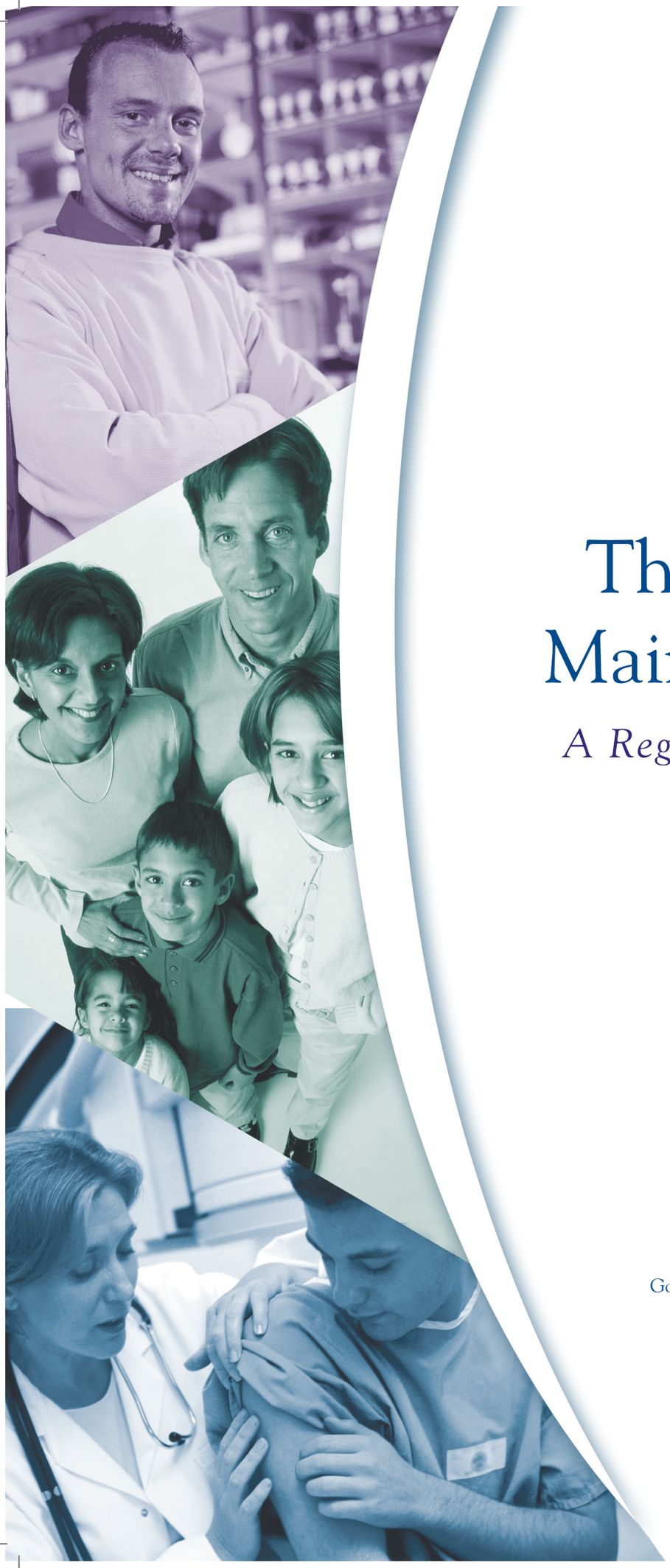

The State of Maine's Health

A Regional Comparison

August, 2005

Governor's Office of Health Policy and Finance

DirigoHealth

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This report has been prepared by the Governor's Office of Health Policy and Finance. We gratefully acknowledge the assistance of Eileen Griffin of the Muskie School of Public Service who contributed her editing skills and to the members of the Governor's Council on Health Systems Development for their input and expertise. We are also thankful to the Public Health Resource Group for their work in preparing the technical analysis and documentation that formed the basis for much of this publication.

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Contents

Overview

The purpose of this report is to describe differences in *health* as well as health *care* across Maine and to serve as a tool to help establish priorities for action as we work together toward our goal of becoming the healthiest people in the nation.

It is important to understand that health and health care are two different things. "Health" refers to how healthy – or unhealthy – a population in a given area is, and is often referred to as the "health status" of the area. Health status reflects the burden of disease that exists within the population. For example, the rate of cancer or the rate of asthma in a given area is a measure of health status. Behavioral risk factors like smoking, exercise and weight are a component of health status. Health status is important because it is one of the most important factors that drive the demand for health care services.

In contrast, there are other measures that assess how well an area's health care system is suited to meeting the population's health *care* needs. These measures may include the number of hospital beds or numbers of doctors in an area. They are related to how health care services are provided, instead of to the health status of those living in the area.

In order to develop informed approaches to improving health and health care in Maine, we must first look at the current picture. That is the purpose of this report. Specifically, this report:

- Describes a set of health status measures to compare Maine to the US;
- Produces a set of measures that describe the similarities and differences in health status, access, quality and cost for three regions of Maine: the Northeastern, Central and Southern regions of the state; and
- Identifies differences in the health status and systems of the three regions that may be important enough to warrant further investigation and action.

The meaning of statistics

In looking at the comparative data in this booklet, certain differences will show up between the regions. While some of these differences might appear to be striking, they might actually simply be due to chance, and not to any underlying problem or characteristic of an area's health care system, environment or population.

The fact that pure chance cannot be ruled out in explaining some differences is a very important point. The way the role of chance is ruled out is through statistical testing of the data. The regional data used in this book have been subject to statistical tests to determine to what degree simple chance might explain any differences seen between the various geographic regions. When chance can be ruled out, the differences are – in statistical "lingo" – said to be *significant*. "Significant" here doesn't mean "big"; it means that the differences in the data are most likely <u>not</u> due to chance.

For example, the difference in incidence of diagnosed prostate cancer across regions in Maine is, according to our analyses, significant. This means that the rates at which this disease is diagnosed in each of the three regions used in this study are probably not different by chance, but are most likely due to differences in the health care provided in these regions or in the regional cultures. This makes it more likely that men in certain locations seek screening and/or health care for symptoms of prostate disease more than do men living in other areas.

This finding does not mean that there is necessarily a difference in the underlying incidence of prostate cancer itself, across these regions, only the rate at which the disease happens to be diagnosed.

On the other hand, the differences in the incidences of other cancers are not significant, meaning the differences we see in the rates across regions are likely due to chance. This does not mean that there are no genuine or important differences in regional experiences. Instead, the data are most probably influenced by other economic, geographic, or demographic factors such as access to health care in those areas, physician training and attitudes towards screening or even differences in the number of uninsured people in the area and the out of pocket costs they face paying for care in their regions.

In this report, we will emphasize data that suggest *significant* differences between Maine and the rest of the country, as well as differences among the three study regions: southern, central and northeastern Maine. These findings are of immediate concern because they are, in all likelihood, not due to a chance occurrence. We also focus on those situations where the data do not vary across areas or in comparison to the US. Issues such as tobacco use, obesity and level of exercise activity do not show meaningful variation by location, but are still important as they contribute enormously to our health status.

Key Findings

When comparing Maine to the United States as a whole, we find that:

- Maine is older, has a smaller percentage of people who have attended college, and earns less income per household than does the US population, generally
- The proportion of Maine's population living below the poverty line is lower than is seen generally in the US
- With regard to health, Maine does better than the rest of the country in some areas including prenatal care and addressing infectious disease, but worse when it comes to chronic diseases like lung cancer. Certain risky health behaviors, like use of tobacco, are higher here than in elsewhere. While Mainers now use less tobacco than they did a decade ago, the chronic conditions associated with years of tobacco use continue to have a large impact on the health status of Mainers to this day. With regard to obesity and lack of physical exercise, Maine people "look like" other Americans; high rates of obesity and low rates of exercise are now the "norm" across the country
- Prevalence and incidence of certain diseases show mixed results between Maine and the US. "Prevalence" refers to the numbers of people who have a particular disease at any single point in time; "incidence" refers to the numbers of people who have a disease over a defined time period, say a year.
    - The prevalence of high blood pressure (hypertension) is *lower* in Maine than in the US
    - The prevalence of high cholesterol is *the same* in Maine as in the US
    - The rate of smoking-related deaths is significantly *higher* in Maine than it is for the US, for both men and women
    - The overall rate of cancer – regardless of kind – is *higher* in Maine than in the US. Mainers have a *higher* incidence of lung cancer, prostate cancer, and colorectal cancer. Mainers have a *lower* incidence of breast cancer, however.

- The overall rate of death from cancer is significantly *higher* in Maine than in the US; this is due in large measure to the high rate of mortality associated with lung cancer, which is seen more often in Maine than in the US, generally
- Death from heart disease is significantly *lower* in Maine than in the US
- Maine women receive health care *earlier* in their pregnancy than do American women, generally, and we have *lower* rates of infant mortality and premature birth even though we have a slightly *higher* rate of low birth weight babies
- The teen birth rate is significantly *lower* in Maine than in the US
- A significantly *lower* proportion of Maine's population is obese than is true of American's, generally. However, a significantly larger percentage of Mainers are overweight.

There is evidence of important, although not statistically significant differences in access to health care, the quality of that care and, to a limited extent, the cost of care available to Mainers across the regions used in this study:

- There are differences in population, income, level of poverty, education and employment between Southern Maine and the rest of the state. There is evidence that these differences, which are influence health status and the use of the health care system, will grow larger over time.
- There are regional differences in the prevalence of chronic disease – including mental illness – and related conditions that are similar to the differences in population social/economic characteristics mentioned above. This leads to *lower* rates of these diseases in Southern Maine than in other areas of the state. Differences in quality of care also follow this pattern.
- Health risk behaviors like smoking, obesity and lack of physical activity differ across regions. While these behaviors reflect lifestyle choices, they may also reflect differences in access to preventive health care and health education.
- The rate of differences in health insurance coverage across the three regions, which may help explain why there is greater use of higher cost health services in some regions.
- There are large regional differences in the use of hospital services (inpatient, outpatient and emergency department) to treat chronic illnesses like heart disease. This may point to differences in access to high quality chronic care services across regions of the state.
- There are differences across regions in mental health services, as indicated by differences in the rates of suicide and hospital use rates for mental health conditions.

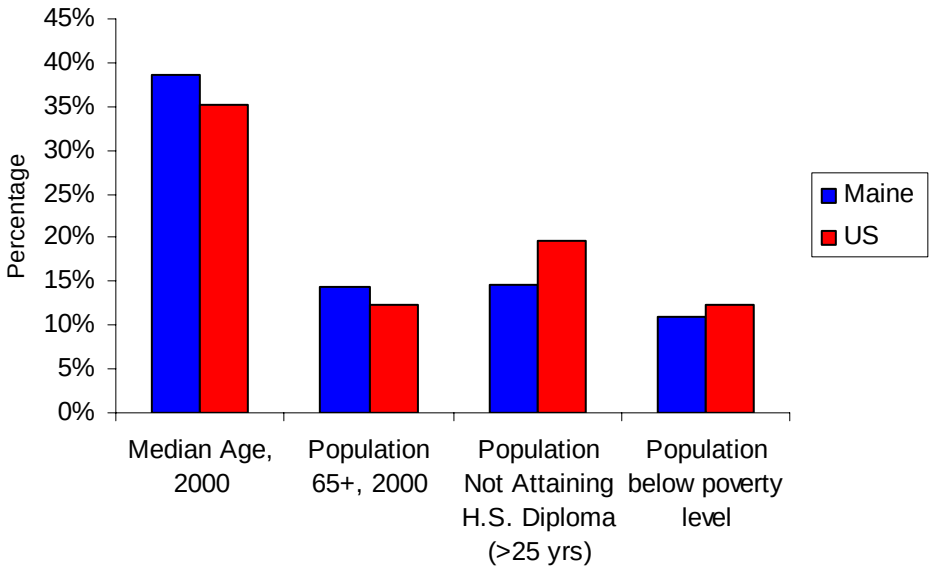
- ***Both at the regional level and at the state level, Maine has accomplished truly notable health care achievements of which we can be proud. In particular, cancer detection and treatment, reproductive health services and regional chronic disease care in Maine is very good and can be used as models for future state and region-wide efforts.***

There are critical measures that cannot yet be produced either because the data are not accessible or not available. Still, the data that are available raise important issues. These findings are meant to stimulate discussion about the cause of the similarities and differences between regions and to map a course of action for improvement. These discussions should include policymakers, clinicians, health system administrators, community leaders, business people and, perhaps most importantly, ordinary citizens.

Maine Compared to the U.S. and Elsewhere

Part One

Demographic Characteristics, Maine & US



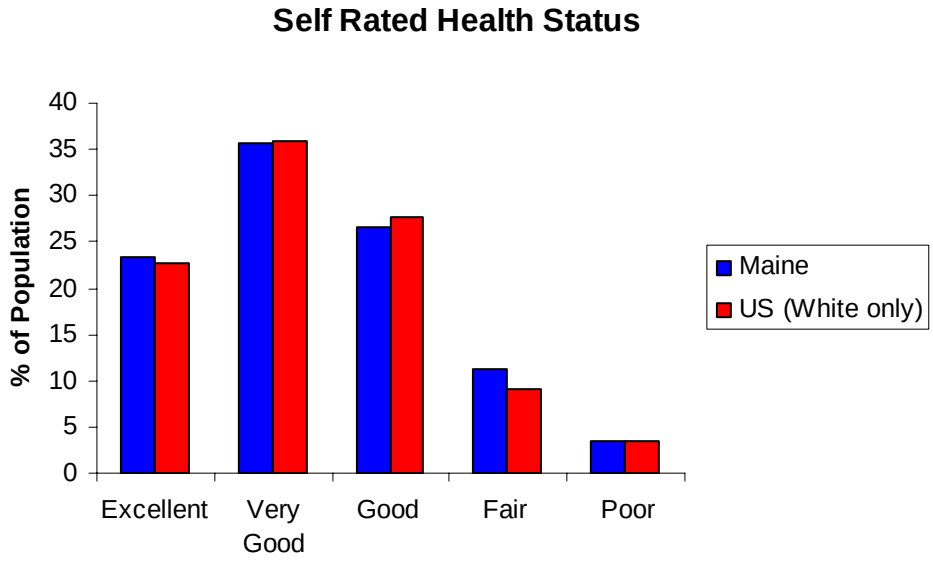
Source: US Census data

At the time of the last national census (2000), the median age of Mainers was 38.6 years, as compared to the US median age of 35.2 years, making Maine the 7th "oldest" state in the country. 14.4% of Mainers are 65 years of age or older; this compares to a nationwide figure of 12.4%.

By the year 2010, Maine is expected to be 3rd in the US for percent of population age 65 and older. In the year 2030, Maine is expected to be 2nd with 26.5% of our population aged 65 or older and only 18.1% under the age of 18.[1]

A higher percentage of Mainers (85.4% v. 80.4%) complete high school than Americans, generally. However, only 23% of adults here have a college degree, placing us 35th in the nation in 2002, in terms of higher education.[2] Fewer Maine residents (10.9% v. 12.4% US) live below the poverty line. Still, median household income in Maine is lower than in the US -- $37,240 as opposed to $41,994 nationwide (data not shown on chart).

[1] www.census.gov/population/projections/PressTabs5.xls. May 9, 2005
[2] *Barriers to Postsecondary Education in Maine.* Senator George J. Mitchell Scholarship Research Institute. July 2002.



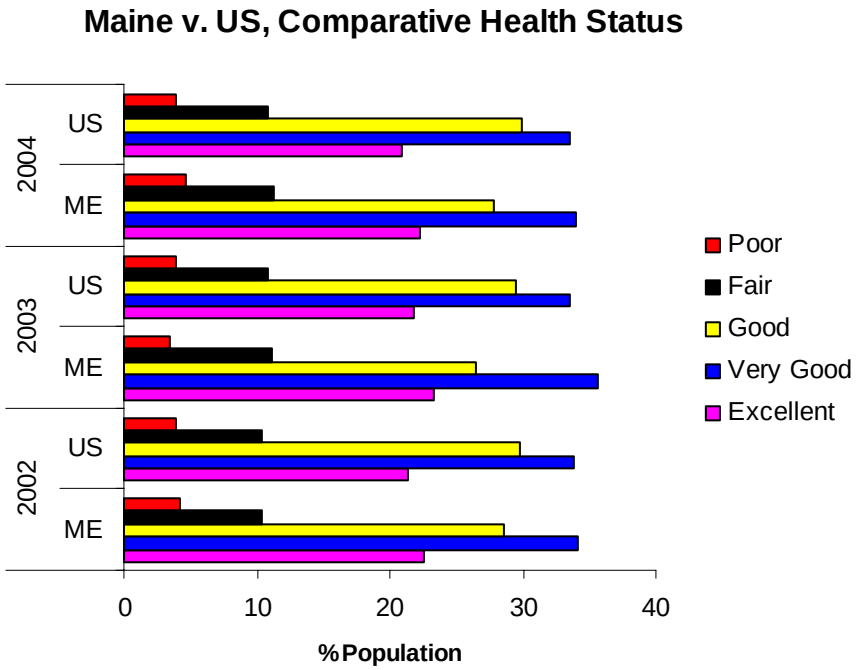
Source: BRFSS data set, 2002-2003

People in Maine rate their own health status in much the same way as do people living all across the country.

Mainers are somewhat older, have less of a likelihood of having a college education and are lower in income than other Americans. These observations might lead you to think that we would, then, rate our own health status as being somewhat poorer than other Americans, but the data do not reflect that result. The differences between Mainers and other Americans in terms of age, education and income are not statistically significant – nor are the differences seen here with regard to self-rated health status. Therefore, these differences might very well be due to chance, as opposed to true differences in the characteristics being measured.

Gender, marital status and health insurance status do not affect how a person perceives is or her own health status.[3]

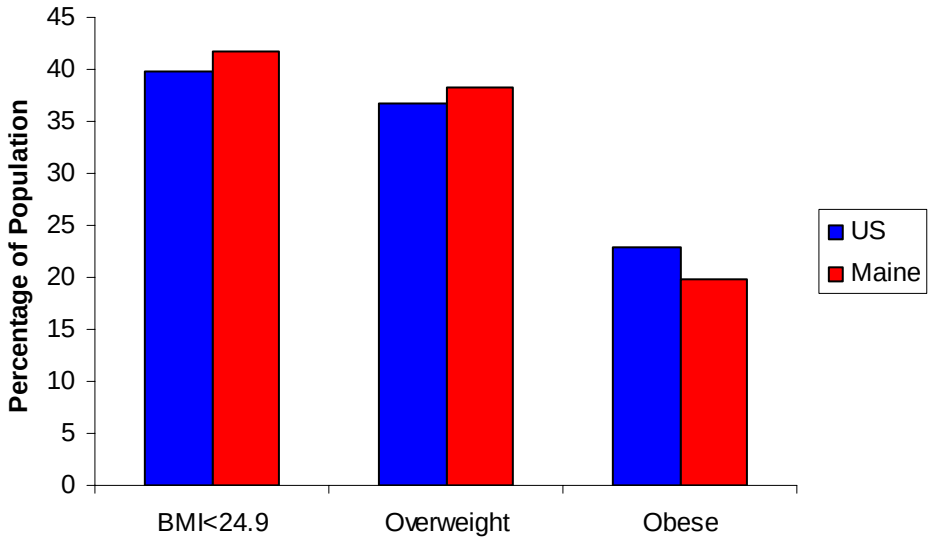
[3] *BRFSS: Results from the 2002 Maine Behavioral Risk Factor Surveillance System.* Bureau of Health, Maine Department of Human Services. January 2002.



Source: BRFSS data

The way Mainers rate their health status as compared to the US as a whole is similar, whether measured within a given year or across years.

Weight Classifications Based on Body Mass Index (BMI)



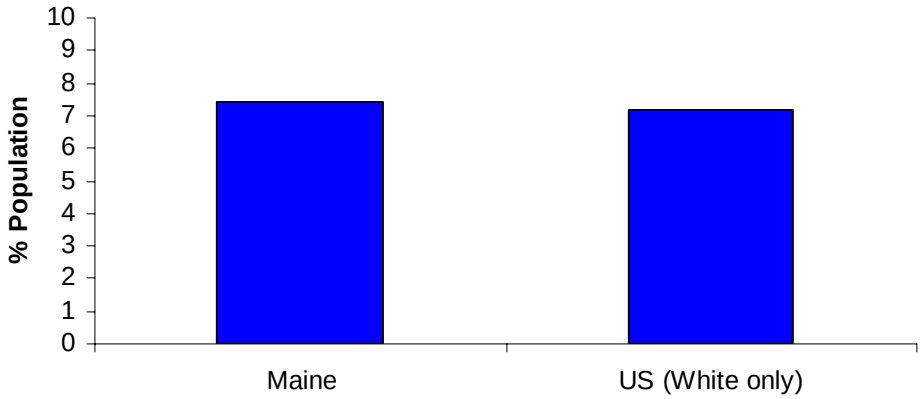
Source: BRFSS data set
Note: Proportion of population that is obese is significantly lower in Maine

More Mainers are at a normal weight and fewer are obese than are Americans, in general. However, a slightly higher percentage of Mainers are overweight than are Americans, on average.

National studies have shown that health care spending on obese adults is much higher than it is for normal-weight adults.[4] Similarly, health spending is rising, in part, because of the growing proportion of adults who are overweight (as opposed to obese).[5]

[4] Thorpe KE, Florence CS, Howard DH and Joski P. *The Rising Prevalence of Treated Disease: Effects on Private Health Insurance Spending.* Health Affairs Web Exclusive, W5-317, July 2005.
[5] *ibid*

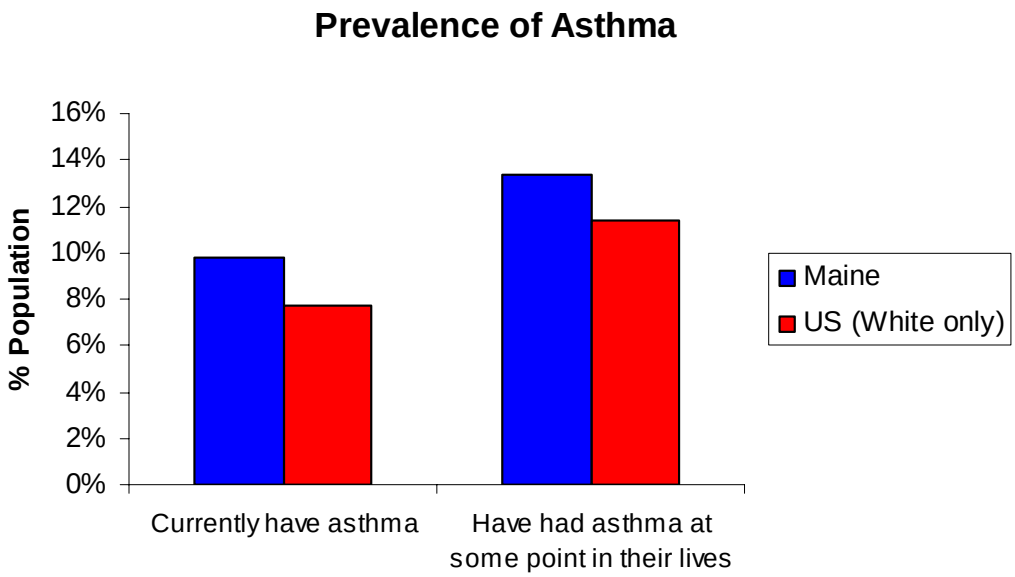
Prevalence of Diabetes (Self Report), 2003



Source: BRFSS data set, 2002-2003

The prevalence of diabetes in Maine and across the nation is almost identical.[6]

[6] Excludes pregnancy-related diabetes.

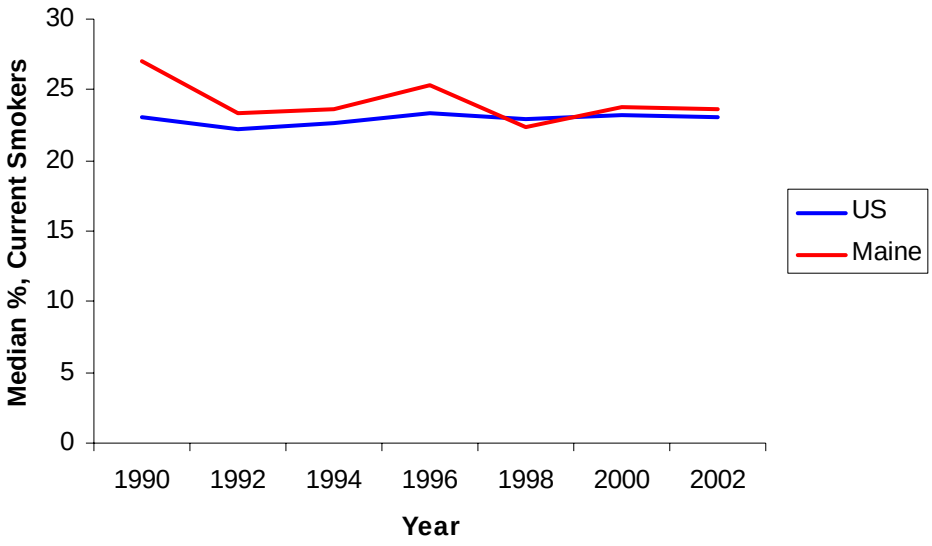


Source: BRFSS data set, 2002-2003
Note: Maine prevalence rates are significantly higher than the US rates

Almost 10% of Maine adults report that they currently have asthma, significantly higher than the 7.7% reported by adults nationally.

Similarly, more than 13% of adults in Maine report having had asthma at some point during their lives. This is significantly different than the national figure, which is 11.4%.

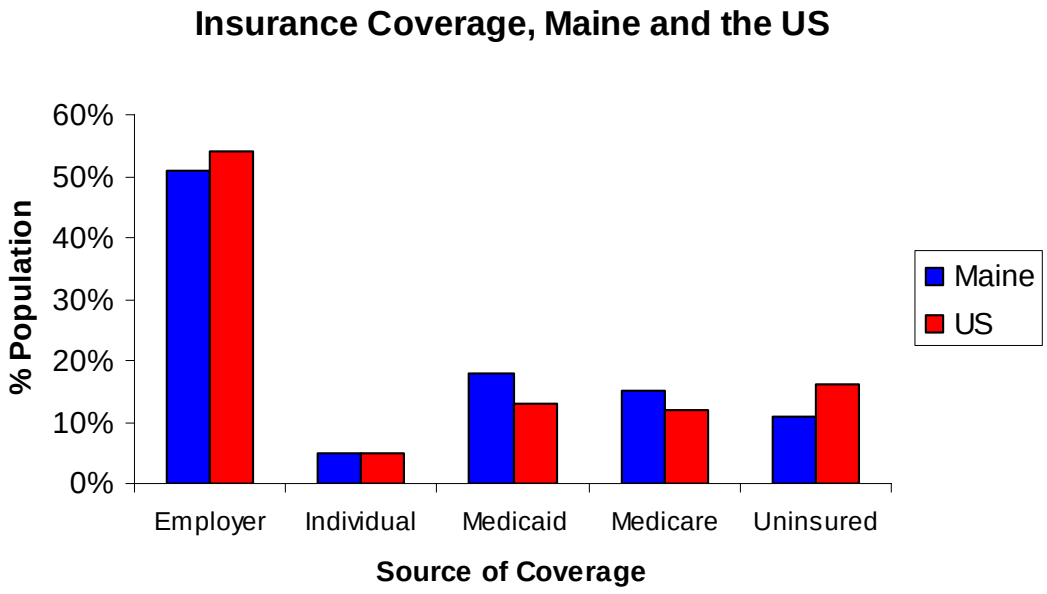
Trends in Percentage of Adults Who Currently Smoke



Source: BRFSS data set

Until the late 1990s, Maine adults had lower quit rates than other Americans; this difference has now essentially disappeared. Our rate of smokers who stay smokers (who don't quit) is about the same as it is for the US as a whole.

The improvement in Maine's adult quit rate may be attributable to the tremendous effort focused on tobacco cessation. This effort includes increasing the tax on tobacco products, a very visible educational campaign about the smoking and the implementation of a publicly-available quit line for help with cessation efforts. Over the past decade, health care providers in Maine have also focused on identifying patients who use tobacco and encouraging them to quit.

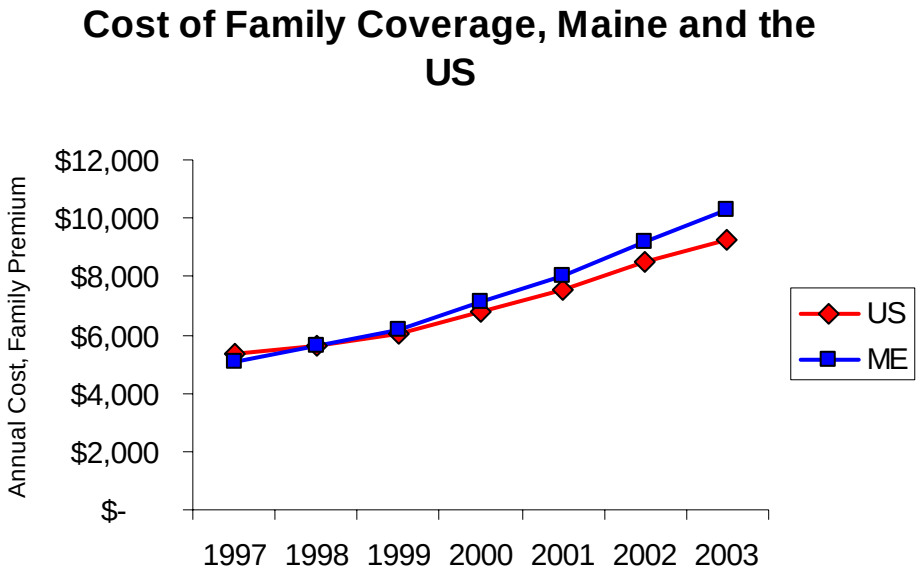


Source: Kaiser Family Foundation,[7] *Maine data is 2002-2003; US data is 2003*

For both Maine and the nation, more than half of the population receives its coverage through the workplace.

