

Quality  
*of*

**LIFE**

# PHYSICAL HEALTH & HEALTH BEHAVIORS

S P O K A N E

SECTION 5



INSET

# SPOKANE COUNTY Neighborhood Boundaries

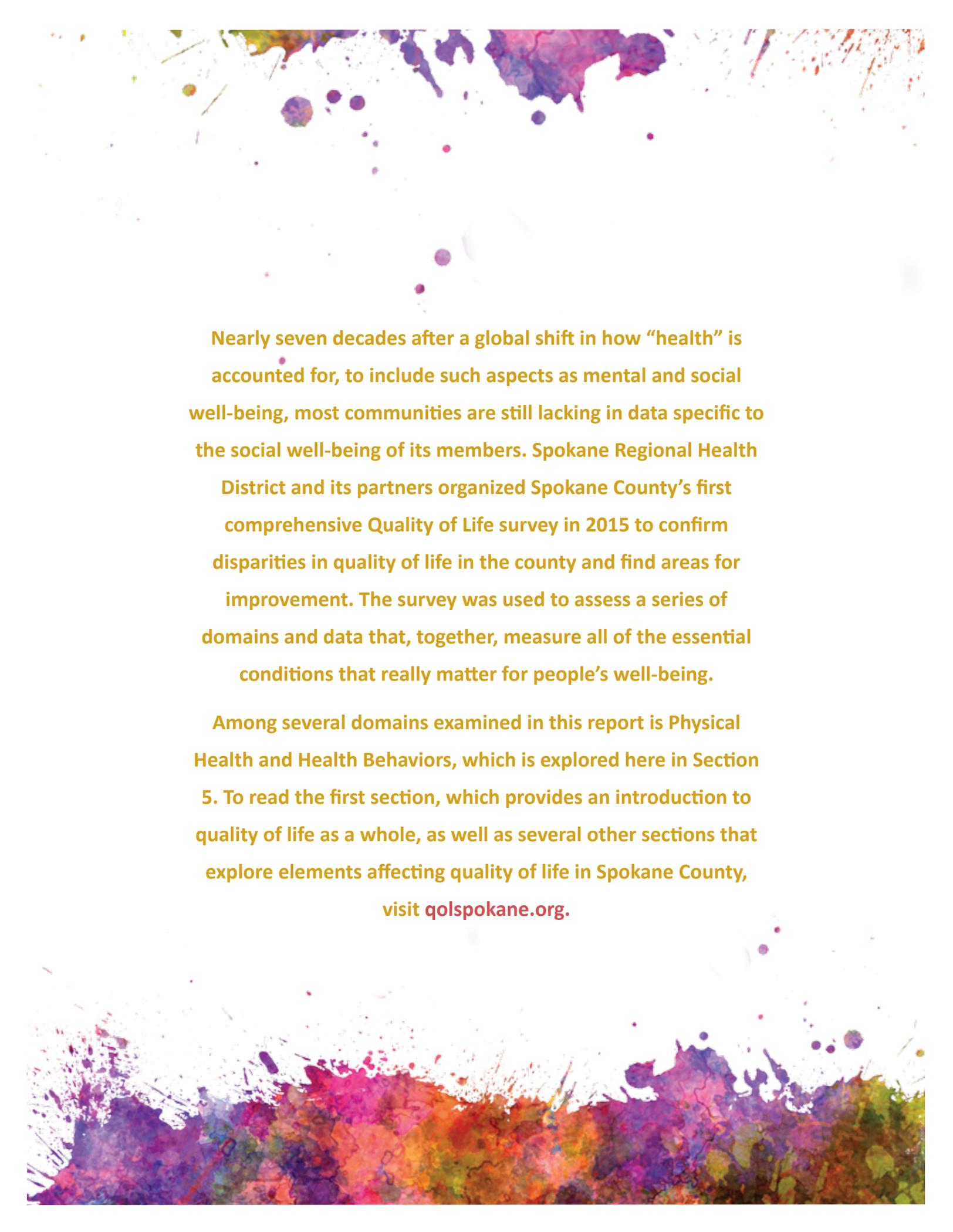


*SRHD Report Contributors:*

- Adam Readhead,  
Sr. Research Scientist, Author
- Ashley Beck,  
Sr. Research Scientist, Technical Editor
- Kim Papich, Public Information Officer
- Amy Jennings, Graphic Designer
- Stacy Wenzl, Data Center Program Manager



**Data Center**  
1101 W. College Ave., #356, Spokane, WA 99201  
TEL 509.323.2853 | TDD 509.324.1464 | srhd.org

The background of the page is an abstract, colorful splatter pattern. It features various shades of purple, pink, red, orange, and green, with some darker, more saturated areas and lighter, more diffused areas. The splatters are scattered across the page, with a higher concentration of colors at the top and bottom edges, leaving a white space in the center where the text is located.

Nearly seven decades after a global shift in how “health” is accounted for, to include such aspects as mental and social well-being, most communities are still lacking in data specific to the social well-being of its members. Spokane Regional Health District and its partners organized Spokane County’s first comprehensive Quality of Life survey in 2015 to confirm disparities in quality of life in the county and find areas for improvement. The survey was used to assess a series of domains and data that, together, measure all of the essential conditions that really matter for people’s well-being.

Among several domains examined in this report is Physical Health and Health Behaviors, which is explored here in Section 5. To read the first section, which provides an introduction to quality of life as a whole, as well as several other sections that explore elements affecting quality of life in Spokane County, visit [qolspokane.org](http://qolspokane.org).



## Introduction

Health is defined as “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.”<sup>1</sup> This section describes select aspects of physical health and health behaviors using data from Spokane County’s Quality of Life survey conducted in 2015.

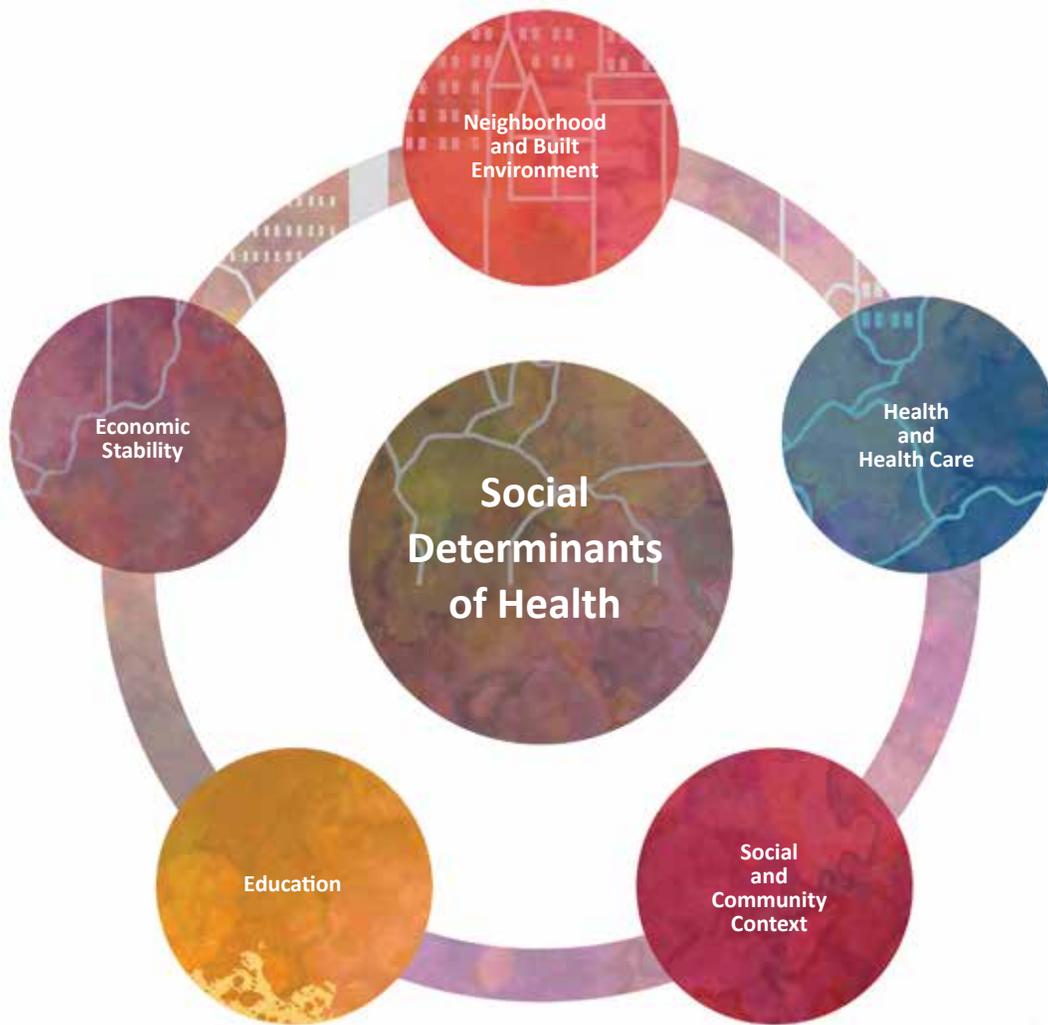
Physical health and health behaviors are influenced by social determinants which are defined as, “the conditions in which people are born, grow, live, work, and age.”<sup>2</sup> Said another way, physical health and health behaviors are affected by income, employment, education, and access to health care, and larger-scale circumstances like the built environment (see figure 1). Earlier reports in Spokane County clearly showed differences in physical health and health behaviors by social determinants.<sup>3</sup> This report provides additional detail on the connection between social determinants and select health behaviors and aspects of health. For information on the connection between health and social well-being, please see Section 1, Introduction and Section 2, Social Capital at [qolspokane.org](http://qolspokane.org).

# Methods

Spokane County’s Quality of Life survey was administered following a “push-to-web” model used extensively within Washington state and other states. Survey invitations were mailed to a random sample of 12,000 addresses within Spokane County. Respondents were encouraged to respond to the survey online (pushed to web) before being given the option of completing a hardcopy survey. In total, 3,833 people responded (32%) and 3,334 records (28%) were valid for analysis. The survey was weighted to account for the sampling design and

differential response rates among subgroups. Weights were created using iterative proportional fitting (raking) across five margins: age, race/ethnicity, sex, education and home ownership. To assess physical health and health behaviors, several questions from Centers for Disease Control and Prevention’s (CDC) Behavioral Risk Factor Surveillance System (BRFSS) were included in the Quality of Life survey.<sup>5</sup> Please see Section 7, Technical Appendix, for detailed methodology.

Figure 1. Social Determinants of Health<sup>4</sup>



# General Health

Self-reported general health was associated with overall quality of life. Overall, 16% of residents rated their general health as *excellent*, 38% *very good*, 36% *good*, 8% *fair* and 3% *poor* (see figure 2).

## Differences by demographic factors

Consistent with previous reports, self-reported general health was associated with age, sex, income, education and employment (see figure 3).<sup>6,7</sup> General health was not associated with marital status, health insurance coverage, or home ownership when taking into account the factors listed previously.

### By age

People 60 years of age and older were less likely to report *excellent* or *very good* general health (46%) than those ages 40-59 years of age (54%), or 20-39 years of age (58%).

### By sex

Women and men reported roughly the same general health; no significant differences were found.

### By race/ethnicity

American Indians Alaska Natives had the highest reports of *poor* general health at 10%. Hispanics (36%) and blacks (26%) had lower reports of *excellent* or *very good* general health than whites (54%).<sup>8</sup> There was also indication that Asian (25%) and Hispanic (22%) subgroups were most likely to report *excellent* general health.

### By income

General health was best for those with higher household incomes. People earning \$100,000 or more per year (household) were three times more likely (77%) to report *excellent* or *very good* health than those earning less than \$25,000 (38%).

## By neighborhood

General health varied by area of the county, even after accounting for age and other factors listed above. People in West Hills/Browne's Addition/Latah were eight times more likely to report good health than people in the East Valley neighborhood.

---

*People with household incomes of \$100,000*

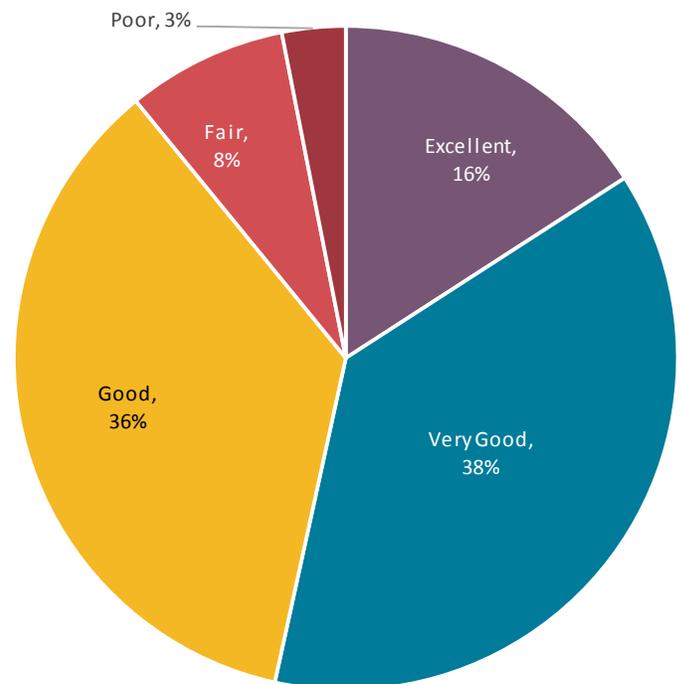
*per year were two times more likely to report*

*excellent or very good health than those earning*

*less than \$25,000.*

---

Figure 2. Self-reported General Health, Spokane County 2015



Note: Percentages do not sum to 100% because of rounding.

