CINA Highlights of Cancer Incidence and Mortality in the United States and Canada, 2000-2004

Rachel Zeig-Owens, Richard Knowlton, Susan T. Gershman, and Holly L. Howe

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INTRODUCTION

Purpose

The purpose of this report is to present the highlights of both cancer incidence and mortality data from the Cancer in North America report for 2000-2004. This report includes information on the more common cancers that occur in Canada and the United States, such as female breast, prostate, lung and bronchus, and colon. There is also discussion of some cancers that occur at lower rates, such as melanoma, cervical cancer, and testicular cancer. Incidence and death rates for males and females for these cancers are compared between the two countries.

METHODS

Cancer Incidence

The Cancer in North America (CINA) data come from population-based cancer registries that meet the high quality criteria for incidence statistics for 2000-2004 set by the North American Association of Central Cancer Registries, Inc. (NAACCR). These registries include 44 United States registries (38 states, the District of Columbia, and five metropolitan areas) and seven Canadian provincial registries.[b] The data represent 61% of the Canadian population and 82% of the United States population.

Since race/ethnicity is not collected in Canada, all race-ethnic information is from U.S. data only. Race/ethnic highlights in this report include information for Hispanic (all races), non-Hispanic white (NHW), and non-Hispanic black (NHB) persons.

Cancer Mortality

United States cancer mortality data for 2000 to 2004 were obtained from the National Center for Health Statistics (NCHS) of the Centers for Disease Control and Prevention (CDC), as provided to the National Cancer Institute (NCI). Canadian cancer mortality data for 2000 to 2004 were from Statistics Canada's Canadian Mortality Data Base (CMDB). These data did not include cancer deaths in Quebec.

[b] The U.S. states are Alabama, Alaska, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Texas, Utah, Washington, West Virginia, Wyoming. The Canadian provinces are Alberta, Manitoba, New Brunswick, Nova Scotia, Ontario, Prince Edward Island, and Saskatchewan.

Cancer Rates

All rates have been age-adjusted to the United States 2000 population standard unless otherwise noted. All rates in the report are per 100,000 population at risk. Rates were not calculated when the category included fewer than 25 cases. The 95% confidence intervals of the rates were used in comparative analyses to suggest whether the rates were similar or different. The rates were different from each other if the 95% confidence intervals did not overlap. Unless noted otherwise, all rate differences cited in the report reflect 95% confidence intervals that did not overlap.

RESULTS

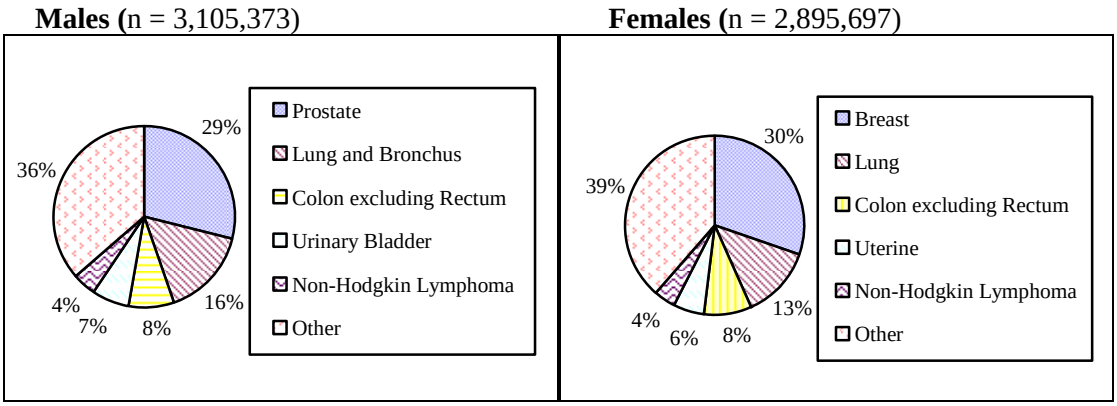
Cancer Incidence Rates

Overall, North American, U.S., and Canadian men had a higher incidence rate of cancer than women in the same areas. North American men had an incidence rate of 555.0 compared with 411.8 for North American women. United States men had a rate of 557.8 while United States women had a rate of 413.1. Canadian men had a lower incidence rate of 523.3 per 100,000 compared with United States men; however, it was still higher than the incidence rate of 396.1 for Canadian women. The rate for United States women (413.1) was also higher than the rate for Canadian women (396.1).

Most Common Cancers

The most common invasive cancers in North American men were prostate, lung and bronchus (lung), colon excluding rectum, bladder (including *in situ*), and non-Hodgkin lymphoma (Figure 1). The most common cancers among women in North America were breast, lung, colon excluding rectum, corpus uteri (uterine), and non-Hodgkin lymphoma (Figure 1).

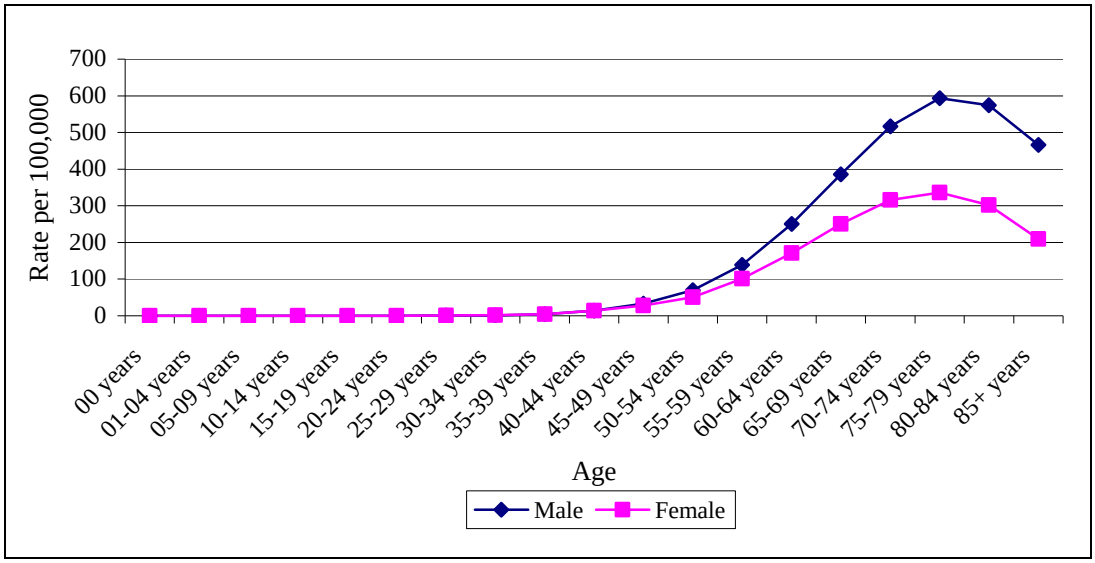
Figure 1. Five Most Commonly Diagnosed Cancer Cases in Men and Women, North America, 2000-2004



Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state cancer registries participating in SEER, NPCR, or both, in the U.S. and provincial/territorial cancer registries participating in the Canadian Cancer Registry in Canada.

Lung cancer: Men had a higher incidence of lung cancer compared with women. The incidence rate of lung cancer for North American men was 1.6 times higher than for women (88.0 for men and 54.7 for women). Age-specific incidence rates were similar for men and women younger than age 45 years, at which point the age-specific rates for men were increasingly higher than for women (Figure 2). The age-specific rate for both men and women was highest in the age group of 75 to 80 year olds.

Figure 2. Age-Specific Lung Cancer Incidence Rates, by Sex, North America, 2000-2004



Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S. and provincial/territorial cancer registries participating in the Canadian Cancer Registry in Canada.

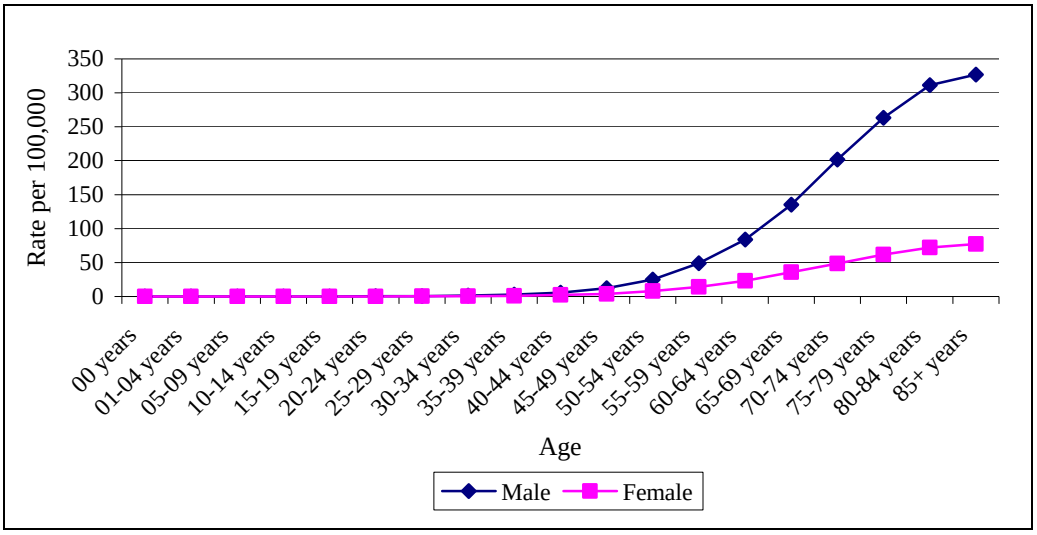
Colon cancer: In North America, the rate of colon cancer was about 1.3 times higher for men than for women (44.5 for men and 34.7 for women). As with lung cancer, the age-specific rates of colon cancer were comparable for men and women until age 45, at which time the rates for men began to diverge and are higher than for women. The age-specific rates for both men and women continue to increase with age. Colon cancer rates for both men and women were higher in Canada than in the United States.

Non-Hodgkin lymphoma: The rate in North American men was 1.4 times the rate for women (22.7 and 16.1, respectively). The age-specific rate for non-Hodgkin lymphoma in North America was higher for men older than one year of age compared with women of the same age. Non-Hodgkin lymphoma was a common cancer at most ages, but the rate for both men and women peaked between the ages of 80 and 85.

Prostate cancer: This was the most common type of cancer diagnosed in North American men, with a rate of 159.9. The rate in the U.S. is higher than in Canada (160.8 for U.S. compared with 149.0 for Canadian men). The age-specific rate for prostate cancer increases, beginning at age 45 and is highest among men, aged 70 to74 years (797.1).

Bladder cancer: The incidence rate of bladder cancer is higher in men than in women. Bladder cancer was the fourth most common cancer for North American men and the 10th most common for North American women, with a rate of 37.7 and 9.6, respectively. For men and women, the age-specific bladder cancer incidence rates increase after the age of 50, peaking in the age group of 80 years and older. However, rates increase more slowly for women (Figure 3).

Figure 3. Age-Specific Bladder Cancer Incidence Rates by Sex, North America, 2000-2004



Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S. and provincial/territorial cancer registries participating in the Canadian Cancer Registry in Canada.

Breast cancer: Breast cancer can occur in both men and women, but male cases represent less than 1% of the total cases. Breast cancer is the most common type of cancer diagnosed in North American women, with a rate of 124.3. Breast cancer rates begins to increase around age 40 and peaked in the age group of 75 to 79 year olds.

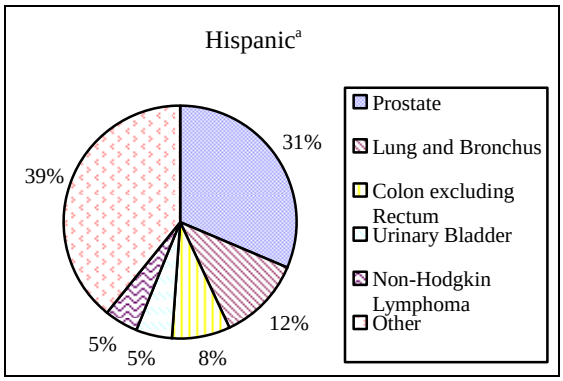
Uterine cancer: This was the fourth-most-common cancer among North American women, with a rate of 22.9. The age-specific rate increases after age 40, with the highest age-specific rate among women, aged 65 to 69.

Race/Ethnic Variations in the Most Common Cancers

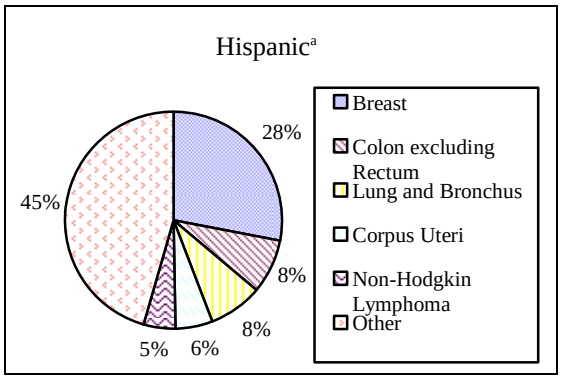
Figure 4 shows the most common cancers by race for males and females.

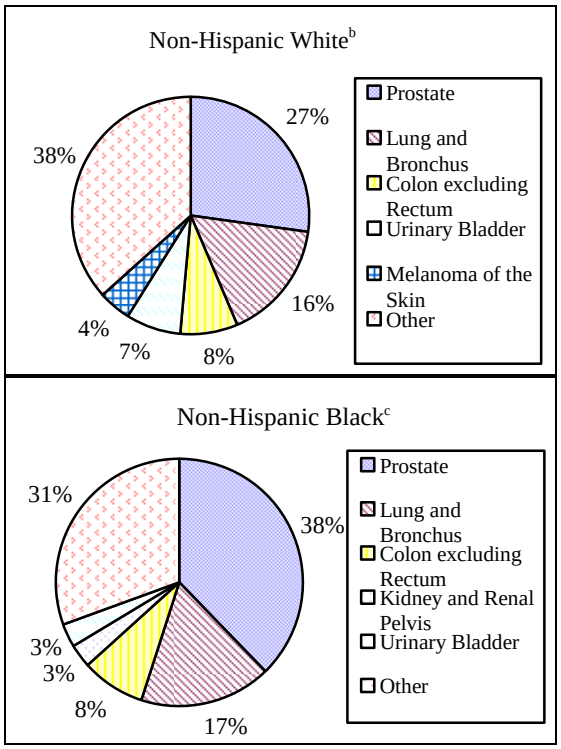
Figure 4. Five Most Common Cancers by Race/Ethnicity and Sex, United States, 2000-2004

Males

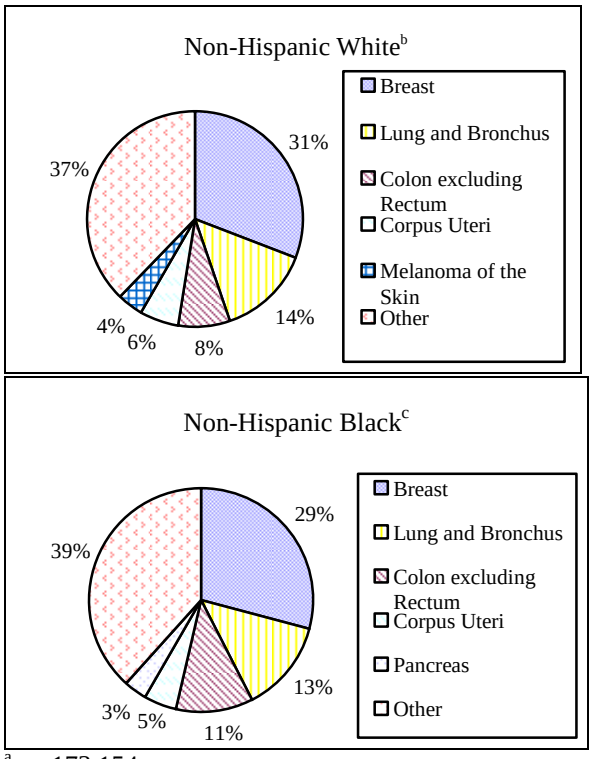


Females





[a] n= 174,274
[b] n= 2,311,756
[c] n= 272,595



[a] n= 173,154
[b] n= 2,167,743
[c] n= 239,314

Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

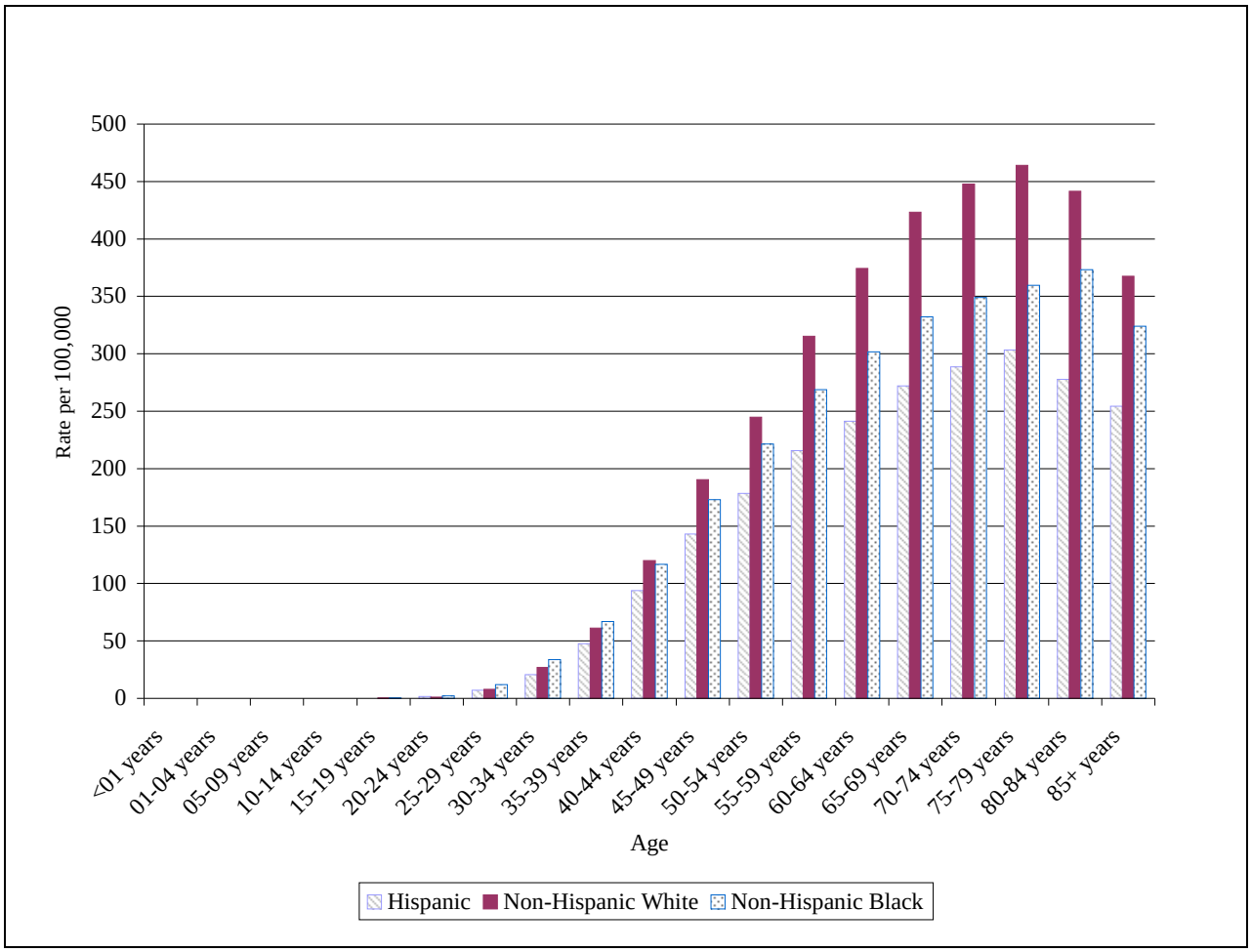
Prostate cancer: NHB men (245.8) had the highest rate of prostate cancer compared with NHW (154.5) and Hispanic (137.4) men. The NHB male rate was 1.6 times that of NHW men and 1.8 times that of Hispanic men.

