



2018-2020 ILLINOIS BEHAVIORAL
RISK FACTOR SURVEILLANCE SYSTEM

ILLINOIS WORKER

HEALTH BY INDUSTRY



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Introduction

Work is a determinant of health in terms of hazardous exposure and risk, as a source of beneficial social and economic resources (e.g., social connections, self-esteem, self-efficacy, wages, health insurance, paid sick leave, retirement benefits), and as a driver of social position and status. In the past two decades there has been a significant shift from traditional work arrangements (direct hire by a single employer, decent wages, social benefits) to precarious work (contract work, gig work, temporary staffing, informal/cash work, under-employment, low wages, no social benefits) (Weill, 2014). Work as a determinant of health was particularly evident during the coronavirus disease (COVID-19) pandemic, as SARS-CoV-2 infection has differentially affected the U.S. worker population, highlighting health inequities at the intersection of race/ethnicity and employment.

Frontline and other “essential” workers experienced COVID-19 outbreaks by nature of their occupations. Those who were required to leave home for work were exposed to hospitalized patients, congregate/nursing home residents, individuals in correctional custody, co-workers, and the public. Some of the hardest hit sectors preferentially employ women, immigrants, people of color, and low-wage workers. For example, agricultural work, food manufacture and packaging, transportation and warehousing, and retail sales (the food supply chain) preferentially employ Latinx immigrants; home care and day care employ women, immigrants, and African Americans; and public transit employs a high proportion of African Americans. Aside from health care, differential exposure of workers by race, immigration status, ethnicity, and gender highlight an array of structural inequities. A deeper understanding of the attendant factors is needed to address these inequities.

Illinois is the sixth largest state in the United States with a population of 12.8 million (USCB, 2020). Illinois has a diverse population, geography, and economy that is highly representative of the overall U.S. population (Kolko, 2016; USCB, 2020a; USCB, 2020b). Illinois formally employs more than 6.1 million people annually (BLS, 2021), including robust employment across multiple high-risk sectors in transportation, utilities, mining (predominately coal, sand/gravel, peat, and tripoli), agriculture, manufacturing, and construction (BLS, 2021). More than 20% of the workforce is employed in high-risk occupations as defined by NIOSH, with about 700,000 workers (11.3% of the Illinois workforce) employed in high morbidity occupations and high mortality industries (NIOSH). Work often impacts our health and can also influence health behavioral risk factors. Analyzing the Illinois Behavioral Risk Factor Surveillance System (BRFSS) data from 2018-2020 can further understanding of the health status of Illinois workers and elucidate both the health and the social conditions exacerbated by the COVID-19 pandemic. Understanding the gaps in health outcomes and risk behaviors between the differing industries and occupations will help develop targeted public health interventions and ultimately improve population health. The objective of this analysis is to estimate the prevalence of inadequate health care access, general health status, health protective behaviors, and health risk factors of the Illinois workforce by industry and occupation.

Methods

BRFSS is a cross-sectional national, random-digit-dialing health survey sponsored by the U.S. Centers for Disease Control and Prevention (CDC) and is designed to collect information on health behaviors and health outcomes from a sample of households in the U.S. (CDC, 2023). BRFSS completes more than 400,000 adult interviews annually in all 50 states, as well as the District of Columbia and three territories, making BRFSS a great tool to assist in creating targeted public health interventions and promoting health behaviors where they are needed most. The Illinois Department of Public Health receives a de-identified list of phone numbers from CDC and collects data from approximately 5,000 adults in Illinois each year. BRFSS consists of 15 core standardized sections on general health status, health care access, exercise, chronic health conditions, demographics, disability, substance use, immunization, HIV/AIDS, and prediabetes awareness. There is a group of rotating core sections that are not asked annually (Table 1). BRFSS provides additional optional modules that states can choose to administer along with the core sections. One of the optional modules asks respondents their *industry* and *occupation*, which Illinois has included since 2015.

All BRFSS respondents are asked about their employment status. Industry is the type of activity of the employer/business, while occupation is the kind of work a person does to make a living. Those who answered that they were currently employed for wages, self-employed, or out of work for less than one year were later asked about their industry (“what kind of business or industry do you work in?”) and occupation (“what kind of work do you do?”). Respondent’s answers are then assigned Census Industry Codes (CIC) and Census Occupation Codes (COC) by the National Institute for Occupational Safety and Health (NIOSH) Industry and Occupation Computerized Coding System (NIOCCS). Responses NIOCCS is unable to code are then coded manually if possible. The two-digit National Health Interview Survey (NHIS) codes (broader groupings of CIC and COC) of 20 industry and 23 occupation groups were used for final analysis categorization (Table 2). BRFSS does not provide a representative sample of persons in the military, thus estimates for this industry group are not provided. To assess whether the BRFSS survey respondents were representative of the employed adult population in Illinois, estimates from the American Community Survey (ACS) conducted by the U.S. Census Bureau (USCB) in Table 2 (USCB, 2023) were compared. Overall, the estimates were similar between ACS and BRFSS.

Statistical analyses were conducted in SAS using PROC SURVEYFREQ as BRFSS employs complex survey sampling methods. Survey weighting is used to reduce bias and create a representative state sample. Final weights are provided by the CDC for each survey year and were adjusted to correct for analysis of multiple cycles (2018-2020). Prevalence estimates and 95% confidence intervals were provided for all currently employed workers with an industry code or occupation code. To determine the validity of the prevalence estimates, the Coefficient of Variation (CV) was used. Prevalence estimates were suppressed for sub-groups with a small sample size ($n < 50$) or high variance ($CV > 0.30$). Significance of prevalence estimates was determined by Rao-Scott chi-square tests ($p < 0.05$) comparing industry and occupation sub-groups to all workers.

Summary of Illinois Worker Health by Industry

Industries with a significantly higher prevalence of fair or poor health compared to all workers include the Administrative, Support, and Waste Services, Accommodation and Food Services, and Manufacturing industries. Whereas the Finance and Insurance; Professional, Scientific, and Technical Services; Public Administration; and Education industries all had a lower prevalence of fair or poor health. Although respondents in the Education sector rated their overall health as better on average compared to all workers, they experienced a higher prevalence of poor physical and mental health for at least one day in the past month. In addition, Health care and Social Assistance and Accommodation and Food Services also experienced poorer mental health compared to all workers.

Overall, the Accommodation and Food Services industry had the worst overall health status and inadequate access to health care. This group had the highest prevalence of fair or poor overall health, poor physical health, poor mental health, and history of a depression diagnosis. Furthermore, almost a quarter reported they did not have any type of health care coverage, did not have a regular primary care physician, and reported they could not go to a doctor because of cost. While they had a higher prevalence of not exercising, they had a lower prevalence of being overweight or obese. This group had a higher prevalence of health risk factors, such as smoking and participating in HIV risk behaviors (including injecting nonprescription drugs, treatment for a sexually transmitted disease (STD), having given or received money or drugs in exchange for sex, having had anal sex without a condom, and/or having had four or more sex partners in the past year, and they also had the highest prevalence of getting tested for human immunodeficiency virus (HIV).

Indicators measuring access to health care were highest among the sectors of Education, Finance and Insurance, and Health care and Social Assistance. These groups reported a significantly lower prevalence rate of lack of health care coverage, lack of a primary care physician, and barriers of care due to cost. Workers in these industries tended to participate in more health protective and less risky health behaviors. Higher proportions of workers in Education and Health care and Social Assistance practiced protective and less risky health behaviors, such as attending routine dental and doctor visits, receiving a flu vaccination, exercising outside of work, not smoking, and not heavy or binge drinking. The Health care and Social Assistance field had a higher prevalence of vaccinations for pneumonia and HPV, testing for HIV, testing for high blood sugar, and completing prostate and colorectal cancer screenings. Finance and Insurance had a lower prevalence of arthritis, depression, and diabetes, while Health care and Social Assistance had a higher prevalence of these chronic health conditions.

The Construction and Manufacturing industries lacked adequate access to health care, both having a higher prevalence of not having health care coverage nor a personal care physician. Those in the Construction industry reported not attending routine dental and doctor visits, although they had a lower prevalence of cancer, depression, and diabetes. Risky health behaviors, such as smoking, heavy and/or binge drinking, and not always wearing a seatbelt, were more commonly seen in Construction, while both Construction and Manufacturing had a higher prevalence of being overweight or obese (Appendix I).

Work, itself, can exacerbate or mitigate health risks. And work settings are optimal sites to target public health interventions. This report demonstrates the value of the Work Module in BRFSS and provides guidance for addressing the health of more than half of Illinois residents and their families.

Table 1. BRFSS Core Sections and Optional Modules Analyzed with Years Survey Was Used

BRFSS Health Indicators	Years Assessed
Core Section: General Health Status	2018, 2019, 2020
Core Section: Healthy Days (Quality of Life)	2018, 2019, 2020
Core Section: Health Care Access	2018, 2019, 2020
Core Section: Exercise	2018, 2019, 2020
Core Section: Inadequate Sleep	2018 and 2020
Core Section: Chronic Health Conditions	2018, 2019, 2020
Core Section: Oral Health	2018 and 2020
Core Section: Demographics	2018, 2019, 2020
Core Section: Tobacco Use	2018, 2019, 2020
Core Section: Alcohol Consumption	2018, 2019, 2020
Core Section: Immunization	2018, 2019, 2020
Core Section: Seat Belt Use	2018 and 2020
Core Section: Breast and Cervical Cancer	2018 and 2020
Core Section: Prostate Cancer Screening	2018 and 2020
Core Section: Colorectal Cancer Screening	2018 and 2020
Core Section: HIV/AIDS	2018, 2019, 2020
Optional Module: Prediabetes Awareness	2019 and 2020
Optional Module: Marijuana Use	2019 and 2020
Optional Module: Sexual Orientation and Gender Identity	2018 and 2020
Optional Module: Human Papillomavirus (HPV) Vaccination	2019 and 2020

Table 2. Industry Groups, Corresponding Census Industry Codes (CIC), and Distribution of Illinois Workforce in the U.S. Census American Community Survey (ACS) and Behavioral Risk Factor Surveillance System (BRFSS), 2018-2020

Industry Group	CIC	ACS (N)	ACS (%)	BRFSS (%)
Agriculture, Forestry, Fishing and Hunting	0170-0290	54,199	0.9	1.5
Mining, Quarrying, and Oil and Gas Extraction	0370-0490	10,318	0.2	0.3
Construction	0770	337,964	5.4	8.0
Manufacturing	1070-3990	732,288	11.7	12.1
Wholesale Trade	4070-4590	183,625	2.9	1.4
Retail Trade	4670-5790	655,746	10.5	8.8
Transportation and Warehousing	6070-6390	372,700	6.0	5.8
Utilities	0570-0690	42,578	0.7	0.8
Information	6470-6780	110,005	1.8	1.7
Finance & Insurance	6870-6990	351,140	5.6	5.1
Real Estate and Rental and Leasing	7070-7190	106,938	1.7	1.7
Professional, Scientific, and Technical Services	7270-7490	487,614	7.8	7.6
Management of Companies and Enterprises	7570	12,369	0.2	0.5
Administrative, Support, and Waste Services	7580-7790	253,680	4.1	4.1
Educational Services	7860-7890	586,207	9.4	8.6
Health care and Social Assistance	7970-8470	866,002	13.9	15.4
Arts, Entertainment, and Recreation	8560-8590	127,334	2.0	1.6
Accommodation and Food Services	8660-8690	420,813	6.7	5.9
Other Services	8770-9290	293,602	4.7	4.9
Public Administration	9370-9590	231,633	3.7	4.0

Illinois Worker Health Results Summary from the Behavioral Risk Factor Surveillance System, 2018-2020



General Health Status

- 30% had at least one day of poor physical health
- 68% are overweight or obese



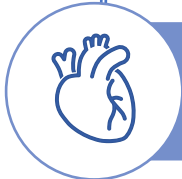
Health Care Access

- 13% do not have health care coverage
- 12% could not see a doctor because of cost



Health Risk Behaviors

- 71% get less than eight hours of sleep at night
- 23% do not engage in leisure time physical activity outside of work
- 24% engage in heavy or binge drinking
- 15% are current smokers



Chronic Health Conditions

- 4% have cardiovascular disease
- 33% had at least one tooth removed from gum disease or tooth decay
- 8% have diabetes and asthma
- 15% have been diagnosed with depression



Vaccinations

- 34% received a flu vaccination
- 19% received a pneumonia vaccine
- 16% were vaccinated for HPV



Cancer Screenings

- 27% of males aged 40+ had a prostate specific antigen test
- 66% of workers aged 45+ had a colorectal cancer screening test
- 73% of females aged 40+ got a mammogram
- 81% of females aged 21-65 had a Pap test

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General Health Status

All respondents were asked to describe their overall health as excellent, very good, good, fair, or poor.

Compared to all workers, the prevalence of fair or poor self-reported overall health status among workers in the following industry groups was significantly:

Higher:

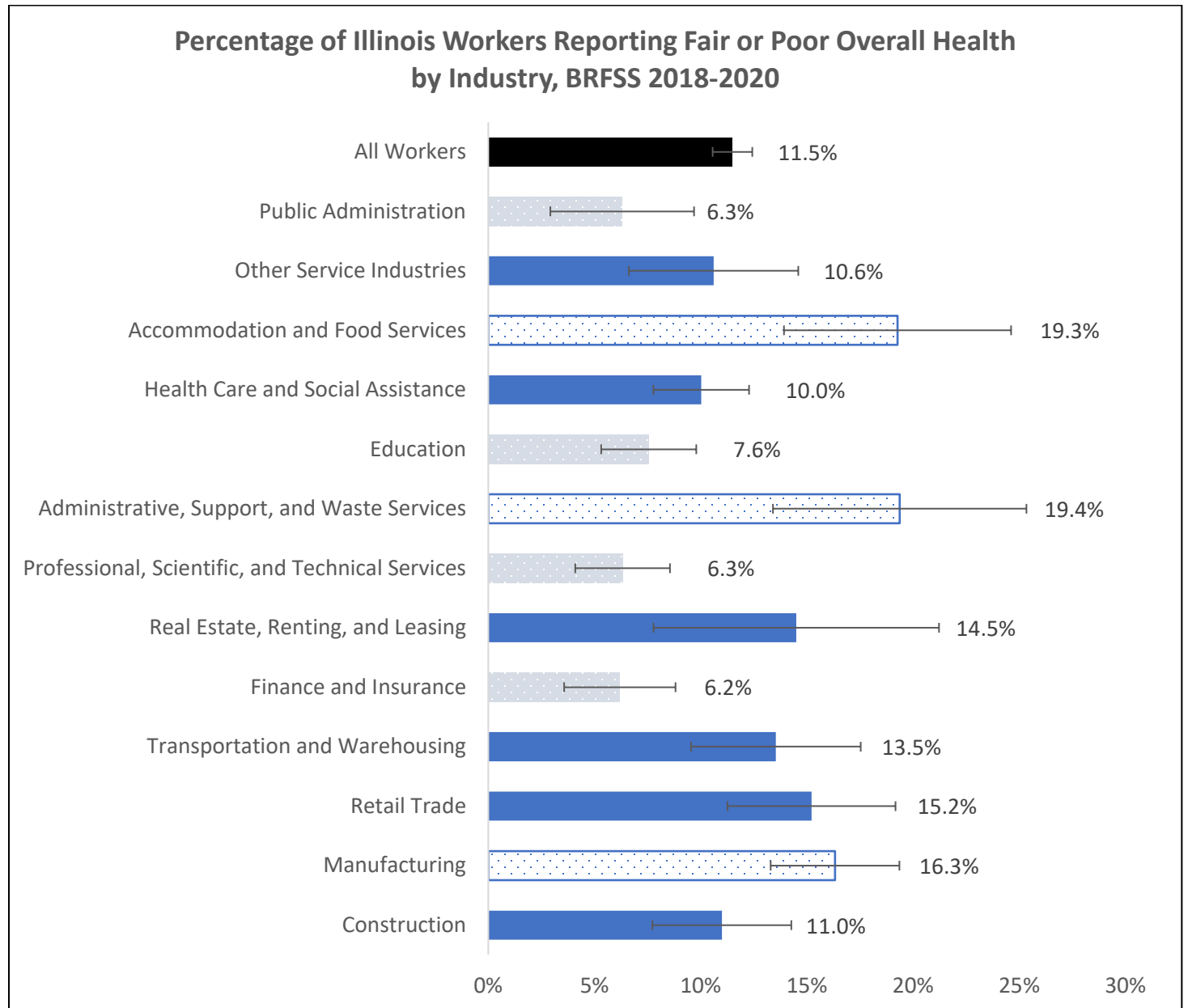
- Accommodation and Food Services
- Administrative, Support, and Waste Services
- Manufacturing

Lower:

- Finance and Insurance
- Professional, Scientific, and Technical Services
- Public Administration
- Education

All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Agriculture, Forestry, Fishing, and Hunting; Utilities; Wholesale Trade; Information; Arts, Entertainment, and Recreation.



Results not shown for the following groups due to insufficient sample size (n<50): Mining, Quarrying, Oil, and Gas; Management of Companies and Enterprises; Military

Healthy Days (Quality of Life) – Physical Health

All respondents were asked to report the number of days during the past month that their physical health, which includes physical illness and injury, had not been good.

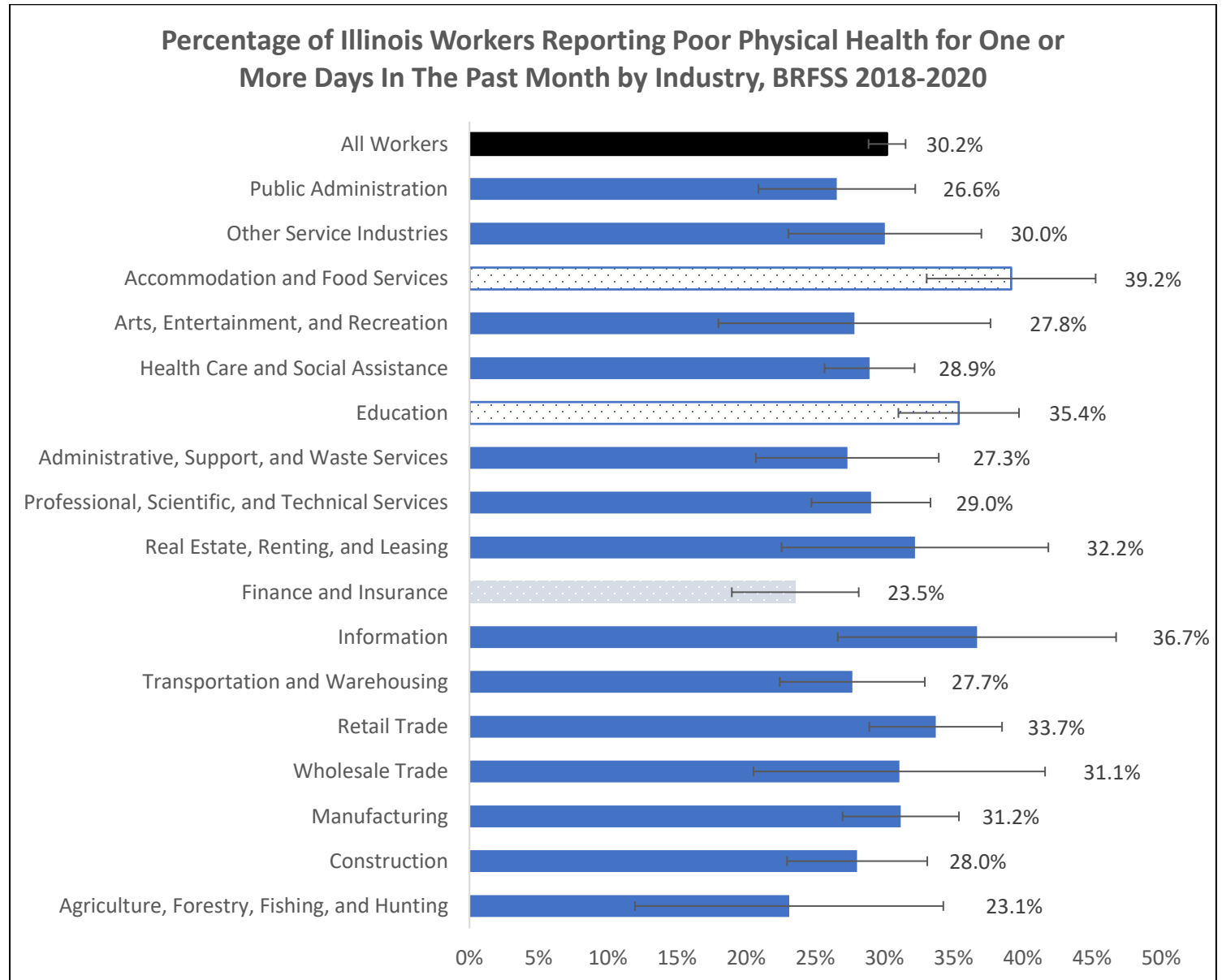
Compared to all workers, the prevalence of poor physical health in the past month among workers in the following industry groups was significantly:

Higher:

- Accommodation and Food Services
- Education

Lower:

- Finance and Insurance



All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Utilities.