While an identical proportion of Maine's and the nation's population is insured in the individual market, more Mainers receive coverage through Medicaid than do Americans, in general (18% v. 13%). We also have a greater proportion of our population on Medicare, which is a reflection of the fact that the average age in Maine is somewhat higher than that observed in the nation as a whole. Maine has a smaller percentage of population that is uninsured, due to the relatively higher numbers of people covered under our Medicaid program and under Medicare.

[7] http://www.statehealthfactsonline.org/cgi-bin/healthfacts.cgi?action=compare&category=Health+Coverage+%26+Uninsured&subcategory=Insurance+Status&topic=Distribution+by+Insurance+Status.

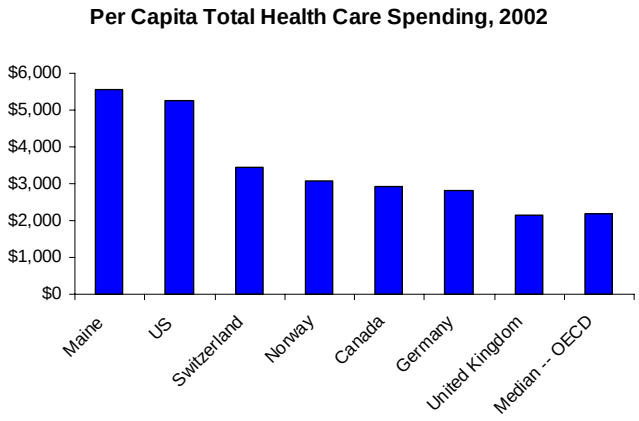


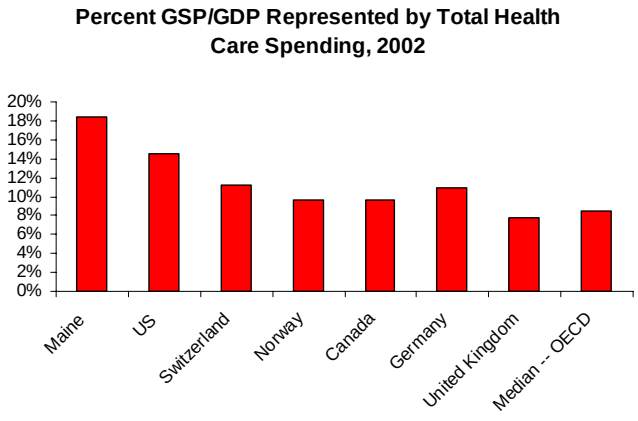
Source: Medical Expenditure Panel Survey, Health Insurance Data set[8]

The cost of a family health insurance plan has been increasing for both Maine businesses and for businesses all across the country, but increases have been greater in Maine than that experienced nationally.

[8] See MEPS website at: www.meps.ahrq.gov/Data_Pub/IC_Tables.htm. For 1998 and 2000, Maine data were estimated using the midpoints between the previous and successive years. Total cost is the sum of both employer and employee costs.

Health Care Spending in Maine and Elsewhere





As compared to all Americans (US) and to other, selected industrialized countries,[9] spending in Maine is higher, both on a per capita (or per person) basis and as a percentage of our economies.

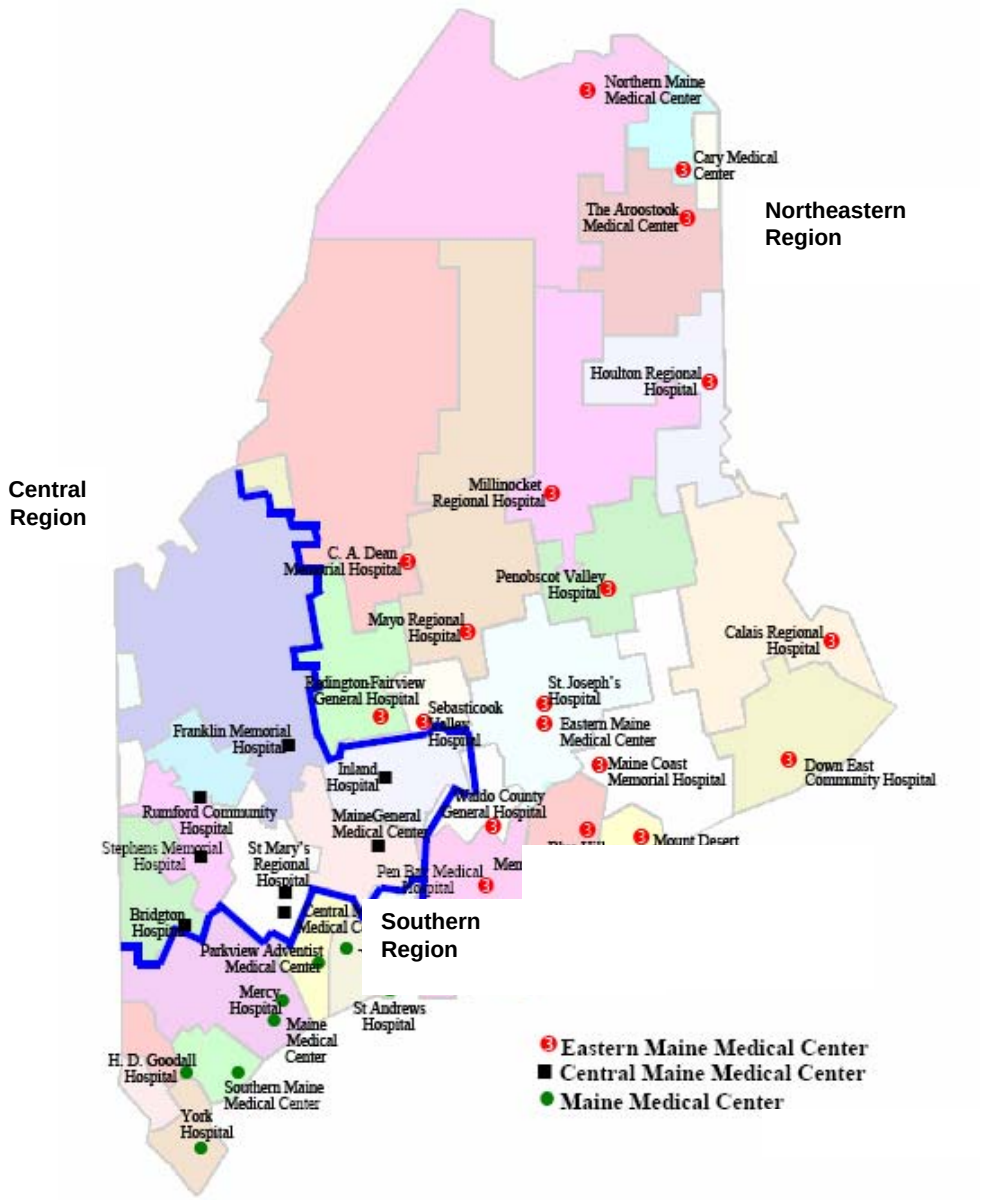
The most recent literature on this topic finds that differences in spending between the US and other nations does not arise from differences in the level of health care resources (such as the number of doctors or nurses per capita), the numbers of hospital beds per capita or the numbers of MRIs or CT units per capita. Nor are the differences apparently due to differences in medical malpractice litigation. What is not clear is the role defensive medicine plays in the differences in costs. “Defensive medicine” is the practice of ordering tests, procedures or visits (or avoiding caring for high risk patients or doing high risk procedures) in order to reduce the risk of being sued by a patient. There is no good way to measure how much defensive medicine is being practiced, nor how much it contributes to total spending on health care.

[9] *See* Anderson GF, Hussey PS, Frogner BK and Waters HR. *Health Spending in the United States and the Rest of the Industrialized World.* Health Affairs 24(4), 903-914, for data on US and OECD nations. Maine figures calculated using data from the CMS Office of the Actuary.

Regional Variation Within Maine

Part Two

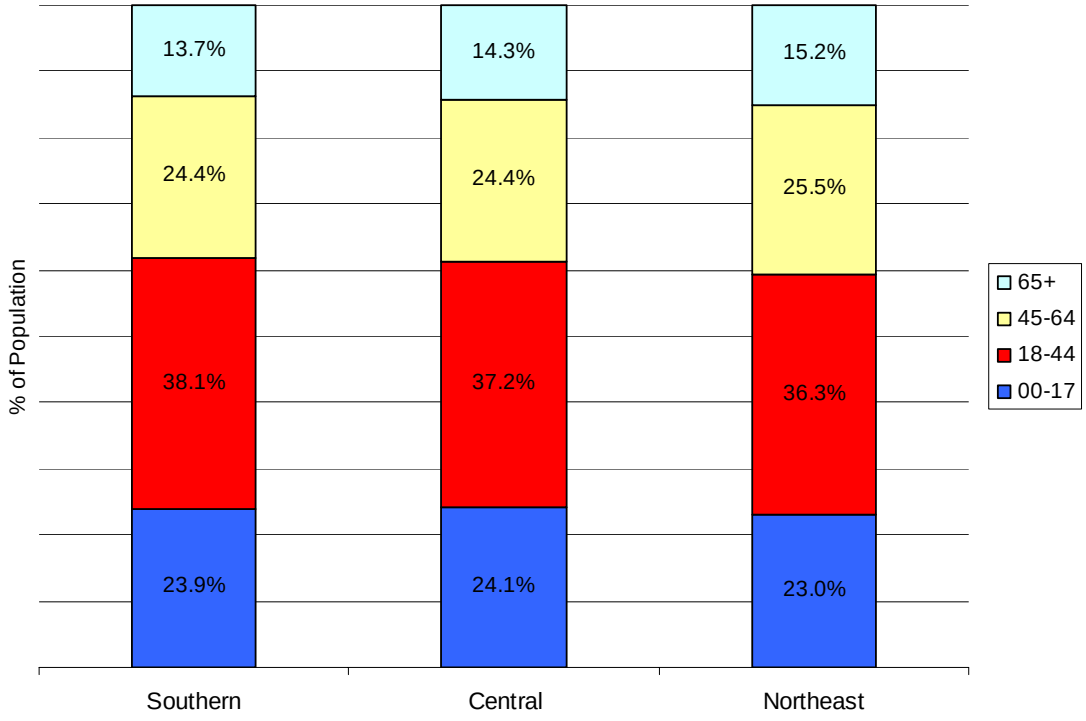
For the purpose of analysis only, we have divided the state into three areas each with approximately the same number of people residing in it. In this section, these regions will be used to look at variations in health and health care across Maine.



*Does not include Veterans Administration (VA) Medical Center nor Mental Health Institutions

Updated November 21, 2003

Population Distribution

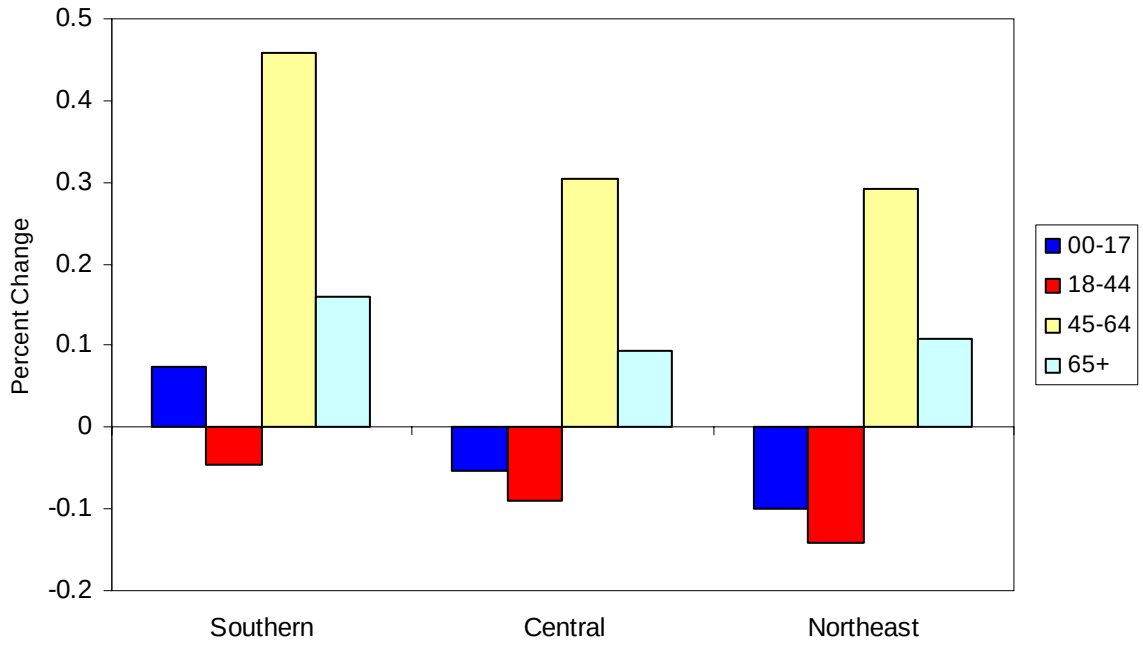


Source: US Census

The number of people living in each of the three regions used in this report is similar.

As of the last census, the three regions have similar age breakdowns within their populations. The northeastern region is slightly older than either of the other two regions.

% Change in Population by Age Group (1990 - 2000)



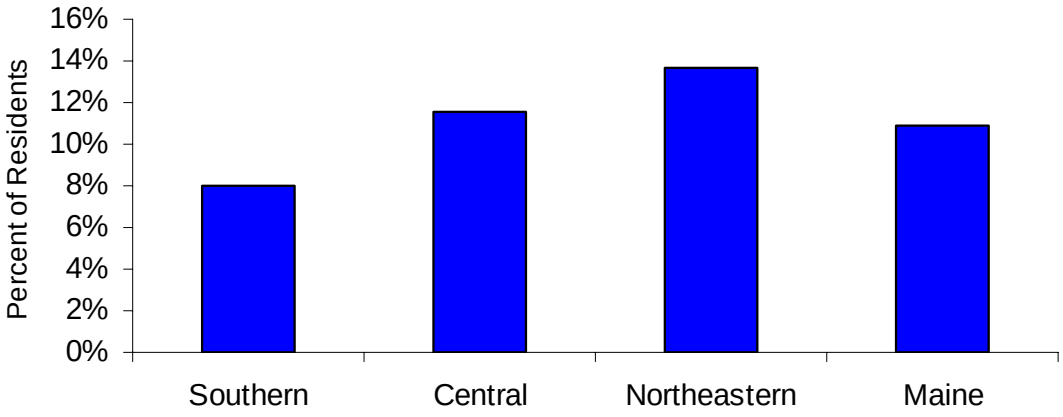
Source: US Census data

The southern region of the state has grown more quickly than are other areas. Because the population is growing most quickly in southern Maine, that region will experience the greatest increase in the demand for healthcare services and that demand will span across all services – from pediatric services for children to chronic care services for elders.

Because the northeastern region has the largest elderly population (data not shown), the demand for health care services due to aging will be greatest in that region. Age is the most important biological contributor to cancer, so it would not be surprising to see a higher rate of cancer in the northeastern region.

The growth in southern Maine's working population coupled with the higher income, employment and education levels in that region, will likely impact the demand for private insurance coverage in the area.

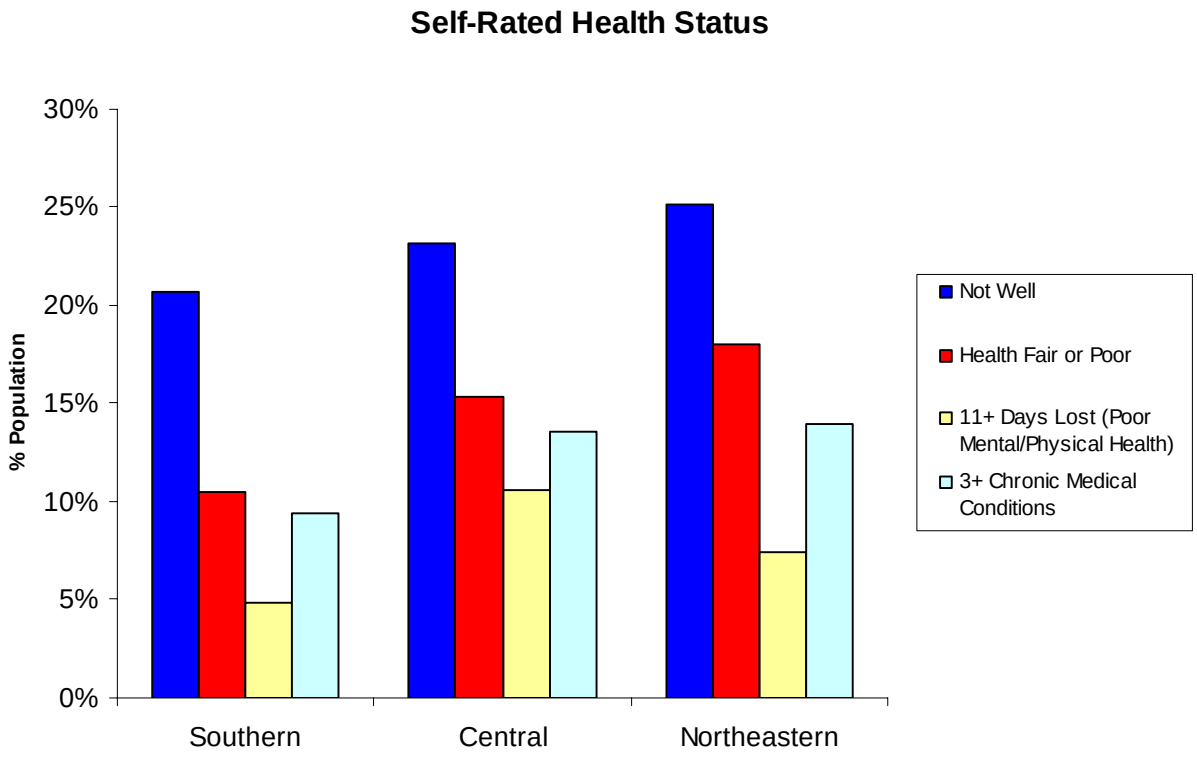
Percent of Population Living Below Poverty



Source: US Census data

The southern region of the state has lower share of its residents living below the poverty line than do either central or northeastern Maine. These data are for 2000, the time of the last national census. That year, the poverty level was $17,050 for a family of four.

Because poverty status is highly correlated with health status, we would generally expect the health status of people living in the southern region to be better than that of people living in other regions.

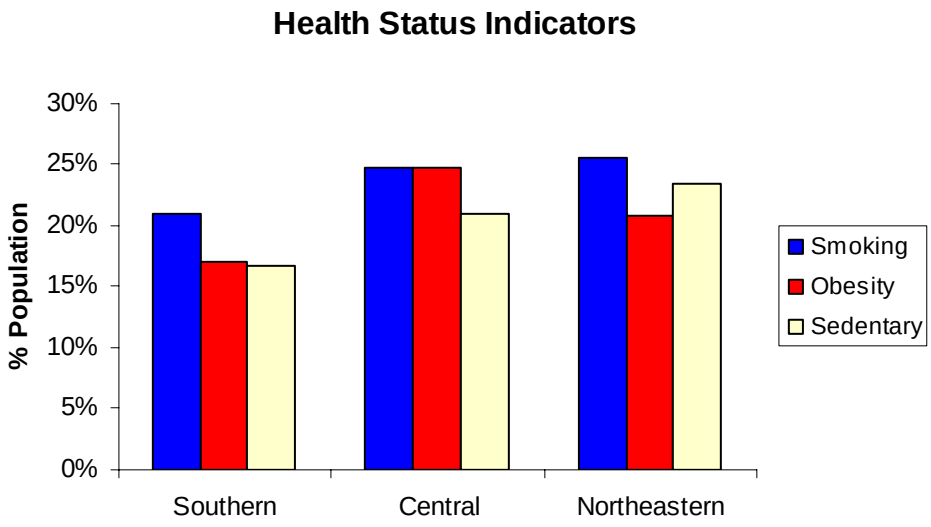


Source: BRFSS data set, 2002-2003
Note: there are significant differences between southern Maine and other areas

People living in central and northeastern Maine generally report their health as being poorer than do those people living in southern Maine. A greater proportion of people living in the central and northeastern regions have three or more chronic medical conditions; residents of southern Maine report having multiple chronic conditions at a rate significantly lower than those of northeastern Maine.

Similarly, more people in central and northeastern areas report their health as being either “fair” or “poor” and characterize themselves as being “not well” than do people in southern Maine, meaning that they have more disease and/or symptoms. The difference between southern Maine residents and others is significantly significant. Likewise, functional health status is better in southern Maine than in either of the two other regions, as shown by the smaller proportion of people having lost many days to poor health.

This information tells us that people living in central and northeastern Maine have a greater burden of chronic disease and physical limitations due to their health. It also means that those areas will see greater demands for chronic health services than will southern Maine. The fact that a greater proportion of people residing in the central and northeastern regions of the state live below poverty is most likely related to the relatively lower health status in these two areas.



Source: BRFSS data set, 2002-2003
Note: There are significant differences between regional rates

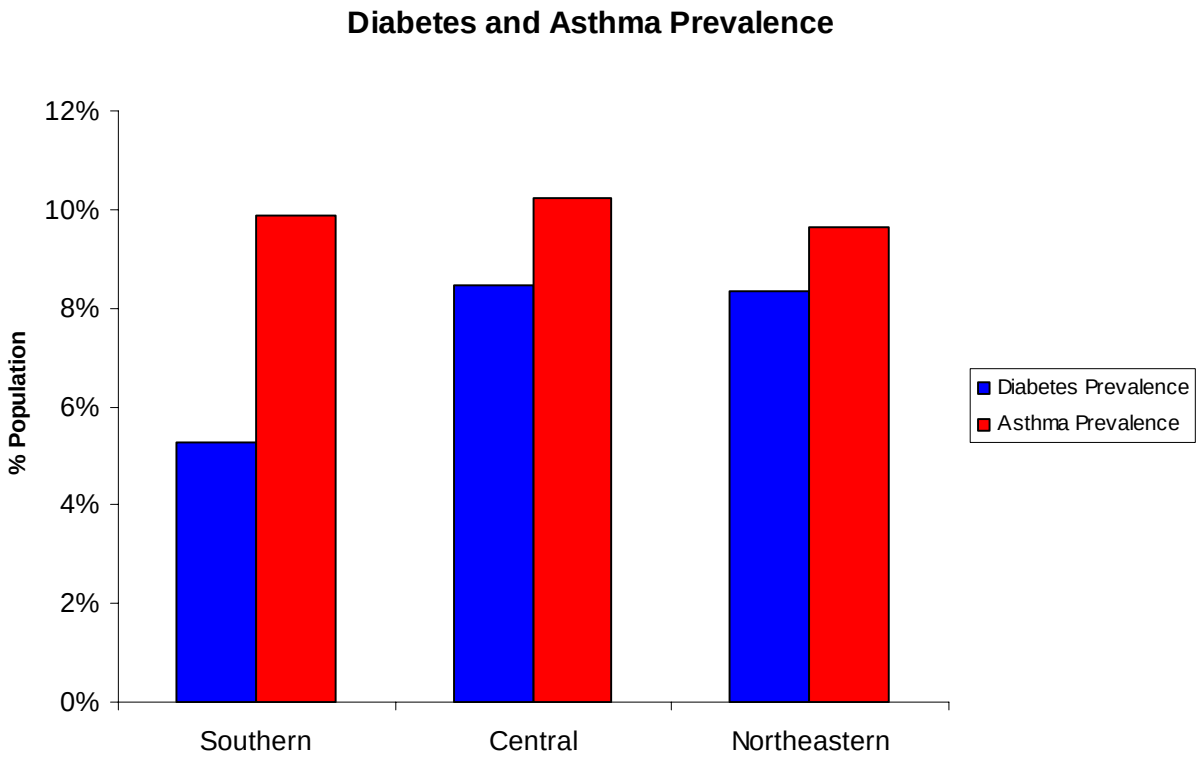
Sedentary lifestyle (lack of exercise), obesity and smoking are major factors across Maine, but especially in central and northeastern regions.

Smoking is more prevalent in central and northeastern Maine than in southern Maine. The difference in smoking rates between southern Maine and northeastern Maine is statistically significant.

Central Maine faces the greatest challenge with regard to obesity, having the highest prevalence of obese persons across all age categories except the elderly (data not shown). In this instance, southern Maine residents have a statistically significantly lower rate of obesity than do residents of central Maine.

Vigorous activity levels are highest in southern Maine, except among the elderly (data not shown). There is a statistically significant difference between southern Maine and northeastern Maine in this regard.

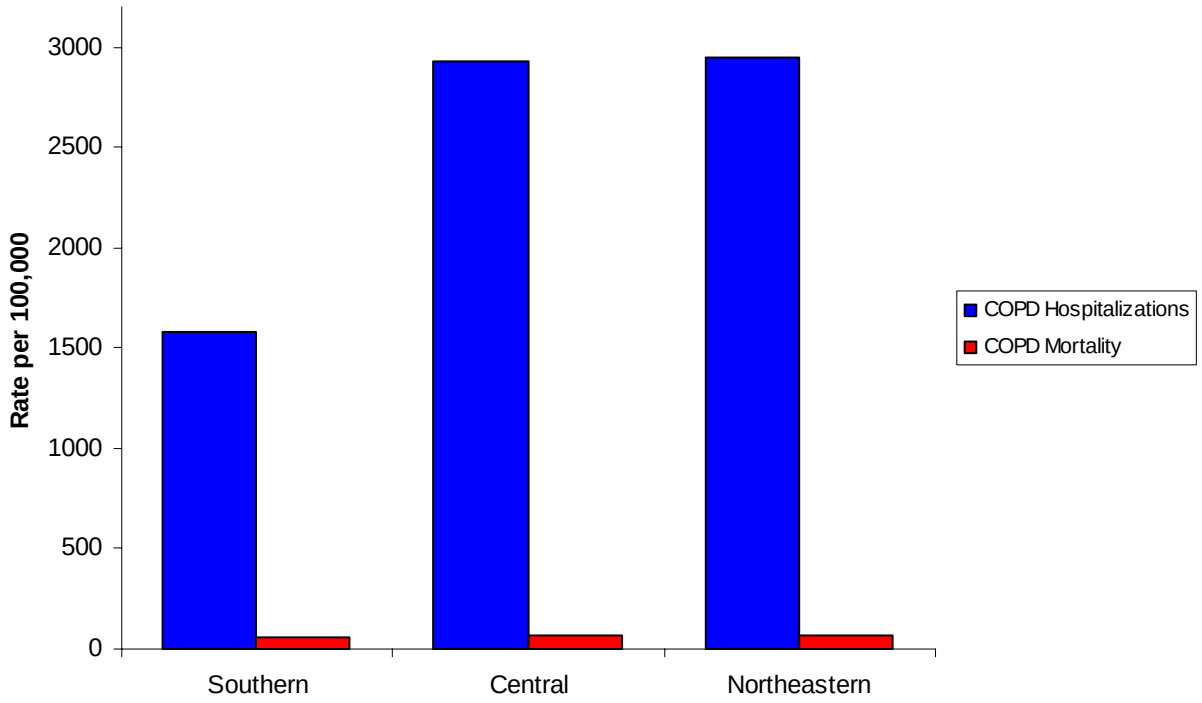
The higher prevalence of behavioral risk factors in central and northeastern Maine will contribute disproportionately to chronic disease conditions and demand for chronic care health care services. It is interesting to note that these two regions also show a higher prevalence of chronic illness and report poorer health status overall (as shown in previous chart).



Source: BRFSS data set, 2002-2003
Note: The rate of diabetes in southern Maine is significantly lower than that in central or northeastern Maine

The prevalence of diabetes is about 58% higher in northeastern and central Maine than in southern Maine; the rate in southern Maine is significantly lower than that of the central or northeastern regions. In contrast, there is little difference in the prevalence of asthma across the state.

Diabetes is a serious condition that can lead to blindness, heart disease, stroke, and kidney disease. Obesity and lack of exercise can contribute to diabetes.

