

Racial and Ethnic Health Disparities by EOHHS Regions in Massachusetts



Deval L. Patrick, Governor
Timothy P. Murray, Lieutenant Governor
JudyAnn Bigby, MD, Secretary of Health and Human Services
John Auerbach, Commissioner, Department of Public Health

Jerry O'Keefe, Bureau Director
Bureau of Health Information, Statistics, Research, and Evaluation
Bruce Cohen, Director
Division of Research and Epidemiology

Massachusetts Department of Public Health

November 2007

ACKNOWLEDGEMENTS

This report was prepared by Isabel Cáceres, MMath, Malena Orejuela-Hood, MPH, and James K. West, PhD of the Division of Research and Epidemiology, Bureau of Health Information, Statistics, Research, and Evaluation.

Special thanks go to Bruce Cohen, PhD, Director of the Division of Research and Epidemiology, Bureau of Health Information, Statistics, Research, and Evaluation, and Jerry O'Keefe, Bureau Director, Bureau of Health Information, Statistics, Research, and Evaluation, and to all of the DPH Bureaus who have contributed to this report.

To obtain additional copies of this report, contact:

Massachusetts Department of Public Health
Health Information, Statistics, Research and Evaluation Bureau
250 Washington Street, 6th Floor
Boston, MA 02108

This and other Department of Public Health publications can be downloaded from the following website:

<http://www.mass.gov/dph/resep>

To obtain more information on the health of Massachusetts and other Department of Public Health data:

Register for the Department's free, Internet-based public health information service, MassCHIP, via the website at:

<http://masschip.state.ma.us>

Or call 888-MAS-CHIP (toll free in MA) or 617-624-5629



The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
250 Washington Street, Boston, MA 02108-4619

DEVAL L. PATRICK
GOVERNOR

TIMOTHY P. MURRAY
LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD
SECRETARY

JOHN AUERBACH
COMMISSIONER

Dear Massachusetts Residents,

Throughout the United States, people of color generally suffer poorer health than whites. We see persistent patterns of increased hospitalization, disability, and premature death among African Americans, Asians, Latinos, and other groups across a broad spectrum of diseases and conditions. These include diabetes, asthma, cancer, HIV/AIDS, cardiovascular disease, and infant mortality.

In Massachusetts, eliminating racial and ethnic health disparities is one of the top priorities of the Patrick-Murray administration. As part of this effort, the Executive Office of Health and Human Services and the Massachusetts Department of Public Health present the administration's first report on **Racial and Ethnic Health Disparities in Massachusetts**. Data in the report show differences in health status among racial and ethnic groups across Massachusetts. The report will serve as a baseline against which we will measure progress in reducing health disparities as we implement programs and initiatives to address the root causes of disparities.

We hope that this report will be useful to Massachusetts residents, healthcare providers, policy makers and other organizations committed to health equity. We welcome suggestions about how to strengthen public and private cooperation to insure that all residents of the Commonwealth have equal opportunities to ensure that they live healthy and productive lives.

Sincerely,

Handwritten signature of JudyAnn Bigby, MD.

JudyAnn Bigby, MD
Secretary
Executive Office of Health and Human Services

Handwritten signature of John Auerbach.

John Auerbach
Commissioner
Department of Public Health

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
TECHNICAL INTRODUCTION	18
 I. WESTERN REGION	 24
 SOCIODEMOGRAPHIC INDICATORS AND HEALTH CARE ACCESS AND STATUS	 26
2005 Population in Communities, Western Region:2005	28
Race and Ethnic Breakdown of Population, Western Region and Massachusetts: 2005....	28
Race and Ethnic Breakdown of Population, Largest Communities, Western Region and Massachusetts: 2005.....	29
Population by Age Group, Western Region and Massachusetts: 2005.....	29
Population by Age Group, Largest Communities, Western Region and Massachusetts: 2005.....	30
Language Spoken at Home, Largest Cities, Western Region and Massachusetts:2000	30
Language Spoken at Home, Western Region, Berkshires, and Massachusetts: 2000	31
Socio-Demographic Indicators Western Region and Massachusetts: 2000.....	31
Socio-Demographic Indicators Largest Cities, Western Region and Massachusetts.....	32
Adults who Have No Health Insurance by Race and Ethnicity, Western Region and Massachusetts: 2005.....	32
Adults who Reported Fair or Poor Health by Race and Ethnicity, Western Region and Massachusetts: 2005.....	33
 BIRTH INDICATORS	 34
Infant Mortality Rates by Race and Ethnicity, Western Region and Massachusetts: 2002- 2005.....	36
Infant Mortality Rates by Race/Ethnicity, Springfield and Massachusetts: 2002-2005.....	36
Low Birthweight by Race and Ethnicity, Western Region and Massachusetts:2005.....	37
Breastfeeding by Race and Ethnicity, Western Region and Massachusetts: 2005.....	37
Teen Birth Rates by Race/Ethnicity, Western Region and Massachusetts: 2005	38
Teen Birth Rates by Race/Ethnicity, Berkshires and Massachusetts: 2005.....	38
 CHRONIC DISEASE OUTCOMES AND OVERWEIGHT/OBESITY	 40
Adults who are Overweight by Race and Ethnicity, Western Region and Massachusetts: 2005.....	42
Hypertension Hospital Discharge Rates by Race/Ethnicity, Western Region, Massachusetts: 2003-2005	42
Heart Disease Death Rates by Race/Ethnicity, Western Region and Massachusetts: 2003- 2005.....	43
Diabetes Hospital Discharge Rates by Race/Ethnicity, Western Region, Massachusetts: 2003-2005	43
Diabetes Hospital Discharge Rates by Race/Ethnicity, Berkshires, Pittsfield, & Massachusetts: 2003-2005	44
Diabetes Death Rates by Race and Ethnicity, Western Region and Massachusetts: 2003- 2005.....	44

CANCER.....	46
Women who had a Clinical Breast Exam in the Past Two Years by Race and Ethnicity, Western Region and Massachusetts : 2004	48
Current Smoker by Race and Ethnicity, Western Region and Massachusetts: 2005.....	48
Smoking During Pregnancy by Race and Ethnicity, Berkshires, Western Region and Massachusetts: 2005.....	49
 SUBSTANCE ABUSE	 50
Substance Abuse Treatment Program Admissions, Alcohol Primary Substance, by Race and Ethnicity, Berkshires and Massachusetts : 2005	52
Opioid-related Emergency Visit Rates by Race and Ethnicity Western Region, Massachusetts : 2003-2005	52
Opioid-Related Fatal Overdoses by Race/Ethnicity, Western Region and Massachusetts: 2003-2005	53
 INJURY AND VIOLENCE	 54
Injury-Related Hospital Discharge Rates by Race and Ethnicity, Western Region and Massachusetts: 2003-2005	56
Emergency Department Visit Rates for Injuries & Poisonings by Race/Ethnicity, Western Region and Massachusetts : 2003-2005	56
Injury Death Rates by Race/Ethnicity, Western Region and Massachusetts: 2003-2005 ..	57
Emergency Department Visit Rates for Firearm Injuries by Race/Ethnicity, Western Region and Massachusetts: 2003-2005	57
Firearm Death Rates by Race and Ethnicity, Western Region and Massachusetts: 2003-2005.....	58
Homicide Rates by Race/Ethnicity, Western Region and Massachusetts: 2003-2005.....	58
Hospital Discharge Rates for Assaults by Race/Ethnicity, Western Region and Massachusetts: 2003-2005	59
Hospital Discharge Rates for Self-Inflicted Injuries by Race/Ethnicity, Western Region and Massachusetts: 2003-2005	59
Suicide Rates by Race and Ethnicity, Western Region and Massachusetts: 2003-2005....	60
Hospital Discharge Rates for Traumatic Brain Injury by Race/Ethnicity, Western Region and Massachusetts : 2003-2005	60
Emergency Department Visit Rates for Traumatic Brain Injury by Race/Ethnicity, Western Region and Massachusetts : 2003-2005	61
Hospital Discharge Rates for Motor Vehicle-Related Injuries by Race/Ethnicity, Western Region, Berkshires and Massachusetts: 2003-2005	61
Hospital Discharge Rates for Fall-Related Injuries by Race/Ethnicity, Western Region and Massachusetts: 2005.....	62
Emergency Department Visit Rates for Fall-Related Injuries by Race/Ethnicity, Western Region and Massachusetts : 2003-2005	62
Fall-Related Injury Death Rates by Race/Ethnicity, Western Region and Massachusetts: 2003-2005	63
 HIV/AIDS.....	 64
HIV/AIDS Death Rates by Race and Ethnicity, Western Region and Massachusetts: 2003 - 2005.....	66

ASTHMA.....	68
Emergency Department Visit Rates for Asthma by Race/Ethnicity, Western Region and Massachusetts: 2005.....	70
Asthma ER Visits, Children Ages 0-14, Rates by Race and Ethnicity, Western Region and Massachusetts: 2005.....	70
Asthma ER Visits, Children Ages 0-14, Rates by Race and Ethnicity, Berkshires and Massachusetts: 2005.....	71
PREMATURE MORTALITY.....	72
Premature Mortality Rate (PMR)	74
PMR by Race/Ethnicity, Western Region and Massachusetts: 2003-2005.....	74
II. CENTRAL REGION	76
SOCIODEMOGRAPHIC INDICATORS AND HEALTH CARE ACCESS AND STATUS	78
Population in Towns in Central Region: 2005	80
Race and Ethnic Breakdown of Population, Central Region and Massachusetts: 2005	80
Race and Ethnic Breakdown of Population, Worcester and Massachusetts: 2005	81
Population by Age Group, Central Region and Massachusetts: 2005.....	81
Language Spoken at Home, Central Region and Massachusetts: 2000	82
Socio-Demographic Indicators, Central Region and Massachusetts: 2000.....	82
Adults who Have No Health Insurance by Race and Ethnicity, Central Region and Massachusetts: 2005.....	83
Adults who Reported Fair or Poor Health by Race and Ethnicity, Central Region and Massachusetts : 2005.....	83
BIRTH INDICATORS.....	84
Infant Mortality Rate by Race/Ethnicity, Central Region and Massachusetts: 2002-2005...	86
Infant Mortality Rates by Race and Ethnicity, Worcester: 1990-2005	86
Low birthweight by Race and Ethnicity, Central Region and Massachusetts: 2005	87
Breastfeeding by Race and Ethnicity, Central Region and Massachusetts: 2005.....	87
Teen Birth Rates by Race and Ethnicity, Central Region and Massachusetts: 2005	88
CHRONIC DISEASE OUTCOMES AND OVERWEIGHT/OBESITY	90
Obesity by Race and Ethnicity, Central Region and Massachusetts: 2005.....	92
Hypertension Hospital Discharge Rates by Race and Ethnicity, Central Region, Massachusetts: 2003-2005	92
Heart Disease Death Rates by Race/Ethnicity, Central Region and Massachusetts: 2003-2005.....	93
Diabetes Hospital Discharge Rates by Race/Ethnicity, Central Region, Massachusetts: 2003-2005	93
Diabetes Mortality Rates by Race/Ethnicity, Central Region and Massachusetts : 2003-2005.....	94

CANCER	96
Women who had a Clinical Breast Exam in the Past Two Years by Race and Ethnicity, Central Region and Massachusetts : 2004.....	98
Smoking During Pregnancy by Race/Ethnicity, Central Region and Massachusetts: 2005..	98
SUBSTANCE ABUSE	100
Opioid-related Emergency Department Visit Rate by Race/Ethnicity, Central Region and Massachusetts : 2003-2005	102
Opioid-related Fatal Overdoses by Race/Ethnicity, Central Region and Massachusetts : 2003-2005	102
INJURY AND VIOLENCE	104
Injury-related Hospital Discharge Rates by Race and Ethnicity, Central Region and Massachusetts: 2003-2005	106
Emergency Department Visit Rates for Injuries & Poisonings by Race and Ethnicity, Central Region and Massachusetts : 2003-2005	106
Hospital Discharge Rates for Traumatic Brain Injury by Race and Ethnicity, Central Region and Massachusetts : 2003-2005	107
Emergency Department Visit Rates for Traumatic Brain Injury by Race and Ethnicity, Central Region and Massachusetts : 2003-2005	107
Hospital Discharge Rates for Assaults by Race and Ethnicity, Central Region and Massachusetts : 2003-2005	108
Homicide Rates by Race/Ethnicity, Central Region and Massachusetts : 2003-2005	108
Hospital Discharge Rates for Self-Inflicted Injuries by Race/Ethnicity, Central Region and Massachusetts: 2003-2005	109
Suicide Rates by Race/Ethnicity, Central Region and Massachusetts: 2003-2005.....	109
Hospital Discharge Rates for Motor Vehicle-related Injuries by Race/Ethnicity, Central Region and Massachusetts: 2003-2005	110
Motor Vehicle-related Death Rates by Race/Ethnicity, Central Region and Massachusetts: 2003-2005	110
Emergency Department Visit Rates for Firearm Injuries by Race/Ethnicity, Central Region and Massachusetts: 2003-2005	111
Firearm Death Rates by Race and Ethnicity, Central Region and Massachusetts: 2003-2005.....	111
Hospital Rates for Fall-related Injuries by Race/Ethnicity, Central Region and Massachusetts : 2005.....	112
Emergency Department Visit Rates for Fall-related Injuries by Race/Ethnicity, Central Region and Massachusetts : 2003-2005	112
Fall-related Injury Mortality Rates by Race/Ethnicity, Central Region and Massachusetts : 2003-2005	113
HIV/AIDS	114
HIV/AIDS Death Rates by Race and Ethnicity, Central Region and Massachusetts: 2003 - 2005.....	116
ASTHMA	118
Emergency Department Visit Rates for Asthma by Race/Ethnicity, Central Region and Massachusetts: 2005.....	120
Asthma ER Visits, Children Ages 0-14, by Race/Ethnicity, Central Region and Massachusetts: 2005.....	120

PREMATURE MORTALITY.....	122
Premature Mortality Rate (PMR)	124
PMR by Race/Ethnicity, Central Region and Massachusetts: 2003-2005.....	124
 III. NORTHEAST REGION.....	 126
 SOCIODEMOGRAPHIC INDICATORS AND HEALTH CARE ACCESS AND STATUS	 128
Population in Communities, Northeast Region: 2005.....	130
Race and Ethnic Breakdown of Population, Northeast Region and Massachusetts:2005	130
Race and Ethnic Breakdown of Population, Lowell, Lawrence, and Lynn: 2005.....	131
Population by Age Group, Northeast Region and Massachusetts: 2005.....	131
Language Spoken at Home, Northeast Region and Massachusetts: 2000.....	132
Socio-Demographic Indicators Northeast Region and Massachusetts: 2000.....	132
Adults who Have No Health Insurance by Race and Ethnicity, Northeast Region and Massachusetts: 2005.....	133
Adults who Reported Fair or Poor Health by Race and Ethnicity, Northeast Region and Massachusetts : 2005.....	133
 BIRTH INDICATORS.....	 134
Infant Mortality Rates by Race and Ethnicity, Northeast Region and Massachusetts: 2003- 2005.....	136
Low birthweight by Race and Ethnicity, Northeast Region and Massachusetts: 2005.....	136
Breastfeeding by Race and Ethnicity, Northeast Region and Massachusetts: 2005.....	137
Teen Birth Rates by Race and Ethnicity, Northeast Region and Massachusetts: 2005....	137
 CHRONIC DISEASE OUTCOMES AND OVERWEIGHT/OBESITY	 138
Overweight by Race and Ethnicity, Northeast Region and Massachusetts: 2005.....	140
Obesity by Race and Ethnicity, Northeast Region and Massachusetts: 2005.....	140
Hypertension Hospital Discharge Rates by Race/Ethnicity, Northeast Region, Massachusetts: 2003-2005	141
Heart Disease Death Rates by Race/Ethnicity, Northeast Region and Massachusetts : 2003-2005	141
Diabetes Hospital Discharge Rates by Race/Ethnicity, Northeast Region, Massachusetts: 2003-2005	142
Diabetes Mortality Rates by Race/Ethnicity, Northeast Region and Massachusetts : 2003- 2005.....	142
 CANCER.....	 144
Women who had a Clinical Breast Exam in the Past Two Years by Race and Ethnicity, Northeast Region and Massachusetts : 2004.....	146
Current Smoker by Race and Ethnicity, Northeast Region and Massachusetts: 2005.....	146
Smoking During Pregnancy by Race and Ethnicity, Northeast Region and Massachusetts: 2005.....	147
Lung Cancer Incidence Rates by Race and Ethnicity, Northeast Region, Massachusetts : 1999-2003	147

Lung Cancer Mortality Rates by Race and Ethnicity, Northeast Region, Massachusetts : 1999-2003	148
SUBSTANCE ABUSE	150
Opioid-related Emergency Department Visit Rate by Race/Ethnicity, Northeast Region and Massachusetts : 2003-2005	152
Opioid-related Emergency Department Visit Rate by Race/Ethnicity, Lawrence, Lowell, Lynn, and Massachusetts : 2003-2005.....	152
Opioid-Related Fatal Overdoses by Race/Ethnicity, Northeast Region and Massachusetts: 2003-2005	153
INJURY AND VIOLENCE	154
Injury-Related Hospital Discharge Rates by Race and Ethnicity, Northeast Region and Massachusetts: 2003-2005	156
Emergency Department Visit Rates for Injuries & Poisonings by Race/Ethnicity, Northeast Region and Massachusetts : 2003-2005	156
Hospital Discharge Rates for Assaults by Race/Ethnicity, Northeast Region and Massachusetts : 2003-2005	157
Homicide Rates by Race/Ethnicity, Northeast Region and Massachusetts : 2003-2005 ..	157
Hospital Discharge Rates for Self-Inflicted Injuries by Race and Ethnicity, Northeast Region and Massachusetts: 2003-2005	158
Suicide Rates by Race/Ethnicity, Northeast Region and Massachusetts: 2003-2005.....	158
Hospital Discharge Rates for Motor Vehicle-Related Injuries by Race/Ethnicity, Northeast Region and Massachusetts: 2003-2005	159
Motor Vehicle-related Death Rates by Race/Ethnicity, Northeast Region and Massachusetts: 2003-2005	159
Hospital Discharge Rates for Traumatic Brain Injury by Race/Ethnicity, Northeast Region and Massachusetts : 2003-2005	160
Emergency Department Visit Rates for Traumatic Brain Injury by Race/Ethnicity, Northeast Region and Massachusetts : 2003-2005	160
Emergency Department Visit Rates for Firearm Injuries by Race/Ethnicity, Northeast Region and Massachusetts: 2003-2005	161
Firearm Death Rates by Race and Ethnicity, Northeast Region and Massachusetts: 2003- 2005.....	161
Hospital Rates for Fall-Related Injuries by Race/Ethnicity, Northeast Region and Massachusetts : 2005.....	162
Emergency Department Visit Rates for Fall-Related Injuries by Race/Ethnicity, Northeast Region and Massachusetts : 2003-2005	162
Fall-Related Injury Mortality Rates by Race/Ethnicity, Northeast Region and Massachusetts : 2003-2005	163
HIV/AIDS.....	164
HIV/AIDS Death Rates by Race/Ethnicity, Northeast Region vs. Massachusetts: 2003 - 2005.....	166
ASTHMA.....	168
Emergency Department Visit Rates for Asthma by Race/Ethnicity, Northeast Region and Massachusetts: 2005.....	170

Asthma ER Visits, Children Ages 0-14, by Race/Ethnicity, Northeast Region and Massachusetts: 2005.....	170
PREMATURE MORTALITY.....	172
Premature Mortality Rate (PMR)	174
PMR by Race/Ethnicity, Northeast Region and Massachusetts: 2003-2005.....	174
IV. METROWEST REGION	176
SOCIODEMOGRAPHIC INDICATORS AND HEALTH CARE ACCESS AND STATUS	178
Population in Communities, Metrowest Region: 2005.....	180
Race and Ethnic Breakdown of Population, Metrowest and Massachusetts: 2005.....	180
Race and Ethnic Breakdown of Population, Cambridge and Quincy: 2005.....	181
Race and Ethnic Breakdown of Population, Somerville and Framingham: 2005	181
Population by Age Group, Metrowest Region and Massachusetts: 2005.....	182
Language Spoken at Home, Metrowest Region and Massachusetts: 2000	182
Socio-Demographic Indicators Metrowest Region and Massachusetts: 2000.....	183
Adults who Have No Health Insurance by Race and Ethnicity, Metrowest Region and Massachusetts: 2005.....	183
Adults who Reported Fair or Poor Health by Race and Ethnicity, Metrowest Region and Massachusetts : 2005.....	184
BIRTH INDICATORS.....	186
Infant Mortality Rates by Race and Ethnicity, Metrowest Region and Massachusetts: 2002-2005.....	188
Teen Birth Rates by Race and Ethnicity, Metrowest Region and Massachusetts: 2005... ..	188
Percent of Cesarean Deliveries by Race and Ethnicity, Metrowest Region, Massachusetts: 2005.....	189
CHRONIC DISEASE OUTCOMES AND OVERWEIGHT/OBESITY	190
Overweight by Race and Ethnicity, Metrowest Region and Massachusetts: 2005.....	192
Hypertension Hospital Discharge Rate by Race/Ethnicity, Metrowest Region, Massachusetts: 2003-2005	192
Heart Disease Death Rates by Race/Ethnicity, Metrowest Region and Massachusetts : 2003-2005	193
Diabetes Hospital Discharges by Race/Ethnicity Metrowest Region and Massachusetts: 2003-2005	193
Diabetes Mortality Rates by Race/Ethnicity Metrowest Region and Massachusetts: 2003-2005.....	194
CANCER.....	196
Incidence Rates for Non-Invasive Female Breast Cancer by Race and Ethnicity, Metrowest Region, Massachusetts : 1999-2003	198
Incidence Rates for Invasive Female Breast Cancer by Race and Ethnicity, Metrowest Region, Massachusetts : 1999-2003	198
Female Breast Cancer Mortality Rates by Race and Ethnicity, Metrowest Region, Massachusetts: 2001-2005	199
Current Smoker by Race and Ethnicity, Metrowest Region and Massachusetts: 2005.....	199

Smoking During Pregnancy by Race and Ethnicity, Metrowest Region and Massachusetts: 2005.....	200
Lung Cancer Mortality Rates by Race and Ethnicity, Metrowest Region and Massachusetts: 2001-2005	200
SUBSTANCE ABUSE	202
Opioid-related Emergency Department Visit Rates by Race and Ethnicity Metrowest Region, Massachusetts : 2003-2005	204
Opioid-related Emergency Department Visit Rates by Race and Ethnicity Quincy, Randolph, and Somerville vs. Massachusetts : 2003-2005.....	204
INJURY AND VIOLENCE	206
Injury-Related Hospital Discharge Rates by Race and Ethnicity, Metrowest Region and Massachusetts: 2003-2005	208
Emergency Department Visit Rates for Injuries & Poisonings by Race/Ethnicity, Metrowest Region and Massachusetts : 2003-2005	208
Hospital Discharge Rates for Traumatic Brain Injury by Race/Ethnicity, Metrowest Region and Massachusetts : 2003-2005	209
Emergency Department Visit Rates for Traumatic Brain Injury by Race/Ethnicity, Metrowest Region and Massachusetts : 2003-2005	209
Hospital Discharge Rates for Assaults by Race/Ethnicity, Metrowest Region and Massachusetts: 2003-2005	210
Homicide Rates by Race/Ethnicity, Metrowest Region and Massachusetts : 2003-2005 ..	210
Hospital Discharge Rates for Self-Inflicted Injuries by Race/Ethnicity, Metrowest Region and Massachusetts: 2003-2005	211
Suicide Rates by Race/Ethnicity, Metrowest Region and Massachusetts: 2003-2005.....	211
Hospital Discharge Rates for Motor Vehicle-Related Injuries by Race/Ethnicity, Metrowest Region and Massachusetts: 2003-2005	212
Motor Vehicle-related Death Rates by Race/Ethnicity, Metrowest Region and Massachusetts: 2003-2005	212
Emergency Department Visit Rates for Firearm Injuries by Race/Ethnicity, Metrowest Region and Massachusetts: 2003-2005	213
Firearm Death Rates by Race and Ethnicity, Metrowest Region and Massachusetts: 2003-2005.....	213
Hospital Discharge Rates for Fall-Related Injuries Ages 65+ by Race/Ethnicity, Metrowest Region and Massachusetts : 2003-2005	214
Hospital Discharge Rates for Fall-Related Injuries by Race/Ethnicity, Metrowest Region and Massachusetts : 2003-2005	214
Emergency Department Visit Rates for Fall-Related Injuries by Race/Ethnicity, Metrowest Region and Massachusetts : 2003-2005	215
HIV/AIDS.....	216
Persons Living with HIV by Race and Ethnicity, Metrowest Region and Massachusetts: 2005.....	218
HIV/AIDS Death Rates by Race and Ethnicity, Metrowest Region and Massachusetts: 2003 - 2005	218
ASTHMA.....	220
Emergency Department Visit Rates for Asthma by Race/Ethnicity, Metrowest Region and Massachusetts: 2005.....	222

PREMATURE MORTALITY.....	224
Premature Mortality Rate (PMR)	226
PMR by Race/Ethnicity, Metrowest Region and Massachusetts: 2003-2005.....	226
 V. SOUTHEAST REGION.....	 228
 SOCIODEMOGRAPHIC INDICATORS AND HEALTH CARE ACCESS AND STATUS	 230
2005 Population in Communities, Southeast Region: 2005	232
Race and Ethnic Breakdown of Population, Southeast and Massachusetts: 2005	232
Race and Ethnic Proportions the Largest Cities in Southeast Region: 2005.....	233
Race and Ethnic Breakdown of Population, Cape & Islands and Massachusetts: 2005 ..	233
Cities with the Largest American Indian Population, Massachusetts: Census 2000	234
Race/Ethnicity in the Largest Cities, Southeast and Massachusetts: 2005.....	234
Population by Age Group, Cape & Islands and Massachusetts: 2005	235
Language Spoken at Home, Southeast Region and Massachusetts: 2000	235
Socio-Demographic Indicators, Southeast Region and Massachusetts: 2000	236
Adults who Have No Health Insurance by Race and Ethnicity, Southeast Region and Massachusetts: 2005.....	236
Adults who Reported Fair or Poor Health by Race and Ethnicity, Southeast Region and Massachusetts : 2005.....	237
 BIRTH INDICATORS.....	 238
Birth by Race and Hispanic Ethnicity, Southeast Region and Massachusetts: 2005	240
Birth by Race and Hispanic Ethnicity, Cape & Islands and Massachusetts: 2005	240
Percent Distribution of Births by Ethnicity, Southeast and Massachusetts: 2005.....	241
Infant Mortality Rates by Race and Ethnicity, Southeast Region and Massachusetts: 2002- 2005.....	241
Low Birthweight by Race and Ethnicity, Southeast Region, Massachusetts: 2005	242
Teen Birth Rates by Race and Ethnicity, Southeast Region and Massachusetts: 2005 ...	242
 CHRONIC DISEASE OUTCOMES AND OVERWEIGHT/OBESITY	 244
Adult Obesity by Race and Ethnicity, Southeast Region and Massachusetts: 2005	246
Hypertension Hospital Discharge Rates by Race/Ethnicity, Southeast Region, Massachusetts: 2003-2005	246
Heart Disease Death Rates by Race/Ethnicity, Southeast Region and Massachusetts: 2003-2005	247
Diabetes Hospital Discharge Rates by Race/Ethnicity, Southeast Region, Massachusetts: 2003-2005	247
Diabetes Death Rates by Race and Ethnicity, Southeast Region and Massachusetts: 2003- 2005.....	248
 CANCER.....	 250
Women who had a Clinical Breast Exam in the Past Two Years by Race and Ethnicity, Southeast Region and Massachusetts : 2004	252
Current Smoker by Race and Ethnicity, Western Region and Massachusetts: 2005.....	252
Smoking During Pregnancy by Race and Ethnicity, Southeast Region and Massachusetts: 2005.....	253

Smoking During Pregnancy by Race and Ethnicity, Cape & Islands and Massachusetts: 2005.....	253
SUBSTANCE ABUSE	254
Opioid-related Emergency Department Visit Rate by Race/Ethnicity, Southeast Region and Massachusetts : 2003-2005	256
Opioid-Related Fatal Overdoses by Race/Ethnicity, Southeast Region and Massachusetts: 2003-2005	256
INJURY AND VIOLENCE	258
Injury-Related Hospital Discharge Rates by Race and Ethnicity, Southeast Region and Massachusetts: 2003-2005	260
Emergency Department Visit Rates for Injuries & Poisonings by Race/Ethnicity, Southeast Region and Massachusetts : 2003-2005	260
Injury Death Rates by Race and Ethnicity, Southeast Region and Massachusetts: 2003- 2005.....	260
Suicide Rates by Race/Ethnicity, Southeast Region and Massachusetts: 2003- 2005	261
Hospital Discharge Rates for Self-Inflicted Injuries by Race/Ethnicity, Southeast Region and Massachusetts: 2003-2005	261
Hospital Discharge Rates for Motor Vehicle-Related Injuries by Race/Ethnicity, Southeast Region and Massachusetts: 2003-2005	262
Motor Vehicle-related Death Rates by Race/Ethnicity, Southeast Region and Massachusetts: 2003-2005	262
Hospital Discharge Rates for Traumatic Brain Injury by Race/Ethnicity, Southeast Region and Massachusetts : 2003-2005	263
Emergency Department Visit Rates for Traumatic Brain Injury by Race/Ethnicity, Southeast Region and Massachusetts : 2003-2005	263
Hospital Discharge Rates for Fall-Related Injuries by Race/Ethnicity, Southeast Region and Massachusetts : 2005.....	264
Emergency Department Visit Rates for Fall-Related Injuries by Race/Ethnicity, Southeast Region and Massachusetts : 2003-2005	265
Emergency Department Visit Rates for Fall-Related Injuries by Race/Ethnicity, Cape & Islands and Massachusetts : 2003-2005	265
Fall-Related Injury Death Rates by Race/Ethnicity, Southeast Region and Massachusetts: 2003-2005	266
Homicide Rates by Race/Ethnicity, Southeast Region and Massachusetts: 2003-2005...	266
Emergency Department Visit Rates for Firearm Injuries by Race/Ethnicity, Southeast Region and Massachusetts: 2003-2005	267
Firearm Death Rates by Race and Ethnicity, Southeast Region and Massachusetts: 2003- 2005.....	267
Hospital Discharge Rates for Assaults by Race/Ethnicity, Southeast Region and Massachusetts: 2003-2005	268
HIV/AIDS.....	270
HIV/AIDS Death Rates by Race and Ethnicity, Southeast Region and Massachusetts: 2003 - 2005	272
ASTHMA.....	274
Emergency Department Visit Rates for Asthma by Race/Ethnicity, Southeast Region and Massachusetts: 2005.....	276

Asthma Emergency Department Visit Rates by Race and Ethnicity, Children ages 0-14, Southeast Region and Massachusetts : 2005	276
PREMATURE MORTALITY.....	278
Premature Mortality Rate (PMR)	280
PMR by Race/Ethnicity, Southeast Region and Massachusetts: 2003-2005	280
VI. BOSTON REGION	282
SOCIODEMOGRAPHIC INDICATORS AND HEALTH CARE ACCESS AND STATUS	284
Population in Cities of Boston Region: 2005	286
Race and Ethnic Breakdown of Population, Boston Region and Massachusetts: 2005....	286
Race and Ethnic Breakdown of Population, Cities in Boston Region and Massachusetts: 2005	287
Population by Age Group, Cities in Boston Region and Massachusetts: 2005	287
Language Spoken at Home, Cities in Boston Region and Massachusetts: 2000.....	288
Socio-Demographic Indicators Cities in Boston Region and Massachusetts: 2000	288
Adults who Have No Health Insurance by Race and Ethnicity Boston Region, Massachusetts: 1999-2005	289
Adults who Reported Fair or Poor Health by Race and Ethnicity, Boston Region and Massachusetts: 2005.....	289
BIRTH INDICATORS.....	290
Infant Mortality Rates by Race and Ethnicity, Boston Region and Massachusetts: 2003-2005.....	292
Teen Birth Rates by Race and Ethnicity, Boston Region and Massachusetts:2005	292
Teen Birth Rates by Race/Ethnicity, Cities in Boston Region and Massachusetts: 2005..	293
CHRONIC DISEASE OUTCOMES AND OVERWEIGHT/OBESITY	294
Adults who are Overweight by Race and Ethnicity, Boston Region: 2005	296
Hospital Discharge Rate for Hypertension by Race/Ethnicity, Boston Region, Massachusetts: 2003-2005	296
Heart Disease Death Rates by Race/Ethnicity, Boston Region and Massachusetts: 2003-2005.....	297
Diabetes Hospital Discharges by Race/Ethnicity, Boston Region and Massachusetts:2003-2005.....	297
Diabetes Mortality Rates by Race and Ethnicity Boston Region and Massachusetts: 2003-2005.....	298
CANCER.....	300
Women who had a Clinical Breast Exam in the Past Two Years by Race and Ethnicity, Boston Region and Massachusetts: 2004	302
Female Breast Cancer Mortality Rates by Race and Ethnicity, Boston Region, Massachusetts: 2001-2005	302
Current Smoker by Race and Ethnicity, Boston Region and Massachusetts: 2005.....	303
Smoking During Pregnancy by Race and Ethnicity, Boston Region and Massachusetts: 2005.....	303
Lung Cancer Mortality Rates by Race and Ethnicity, Boston Region and Massachusetts: 2001-2005	304

SUBSTANCE ABUSE	306
Opioid-related Emergency Department Visit Rates by Race and Ethnicity Boston Region, Massachusetts : 2003-2005	308
Opioid-Related Fatal Overdoses by Race/Ethnicity, Boston Region and Massachusetts: 2003-2005	308
INJURY AND VIOLENCE	310
Injury-Related Hospital Discharge Rates by Race and Ethnicity, Boston Region and Massachusetts: 2003-2005	312
Emergency Department Visit Rates for Injuries & Poisonings by Race/Ethnicity, Boston Region and Massachusetts : 2003-2005	312
Hospital Discharge Rates for Assaults by Race/Ethnicity, Boston Region and Massachusetts: 2003-2005	313
Homicide Rates by Race/Ethnicity, Boston Region and Massachusetts: 2003-2005.....	313
Hospital Discharge Rates for Self-Inflicted Injuries by Race/Ethnicity, Boston Region and Massachusetts: 2003-2005	314
Suicide Rates by Race/Ethnicity, Boston Region and Massachusetts: 2003-2005.....	314
Hospital Discharge Rates for Motor Vehicle-Related Injuries by Race/Ethnicity, Boston Region and Massachusetts: 2003-2005	315
Motor Vehicle-Related Death Rates by Race/Ethnicity, Boston Region and Massachusetts: 2003-2005	315
Emergency Department Visit Rates for Traumatic Brain Injury by Race/Ethnicity, Boston Region and Massachusetts : 2003-2005	316
Hospital Discharge Rates for Traumatic Brain Injury by Race/Ethnicity, Boston Region and Massachusetts : 2003-2005	316
Emergency Department Visit Rates for Firearm Injuries by Race/Ethnicity, Boston Region and Massachusetts: 2003-2005	317
Firearm Death Rates by Race/Ethnicity, Boston Region and Massachusetts 2003-2005.	317
Hospital Discharge Rates for Fall-Related Injuries by Race/Ethnicity, Boston Region and Massachusetts : 2003-2005	318
Emergency Department Visit Rates for Fall-Related Injuries by Race/Ethnicity, Boston Region and Massachusetts : 2003-2005	318
Fall-Related Injury Mortality Rates by Race/Ethnicity, Boston Region and Massachusetts: 2003-2005	319
HIV/AIDS.....	320
HIV/AIDS Death Rates by Race and Ethnicity, Boston Region and Massachusetts: 2003 - 2005.....	322
ASTHMA.....	324
Asthma Emergency Department Visit Rates by Race and Ethnicity, Children Ages 0-14, Boston Region and Massachusetts : 2005	326
PREMATURE MORTALITY.....	328
Premature Mortality Rate (PMR)	330
PMR by Race/Ethnicity, Southeast Region and Massachusetts: 2003-2005	330

APPENDIX.....	332
Glossary	334
Data Sources.....	337
Regions and Towns.....	341
Table A1. 2005 Massachusetts Population Estimates By Age Group, Gender, Race and Hispanic Ethnicity (mutually exclusive).....	349

EXECUTIVE SUMMARY

Massachusetts ranks among the best performing states in nation for many health indicators. Yet when we examine the diverse groups that make up the state's population, we find that some groups experience far worse health than the overall state average indicates. When we examine health status by income groups, education levels, gender, and geography, we find, for example:

- Only 10.5% of adults with an annual household income of \$75,000 or more reported smoking in 2005; whereas, 26.2% of those with an annual household income of less than \$25,000 reported smoking.
- The age-adjusted death rate for those with a high school education or less was 520.9 per 100,000 population -- 3 times higher than the rate of 172.2 for those with 13 years of education or more in 2005.
- Males were 2.3 times more likely to die from injury than females and 9.1 times more likely to die from a firearm injury in 2005.
- Among the 30 largest Massachusetts municipalities, Brockton (11.5%), Revere (10.9%), New Bedford (10.6%), Springfield (9.8%), and Boston (9.6%) recorded low birthweight percentages that were higher than the statewide average of 7.9%.

However, the greatest disparities in the health are those experienced by some racial and ethnic groups in the state. This report provides important data, which highlights disparities experienced by minority racial and ethnic groups for the state as a whole and for each EOHHS region.

Sociodemographic Indicators

Race and Ethnicity

The largest racial and ethnic group in Massachusetts is White Non-Hispanics, who are 81% of the population. The second largest group is Hispanic, 7.9%, followed by Black Non-Hispanics, 6%, Asian Non-Hispanics, 4.9%, and 0.2% American Indians.

The racial and ethnic group proportions vary by EOHHS region. The Southeast Region has almost 90% White Non-Hispanics; whereas, the Boston Region has 54% White Non-Hispanics.

- The Boston Region has the highest proportion of Hispanics at 16.6%, and the Southeast has the lowest at 3.4%.

- The Boston Region has the highest proportion of Black Non-Hispanics at 20.4%, and the Northeast has the lowest at 3.1%.
- The Boston Region has the highest proportion of Asian Non-Hispanics at 8.6%, and the Southeast has the lowest at 1.5%.
- The Southeast has the highest proportion of American Indian Non-Hispanics at 1/3 of 1%, and the Metrowest Region has the lowest at less than 2/10 of 1%.

Age

Almost half of Massachusetts' population is less than 35 years old. Forty-one percent are between the ages of 35 and 64, and 13.3% are ages 65 and older.

The Boston Region is the youngest region with 52.9% of the population below age 35, and the Southeast is the oldest region with 14.5% of its population ages 65 and older. In the state as a whole, the percent of persons below age 35 is 41.2, and the percentage of the population that is ages 65 and older is 13.3%.

Language

The proportion of the population who speak only English at home is 81.3%.

The Boston and Northeast Regions have significantly lower percentages of persons who speak only English at home than the state average (81.3%), while the other regions have significantly higher proportions than the state average.

Poverty

The state per capita income is \$25,952, which is higher than that of the U.S., which is \$21,587. The percent of persons living below 100% poverty in Massachusetts is 9.3% as compared with 12.4% for the U.S.

- Except for the Metro West Region, all regions have a lower per capita income than the state average (\$25,952).
- The percent of persons living 100% below poverty is significantly higher for the Boston and Southeast Regions than the state average (9.3%).

Health Care Access and Status

No Health Insurance: 2005

Overall, 9.0% of Massachusetts residents did not have health insurance. Hispanics have the highest percentage of no health insurance in the state for any race or ethnicity group at 24%, which is 2.7 times the state level.

- Hispanics in the Western, Northeast, Southeast, and Boston Regions had a significantly higher percentage of adults with no health insurance in 2005 (BRFSS, 2005) than the state average (9%).
- White Non-Hispanics in the Northeast and Metrowest Regions had significantly lower percentages of those with no health insurance than the state average.

Fair Poor Health

Overall, 13.0% of Massachusetts residents reported fair or poor health in 2005. Hispanics have the highest percentage of fair or poor health in 2005 in the state for any race or ethnicity group at 23%, which is 1.8 times the state level.

- Hispanics in all Regions except the Metrowest Region had significantly higher percentages of adults who reported fair or poor health in 2005 than the state average (13%) (BRFSS, 2005).
- White Non-Hispanics in the Metrowest Region had a significantly lower percentage of adults who reported fair or poor health in 2005 (BRFSS, 2005).

Birth Indicators

Overall, the infant mortality rate (IMR) for Massachusetts is 4.9 infant deaths per 1,000 live births. Black Non-Hispanics have the highest infant mortality rate followed by Hispanics. The Black Non-Hispanic IMR is 2.3 times that of the state, and the Hispanic IMR is 1.4 times that of the state.

The teen birth rate for Hispanics was 3.3 times that of the state in 2005 (73.2 vs. 21.7 per 1,000 women ages 15-19).

Black Non-Hispanic infants had the highest percentage of low birth weight (LBW) in the state for any race or ethnicity group at 12.0% in 2005.

- Black Non-Hispanics in all regions of the state have higher infant mortality rates (IMR) than the state overall. Black Non-Hispanics in the Central Region have the highest IMR in the state for any race and Hispanic ethnicity group for the period 2002-2005. The rate is almost 4 times that of the state average. (18.9 infant deaths per 1,000 live births; the state average is 4.9 infant deaths per 1,000 live births)
- Black Non-Hispanics in the Western, Northeast, and Southeast Regions have higher proportion of low birth weight infants than the state overall for the period of 2005. Black Non-Hispanics in the Western Region have the highest proportion of low birth weight infants for 2005. The rate is 1.5 times that of the state average. (12.2%; the state average is 7.9%)
- Hispanics in all regions of the state have higher teen birth rates than the state overall. Hispanics in the Western region have the highest teen birth rate in the state for any race and Hispanic ethnicity group. The rate is almost 5 times that of the state average. (108 teen births per 1,000 women 15-19 years of age; the state average is 22 teen births per 1,000 women 15-19 years of age)

Chronic Conditions

More than half of Massachusetts adults were overweight in 2005. Black Non-Hispanics had the highest percentage of overweight in the state for any race or ethnicity group at 68%.

Black Non-Hispanics, followed by Hispanics had the highest hypertension hospitalization rates in the state for any race or ethnicity group at 176 and 89 discharges per 100,000 population age-adjusted for 2003-2005.

Black Non-Hispanics, followed by Hispanics had the highest diabetes mortality rates in the state for any race or ethnicity group at 38 and 29 deaths per 100,000 population age-adjusted for 2003-2005.

Black Non-Hispanic, followed by Hispanic children ages 0 to 14 had the highest asthma emergency department visit rates in the state for any race or ethnicity group at 2,096 and 1,573 per 100,000 population ages 0 to 14 for 2005.

- Black Non-Hispanics and Hispanics in the Western Region have the highest proportion of overweight adults in the state. These proportions were 1.4 times and 1.3 times that of the state average, respectively (76% of Black Non-Hispanic adults and 70% of Hispanic adults in the Western region; the state average is 56%).

- Black Non-Hispanics and Hispanics in all regions have higher hospitalization rates for hypertension than the state overall for the period 2003-2005. Black Non-Hispanics in Boston have the highest rate in the state for any race and Hispanic ethnicity group. The rate is more than five times that of the state average. (207 hospitalizations per 100,000 population age-adjusted; the state average is 39 hospitalizations per 100,000)
- Hispanics in the Central Region have the highest diabetes mortality rate of all race and ethnicity groups in the region for the period 2003-2005. The rate is almost three times that of the state average. (49 deaths per 100,000 population age-adjusted; the state average is 18 deaths per 100,000)
- In the Northeast, Southeast, and Boston regions, Black Non-Hispanic children, ages 0 to 14, have higher emergency visit rates for asthma than the state overall. The highest emergency visit rate for asthma is in Boston with a rate almost 4 times that of the state average (3,111 emergency visits per 100,000 population ages 0 to 14, compared with the state average of 808 emergency visits per 100,000).

Substance Abuse

Hispanics had the highest opioid-related emergency department visit rates in the state for any race or ethnicity group at 237 per 100,000 compared with the state average of 181 visits per 100,000 visits for 2005.

- White Non-Hispanics in the Central, Northeast, Southeast, and Boston Regions have significantly higher opioid-related emergency visit rates than the state average, while White Non-Hispanics in the Metrowest and Western regions have significantly lower opioid-related emergency visit rates than the state average. (state average is 181 visits per 100,000 visits)
- White Non-Hispanics in the Northeast, Southeast, and Boston Regions have significantly higher opioid-related fatal overdose death rates than the state average, while White Non-Hispanics in the Western and Central regions have significantly lower opioid-related fatal overdose death rates than the state average. (state average is 8 deaths per 100,000 visits)

Injury/Violence

Black Non-Hispanics, followed by Hispanics had the highest firearm-related emergency department visit rates in the state for any race or ethnicity group at 36 and 19 visits per 100,000 visits for 2003-2005, which, for Black Non-Hispanics is 5.4 times the state average, and for Hispanics, it is 2.7 times the state average.

- Black Non-Hispanics and Hispanics in all regions of the state have higher firearm emergency department visit rates and death rates than the state overall. Black Non-Hispanics in the Western Region have the highest firearm-related emergency department visit rate for the period of 2003-2005. Black Non-Hispanics in the Boston Region have the highest firearm-related death rate for the period of 2003-2005.
- Black Non-Hispanics and Hispanics in all regions have higher assault hospital discharge rates than the state overall. White Non-Hispanics in the Boston region also have higher assault hospital discharge rates than the state overall. Black Non-Hispanics in the Boston Region have the highest assault hospital discharge rate for the period of 2003-2005.
- White Non-Hispanics in all regions except the Boston and Metro Region have higher fall-related emergency department visit rates than the state overall. Black Non-Hispanics and Hispanics in the Western Region also have higher fall-related emergency department visit rates than the state overall. White Non-Hispanics in the Boston Region have the highest fall-related emergency department visit rate for the period of 2003-2005.

HIV/AIDS

Black Non-Hispanics, followed by Hispanics had the highest HIV/AIDS mortality rates in the state for any race or ethnicity group at 16 and 13 deaths per 100,000 per 100,000 population age-adjusted for 2003-2005, which, for Black Non-Hispanics is 5.3 times the state average, and for Hispanics, it is 4.3 times the state average.

- Black Non-Hispanics and Hispanics in every region of the state have higher HIV/AIDS death rates than the state overall. Hispanics in the Western Region have the highest HIV/AIDS death rate for the period of 2003-2005.

TECHNICAL INTRODUCTION

Background: This report presents important health status indicators by race and Hispanic ethnicity for the six Executive Office of Health and Human Services (EOHHS) regions in the state of Massachusetts¹: (Region 1–Western; Region 2–Central; Region 3–Northeast; Region 4–Metrowest; Region 5–Southeast; Region 6–Boston). It also contains maps and socio-demographic indicators for the regions in order to provide a context for the health status indicators. The Massachusetts Department of Public Health is committed to ending disparities in health, and it is hoped that this report will serve as a resource for this purpose.

In this report, the Massachusetts Department of Public Health provides monitoring, surveillance, and reporting of the health status for broad race and Hispanic ethnicity groups in Massachusetts using the following five, mutually exclusive categories: White Non-Hispanic, Black Non-Hispanic, Asian Non-Hispanic, Native American Non-Hispanic, and Hispanic. (When the Department standard for collection of language and detailed ethnicity is fully implemented, more detailed variation in the health status for population subgroups will become available.) The Department currently collects race and Hispanic ethnicity data by self-report whenever possible. For example, the mother or parents of a newborn infant fill out a worksheet on which they specify race and Hispanic ethnicity for the birth certificate. Of course, for the death certificate, the race and Hispanic ethnicity of the decedent must be reported by an informant or obtained by observation.

Taken as a whole, the Massachusetts population according to 2005 Census Bureau estimates, is 81% White Non-Hispanic. The other race and Hispanic ethnicity group proportions are as follows: Black Non-Hispanic, 6%; Hispanic 7.9%; Asian Non-Hispanic, 4.9%; and Native American Non-Hispanic, less than 1% (0.02%). However, there are cities and towns in which the race and Hispanic ethnicity groups

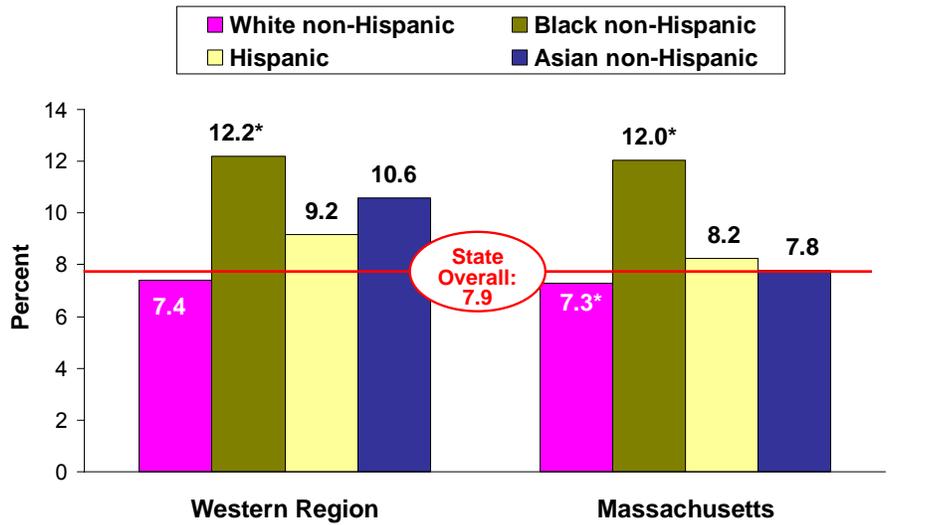
¹ Note that this is different from the Regional Reports in which the race and Hispanic ethnicity group's performance on each indicator was compared with that of the group at the state level.

have larger proportions of the population than they do in the state overall, and race and Hispanic ethnicity proportions in the six EOHHS regions differ from the state overall race and Hispanic ethnicity distribution.

Format: In this report, health status indicators for each of the six EOHHS regions, selected cities, and the state as a whole are stratified by race and Hispanic ethnicity. The race and Hispanic ethnicity group's performance on each indicator is compared with that of the state overall for all race groups, that is, the state average. On health indicator charts, two sets of race and Hispanic ethnicity groups are shown: the region's race and Hispanic ethnicity groups and the state's race and Hispanic ethnicity groups. For example, in Figure 1 below, the set of bars on the left represent the *region's* race and Hispanic ethnicity groups' performance on the low birthweight indicator. The set of bars on the right represents the *state's* race and ethnicity groups' low birthweight performance. The red line across the bars and the oval show the state average low birthweight (7.9%). Each race and ethnicity group is compared with the state average, and an asterisk indicates that there a statistically significant difference from the state average (that is, the difference cannot be attributed to chance alone). In the example, the region's Black Non-Hispanics have a higher proportion of low birthweight infants than the state average (12.2%). For the state, both White Non-Hispanics (7.3%) and Black Non-Hispanics (12.0%) differ from the state average. All other groups' low birthweight values do not differ significantly from the state average.

Figure 1: An Example of Health Status Indicator Charts

Low Birthweight by Race and Ethnicity Western Region and Massachusetts: 2005



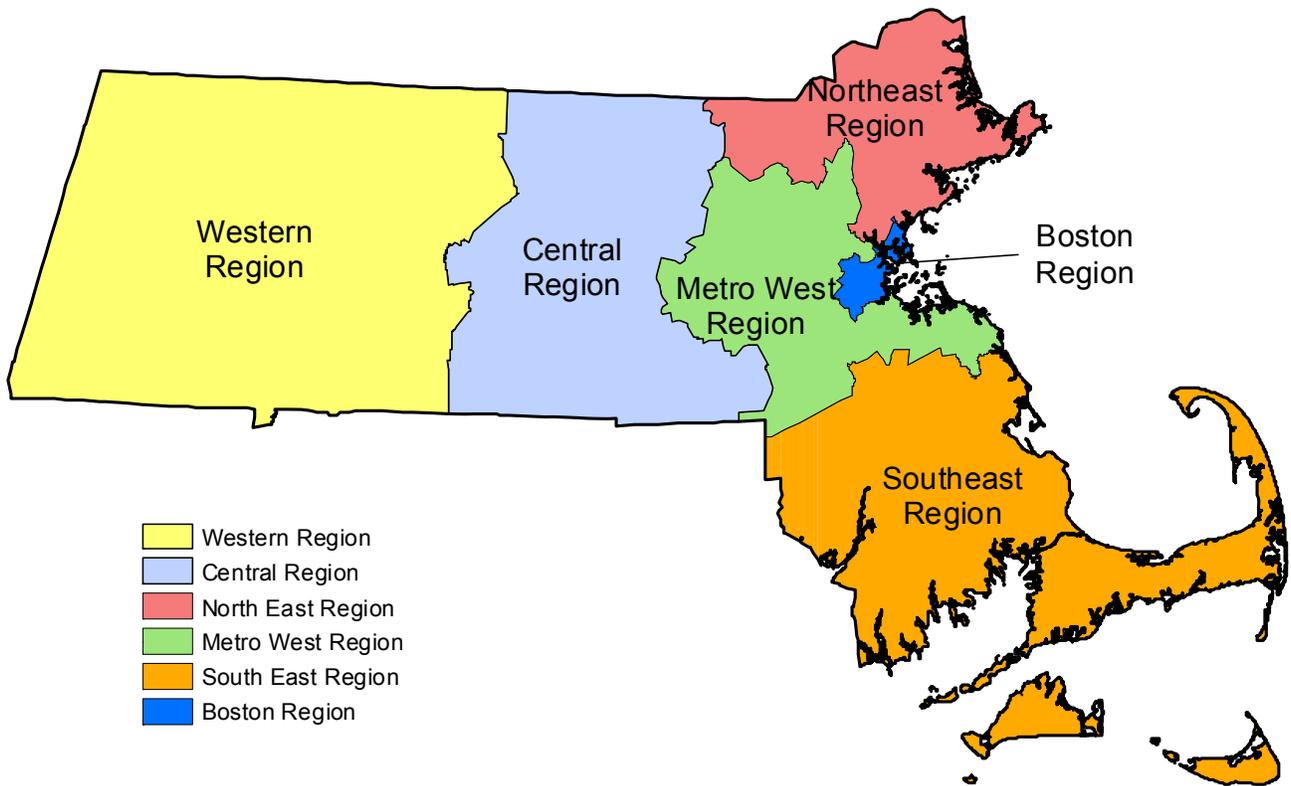
(*) Statistically different from State ($p \leq .05$)

Low birthweight: less than 2,500 grams or 5.5 pounds

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

When there are insufficient numbers of events for a race and Hispanic ethnicity group to enable a comparison, this group is marked as “N/A”, not available.

