

# Health in Rural Massachusetts

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**Health Professions Students**

**Cathleen McElligott, Director**  
**MDPH State Office of Rural Health**  
**[Cathleen.mcelligott@state.ma.us](mailto:Cathleen.mcelligott@state.ma.us)**





# Rural Massachusetts

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Mass. often thought of as urban because dense concentration of people in metro Boston/eastern cities,

**BUT...**

- Nearly 800,000 people (12%) live in 54% of state's landmass classified as rural (Census Bur).
- Nearly half MA towns rural (46%) by a federal definition.
- Rural does not necessarily mean “extreme remoteness,” or even “Western Mass.”
- There are many, many rural definitions !!
- Key factors used:
  - population size, population density, distance to core cities

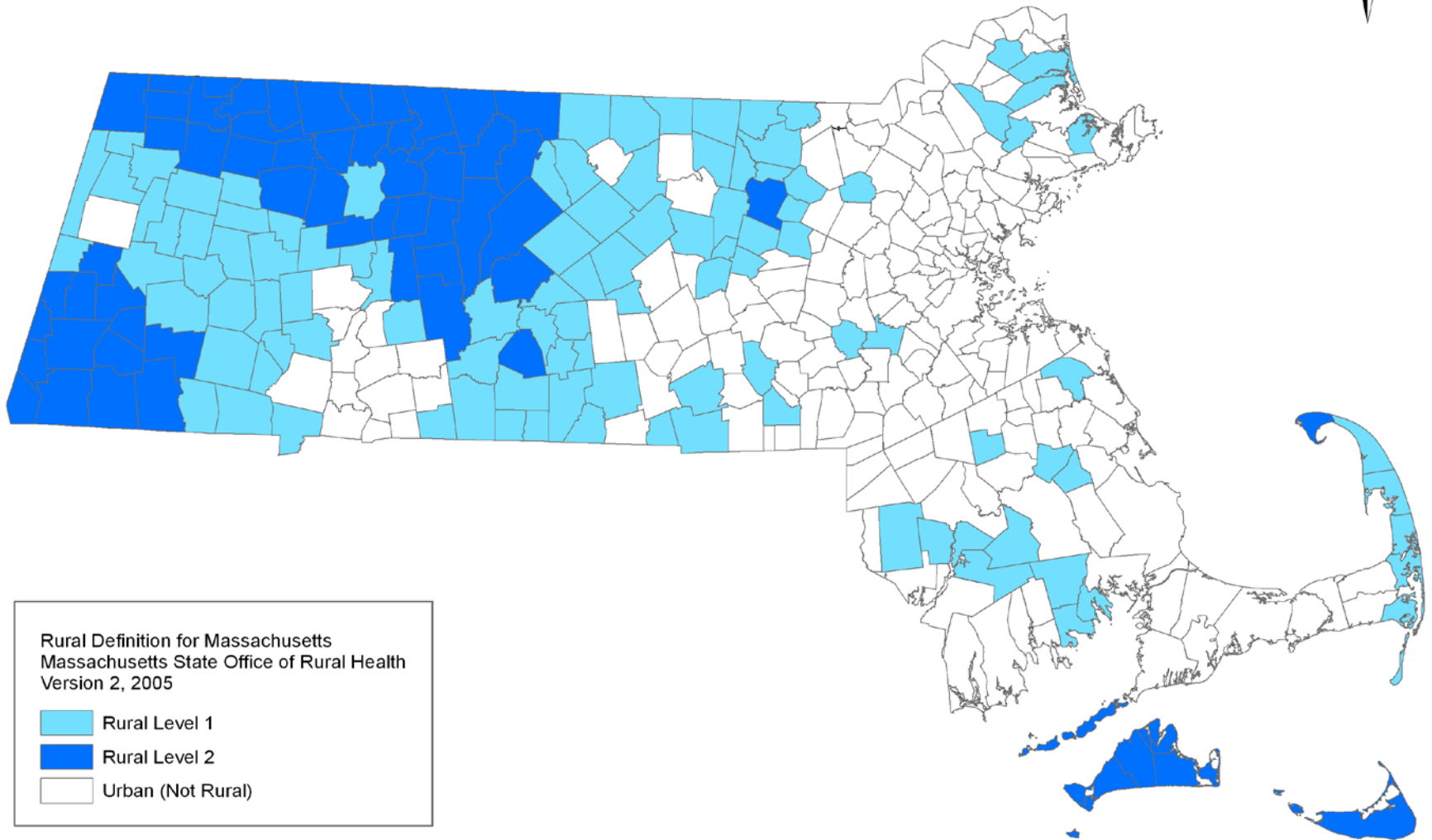


## From the Berkshires to the Islands

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- Massachusetts' rural communities are diverse geographically, economically, and culturally.
- Rural Mass. communities stretch from
  - **Western Mass** - river valleys, hill towns, and forested mountains
  - **Central Mass** - scenic pastures, forests, small towns
  - **Southeast and Coastal** - seashores and Island communities

## A Definition of Rural Applied to Massachusetts Towns



# *"When you see one rural area you have seen one rural area."*

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- Some similar characteristic needs, challenges, and strengths as a group.