---

*People in the neighborhoods of West Hills/*

*Browne's Addition/Latah were eight times more*

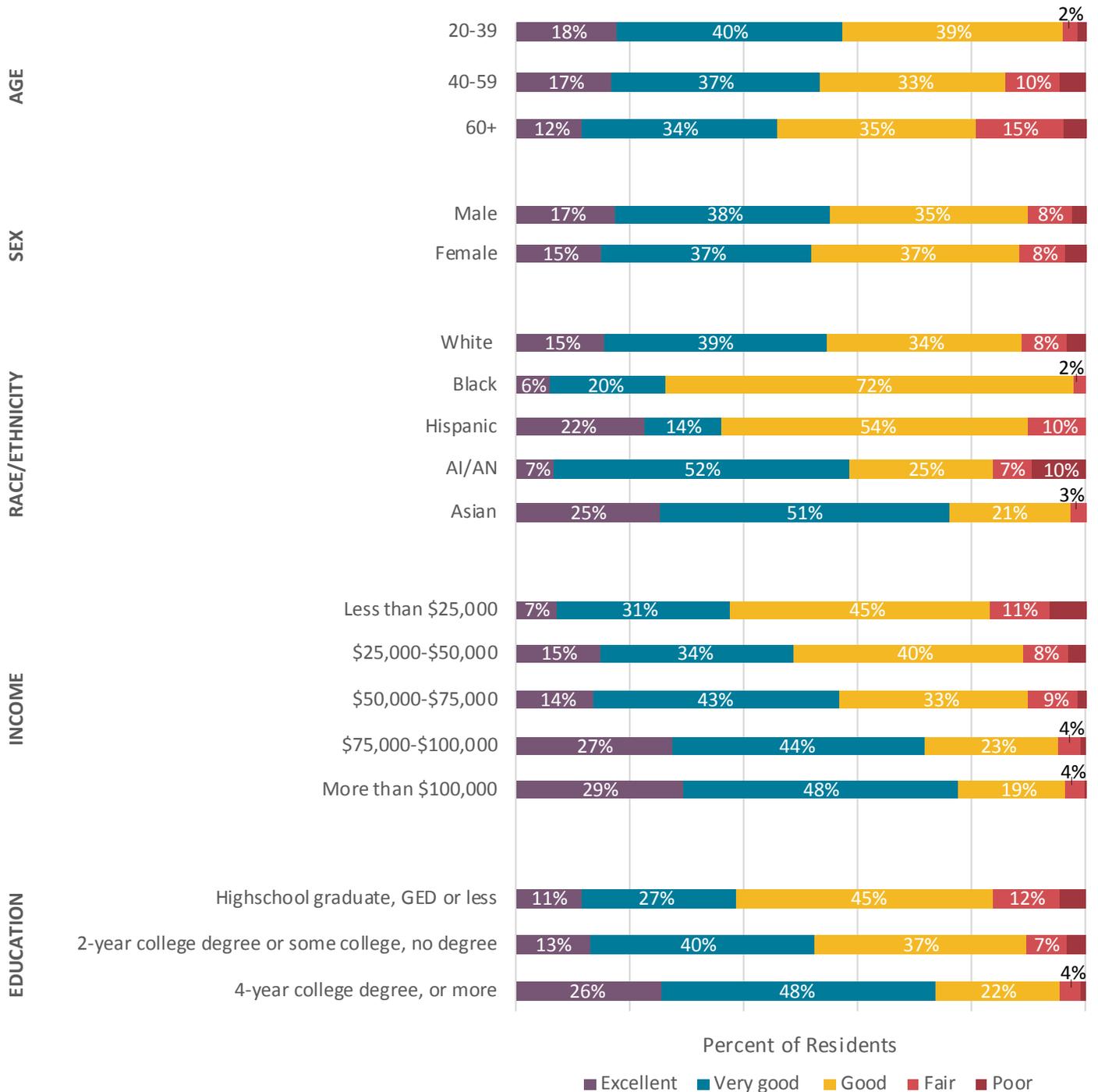
*likely to report good health than people in the*

*East Valley neighborhood.*

---



Figure 3. Self-reported General Health by Demographic Factors, Spokane County 2015



Note: Percentages do not sum to 100% because of rounding. While they are represented on this figure, percentages for poor general health are not displayed because of their small size.

# Health Insurance

Of residents in Spokane County, 90% had some form of health insurance. This aligns with estimates from other recent surveys, namely BRFSS, which estimated health insurance coverage in the county to be 88% in 2014.<sup>9</sup> Both of these estimates were notably higher than statistics reported in 2013.<sup>10</sup> Recent changes in health insurance laws and other local initiatives, may explain the difference in these estimates.

## Differences by demographic factors

Having health insurance was related to race/ethnicity, income, employment, neighborhood, and home ownership (see figure 4).

### By race/ethnicity

Black and Hispanic residents were much less likely to have health insurance, even when accounting for other factors listed above; similar to results on health insurance from

the American Community Survey.<sup>11</sup> Black residents were less likely (76%) than white (95%) and American Indian and Alaska Native residents (95%) to have health insurance. Similarly, Hispanic residents were least likely to have health insurance (56%).

### By income

As household income increased, so did rates of having insurance. People in households who earned \$25,000 per year or less were least likely to have health insurance at 83%, compared to 99% of those earning more than \$100,000 per year.

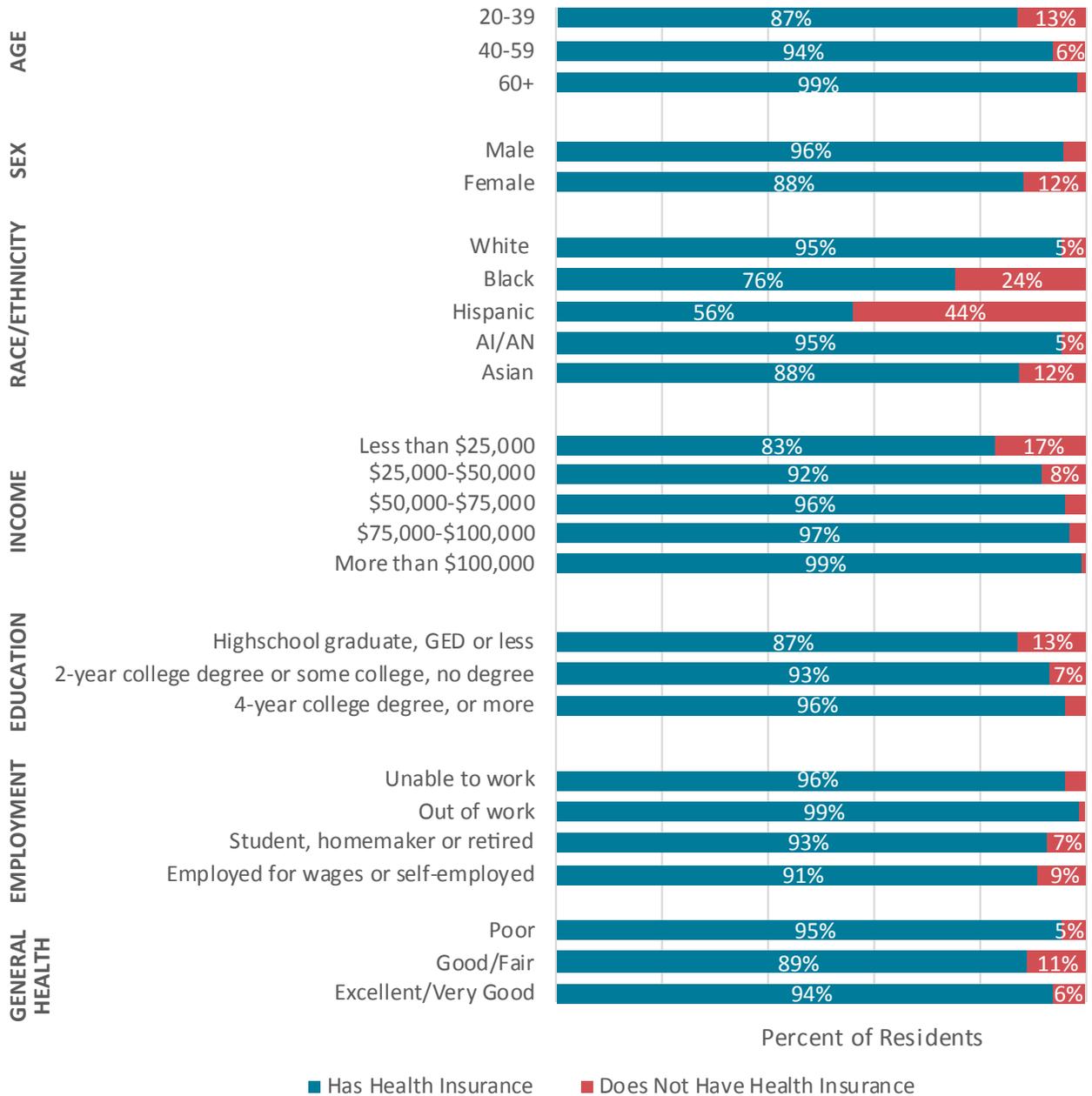
### By employment

Residents who were employed for wages were least likely to have insurance (91%). Those who were out of work (99%) or unable to work (96%) had the highest rates of being insured.





Figure 4. Health Insurance Status by Demographic Factors



Note: Percentages do not sum to 100% because of rounding. While they are represented on this figure, percentages for those who do not have health insurance are sometimes not displayed because of their small size.

# Food Insecurity

Of Spokane County residents, 24% cut meal sizes or skipped meals at least once a year because there was not enough money for food; 8% of residents did so at least once a week. To further break-down food insecurity, insecurity was separated into two categories: food insecure, those cutting meals once a month or more; and at-risk, those cutting meals once or a few times per year.

## Differences by demographic factors

As expected, food insecurity was associated with household income but it was also associated with age, self-rated health, marital status, number of children, and neighborhood (see figure 5). This means that even when accounting for income—which is an important cause of food insecurity—age, health, and the other factors were also associated with food insecurity.

### By income

People with annual household incomes of less than \$25,000 had the highest rates of food insecurity (26%) and for being at-risk for food insecurity (30%). As household income went up, rates for risk and food insecurity went down. Only 3% of those earning between \$75,000-\$100,000 were considered at-risk or food insecure.

### By age

Food insecurity and risk was reported most often for residents 20-39 years of age at 39%, and declined with age. Seventeen percent of 40-59 year olds and 9% of those 60 years of age and older reported food insecurity or risk.

### By number of children

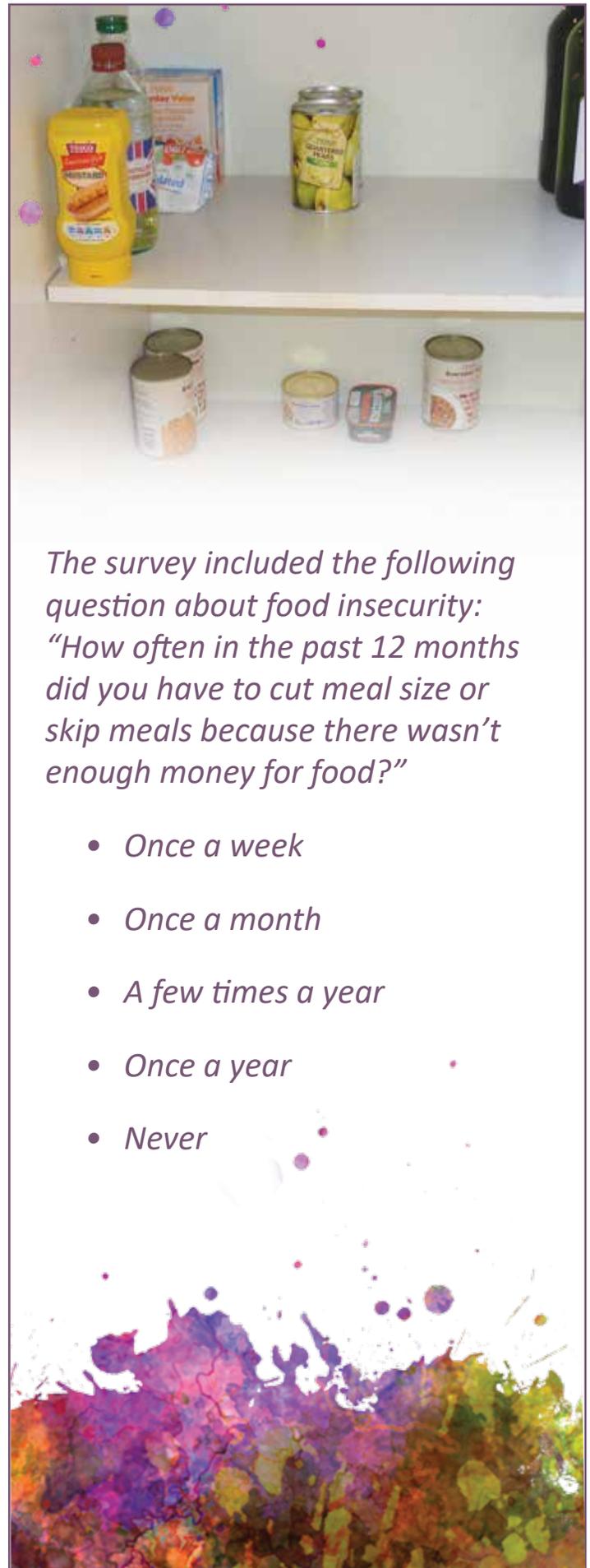
Accounting for the factors listed above, people with three to five children or six or more children were four and six times more likely to experience food insecurity or risk.

