



PUBLIC HEALTH

**ALWAYS WORKING FOR A SAFER AND
HEALTHIER WASHINGTON**

Keeping Track of Rural Health

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October 9, 2007

Closing Health Disparities

■ Goals:

- ❑ To identify the health disparities affecting rural areas.
- ❑ To help programs target activities more effectively in rural areas.
- ❑ To assure that state policies consider the health and health care needs of rural residents.

Assessing Rural Health

We are reporting on 26 out of 32 Indicators Selected by the State Public Health Subcommittee

Maternal and Child Health

- First trimester prenatal care
- Maternal cigarette smoking
- Teen birth rate
- Low birth weight
- Teen physical activity
- Teen cigarette smoking
- Teen overweight
- Teen alcohol use
- Childhood unintentional injury hospitalizations

Communicable Disease

- Reported Chlamydia infections
- Treated Chlamydia infections
- Influenza vaccine

Prevention and Health Promotion

- Adult cigarette smoking
- Adult physical activity
- Adult overweight/obese
- Adult fruit/vegetable consumption
- Adult binge drinking
- Adults with diabetes
- Adult poor mental Health

Access to Care


- Adults with unmet medical need
- Adults with a personal health care provider
- Adult dental care
- Adults with health insurance coverage
- Adult preventive cancer screening
(Breast, Cervical, Colorectal)

Assessing Rural Health

The criteria by which the indicators are chosen:

- ❑ Consistent with local, state, and national measures such as Healthy People 2010
- ❑ Measure an important aspect of public health—either health determinants or status
- ❑ Come from data that are well defined and accessible
- ❑ Measurable over time to determine trends
- ❑ Easily understandable and need no extensive explanation
- ❑ Actionable—the public health system can implement activities to improve performance against the measure

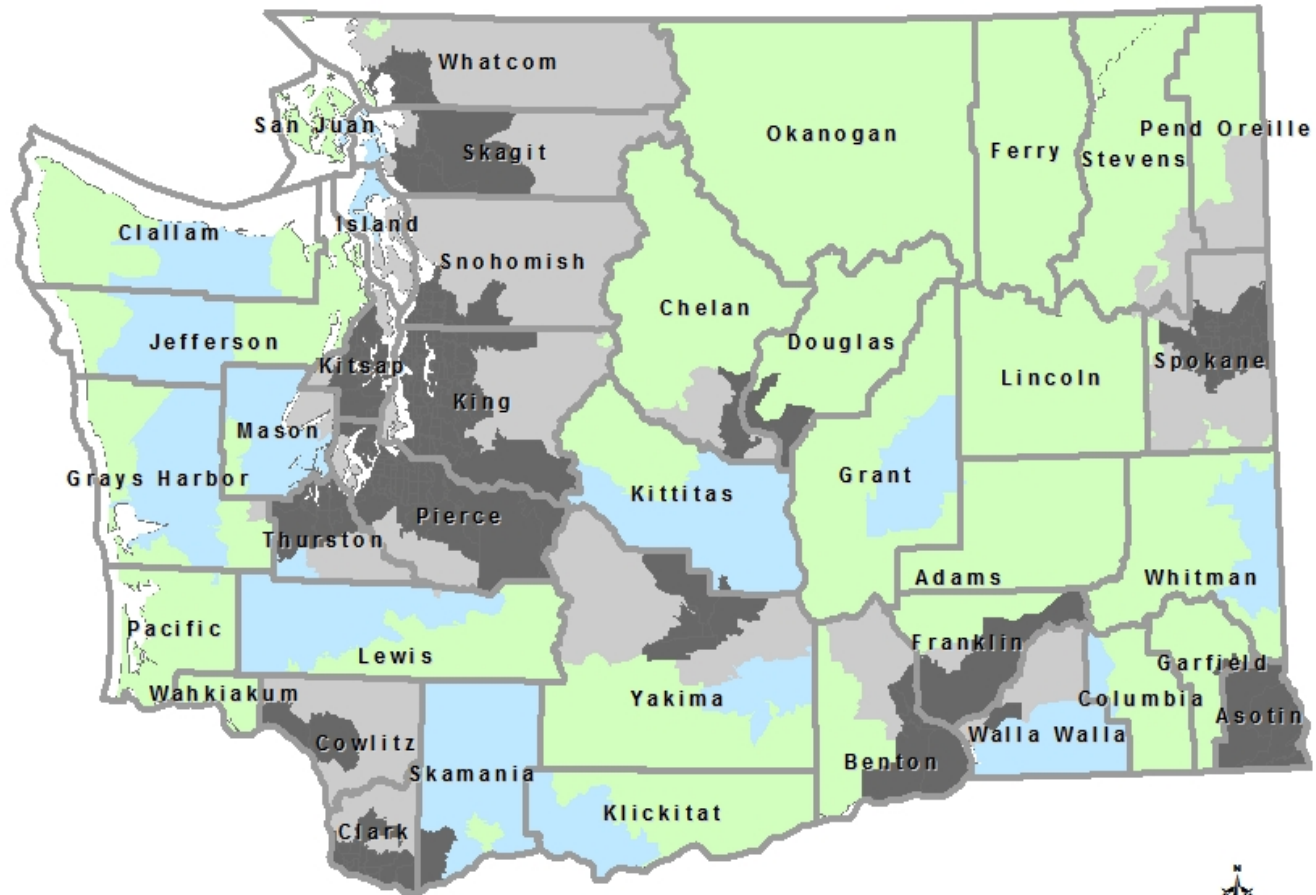
Defining the Urban-Rural Continuum

- We rank geographic areas from most urban to most rural by looking at population density and patterns of commuting for work/education.
- We cluster zip-code areas that are pre-classified by the Rural-Urban Commuting Area (RUCA) coding system developed by the University of Washington.
- We divide resident population as:
 - Urban Core
 - Suburban
 - Large Town
 - Small Town and Isolated Rural

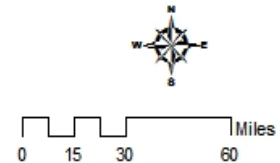
From high density, commuting destination.

