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# Public Health in a Challenging Time

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John Auerbach, Commissioner  
Nantucket Health Dialogue  
July 10, 2009



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# Impact of the economic crisis on DPH programs

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## 9C cuts to DPH FY09 budget

(October, 2008 and January, 2009 cuts)

- **\$30.4 million (5%) of FY09 state funding lost**
  - 100 jobs eliminated, including 50 employees involuntarily laid off
  - Millions of dollars in contracts to community agencies cut
  - Important services scaled back or ended
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# FY10 DPH budget (after vetoes)

- Total \$504.6 million
  - Effective loss of \$70.7 million (12%) from FY09 pre-9C maintenance budget
  - Additional jobs expected to be eliminated
  - Millions of dollars in additional cuts to community providers required
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# FY10 Budget Cuts: Program Impacts

## ■ **Examples of major program cuts**

- ❑ Youth violence prevention
  - ❑ Domestic violence & sexual assault prevention & treatment
  - ❑ Suicide prevention
  - ❑ Health promotion & chronic disease prevention
  - ❑ Tobacco control
  - ❑ Community health centers
  - ❑ Substance abuse services
  - ❑ Dental health
  - ❑ Family planning
  - ❑ School nurses & school-based health clinics
  - ❑ Environmental health programs
  - ❑ Early intervention services
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# Federal Economic Stimulus Package Offers Some Help in FY10

- \$2 million in Immunization funding for low income children and adults
- \$3.7 million in Early Intervention funding
- Funding for WIC – amount uncertain

*Some of new funding helps replace cuts (EI).*

*Some only funds new work (WIC, Immunizations).*

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# Mass in Motion

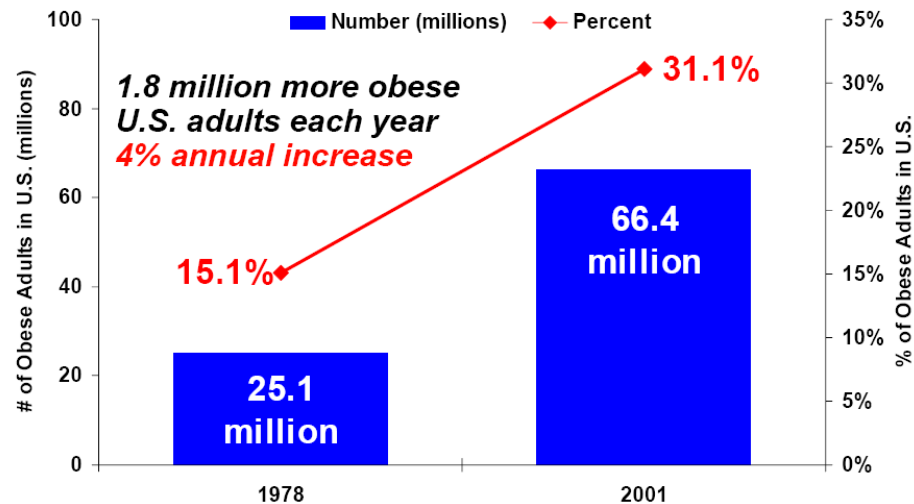
## *Combating Obesity and Preventing Chronic Disease*

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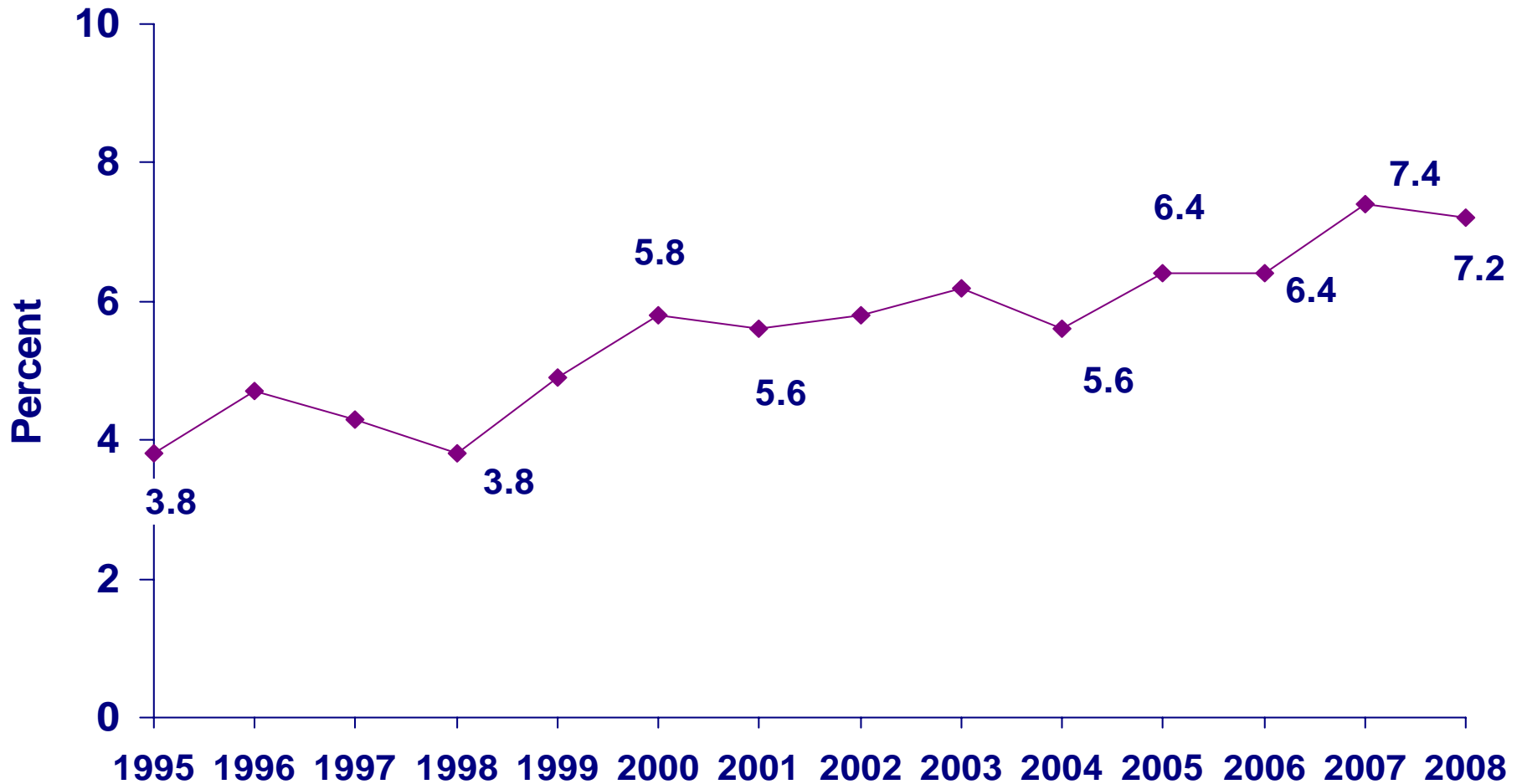
# Campaign to address overweight epidemic and resulting chronic disease

## Epidemic of Obesity in the U.S.



With over 60% of adults and 30% of Massachusetts children overweight, a statewide comprehensive effort is needed

# Prevalence of Diabetes Massachusetts: 1994-2008



# *Mass in Motion* Campaign Includes

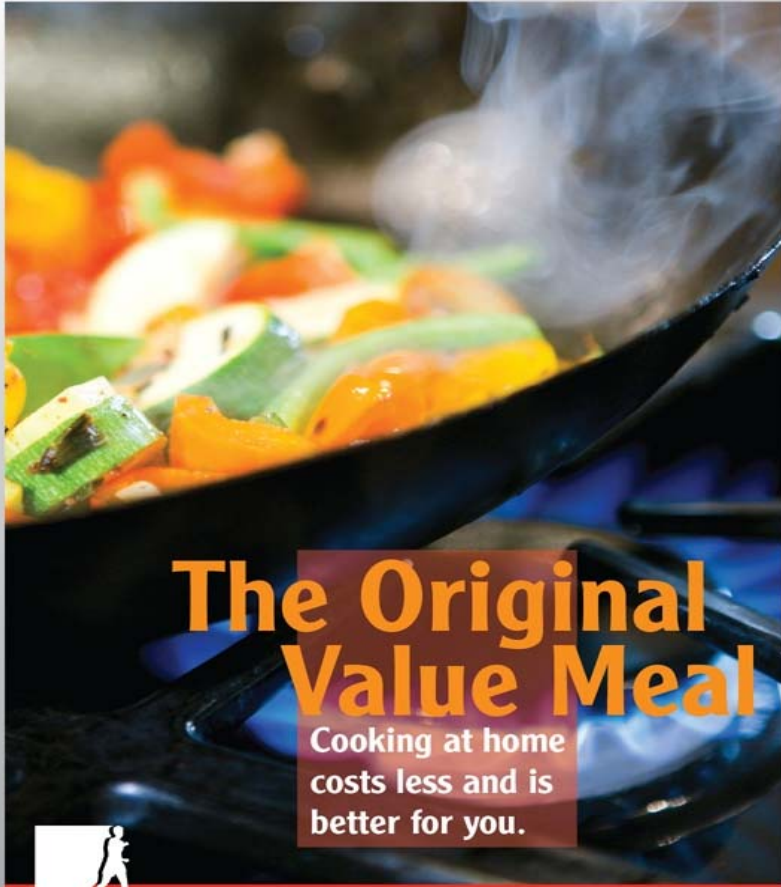
- *Statewide regulations:* Menu labeling of fast foods
- *Schools:* mandated BMI testing of all students
- *Worksites:* Employee wellness programs
- *Cities and towns:* Community-wide mobilization grants