- Always have to look at each rural area so you do not mask needs or challenges for particular rural parts of the state.



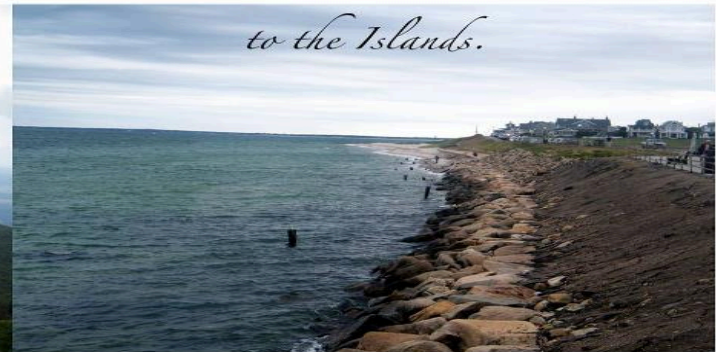
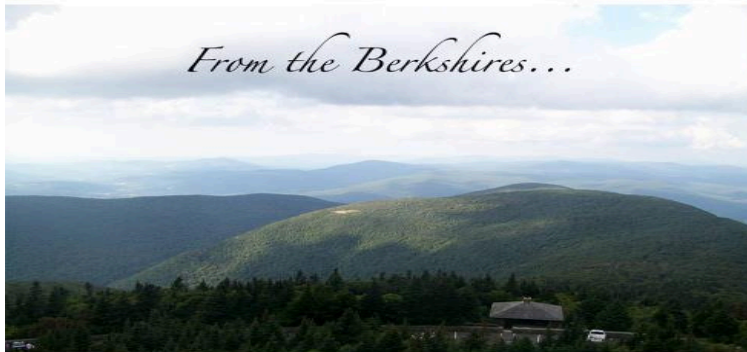
# Rural Appropriate Models

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For models of care & program models...

*"Rural is not just small urban!"*

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# Rural Massachusetts

## Rural People

- Possess a strong sense of community and place
- Know each other, listen to each other, and work together to benefit the community



## Rural Communities

- Rich history of creativity and ingenuity in addressing local problems
- Great places for healthcare collaboration and innovation





# Rural Massachusetts

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## Rural Healthcare

- More patient-centered
- Providers have the opportunity to provide broader range of services
- Get to know their patients in a fuller way

## Rural Healthcare Organizations

- Sources of innovation, ingenuity, and resourcefulness
- Reach beyond geographic boundaries
- Deliver quality care – ***Rural leads in quality!***
- Economic foundation of communities







# Key Challenge for Rural Healthcare

**Lower population density *AND* greater distances**

- ❑ Population smaller and spread out... program fixed costs can be higher per person served
- ❑ Lower volume...but need to maintain quality and good accessibility
- ❑ Need supply of providers and allied/support staff that like the lifestyle and the community based, connected practice style



