

I. HEALTH ASSESSMENT

C. HEALTH STATUS

4. BEHAVIORAL RISK FACTORS

1. WHAT IS THE HEALTH STATUS OF DELAWARE RESIDENTS WITH REGARD TO BEHAVIORAL RISK FACTORS?

Delaware residents perform slightly more favorably or comparably to benchmarks on roughly half of the indicators for which data were available, including binge drinking, women's preventive services (e.g., mammograms and Pap smears), obesity, seat belt use and blood pressure screening. Delaware residents were more likely to die in an alcohol-related motor vehicle accident or other accidents, smoke and live a sedentary lifestyle.

- Behavioral risk factor section data were taken from several different sources:

- Data from the Behavior Risk Factor Surveillance Surveys¹ conducted in 1997 and 1998 provided state level data for eight indicators (sedentary lifestyle, obesity, smoking, binge drinking, seat belt use, Pap smear rate, mammography rate and blood pressure screening).
- The Lewin Group calculated alcohol-related motor vehicle accident fatality data for Delaware using national mortality and traffic fatality databases.
- The National Center for Health Statistics provided the data to analyze the rate of deaths related to accidental injuries².

TECHNICAL NOTE

Data from the Behavioral Risk Factor Surveillance Survey are self-reported, as is much data regarding behavioral risk factors. Although self-reporting creates a potential bias for underreporting of behavioral risks, there is no evidence that this is more pronounced for Delaware than for benchmarks.

¹ The Behavior Risk Factor Surveillance Survey (BRFSS) is a Center for Disease Control and Prevention survey effort conducted nationwide to assess the prevalence of health-related behavioral risk factors associated with leading causes of premature death and disability.

² Deaths related to injury includes deaths from accidental and adverse effects including cut/pierce; drowning/submersion; drug, adverse effects; fall; fire/burn; firearm; medical care, adverse effects; motor vehicle traffic; natural environmental; over exertion; pedal cyclist, other; pedestrian; poisoning; struck by, against machinery; suffocation; and transport, other.

- **Delaware residents appear less likely to exercise than residents of benchmarks.**
 - Consistent with stakeholder perceptions, in 1996 a higher proportion of Delaware residents reported **sedentary lifestyles** (36.1 percent of respondents) than in most benchmark communities (ranging from 19.1 percent to 33.8 percent of respondents).
- **The percent of Delaware residents who are overweight is comparable to benchmarks.**
 - Roughly 32.5 of Delaware respondents reported being **overweight** in 1997, compared to between 28.2 percent and 32.2 percent in comparison states and the nation.
 - Delaware did not meet the Healthy People 2000 objective of reducing the prevalence of obesity to no more than 20 percent.
- **Delaware residents are slightly more likely to smoke than their counterparts in comparison states and the nation.**
 - In 1997, 26.6 percent of respondents in Delaware **smoked**, compared to between 20.4 percent and 24.2 percent in comparison states and 23.2 percent in the U.S.
 - Delaware fell short of the Healthy People 2000 objective of reducing the prevalence of smoking in the population 20 years and older to no more than 15 percent.
 - A survey conducted by The Lewin Group in 2000 indicated that, of respondents who currently smoke and visited a health care provider in the last 12 months, 82 percent were **advised to quit smoking**.
- **Delaware residents engage in binge drinking³ slightly less than their counterparts in comparison states and the U.S.**
 - In 1997, 22.1 percent of Delaware respondents reported binge drinking, a smaller proportion than in the U.S. (27.5 percent of respondents) and three of four comparison states.
- **Delaware has a substantially higher rate of alcohol-related motor vehicle accident fatalities relative to benchmarks.**

ISSUE FOR FUTURE STUDY

Despite a smaller proportion of Delaware residents engaging in binge drinking, the State still experiences a high rate of alcohol-related motor vehicle fatalities. Numerous factors, including seat belt use, public health education initiatives, and drivers' education, could contribute to reducing the number of alcohol-related motor vehicle fatalities. Delaware's performance on seat belt use and other accidental death are comparable to benchmarks.

³ Binge drinking is defined as consuming five or more drinks on one or more occasions in the previous month.

- Delaware’s 1997 rate of **alcohol-related motor vehicle accident fatalities** (9.1 fatalities per 100,000 persons) is 153 percent to 314 percent greater than comparison states and 139 percent greater than in the U.S.
- Delaware’s proportion of **alcohol-related motor vehicle accident fatalities** per 100,000 persons exceeds the Healthy People 2000 objective of 5.5 fatalities per 100,000 persons by 65 percent.
- **Delaware residents use seatbelts at a comparable rate compared to benchmark populations.**
 - Delaware survey data from 1997 indicates that Area residents are about as likely to use **seatbelts** (69.9 percent) as residents of the nation as a whole and comparison states. The proportion of residents aged 18 years and over who reported always using seatbelts in the nation and comparison states ranged from 67.3 percent to 76.1 percent.
 - Delaware fell short of meeting the Healthy People 2000 goal of increasing seatbelt usage to at least 85 percent.
- **Delaware’s accidental and adverse effects death rate is slightly higher than in the nation and comparison states⁴.**
 - In 1997, Delaware residents exhibited an **accidental and adverse effects mortality rate** (33.3 deaths per 100,000 persons) six percent to 53 percent higher than comparison states and 11 percent higher than the nation.
 - Delaware fell short the Healthy People 2000 objective of reducing the **rate of unintentional injury deaths** to no more than 29.3 per 100,000 persons.
- **Delaware residents appear equally as likely to check their blood pressure when compared to benchmark populations.**
 - Based on state BRFSS data from 1997, Delaware residents appear equally as likely to have had **blood pressure screening** in the previous two years (94.3 percent) as residents of comparison states and the nation as a whole.
- **Use of preventive women’s health services, such as Pap smears and mammograms, is slightly better than in benchmarks.**
 - Approximately 90 percent of Delaware females responding to the BRFS survey in 1997 reported having had a **Pap smear** in the past three years, a proportion

⁴ Deaths related to injury includes deaths from accidental and adverse effects include cut/pierce; drowning/submersion; drug, adverse effects; fall; fire/burn; firearm; medical care, adverse effects; motor vehicle traffic; natural environmental; over exertion; pedal cyclist, other; pedestrian; poisoning; struck by, against machinery; suffocation; and transport, other.