Colon cancer: Hispanic men (35.4) had the lowest rate of colon cancer compared with NHB (54.4) and NHW men (44.3), while the rate for NHB men was 1.5 times greater than the NHW men and 1.3 times the rate for Hispanic men.

NHB women also had the highest rate of colon cancer compared with NHW and Hispanic women. As with men, the rate for NHB women (42.6) was 1.6 times the rate for Hispanic women (26.9). The rate for NHB women was 1.2 times greater than the rate for NHW women (34.4).

Breast cancer: Overall, NHW women had the highest rate of breast cancer compared with NHB and Hispanic women. NHW women (131.0) were 1.2 times more likely to have breast cancer than NHB women (113.2) and 1.4 times more likely than Hispanic women (90.5). However, between the ages of 20 and 40 NHB women had the highest rate of breast cancer, about 1.2 times higher than the rate for NHW women (Figure 5).

Figure 5. Age-Specific Breast Cancer Incidence Rates by Race/Ethnicity, Females, United States, 2000-2004



Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

Non-Hodgkin lymphoma: The rates were highest among NHW men and women compared with NHB and Hispanic men and women. Both NHW men (23.9) and women (16.9) had non-Hodgkin lymphoma rates about 1.4 times higher than NHB men (17.2) and women (11.6) and 1.2 times higher than Hispanic men (19.8) and women (14.4).

Bladder cancer: The rate of bladder cancer (including *in situ* cases) for NHW men (42.2) was about double the rates for NHB (19.0) and Hispanic men (21.2). Similar patterns were noted for women: the rate of bladder cancer for NHW women (10.6) was about double the rates for NHB (6.9) and Hispanic women (5.7).

Lung cancer: The rates were lowest among Hispanic men and women (51.5 and 26.7 respectively). NHB men had the highest rate (111.5) compared with non-Hispanic whites (91.5) and Hispanics. NHW women had the highest lung cancer incidence rate (59.4), compared with NHB women (52).

State and Provincial Variations in Selected Cancer Sites

Figures 6 through 29 display the state and provincial rates for cancers of the prostate, breast, lung, and colon. The race/ethnic-specific rates are presented for the US only.

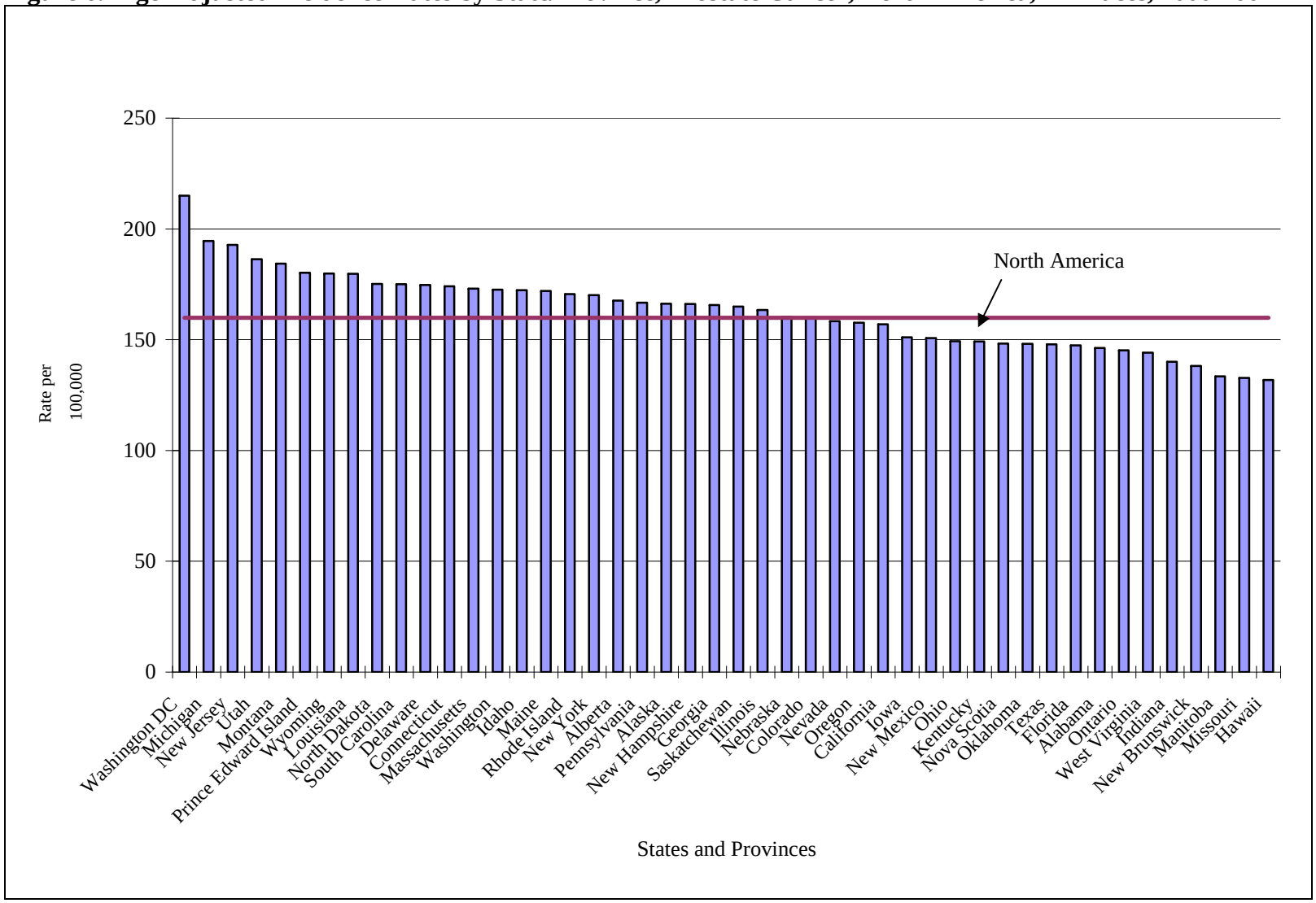
Prostate cancer: state range of rates and places with highest and lowest rates

Breast cancer: state range of rates and places with highest and lowest rates
The lower rates among most Canadian provinces than U.S. states is affected in part by the differences in the standard used by the Canadian Cancer Registry in counting breast tumors. The NAACCR standard, followed by all U.S. registries, has been defined for multiple primary tumors by the NCI SEER program. The Canadian Cancer Registry follows the standard set by the International Association of Cancer Registries and is different from the SEER standard and results in the counting of fewer tumors.

Lung cancer: state range of rates and places with highest and lowest rates

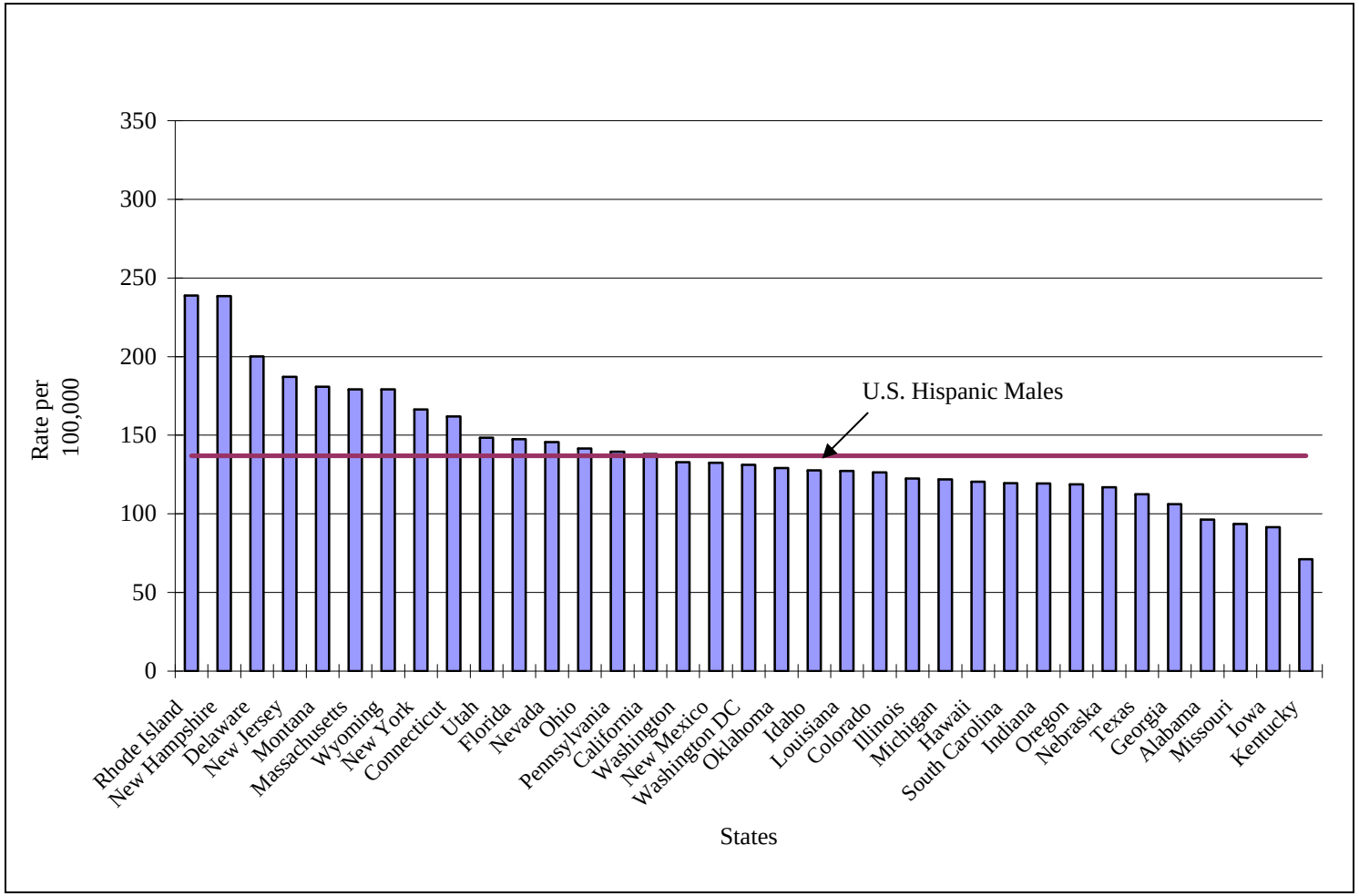
Colon cancer: state range of rates and places with highest and lowest rates

Figure 6. Age-Adjusted Incidence Rates by State/Province, Prostate Cancer, North America, All Races, 2000-2004



Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S. and provincial/territorial cancer registries participating in the Canadian Cancer Registry in Canada.

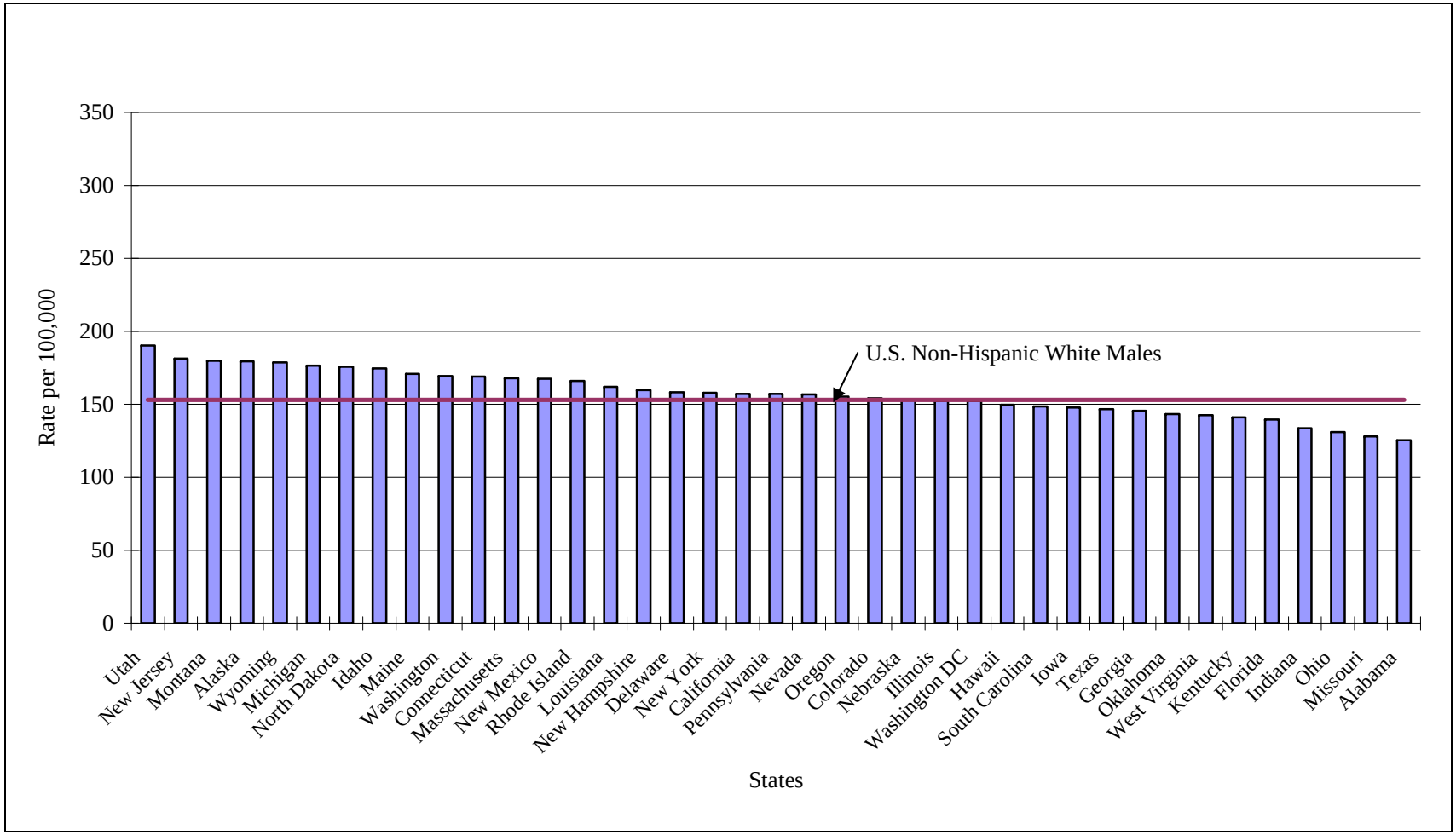
Figure 7. Age-Adjusted Incidence Rates by State/Province, Prostate Cancer, North America, Hispanic Males, 2000-2004



* Idaho, Maine, Montana, North Dakota, and Wyoming are excluded because each state had fewer than 25 cases of prostate cancer in Hispanic men during this period.

