

**132<sup>nd</sup> NACNEP Meeting**

**Population Health:  
Issues and Perspectives from the  
Rural and Frontier**



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**Deputy Commissioner of Higher Education  
Montana University System**

# Special Recognition to :

**Kris Juliar**

Director  
Office of Rural Health  
Montana State University

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Vice President  
Montana Hospital Association

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Associate Professor  
Community and Public Health Nursing  
Carroll College

**Susan Skillman**

Deputy Director  
Center for Health Workforce Studies  
University of Washington

# Definitions - Frontier

## Category I

States with more than 15% of their population in frontier counties or with a total frontier population of greater than 250,000

(If a county has a population density of less than seven persons per square mile)

# A Look at Category I Counties Meeting Frontier Status

**Wyoming: 18**

**Alaska: 21**

**Montana: 47**

**South Dakota: 39**

**North Dakota: 37**

**Idaho: 22**

# Other Category Designations

**Category II: States with 5-14%**

(NM, UT, NV, NE, KS, AZ, CO, and TX)

**Category III: States with 1-4%**

(OR, ME, MN, WA, OK, and CA)

**Category IV: States with less than 1%:**

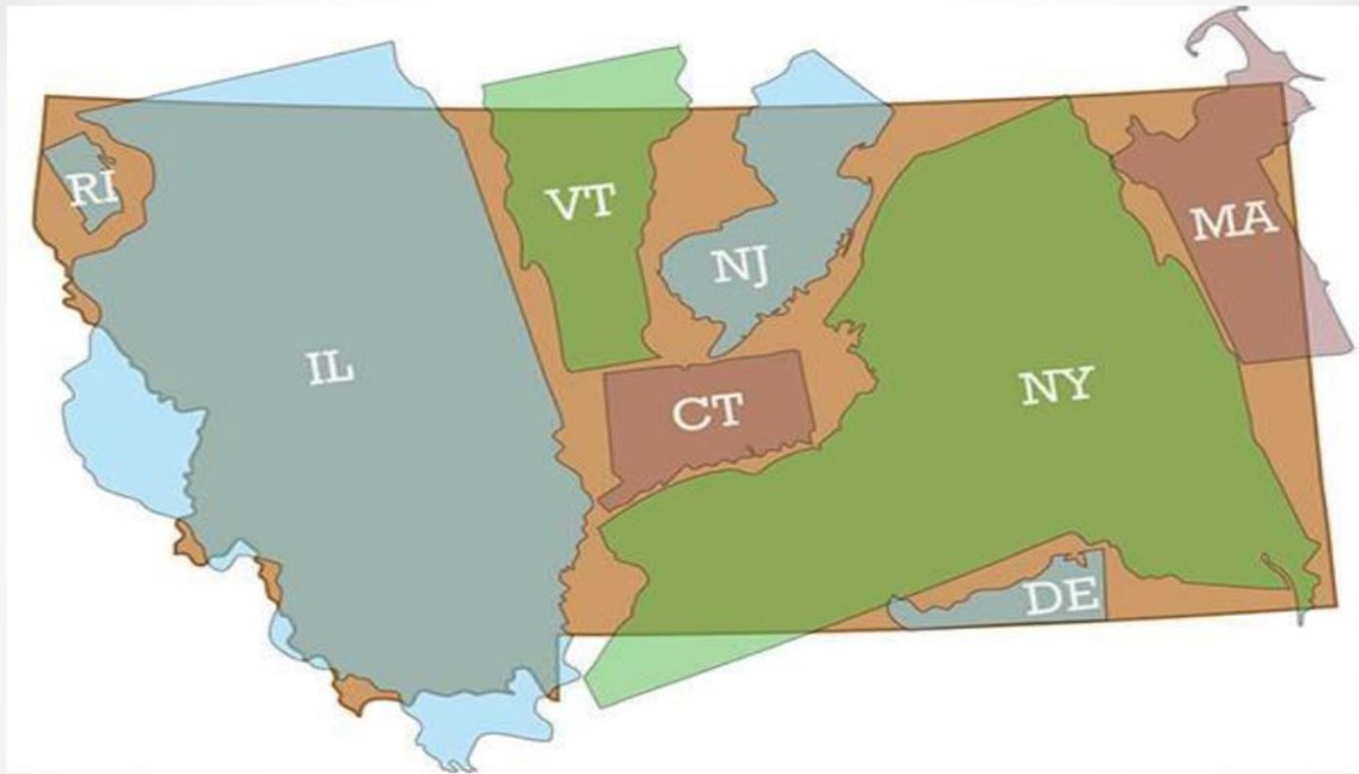
(MI, MS, VA, FL, GA & NY)