- exceeding those of the nation, comparison states and the Healthy People 2000 Objective by up to five percent.
- A survey of Delaware residents conducted by The Lewin Group in 2000 indicated that 68.3 percent of respondents who were female, 18 years of age and older reported receiving a pelvic exam in the past 12 months.
 - The proportion of Delaware age 18 and over responding to the BRFSS survey who reported **mammography** services (90.0 percent) was slightly higher than most comparison states.
 - In 2000, 80.5 percent of female respondents 40 years of age and older reported receiving a mammogram in the past 12 months on a survey conducted by The Lewin Group.

Exhibit I-C-42: Delaware’s behavior risk profile yielded mixed results. Of note, the state performed better relative to Pap smears and mammograms but worse relative to seat belt use and smoking.

Health Status Indicators

Behavioral Risk Factors	
Sedentary Lifestyle	—
Overweight	↔
Smoking	—
Binge Drinking	+
Alcohol-related Motor Vehicle Accident Fatalities	—
Seat Belt Use	↔
Accidents and Adverse Events	—
Blood Pressure Screening	↔
Pap Smear	+
Mammogram	+

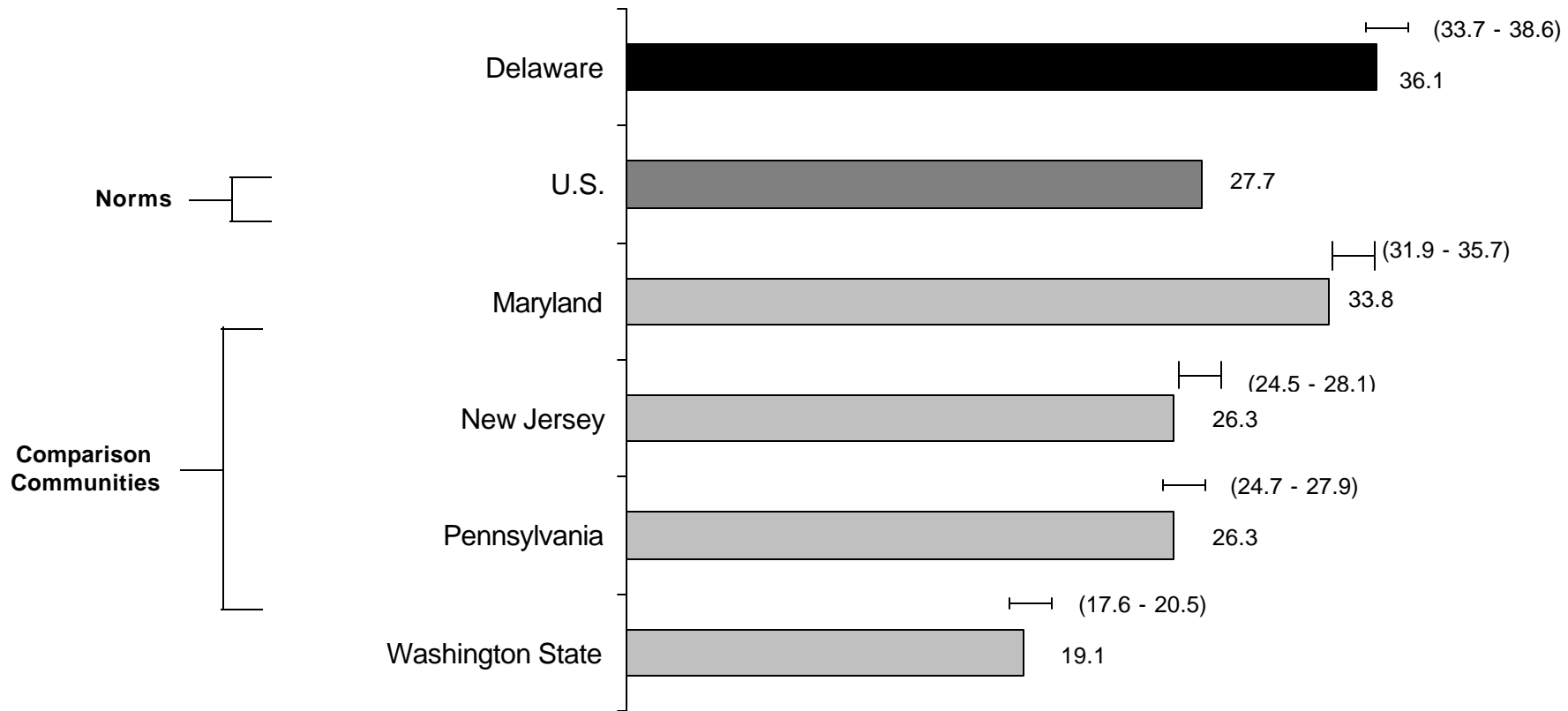
Performance Relative to Benchmarks: + More Favorable ↔ Comparable — Less Favorable

HEALTH	RESOURCE	VALUE
Demographic	Socioeconomic	Health Status

Exhibit I-C-43:

A larger proportion of Delaware residents reported no physical activity in the prior month compared to the national norm and comparison communities.

**Proportion of Residents Aged 18 and Older Reporting No Physical Activity in the Past Month^(a)
Delaware, U.S. and Comparison Communities 1996**



Sources: 1-6) 1996 data, Behavior Risk Factor Surveillance System.