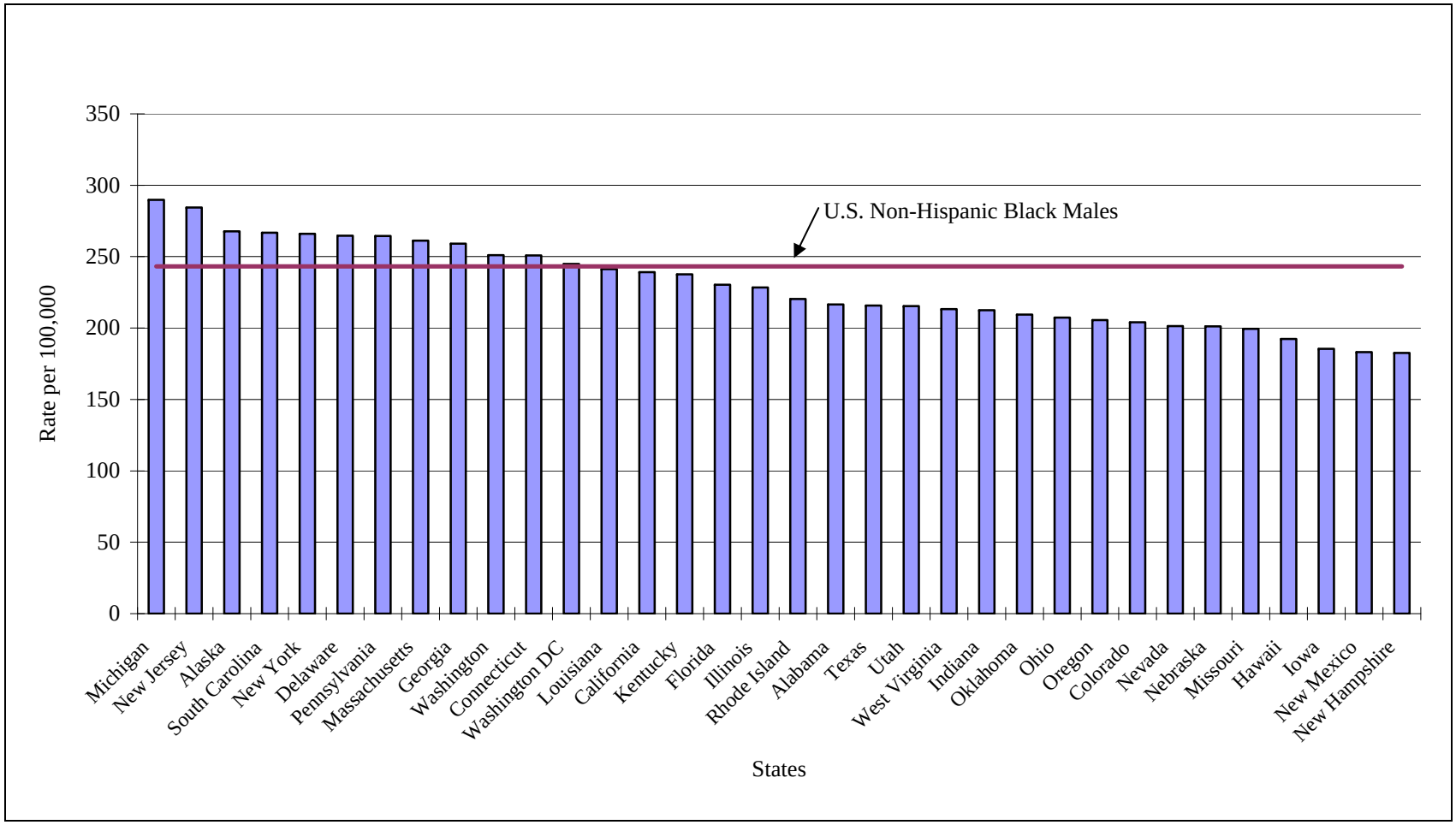
Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

Figure 8. Age-Adjusted Incidence Rates by State/Province, Prostate Cancer, North America, NHW Males, 2000-2004



Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

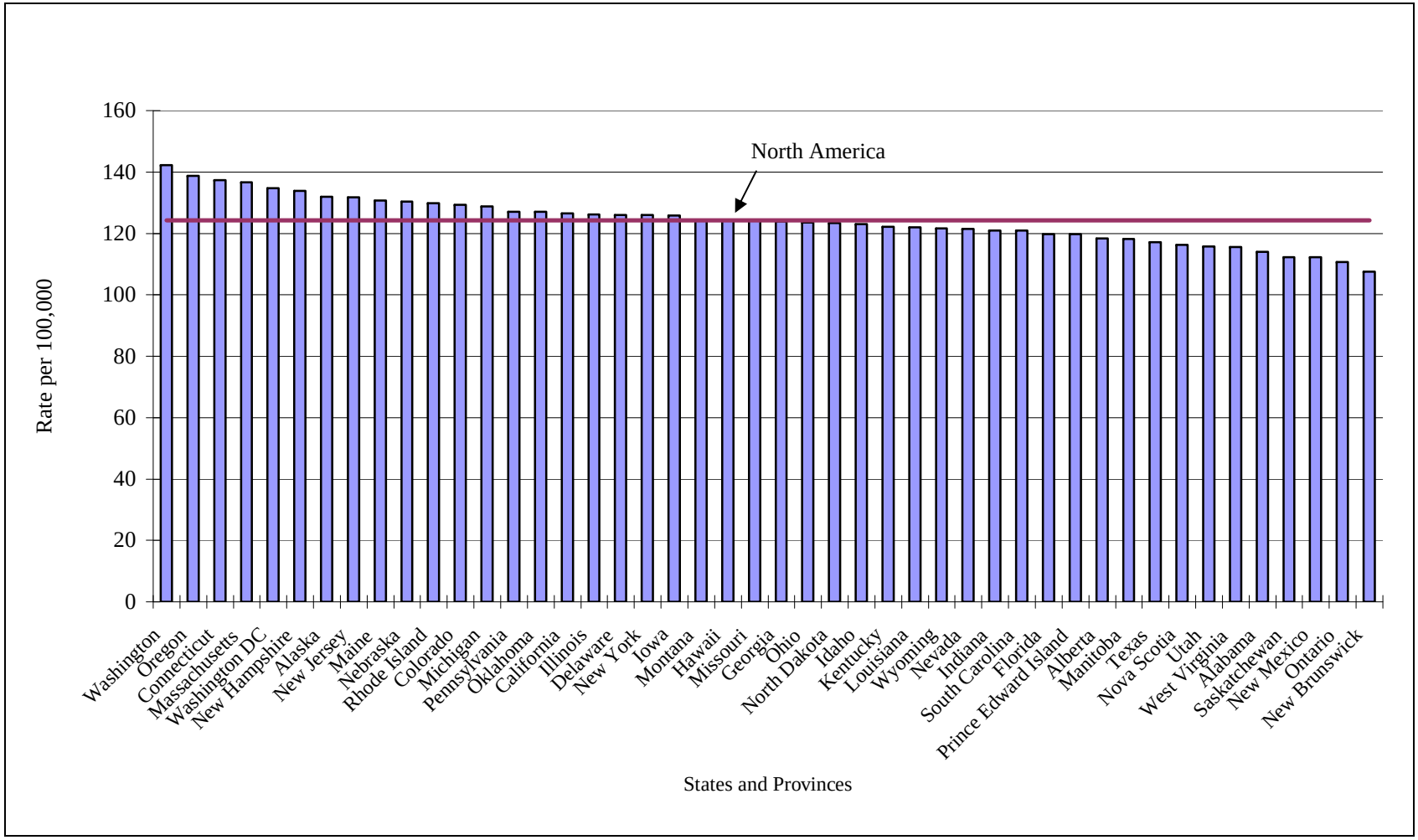
Figure 9. Age-Adjusted Incidence Rates by Registry*, Prostate Cancer, United States, NHB Males, 2000-2004



* Idaho, Maine, Montana, North Dakota, and Wyoming are excluded because each state had fewer than 25 cases of prostate cancer in NHB men during this period.

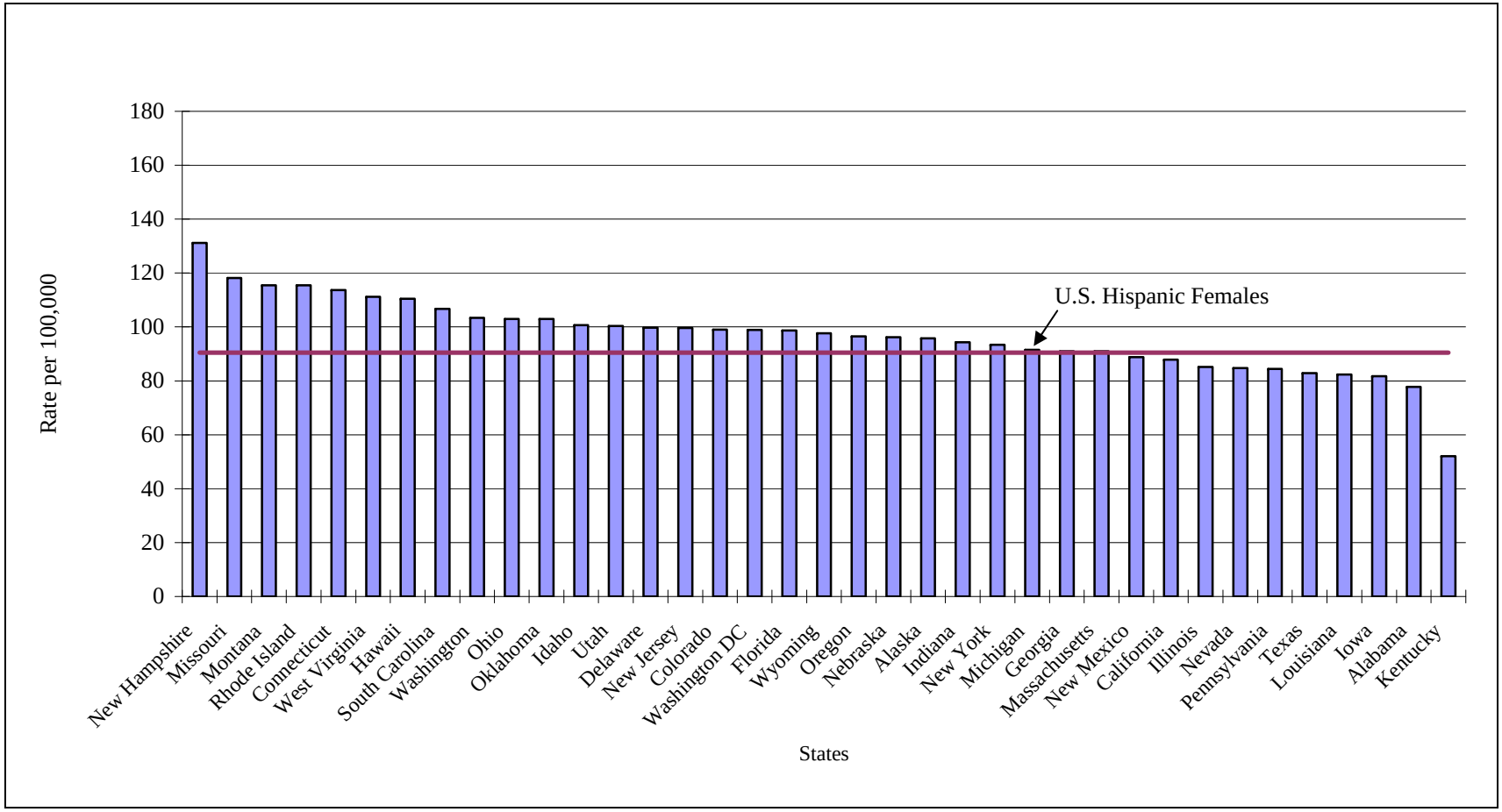
Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

Figure 10. Age-Adjusted Incidence Rates by State/Province, Female Breast Cancer, North America, All Races, 2000-2004



Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S. and provincial/territorial cancer registries participating in the Canadian Cancer Registry in Canada.

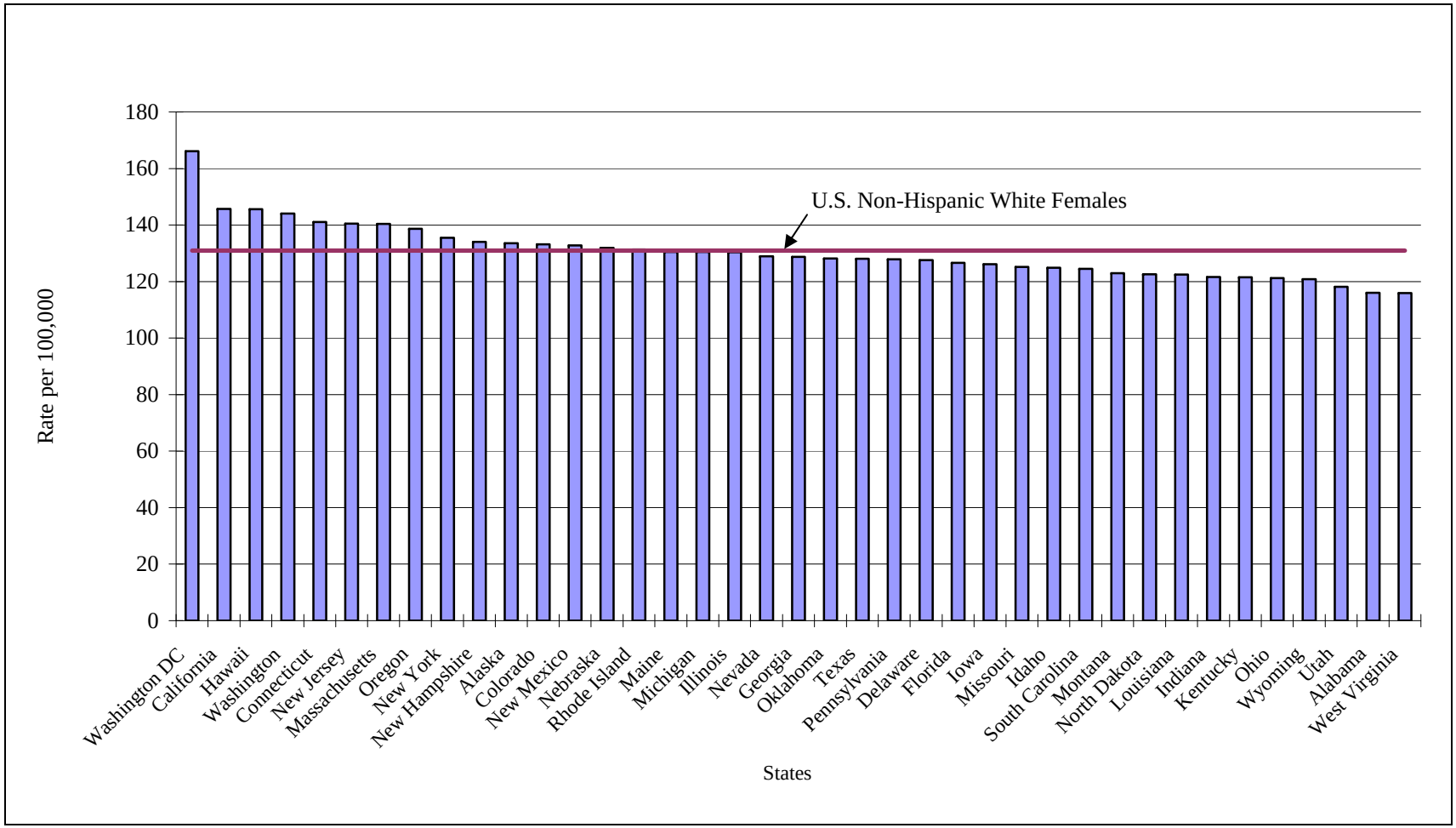
Figure 11. Age-Adjusted Incidence Rates by State/Province, Breast Cancer, North America, Hispanic Females, 2000-2004



* Maine and North Dakota are excluded because each state had fewer than 25 cases of breast cancer in Hispanic women during this period.

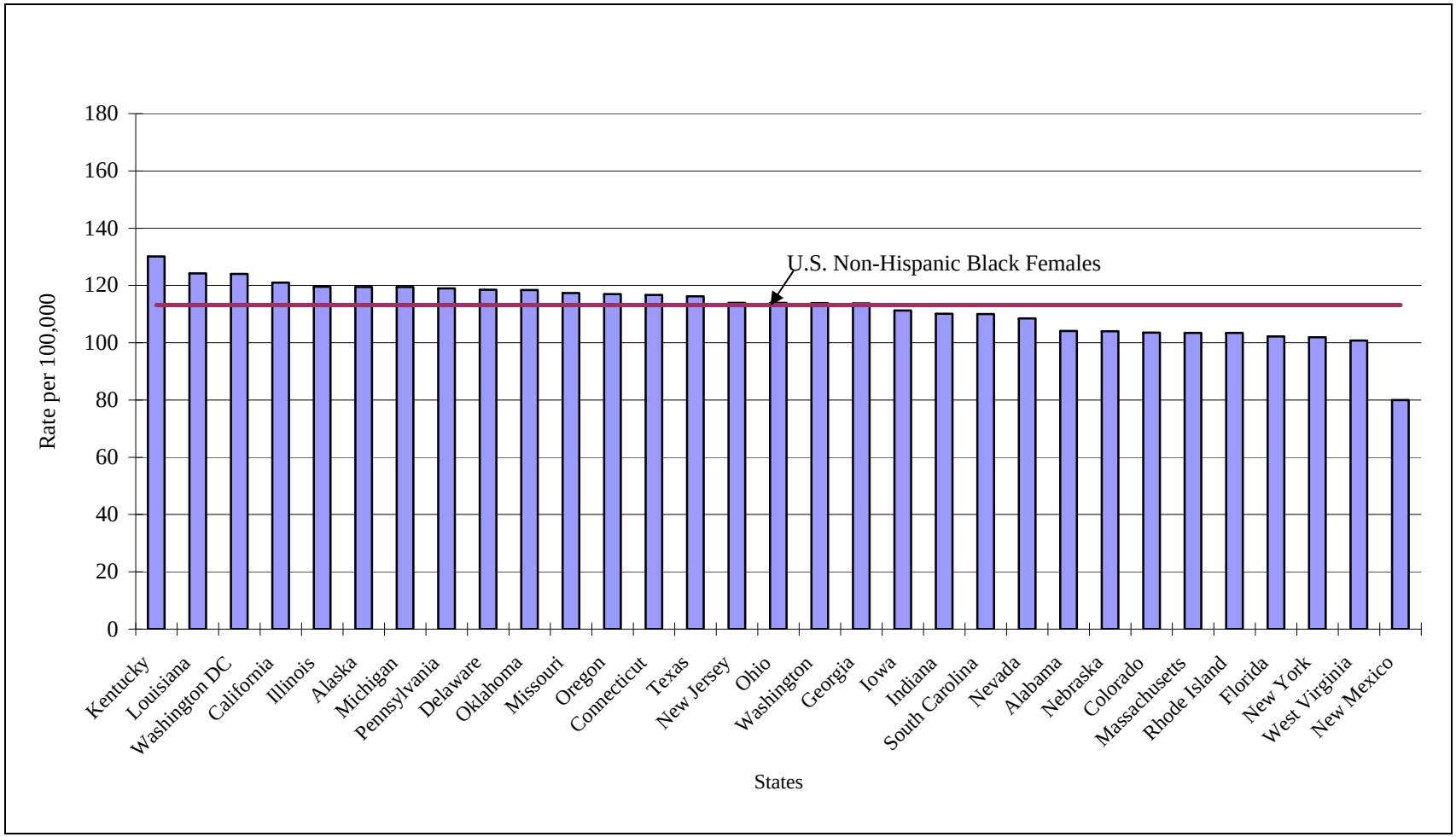
Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