# Population Decline



County Census Data				
County	2000 Population	2010 Population	2010 Change	2010 % Change
<b>Barnstable</b>	<b>222,230</b>	<b>215,888</b>	<b>-6,342</b>	<b>-2.85%</b>
<b>Berkshire</b>	<b>134,953</b>	<b>131,219</b>	<b>-3,734</b>	<b>-2.77%</b>
Bristol	534,678	548,285	13,607	2.54%
<b>Dukes</b>	<b>14,987</b>	<b>16,535</b>	<b>1,548</b>	<b>10.33%</b>
Essex	723,419	743,159	19,740	2.73%
<b>Franklin</b>	<b>71,535</b>	<b>71,372</b>	<b>-163</b>	<b>-0.23%</b>
<b>Hampden</b>	<b>456,228</b>	<b>463,490</b>	<b>7,262</b>	<b>1.59%</b>
<b>Hampshire</b>	<b>152,251</b>	<b>158,080</b>	<b>5,829</b>	<b>3.83%</b>
Middlesex	1,465,396	1,503,085	37,689	2.57%
<b>Nantucket</b>	<b>9,520</b>	<b>10,172</b>	<b>652</b>	<b>6.85%</b>
Norfolk	650,308	670,850	20,542	3.16%
Plymouth	472,822	494,919	22,097	4.67%
Suffolk	689,807	722,023	32,216	4.67%
Worcester	750,963	798,552	47,589	6.34%

**The 3 counties that experienced a population decrease are predominately RURAL counties.**

# Geographic Barriers to Care for Rural MA

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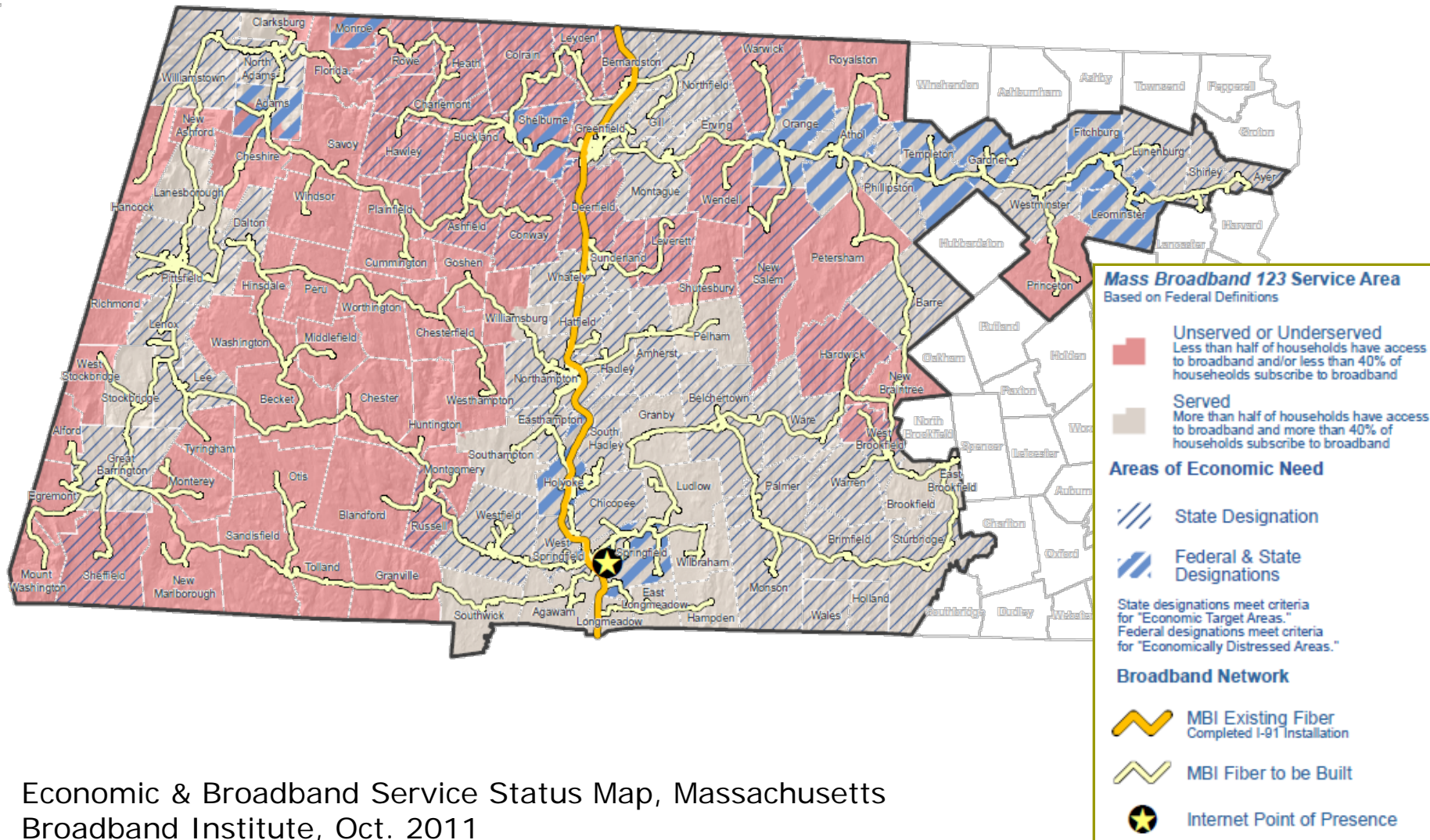
- Low population densities
- Longer distances
- Mountains, hills, oceans, winding country roads, longer distances, lack of public transportation
- Patchwork quilt of small towns
- Lack of inexpensive and fast telecommunications, (broadband, high speed internet, cell phone)
- Cultural differences