### By marital status

Married, divorced, and widowed people were less likely to experience food insecurity or risk than those who had never been married, even when accounting for age, income, and the other factors.

### By neighborhood

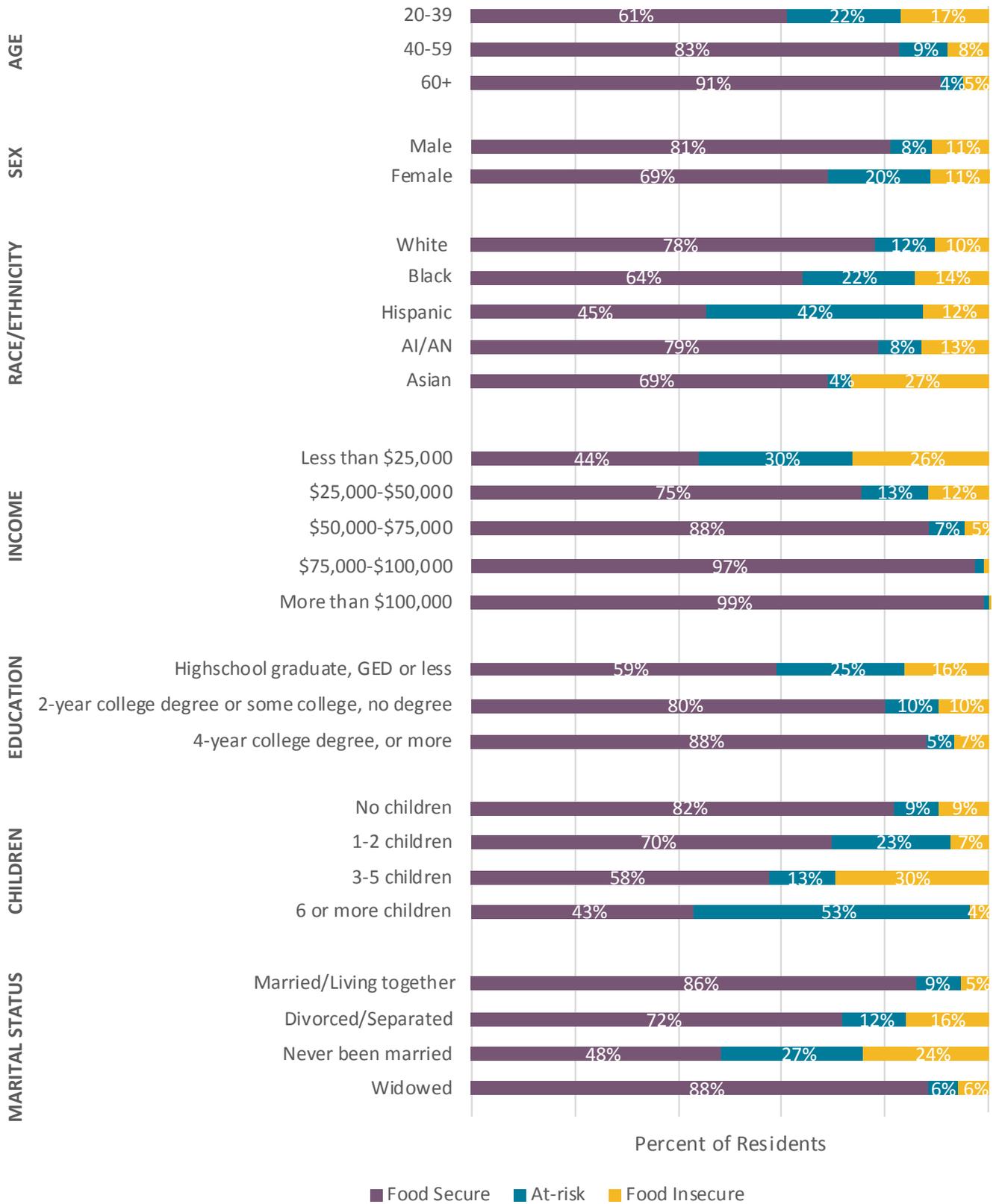
Neighborhood was strongly linked to risk for food insecurity.<sup>12</sup> More than half of residents in Edgecliff, West Central/Riverside, Hillyard/Whitman, and Logan/Chief Garry had food insecurity (as defined above). In contrast, less than 3% of residents in Rockwood, Southgate, and Manito neighborhoods had food insecurity risk (see figure 6).



*The survey included the following question about food insecurity: “How often in the past 12 months did you have to cut meal size or skip meals because there wasn’t enough money for food?”*

- *Once a week*
- *Once a month*
- *A few times a year*
- *Once a year*
- *Never*

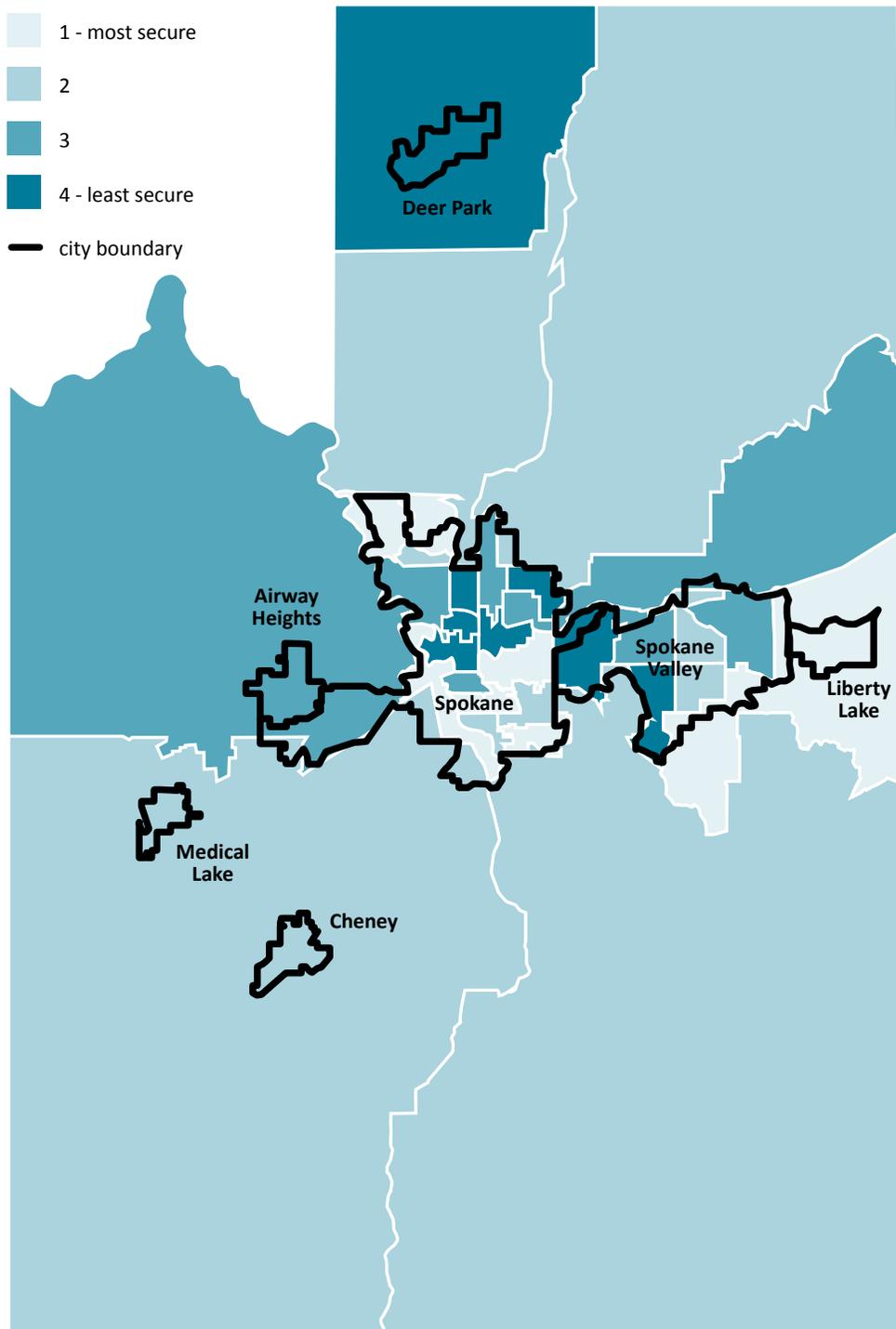
Figure 5. Food Security by Demographic Factors



Note: Percentages may not sum to 100% because of rounding. While they are represented on this figure, percentages for risk/food insecurity are sometimes not displayed because of their small size.



Figure 6. Food Insecurity or Risk by Neighborhood, Spokane County 2015



More than **50%**  
of people in West Central and  
Hillyard/Whitman neighborhoods  
reported food insecurity risk.

Less than **3%**  
of people in Southgate, Rockwood  
and Manito neighborhoods  
reported food insecurity risk.

# Smoking

More than 15% of Spokane County residents smoked regularly. This is slightly lower than the proportion reported in BRFSS 2014 (18%).<sup>13</sup>

## Differences by demographic factors

Smoking was related to age, race/ethnicity, income, education, employment status, self-rated health, marital status, and neighborhood (see figure 7). It was not related to sex, number of children, or home ownership, when taking into account the aforementioned factors. The following comparisons account for all of the factors listed above.

### By race/ethnicity

Black and American Indian and Alaska Native residents had the highest rates of smoking at 33% and 33%, respectively. Asians (9%) and Hispanics (5%) were less likely to smoke than any other subgroup.

### By age

Older people were less likely to smoke than younger people; 21% of 20- to 39-year-olds smoked, followed by 15% of 40- to 59-year-olds, and 9% of those 60 years of age and older.

### By employment

Employment status was a key factor in smoking even when controlling for other factors. People who were out of work

were most likely to smoke at 58%. Those unable to work also had high higher rates of smoking (49%) than those who were employed for wages (13%), and students, homemakers, or retirees (9%).

### By marital status

People who had never been married (30%) or who were separated/divorced (20%) were significantly more likely to smoke than married/living together people (10%).

### By general health

Smoking and self-rated health were inversely related: people who reported being in better health were less likely to smoke.

### By income

People with higher incomes were less likely to smoke. Only 2% of those with household incomes of over \$100,000 per year reported smoking, compared to 25% of those earning under \$25,000.

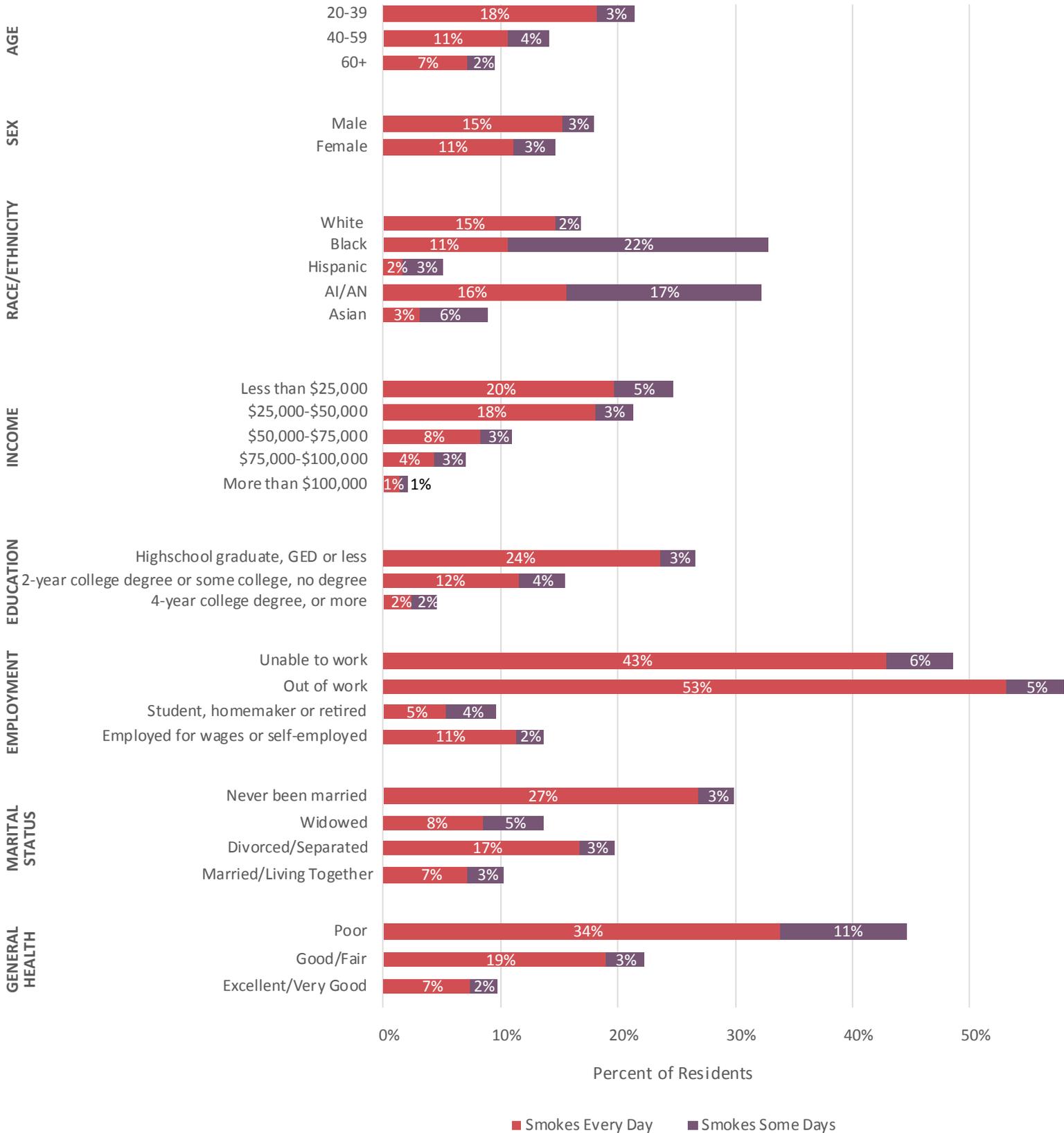
### By neighborhood

Even accounting for the factors above, there were notable differences in the likelihood of smoking by neighborhood (see figure 8). More than 33% of residents in Chattaroy/Deer Park, Hillyard/Whitman and University neighborhoods smoked. In contrast, less than 2% of residents in Southgate, Rockwood, and Comstock neighborhoods smoked.