Figure 12. Age-Adjusted Incidence Rates by State/Province, Breast Cancer, North America, NHW Females, 2000-2004



Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

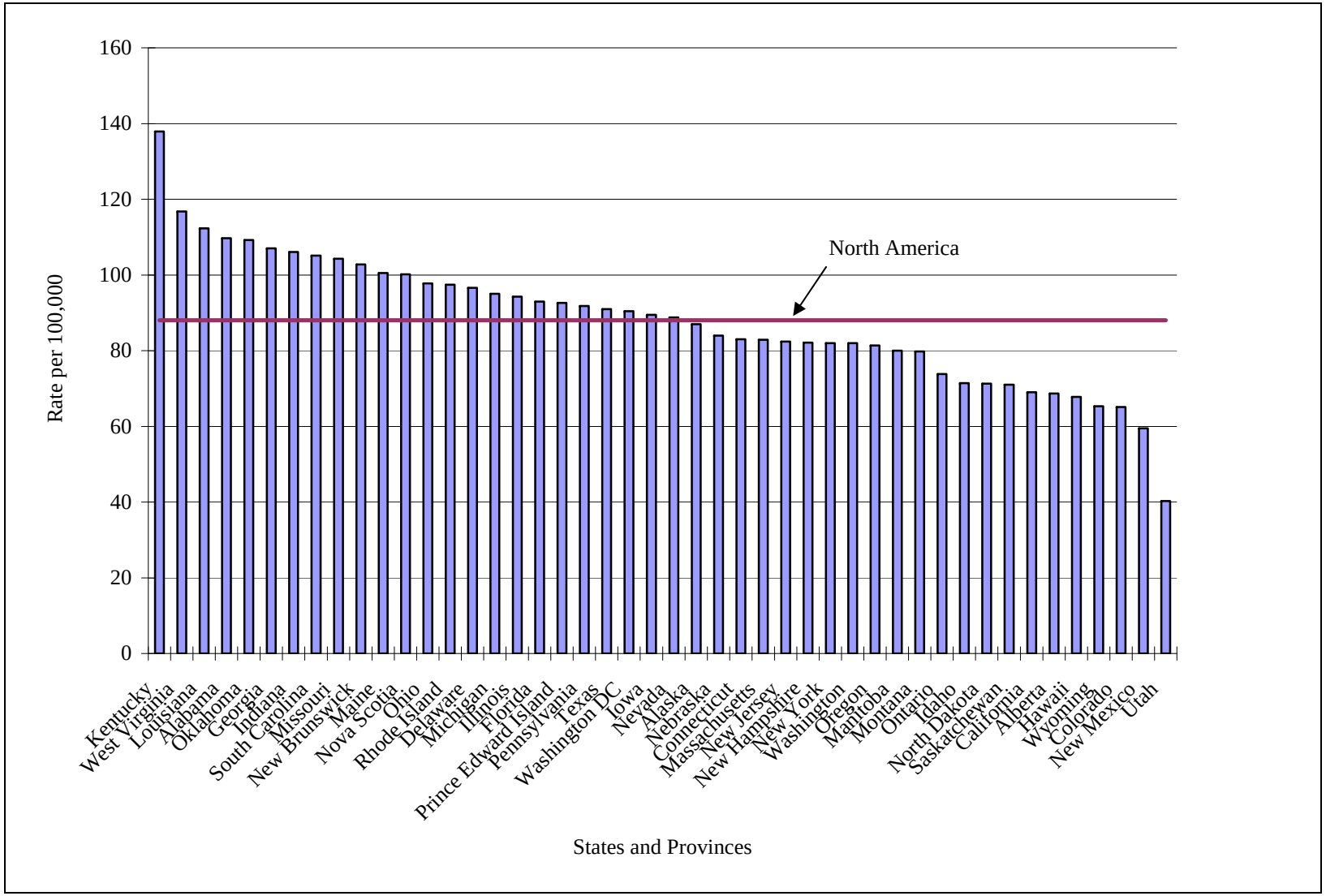
Figure 13. Age-Adjusted Incidence Rates by State/Province, Breast Cancer, North America, NHB Females, 2000-2004



* Hawaii, Idaho, Maine, Montana, New Hampshire, North Dakota, Utah, and Wyoming are excluded because each state had fewer than 25 cases of breast cancer in NHB women during this period.

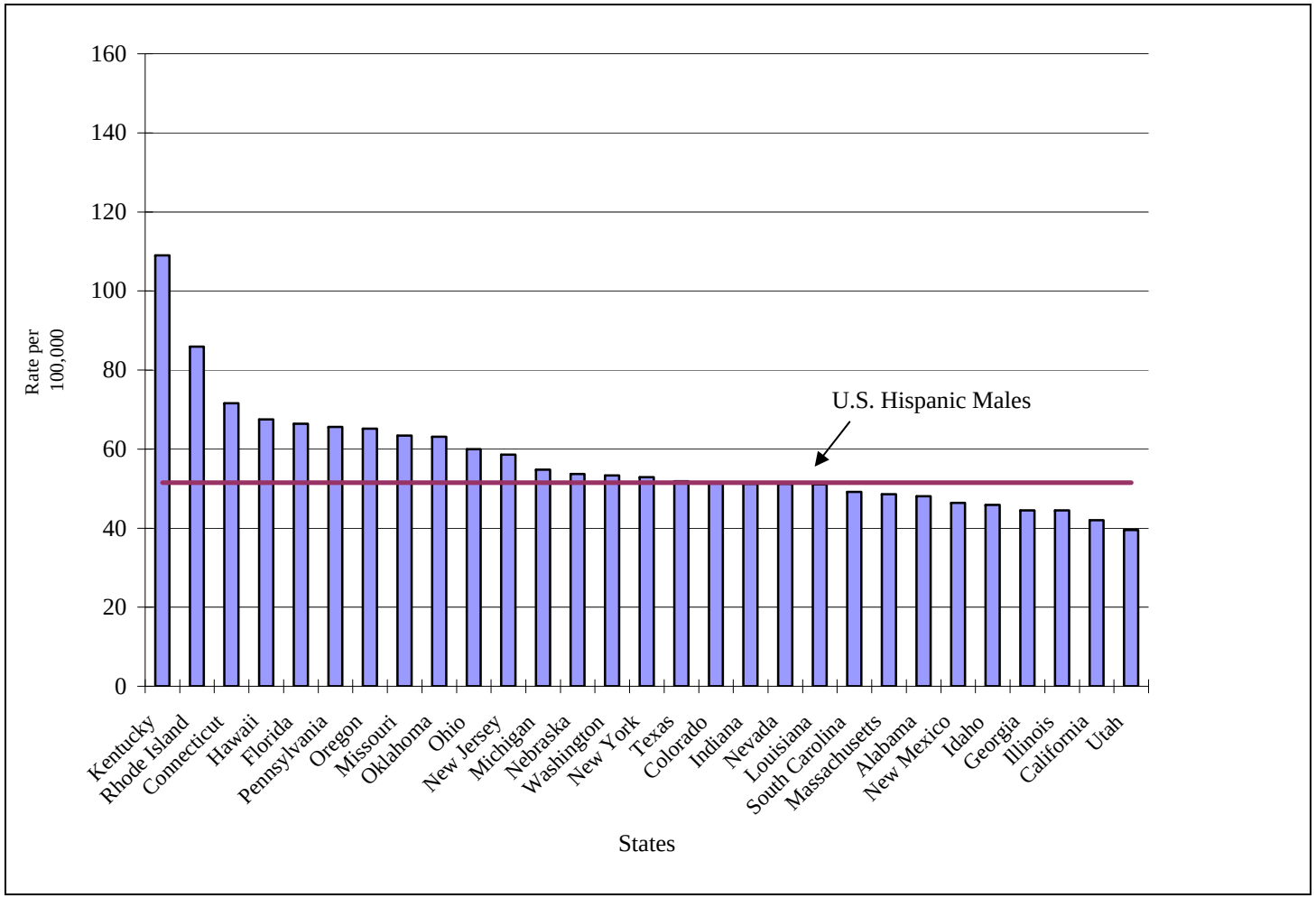
Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S..

Figure 14. Age-Adjusted Incidence Rates by Registry, Lung Cancer, North America, Males, 2000-2004



Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S. and provincial/territorial cancer registries participating in the Canadian Cancer Registry in Canada.

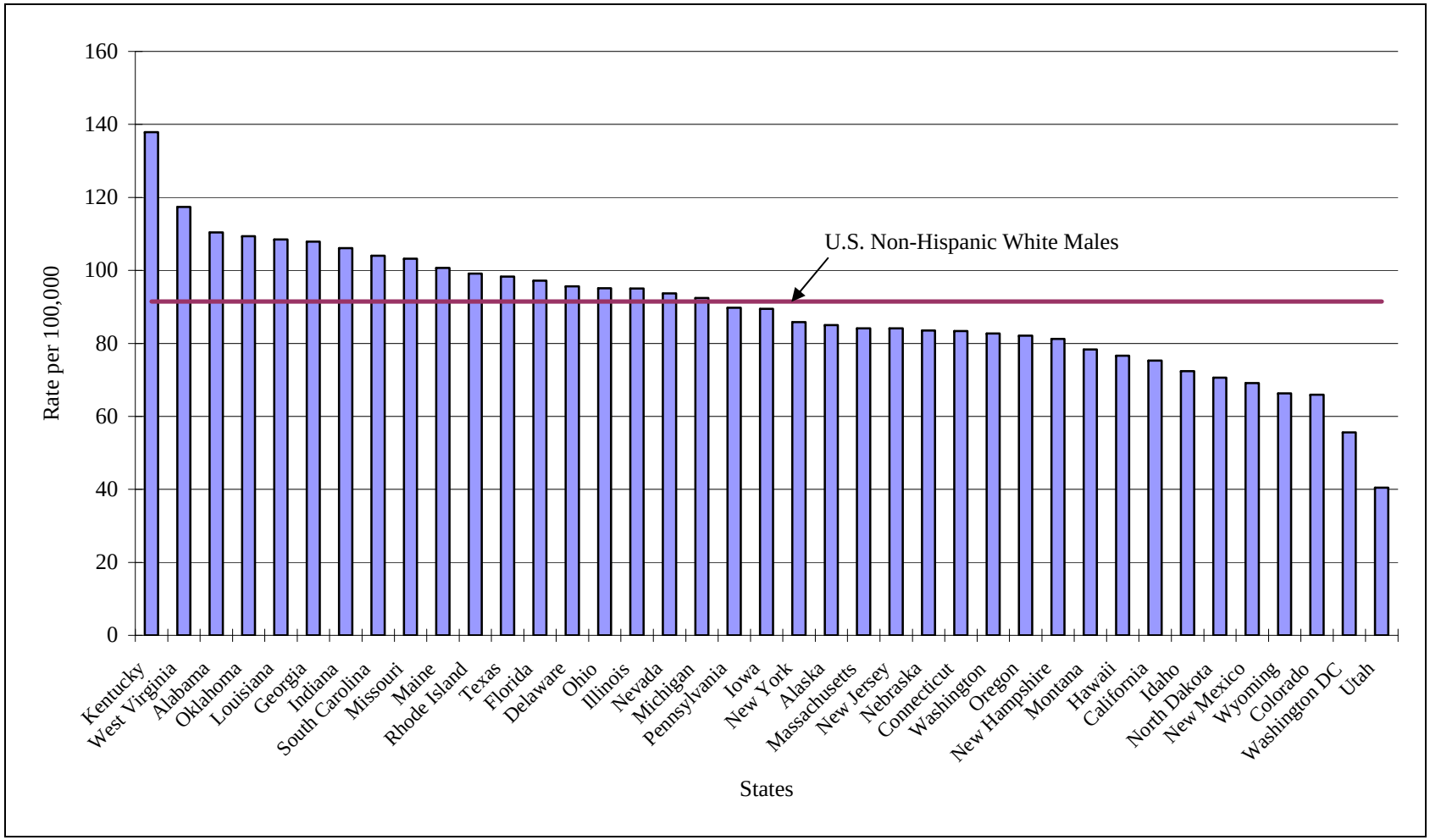
Figure 15. Age-Adjusted Incidence Rates by Registry*, Lung Cancer, United States, Hispanic Males, 2000-2004



* Alaska, Delaware, Washington DC, Iowa, Maine, Montana, New Hampshire, North Dakota, West Virginia, and Wyoming are excluded because each state had fewer than 25 cases of lung cancer in Hispanic men during this period.

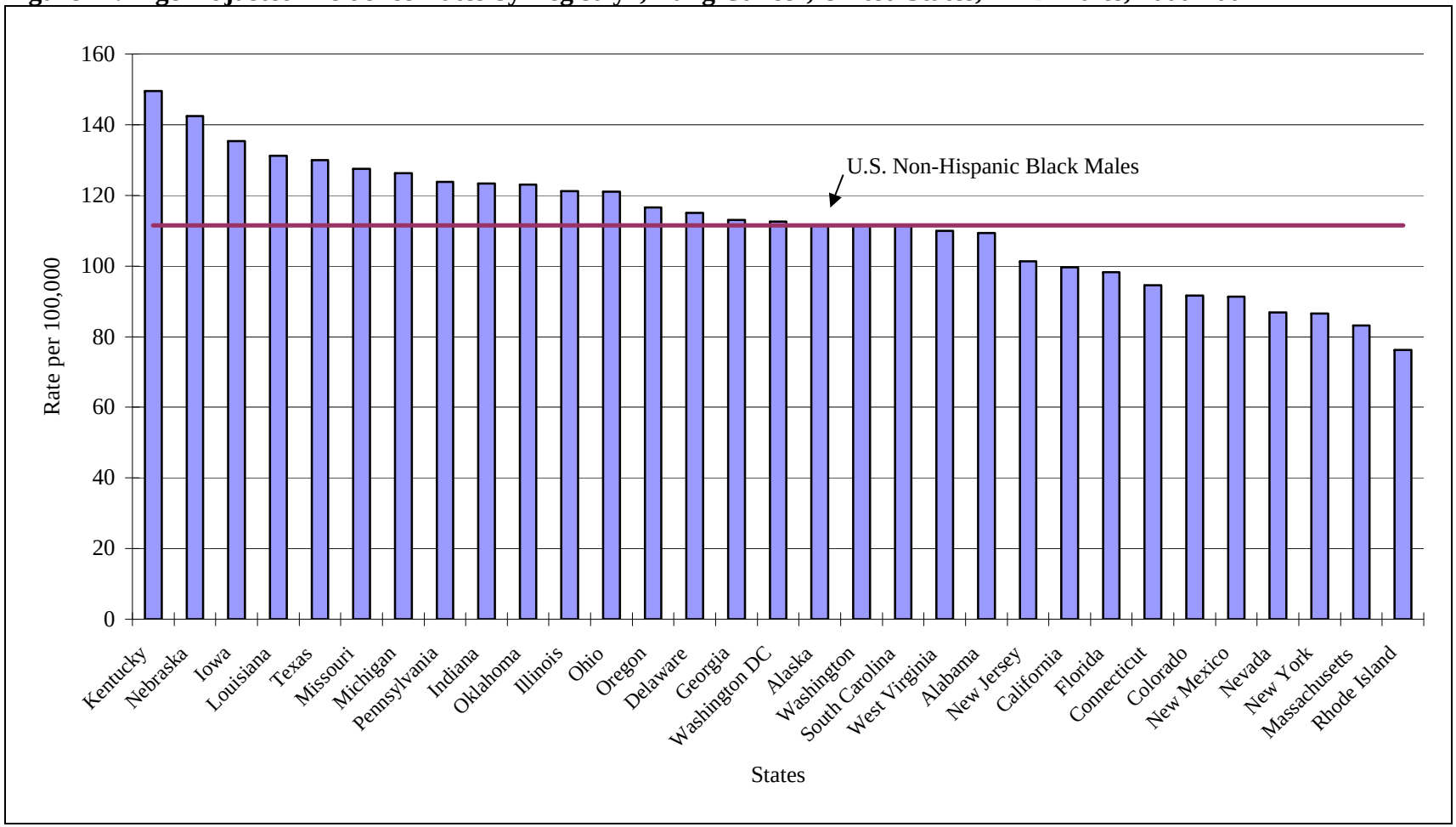
Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

Figure 16. Age-Adjusted Incidence Rates by Registry, Lung Cancer, United States, NHW Males, 2000-2004



Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

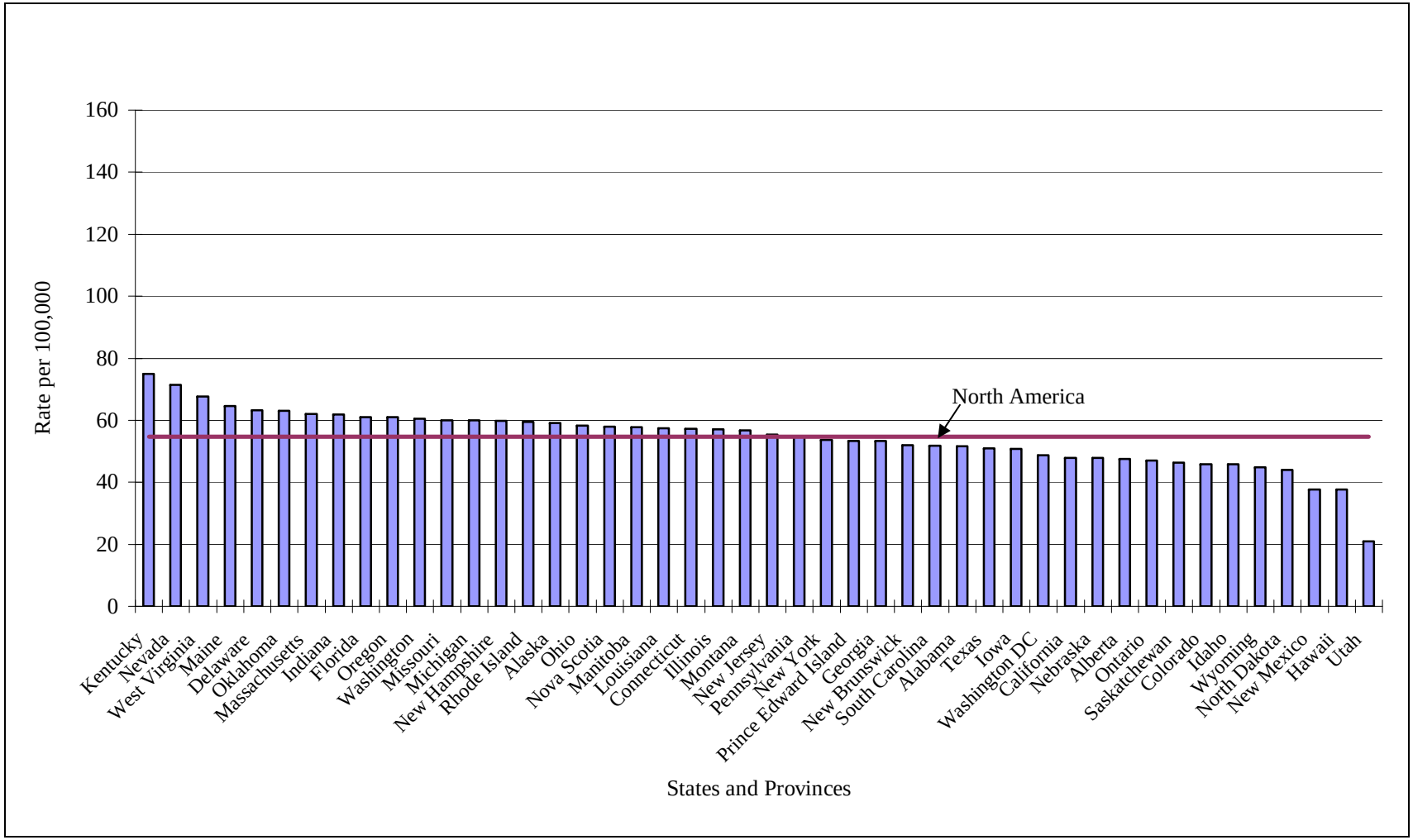
Figure 17. Age-Adjusted Incidence Rates by Registry*, Lung Cancer, United States, NHB Males, 2000-2004



* Hawaii, Idaho, Maine, Montana, New Hampshire, North Dakota, Utah, and Wyoming are excluded because each state had fewer than 25 cases of lung cancer in NHB men during this period.