further isolate rural communities from more centralized or regionalized state programs





# Broadband Access in Western MA



# Provider Data



Middlesex County has nearly *twice* as many general practice physicians as Barnstable, Berkshire, Dukes, Franklin and Nantucket counties combined and *six times* as many physicians with a specialty in psychiatry

Geography	Year	Licensed Physicians with Specialty: Psychiatry: Count	People per Physican
Middlesex County	2009	610	2,464
Rural Counties	2009	106	4,200
Massachusetts Total	2009	1,773	3,693

# Western Mass. EMS Organizations

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*92% survey response rate*



## Service Level

*(Some recent improvements toward increase in paramedic level respondents)*

- ❑ 39% of respondents - Basic Level Only
- ❑ 18% of respondents - Intermediate Level is highest level
- ❑ 43% of respondents - Paramedic Level

## Personnel Status

- ❑ 49% respondents have paid staff
- ❑ 22% of respondents have a mix of paid and volunteer staff
- ❑ 27% of respondents have volunteer staff



# Rural MA Socioeconomic Challenges

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- ❑ Incomes lower
- ❑ Rely heavily on tourism, service, agricultural, and fishing economies
- ❑ Some rural towns are former small mill towns where the mill has closed or greatly downsized
- ❑ Higher proportion of self-employed, family workers, and small businesses; with fewer benefits.
- ❑ Number of persons in rural areas with advanced education lower than the state average

# Health Disparities in Rural MA

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- Many of our rural counties experience higher rates of injuries, chronic disease, teen pregnancy, smoking, and substance abuse than the state as a whole.
- The health outcomes of rural communities vary greatly across communities; the health issues of one rural county may not be a health issue at all in a different rural county.
- Lack of access to general and specialty healthcare services, mental health, and oral health services due to healthcare professional shortages.
- Can be a real culture clash when “regionalization” happens and an urban “expert” organization goes in to serve a rural community. “home grown” vs. “expert from outside”

# Chronic Disease



## Chronic Disease Indicators

Crude rates per 100,000 people

	Berkshire	Dukes	Nantucket	Franklin	Barnstable	State
Total deaths (all causes)	<b>749.1</b>	701.4	<b>903.1</b>	<b>711.7</b>	618.2	699.1
Total cancer deaths	173.1	<b>205.3</b>	216.8	190.4	170.8	177.4
Lung cancer deaths	49.2	<b>62</b>	<b>56.2</b>	<b>63.5</b>	43.3	49.4
Breast cancer deaths	24.8	15.3	43.7	20.7	23.7	21.2
Cardiovascular disease deaths	<b>228.4</b>	210.3	<b>331.7</b>	<b>226</b>	187.4	210.9