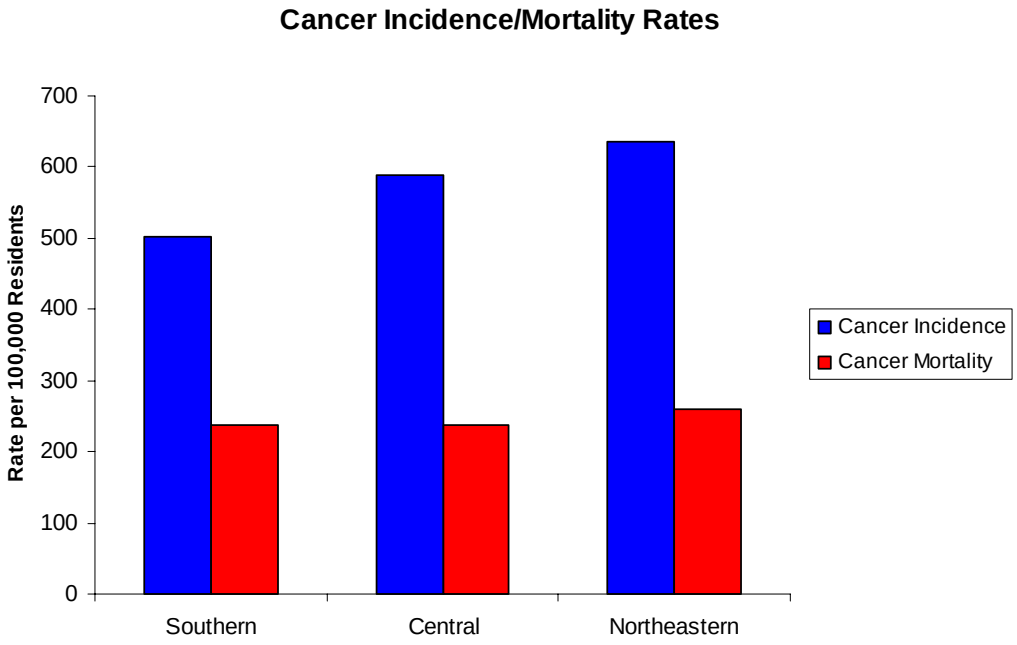


Source: Maine Department of Health & Human Services, Office of Data Research and Vital Statistics, 2001-2002; Maine Health Data Organization UHDDS 2002, 2003
Note: Rate of hospitalization in southern Maine is significantly lower than that in either of the other two regions. The COPD mortality rate is significantly higher in central Maine than in southern Maine

Far more people are hospitalized for Chronic Obstructive Pulmonary Disease (COPD) in central and northeastern Maine than in southern Maine. In fact, the rate in southern Maine is signficantly lower than that in either of the other two regions. People with COPD in these areas may either be sicker and require hospitalization more often than those living elsewhere, or the way in which physicians treat COPD may differ across regions.

Although the overall death rate from COPD is relatively low, the rate in central Maine is 30% higher than it is in southern Maine and 9% higher in northeastern Maine than in southern Maine. The rate of death due to COPD is statistically significantly higher in central Maine than in southern Maine.

COPD is a disease where a patient's lungs are damaged, making it difficult for them to breathe. Smoking is the most common cause of COPD, but the disease can also be caused by exposure to pollution, dust or chemical irritants over a long period of time.



Source: Maine Department of Health & Human Services; Maine Health Data Organization UHDDS 2002, 2003

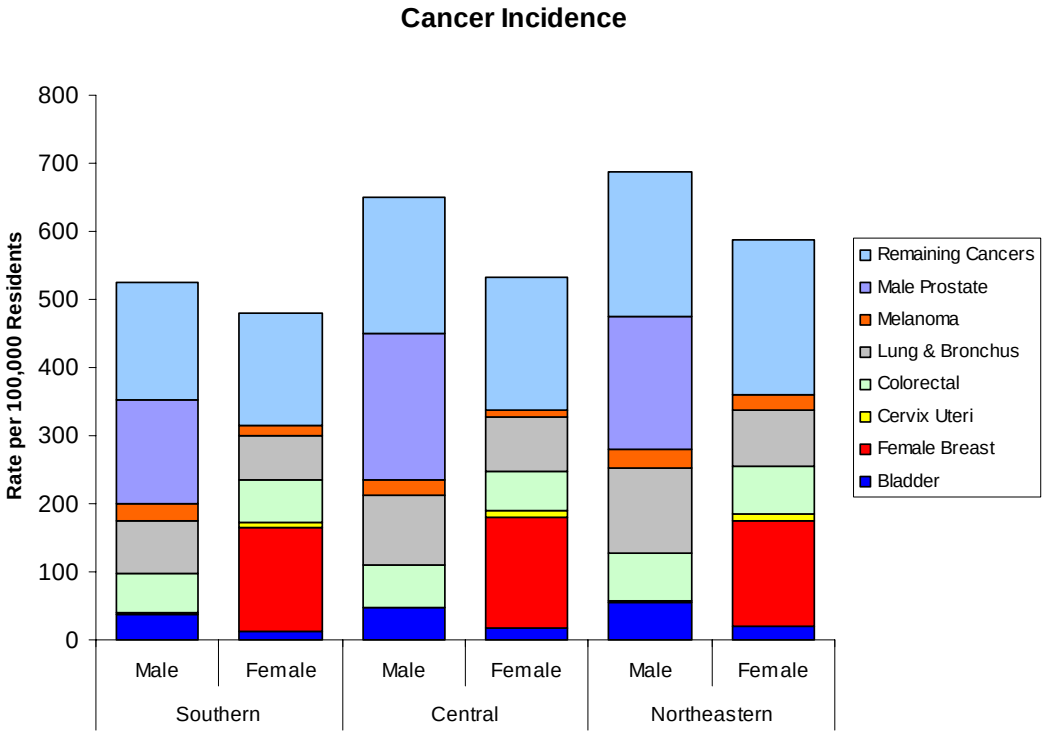
Note: the incidence of cancer is significantly lower in southern Maine than in either of the other two regions

The residents of central and northeastern Maine have a greater burden of cancer disease and, as a result, will likely place greater demands on the health care system for cancer prevention, treatment, management and support services.

The differences in the incidence of cancer may be the result of any number of factors *other than* genetics, environment, behaviors or other factors. For example, cancer is highly correlated with age. The "oldest" region in Maine is the northeast; the incidence of all cancers is 25% higher in northeastern Maine than in southern Maine. The incidence of all cancers is 6% higher in central Maine (the second "oldest" region) than it is in the southern region (the "youngest" region).

The regions also vary in the rate of screening for certain types of cancer. When the screening rate is higher, the identification of disease is likely to be higher.

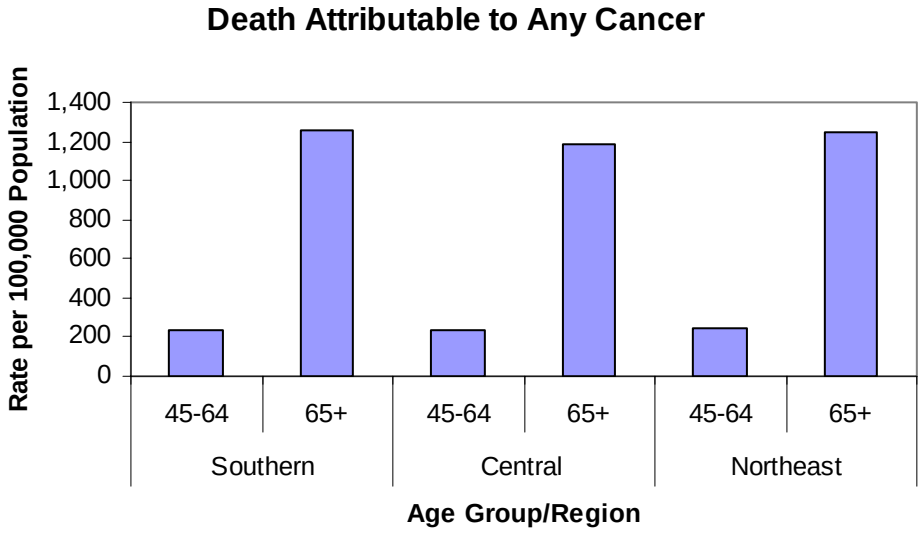
The death (mortality) rate due to cancer is the same across the state. The similarity in the cancer death rates indicates that access to quality cancer care services is probably about the same all across the state.



Source: Maine Department of Health & Human Services, Maine Cancer Registry, 2000-2001

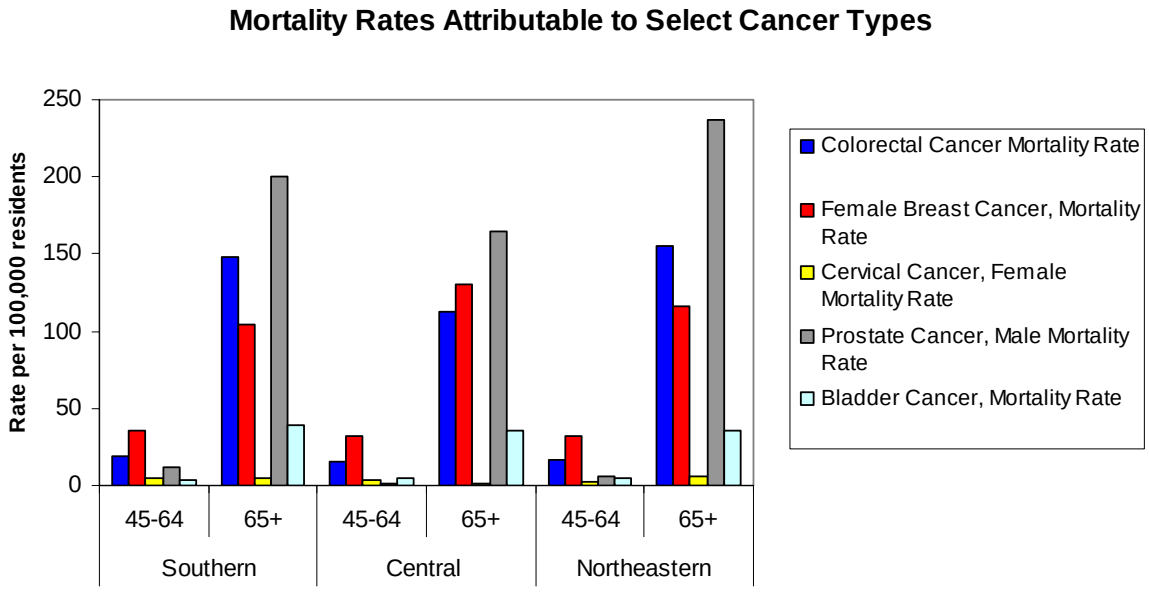
The difference among regions in the rate at which prostate cancer is diagnosed is statistically significant, with the rate being 40% higher in central Maine and 28% higher in northeast Maine than in the southern region. Differences in the incidence rates of other types of cancer are not statistically significant.

Different rates of screening for prostate cancer may be at least partially responsible for the variation in incidence rates we see, rather than genetics or some environmental or behavioral cause (see charts on preventive screening) influencing the underlying rate of disease in the population.



Source: Maine Department of Health & Human Services, 2001-2002

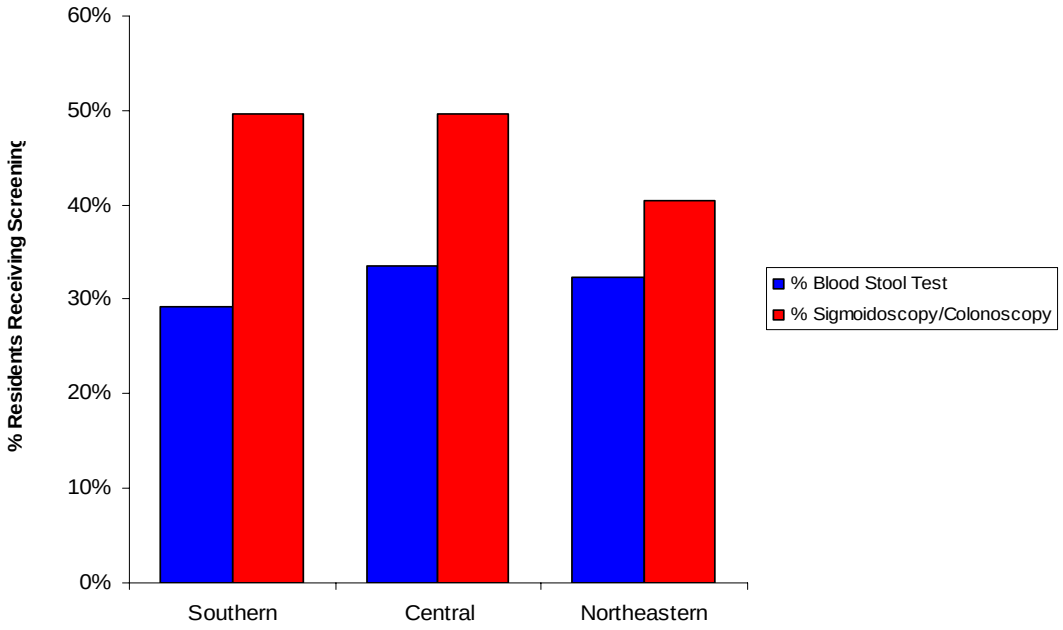
Although the incidence of diagnosed cancer differs across the three regions of Maine, death due to cancer is similar in each of the areas and across age groups.



Source: Maine Department of Health & Human Services, 2001-2002

The death rate attributable to particular types of cancer differs somewhat across regions, with the northeastern region having the highest rates for colorectal, breast, cervical and prostate cancer among the elderly. The mortality rates among other adults is very much the same.

Blood Stool and Sigmoidoscopy Screening Rates



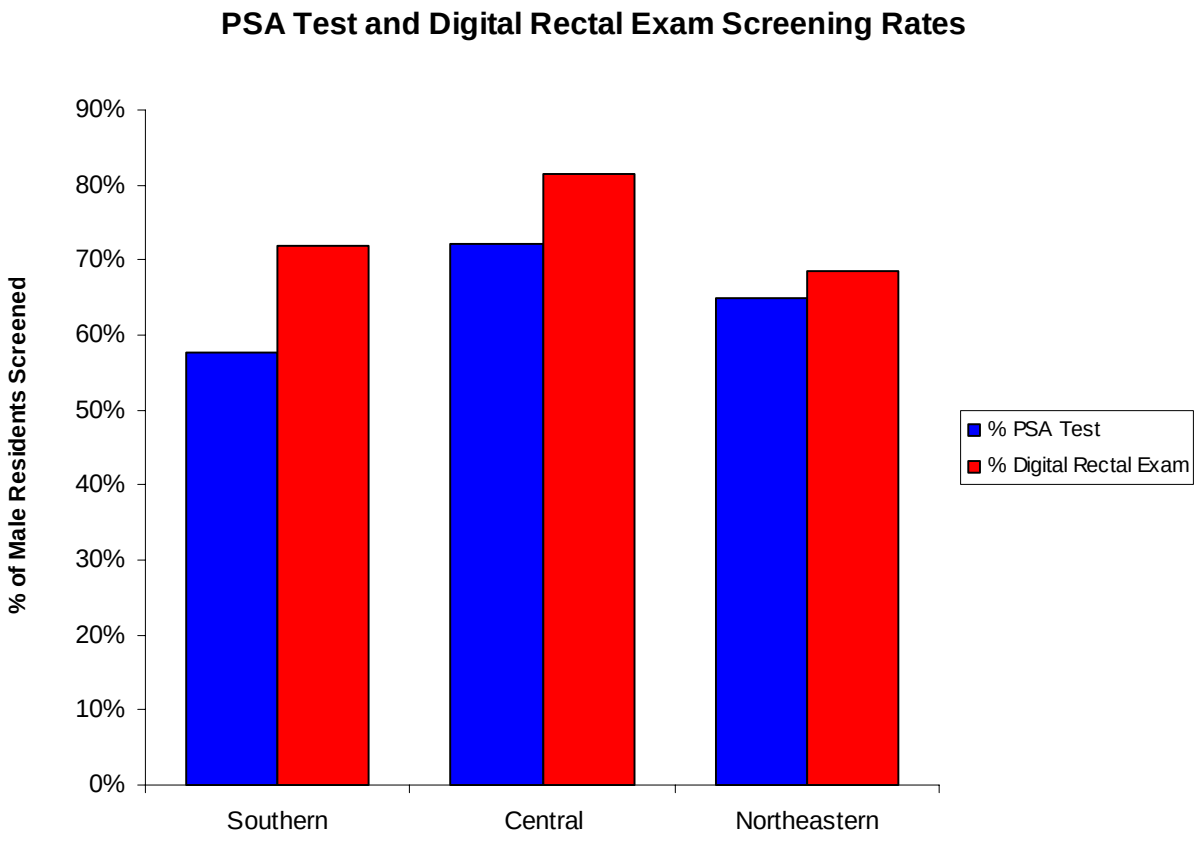
Source: BRFSS data set, 2002-2003
Note: Rate of sigmoidoscopy/colonoscopy in northeastern Maine is significantly lower than in other regions

Blood stool testing and colonoscopy/sigmoidoscopy are screening tests for colon cancer.

The rate of blood stool testing is roughly the same across regions. There are regional differences in the rate of screening using the more aggressive screening tool – colonoscopy/sigmoidoscopy. The rate of this procedure is significantly lower in northeastern Maine than it is in the rest of the state.

Although not shown here, the rate of screening among the population at highest risk for colon cancer – men and women over the age of 50 – varies significantly across regions, with the rate in the northeastern region being the lowest at 40.5% This suggests that people living in the northeastern region of Maine either do not have comparable access to this type of preventive care or, perhaps for some cultural reasons, do not use this type of care as frequently as do other Mainers.

A lack of comprehensive health coverage may lead to lower rates of some types of screening, especially expensive procedures like colonoscopy, the cost of which would have to be paid out of pocket by uninsured individuals. The northeastern region, where the rate of health insurance coverage is lowest, also has the lowest rate of colonoscopy.



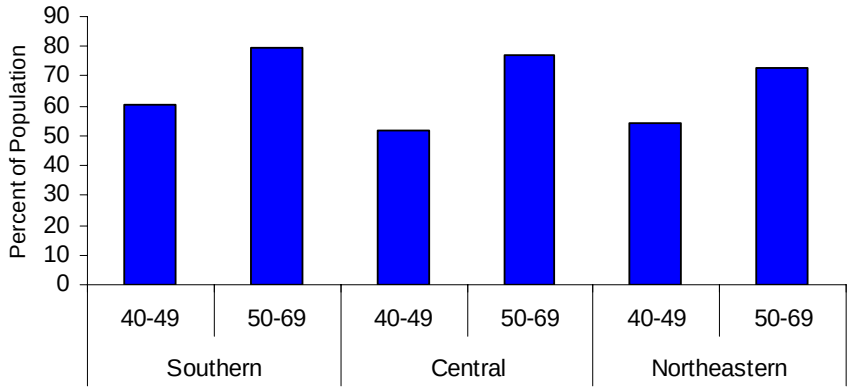
Source: BRFSS data set, 2002-2003

Prostate specific antigen – PSA – tests and digital rectal exams are performed to screen men for prostate cancer.

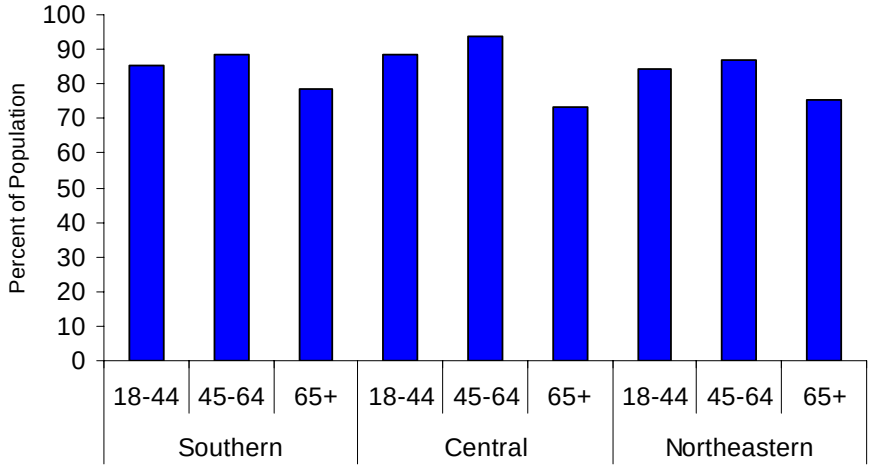
The rates of PSA blood tests and digital rectal exams are highest in central Maine, which also exhibits the highest incidence rate for prostate cancer. As noted earlier, these two observations are likely inter-related. That is, we tend to find more disease when we look for it.

The fact that the populations of central and northeastern Maine are older than that of southern Maine is likely related to the higher rates of screening, since a greater proportion of the population would be considered at risk for prostate cancer.

Percent of Women Having a Mammogram in Previous Year



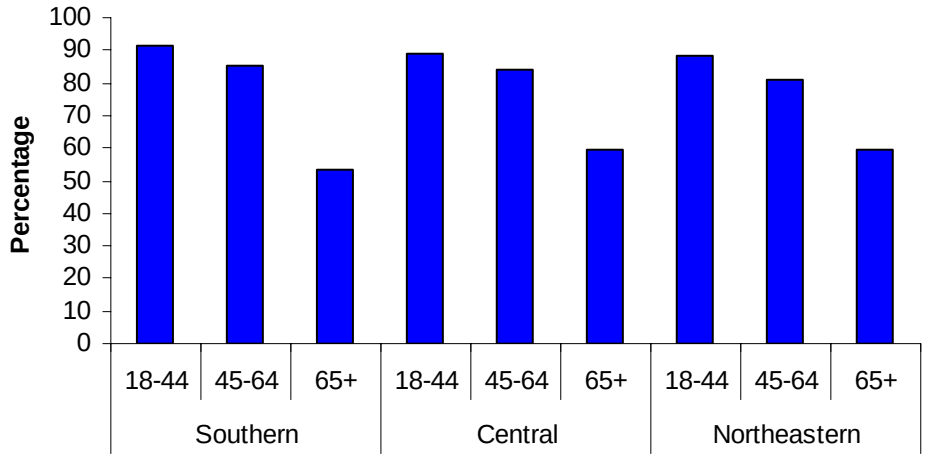
Percent of Women Having a Clinical Breast Exam in Previous Year



Source – both charts: BRFSS data set, 2002-2003

All regions in Maine do relatively well in terms of screening for breast cancer, across all age groups.

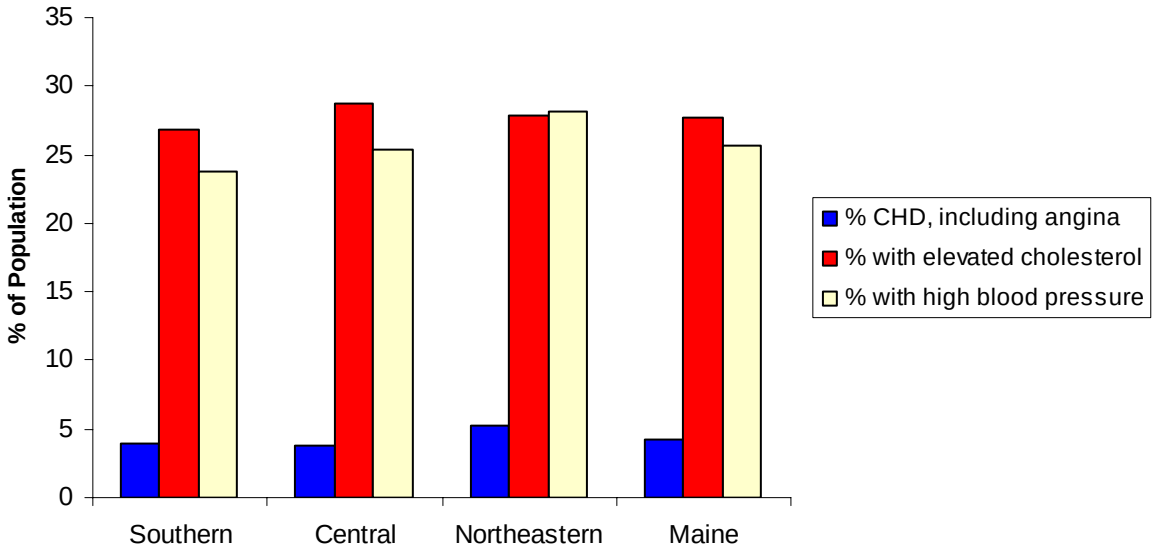
Percentage of Women Having a Pap Smear Within Previous Two Years



Source: BRFSS data set, 2002-2003

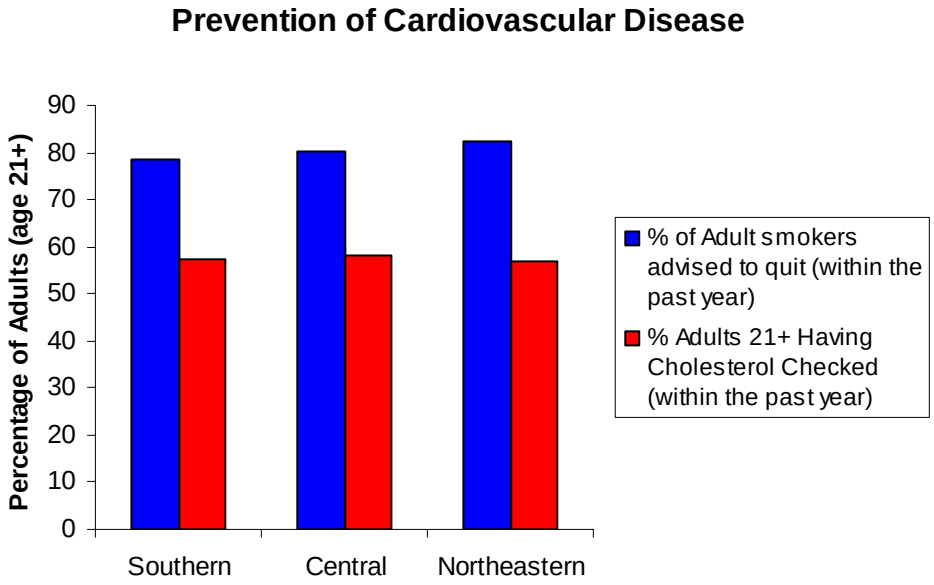
Regardless of region, Maine does a good job screening women for cervical cancer.

Prevalence of Heart Disease and Related Conditions



Source: BRFSS data set, 2002-2003

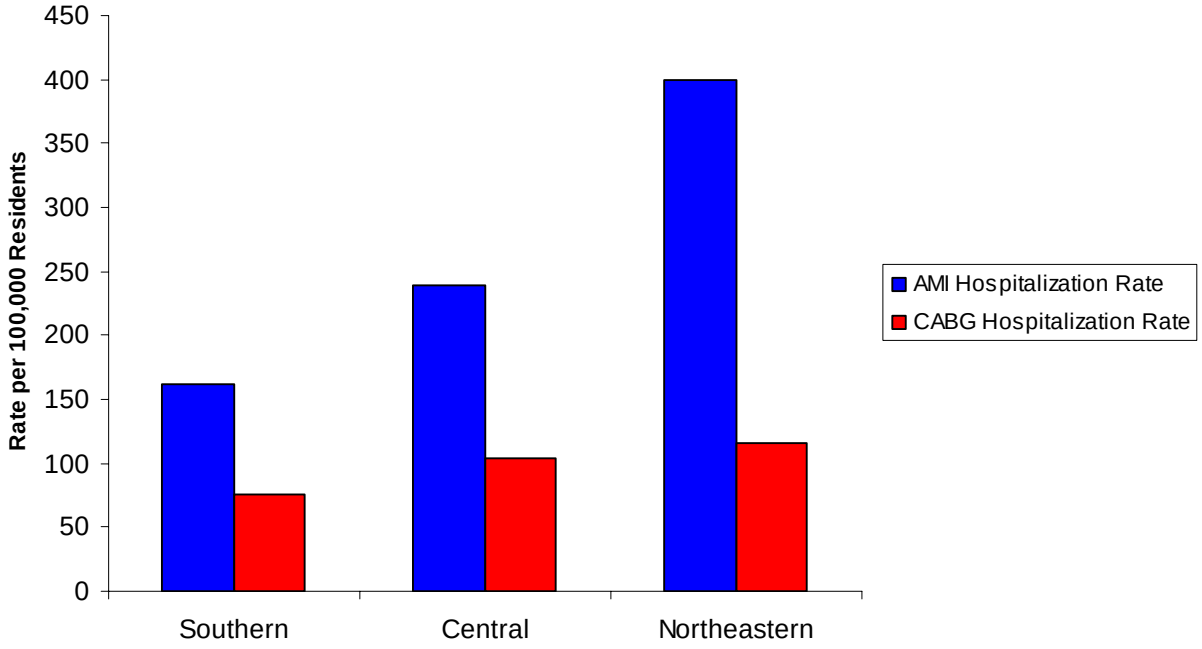
The prevalence of coronary heart disease (CHD) and related conditions such as high blood pressure and high cholesterol is similar across regions. However, the self-reported prevalence in the age group 45-64 is more than 150% higher in central and northeastern Maine than it is in southern Maine (data not shown). Among the elderly, the rate of heart disease is highest in southern Maine, exceeding the rate in central Maine by 70%, and the rate in northeastern Maine by 14% (data not shown).



Source: BRFSS data set, 2002-2003

There is little variation by region relative to physician screening practices and prevention services for heart disease. Just over 80% of adult smokers statewide were advised by a physician to quit in the past year. 60% of adults at risk for heart disease (men ages 35-65; women age 45-65) report having had their cholesterol checked in the previous 12 months.

Cardiovascular Hospital Admission Rates



Source: Maine Health Data Organization, UHDDS, 2002-2003
Note: The differences in rates of CABG in each of the regions are statistically significant.

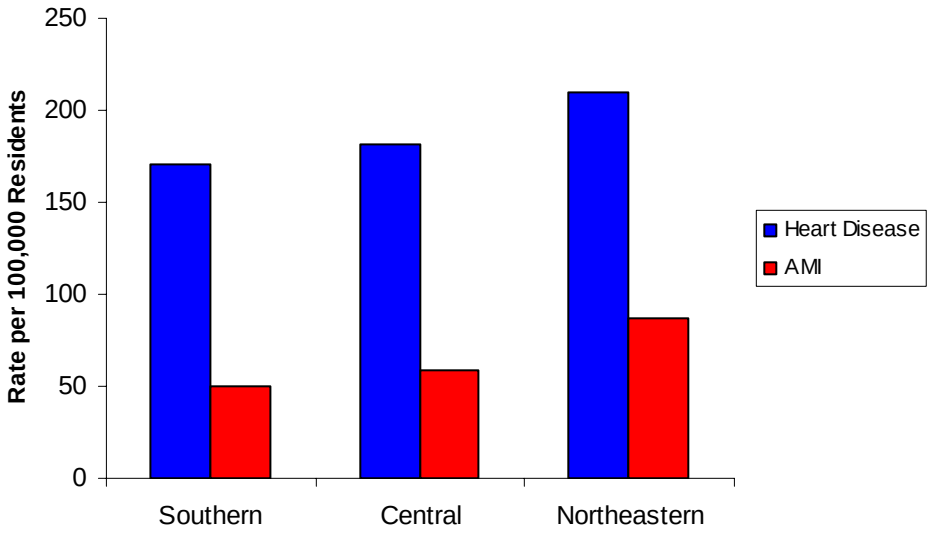
The incidence of acute myocardial infarction (AMI, or heart attack) is very different across regions, with the lowest incidence seen in southern Maine; the rate in each area is significantly different from those in the other two. The rate of hospitalization for CABG (coronary artery bypass graft) is highest in northeastern Maine and lowest in southern Maine.