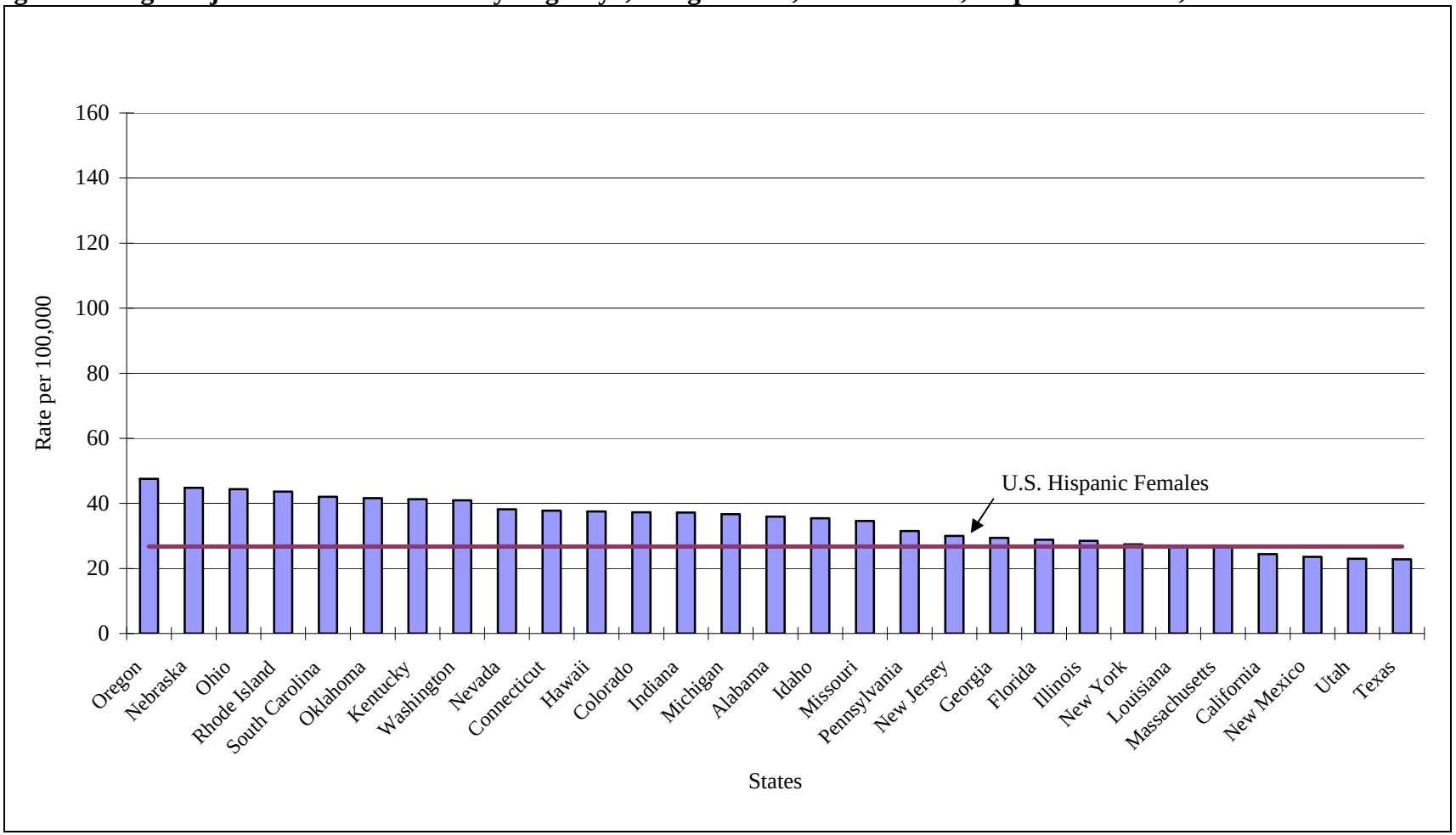
Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

Figure 18. Age-Adjusted Incidence Rates by Registry, Lung Cancer, North America, Females, 2000-2004



Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S. and provincial/territorial cancer registries participating in the Canadian Cancer Registry in Canada.

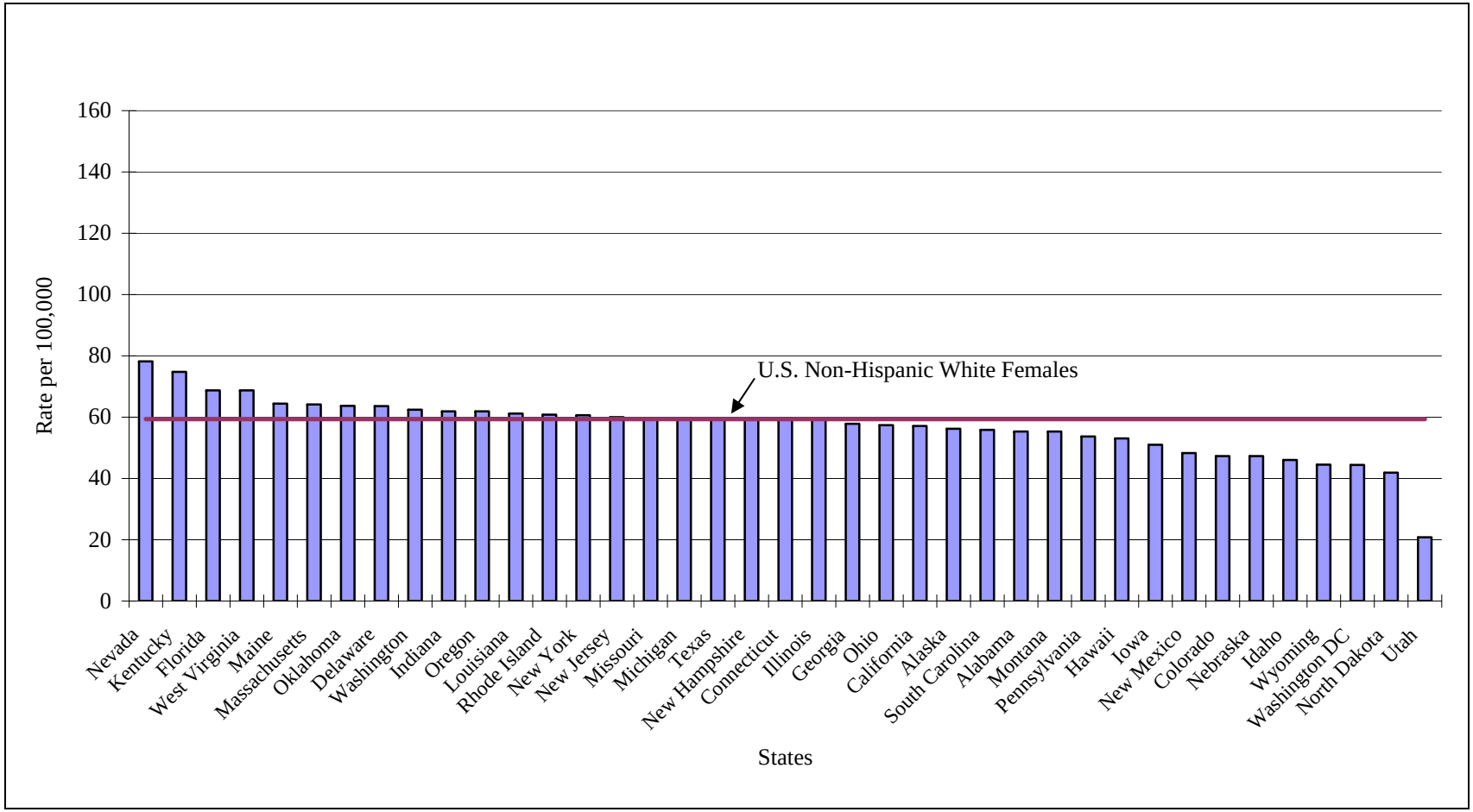
Figure 19. Age-Adjusted Incidence Rates by Registry*, Lung Cancer, United States, Hispanic Females, 2000-2004



* Alaska, Delaware, Washington DC, Iowa, Maine, Montana, New Hampshire, North Dakota, West Virginia, and Wyoming are excluded because each state had fewer than 25 cases of lung cancer in Hispanic women during this period.

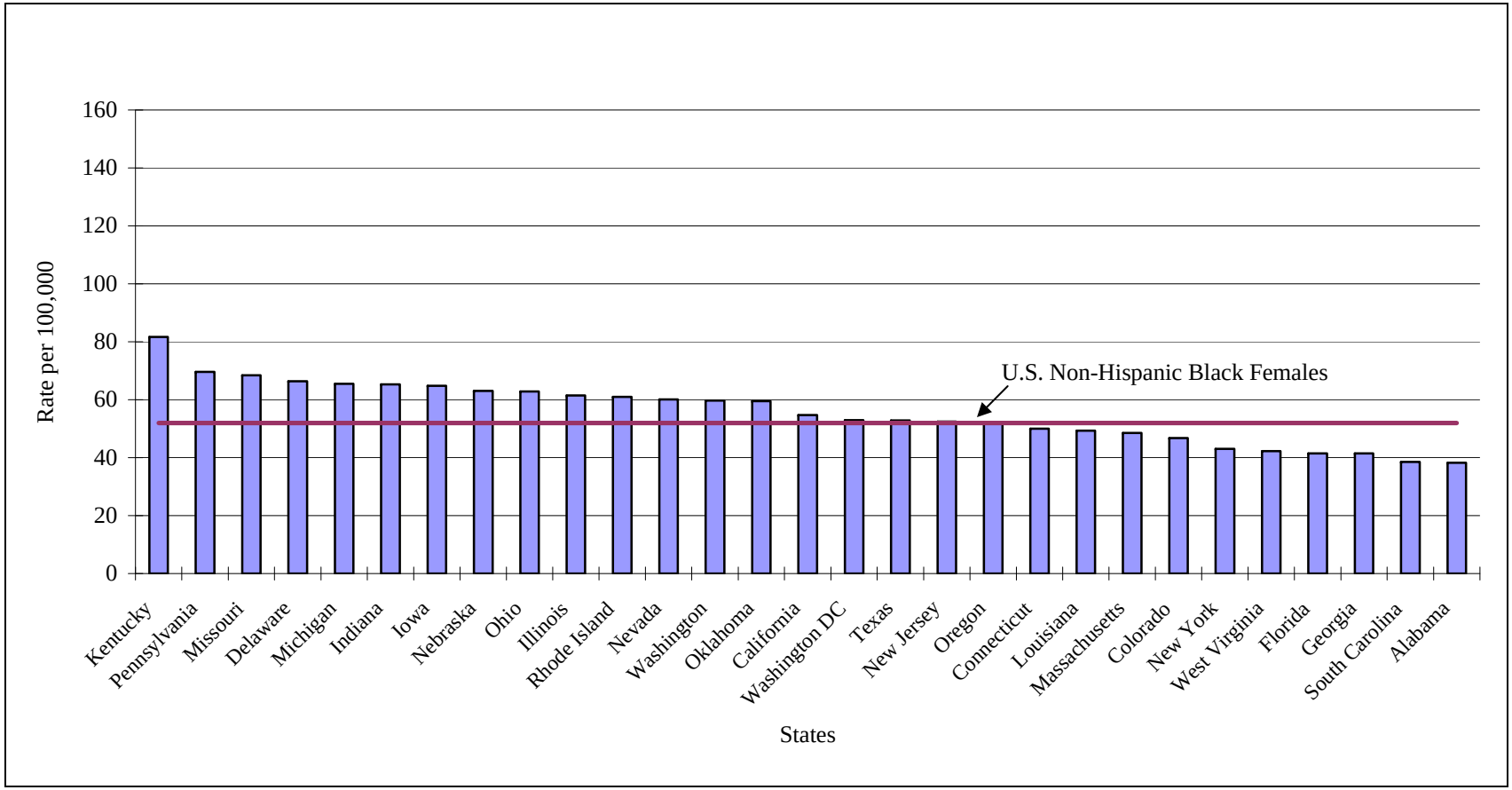
Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

Figure 20. Age-Adjusted Incidence Rates by Registry, Lung Cancer, United States, NHW Females, 2000-2004



Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

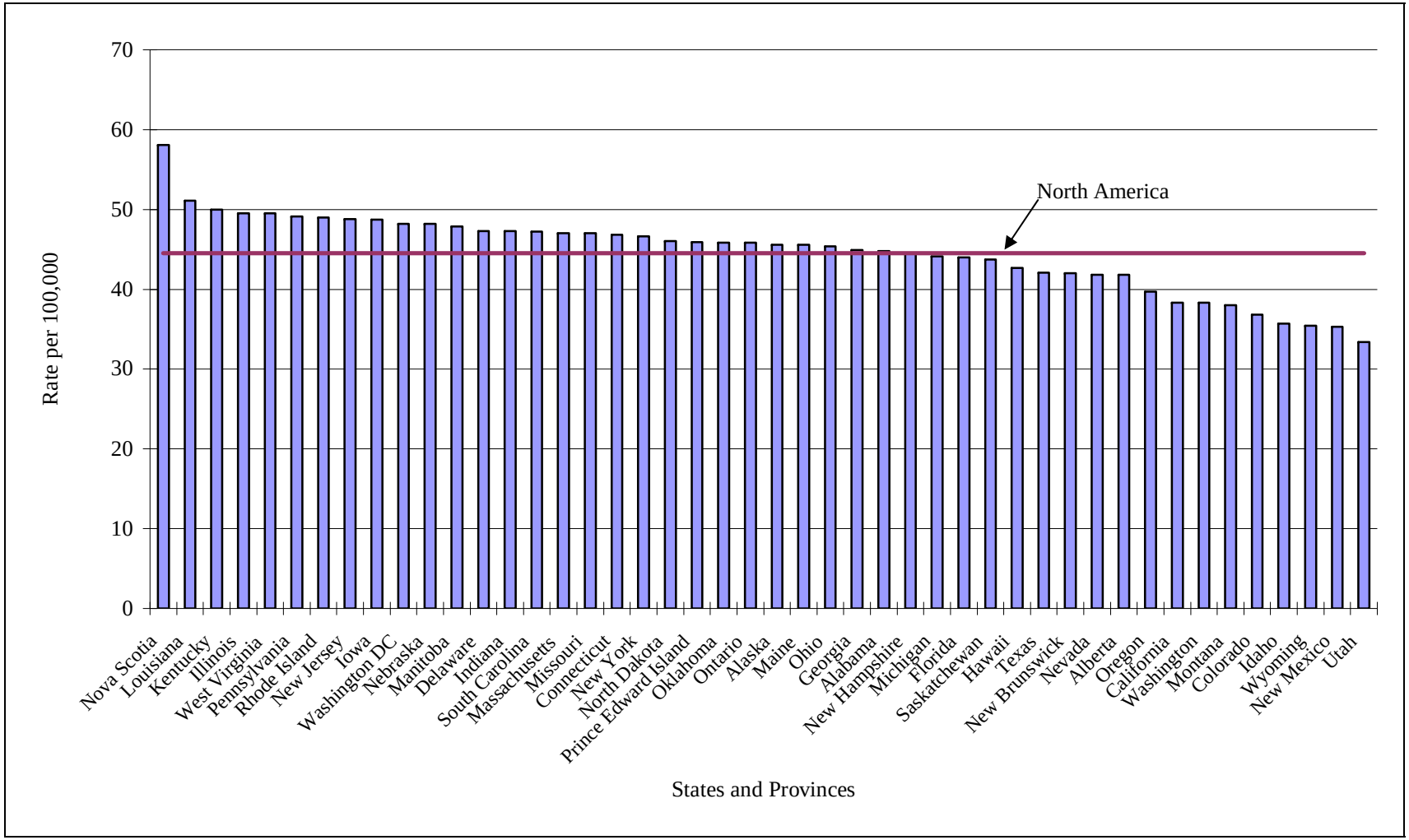
Figure 21. Age-Adjusted Incidence Rates by Registry*, Lung Cancer, United States, NHB Females, 2000-2004



* Alaska, Delaware, Washington DC, Iowa, Maine, Montana, New Hampshire, North Dakota, Utah, West Virginia, and Wyoming are excluded because each state had fewer than 25 cases of lung cancer in NHB women during this period.