SANDWICHES	CALORIES	PRICE
HAMBURGER	280	.89
CHEESEBURGER	330	.99
FILET-O-FISH®	470	1.99
CRISPY CHICKEN	550	2.79
QUARTER POUNDER®	430	2.29
BIG N' TASTY®	540	2.29
BIG MAC®	590	2.39
CHICKEN McGRILL®	450	2.89
DOUBLE QUARTER POUNDER®	760	2.99




# Multi-faceted Education and Support

- Interactive web site with resources
- Public information campaign – and
- Support for primary care-based counseling



**The Original Value Meal**  
Cooking at home costs less and is better for you.



**Mass in Motion**  
Better health. It's your move.  
[www.mass.gov/massinmotion](http://www.mass.gov/massinmotion)

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# The H1N1 (Swine) Flu

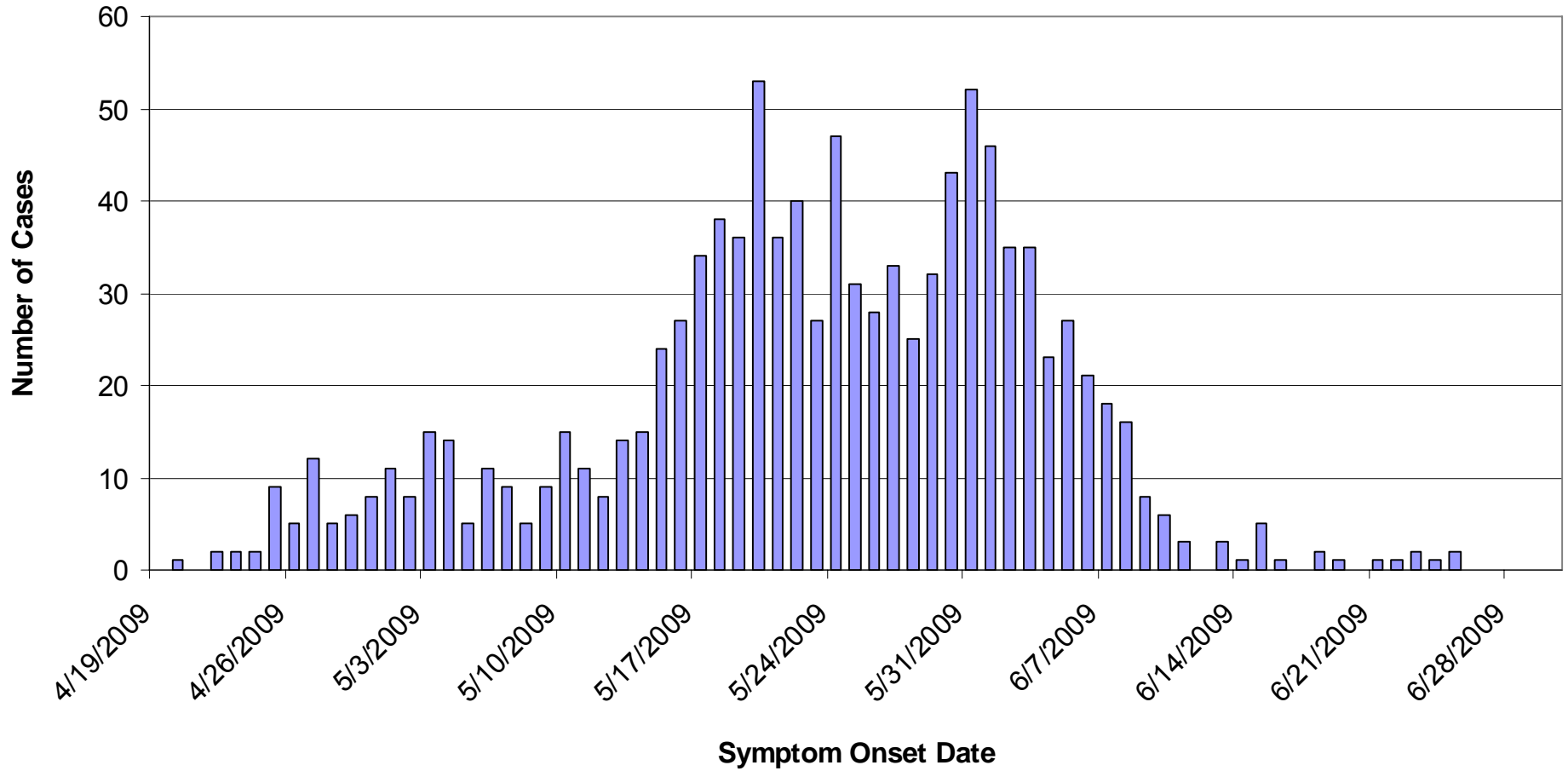
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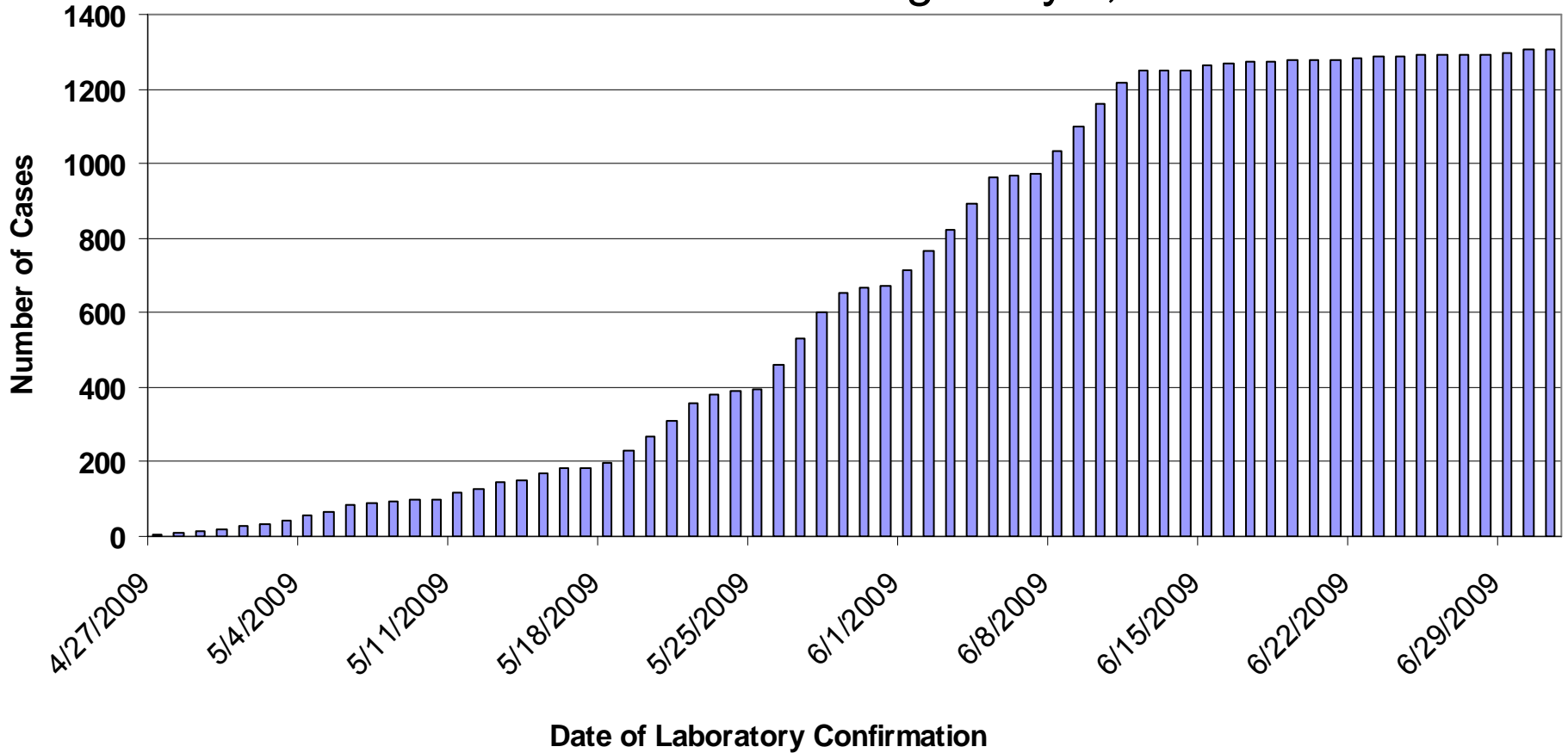
# Where we are in the outbreak