Healthy Days (Quality of Life) – Mental Health

All respondents were asked to report the number of days during the past month that their mental health, which includes stress, depression, and problems with emotions, had not been good.

Compared to all workers, the prevalence of poor mental health in the past month among workers in the following industry groups was significantly:

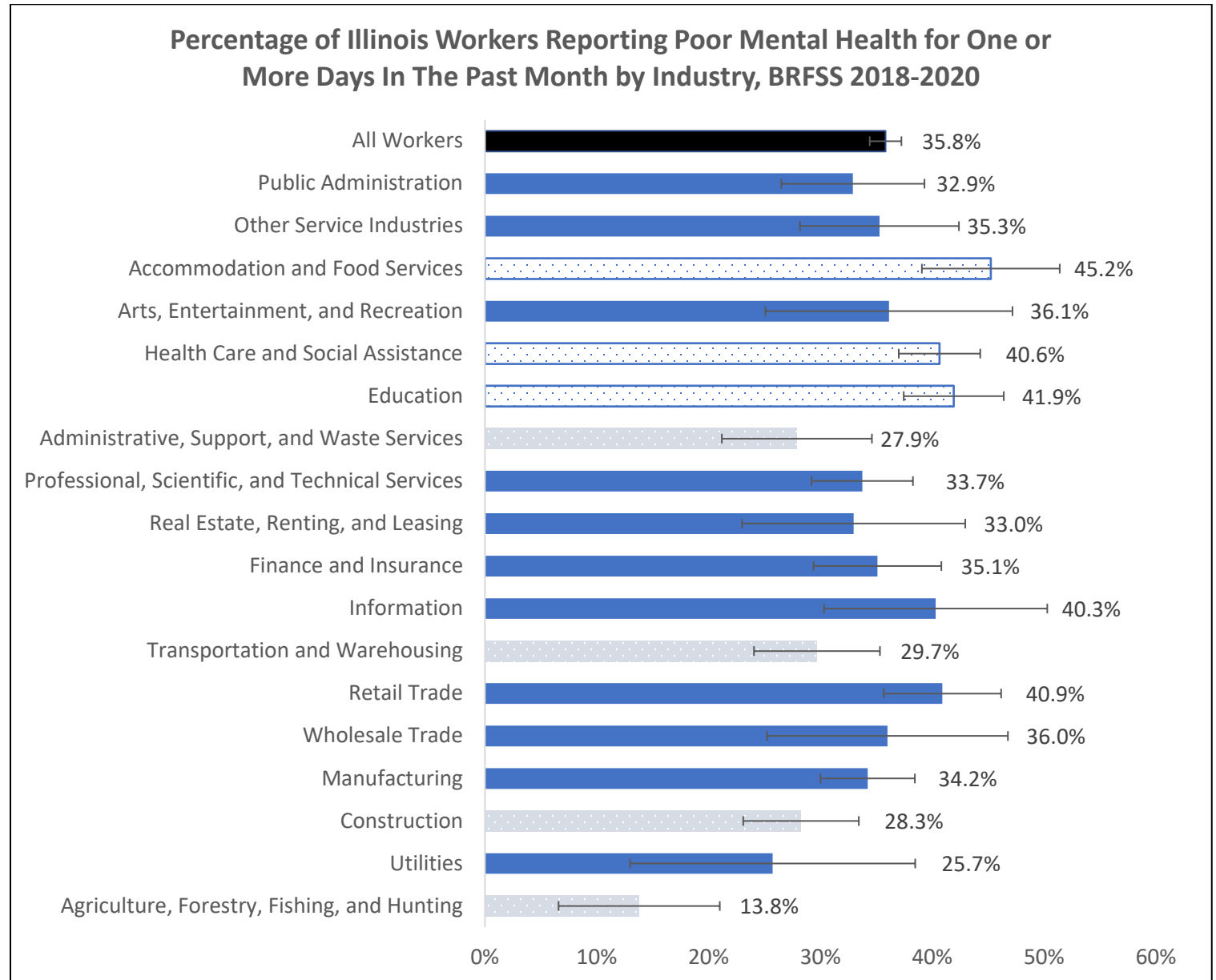
Higher:

- Accommodation and Food Services
- Education
- Health care and Social Assistance

Lower:

- Agriculture, Forestry, Fishing, and Hunting
- Administrative, Support, and Waste Services
- Construction
- Transportation and Warehousing

All workers = respondents with an industry code



Chronic Health Conditions – Cardiovascular Disease

All respondents were asked if a doctor, nurse, or other health professional ever told them that they had a heart attack, angina, coronary heart disease, or stroke.

Compared to all workers, the prevalence of cardiovascular disease among workers in the following industry groups was significantly:

Higher:

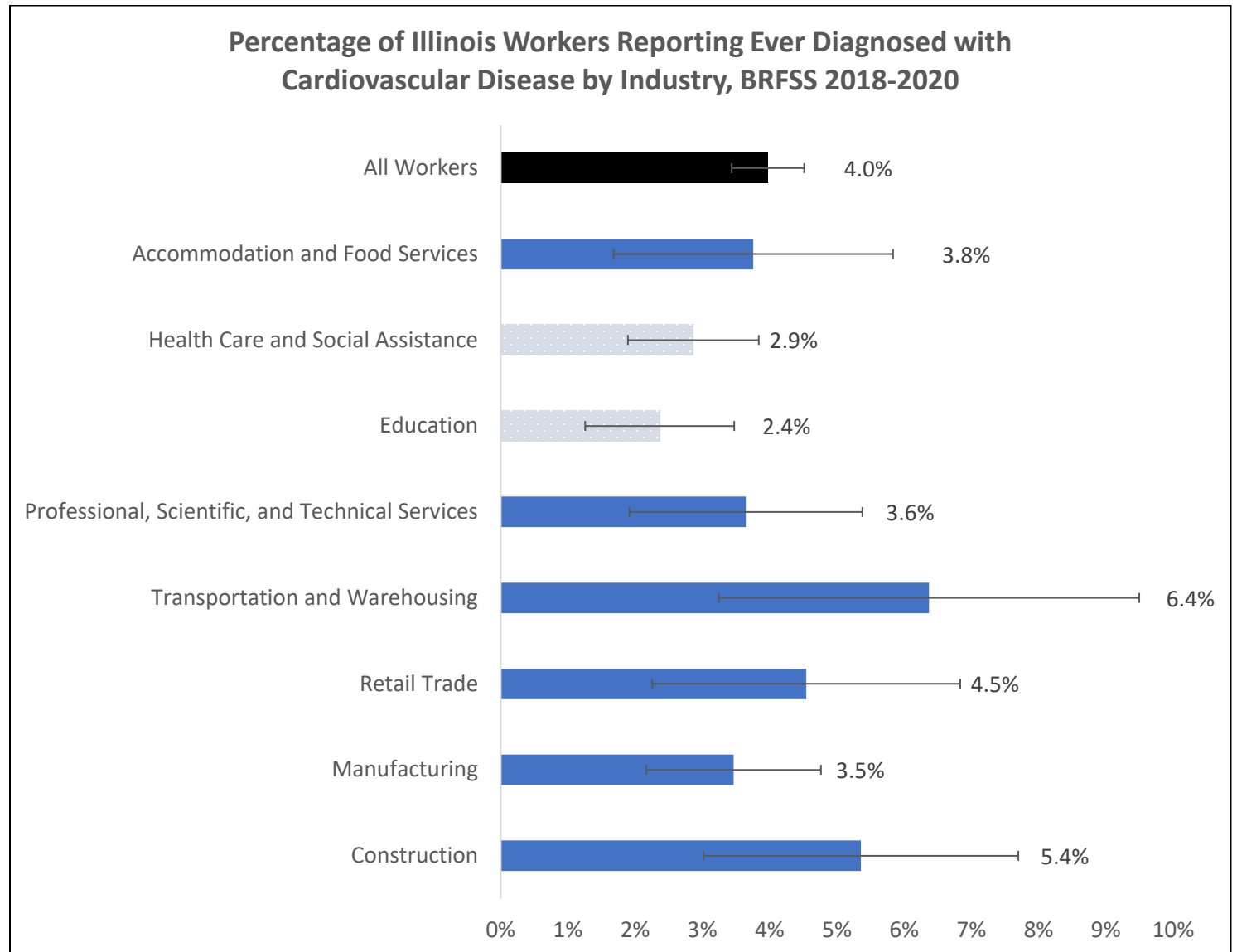
- None

Lower:

- Education
- Health care and Social Assistance

All workers = respondents with an industry code

Results not shown for the following groups due to high variance ($CV > 0.3$): Agriculture, Forestry, Fishing, and Hunting; Utilities; Wholesale Trade; Information; Finance and Insurance; Real Estate, Renting, and Leasing; Administrative, Support, and Waste Services; Arts, Entertainment, and Recreation; Other Service Industries; Public Administration.



Chronic Health Conditions – Current Asthma

All respondents were asked if a doctor, nurse, or other health professional ever told them that they currently had asthma.

Compared to all workers, the prevalence of current asthma among workers in the following industry groups was significantly:

Higher:

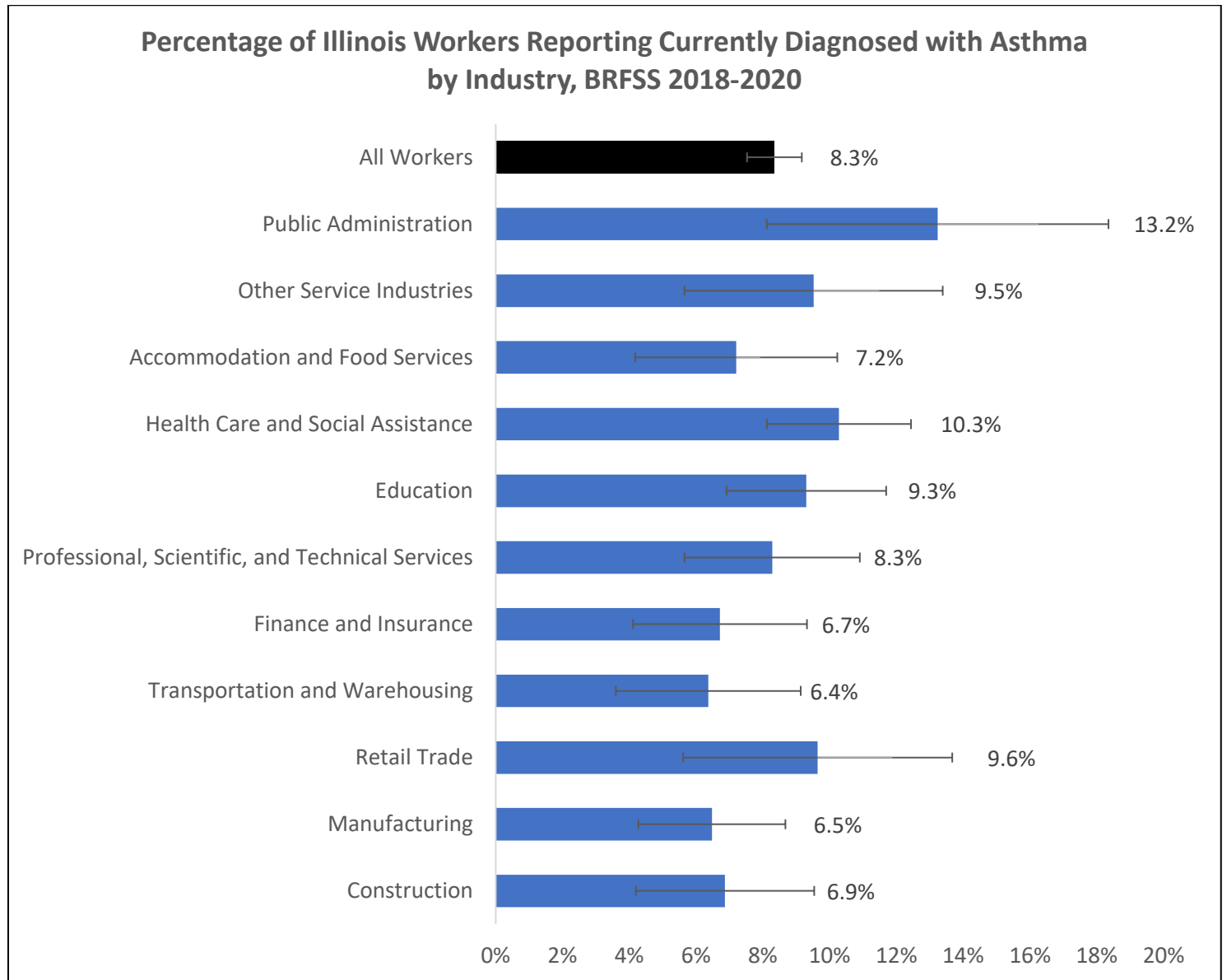
- None

Lower:

- None

All workers = respondents with an industry code

Results not shown for the following groups due to high variance ($CV > 0.3$): Agriculture, Forestry, Fishing, and Hunting; Utilities; Wholesale Trade; Information; Real Estate, Renting, and Leasing; Administrative, Support, and Waste Services; Arts, Entertainment, and Recreation.



Chronic Health Conditions – Cancer

All respondents were asked if a doctor, nurse, or other health professional ever told them that they had skin cancer or any other types of cancer.

Compared to all workers, the prevalence of cancer among workers in the following industry groups was significantly:

Higher:

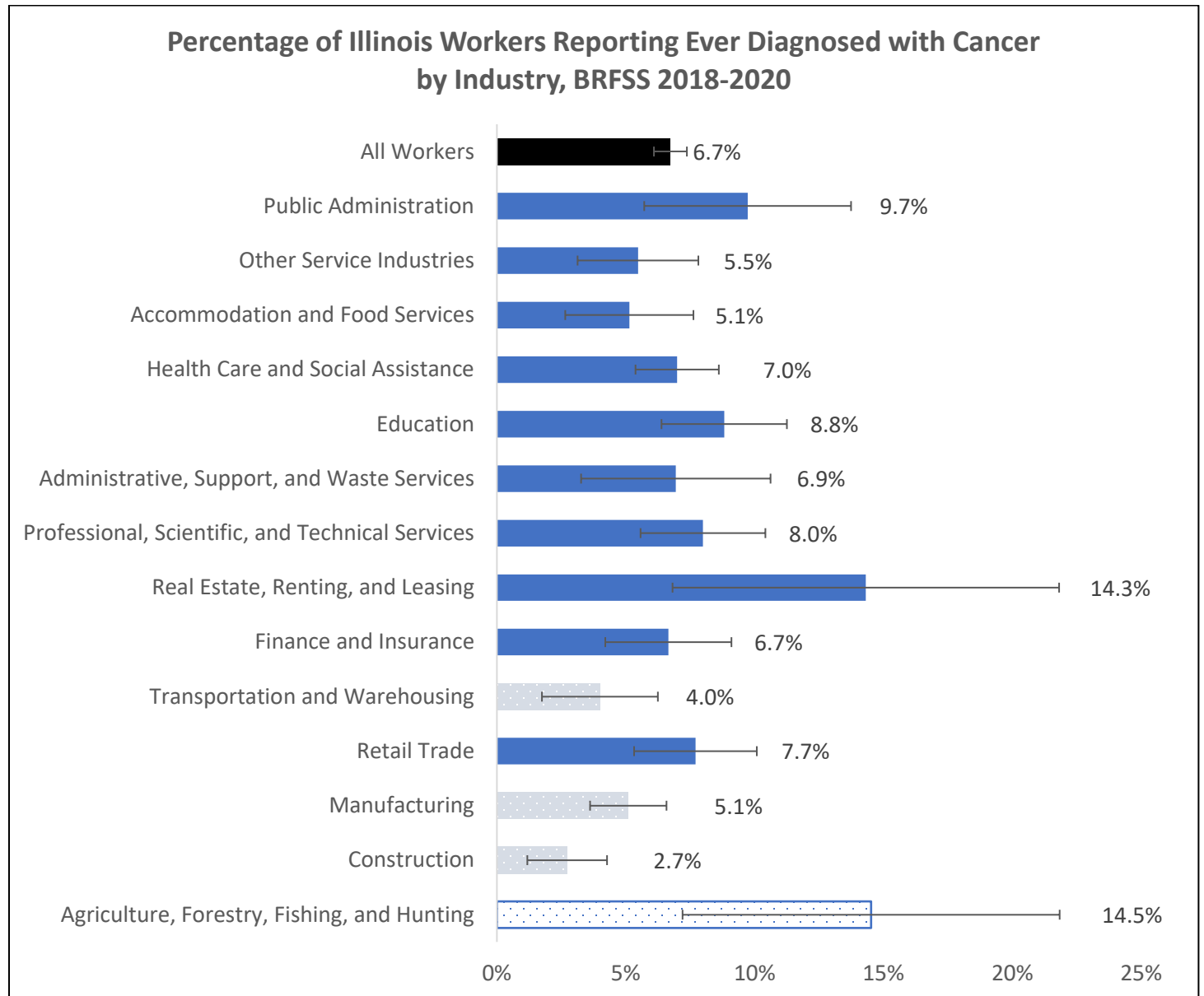
- Agriculture, Forestry, Fishing, and Hunting

Lower:

- Transportation and Warehousing
- Manufacturing
- Construction

All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Utilities; Wholesale Trade; Information; Arts, Entertainment, and Recreation.



Chronic Health Conditions – Respiratory Disease

All respondents were asked if a doctor, nurse, or other health professional ever told them that they had chronic obstructive pulmonary disease (COPD), emphysema, or chronic bronchitis.