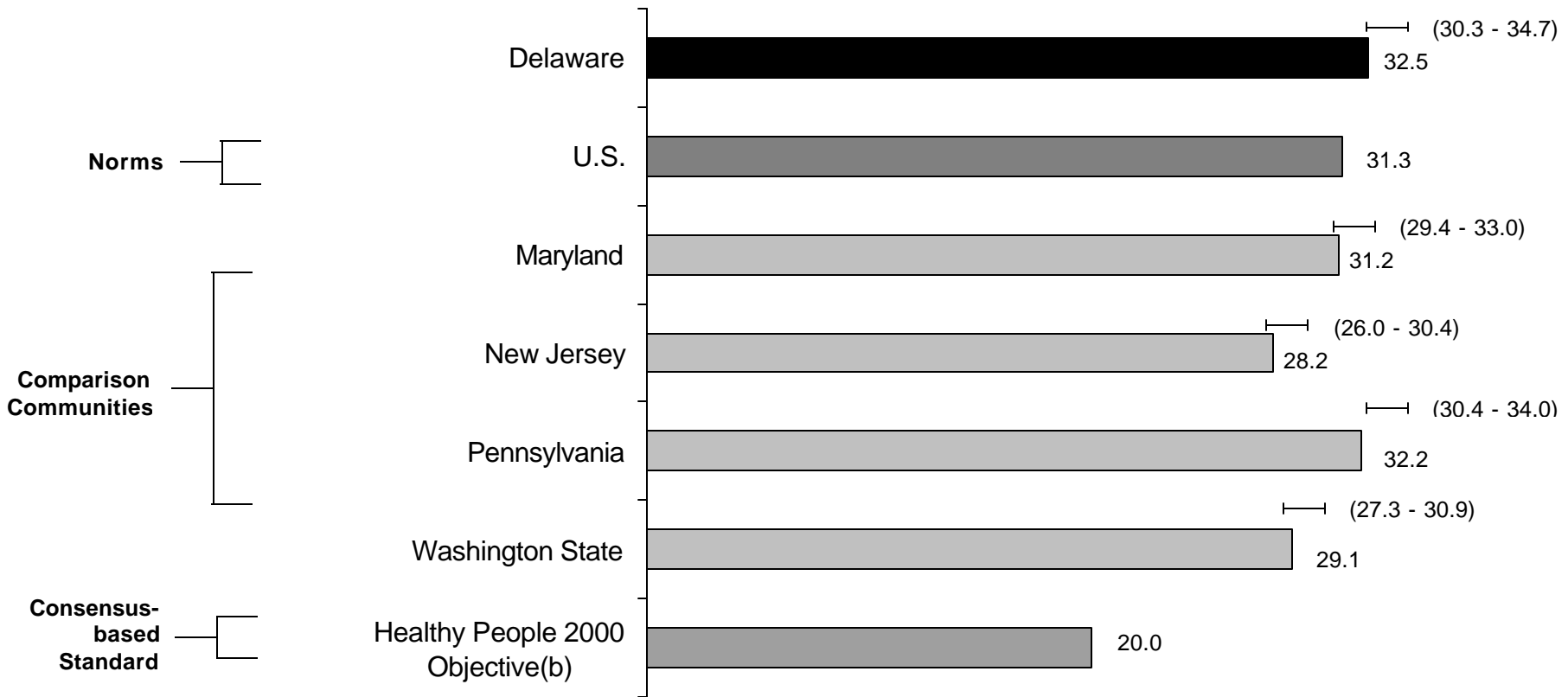
Notes: (a) Brackets above each bar represent the 95% confidence interval surrounding the proportion.

HEALTH	RESOURCE	VALUE
Demographic	Socioeconomic	Health Status

Exhibit I-C-44:

The proportion of Delaware residents surveyed in 1997 who reported being overweight was similar to the national norm and comparison communities but higher than the Healthy People 2000 Objective.

**Proportion of Residents Aged 18 and Older Classified as Overweight^(a)
Delaware, U.S. and Comparison Communities 1997**



Sources: 1-6) 1997 data, Behavior Risk Factor Surveillance System; 7) Healthy People 2000 Objective.

Notes: (a) Overweight defined as body mass index (BMI = weight [kg]/height [m²]) ≥ 27.8 for men and ≥ 27.3 for women. The brackets above each bar represent the 95% confidence interval surrounding the proportion.

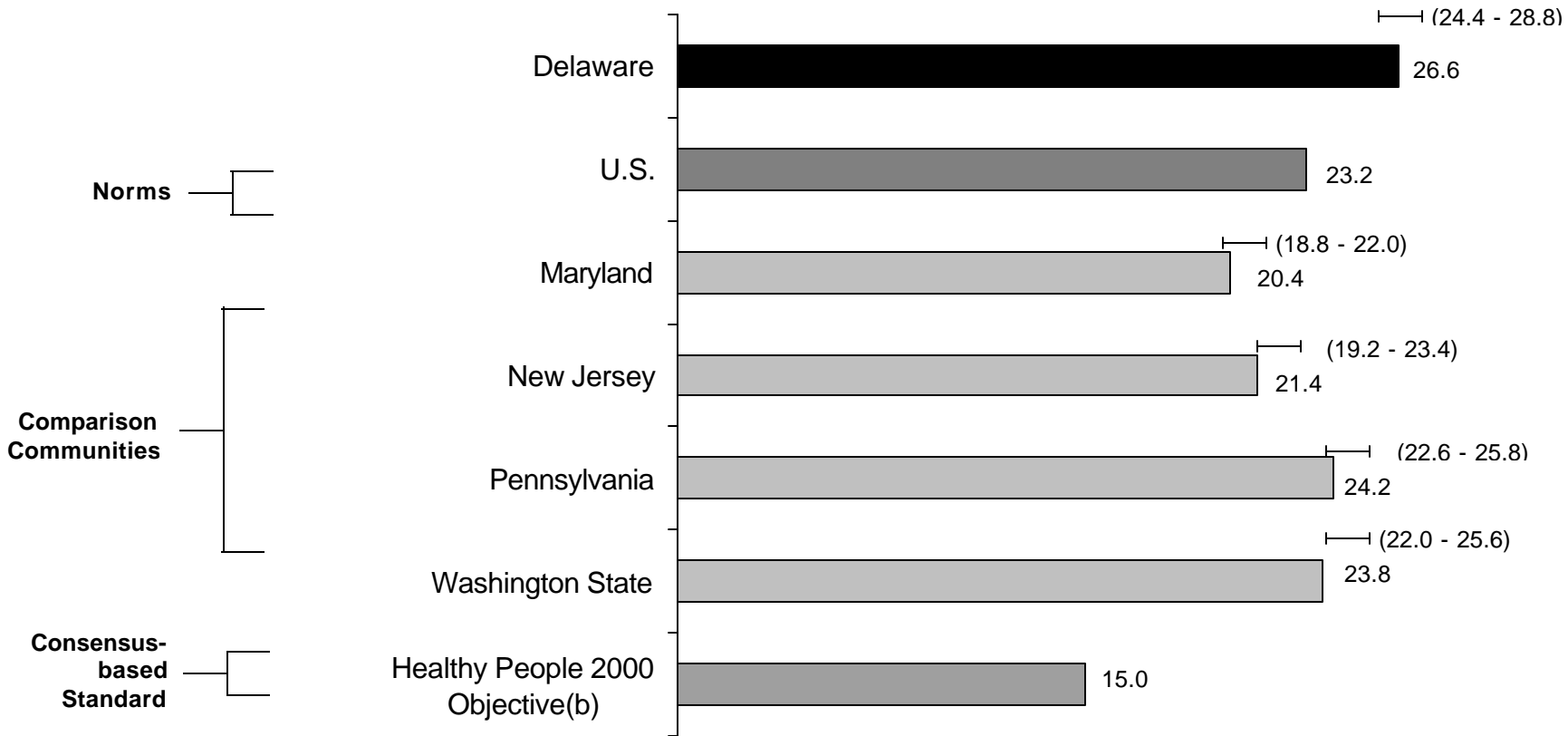
(b) The Healthy People 2000 Objective is to reduce the prevalence of obesity to no more than 20% of those 20 years and older.