To low density with minimal outward commuting.
- The Office of Community and Rural Health (OCRH) focuses on large towns and small town/isolated rural areas for its rural programs.

Rural and Urban Areas Based on RUCA Codes



September 11, 2007
Created with ArcGIS
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Assessing Rural Health

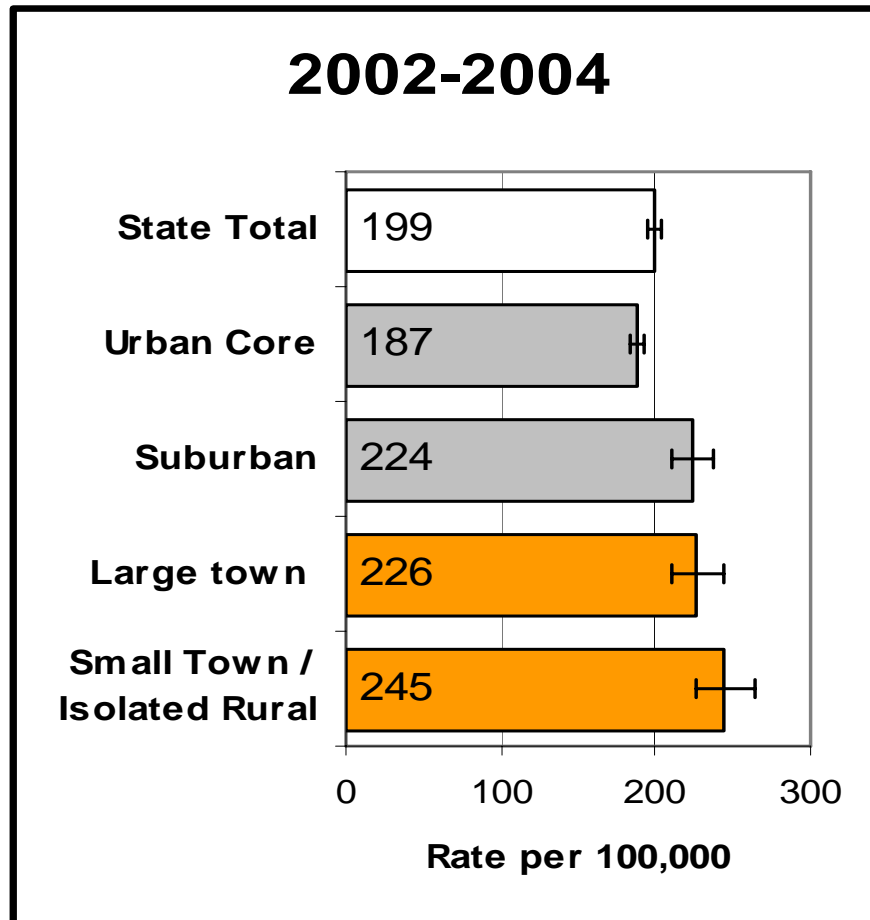
Findings:

- ❑ We found 13 indicators for which **rural areas** need to catch up.
- ❑ These are indicators with values below those for the state. (Differences statistically significant at $p < 0.05$)
- ❑ For planning programs, we need to know what health problems exist and in what population groups.

Rural Areas Have

Higher Rates of Children Hospitalized Due to Unintentional Injuries

(Rate of hospitalization for unintentional injury per 100,000 children ages 0 to 17)

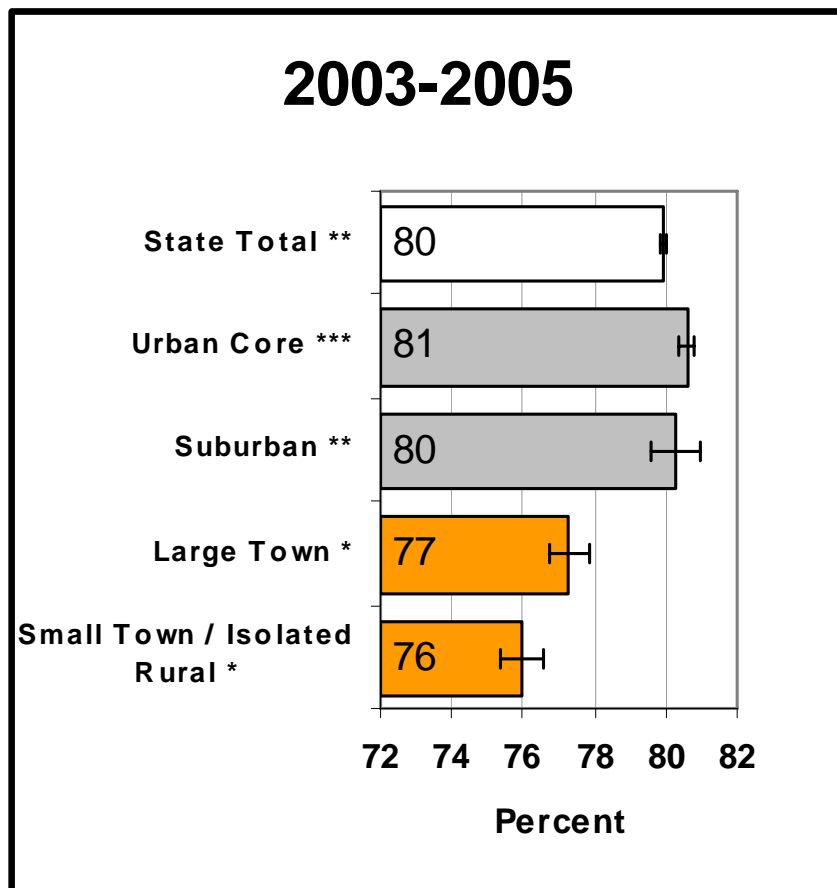


We have not been able to do multivariate analysis for this indicator.