Executive Office of Health and Human Services Regions



I. WESTERN REGION

**SOCIODEMOGRAPHIC
INDICATORS
AND
HEALTH CARE ACCESS
AND STATUS**

Race and Ethnic Breakdown of Population Largest Communities, Western Region and Massachusetts: 2005

3

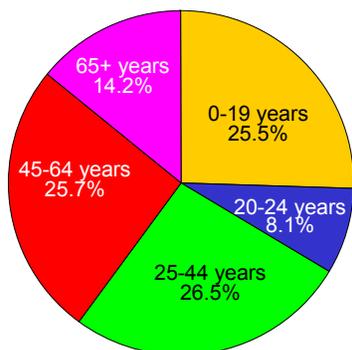
	Western Region	Chicopee	Holyoke	Springfield	Pittsfield	MA Total
White non-Hispanic	81.3%	86.3%	49.3 %	45.0 %	90.8%	81.0%
Black non-Hispanic	5.5%	2.2%	2.7 %	21.3 %	4.7%	6.0%
Hispanic	11.0%	10.1%	46.7 %	31.0 %	2.8%	7.9%
Asian non-Hispanic	2.0%	1.2 %	1.0 %	2.4 %	1.6%	4.9%
American Indian	0.2%	0.2 %	0.2 %	0.3 %	0.1%	0.2%

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

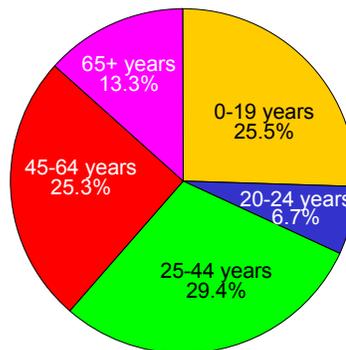
Population by Age Group Western Region and Massachusetts: 2005

4

Western Region



Massachusetts



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

Population by Age Group Largest Communities, Western Region and Massachusetts: 2005

Ages	Western Region	Chicopee	Holyoke	Springfield	MA Total
0-19 years	25.5%	23.7%	30.5%	30.6%	25.5%
20-24 years	8.1%	6.7%	6.7%	8.6%	6.7%
25-44 years	26.5%	27.2%	27.1%	28.3%	29.4%
45-64 years	25.7%	25.6%	21.2%	20.9%	25.3%
65+ years	14.2%	16.8%	14.4%	11.7%	13.3%

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

Language Spoken at Home, Largest Cities, Western Region: 2000

	Western Region	Chicopee	Holyoke	Springfield
Only English	83.9	79.2	57.2	68.4
Spanish/Spanish Creole	8.2	7.1	35.8	23.5
Portuguese/Portuguese Creole	0.9	1.8	0.3	0.7
French	1.5	3.7	1.9	1.3
Italian	0.7	0.3	0.2	1.1
French Creole	0.04	0.07	0.03	0.06
Russian	0.7	0.9	0.1	0.7
Other languages	4.1	6.9	4.5	4.2

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

Language Spoken at Home, Western Region and Massachusetts: 2000

7

	Pittsfield	Berkshires	Western Region	Massachusetts Overall
Only English	93.0	93.6	83.9	81.3
Spanish or Spanish Creole	1.7	1.6	8.2	6.2
Portuguese or Portuguese Creole	0.2	0.1	0.9	2.7
French	0.9	1.1	1.5	1.4
Chinese	0.2	0.2	0.4	1.2
Italian	1.4	0.8	0.7	1.0
French Creole	0.0	0.01	0.04	0.7
Russian	0.2	0.09	0.7	0.6
Vietnamese	0.1	0.1	0.3	0.5
Polish	0.9	0.9	1.4	0.5

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

Socio-Demographic Indicators Western Region and Massachusetts: 2000

8

	Western Region	Massachusetts Overall	US Overall
Per Capita Income	\$20,347	\$25,952	\$21,587
Persons living below 100% poverty	12.5%	9.3%	12.4%
Children < 18 living below 100% poverty	17.8%	11.6%	16.1%
Less than a High School Education	17.2%	15.2%	19.6%
Foreign born	6.2%	12.2%	11.1%
Unemployed	5.2%	5.1%	5.5%

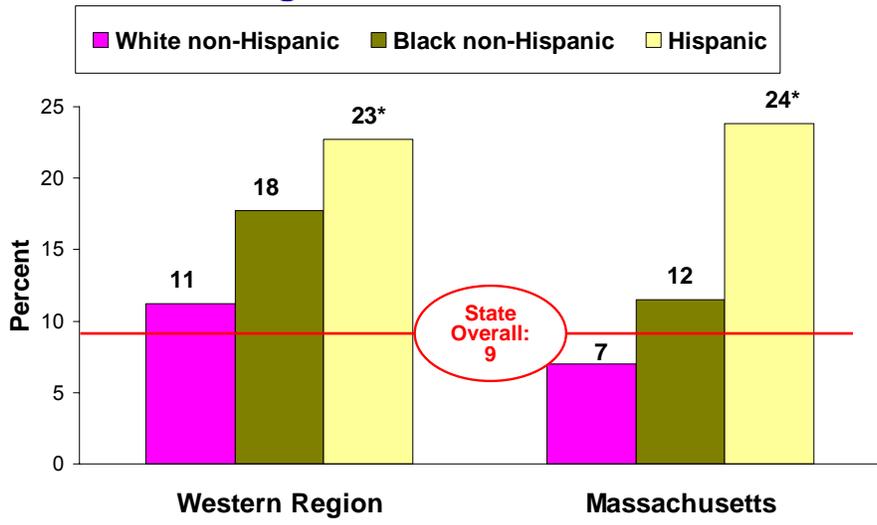
Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation Bureau, Division of Research & Epidemiology

Socio-Demographic Indicators Largest Cities, Western Region and Massachusetts

	Massachusetts	Chicopee	Holyoke	Springfield	Pittsfield
Per Capita Income (2000)	\$25,952	\$18,646	\$15,913	\$15,232	\$20,549
Persons living below 100% poverty (2000)	9.3%	12.3%	26.4%	23.1%	11.4%
Children < 18 living below 100% poverty (2000)	11.6%	19.5%	41.7%	33.9%	16.7%
Less than a High School Education (2000)	15.2%	25.1%	30.0%	26.6%	15.6%
Foreign born (2000)	12.2%	8.2%	5.4%	8.0%	3.9%
Speak language other than English at home (2000)	18.7%	20.8%	42.8%	31.6%	7.0%
Unemployed (2004)	5.1%	6.2%	7.3%	7.7%	4.8%

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

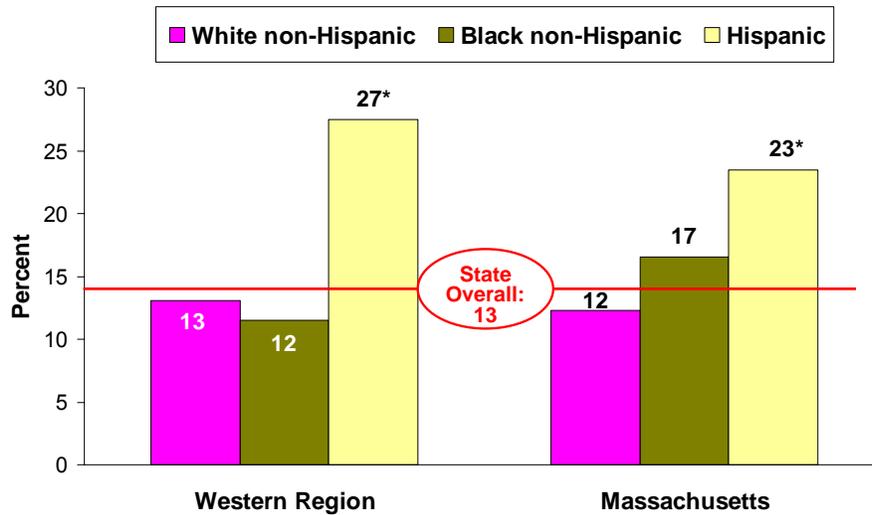
Adults who Have No Health Insurance by Race and Ethnicity Western Region and Massachusetts: 2005



(*) Statistically different from State (p ≤ .05)
 Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), Health Survey Program

Adults who Reported Fair or Poor Health by Race and Ethnicity Western Region and Massachusetts: 2005

11



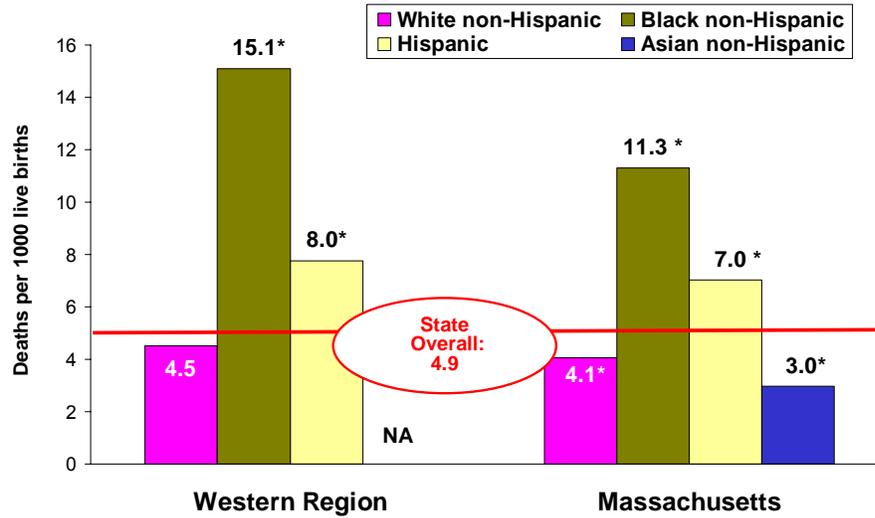
* Statistically Significant different from state ($p \leq .05$)

Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Health Survey Program

BIRTH INDICATORS

Infant Mortality Rates by Race/Ethnicity Western Region and Massachusetts: 2002-2005

12



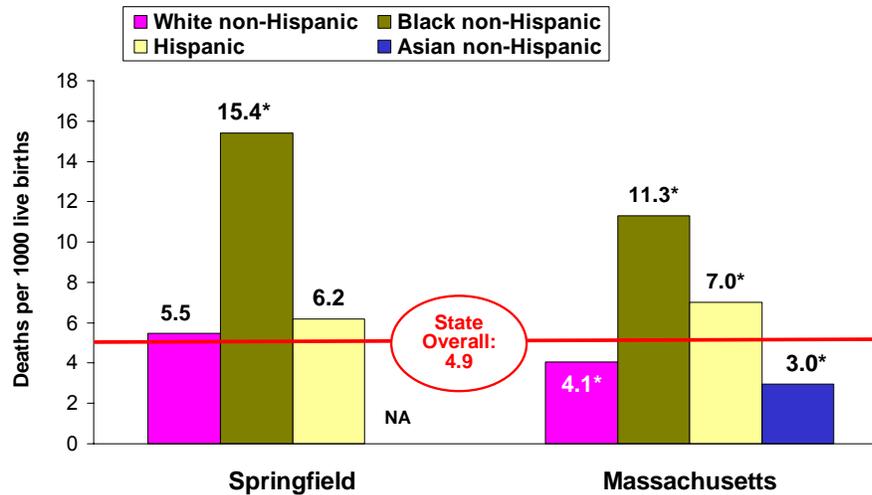
NA= Calculations based on less than 5 events are excluded

(*) Statistically different from State ($p \leq .05$)

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

Infant Mortality Rates by Race/Ethnicity Springfield and Massachusetts: 2002-2005

13

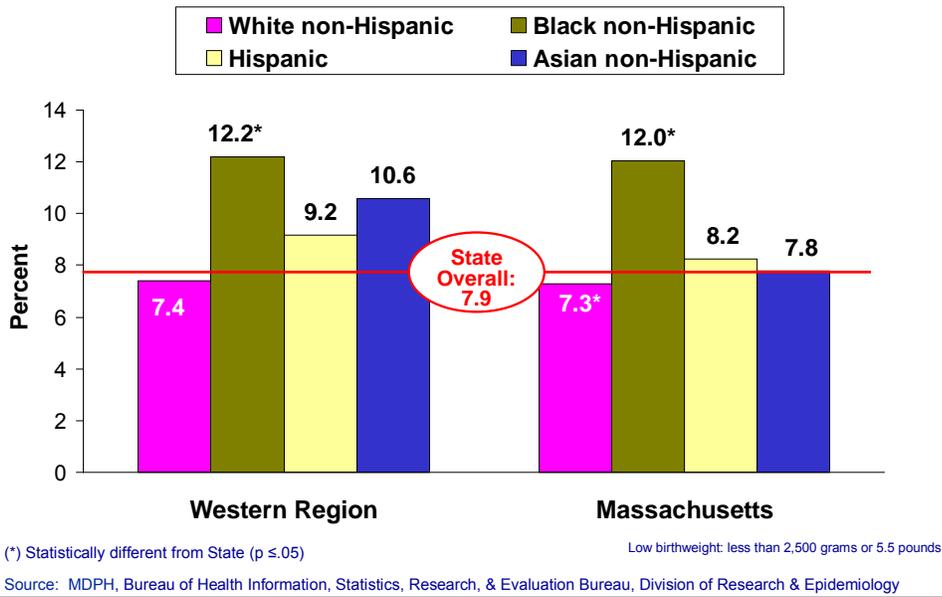


Statistically different from State ($p \leq .05$)

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

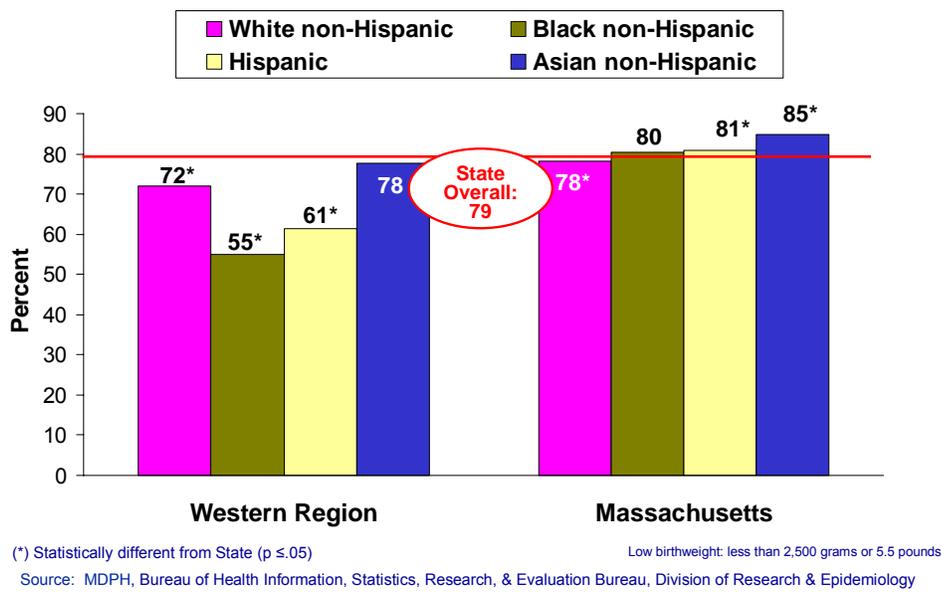
Low Birthweight by Race and Ethnicity Western Region and Massachusetts: 2005

14



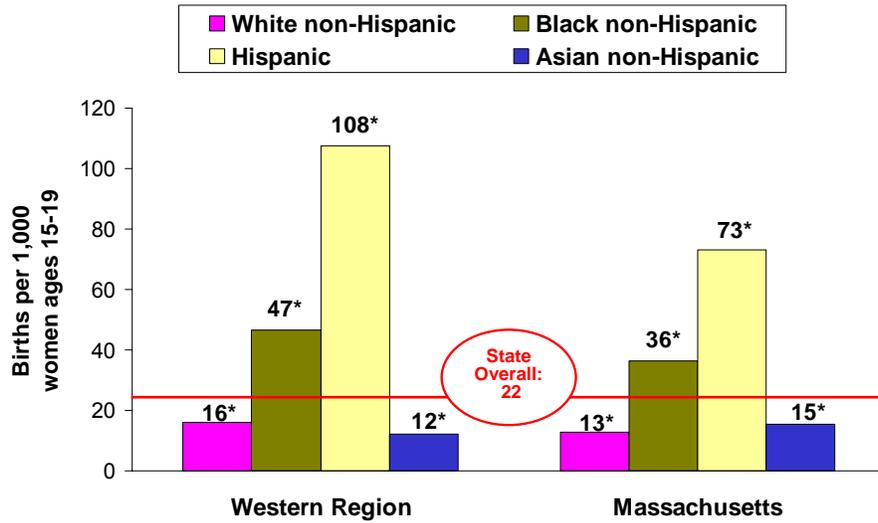
Breastfeeding in Western Region and Massachusetts by Race/Ethnicity: 2005

15



Teen Birth Rates by Race and Ethnicity Western Region and Massachusetts: 2005

16



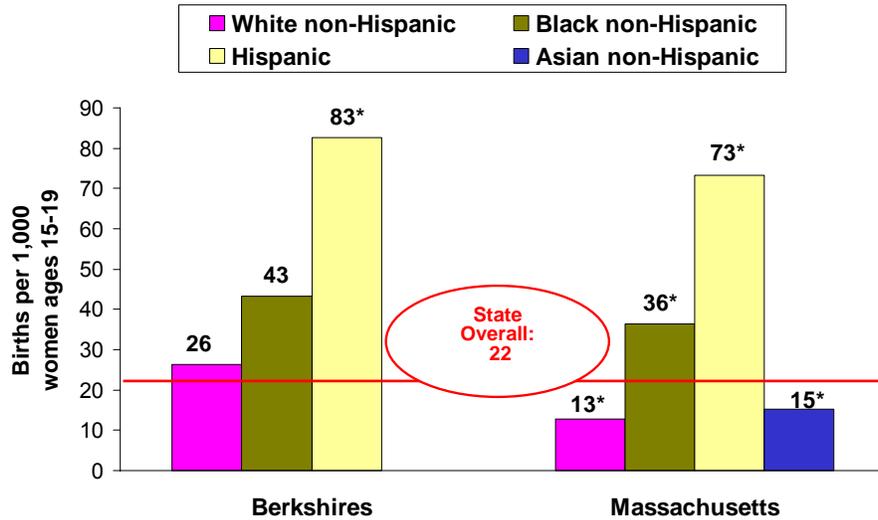
(*) Statistically different from State ($p \leq .05$)

Teen Birth Rate: the number of births to women ages 15-19 per 1,000 women ages 15-19.

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

Teen Birth Rates by Race and Ethnicity Berkshires and Massachusetts: 2005

17



(*) Statistically different from State ($p \leq .05$)

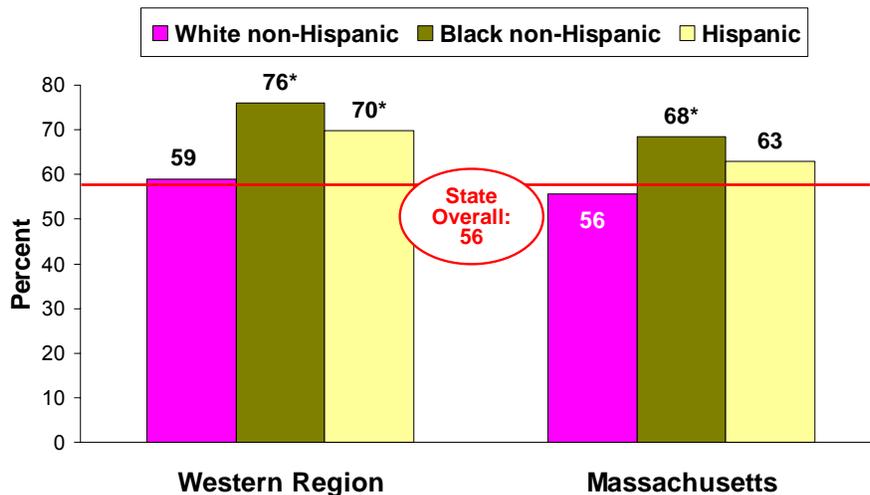
Teen Birth Rate: the number of births to women ages 15-19 per 1,000 women ages 15-19.

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

CHRONIC DISEASE OUTCOMES AND OVERWEIGHT/OBESITY

Overweight¹ by Race and Ethnicity Western Region and Massachusetts: 2005

18



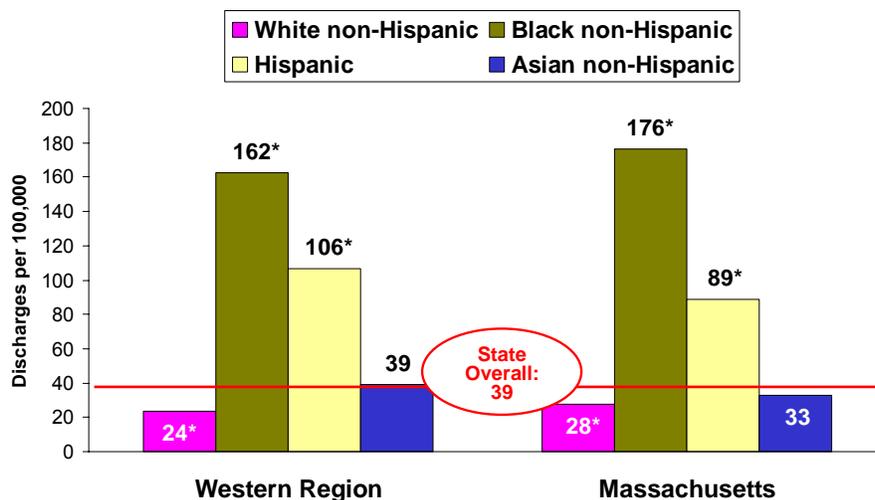
(*) Statistically different from State ($p \leq .05$)

¹ Overweight: BMI greater than or equal to 25

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

Hypertension Hospital Discharge Rate by Race/Ethnicity Western Region Massachusetts: 2003-2005

19



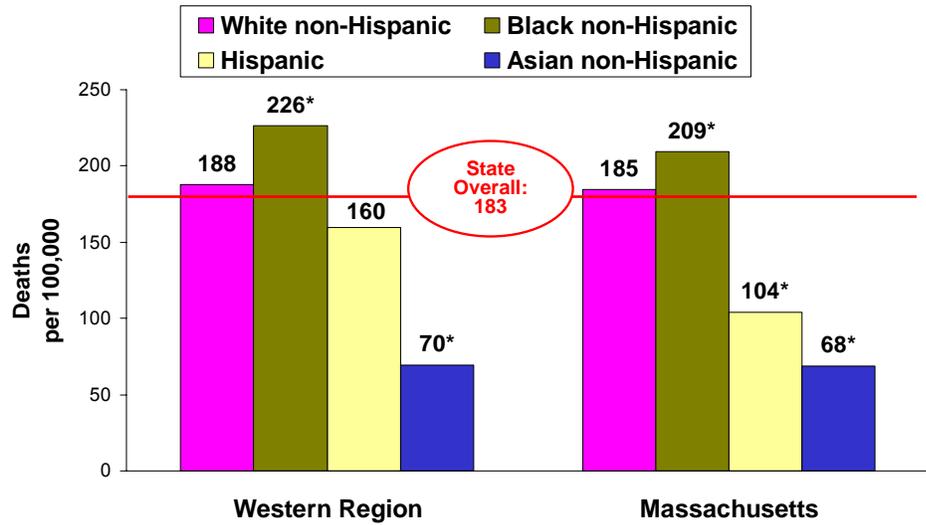
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy, Calendar Year 2003-2005, Inpatient Hospital Discharge Database

Heart Disease Death Rate by Race/Ethnicity Western Region and Massachusetts: 2003-2005

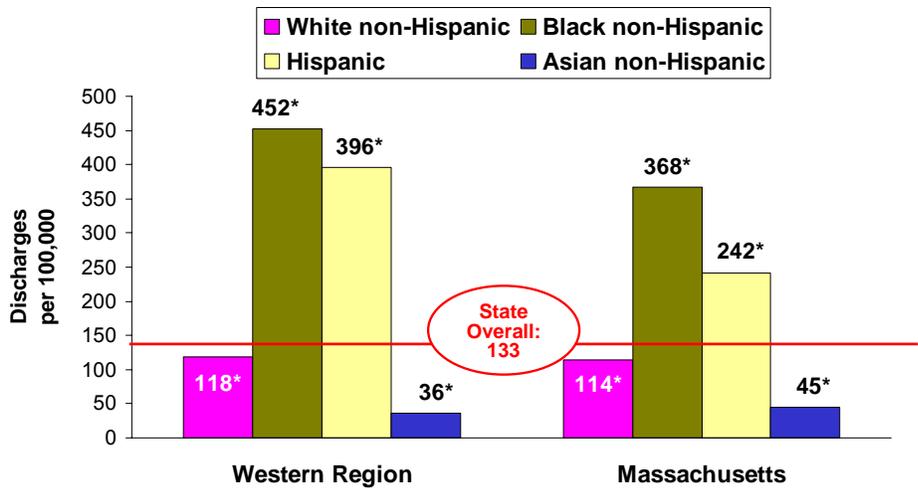
20



(*) Statistically different from State ($p \leq .05$)
 Age-adjusted to the 2000 US standard population.
 Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

Diabetes Hospital Discharge Rate by Race/Ethnicity Western Region and Massachusetts: 2003-2005

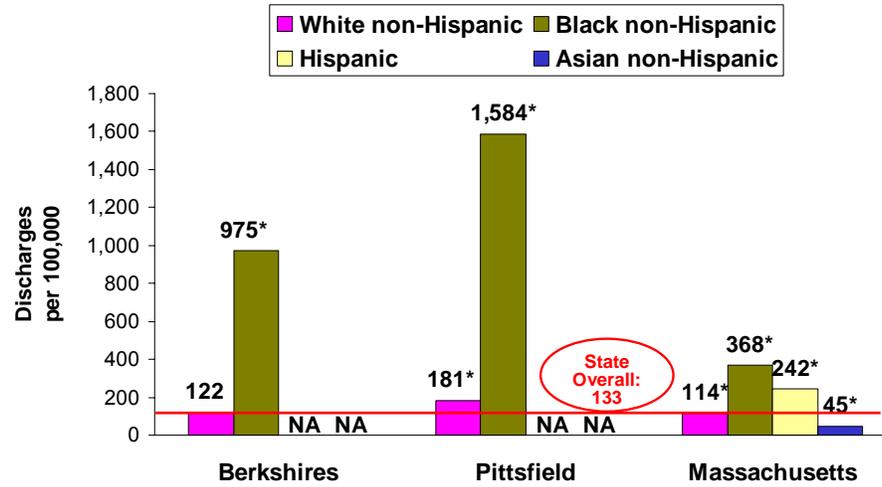
21



(*) Statistically different from State ($p \leq .05$)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy, Calendar Year 2003-2005, Inpatient Hospital Discharge Database

Diabetes Hospital Discharge Rate by Race/Ethnicity Berkshires, Pittsfield & Massachusetts: 2003-2005

22



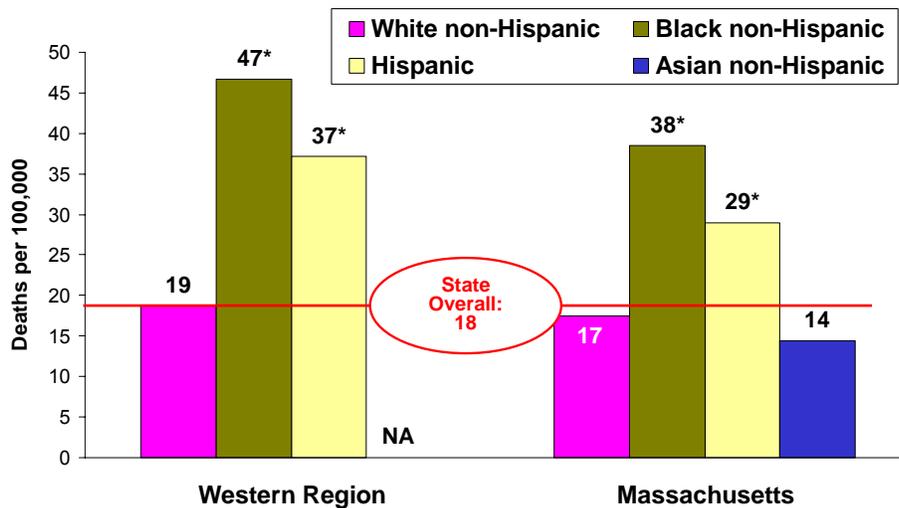
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

Diabetes Death Rate by Race/Ethnicity Western Region and Massachusetts: 2003-2005

23



(*) Statistically different from State ($p \leq .05$)

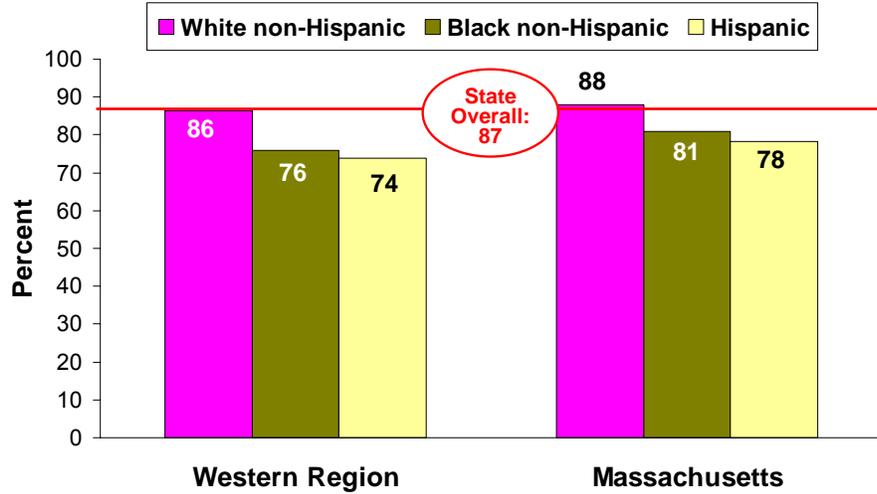
Age-adjusted to the 2000 US standard population.

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

CANCER

Women who had a Clinical Breast Exam in Past Two Years by Race and Ethnicity Western Region and Massachusetts: 2004

24

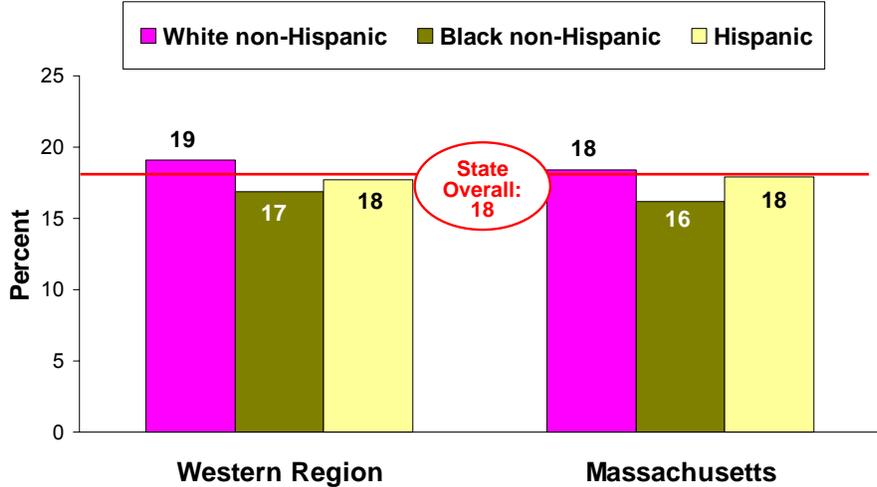


(*) Statistically different from State ($p \leq .05$)

Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Health Survey Program

Current Smoker by Race and Ethnicity Western Region and Massachusetts: 2005

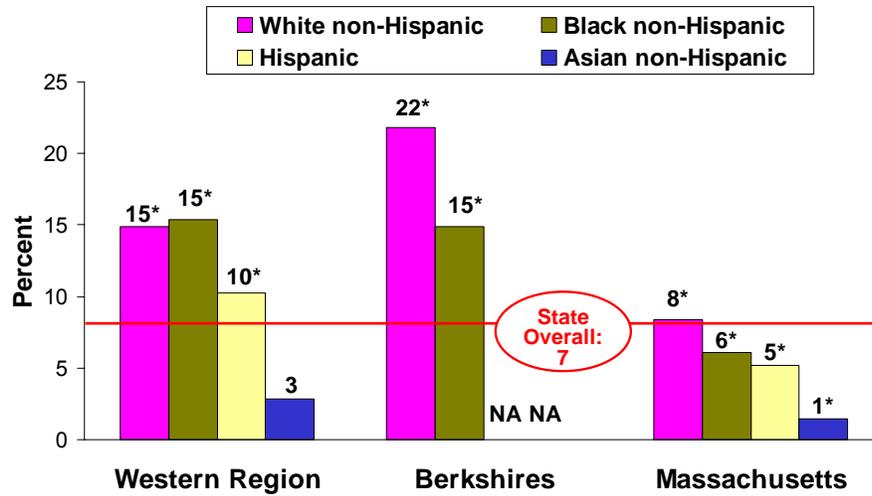
25



(*) Statistically different from State ($p \leq .05$)

Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Health Survey Program

Smoking During Pregnancy by Race and Ethnicity Western Region, Berkshires, and Massachusetts: 2005



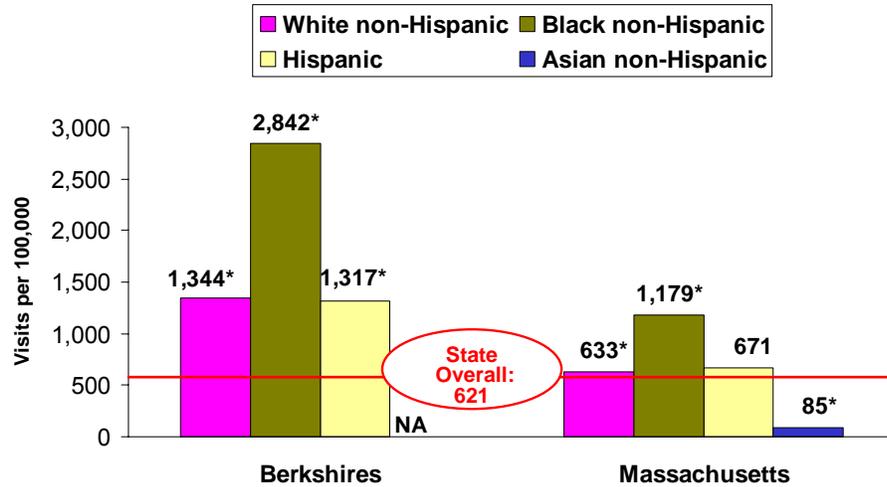
(*) Statistically different from State ($p \leq .05$)

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

SUBSTANCE ABUSE

Substance Abuse Treatment Program Admissions- Alcohol Primary Substance by Race/Ethnicity Berkshires and Massachusetts: 2005

27



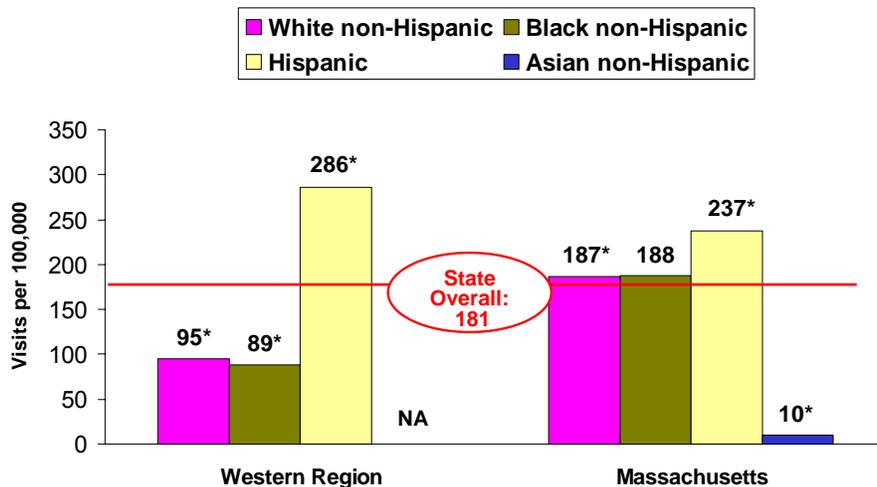
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Department Visits

Opioid-Related Emergency Department Visit Rates by Race/Ethnicity Western Region and Massachusetts: 2003-2005

28

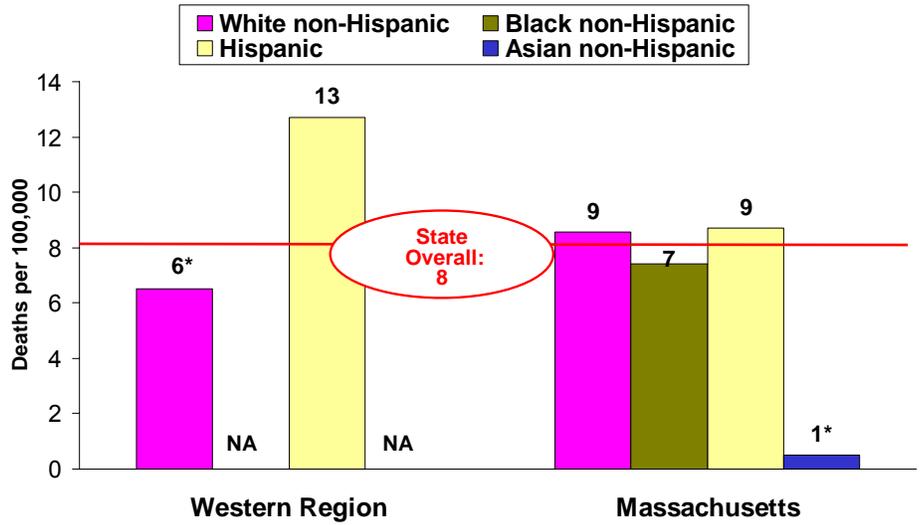


(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Department Visits

Opioid-Related Fatal Overdoses by Race/Ethnicity Region and Massachusetts: 2003-2005



(*) Statistically different from State ($p \leq .05$)

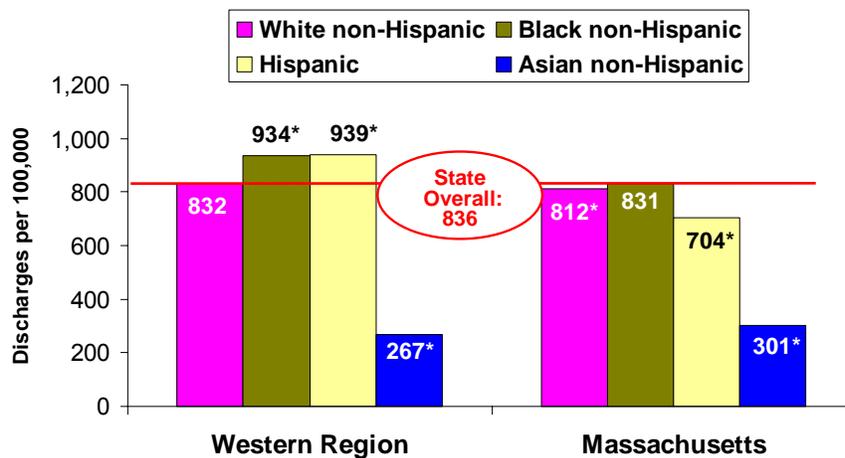
Age-adjusted to the 2000 US standard population.

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

INJURY AND VIOLENCE

Injury-Related Hospital Discharge Rates by Race/Ethnicity, Western Region and Massachusetts: 2003-2005

30



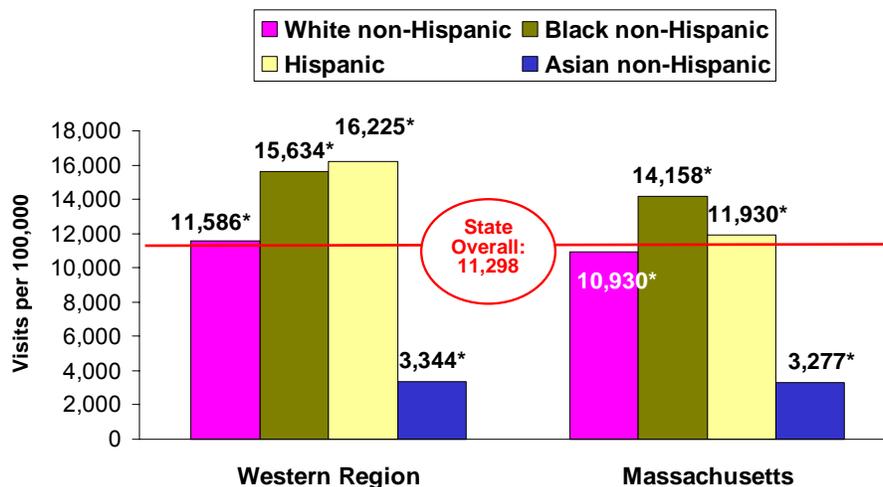
(*) Statistically different from State (p ≤ .05)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

Emergency Department Visit Rates for Injuries & Poisonings by Race/Ethnicity Western Region and Massachusetts: 2003-2005

31

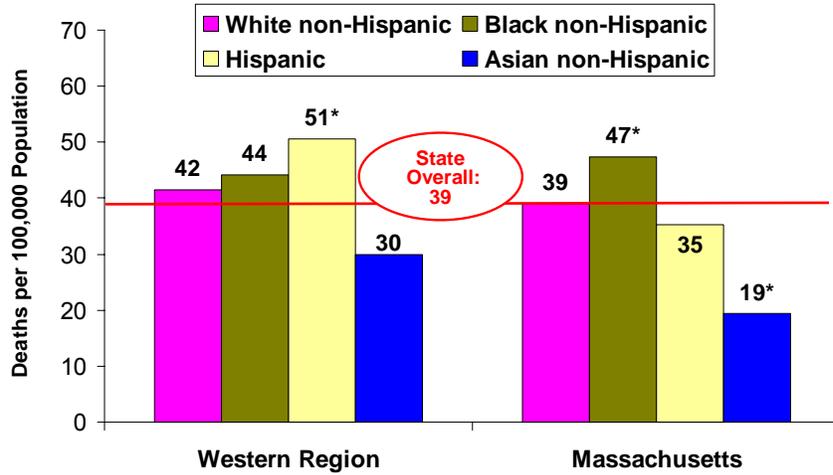


(*) Statistically different from State (p ≤ .05)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Department Visits

Injury Death Rates by Race/Ethnicity Western Region and Massachusetts: 2003-2005

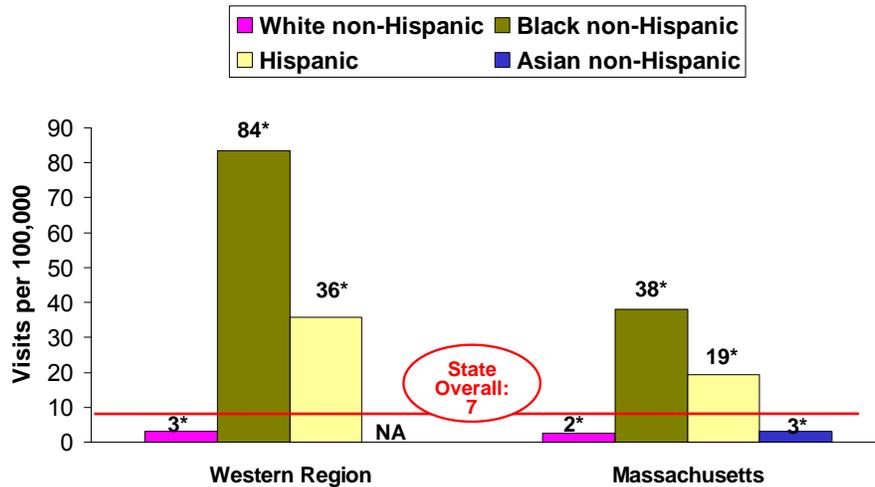


(*) Statistically different from State (p ≤ .05)

Age-adjusted to the 2000 US standard population.

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

Emergency Department Visit Rates for Firearm Injuries by Race/Ethnicity Western Region and Massachusetts: 2003-2005

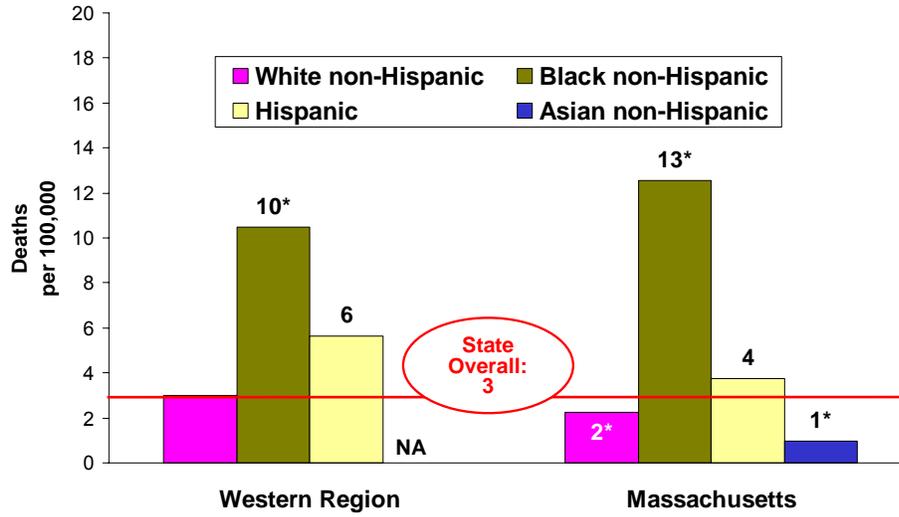


(*) Statistically different from State (p ≤ .05)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy, Calendar Year 2003-2005, Emergency Department Visits

Firearm Death Rates by Race/Ethnicity Western Region and Massachusetts: 2003-2005

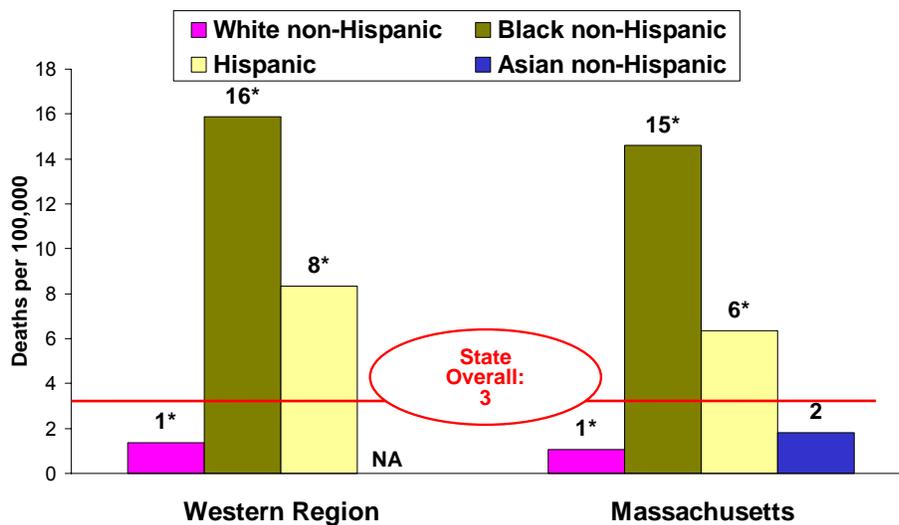


(*) Statistically different from State (p ≤ .05)

Age-adjusted to the 2000 US standard population.

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

Homicide Rates by Race/Ethnicity Western Region and Massachusetts: 2003-2005

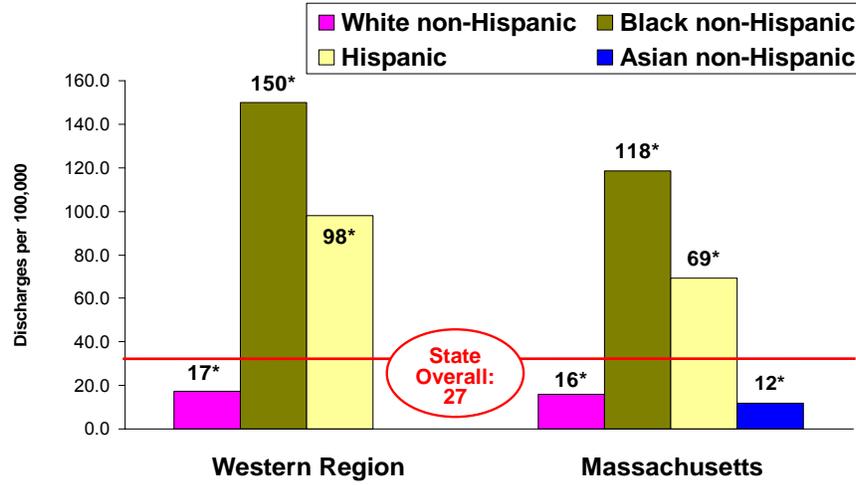


(*) Statistically different from State (p ≤ .05)

Age-adjusted to the 2000 US standard population.

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

Hospital Discharge Rates for Assaults by Race/Ethnicity Western Region and Massachusetts: 2003-2005

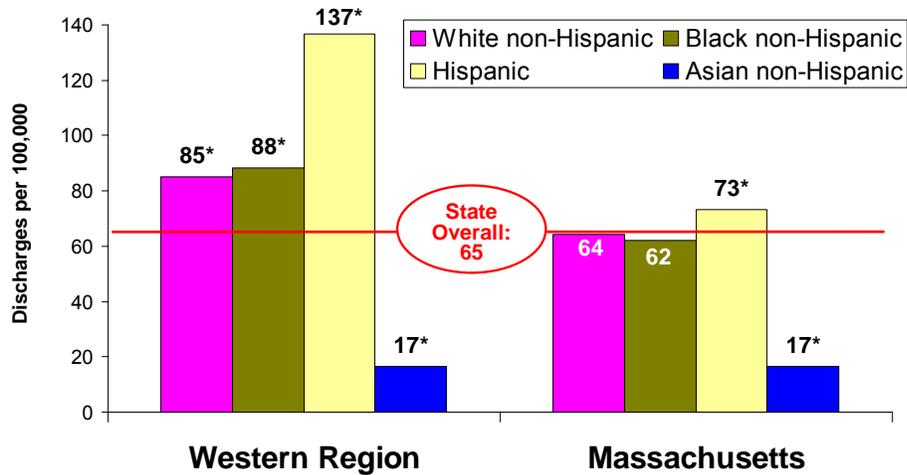


(*) Statistically different from State (p ≤ .05)

Crude rates

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

Hospital Discharge Rates for Self-Inflicted Injuries by Race/Ethnicity, Western Region and Massachusetts: 2003-2005

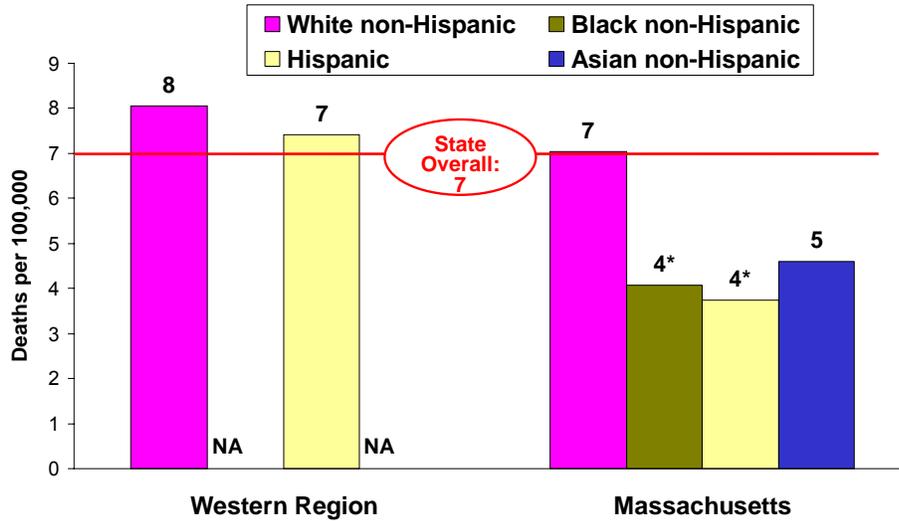


(*) Statistically different from State (p ≤ .05)

Crude rates

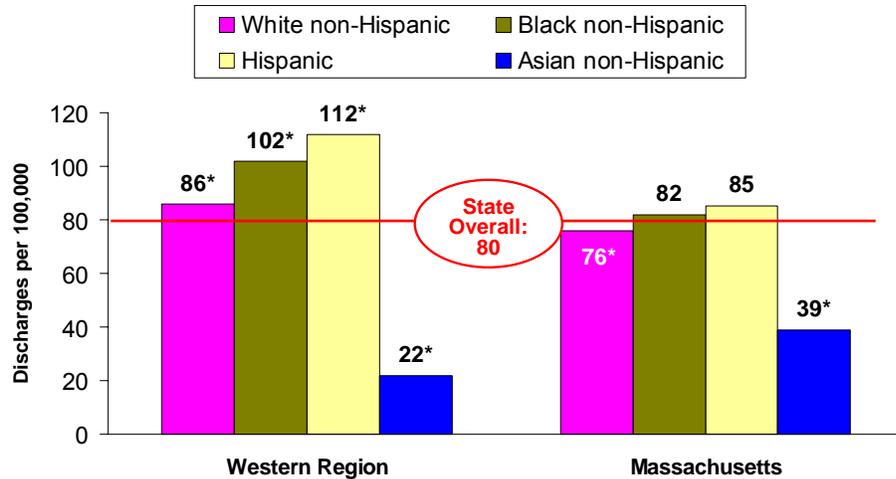
Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

Suicide Rates by Race/Ethnicity Western Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

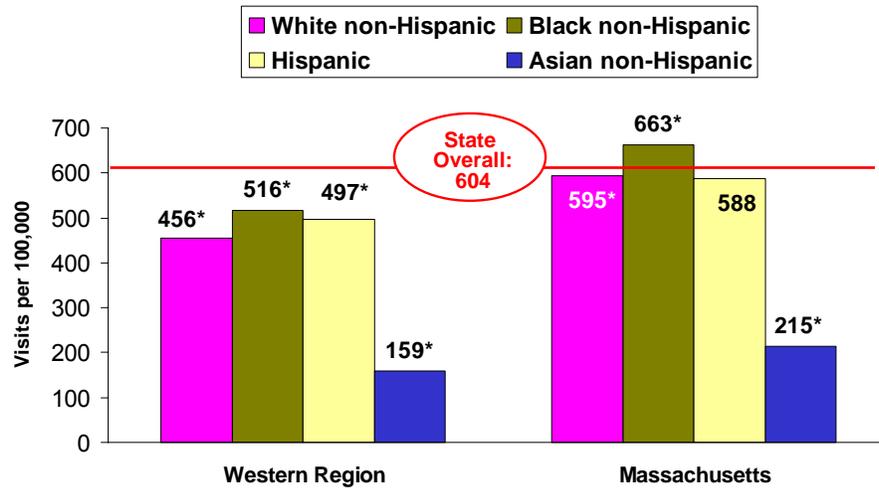
Hospital Discharge Rates – Traumatic Brain Injury by Race/Ethnicity Western Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy, Calendar Year 2003-2005, Inpatient Hospital Discharge Database

Emergency Department Visit Rates Traumatic Brain Injury by Race/Ethnicity Western Region and Massachusetts: 2003-2005

40



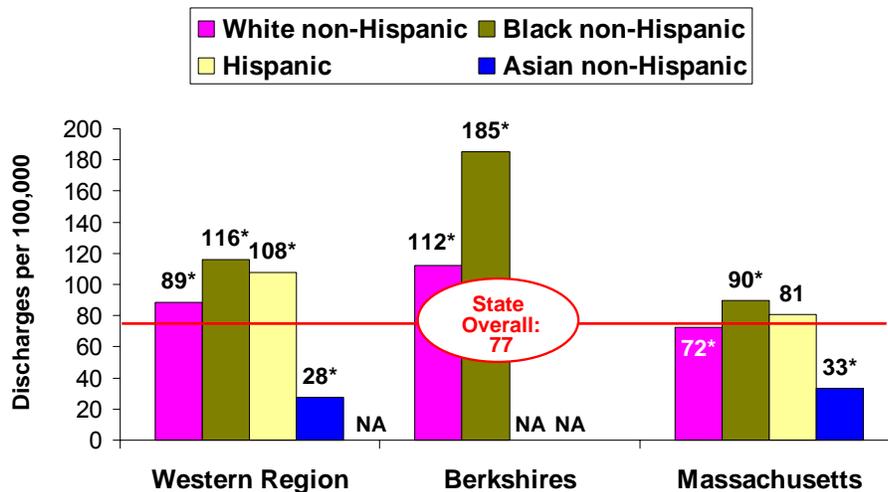
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Department Visits

Hospital Discharge Rates for Motor Vehicle- Related Injuries by Race/Ethnicity, Western Region, Berkshires, and Massachusetts: 2003-2005

41

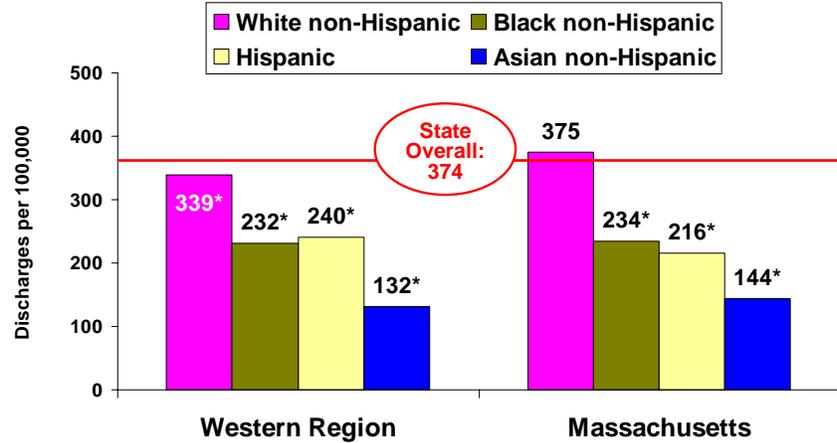


(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

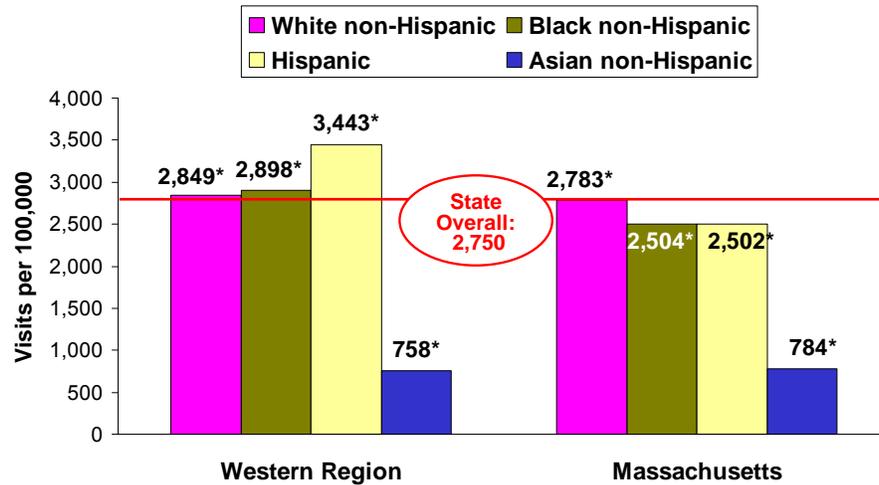
Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

Hospital Discharge Rates for Fall-Related Injuries by Race/Ethnicity, Western Region and Massachusetts: 2003-2005



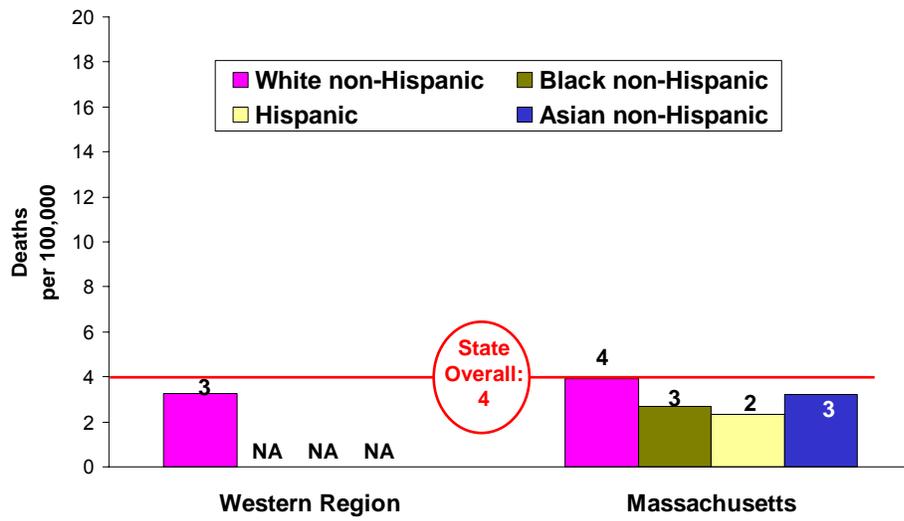
(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

Emergency Department Visit Rates for Fall-Related Injuries by Race/Ethnicity, Western Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Department Visits

Fall-related Injury Death Rates by Race/Ethnicity Western Region and Massachusetts: 2003-2005



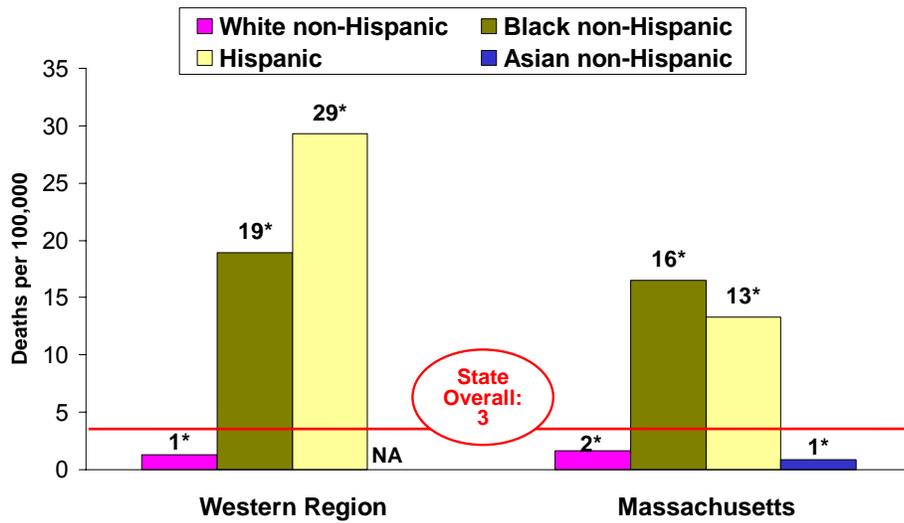
(* Statistically different from State ($p \leq .05$))

Age-adjusted to the 2000 US standard population.

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

HIV/AIDS

HIV/AIDS Death Rate by Race/Ethnicity Western Region and Massachusetts: 2003-2005



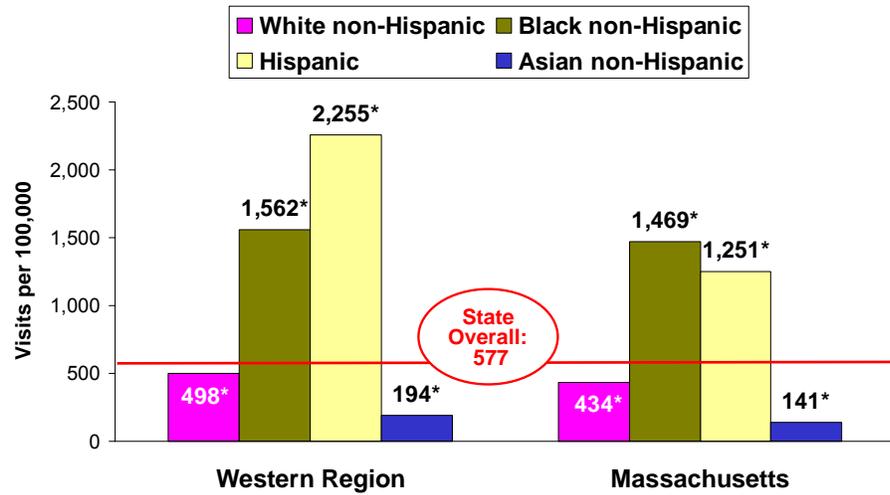
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

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

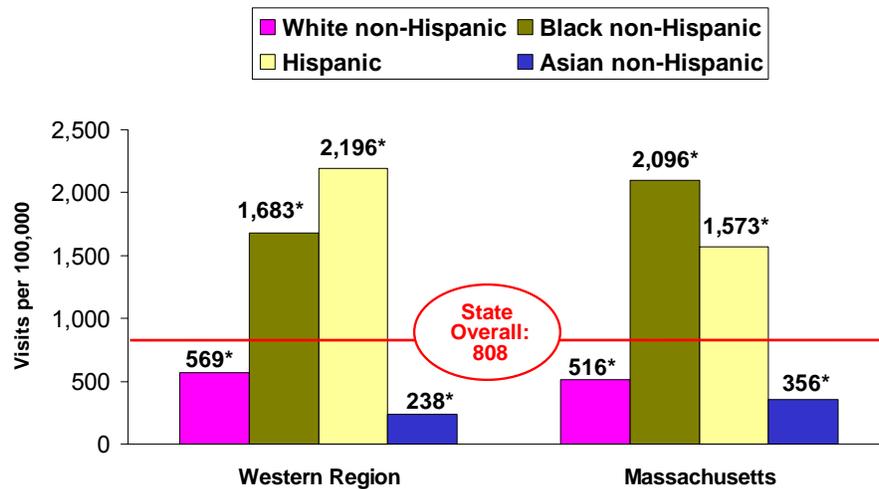
ASTHMA

Emergency Department Visit Rates for Asthma by Race/Ethnicity Western Region and Massachusetts: 2005



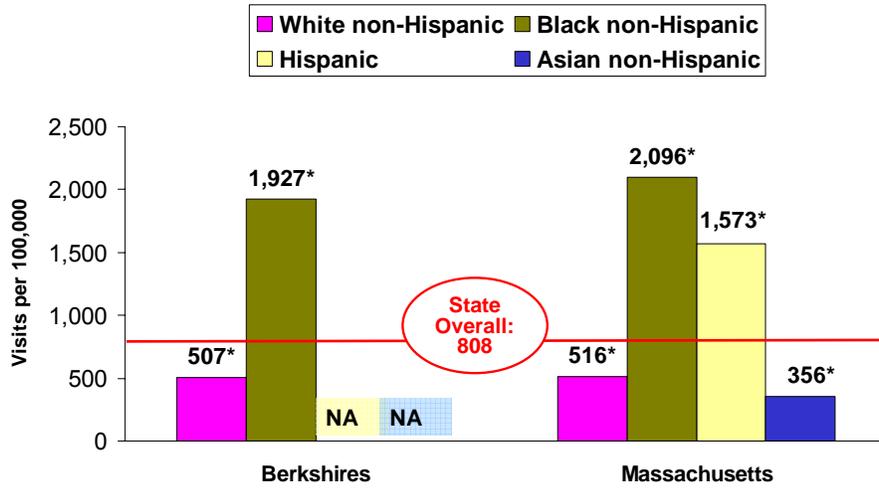
(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2005. Emergency Department Visits

Asthma Emergency Department Visit Rates by Race and Ethnicity, Children Ages 0-14 Western Region and Massachusetts: 2005



(*) Statistically different from State (p ≤ .05)
 Source: Division of Health Care Finance and Policy. Calendar Year 2005. Emergency Department Visits

Asthma Emergency Department Visit Rates by Race and Ethnicity, Children Ages 0-14 Berkshires and Massachusetts: 2005



(*) Statistically different from State (p ≤ .05)

Source: Division of Health Care Finance and Policy. Calendar Year 2005. Emergency Department Visits

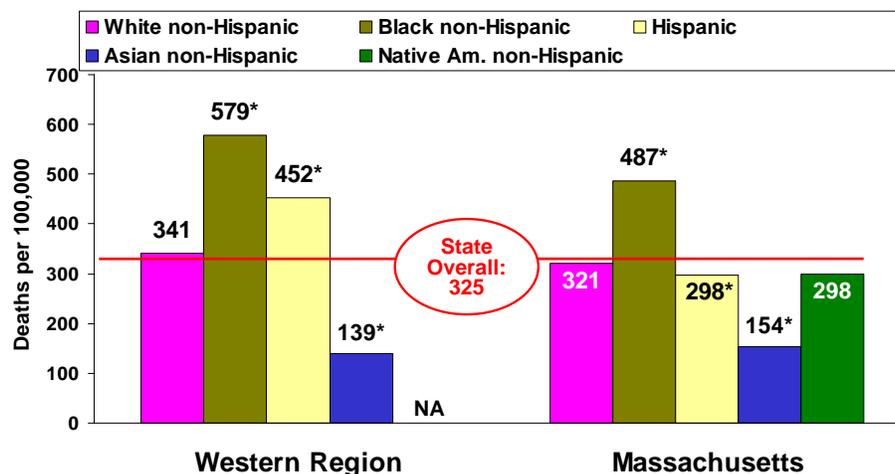
PREMATURE MORTALITY

Premature Mortality Rate (PMR)¹

- **Definition**
 - deaths before age 75
- **Rationale**
 - two-thirds of deaths to persons ages 75+
 - vast majority of deaths to persons age 75+ are due to chronic conditions associated with aging
 - focusing on deaths to persons less than 75 years may be more preventable
- **Summary health statistic**
 - excellent measure to reflect the health status of a population
 - used as a health status indicator that can be used to focus prevention initiatives and target programs

¹ Rates are per 100,000 population. Age-adjusted to the 2000 US standard population under 75 years of age.
Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

Premature Mortality Rate by Race/Ethnicity Western Region and Massachusetts: 2003-2005



(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population under 75 years of age.