HEALTH	RESOURCE	VALUE
Demographic	Socioeconomic	Health Status

Exhibit I-C-45:

A slightly higher proportion of Delaware residents surveyed in 1997 smoked compared to the national norm and comparison communities.

**Prevalence of Cigarette Smoking Among Residents 18 Years and Older^(a)
Delaware, U.S. and Comparison Communities 1997**



Sources: 1-6) 1997 data, Behavior Risk Factor Surveillance System; 7) Healthy People 2000 Objective.

Notes: (a) The brackets above each bar represent the 95% confidence interval surrounding the proportion.

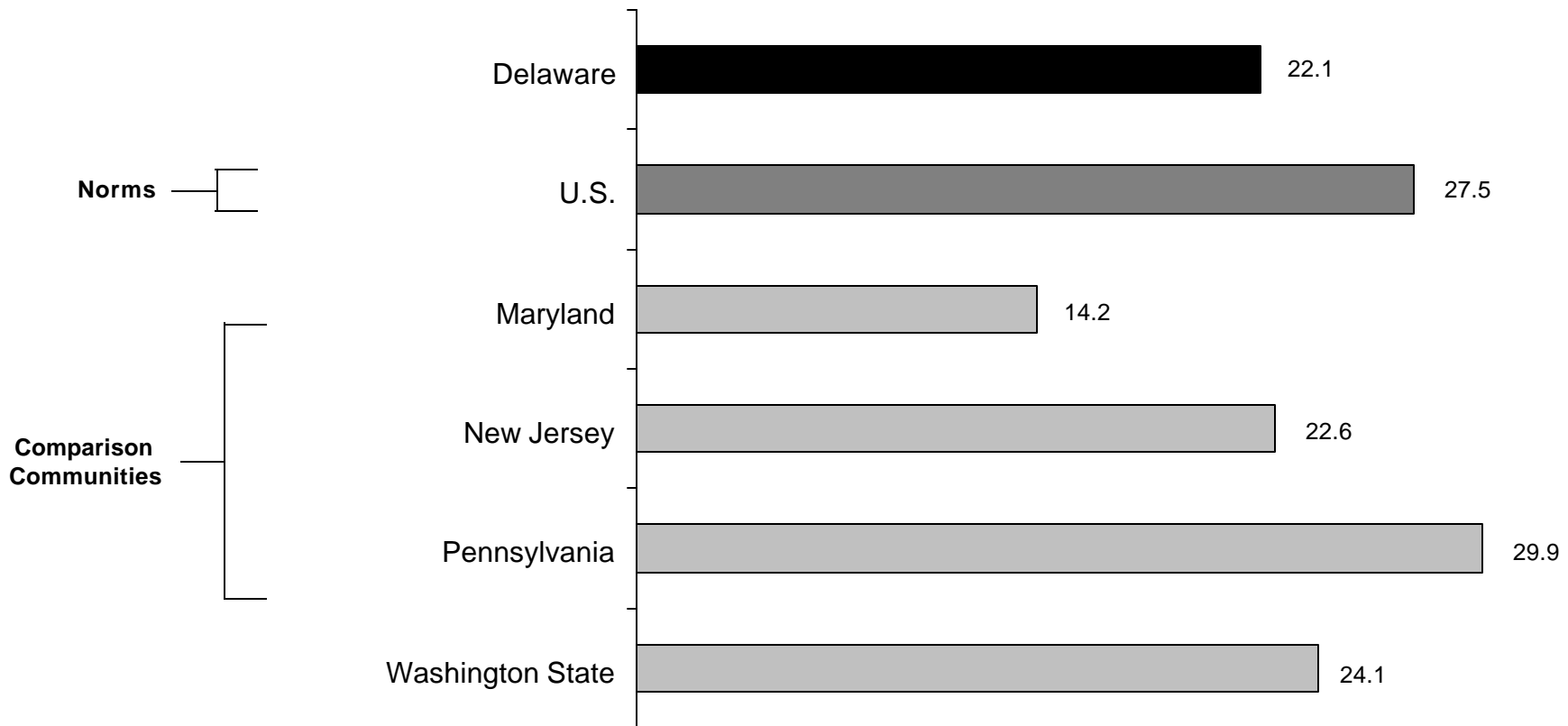
(b) The Healthy People 2000 objective is to reduce the prevalence of smoking in the population 20 years and older to no more than 15%.

HEALTH	RESOURCE	VALUE
Demographic	Socioeconomic	Health Status

Exhibit I-C-46:

Delaware residents were less at-risk for binge drinking compared to the majority of benchmarks.

**Proportion of Residents 18 Years and Older at Risk for Binge Drinking^(a)
Delaware, U.S. and Comparison Communities 1997**



Sources: 1-6) 1997 data, Behavior Risk Factor Surveillance System.