Rural Areas Have

Lower Percentage of Pregnant Women Receiving First Trimester Prenatal Care

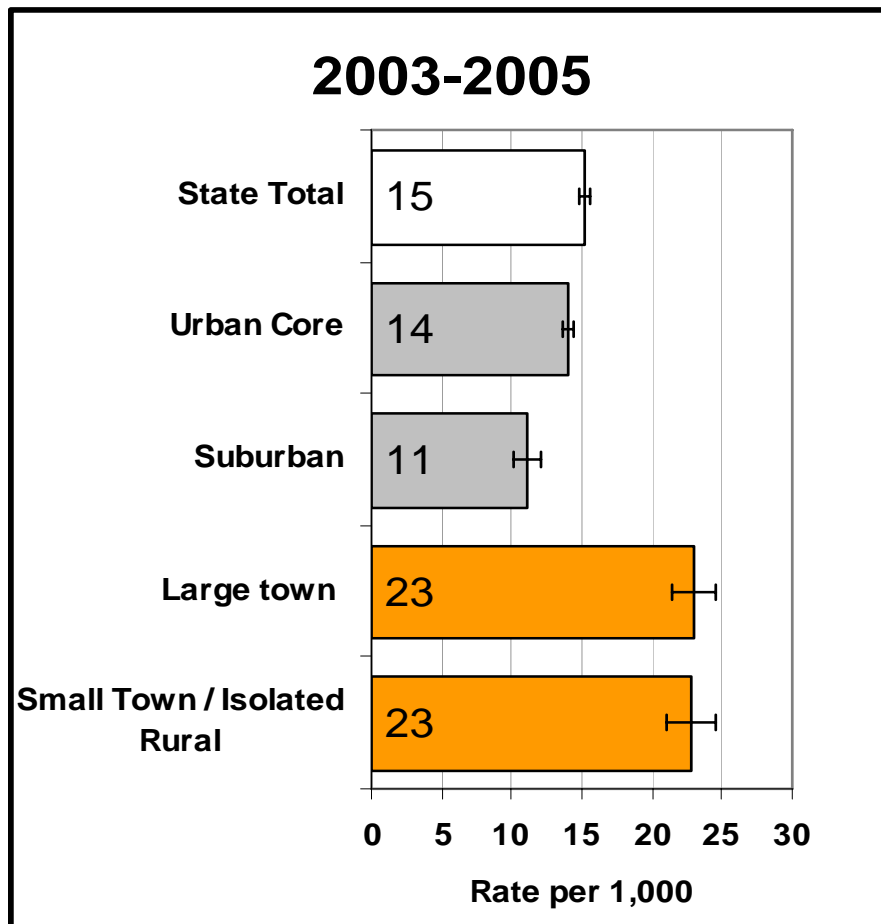
(Percent of women giving birth who received prenatal care starting in the first trimester of pregnancy)



We have not been able to do multivariate analysis for this indicator.

Rural Areas Have Higher Rates of Teenage Births

(Rate of live born infants per 1,000 women ages 15 to 17)

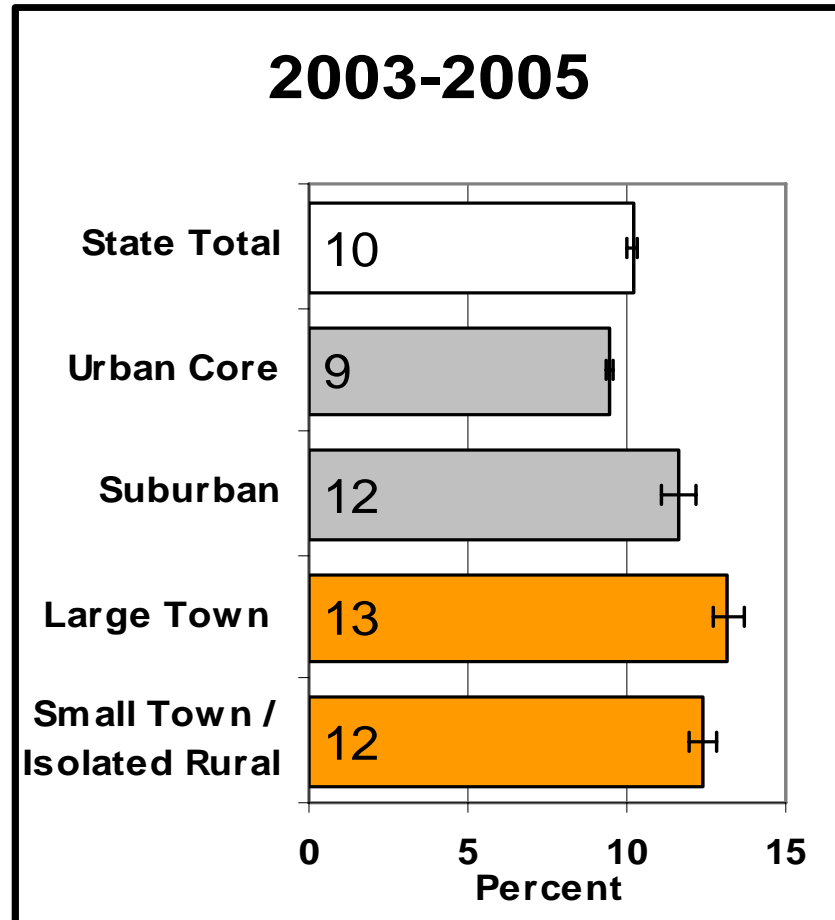


We have not been able to do multivariate analysis for this indicator.