- Massachusetts/United States
  - Age and geographic distribution
  - Severity of illness
  - Uncertainty with possibility of additional waves of greater severity
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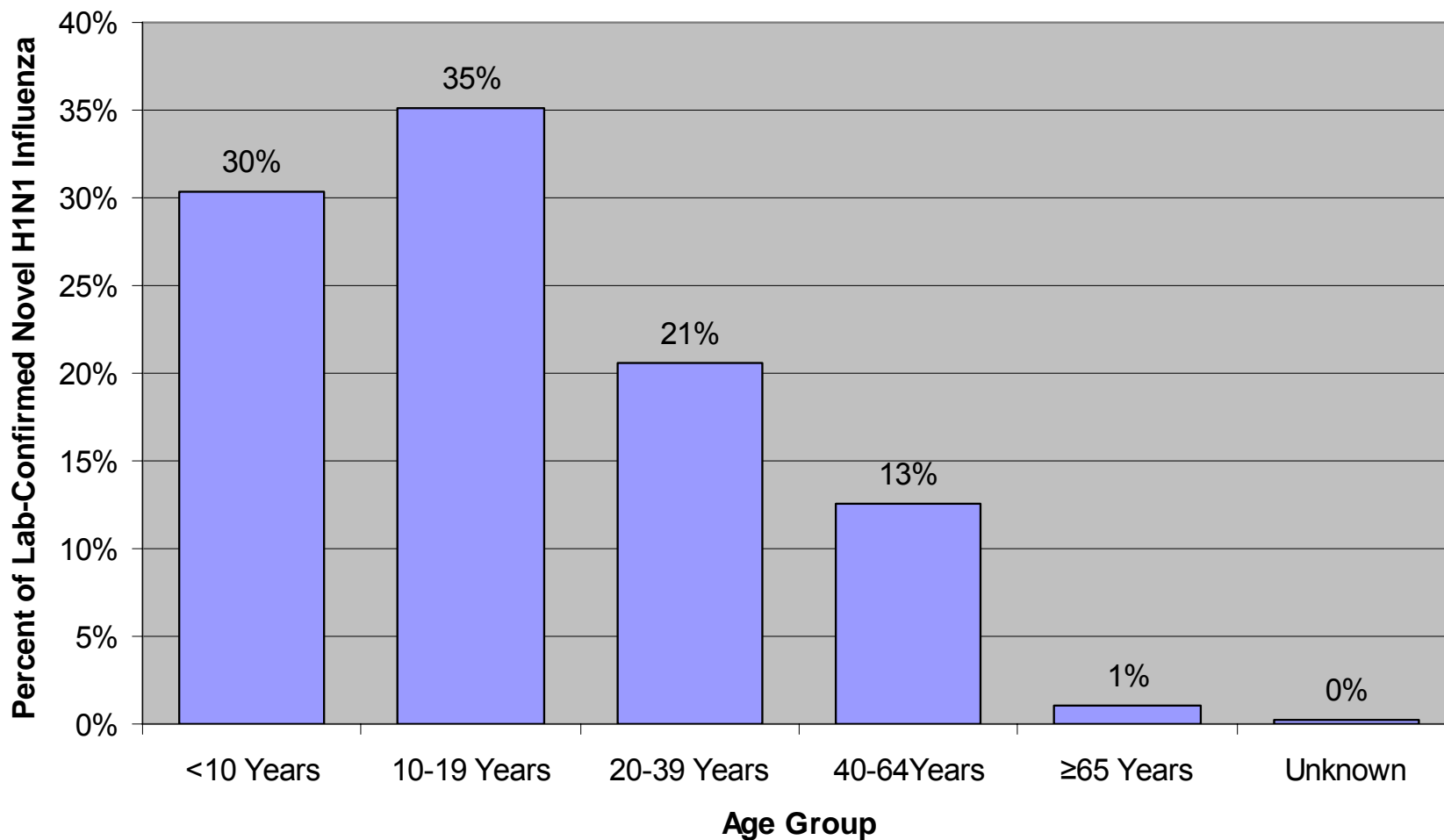
# Cases of Novel Influenza (H1N1) by Date of Symptom Onset



# Cumulative Number of Swine-Origin Influenza A H1N1 in Massachusetts - through July 1, 2009



# Age Distribution of Swine-Origin Influenza A H1N1 in Massachusetts - Through July 1, 2009



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# Response illustrates importance of having a robust public health system

*The goals: preventing transmission and insuring proper care for those exposed and/or ill*

- Heightening monitoring/reporting
  - Expanding laboratory testing
  - Working with patients with confirmed cases
  - Educating the public/responding to media
  - Supporting clinicians and front-line agencies
  - Insuring that medications and supplies are available
  - Preparing to administer a vaccine
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# Public Education and Outreach

- Conference calls with local public health officials and health care providers
  - HHAN alerts, including Situation Reports
  - Website information, updates, alerts
  - Fact sheets in 14 languages besides English
  - Special information for
    - Parents and pregnant women
    - School and childcare professionals
    - Employers
  - 24/7 public information service (telephone 211)
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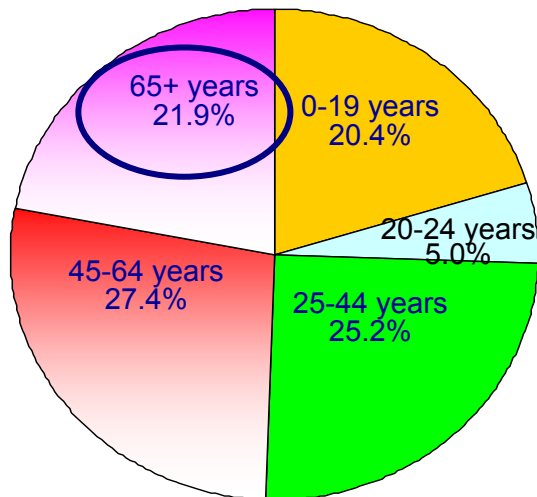
# Particular Health Challenges in the Region

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# Population by Age Group

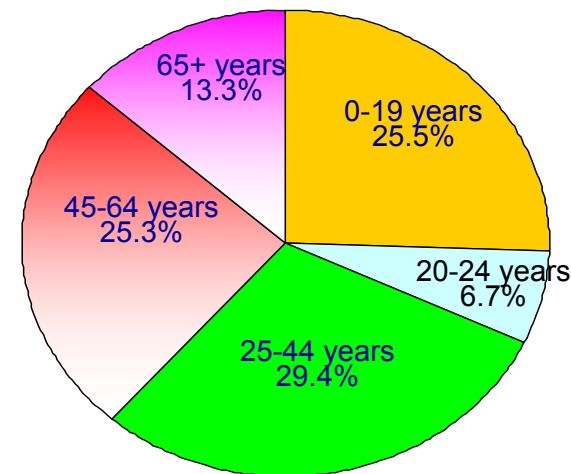
## Cape & Islands and Massachusetts: 2005

