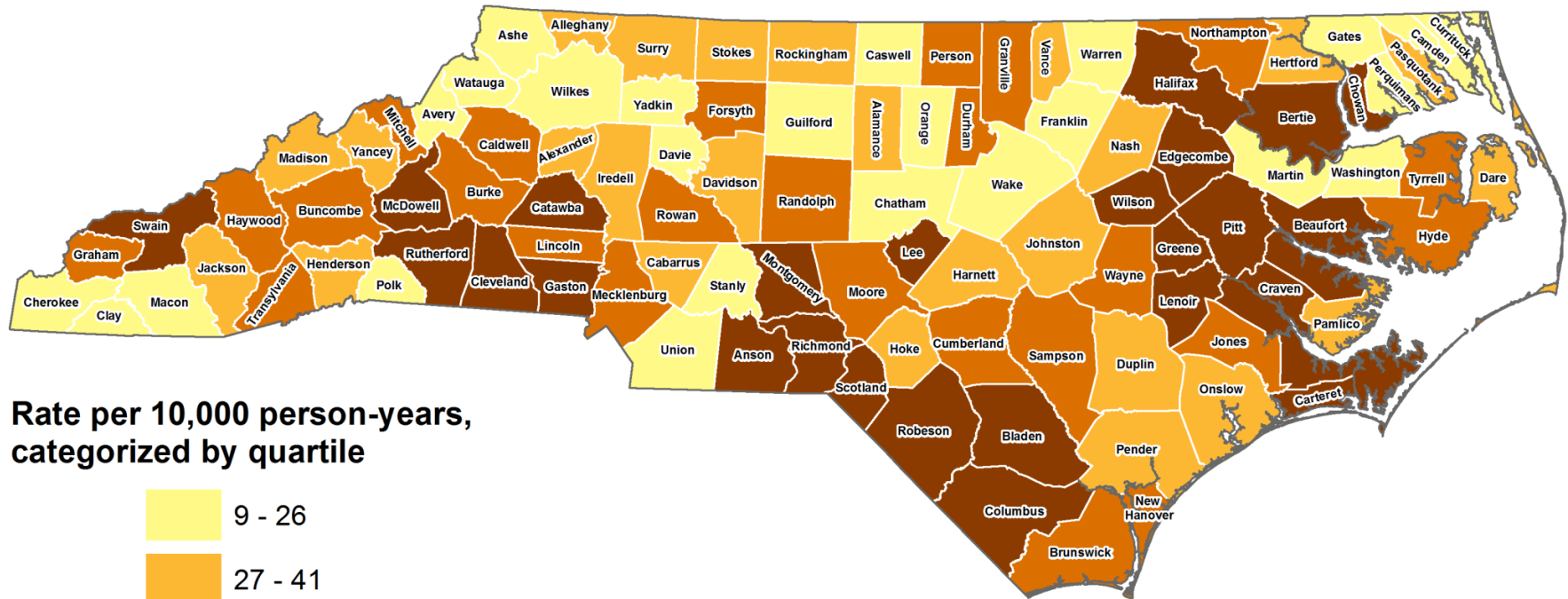


For More Information

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Emergency Department (ED) Visit Rates for Injuries Due to Assault by County of Residence: North Carolina, 2010

Unadjusted rate for North Carolina: 40 ED visits per 10,000 person-years



Definition: An ED visit with an ICD-9-CM E-code of E960-E969 (.0-.9), E979 (.0-.9), and/or E999.1.