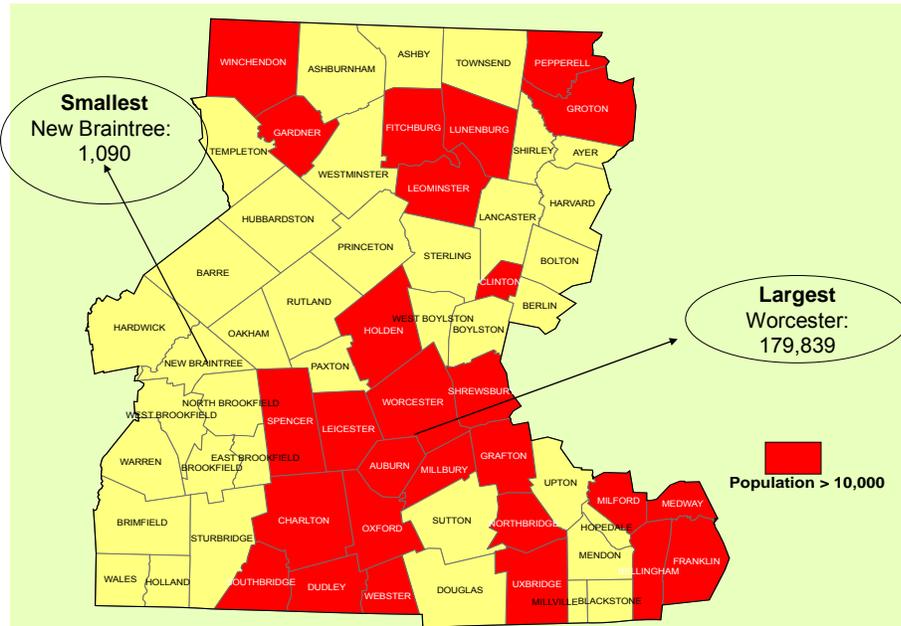
Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

II. CENTRAL REGION

**SOCIODEMOGRAPHIC
INDICATORS
AND
HEALTH CARE ACCESS
AND STATUS**

Population in Towns in Central Region: 2005

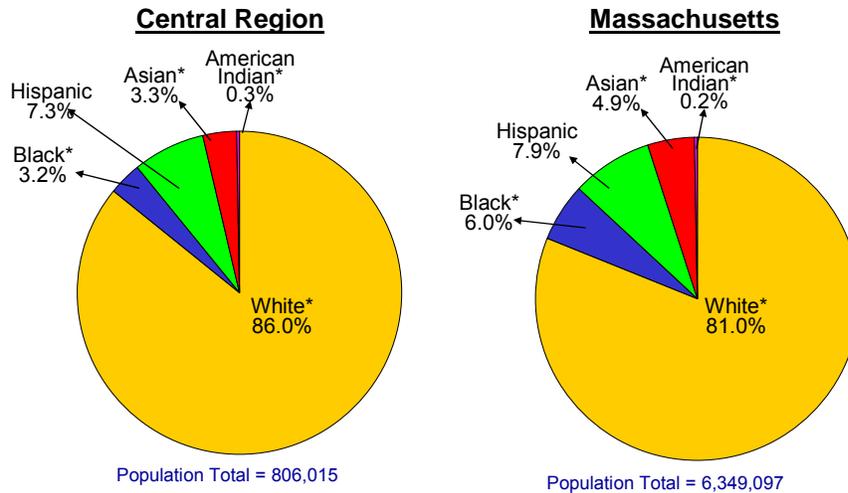
51



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

Race and Ethnic Breakdown of Population Central Region and Massachusetts: 2005

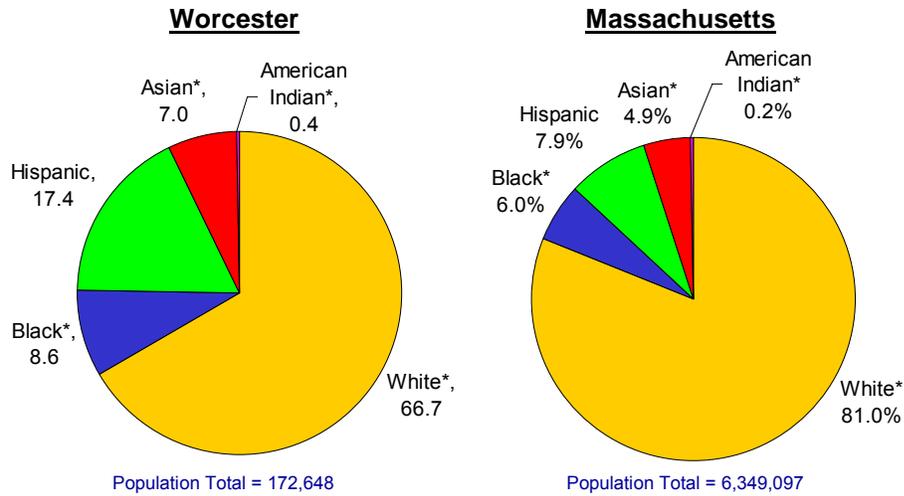
52



* Non-Hispanics

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

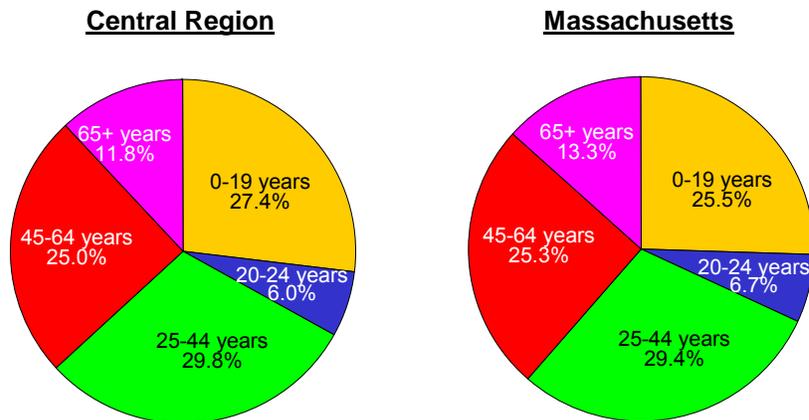
Race and Ethnic Breakdown of Population Worcester and Massachusetts: 2005



* Non-Hispanics

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

Population by Age Group Central Region and Massachusetts: 2005



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

Language Spoken at Home Central Region and Massachusetts: 2000

55

	Central Region	Massachusetts Overall
Only English	85.7	81.3
Spanish or Spanish Creole	5.8	6.2
Portuguese or Portuguese Creole	0.7	2.7
French	1.9	1.4
Chinese	0.3	1.2
Italian	0.6	1.0
African Languages	0.4	0.2
Russian	0.2	0.6
Vietnamese	0.7	0.5
Polish	0.7	0.5

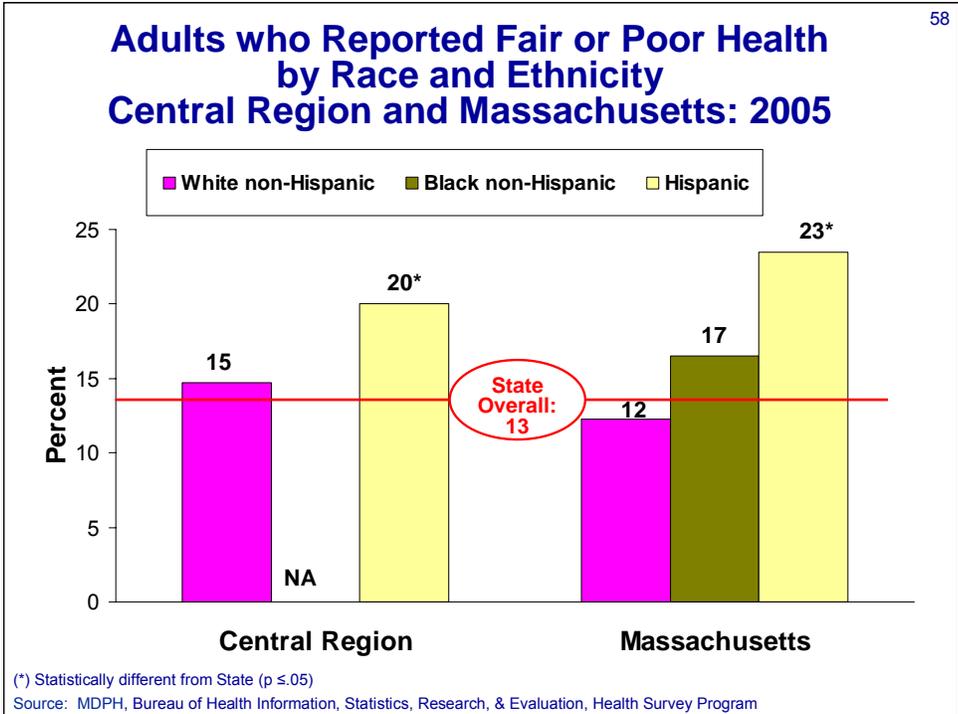
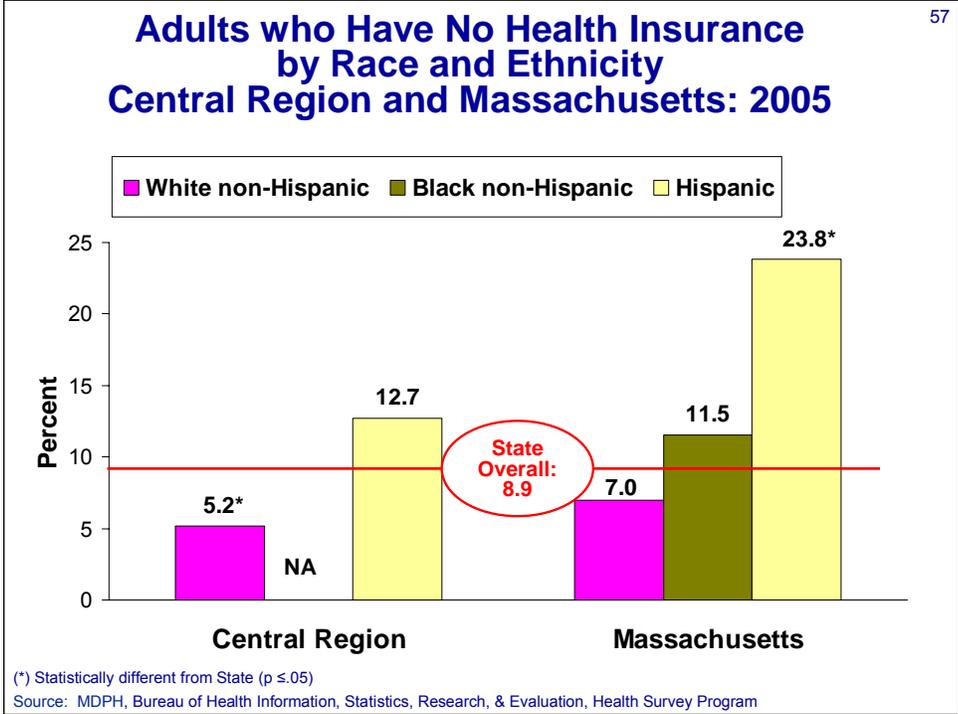
Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

Socio-Demographic Indicators Central Region and Massachusetts: 2000

56

	Central Region	Massachusetts Overall
Per Capita Income (2000)	\$22,775	\$25,952
Those living below 100% poverty (2000)	8.8%	9.3%
Children < 18 living below 100% poverty (2000)	11.2%	11.6%
Less than a High School Education (2000)	16.2%	15.2%
Foreign born (2000)	7.4%	12.2%
Unemployed (2004)	5.4%	5.1%

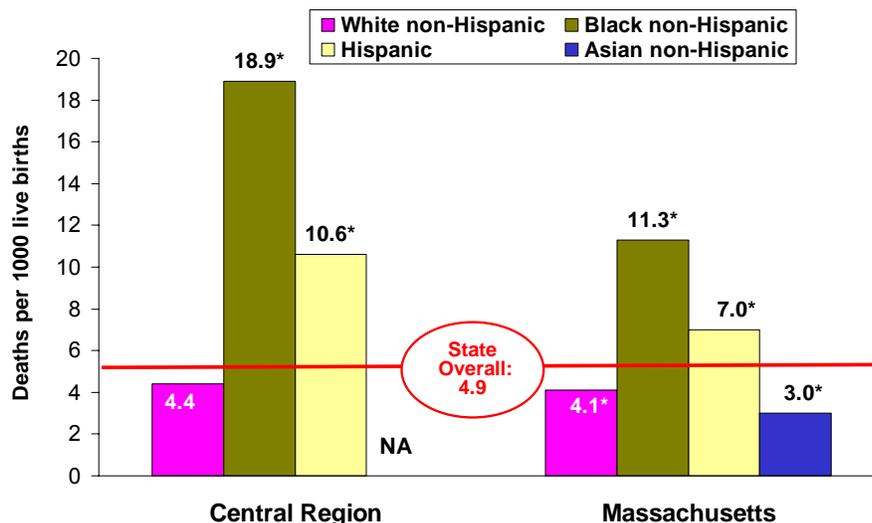
Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology



BIRTH OUTCOMES

Infant Mortality Rates by Race/Ethnicity Central Region and Massachusetts: 2002-2005

59



NA= Calculations based on less than 5 events are excluded

(*) Statistically different from State (p ≤.05)

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

Infant Mortality Rates by Race and Ethnicity Worcester: 1990-2005

60

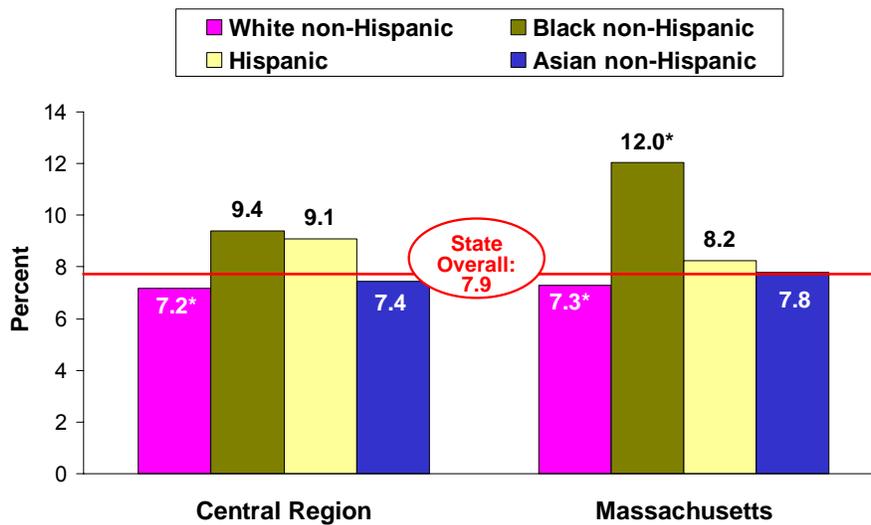
	White non-Hispanic	Black non-Hispanic	Hispanic	Worcester (all races)
1990	6.7	--	11.3	7.7
1991	5.8	28.4	18.8	9.5
1992	5.4	27.5	--	7.4
1993	9.4	--	8.8	6.2
1994	14.3	--	--	12.1
1995	6.8	--	11.6	8.8
1996	10.6	--	--	9.8
1997	8.6	--	--	8.2
1998	4.4	32.0	--	7.0
1999	6.5	20.4	9.8	8.1
2000	6.6	31.5	--	9.9
2001	5.3	29.5	--	8.2
2002	6.9	19.5	10.3	8.8
2003	--	17.4	--	4.3
2004	--	21.9	10.3	6.6
2005	11.1	15.7	24.2	13.9

Rate = infant deaths per 1,000 live births.

-- Calculations based on less than 5 events are excluded.

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

Low Birthweight by Race and Ethnicity Central Region and Massachusetts: 2005

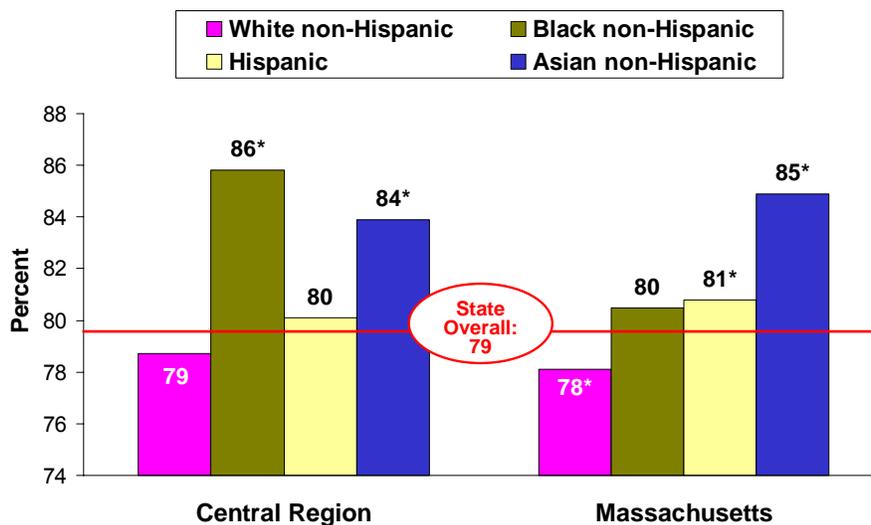


(*) Statistically different from State (p ≤ .05)

Low birthweight: less than 2,500 grams or 5.5 pounds

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

Breastfeeding by Race/Ethnicity Central Region and Massachusetts : 2005

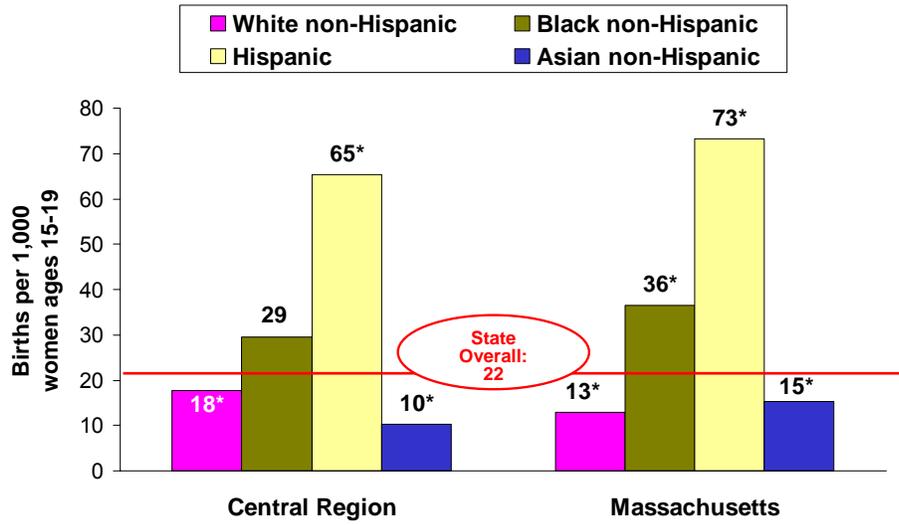


(*) Statistically different from State (p ≤ .05)

Low birthweight: less than 2,500 grams or 5.5 pounds

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

Teen Birth Rates by Race and Ethnicity Central Region and Massachusetts: 2005



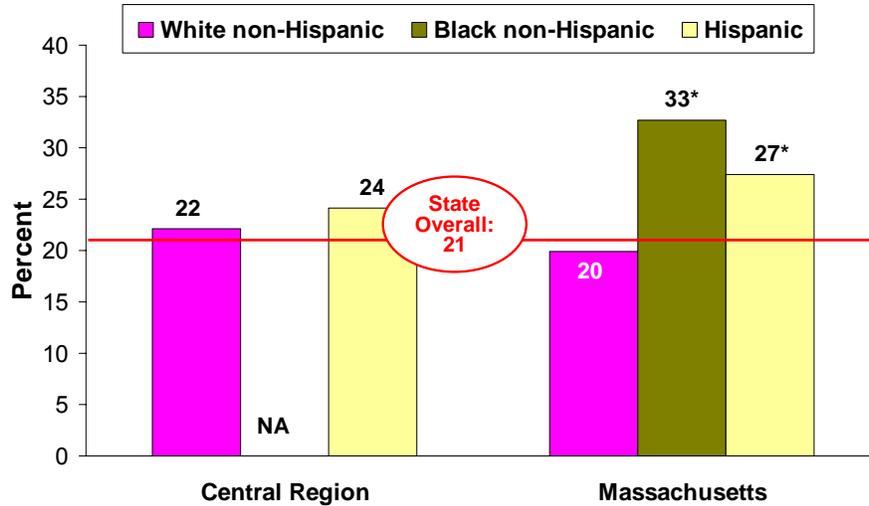
(*) Statistically different from State (p ≤ .05)

Teen Birth Rate: the number of births to women ages 15-19 per 1,000 women ages 15-19.

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

CHRONIC DISEASE OUTCOMES AND OVERWEIGHT/OBESITY

Obesity¹ by Race and Ethnicity Central Region and Massachusetts: 2005

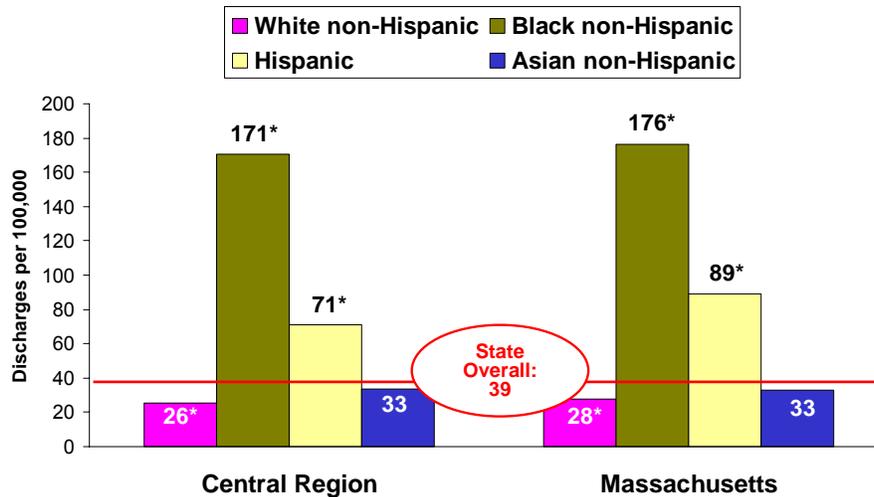


(*) Statistically different from State (p ≤ .05)

¹ Obesity: BMI greater than or equal to 30

Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Health Survey Program

Hypertension Hospital Discharge Rates by Race/Ethnicity Central Region Massachusetts: 2003-2005

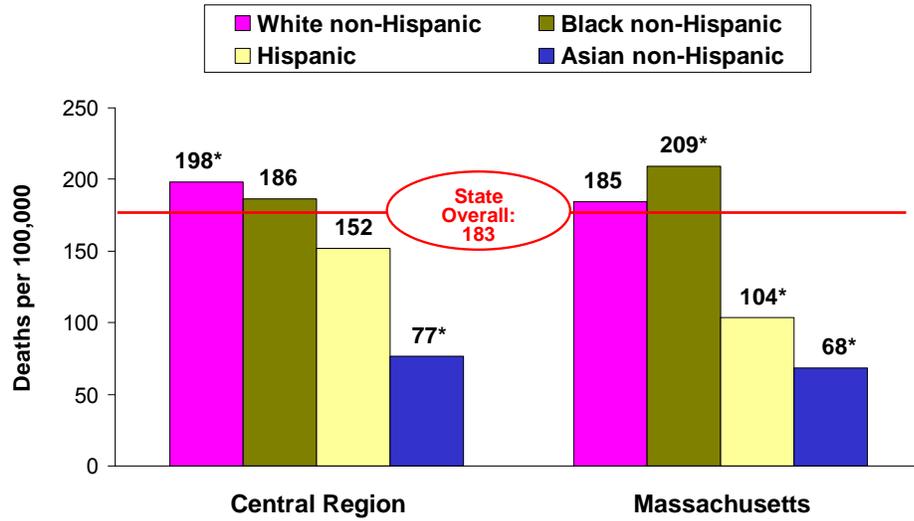


(*) Statistically different from State (p ≤ .05)

Age-adjusted to the 2000 US standard population.

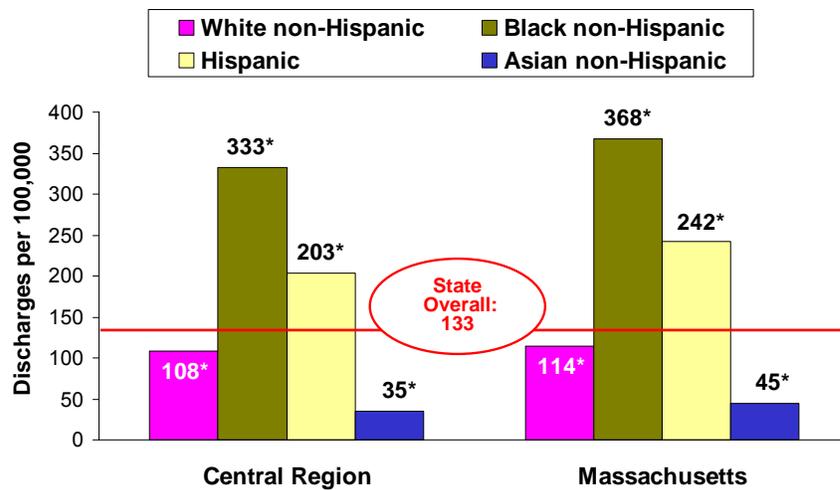
Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

Heart Disease Death Rates by Race/Ethnicity Central Region and Massachusetts: 2003-2005



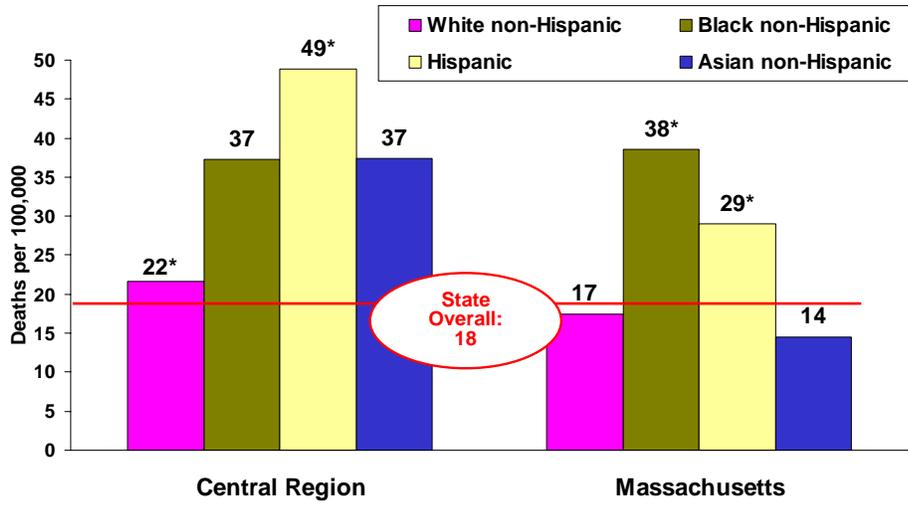
(*) Statistically different from State ($p \leq .05$)
 Age-adjusted to the 2000 US standard population.
 Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

Diabetes Hospital Discharge Rates by Race/Ethnicity Central Region Massachusetts: 2003-2005



(*) Statistically different from State ($p \leq .05$)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy, Calendar Year 2003-2005, Inpatient Hospital Discharge Database

Diabetes Mortality Rates by Race/Ethnicity Central Region and Massachusetts: 2003-2005



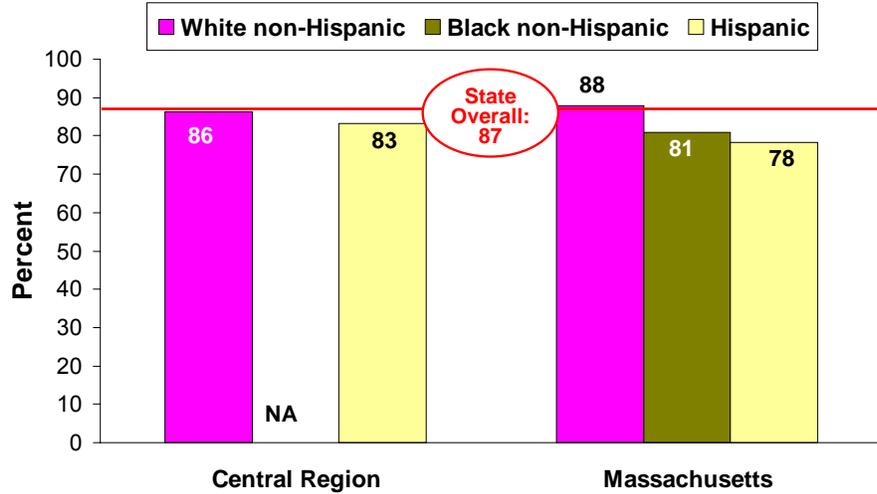
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

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

CANCER

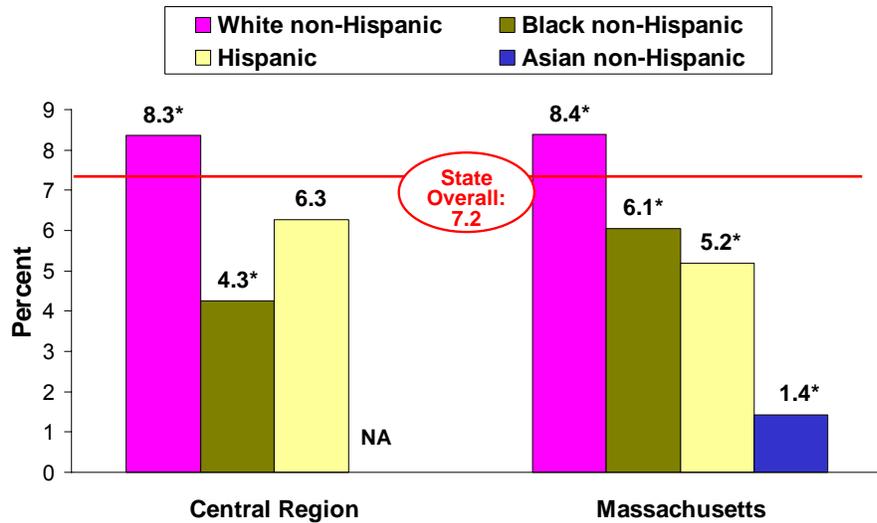
Women who had a Clinical Breast Exam in the Past Two Years by Race & Ethnicity Central Region and Massachusetts: 2004



(*) Statistically different from State (p ≤.05)

Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Health Survey Program

Smoking During Pregnancy by Race and Ethnicity Central Region and Massachusetts: 2005

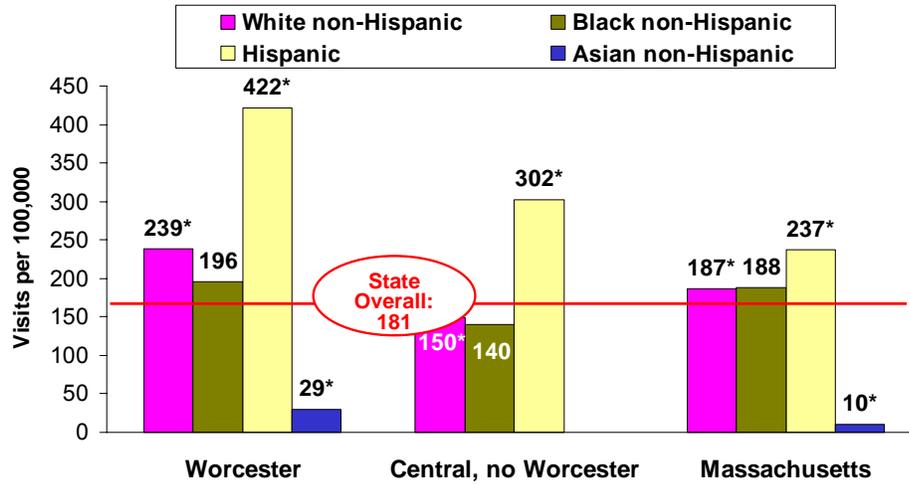


(*) Statistically different from State (p ≤.05)

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

SUBSTANCE ABUSE

Opioid-Related Emergency Department Visit Rate by Race/Ethnicity Central Region and Massachusetts: 2003-2005 ⁷¹

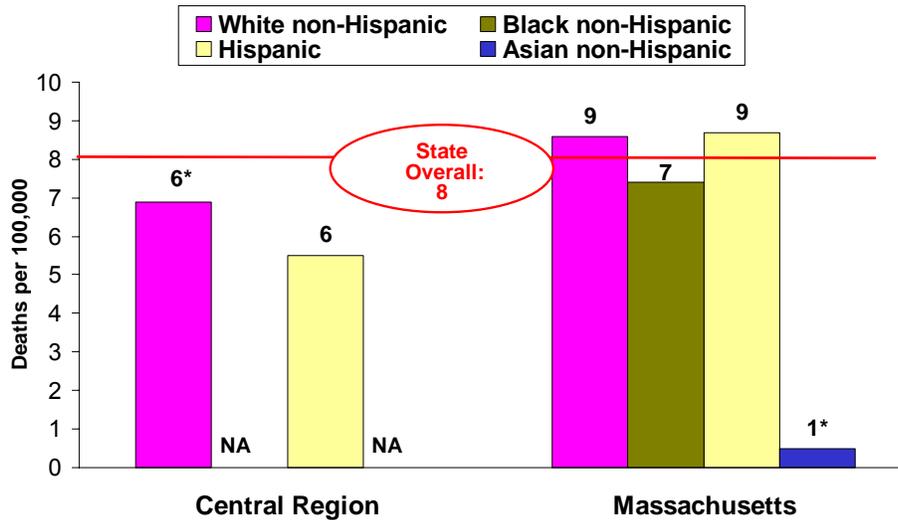


(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Visits

Opioid-Related Fatal Overdoses by Race/Ethnicity Central Region and Massachusetts: 2003-2005 ⁷²



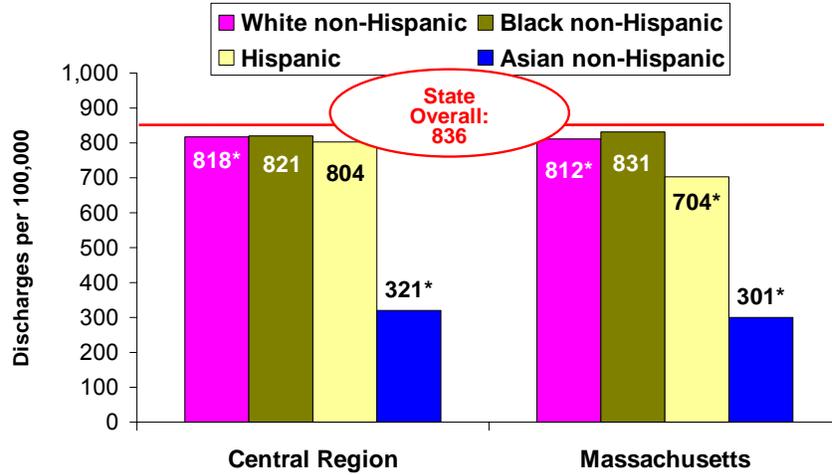
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

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

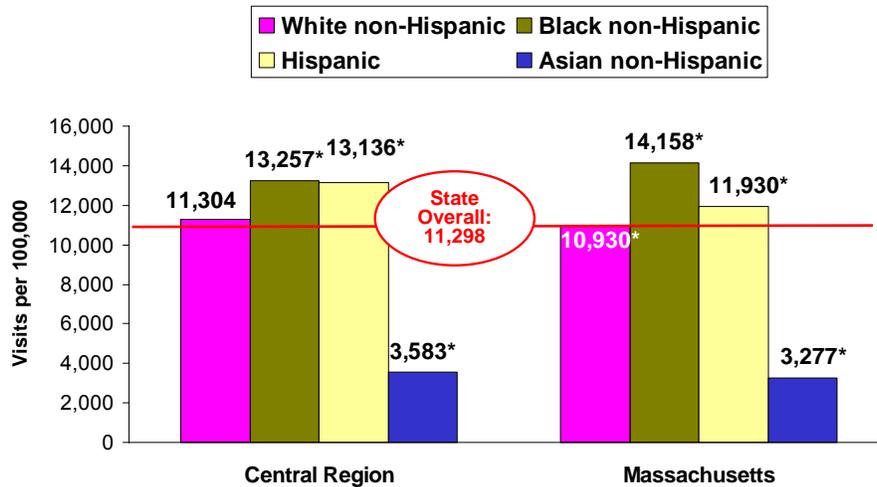
INJURY AND VIOLENCE

Injury-related Hospital Discharge Rates by Race/Ethnicity Central Region & Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Hospital Discharges

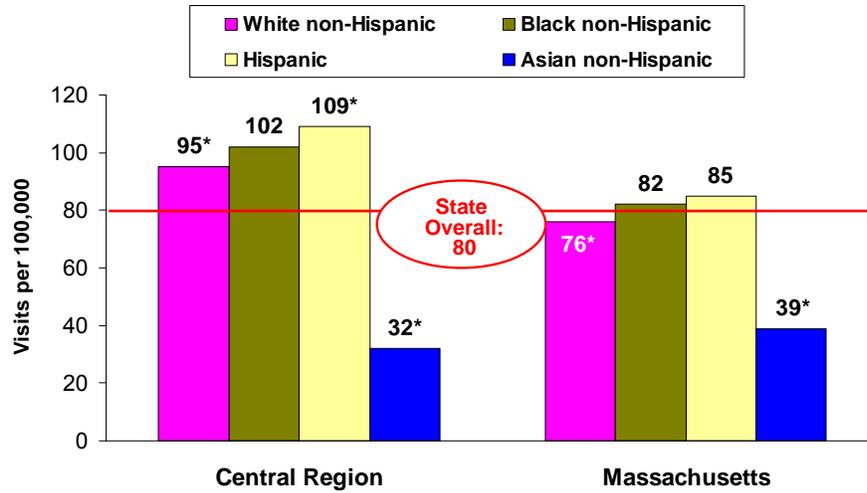
Emergency Department Visit Rates for Injuries & Poisonings by Race/Ethnicity Central Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Visits

Hospital Discharge Rates – Traumatic Brain Injury by Race/Ethnicity Central Region and Massachusetts: 2003-2005

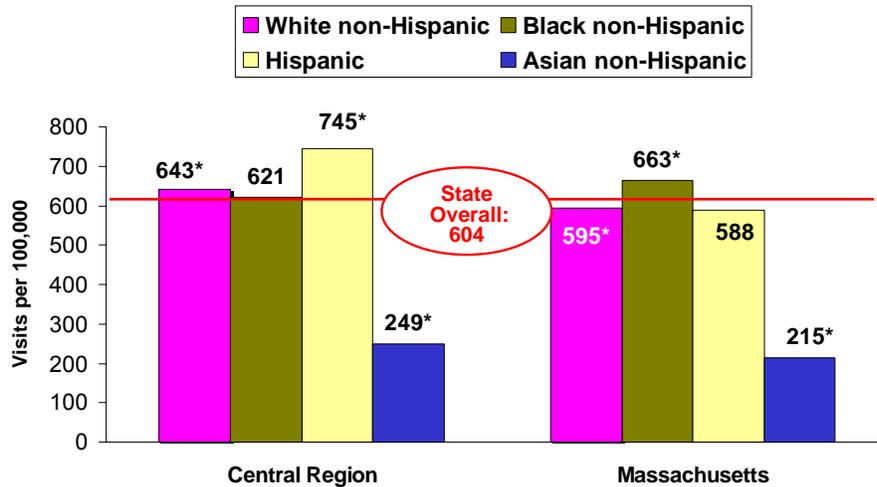
75



(*) Statistically different from State ($p \leq .05$)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Hospital Discharges

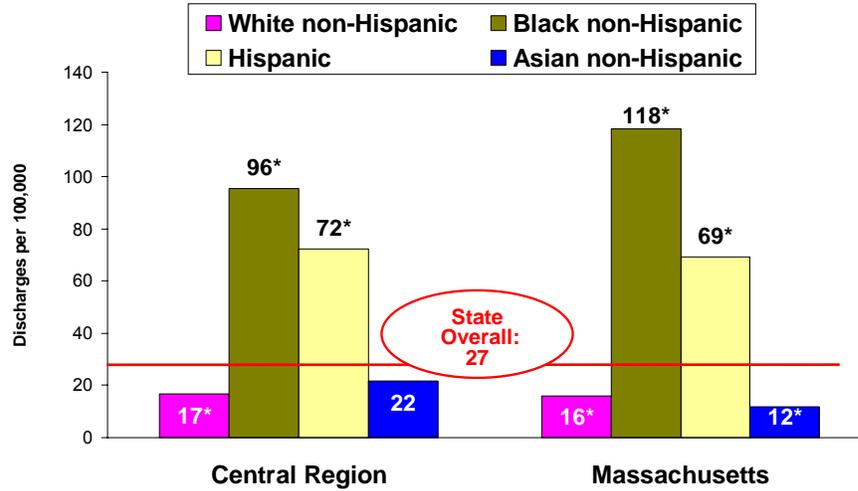
Emergency Department Visit Rates Traumatic Brain Injury by Race/Ethnicity Central Region and Massachusetts: 2003-2005

76



(*) Statistically different from State ($p \leq .05$)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Visits

Hospital Discharge Rates for Assaults by Race/Ethnicity Central Region and Massachusetts: 2003-2005

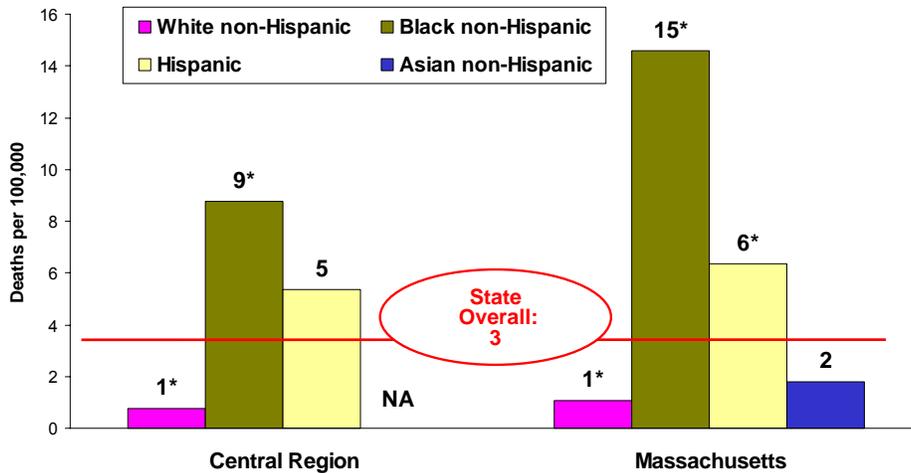


(*) Statistically different from State (p ≤ .05)

Crude rates

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Hospital Discharges

Homicide Rates by Race/Ethnicity Central Region and Massachusetts: 2003-2005



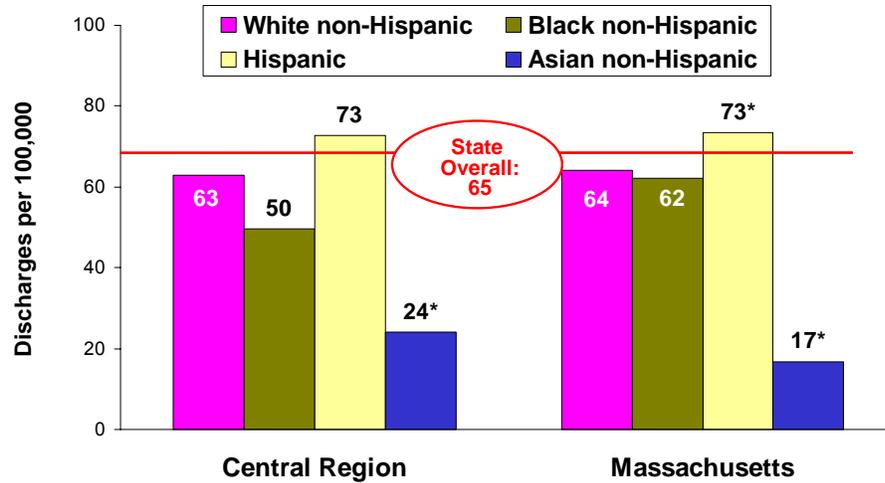
(*) Statistically different from State (p ≤ .05)

Age-adjusted to the 2000 US standard population.

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

Hospital Discharge Rates for Self-inflicted Injuries by Race/Ethnicity, Central Region and Massachusetts: 2003-2005

79



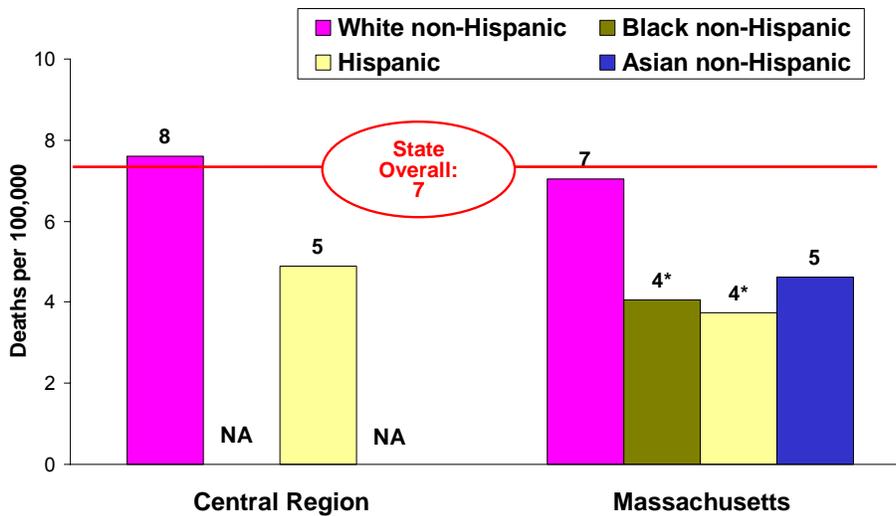
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Hospital Discharges

Suicide Rates by Race/Ethnicity Central Region and Massachusetts: 2003-2005

80



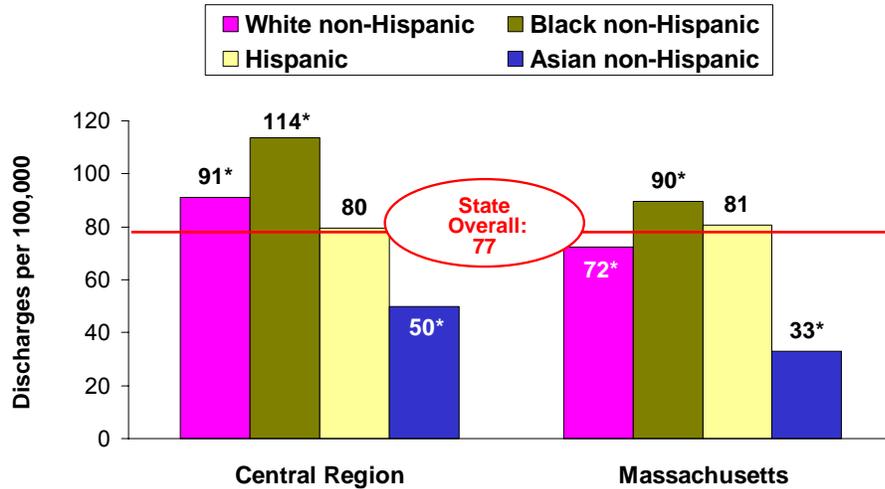
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

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

Hospital Discharge Rates for Motor Vehicle-Related Injuries by Race/Ethnicity, Central Region and Massachusetts: 2003-2005

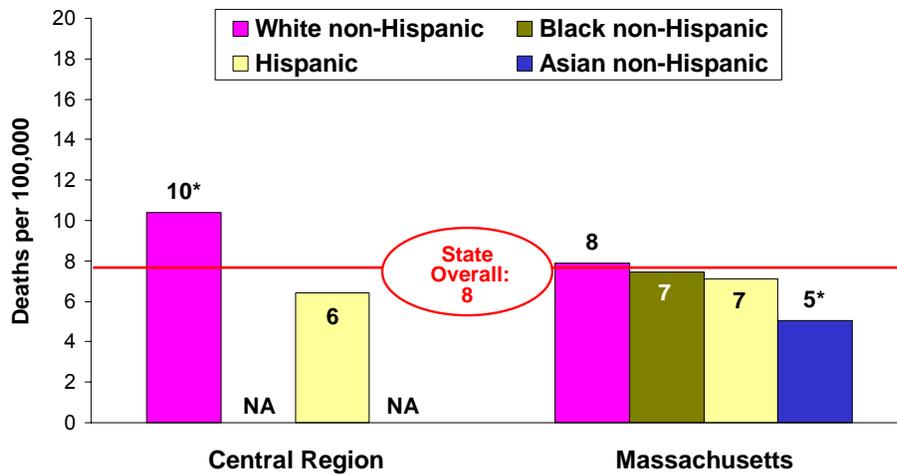
81



(*) Statistically different from State ($p \leq .05$)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Hospital Discharges

Motor Vehicle-Related Death Rates by Race/Ethnicity Central Region and Massachusetts: 2003-2005

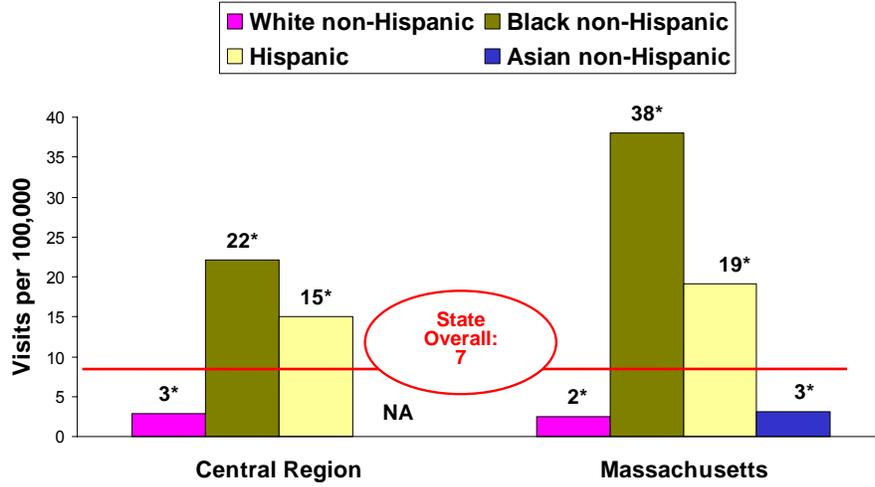
82



(*) Statistically different from State ($p \leq .05$)
 Age-adjusted to the 2000 US standard population.
 Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

Emergency Department Visit Rates for Firearm Injuries by Race/Ethnicity Central Region and Massachusetts: 2003-2005

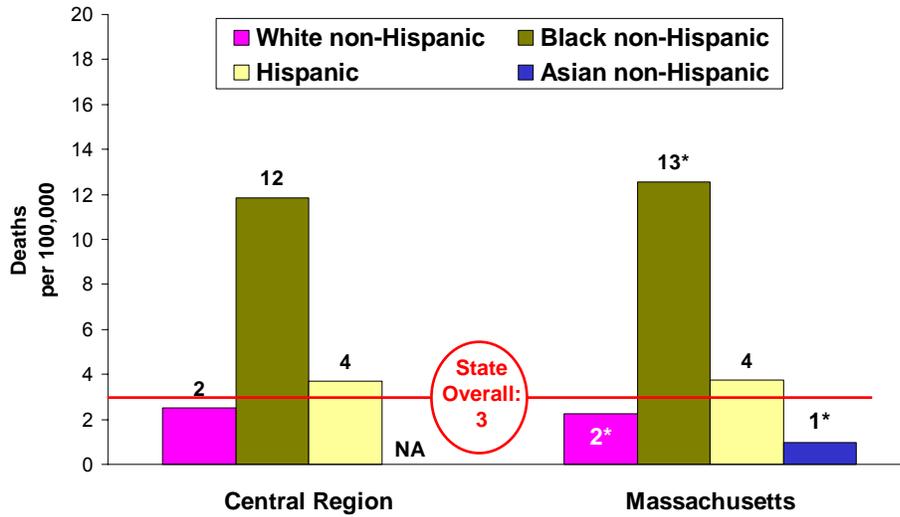
83



(*) Statistically different from State ($p \leq .05$)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Visits

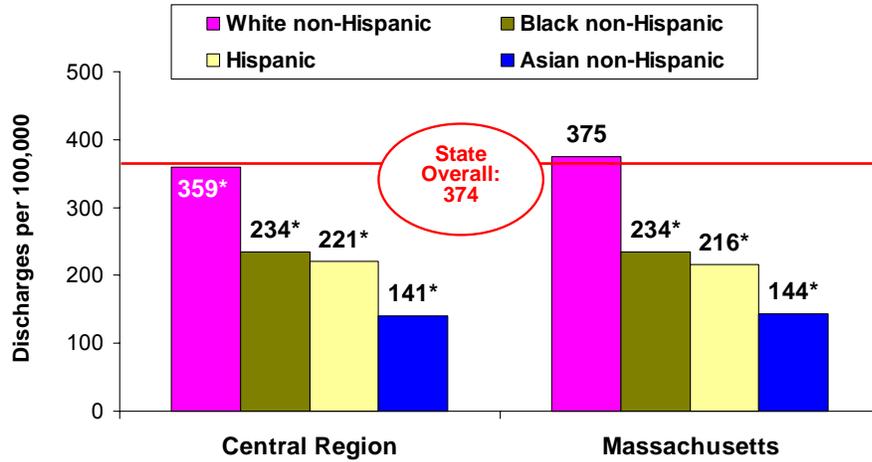
Firearm Death Rates by Race/Ethnicity Central Region and Massachusetts: 2003-2005

84



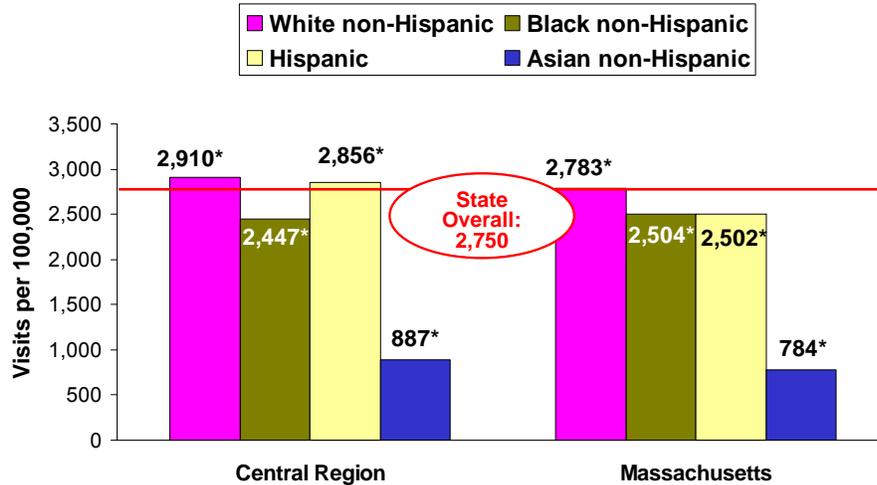
(*) Statistically different from State ($p \leq .05$)
 Age-adjusted to the 2000 US standard population.
 Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

Hospital Discharge Rates for Fall-Related Injuries by Race/Ethnicity, Central Region and Massachusetts: 2003-2005



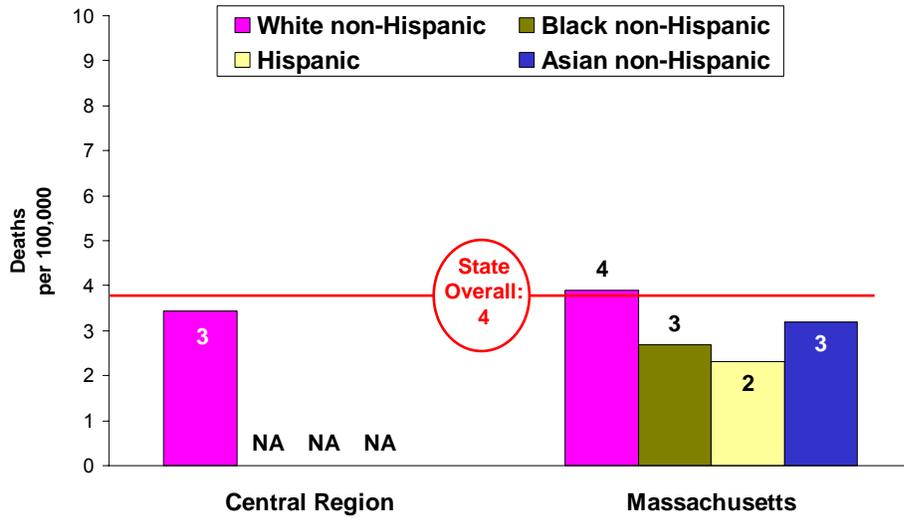
(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Hospital Discharges

Emergency Department Visit Rates for Fall-Related Injuries by Race/Ethnicity Central Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Visits

Fall-Related Injury Death Rates by Race/Ethnicity Central Region and Massachusetts: 2003-2005



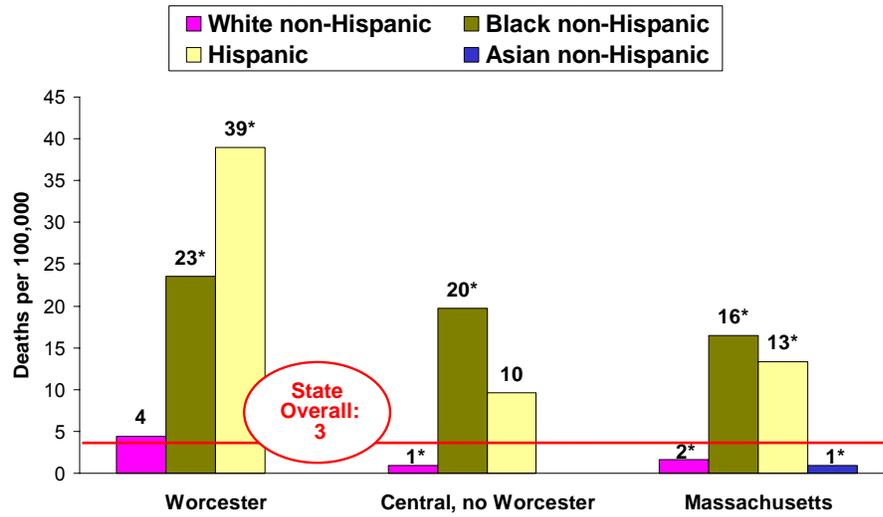
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

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

HIV/AIDS

HIV/AIDS Death Rate by Race/Ethnicity Worcester & Central Region Massachusetts: 2003-2005



(*) Statistically different from State ($p \leq .05$)

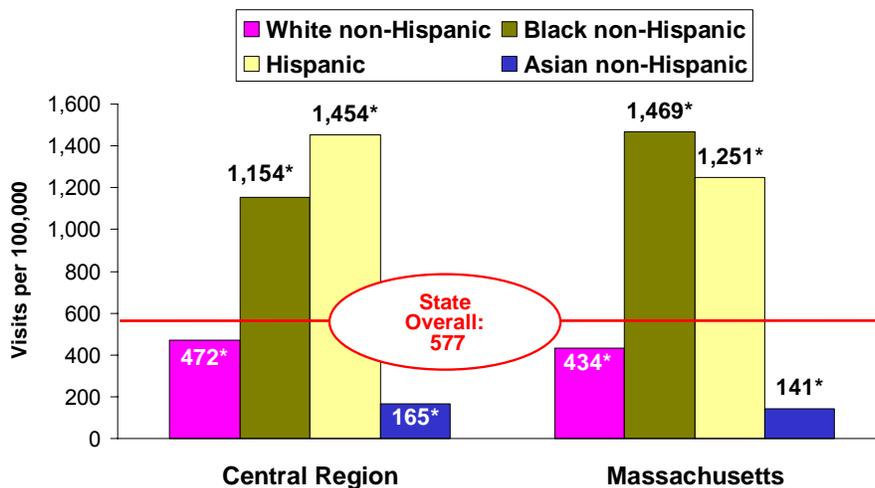
Age-adjusted to the 2000 US standard population.

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

ASTHMA

Emergency Department Visit Rates for Asthma by Race/Ethnicity Central Region and Massachusetts: 2005

89



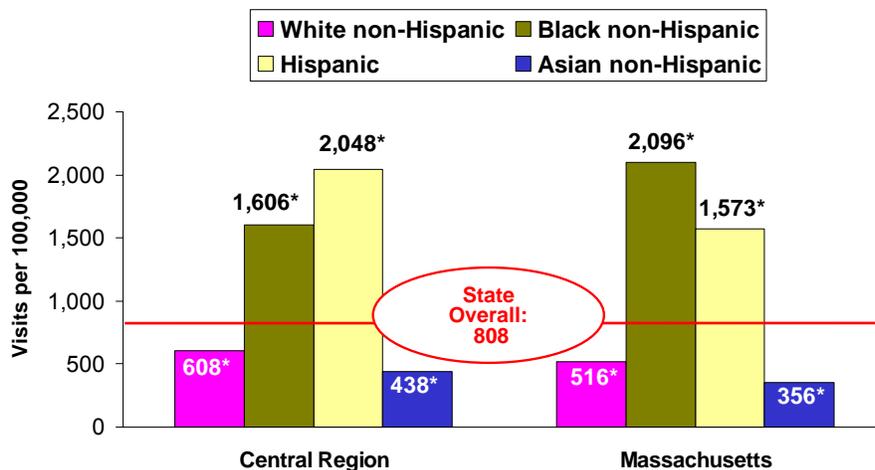
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2005. Emergency Visits

Asthma Emergency Department Visit Rates by Race/Ethnicity, Children Ages 0-14 Central Region and Massachusetts: 2005

90



(*) Statistically different from State ($p \leq .05$)

Source: Division of Health Care Finance and Policy. Calendar Year 2005. Emergency Visits

PREMATURE MORTALITY

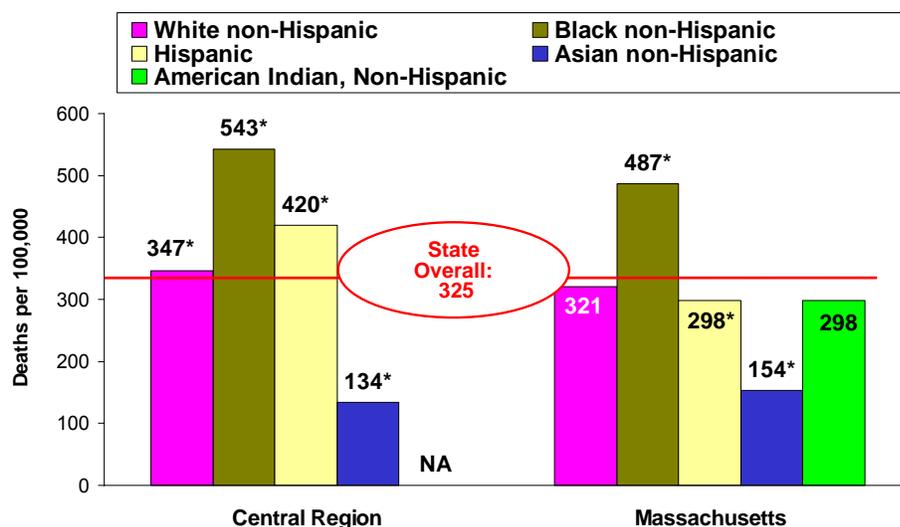
Premature Mortality Rate (PMR)¹

- **Definition**
 - deaths before age 75
- **Rationale**
 - two-thirds of deaths to persons ages 75+
 - vast majority of deaths to persons age 75+ are due to chronic conditions associated with aging
 - focusing on deaths to persons less than 75 years may be more preventable
- **Summary health statistic**
 - excellent measure to reflect the health status of a population
 - used as a health status indicator that can be used to focus prevention initiatives and target programs

¹ Rates are per 100,000 population. Age-adjusted to the 2000 US standard population under 75 years of age.

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

Premature Mortality Rate by Race/Ethnicity Central Region and Massachusetts: 2003-2005



(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population under 75 years of age.