These measures are indicators of heart disease in a population.

As has been noted before, the population in the northeastern region is older, poorer, more sedentary and more likely to smoke. These factors are likely related to the higher rate of heart attack in this area.

Also, people in northeastern Maine tend to have multiple chronic conditions; this may aggravate their heart disease, resulting in higher rates of both heart attack and the need for bypass surgery in that region. There may also be differences in access to high quality chronic disease prevention, early detection and disease management services across regions.

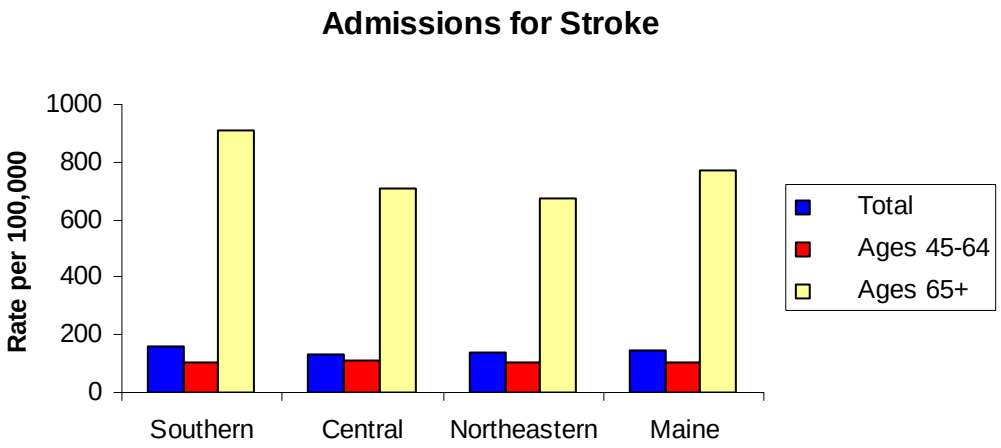
Mortality Rates due to Heart Disease, AMI



Source: Maine Department of Health & Human Services, 2001-2002

The mortality rate due to heart disease is significantly lower in southern Maine as compared to northeastern Maine. This holds true regardless of what age grouping of adults are examined.

Similarly, the rate of death due heart attack (AMI) is consistently higher in the northeastern region. Since the prevalence of heart disease is similar across all three regions (see previous chart), these variations may arise from differences in access to care for heart conditions, differences in other, underlying causes of heart disease such as smoking rates or weight or other lifestyle differences.

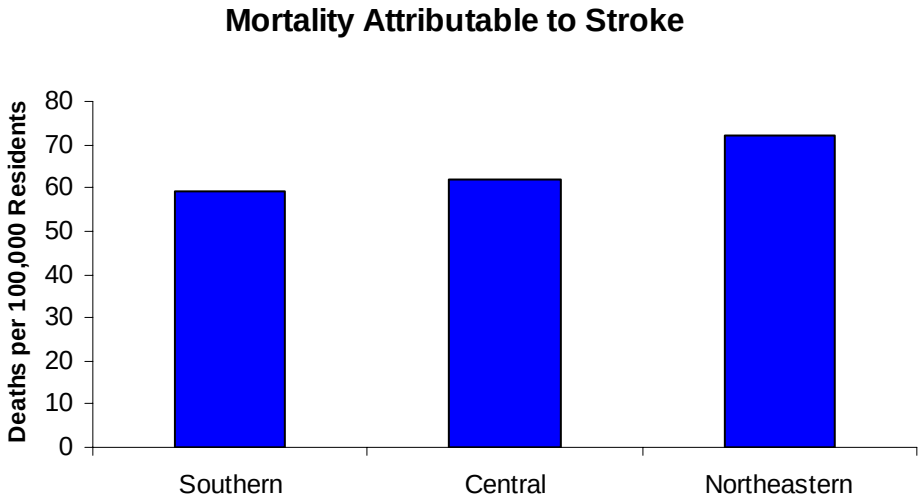


Source: Maine Health Data Organization, UHDDS, 2002-2003

The overall incidence of hospitalization for stroke is highest in the southern region of the state.[10] This difference is driven by the much higher rates of stroke in the elderly population in that area. Hospitalization for stroke is what is called a "low variation" condition. This means that people who suffer stroke are ordinarily hospitalized; so, looking at hospitalization for stroke is a good indicator of the incidence of stroke in a population.

The rate of inpatient admission for stroke is an indicator of the incidence of cerebrovascular disease in a population. While stroke in some patients may be related to genetic factors, in others it may be related to the same poor health habits that contribute to heart disease or to inadequate medical management of the disease.

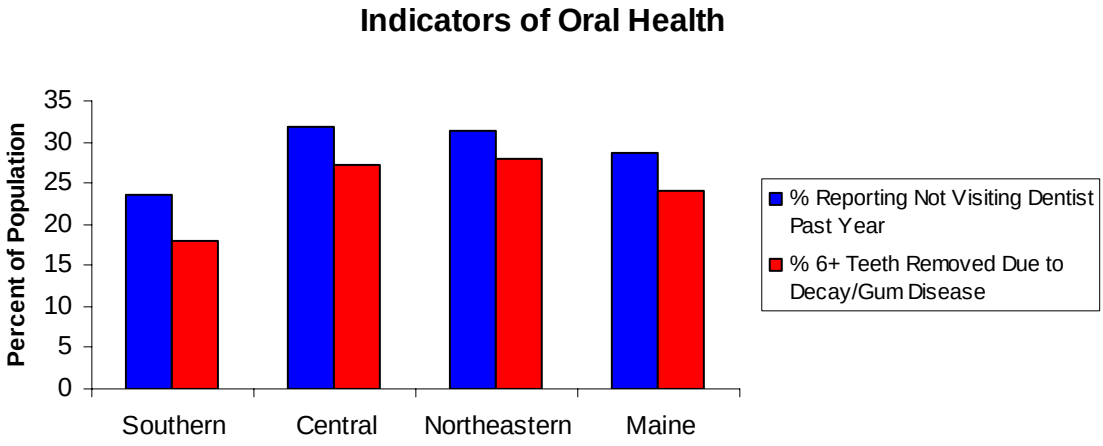
[10] These data relate to hospitalization for stroke and not for transient ischemic attack (TIA).



Source: Maine Department of Health & Human Services, 2001-2002

The rate of death due to stroke is higher in the northeastern region of the state.

Although the rate of hospital admission for stroke is highest in southern Maine, it may be that there are important risk factors for stroke mortality that are more prevalent in the northeastern region than elsewhere in Maine. For example, the “older” population in the northeastern region may contribute to increased mortality from cerebrovascular disease. Additionally, the high rate of heart disease in this area as well as the greater likelihood of multiple chronic conditions among people living in northeastern Maine may contribute to a higher mortality rate when stroke occurs.



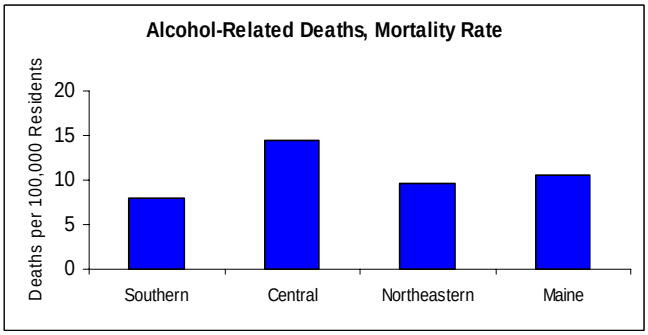
Source: BRFSS data set, 2002-2003

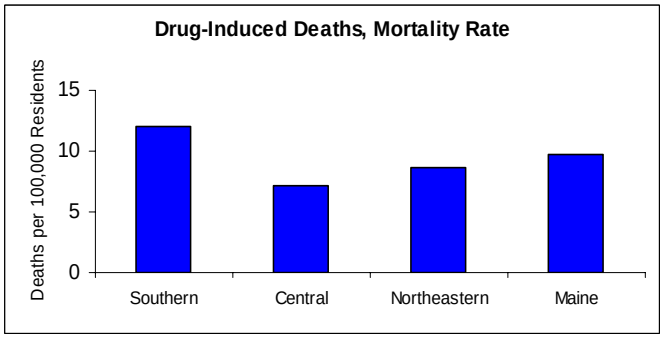
People living in the southern region of the state were *more* likely to see a dentist during the past year, than people living elsewhere in the state.

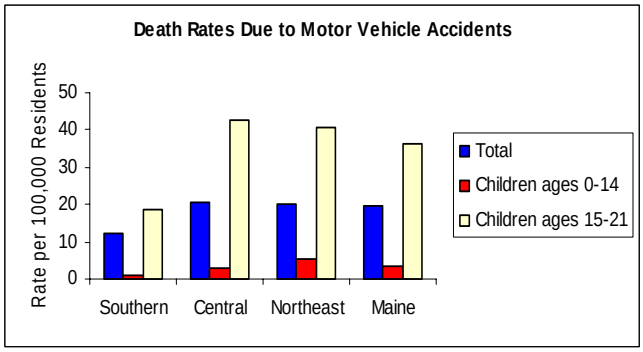
A smaller proportion of southern Maine's population suffers from gum disease than do people living in the central or northeastern regions of the state, or in Maine, generally.

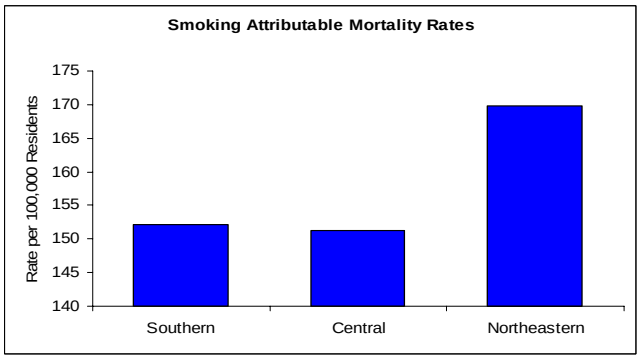
Good oral health is an important aspect of health status. In order to maintain a healthy diet, our teeth and gums need to be healthy. Good oral health is related to adequate access to dental care, which also varies across regions.

Selected Mortality Rates









Source: Maine Department of Health & Human Services, 2001-2002

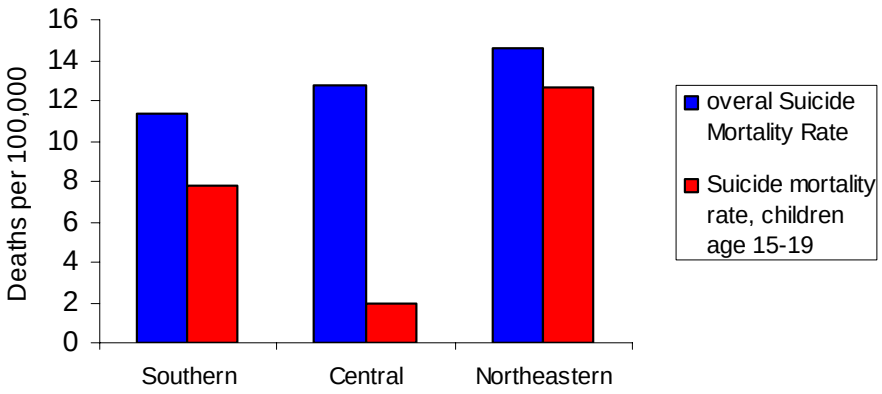
There is variation across the state in the rate of death related to alcohol and drug use. The mortality rate attributable to alcohol use is much higher in central Maine than it is in either of the two other regions or in Maine, generally. In each region, the death rate for men is higher than it is for women (data not shown).

In the case of drug-induced deaths, the mortality rate is considerably higher in southern Maine than in central and northeastern regions, or statewide. Death rates for men are higher than that for women in both southern and northeastern Maine, but are similar in central Maine.

The overall death rate due to motor vehicle accidents is highest in central Maine; this statistic is influenced by the mortality rate for teenagers and young adults (ages 15 to 21). Central Maine also has the highest rate of alcohol-related deaths; this might be an indication that drunk driving may be a factor in motor vehicle accidents there. The death rate due to motor vehicle accidents for children under the age of 15 is highest in northeastern Maine.

The death rate attributable to smoking related diseases is markedly higher in northeastern Maine. Death rates for men are significantly higher than that for women in each of the regions (data not shown).

Death Due to Suicide

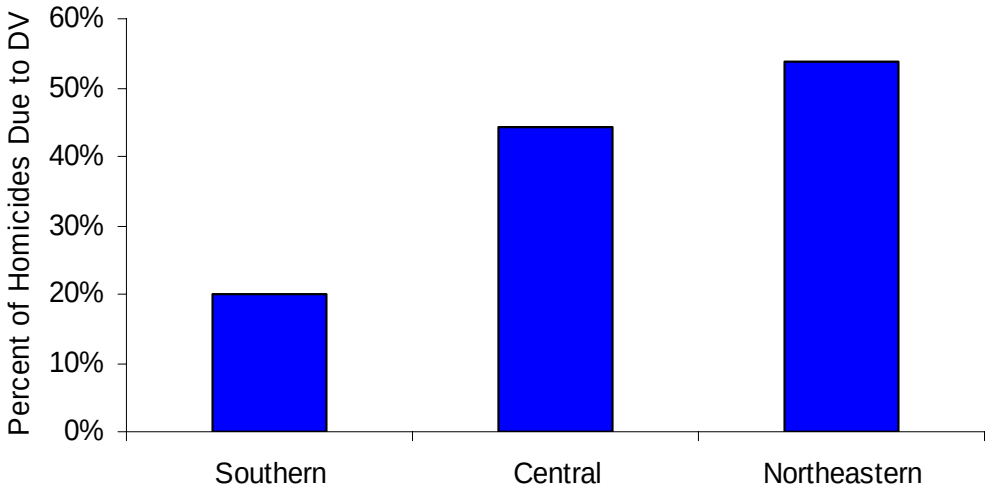


Source: Maine Department of Health & Human Services, 2001-2002

Overall suicide mortality rates are higher in the northeastern region of Maine than in southern or central Maine. Suicide among teens ages 15 – 19 is highest in the northeastern region; that rate is 84% higher than the comparable rate for the central region and 38% higher than the southern region.

The rate of suicide among persons age 45 and older is highest in northeastern Maine (data not shown).

Domestic Violence Related Homicides



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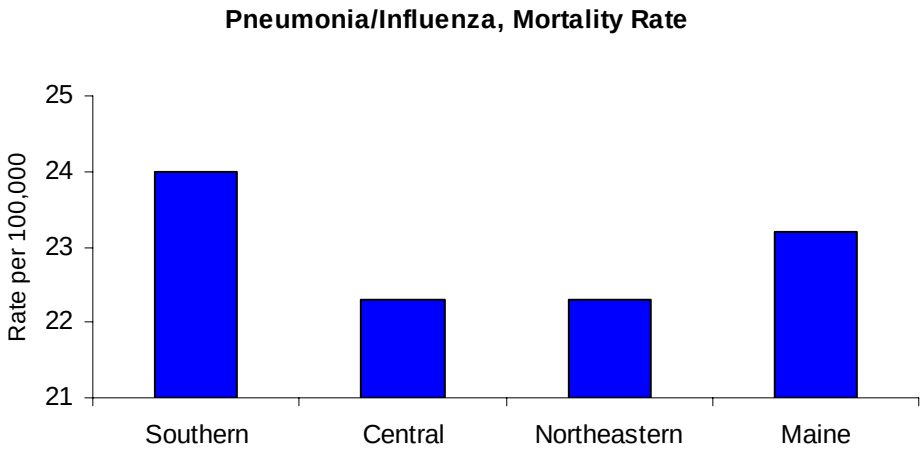
Source: Maine Department of Public Safety, 2000-2003

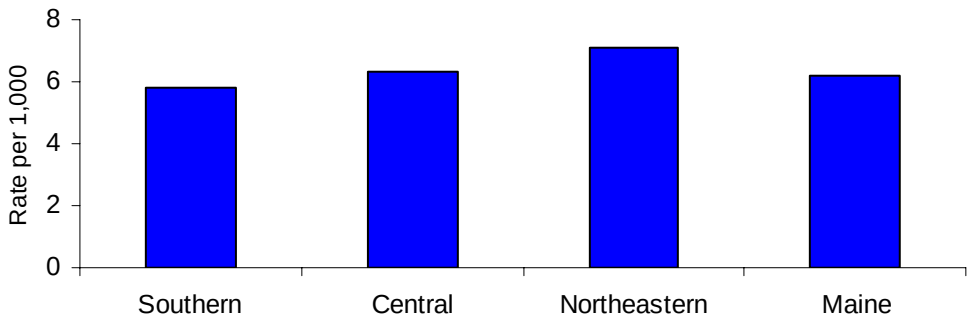
Over 40% of homicide deaths in Maine are associated with a domestic violence situation. The proportion of all homicides that are attributable to domestic violence varies across areas, with the highest proportion occurring in the northeastern region.



Source: Maine Department of Health & Human Services, 2001-2002

The rate of death due to pneumonia and flu differs considerably across the three planning regions, but is highest in southern Maine.

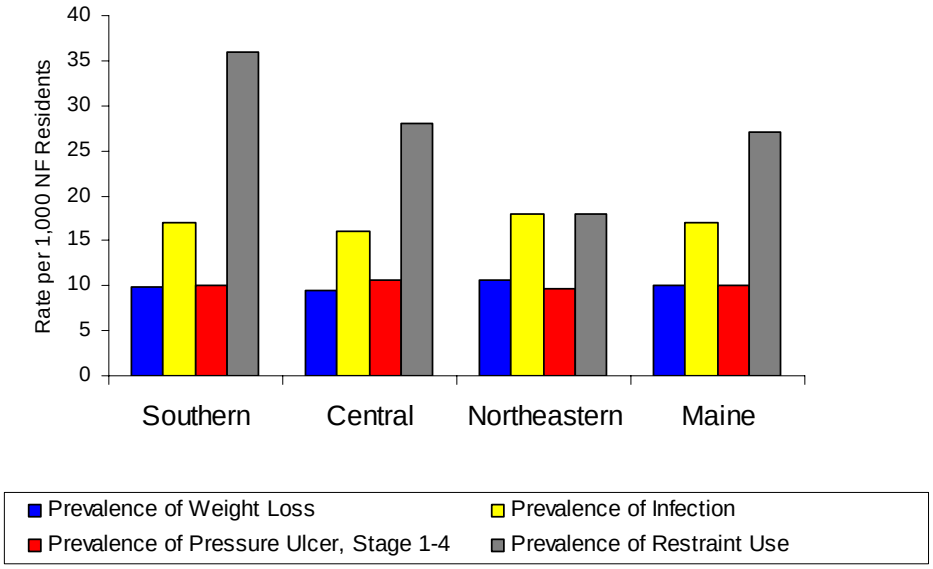
Total Residents and New Admissions to Nursing Facilities



Source: US Department of Health & Human Services, Centers for Medicare & Medicaid Services, Minimum Data Set, 2002-2003

The use of nursing facilities (NFs) is highest in northeastern Maine, the region with the greatest proportion of elderly. However, the rates of NF use in southern and central Maine are not very different.

Selected Quality Indicators, Nursing Home Care

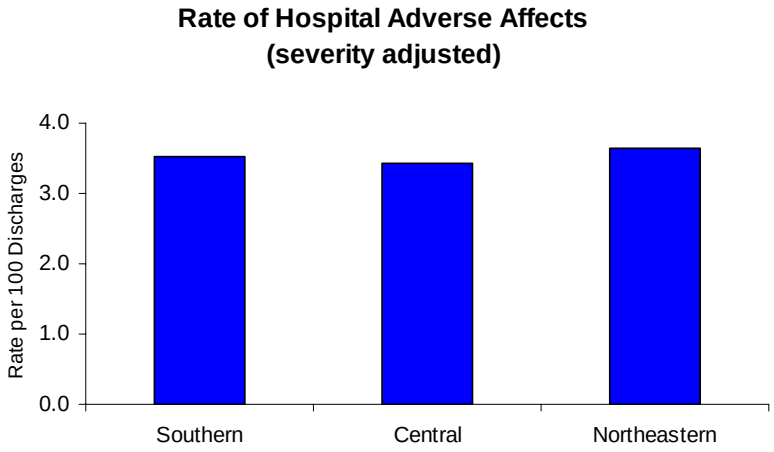


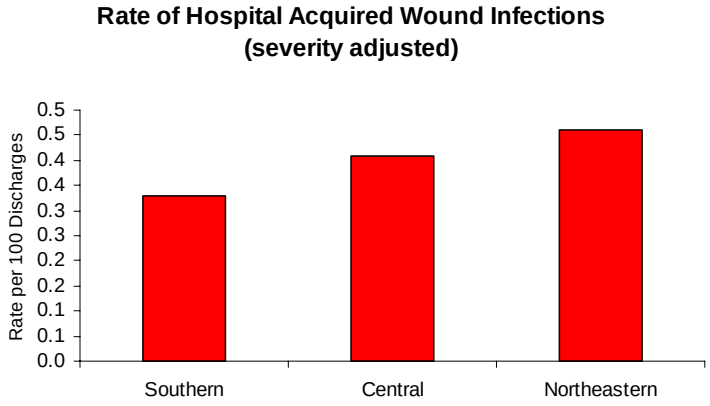
Source: US Department of Health & Human Services, Centers for Medicare & Medicaid Services, Minimum Data Set, 2002-2003

Most of the quality indicators for residents of nursing facilities are similar, regardless of region. In southern Maine, however, the use of restraints is 29% higher than in central Maine and 100% higher than in northeastern Maine.

Federal studies have shown that the use of restraints is related to the number of residents in a nursing facility (the more full a facility is, the more likely is the use of restraints), the degree of impairment of those residents and the nurse staffing ratio at the facility (the higher the ratio, the less likely the use of restraints).[11]

[11] Castle NG and Fogel B. "Characteristics of nursing homes that are restraint free." *The Gerontologist.* 38(2); 1818-188. 1998.





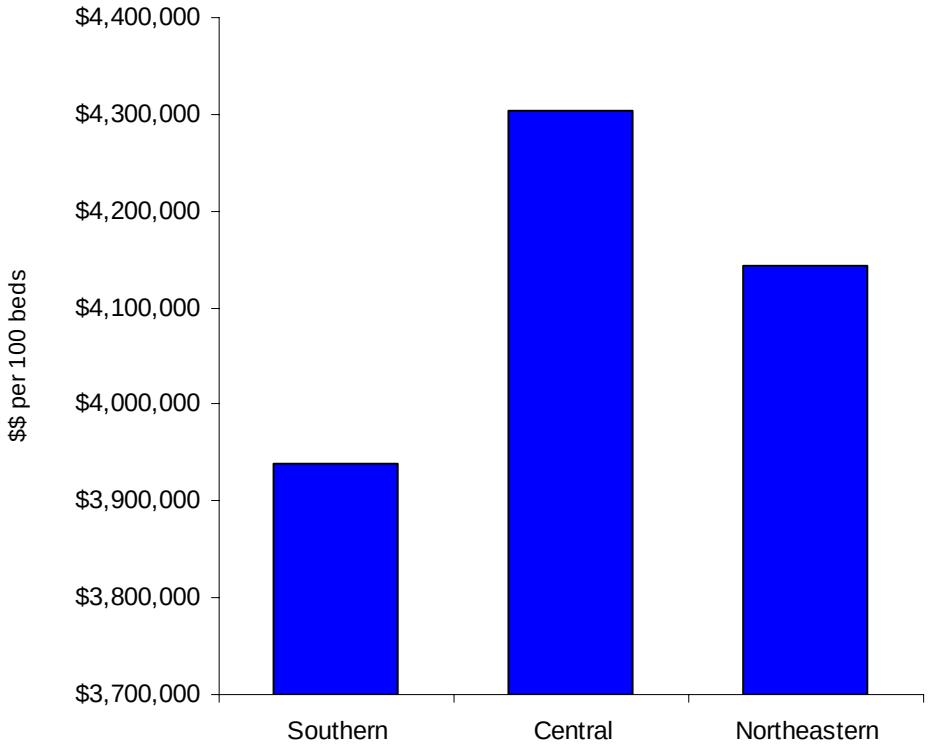
Source - both charts: Maine Health Data Organization, 2002

The rate of any adverse event – or bad outcome – following a hospital discharge is fairly similar, regardless of region. The rate at which patients acquire wound infections while admitted to the hospital varies somewhat, with the rate in the northeastern being the highest. However, rates in all regions are relatively low.

These data are adjusted to account for differences in the severity of illness of; it would be expected that patients who are more severely ill might be more likely to experience a bad outcome more often than patients who are less ill. Adjusting for severity removes that influence from the analysis.

Looking *only* at these two quality markers, it would appear there is little difference in the overall quality of care at Maine hospitals in the three regions.

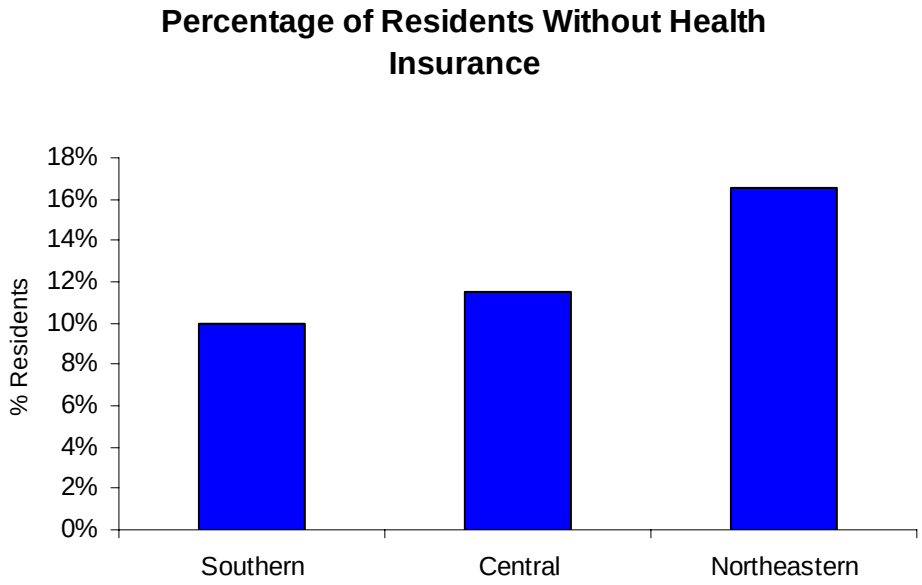
Hospital Uncompensated Care



Source: Maine Hospital Association, data for 2003

If a patient is unable to pay all or part of a medical bill, the unpaid amount is referred to as "uncompensated care" or, sometimes, "bad debt/charity care." The annual *hospital* uncompensated care burdens are highest in the central Maine region and lowest in southern Maine.

Lack of insurance and poverty status are often associated with the inability to pay for health care. However, the likelihood of being uninsured and the likelihood of being very poor are highest in northeastern Maine, not central Maine. The difference may be attributable, instead, to differing hospital policies for uncompensated care in these areas; to different cultural attitudes regarding bill paying across these areas; or, perhaps, to differences in the cost of care across areas.

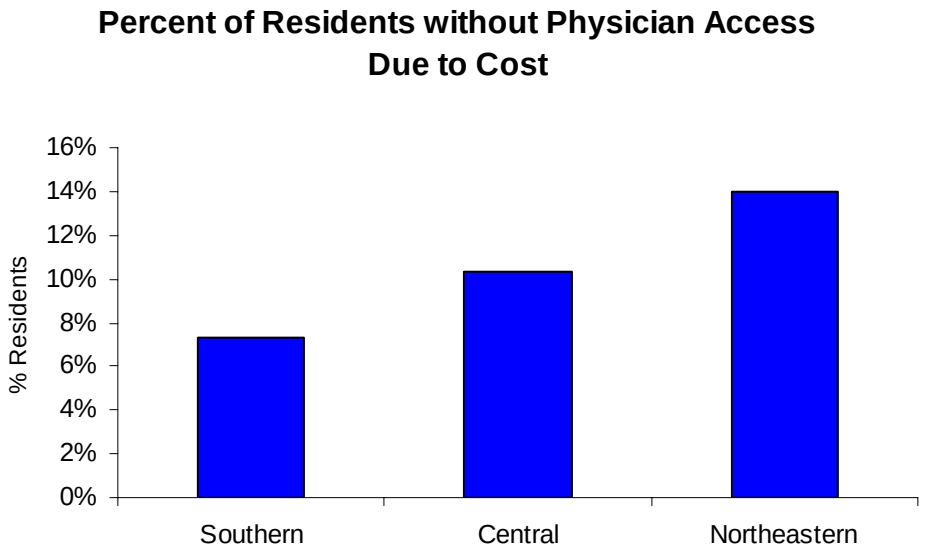


Source: BRFSS data set, 2002-2003
Note: The uninsured rate in northeastern Maine is significantly higher than the rates in either southern or central Maine

Overall – residents (both children and adults) of the southern Maine region have the largest percentage of its population covered by health insurance in the state, with only approximately 10% of the population lacking coverage. While the central region exhibits a rate of 11.6% uninsured, 16.5% of residents of the northeastern region are without coverage. The rate of uninsured in northeastern Maine is statistically significantly higher than that observed in either central or southern regions. These regional rates compare to a national rate of uninsured equal to 16% (Kaiser Family Foundation).