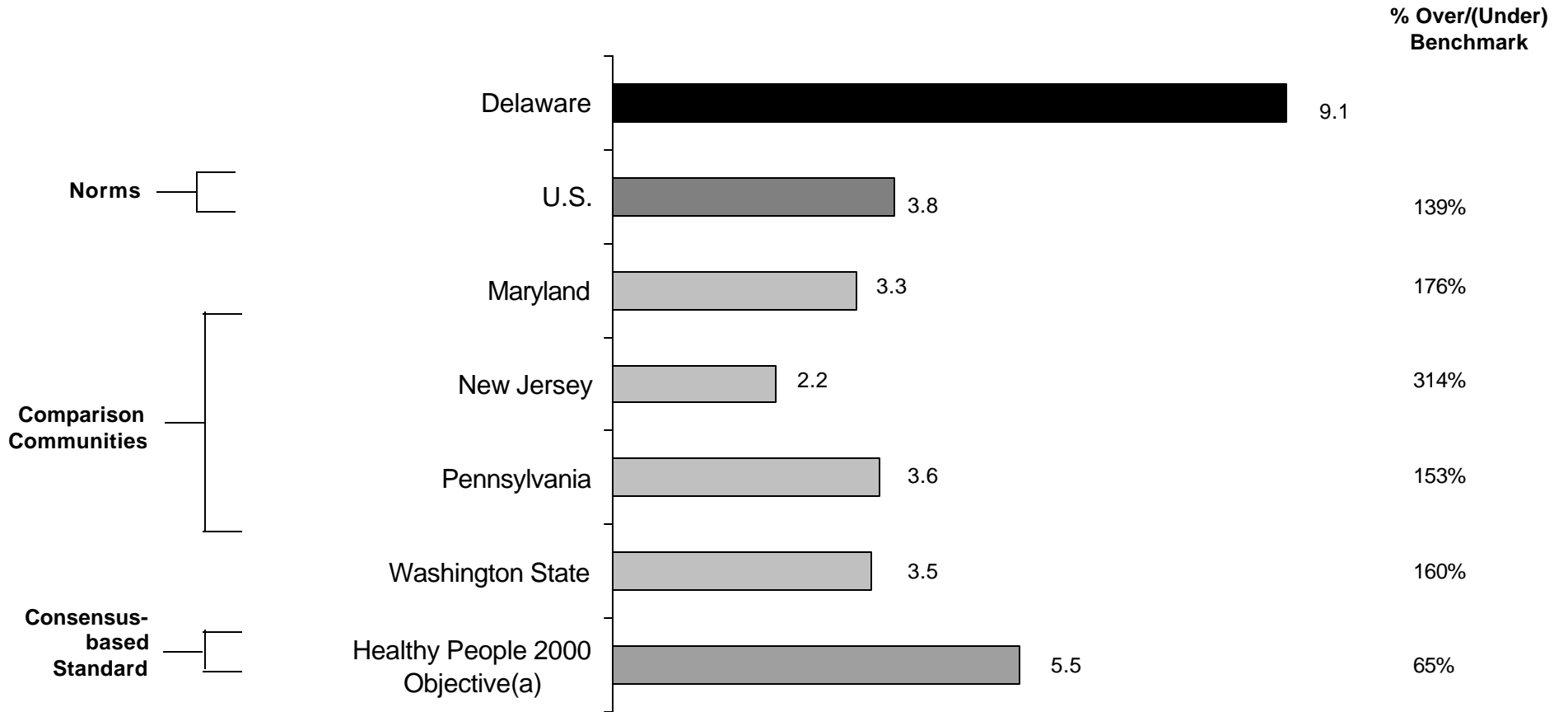
Notes: (a) Binge drinking defined as consuming five or more drinks on one or more occasion in the past month.

HEALTH	RESOURCE	VALUE
Demographic	Socioeconomic	Health Status

Exhibit I-C-47:

In 1997, Delaware experienced a substantially higher alcohol-related motor vehicle accident fatality rate compared to the national norm, state comparisons and the Healthy People 2000 Objective.

Alcohol-related Motor Vehicle Accident Fatalities per 100,000 Persons 1997



Sources: 1-6) 1997 data, National Highway Traffic Safety Administration, Fatality Analysis Reporting System; 7) Healthy People 2000 Objective.

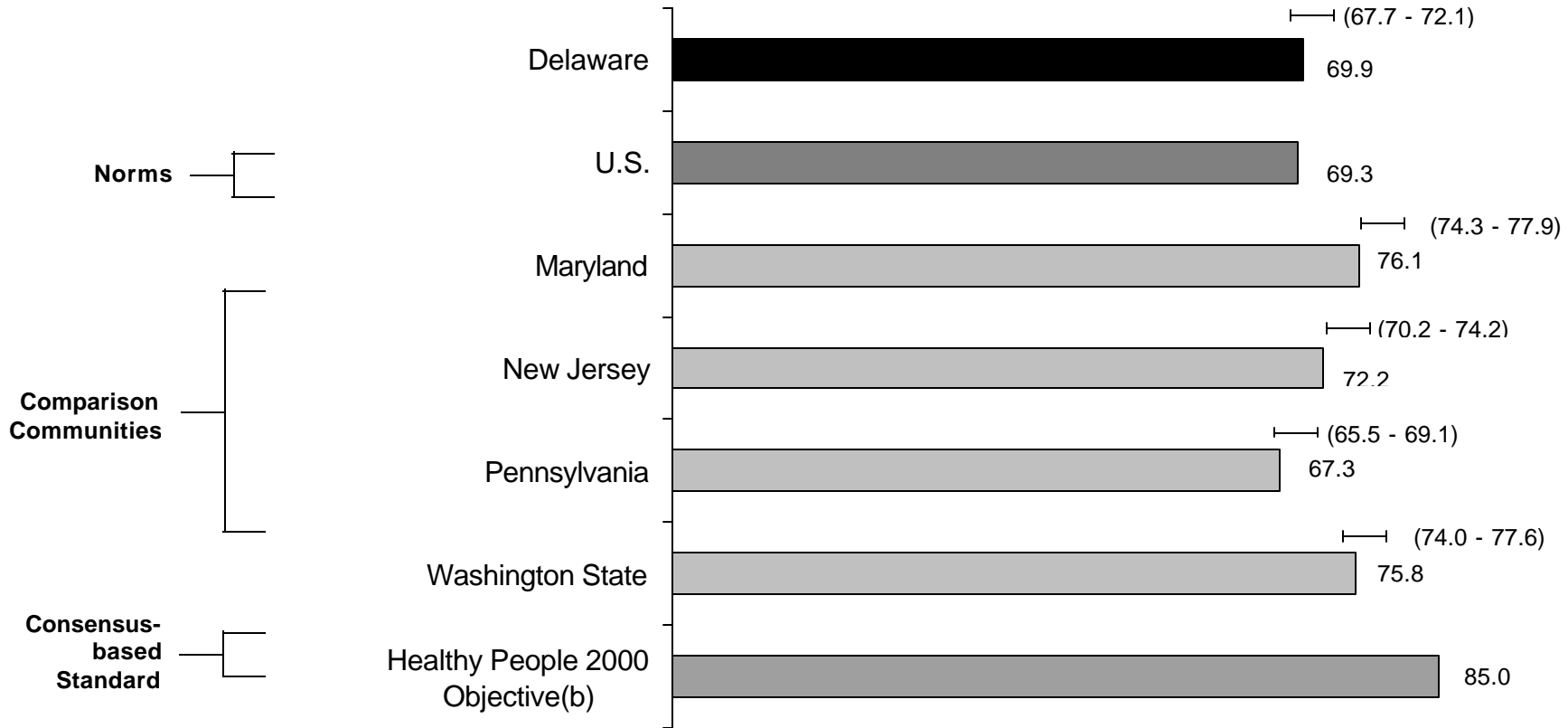
Notes: (a) The Healthy People 2000 objective is to reduce the incidence of alcohol-related motor vehicle fatalities to no more than 5.5 per 100,000 persons.