Compared to all workers, the prevalence of COPD, emphysema, and chronic bronchitis among workers in the following industry groups was significantly:

Higher:

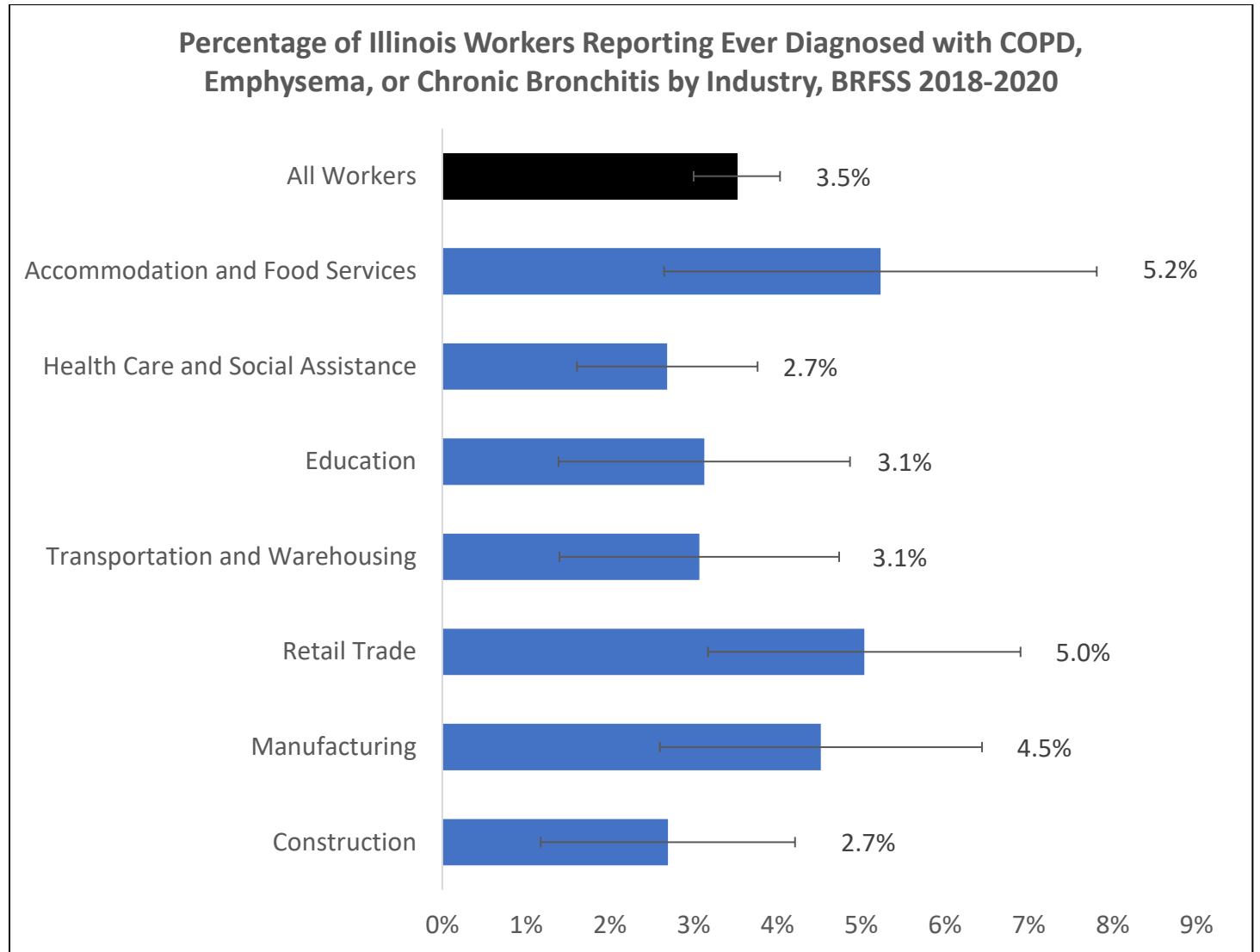
- None

Lower:

- None

All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Agriculture, Forestry, Fishing, and Hunting; Utilities; Wholesale Trade; Information; Finance and Insurance; Real Estate, Renting, and Leasing; Professional, Scientific, and Technical Services; Administrative, Support, and Waste Services; Arts, Entertainment, and Recreation; Other Service Industries; Public Administration.



Chronic Health Conditions - Arthritis

All respondents were asked if a doctor, nurse, or other health professional ever told them that they had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia.

Compared to all workers, the prevalence of some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia among workers in the following industry groups was significantly:

Higher:

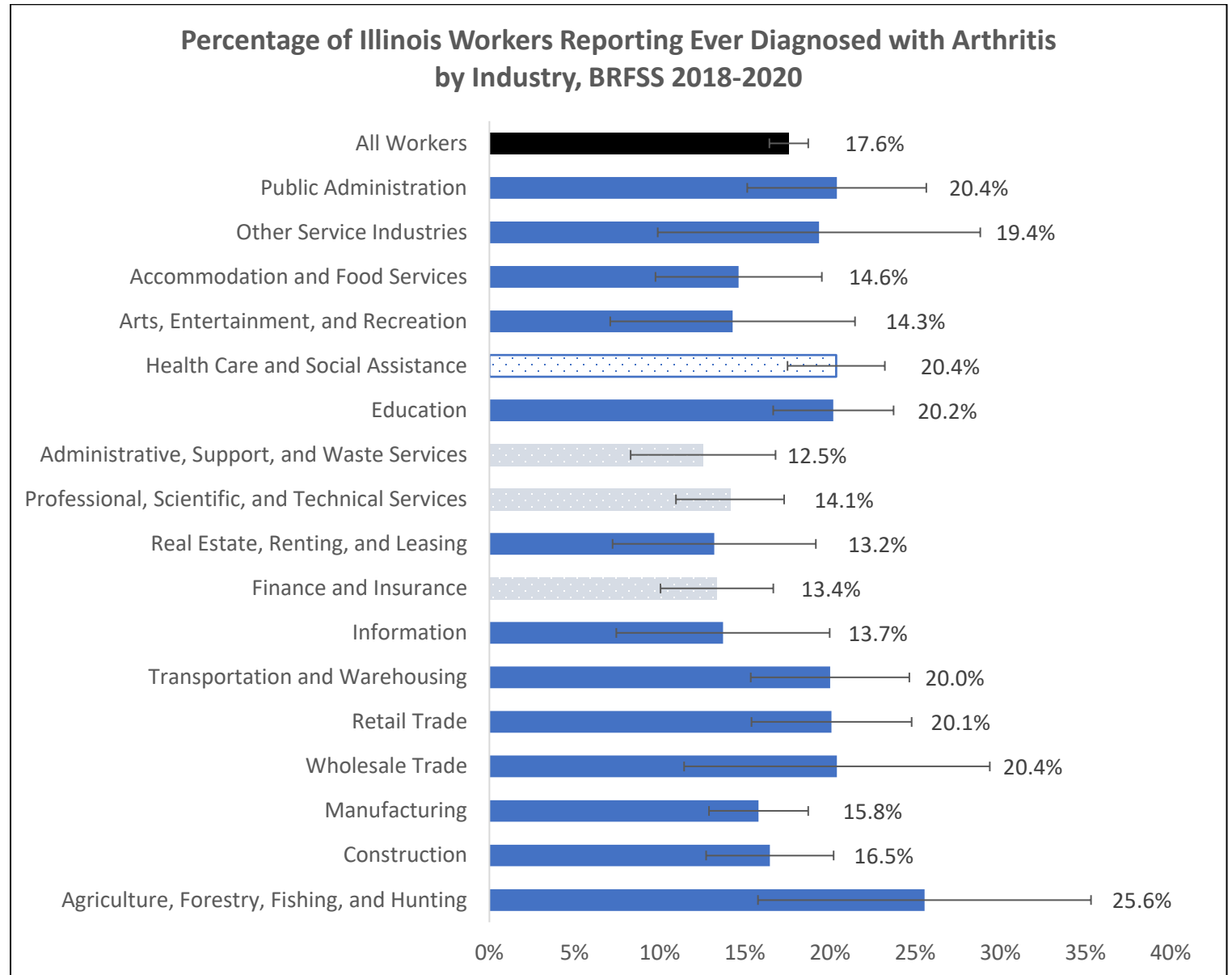
- Health care and Social Assistance

Lower:

- Administrative, Support, and Waste Services
- Professional, Scientific, and Technical Services
- Finance and Insurance

All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Utilities.



Chronic Health Conditions - Depression

All respondents were asked if a doctor, nurse, or other health professional ever told them that they had a depressive disorder (including depression, major depression, dysthymia, or minor depression).

Compared to all workers, the prevalence of depression among workers in the following industry groups was significantly:

Higher:

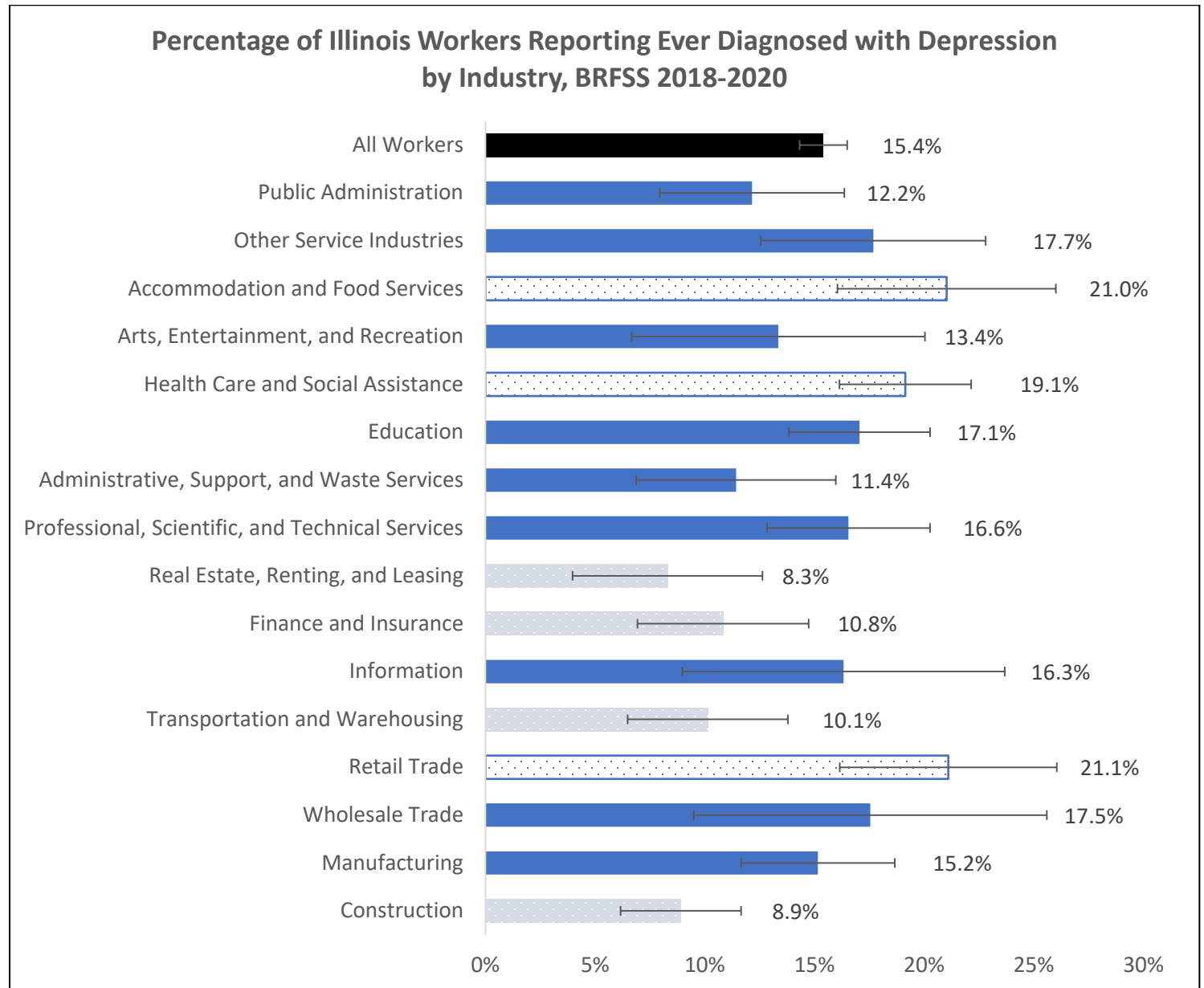
- Accommodation and Food Services
- Health care and Social Assistance
- Retail Trade

Lower:

- Finance and Insurance
- Construction
- Transportation and Warehousing
- Real Estate, Renting, and Leasing

All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Agriculture, Forestry, Fishing, and Hunting; Utilities.



Chronic Health Conditions – Diabetes

All respondents were asked if a doctor, nurse, or other health professional ever told them that they had diabetes.

Compared to all workers, the prevalence of diabetes among workers in the following industry groups was significantly:

Higher:

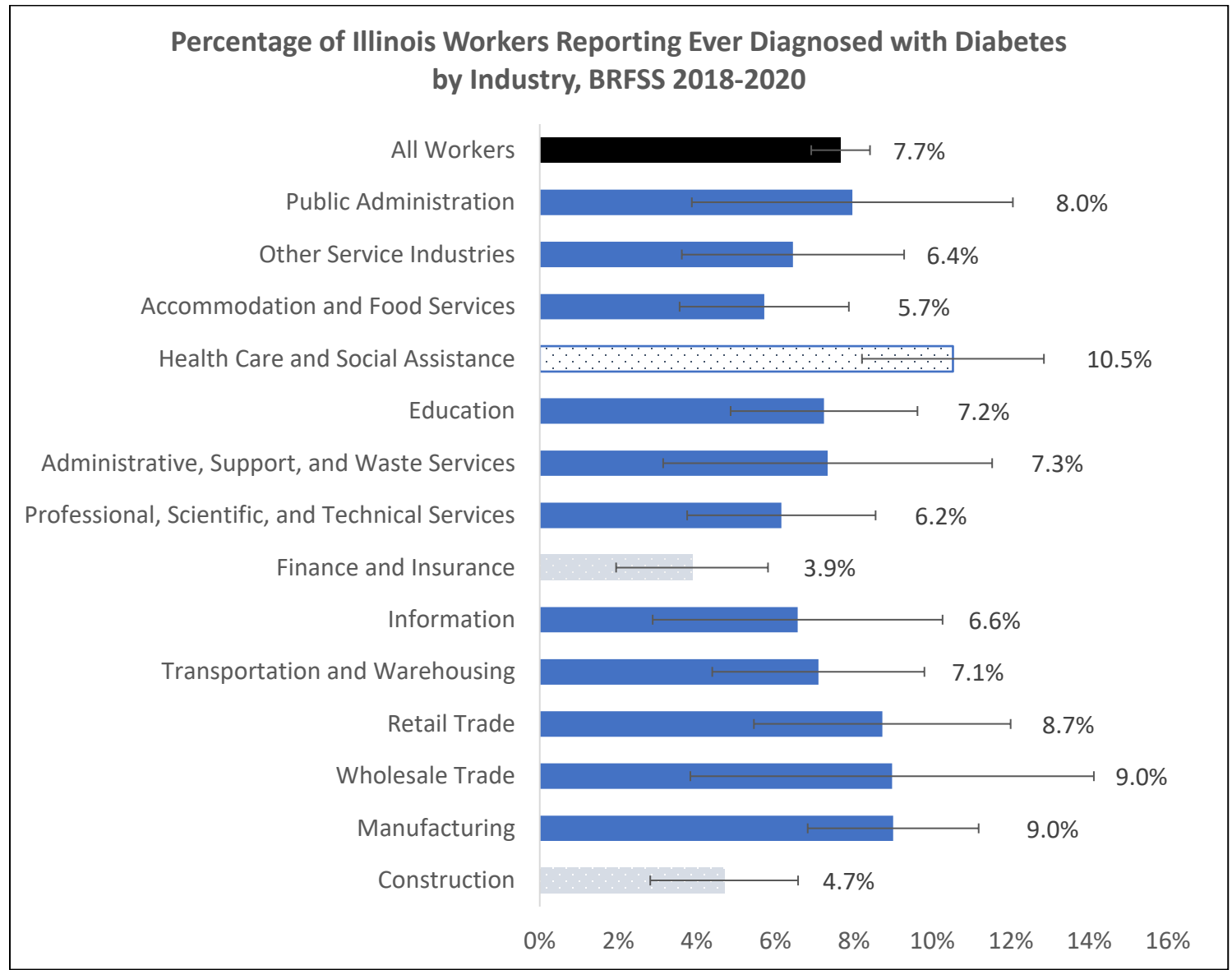
- Health care and Social Assistance

Lower:

- Finance and Insurance
- Construction

All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Agriculture, Forestry, Fishing, and Hunting; Utilities; Real Estate, Renting, and Leasing; Arts, Entertainment, and Recreation.



Oral Health – Tooth Removal

All respondents were asked how many of their permanent teeth had been removed because of tooth decay or gum disease, not including teeth lost for injury or orthodontics.

Compared to all workers, the prevalence of having a tooth removed because of tooth decay or gum disease among workers in the following industry groups was significantly:

Higher:

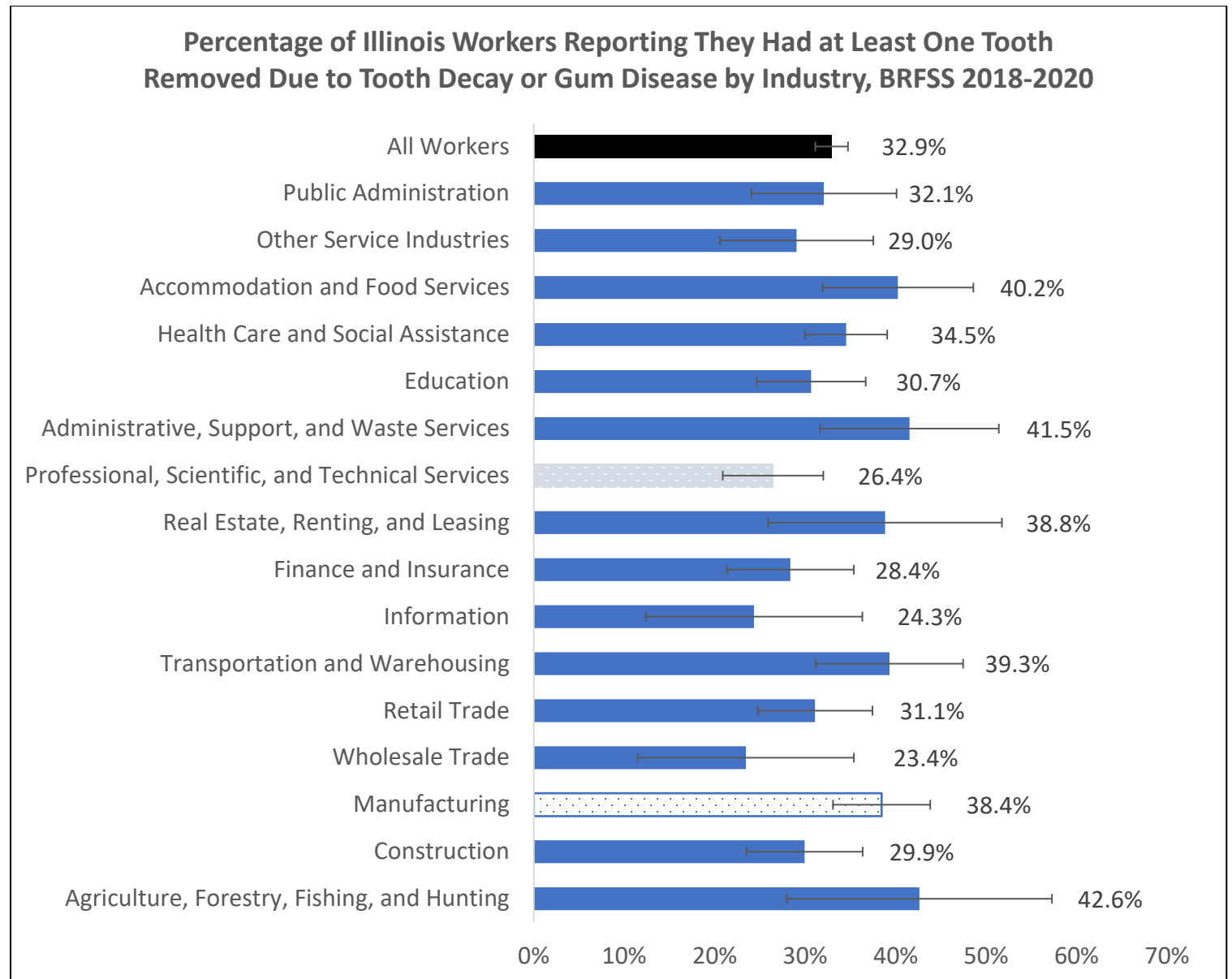
- Manufacturing

Lower:

- Professional, Scientific, and Technical Services

All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Utilities; Arts, Entertainment, and Recreation.