# Behavioral Health (MassChip)



## Injury Indicators

Crude rates per 100,000 people

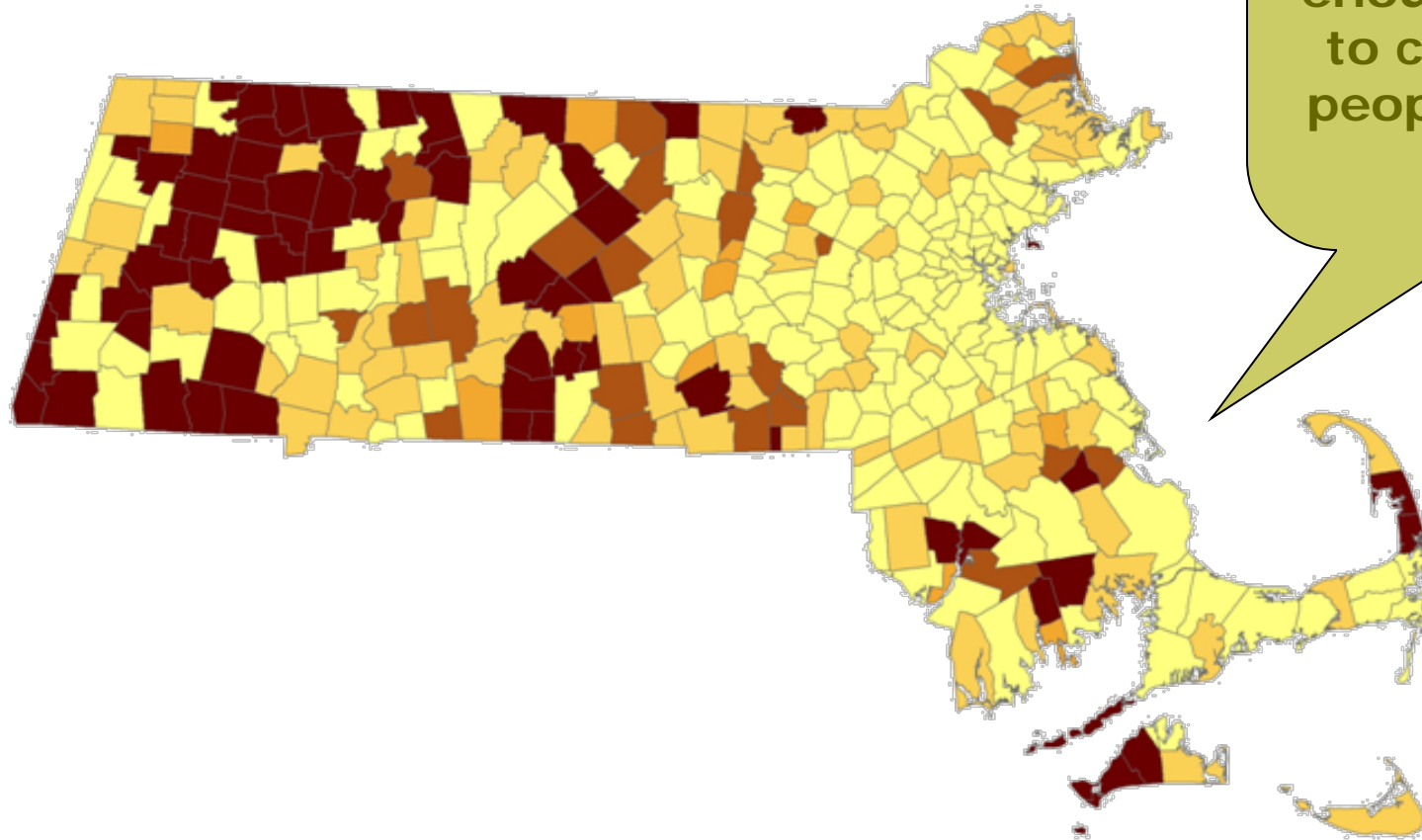
	Berkshire	Dukes	Nantucket	Franklin	Barnstable	State
Motor vehicle related injury deaths	<b>7.6</b>	6.4	0	<b>8.3</b>	5.3	5.8
Suicide	<b>11.4</b>	<b>12.8</b>	<b>9.9</b>	6.9	<b>14.6</b>	7.7