Among children 0-17 years of age, the rate of health insurance coverage in central Maine is 10% lower than in the southern or northeastern regions of the state. A recent national study finds that 20% of Maine children without insurance coverage in 2003 received no medical care during that year. Similarly, only 82% of uninsured children in Maine in 2003 report having a personal doctor or nurse.[12]

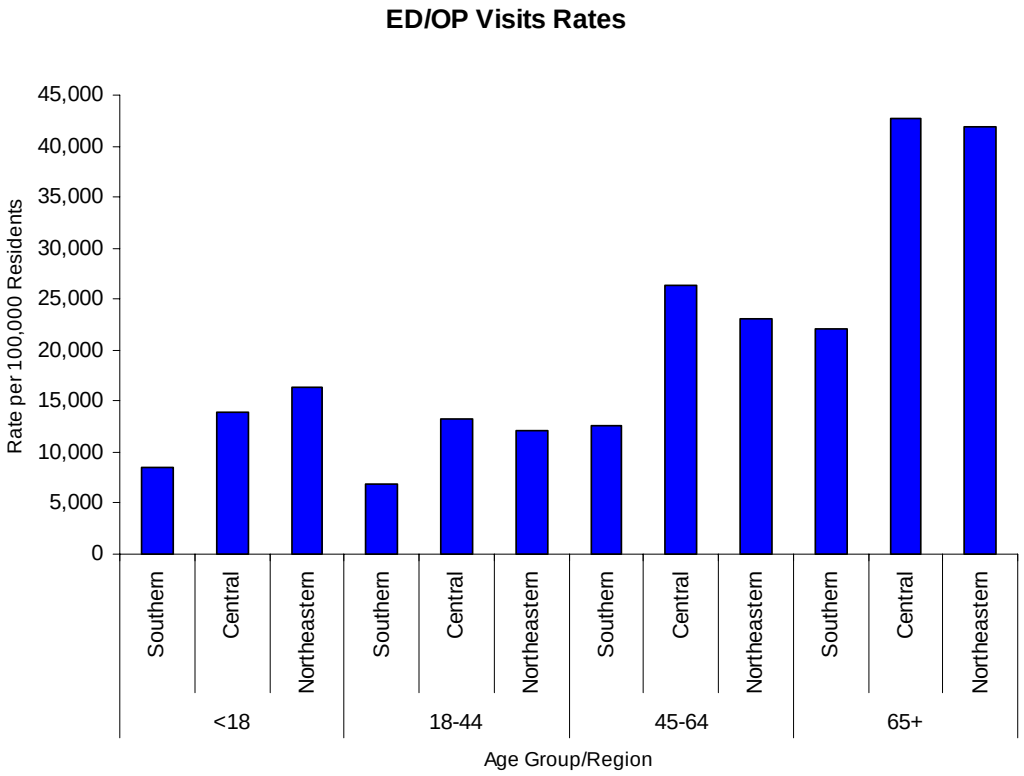
[12] State Health Access Data Assistance Center and Urban Institute. *Going Without: America's Uninsured Children.* Covering Kids and Families; The Robert Wood Johnson Foundation. August 2005.



Source: BRFSS data set, 2002-2003
Note: The percentage of residents facing physician access difficulties due to cost is significantly lower in southern Maine than in northeastern Maine

Many Mainers – about 10% of the state's total population – have difficulty affording physician visits when needed. This cost issue varies substantially across regions of the state, with those living in the northeastern region experiencing the greatest difficulty. The rate in the northeastern area is significantly higher than the rate in southern Maine.

A lack of access to physician care can contribute to higher rates of illness and mortality. This finding is consistent with data that indicate that the risk of living in poverty is greatest in the northeastern region of the state, as is the risk of being uninsured. It may also be an underlying reason for the higher rates of heart disease and hospitalization for heart attack in this area and for the lower rate of screening colonoscopy.

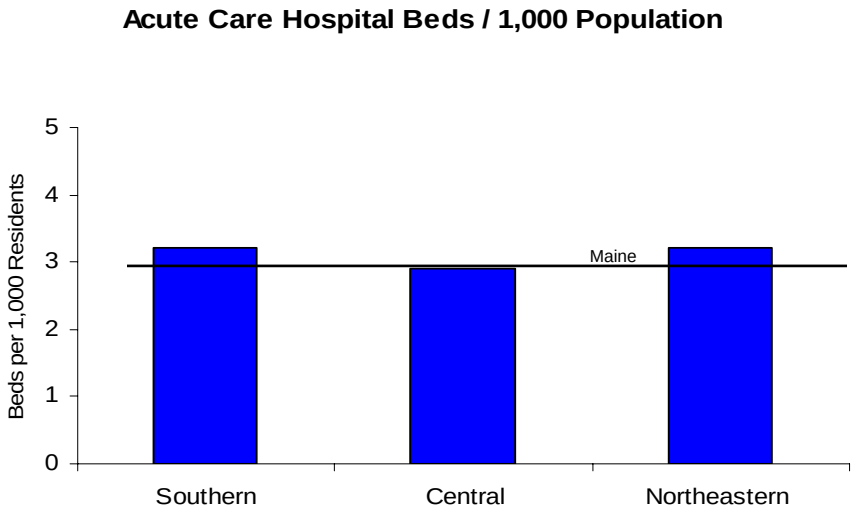


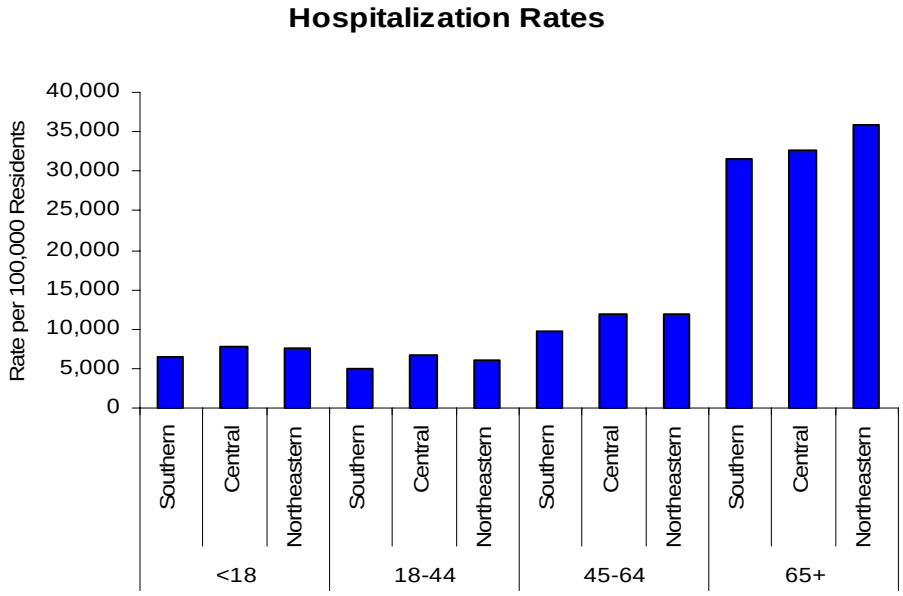
Source: Maine Health Data Organization, UHDDS, 2002

The use of emergency and outpatient departments varies greatly by region of the state. The central and northeastern regions have almost twice the utilization rate of these services as does southern Maine. These differences occur across all age groups. Visits to the emergency department for substance abuse (alcohol and drug-related psychoses) and asthma are highest in central Maine, followed by northeastern and southern Maine (data not shown).

Care provided by the emergency department can be very expensive, so it is important to seek care in the proper setting. Not all care delivered in hospital emergency departments (ED) is for emergency conditions. While it is appropriate to go to the emergency department for accidents or illnesses that you believe pose a significant danger to a person's well being, many people use emergency services for situations that can be treated just as well in a doctor's office. Sometimes, people have a difficult time knowing what is an emergency and what isn't. Other times, people lack access to a primary care doctor or they are unable to get an appointment quickly enough or at a convenient time.

The regional differences in ED and outpatient services use is consistent with the data shown on the previous page, which indicate a greater likelihood of having trouble accessing physician care in central and, especially, northeastern Maine.





Source: Maine Health Data Organization, UHDDS, 2002-2003

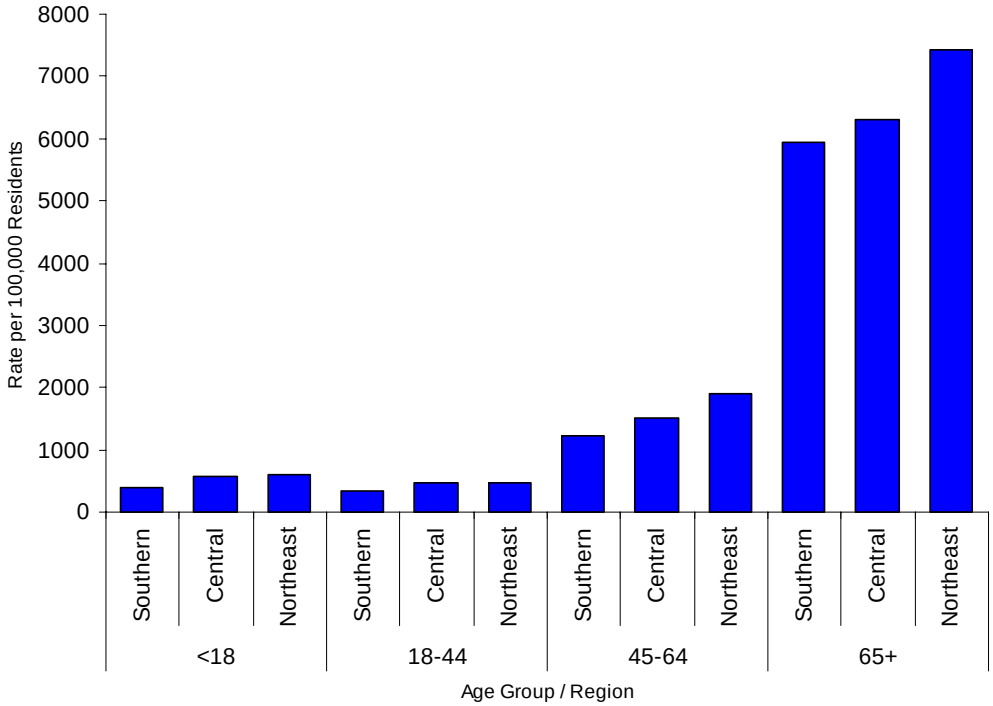
The number of licensed acute care hospital beds per resident is similar across all areas of the state.[13]

The rate of hospitalization for acute care conditions is somewhat higher in northeastern and central regions of the state, as compared to southern Maine. This is true for both the entire population and within age groups.

People without adequate access to physicians sometimes avoid obtaining needed care until their condition is acute and they are in need of hospital care. Not only is this costly, but it diminishes patients' chances of a good outcome (survival or complete recovery).

[13] Maine Health Information Center, 2002

Rate of Hospitalization for Ambulatory Care Sensitive Conditions



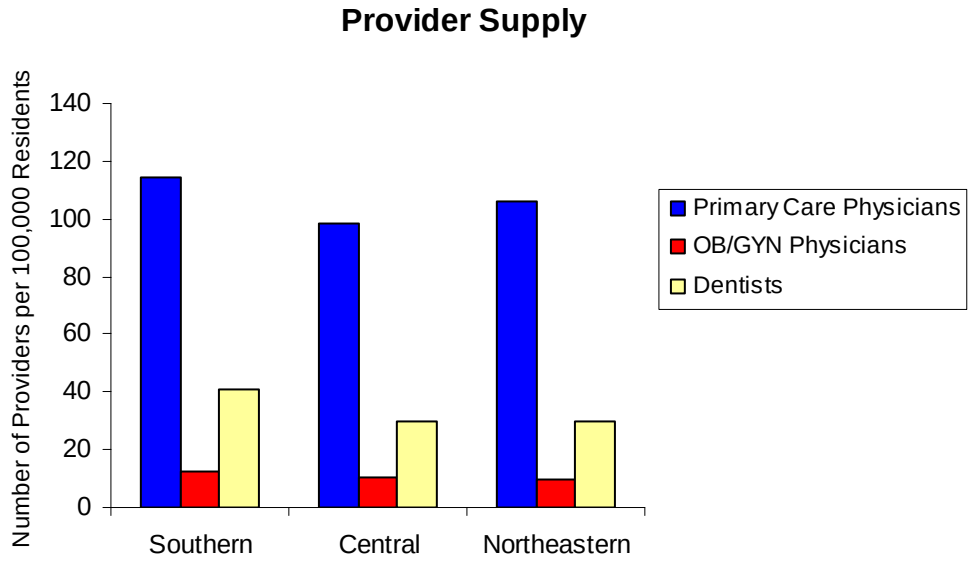
Source: Maine Health Data Organization, UHDDS, 2002-2003

The highest rates of admissions for ambulatory care sensitive conditions occurs among the elderly, with the highest rate in northeastern Maine, followed by the elderly in central and southern Maine. Rates for all other age groups are markedly lower.

Ambulatory care sensitive conditions (ACS) are defined as conditions where appropriate and timely outpatient or ambulatory care might prevent or reduce the need for a hospital admission. For example, a patient with a chronic condition like congestive heart failure, who receives the right outpatient care at the right time, might keep their condition managed well enough to avoid an acute episode that requires hospitalization. Similarly, a patient with diabetes, whose condition is well managed, might avoid complications of the disease that would otherwise require an admission to the hospital.

High rates of these types of admissions indicate either a lack of adequate access to ambulatory care in an area, or physician practice patterns that favor hospitalization. Sometimes, a patient might be admitted to the hospital because the physician is concerned that they be watched carefully and have no family or community support to keep watch over them in their homes. Sometimes, a patient may be hospitalized if he or she lives a great distance from care and the physician is worried about them receiving needed care in a timely manner.

Hospital care is costly. High rates of hospital care that might have been avoided serve to increase the cost of health insurance premiums as well as the cost of public programs supported by tax dollars.



Source: Maine Department of Health & Human Services, 2002

Maine's supply of primary care doctors (family practitioners, pediatricians, internists) including OB/GYN physicians and the supply of dentists varies by region.

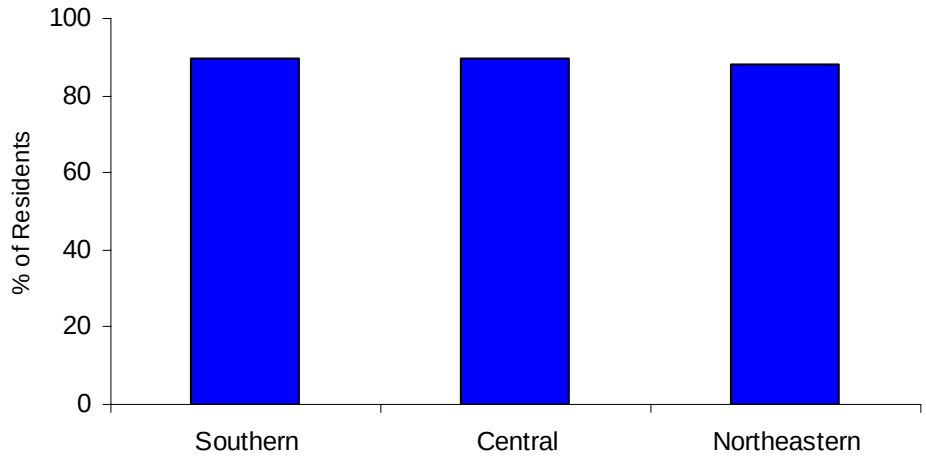
The highest number of full time equivalent primary care and OB/GYN physicians per 100,000 residents can be found in the southern region of Maine.

The number of dentists per 100,000 residents is significantly higher in southern Maine than in either of the other two areas. There is also a higher rate of use of dental services in this region and better oral hygiene (data not shown).

The number of registered nurses and licensed practical nurses is lower in central Maine (162 per 100 hospital beds) than in southern and northeastern Maine (170/100 hospital beds and 177/100 hospital beds, respectively) (data not shown).

The higher distribution of physicians in southern Maine is inconsistent with the relatively greater burden of disease in central and northeastern regions.

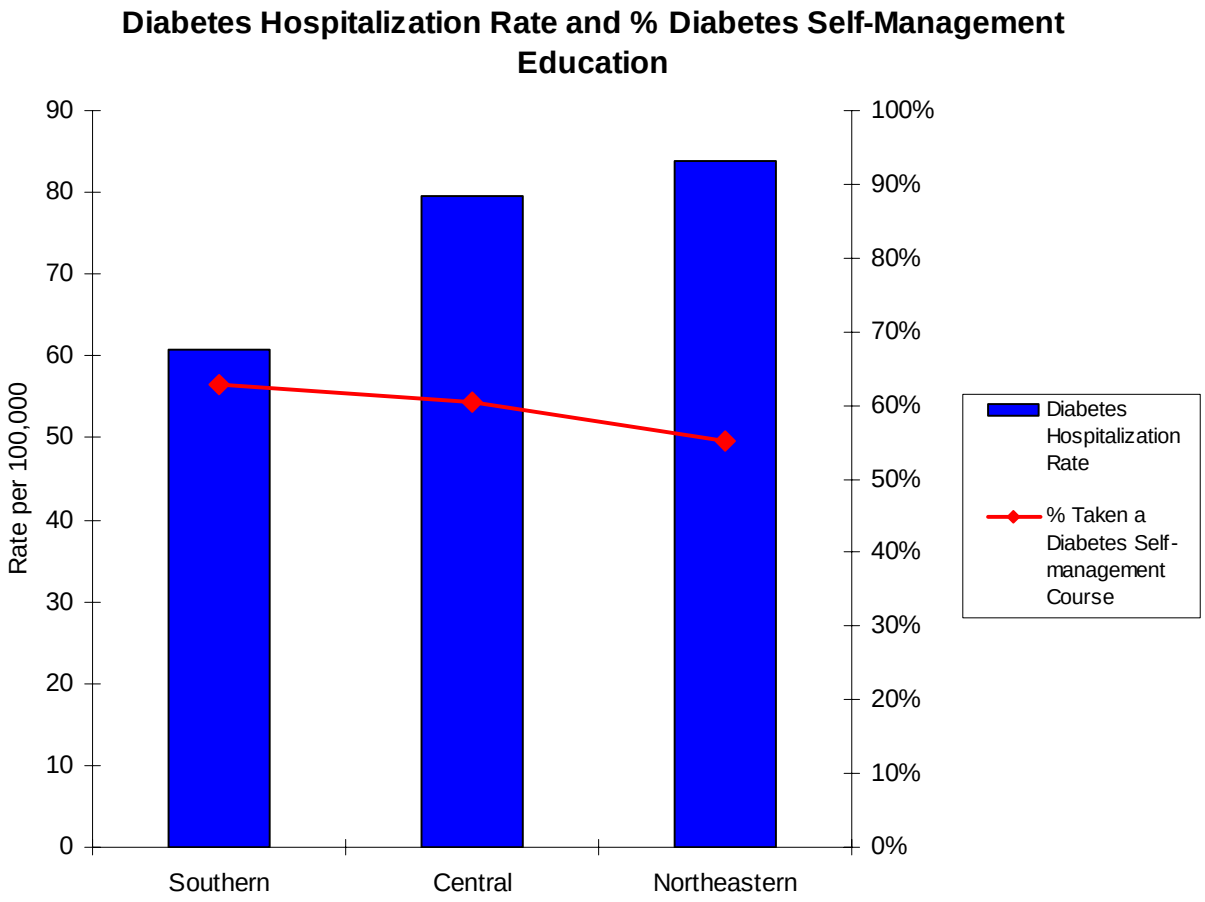
Percentage of Population with Usual Source of Care (Physician or Clinic)



Source: BRFSS data set, 2002-2003

The percentage of people reporting having a regular source of care is almost identical across the three analysis regions. Almost 90% of people living in southern and central Maine and more than 88% of people living in northeastern Maine report having a usual source of care.

It is important for people to establish a relationship with a primary care provider. Having a usual source of care gives a person a place to go for routine, preventive care as well as sick care. It ensures that a medical professional gets to know that person well, enabling him/her to provide care tailored to the patient's particular circumstances, which can lead to better outcomes.

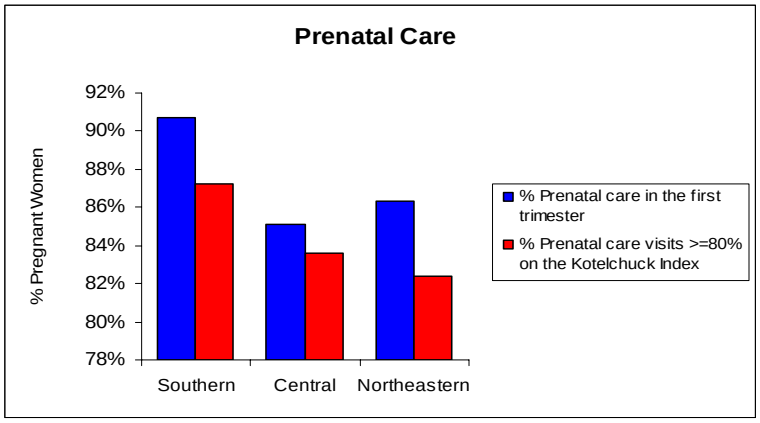


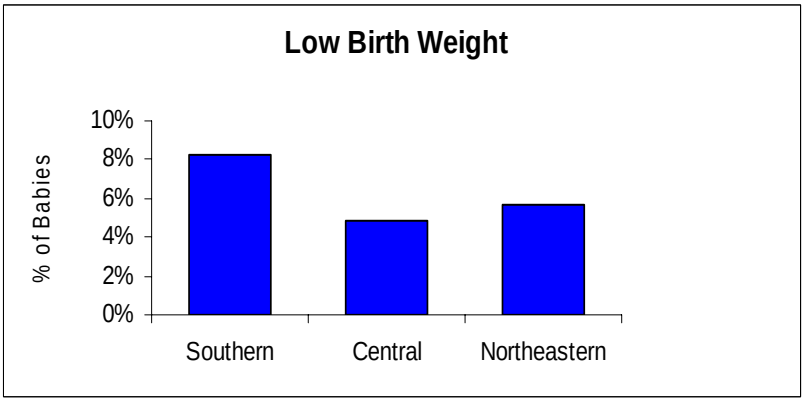
Source: Hospital utilization data from Maine Health Data Organization, UHDDS, 2002-2003; diabetes education data from BRFSS data set, 2002-2003
Note: The rate of hospitalization for diabetes is significantly lower in southern Maine than in either of the other two regions

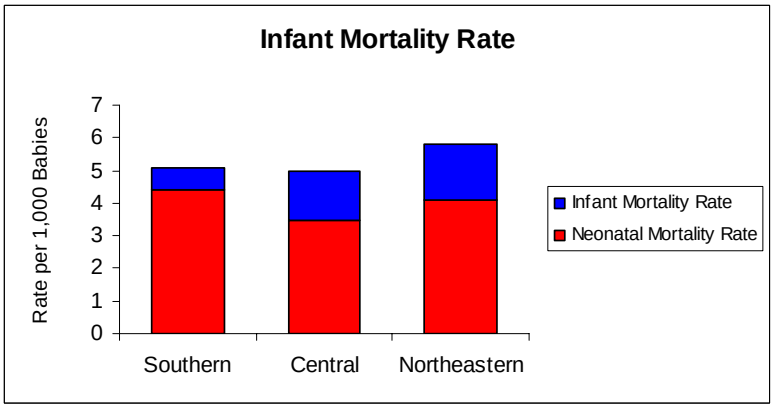
In areas where a greater proportion of these patients have received self-management education, the number of hospitalizations for diabetes is lowest; the rate of hospitalization for diabetes is significantly lower in southern Maine than in central or northeastern Maine. Conversely, northeastern Maine, where the lowest proportion of patients with diabetes have taken a self-management course, has the highest number of admissions for diabetes.

Diabetes is a chronic illness that requires patients to be involved in their own care in order for the disease to be properly controlled and the patient to remain relatively healthy.

Type II diabetes is associated with overweight and obesity, which is highest in central Maine. Lack of access to physician care and insurance coverage presents the greatest challenge to those in northeastern Maine. These factors may contribute to the higher rates of hospitalization for diabetes, as well as the lower rates of diabetes education, in those regions.





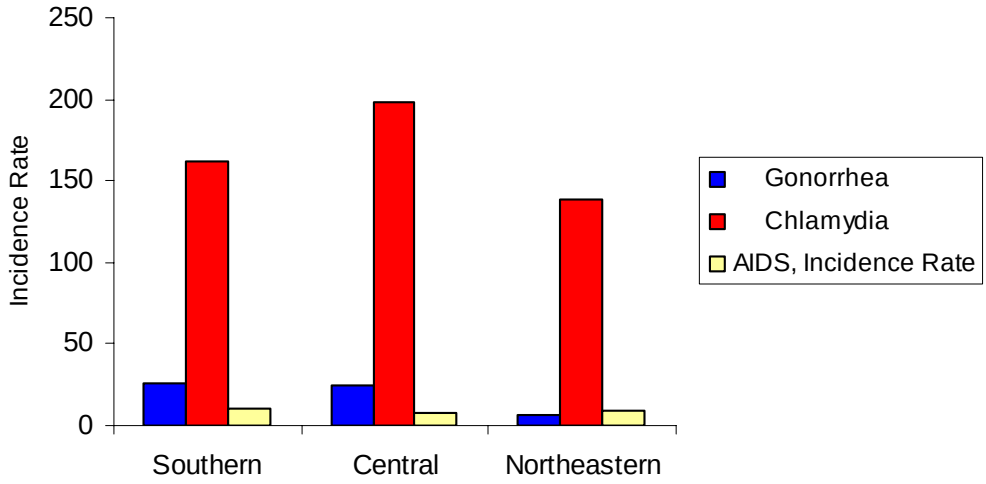


Source for all charts: Maine Department of Health & Human Services, 2002

Indicators of Maine's reproductive health are quite good and are similar across regions. A high proportion of women are receiving good care early in their pregnancy. A low proportion of babies are born weighing less than 2500 grams, although there is a higher rate of low birth weight in southern Maine. These data have not been adjusted for the incidence of multiple births, which are not uncommon in women receiving aggressive fertility treatment.

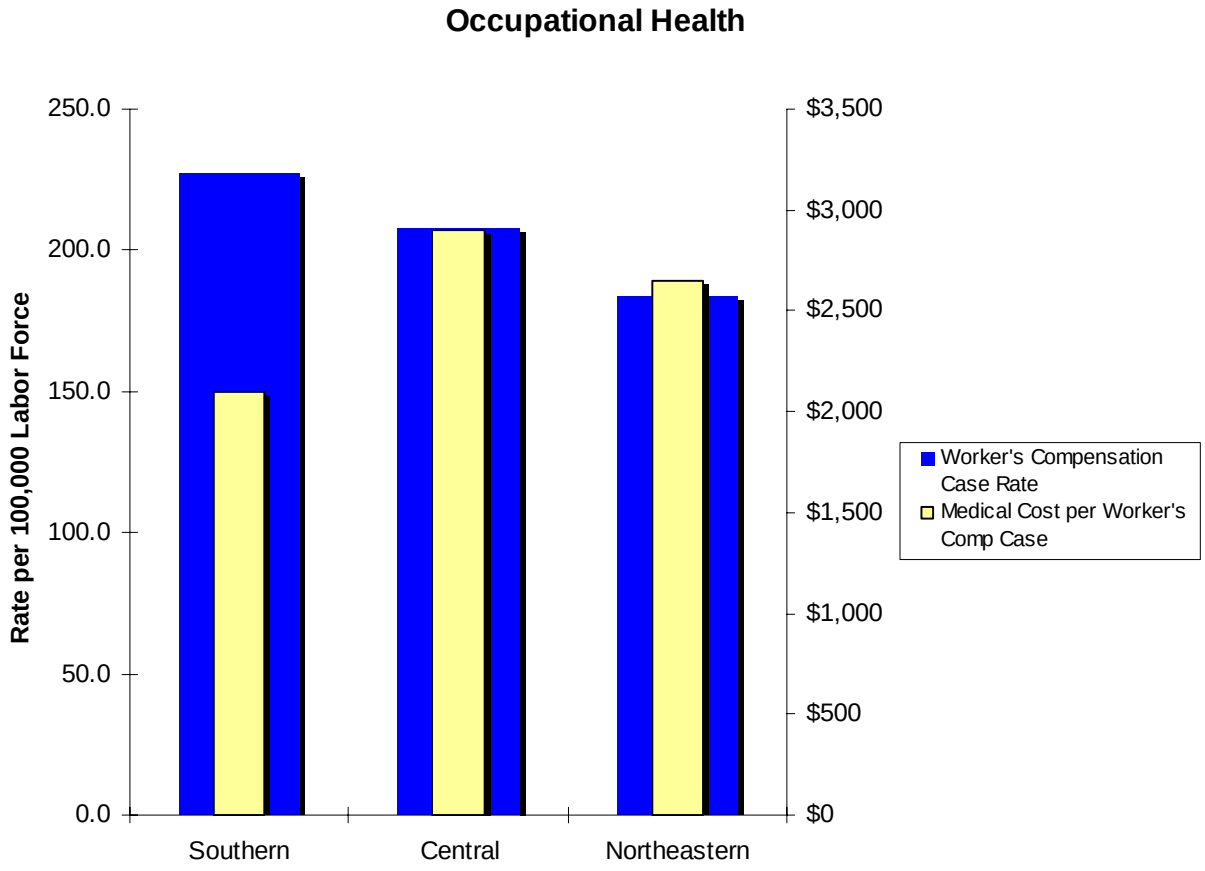
Maine has one of the lowest infant mortality rates in the nation.