Rural Areas Have

Higher Percentages of Women Smoking Cigarettes During Pregnancy

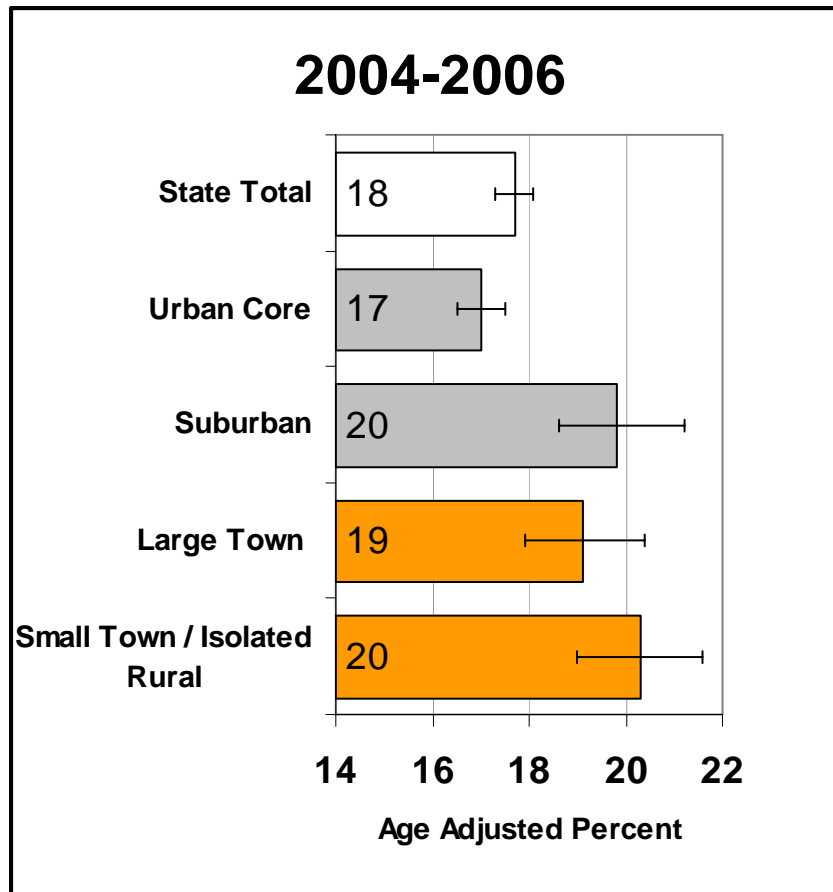
(Percent of women giving birth who smoked any time during pregnancy)



We have not been able to do a multivariate analysis for this indicator.

Rural Areas Have Higher Percentages of Adults Smoking Cigarettes

(Percent of adults age 18 or older who smoked at least 100 cigarettes
in their lifetime and are current smokers)



**Some of the variation is
explained by differences in**

- Age structure
- Race and ethnicity
- Income
- Education

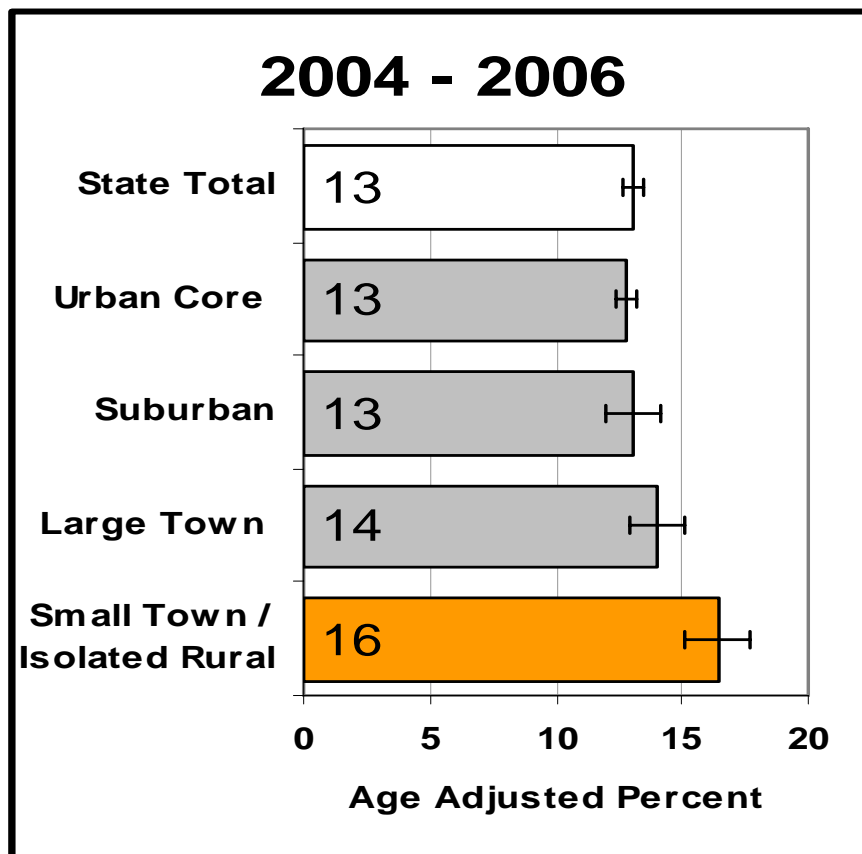
**Target Populations for rural
programs:**