# A Look at a Frontier State

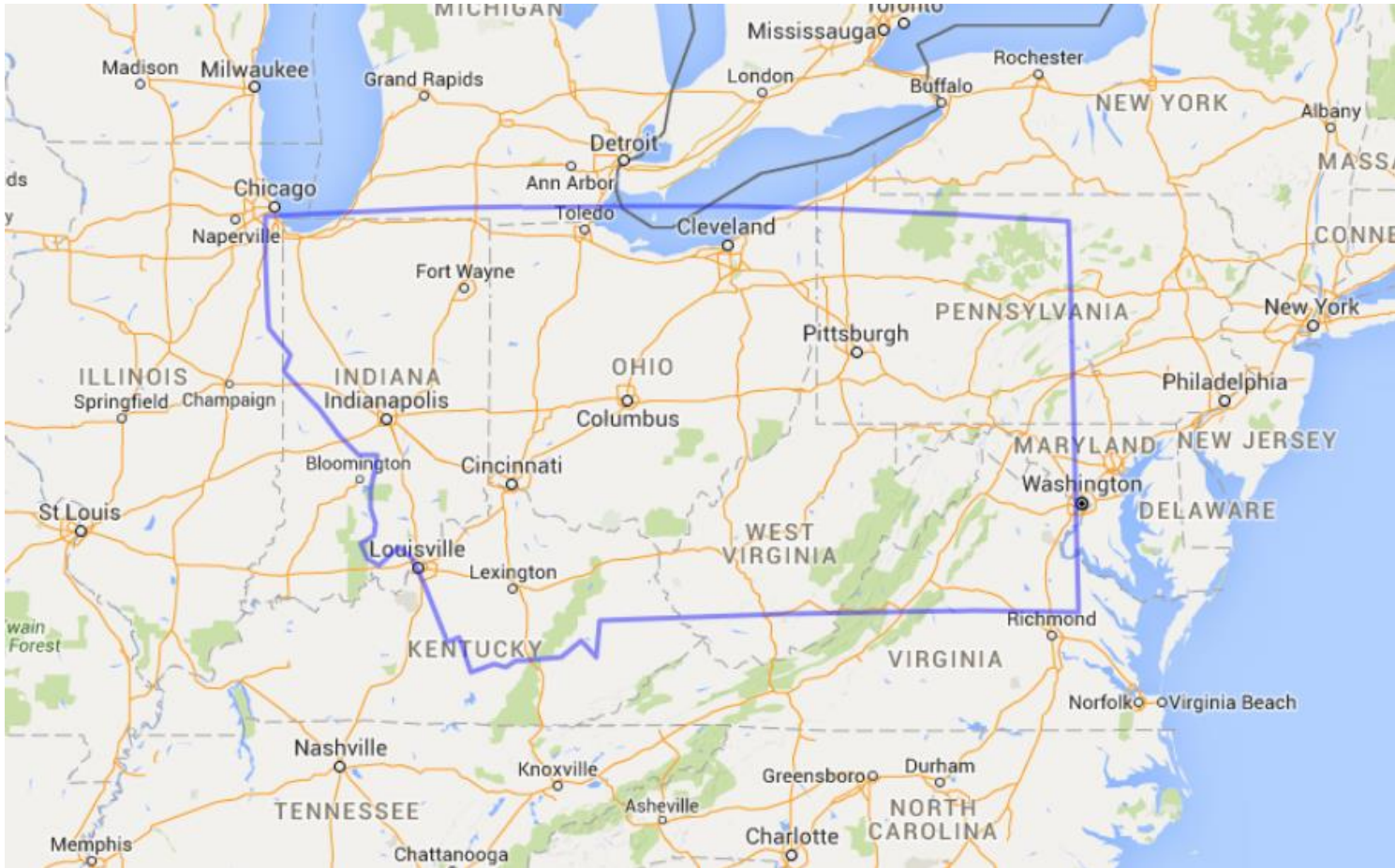
## Montana

- 147,555 square miles with 1 million people
- 6.8 persons per square mile
- 53% of the State's population lives in rural or frontier areas
- 56 counties with 45 classified as frontier
- Montana has 64 acute care facilities spread far and wide in rural areas
  - 48 have been converted to Critical Access Hospitals (25 beds or fewer)