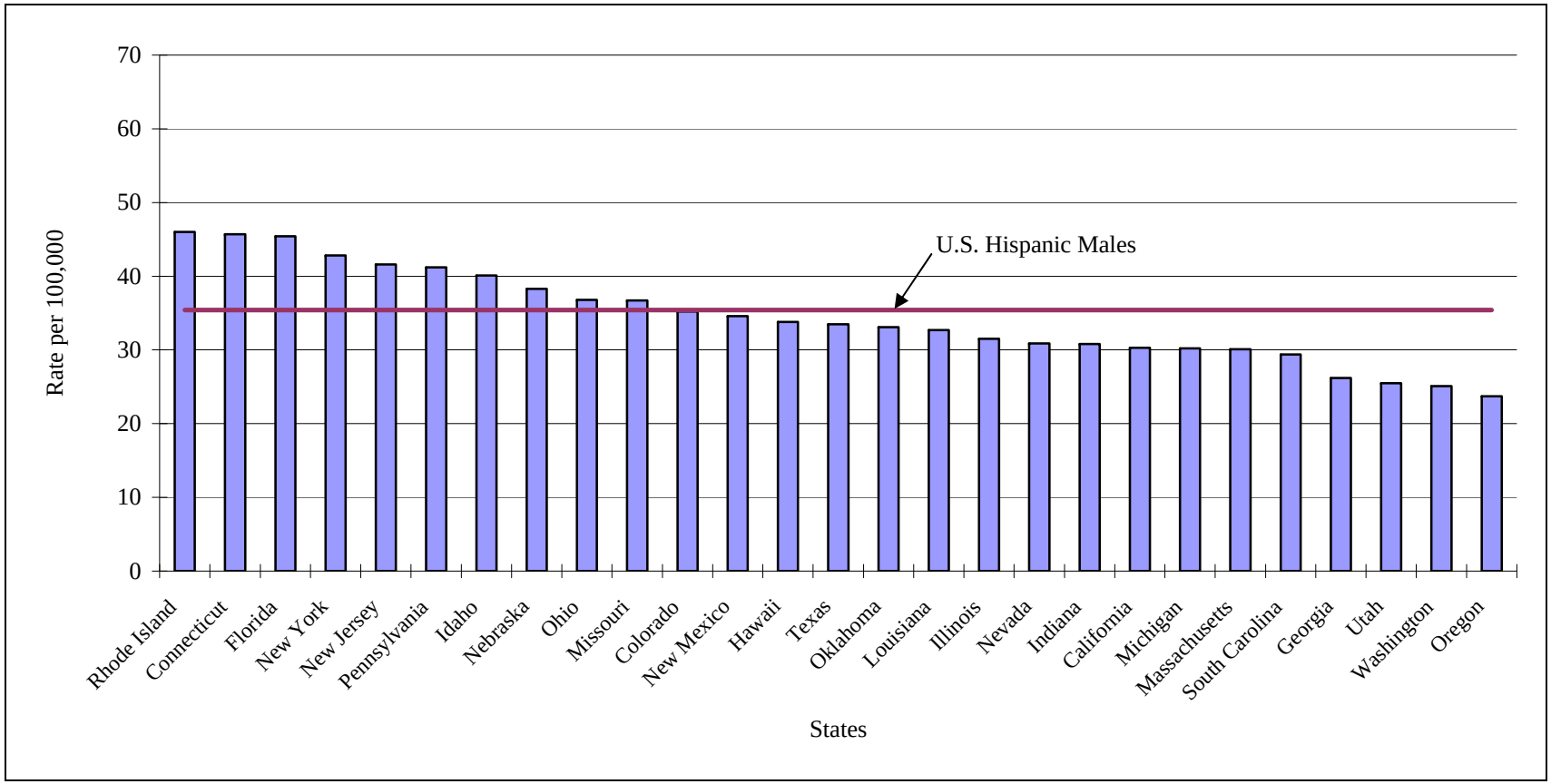
Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

Figure 22. Age-Adjusted Incidence Rates by Registry, Colon Cancer, North America, Males, 2000-2004



Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S. and provincial/territorial cancer registries participating in the Canadian Cancer Registry in Canada.

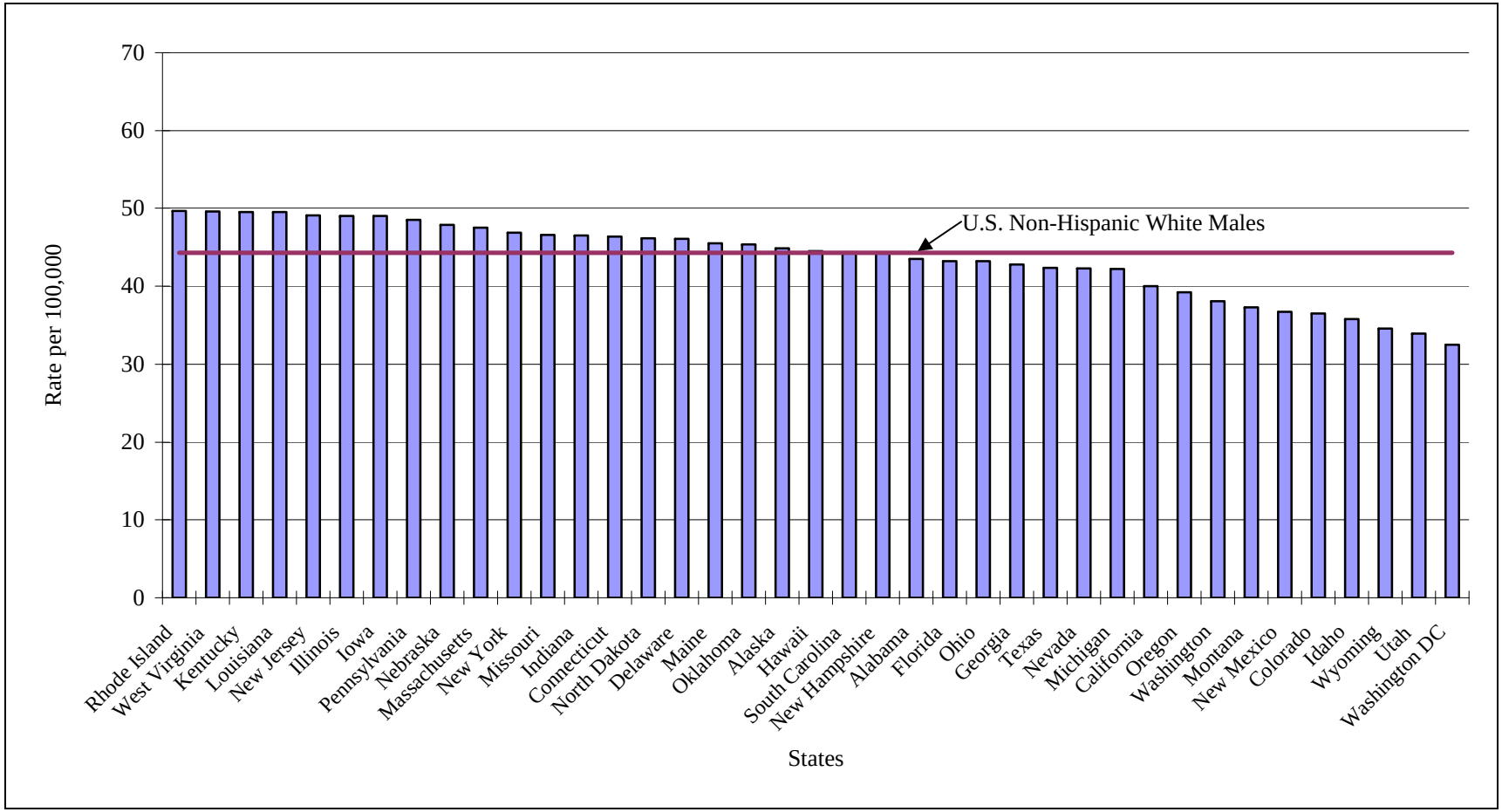
Figure 23. Age-Adjusted Incidence Rates by Registry*, Colon Cancer, United States, Hispanic Males, 2000-2004



* Alabama, Alaska, Delaware, Washington DC, Iowa, Kentucky, Maine, Montana, New Hampshire, North Dakota, West Virginia, and Wyoming are excluded because each state had fewer than 25 cases of colon cancer in Hispanic men during this period.

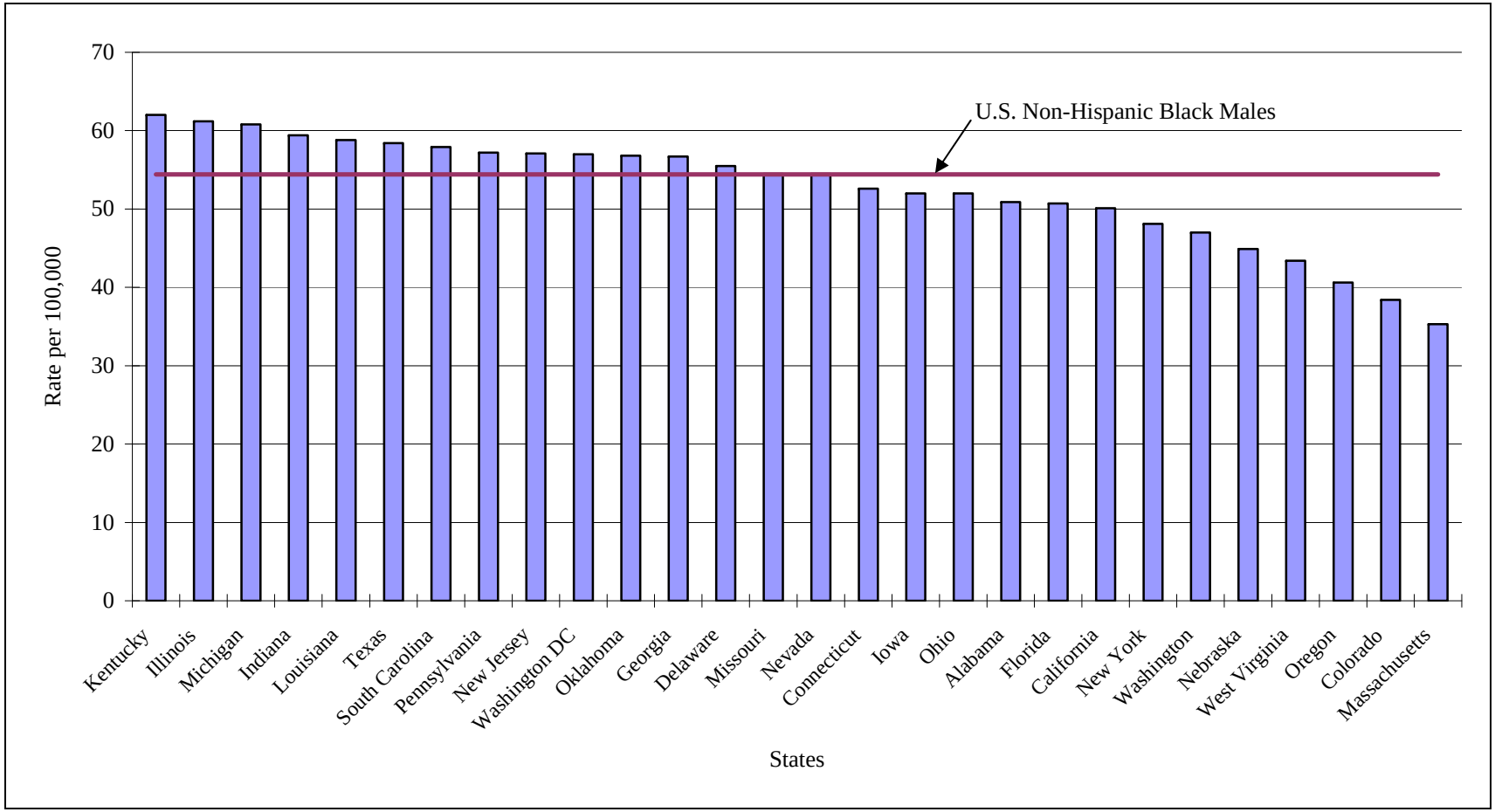
Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

Figure 24. Age-Adjusted Incidence Rates by Registry*, Colon Cancer, United States, NHW Males, 2000-2004



Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

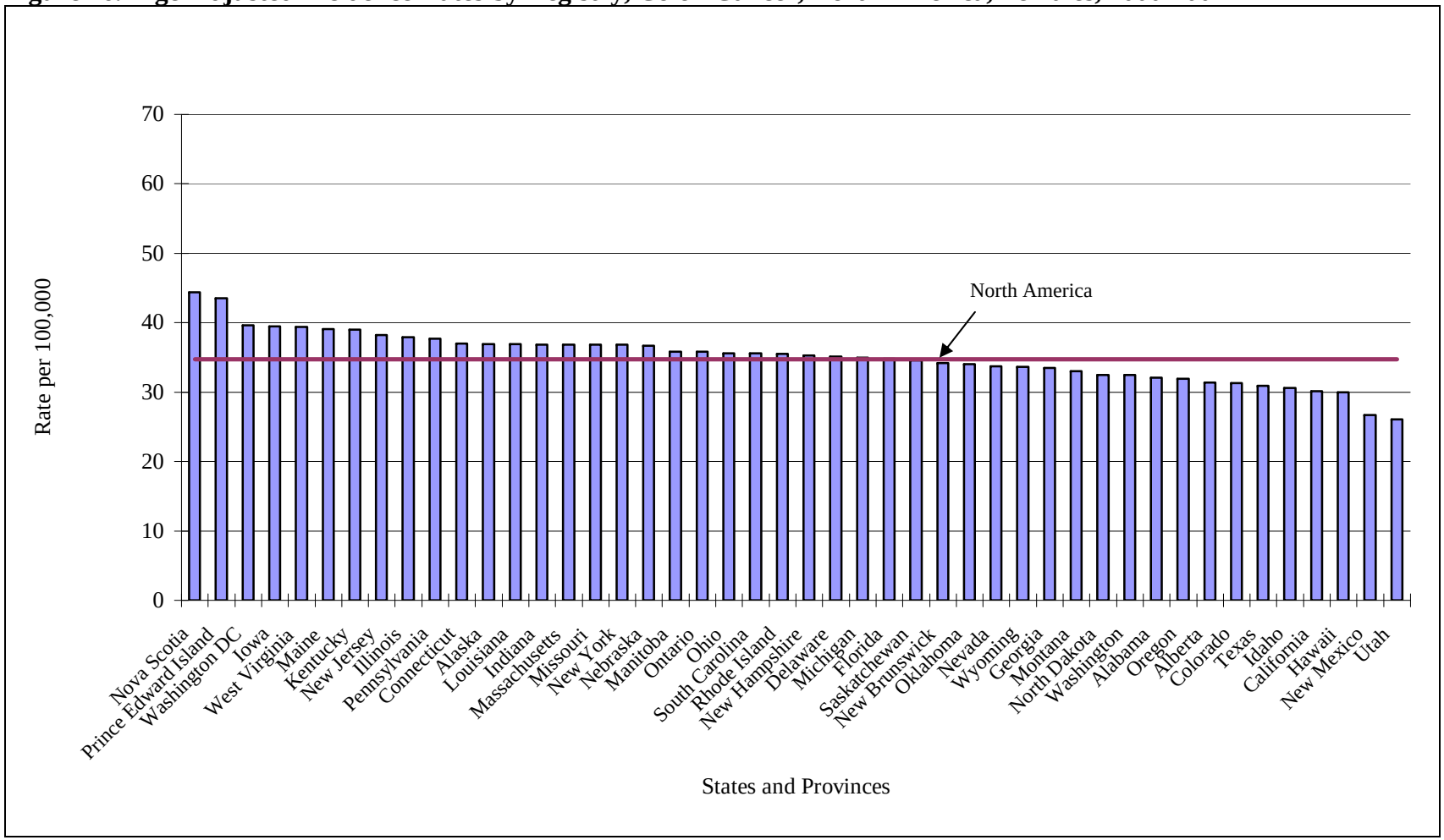
Figure 25. Age-Adjusted Incidence Rates by Registry*, Colon Cancer, United States, NHB Males, 2000-2004



* Alaska, Hawaii, Idaho, Maine, Montana, New Hampshire, North Dakota, Rhode Island, Utah, and Wyoming are excluded because each state had fewer than 25 cases of colon cancer in NHB men during this period.