### Cape & Islands



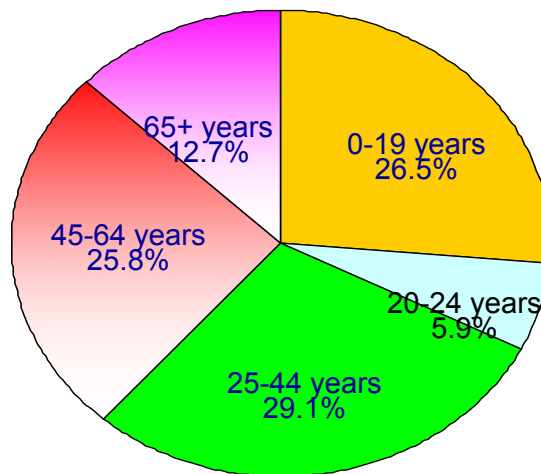
**Total = 252,204**

### Massachusetts



**Total = 6,436,940**

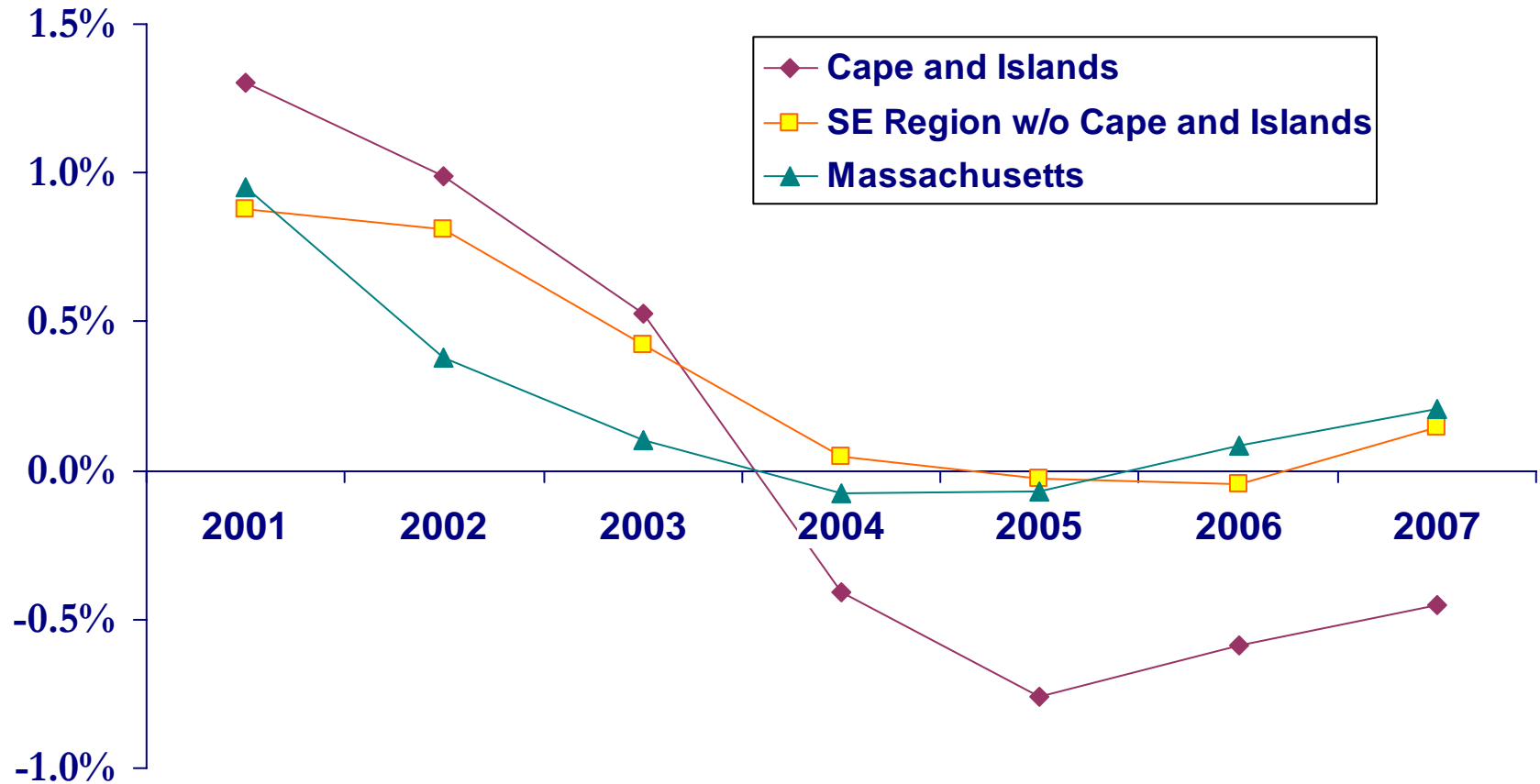
### Southeast (non-Cape)



**Total = 1,026,041**

# Population Trends 2000-2007

## Massachusetts, SE Region, and Cape and Islands



# Socio-Demographic Indicators Southeast Region and Massachusetts

	<b>Cape &amp; Islands</b>	<b>Southeast</b> (not including Cape & Islands)	<b>Southeast Region</b>	<b>Massachusetts Overall</b>
<b>Per Capita Income (2000)</b>	\$25,619	\$21,520	\$22,273	\$25,952
<b>Persons living below 100% poverty (2000)</b>	6.9%	8.5%	8.3%	9.3%
<b>Children &lt; 18 living below 100% poverty (2000)</b>	8.5%	10.9%	10.5%	11.6%
<b>Less than a High School Education (2000)</b>	8.3%	20.4%	18.0%	15.2%
<b>Foreign born (2000)</b>	5.1%	9.5%	8.7%	12.2%
<b>Speak language other than English at home (2000)</b>	7.0%	16.3%	14.6%	18.7%
<b>Unemployed (2004)</b>	4.6%	5.7%	5.5%	5.1%

# Leading Causes of Death Nantucket and Massachusetts: 2003-2007

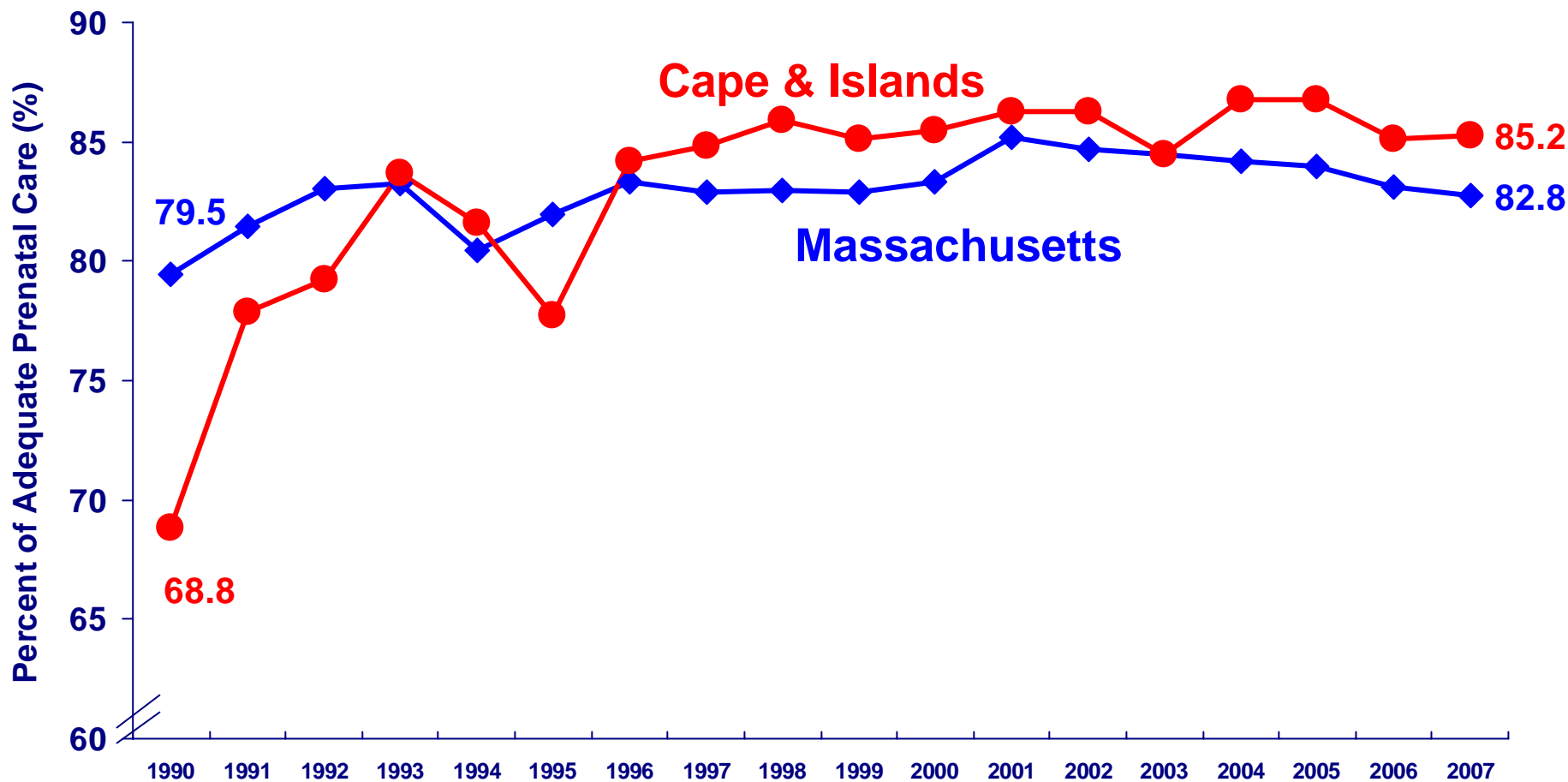
<u>Nantucket</u> N=308		
Cancer	86	27.9%
Heart Disease	84	27.3%
Stroke	20	6.5%
All Injuries	17	5.5%
Atherosclerosis	17	5.5%*
Chronic Lower Respiratory Disease (formerly COPD)	14	4.6%
Influenza and pneumonia	11	3.6%
Nephritis	8	4.0%
Diabetes	5	1.6%
Alzheimer's	5	1.6%