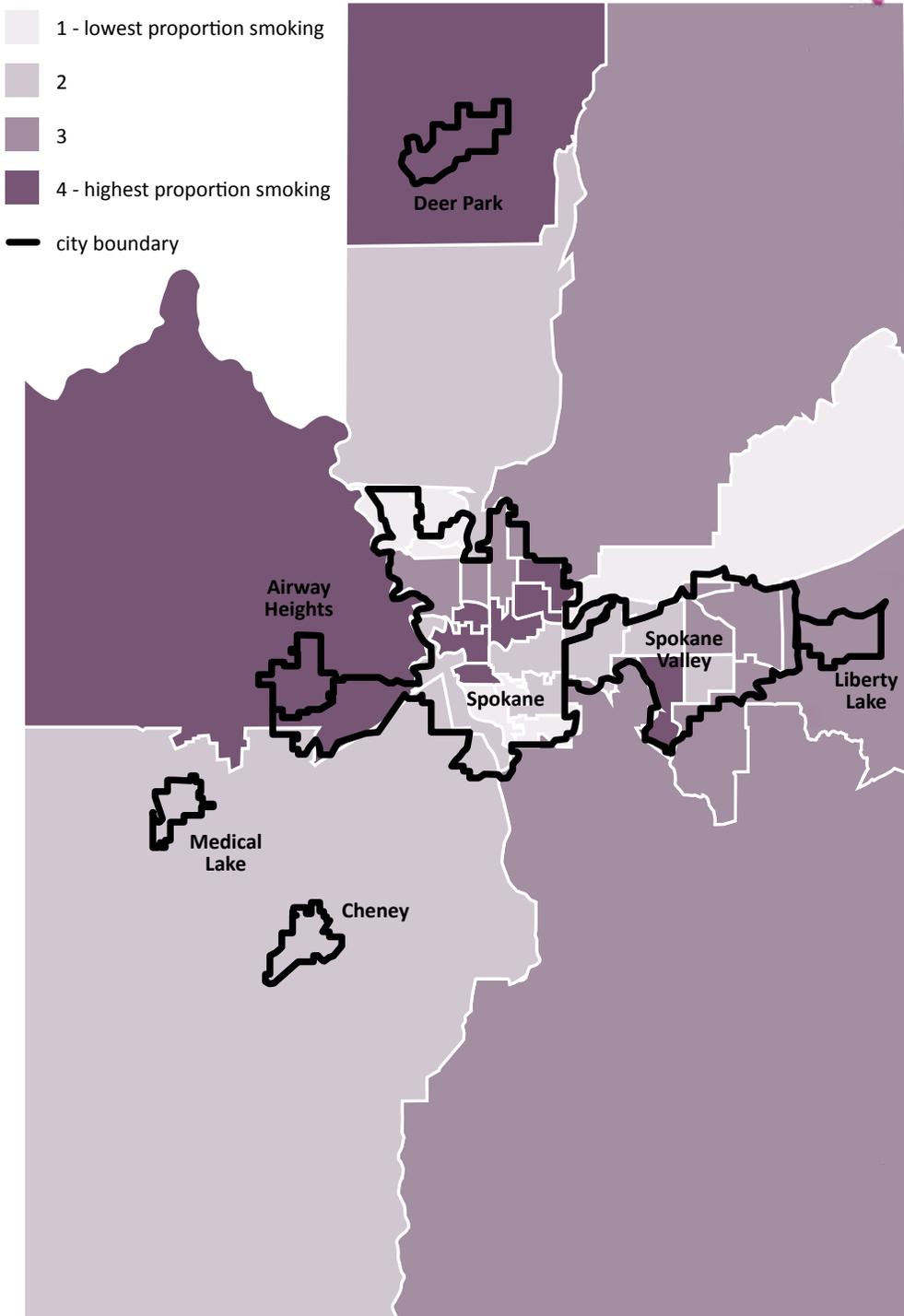
*People who were out of work  
had the highest rates of  
smoking at 58%.*

Figure 7. Smoking by Demographic Factors, Spokane County 2015



Note: Percentages do not sum to 100% because residents who do not smoke are not represented.

Figure 8. Smoking by Neighborhood, Spokane County 2015



# Stress, Anxiety, or Conflict Related to Drinking

*The survey included the following question related to drinking alcohol: “In the past 12 months, how often did alcohol use, by you or another member of your household, cause stress, conflict, or anxiety for you?”*

Of Spokane County residents, 7% had stress, anxiety, or conflict related to drinking once a month or more. An additional 14% experienced this once a year or a few times a year.

## Differences by demographic factors

Stress related to drinking was not related to age, educational attainment, general health, or marital status. It was related to sex, race/ethnicity, income, employment status, home ownership, number of children, and neighborhood (see figure 9).

### By race/ethnicity

Overall, white residents reported experiencing the most drinking-related stress at least once a year at 23%

compared to subgroups with the lowest rates, Asians (6%) and Hispanics (8%).

### By income

People with household incomes under \$25,000 were more likely to have experienced drinking-related stress/conflict on a regular basis; once a month or more at 11%, compared to those earning over \$75,000 at 5%. All other income brackets experienced roughly the same level of drinking stress/conflict when accounting for the other factors listed above.

### By employment

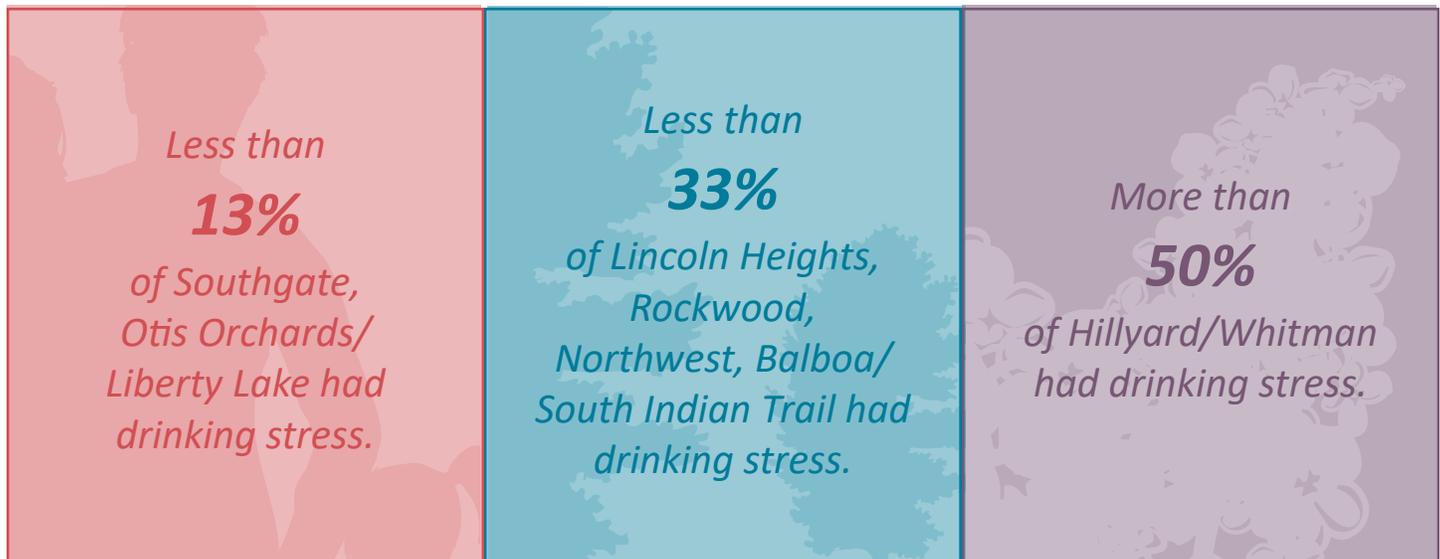
Those out of work were most likely to experience drinking-related stress. Fifty-five percent of those out of work experienced drinking-related stress at least once a year, compared to 23% of those employed for wages.

### By number of children

There was indication that parents who had six or more children under 18 at home were much more likely to have drinking stress compared to other parents and those without children, but data was too sparse to be sure.

### By neighborhood

Drinking stress also varied by neighborhood (see figure 10). More than 50% of residents of Hillyard/Whitman had drinking stress and more than 33% of residents in Lincoln Heights, Rockwood, Northwest, Balboa/South Indian Trail had drinking stress. In contrast, 13% of residents in Southgate, Otis Orchards/Liberty Lake had drinking stress.



---

*People with household incomes under \$25,000 were most likely to have experienced drinking stress/conflict on a regular basis, once a month or more.*

---



Figure 9. Stress, Anxiety, or Conflict Related to Drinking by Demographic Factors