HEALTH	RESOURCE	VALUE
Demographic	Socioeconomic	Health Status

Exhibit I-C-48:

The proportion of Delaware residents who always used seat belts fell within the range of state and national experiences but fell short of the Healthy People 2000 Objective.

**Proportion of Residents Aged 18 Years and Older Who Always Use Seat Belts
Delaware, U.S. and Comparison Communities^(a) 1997**



Sources: 1-6) 1997 data, Behavior Risk Factor Surveillance System; 7) Healthy People 2000 Objective.

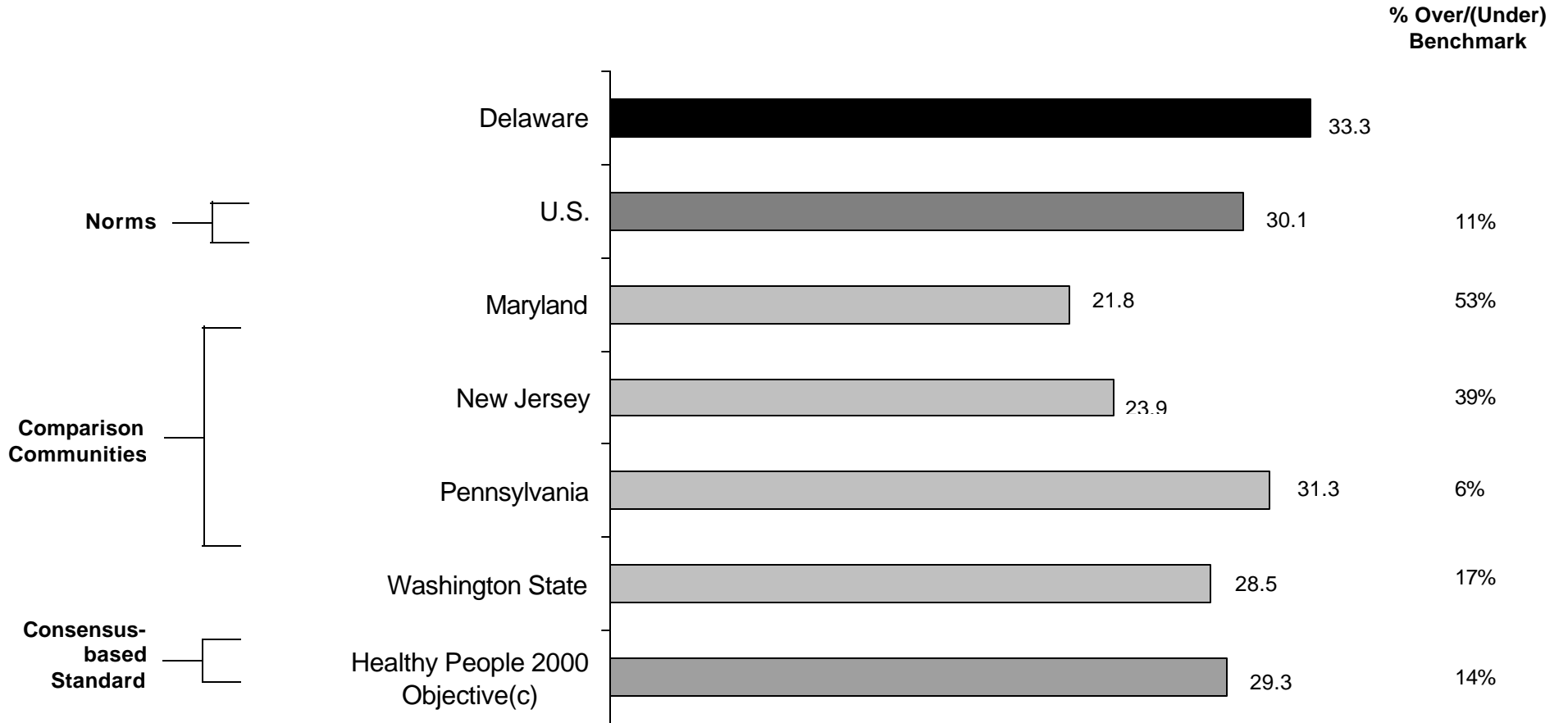
Notes: (a) The brackets above each bar represent the 95 percent confidence interval surrounding the proportion.
(b) The Healthy People 2000 objective is to increase the proportion of individuals who always use seat belts to 85 percent.

HEALTH	RESOURCE	VALUE
Demographic	Socioeconomic	Health Status

Exhibit I-C-49:

The rate of accidental deaths and deaths due to adverse effects in Delaware was higher than in benchmarks and the Healthy People 2000 Objective.

Accidents and Adverse Effects^(a) Deaths per 100,000 Persons^(b) 1997



Sources: 1-6) 1997 data, U.S. National Center for Health Statistics; CDC, CDC Wonder Data Extraction Software; 7) Healthy People 2000 Objective.

Notes: (a) Deaths related to injury includes deaths from accidental and adverse effects including cut/pierce; drowning/submersion; drug, adverse effects; fall; fire/burn; firearm; medical care, adverse effects; motor vehicle traffic; natural environmental; over exertion; pedal cyclist, other; pedestrian; poisoning; struck by, against machinery; suffocation; and transport, other.

(b) Death rates are age-adjusted (except for U.S. rates which are age-sex adjusted) to 1940 U.S. national population.