Health Care Access – Insurance Coverage

All respondents were asked if they have any type of health care coverage, including health insurance, prepaid plans, such as HMOs, or government plans, such as Medicare or Indian Health Service.

Compared to all workers, the prevalence of **not** having health care coverage among workers in the following industry groups was significantly:

Higher:

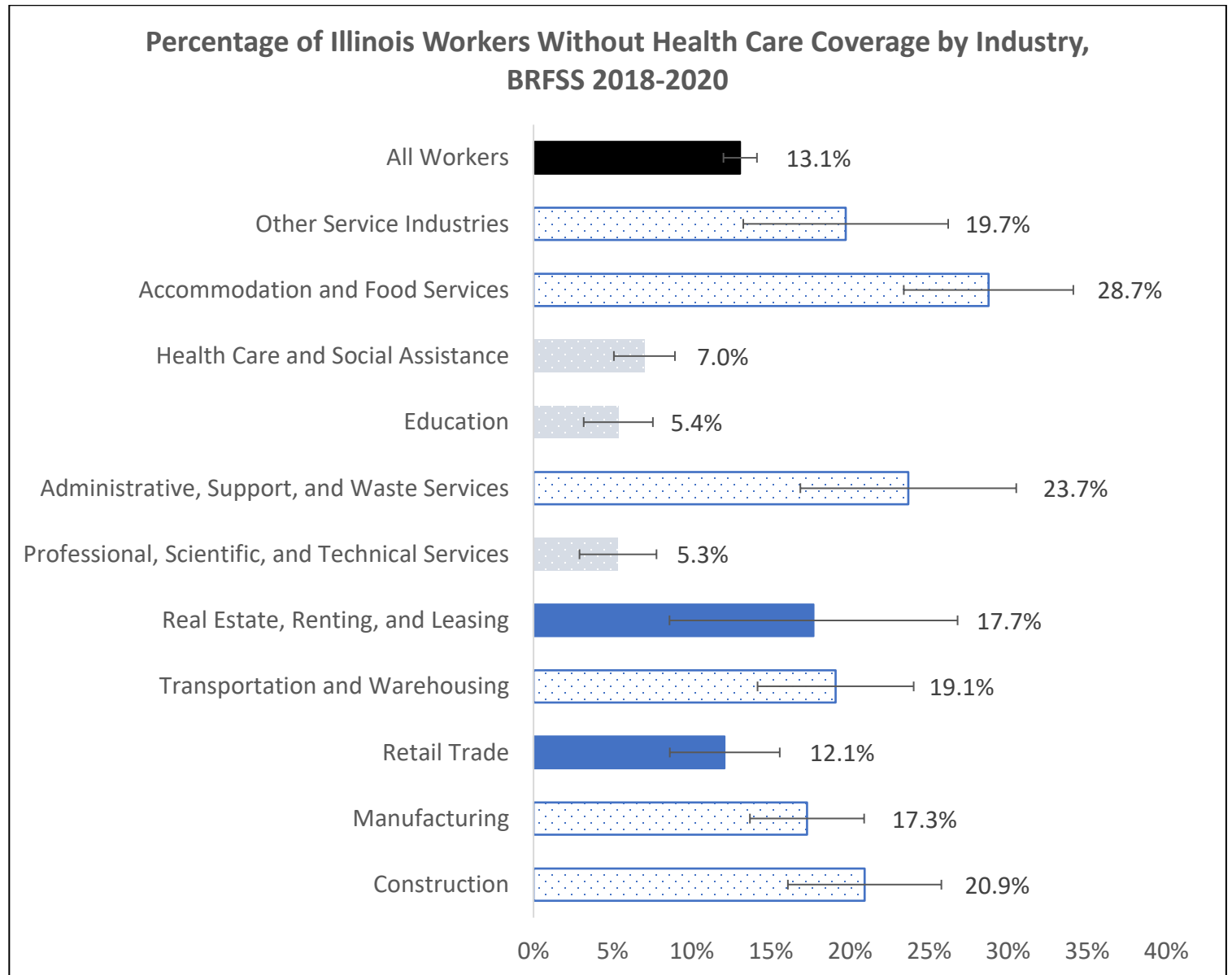
- Accommodation and Food Services
- Administrative, Support, and Waste Services
- Transportation and Warehousing
- Manufacturing
- Other Service Industries
- Construction

Lower:

- Health care and Social Assistance
- Professional, Scientific, and Technical Services
- Education

All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Agriculture, Forestry, Fishing, and Hunting; Utilities; Wholesale Trade; Information; Finance and Insurance; Arts, Entertainment, and Recreation; Public Administration.



Health Care Access – Personal Physician

All respondents were asked if they have one person they think of as their personal doctor or health care provider.

Compared to all workers, the prevalence of not having a personal physician among workers in the following industry groups was significantly:

Higher:

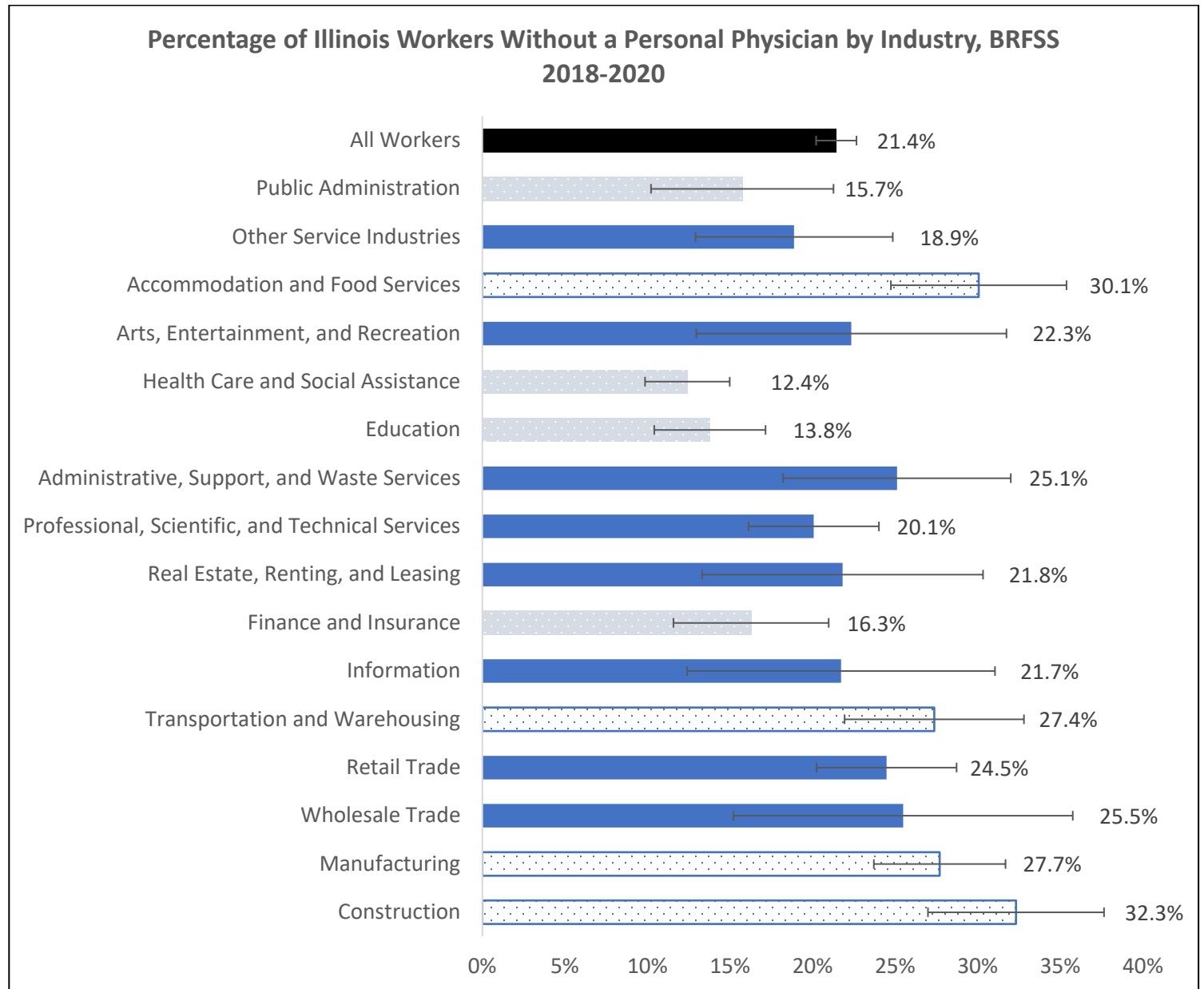
- Accommodation and Food Services
- Manufacturing
- Transportation and Warehousing
- Construction

Lower:

- Finance and Insurance
- Health care and Social Assistance
- Public Administration
- Education

All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Agriculture, Forestry, Fishing, and Hunting; Utilities.



Health Care Access – Cost Barrier

All respondents were asked whether there was any time in the past year when they were unable to see a doctor due to cost.

Compared to all workers, the prevalence of **not** being able to see a physician in the past year due to cost among workers in the following industry groups was significantly:

Higher:

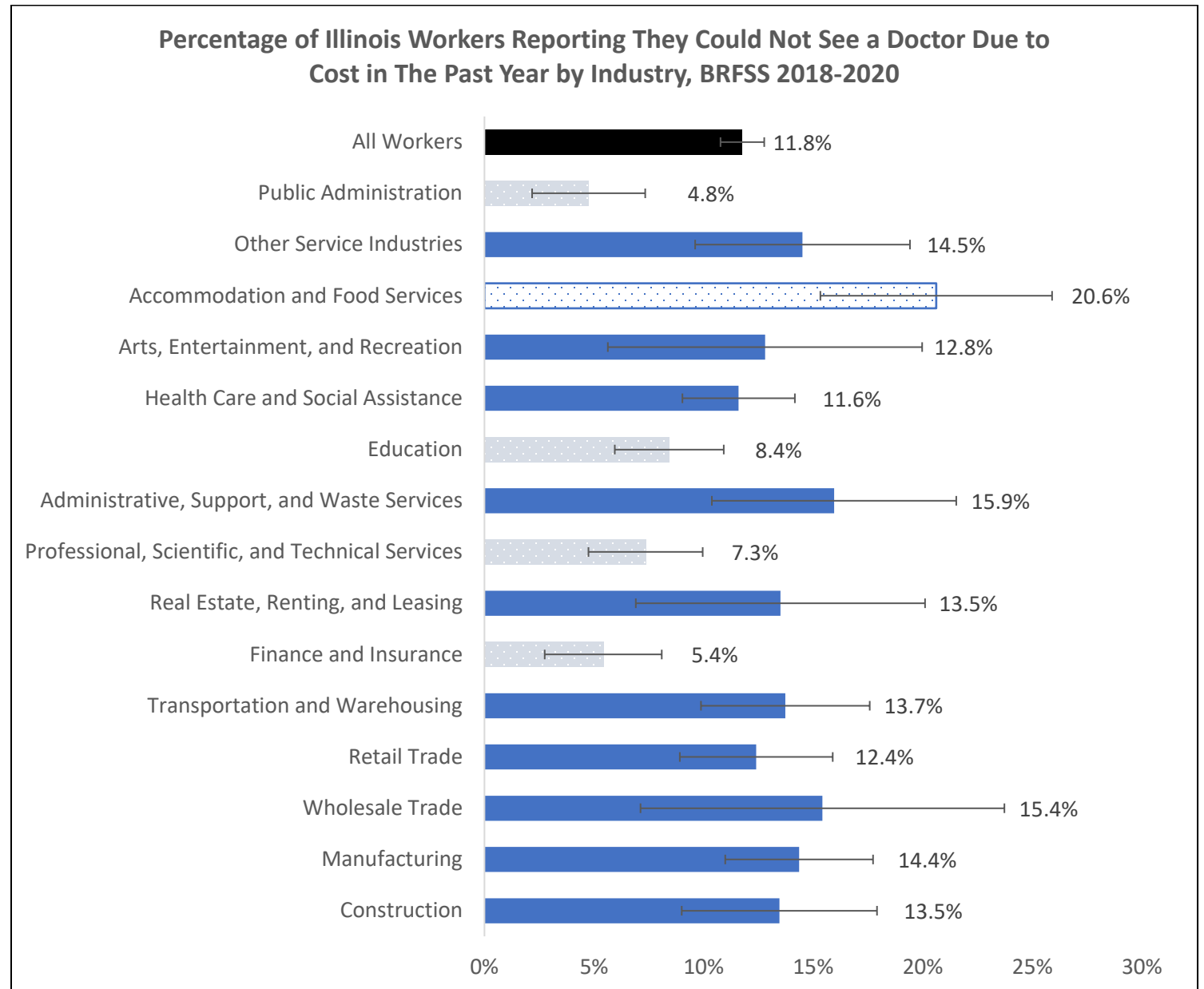
- Accommodation and Food Services

Lower:

- Finance and Insurance
- Professional, Scientific, and Technical Services
- Education
- Public Administration

All workers = respondents with an industry code

Results not shown for the following groups due to high variance ($CV > 0.3$): Agriculture, Forestry, Fishing, and Hunting; Utilities; Information.



Routine Doctor Visit

All respondents were asked how long it had been since they last visited a doctor for a routine check-up.

Compared to all workers, the prevalence of attending a routine doctor visit in the past year among workers in the following industry groups was significantly:

Higher:

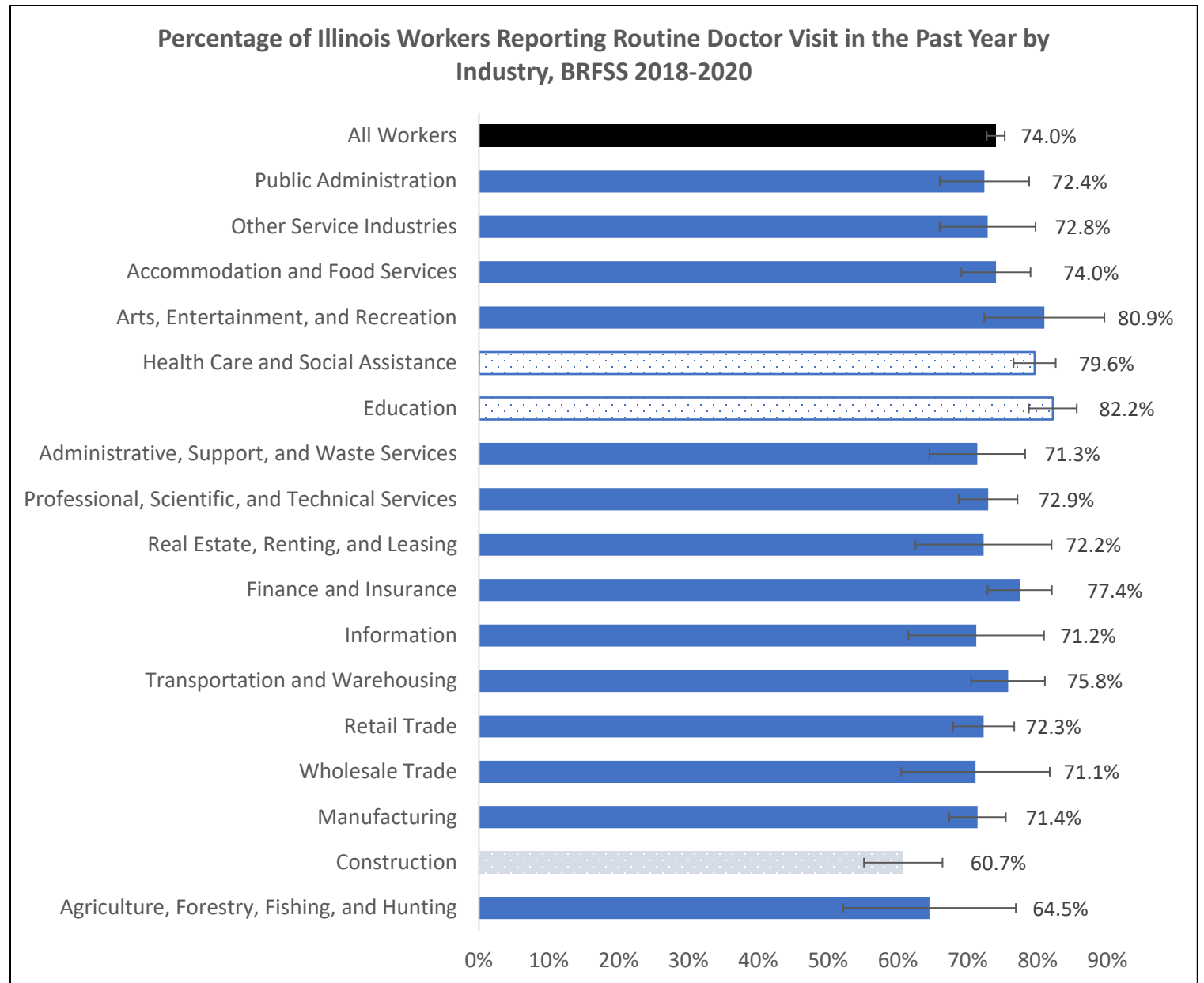
- Health care and Social Assistance
- Education

Lower:

- Construction

All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Utilities.



Routine Dentist Visit

All respondents were asked how long had it been since they last visited a dentist or a dental clinic (including all types of dentists, such as orthodontists, oral surgeons, and all other dental specialists, as well as dental hygienists) for any reason?

Compared to all workers, the prevalence of not visiting a dentist, dental hygienist, or dental clinic in the past year among workers in the following industry groups was significantly:

Higher:

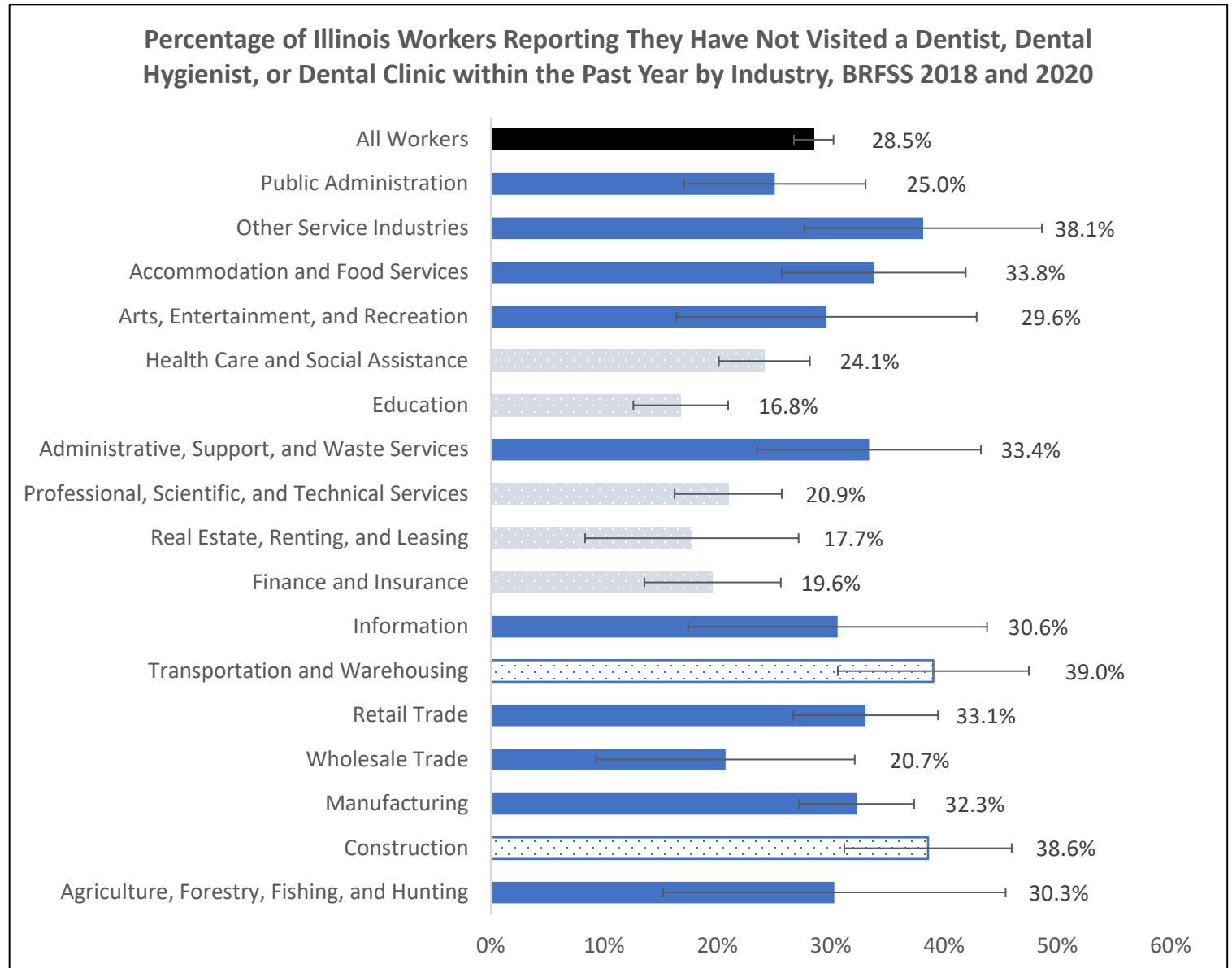
- Transportation and Warehousing
- Construction

Lower:

- Finance and Insurance
- Professional, Scientific, and Technical Services
- Education
- Real Estate, Renting, and Leasing
- Health care and Social Assistance

All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Utilities.