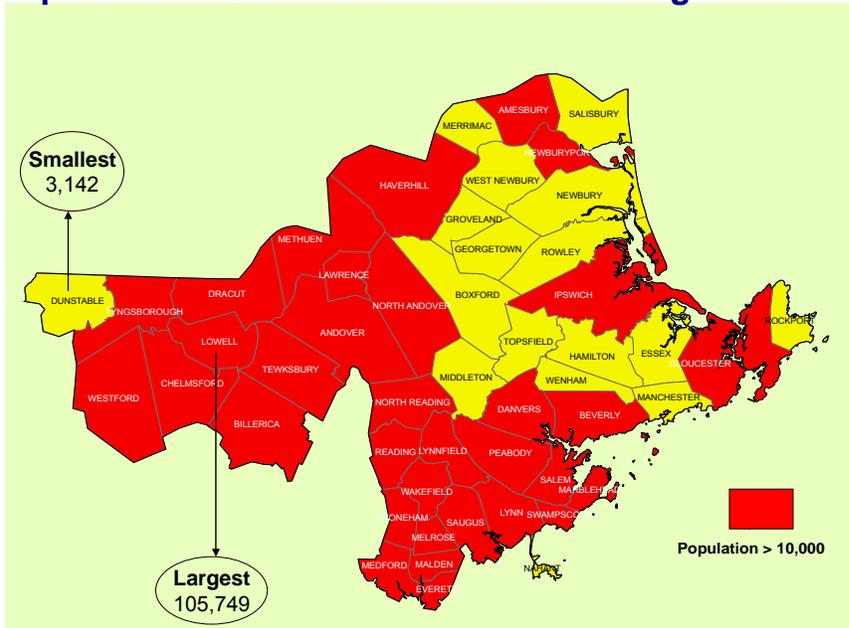
Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

III. NORTHEAST REGION

**SOCIODEMOGRAPHIC
INDICATORS
AND
HEALTH CARE ACCESS
AND STATUS**

Population in Communities-Northeast Region: 2005

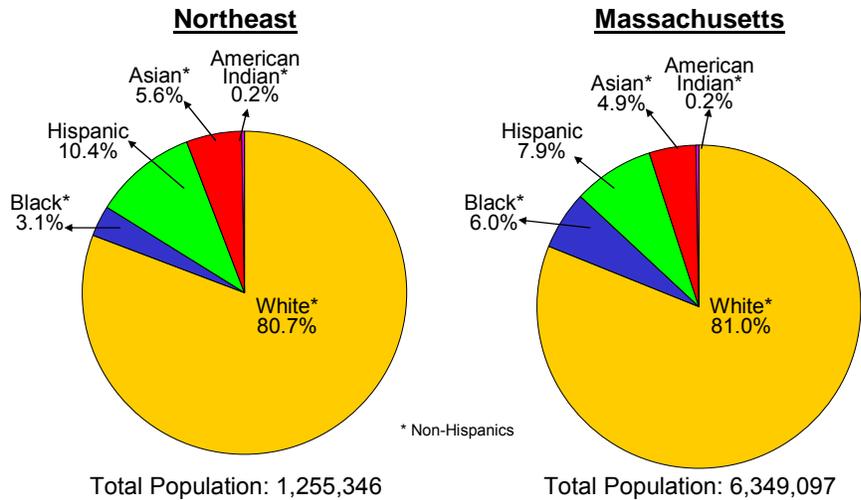
93



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

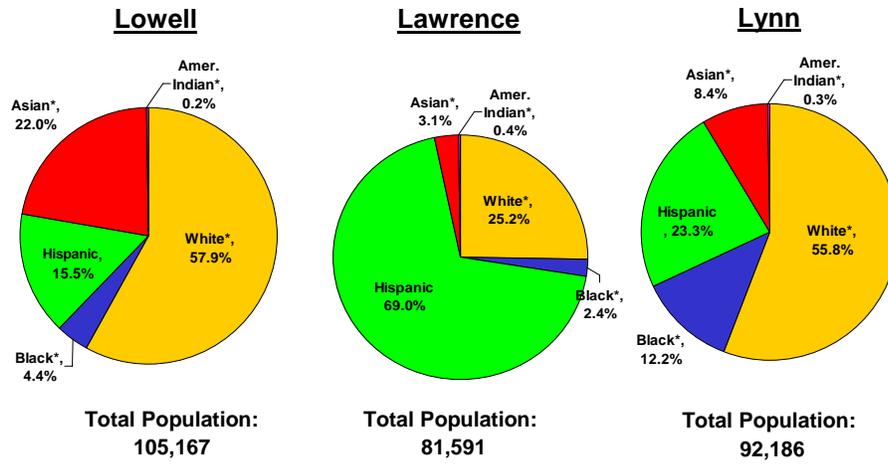
Race and Ethnic Breakdown of Population Northeast Region and Massachusetts: 2005

94



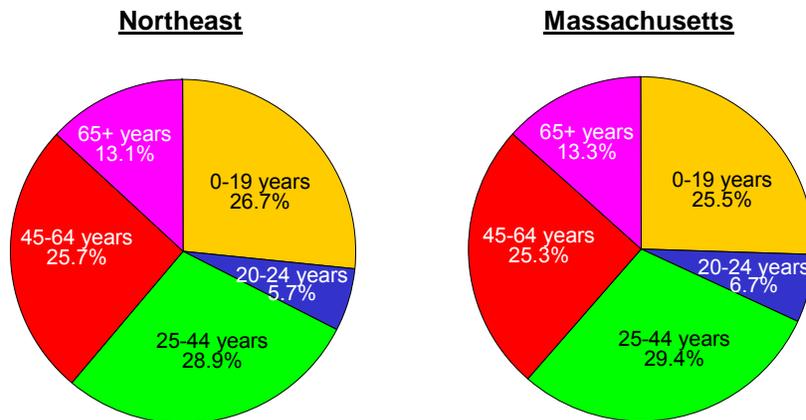
Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

Race and Ethnic Breakdown of Population Lowell, Lawrence, and Lynn : 2005



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

Population by Age Group Northeast Region and Massachusetts: 2005



Source: MDPH, Health Information, Statistics, Research and Evaluation Bureau, Research & Epidemiology Program

Language Spoken at Home Northeast Region and Massachusetts: 2000

	Lawrence	Lowell	Northeast Region	Massachusetts
Only English	35.6%	59.3%	80.1%	81.3%
Spanish or Spanish Creole	55.3%	12.4%	7.9%	6.2%
Portuguese or Portuguese Creole	1.0%	5.4%	1.6%	2.7%
Italian	1.0%	0.2%	1.5%	1.0%
French (Incl. Patois, Cajun)	2.3%	3.2%	1.5%	1.4%
Mon Khmer, Cambodian	0.8%	9.6%	1.3%	0.4%
Chinese	0.7%	0.7%	0.9%	1.2%
Greek	0.0%	1.4%	0.8%	0.5%
Vietnamese	1.0%	1.3%	0.6%	0.5%
Russian	0.0%	0.1%	0.5%	0.5%

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

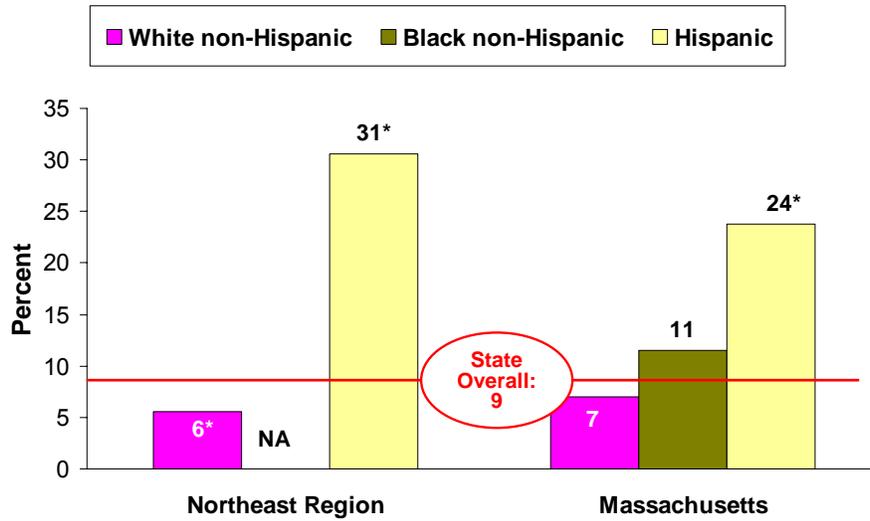
Socio-Demographic Indicators Northeast Region and Massachusetts: 2000

	Lawrence	Lowell	Lynn	Northeast Region	MA Overall	US Overall
Per Capita Income	\$13,360	\$17,557	\$17,492	\$25,748	\$25,952	\$21,587
Those living below 100% poverty	24.3%	16.8%	16.5%	8.3%	9.3%	12.4%
Children < 18 living below 100% poverty	31.7%	23.2%	22.9%	11.2%	12.0%	16.1%
Less than a High School Education	19.8%	12.9%	10.1%	15.7%	15.2%	19.6%
Speak language other than English at home	64.4%	40.7%	34.2%	19.9%	18.7%	17.9%
Foreign born	30.6%	22.1%	22.8%	12.6%	12.2%	11.1%
Unemployed	11.3%	6.9%	6.5%	6.6%		

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

Adults who Have No Health Insurance by Race and Ethnicity Northeast Region and Massachusetts: 2005

99

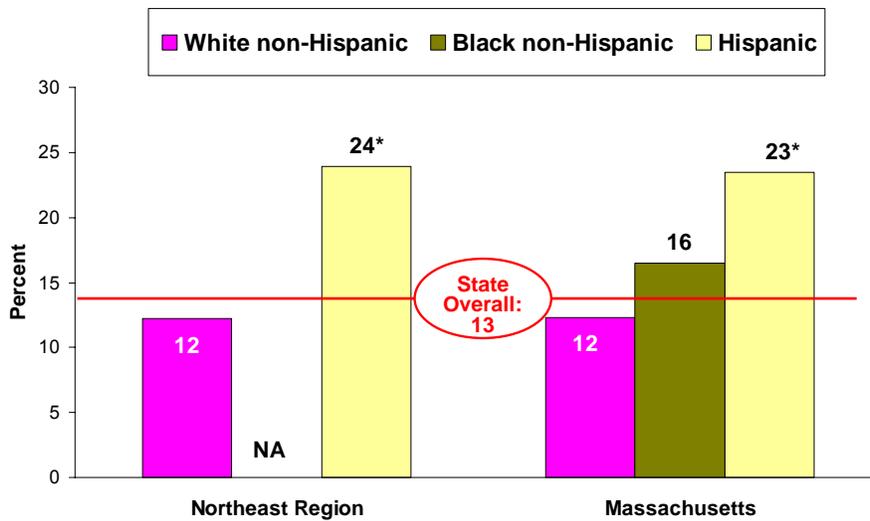


(*) Statistically different from State ($p \leq .05$)

Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Health Survey Program

Adults who Reported Fair or Poor Health by Race and Ethnicity Northeast Region and Massachusetts: 2005

100



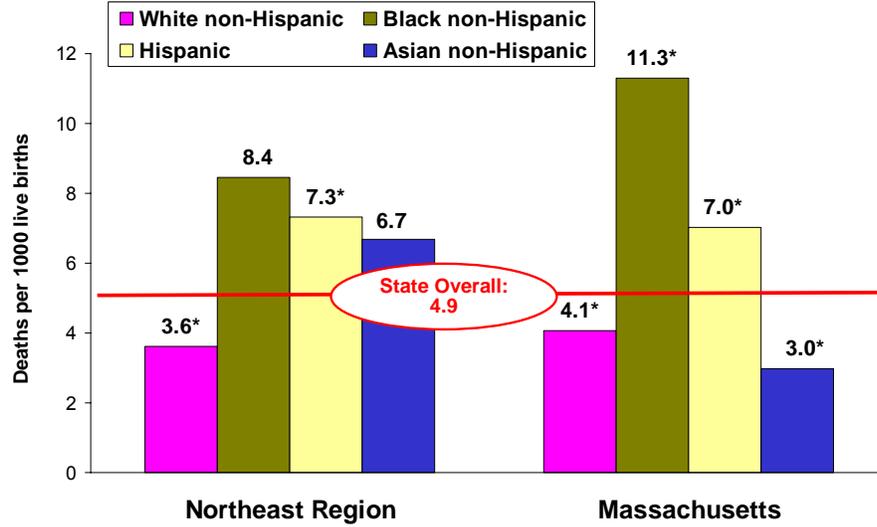
(*) Statistically different from State ($p \leq .05$)

Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Health Survey Program

BIRTH OUTCOMES

Infant Mortality Rates by Race/Ethnicity Northeast Region and Massachusetts: 2003-2005

101



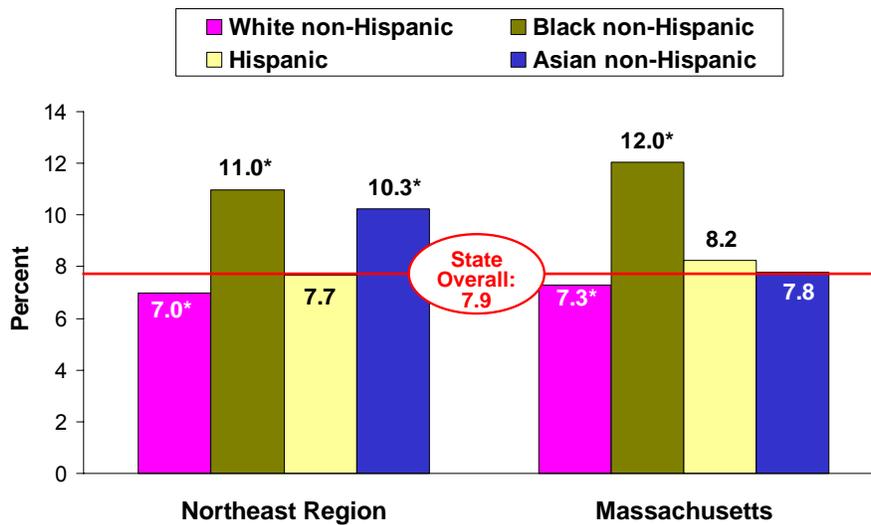
NA= Calculations based on less than 5 events are excluded

(*) Statistically different from State (p ≤ .05)

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

Low Birthweight by Race and Ethnicity Northeast Region and Massachusetts: 2005

102

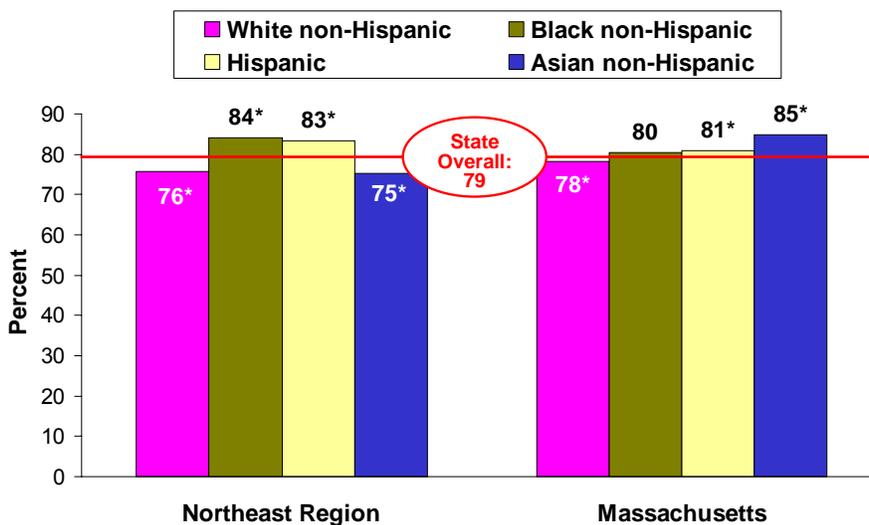


(*) Statistically different from State (p ≤ .05)

Low birthweight: less than 2,500 grams or 5.5 pounds

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

Breastfeeding by Race/Ethnicity Northeast Region and Massachusetts : 2005

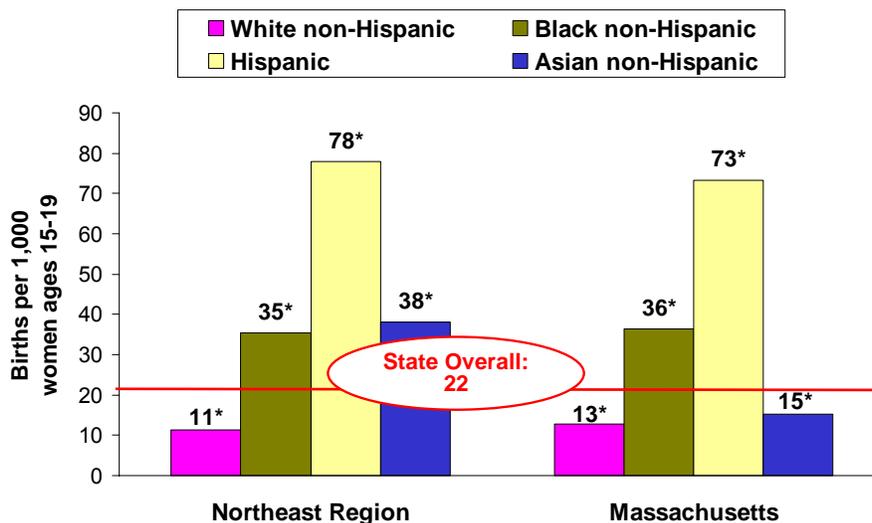


(*) Statistically different from State (p ≤ .05)

Low birthweight: less than 2,500 grams or 5.5 pounds

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

Teen Birth Rates by Race and Ethnicity Northeast Region and Massachusetts: 2005



(*) Statistically different from State (p ≤ .05)

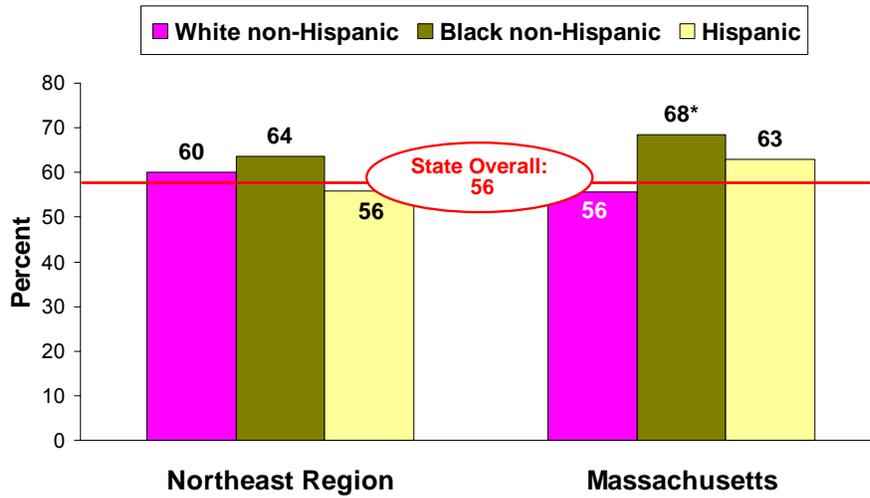
Teen Birth Rate: the number of births to women ages 15-19 per 1,000 women ages 15-19.

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

CHRONIC DISEASE OUTCOMES AND OVERWEIGHT/OBESITY

Overweight¹ by Race and Ethnicity Northeast Region and Massachusetts: 2005

105



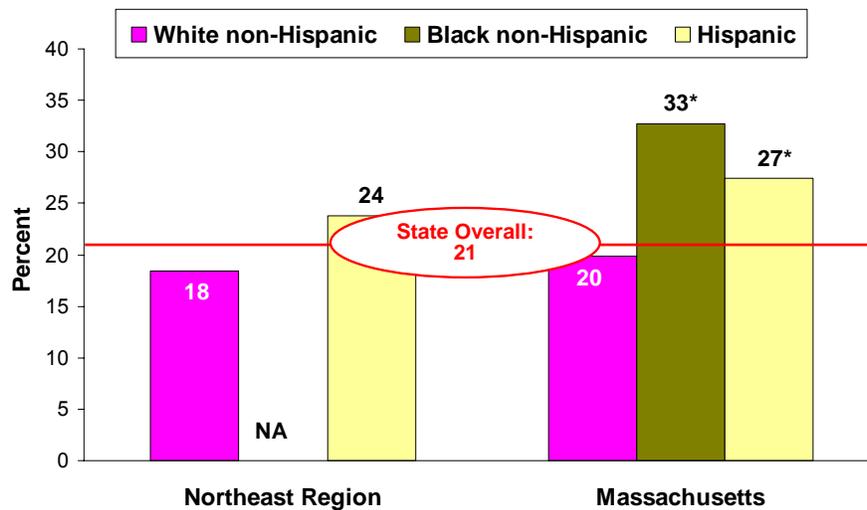
(*) Statistically different from State ($p \leq .05$)

¹ Overweight: BMI greater than or equal to 25

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

Obesity¹ by Race and Ethnicity Northeast Region and Massachusetts: 2005

106



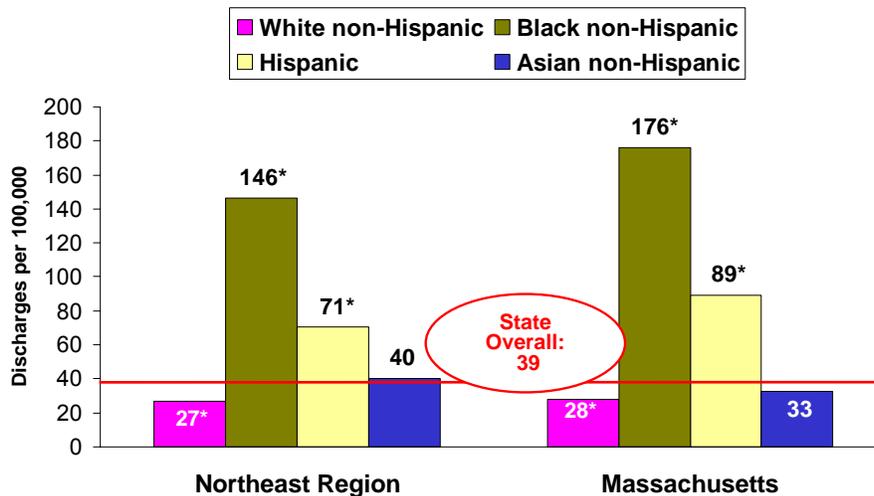
(*) Statistically different from State ($p \leq .05$)

¹ Obesity: BMI greater than or equal to 30

Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Health Survey Program

Hypertension Hospital Discharge Rate by Race/Ethnicity Northeast Region Massachusetts: 2003-2005

107



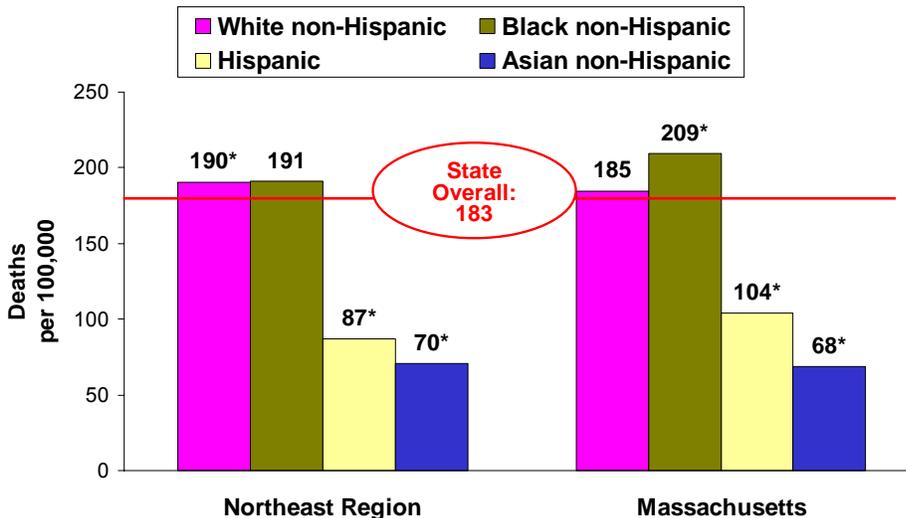
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

Heart Disease Death Rate by Race/Ethnicity Northeast Region and Massachusetts: 2003-2005

108

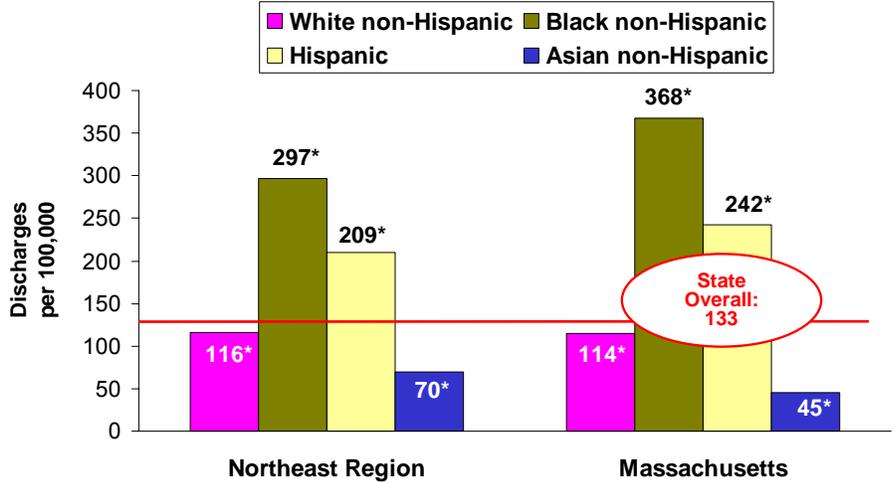


(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

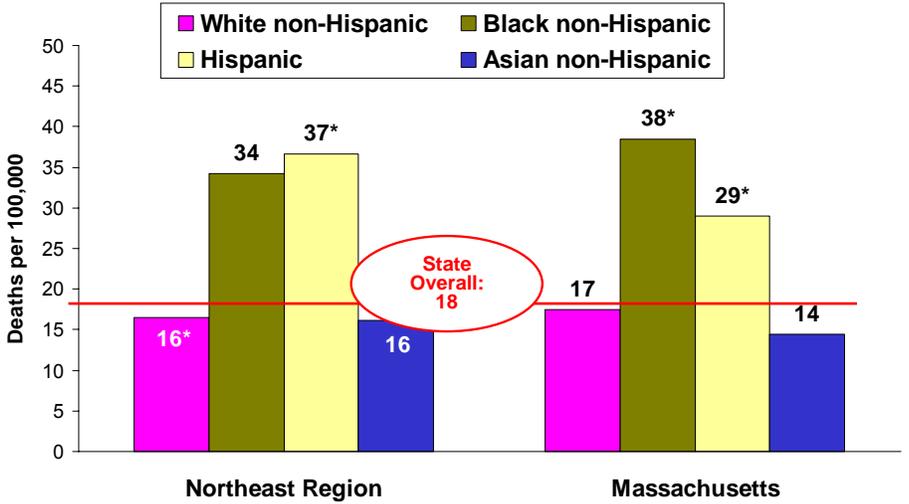
Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Division of Research & Epidemiology

Diabetes Hospital Discharge Rate by Race/Ethnicity Northeast Region Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

Diabetes Mortality Rate by Race/Ethnicity Northeast Region and Massachusetts: 2003-2005

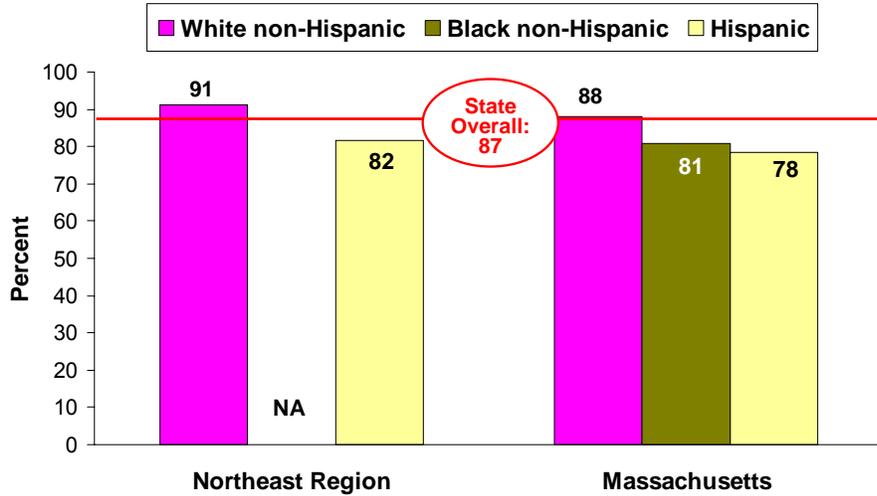


(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Division of Research & Epidemiology

CANCER

Women who had a Clinical Breast Exam in the Past Two Years by Race and Ethnicity Northeast Region and Massachusetts: 2004

111

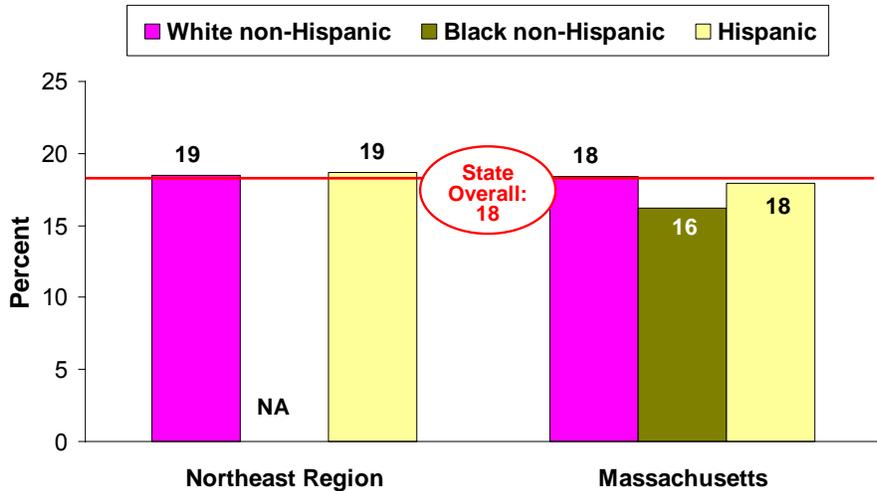


(*) Statistically different from State ($p \leq .05$)

Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Health Survey Program

Current Smoker by Race and Ethnicity Northeast Region and Massachusetts: 2005

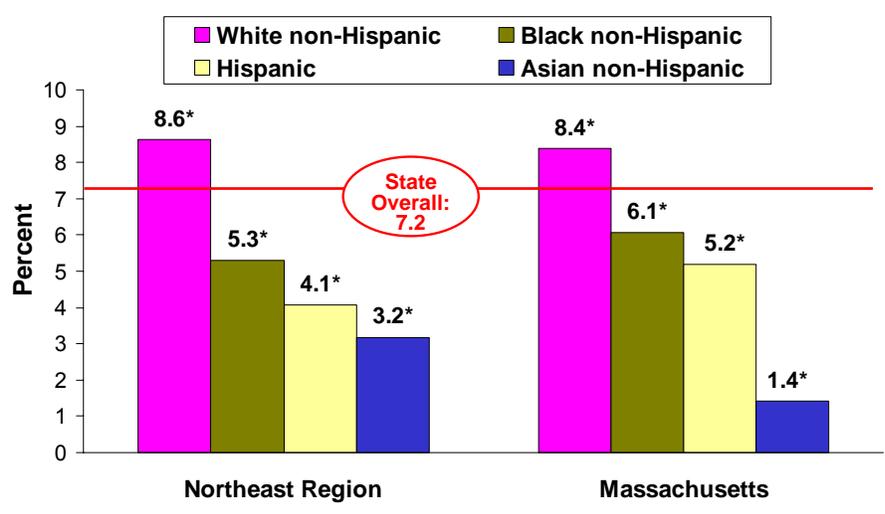
112



(*) Statistically different from State ($p \leq .05$)

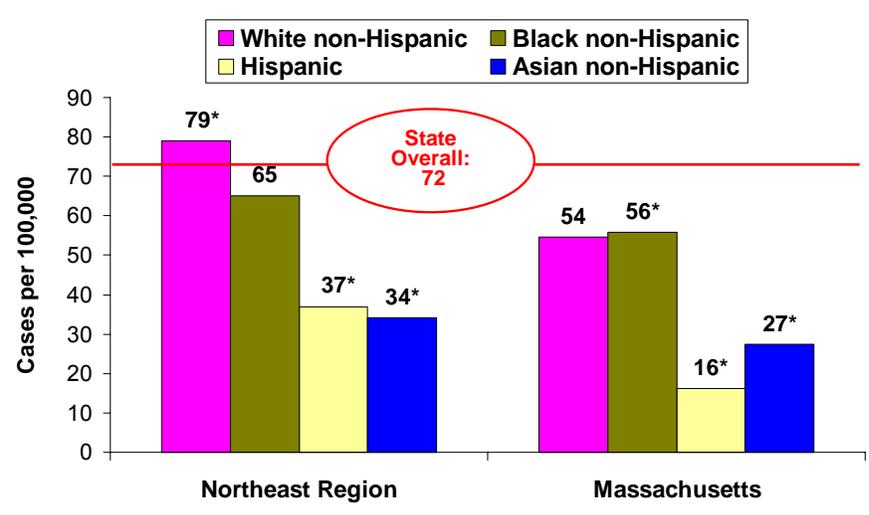
Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Health Survey Program

Smoking During Pregnancy by Race and Ethnicity Northeast Region and Massachusetts: 2005



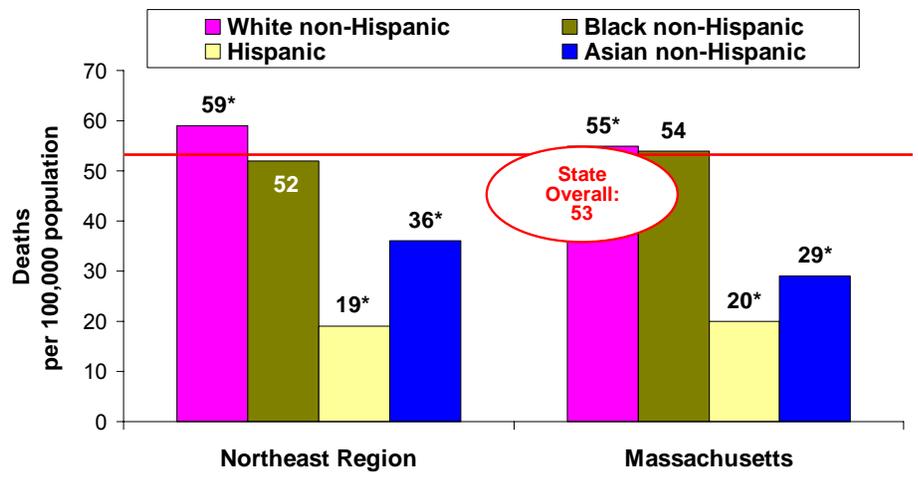
(*) Statistically different from State (p ≤ .05)
 Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Division of Research & Epidemiology

Lung Cancer Incidence Rates by Race and Ethnicity Northeast Region & Massachusetts: 1999-2003



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Cancer Registry

Lung Cancer Mortality Rates by Race and Ethnicity Northeast Region & Massachusetts: 2001-2005

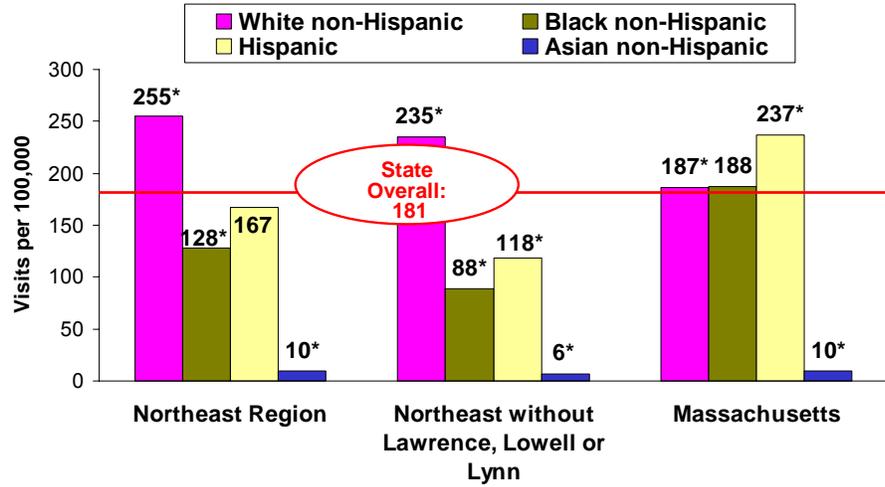


(*) Statistically different from State (p ≤ .05)
Age-adjusted to the 2000 US standard population.
Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Division of Research & Epidemiology

SUBSTANCE ABUSE

Opioid-Related Emergency Department Visit Rates by Race/Ethnicity Northeast Region and Massachusetts: 2003-2005

116



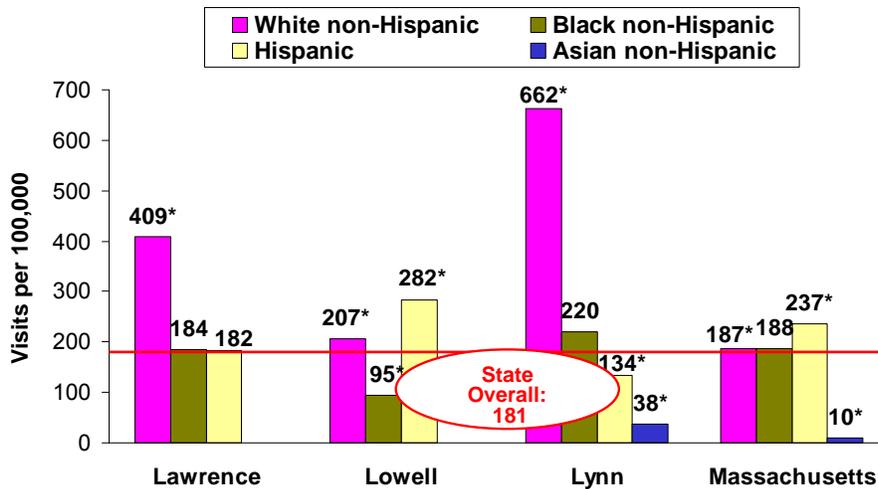
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003- 2005. Emergency Department Visits

Opioid-Related Emergency Department Visit Rates by Race/Ethnicity--Lawrence, Lowell, and Lynn Massachusetts: 2003-2005

117

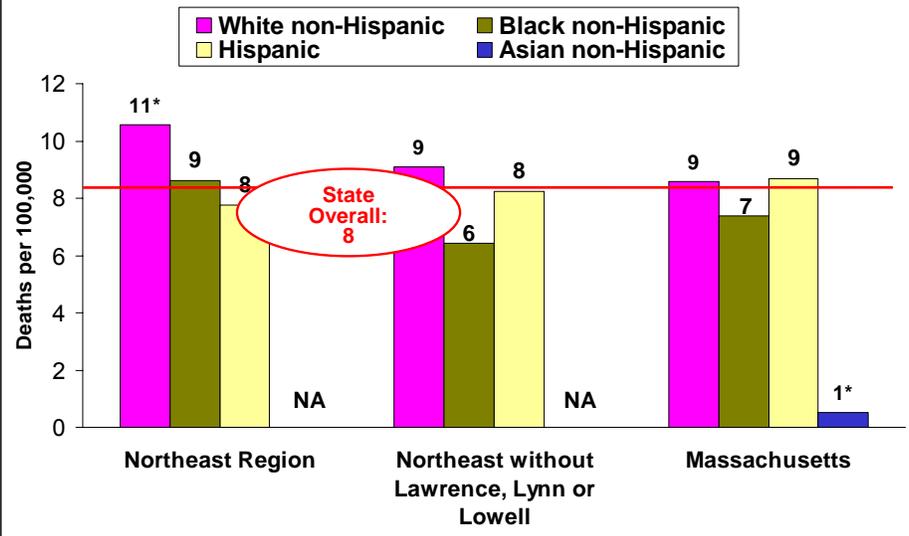


(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003- 2005. Emergency Department Visits

Opioid-Related Fatal Overdoses by Race/Ethnicity Northeast Region and Massachusetts: 2003-2005

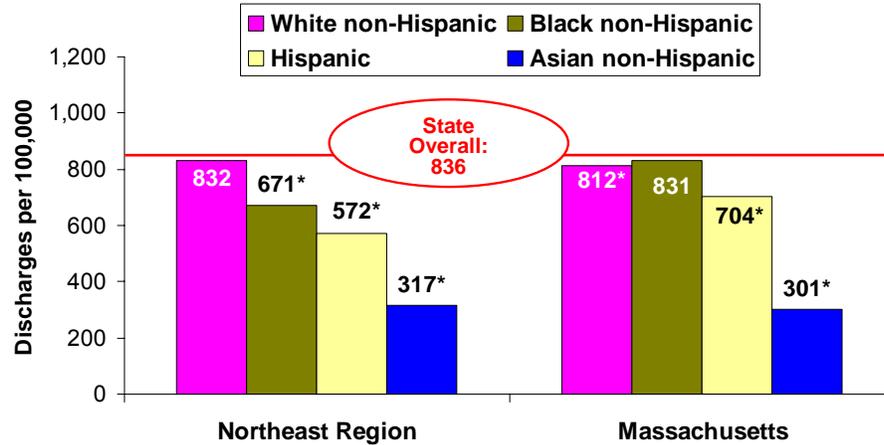


(*) Statistically different from State (p ≤ .05)
Age-adjusted to the 2000 US standard population.
Source: MDPH, Health Information, Statistics, Research, and Evaluation Bureau, Research & Epidemiology Program

INJURY AND VIOLENCE

Injury-Related Hospital Discharge Rates by Race/Ethnicity, Northeast Region & Massachusetts: 2003-2005

119



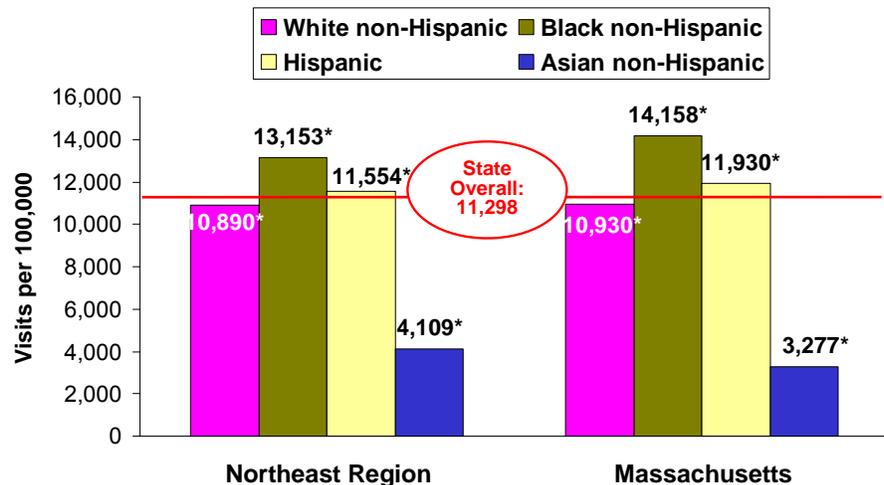
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003- 2005. Hospital Discharges

Emergency Department Visit Rates for Injuries & Poisonings by Race/Ethnicity Northeast Region and Massachusetts: 2003-2005

120

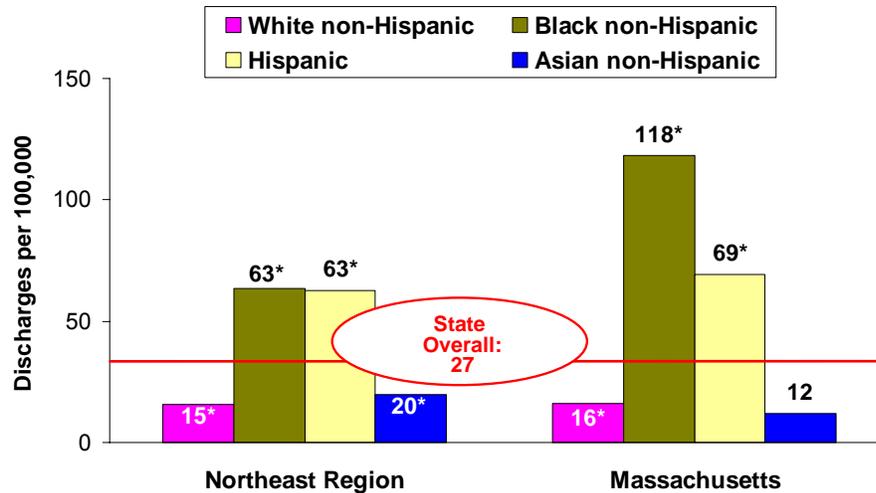


(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003- 2005. Emergency Department Visits

Hospital Discharge Rates for Assaults by Race/Ethnicity Northeast Region and Massachusetts: 2003-2005

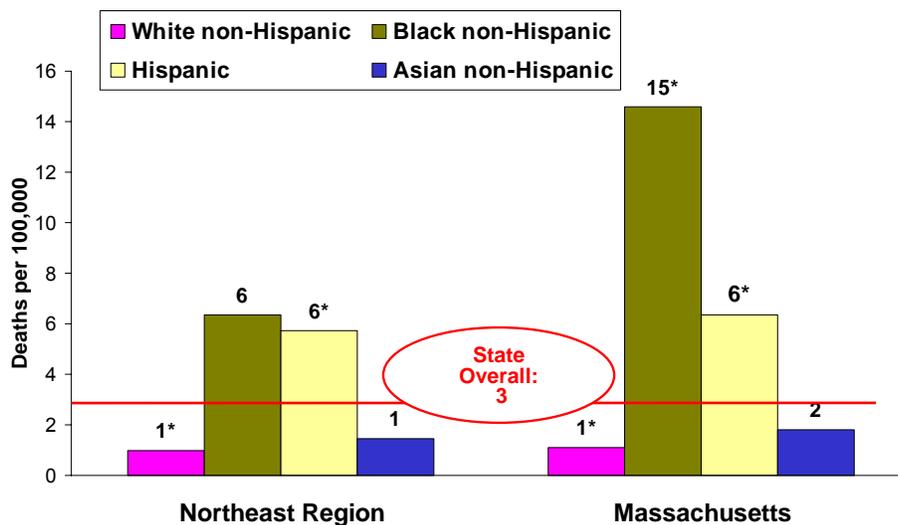


(*) Statistically different from State (p ≤ .05)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003- 2005. Hospital Discharges

Homicide Rates by Race/Ethnicity Northeast Region and Massachusetts: 2003-2005



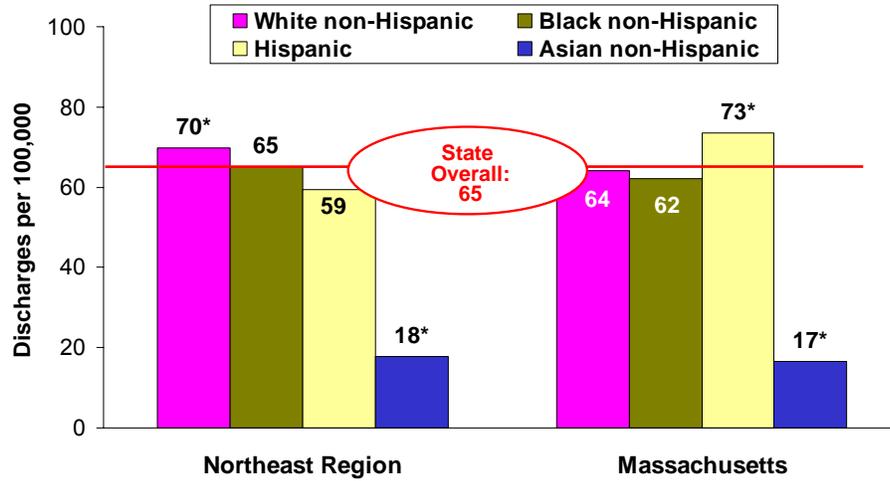
(*) Statistically different from State (p ≤ .05)

Age-adjusted to the 2000 US standard population.

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

Hospital Discharge Rates for Self-Inflicted Injuries by Race/Ethnicity Northeast Region and Massachusetts: 2003-2005

123



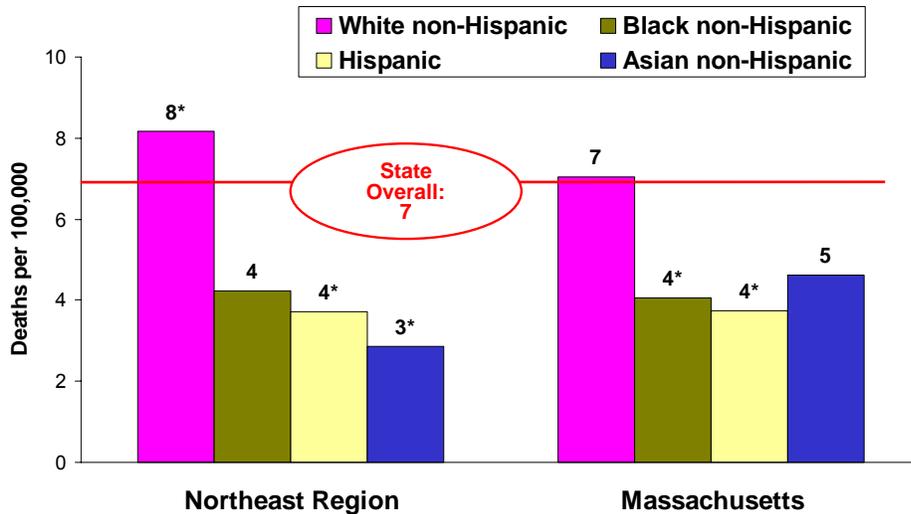
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003- 2005. Hospital Discharges

Suicide Rates by Race/Ethnicity Northeast Region and Massachusetts: 2003-2005

124



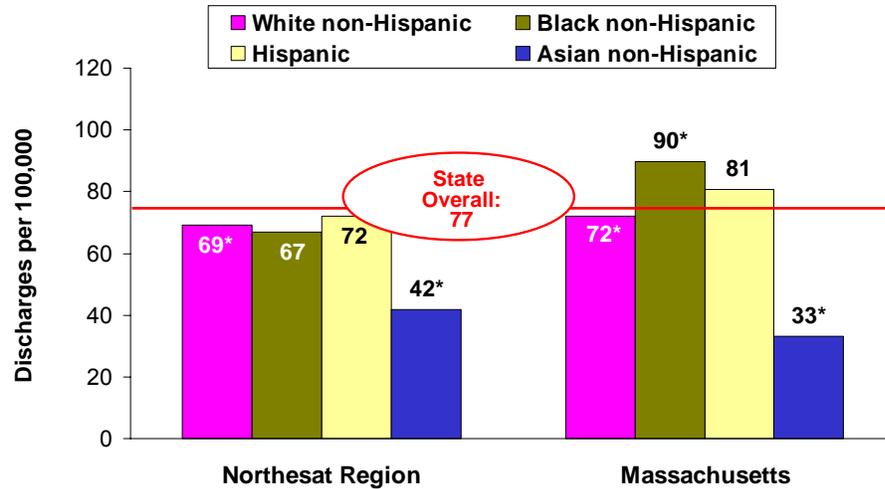
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

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

Hospital Discharge Rates for Motor Vehicle-Related Injuries by Race/Ethnicity Northeast Region and Massachusetts: 2003-2005

125



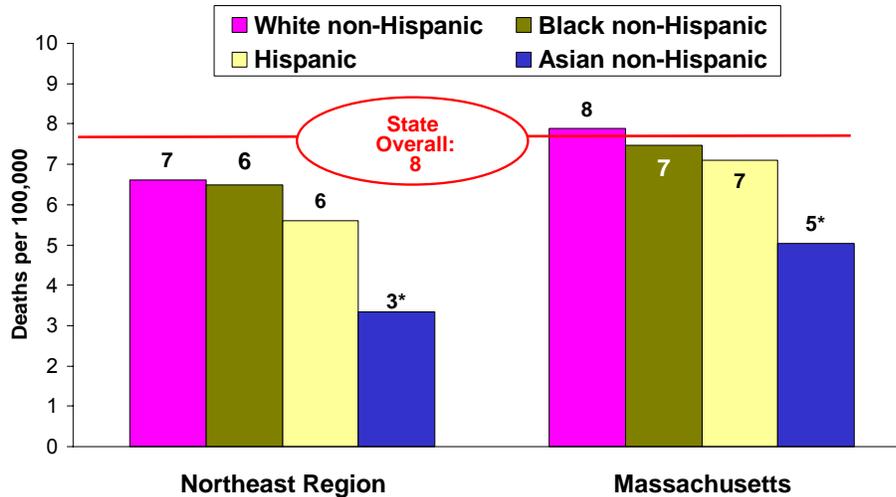
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003- 2005. Hospital Discharges

Motor Vehicle-Related Death Rates by Race/Ethnicity Northeast Region and Massachusetts: 2003-2005

126

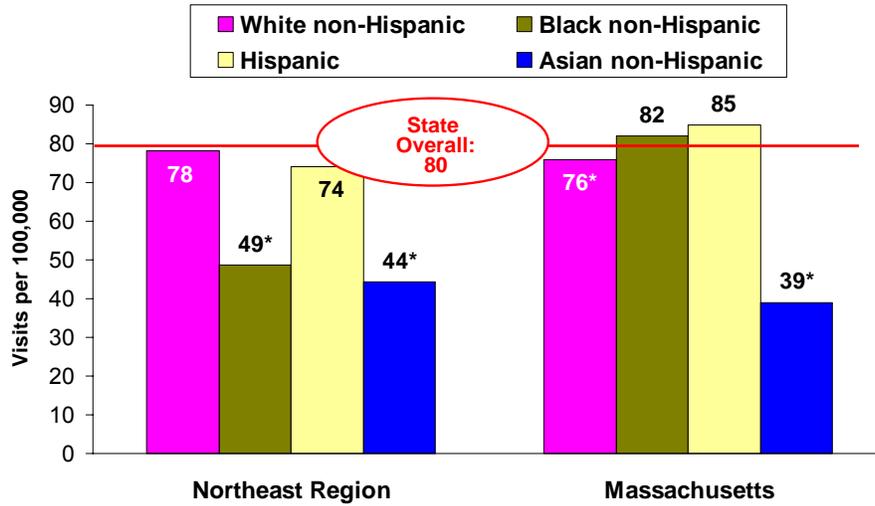


(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

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

Hospital Discharge Rates for Traumatic Brain Injury¹²⁷ by Race/Ethnicity, Northeast Region and Massachusetts: 2003-2005

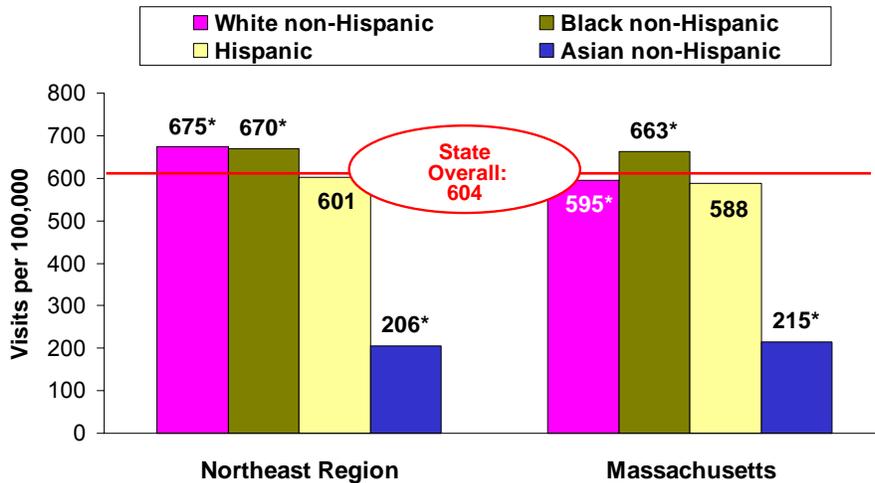


(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003- 2005. Hospital Discharges

Emergency Department Visit Rates for Traumatic Brain Injury by Race/Ethnicity¹²⁸ Northeast Region and Massachusetts: 2003-2005



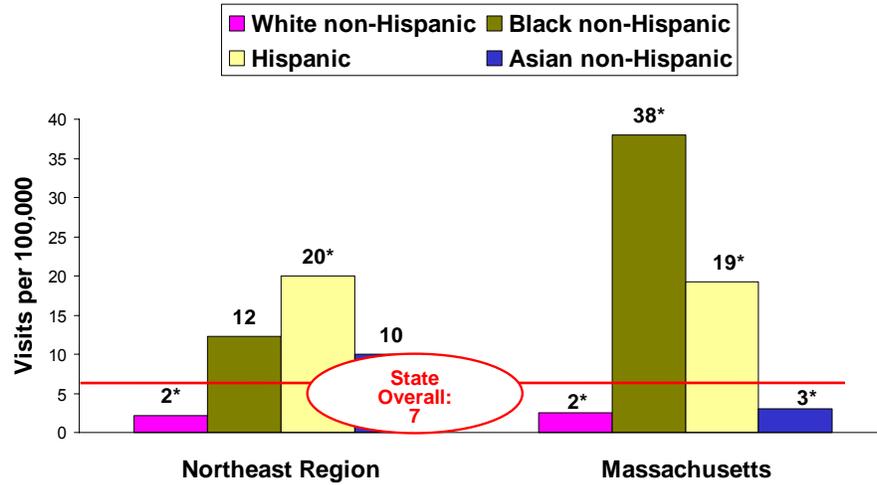
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2005. Emergency Visits

Emergency Department Visit Rates for Firearm Injuries by Race/Ethnicity Northeast Region and Massachusetts: 2003-2005

129



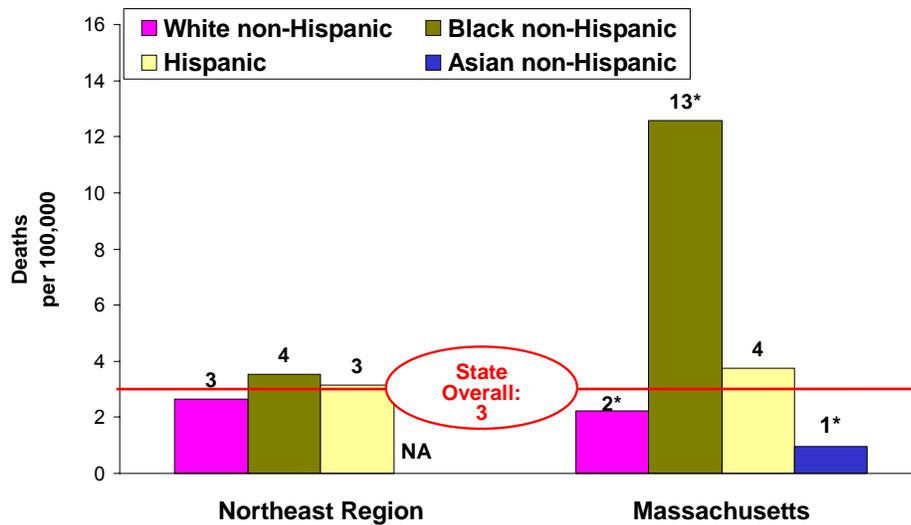
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Visits

Firearm Death Rates by Race/Ethnicity Northeast Region and Massachusetts: 2003-2005

130

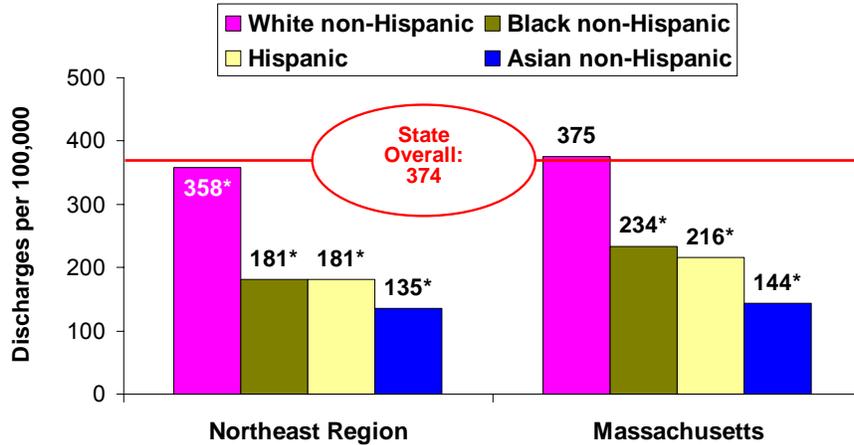


(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

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

Hospital Discharge Rates for Fall-Related Injuries¹³¹ by Race/Ethnicity Northeast Region and Massachusetts: 2003-2005

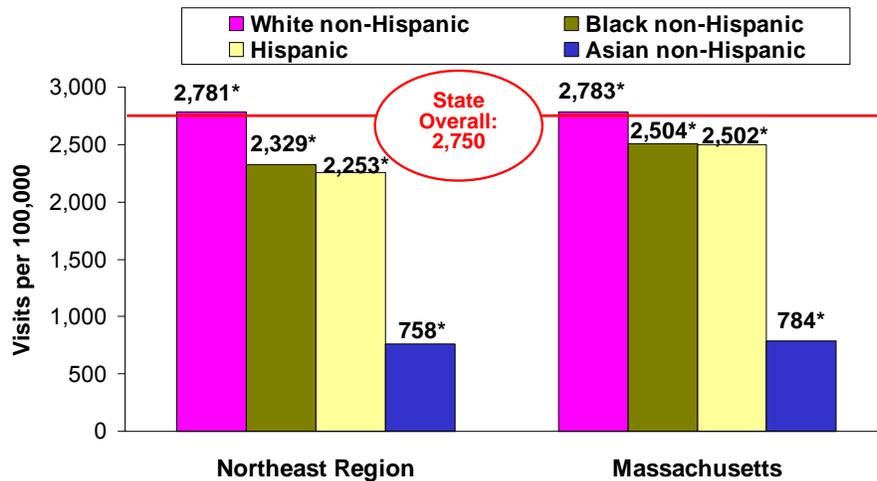


(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003- 2005. Hospital Discharges

Emergency Department Visit Rates for Fall-Related Injuries¹³² by Race/Ethnicity Northeast Region and Massachusetts: 2003-2005

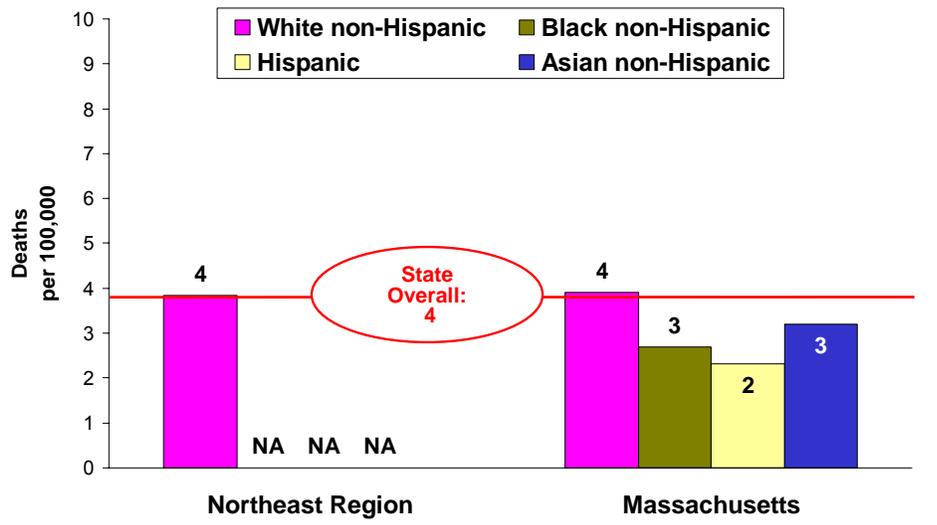


(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2005. Emergency Visits

Fall-Related Injury Mortality Rates by Race/Ethnicity Northeast Region and Massachusetts: 2003-2005



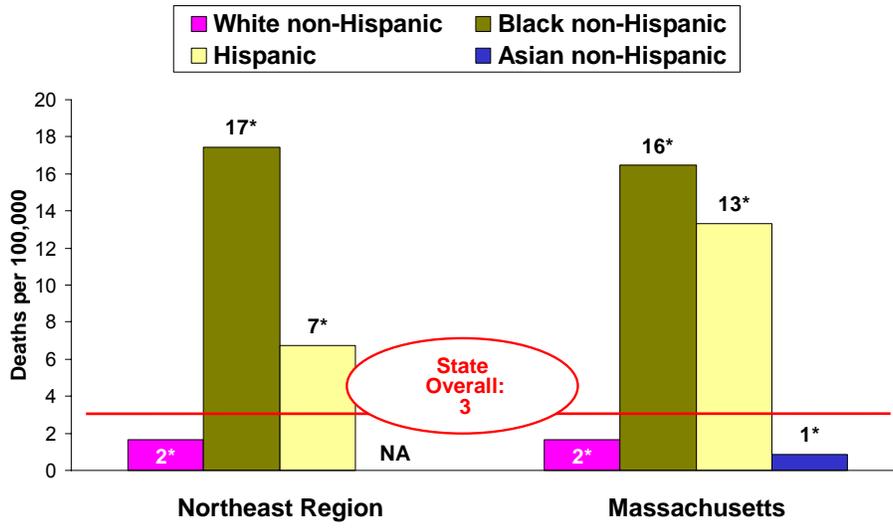
(*) Statistically different from State (p ≤ .05)

Age-adjusted to the 2000 US standard population.