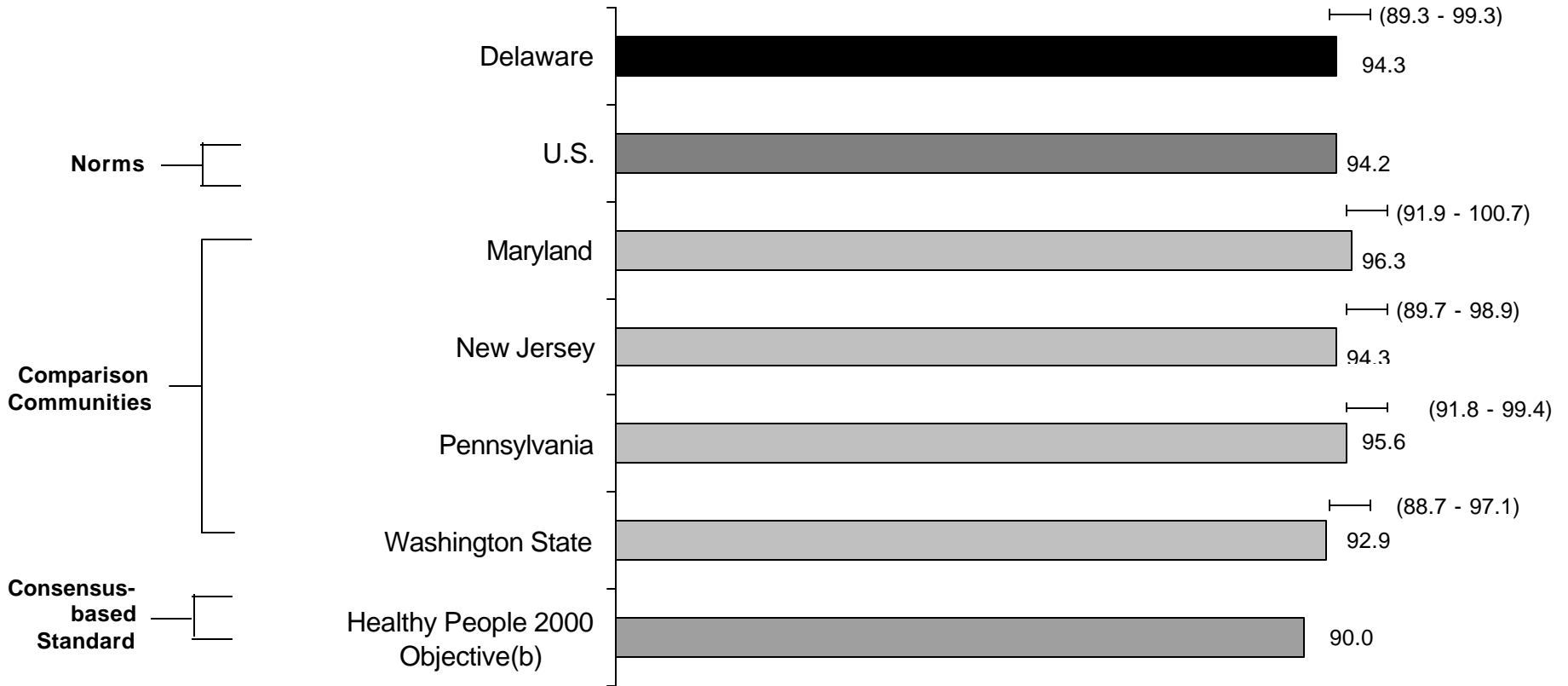
(c) The Healthy People 2000 objective is to reduce unintentional injury deaths to no more than 29.3 deaths per 100,000 persons.

HEALTH	RESOURCE	VALUE
Demographic	Socioeconomic	Health Status

Exhibit I-C-50:

The proportion of Delaware residents who had their blood pressure checked during the prior two years was comparable to national and state experiences but slightly higher than the Healthy People 2000 Objective.

Proportion of Residents Aged 18 Years and Older Reporting Blood Pressure was Checked within Preceding Two Years ^(a) Delaware, U.S. and Comparison Communities 1997



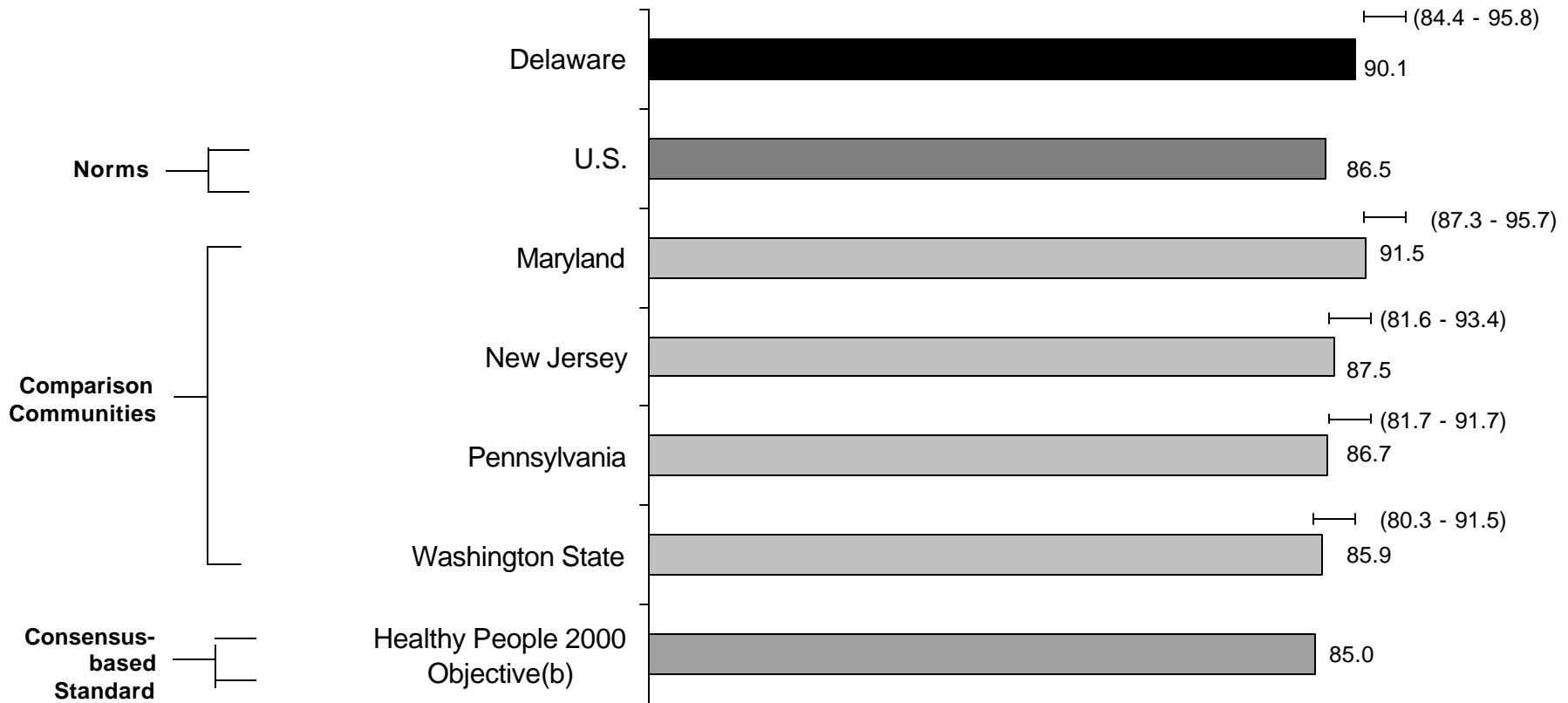
Sources: 1-6) 1997 data, Behavior Risk Factor Surveillance System; 7) Healthy People 2000 Objective.