Prediabetes Awareness

All respondents, except for those with diabetes, were asked if they have ever been tested for high blood sugar or diabetes within the past three years.

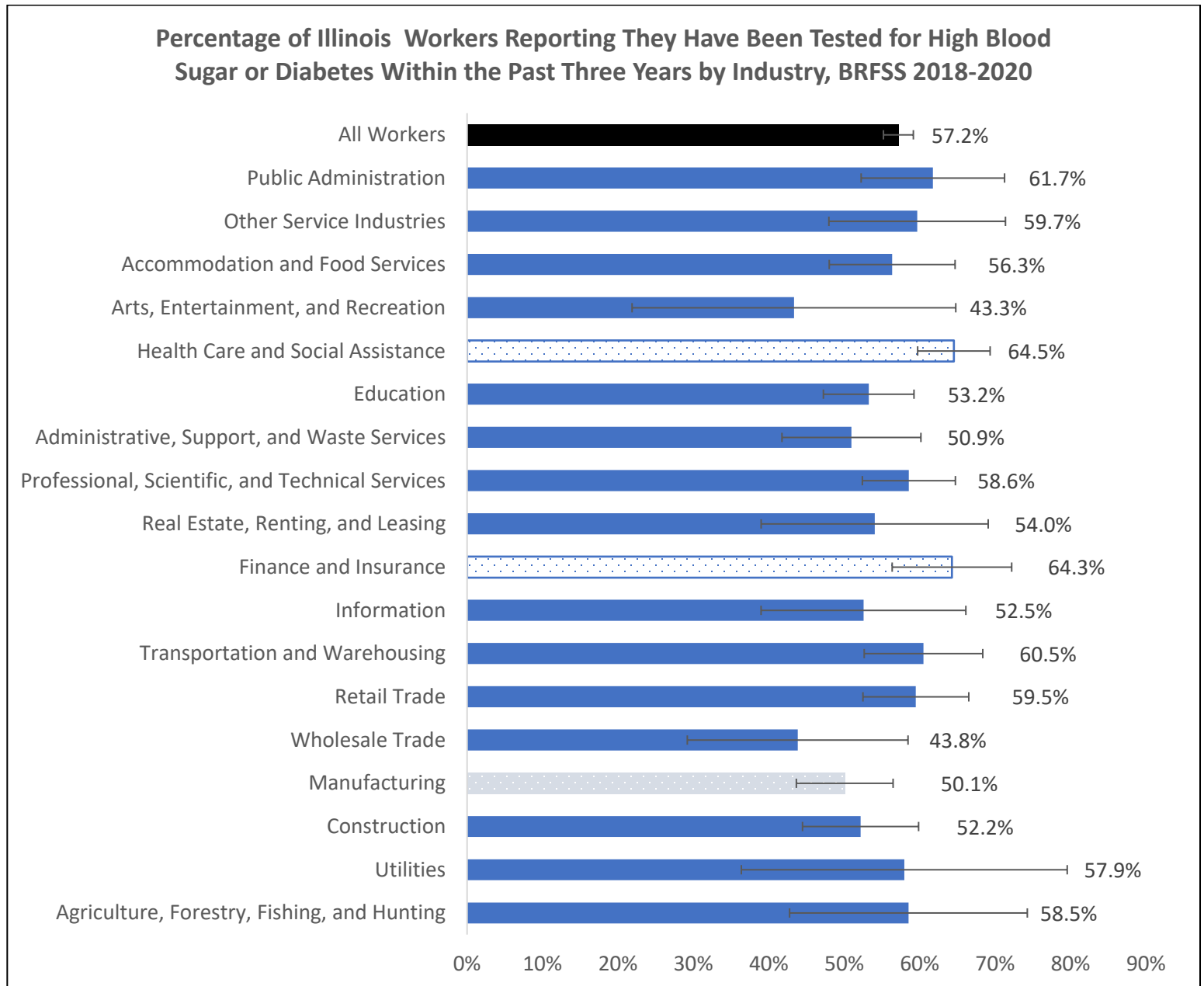
Compared to all workers, the prevalence of being tested for high blood sugar or diabetes within the past three years among workers in the following industry groups was significantly:

Higher:

- Health care and Social Assistance
- Finance and Insurance

Lower:

- Manufacturing



All workers = respondents with an industry code

Flu Vaccination

All respondents were asked during the past 12 months, have they had either a flu shot or a flu vaccine that was sprayed in their nose.

Compared to all workers, the prevalence of receiving a flu vaccine among workers in the following industry groups was significantly:

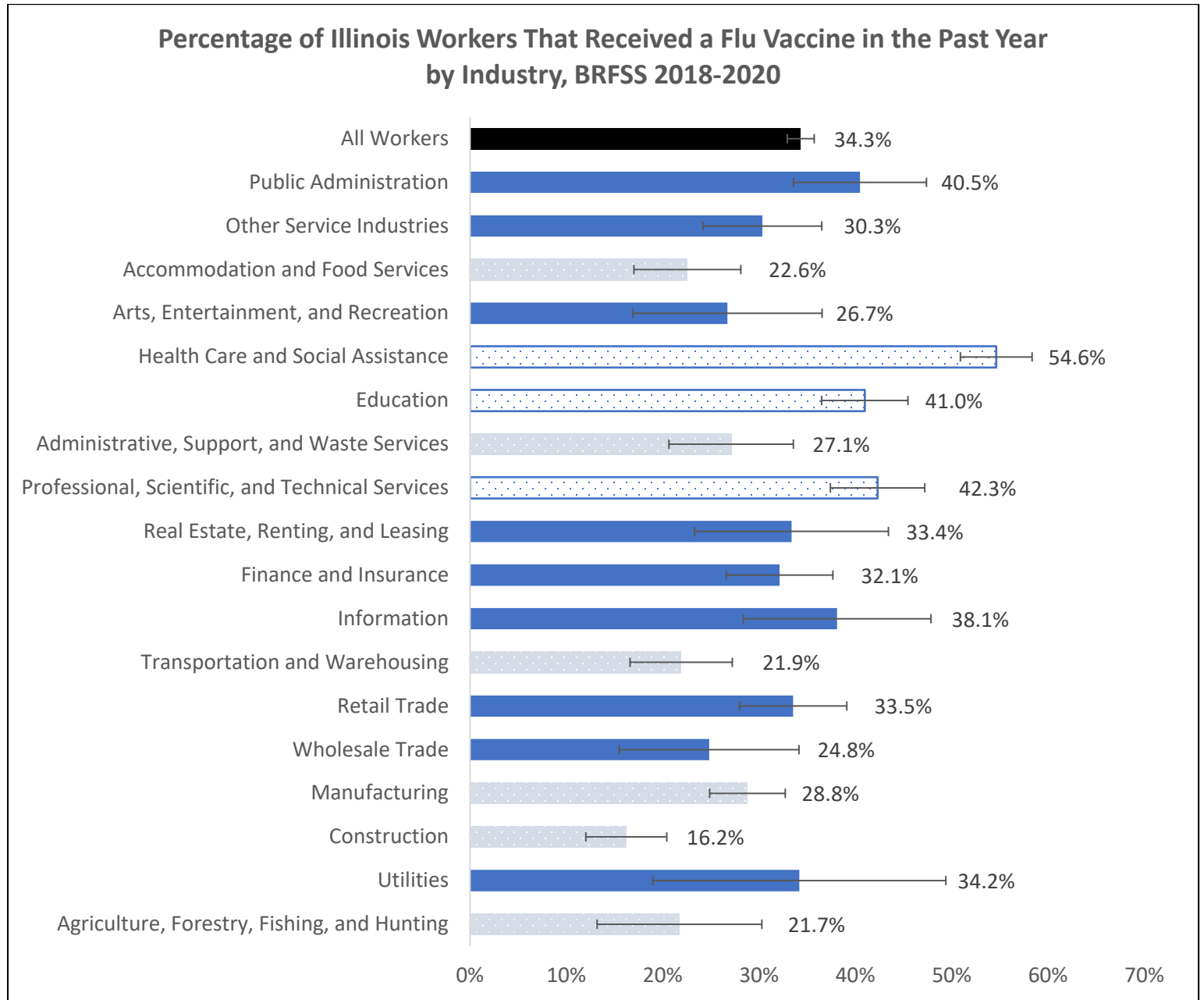
Higher:

- Health care and Social Assistance
- Education
- Professional, Scientific, and Technical Services

Lower:

- Agriculture, Forestry, Fishing, and Hunting
- Construction
- Transportation and Warehousing
- Administrative, Support, and Waste Services
- Accommodation and Food Services

All workers = respondents with an industry code



Pneumonia Vaccination

All respondents were asked if they ever had a pneumonia shot, also known as a pneumococcal vaccine.

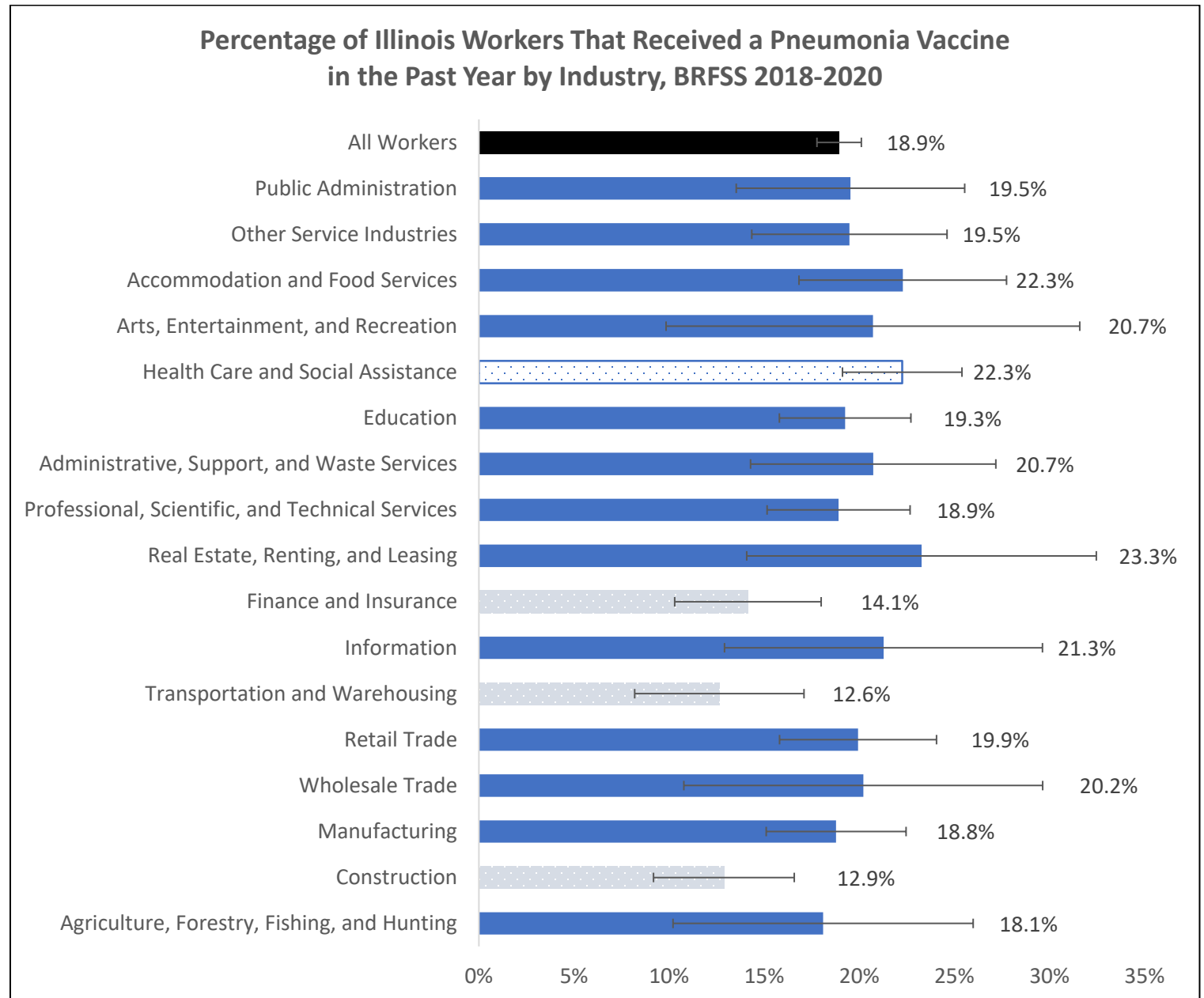
Compared to all workers, the prevalence of receiving a pneumonia vaccine among workers in the following industry groups was significantly:

Higher:

- Health care and Social Assistance

Lower:

- Construction
- Transportation and Warehousing
- Finance and Insurance



All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Utilities.

HPV Vaccination

All respondents were asked if they have ever had an HPV vaccination.

Compared to all workers, the prevalence receiving an HPV vaccination among workers in the following industry groups was significantly:

Higher:

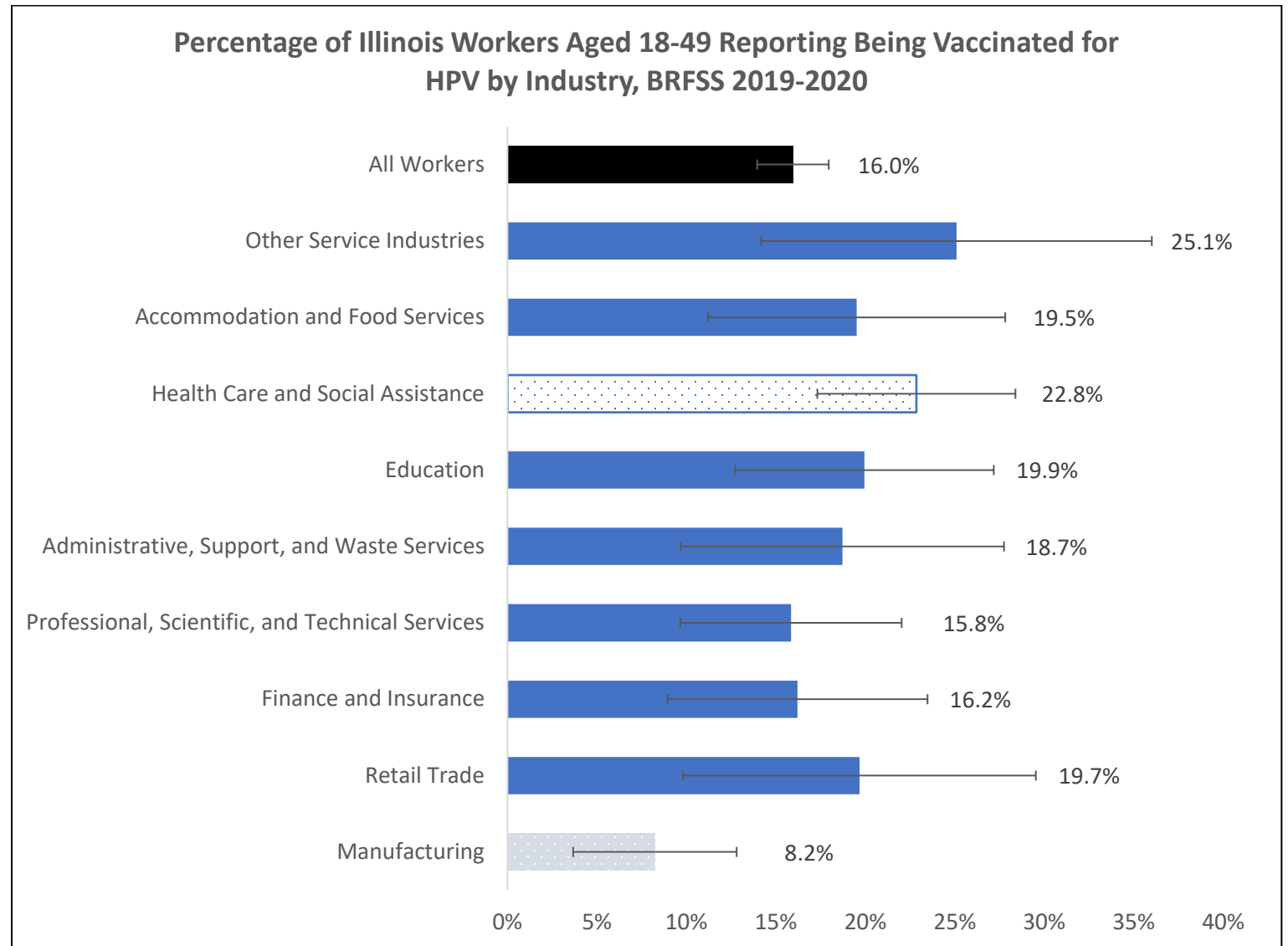
- Accommodation and Food Services

Lower:

- Manufacturing

All workers = respondents with an industry code

Results not shown for the following groups due to high variance ($CV > 0.3$): Agriculture, Forestry, Fishing, and Hunting; Utilities; Construction; Manufacturing; Wholesale Trade; Information; Real Estate, Renting, and Leasing; Arts, Entertainment, and Recreation; Public Administration.



Breast Cancer Screening

All female respondents were asked if they have ever had a mammogram.