# Just how big is Montana?



Population of 9 east coast states – 50 million,  
Population of Montana – 1 million





# Distribution of Physicians in the U.S.

Primary care physicians (2005):

**Urban 87%**

**Rural 13%**

Generalists per 100,000 population:

**Urban 72**

**Large Rural 61**

**Small Rural 59**

**Isolated Small Rural 36**

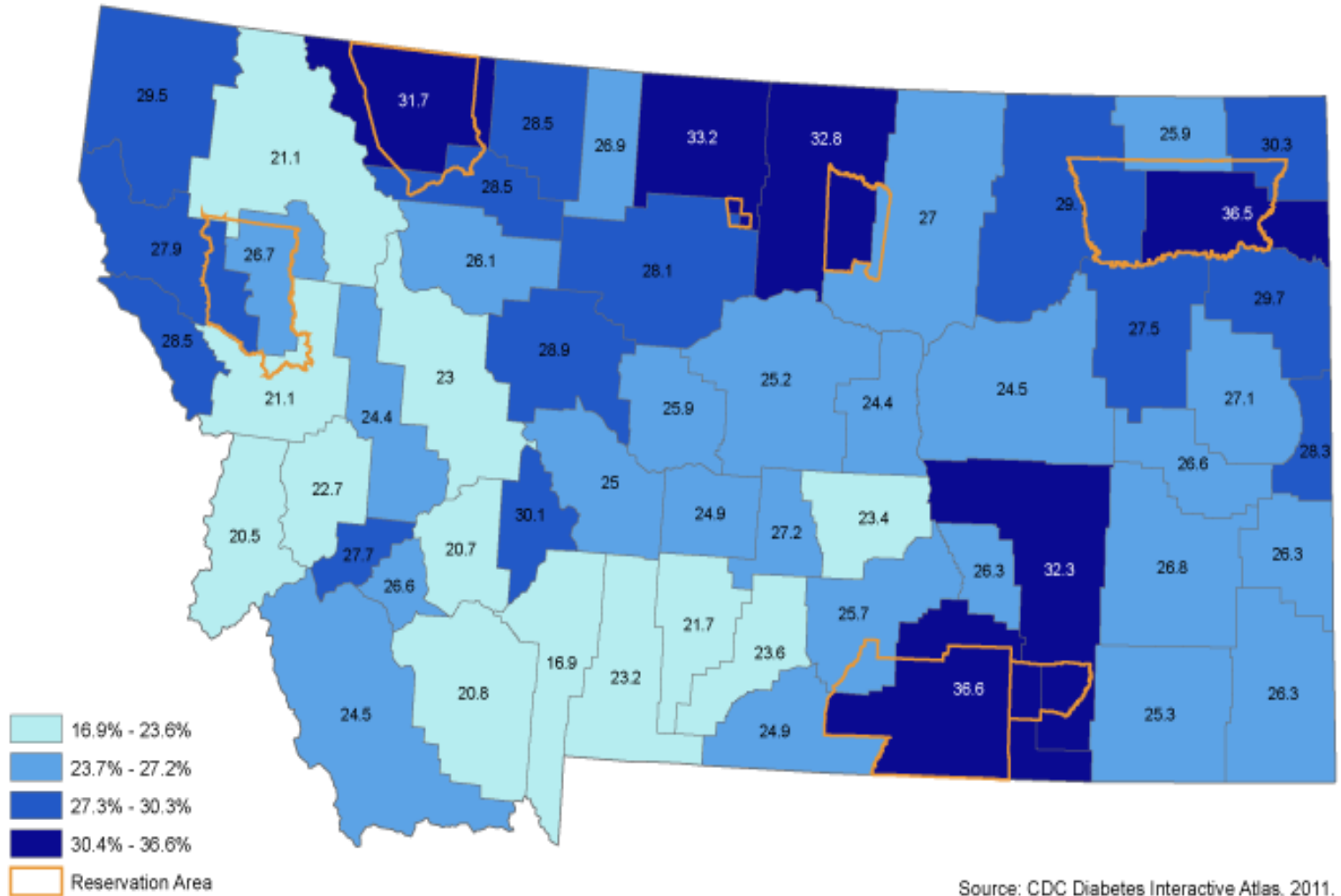
Source: University of Washington Rural Health Research Center. (2007) *2005 Physician Supply and Distribution in Rural Areas of the United States.*