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

HIV/AIDS

HIV/AIDS Death Rate by Race/Ethnicity Northeast Region and Massachusetts: 2003-2005



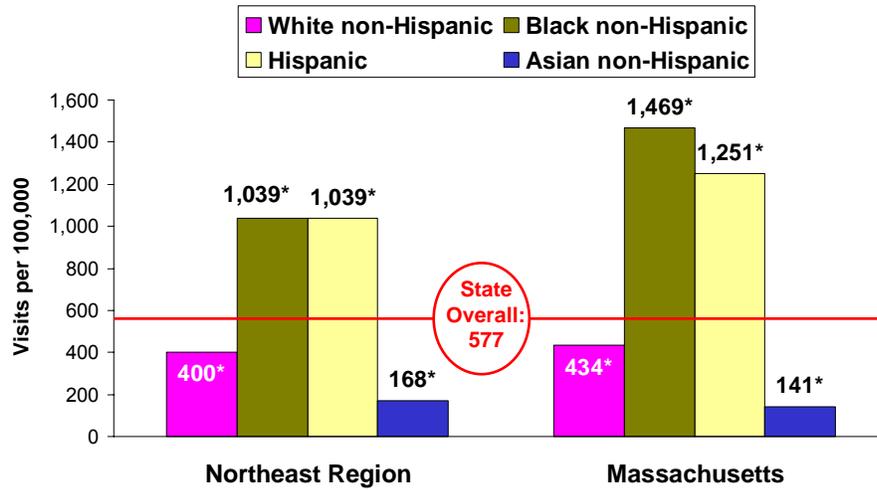
(*) Statistically different from State (p ≤ .05)

Age-adjusted to the 2000 US standard population.

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

ASTHMA

Emergency Department Visit Rates for Asthma by Race/Ethnicity Northeast Region and Massachusetts: 2005

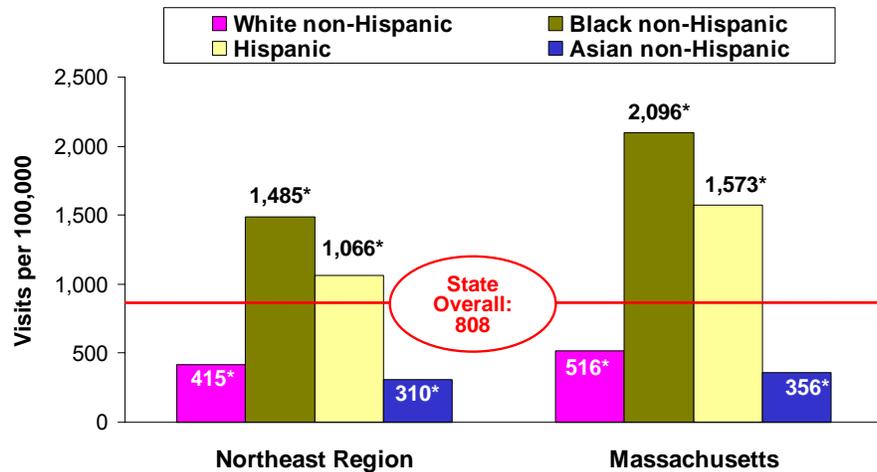


(*) Statistically different from State (p ≤ .05)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2005. Emergency Visits

Asthma Emergency Department Visit Rates Children Ages 0-14 Northeast Region and Massachusetts: 2005



(*) Statistically different from State (p ≤ .05)

Source: Division of Health Care Finance and Policy. Calendar Year 2005. Emergency Visits

PREMATURE MORTALITY

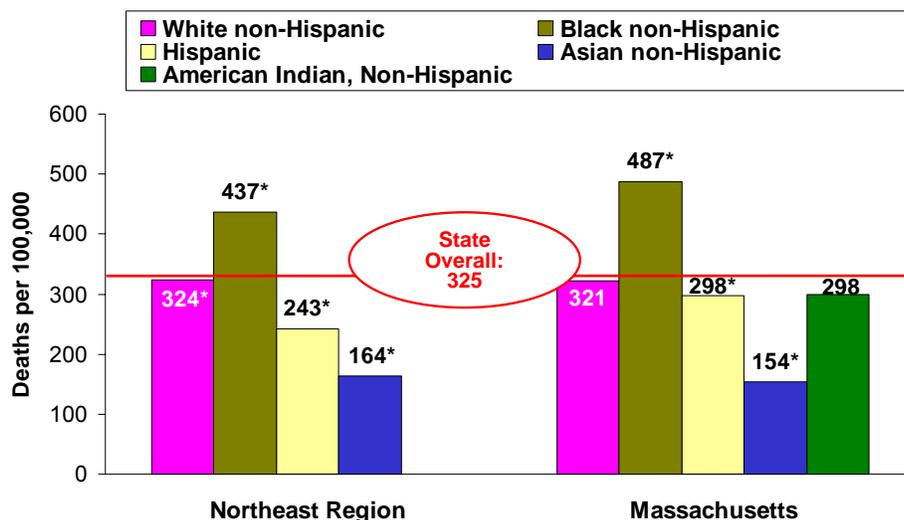
Premature Mortality Rate (PMR)¹

- **Definition**
 - deaths before age 75
- **Rationale**
 - two-thirds of deaths to persons ages 75+
 - vast majority of deaths to persons age 75+ are due to chronic conditions associated with aging
 - focusing on deaths to persons less than 75 years may be more preventable
- **Summary health statistic**
 - excellent measure to reflect the health status of a population
 - used as a health status indicator that can be used to focus prevention initiatives and target programs

¹ Rates are per 100,000 population. Age-adjusted to the 2000 US standard population under 75 years of age.

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

Premature Mortality Rate by Race/Ethnicity Northeast Region and Massachusetts: 2003-2005



(*) Statistically different from State ($p \leq .05$)

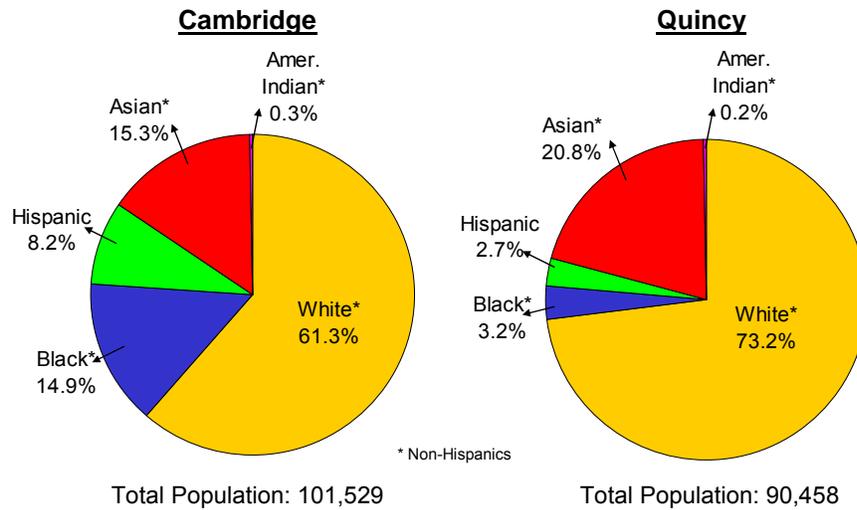
Age-adjusted to the 2000 US standard population under 75 years of age.

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

IV. METROWEST REGION

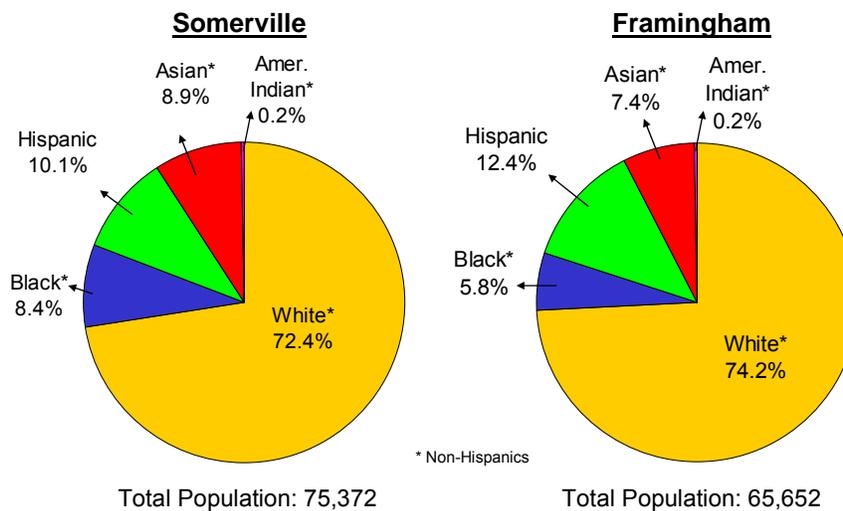
**SOCIODEMOGRAPHIC
INDICATORS
AND
HEALTH CARE ACCESS
AND STATUS**

Race and Ethnic Breakdown of Population Cambridge and Quincy : 2005



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

Race and Ethnic Breakdown of Population Somerville and Framingham: 2005



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

Population by Age Group Metrowest Region and Massachusetts: 2005

Ages	Cambridge	Quincy	Somerville	Framingham	Metro west Region	MA Total
0-19 years	19.1%	19.5%	18.4%	23.5%	24.4%	25.5%
20-24 years	15.4%	6.5%	12.7%	6.4%	5.9%	6.7%
25-44 years	36.0%	32.9%	39.3%	32.1%	29.5%	29.4%
45-64 years	20.2%	25.2%	19.0%	25.1%	26.6%	25.3%
65+ years	9.3%	15.9%	10.6%	12.9%	13.6%	13.3%

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

Language Spoken at Home, Metrowest Region and Massachusetts: 2000

	Cambridge	Quincy	Metrowest Region	Massachusetts
Only English	68.8	76.2	82.4	81.3
Spanish or Spanish Creole	6.8	1.9	3.3	6.2
Chinese	3.7	10.5	2.3	1.2
Portuguese or Portuguese Creole	3.0	0.7	2.0	2.7
Italian	1.0	1.2	1.3	1.0
French (Incl. Patois, Cajun)	2.3	0.7	1.2	1.4
Russian	0.8	0.3	0.8	0.6
French Creole	2.9	0.2	0.7	0.7
Greek	0.5	0.5	0.7	0.5
German	0.8	0.4	0.5	0.3
Korean	1.5	0.1	0.4	0.2
Vietnamese	0.3	1.5	0.3	0.5

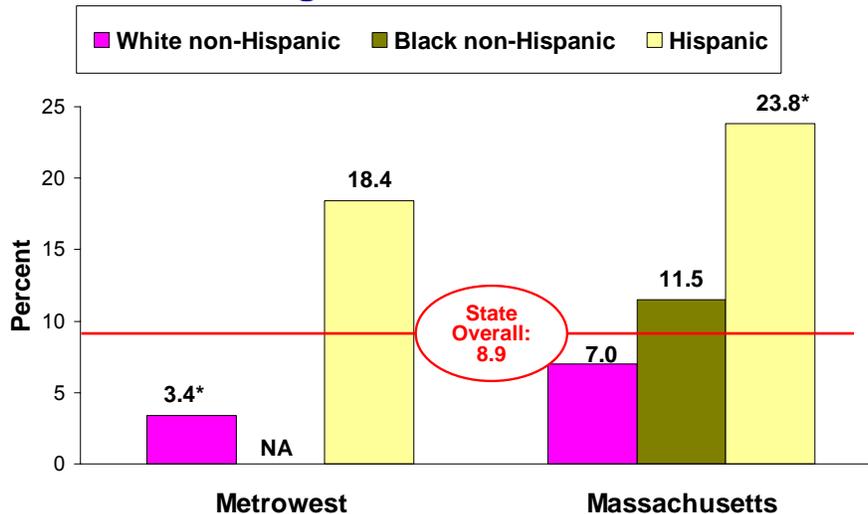
Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Division of Research & Epidemiology

Socio-Demographic Indicators Metrowest Region and Massachusetts: 2000

	Cambridge	Quincy	Somerville	Framingham	Metro west Region	MA
Per Capita Income	\$31,156	\$26,001	\$23,628	\$27,758	\$34,341	\$25,952
Those living below 100% poverty	12.9%	7.3%	12.5%	8.1%	5.3%	9.3%
Less than a High School Educ.	10.5%	14.8%	19.4%	12.9%	9.0%	15.2%
Speak language other than English at home	31.2%	23.8%	35.6%	29.2%	21.9%	18.7%
Foreign born	25.9%	20.0%	29.3%	21.2%	12.1%	12.2%
Unemployed	3.6%	5.2%	4.0%	4.1%	4.2%	5.1%

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

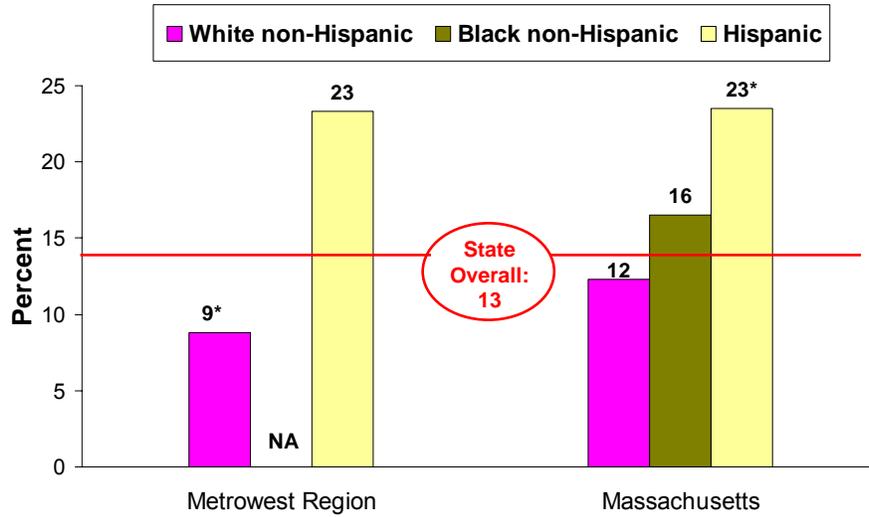
Adults who Have No Health Insurance by Race and Ethnicity Metrowest Region and Massachusetts: 2005



(*) Statistically different from State (p ≤ .05)

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

Adults who Reported Fair or Poor Health by Race and Ethnicity Metrowest Region and Massachusetts: 2005



NA= Calculations based on less than 5 events are excluded

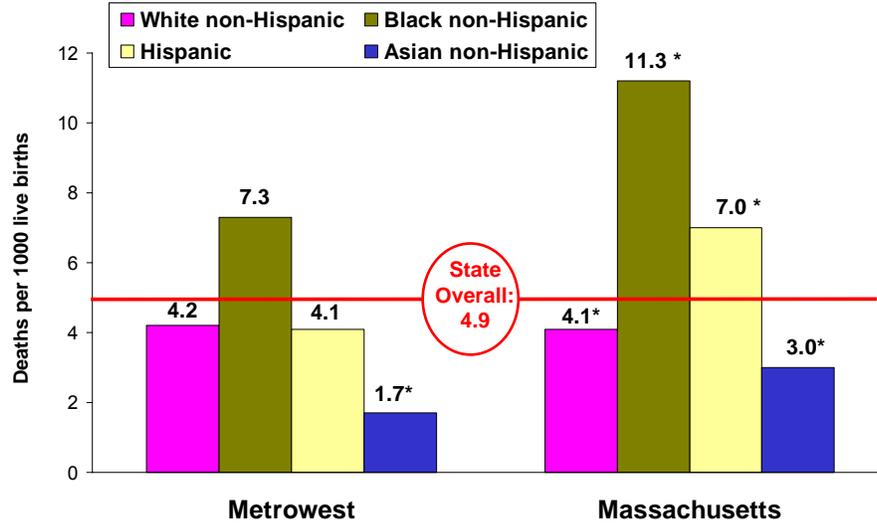
(*) Statistically different from State (p ≤ .05)

Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Health Survey Program

BIRTH OUTCOMES

Infant Mortality Rates by Race/Ethnicity Metrowest Region and Massachusetts: 2003-2005

148

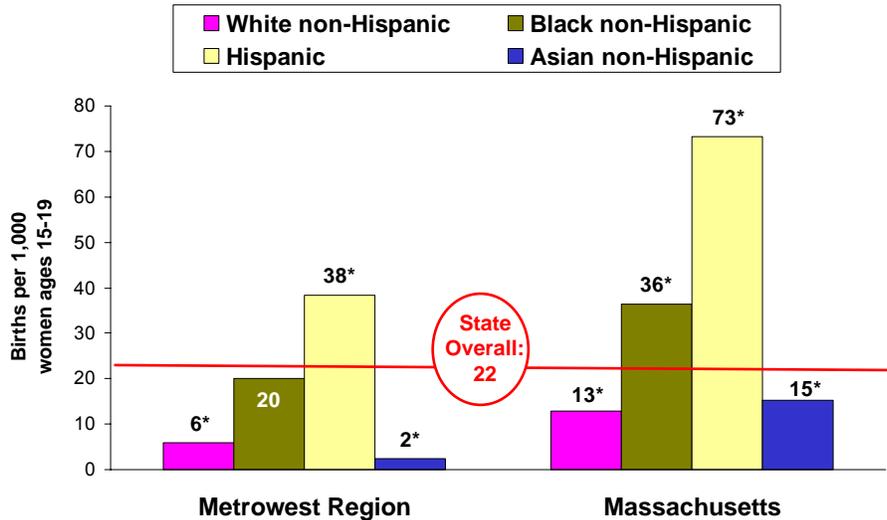


(*) Statistically different from State ($p \leq .05$)

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

Teen Birth Rates by Race and Ethnicity Metrowest Region and Massachusetts: 2005

149

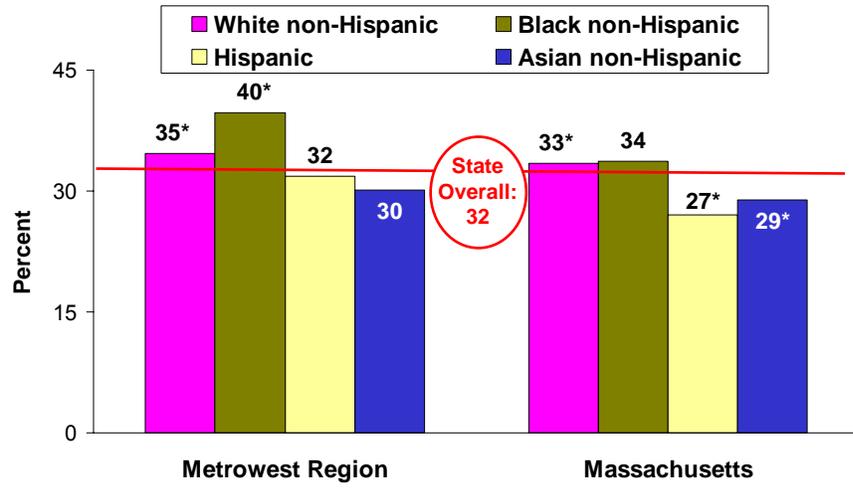


(*) Statistically different from State ($p \leq .05$)

Teen Birth Rate: the number of births to women ages 15-19 per 1,000 women ages 15-19.

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

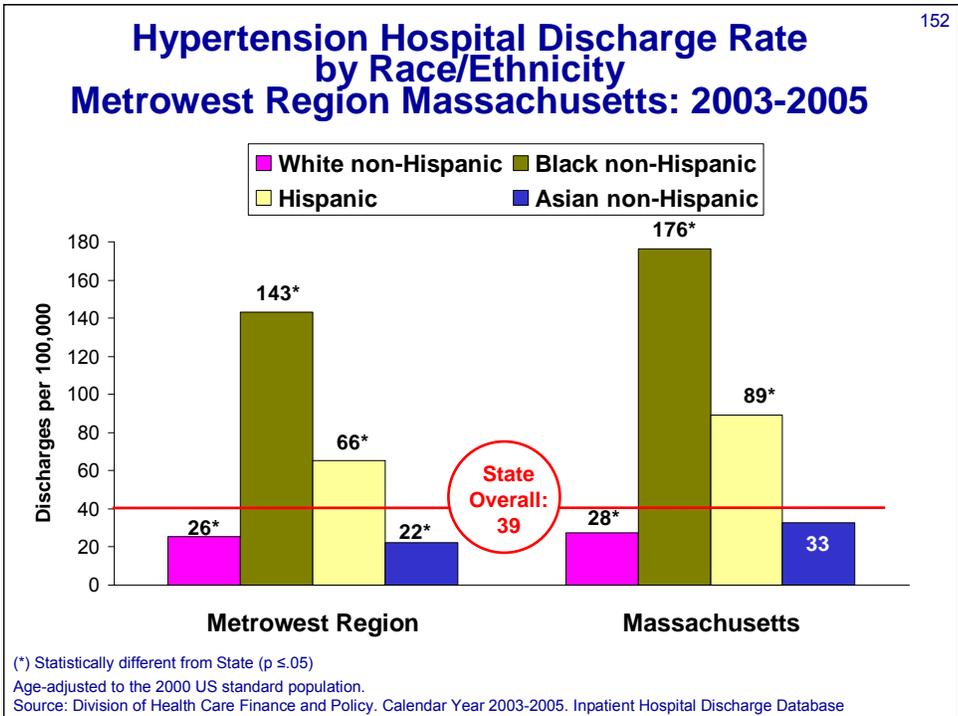
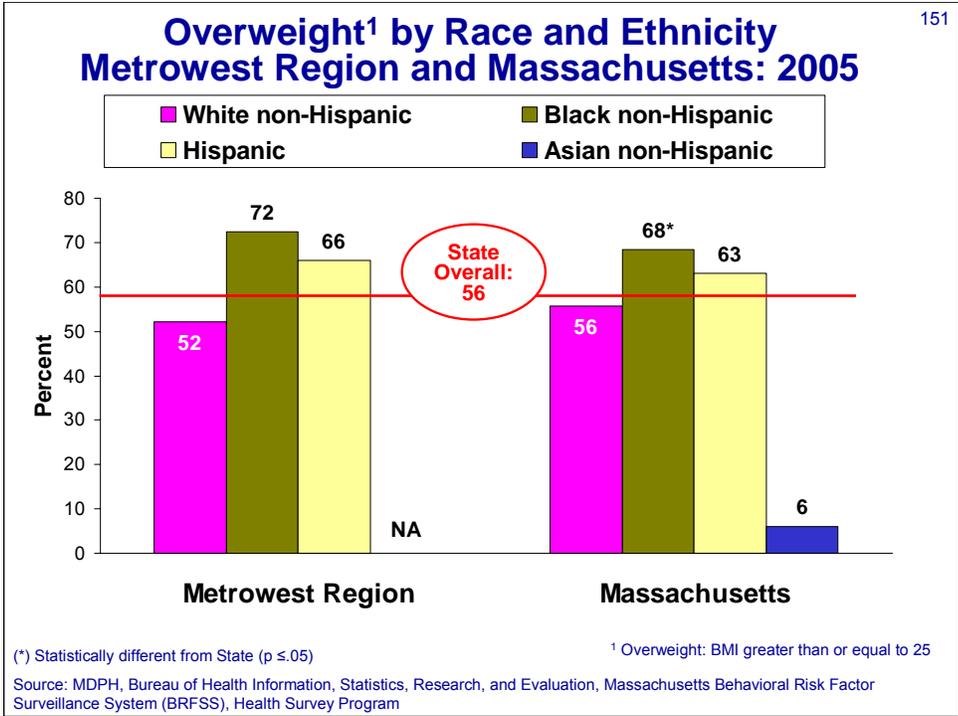
Percent of Cesarean Deliveries by Race and Ethnicity Metrowest Region and Massachusetts: 2005



(*) Statistically different from State ($p \leq .05$)

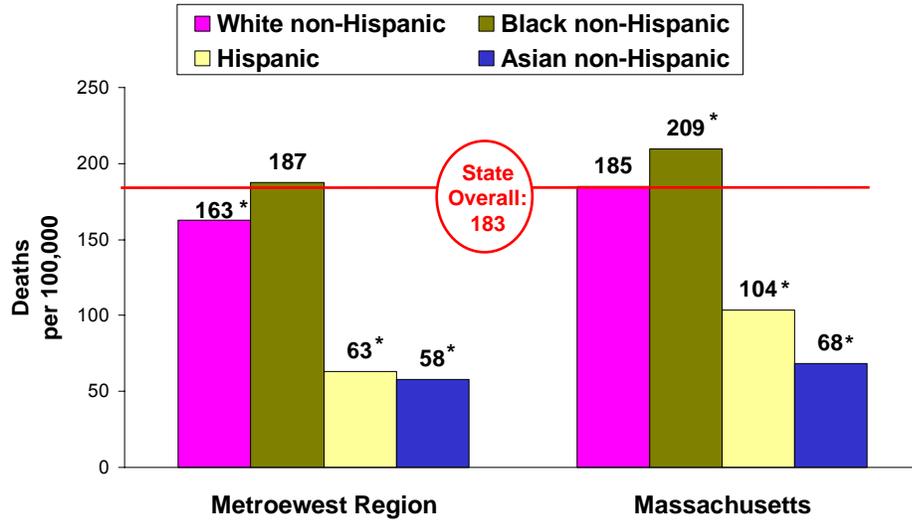
Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Division of Research & Epidemiology

CHRONIC DISEASE OUTCOMES AND OVERWEIGHT/OBESITY



Heart Disease Death Rate by Race/Ethnicity Metrowest Region and Massachusetts: 2003-2005

153



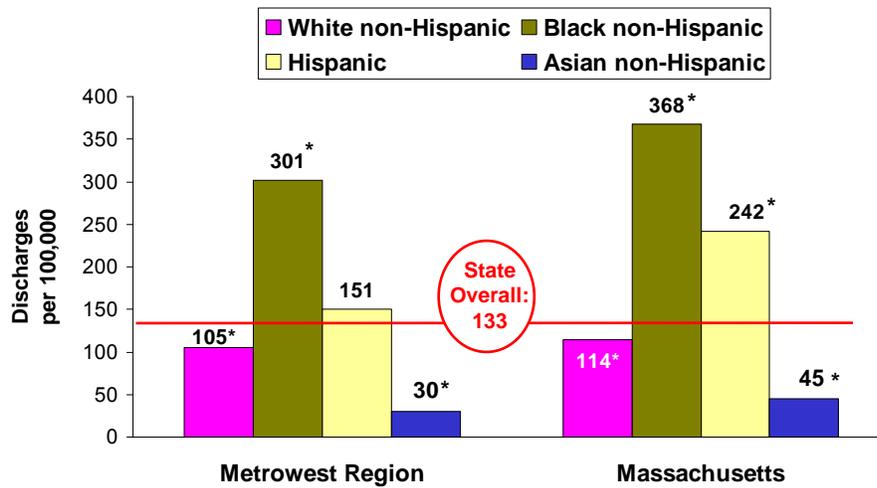
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

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

Diabetes Hospital Discharge Rate by Race/Ethnicity Metrowest Region Massachusetts: 2003-2005

154

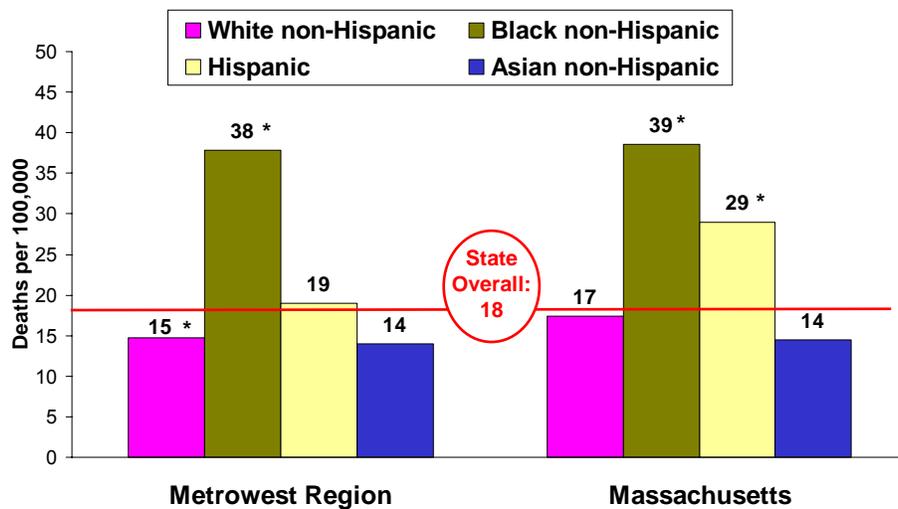


(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy, Calendar Year 2003-2005, Inpatient Hospital Discharge Database

Diabetes Mortality Rate by Race/Ethnicity Metrowest Region and Massachusetts: 2003-2005



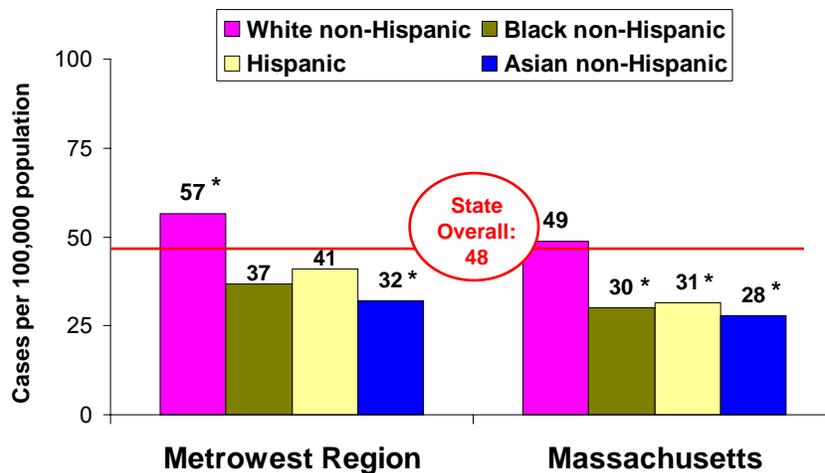
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

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

CANCER

Incidence Rates for Non-invasive Female Breast Cancer by Race and Ethnicity, Metrowest Region & Massachusetts: 1999-2003

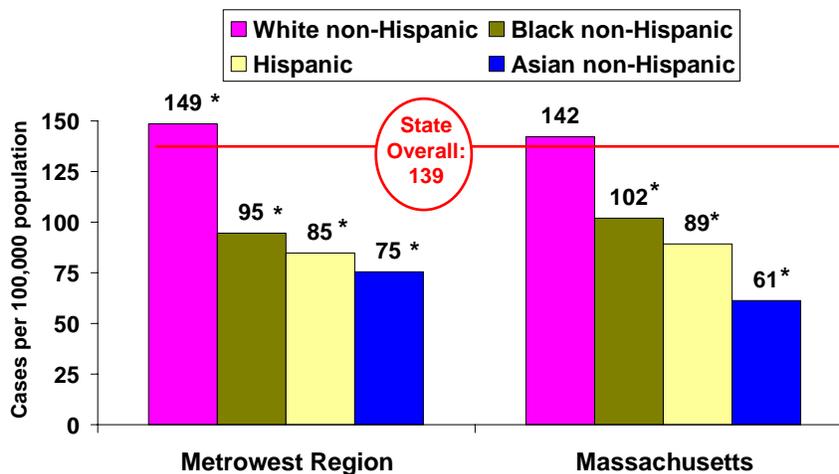


(*) Statistically different from State (p ≤ .05)

Age-adjusted to the 2000 US standard population.

Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Cancer Registry

Incidence Rates for Invasive Female Breast Cancer by Race and Ethnicity, Metrowest Region & Massachusetts: 1999-2003

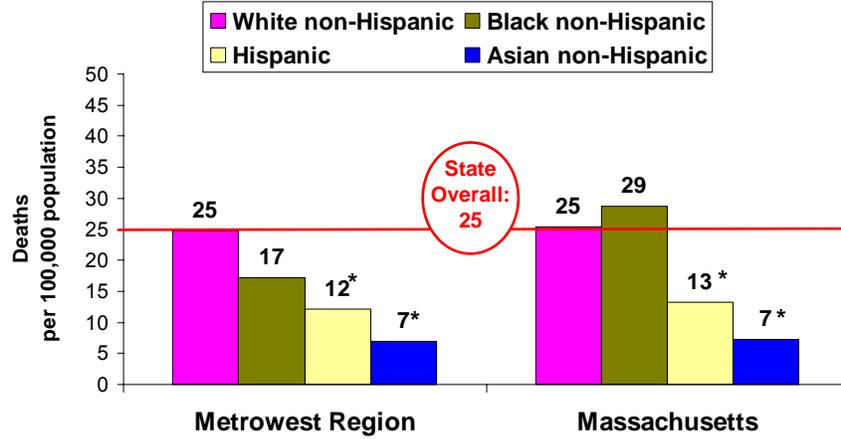


(*) Statistically different from State (p ≤ .05)

Age-adjusted to the 2000 US standard population.

Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Cancer Registry

Female Breast Cancer Mortality Rates by Race and Ethnicity, Metrowest Region & Massachusetts: 2001-2005

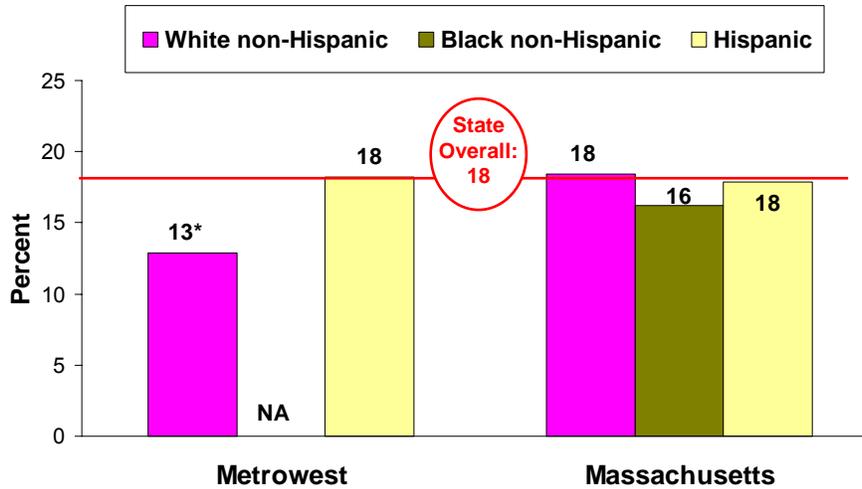


(*) Statistically different from State (p ≤ .05)

Age-adjusted to the 2000 US standard population.

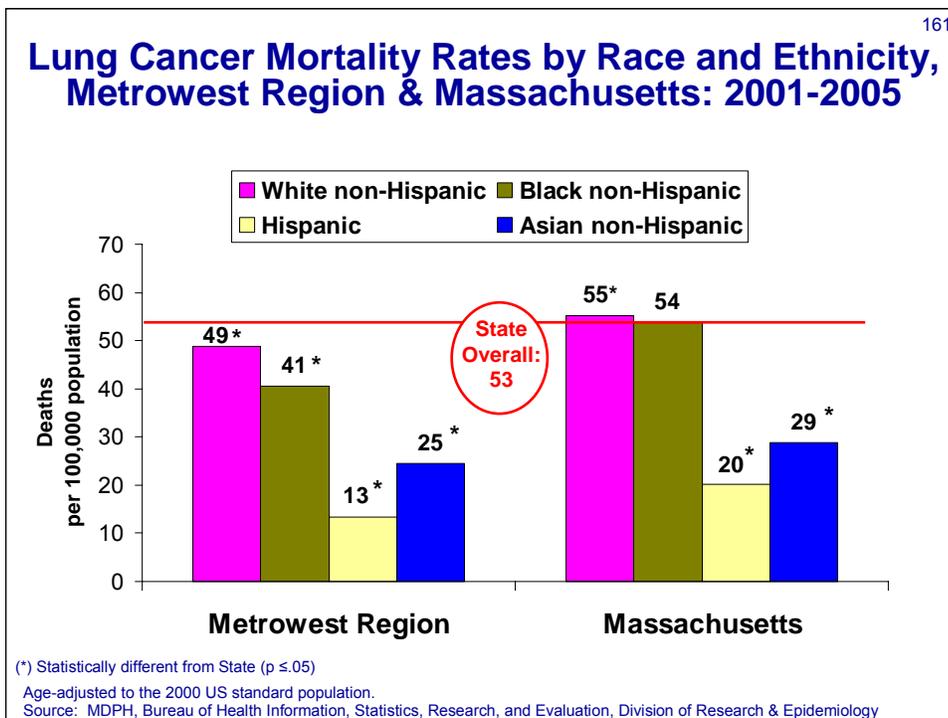
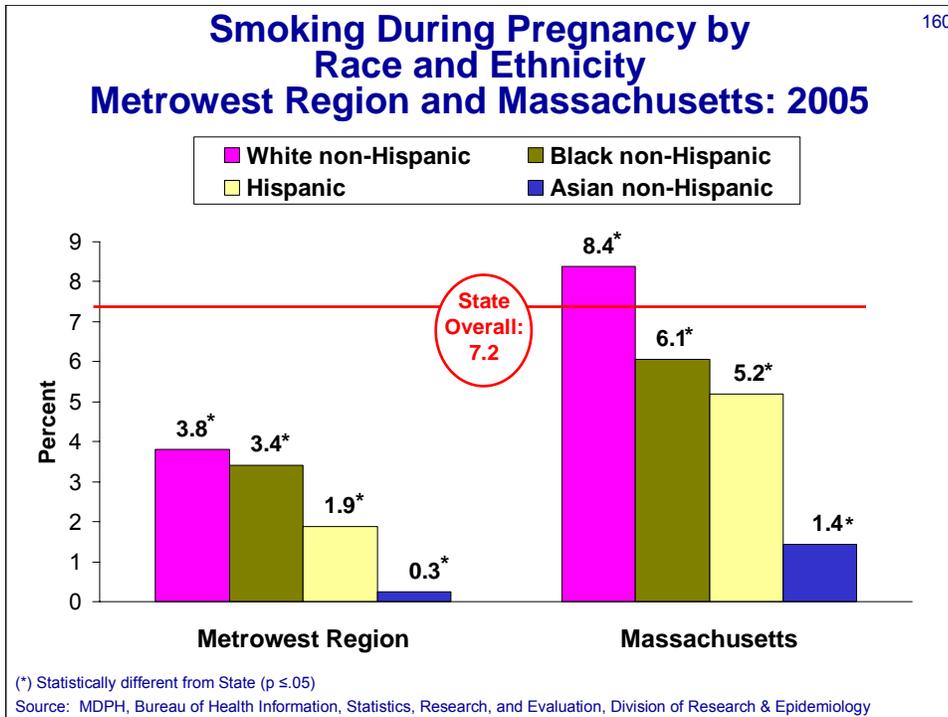
Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Division of Research & Epidemiology

Current Smoker by Race and Ethnicity, Metrowest Region and Massachusetts: 2005



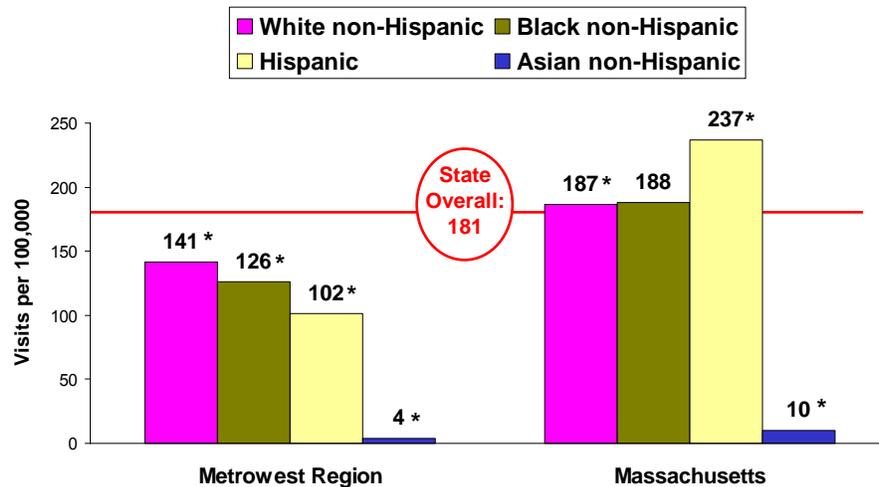
(*) Statistically different from State (p ≤ .05)

Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Health Survey Program



SUBSTANCE ABUSE

Opioid-Related Emergency Department Visit Rates¹⁶² by Race/Ethnicity Metrowest Region and Massachusetts: 2003-2005

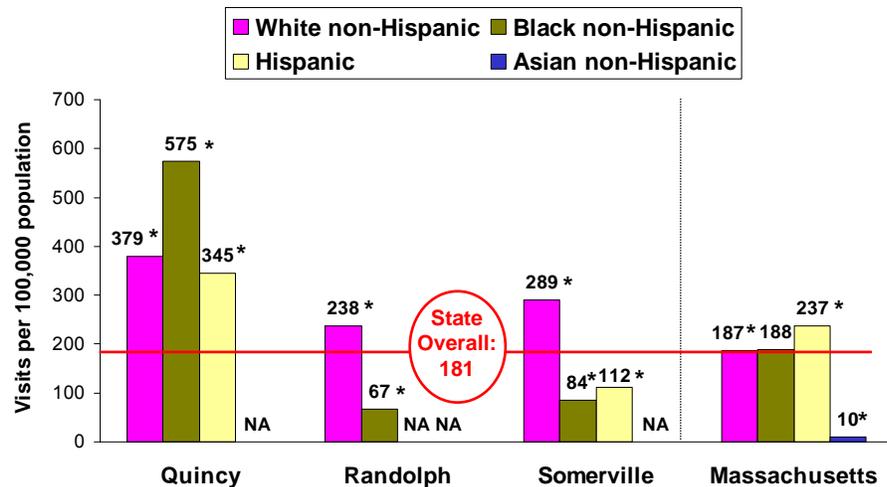


(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003- 2005. Emergency Department Visits

Opioid-Related Emergency Department Visit Rates¹⁶³ by Race/Ethnicity Quincy, Randolph, and Somerville vs. Massachusetts: 2003-2005



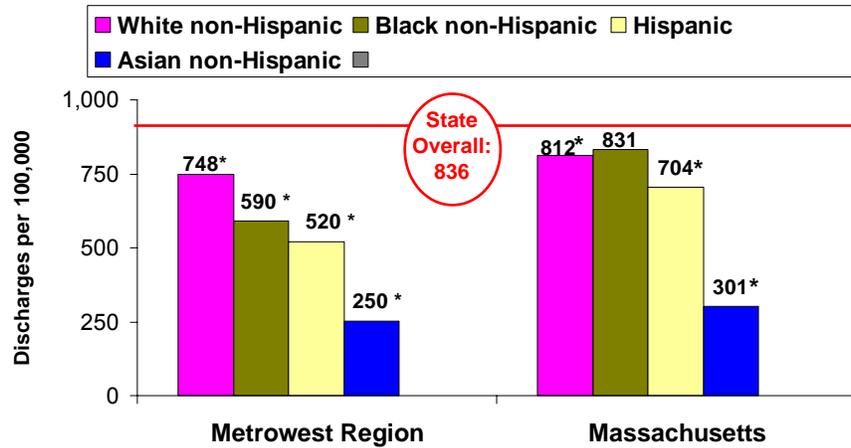
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003- 2005. Emergency Department Visits

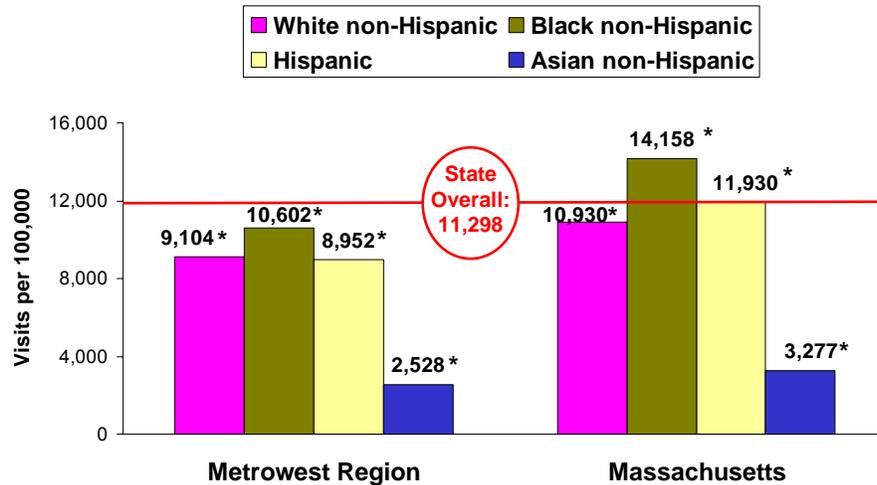
INJURY AND VIOLENCE

Injury-Related Hospital Discharge Rates by Race/Ethnicity, Metrowest Region & Massachusetts: 2003-2005



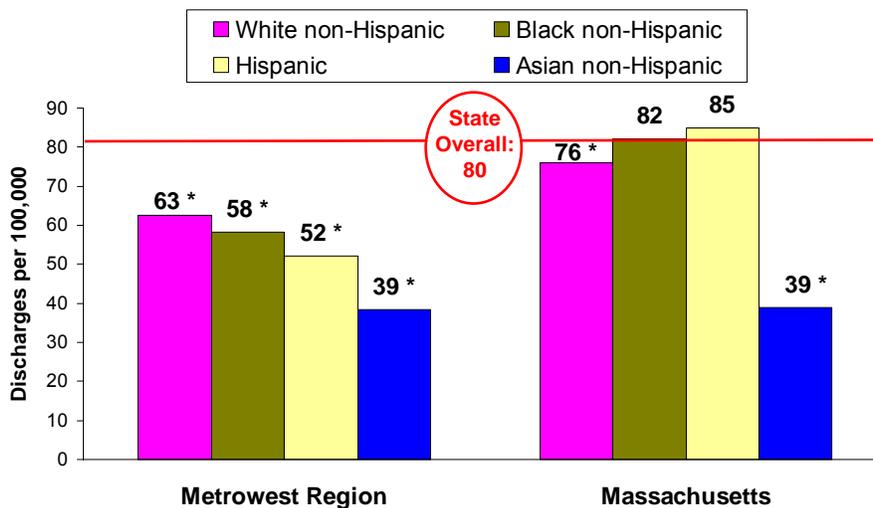
(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003- 2005. Hospital Discharges

Emergency Department Visit Rates for Injuries & Poisonings by Race/Ethnicity Metrowest Region and Massachusetts: 2003-2005



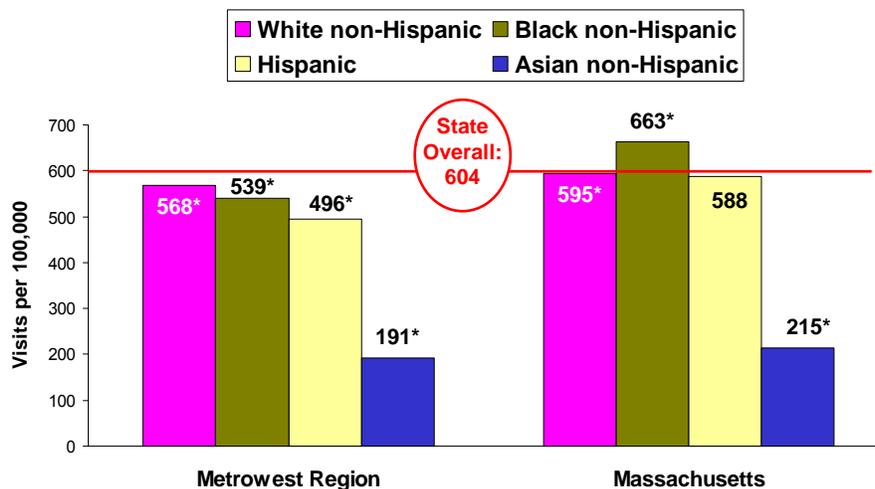
(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003- 2005. Emergency Department Visits

Hospital Discharge Rates for Traumatic Brain Injury by Race/Ethnicity, Metrowest Region and Massachusetts: 2003-2005



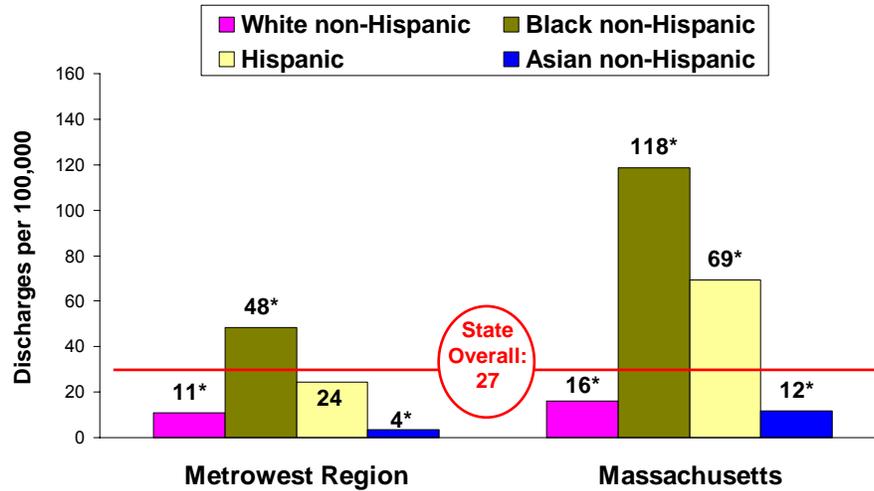
(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003- 2005. Hospital Discharges

Emergency Department Visit Rates for Traumatic Brain Injury by Race/Ethnicity Metrowest Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2005. Emergency Visits

Hospital Discharge Rates for Assaults by Race/Ethnicity, Metrowest Region and Massachusetts: 2003-2005

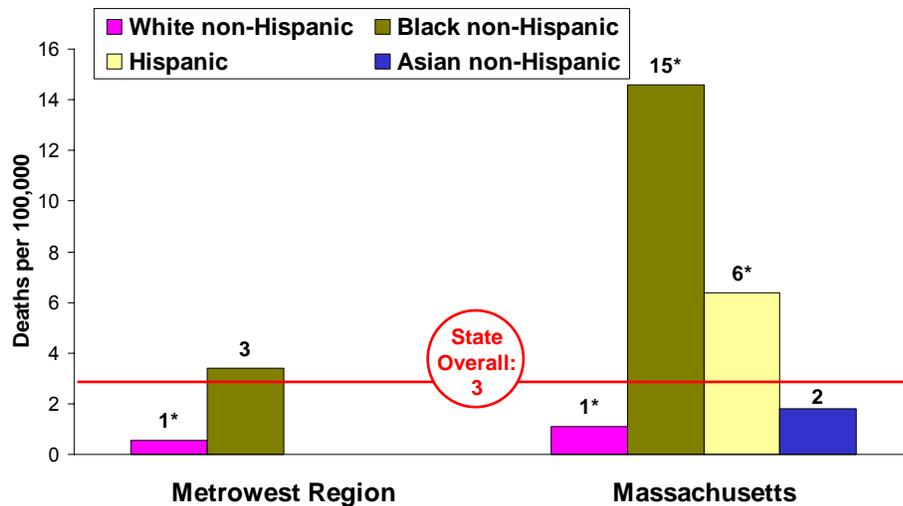


(*) Statistically different from State (p ≤ .05)

Crude rates.

Source: Division of Health Care Finance and Policy. Calendar Year 2003- 2005. Hospital Discharges

Homicide Rates by Race/Ethnicity Metrowest Region and Massachusetts: 2003-2005



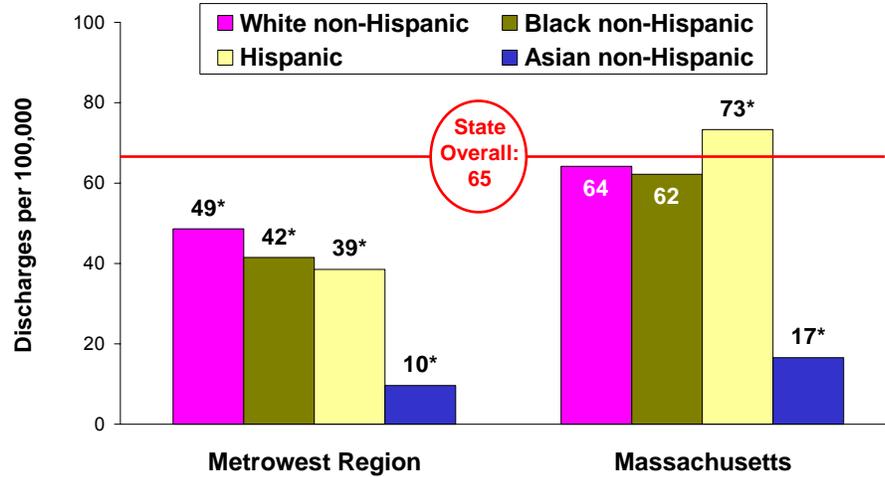
(*) Statistically different from State (p ≤ .05)

Age-adjusted to the 2000 US standard population.