Compared to all workers, the prevalence of receiving a mammogram among workers in the following industry groups was significantly:

Higher:

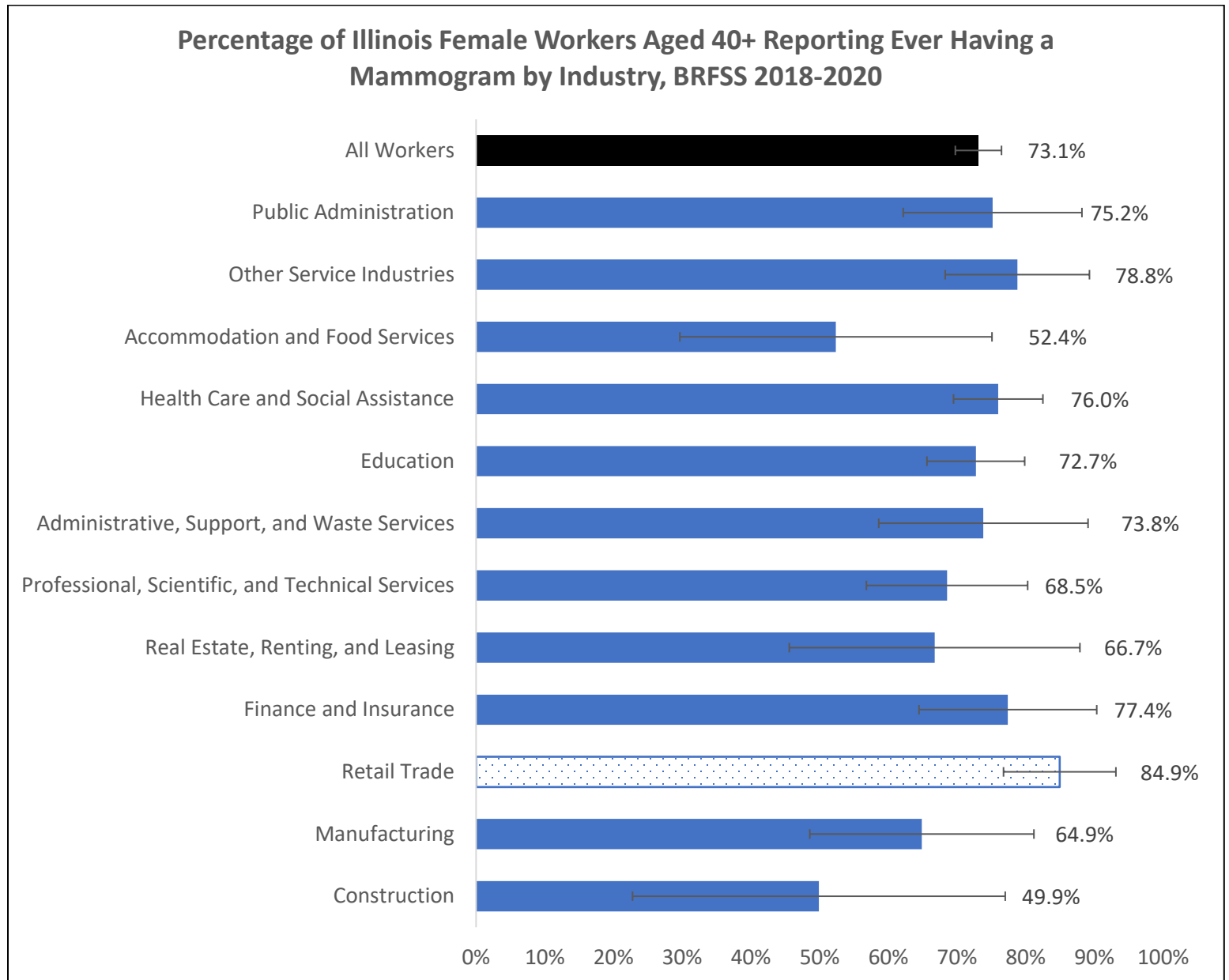
- Retail Trade

Lower:

- None

All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Agriculture, Forestry, Fishing, and Hunting; Wholesale Trade; Transportation and Warehousing; Utilities; Information; Arts, Entertainment, and Recreation.



Results not shown for the following groups due to insufficient sample size (n<50): Mining, Quarrying, Oil, and Gas; Management of Companies and Enterprises; Military

Cervical Cancer Screening

All female respondents were asked if they have ever had a Pap test.

Compared to all workers, the prevalence of receiving a Pap test among workers in the following industry groups was significantly:

Higher:

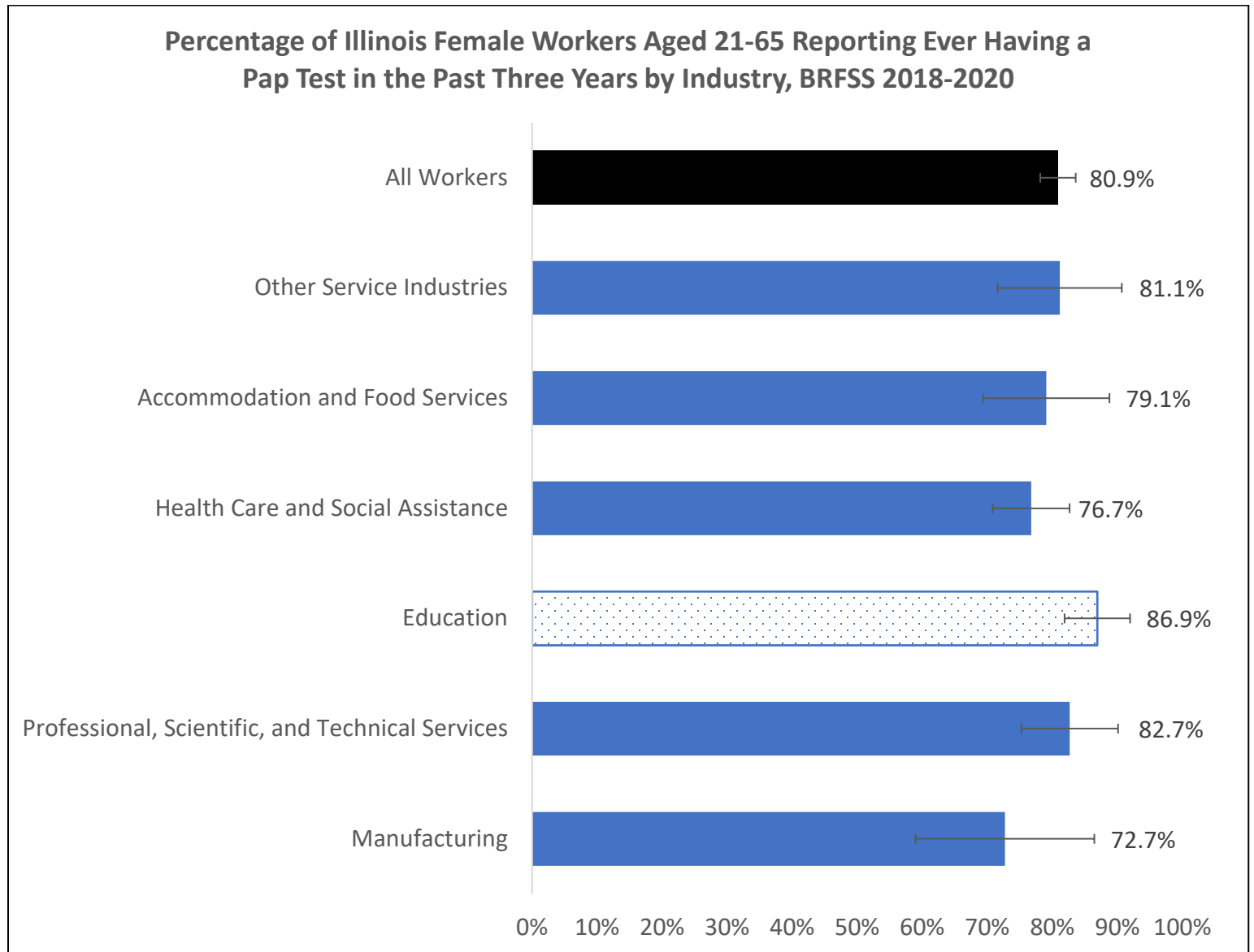
- Education

Lower:

- None

All workers = respondents with an industry code

Results not shown for the following groups due to high variance ($CV > 0.3$): Agriculture, Forestry, Fishing, and Hunting; Construction; Retail Trade; Wholesale Trade; Transportation and Warehousing; Utilities; Information; Finance and Insurance; Real Estate, Renting, and Leasing; Administrative, Support, and Waste Services; Arts, Entertainment, and Recreation; Public Administration.



Prostate Screening

All male respondents were asked if they have ever had a prostate specific antigen (PSA) test.

Compared to all workers, the prevalence of receiving a PSA among workers in the following industry groups was significantly:

Higher:

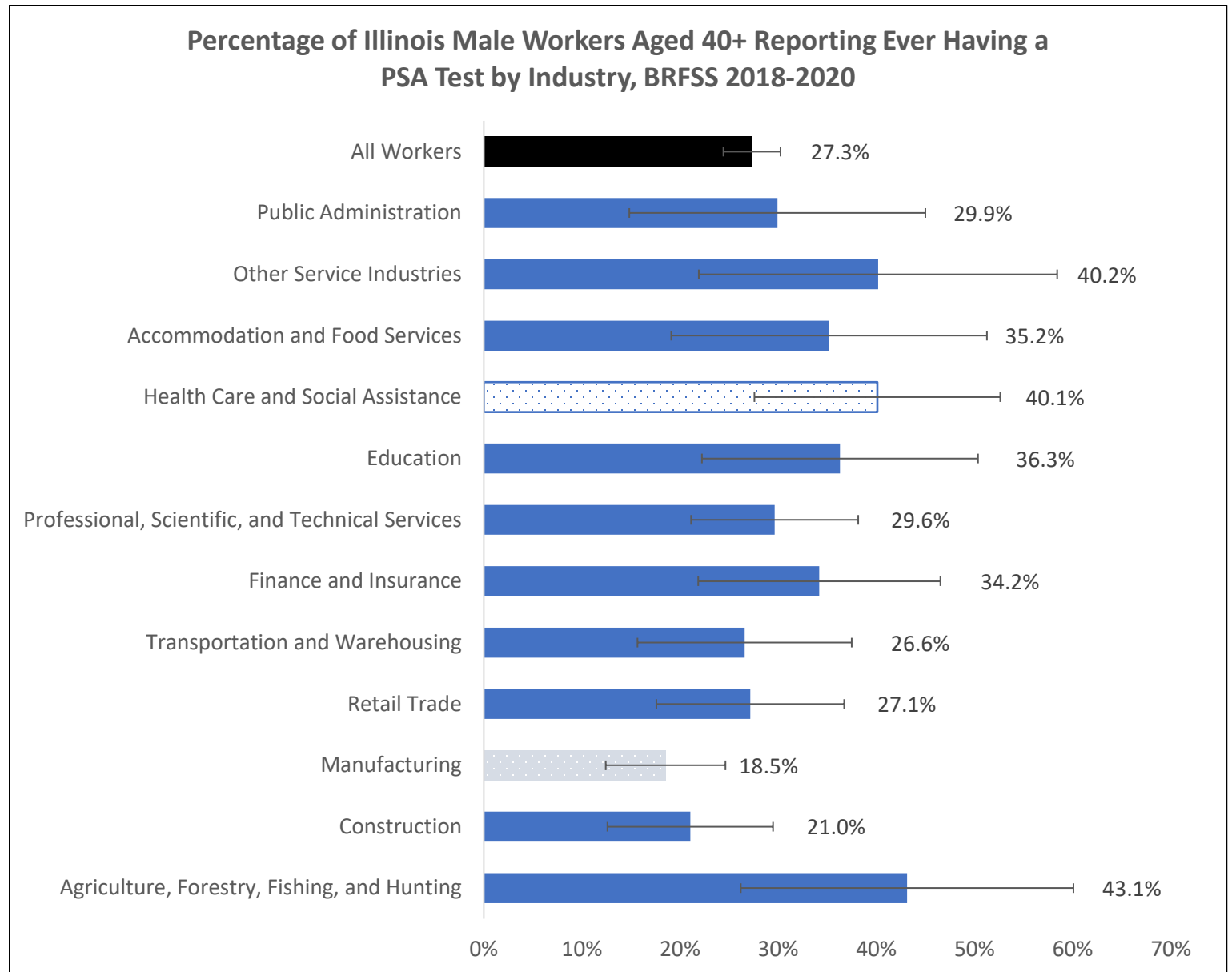
- Health care and Social Assistance

Lower:

- Manufacturing

All workers = respondents with an industry code

Results not shown for the following groups due to high variance ($CV > 0.3$): Utilities; Wholesale Trade; Information; Real Estate, Renting, and Leasing; Administrative, Support, and Waste Services; Arts, Entertainment, and Recreation.



Colorectal Cancer Screening – Met Screening Recommendations

Calculated variable for respondents aged 50–75 who have fully met the U.S. Preventative Services Taskforce (USPSTF) screening recommendations within the recommended time interval.

Compared to all workers, the prevalence of meeting USPSTF guidelines for recommended colorectal cancer screening among workers in the following industry groups was significantly:

Higher:

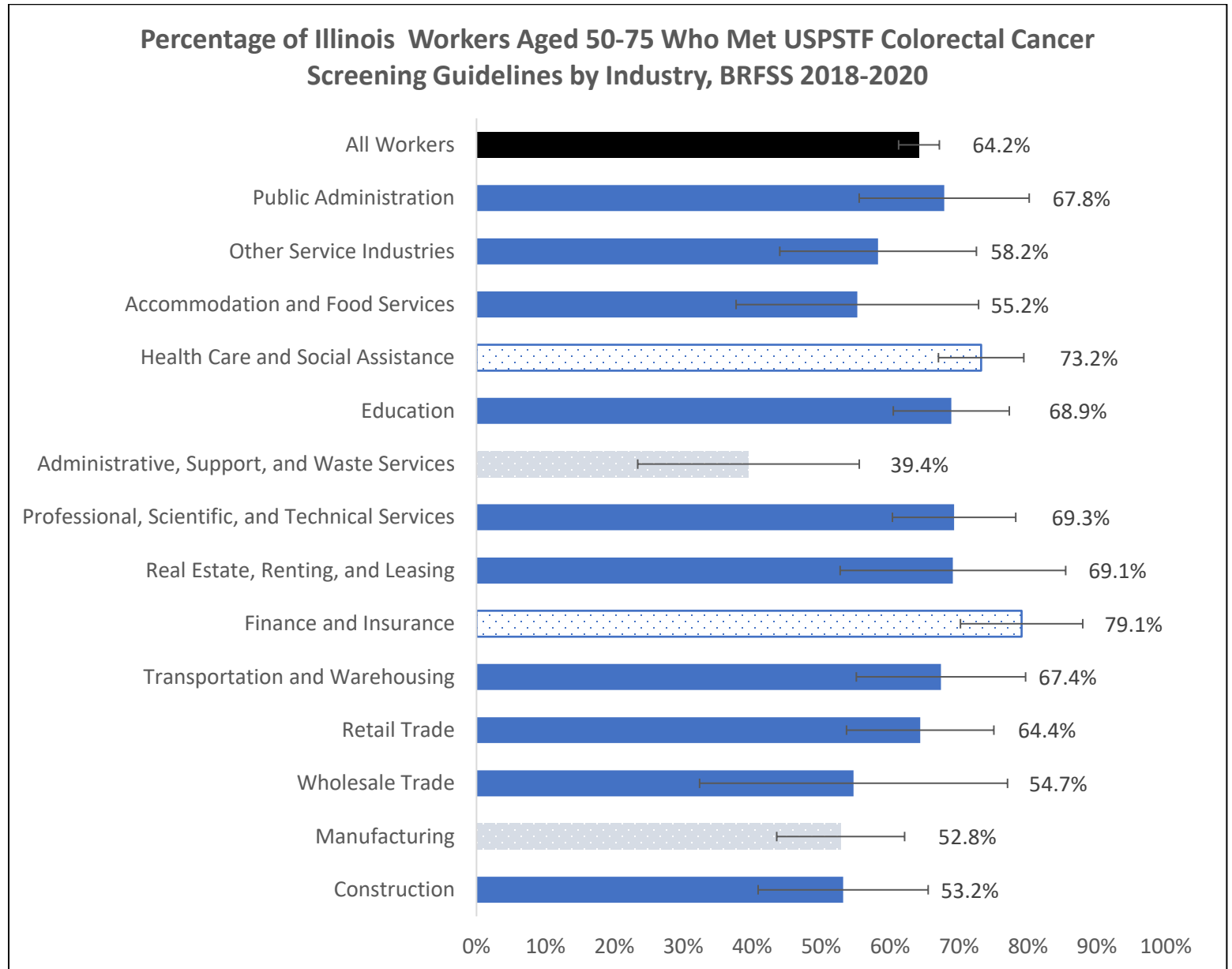
- Health care and Social Assistance
- Finance and Insurance

Lower:

- Manufacturing
- Administrative, Support, and Waste Services

All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Agriculture, Forestry, Fishing, and Hunting; Utilities; Information; Arts, Entertainment, and Recreation.



HIV/AIDS – Screening

All respondents were asked if they have ever been tested for human immunodeficiency virus (HIV).

Compared to all workers, the prevalence of being tested for HIV among workers in the following industry groups was significantly:

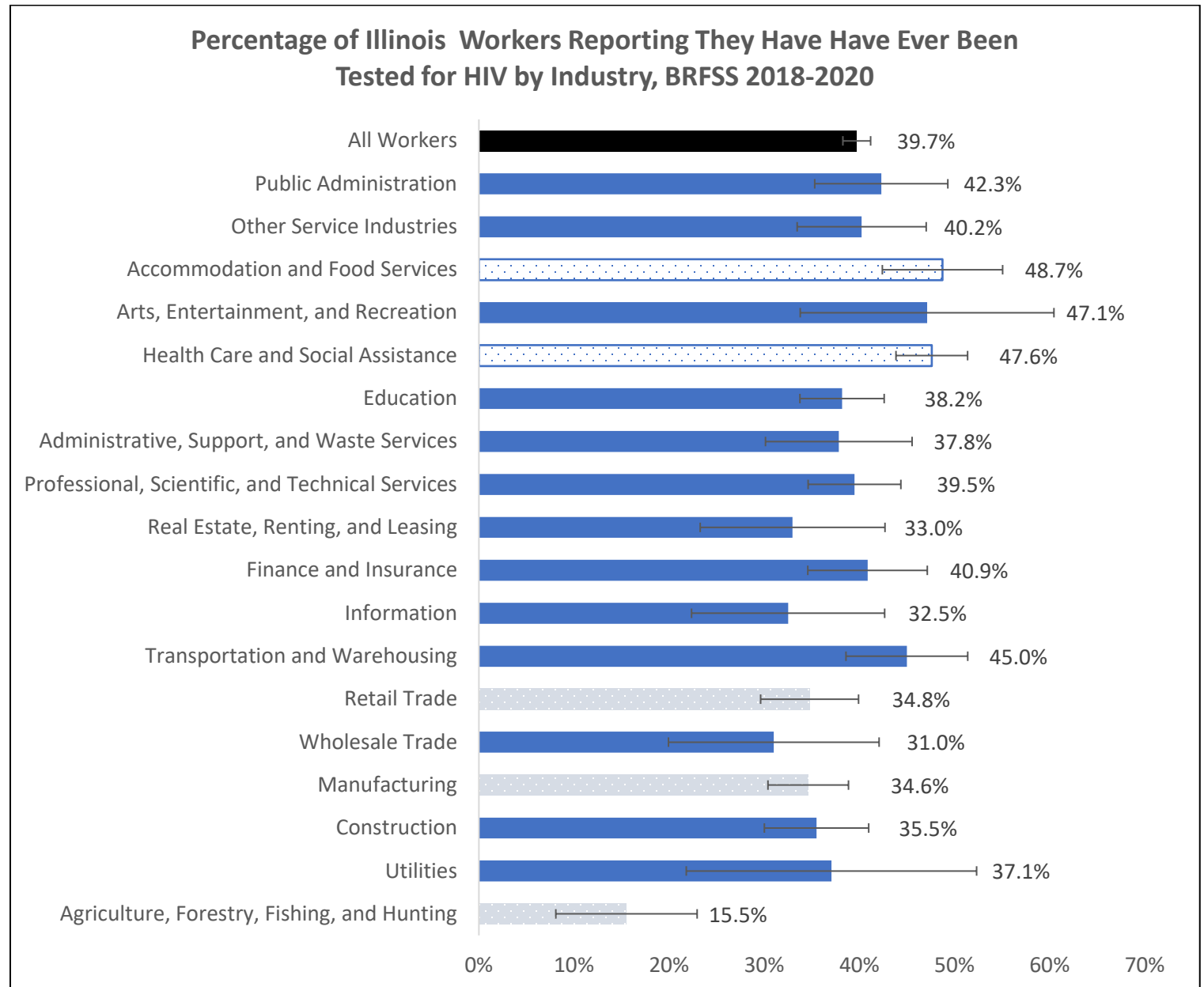
Higher:

- Health care and Social Assistance
- Accommodation and Food Services

Lower:

- Retail Trade
- Manufacturing
- Agriculture, Forestry, Fishing, and Hunting

All workers = respondents with an industry code



Inadequate Sleep

All respondents were asked, on average, how many hours of sleep they got in a 24-hour period.