<http://depts.washington.edu/uwrhrc/uploads/RHRC%20FR116%20Fordyce.pdf>

University of Washington Rural Health Research Center. (2013) *The Aging of the Rural Primary Care Physician Workforce: Will Some Locations Be More Affected than Others?*

<http://depts.washington.edu/uwrhrc/uploads/RHRC%20FR116%20Fordyce.pdf>

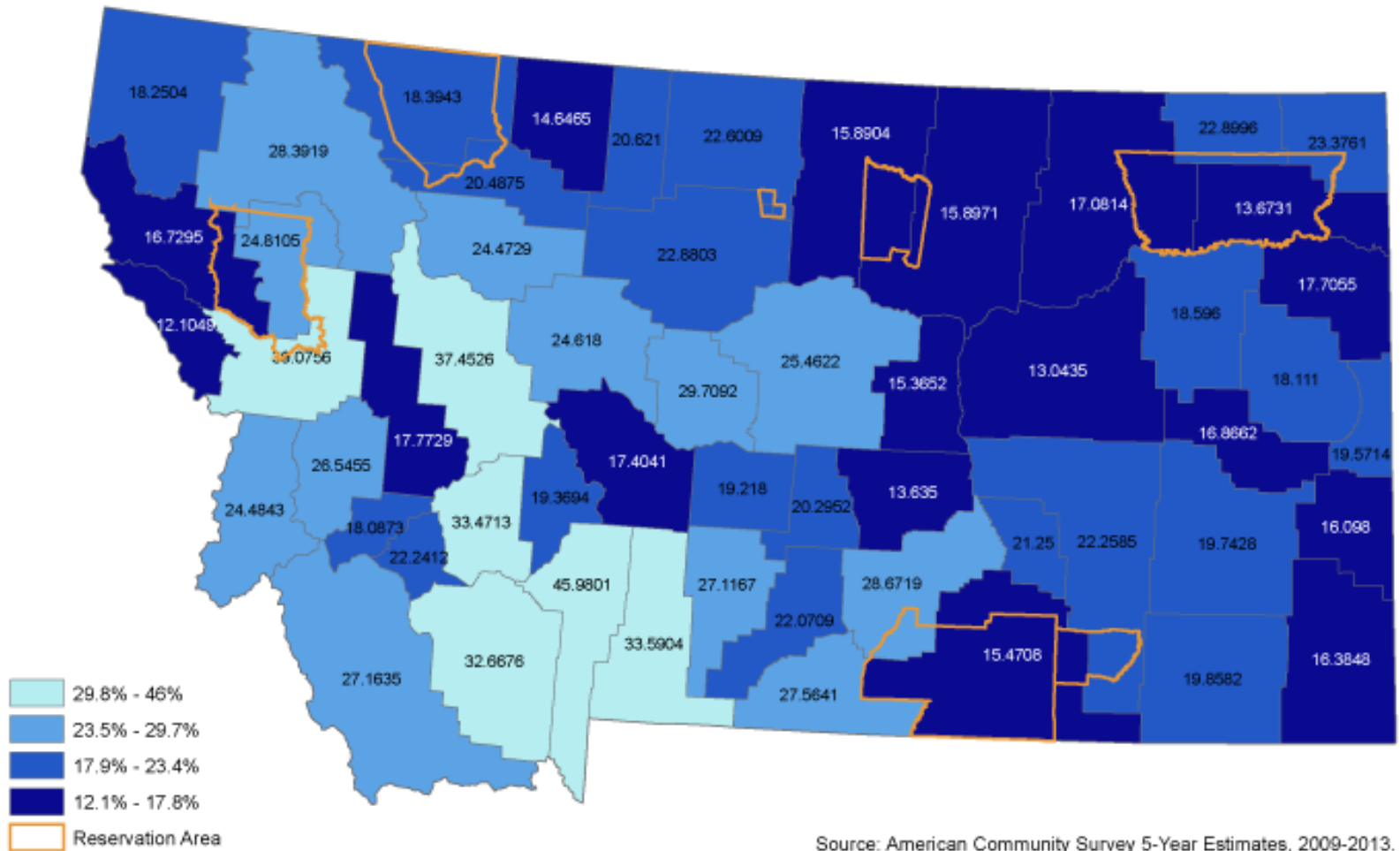
# DISPARITIES IN HEALTH CONDITIONS: OBESITY RATE IN MONTANA



Source: CDC Diabetes Interactive Atlas, 2011.