<u>Massachusetts</u> N=270,372		
Heart Disease	67,288	28.5%
Cancer	66,331	28.1%
Stroke	15,208	6.4%
All Injuries	13,875	5.9%
Chronic Lower Respiratory Disease (formerly COPD)	12,823	5.4%
Influenza and pneumonia	9,179	3.9%
Alzheimer's	8,165	3.5%
Nephritis	6,682	2.8%
Diabetes	6,361	2.7%
Septicemia	4,703	2.0%

Statistically different from State ( $p \leq 0.05$ ) Red (\*) = Statistically worse; Green (\*\*) = Statistically better

Source: MDPH, Bureau of Health Information, Statistics, Research & Evaluation, Division of Research & Epidemiology

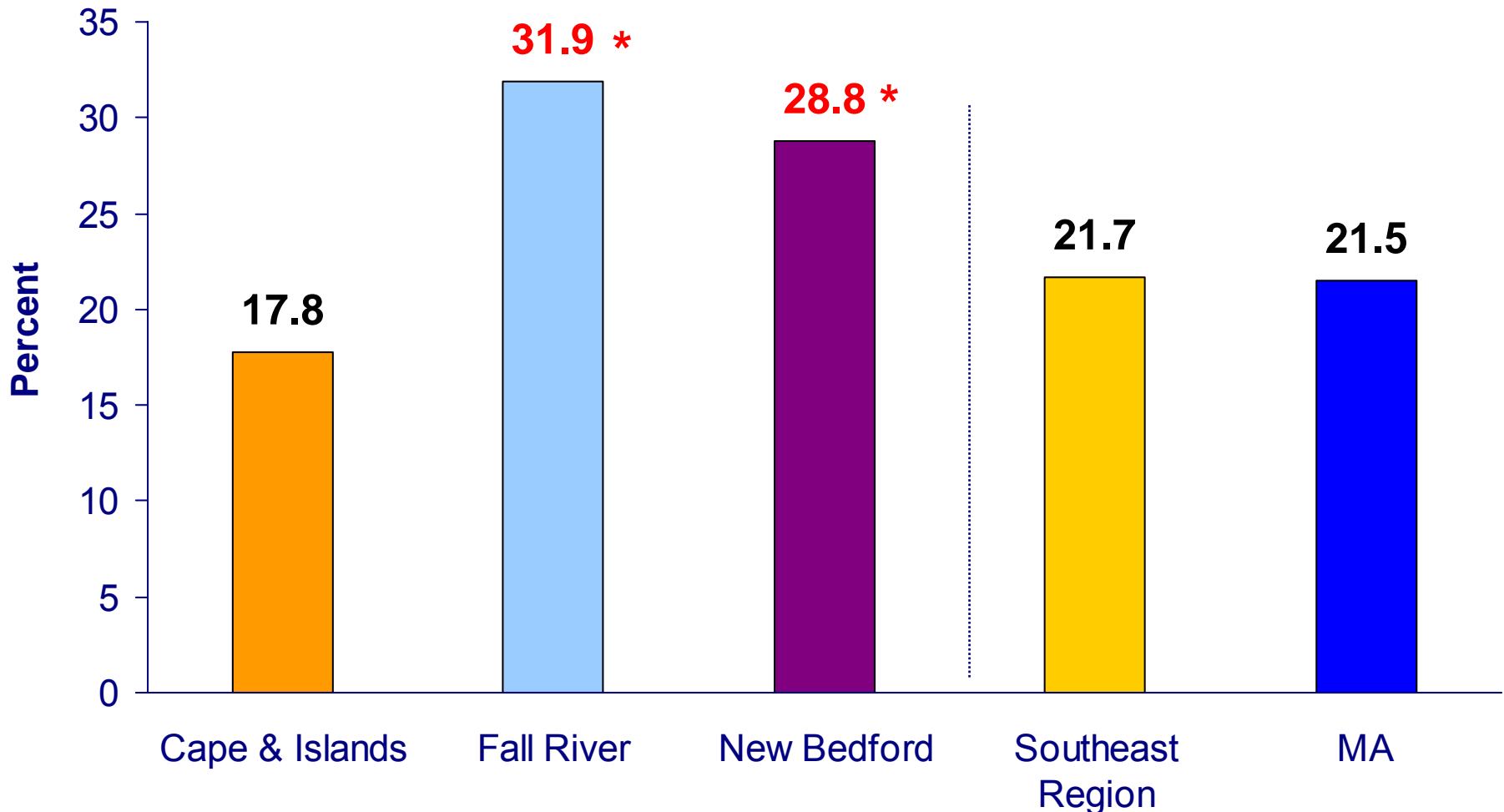
# Adequate Prenatal Care Cape & Islands and Massachusetts: 1990-2007



Based on Adequacy of Prenatal Care Utilization (APNCU) Index.

Source: MDPH, Bureau of Health Information, Statistics, Research & Evaluation, Division of Research & Epidemiology

# Adults who are Obese, Southeast, Cities, Cape, and Massachusetts: 2008

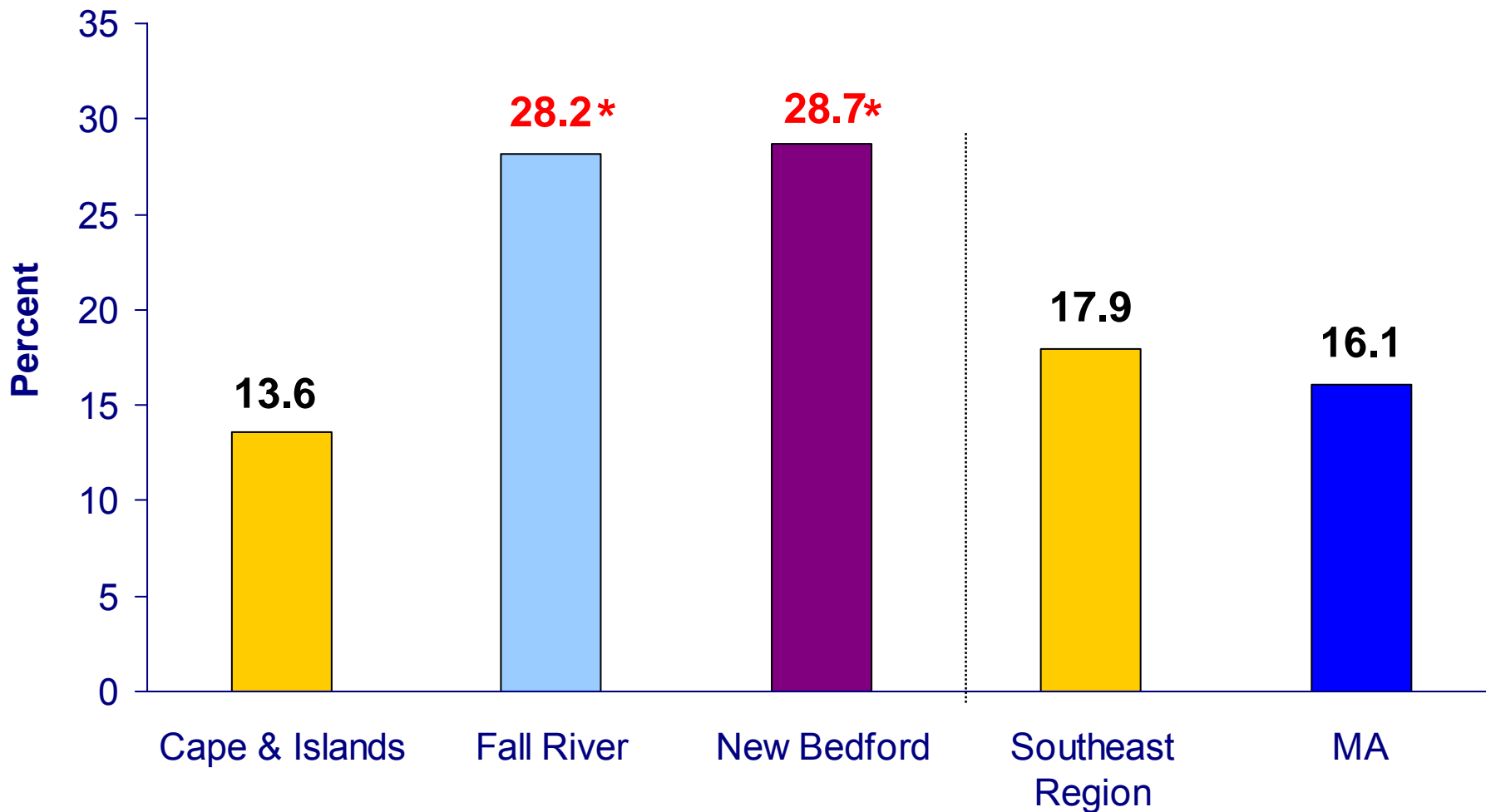


Statistically different from State ( $p \leq .05$ ) Red (\*) = Statistically worse; Green (\*\*) = Statistically better