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

Hospital Discharge Rates for Self-Inflicted Injuries by Race/Ethnicity, Metrowest Region and Massachusetts: 2003-2005

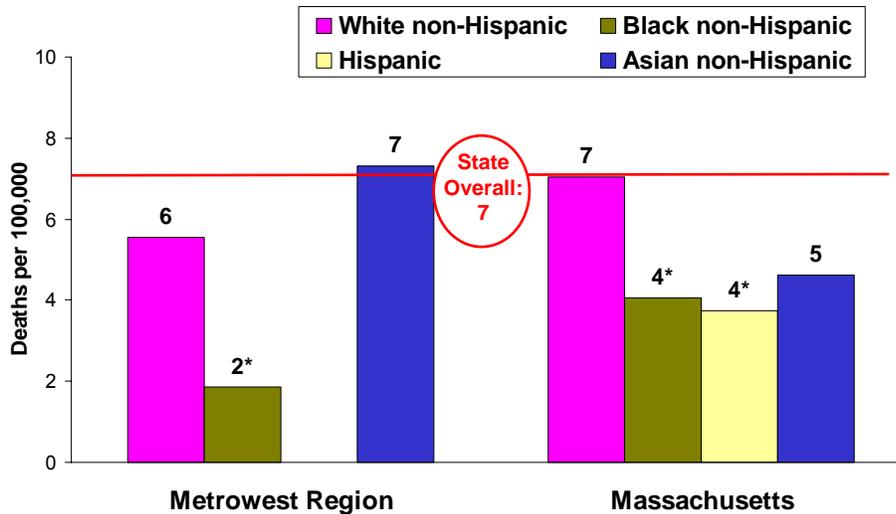
170



(*) Statistically different from State ($p \leq .05$)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003- 2005. Hospital Discharges

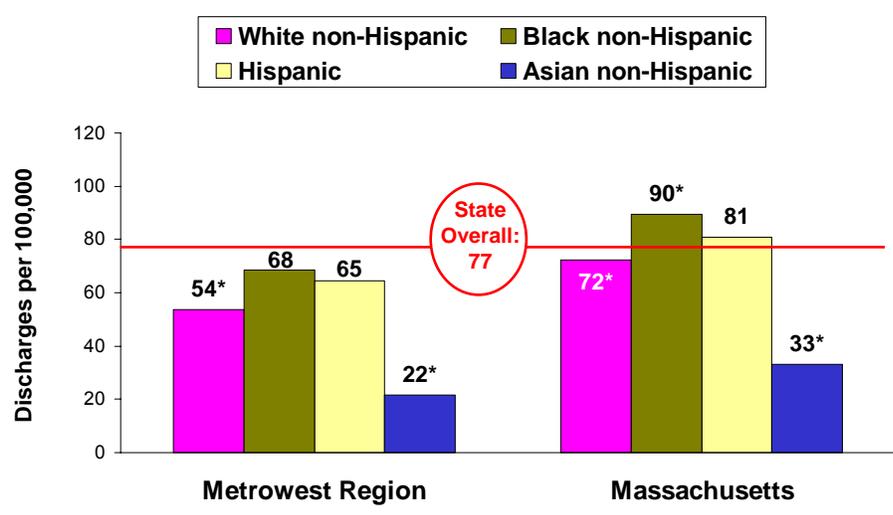
Suicide Rates by Race/Ethnicity Metrowest Region and Massachusetts: 2003-2005

171



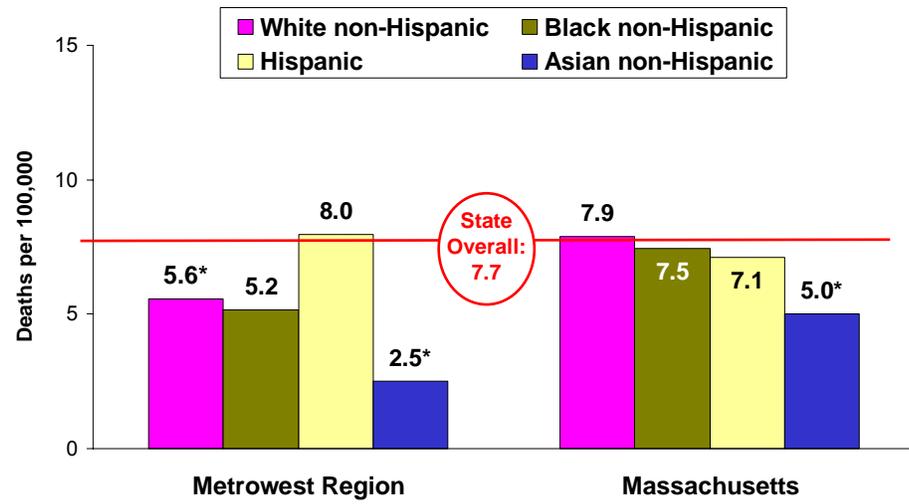
(*) Statistically different from State ($p \leq .05$)
 Age-adjusted to the 2000 US standard population.
 Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Division of Research & Epidemiology

Hospital Discharge Rates for Motor Vehicle-Related Injuries by Race/Ethnicity, Metrowest Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003- 2005. Hospital Discharges

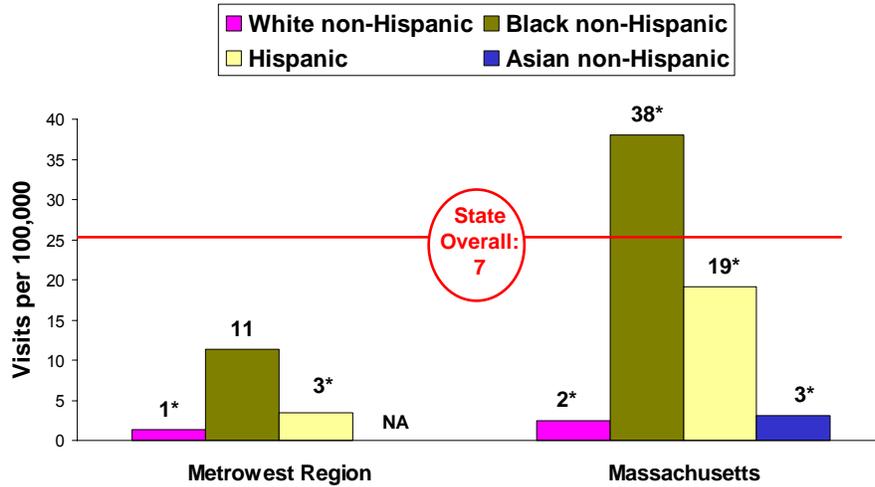
Motor Vehicle-Related Death Rates by Race/Ethnicity, Metrowest Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Division of Research & Epidemiology

Emergency Department Visit Rates for Firearm Injuries by Race/Ethnicity Metrowest Region and Massachusetts: 2003-2005

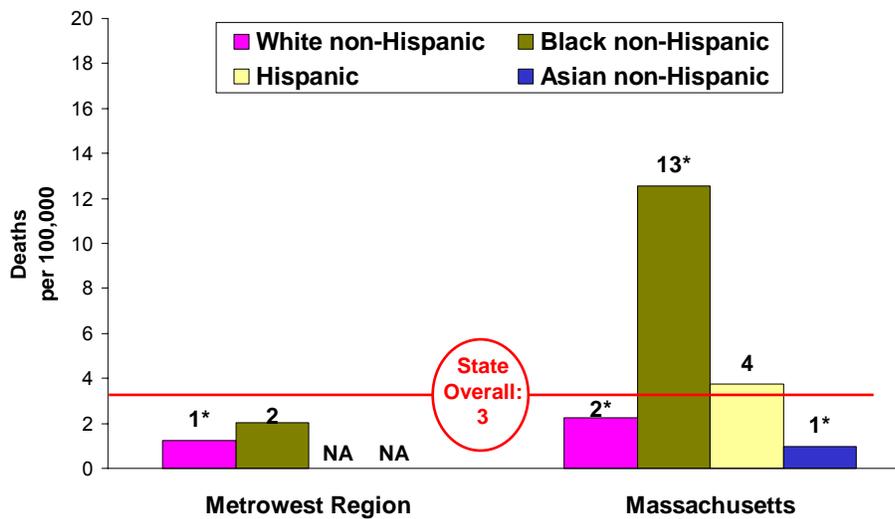
174



(*) Statistically different from State ($p \leq .05$)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Visits

Firearm Death Rates by Race/Ethnicity Metrowest Region and Massachusetts: 2003-2005

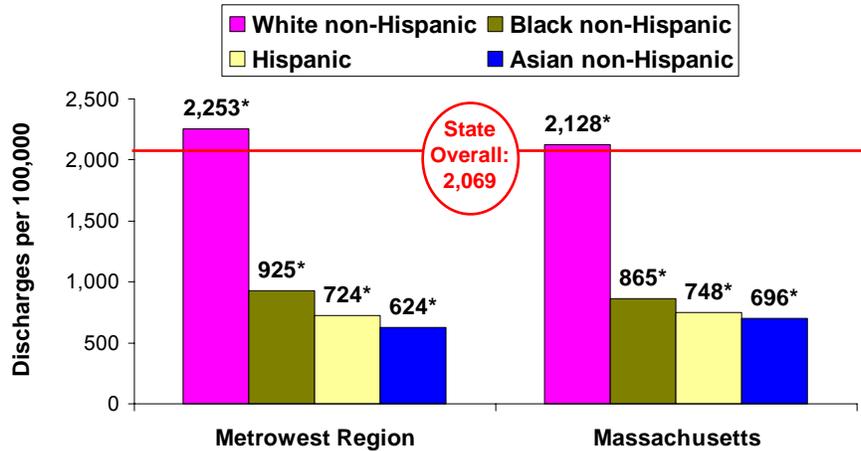
175



(*) Statistically different from State ($p \leq .05$)
 Age-adjusted to the 2000 US standard population.
 Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Division of Research & Epidemiology

Hospital Discharge Rates for Fall-Related Injuries Ages 65+ by Race/Ethnicity, Metrowest Region and Massachusetts: 2003-2005

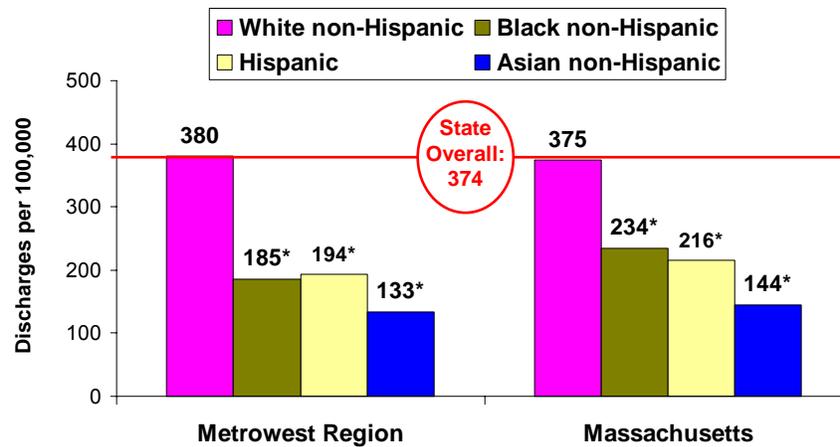
176



(*) Statistically different from State ($p \leq .05$)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003- 2005. Hospital Discharges

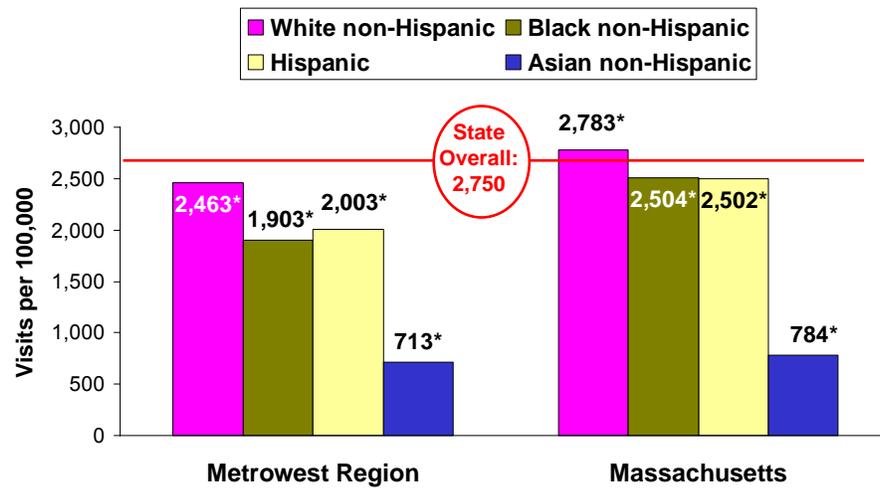
Hospital Discharge Rates for Fall-Related Injuries by Race/Ethnicity, Metrowest Region and Massachusetts: 2003-2005

177



(*) Statistically different from State ($p \leq .05$)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003- 2005. Hospital Discharges

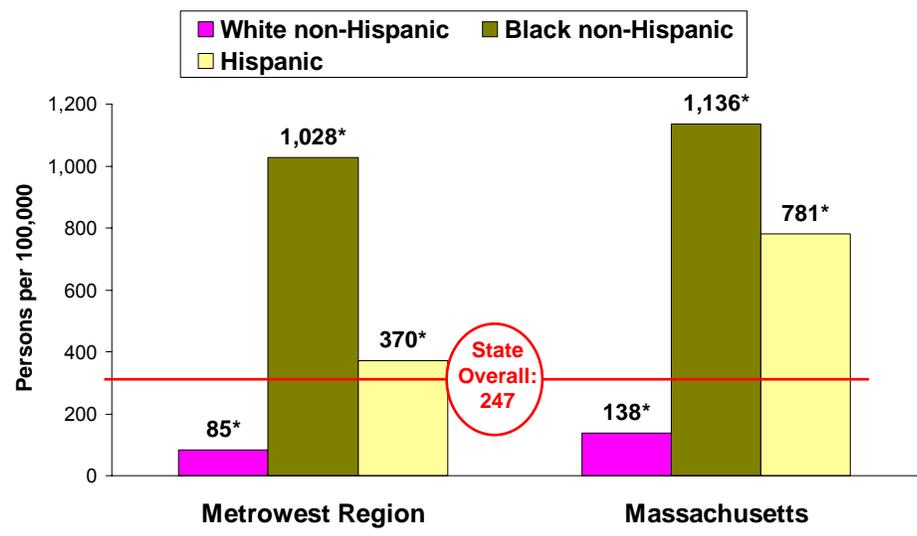
Emergency Department Visit Rates for Fall-Related Injuries by Race/Ethnicity Metrowest Region and Massachusetts: 2003-2005



(*) Statistically different from State (p < .05)
Age-adjusted to the 2000 US standard population.
Source: Division of Health Care Finance and Policy. Calendar Year 2005. Emergency Visits

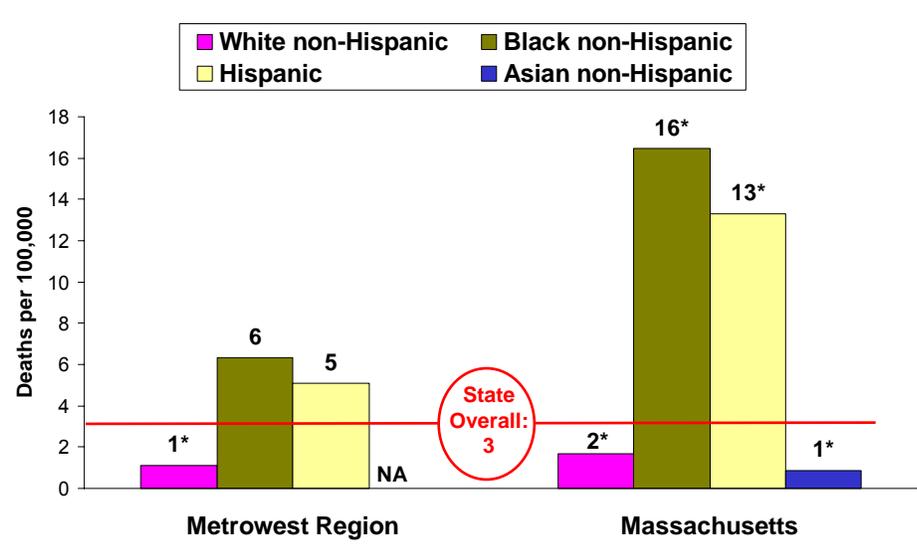
HIV/AIDS

Persons Living with HIV by Race/Ethnicity Metrowest Region and Massachusetts: 2005



(*) Statistically different from State (p ≤ .05)
Crude rates
Source: MDPH, BCDC HIV/AIDS Files as of 09/01/06

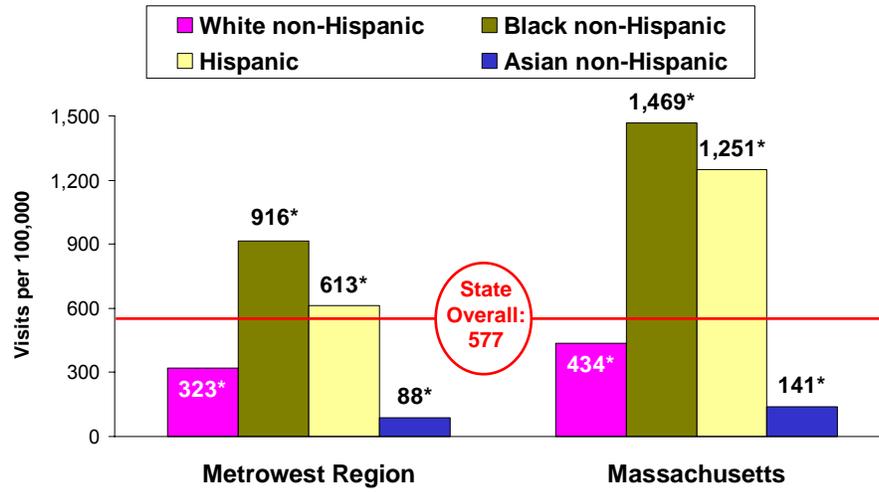
HIV/AIDS Death Rate by Race/Ethnicity Metrowest Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
Age-adjusted to the 2000 US standard population.
Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Division of Research & Epidemiology

ASTHMA

Emergency Department Visit Rates for Asthma by Race/Ethnicity Metrowest Region and Massachusetts: 2005



(*) Statistically different from State ($p \leq .05$)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2005. Emergency Visits

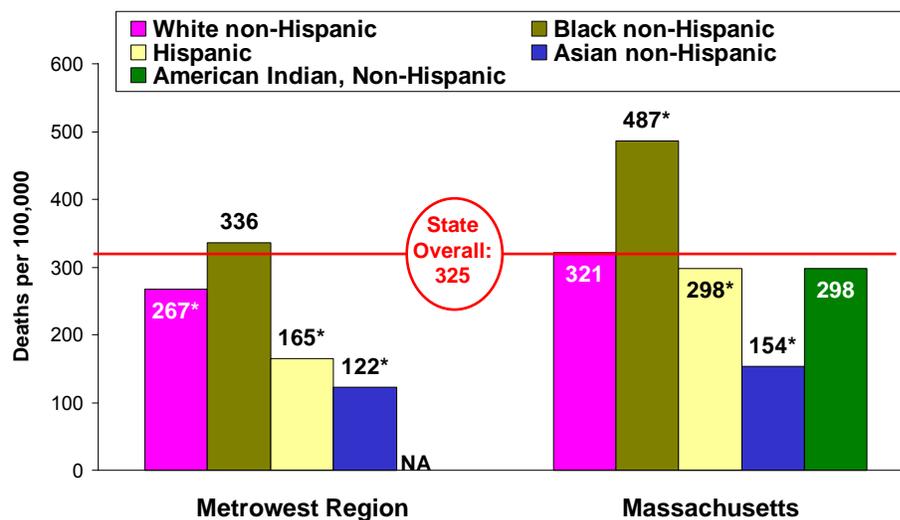
PREMATURE MORTALITY

Premature Mortality Rate (PMR)¹

- **Definition**
 - deaths before age 75
- **Rationale**
 - two-thirds of deaths to persons ages 75+
 - vast majority of deaths to persons age 75+ are due to chronic conditions associated with aging
 - focusing on deaths to persons less than 75 years may be more preventable
- **Summary health statistic**
 - excellent measure to reflect the health status of a population
 - used as a health status indicator that can be used to focus prevention initiatives and target programs

1. Age-adjusted to the 2000 US standard population under 75 years of age.
Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

Premature Mortality Rate by Race/Ethnicity Metrowest Region and Massachusetts: 2003-2005

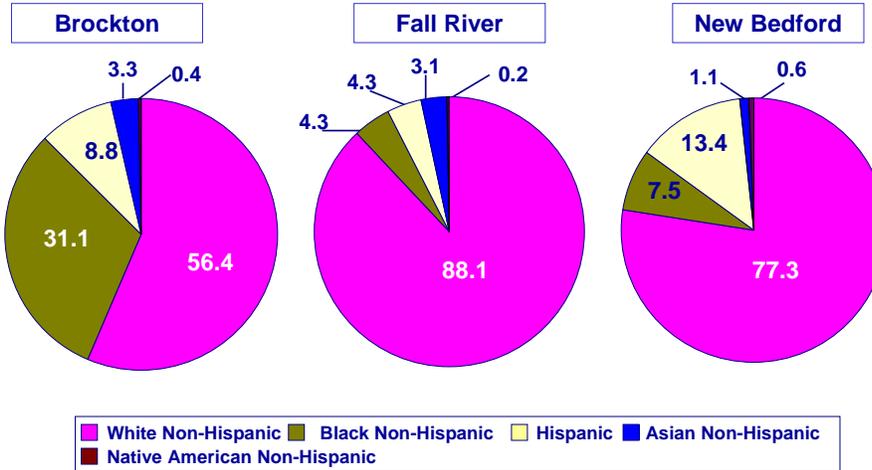


(*) Statistically different from State ($p \leq .05$)
Age-adjusted to the 2000 US standard population under 75 years of age.
Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

V. SOUTHEAST REGION

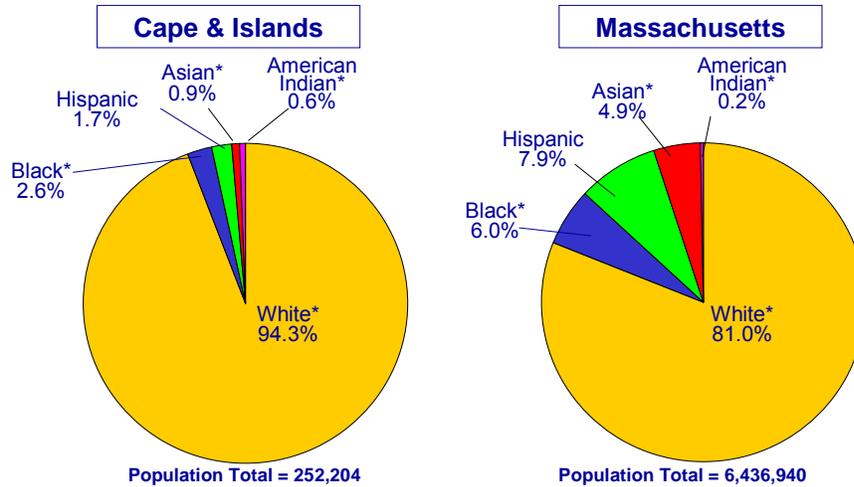
**SOCIODEMOGRAPHIC
INDICATORS
AND
HEALTH CARE ACCESS
AND STATUS**

Race/Ethnicity Proportions Largest Cities in Southeast Region: 2005



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

Race and Ethnic Breakdown of Population Cape & Islands and Massachusetts: 2005



* Non-Hispanics

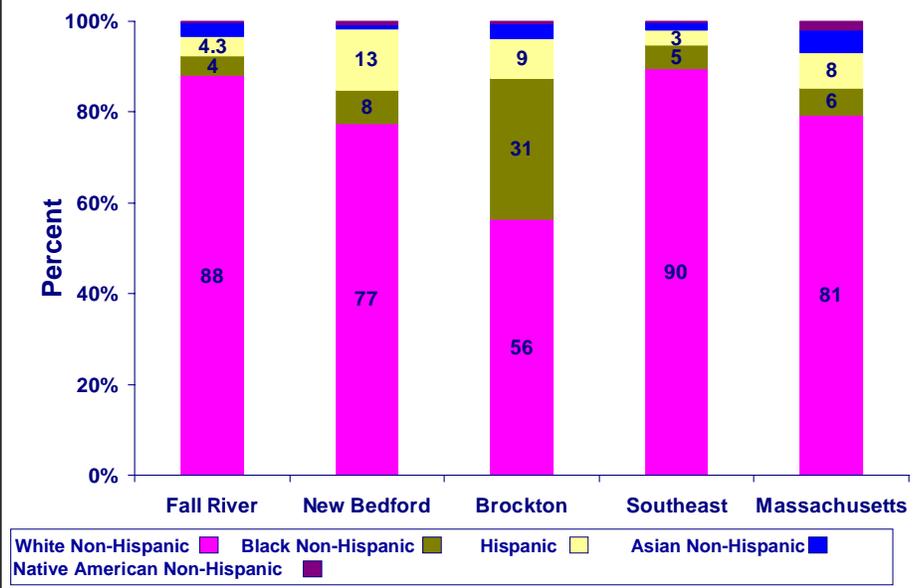
Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

Cities with the Largest American Indian Populations, Massachusetts: Census 2000

City / Town	American Indian (Alone)	City / Town	American Indian (Alone, or in Combination)
Boston	2,365	Boston	5,384
Worcester	769	Worcester	1,700
Lawrence	583	Springfield	1,473
New Bedford	579	New Bedford	1,288
Springfield	569	Lawrence	921
Mashpee	377	Brockton	876
Brockton	338	Cambridge	853
Lynn	332	Lynn	796
Cambridge	290	Lowell	676
Barnstable	283	Fall River	587

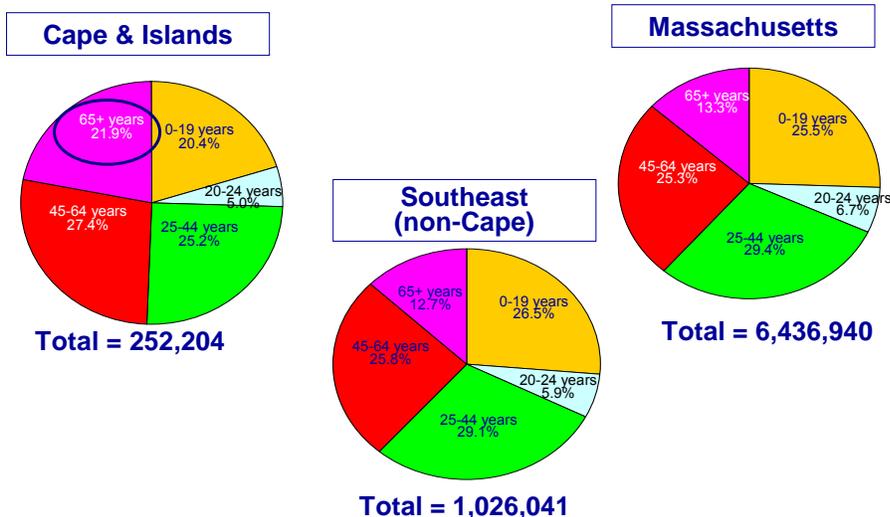
Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

Race/Ethnicity in the Largest Cities Southeast and Massachusetts: 2005



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

Population by Age Group Cape & Islands and Massachusetts: 2005



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

Language Spoken at Home, Southeast Region and Massachusetts: 2000

	Southeast Region	Massachusetts Overall
Only English	85.4	81.3
Spanish or Spanish Creole	2.5	6.2
Portuguese or Portuguese Creole	7.4	2.7
French	1.3	1.4
Chinese	0.2	1.2
Italian	0.4	1.0
French Creole	0.7	0.7
Russian	0.1	0.6
Vietnamese	0.1	0.5
Polish	0.2	0.5
Other languages	1.7	3.9

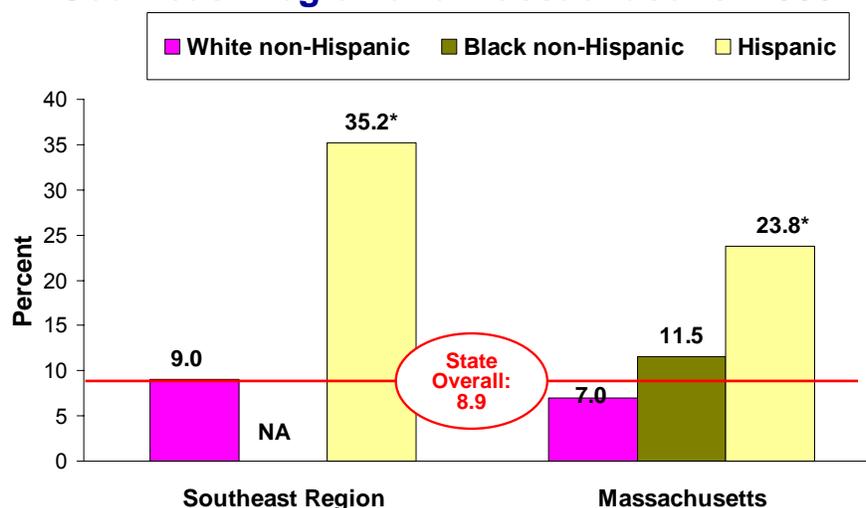
Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

Socio-Demographic Indicators Southeast Region and Largest Cities: 2000

	Brockton	Fall River	New Bedford	Southeast w/o 3 Largest Cities	MA
Per Capita Income	\$17,163	\$16,118	\$15,602	\$24,695	\$25,952
Persons living below 100% poverty	14.5%	17.1%	20.2%	5.6%	9.3%
Children < 18 living below 100% poverty	19.4%	25.4%	29.0%	6.2%	12.0%
Less than a High School Education	24.1%	43.4%	42.4%	12.8%	15.2%
Foreign born	18.4%	19.8%	19.6%	9.0%	12.2%
Speak language other than English at home	28.4%	34.6%	37.8%	5.6%	18.7%
Unemployed	6.7%	8.1%	8.4%	2.9%	5.1%

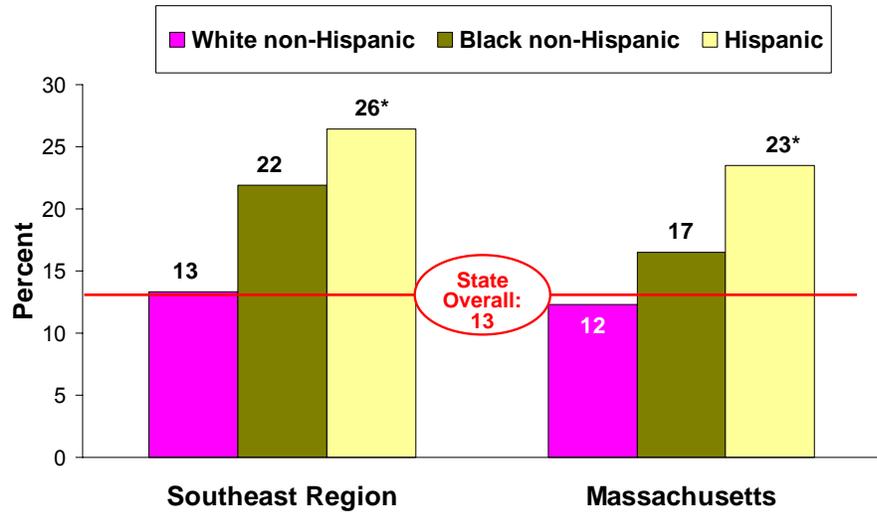
Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

Adults who Have No Health Insurance by Race and Ethnicity Southeast Region and Massachusetts: 2005



Statistically different from State (p ≤.05) Red (*) = Statistically worse; Green (**) = Statistically better
 Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), Health Survey Program

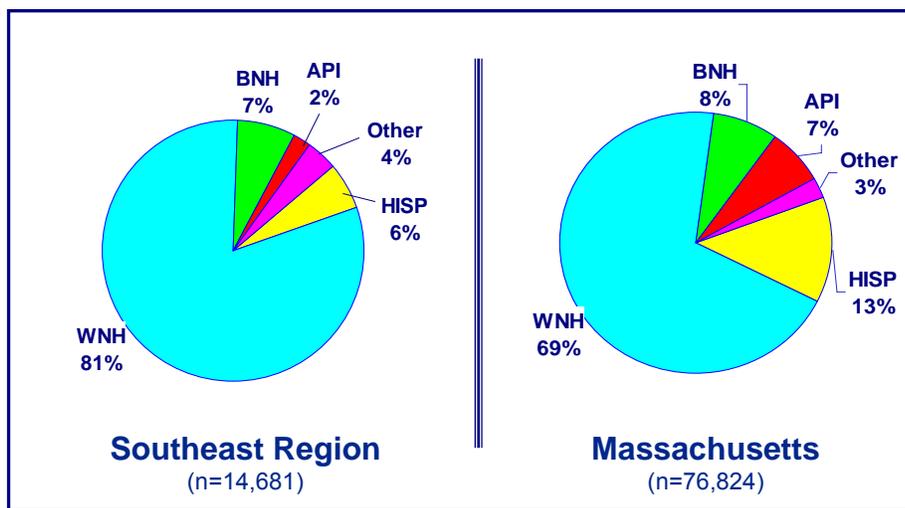
Adults who Reported Fair or Poor Health by Race and Ethnicity Southeast Region and Massachusetts: 2005



Statistically different from state (p ≤.05)– Red (*) Statistically worse than state- Green (**) statistically better than state
Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), Health Survey Program

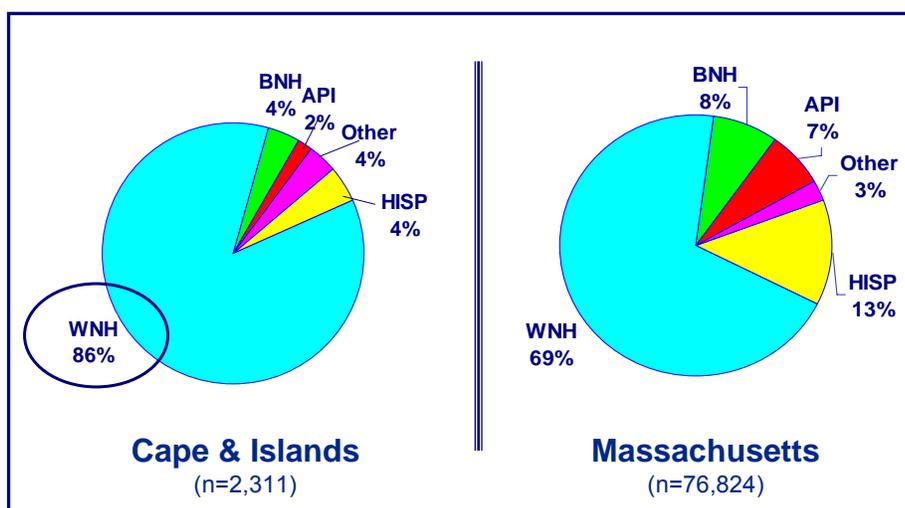
BIRTH OUTCOMES

Births by Race and Hispanic Ethnicity Southeast Region and Massachusetts: 2005



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

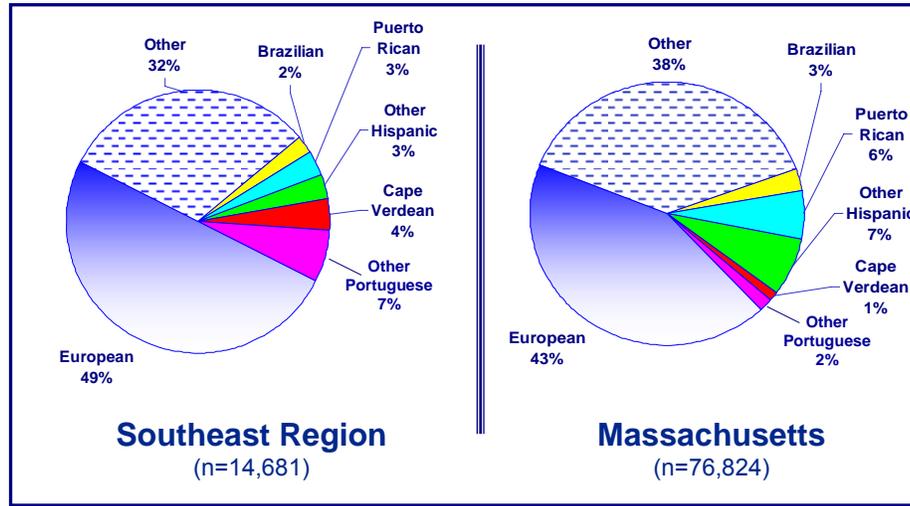
Births by Race and Hispanic Ethnicity Cape & Islands and Massachusetts: 2005



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

Percent Distribution of Births by Ethnicity Southeast Region and Massachusetts: 2005

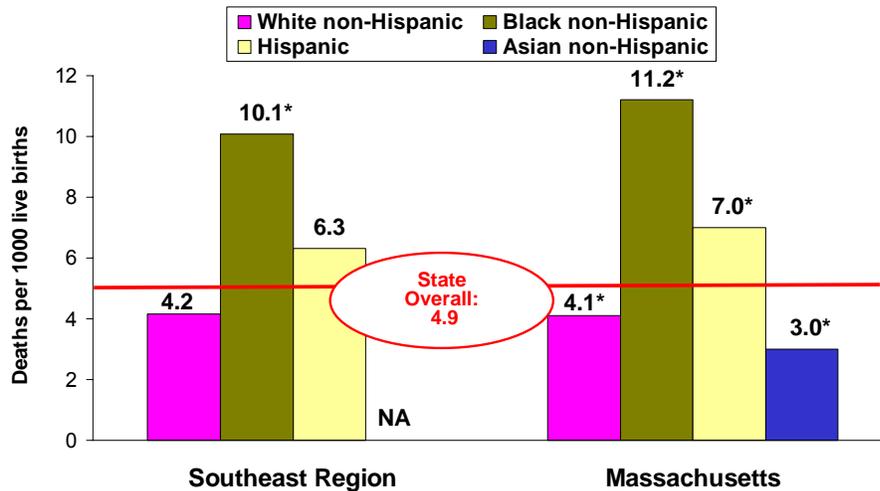
197



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

Infant Mortality Rates by Race/Ethnicity Southeast Region and Massachusetts: 2002-2005

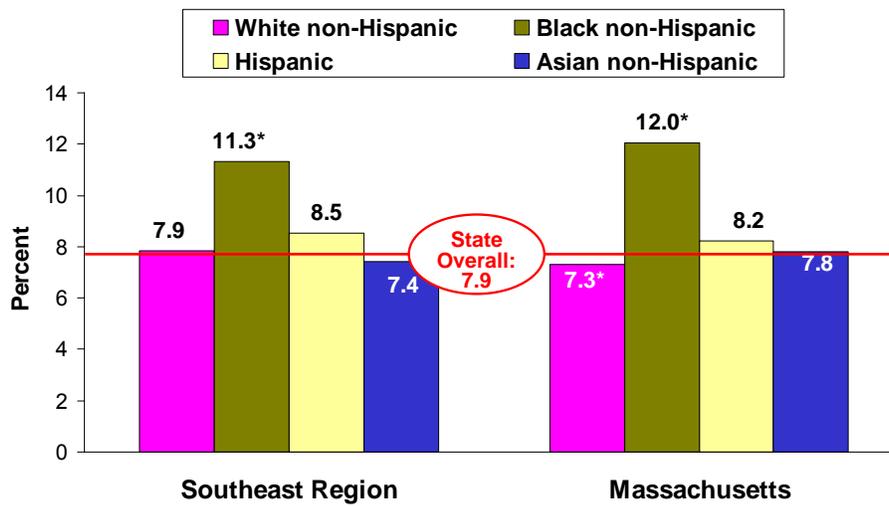
198



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

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

Low birthweight by Race and Ethnicity Southeast Region and Massachusetts: 2005

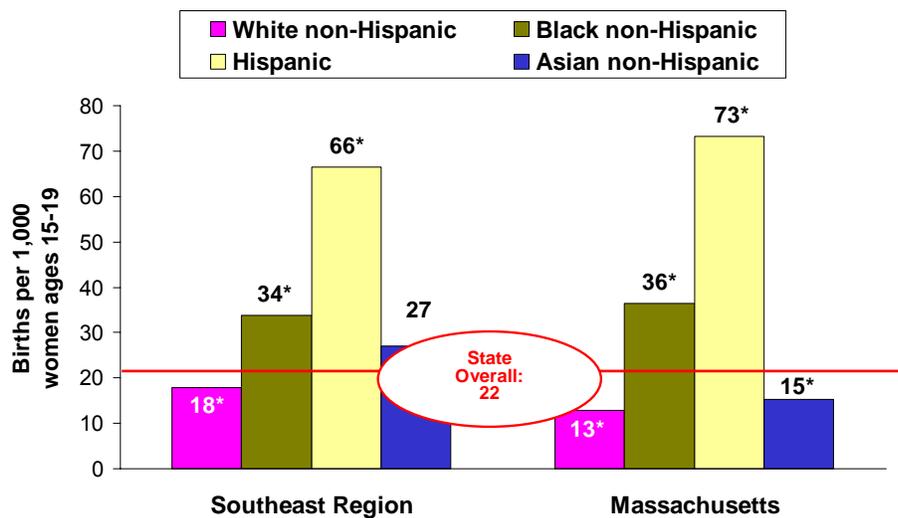


Statistically different from State ($p \leq .05$) Red (*) = Statistically worse; Green (**) = Statistically better

Low birthweight: less than 2,500 grams or 5.5 pounds

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

Teen Birth Rates by Race and Ethnicity Southeast Region and Massachusetts: 2005



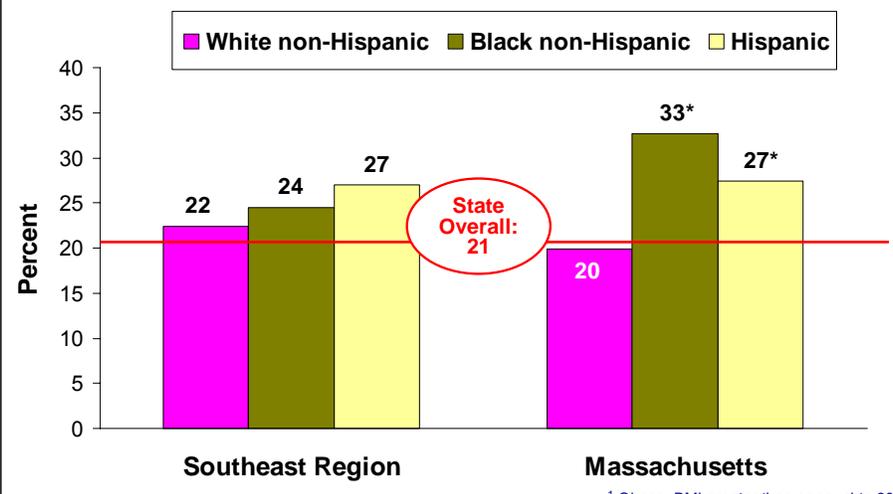
(*) Statistically different from State ($p \leq .05$)

Teen Birth Rate: the number of births to women ages 15-19 per 1,000 women ages 15-19.

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

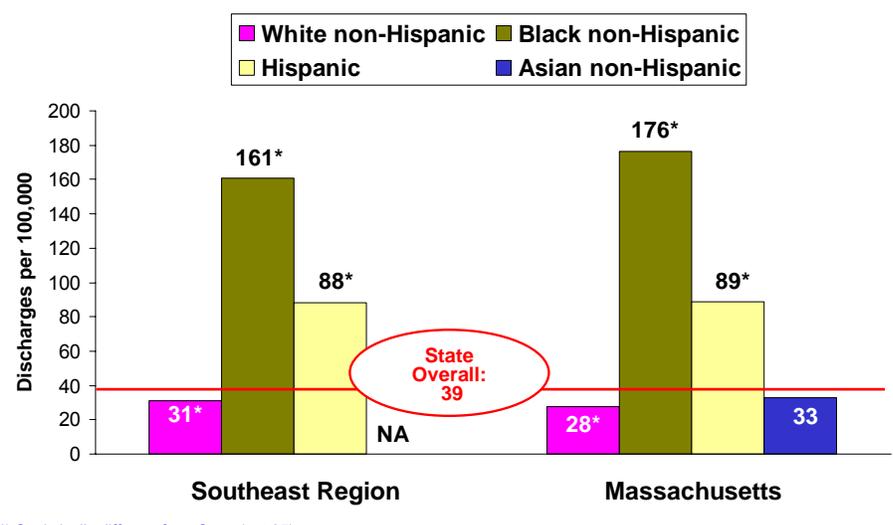
CHRONIC DISEASE OUTCOMES AND OVERWEIGHT/OBESITY

Adult Obesity¹ by Race and Ethnicity Southeast Region and Massachusetts: 2005



(*) Statistically different from State (p ≤ .05) ¹ Obese: 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

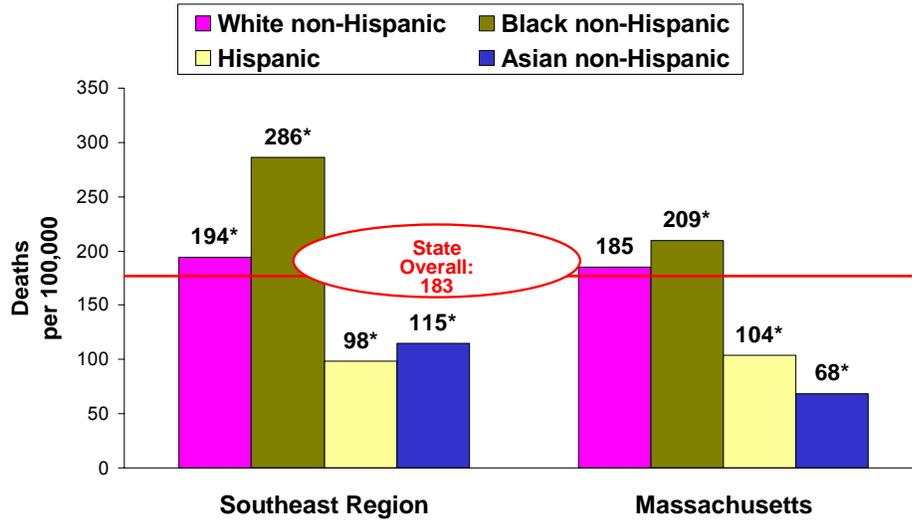
Hypertension Hospital Discharge Rate by Race/Ethnicity Southeast Region, Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy, Calendar Year 2003-2005, Inpatient Hospital Discharge Database

Heart Disease Death Rate by Race/Ethnicity Southeast Region and Massachusetts: 2003-2005

203



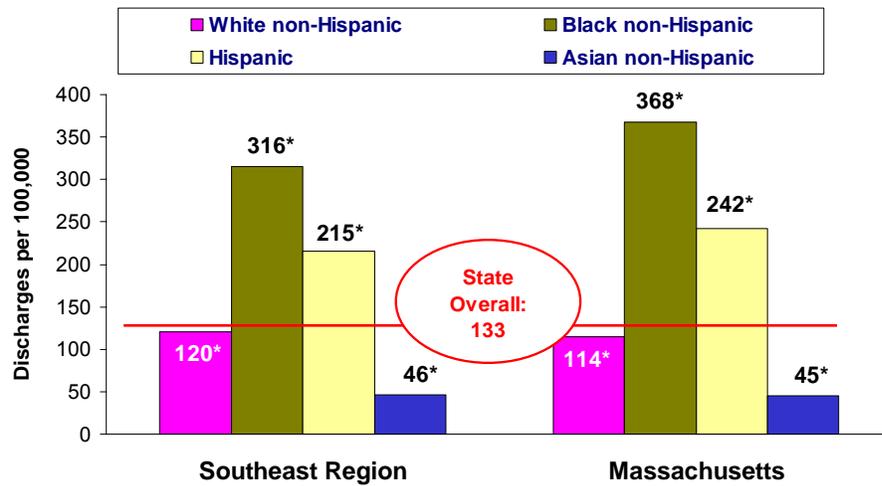
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

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

Diabetes Hospital Discharge Rate by Race/Ethnicity Southeast Region Massachusetts: 2003-2005

204

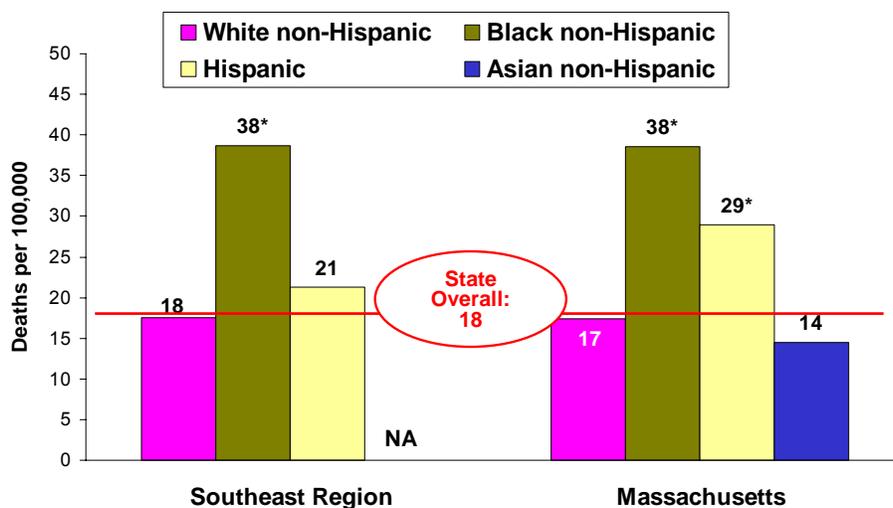


(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy, Calendar Year 2003-2005, Inpatient Hospital Discharge Database

Diabetes Death Rate by Race/Ethnicity Southeast Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)

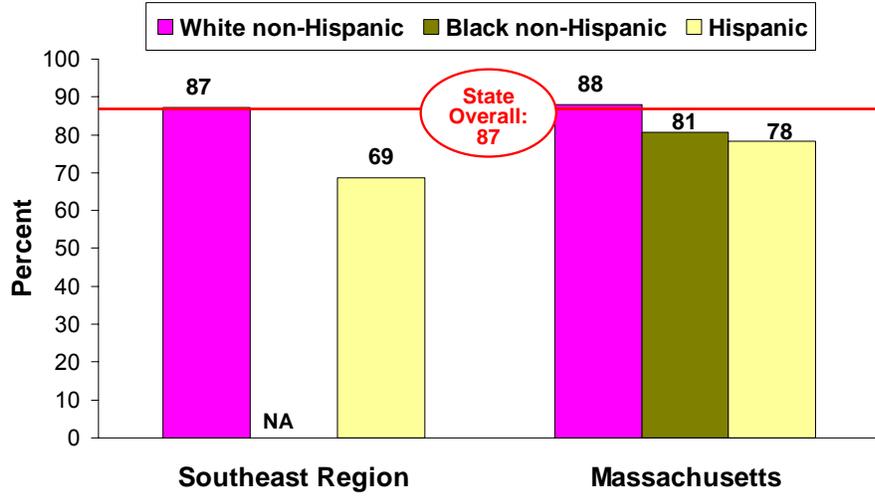
Age-adjusted to the 2000 US standard population.

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

CANCER

Women who had a Clinical Breast Exam in the Past Two Years by Race and Ethnicity Southeast Region and Massachusetts: 2004

206

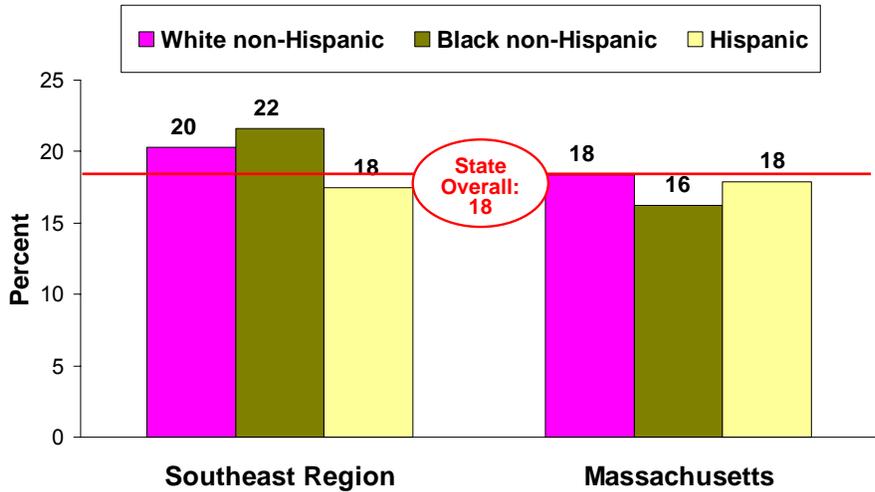


(*) Statistically different from State ($p \leq .05$)

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

Current Smoker by Race and Ethnicity Southeast Region and Massachusetts: 2005

207

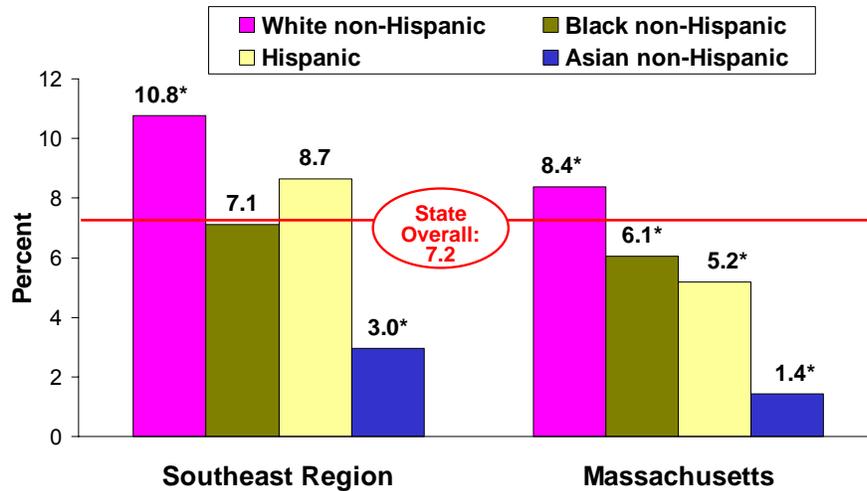


(*) Statistically different from State ($p \leq .05$)

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

Smoking During Pregnancy by Race and Ethnicity Southeast Region and Massachusetts: 2005

208



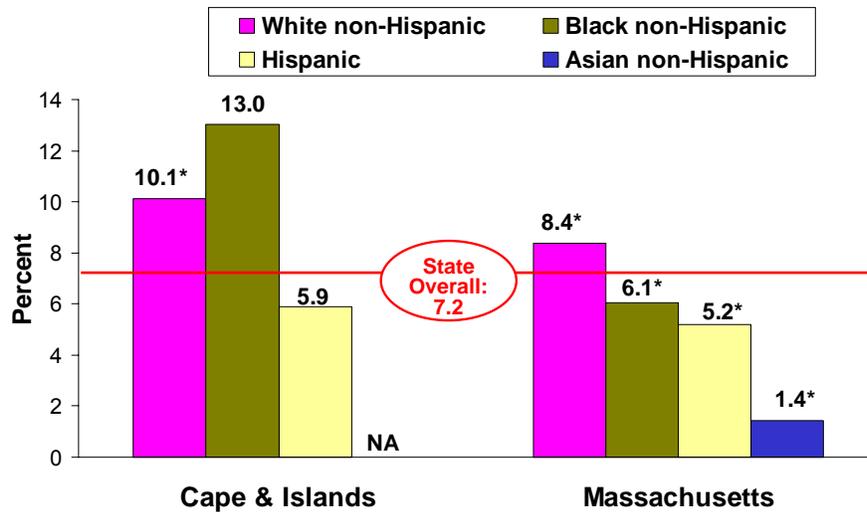
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

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

Smoking During Pregnancy by Race and Ethnicity Cape & Islands and Massachusetts: 2005

209



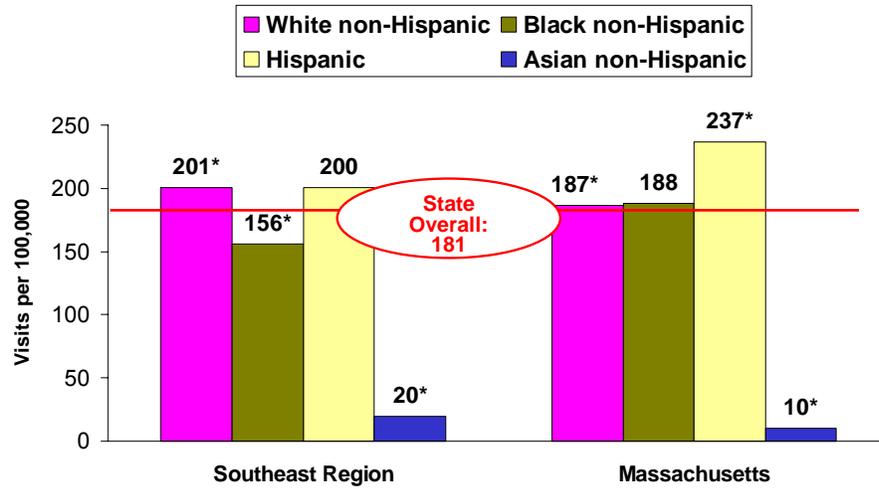
(*) Statistically different from State ($p \leq .05$)

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

SUBSTANCE ABUSE

Opioid-Related Emergency Department Visit Rates by Race/Ethnicity Southeast Region and Massachusetts: 2003-2005

210



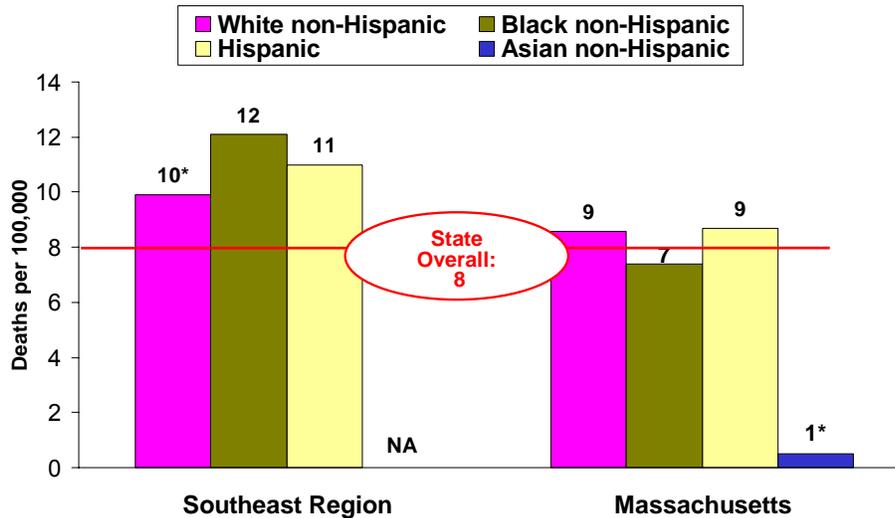
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Department Visits

Opioid-Related Fatal Overdoses by Race/Ethnicity Southeast Region and Massachusetts: 2003-2005

211



(*) Statistically different from State ($p \leq .05$)

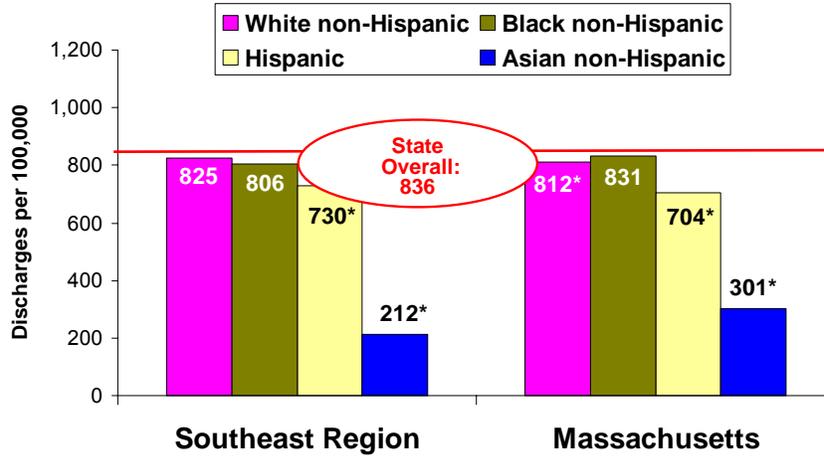
Age-adjusted to the 2000 US standard population.

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

INJURY AND VIOLENCE

Injury-Related Hospital Discharge Rates by Race/Ethnicity, Southeast Region and Massachusetts: 2003-2005

212



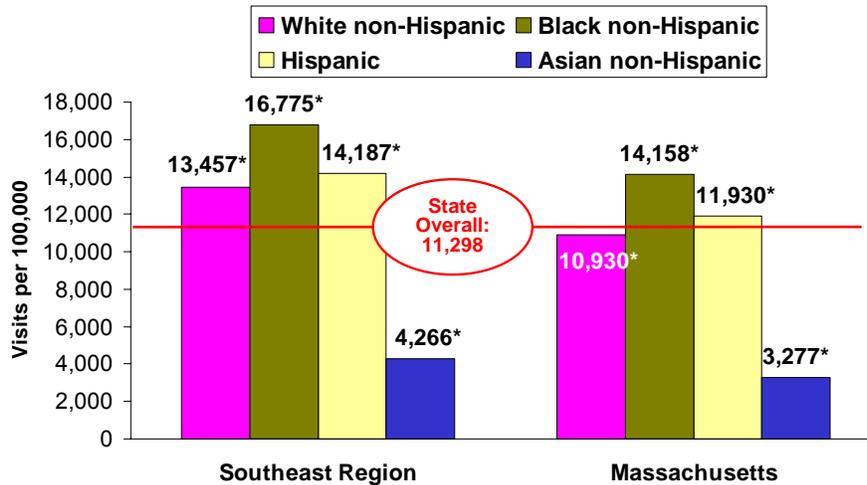
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

Emergency Department Visit Rates for Injuries & Poisonings by Race/Ethnicity Southeast Region and Massachusetts: 2003-2005

213

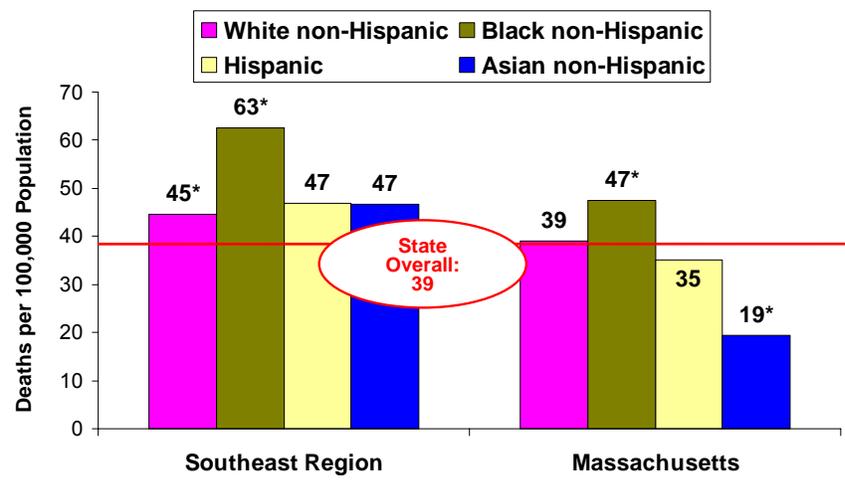


(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

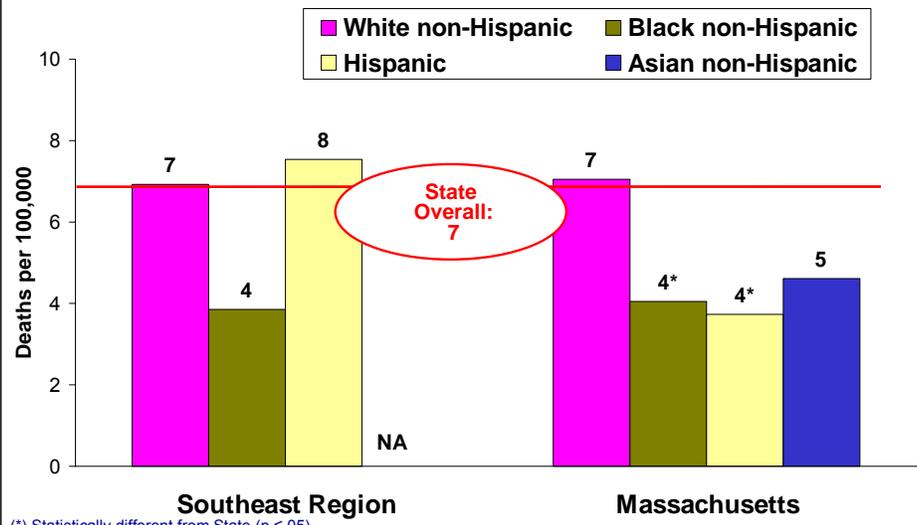
Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Department Visits

Injury Death Rates by Race/Ethnicity Southeast Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

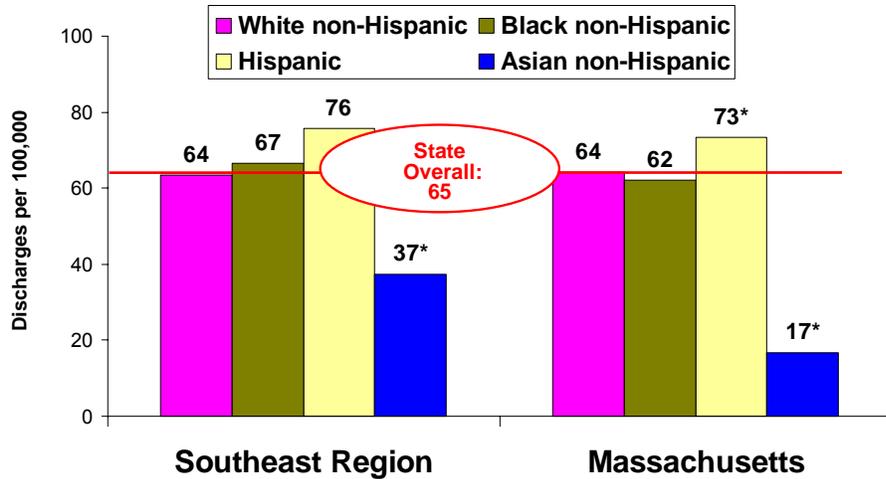
Suicide Rates by Race/Ethnicity Southeast Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

Hospital Discharge Rates for Self-Inflicted Injuries by Race/Ethnicity Southeast Region and Massachusetts: 2003-2005

216



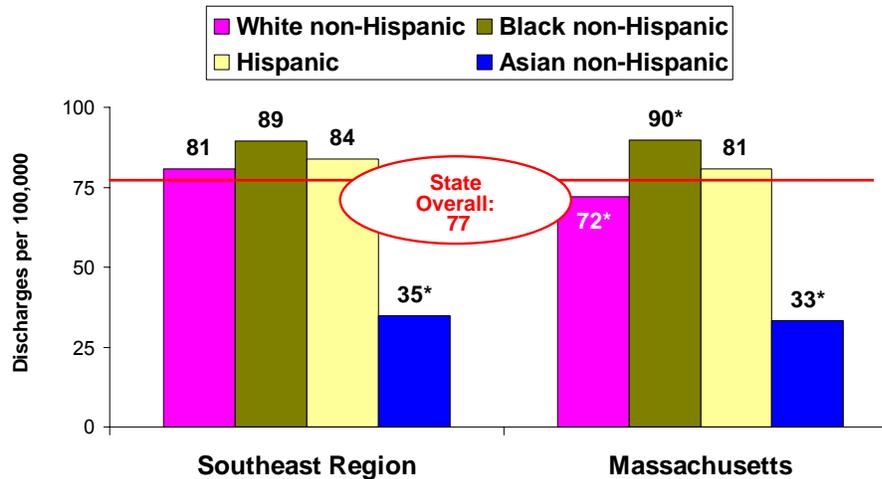
(*) Statistically different from State ($p \leq .05$)

Crude rates

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

Hospital Discharge Rates for Motor Vehicle- Related Injuries by Race/Ethnicity, Southeast Region and Massachusetts: 2003-2005

217

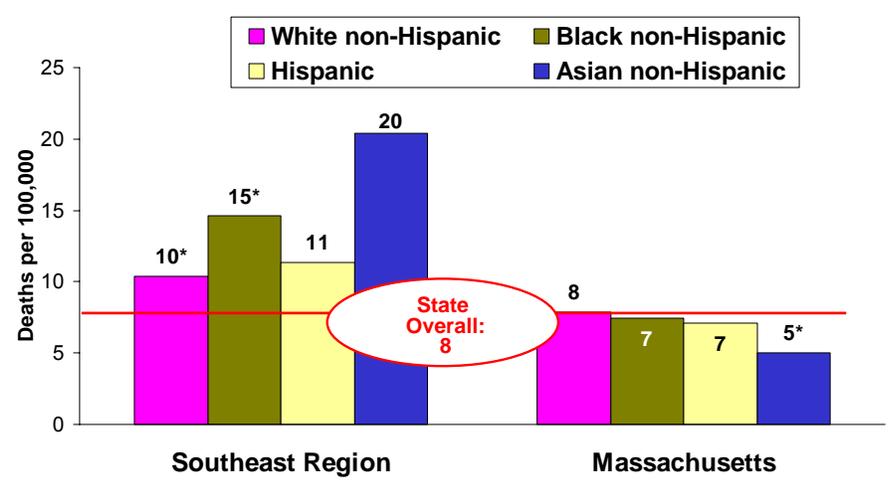


(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

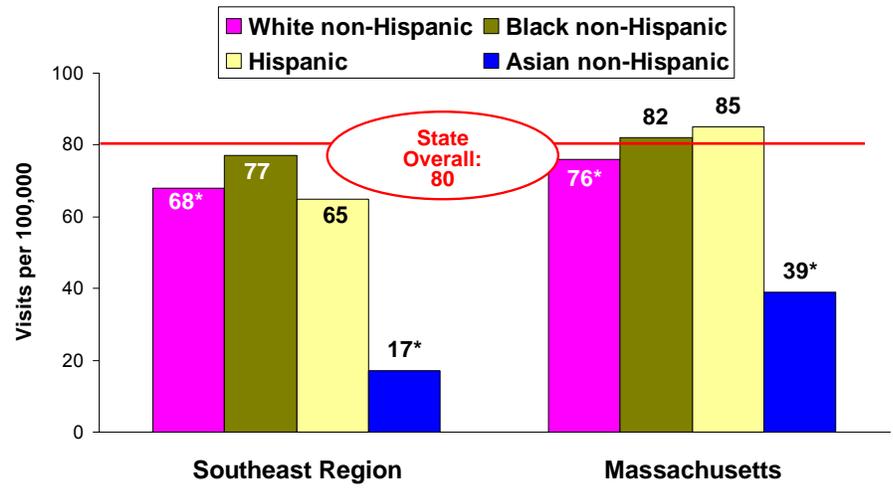
Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

Motor Vehicle-Related Death Rates by Race/Ethnicity, Southeast Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

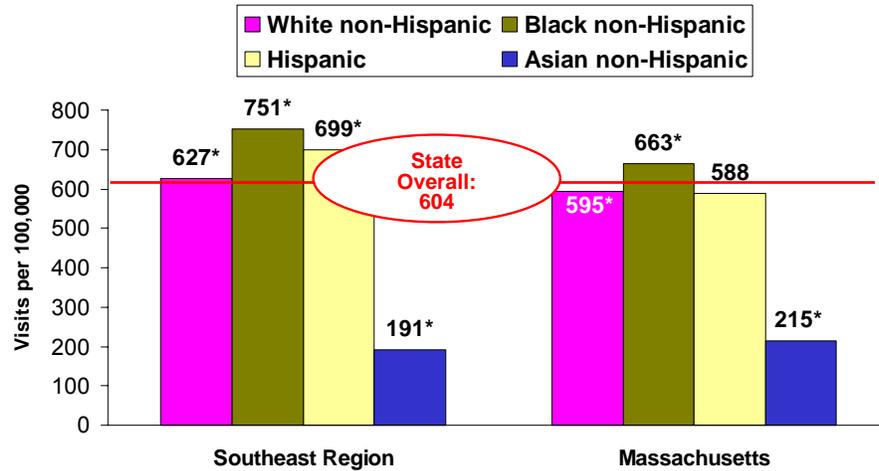
Hospital Discharge Rates for Traumatic Brain Injury by Race/Ethnicity, Southeast Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy, Calendar Year 2003-2005, Inpatient Hospital Discharge Database