- Middle and low income people (<\$50,000 per year)
- People with no college graduation
- American Indians
- Ages under 45

Rural Areas Have

Higher Percentages of Adults with Unmet Medical Needs

(Percent of adults age 18 or older who reported needing to see a doctor within the past year but could not due to cost)



Some of the variation is explained by differences in

- Age Structure
- Gender
- Race and ethnicity
- Income
- Education

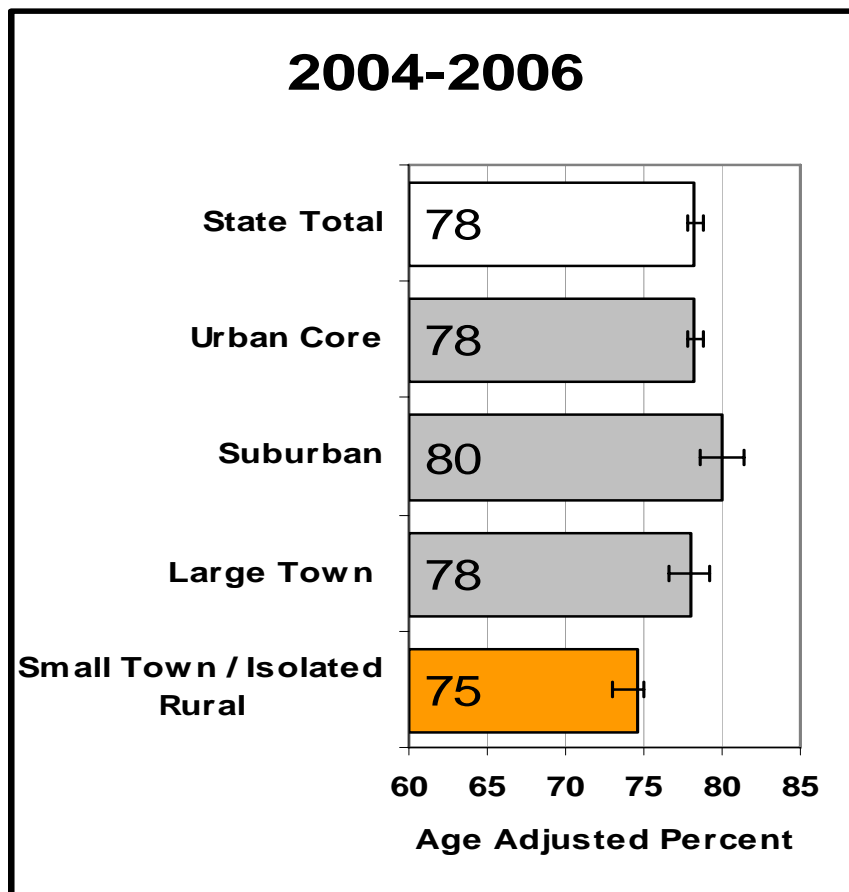
Target Populations for rural programs:

- Middle and low income people (<\$50,000 per year)
- People with no college graduation
- American Indians and people of Hispanic origin
- Younger people (Ages 25-34)
- Females

Rural Areas Have

Lower Percentage of Adults with a Personal Health Care Provider

(Percent of adults age 18 or over who report a usual source of Health Care)



Some of the variation is explained by differences in

- Age structure
- Race and ethnicity
- Income
- Education

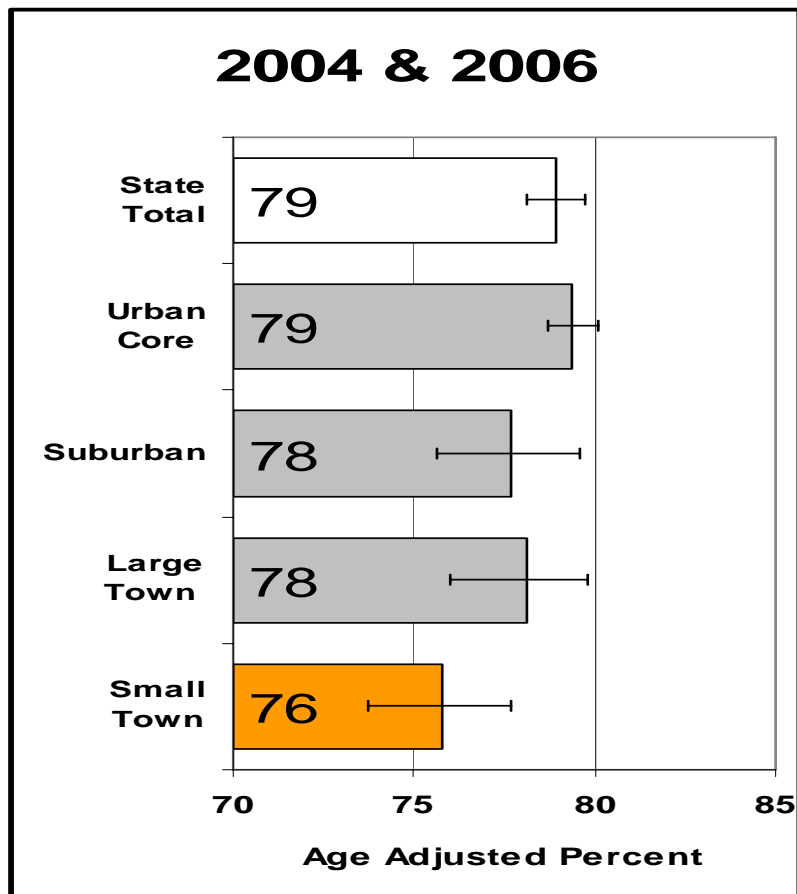
Target Populations for rural programs:

- Middle and low income people (<\$50,000 per year)
- People with no college
- People of Hispanic origin
- Younger people (Ages 25-34)
- Males

Rural Areas Have

Lower Percentage of Women Receiving Cervical Cancer Screening

(Percent of women age 18 or older who report receiving a pap smear test within the last 3 years)



Some of the variation is explained by differences in

- Race and ethnicity
- Income
- Education

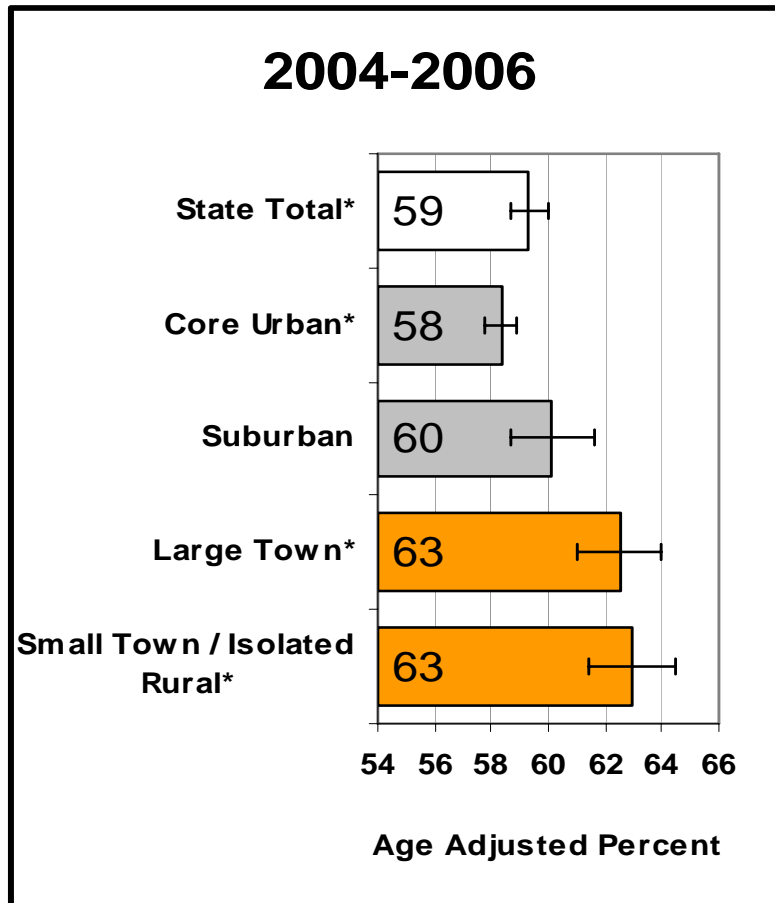
Target Populations for rural programs:

- Middle and low income women (<\$50,000 per year)
- Women with no college graduation
- Asian/ Pacific Islanders

Rural Areas Have

Higher Percentages of Adults Overweight/Obese

(Percent of adults age 18 or older who have body mass index greater than 25)



Some of the variation is explained by differences in

- Age structure
- Race and ethnicity
- Income
- Education

After taking account of all demographic differences, obesity is still a problem in large towns.

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Rural Areas Have Higher Percentages of Adults Overweight/Obese

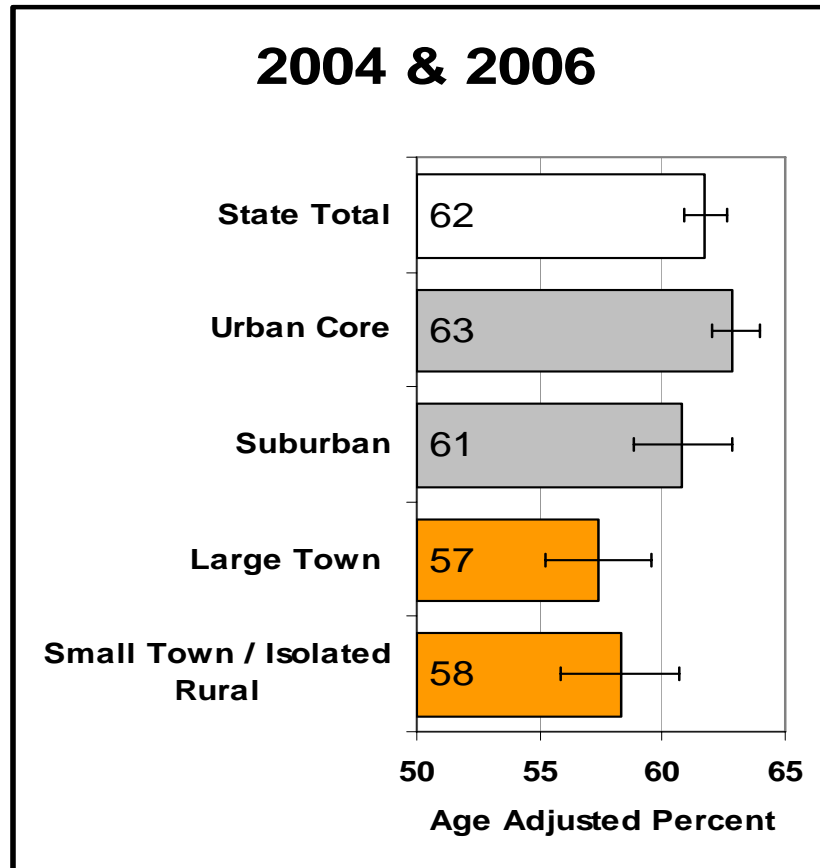
Target Populations for rural programs:

- Low income people (<\$20,000 per year)
- People with no college graduation
- People of Hispanic origin and American Indians
- All ages 25 and over

Rural Areas Have

Lower Percentage of Adults Receiving Preventive Colorectal Cancer Screening

(Percent of adults age 50 or older who had a blood stool test in the past year, sigmoidoscopy in the past 5 years, or colonoscopy in the past 10 years)



Some of the variation is explained by differences in

- Income
- Education

After taking account of all demographic differences, lack of colorectal screening is still a problem in both large towns and small town/isolated rural areas.

(continued)

Rural Areas Have

Lower Percentage of Adults Receiving Preventive Colorectal Cancer Screening

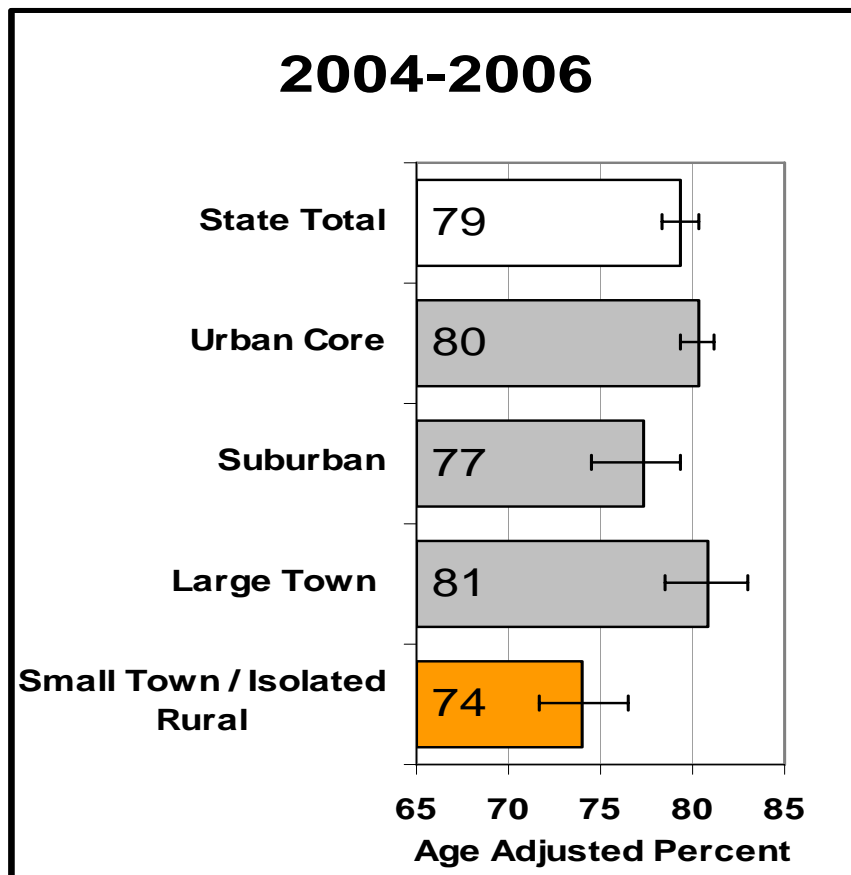
Target Populations for rural programs:

- Middle and low income people (<\$50,000 per year)
- People with no college graduation

Rural Areas Have

Lower Percentage of Women Receiving Breast Cancer Screening

(Percent of women age 50 or older who report receiving a mammogram within the past 2 years)



Some of the variation is explained by differences in

- Income
- Education

After taking account of all demographic differences, lack of breast cancer screening is still a problem in **small town/ isolated rural areas.**

(continued)

Rural Areas Have

Lower Percentage of Women Receiving Breast Cancer Screening

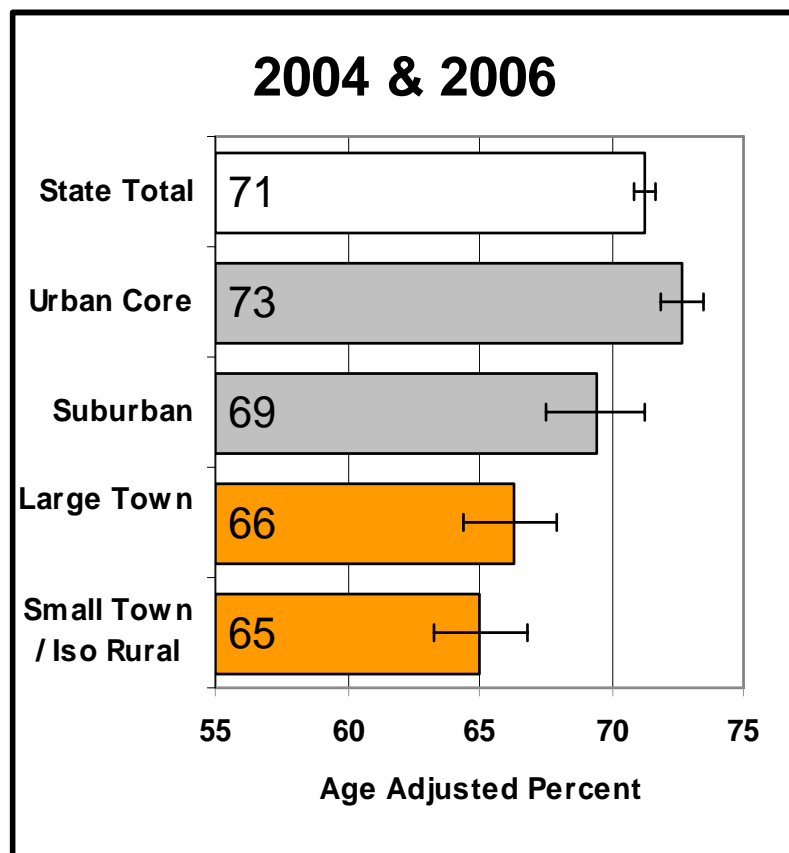
Target Populations for rural programs:

- Middle and low income women (<\$50,000 per year)
- Women with no college graduation

Rural Areas Have

Lower Percentages of Adults Receiving Annual Dental Care

(Percent of adults age 18 or older who reported visiting a dentist or dental clinic during the last year)



Some of the variation is explained by differences in

- Age Structure
- Gender
- Race and ethnicity
- Income
- Education

After taking account of all demographic differences, not seeing a dentist is still a problem in **large towns.**

(continued)

Rural Areas Have

Lower Percentages of Adults Receiving Annual Dental Care

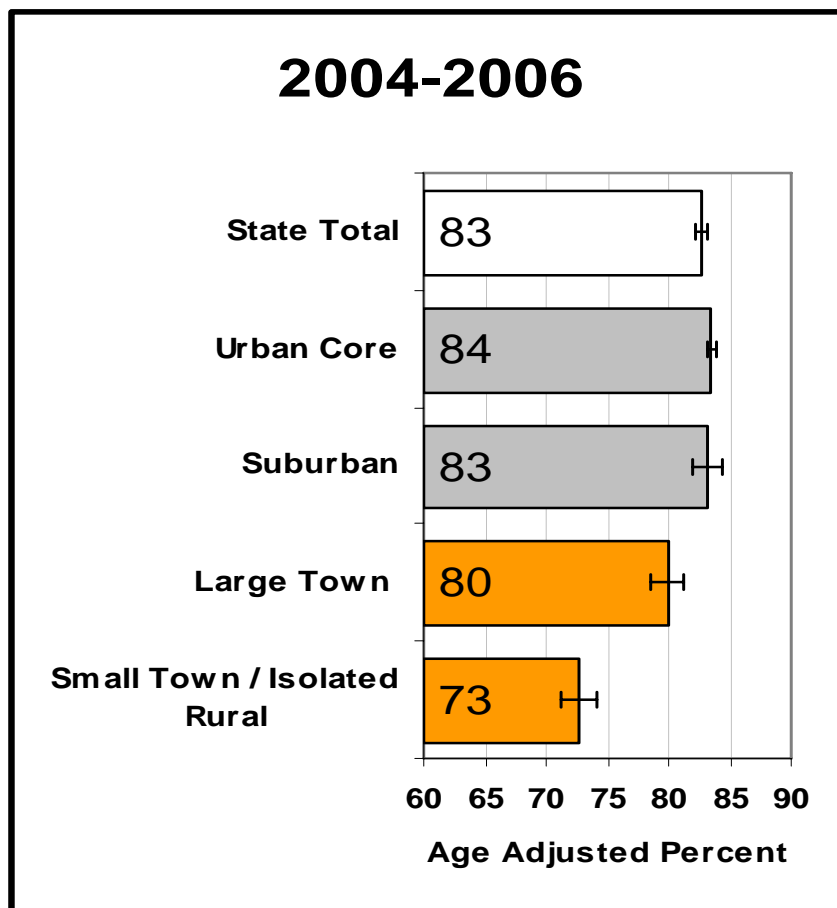
Target Populations for rural programs:

- Middle and low income people (<\$50,000 per year)
- Males
- People with no college graduation
- Asian/ Pacific Islanders and American Indians
- Ages 25 - 64

Rural Areas Have

Lower Percentage of Adults with Health Insurance

(Percent of adults age 18 to 64 who reported currently having health insurance)



Some of the variation is explained by differences in

- Gender
- Race and ethnicity
- Income
- Education

After taking account of all demographic differences, lack of health insurance is still a problem in **small town/ isolated rural areas.**

(continued)

Rural Areas Have

Lower Percentage of Adults with Health Insurance

Target Populations for rural programs:

- Middle and low income people (<\$50,000 per year)
- People with no college graduation
- Males
- People of Hispanic origin

Assessing Rural Health

Conclusions:

- ❑ Half of the indicators that we analyzed showed significant differences for rural areas (large towns and small town/isolated rural areas).
- ❑ The following health problems remained statistically significant for rural areas even after adjusting for the demographic factors:
 - Obesity
 - Low percentage of adults receiving colorectal cancer screening
 - Low percentage of women receiving breast cancer screening
 - Lack of annual dental care
 - Lack of health insurance coverage

(continued)

Conclusions *(Continued)*:

- ❑ Within rural areas health programs will obtain the best results by targeting the groups shown to be most at risk.
- ❑ Low income and low education groups are most often at higher risk of health problems.

Acknowledgements

The Following Persons Contributed to This Draft:

Mary Lemier

Lillian Bensley

Diana Ehri

Ann Lima

Cathy Wasserman

Diane Pilkey

Kris Sparks

Mark Stenger

Robin Walker