Incidence of Sexually Transmitted Disease



Source: Maine Department of Health & Human Services – HIV/AIDS data for 1999-2003; Gonorrhea and Chlamydia data for 2003

While the incidence of AIDS is similar across all three regions of the state, the rate of other STDs – sexually transmitted diseases – are lowest in the northeastern region.

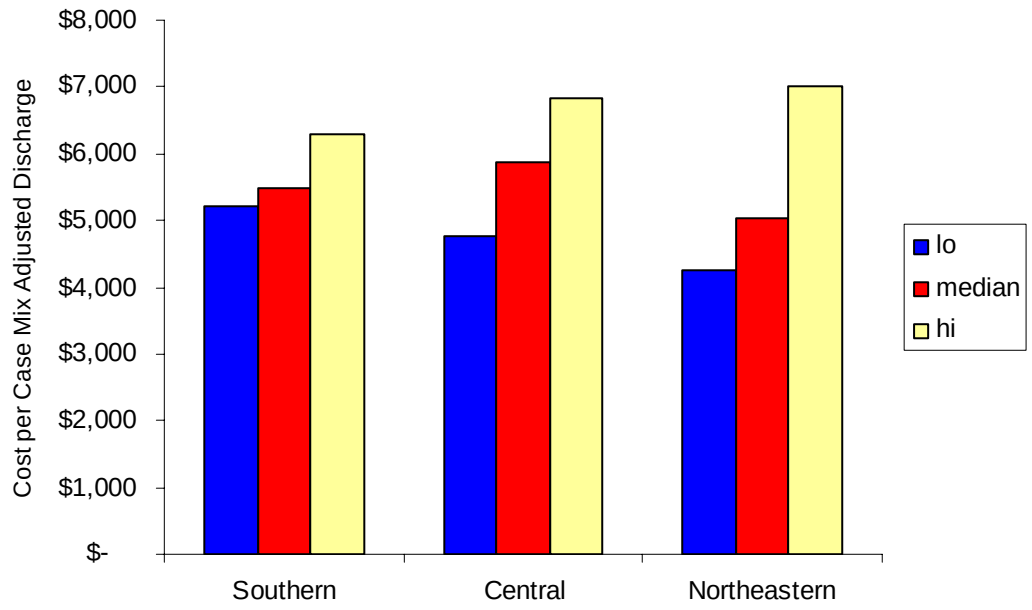


Source: Maine Department of Labor, 1997-1998.

Southern Maine has the highest rate of workers' compensation injury cases, followed by the central and northeastern regions. Central Maine, though, has the highest medical cost per workers' compensation case, followed by northeastern Maine and then southern Maine.

The cost of this type of care influences the premium costs businesses must pay when purchasing workers' compensation insurance.

Average Cost per Inpatient Discharge, 2002



Source:

There is a wide range of variation in the cost of a treating a patient who stays at least one night in the hospital. The range from the lowest to highest cost for an average discharge is widest in the northeastern region of Maine and narrowest in the southern region.

The data used here are adjusted for differences in the severity of illness of patients treated. By removing the influence of severity of illness, costs across hospitals can be compared more fairly.

The hospital with the lowest cost per average inpatient stay in 2002 was in northeastern Maine, as was the hospital with highest cost per average inpatient stay.

Here, cost means the costs incurred by the hospital in providing care. It does not refer to the prices charged to patients for the care they get or the payments made for that care.

Hospital care is the largest component of health care costs. Changes in the cost of hospital care exercise considerable influence on overall health care spending.

The information on the next page shows the cost per discharge at each hospital in the state in 2002. The data is presented in two tables: one shows hospitals grouped by region; the other shows hospitals grouped by peer groups. These peer groupings are designed to group hospitals that have similar characteristics together to allow fairer comparisons among hospitals. It might not be fair to compare a hospital in one peer group to a hospital in a different group.

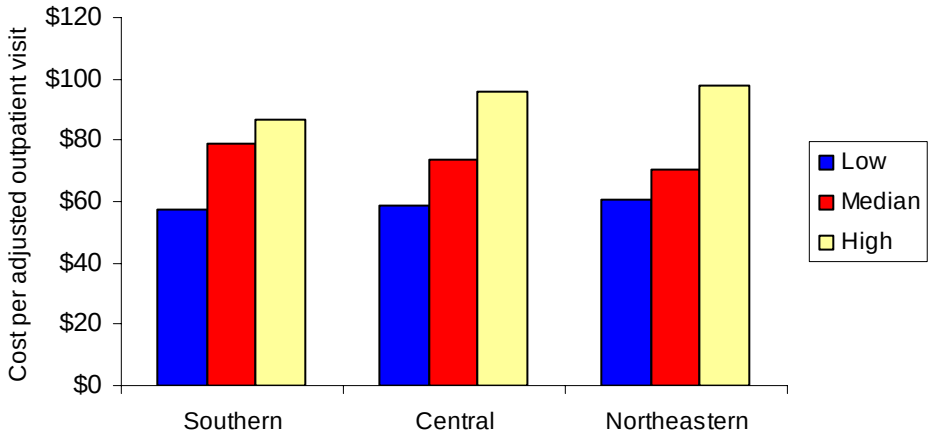
Cost Per Case Mix Adjusted Discharge, by Hospital, 2002[14]

Southern - Median $5,498	
Mercy Hospital	$ 5,205
Goodall Hospital	$ 5,341
Mid Coast Hospital	$ 5,379
Southern Maine Medical Center	$ 5,396
Parkview Adventist Medical Center	$ 5,498
York Hospital	$ 5,771
Maine Medical Center	$ 5,936
St. Andrews Hospital	$ 6,088
Miles Memorial Hospital	$ 6,294
Central - Median $5,873	
Bridgton Hospital	$ 4,763
Stephens Memorial Hospital	$ 4,873
Inland Hospital	$ 5,183
Franklin Memorial Hospital	$ 5,537
MaineGeneral Medical Center	$ 6,209
Rumford Hospital	$ 6,389
St Mary's Regional Medical Center	$ 6,395
Central Maine Medical Center	$ 6,836
Northeastern - Median $5,044	
Penobscot Valley Hospital	$ 4,243
CA Dean Memorial Hospital	$ 4,426
Mount Desert Island Hospital	$ 4,556
Houlton Regional Hospital	$ 4,665
Maine Coast Memorial Hospital	$ 4,767
Mayo Regional Hospital	$ 4,830
Sebasticook Valley Hospital	$ 4,894
Cary Medical Center	$ 4,960
Penobscot Bay Medical Center	$ 5,030
Calais Regional Hospital	$ 5,044
St Joseph Hospital	$ 5,921
Down East Community Hospital	$ 6,038
Eastern Maine Medical Center	$ 6,043
Blue Hill Memorial Hospital	$ 6,069
Northern Maine Medical Center	$ 6,249
Waldo County General Hospital	$ 6,296
Redington-Fairview General Hospital	$ 6,365
Millinocket Regional Hospital	$ 6,461
The Aroostook Medical Center	$ 7,021
Maine - Statewide Median	$ 5,654

Peer Group A - Median $6,126	
Maine Medical Center	$ 5,936
Eastern Maine Medical Center	$ 6,043
MaineGeneral Medical Center	$ 6,209
Central Maine Medical Center	$ 6,836
Peer Group B - Median $5,584	
Penobscot Bay Medical Center	$ 5,030
Mercy Hospital	$ 5,205
Mid Coast Hospital	$ 5,379
Southern Maine Medical Center	$ 5,396
York Hospital	$ 5,771
St. Joseph Hospital	$ 5,921
St. Mary's Regional Medical Center	$ 6,395
The Aroostook Medical Center	$ 7,021
Peer Group C - Median $5,341	
Maine Coast Memorial Hospital	$ 4,767
Cary Medical Center	$ 4,960
Goodall Hospital	$ 5,341
Redington-Fairview General Hospital	$ 6,365
Franklin Memorial Hospital	$ 5,537
Peer Group D - Median $5,768	
Stephens Memorial Hospital	$ 4,873
Sebasticook Valley Hospital	$ 4,894
Inland Hospital	$ 5,183
Parkview Adventist Medical Center	$ 5,498
Down East Community Hospital	$ 6,038
Northern Maine Medical Center	$ 6,249
Miles Memorial Hospital	$ 6,294
Waldo County General Hospital	$ 6,296
Peer Group E - Median 4,830	
Penobscot Valley Hospital	$ 4,243
CA Dean Memorial Hospital	$ 4,426
Mount Desert Island Hospital	$ 4,556
Houlton Regional Hospital	$ 4,665
Bridgton Hospital	$ 4,763
Mayo Regional Hospital	$ 4,830
Calais Regional Hospital	$ 5,044
Blue Hill Memorial Hospital	$ 6,069
St. Andrews Hospital	$ 6,088
Rumford Hospital	$ 6,389
Millinocket Regional Hospital	$ 6,461

[14] Source: Analysis of data from Maine Health Data Organization performed by HealthShare Technology

Cost Per Relative Weight Adjusted Outpatient Visit, 2002



Source: Cleverley & Associates. Medicare data for 2002.[15]

There is variation across regions in the cost of outpatient care as well, although it is not as marked as it is for inpatient services.

About half of all hospital services are delivered as outpatient care. In recent years, there has been a trend to treat more patients on an outpatient basis and fewer on an inpatient basis.

[15] These data are from an analysis by Cleverley & Associates of the Medicare cost reports for each Maine hospital (excluding AMHI, BMHI, Acadia, Spring Harbor, and New England Rehabilitation Hospitals, and the eight hospitals that were Critical Access Hospitals in 2002) and are adjusted for differences in patient severity using the Ambulatory Patient Classification system.

The Difference Between Costs, Charges and Prices

The cost of producing hospital care varies widely across hospitals. The variation can be seen within regions, so it is unlikely that differences in labor costs, fuel, and so on, between geographic areas are impacting the cost of care. There is also variation across hospitals within peer groups.

The information on the following pages show the average *prices paid* by private insurance companies (not Medicare or Medicaid) *per inpatient day* and *per outpatient visit* at different hospitals. The charts also show the percentage of the inpatient days and outpatient visits at each hospital used by Medicare and Medicaid patients.

There is also a chart showing the average *charge* per *inpatient discharge* (adjusted for differences in patient severity). This is not comparable to the *price* paid per inpatient day for two reasons. First, when a person checks into the hospital, it might be several days (or longer) until they are discharged, not just one day. Second, *charges* are usually higher than what private insurance companies actually *pay* for services, largely because insurance companies are able to negotiate discounts off of charges. The uninsured – who do not have insurance companies to negotiate on their behalf for lower prices – are the only ones expected to pay the full charge.

A range of factors influence what hospitals charge and what we pay. Cost is one of the most important factors, because the more it costs the provider to provide the care, the more the provider needs to charge patients and insurance companies to cover those costs. To the extent that providers can become more efficient at providing care by moderating their costs, what we pay for that care – and therefore for our premiums – would moderate too. Another factor is that all health care providers care for patients who cannot or will not pay for the services they receive. Providers need to raise their charges to recover the money they lose on patients who do not pay for care.

Also, some publicly-funded insurers – like Medicare and Medicaid (which in this state is called "MaineCare") – pay differently than private insurance companies. Sometimes their rates are the same or better than what private insurers pay for services; often they are lower. This type of gap can cause a health provider to raise its charges to private insurers, in an effort to recover the funds needed to operate.

The mix of patients a provider serves – that is, the proportion of patients covered by private insurers, by Medicare and Medicaid, uninsured patients and patients who don't pay for care – will determine how different charges and prices paid will be from the actual cost of providing the services they deliver. You may have heard this phenomenon referred to as "cost shifting." This information shows that, contrary to popular opinion, the proportion of Medicare and Medicaid patients a hospital has does not appear to be strongly related to higher prices paid by private payers. If it was, you would expect that hospitals with higher proportions Medicare and Medicaid patients would consistently be getting higher payment rates from private payers.

This book includes data on hospitals and not on other providers because comparative data on other providers' costs, payments, and charges is not available like it is for hospitals. However, hospital care is the largest component of health care costs, representing over one-third of healthcare spending. Changes in the cost of hospital care exercise considerable influence on overall health care spending.

Average *Price Paid* Per Inpatient Day by Private Payers, 2003[16]

			% Medicare/Medicaid
Peer Group A	MaineGeneral Medical Center	$2,198	76%
	Maine Medical Center	$2,408	59%
	Central Maine Medical Center	$2,722	68%
	Eastern Maine Medical Center	$2,796	67%
Peer Group B	Mercy Hospital	$1,481	69%
	Mid Coast Hospital	$1,932	61%
	York Hospital	$1,974	69%
	Penobscot Pay Medical Center	$1,984	77%
	St. Mary's Regional Medical Center	$2,086	74%
	Southern Maine Medical Center	$2,110	75%
	St. Joseph Hospital	$2,591	79%
	The Aroostook Medical Center	$2,932	77%
Peer Group C	Goodall Hospital	$1,928	80%
	Cary Medical Center	$2,416	81%
	Franklin Memorial Hospital	$2,885	73%
	Maine Coast Memorial Hospital	$2,971	72%
	Redington-Fairview General Hospital	$3,730	84%
Peer Group D	Waldo County General Hospital	$1,432	72%
	Northern Maine Medical Center	$1,791	82%
	Parkview Adventist Medical Center	$1,850	67%
	Sebasticook Valley Hospital	$1,944	83%
	Stephens Memorial Hospital	$2,382	80%
	Down East Community Hospital	$2,519	78%
	Inland Hospital	$2,550	75%
	Miles Memorial Hospital	$2,921	78%
Peer Group E	CA Dean Memorial Hospital	$914	81%
	St. Andrews Hospital	$1,849	82%
	Calais Regional Hospital	$1,886	80%
	Millinocket Regional Hospital	$1,910	80%
	Bridgton Hospital	$1,998	73%
	Penobscot Valley Hospital	$2,045	78%
	Houlton Regional Hospital	$2,140	79%
	Rumford Hospital	$2,192	81%
	Blue Hill Memorial Hospital	$2,273	69%
	Mount Desert Island Hospital	$2,705	71%
	Mayo Regional Hospital	$3,394	78%

[16] These data are from the Maine Health Data Organization (excludes AMHI, BMHI, Acadia, Spring Harbor and New England Rehabilitation Hospitals)

Average *Price Paid* Per Outpatient Visit by Private Payers, 2003[17]

			% Medicare/Medicaid
Peer Group A	Central Maine Medical Center	$321	48%
	MaineGeneral Medical Center	$397	50%
	Eastern Maine Medical Center	$641	49%
	Maine Medical Center	$721	36%
Peer Group B	St. Mary's Regional Medical Center	$338	52%
	Mid Coast Hospital	$371	36%
	Southern Maine Medical Center	$381	39%
	York Hospital	$387	36%
	Penobscot Bay Medical Center	$396	52%
	St. Joseph Hospital	$486	48%
	The Aroostook Medical Center	$503	55%
	Mercy Hospital	$514	43%
Peer Group C	Franklin Memorial Hospital	$283	52%
	Goodall Hospital	$366	49%
	Cary Medical Center	$448	57%
	Redington-Fairview Hospital	$472	60%
	Maine Coast Memorial Hospital	$533	57%
Peer Group D	Parkview Adventist Medical Center	$257	37%
	Stephens Memorial Hospital	$289	54%
	Sebasticook Valley Hospital	$325	58%
	Northern Maine Medical Center	$375	58%
	Inland Hospital	$378	49%
	Miles Memorial Hospital	$407	44%
	Waldo County General Hospital	$410	50%
	Down East Community Hospital	$588	56%
Peer Group E	CA Dean Memorial Hospital	$291	62%
	Penobscot Valley Hospital	$331	58%
	Blue Hill Memorial Hospital	$334	52%
	Bridgton Hospital	$336	50%
	St. Andrews Hospital	$354	49%
	Rumford Hospital	$358	55%
	Mount Desert Island Hospital	$362	44%
	Houlton Regional Hospital	$367	61%
	Mayo Regional Hospital	$407	44%
	Millinocket Regional Hospital	$432	52%
	Calais Regional Hospital	$450	58%

[17] These data are from the Maine Health Data Organization (excludes AMHI, BMHI, Acadia, Spring Harbor and New England Rehabilitation Hospitals)

Health Care Resources

The availability of health care resources varies depending upon where you live in Maine. Other charts in this book have shown the numbers of hospital beds in each of the three regions, as well as the number of primary care providers.

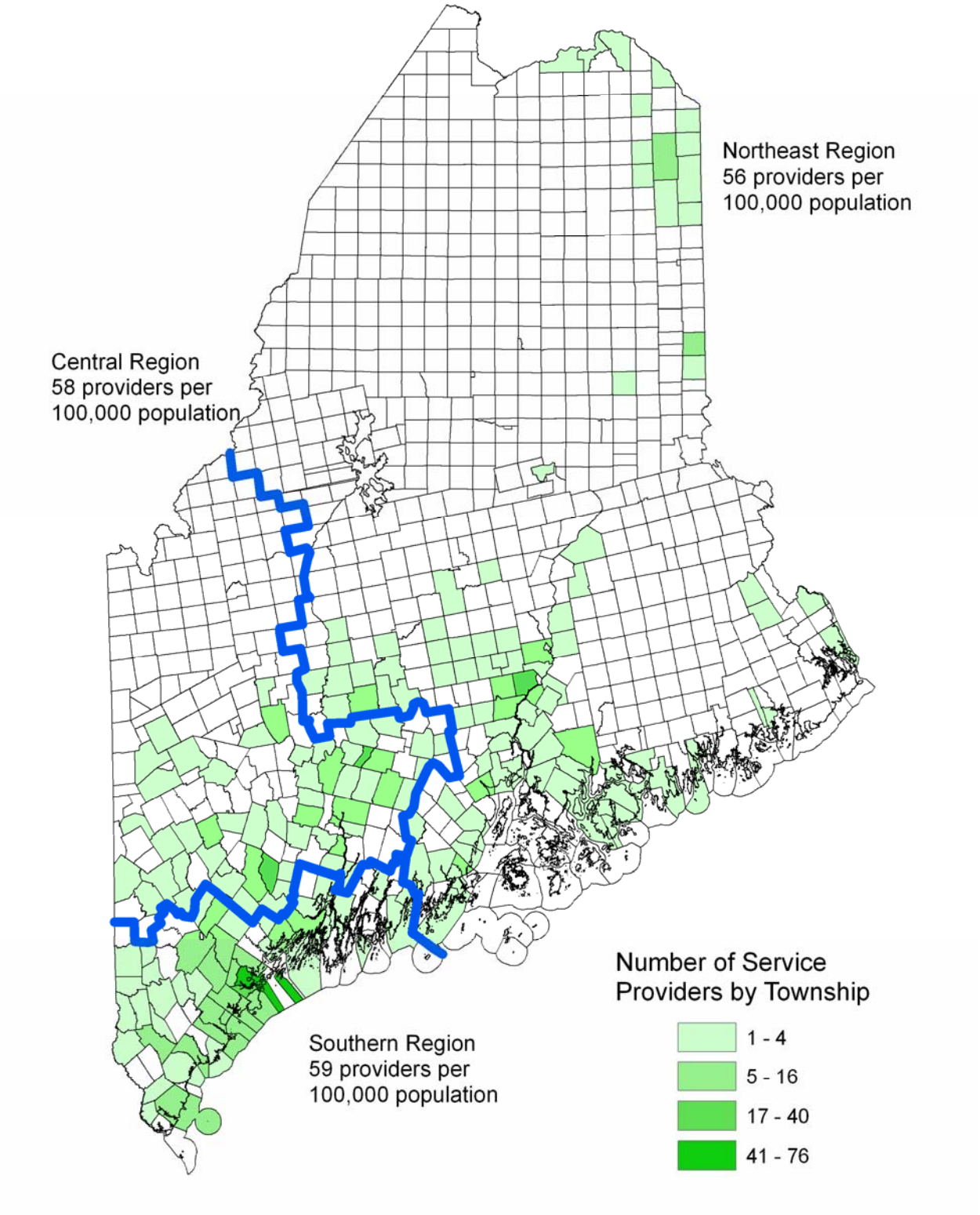
What follows is a series of maps designed to show the availability of a range of different types of health care providers and services in different areas of the state. In the case of licensed professionals, note that not all people holding licenses actually practice in their field. Similarly, there are people with out of state addresses who are licensed to practice their profession in Maine; those individuals are excluded from this inventory.

While only a subset of all health care resources, these will provide an impression of the distribution of some of the most important resources across our state.

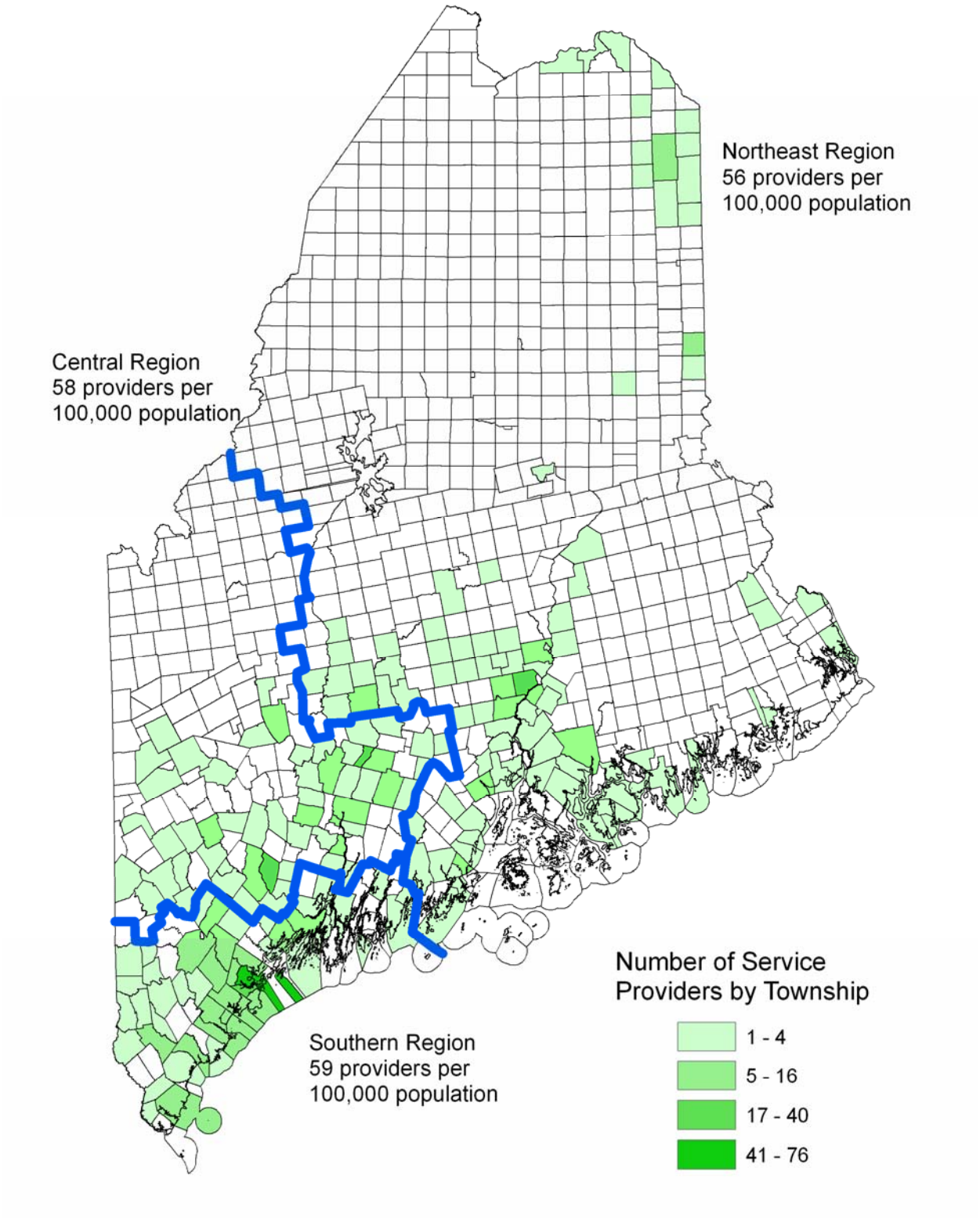
These maps show availability both on a township level and on the regional level.[18]

[18] The data used for these maps are from a variety of sources. Data related to certain types of services – like CT scanners or MRIs – are from the Department of Health & Human Services. Data on the number of different types of providers are from the Department of Professional & Financial Regulation and phone book listings. Licensing data count the number of individuals who hold current licenses, not the number of individuals who are actively practicing time, be that on a full or part time basis.

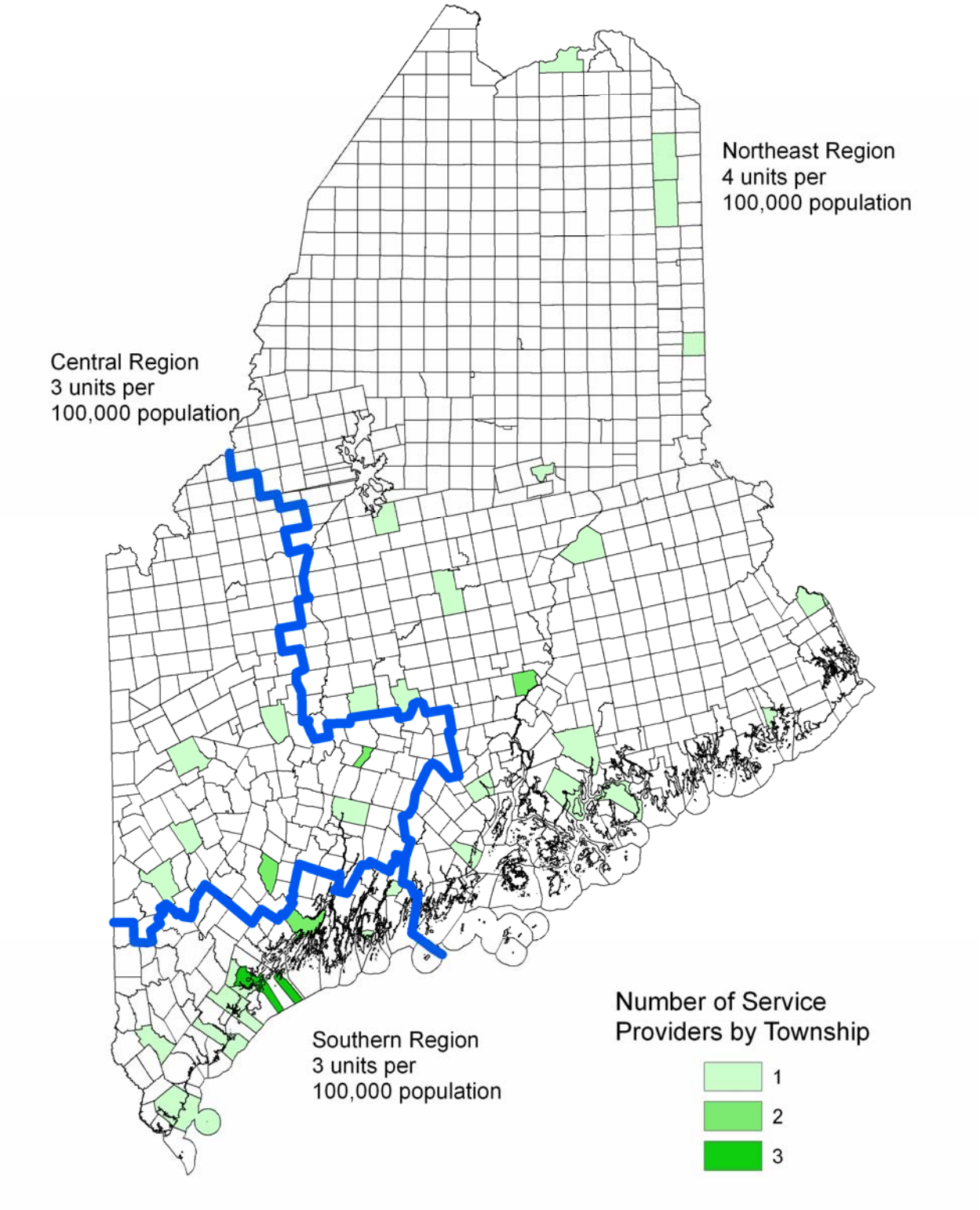
Distribution of Alcohol/Drug Abuse Counselors in Maine, 2004