Obesity: BMI greater than or equal to 30

Source: MDPH, Bureau of Health Information, Statistics, Research and Evaluation, Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), Health Survey Program

# Adults who Currently Smoke Southeast Region and Massachusetts: 2008

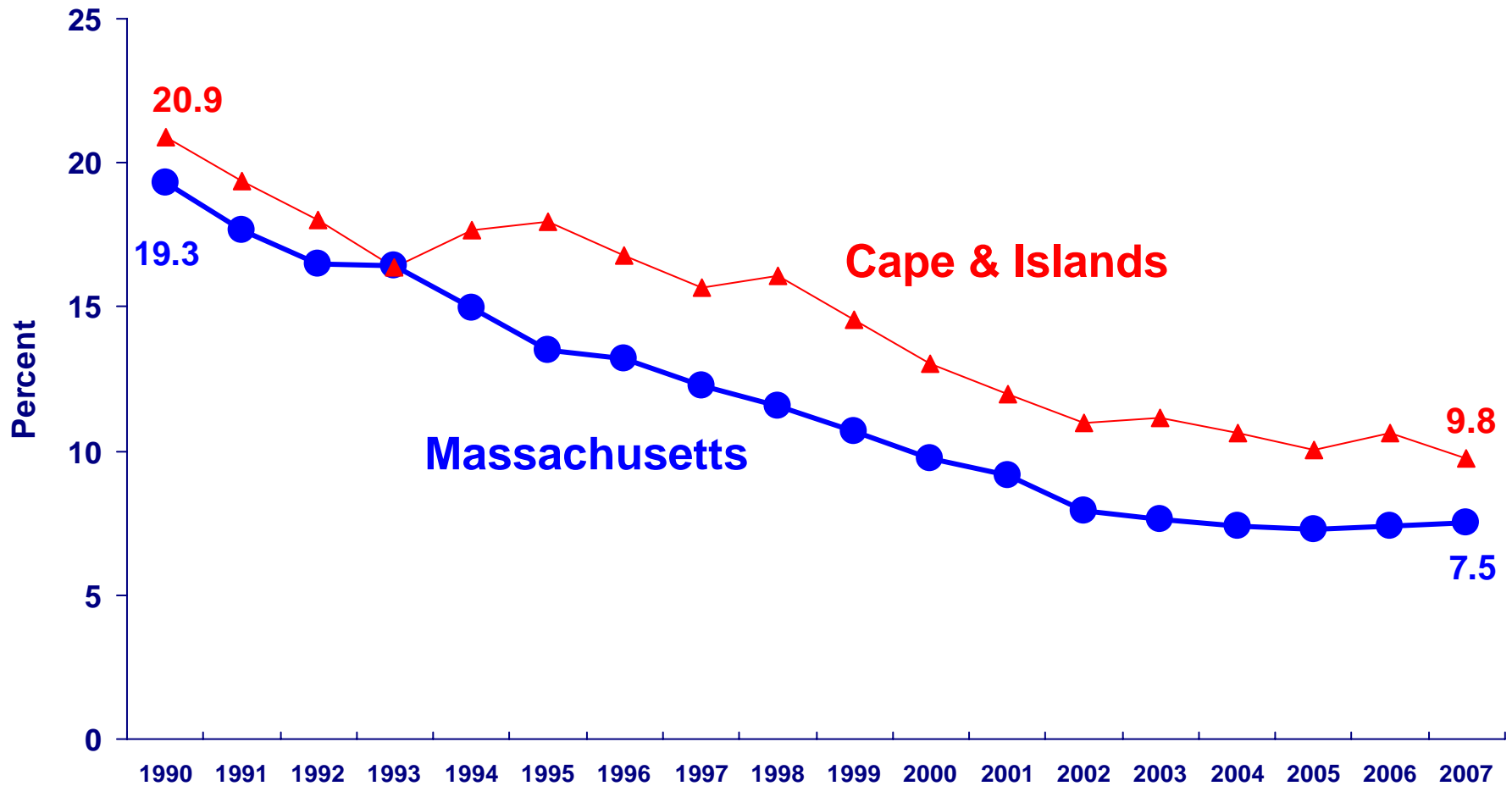


Statistically different from State ( $p \leq .05$ ) Red (\*) = Statistically worse; Green (\*\*) = Statistically better

Obesity: BMI greater than or equal to 30

Source: MDPH, Bureau of Health Information, Statistics, Research and Evaluation, Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), Health Survey Program

# Smoking During Pregnancy Cape & Islands and Massachusetts: 1990-2007



# Summary Substance Abuse Indicators Southeast Region, Cape & Islands and MA: 2007

Indicator	MA Total	Southeast	Cape & Islands
Substance Abuse Treatment Program Admissions Rate (crude rate)	1,637	1,802	2,074
Substance Abuse Treatment Program Admissions Rate—Alcohol (crude rate)	666	802	1,174
Substance Abuse Treatment Program Admissions Rate—Cocaine (crude rate)	73	92	103
Substance Abuse Treatment Program Admissions Rate—Heroin (crude rate)	587	548	376



Statistically lower than state



Statistically higher than state

# Summary Opioid Indicators – Southeast Region, Cape and Islands, Nantucket, and Massachusetts, 2005-2007

Indicator	MA Total	Southeast	Southeast (excluding Cape & Islands)	Cape & Islands	Nantucket
Opioid-related Emergency Department Rate	183.7	198.3	190.6	229.6	145.3
Opioid-related Fatal Overdose Rate	9.4	11.5	11.8	10.6	**

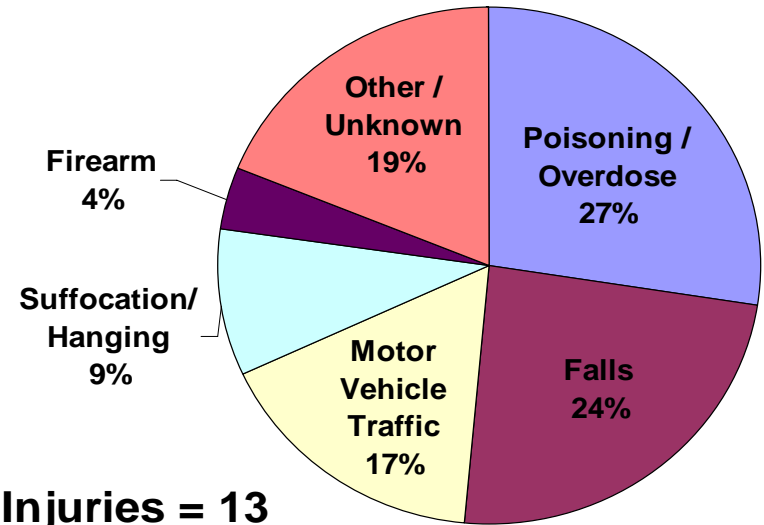
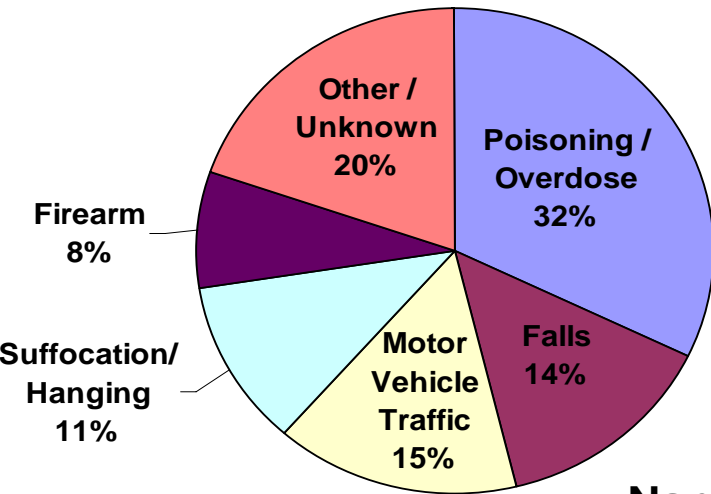
significantly higher than statewide rate

\*\* N<5, Rate not calculated

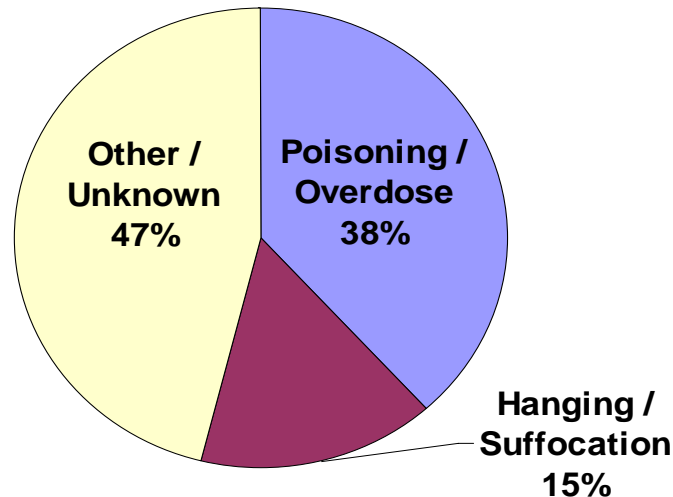
# Causes of Injury Deaths: Nantucket, Cape & Islands, and Massachusetts, 2005-2007