Emergency Department Visit Rates for Traumatic Brain Injury by Race/Ethnicity Southeast Region and Massachusetts: 2003-2005

220



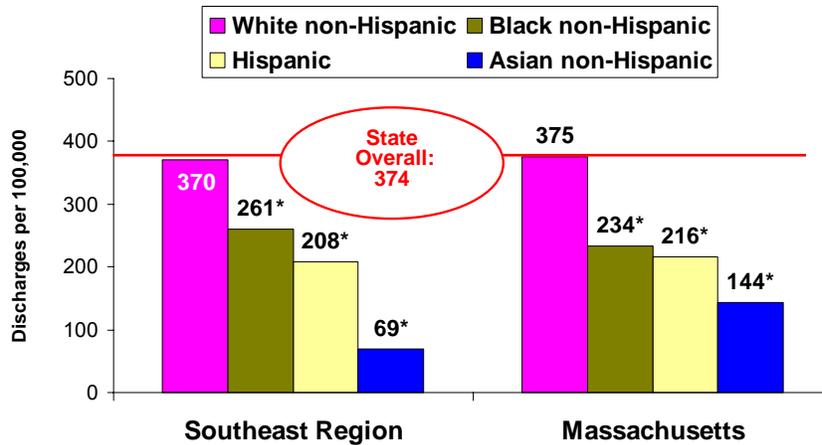
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Department Visits

Hospital Discharge Rates for Fall-Related Injuries by Race/Ethnicity Southeast Region and Massachusetts: 2003-2005

221

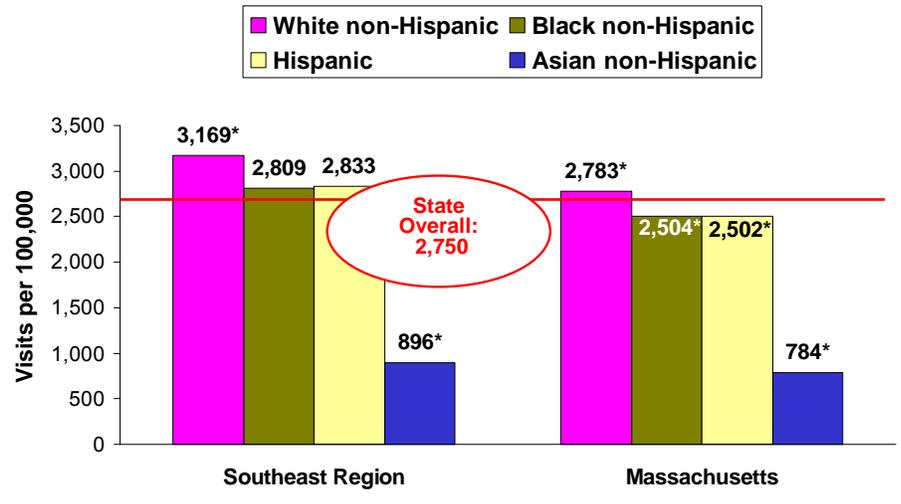


(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

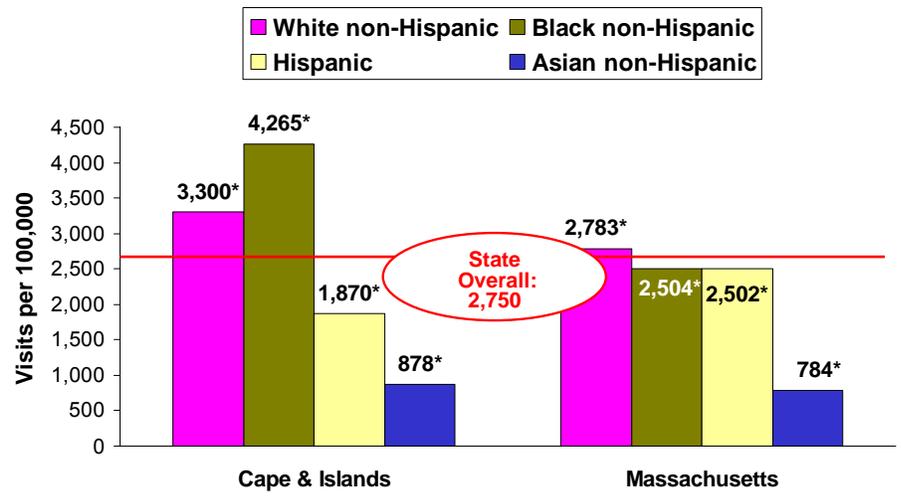
Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

Emergency Department Visit Rates for Fall-Related Injuries by Race/Ethnicity Southeast Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Department Visits

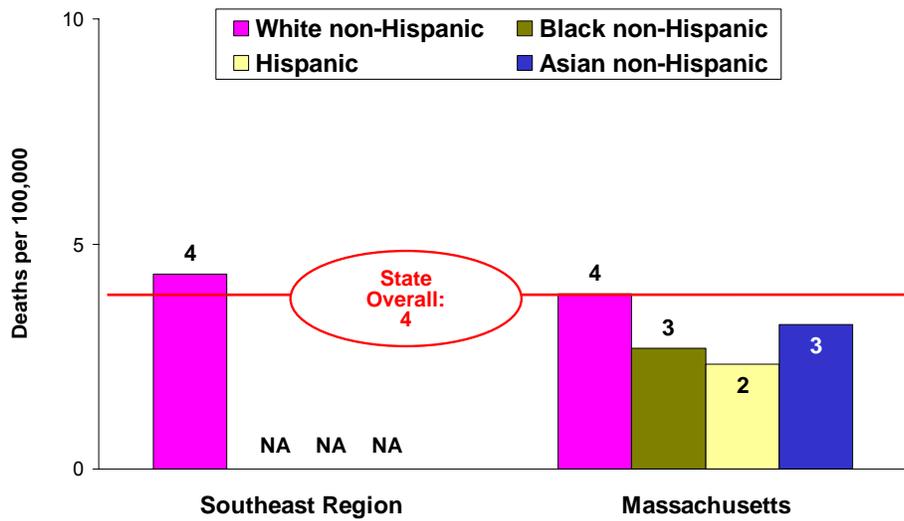
Emergency Department Visit Rates for Fall-Related Injuries by Race/Ethnicity Cape & Islands and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Department Visits

Fall-Related Injury Death Rates by Race/Ethnicity Southeast Region and Massachusetts: 2003-2005

224



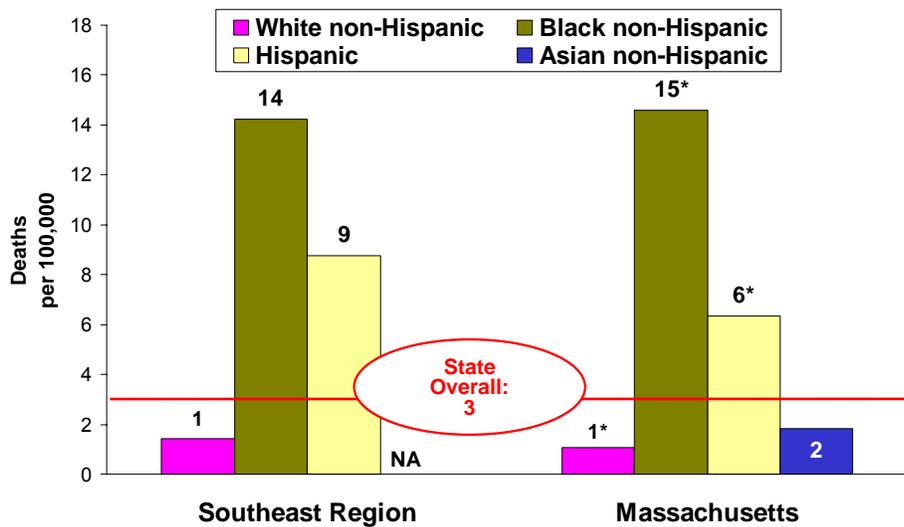
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

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

Homicide Rates by Race/Ethnicity Southeast Region and Massachusetts: 2003-2005

225



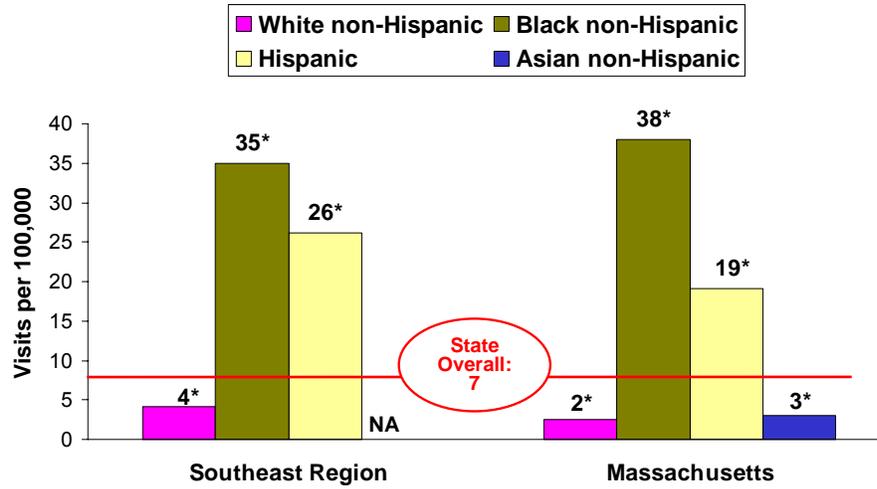
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

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

Emergency Department Visit Rates for Firearm Injuries by Race/Ethnicity Southeast Region and Massachusetts: 2003-2005

226



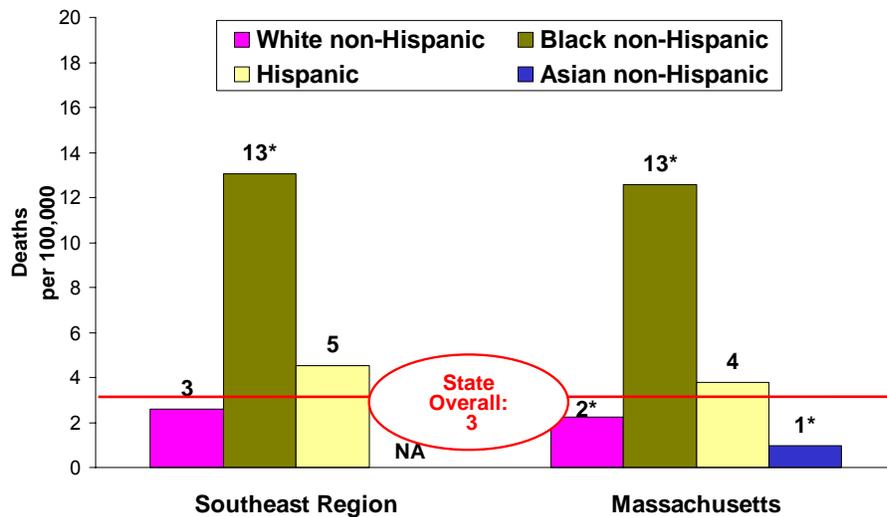
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Department Visits

Firearm Death Rates by Race/Ethnicity Southeast Region and Massachusetts: 2003-2005

227

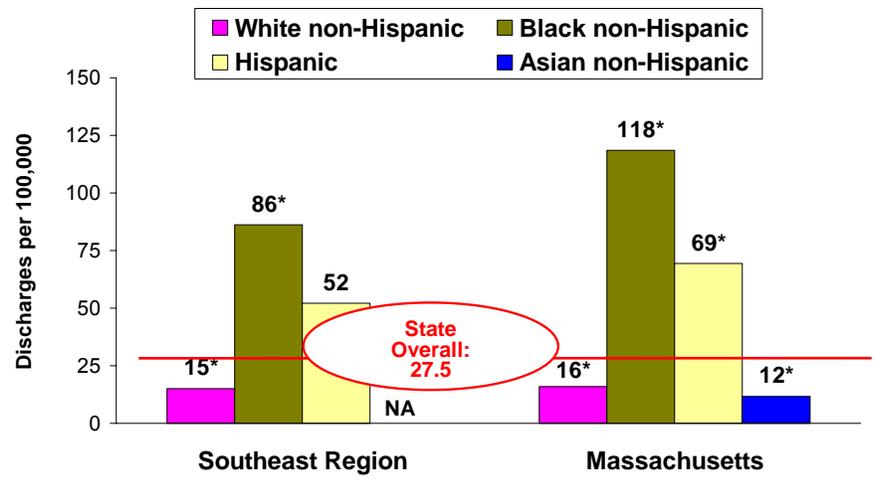


(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

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

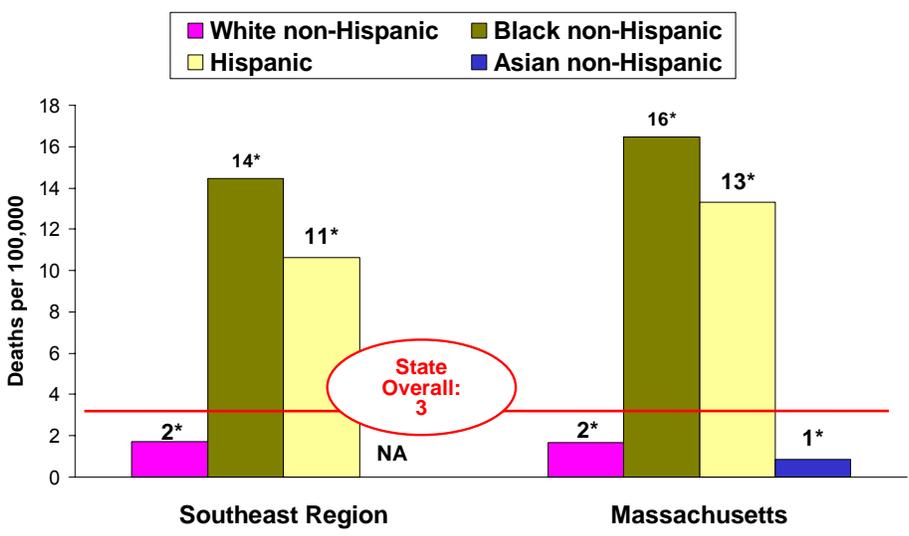
Hospital Discharge Rates for Assaults by Race/Ethnicity Southeast Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
Crude rates
Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

HIV/AIDS

HIV/AIDS Death Rates by Race/Ethnicity Southeast Region and Massachusetts: 2003-2005

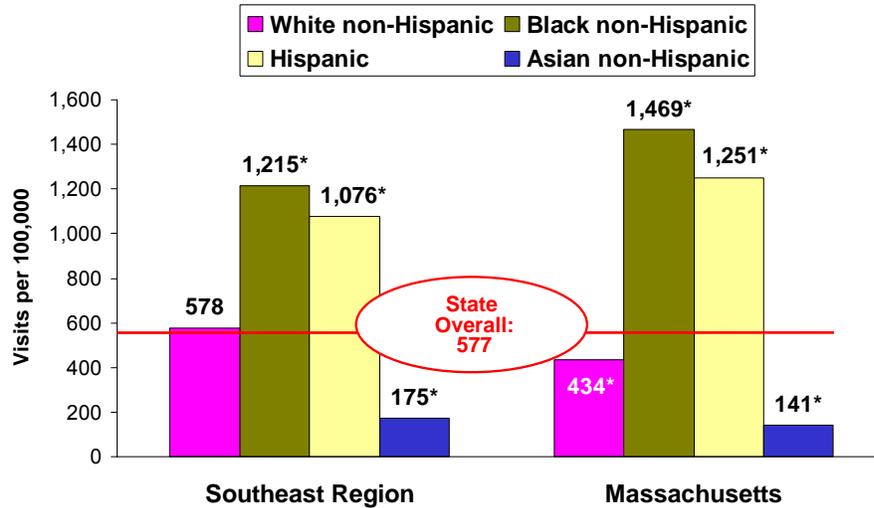


(*) Statistically different from State (p ≤ .05)
Age-adjusted to the 2000 US standard population.
Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

ASTHMA

Emergency Department Visits Rates for Asthma by Race/Ethnicity Southeast Region and Massachusetts: 2005

230



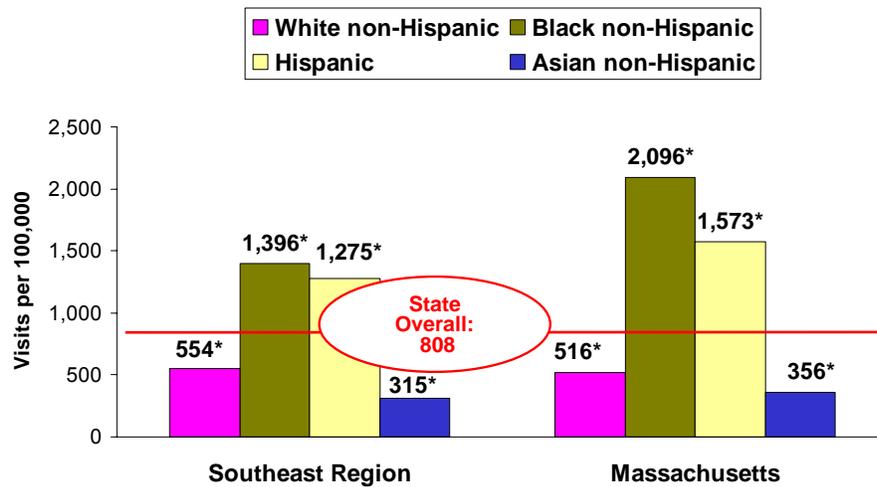
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2005. Emergency Department Visits

Asthma Emergency Visit Rates by Race/Ethnicity, Children Ages 0-14 Southeast Region and Massachusetts: 2005

231



(*) Statistically different from State ($p \leq .05$)

Source: Division of Health Care Finance and Policy. Calendar Year 2005. Emergency Department Visits

PREMATURE MORTALITY

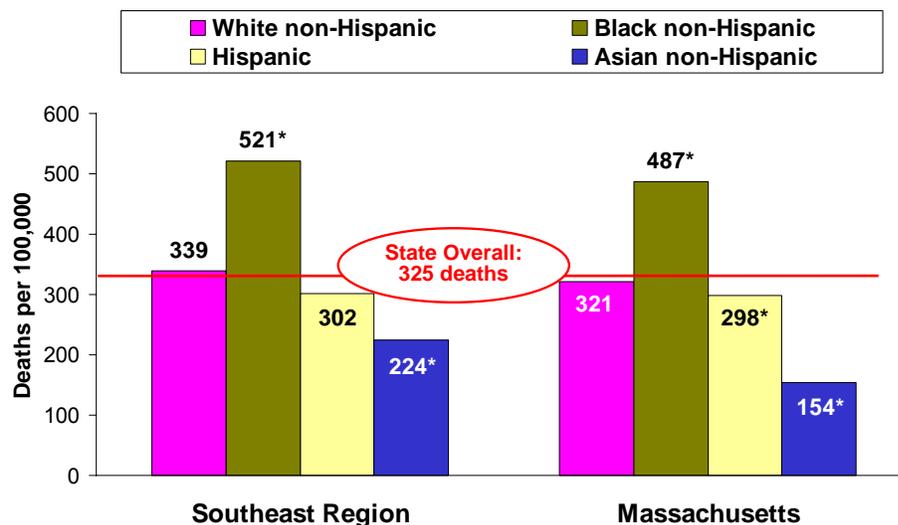
Premature Mortality Rate (PMR)¹

- **Definition**
 - deaths before age 75
- **Rationale**
 - two-thirds of deaths to persons ages 75+
 - vast majority of deaths to persons age 75+ are due to chronic conditions associated with aging
 - focusing on deaths to persons less than 75 years may be more preventable
- **Summary health statistic**
 - excellent measure to reflect the health status of a population
 - used as a health status indicator that can be used to focus prevention initiatives and target programs

¹ Rates are per 100,000 population. Age-adjusted to the 2000 US standard population under 75 years of age.

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

Premature Mortality Rate by Race/Ethnicity Southeast Region and Massachusetts: 2003-2005



(*) Statistically different from State ($p \leq .05$)

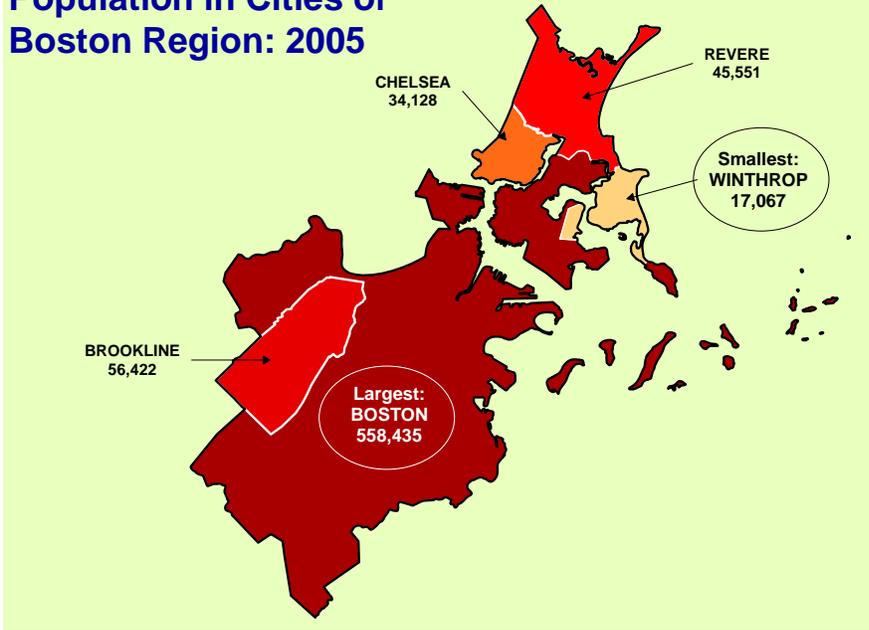
Age-adjusted to the 2000 US standard population under 75 years of age.

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

VI. BOSTON REGION

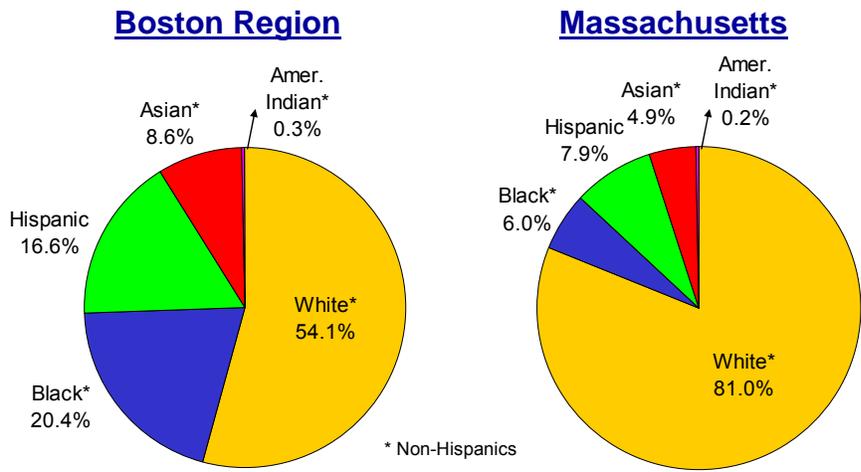
**SOCIODEMOGRAPHIC
INDICATORS
AND
HEALTH CARE ACCESS
AND STATUS**

Population in Cities of Boston Region: 2005



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

Race and Ethnic Breakdown of Population Boston Region and Massachusetts: 2005



Total Population: 711,603

Total Population: 6,436,940

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

Race and Ethnic Breakdown of Population Cities in Boston Region and Massachusetts: 2005

Racial Hispanic Group	City of Boston	Brookline	Chelsea	Revere	Winthrop	Boston Region	MA Total
White*	49.9%	73%	35.9%	81.6%	93.9%	54.1%	81%
Black*	25%	4.2%	5.6%	2.5%	1.5%	20.4%	6%
Hispanic	16.4%	4.8%	53.3%	10.5%	3.1%	16.6%	7.9%
Asian*	8.4%	17.9%	5%	5.2%	1.3%	8.6%	4.9%
American Indian*	0.3%	0.1%	0.3%	0.2%	0.2%	0.3%	0.2%

* Non-Hispanics

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

Population by Age Group Cities in Boston Region and Massachusetts: 2005

Ages	City of Boston	Brookline	Chelsea	Revere	Winthrop	Boston Region	MA Total
0-19 years	24%	19%	30%	23%	21%	23%	26%
20-24 years	11%	10%	7%	5%	5%	10%	7%
25-44 years	35%	34%	35%	33%	34%	35%	29%
45-64 years	20%	25%	18%	23%	25%	20%	25%
65+ years	11%	12%	11%	16%	16%	11%	13%

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

Language Spoken at Home, Cities in Boston Region and Massachusetts: 2000

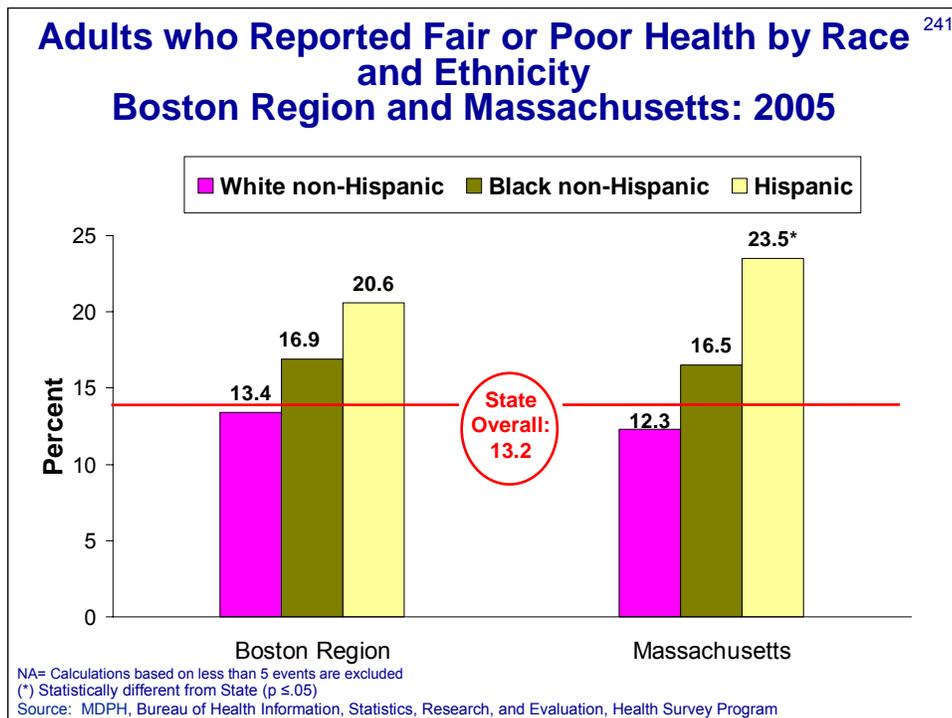
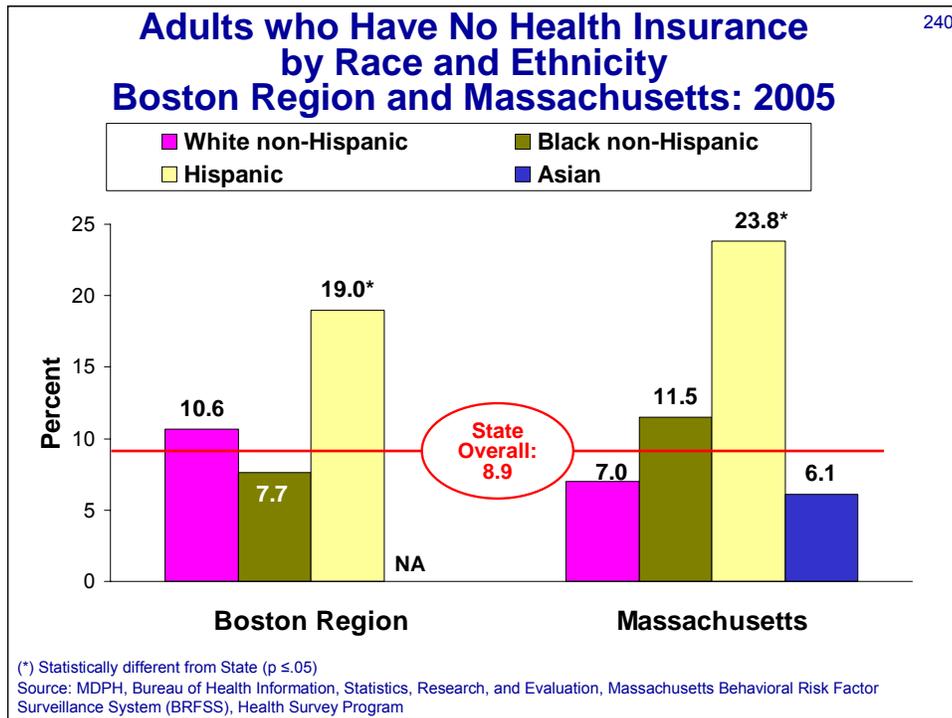
As % of all persons ages>5	City of Boston	Brookline	Chelsea	Revere	Winthrop	Boston Region	MA Total
Only English	66.6%	71%	41.6%	71%	87.1%	66.6%	81.3%
Spanish or Spanish Creole	13.6%	3.6%	43.8%	9%	3.6%	13.7%	6.2%
Chinese	3.2%	5.7%	0.6%	0.6%	0.1%	3%	1.2%
French Creole	3.5%	0.4%	0.8%	0.3%	0.1%	2.8%	0.7%
Portuguese or Port. Creole	2.3%	0.7%	2.1%	2.4%	1.4%	2.1%	2.7%
Vietnamese	1.8%	0.1%	1.9%	1%	0%	1.6%	0.5%
Italian	1.2%	0.4%	1%	6.8%	3%	1.5%	1%
French (Incl. Patois, Cajun)	1.4%	1.4%	0.9%	0.6%	1%	1.3%	1.4%
Russian	1.1%	4.4%	0.1%	0.5%	0%	1.2%	0.6%
Mon Khmer, Cambodian	0.1%	0.3%	0.9%	2.5%	0.1%	0.3%	0.4%
Hebrew	0.1%	2.1%	0.1%	0%	0.2%	0.3%	0.1%
Serbo Croatian	0.1%	0.1%	2%	0.9%	0%	0.2%	0.1%

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

Socio-Demographic Indicators Cities in Boston Region and Massachusetts: 2000

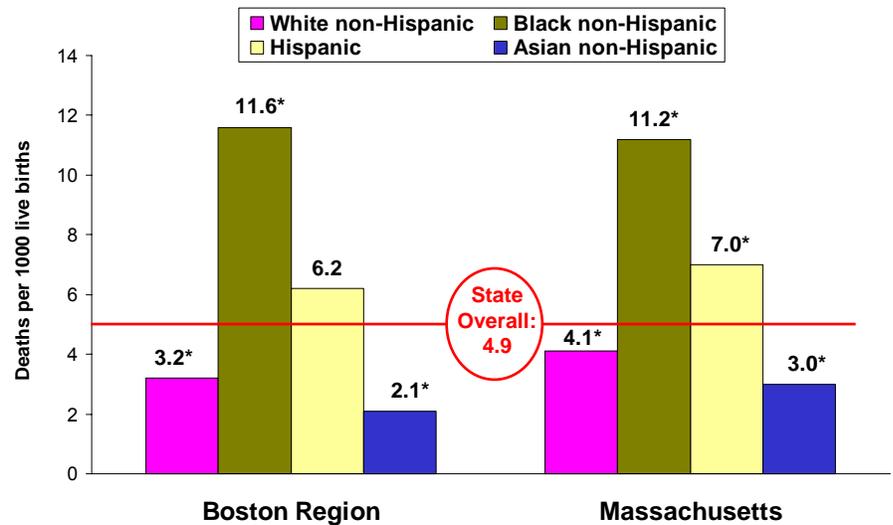
	City of Boston	Brookline	Chelsea	Revere	Winthrop	Boston Region	MA Total
Per Capita Income	\$23,353	\$44,327	\$14,628	\$19,698	\$27,374	\$24,413	\$25,952
Those living below 100% poverty	19.5%	9.3%	23.3%	14.6%	5.5%	18.2%	9.3%
Less than a High School Education	21.1%	3.7%	40.5%	23.3%	10%	20.3%	15.2%
Speak language other than English at home	33.4%	29.0%	58.4%	29.1%	12.9%	21.9%	18.7%
Foreign born	25.8%	26.6%	36.1%	21%	8.7%	25.6%	12.2%
Unemployed	5.5%	3%	7.5%	6.3%	5.1%	5.4%	5.1%

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



BIRTH OUTCOMES

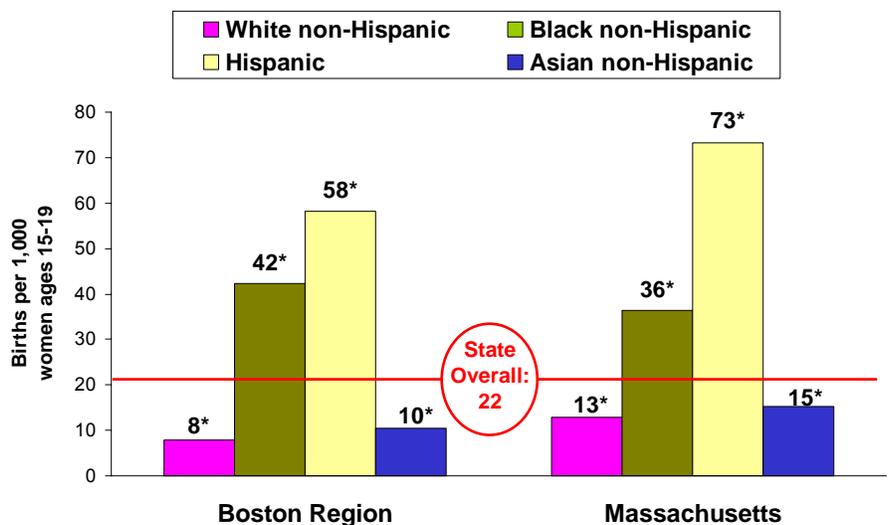
Infant Mortality Rates by Race/Ethnicity Boston Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)

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

Teen Birth Rates by Race and Ethnicity Boston Region and Massachusetts: 2005

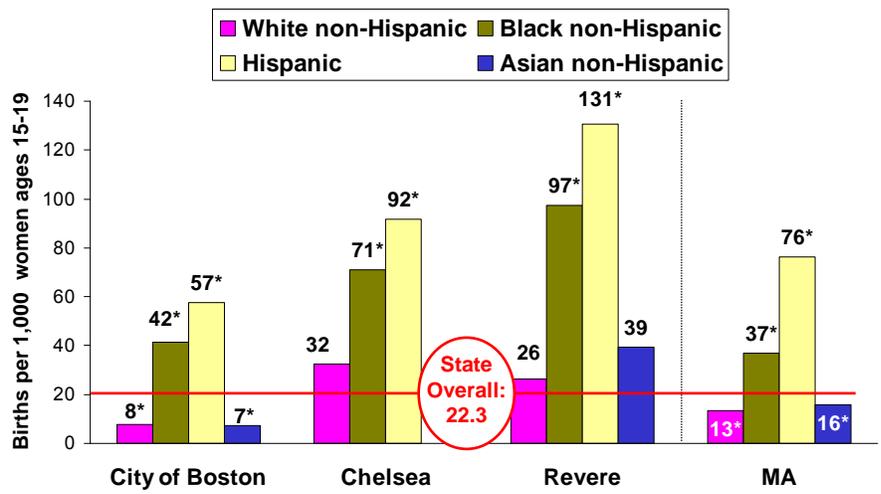


(*) Statistically different from State (p ≤ .05)

Teen Birth Rate: the number of births to women ages 15-19 per 1,000 women ages 15-19.

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

Teen Birth Rate by Race and Ethnicity Cities in Boston Region & Massachusetts: 2003-2005



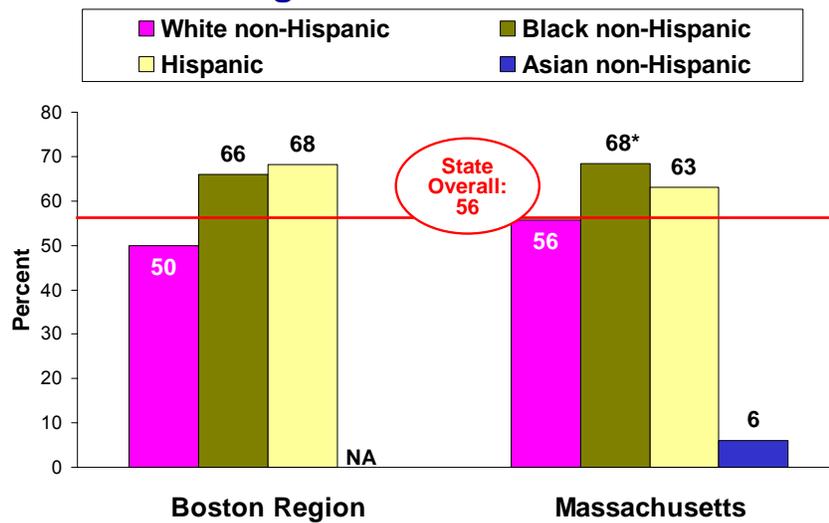
(*) Statistically different from State (p ≤ 0.05)

Teen Birth Rate: the number of births to women ages 15-19 per 1,000 women ages 15-19.

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

CHRONIC DISEASE OUTCOMES AND OVERWEIGHT/OBESITY

Overweight¹ by Race and Ethnicity Boston Region and Massachusetts: 2005

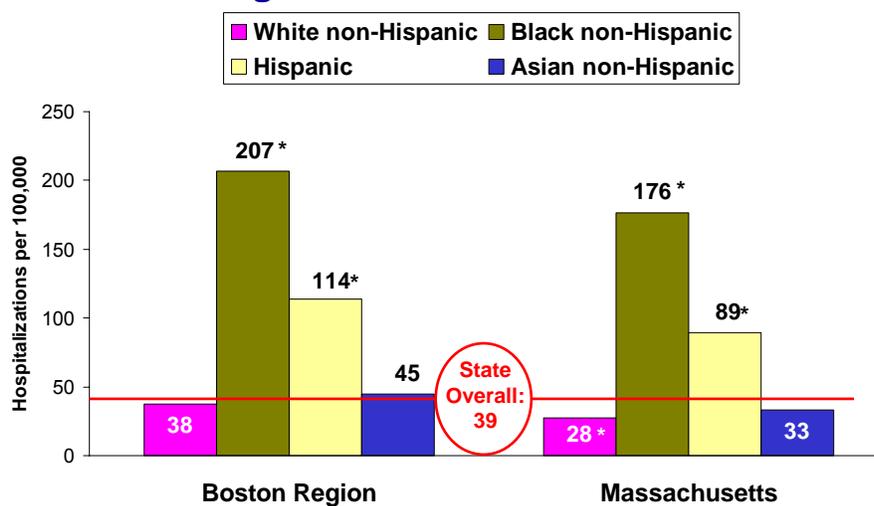


(*) Statistically different from State (p ≤ .05)

¹ Overweight: BMI greater than or equal to 25

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

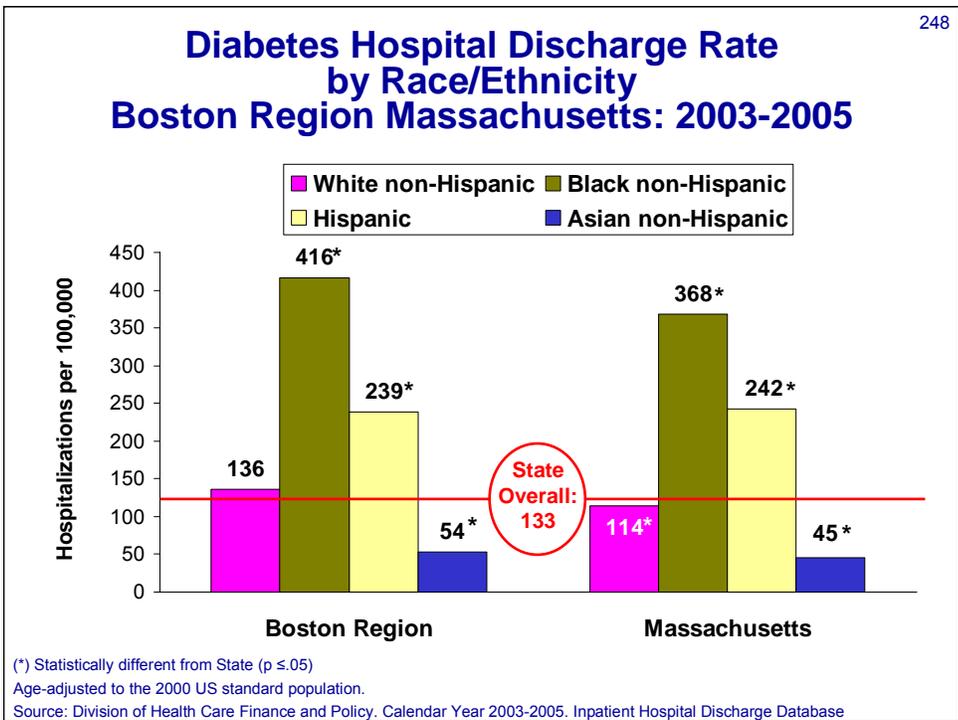
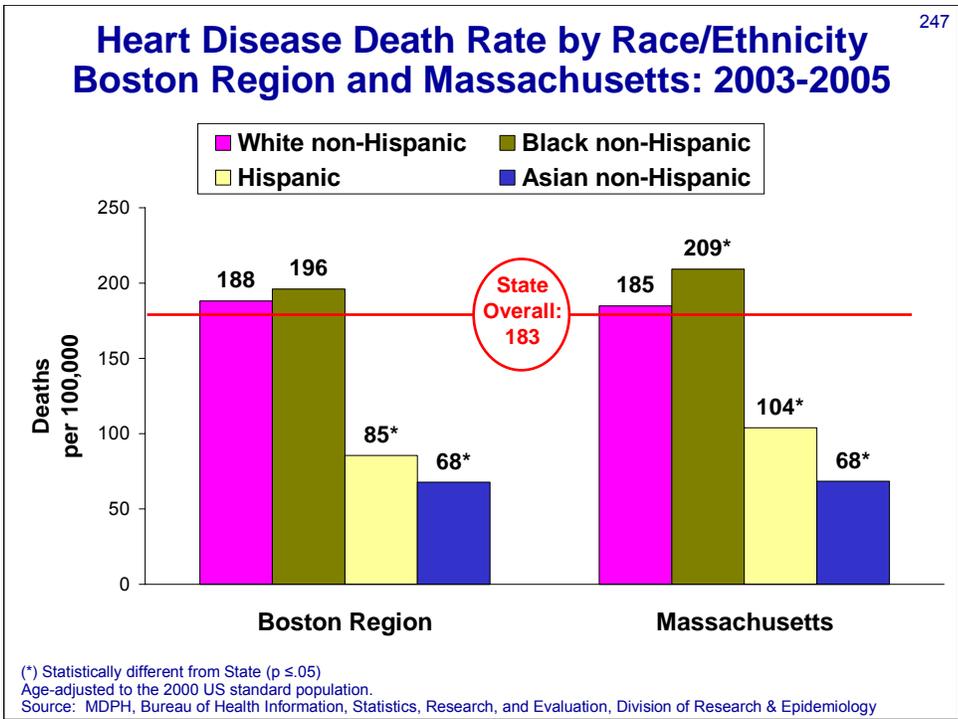
Hospital Discharge Rate for Hypertension by Race/Ethnicity Boston Region & Massachusetts: 2003-2005



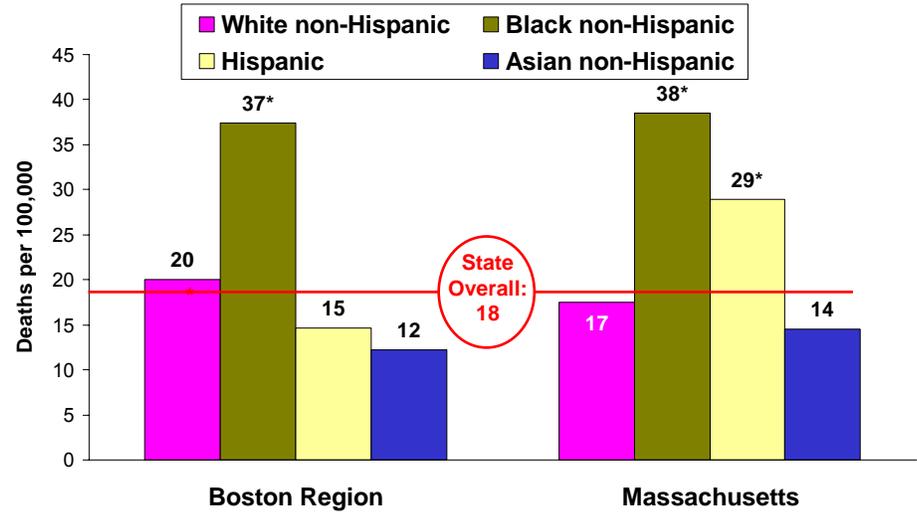
(*) Statistically different from State (p ≤ .05)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy, Calendar Year 2003-2005, Inpatient Hospital Discharge Database



Diabetes Death Rate by Race/Ethnicity Boston Region and Massachusetts: 2003-2005

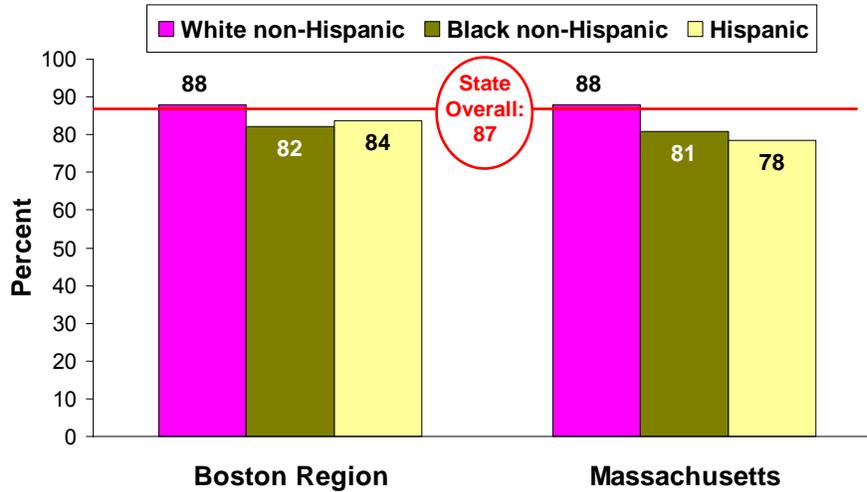


(*) Statistically different from State ($p \leq 0.05$)
Age-adjusted to the 2000 US standard population.
Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Division of Research & Epidemiology

CANCER

Women who had a Clinical Breast Exam in the Past Two Years by Race and Ethnicity Boston Region and Massachusetts: 2004

250

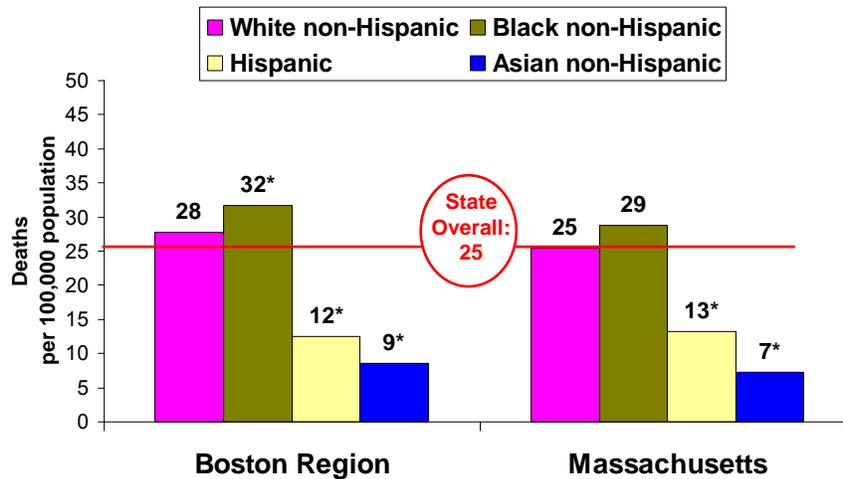


(*) Statistically different from State ($p \leq .05$)

Source: MDPH, Health Information, Statistics, Research, and Evaluation Bureau, Health Survey Program

Female Breast Cancer Mortality Rates by Race and Ethnicity, Boston Region & Massachusetts: 2001-2005

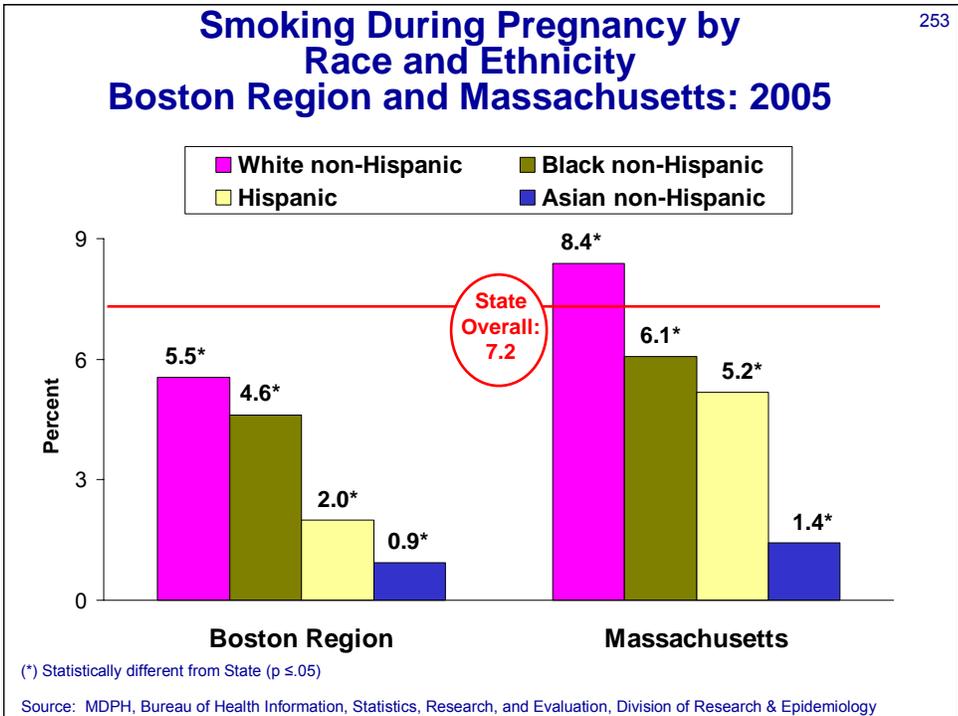
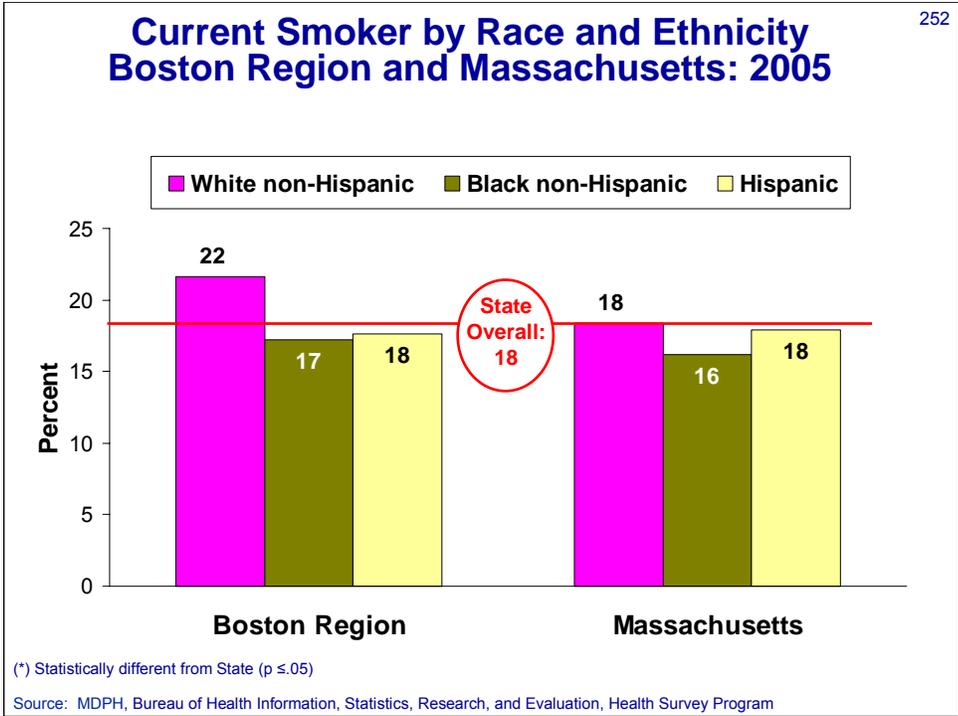
251



(*) Statistically different from State ($p \leq .05$)

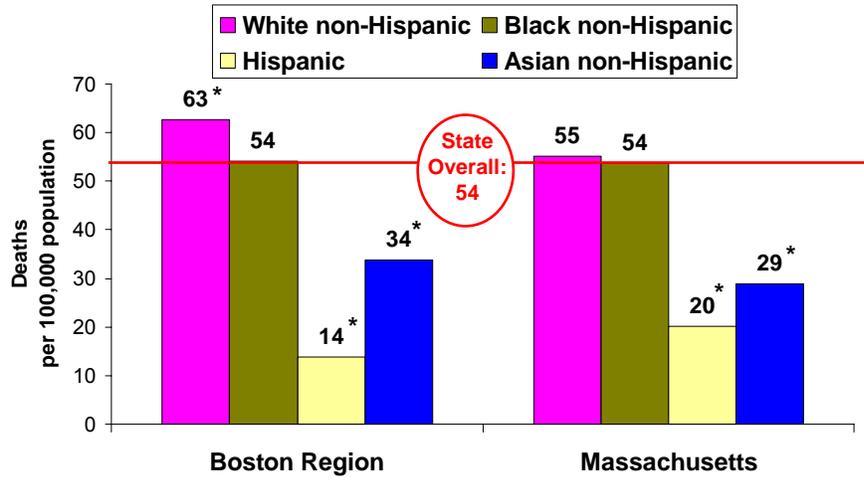
Age-adjusted to the 2000 US standard population.

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



254

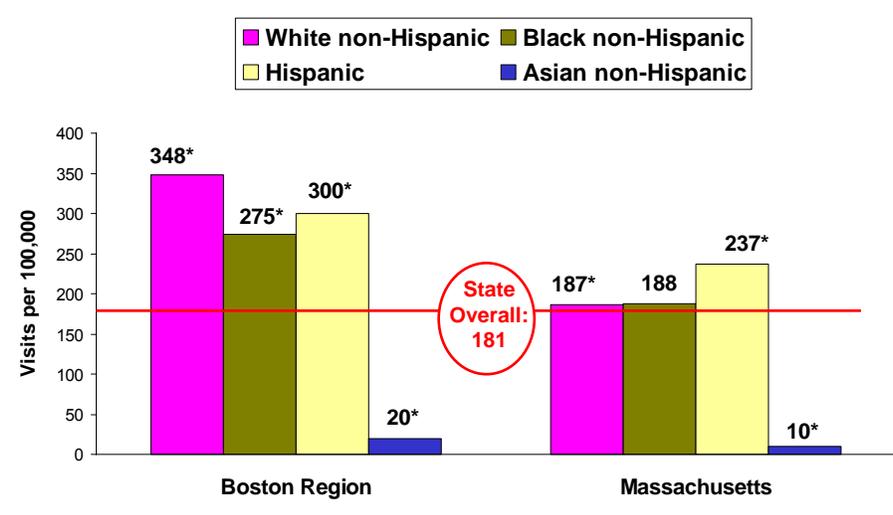
Lung Cancer Mortality Rates by Race and Ethnicity, Boston Region & Massachusetts: 2001-2005



(*) Statistically different from State ($p \leq 0.05$)
 Age-adjusted to the 2000 US standard population.
 Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Division of Research & Epidemiology

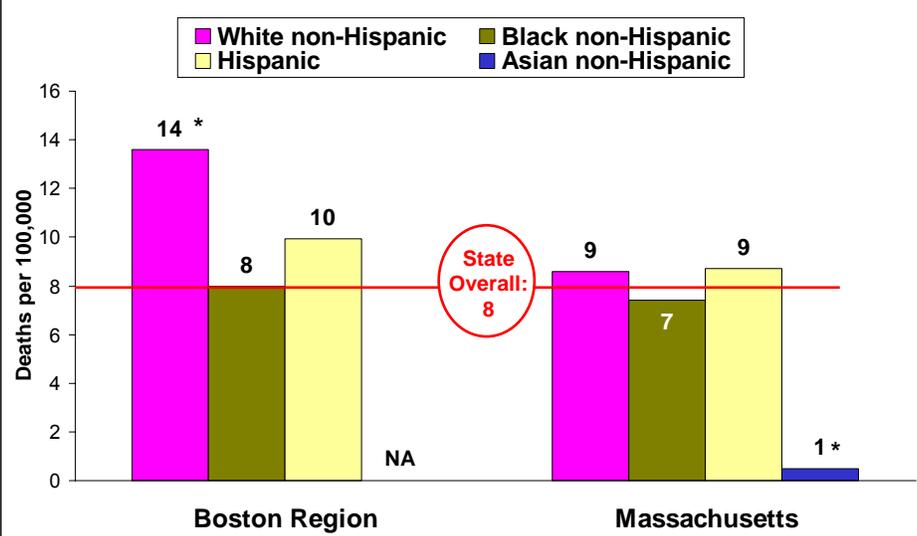
SUBSTANCE ABUSE

Opioid-Related Emergency Visit Rates by Race/Ethnicity Boston Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
Age-adjusted to the 2000 US standard population.
Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Department Visits

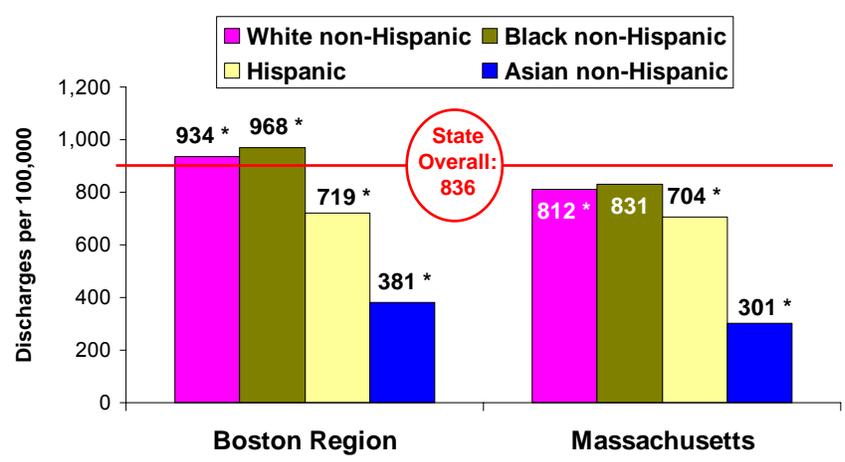
Opioid-Related Fatal Overdoses by Race/Ethnicity Boston Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
Age-adjusted to the 2000 US standard population.
Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Division of Research & Epidemiology

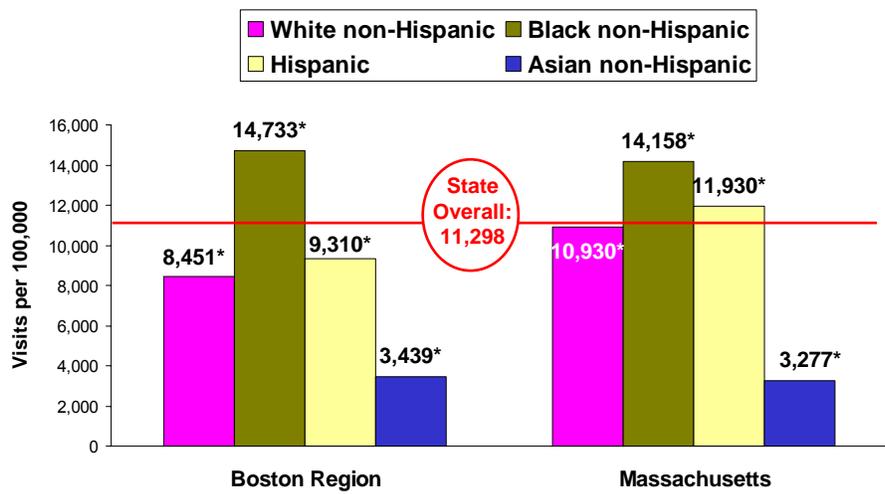
INJURY AND VIOLENCE

Injury-related Hospital Discharge Rates by Race/Ethnicity, Boston Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

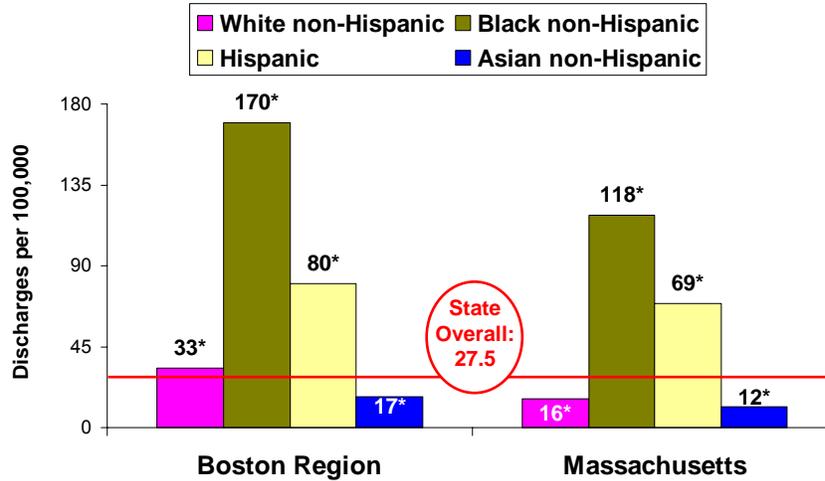
Emergency Department Visit Rates for Injuries & Poisonings by Race/Ethnicity Boston Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Department Visits

Hospital Discharge Rates for Assaults by Race/Ethnicity, Boston Region and Massachusetts: 2003-2005

259

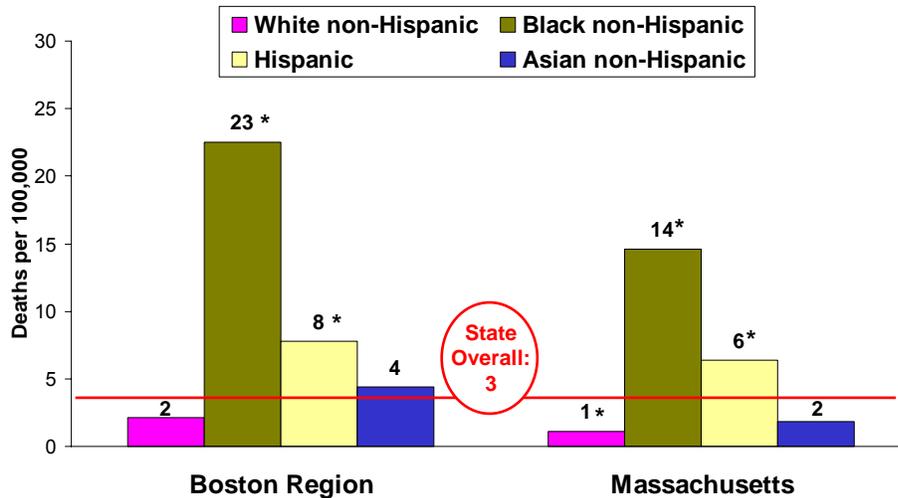


(*) Statistically different from State ($p \leq .05$)
Crude rates.