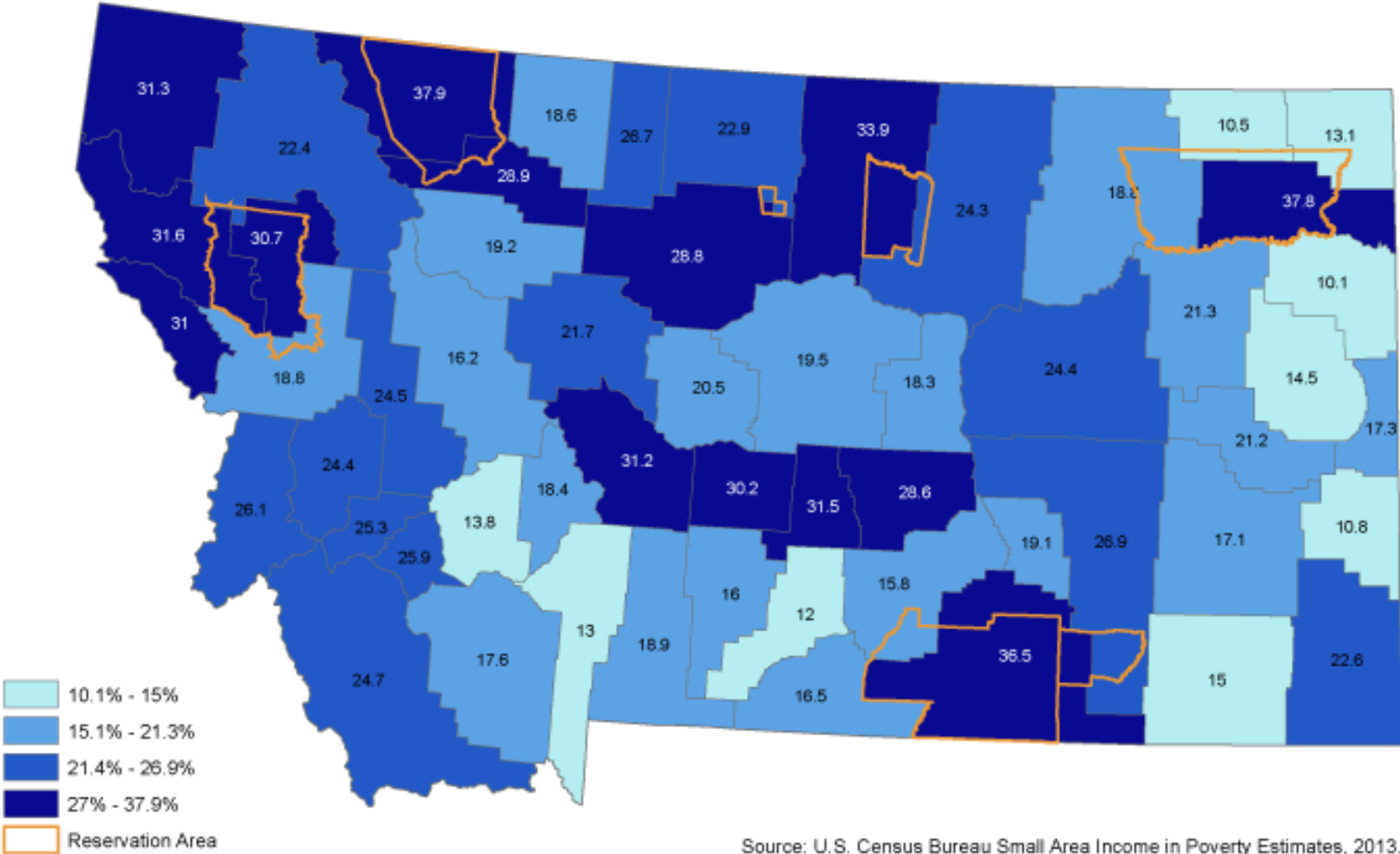
# EDUCATION = HEALTH

## B.A. DEGREE OR HIGHER IN MONTANA



Source: American Community Survey 5-Year Estimates, 2009-2013.

# A GOOD START IN LIFE MATTERS: CHILDREN IN POVERTY IN MONTANA



Source: U.S. Census Bureau Small Area Income in Poverty Estimates, 2013.