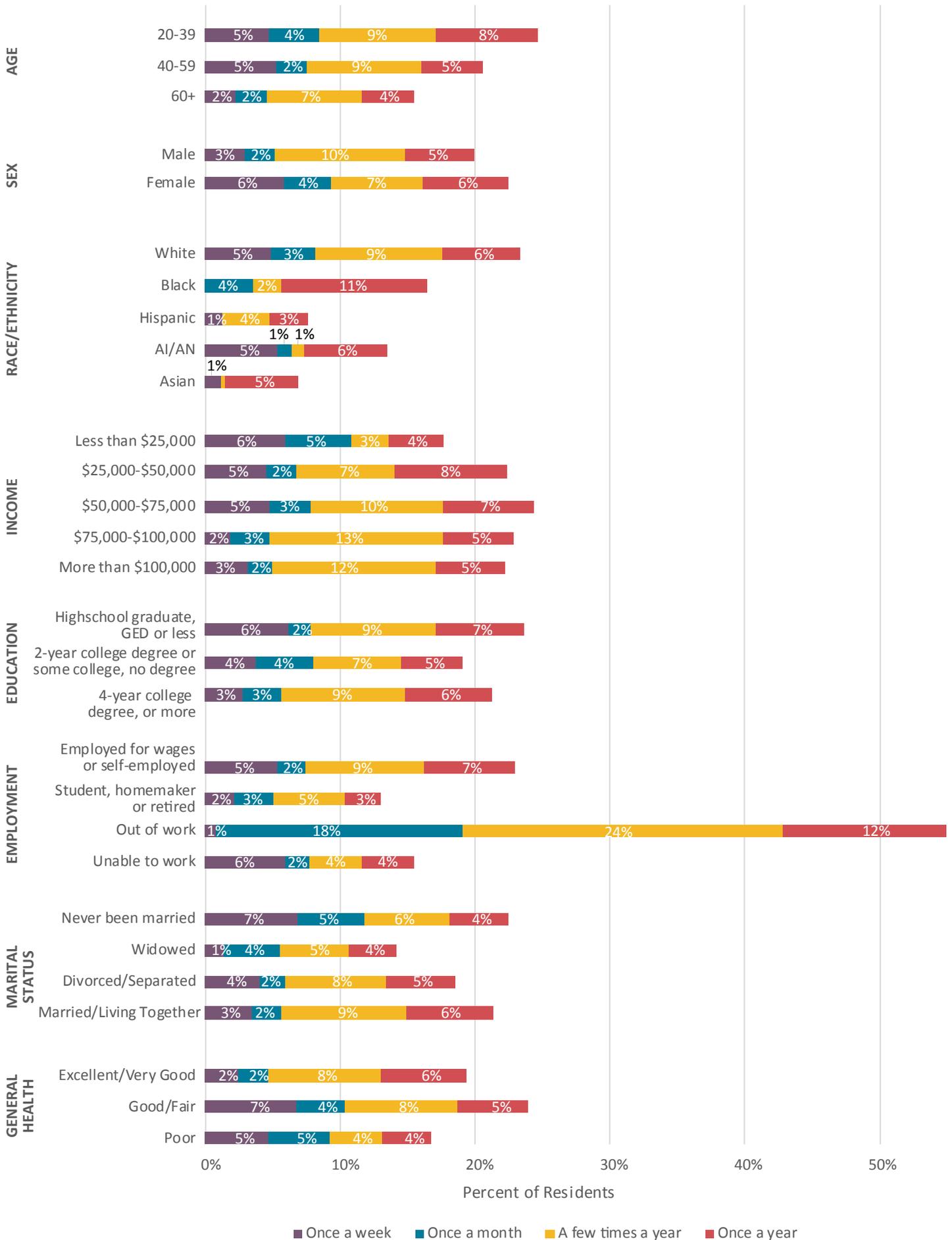
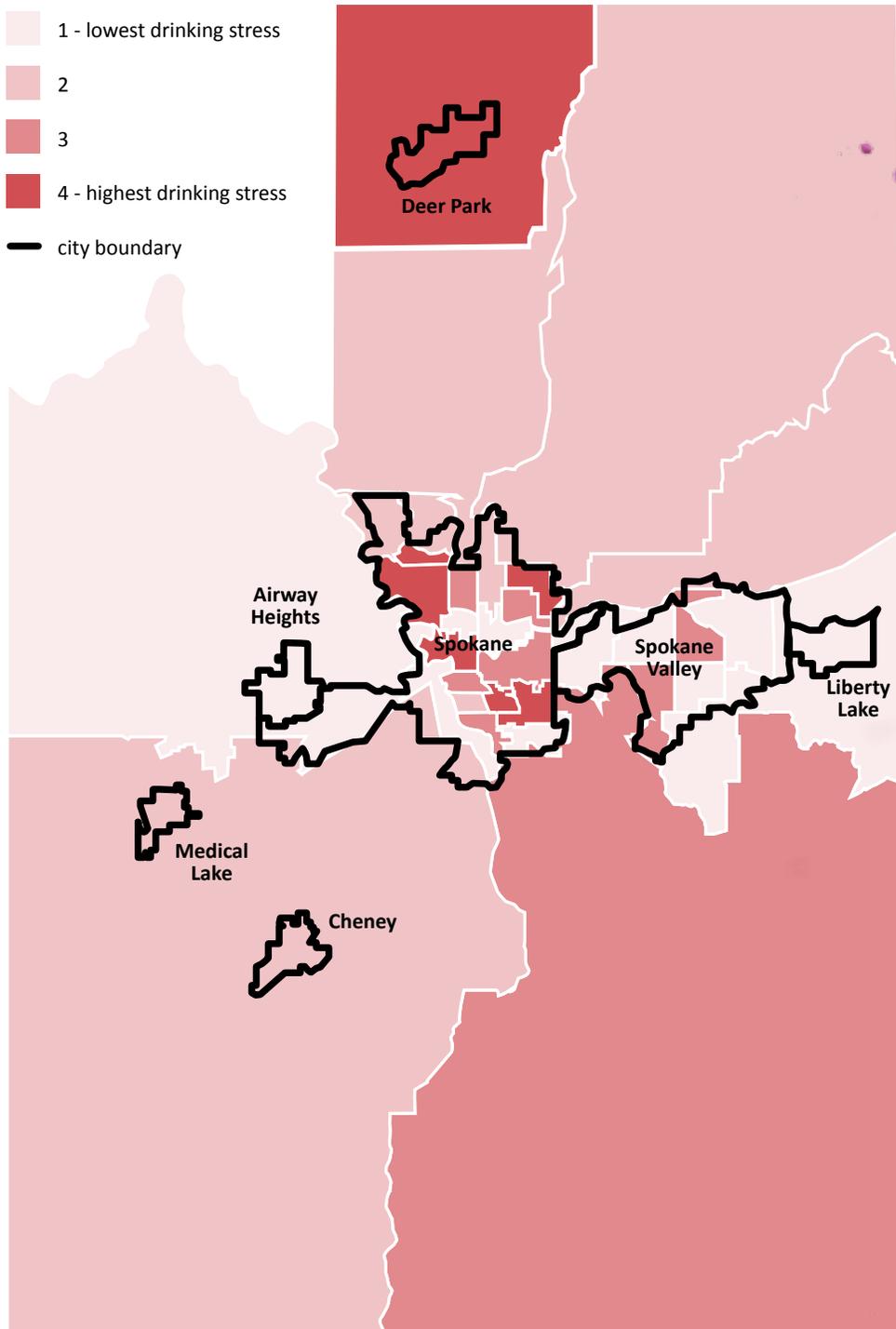


Figure 10. Drinking-Related Stress, Anxiety, or Conflict by Neighborhood, Spokane County 2015



# Exercise

Of Spokane County residents, 42% exercised one to three days per week and another 21% exercised four to five days per week (see figure 11). Thirteen percent of residents exercised six to seven days per week and 24% had not exercised in the last seven days.

---

*High school graduates and those with GED diplomas were two times less likely to exercise than those with some college, but no degree.*

---

## Differences by demographic factors

Of factors available for analysis, the following were related to exercising: age, education, employment status, self-rated health, and children in the home (see figure 12).

### By age

Frequency of exercising decreased with age. People 60 years of age and older were less likely to exercise (32% reporting no weekly exercise) than 20 to 39 year olds (17% reporting no weekly exercise).

### By sex

Women were slightly less likely to exercise than men. Men showed higher rates of frequent exercise (four or more days per week) at 39% compared to women at 30%.

### By education

High school graduates and those with GED diplomas were least likely to exercise with 32% reporting no weekly

exercise compared to those with a two-year degree/some college but no degree (22%), or those with a four-year degree or higher (17%).

### By employment

Those out of work reported the highest rates of weekly exercise compared to any other group with only 9% reporting no weekly exercise, compared to 31% of those unable to work and 25% of those employed for wages.

Students, homemakers and retirees had the highest rates of exercising more frequently; 41% reporting that they exercise four or more days per week.

### By general health

As expected, the likelihood of exercise decreased with decreased health; the lowest rates of reported exercise were of residents in *poor* health. From this type of data, it is not clear if *poor* health caused lack of exercise or if lack of exercise resulted in *poor* health.

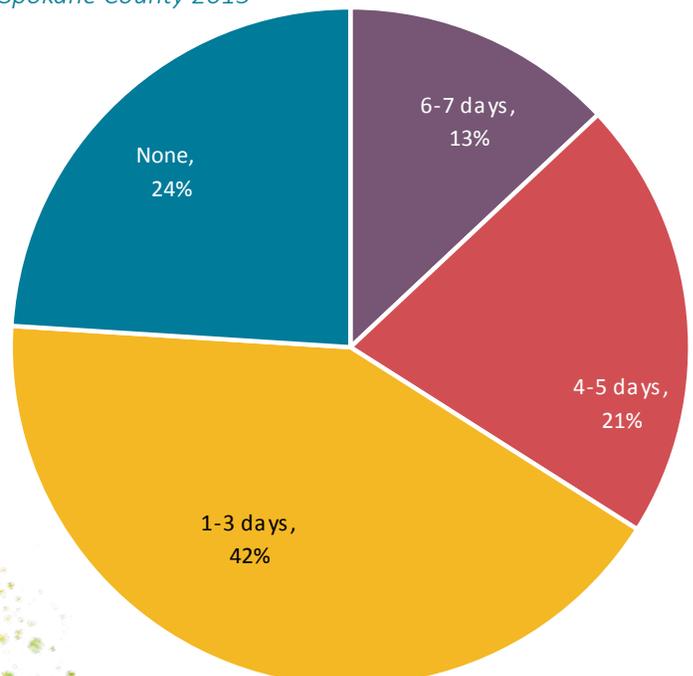
### By number of children

Finally, those with children were less likely to exercise than those without. People with children under 18 in the home were roughly half as likely as people without children in the home to exercise.

### By neighborhood

There were also differences in exercise frequency by neighborhood (see figure 13).

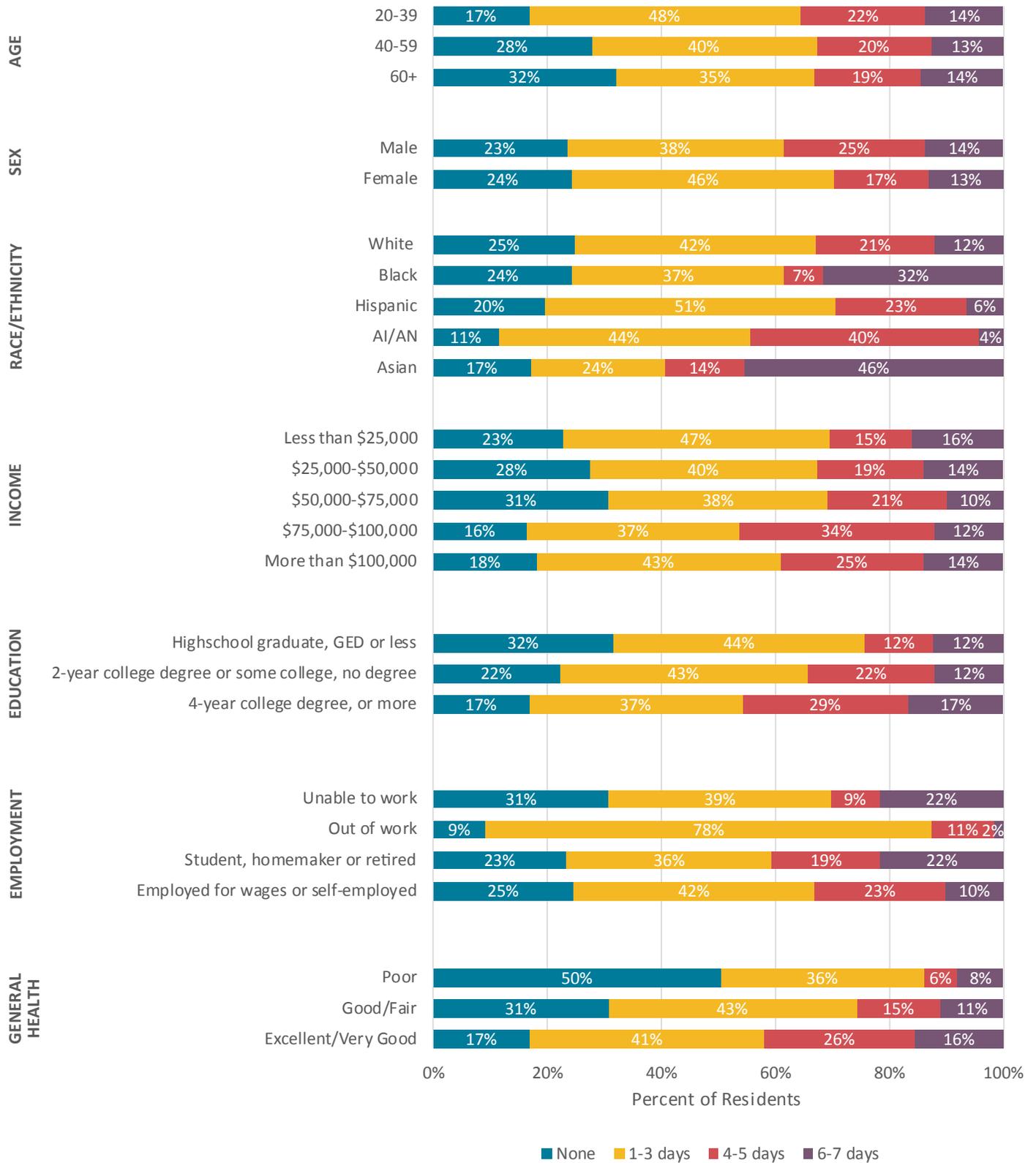
Figure 11. Frequency of Exercise per Week, Spokane County 2015



Note: Percentages do not sum to 100% because of rounding.

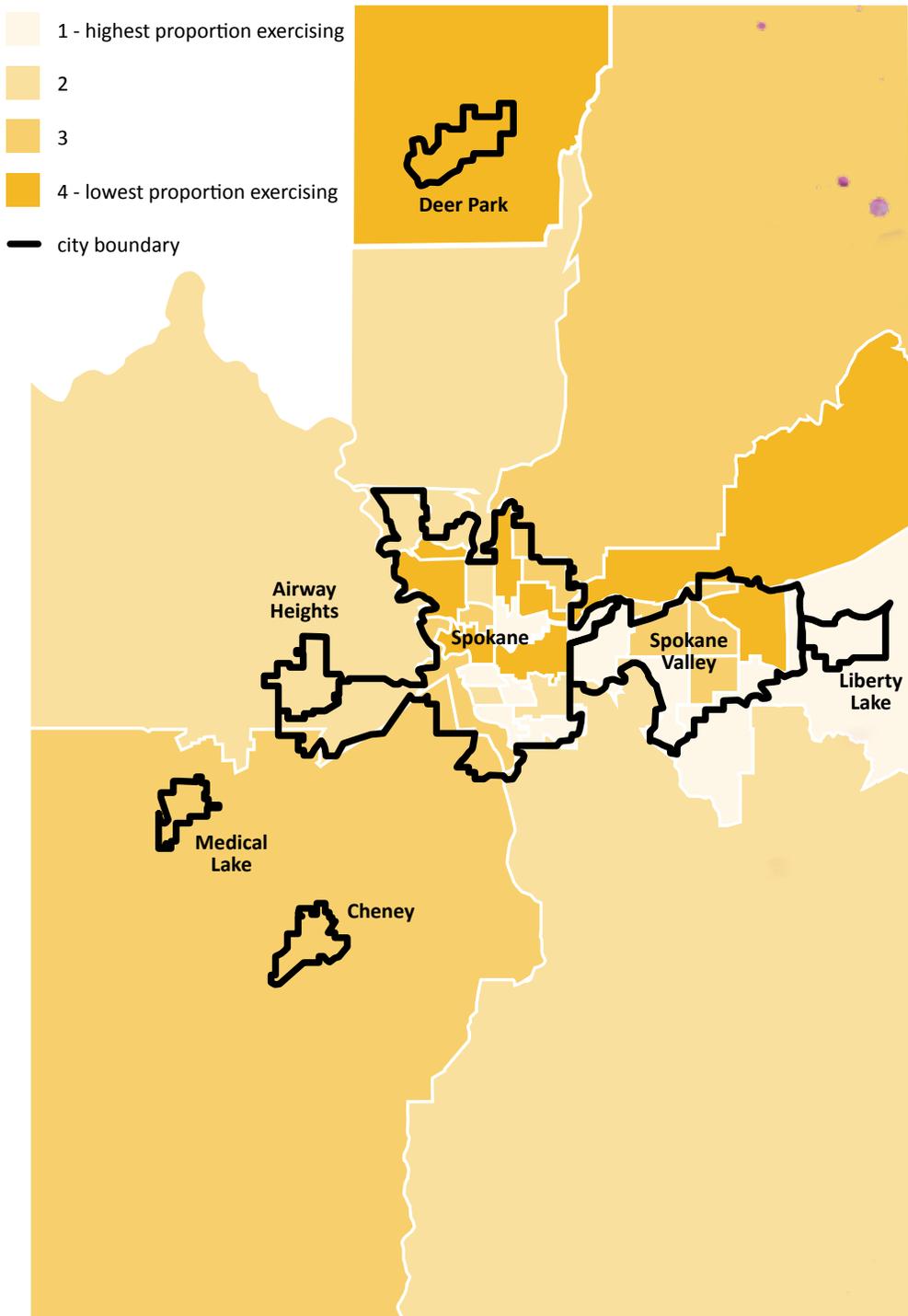


Figure 12. Days with 30 Minutes Exercise or More by Demographic Factors, Spokane County 2015



Note: Percentages do not sum to 100% because of rounding. Percentages for those who exercise 6-7 days per week are not presented here because of small reporting numbers.