Notes: (a) The brackets above each bar represent the 95% confidence interval surrounding the proportion.
 (b) The Healthy People 2000 objective is to increase the proportion of adults who have had a blood pressure check in the past two years to at least

HEALTH	RESOURCE	VALUE
Demographic	Socioeconomic	Health Status

Exhibit I-C-51: The proportion of Delaware females who had a Pap smear during the prior three years was slightly higher than most benchmarks and the Healthy People

**Proportion of Female Residents Aged 18 Years and Older Who have had a Pap Smear in the Last Three Years^(a)
Delaware, U.S. and Comparison Communities 1997**



Sources: 1-6) 1997 data, Behavior Risk Factor Surveillance System; 7) Healthy People 2000 Objective.

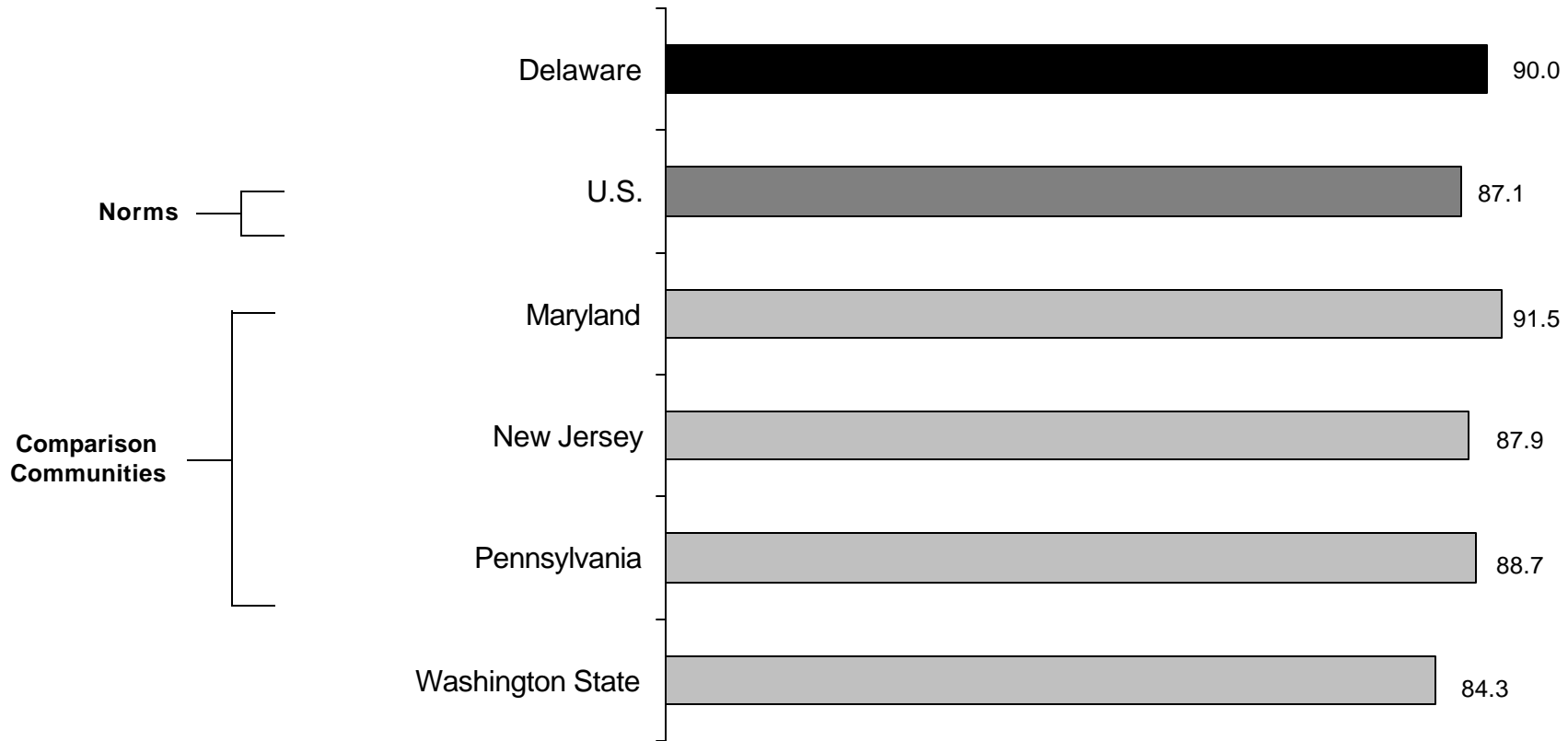
Notes: (a) The brackets above each bar represent the 95% confidence interval surrounding the proportion.
(b) The Healthy People 2000 objective is to increase the proportion of females with a uterine cervix who have had a PAP smear within the past three years to at least 85%.

HEALTH	RESOURCE	VALUE
Demographic	Socioeconomic	Health Status

Exhibit I-C-52:

The proportion of Delaware females who had a mammogram during the prior three years was slightly higher than the national norm and three out of four state comparisons.

**Proportion of Female Residents 18 Years and Older Who have had a Mammogram in the Last Three Years
Delaware, U.S. and Comparison Communities 1997**



Sources: 1997 data, Behavior Risk Factor Surveillance System.

HEALTH	RESOURCE	VALUE
Demographic	Socioeconomic	Health Status