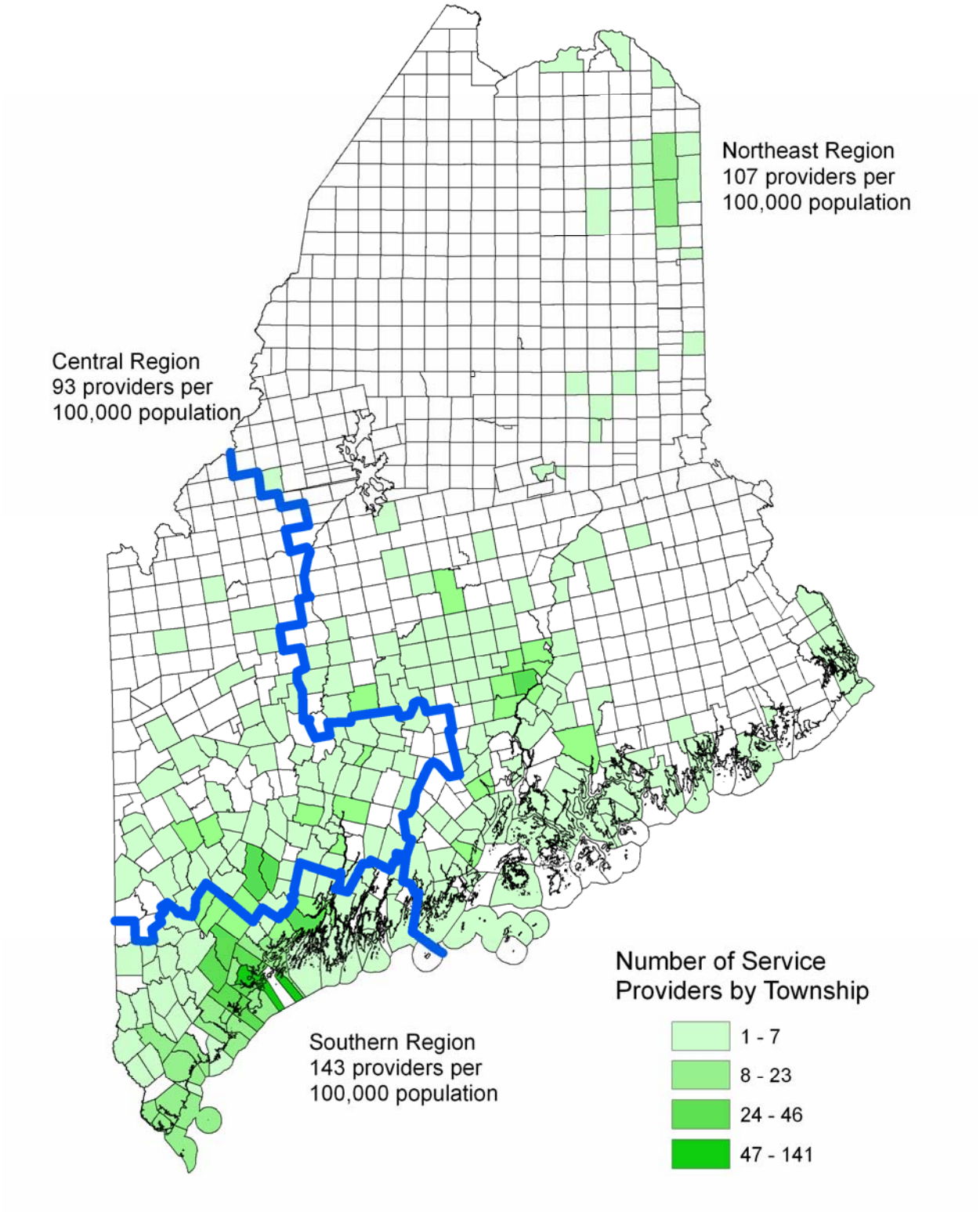
Distribution of Chiropractors in Maine, 2004



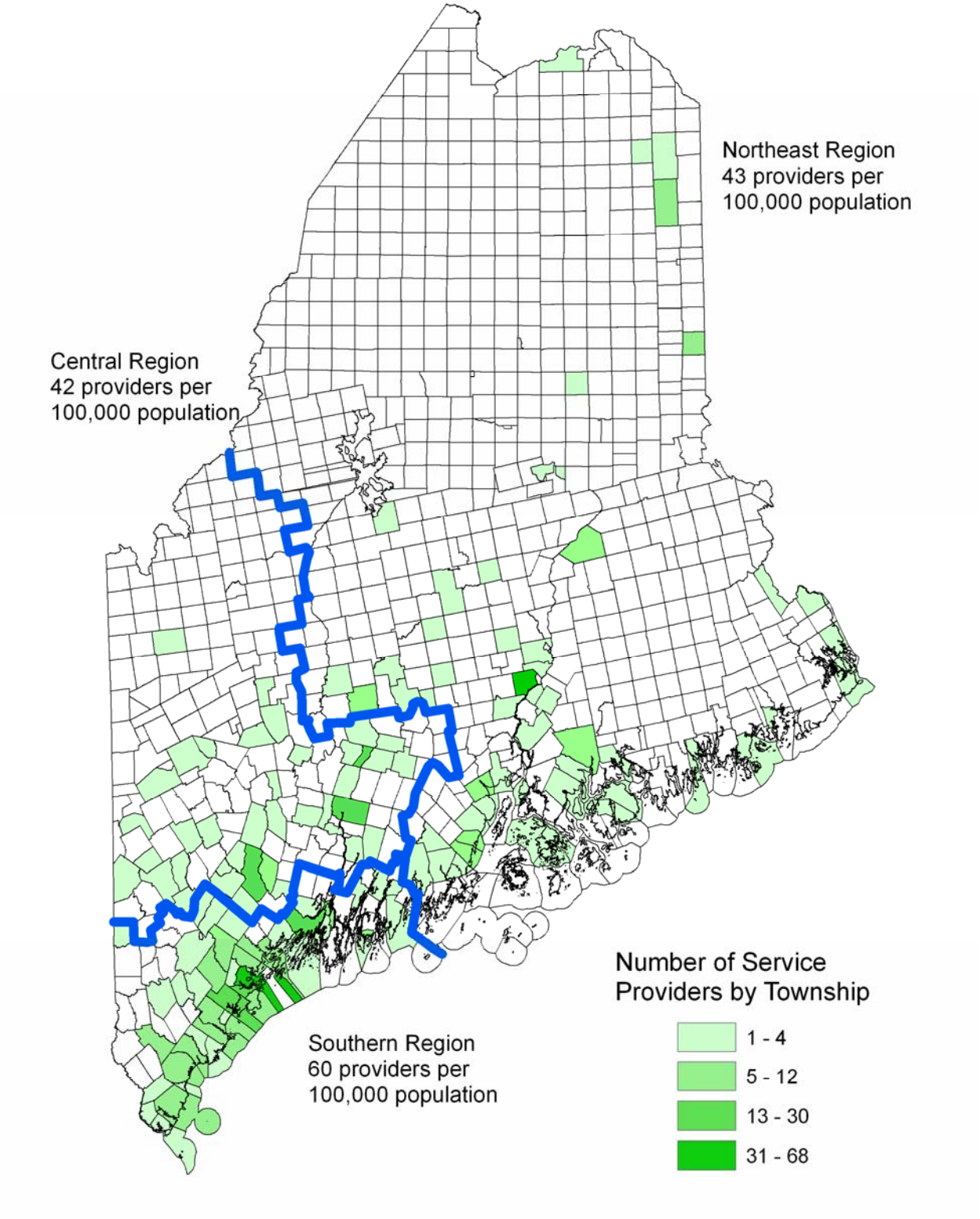
Distribution of CT Scanners in Maine



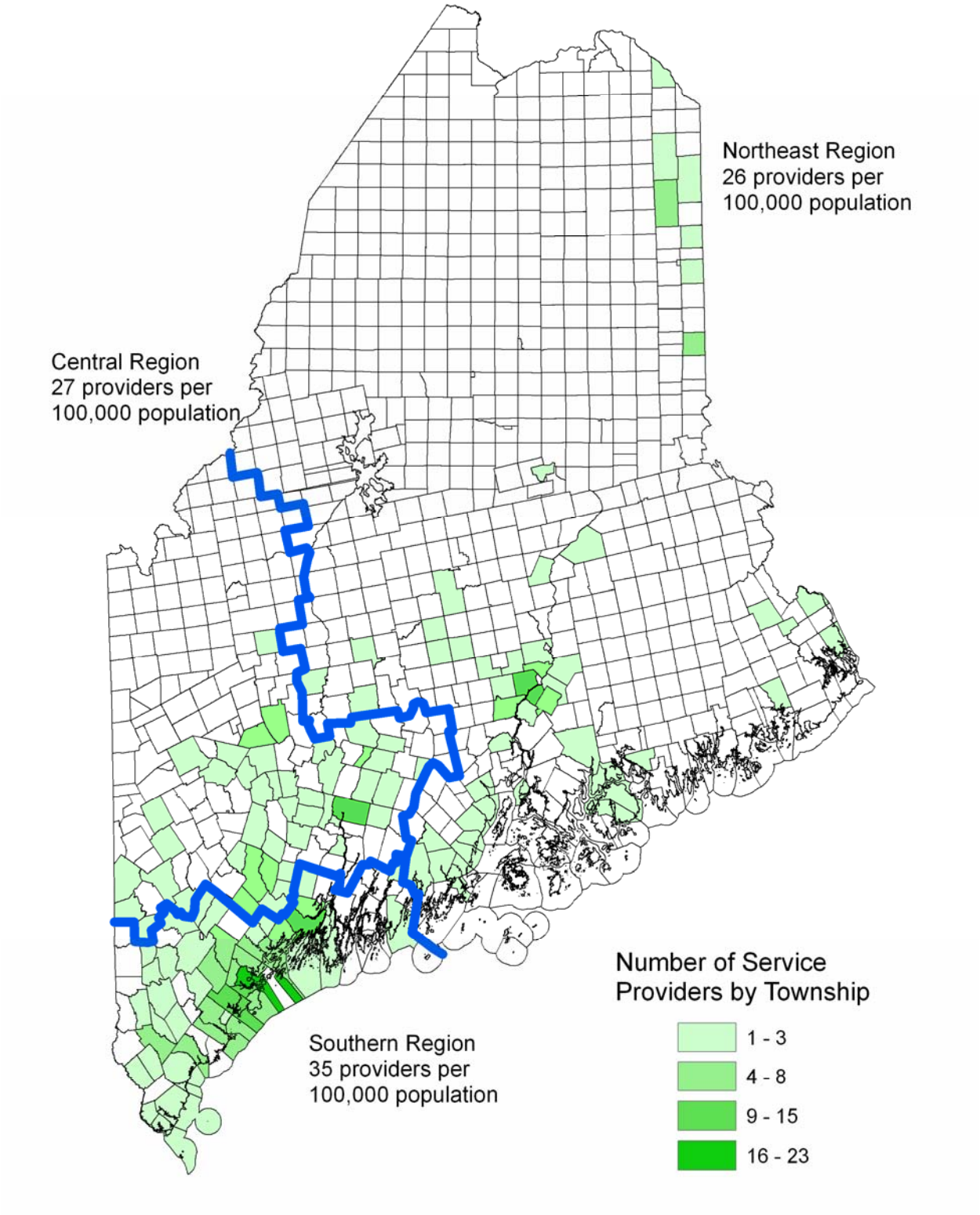
Distribution of Dental Hygienists in Maine, 2004



Distribution of Dentists in Maine, 2004

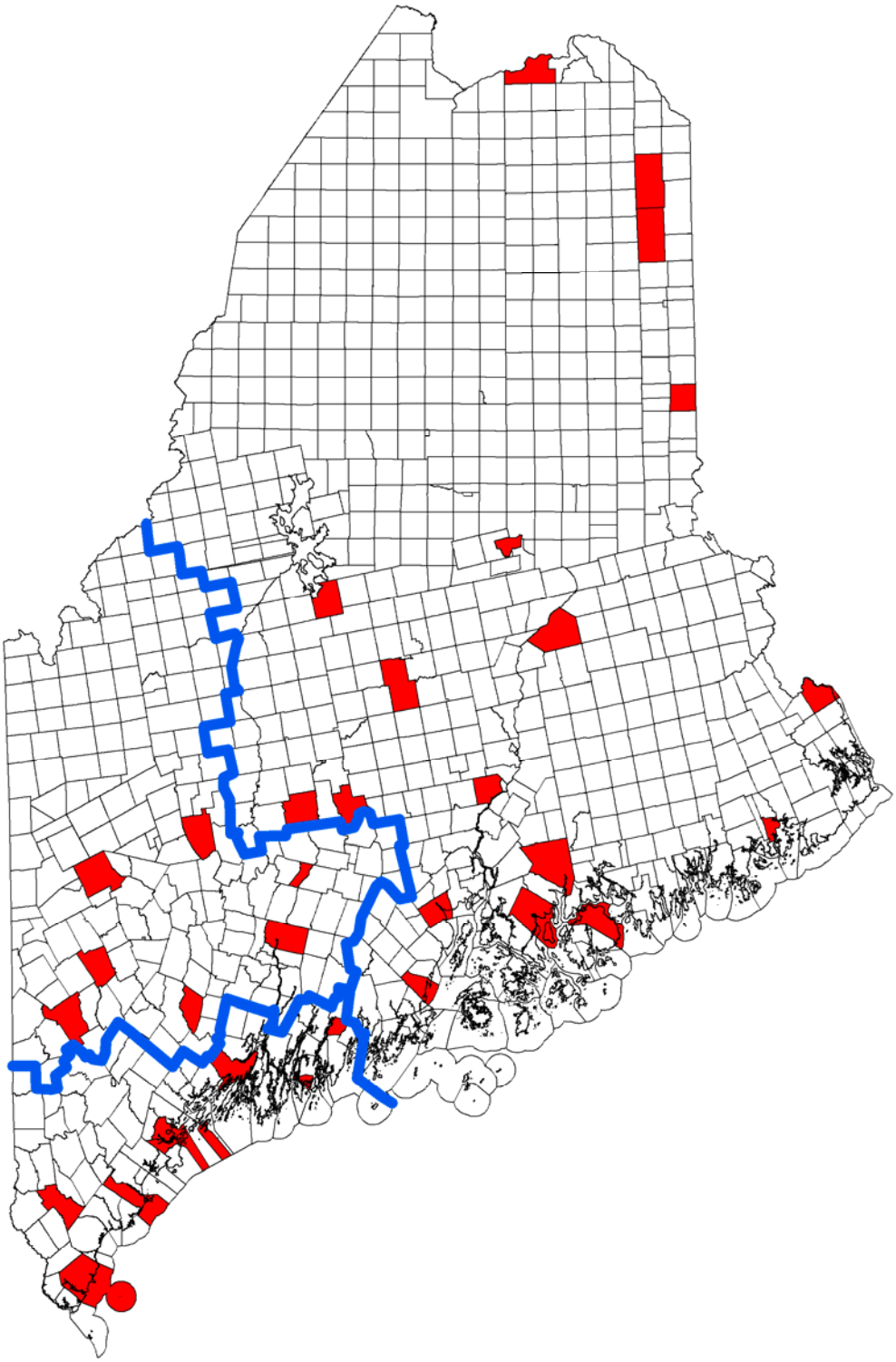


Distribution of Registered Dieticians in Maine, 2004



Location of Maine Hospitals

Note: the darkened areas on this map indicate towns where one or more hospitals are located

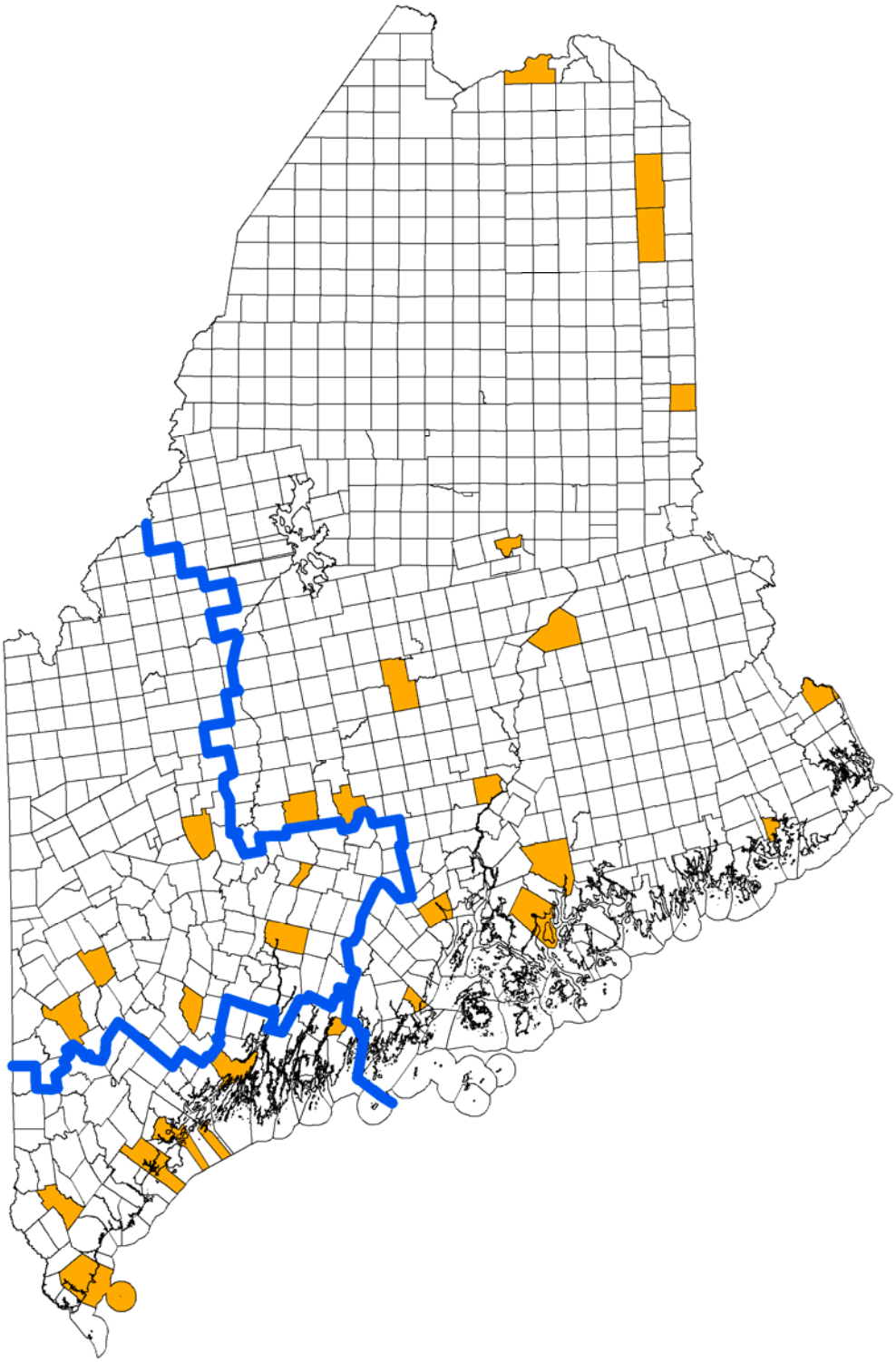


Maine Hospitals, By Town

Town	Hospital
Augusta	MaineGeneral Medical Center
	Veterans' Administration Hospital - Togus
Bangor	Eastern Maine Medical Center
	Spring Harbor Hospital (Mental Health)
	St. Joseph's Hospital
Bar Harbor	Mount Desert Island Hospital
Belfast	Waldo County General Hospital
Biddeford	Southern Maine Medical Center
Blue Hill	Blue Hill Memorial Hospital
Boothbay Harbor	St. Andrew's Hospital & Healthcare Center
Bridgton	Bridgton Hospital
Brunswick	Mid Coast Memorial Hospital
	Parkview Adventist Medical Center
Calais	Calais Regional Hospital
Caribou	Cary Medical Center
Damariscotta	Miles Memorial Hospital
Dover-Foxcroft	Mayo Regional Hospital
Ellsworth	Maine Coast Memorial Hospital
Farmington	Franklin Memorial Hospital
Fort Kent	Northern Maine Medical Center
Greenville	CA Dean Memorial Hospital
Houlton	Houlton Regional Hospital
Lewiston	Central Maine Medical Center
	St. Mary's Regional Medical Center
Lincoln	Penobscot Valley Hospital
Machias	Down East Community Hospital
Millinocket	Millinocket Regional Hospital
Norway	Stephens Memorial Hospital
Pittsfield	Sebasticook Valley Hospital
Portland	Maine Medical Center
	Mercy Hospital
	New England Rehabilitation Hospital (Rehab)
Presque Isle	The Aroostook Medical Center
Rockport	Penobscot Bay Medical Center
Rumford	Rumford Hospital
Sanford	Goodall Hospital
Skowhegan	Redington-Fairview Memorial Hospital
Waterville	Inland Hospital
	MaineGeneral Medical Center
Westbrook	Spring Harbor Hospital (Mental Health)
York	York Hospital

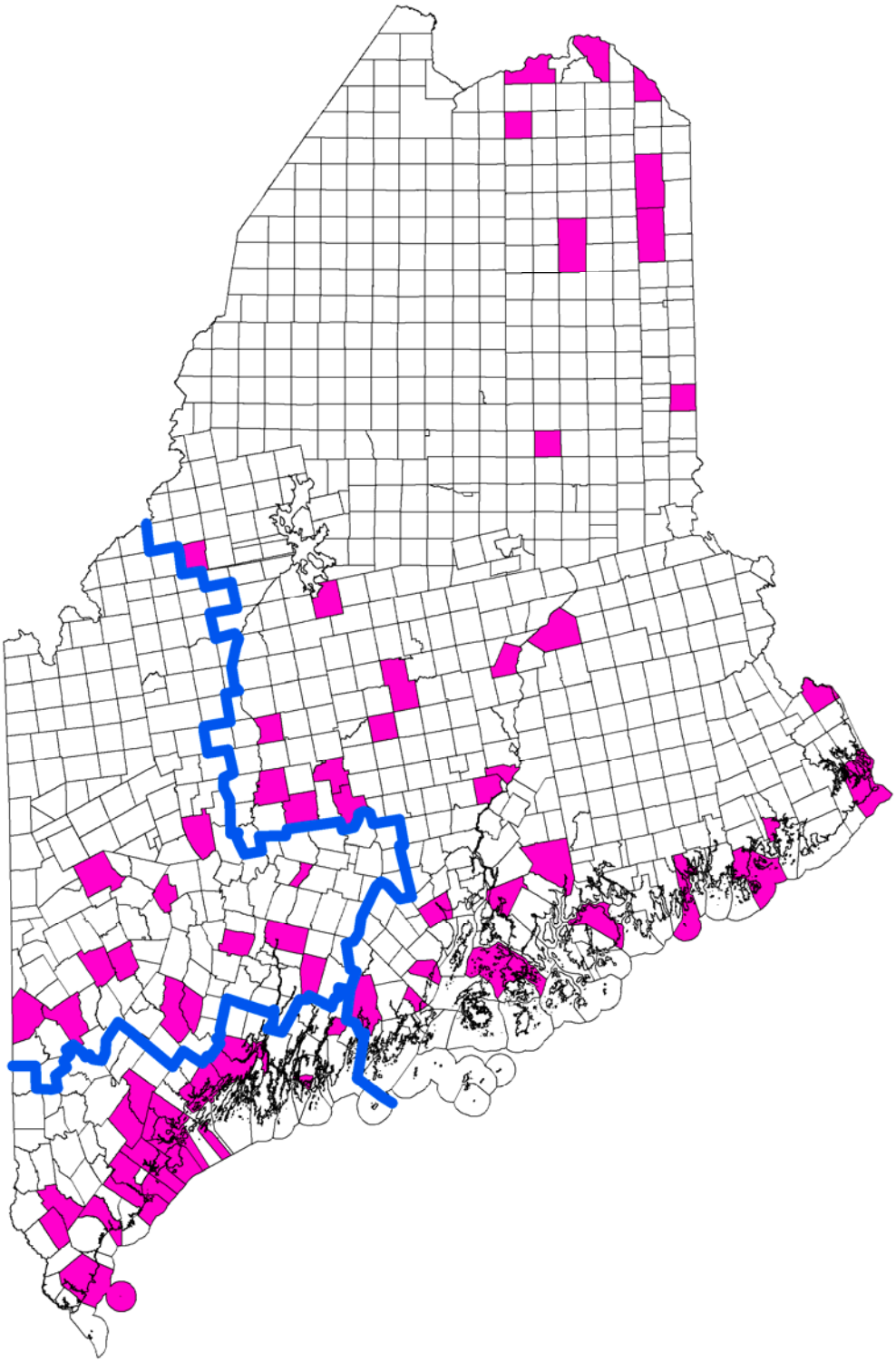
MRI Service Availability by Town

Note: This map indicates the towns where MRI services are available. It does not indicate the number of MRI machines in Maine.

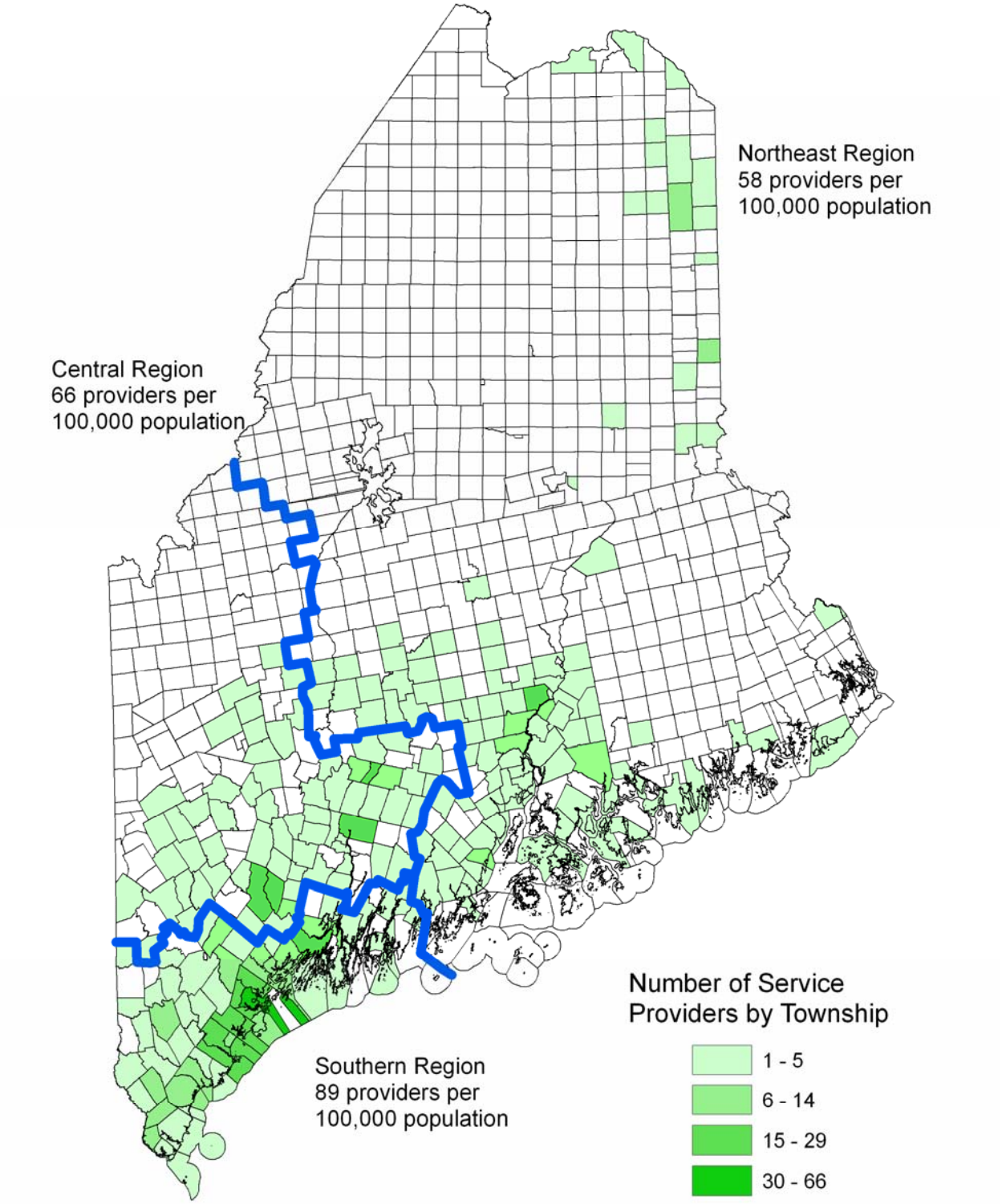


Nursing Facilities in Maine

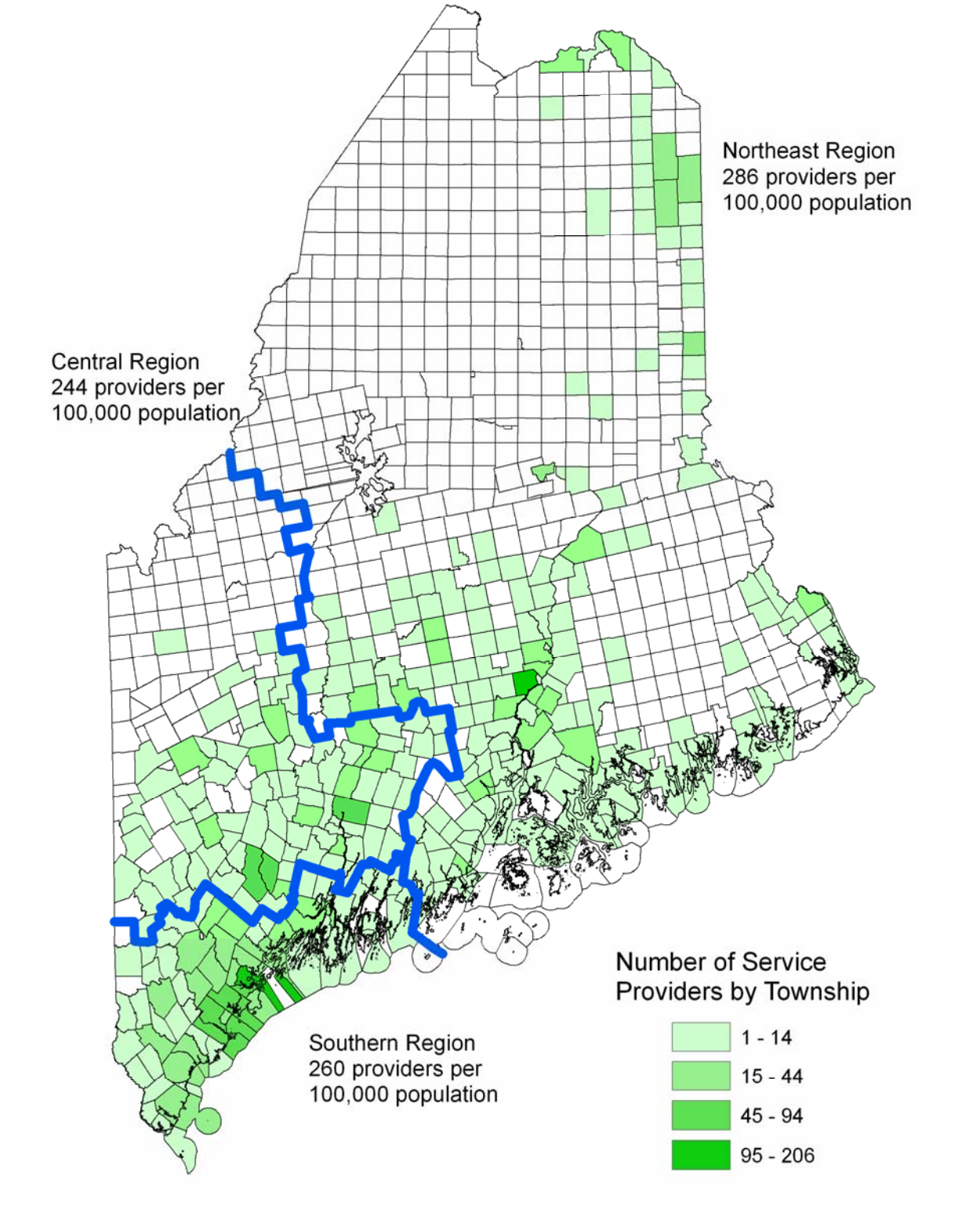
This map indicates where nursing facilities are located in the state; some nursing facilities are located within a hospital.