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

Homicide Rates by Race/Ethnicity Boston Region and Massachusetts: 2003-2005

260



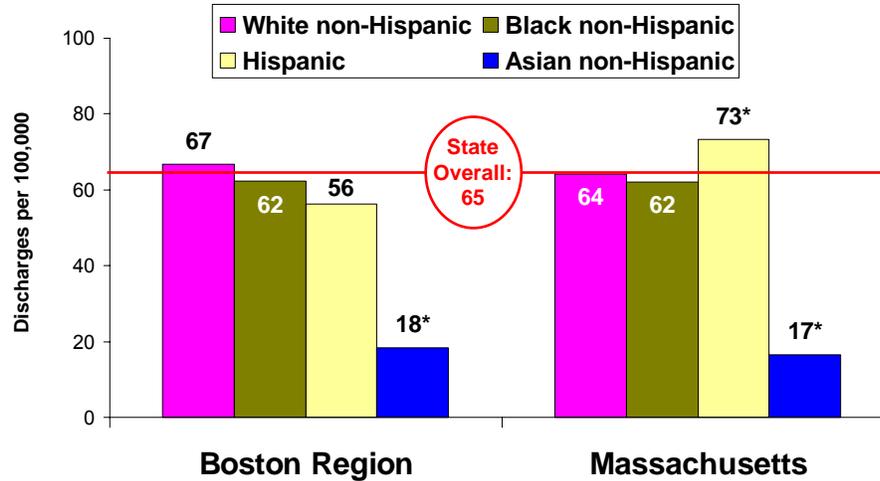
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

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

Hospital Discharge Rates for Self-inflicted Injuries by Race/Ethnicity, Boston Region and Massachusetts: 2003-2005

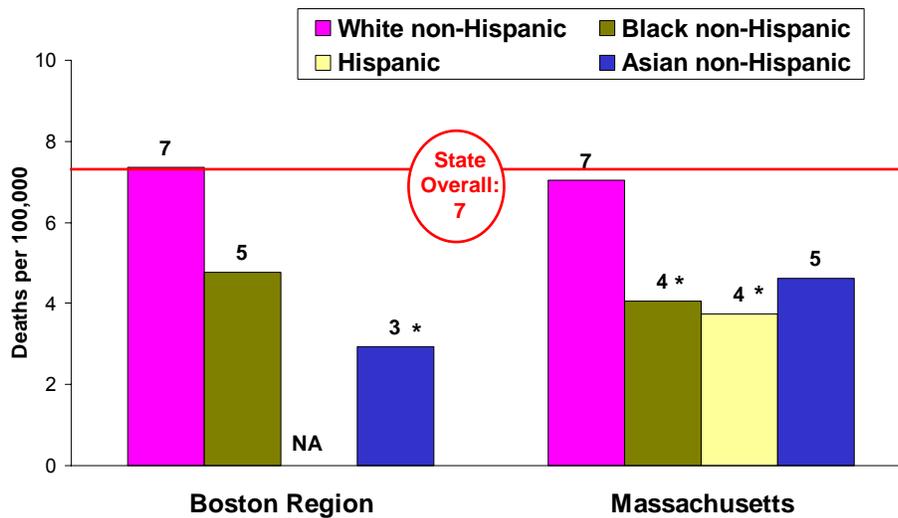
261



(*) Statistically different from State ($p \leq 0.05$)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

Suicide Rates by Race/Ethnicity Boston Region and Massachusetts: 2003-2005

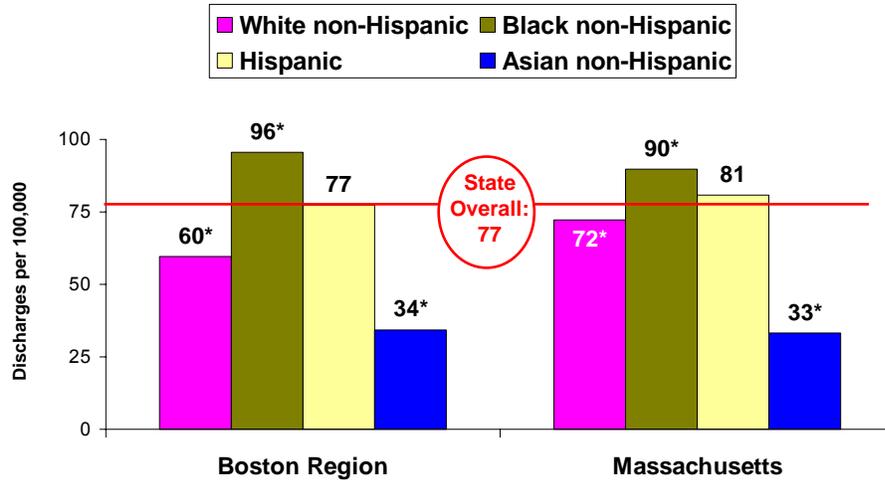
262



(*) Statistically different from State ($p \leq 0.05$)
 Age-adjusted to the 2000 US standard population.
 Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Division of Research & Epidemiology

Hospital Discharge Rates for Motor Vehicle-Related Injuries by Race/Ethnicity Boston Region and Massachusetts: 2003-2005

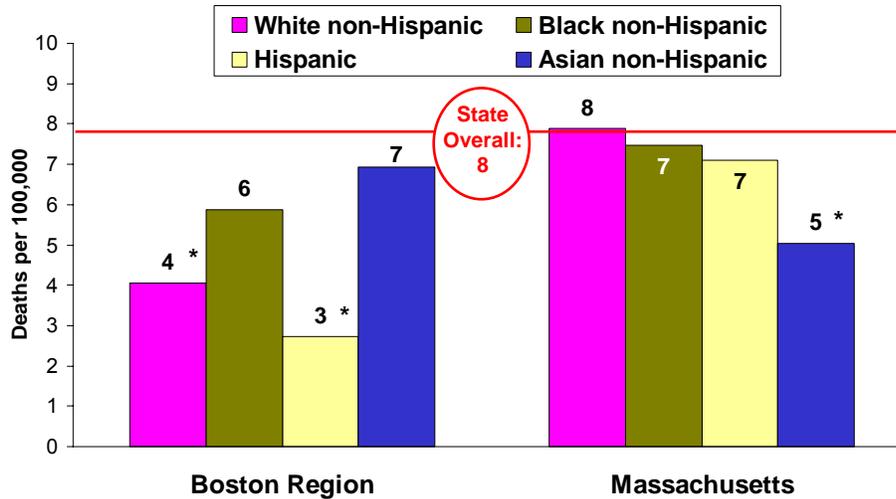
263



(*) Statistically different from State ($p \leq 0.05$)
Age-adjusted to the 2000 US standard population.
Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

Motor Vehicle-Related Death Rates by Race/Ethnicity Boston Region and Massachusetts: 2003-2005

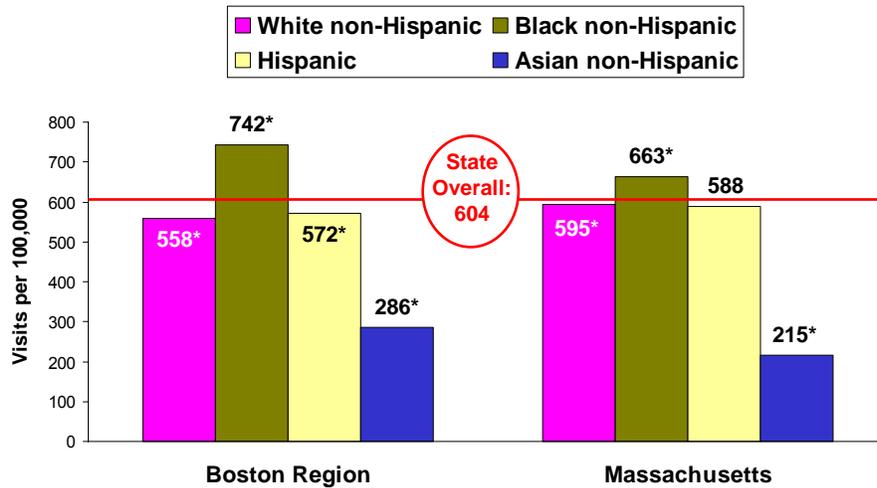
264



(*) Statistically different from State ($p \leq 0.05$)
Age-adjusted to the 2000 US standard population.
Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Division of Research & Epidemiology

Emergency Department Visit Rates for Traumatic Brain Injury by Race/Ethnicity Boston Region and Massachusetts: 2003-2005

265



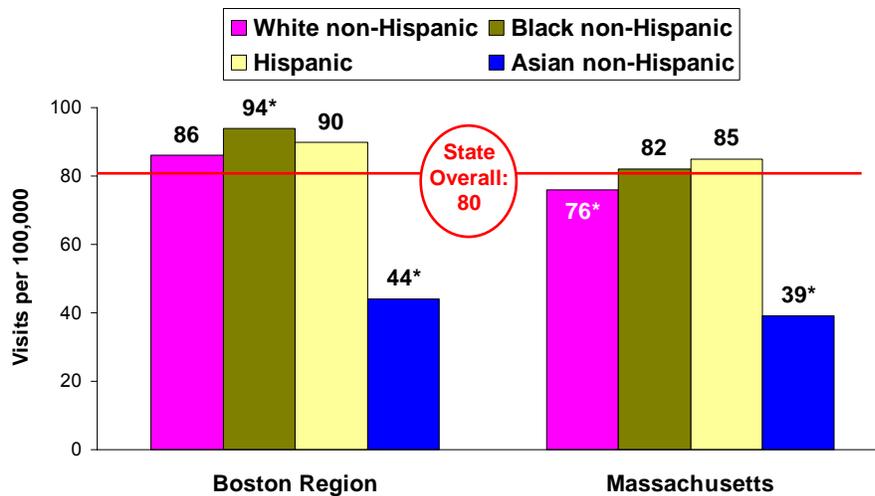
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Department Visits

Hospital Discharge Rates for Traumatic Brain Injury by Race/Ethnicity, Boston Region and Massachusetts: 2003-2005

266



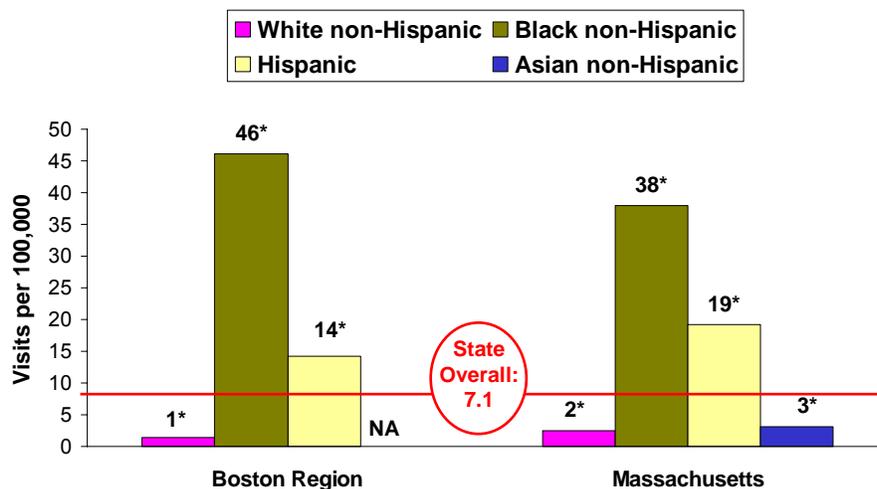
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

Emergency Department Visit Rates for Firearm Injuries by Race/Ethnicity Boston Region and Massachusetts: 2003-2005

267



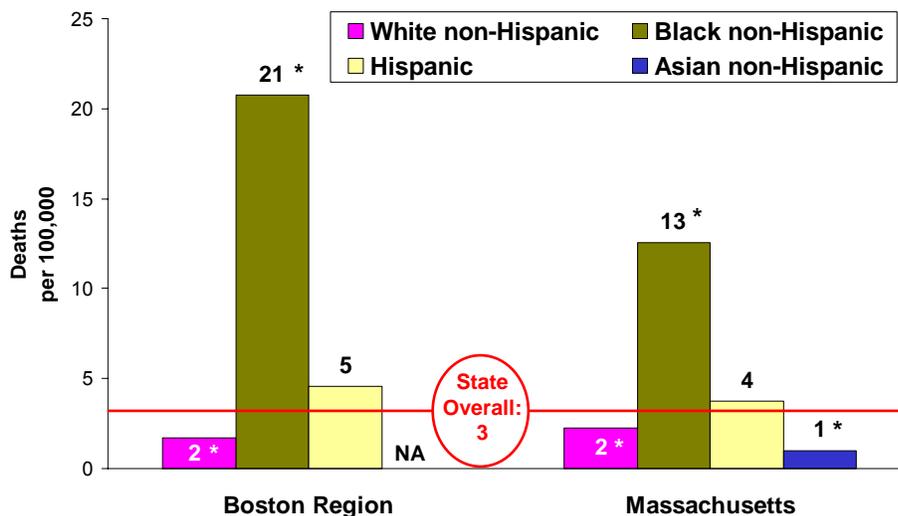
(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Department Visits

Firearm Death Rates by Race/Ethnicity Boston Region and Massachusetts: 2003-2005

268

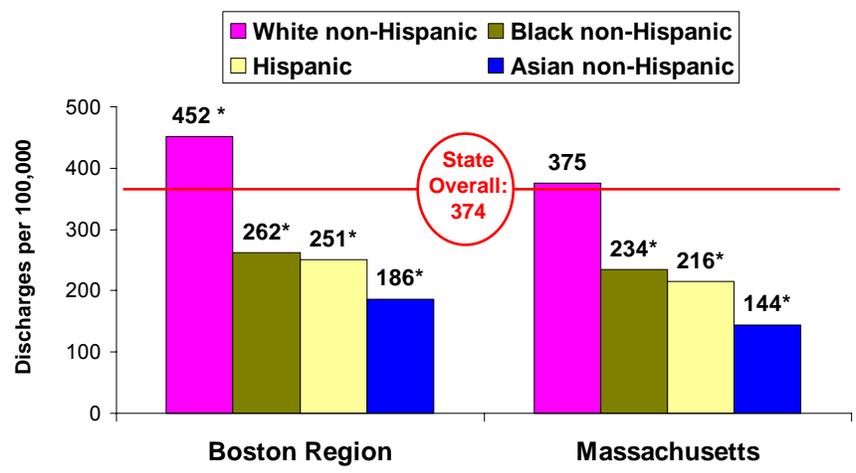


(*) Statistically different from State ($p \leq .05$)

Age-adjusted to the 2000 US standard population.

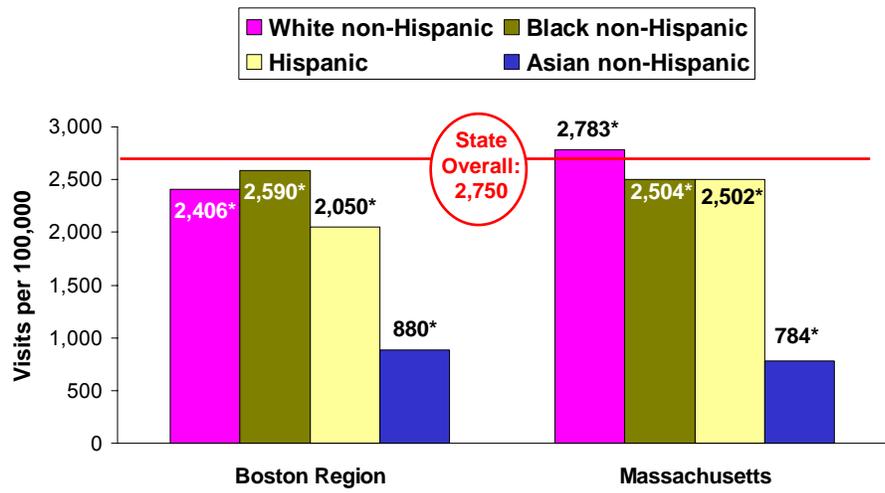
Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Division of Research & Epidemiology

Hospital Discharge Rates for Fall-Related Injuries by Race/Ethnicity, Boston Region and Massachusetts: 2003-2005



(*) Statistically different from State (p < .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Inpatient Hospital Discharge Database

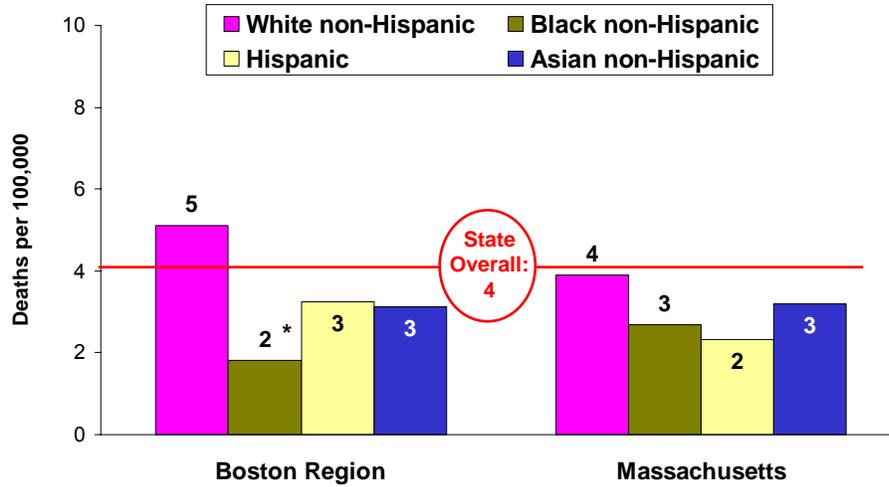
Emergency Department Visit Rates for Fall-Related Injuries by Race/Ethnicity, Boston Region and Massachusetts: 2003-2005



(*) Statistically different from State (p < .05)
 Age-adjusted to the 2000 US standard population.
 Source: Division of Health Care Finance and Policy. Calendar Year 2003-2005. Emergency Department Visits

Fall-Related Injury Death Rates by Race/Ethnicity Boston Region and Massachusetts: 2003-2005

271



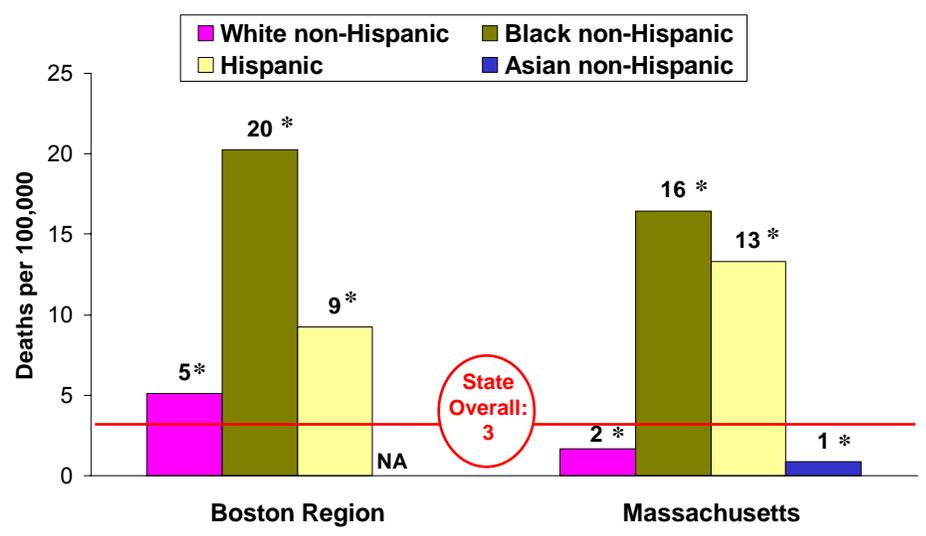
(*) Statistically different from State ($p \leq 0.05$)

Age-adjusted to the 2000 US standard population.

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

HIV/AIDS

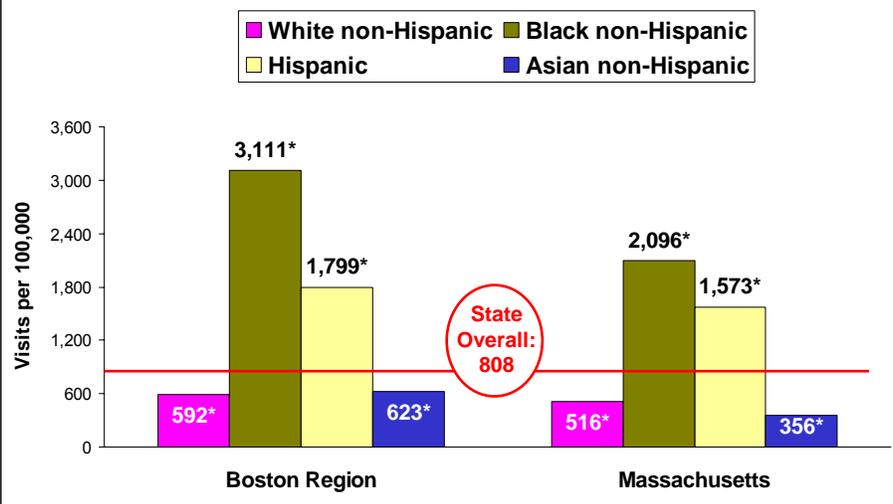
HIV/AIDS Death Rate by Race/Ethnicity Boston Region and Massachusetts: 2003-2005



(*) Statistically different from State ($p \leq .05$)
Age-adjusted to the 2000 US standard population.
Source: MDPH, Bureau of Health Information, Statistics, Research, and Evaluation, Division of Research & Epidemiology

ASTHMA

Asthma Emergency Department Visit Rates, Children Ages 0-14 Boston Region and Massachusetts: 2005



(* Statistically different from State (p ≤.05))

Source: Division of Health Care Finance and Policy. Calendar Year 2005. Emergency Department Visits

PREMATURE MORTALITY

Premature Mortality Rate (PMR)¹

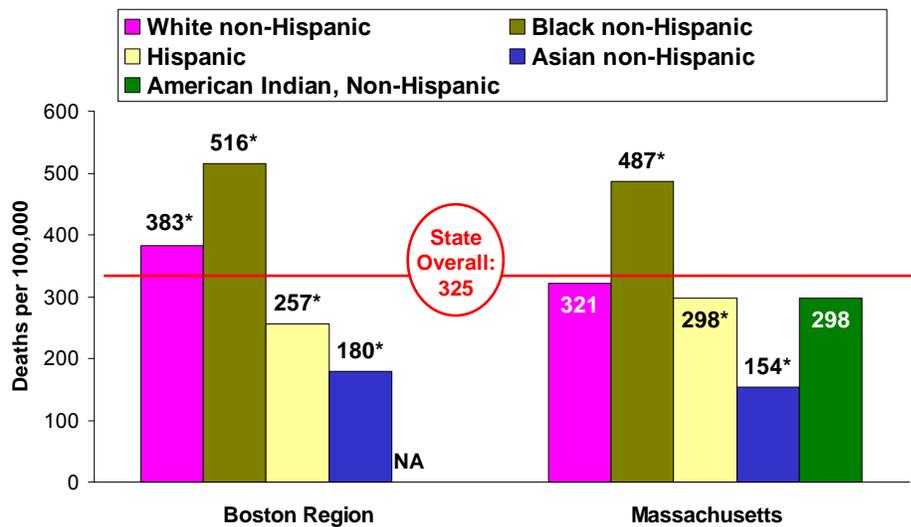
- **Definition**
 - deaths before age 75

- **Rationale**
 - two-thirds of deaths to persons ages 75+
 - vast majority of deaths to persons age 75+ are due to chronic conditions associated with aging
 - focusing on deaths to persons less than 75 years may be more preventable

- **Summary health statistic**
 - excellent measure to reflect the health status of a population
 - used as a health status indicator that can be used to focus prevention initiatives and target programs

Age-adjusted to the 2000 US standard population under 75 years of age.
 Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

Premature Mortality Rate by Race/Ethnicity Boston Region and Massachusetts: 2003-2005



(*) Statistically different from State (p ≤ .05)
 Age-adjusted to the 2000 US standard population under 75 years of age.
 Source: MDPH, Bureau of Health Information, Statistics, Research, & Evaluation, Division of Research & Epidemiology

APPENDIX

GLOSSARY

Census Terminology

Note that AIAN is used in the demographics section. In this publication, the following will be used:

AIAN = American Indian and Alaska Native

“alone” = indicates the choice of the single-race

“two or more races” = indicates that more than one race was marked

“alone or in combination” = all persons who indicated the race

Crude Rate

An estimate of the proportion of a population that had the event during the year. The numerator is the number of persons who had an event during the year and the denominator is the size of the population. The crude rate in a population is calculated by the formula:

$$\text{Crude rate} = \frac{\text{Number of events in a year}}{\text{Number of residents}} \times 100,000$$

Age-Adjusted Rate

A summary rate designed to minimize the distortions created by differences in age distribution when comparing rates for populations with different age compositions. Age-adjusted rates are useful when comparing death rates from different populations or in the same population over time. For example, if one wished to compare the 1998 death rates between Barnstable County (Cape Cod) and Hampshire County, the age-adjusted formula would account for the fact that 24% of the Barnstable County residents were 65 years of age or older, whereas only 11% of the Hampshire County residents were in this age group.

Age-adjusted rates are calculated by weighting the age-specific rates for a given year by the age distribution of a standard population. The weighted age-specific rates are then added to produce the adjusted rate for all ages combined. (Please see example below).

The 2000 U.S. projected population is used as the standard population in this document for consistency with data published by the National Center for Health Statistics (NCHS). **ONLY RATES USING THE SAME STANDARD POPULATION CAN BE COMPARED.** All age-adjusted rates published in this report have been re-calculated using the 2000 U.S. standard population. These rates should NOT be

compared with age-adjusted rates previously published which used the 1940 U.S. standard population.

**Example: Calculation of 1999 Age-adjusted Mortality Rate, Massachusetts:
All Causes of Death**

A	B	C	D	E	F	G
Age group (in years)	# of deaths (1999)	Population (1998)	1940 U.S. standard	2000 U.S. standard	Age-adjusted rate (using 1940 standard) =([(B/C)*D]*100,000]	Age-adjusted rate (using 2000 standard) =([(B/C)*E]*100,000]
< 1	418	79,860	0.015343	0.013818	8.0	7.2
1-4	65	320,000	0.064718	0.055317	1.3	1.1
5-14	100	806,670	0.170355	0.145565	2.1	1.8
15-24	407	883,830	0.181677	0.138646	8.4	6.4
25-34	701	1,005,337	0.162066	0.135573	11.3	9.5
35-44	1,696	1,019,365	0.139237	0.162613	23.2	27.1
45-54	2,870	818,660	0.117811	0.134834	41.3	47.3
55-64	4,561	495,555	0.080294	0.087247	73.9	80.3
65-74	9,782	442,003	0.048426	0.066037	107.2	146.1
75-84	17,397	299,482	0.017303	0.044842	100.5	260.5
85+	17,765	120,501	0.002770	0.015508	40.8	228.6
Total					418.0	815.9

Age-Specific Death Rate

A rate for a specified age group. Age-specific death rates are calculated by dividing the actual number of deaths in a given year for a specific age group by the population in that age group for that year. The numerator and denominator refer to the same age group.

$$\text{Age-specific death rate (ages 25-34)} = \frac{\text{Number of deaths among residents ages 25-34 in a given year}}{\text{population ages 25-34 in that year}} \times 100,000$$

Obesity and Overweight

All respondents to the BRFSS are asked to report their height and weight. Respondents are then categorized based on their Body Mass Index (BMI), which equals weight in kilograms divided by height in meters squared. Using the Healthy People 2010 standards (HP2010), all adults with a BMI between 25.0-29.9 were classified as being overweight and adults with a BMI greater than or equal to 30.0

were classified as being obese. For example, a person who is 5'6" would be considered overweight at 155 pounds and obese at 186 pounds.

<u>Height</u>	<u>Overweight</u> BMI 25.0-29.9	<u>Obesity</u> BMI > 30
5'	128 lbs.	153 lbs.
5'2"	136	164
5'4"	145	174
5'6"	155	186
5'8"	164	197
6'	184	221
6'2"	195	234

Population

Every year the Population Estimates Program of the U.S. Census Bureau, in collaboration with the National Center for Health Statistics (NCHS), produces bridged race files for the states and counties. These estimates are known as the Modified Age Race Sex (MARS) estimates. In previous years, we have not used these estimates since they are not available at the city/town level.

Methodology for 2005 Population Estimates

In the years since Census 2000, the distribution of Massachusetts residents has changed by age, race/ethnicity, and race. In 2006, because these changes were significant, MDPH decided to produce new population estimates by age, race/ethnicity, and sex at the city/town level.

These estimates were created using the city/town age, race/ethnicity, and sex proportions of their counties in the MRACE estimates and applying these to the MARS county estimates. The resulting estimates were called the Massachusetts Department of Public Health Modified Age, Race, & Sex 200x Estimates (MMARS0x), where x = year. Estimates were produced for 2000, 2001, 2002, 2003, 2004, and 2005.

Statistical Significance

The statistical significance of an outcome or comparison is the probability that the outcome occurred by pure chance. We refer to outcomes that were unlikely to have occurred by chance as "statistically significant" and those that are likely to have occurred by chance as "not statistically significant." The probability of error (or degree of uncertainty) that we use to determine if our observed result is statistically significant is 5% ($p=.05$), which means that there is a 5% probability that we are in error in stating that our finding is "statistically significant." On the other hand, we are 95% certain that our result *is* significant. We use several statistical tools to determine if an outcome is statistically significant including comparing confidence intervals and regression analysis.

DATA SOURCES

Census Bureau

The U.S. Census Bureau used two different forms to collect Census 2000 data. A short form (100% data) with seven basic questions went to all households and a long form with these same questions and additional questions went to a sample of households. The questions asked on the short form included: name; sex; age; household relationship; Hispanic origin; race, and whether the home was owned or rented. About 83 percent of households received the short form. The information that is tabulated from the questions asked of every person and housing unit is called the 100-percent or short-form data. The long-form questionnaire included the same seven population and housing questions plus additional inquiries. On average, 1 in every 6 households received the long form. The information that is tabulated from the questions asked of this sample of persons and housing units is called sample or long-form data. The Census race category for American Indians is "American Indian and Alaska Native".

Summary File 1 (SF 1) presents counts and basic cross-tabulations of information collected from all people and housing units. This information includes age, sex, race, Hispanic or Latino origin, household relationship, and whether the residence is owned or rented.

Summary File 2 (SF 2) provides population and housing characteristics for many detailed race and Hispanic or Latino categories, and American Indian and Alaska Native tribes. Thresholds for SF2: Two "rules of 100" are applied to the SF 2 tables:

- No tables are available for geographic areas having a population of less than 100.
- Tables are repeated only for the race groups, American Indian and Alaska Native tribes, and Hispanic or Latino groups having a population of 100 or more within the geographic area.
- SF2 includes data for 78 American Indian and Alaska Native tribes (reflecting 39 individual tribes)

Summary File 3 (SF 3) provides information from the long-form plus additional questions on income, education, occupation, housing rent and value.

Summary File 4 (SF 4) contains tabulations of population and housing data collected from a sample of the population. The data are shown down to the census tract level for 336 race, Hispanic or Latino, American Indian and Alaska Native, and ancestry categories. Thresholds for SF4:

- Tables for any population group excluded from SF 2 because the group's total population in a specific geographic area did not meet the threshold of 100 people are excluded from SF 4.
- Tables in SF 4 shown for any of the above population groups will only be shown if there are at least 50 unweighted sample cases in a specific geographic area. The same 50 unweighted sample cases also applied to ancestry iterations.
- SF4 includes data for 78 American Indian and Alaska Native tribes (reflecting 39 individual tribes)

U.S. Census Bureau & National Center for Health Statistics (NCHS) Modified Age/ Race, Sex (MARS) File

In addition to the Census 2000 Summary Files, the Census Bureau, in collaboration with the National Center for Health Statistics produces yearly estimates in which the “some other race” and “two or more race” populations are distributed among the pre-1997 OMB standard race groups (White, Black or African American, American Indian or Alaska Native, Asian or Pacific Islander) and two ethnicities (Hispanic and non-Hispanic).

The bridged Vintage 2004 postcensal population (MARS) file contains estimates of the resident population of the United States as of July 1, 2000, July 1, 2001, July 1, 2002, July 1, 2003, and July 1, 2004, by county, single-year of age (0, 1, 2,..., 85 years and over), bridged-race category (White, Black or African American, American Indian or Alaska Native, Asian or Pacific Islander), Hispanic origin (not Hispanic or Latino, Hispanic or Latino), and sex (1). The estimates on this file resulted from bridging the Vintage 2004 postcensal estimates with 31 race groups (the 31 race groups used in Census 2000 in accordance with the 1997 Office of Management and Budget (OMB) standards for the collection of data on race and ethnicity) to the four race categories specified under the 1977 OMB standards. Thus, the estimates in this file are based on Census 2000. The bridged-race postcensal estimates were produced by the Population Estimates Program of the U.S. Census Bureau in collaboration with the National Center for Health Statistics (NCHS). This file was released by NCHS on September 9, 2005.

Behavioral Risk Factor Survey

The Behavioral Risk Factor Surveillance System (BRFSS) is a continuous, random-digit-dial, telephone survey of adults age 18 and older, and is conducted in all states as a joint collaboration between the Centers for Disease Control and Prevention (CDC) and state Departments of Health. The survey has been conducted in Massachusetts since 1986. The BRFSS collects data on a variety of health characteristics, risk factors for chronic conditions, and preventive behaviors. The information obtained in this survey assists in identifying the need for health interventions, monitoring the effectiveness of existing intervention and prevention

programs, developing health policy and legislation, and measuring progress toward attaining state and national health objectives. Race and ethnicity data is determined based on self-identification. The BRFSS race category for American Indians is “American Indian or Alaska Native”.

Birth Data

Data on births are based on information from the Massachusetts certificate of live birth. Medical information such as birthweight and prematurity are based on information supplied by hospitals, while demographic and behavioral data such as race and ethnicity, and smoking during pregnancy are supplied by the woman who gave birth. Women chose their race from five categories: White, Black, Asian/Pacific Islander, American Indian, and Other. Ancestry is self-identified by selecting one of 38 ancestry/ethnicity groups, including Native American (American Indian is used for race, and Native American is used for ethnicity.)

Mortality Data

Data on mortality are based on information from death certificates filed with the Massachusetts Registry of Vital Records and Statistics. Physicians and medical examiners assign cause of death through a system that acknowledges the possibility of multiple causes. Demographic information on death certificates, such as age, race, Hispanic ethnicity, gender, educational attainment, marital status, and occupation is recorded by the funeral director based on information provided by an informant, usually a family member, or, in the absence of an informant, based on observation. Race and Hispanic ancestry are based on responses to two questions: one to identify race and the other to ascertain whether the decedent was of Hispanic ancestry. The mortality race category for American Indians is “Indian (American, Alaskan, Canadian, Mexican Indian, Eskimo and Aleut)”.

Substance Abuse Treatment Programs

The Bureau of Substance Abuse Services oversees the substance abuse prevention and treatment services in the Commonwealth. Its responsibilities include licensing programs and counselors, funding and monitoring prevention and treatment services, providing access to treatment for the indigent and uninsured, developing and implementing policies and programs, and, tracking substance abuse trends in the state. Their data on race and ethnicity are self-reported. It should be noted that the *use* of substance abuse treatment programs is not synonymous with the *need* for access to these programs. The race category used for this section is “American Indians”.

Hospital Discharge and Emergency Department Data

Hospital Discharge and Emergency Department Visit Data are from the Division of Health Care Finance and Policy’s (DHCF&P). The Hospital Discharge Data file contains approximately 800,000 records for all discharges from short-stay acute care hospital facilities in Massachusetts (except several federal and state facilities). Race/Hispanic ethnicity is coded to one of six mutually exclusive categories in the Hospital Discharge Dataset: White, Black, Hispanic, Asian, American Indian, or

Other. The Emergency Department Data database captures data for all outpatient visits to Massachusetts acute care hospitals EDs and satellite emergency facilities. It includes patient demographics, clinical characteristics, services provided, charges, and hospital and practitioner information.

AIDS Incidence Data

AIDS Case Data are from the HIV/AIDS Surveillance Program at the MA Department of Public Health. AIDS has been a reportable condition in MA since 1983. All healthcare providers are required by law to report CDC-defined AIDS to the MA Department of Public Health HIV/AIDS Surveillance Program (MHASP) located at the State Laboratory Institute. Even though a greater proportion of actual AIDS cases are reported than many other communicable diseases, interpretation of AIDS case data is hampered by a small degree of non-reporting (10-15%). In addition, not all cases are reported at the time of diagnosis, creating a reporting lag leading to an undercounting of recent cases (prior six months). Data on race/ethnicity are abstracted primarily from medical records.

REGIONS AND TOWNS

REGION	TOWN	COUNTY	CHNA
BOSTON	BOSTON	SUFFOLK	Alliance for Community Health
	BROOKLINE	NORFOLK	Alliance for Community Health
	CHELSEA	SUFFOLK	Alliance for Community Health
	REVERE	SUFFOLK	Alliance for Community Health
	WINTHROP	SUFFOLK	Alliance for Community Health
CENTRAL	ASHBURNHAM	WORCESTER	Fitchburg/Gardner CHN
	ASHBY	MIDDLESEX	Fitchburg/Gardner CHN
	AUBURN	WORCESTER	Community Wellness Coalition
	AYER	MIDDLESEX	Fitchburg/Gardner CHN
	BARRE	WORCESTER	Fitchburg/Gardner CHN
	BELLINGHAM	NORFOLK	Community Partners for Health
	BERLIN	WORCESTER	Fitchburg/Gardner CHN
	BLACKSTONE	WORCESTER	Community Partners for Health
	BOLTON	WORCESTER	Fitchburg/Gardner CHN
	BOYLSTON	WORCESTER	Community Wellness Coalition
	BRIMFIELD	HAMPDEN	CHN of Southern Worcester County
	BROOKFIELD	WORCESTER	CHN of Southern Worcester County
	CHARLTON	WORCESTER	CHN of Southern Worcester County
	CLINTON	WORCESTER	Fitchburg/Gardner CHN
	DOUGLAS	WORCESTER	Community Partners for Health
	DUDLEY	WORCESTER	CHN of Southern Worcester County
	EAST BROOKFIELD	WORCESTER	CHN of Southern Worcester County
	FITCHBURG	WORCESTER	Fitchburg/Gardner CHN
	FRANKLIN	NORFOLK	Community Partners for Health
	GARDNER	WORCESTER	Fitchburg/Gardner CHN
	GRAFTON	WORCESTER	Community Wellness Coalition
	GROTON	MIDDLESEX	Fitchburg/Gardner CHN
	HARDWICK	WORCESTER	Fitchburg/Gardner CHN
	HARVARD	WORCESTER	Fitchburg/Gardner CHN
	HOLDEN	WORCESTER	Community Wellness Coalition
	HOLLAND	HAMPDEN	CHN of Southern Worcester County
	HOPEDALE	WORCESTER	Community Partners for Health
	HUBBARDSTON	WORCESTER	Fitchburg/Gardner CHN
	LANCASTER	WORCESTER	Fitchburg/Gardner CHN
	LEICESTER	WORCESTER	Community Wellness Coalition
	LEOMINSTER	WORCESTER	Fitchburg/Gardner CHN
	LUNENBURG	WORCESTER	Fitchburg/Gardner CHN
	MEDWAY	NORFOLK	Community Partners for Health
	MENDON	WORCESTER	Community Partners for Health
	MILFORD	WORCESTER	Community Partners for Health
MILLBURY	WORCESTER	Community Wellness Coalition	
MILLVILLE	WORCESTER	Community Partners for Health	
NEW BRAINTREE	WORCESTER	Fitchburg/Gardner CHN	
NORTH BROOKFIELD	WORCESTER	CHN of Southern Worcester County	
NORTHBRIDGE	WORCESTER	Community Partners for Health	
OAKHAM	WORCESTER	Fitchburg/Gardner CHN	
OXFORD	WORCESTER	CHN of Southern Worcester County	

	PAXTON PEPPERELL PRINCETON RUTLAND SHIRLEY SHREWSBURY SOUTHBRIDGE SPENCER STERLING STURBRIDGE SUTTON TEMPLETON TOWNSEND UPTON UXBRIDGE WALES WARREN WEBSTER WEST BOYLSTON WEST BROOKFIELD WESTMINSTER WINCHENDON WORCESTER	WORCESTER MIDDLESEX WORCESTER WORCESTER MIDDLESEX WORCESTER WORCESTER WORCESTER WORCESTER WORCESTER WORCESTER WORCESTER MIDDLESEX WORCESTER WORCESTER HAMPDEN WORCESTER WORCESTER WORCESTER WORCESTER WORCESTER WORCESTER WORCESTER	Community Wellness Coalition Fitchburg/Gardner CHN Fitchburg/Gardner CHN Fitchburg/Gardner CHN Fitchburg/Gardner CHN Community Wellness Coalition CHN of Southern Worcester County CHN of Southern Worcester County Fitchburg/Gardner CHN CHN of Southern Worcester County Community Partners for Health Fitchburg/Gardner CHN Fitchburg/Gardner CHN Community Partners for Health Community Partners for Health CHN of Southern Worcester County CHN of Southern Worcester County CHN of Southern Worcester County Community Wellness Coalition CHN of Southern Worcester County Fitchburg/Gardner CHN Fitchburg/Gardner CHN Community Wellness Coalition
METRO WEST	ACTON ARLINGTON ASHLAND BEDFORD BELMONT BOXBOROUGH BRAINTREE BURLINGTON CAMBRIDGE CANTON CARLISLE COHASSET CONCORD DEDHAM DOVER FOXBOROUGH FRAMINGHAM HINGHAM HOLLISTON HOPKINTON HUDSON HULL LEXINGTON LINCOLN LITTLETON MARLBOROUGH MAYNARD	MIDDLESEX MIDDLESEX MIDDLESEX MIDDLESEX MIDDLESEX MIDDLESEX NORFOLK MIDDLESEX MIDDLESEX NORFOLK MIDDLESEX NORFOLK NORFOLK NORFOLK MIDDLESEX MIDDLESEX NORFOLK NORFOLK NORFOLK MIDDLESEX PLYMOUTH MIDDLESEX MIDDLESEX MIDDLESEX PLYMOUTH MIDDLESEX MIDDLESEX MIDDLESEX MIDDLESEX MIDDLESEX	Greater Woburn/Concord/Littleton CHN Greater Cambridge/Somerville CHN CHN of Greater Metro West Greater Woburn/Concord/Littleton CHN Greater Cambridge/Somerville CHN Greater Woburn/Concord/Littleton CHN Blue Hills Community Health Alliance Greater Woburn/Concord/Littleton CHN Greater Cambridge/Somerville CHN Blue Hills Community Health Alliance Greater Woburn/Concord/Littleton CHN Blue Hills Community Health Alliance Greater Woburn/Concord/Littleton CHN West Suburban Health Network West Suburban Health Network CHN of Greater Metro West CHN of Greater Metro West Blue Hills Community Health Alliance CHN of Greater Metro West CHN of Greater Metro West CHN of Greater Metro West Blue Hills Community Health Alliance Greater Woburn/Concord/Littleton CHN Greater Woburn/Concord/Littleton CHN Greater Woburn/Concord/Littleton CHN CHN of Greater Metro West CHN of Greater Metro West

	MEDFIELD MILLIS MILTON NATICK NEEDHAM NEWTON NORFOLK NORTHBOROUGH NORWELL NORWOOD PLAINVILLE QUINCY RANDOLPH SCITUATE SHARON SHERBORN SOMERVILLE SOUTHBOROUGH STOW SUDBURY WALPOLE WALTHAM WATERTOWN WAYLAND WELLESLEY WESTBOROUGH WESTON WESTWOOD WEYMOUTH WILMINGTON WINCHESTER WOBURN WRENTHAM	NORFOLK NORFOLK NORFOLK MIDDLESEX NORFOLK MIDDLESEX NORFOLK NORFOLK WORCESTER PLYMOUTH NORFOLK NORFOLK NORFOLK PLYMOUTH NORFOLK NORFOLK MIDDLESEX MIDDLESEX WORCESTER MIDDLESEX MIDDLESEX NORFOLK MIDDLESEX MIDDLESEX NORFOLK MIDDLESEX MIDDLESEX NORFOLK WORCESTER MIDDLESEX NORFOLK NORFOLK MIDDLESEX MIDDLESEX MIDDLESEX NORFOLK	CHN of Greater Metro West CHN of Greater Metro West Blue Hills Community Health Alliance CHN of Greater Metro West West Suburban Health Network West Suburban Health Network CHN of Greater Metro West CHN of Greater Metro West Blue Hills Community Health Alliance Blue Hills Community Health Alliance CHN of Greater Metro West Blue Hills Community Health Alliance Blue Hills Community Health Alliance Blue Hills Community Health Alliance Blue Hills Community Health Alliance CHN of Greater Metro West Greater Cambridge/Somerville CHN CHN of Greater Metro West CHN of Greater Metro West CHN of Greater Metro West CHN of Greater Metro West West Suburban Health Network Greater Cambridge/Somerville CHN CHN of Greater Metro West West Suburban Health Network CHN of Greater Metro West West Suburban Health Network West Suburban Health Network Blue Hills Community Health Alliance Greater Woburn/Concord/Littleton CHN Greater Woburn/Concord/Littleton CHN Greater Woburn/Concord/Littleton CHN CHN of Greater Metro West
NORTHEAST	AMESBURY ANDOVER BEVERLY BILLERICA BOXFORD CHELMSFORD DANVERS DRACUT DUNSTABLE ESSEX EVERETT GEORGETOWN GLOUCESTER GROVELAND HAMILTON HAVERHILL IPSWICH	ESSEX ESSEX ESSEX MIDDLESEX ESSEX MIDDLESEX ESSEX MIDDLESEX MIDDLESEX ESSEX MIDDLESEX ESSEX ESSEX ESSEX ESSEX ESSEX ESSEX ESSEX ESSEX ESSEX	Greater Haverhill CHN Greater Lawrence CHN Community Health Network North Greater Lowell CHN Greater Haverhill CHN Greater Lowell CHN North Shore CHN Greater Lowell CHN Greater Lowell CHN Community Health Network North North Suburban Health Alliance Greater Haverhill CHN Community Health Network North Greater Haverhill CHN Community Health Network North Greater Haverhill CHN Community Health Network North

	LAWRENCE LOWELL LYNN LYNNFIELD MALDEN MANCHESTER MARBLEHEAD MEDFORD MELROSE MERRIMAC METHUEN MIDDLETON NAHANT NEWBURY NEWBURYPORT NORTH ANDOVER NORTH READING PEABODY READING ROCKPORT ROWLEY SALEM SALISBURY SAUGUS STONEHAM SWAMPSCOTT TEWKSBURY TOPSFIELD TYNGSBOROUGH WAKEFIELD WENHAM WEST NEWBURY WESTFORD	ESSEX MIDDLESEX ESSEX ESSEX MIDDLESEX ESSEX ESSEX MIDDLESEX MIDDLESEX ESSEX ESSEX ESSEX ESSEX ESSEX ESSEX ESSEX MIDDLESEX ESSEX MIDDLESEX ESSEX ESSEX ESSEX MIDDLESEX ESSEX MIDDLESEX MIDDLESEX MIDDLESEX ESSEX MIDDLESEX MIDDLESEX ESSEX ESSEX MIDDLESEX	Greater Lawrence CHN Greater Lowell CHN North Shore CHN North Shore CHN North Suburban Health Alliance Community Health Network North North Shore CHN North Suburban Health Alliance North Suburban Health Alliance Greater Haverhill CHN Greater Lawrence CHN Greater Lawrence CHN North Shore CHN Greater Haverhill CHN Greater Haverhill CHN Greater Lawrence CHN North Suburban Health Alliance North Shore CHN North Suburban Health Alliance Community Health Network North Greater Haverhill CHN North Shore CHN Greater Haverhill CHN North Shore CHN North Suburban Health Alliance North Shore CHN Greater Lowell CHN Community Health Network North Greater Lowell CHN North Suburban Health Alliance Community Health Network North Greater Haverhill CHN Greater Lowell CHN
SOUTHEAST	ABINGTON ACUSHNET ATTLEBORO AVON BARNSTABLE BERKLEY BOURNE BREWSTER BRIDGEWATER BROCKTON CARVER CHATHAM CHILMARK DARTMOUTH DENNIS DIGHTON DUXBURY	PLYMOUTH BRISTOL BRISTOL NORFOLK BARNSTABLE BRISTOL BARNSTABLE BARNSTABLE PLYMOUTH PLYMOUTH PLYMOUTH BARNSTABLE DUKES BRISTOL BARNSTABLE BRISTOL PLYMOUTH	Greater Brockton CHN Greater New Bedford CHN Health & Education Response Greater Brockton CHN Cape and Islands CHN Health & Education Response Cape and Islands CHN Cape and Islands CHN Greater Brockton CHN Greater Brockton CHN South Shore Community Partners in Prevention Cape and Islands CHN Cape and Islands CHN Greater New Bedford CHN Cape and Islands CHN Health & Education Response South Shore Community Partners in Prevention

EAST BRIDGEWATER	PLYMOUTH	Greater Brockton CHN
EASTHAM	BARNSTABLE	Cape and Islands CHN
EASTON	BRISTOL	Greater Brockton CHN
EDGARTOWN	DUKES	Cape and Islands CHN
FAIRHAVEN	BRISTOL	Greater New Bedford CHN
FALL RIVER	BRISTOL	Partners for a Healthier Community
FALMOUTH	BARNSTABLE	Cape and Islands CHN
FREETOWN	BRISTOL	Greater New Bedford CHN
GAY HEAD	DUKES	Cape and Islands CHN
GOSNOLD	DUKES	Cape and Islands CHN
HALIFAX	PLYMOUTH	South Shore Community Partners in Prevention
HANOVER	PLYMOUTH	South Shore Community Partners in Prevention
HANSON	PLYMOUTH	South Shore Community Partners in Prevention
HARWICH	BARNSTABLE	Cape and Islands CHN
HOLBROOK	NORFOLK	Greater Brockton CHN
KINGSTON	PLYMOUTH	South Shore Community Partners in Prevention
LAKEVILLE	PLYMOUTH	Health & Education Response
MANSFIELD	BRISTOL	Health & Education Response
MARION	PLYMOUTH	Greater New Bedford CHN
MARSHFIELD	PLYMOUTH	South Shore Community Partners in Prevention
MASHPEE	BARNSTABLE	Cape and Islands CHN
MATTAPOISETT	PLYMOUTH	Greater New Bedford CHN
MIDDLEBOROUGH	PLYMOUTH	Health & Education Response
NANTUCKET	NANTUCKET	Cape and Islands CHN
NEW BEDFORD	BRISTOL	Greater New Bedford CHN
NORTH ATTLEBORO	BRISTOL	Health & Education Response
NORTON	BRISTOL	Health & Education Response
OAK BLUFFS	DUKES	Cape and Islands CHN
ORLEANS	BARNSTABLE	Cape and Islands CHN
PEMBROKE	PLYMOUTH	South Shore Community Partners in Prevention
PLYMOUTH	PLYMOUTH	South Shore Community Partners in Prevention
PLYMPTON	PLYMOUTH	South Shore Community Partners in Prevention
PROVINCETOWN	BARNSTABLE	Cape and Islands CHN
RAYNHAM	BRISTOL	Health & Education Response
REHOBOTH	BRISTOL	Health & Education Response
ROCHESTER	PLYMOUTH	Greater New Bedford CHN
ROCKLAND	PLYMOUTH	South Shore Community Partners in Prevention
SANDWICH	BARNSTABLE	Cape and Islands CHN
SEEKONK	BRISTOL	Health & Education Response
SOMERSET	BRISTOL	Partners for a Healthier Community
STOUGHTON	NORFOLK	Greater Brockton CHN
SWANSEA	BRISTOL	Partners for a Healthier Community
TAUNTON	BRISTOL	Health & Education Response
TISBURY	DUKES	Cape and Islands CHN
TRURO	BARNSTABLE	Cape and Islands CHN
WAREHAM	PLYMOUTH	Greater New Bedford CHN
WELLFLEET	BARNSTABLE	Cape and Islands CHN
WEST BRIDGEWATER	PLYMOUTH	Greater Brockton CHN
WEST TISBURY	DUKES	Cape and Islands CHN
WESTPORT	BRISTOL	Partners for a Healthier Community

	WHITMAN YARMOUTH	PLYMOUTH BARNSTABLE	Greater Brockton CHN Cape and Islands CHN
WESTERN	ADAMS	BERKSHIRE	CHN of Berkshire
	AGAWAM	HAMPDEN	The Community Health Connection
	ALFORD	BERKSHIRE	CHN of Berkshire
	AMHERST	HAMPSHIRE	Partnership for Health in Hampshire County
	ASHFIELD	FRANKLIN	Upper Valley Health Web
	ATHOL	WORCESTER	Upper Valley Health Web
	BECKET	BERKSHIRE	CHN of Berkshire
	BELCHERTOWN	HAMPSHIRE	Partnership for Health in Hampshire County
	BERNARDSTON	FRANKLIN	Upper Valley Health Web
	BLANDFORD	HAMPDEN	The Community Health Connection
	BUCKLAND	FRANKLIN	Upper Valley Health Web
	CHARLEMONT	FRANKLIN	Upper Valley Health Web
	CHESHIRE	BERKSHIRE	CHN of Berkshire
	CHESTER	HAMPDEN	Four (For) Communities
	CHESTERFIELD	HAMPSHIRE	Partnership for Health in Hampshire County
	CHICOPEE	HAMPDEN	Four (For) Communities
	CLARKSBURG	BERKSHIRE	CHN of Berkshire
	COLRAIN	FRANKLIN	Upper Valley Health Web
	CONWAY	FRANKLIN	Upper Valley Health Web
	CUMMINGTON	HAMPSHIRE	Partnership for Health in Hampshire County
	DALTON	BERKSHIRE	CHN of Berkshire
	DEERFIELD	FRANKLIN	Upper Valley Health Web
	EAST LONGMEADOW	HAMPDEN	The Community Health Connection
	EASTHAMPTON	HAMPSHIRE	Partnership for Health in Hampshire County
	EGREMONT	BERKSHIRE	CHN of Berkshire
	ERVING	FRANKLIN	Upper Valley Health Web
	FLORIDA	BERKSHIRE	CHN of Berkshire
	GILL	FRANKLIN	Upper Valley Health Web
	GOSHEN	HAMPSHIRE	Partnership for Health in Hampshire County
	GRANBY	HAMPSHIRE	Partnership for Health in Hampshire County
	GRANVILLE	HAMPDEN	The Community Health Connection
	GREAT BARRINGTON	BERKSHIRE	CHN of Berkshire
	GREENFIELD	FRANKLIN	Upper Valley Health Web
	HADLEY	HAMPSHIRE	Partnership for Health in Hampshire County
	HAMPDEN	HAMPDEN	The Community Health Connection
	HANCOCK	BERKSHIRE	CHN of Berkshire
	HATFIELD	HAMPSHIRE	Partnership for Health in Hampshire County
	HAWLEY	FRANKLIN	Upper Valley Health Web
	HEATH	FRANKLIN	Upper Valley Health Web
	HINSDALE	BERKSHIRE	CHN of Berkshire
	HOLYOKE	HAMPDEN	Four (For) Communities
	HUNTINGTON	HAMPSHIRE	Four (For) Communities
	LANESBOROUGH	BERKSHIRE	CHN of Berkshire
	LEE	BERKSHIRE	CHN of Berkshire
	LENOX	BERKSHIRE	CHN of Berkshire
	LEVERETT	FRANKLIN	Upper Valley Health Web
	LEYDEN	FRANKLIN	Upper Valley Health Web
	LONGMEADOW	HAMPDEN	The Community Health Connection

LUDLOW	HAMPDEN	Four (For) Communities
MIDDLEFIELD	HAMPSHIRE	Partnership for Health in Hampshire County
MONROE	FRANKLIN	Upper Valley Health Web
MONSON	HAMPDEN	The Community Health Connection
MONTAGUE	FRANKLIN	Upper Valley Health Web
MONTEREY	BERKSHIRE	CHN of Berkshire
MONTGOMERY	HAMPDEN	The Community Health Connection
MOUNT WASHINGTON	BERKSHIRE	CHN of Berkshire
NEW ASHFORD	BERKSHIRE	CHN of Berkshire
NEW MARLBOROUGH	BERKSHIRE	CHN of Berkshire
NEW SALEM	FRANKLIN	Upper Valley Health Web
NORTH ADAMS	BERKSHIRE	CHN of Berkshire
NORTHAMPTON	HAMPSHIRE	Partnership for Health in Hampshire County
NORTHFIELD	FRANKLIN	Upper Valley Health Web
ORANGE	FRANKLIN	Upper Valley Health Web
OTIS	BERKSHIRE	CHN of Berkshire
PALMER	HAMPDEN	The Community Health Connection
PELHAM	HAMPSHIRE	Partnership for Health in Hampshire County
PERU	BERKSHIRE	CHN of Berkshire
PETERSHAM	WORCESTER	Upper Valley Health Web
PHILLIPSTON	WORCESTER	Upper Valley Health Web
PITTSFIELD	BERKSHIRE	CHN of Berkshire
PLAINFIELD	HAMPSHIRE	Partnership for Health in Hampshire County
RICHMOND	BERKSHIRE	CHN of Berkshire
ROWE	FRANKLIN	Upper Valley Health Web
ROYALSTON	WORCESTER	Upper Valley Health Web
RUSSELL	HAMPDEN	The Community Health Connection
SANDISFIELD	BERKSHIRE	CHN of Berkshire
SAVOY	BERKSHIRE	CHN of Berkshire
SHEFFIELD	BERKSHIRE	CHN of Berkshire
SHELBURNE	FRANKLIN	Upper Valley Health Web
SHUTESBURY	FRANKLIN	Upper Valley Health Web
SOUTH HADLEY	HAMPSHIRE	Partnership for Health in Hampshire County
SOUTHAMPTON	HAMPSHIRE	Partnership for Health in Hampshire County
SOUTHWICK	HAMPDEN	The Community Health Connection
SPRINGFIELD	HAMPDEN	The Community Health Connection
STOCKBRIDGE	BERKSHIRE	CHN of Berkshire
SUNDERLAND	FRANKLIN	Upper Valley Health Web
TOLLAND	HAMPDEN	The Community Health Connection
TYRINGHAM	BERKSHIRE	CHN of Berkshire
WARE	HAMPSHIRE	Partnership for Health in Hampshire County
WARWICK	FRANKLIN	Upper Valley Health Web
WASHINGTON	BERKSHIRE	CHN of Berkshire
WENDELL	FRANKLIN	Upper Valley Health Web
WEST SPRINGFIELD	HAMPDEN	The Community Health Connection
WEST STOCKBRIDGE	BERKSHIRE	CHN of Berkshire
WESTFIELD	HAMPDEN	Four (For) Communities
WESTHAMPTON	HAMPSHIRE	Partnership for Health in Hampshire County
WHATELY	FRANKLIN	Upper Valley Health Web
WILBRAHAM	HAMPDEN	The Community Health Connection

	WILLIAMSBURG WILLIAMSTOWN WINDSOR WORTHINGTON	HAMPSHIRE BERKSHIRE BERKSHIRE HAMPSHIRE	Partnership for Health in Hampshire County CHN of Berkshire CHN of Berkshire Partnership for Health in Hampshire County
--	--	--	--

Table A1. 2005 Massachusetts Population Estimates¹ By Age Group, Gender, Race and Hispanic Ethnicity² (mutually exclusive)

AGE	GENDER	TOTAL	WHITE non- Hispanic	BLACK non- Hispanic	ASIAN non- Hispanic	HISPANIC
UNDER 1	MALE	40,780	29,060	3,681	2,379	5,605
	FEMALE	38,831	27,746	3,331	2,387	5,294
	TOTAL	79,611	56,806	7,012	4,766	10,899
1 TO 4	MALE	162,304	116,689	14,175	9,331	21,870
	FEMALE	154,813	111,378	13,360	9,120	20,704
	TOTAL	317,117	228,067	27,535	18,451	42,574
5 TO 14	MALE	410,735	311,258	32,181	19,514	46,748
	FEMALE	391,193	295,066	30,853	19,694	44,574
	TOTAL	801,928	606,324	63,034	39,208	91,322
15 TO 24	MALE	432,415	327,719	32,814	23,489	47,155
	FEMALE	418,260	317,116	32,090	24,725	43,090
	TOTAL	850,675	644,835	64,904	48,214	90,245
25 TO 34	MALE	428,556	311,465	29,529	35,643	50,866
	FEMALE	439,791	322,370	31,130	36,700	48,515
	TOTAL	868,347	633,835	60,659	72,343	99,381
35 TO 44	MALE	498,198	401,394	29,201	27,847	38,574
	FEMALE	512,746	412,427	31,349	27,434	40,329
	TOTAL	1,010,944	813,821	60,550	55,281	78,903
45 TO 54	MALE	460,062	395,585	23,351	17,238	22,742
	FEMALE	485,064	415,221	25,182	18,185	25,327
	TOTAL	945,126	810,806	48,533	35,423	48,069
55 TO 64	MALE	321,040	286,247	13,026	9,599	11,474
	FEMALE	351,129	310,327	15,859	10,254	13,950
	TOTAL	672,169	596,574	28,885	19,853	25,424
65 TO 74	MALE	175,999	159,256	6,394	5,142	4,871
	FEMALE	214,003	192,152	9,015	5,756	6,750
	TOTAL	390,002	351,408	15,409	10,898	11,621
75 TO 84	MALE	127,036	118,796	3,199	2,530	2,295
	FEMALE	193,452	180,798	5,802	3,225	3,375
	TOTAL	320,488	299,594	9,001	5,755	5,670
85 +	MALE	43,895	41,255	1,083	684	794
	FEMALE	98,441	93,460	2,248	1,109	1,457
	TOTAL	142,336	134,715	3,331	1,793	2,251
ALL AGES	MALE	3,101,020	2,498,724	188,634	153,396	252,994
	FEMALE	3,297,723	2,678,061	200,219	158,589	253,365
	TOTAL	6,398,743	5,176,785	388,853	311,985	506,359

1. National Center for Health Statistics. Estimates of the July 1, 2000-July 1, 2005, United States resident population from the Vintage 2005 postcensal series by year, county, age, sex, race, and Hispanic origin, prepared under a collaborative arrangement with the U.S. Census Bureau. Available on the Internet from: <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>. August 16, 2006. 2. Persons of Hispanic ethnicity are NOT included in the race categories. These estimates are used to calculate population based rates in published in this report, except for Table A1.