Figure 13. Resident Exercise by Neighborhood, Spokane County 2015



# Fruit and Vegetable Intake

Fruit and vegetable intake was low in Spokane County. The Food and Drug Administration recommends five servings of fruit and vegetables a day.<sup>14</sup> Most residents had one or two servings of fruit a day, with 39% having just one serving and 28% having two servings. One in 10 had no servings of fruit a day. Similarly, most residents had one to two servings of vegetables a day with 34% having one serving and 32% having two servings. Six percent had no servings of vegetables a day. Only 33% of residents reported consuming five or more servings of fruits or vegetables each day.

## Differences by demographic factors

When considering demographic factors, the following factors were noted as related to fruit and vegetable intake: age, sex, education, income, employment situation, and self-rated health (see figure 14). Neighborhood, home ownership, marital status, and presence of children in the home were not related. There was some indication that race/ethnicity was related to fruit and vegetable intake but there was not enough data to be sure.

### By race/ethnicity

Asians were least likely to consume five or more daily servings of fruits and vegetables (18%), compared to 32% of whites. There was indication that blacks (46%), Hispanics (45%) and American Indian and Alaska Natives (40%) were more likely than whites (32%) to consume five or more daily servings of fruits and vegetables.

### By sex

Women (39%) were more likely than men (27%) to report consuming five or more daily servings of fruits and vegetables.

### By age

Younger people were more likely to consume higher amounts of fruits and vegetables. Forty percent of people 20-39 years of age reported consuming five or more daily servings of fruits and vegetables, compared to approximately 27% of those over age 40.

### By income

There was some indication that fruit and vegetable intake increased with income. People with annual household incomes lower than \$25,000 had the lowest reports of consuming five or more daily servings of fruits and vegetables (25%), compared to those earning \$75,000-\$100,000 who had the highest reports at 47%.

### By education

Fruit and vegetable intake appeared to be higher among those with higher educational attainment. High school graduates and those with their GED diploma were least likely to report consuming five or more daily servings of fruits and vegetables (25%), compared to those with some college no degree (32%), and those with a four-year degree or higher (42%).

### By employment

Those out of work were least likely to report consuming five or more daily servings of fruits and vegetables (15%), compared to those unable to work (28%), students, homemakers and retirees (34%) and those employed for wages (34%).

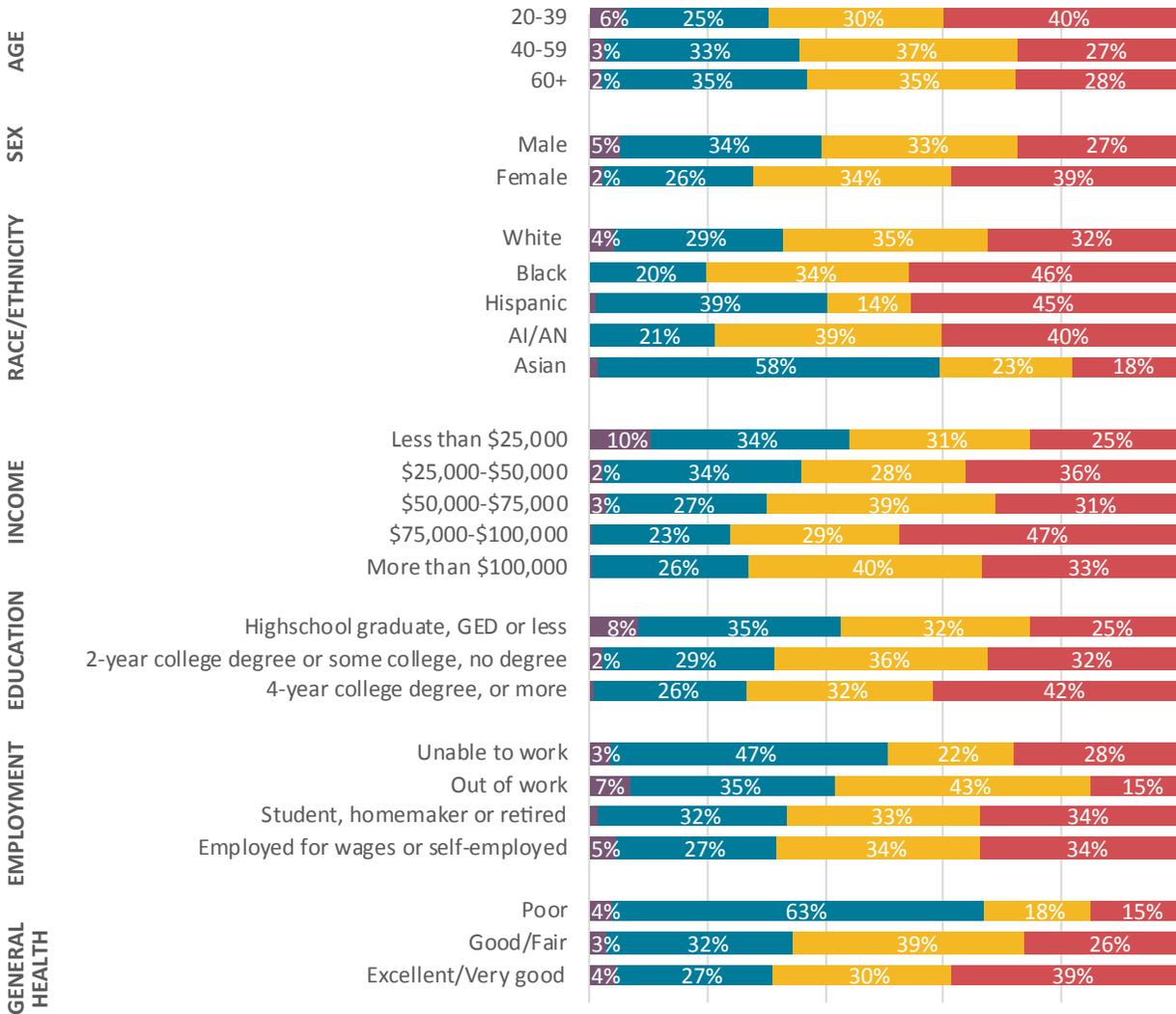
### By general health

Fruit and vegetable intake was also related to self-rated health. It is unclear from these analyses if increasing fruit and vegetable intake improves health, or vice versa.

*People with household incomes under \$25,000 were least likely to consume five or more daily servings of fruits and vegetables.*

*People with a four year degree or more had the highest levels of fruit and vegetable consumption.*

Figure 14. Fruit and Vegetable Intake by Demographic Factors, Spokane County 2015



Percent of Residents

■ No Daily Servings   
 ■ 1-2 Daily Servings  
■ 3-4 Daily Servings   
 ■ 5 or More Daily Servings

Note: Percentages do not sum to 100% because of rounding. While they are represented on this figure, percentages for those who reported no daily servings of fruits and vegetables are sometimes not displayed because of their small size.



# Oral Health

## *Differences in oral health by demographic and other factors*

Oral health, as measured by the number of teeth missing, was notably worse among older people, out-of-work people, people in poor general health, people with lower incomes, people with lower educational attainment, and those without health insurance. There was some indication that oral health was worse among Asians, Hispanics, and American Native and Alaska Natives than whites and blacks but there was too little data to be sure. Other Washington state surveys found that minority children have worse oral health than white children.<sup>15</sup> Sex and marital status were not associated with oral health.

Age, sex, employment status, general health, income, education, and neighborhood were all independent predictors of oral health (see figure 15). Dental health may be associated with race/ethnicity but there were too few data to be sure. Having health insurance was not associated with better oral health; the survey did not address dental insurance coverage or barriers to dental care.

### **By age**

Age was the strongest predictor of poor oral health by far. Of people aged 60 or older, 32% were missing six or more teeth in comparison to 3% of people 20-39 years of age.

### **By income**

As income went up, rates of residents missing teeth went down. Of people with household incomes under \$25,000, 18% had six or more teeth missing. In contrast, 2% of people with household income of over \$100,000 had six or more teeth missing.

### **By employment**

People employed for wages were most likely to have intact teeth at 69%. Those unable to work (13%) and out of work (33%) were least likely to have intact teeth.

- *Of people with household incomes under \$25,000, 18% had six or more teeth missing.*
- *In contrast, 2% of people with household incomes over \$100,000 had six or more teeth missing.*

### **By neighborhood**

Even when taking into account the income, age, education, and the other factors associated with oral health listed previously, neighborhood was still linked to oral health. (see figure 16). Approximately 33% of residents in West Hills/Browne's Addition/Latah and Nevada/Lidgerwood neighborhoods were missing six or more teeth. In contrast, 8% of Otis Orchard/Liberty Lake residents were missing six or more teeth. Similarly, only 8% of Rockwood, Comstock, Cliff/Cannon, Manito residents were missing six or more teeth.

- *33% of residents in West Hills/Browne's Addition/Latah and Nevada/Lidgerwood neighborhoods were missing six or more teeth.*
- *In contrast, 8% of Otis Orchard/Liberty Lake residents were missing six or more teeth.*