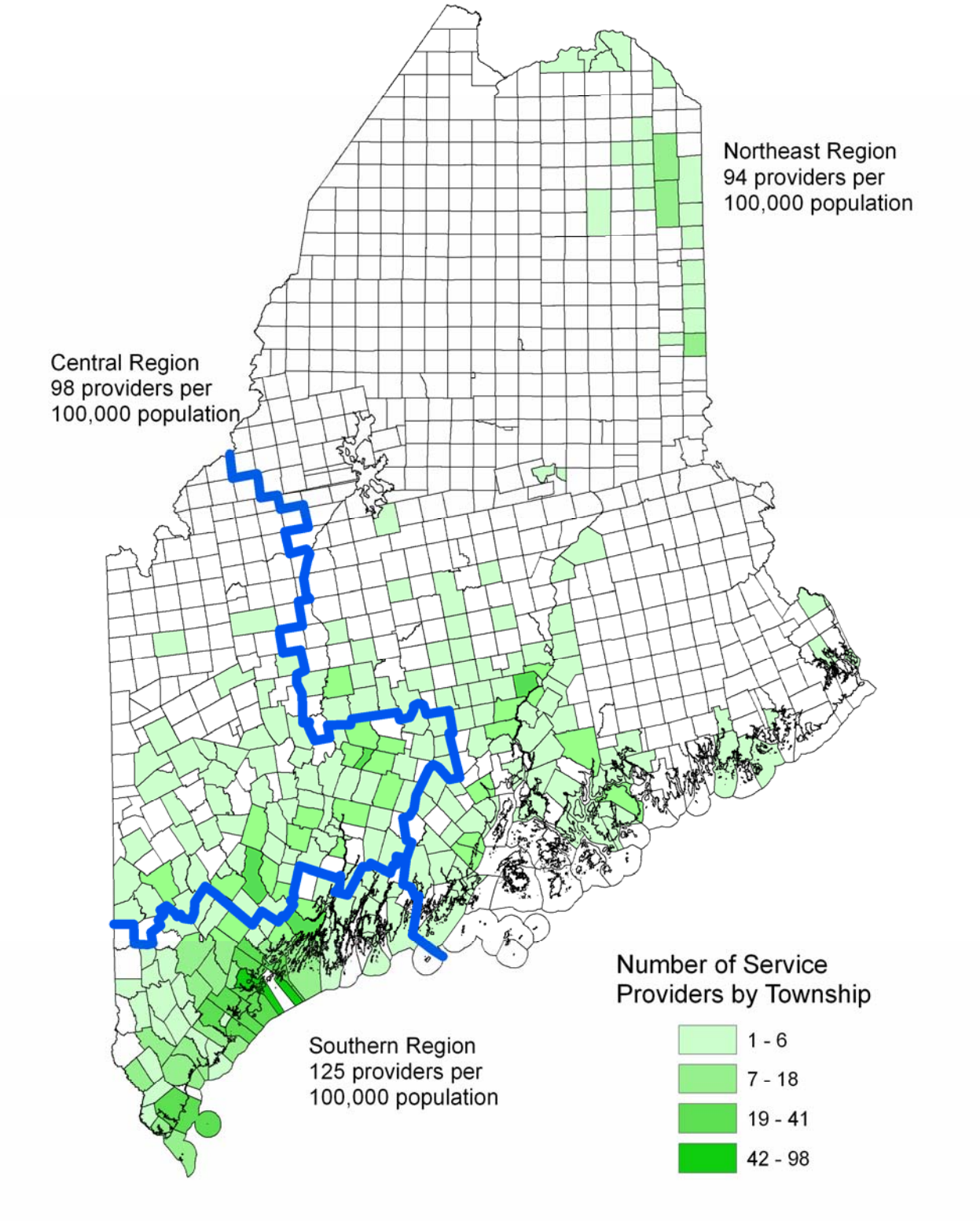
Distribution of Occupational Therapists in Maine, 2004



Distribution of Pharmacists in Maine, 2004

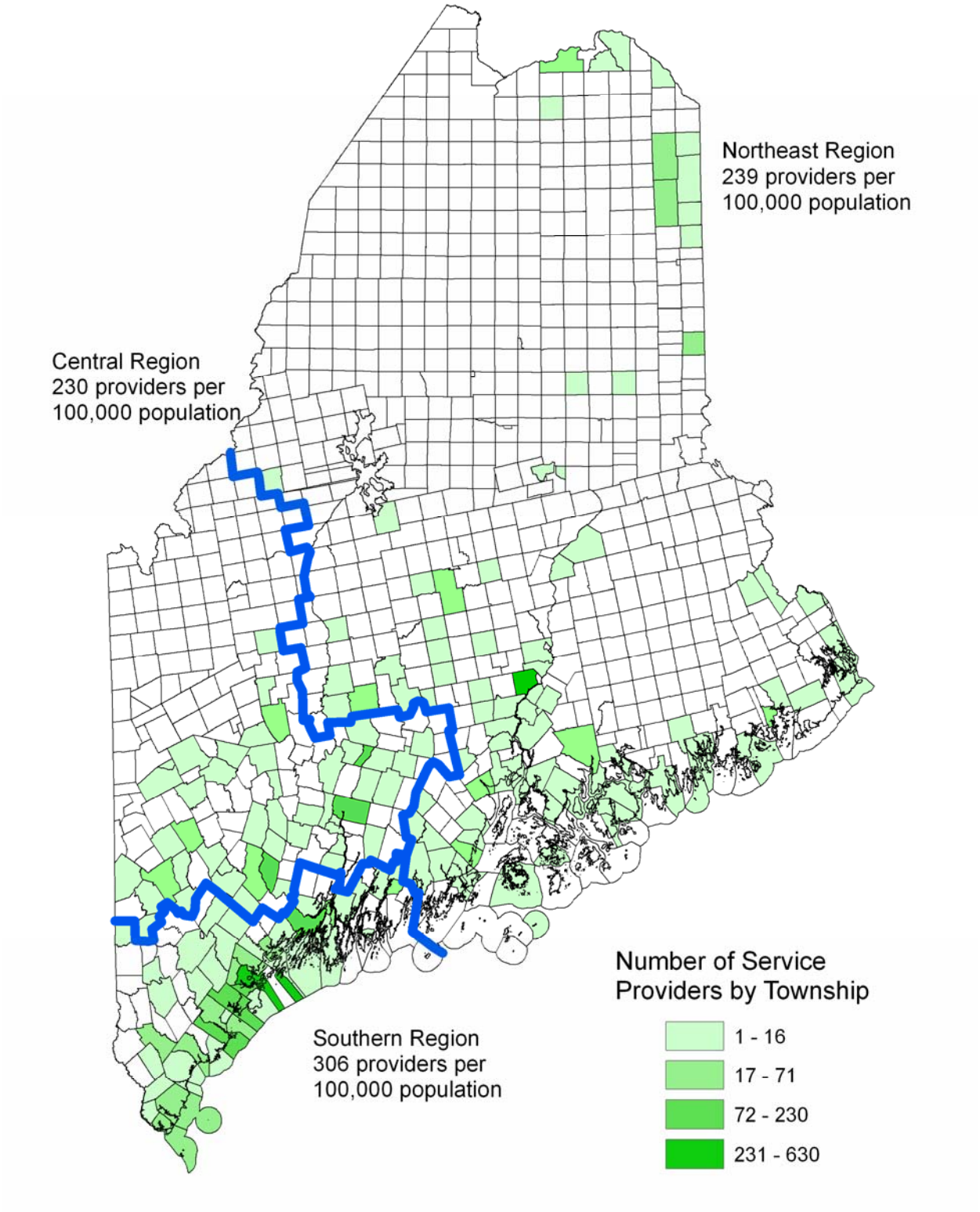


Distribution of Physical Therapists in Maine, 2004

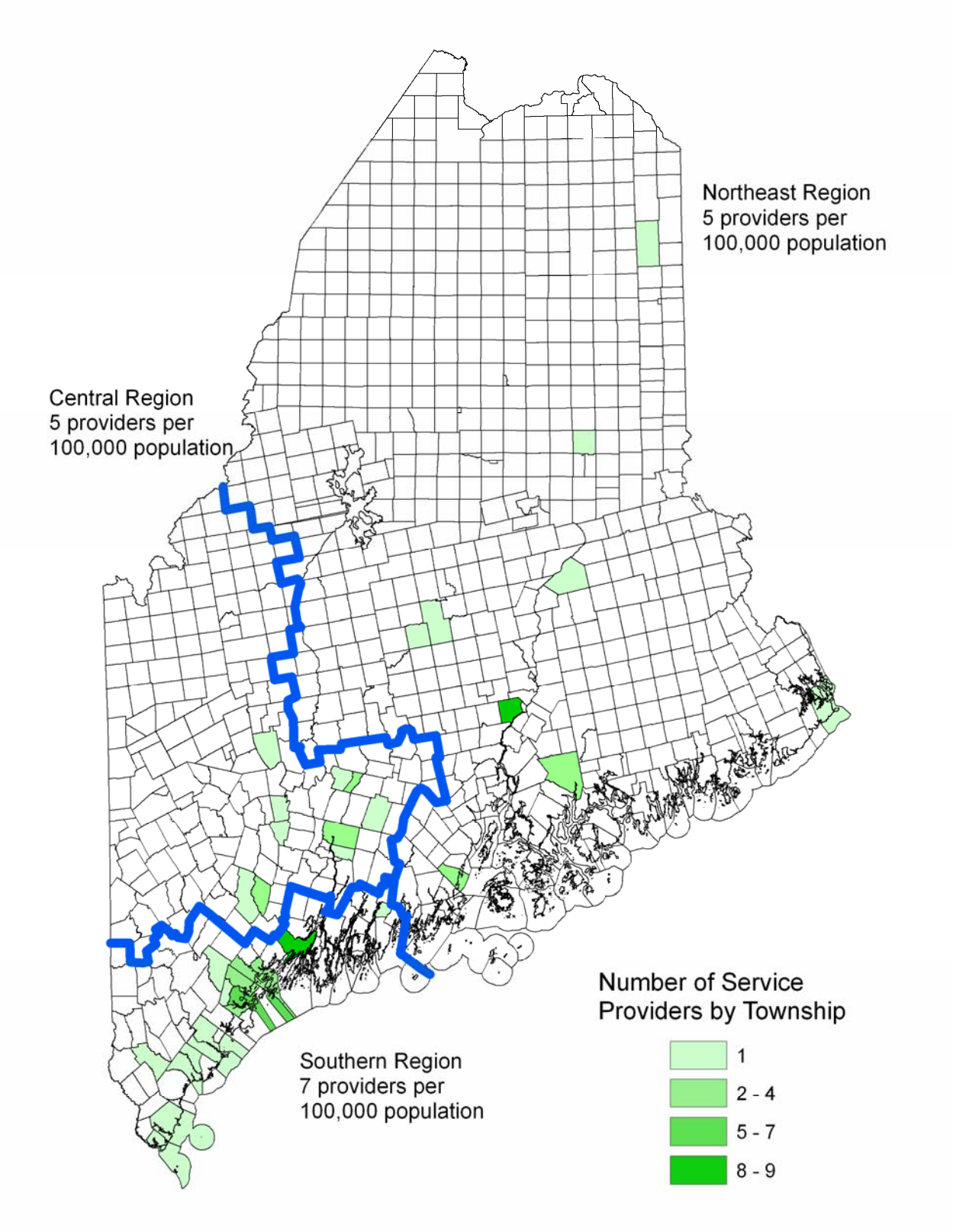


Distribution of Physicians in Maine, 2004

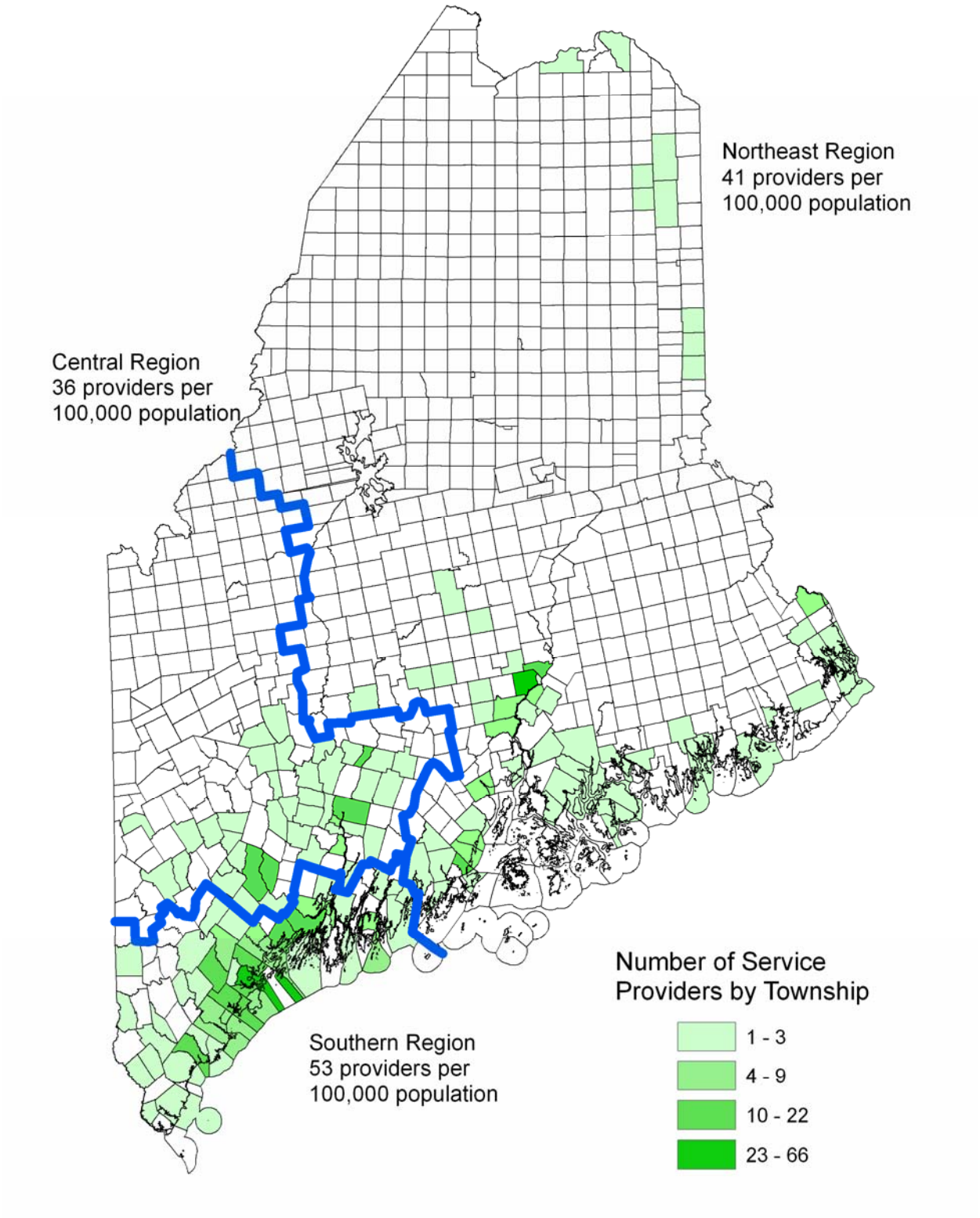
Includes both allopathic and osteopathic physicians, primary care and specialists



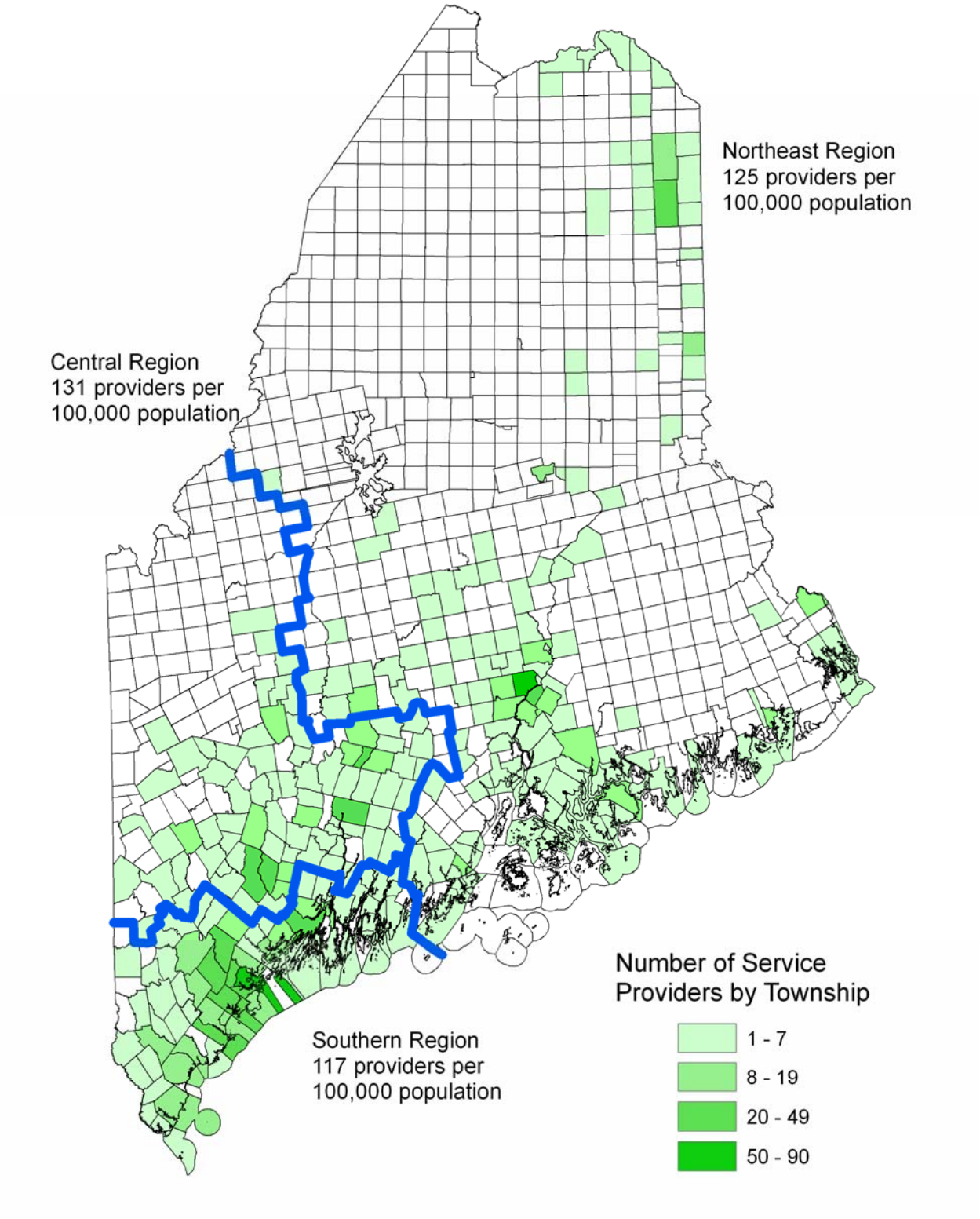
Distribution of Podiatrists in Maine, 2004



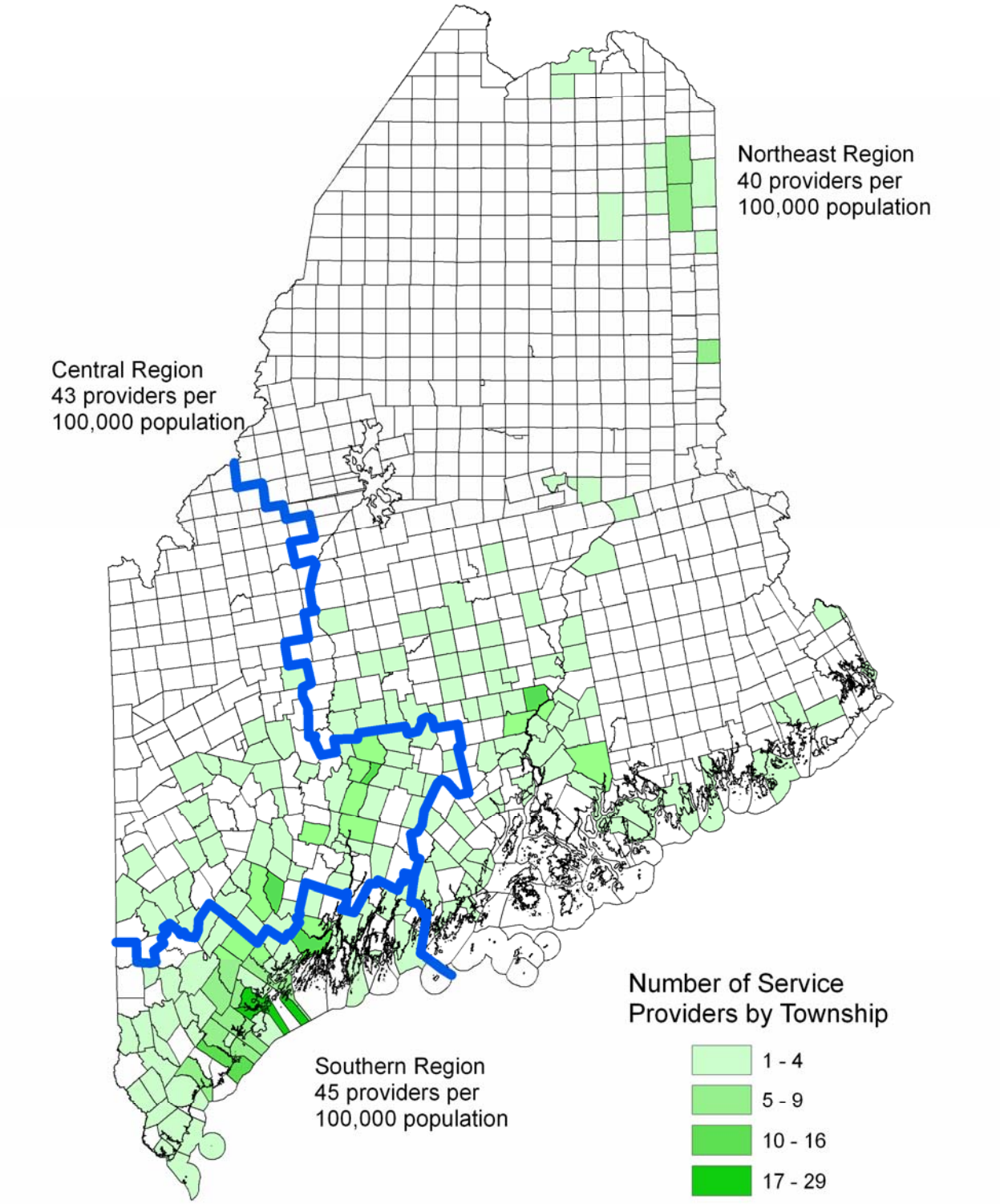
Distribution of Psychologists in Maine, 2004



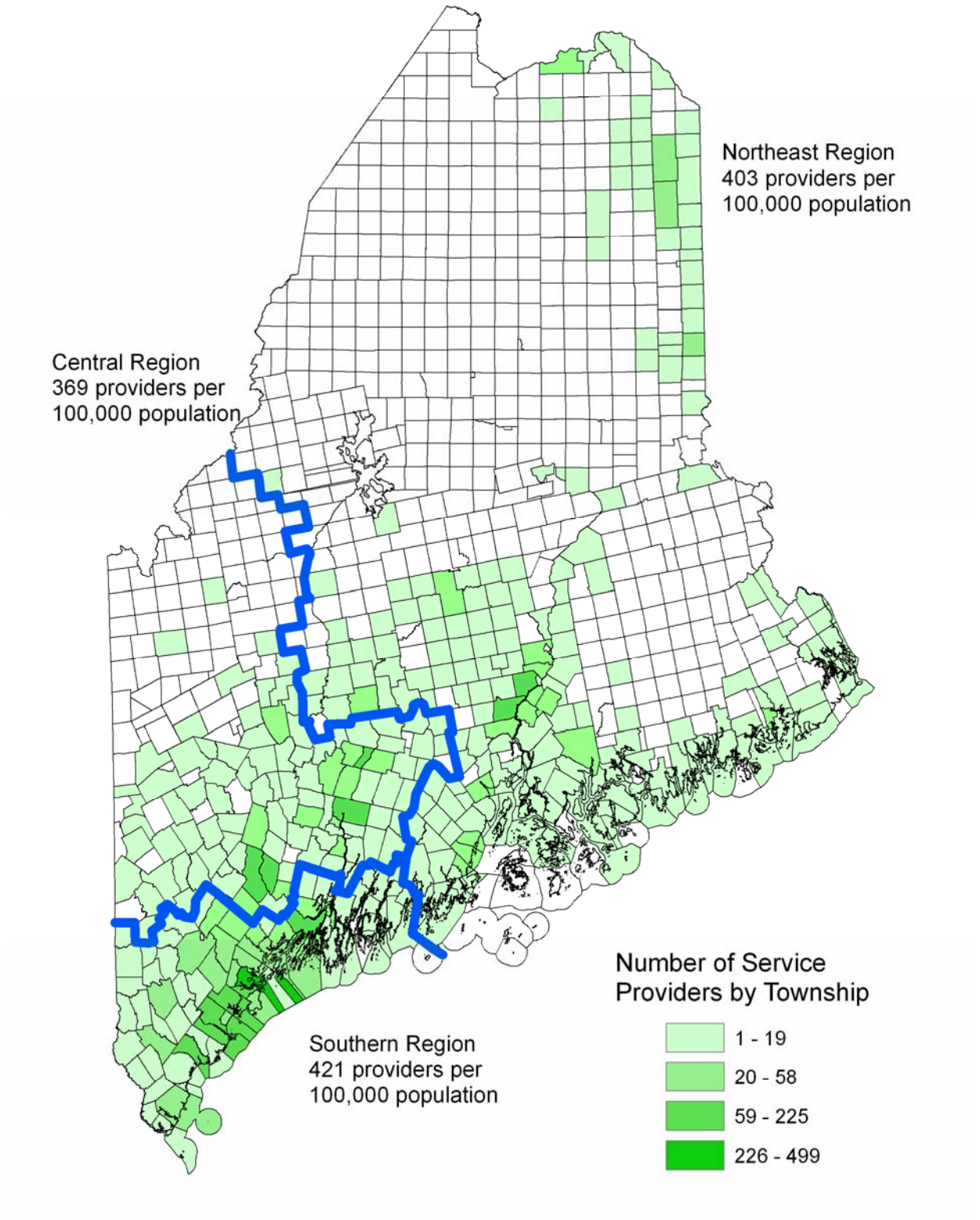
Distribution of Radiology Technicians in Maine, 2004



Distribution of Respiratory Therapists in Maine, 2004



Distribution of Licensed Social Workers in Maine, 2004



Other Resources

If you are interested in learning more about health and health care in Maine, you may want to check out the following websites which, in turn, will lead you to other resources:

Dirigo Health Reform	www.dirigohealth.maine.gov
Maine Health Data Organization	www.mhdo.maine.gov/mhdo/
Maine Quality Forum	www.mainequalityforum.gov
Maine Bureau of Insurance	www.maineinsurancereg.org
Maine Hospital Association	www.themha.org
Maine Medical Association	www.mainemed.com
Maine Osteopathic Association	www.mainedo.org
Maine Primary Care Association	www.mepca.org

The technical report that forms the basis for much of this publication is posted on our website and may be accessed by going to www.dirigohealth.maine.gov. Follow the links to the “news” section and click on “Maine Healthcare System Assessment Report: A Profile on Health Status, Access, Quality and Cost Indicators for the Northeast, Central and Southern Regions of Maine.” This report was prepared for the Governor’s Office of Health Policy and Finance by the Public Health Resource Group of Portland, Maine.