**MA Total Injuries = 8534**

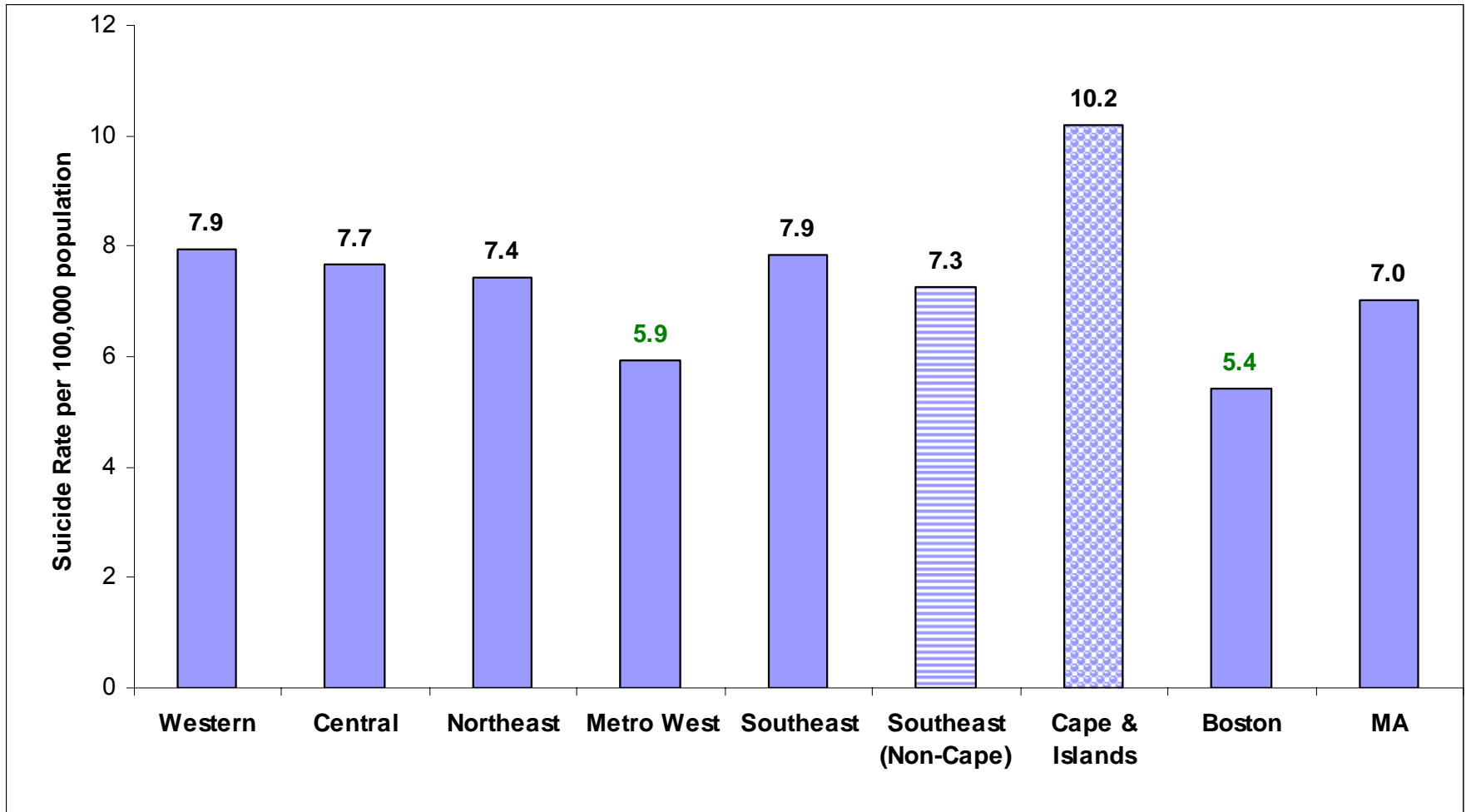
**Cape & Islands Total Injuries = 456**



**Nantucket Total Injuries = 13**



# Suicide Rates by EOHHS Region, Massachusetts, 2003-2007



Rate significantly lower than statewide rate

# Recent Suicide Data for Nantucket Residents

## ■ ADULTS

- As of 9/2008, 4 completed adult suicides and 6 serious attempts

## ■ YOUTHS

- As of Feb. 2006, 6 completed youth suicides
- Total of 40 youths hospitalized for severe attempt of suicidal ideation over 2 years
  - 14 of these 40 were confirmed suicide attempts
  - Hospitalizations peaked in February-May of 2008 and November-December of 2008

### Confirmed Data 2003-2007

Year	# of Suicides in Nantucket	Ages
2003	1	30
2004	0	
2005	1	30
2006	2	45, 89
2007	3	15, 17, 47

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# Recent Suicide Data for Nantucket Residents

- Recent surge of risky behavior in Nantucket
  - Alcohol poisoning/overdoses
    - Difficulty classifying them as either suicide attempts or accidents
  - Rising presence of Heroine & Marijuana use
  - Alcohol and other drugs present in approx. 80% of suicide cases

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# DPH Suicide Prevention Efforts in Nantucket

- **QPR Certification Training**
  - Three Nantucket residents have been certified to conduct the QPR Gatekeeper Training for community members.
- **Nantucket Planning Group**
  - The MDPH Suicide Prevention Program has taken a role in coordinating the DPH and DMH youth suicide prevention activities on the Island.
- **Police/Fire Department Training**
  - Dr. Barry Feldman provided a full day of training (on Island) to the police department and will do the same for fire personnel.
- **S.O.S. Implementation**
  - Dr. Larry Berkowitz and his staff from Riverside Community Care assisted the high school to implement the Signs of Suicide Prevention Program in all grades.

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# DPH Suicide Prevention Efforts in Nantucket

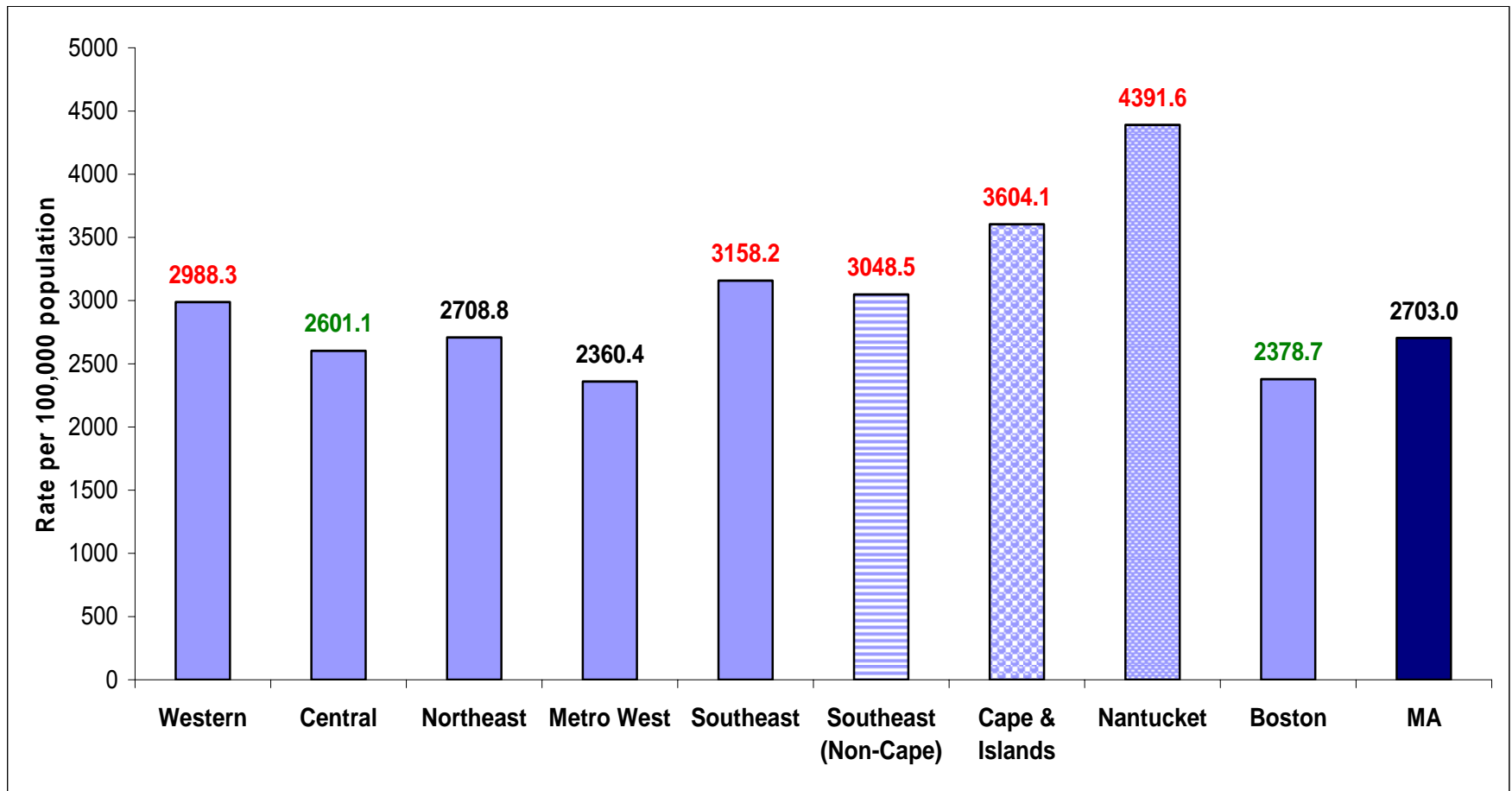
- **Training of Survivor Support Group Leaders**
    - Support will be provided for 2 Nantucket residents (plus travel expenses) to attend the American Foundation for Suicide Prevention Facilitator Training.
  - **Bibliography of Readings for Survivors**
    - The Program will assist the Community Organizer to develop a reading list of books and articles and will purchase the materials for the Library.
  - **Resource Information Packet**
    - The Program will assist the Community Organizer to develop and distribute a Resource Directory of services accessible to residents for mental health and substance abuse and support services.
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# DPH Suicide Prevention Efforts in Nantucket