## Substance Abuse Indicators

Crude rates per 100,000 people

	Berkshire	Dukes	Nantucket	Franklin	Barnstable	State
Admissions to DPH funded treatment	<b>2193.8</b>	<b>1704.6</b>	584.5	1342.3	<b>2281.6</b>	1589.9
Injection drug user admissions to DPH	378.1	358.9	NA	172.6	606.2	619.5
Alcohol and other drug related hospital	<b>1011.6</b>	173	178.3	308	243.7	345.6

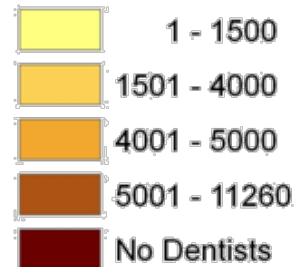
# People-Per-Dentist Ratio



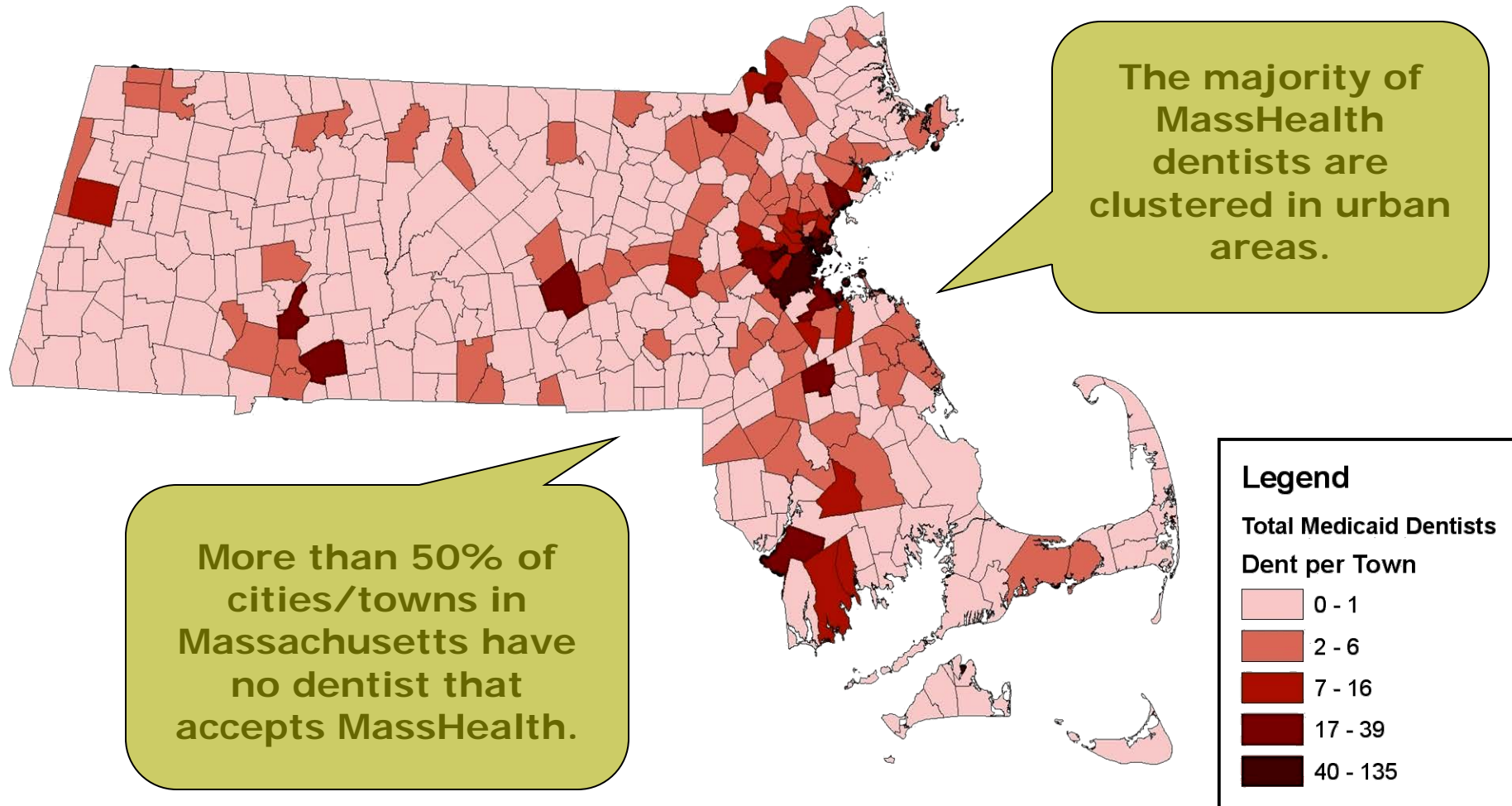
30% of cities/towns in Massachusetts don't have enough dentists to care for the people who live there.