Compared to all workers, the prevalence of getting less than eight hours of sleep among workers in the following industry groups was significantly:

Higher:

- None

Lower:

- None

All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Utilities; Wholesale Trade.



Physical Activity – Exercise

All respondents were asked during the past month, other than their regular job, if they participated in any physical activities or exercises, such as running, calisthenics, golf, gardening, or walking for exercise.

Compared to all workers, the prevalence of **not** engaging in leisure time physical activity outside of work among workers in the following industry groups was significantly:

Higher:

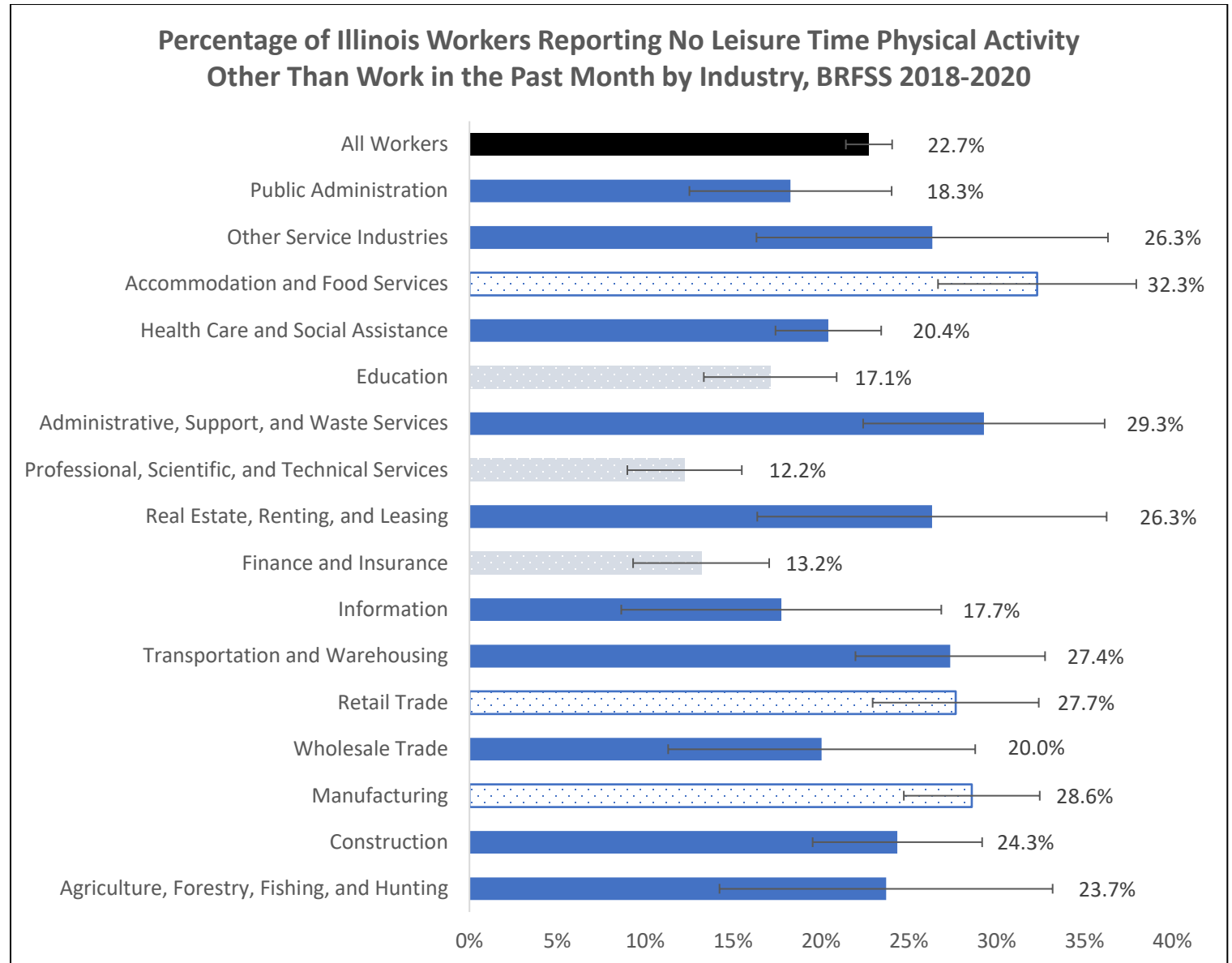
- Accommodation and Food Services
- Manufacturing
- Retail Trade

Lower:

- Finance and Insurance
- Professional, Scientific, and Technical Services
- Education

All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Utilities; Arts, Entertainment, and Recreation.



Seatbelt Use

All respondents were asked if they always use seat belts when they drive or ride in a car.

Compared to all workers, the prevalence of always wearing a seatbelt among workers in the following industry groups was significantly:

Higher:

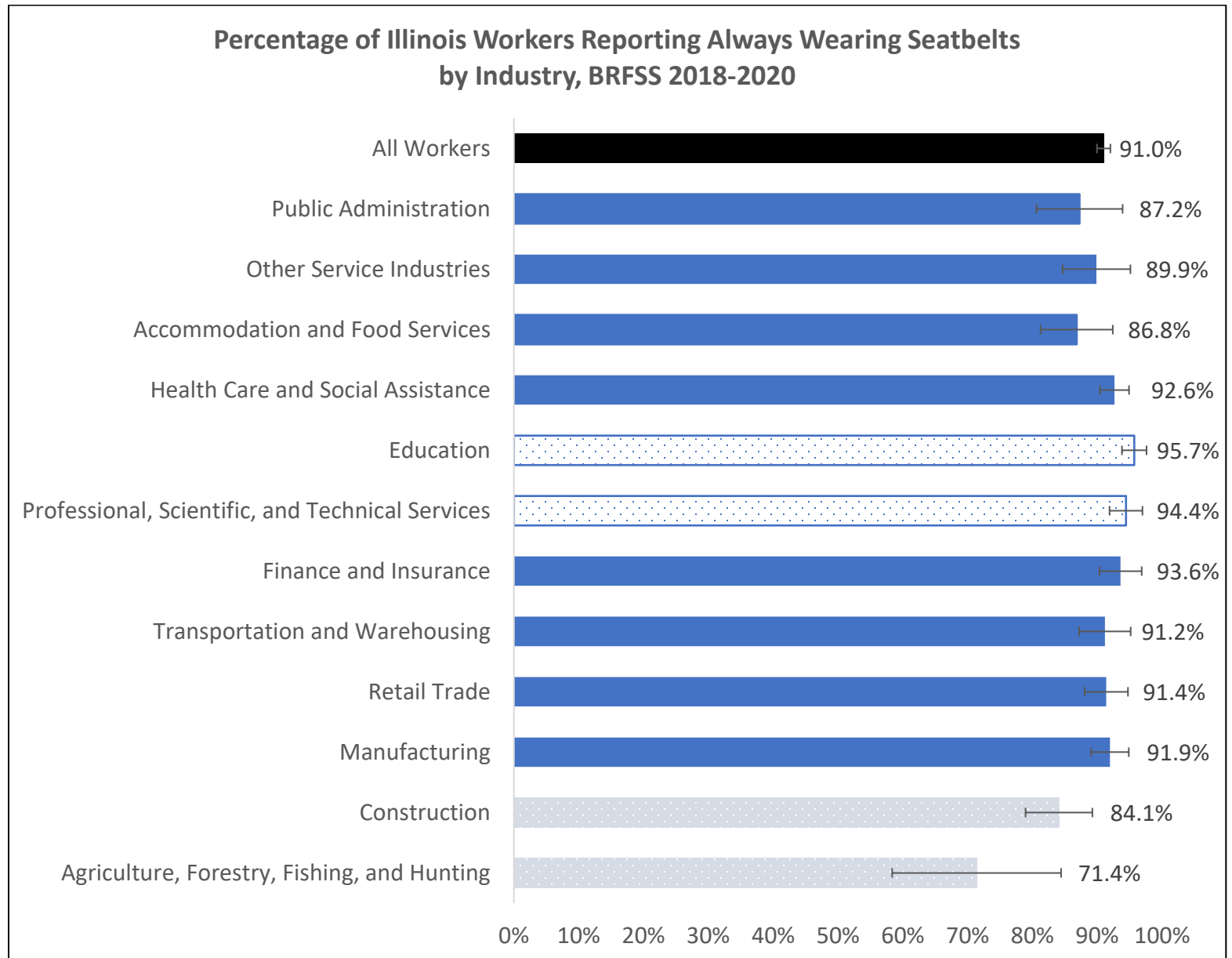
- Professional, Scientific, and Technical Services
- Education

Lower:

- Agriculture, Forestry, Fishing, and Hunting
- Construction

All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Utilities; Wholesale Trade; Information; Real Estate, Renting, and Leasing; Administrative, Support, and Waste Services; Arts, Entertainment, and Recreation.



Overweight/Obese

All respondents were asked their height and weight to calculate BMI. Overweight is defined as a BMI of 25.0-29.9 and obesity is defined as a BMI of 30.0 or higher.

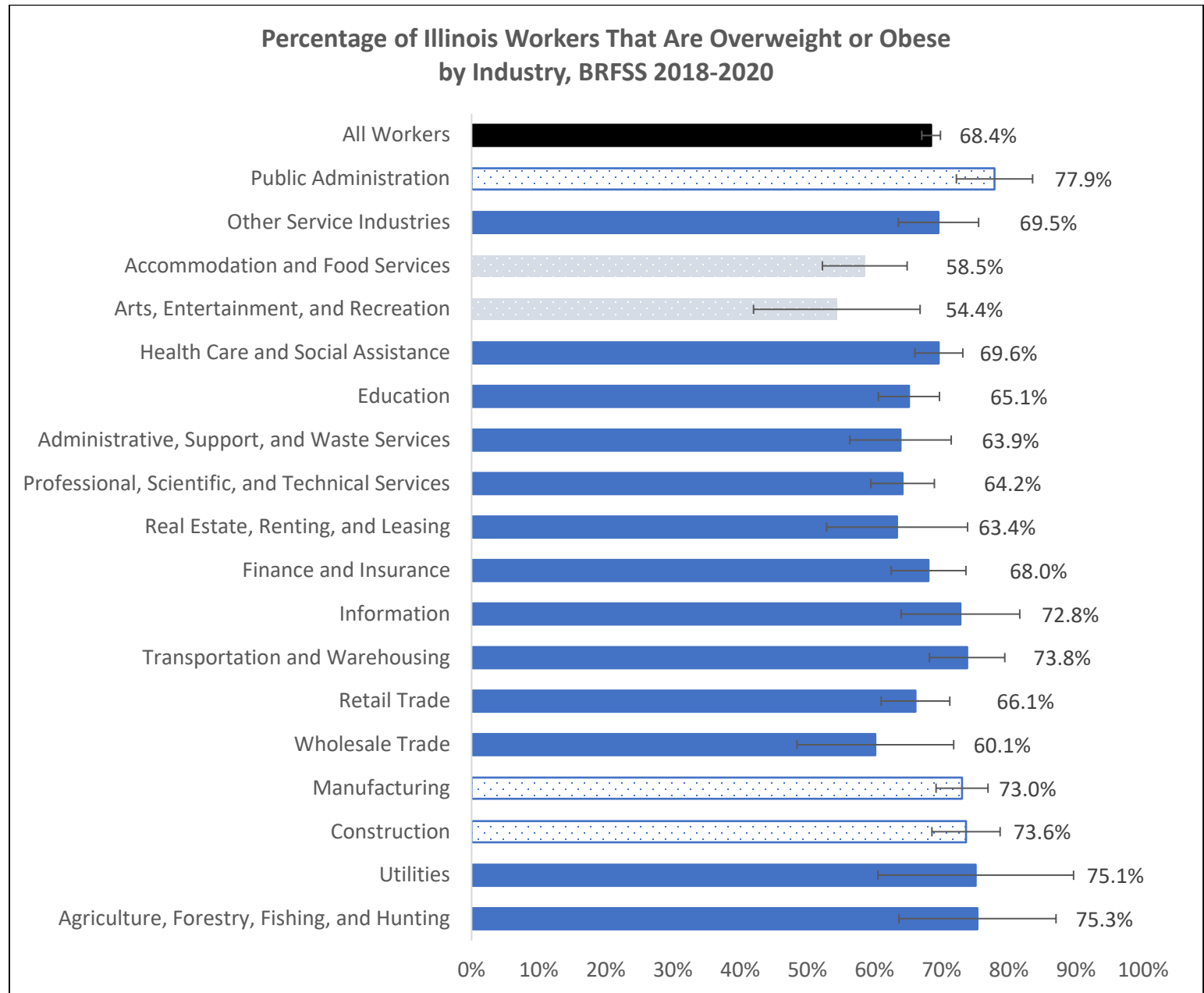
Compared to all workers, the prevalence of being overweight or obese among workers in the following industry groups was significantly:

Higher:

- Manufacturing
- Construction
- Public Administration

Lower:

- Accommodation & Food Services
- Arts, Entertainment, and Recreation



All workers = respondents with an industry code

Tobacco Use

All respondents were asked if they currently smoke cigarettes every day, some days, or not at all. Current smokers were defined as respondents who indicated they smoke some days or every day.

Compared to all workers, the prevalence of current smokers among workers in the following industry groups was significantly:

Higher:

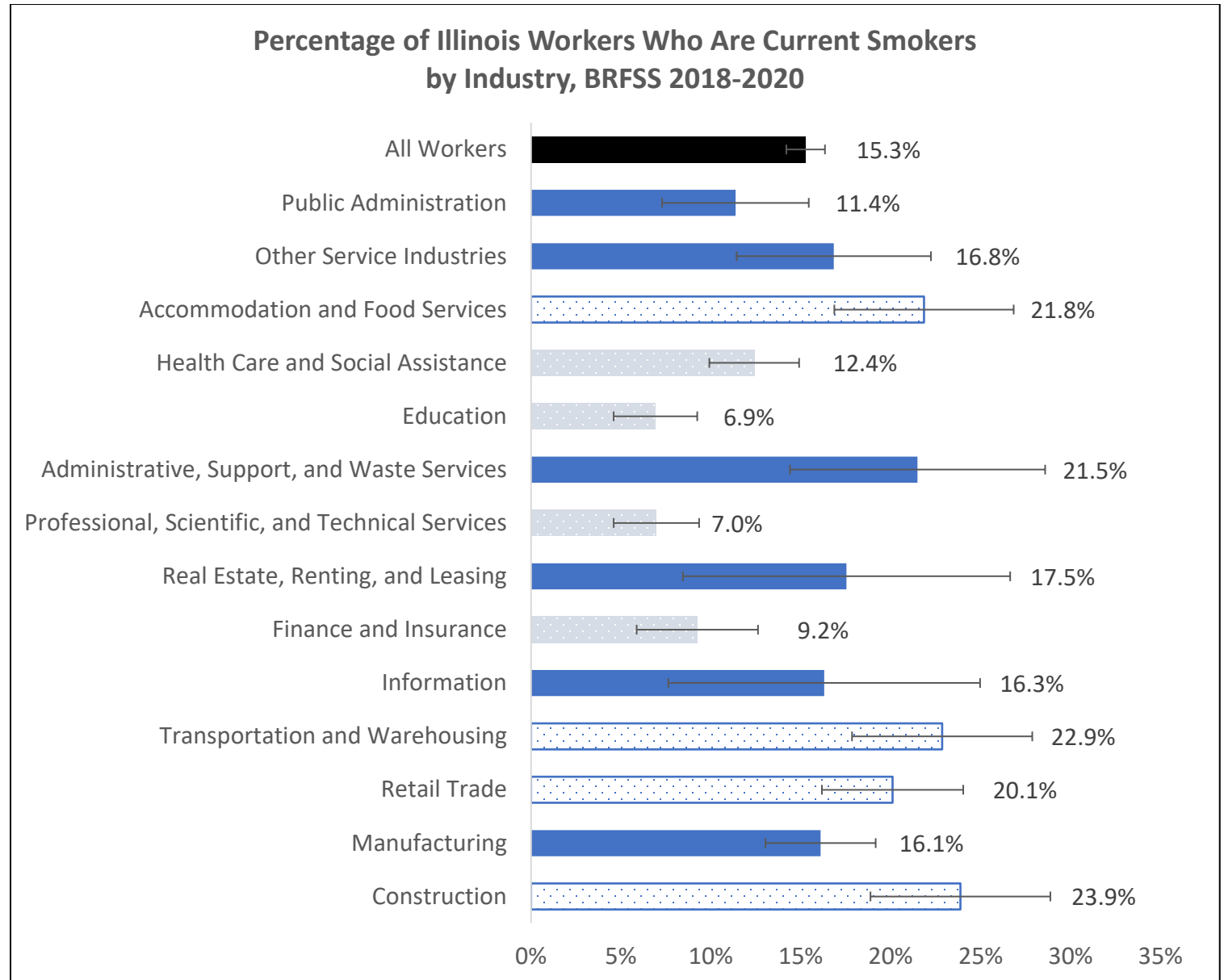
- Retail Trade
- Transportation and Warehousing
- Construction
- Accommodation and Food Services

Lower:

- Health care and Social Assistance
- Education
- Professional, Scientific, and Technical Services
- Finance and Insurance

All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Agriculture, Forestry, Fishing, and Hunting; Utilities; Wholesale Trade; Arts, Entertainment, and Recreation.



Alcohol Use

All respondents were asked a series of questions about alcohol use. Binge drinking is defined as having five or more drinks on one occasion for men and four or more drinks on one occasion for women. Heavy drinking is defined as having 14 or more drinks per week for men and seven or more drinks per week for women.