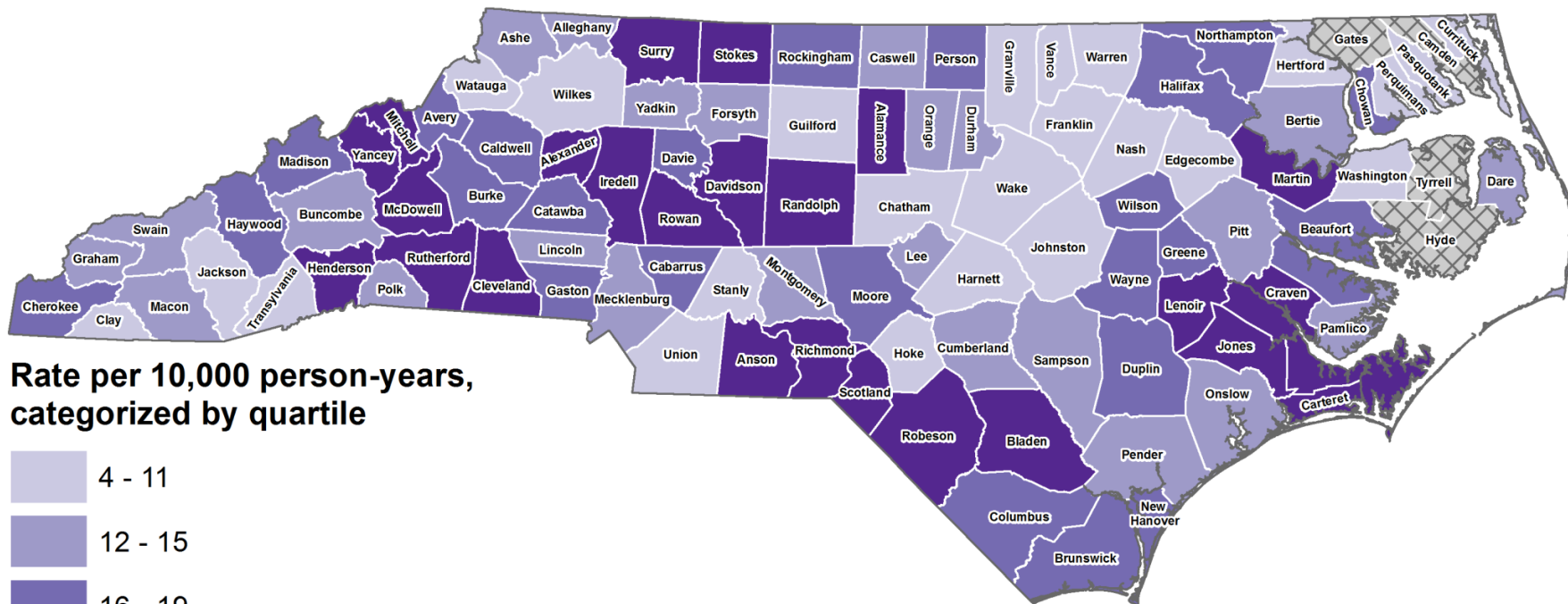
Analyses were limited to NC residents with a valid NC county of residence. In 2010, there were 38,599 ED visits due to assault by NC residents to a 24/7 civilian acute care hospital-based ED.

Source:

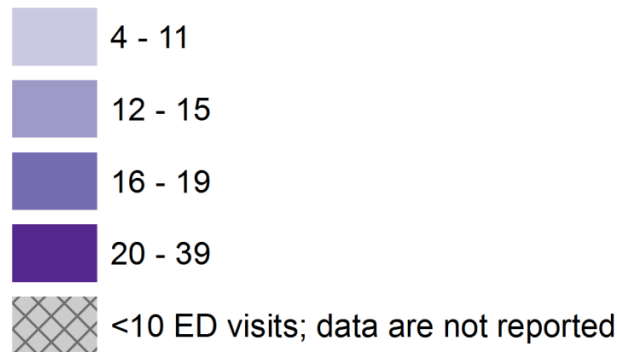
Injury data: NC DETECT ED surveillance data, North Carolina Division of Public Health
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Emergency Department (ED) Visit Rates for Injuries Due to Unintentional Poisonings by County of Residence: North Carolina, 2010

Unadjusted rate for North Carolina: 15 ED visits per 10,000 person-years



Rate per 10,000 person-years, categorized by quartile



Definition: An ED visit with an ICD-9-CM E-code of E850-E869 (.0-9).