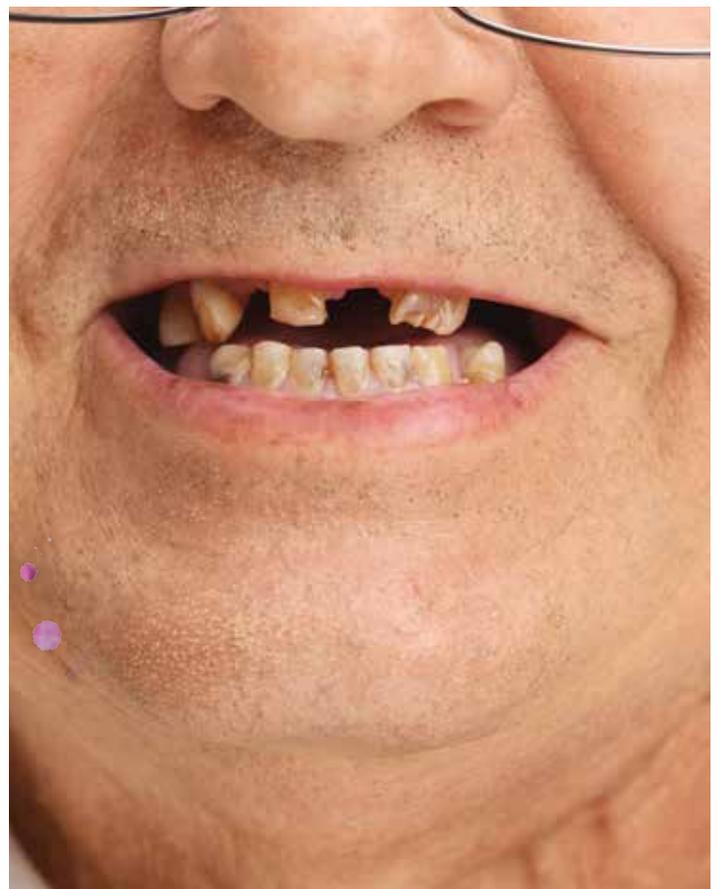
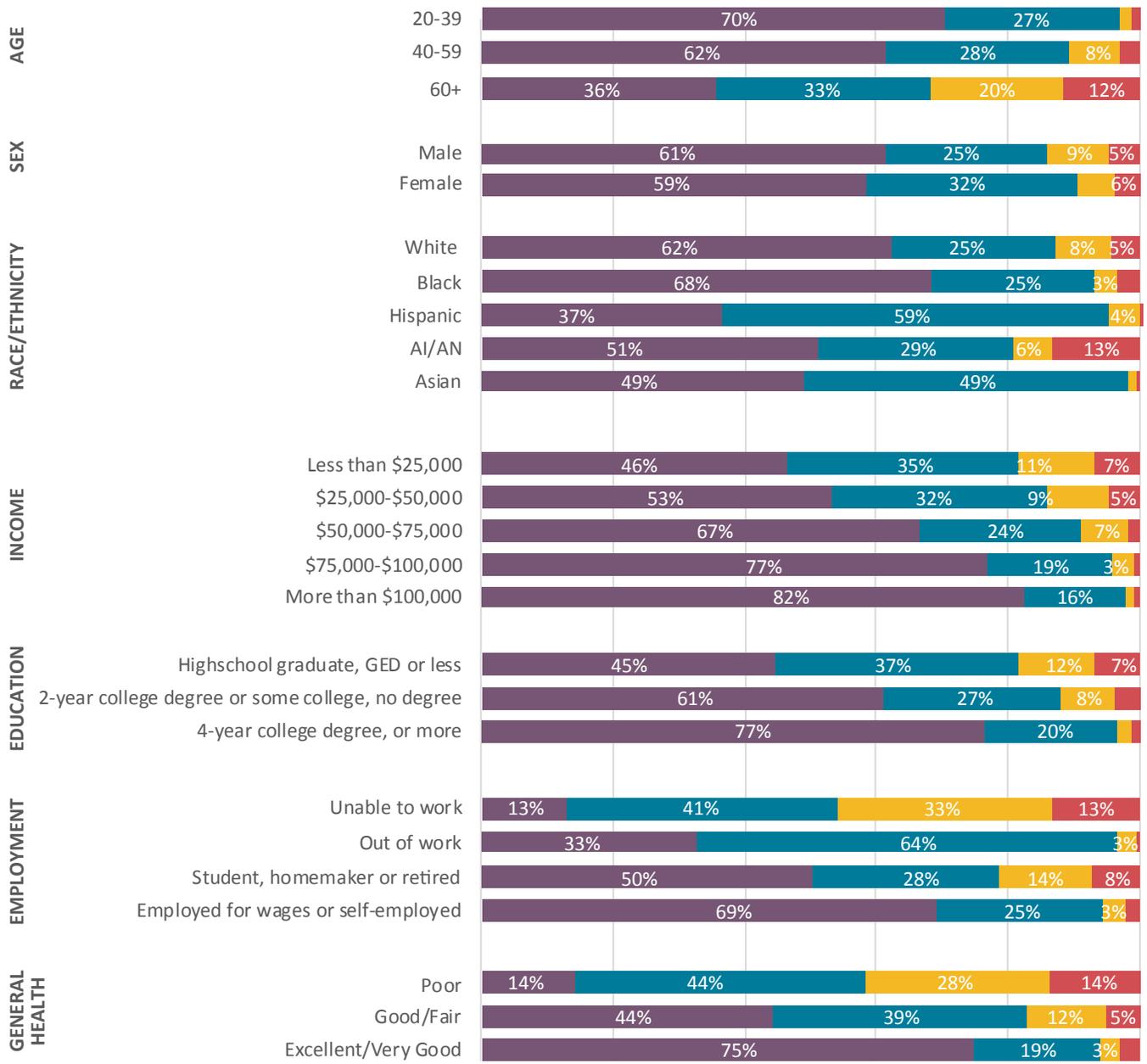


Figure 15. Residents Missing Teeth by Demographic Factors, Spokane County 2015



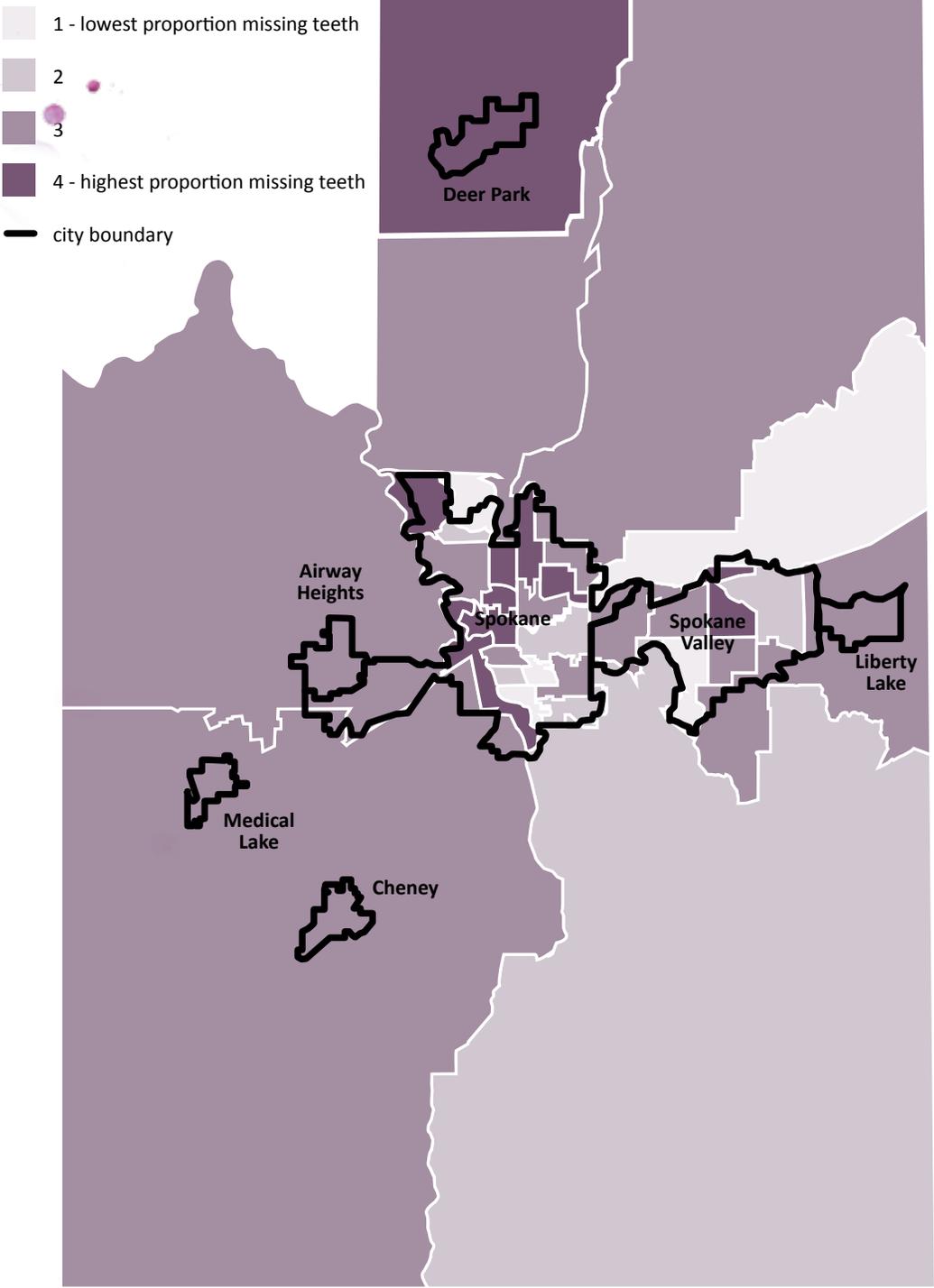
Percent of Residents

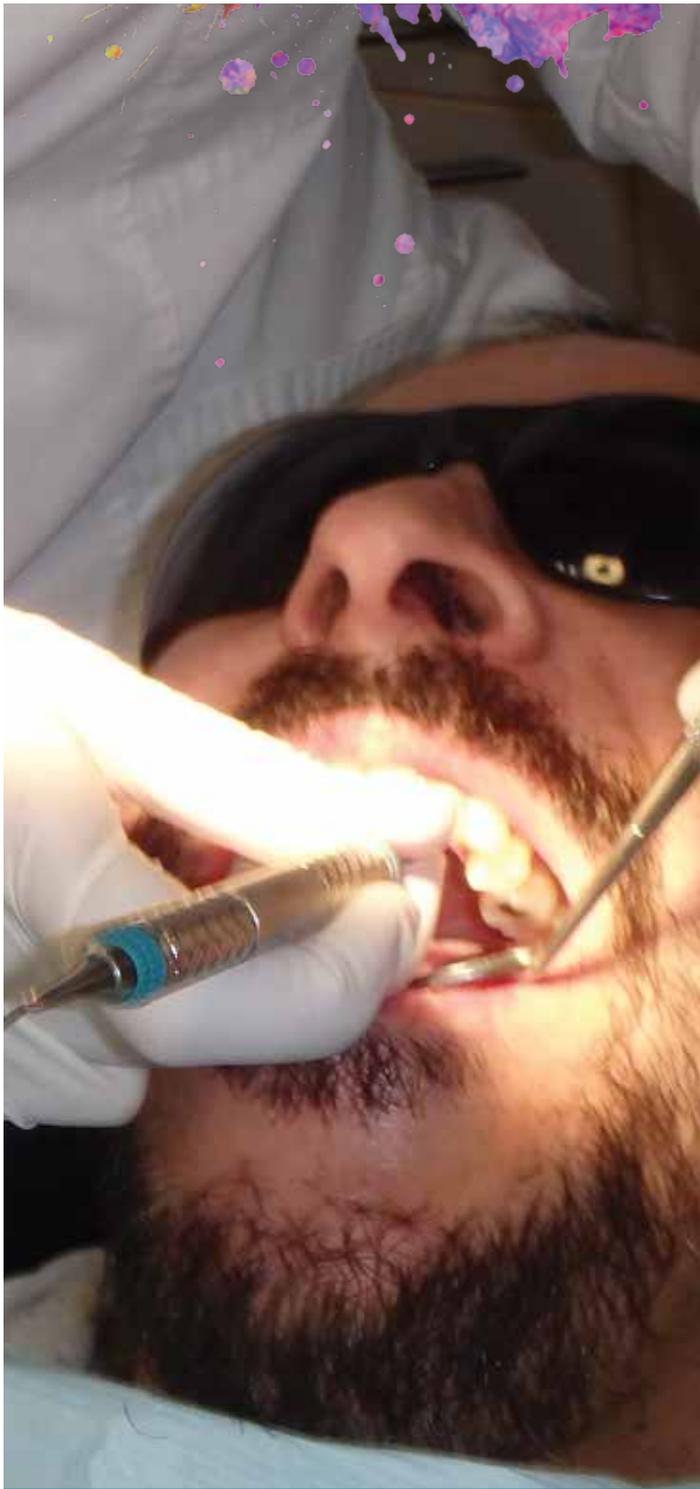
- Missing No Teeth
- Missing 1-5 Teeth
- Missing 6 or More Teeth, Not All
- Missing All Teeth

Note: Percentages do not sum to 100% because of rounding. While they are represented on this figure, percentages for those who are missing 6 or more teeth, or all teeth are sometimes not displayed because of their small size.



Figure 16. Residents with Six or More Teeth Missing by Neighborhood, Spokane County 2015





## ***Demographic and other factors associated with not visiting the dentist***

Consistent with national surveys, women, people with high household income, people with higher educational attainment, and those actively employed were more likely to have visited the dentist in the last 12 months.<sup>16,17</sup> See figure 17 for rates of visiting the dentist by demographic factors.

### **By sex**

Women were twice as likely as men to have gone to the dentist in the last 12 months with 70% of women reporting that they had, compared to 61% of men.

### **By employment**

People out of work and those unable to work were particularly unlikely to visit the dentist. Twenty-eight percent of those out of work, and 38% of those unable to work had visited the dentist in the last 12 months, compared to 66% of students, homemakers, and retirees, and 70% of those employed for wages.

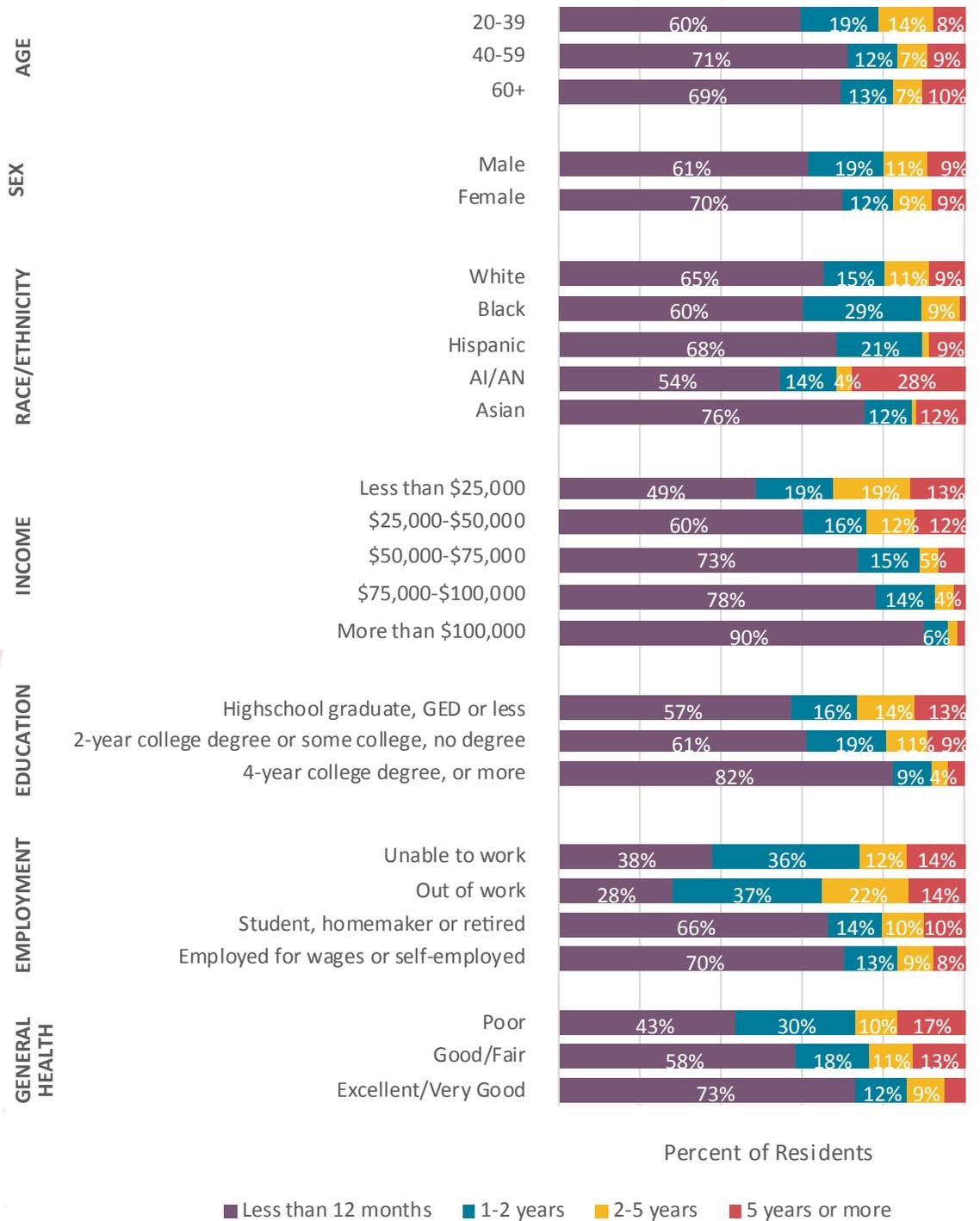
### **By income**

Those with household incomes of less than \$25,000 were least likely to have visited the dentist in the last 12 months at 49%. As income went up so did rates of having visited the dentist. Those with household incomes over \$100,000 had the highest rates of having been to the dentist in the last 12 months with 90% reporting that they had.