Compared to all workers, the prevalence of heavy and/or binge drinking among workers in the following industry groups was significantly:

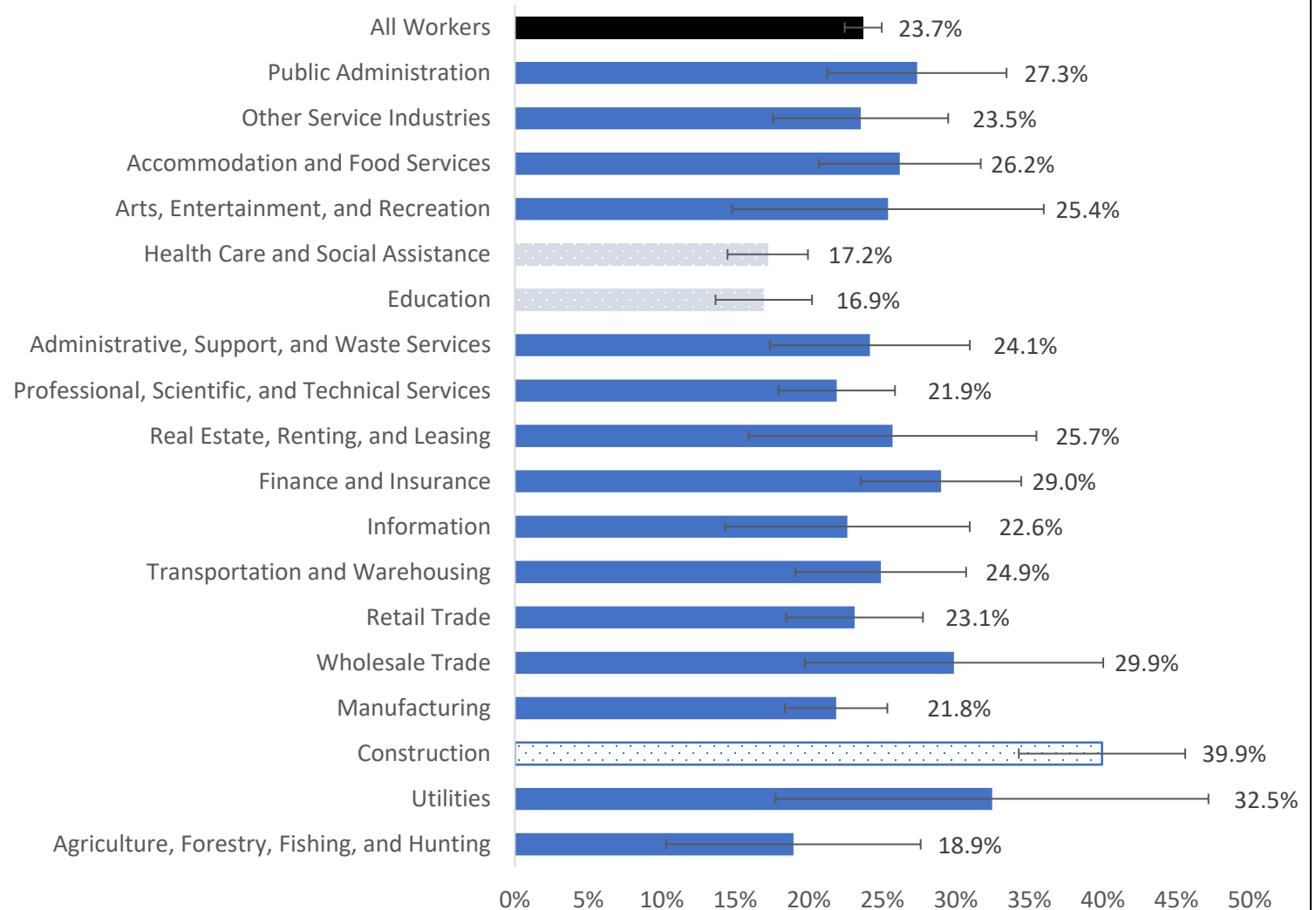
Higher:

- Construction

Lower:

- Health care and Social Assistance
- Education

Percentage of Illinois Workers Reporting Binge or Heavy Drinking in the Past 30 Days by Industry, BRFSS 2018-2020



All workers = respondents with an industry code

HIV/AIDS – Risky Behavior

All respondents were asked if they have ever experienced any of the following situations: have injected any drug other than those prescribed for you, treated for a sexually transmitted disease (STD), given or received money or drugs in exchange for sex, had anal sex without a condom, and/or had four or more sex partners in the past year.

Compared to all workers, the prevalence engaging in risky HIV/AIDS behavior among workers in the following industry groups was significantly:

Higher:

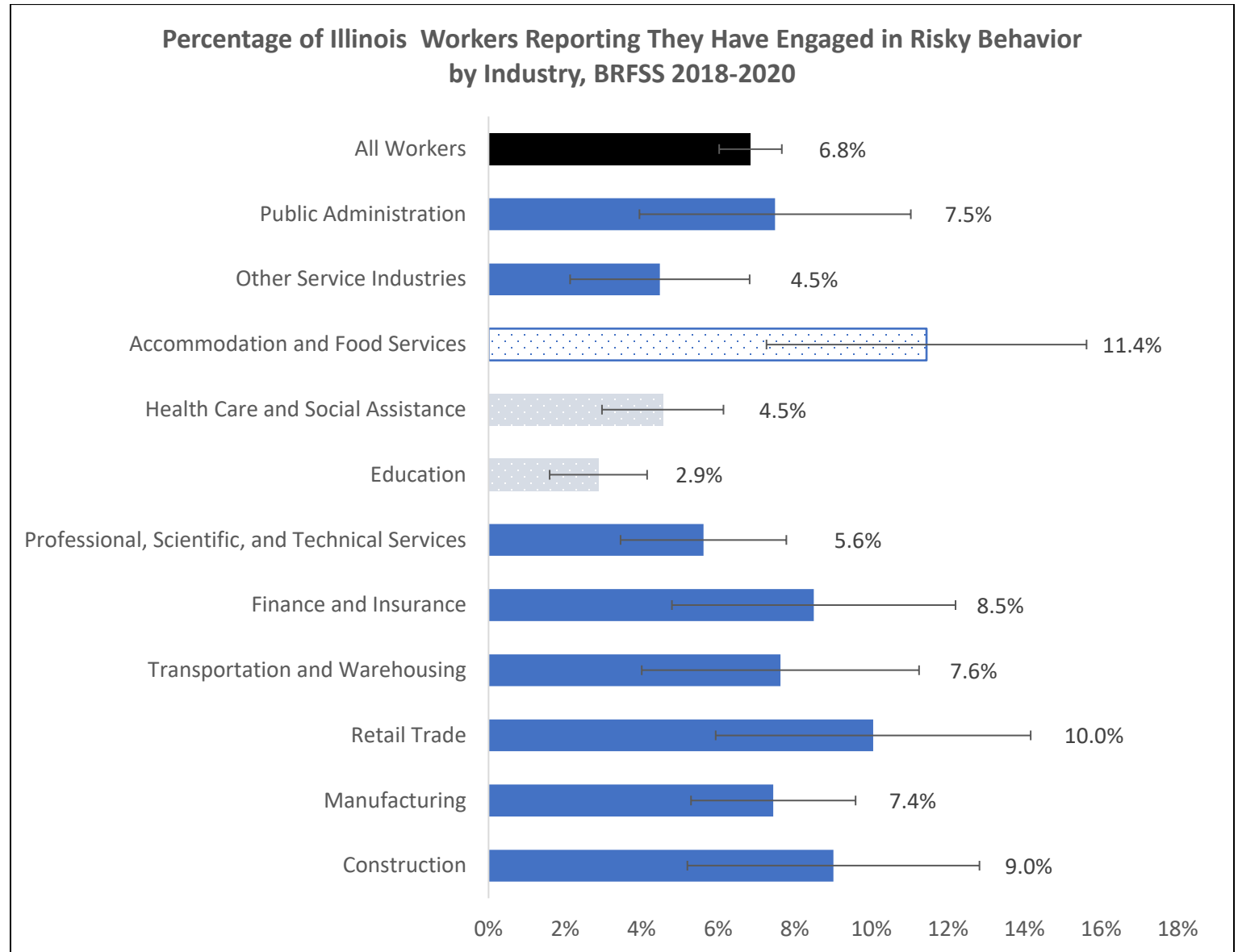
- Accommodation and Food Services

Lower:

- Education
- Health care and Social Assistance

All workers = respondents with an industry code

Results not shown for the following groups due to high variance ($CV > 0.3$): Agriculture, Forestry, Fishing, and Hunting; Utilities; Wholesale Trade; Information; Real Estate, Renting, and Leasing; Administrative, Support, and Waste Services; Arts, Entertainment, and Recreation.



Marijuana Usage

All respondents were asked during the past 30 days, on how many days did they use marijuana or cannabis.

Compared to all workers, the prevalence using marijuana or cannabis among workers in the following industry groups was significantly:

Higher:

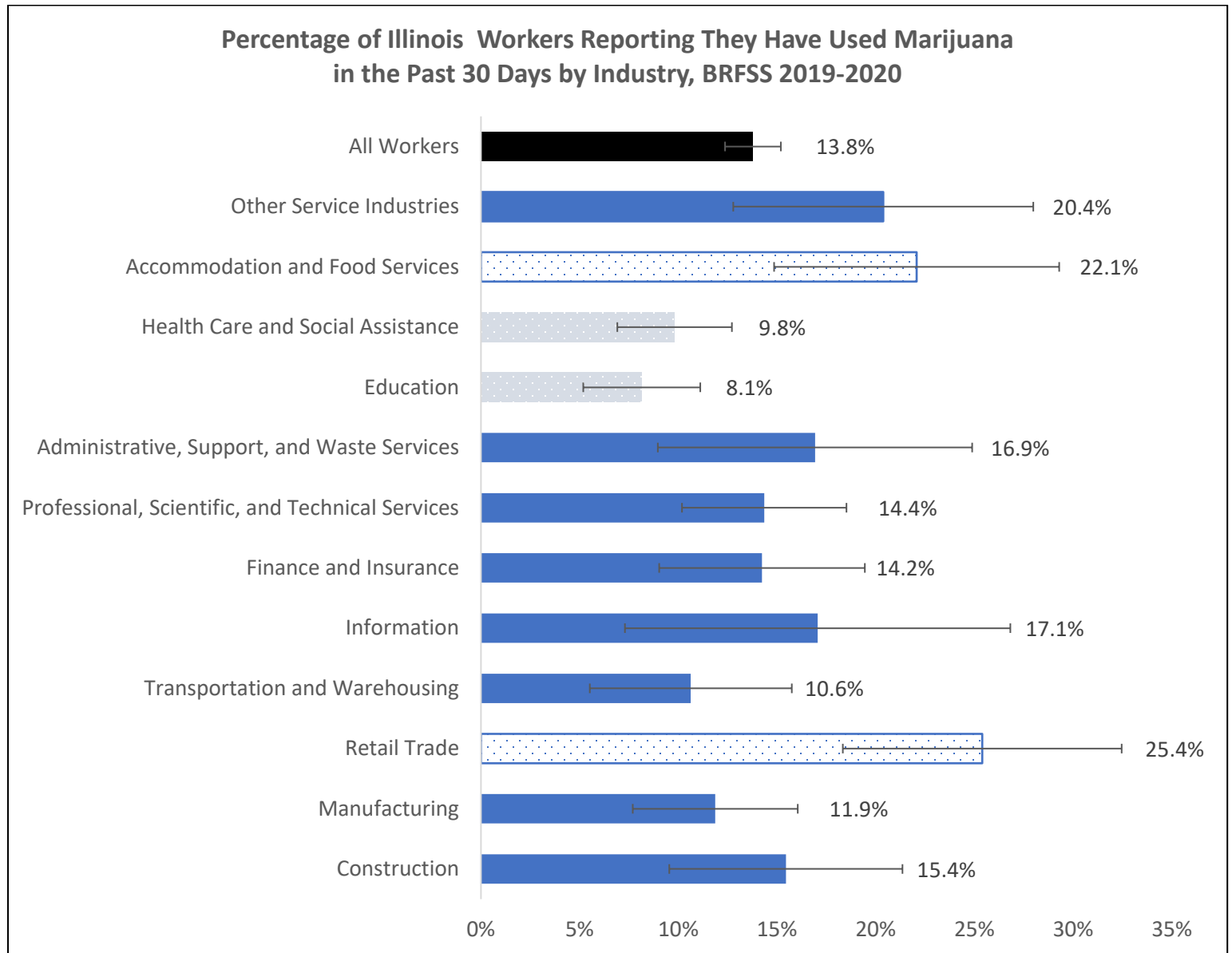
- Accommodation and Food Services
- Retail Trade

Lower:

- Education
- Health care and Social Assistance

All workers = respondents with an industry code

Results not shown for the following groups due to high variance (CV>0.3): Agriculture, Forestry, Fishing, and Hunting; Utilities; Wholesale Trade; Real Estate, Renting, and Leasing; Arts, Entertainment, and Recreation; Public Administration.



Sexual Orientation

All respondents were asked about their sexual orientation.

Compared to all workers, the prevalence of identifying as LGBTQIA+ among workers in the following industry groups was significantly:

Higher:

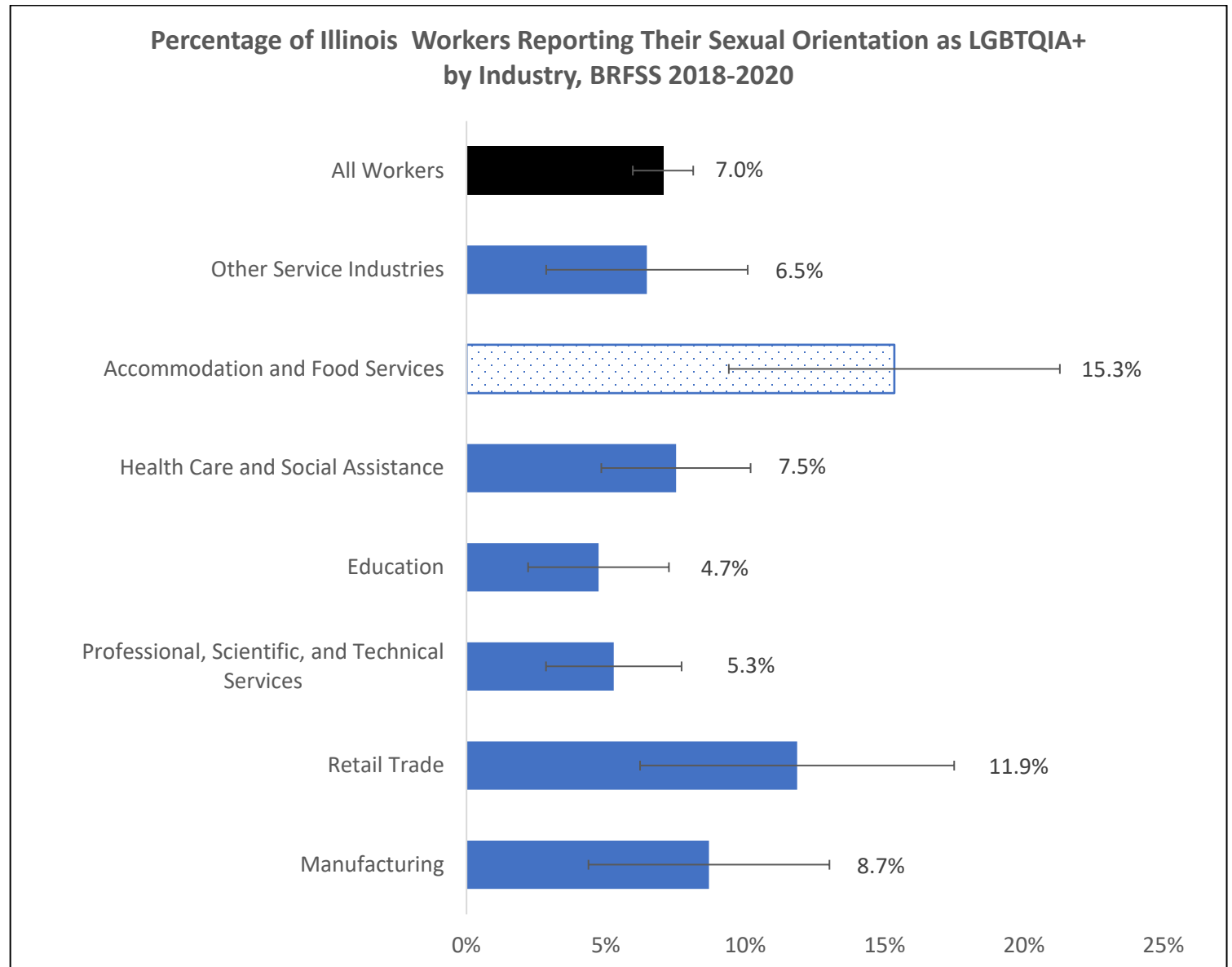
- Accommodation and Food Services

Lower:

- None

All workers = respondents with an industry code

Results not shown for the following groups due to high variance ($CV > 0.3$): Agriculture, Forestry, Fishing, and Hunting; Utilities; Manufacturing; Wholesale Trade; Information; Real Estate, Renting, and Leasing; Administrative, Support, and Waste Services; Arts, Entertainment, and Recreation.



Appendix I. Summary of Significant Results by Industry

Industry	Significantly Lower Prevalence	Significantly Higher Prevalence
Transportation and Warehousing	<ul style="list-style-type: none"> - Poor mental health days - Cancer - Depression diagnoses 	<ul style="list-style-type: none"> - Flu vaccination - Pneumonia vaccination - No health care coverage - No primary care physician - No routine dental visit - Current smokers
Agriculture, Forestry, Fishing, and Hunting	<ul style="list-style-type: none"> - Poor mental health days - Cancer - Been tested for HIV 	<ul style="list-style-type: none"> - Always wearing a seatbelt - Flu vaccination
Construction	<ul style="list-style-type: none"> - Poor mental health days - Cancer - Depression diagnoses - Diabetes 	<ul style="list-style-type: none"> - Attending routine doctor visits - Flu vaccination - Pneumonia vaccination - Always wearing a seatbelt - No health care coverage - No primary care physician - No routine dental visit - Overweight or obese - Current smokers - Heavy or binge drinking
Professional, Scientific, and Technical Services	<ul style="list-style-type: none"> - Fair/poor overall health - No health care coverage - Unable to see doctor due to cost - Not exercising - Arthritis 	<ul style="list-style-type: none"> - Not attending routine dental visits - Teeth removed due to decay or gum disease - Current smokers - Flu vaccination - Always wearing a seatbelt
Administrative, Support, and Waste Services	<ul style="list-style-type: none"> - Poor mental health days - Arthritis - Flu vaccination 	<ul style="list-style-type: none"> - Met screening recommendations for colorectal cancer - Fair /poor overall health - No Health care coverage
Public Administration	<ul style="list-style-type: none"> - Fair/poor overall health - No primary care physician 	<ul style="list-style-type: none"> - Inability to see doctor due to cost - Overweight or obese
Arts, Entertainment, and Recreation	<ul style="list-style-type: none"> - Overweight or obese 	
Real Estate, Rentals, and Leasing	<ul style="list-style-type: none"> - Depression 	<ul style="list-style-type: none"> - No routine dental visit
Other Service Industries		<ul style="list-style-type: none"> - No health care coverage
Finance and Insurance	<ul style="list-style-type: none"> - Fair/poor overall health - Poor physical health days - No primary physician - Unable to see physician due to cost - Not attending routine dental visits 	<ul style="list-style-type: none"> - Not exercising - Arthritis - Depression diagnoses - Diabetes - Current smokers - Pneumonia vaccination - Met screening recommendations for colorectal cancer - Tested for high blood sugar

Industry	Significantly Lower Prevalence	Significantly Higher Prevalence
Manufacturing	<ul style="list-style-type: none"> - Cancer - Screened for prostate cancer - Met screening recommendations for colorectal cancer - Been tested for HIV 	<ul style="list-style-type: none"> - Tested for high blood sugar - Flu vaccination - HPV vaccination
Accommodation and Food Services	<ul style="list-style-type: none"> - Fair/poor overall health - No health care coverage - No primary care physician - Inability to see doctor due to cost - Not exercising 	<ul style="list-style-type: none"> - Not exercising - Teeth removed due to decay or gum disease - Overweight or obese
Health care and Social Assistance	<ul style="list-style-type: none"> - Overweight or obese - Flu vaccination 	<ul style="list-style-type: none"> - Fair/poor overall health - Poor physical health days - Poor mental health days - No health care coverage - No primary care physician - Inability to see doctor due to cost - Not exercising
Educational Services	<ul style="list-style-type: none"> - No health care coverage - No primary care physician - Cardiovascular disease - Not attending routine dental visits - Current smokers - Heavy or binge drinking - Engaging in risky HIV behavior 	<ul style="list-style-type: none"> - Using marijuana or cannabis - Poor mental health days - Arthritis - Depression - Diabetes - Attending routine doctor visits - Flu vaccination - Pneumonia vaccination
Retail Trade	<ul style="list-style-type: none"> - Fair/poor overall health - No health care coverage - No primary care physician - Inability to see doctor due to cost - Not exercising - Cardiovascular disease 	<ul style="list-style-type: none"> - No routine dental visit - Current smokers - Heavy or binge drinking - Engaging in risky HIV behavior - Using marijuana or cannabis
Manufacturing	<ul style="list-style-type: none"> - Tested for HIV 	<ul style="list-style-type: none"> - Not exercising - Depression - Current smokers

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