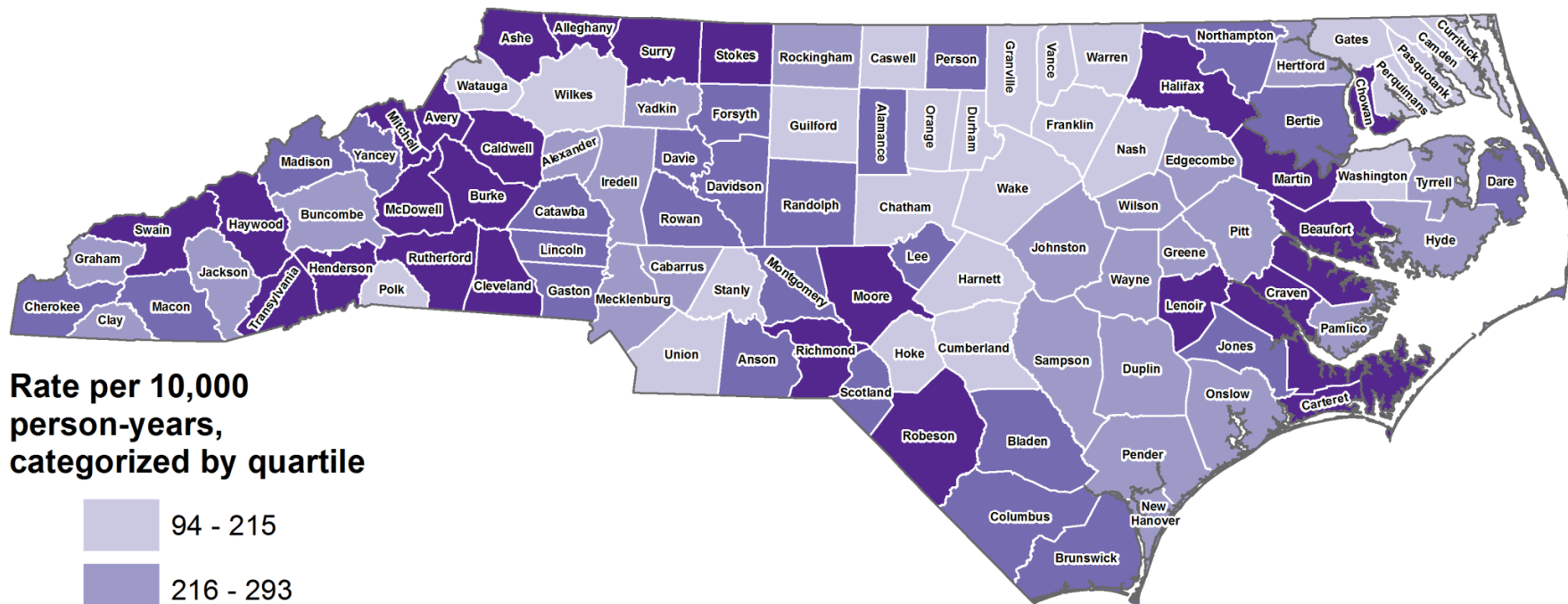
Analyses were limited to NC residents with a valid NC county of residence. In 2010, there were 13,870 unintentional poisoning-related ED visits by NC residents to a 24/7 civilian acute care hospital-based ED.

Source:

Injury data: NC DETECT ED surveillance data, North Carolina Division of Public Health
Population: 2010 NC county population, United States Census data
Created by: Katherine J. Harmon, October 1, 2012, Injury Prevention Research Center, UNC Chapel Hill
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Emergency Department (ED) Visit Rates for Fall-related Injuries by County of Residence: North Carolina, 2010

Unadjusted rate for North Carolina: 260 ED visits per 10,000 person-years



Definition: An ED visit with an ICD-9-CM E-code of E880-E886 (.0-.9) and E888 (.0-.9).