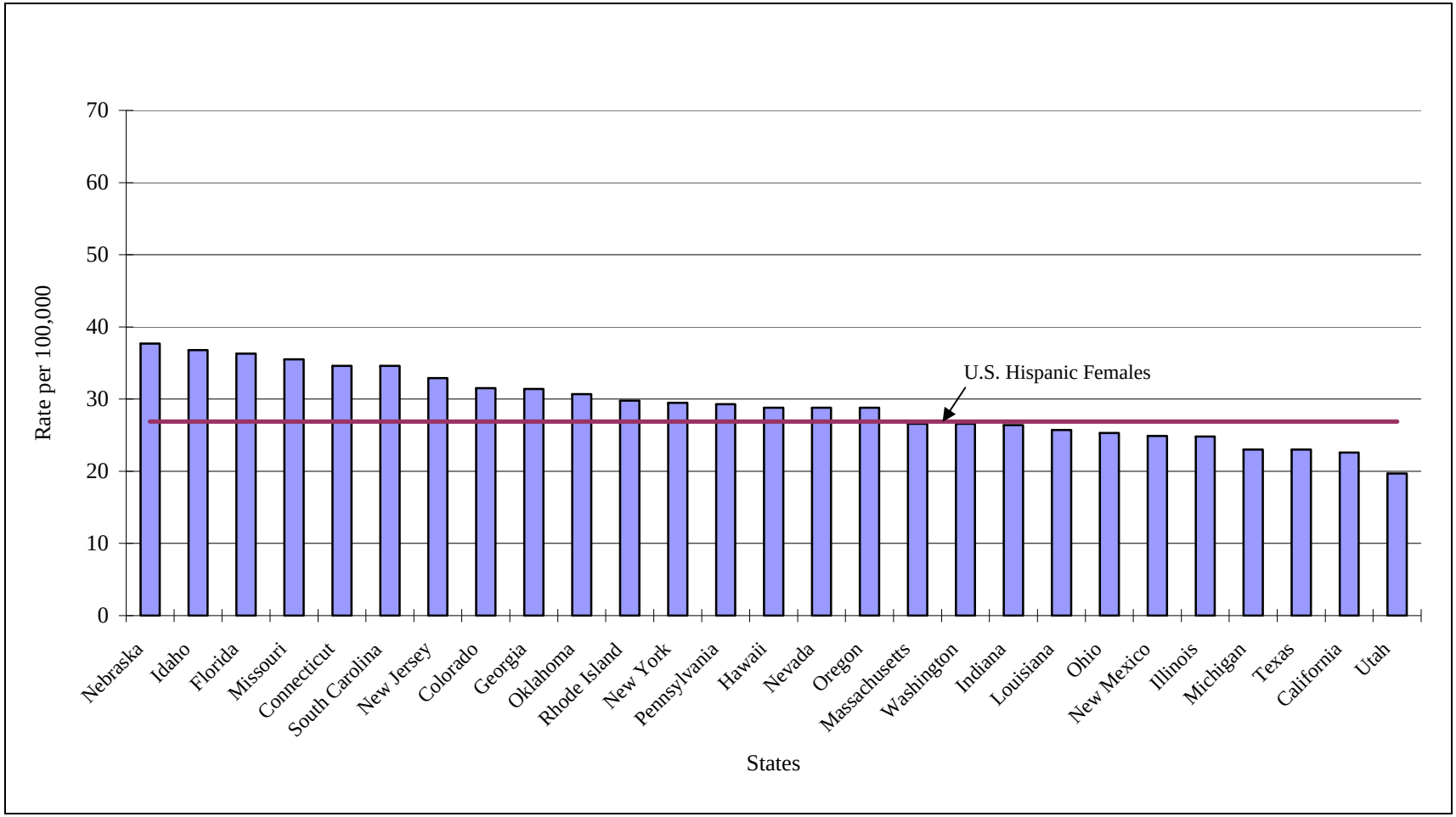
Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

Figure 26. Age-Adjusted Incidence Rates by Registry, Colon Cancer, North America, Females, 2000-2004



Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S. and provincial/territorial cancer registries participating in the Canadian Cancer Registry in Canada.

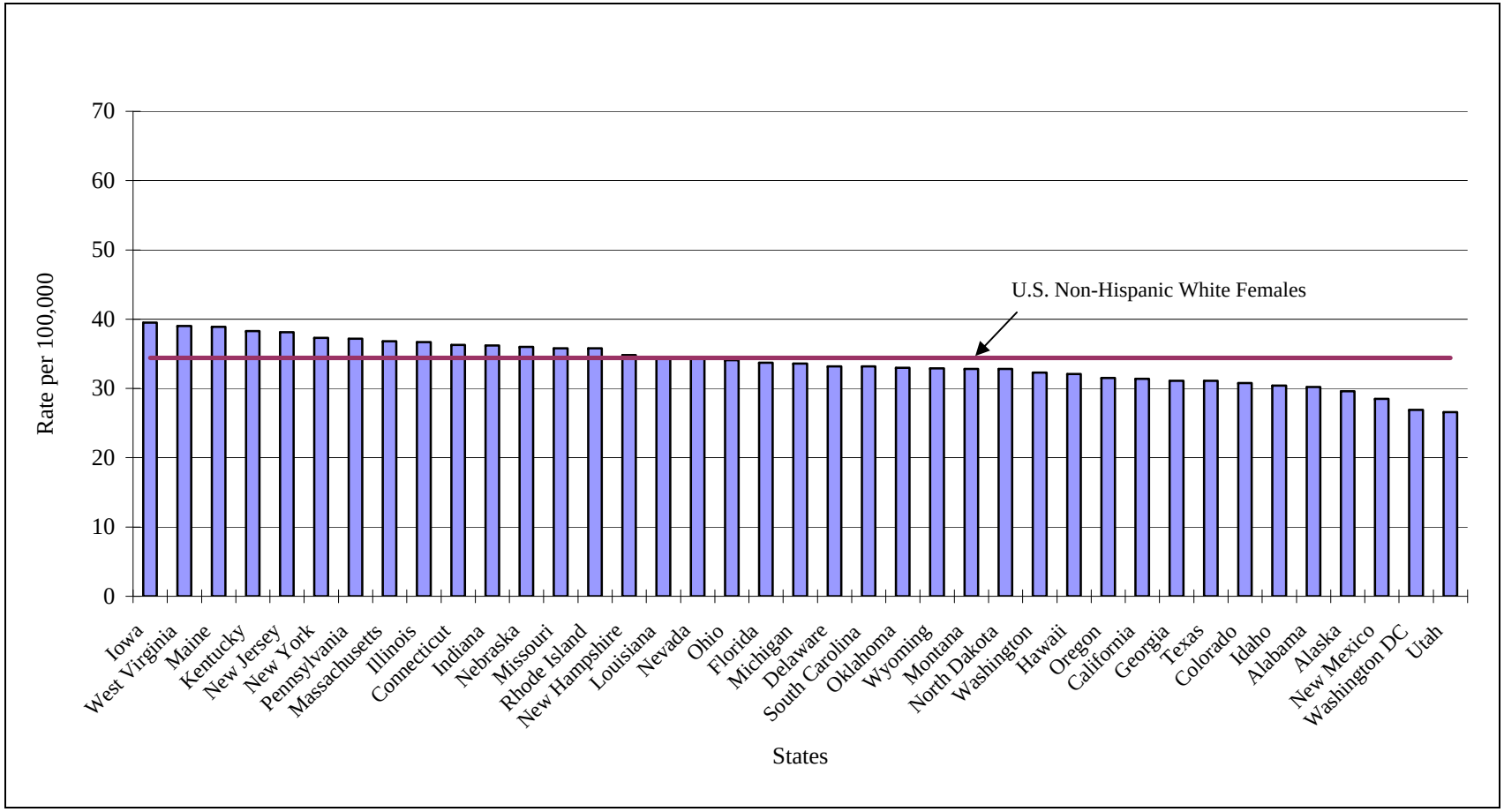
Figure 27. Age-Adjusted Incidence Rates by Registry*, Colon Cancer, United States, Hispanic Females, 2000-2004



* Alabama, Alaska, Delaware, Washington DC, Iowa, Kentucky, Maine, Montana, New Hampshire, North Dakota, West Virginia, and Wyoming are excluded because each state had fewer than 25 cases of colon cancer in Hispanic women during this period.

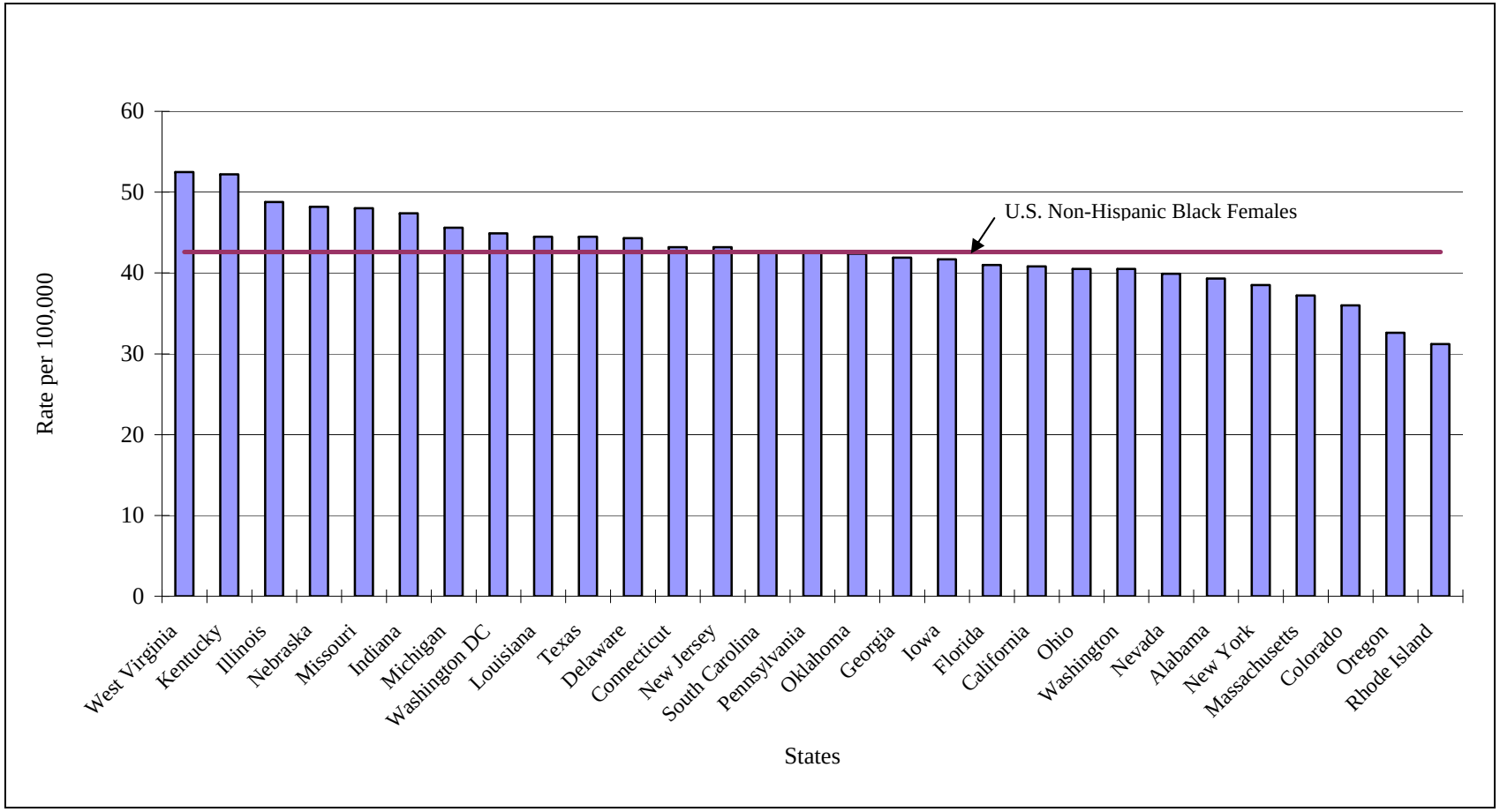
Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

Figure 28. Age-Adjusted Incidence Rates by Registry, Colon Cancer, United States, NHW Females, 2000-2004



Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

Figure 29. Age-Adjusted Incidence Rates by Registry*, Colon Cancer, United States, NHB Females, 2000-2004



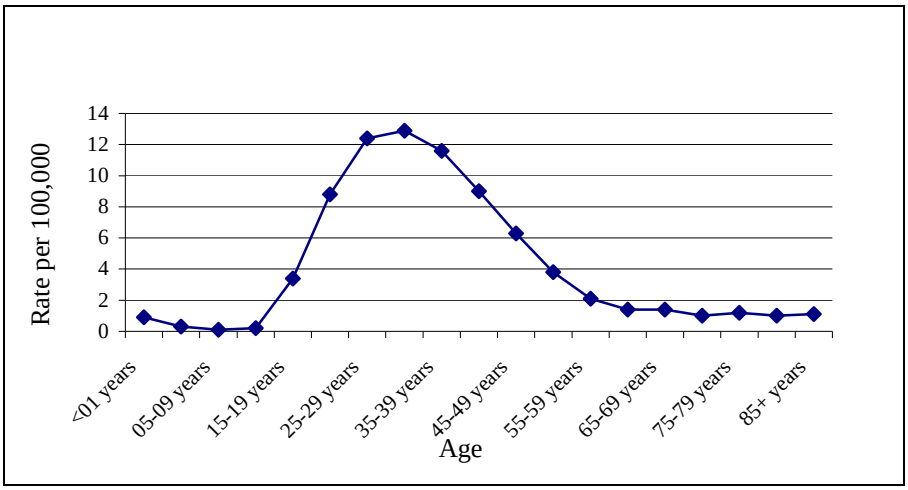
* Alaska, Hawaii, Idaho, Maine, Montana, New Hampshire, New Mexico, North Dakota, Utah, and Wyoming are excluded because each state had fewer than 25 cases of colon cancer in NHB women during this period.

Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

Highlights for Other Selected Cancers

Testicular cancer: Unlike many cancer sites, age-specific testicular cancer rates peaked in the age group of 35 to 39 year olds (Figure 30). The age-adjusted rate of testicular cancer in North America was 5.3, and was highest among NHW men compared with NHB and Hispanic men.

Figure 30. Age-Specific Incidence Rates for Testicular Cancer, North America, 2000-2004



Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S. and provincial/territorial cancer registries participating in the Canadian Cancer Registry in Canada.

Cervical cancer: Rates of cervical cancer varied by race. In the U.S., NHW women had an incidence rate of 7.7. NHB women had a rate 1.6 times the rate for NHW women (12.4) and Hispanic women had a rate 1.8 times higher the rate for NHW women (13.8). For all North American women, the rate of cervical cancer was 8.8.

Melanoma of the skin: The age-specific rates were higher among women younger than age 50 than among men of the same age group. However, after age 50, the age-specific rates of melanoma for men increased more rapidly and were higher for men than women. In the U.S., melanoma was also most common in NHW men (25.1) and women (16.7) compared with Hispanic men (4.4) and women (4.1) and NHB men and women (both 1.0). Melanoma rates were also higher in the U.S. compared with Canada, 16.7 and 14.0 respectively.

CHILDHOOD AND ADOLESCENT CANCERS

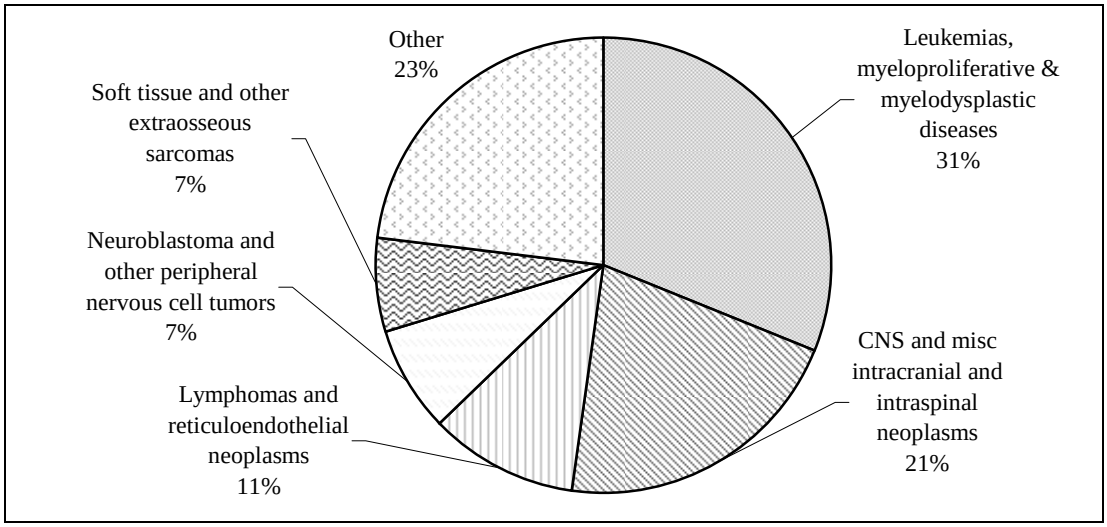
Childhood Cancers

Children ages 0 to 14 accounted for less than 1% of all cancer diagnoses between 2000 and 2004. The most common forms of cancer for this age group were leukemias, central nervous system, lymphomas, peripheral nervous cell tumors, and soft tissue (Figure 31). The distribution of these most common cancers was similar in boys and girls. North American boys had slightly, but significantly, higher rates of leukemias, and lymphomas compared to girls of the same age.

In the U.S., there were few racial variations among incidence rates for children ages 0 to 14. Hispanic children had the highest rate of leukemia compared to non-Hispanic white and non-Hispanic black children. Non-Hispanic white children had the highest rate of central nervous

system cancers and peripheral nervous cell tumors compared to both non-Hispanic black and Hispanic children. There was no difference between Hispanic and non-Hispanic white children for lymphomas, however the rate for non-Hispanic black children was significantly lower. There were no differences between the races for soft tissue sarcomas.