## Legend

People per Dentist  
by City/Town



# Number of MassHealth Dentists





# Publicly Financed Care

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- ❑ Rural population is more dependent on publicly-funded health services, as are the providers.
- ❑ High proportion of elderly population; Medicare is payer of major importance.

Higher % of elderly Age 65+ (Census 2010)

■ <b>Statewide urban &amp; rural</b>	<b>14%</b>
■ <b>Barnstable County</b>	<b>25%</b>
■ <b>Berkshire County</b>	<b>19%</b>
■ <b>Dukes County</b>	<b>16%</b>
■ <b>Franklin County</b>	<b>15%</b>
■ <b>Nantucket County</b>	<b>12%</b>



35  
%

54  
%

In **Berkshire County**, 54% of pregnant women rely on **publicly financed prenatal care** compared to 35% **statewide**.



# Mass SORH

## *State Office of Rural Health*



### ■ Funding

- Federal Office of Rural Health Policy/HRSA
- MDPH state matching funds
- Leverage other state, federal, private sources through partnerships and collaborations

- Builds partnerships to improve access to health services, build better systems of care, and improve health status in rural communities.

# MA SORH

## Federal Grants



HRSA/Federal Office of Rural Health Policy

## State Office of Rural Health Program

### Core Functions

- Collection and dissemination of information
- Leadership and coordination of rural health resources and activities statewide
- Provision of technical assistance
- Encourage recruitment and retention of health professionals in rural areas
- Participate in strengthening state, local, and federal partnerships
- Rural voice within state government

# SORH Initiatives This Year

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- 2<sup>nd</sup> Annual National Rural Health Day
- Reshaping advocacy and awareness efforts
- Reshaping Advisory Council
- Info dissemination, education, and networking
- New England Rural Health RoundTable
- Healthcare workforce pipeline, recruitment, and retention
- Safety net healthcare providers and rural health system development
- Evidenced based elder health programs
- Veterans health services

# MA SORH

## Federal Grants

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### Massachusetts Rural Hospital Flexibility Program

#### ***MA and National Health Reform Priorities***

- Hospital operational and financial improvement
- Quality improvement and patient safety initiatives
- Coordinated and integrated systems of care - health systems development and community engagement
- Critical Access Hospital designation and support
- Data reporting, HIT, and telemedicine
- Emergency Medical Services....QI, integration, workforce

# MA SORH Federal Grants

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## Small Rural Hospital Improvement Program

### ***Subcontracts Support Health Reform Initiatives***

- ❑ Prospective payment systems
- ❑ Bundled payments - new payment systems
- ❑ Value based purchasing - data reporting and quality improvement
- ❑ Accountable Care Organizations - collaborative systems development and alignment

# Find Us On

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Facebook:

[www.facebook.com/RuralHealthMDPH](http://www.facebook.com/RuralHealthMDPH)

Mass.Gov:

[www.mass.gov/dph/ruralhealth](http://www.mass.gov/dph/ruralhealth)

New England Rural Health RoundTable:

[www.newenglandruralhealth.org](http://www.newenglandruralhealth.org)