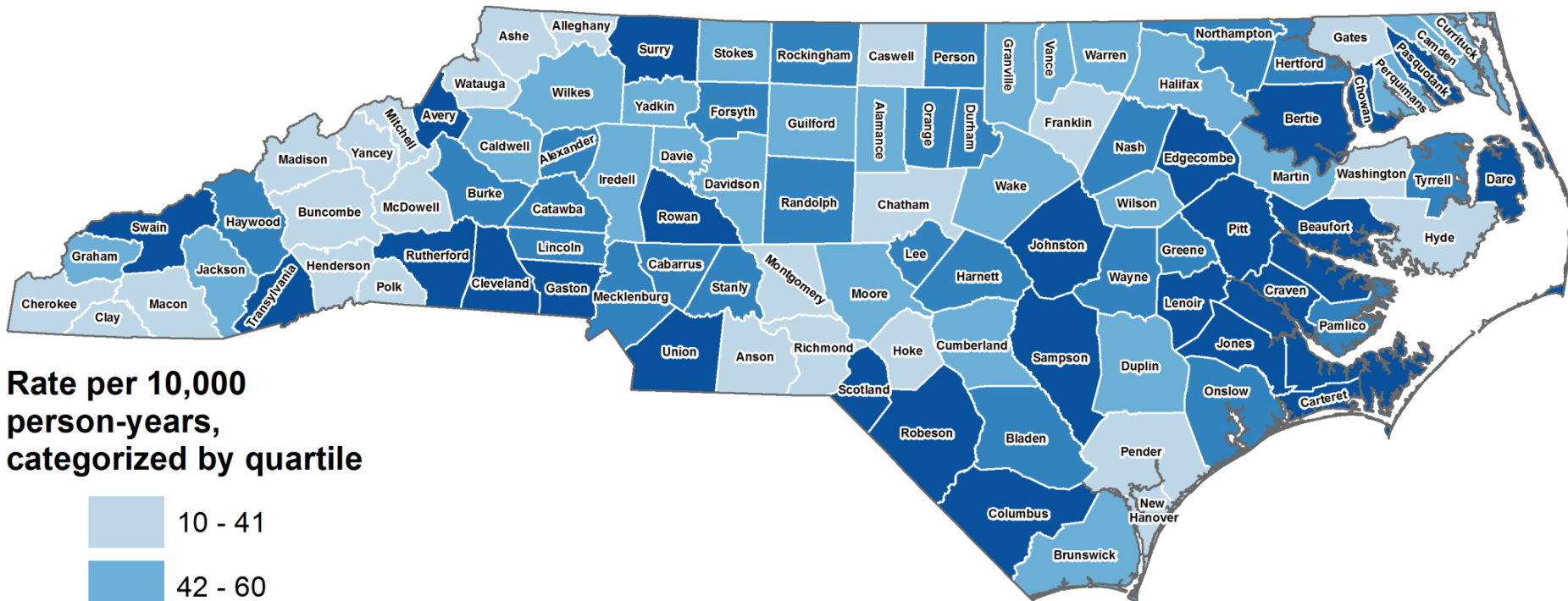
Analyses were limited to NC residents with a valid NC county of residence. In 2010, there were 247,468 unintentional fall-related ED visits by NC residents to a 24/7 civilian acute care hospital-based ED.

Source:

Injury data: NC DETECT ED surveillance data, North Carolina Division of Public Health
Population: 2010 NC county population, United States Census data
Created by: Katherine J. Harmon, October 1, 2012, Injury Prevention Research Center, UNC Chapel Hill
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Emergency Department (ED) Visit Rates for Traumatic Brain Injuries (TBIs) by County of Residence: North Carolina, 2010

Unadjusted rate for North Carolina: 66 ED visits per 10,000 person-years



Definition: An ED visit with an ICD-9-CM diagnosis code of 850-853 (.0-9), 854.0-854.1, 950.1-950.3, 995.55, and/or 959.01

Analyses were limited to NC residents with a valid NC county of residence. In 2010, there were 62,672 TBI-related ED visits by NC residents to a 24/7 civilian acute care hospital-based ED.

Source:
Injury data: NC DETECT ED surveillance data, North Carolina Division of Public Health
Population: 2010 NC county population, United States Census data
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