Figure 31. Five Most Commonly Diagnosed Cancers among Children Ages 0-14, North America, 2000-2004



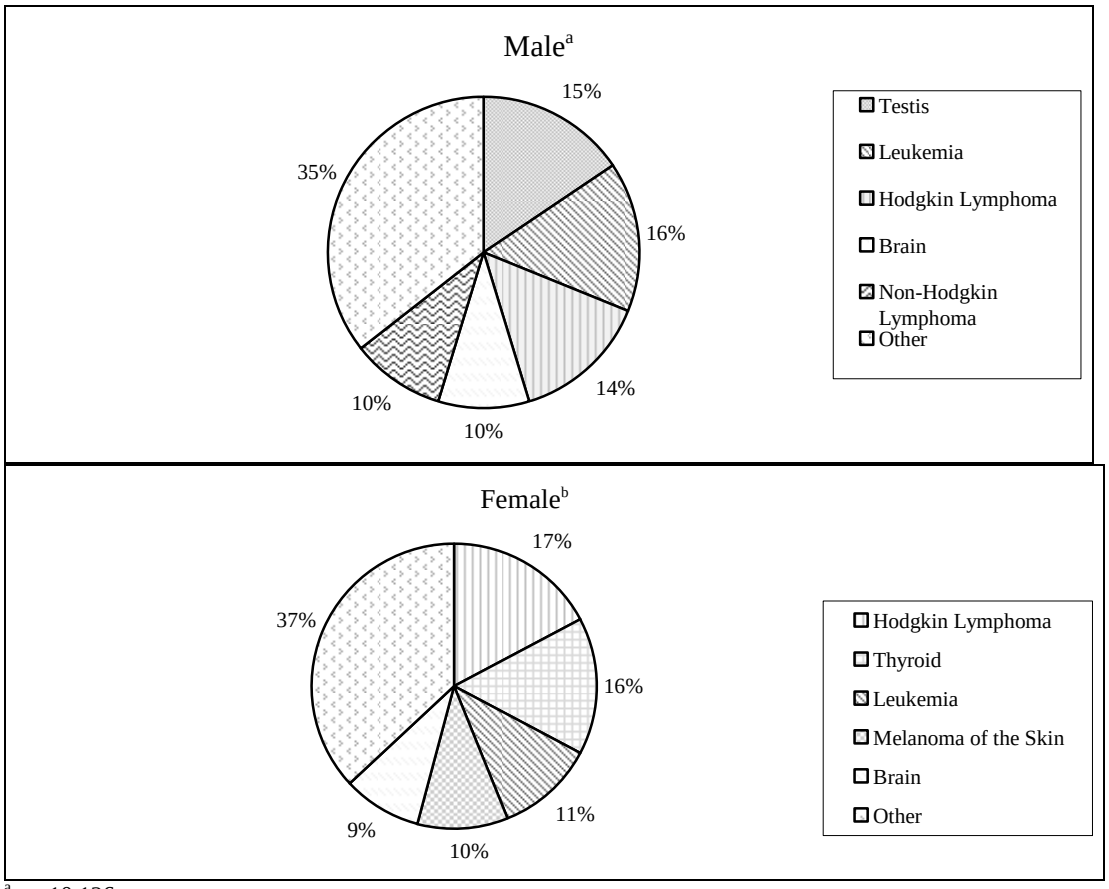
*n= 40,207 Note: due to small number of cases by sex both male and female childhood cancer rates were calculated.

Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S. and provincial/territorial cancer registries participating in the Canadian Cancer Registry in Canada.

Adolescent Cancers

While some of the common cancers for adolescents ages 15 to 19 were also common in younger children, others were not. For North American boys ages 15 to 19, the most common forms of cancer were testicular, leukemia, Hodgkin lymphoma, brain, and non-Hodgkin lymphoma (Figure 32). For North American girls of the same age, the most common cancers were Hodgkin lymphoma, thyroid, leukemia, melanoma of the skin, and brain (Figure 32).

Figure 32. Five Most Commonly Diagnosed Cancers among Adolescents Ages 15-19, by Sex, North America, 2000-2004



[a] n= 10,126
[b] n= 8,696
Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S. and provincial/territorial cancer registries participating in the Canadian Cancer Registry in Canada.

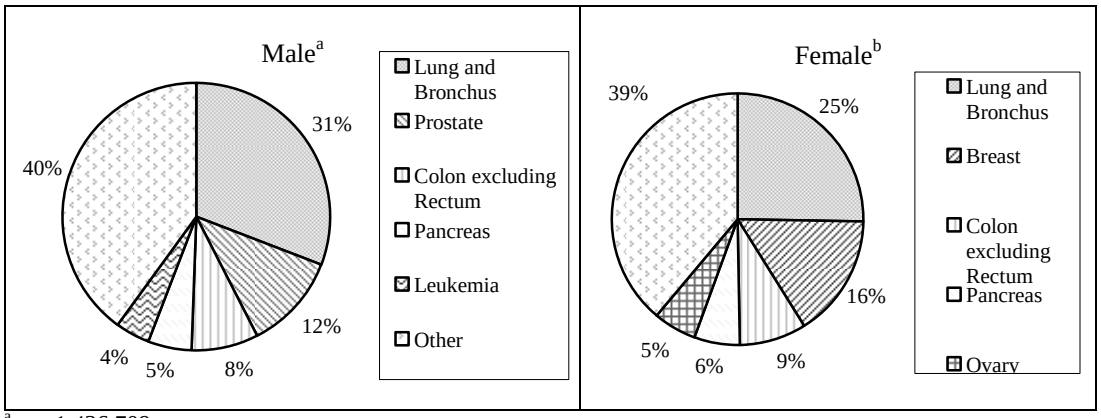
Adolescent boys had significantly higher rates of leukemia, brain cancer, and non-Hodgkin lymphoma compared to adolescent girls. Girls ages 15 to 19 had significantly higher rates of Hodgkin lymphoma, thyroid cancer, and melanoma of the skin in relation to adolescent boys.

In the U.S., testicular cancer rates were lowest among non-Hispanic black adolescent boys. The rate for non-Hispanic white and Hispanic adolescents (3.9) was 5.5 times higher than for non-Hispanic blacks (0.7). Hodgkin lymphoma was significantly higher for non-Hispanic white boys (3.4) compared to non-Hispanic black (2.0) and Hispanic boys (2.5). Hodgkin lymphoma was also significantly higher for non-Hispanic white adolescent girls compared to non-Hispanic black and Hispanic girls of the same age. The rate of thyroid cancer for non-Hispanic white girls was 5.1 times that for non-Hispanic black girls. Adolescent Hispanic girls also had a significantly higher rate of thyroid cancer when compared to non-Hispanic blacks, 3.7 times higher.

CANCER MORTALITY, 2000-2004

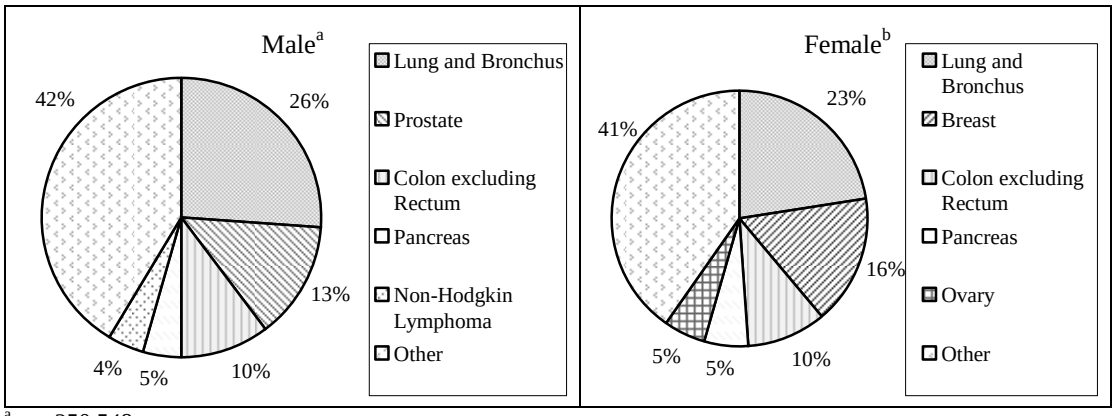
In the United States, the most common causes of cancer deaths in men were lung, prostate, colon, and pancreatic cancers, and leukemia (Figure 33). Among women, the most common causes of cancer deaths were lung, breast, colon, pancreatic, and ovarian cancers (Figure 33). The most common forms of cancer-related deaths for women in Canada were the same as for United States women (Figure 34). Canadian men however differed slightly from the United States men. The most common causes of cancer deaths for men in Canada were lung, prostate, colon, and pancreatic cancers, and non-Hodgkin lymphoma (Figure 34).

Figure 33. Five Most Common Causes of Deaths from Cancer, by Sex, United States, 2000-2004



[a] n = 1,436,709
[b] n= 1,338,165
Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S.

Figure 34. Five Most Common Causes of Deaths from Cancer, by Sex, Canada, 2000-2004



[a] n = 250,548
[b] n = 224,864
Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from provincial/territorial cancer registries participating in the Canadian Cancer Registry in Canada.

Lung cancer: The lung cancer death rate was higher among men than women in both the U.S. and Canada. The death rate for lung cancer was lower in Canada compared with the U.S. In the

United States, black men had a 1.3 times higher rate of lung cancer deaths compared with white men. However, white women had a higher lung cancer mortality compared with black women.

Prostate cancer: This was the second most common cause of cancer deaths for both United States and Canadian men. The death rates in the United States and Canada were similar. In the United States black men had a 2.4 times higher death rate than white men.

Breast cancer: In women, breast cancer was the second most common cause of cancer mortality in the U.S. and Canada. Canadian women had a lower mortality compared with women in the United States. Even though white United States women had the highest incidence rate of breast cancer, black United States women had a higher death rate compared with white women.

Colon cancer: For both men and women, the death rate for colon cancer was higher in Canada than in the U.S. Men had a higher rate of colon cancer deaths than women in both Canada and the U.S. United States black men and women had higher death rates compared with white men and women, about 1.5 times higher for both men and women.

Pancreatic cancer: The death rate for pancreatic cancer was higher for men than for women in both Canada and the U.S. United States women had a higher rate of pancreatic cancer deaths compared with Canadian women. Canadian men, however, had a higher death rate compared with men in the U.S. In the U.S., black men and women had higher death rates from pancreatic cancer compared with white men and women.

Ovarian cancer: The ovarian cancer death rate was significantly higher for United States women compared with Canadian women. White women had a 1.2 times higher mortality compared with black women in the United States.

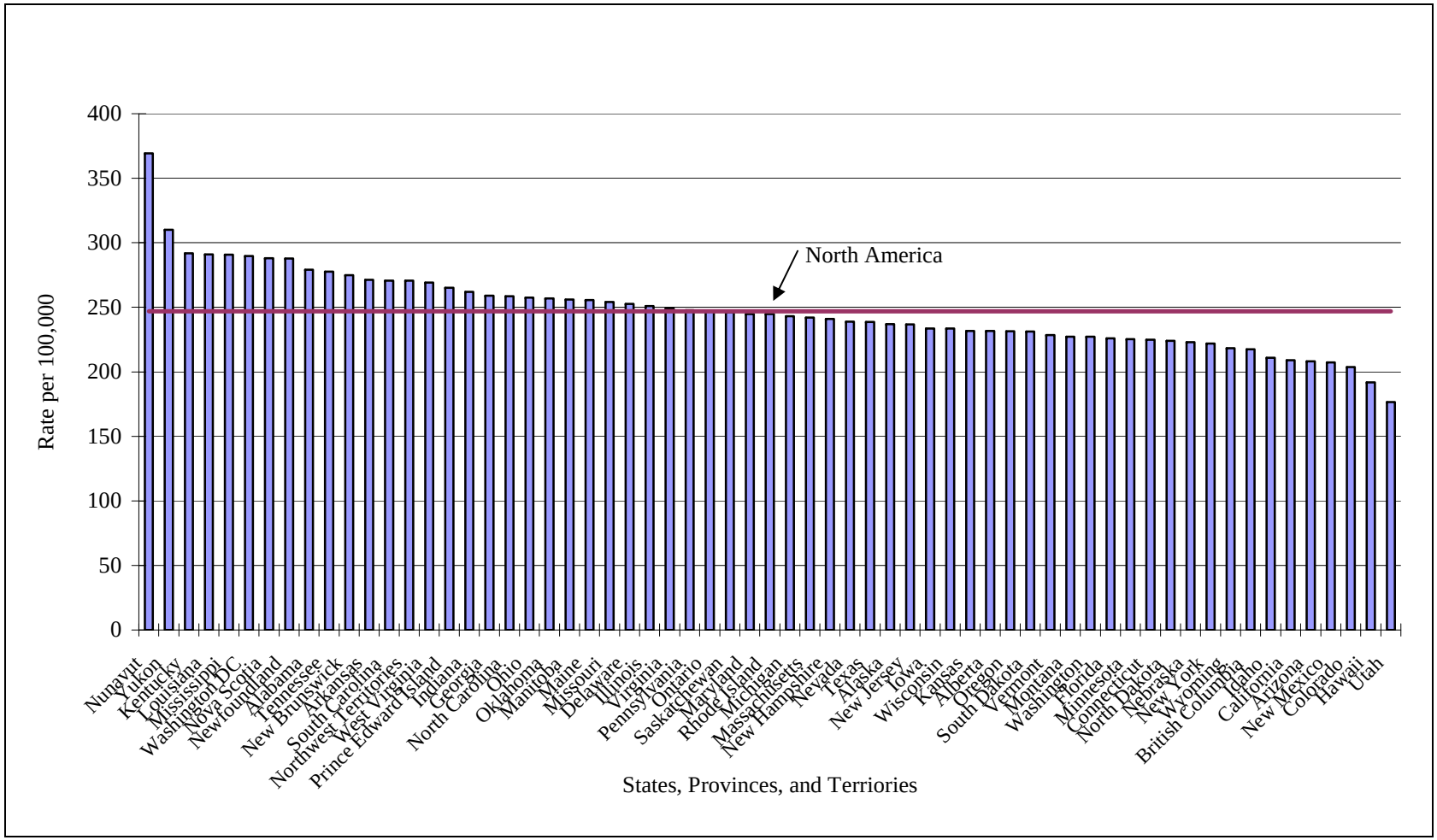
Leukemia: This was the fifth most common cause of cancer deaths for United States men. The mortality for leukemia among men was 1.2 times higher in the U.S. than in Canada. White men had a higher death rate than black men in the U.S.

Non-Hodgkin lymphoma: This was the fifth most common cause of cancer deaths in Canada for men. However, the death rate for non-Hodgkin lymphoma was higher in the U.S. than in Canada. As with leukemia, white men in the U.S. had a higher death rate than black men.

State/Provincial Variations in Common Causes of Cancer Deaths

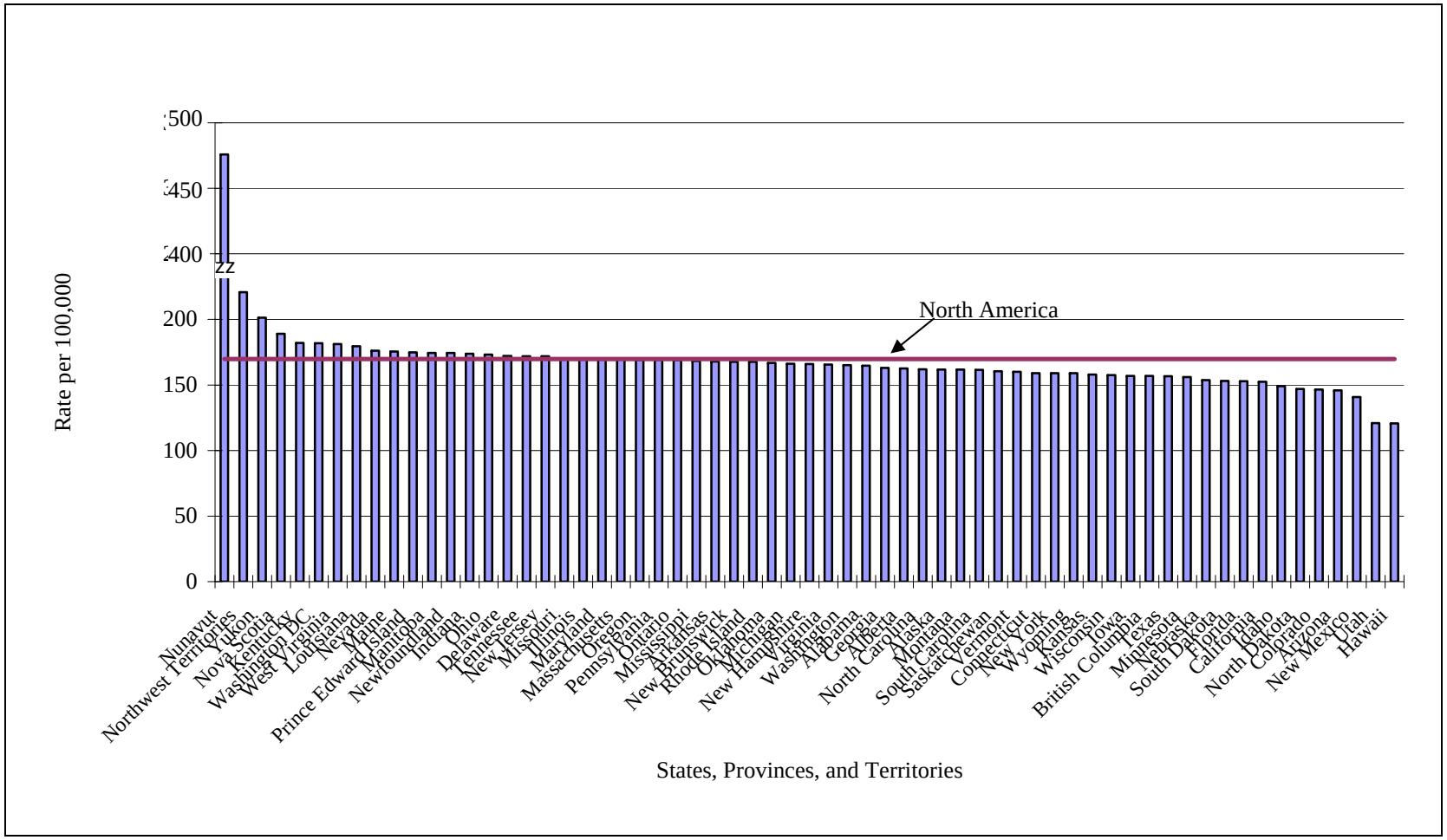
Death rates for all cancer sites varied by state, province, and territory for both men and women (Figures 35 and 36). For both men and women, the territory of Nunavut in northern Canada had the highest death rate for all cancer sites combined. Many regions with above-average death rates for men also had above-average death rates for women.

Figure 35. Age-Adjusted Death Rates by Registry, All-Cancer, North America, Males, 2000-2004



Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S. and provincial/territorial cancer registries participating in the Canadian Cancer Registry in Canada.

Figure 36. Age-Adjusted Death Rates by Registry, All-Cancer, North America, Females, 2000-2004



Source: Data as of December 2006 reported by NAACCR as meeting high quality standards for 2000-2004 and including data from state registries participating in the SEER and/or NPCR Programs in the U.S. and provincial/territorial cancer registries participating in the Canadian Cancer Registry in Canada.