- **Full time mental health counselor in the high school**
  - The Nantucket Behavioral Health Center has been given \$70,000 (annualized) to support a full time social worker at the high school through an Interagency Service Agreement with DMH
- **Assessing and Managing Suicide Risk**
  - The school social worker participated in this full day, nationally recognized training for mental health clinicians conducted by Dr. Barry Feldman.
- **Cape and Islands Community Health Network Grant**
  - Though funding obtained by the DPH Suicide Prevention Program, the Cape & Islands CHNA received a grant of \$100,000 per year for 3 years to develop and implement a youth suicide prevention project.

# Emergency Department Visit Rates for Fall-related Injuries by EOHHS Region, Massachusetts, 2005-2007



Rate significantly higher than statewide rate

Rate significantly lower than statewide rate

# Emergency Department Injury/Violence Indicators Southeast Region, Cape & Islands, Nantucket, and Massachusetts, 2005-2007

Indicator (Rate per 100,000)	MA Total	Southeast	Southeast (excluding Cape & Islands)	Cape & Islands	Nantucket
ED Visit Rate for all Injuries	10,990.4	13,486.9	13,278.8	14,333.8	23,130.3
ED Visit Rate for Traumatic Brain Injuries	674.3	711.7	678.2	848.0	567.9
ED Visit Rate for Firearm-related Injuries	6.6	7.7	9.0	2.6	**
ED Visit Rate for Fall- related Injuries	2,703.0	3,158.2	3,048.5	3,604.1	4,391.6

Rate significantly higher than statewide rate

Rate significantly lower than statewide rate

\*\* N<5; Rate not calculated

# Summary HIV/AIDS Indicators Southeast Region, Cape & Islands and Massachusetts

Indicator Crude rate, per 100,000	MA Total	Southeast	Cape & Islands
Persons living with HIV (2005)	247.1	170.9	235.9
HIV Incidence(2006)	11.7	9.0	13.5
Persons living with AIDS (2005)	133.2	95.2	124.9
AIDS Incidence (2005)	8.0	6.3	7.1
HIV/AIDS Mortality (2003-2007)	2.8	2.2	1.7

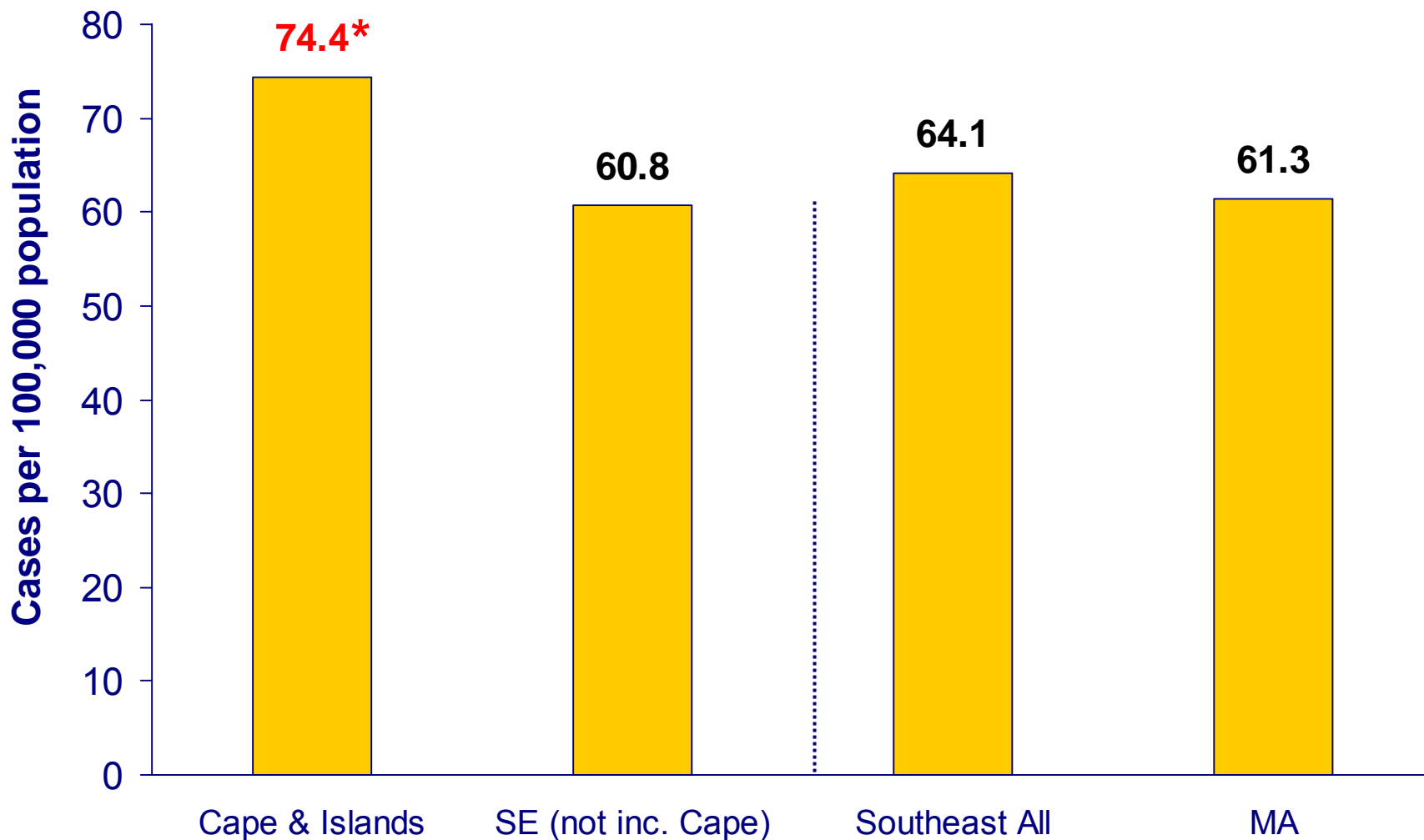


Better Outcome (significantly different from state)



Worse Outcome (significantly different from state)

# Confirmed Lyme Disease Incidence Cases, Southeast, Cape & Islands, and Massachusetts: 2008



Statistically different from State ( $p \leq .05$ ) Red (\*) = Statistically worse; Green (\*\*) = Statistically better

Note: 2000 Census Counts are used to calculate crude rates

Source: MDPH Bureau of Infectious Disease Prevention, Response and Services, ISIS

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# Summary-Cape & Islands

In general, the Cape & Islands is a relatively healthy place to live:

- ❑ Birth indicators are better than state averages
  - ❑ Heart disease and diabetes mortality are low
  - ❑ Homicides, firearm, STDs are lower than state averages
  - Some indicators are higher than state averages:
    - ❑ Breast and prostate cancer
    - ❑ Motor vehicle deaths
    - ❑ Suicides
    - ❑ Lyme Disease
    - ❑ Asthma for children ages 10-14 years
    - ❑ Substance abuse treatment program admission rates and opiate related ER visits
  - Socio-demographic differences affect health status:
    - ❑ Older, more affluent population
    - ❑ Mostly white non-Hispanics
    - ❑ Majority speak only English
  - We need to examine local variation and subgroups in the population to get a more complete picture of the health of the Cape & Islands region
  - These are resident data and do not reflect the impact of visitors on the Cape & Islands
-