# Rural and Frontier Health Challenges

- Less likely to have employer-provided health care coverage
- Rural poor less likely to be covered by Medicaid
- Residents must travel long distances to seek specialized treatment
- Per capita income is lower than urban counterparts
- Residents more likely to live below poverty level

# More Rural and Frontier Health Challenges

- Increases in health care costs have disproportionate effect
- Residents facing shortage of health care providers
- Health Professional Shortage Area
- Likely to lack mental health services (especially for children)
- Recruitment challenges

Source: Bigbee, JL, Gehrke, P, Otterness, N. *Public health nurses in rural/frontier one-nurse offices. The International Electronic Journal of Rural and Remote Health, Research, Education, Practice, and Policy.* Nov 2009. 9(1282): 1-12

# More Rural and Frontier Health Challenges

- Nurses, whether BSNs or ADNs, may be the only or one of the only healthcare providers in a frontier setting
- Residents rely on non-hospital based care settings for greater proportion of healthcare
- Public Health Nurses (PHN) must have broad-based knowledge and have the ability to improvise

Source: Bigbee, JL, Gehrke, P, Otterness, N. *Public health nurses in rural/frontier one-nurse offices. The International Electronic Journal of Rural and Remote Health, Research, Education, Practice, and Policy.* Nov 2009. 9(1282): 1-12

***“Nurses often have to try and patch care together in rural communities where there is a complete lack of post-hospital services. There is likely no home health care of either a skilled or custodial nature, no hospice, and maybe even not a skilled nursing facility that can accommodate a long-term stay ....”***

**- Dr. Casey Blumenthal, Vice President, Montana Hospital Association**



# Montana Specific Challenges

- Overcome most significant barrier – recruitment of all healthcare personnel to rural/frontier
- Nine Montana counties are without a single physician
- Twelve Montana counties lack a single primary care physician
- Difficulties recruiting and retaining skilled healthcare workers
- Sites tend to be low resource environments with fewer professional development opportunities

Source: Montana State University Office of Rural Health

# Idaho Study

- 15 PHNs who worked in one-nurse offices (15 different counties)
- Counties ranged in population from 2,781 to 28,114 (mean = 11,013)
- County land masses ranged from 450 to 8,485 sq miles (mean – 3,753)

Source: Bigbee, JL, Gehrke, P, Otterness, N. *Public health nurses in rural/frontier one-nurse offices. The International Electronic Journal of Rural and Remote Health, Research, Education, Practice, and Policy.* Nov 2009. 9(1282): 1-12

# Idaho Study: Summary

- Strong job satisfaction
  - Benefits of autonomy
  - Variety and close community ties
- Frustrations
  - Communication with outside world
  - Feeling out of the loop
  - Communication with other nurses mostly by email/phone



# Voices from the Frontier of Montana



# What do we hear in Montana – from the MT Office of Rural Health/AHEC

Regional AHECs are conducting multiple needs assessments with small rural communities (critical access hospitals, employers, community organizations)

# Findings:

- Move away from hospital-based services - focus on improving health throughout the community
- Nurses – cradle to grave care vs. specialized focus
- Advising and collaborating with community partners to address the whole person – housing, food, mental health, education
- Picking up the slack in communities with no or limited home health care services impacting their ability to carry out public health roles

## Some recommendations from Montana:

- Expand nursing education to include health/population skills at the beginning of the nursing education continuum
- Expansion of rural sites for nursing curriculum & rural training experiences
- Address salary concerns for nurses working in rural/frontier areas
- Create more incentive programs for nurses of all backgrounds (e.g. loan repayment)
- More funding and incentive for masters prepared RNs

## Some recommendations from Montana:

- Greater recruitment of rural students into nursing programs
- Create new continuing education strategies for nurses working in rural and frontier areas (focus on pop health)
- Create new e-networking opportunities for frontier nurses
- Address funding levels for public health at the local level
- Increase knowledge of financial aspects/budgets in nursing education or as continuing education
- Promote public health nursing as a career opportunity



# National Rural Health Association (NRHA) Recommendations

- Increased resources for rural and public health preparation in nursing education programs
- Strengthening of partnerships between rural and public health agencies and nursing education programs to promote public health nursing recruitment, CE, and research
- Establishment of minimum education standards for public health nursing practice
- Need for enhanced incentive programs, such as a loan repayment programs designed to attract well educated, diverse nurses to rural public health practice

# NRHA Recommendations

- Development of creative distance education strategies (accessible PD and CE)
- Exploring strategies to encourage rural young people to pursue nursing careers
- Develop better communication and technological support for rural areas
- Address funding issues to support quality and equitable public health services for rural populations, including support for increasing salaries



# Questions?