### **By neighborhood**

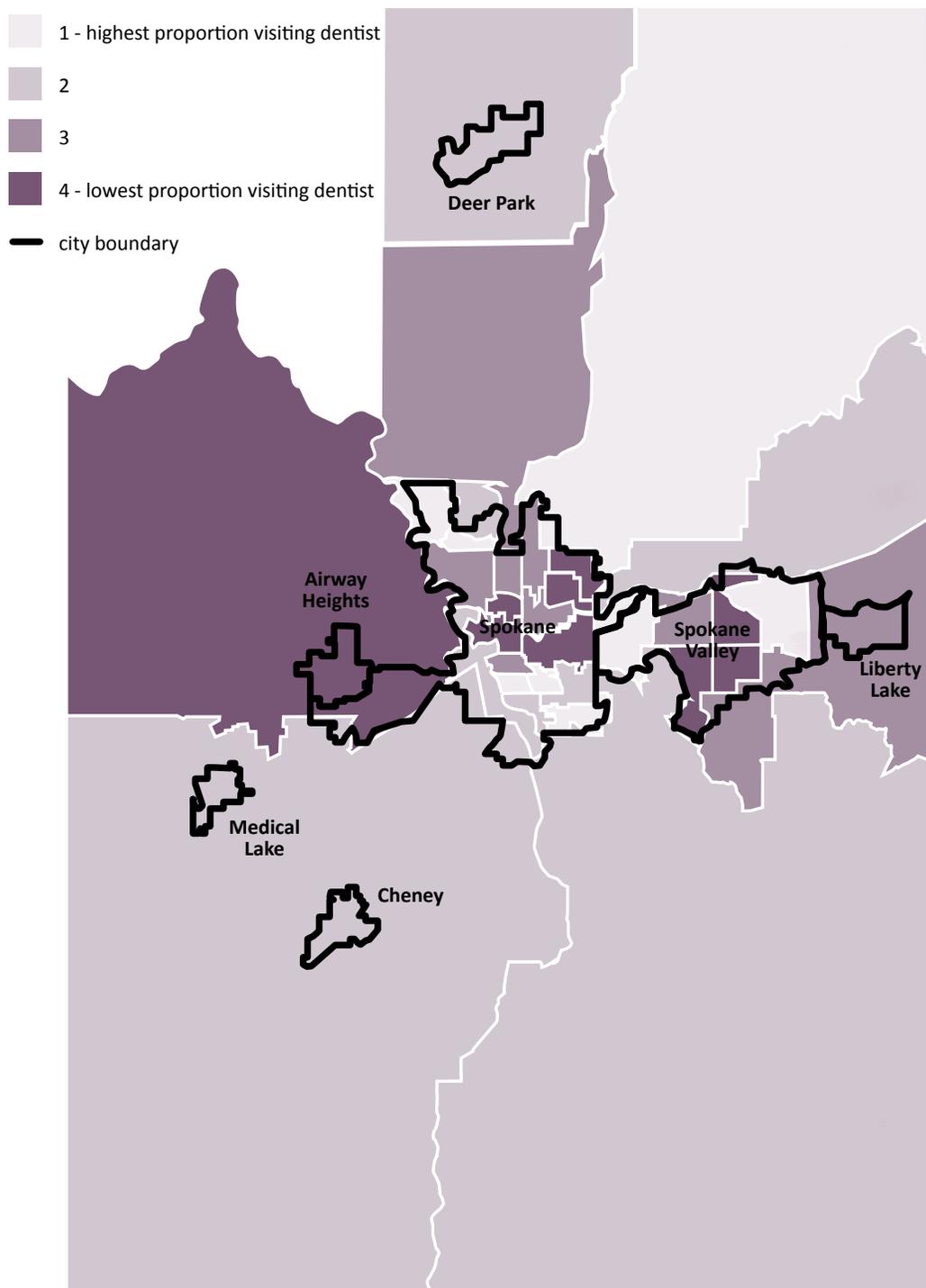
There were also differences in dental visits by area of the county (see figure 18). About 90% of the residents in Rockwood and Balboa/South Indian Trail had visited the dentist within the last 12 months. In contrast, 44% of East Central residents and 35% of West Plains residents had visited the dentist in the same time frame.

Figure 17. Time Since Last Dental Visit by Demographic Factors, Spokane County 2015



Note: Percentages do not sum to 100% because of rounding. While they are represented on this figure, percentages for those who have not visited the dentist in 2-5, or more than 5 years are sometimes not displayed because of their small size.

Figure 18. Residents Having Visited the Dentist in the Last 12 Months by Neighborhood, Spokane County 2015



# Conclusion

Health and health behaviors were associated with social determinants. Said another way, there were marked disparities between different groups. For example, smoking was higher among 20- to 29-year-olds, blacks, people with incomes between \$10,000 and \$25,000, unemployed people, and residents of certain neighborhoods. These results, taken in context with other studies and policies, can support the following conclusions.

## First, health and health behaviors are strongly linked to social determinants.

In this and other surveys, social determinants are recognized as a key component of health. As a reminder, social determinants of health are defined as “[the] conditions in the social, physical, and economic environment in which people are born, live, work, and age.”<sup>18</sup> Thus, efforts to improve health in Spokane County should always take social determinants into account. In this survey, unemployed people were 25 times more likely to smoke than employed people even when even accounting for differences in income, education and other factors.

## Second, health inequities are present in Spokane County.

This survey, in addition to SRHD’s report on inequities in Spokane County, *Odds Against Tomorrow*, clearly show that health and other life aspects differ by social determinants. This should serve as a reminder that inequities continue to exist in Spokane County. Thus, efforts to improve quality of life in Spokane County should focus on the social, physical, and economic environment in which people live.

## Third, these results can guide interventions to improve health.

This survey provides a wealth of data, not all of which was presented here, that allows interventions to be tailored to specific subpopulations or neighborhoods with poor health or harmful health behaviors, based upon their individual needs. These results do not identify which programs are likely to improve quality of life in Spokane County, but they do provide a glimpse into health-related disparities within specific populations and neighborhoods.<sup>19</sup> There is extensive evidence tying social determinants of health to key health outcomes even if the mechanisms of action are often not known. Regardless, there is sufficient evidence and rationale in many areas to support taking action.<sup>20,21</sup> Identifying effective interventions is best done through a systematic decision-making process that considers evidence of community need, including the information in this report, in addition to knowledge of best practice solutions, other data, available resources, and organizational and community contexts. For reference, a resource table of best practice solutions related to quality of life is included and select research studies are noted here (see figure 19).<sup>22,23,24</sup>

Issues involving quality of life, inequities, and health are complex and inter-related; they will also be complicated to resolve. Given the nature of the issues, a cross-sector, collective action approach is recommended, as are interventions that change policy, systems, or the environment.<sup>25,26</sup> Residents, non-profit organizations, and government agencies each have a role in using this information to pursue strategies to improve health in Spokane County.

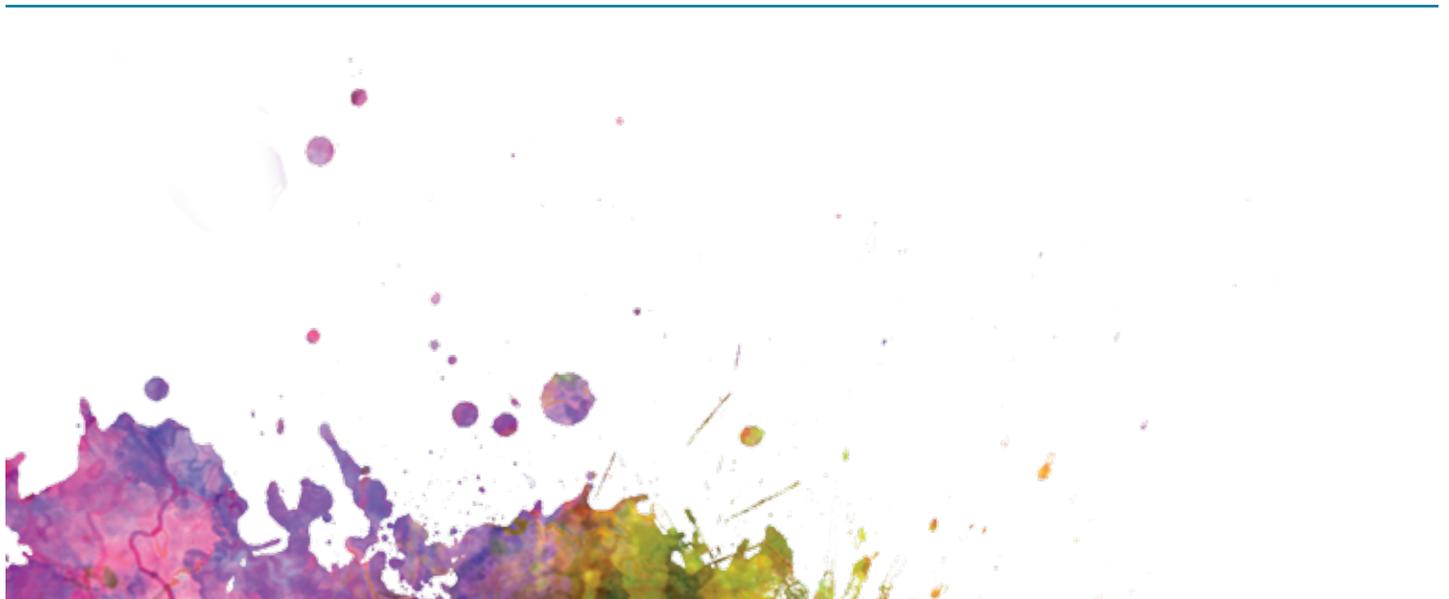


Figure 19. Selected Compilations of Best Practices Related to Quality of Life.

SECTOR	TITLE	ORGANIZATION	URL
Public Health	Healthy People 2020	US Department of Health and Human Services	<a href="http://www.healthypeople.gov/2020/topics-objectives">www.healthypeople.gov/2020/topics-objectives</a>
	The Community Guide	US Centers for Disease Control and Prevention	<a href="http://www.thecommunityguide.org">www.thecommunityguide.org</a>
Clinical Preventive Services	US Preventive Services Task Force	US Preventive Services Task Force	<a href="http://www.uspreventiveservices.taskforce.org">www.uspreventiveservices.taskforce.org</a>
Poverty and Community Development	What Works for America	Federal Reserve Bank of San Francisco and the Low Income Investment Fund	<a href="http://www.whatworksforamerica.org">www.whatworksforamerica.org</a>
	Social Programs that Work	Coalition for Evidence-Based Policy	<a href="http://evidencebasedprograms.org">evidencebasedprograms.org</a>
	The Campbell Library of Systematic Reviews	The Campbell Collaboration	<a href="http://www.campbellcollaboration.org">www.campbellcollaboration.org</a>
Education	The Best Evidence Encyclopedia	Johns Hopkins University	<a href="http://www.bestevidence.org">www.bestevidence.org</a>
	What Works Clearinghouse	US Department of Education	<a href="http://ies.ed.gov/ncee/wwc">ies.ed.gov/ncee/wwc</a>
	Blueprints	State of Colorado; University of Colorado, Boulder	<a href="http://www.colorado.edu/cspv/blueprints/index.html">www.colorado.edu/cspv/blueprints/index.html</a>



## Endnotes

1. World Health Organization. Constitution of WHO: principle [online]. 1948. [cited 2016 Aug 2]. Available from URL: <http://www.who.int/about/mission/en>.
2. World Health Organization. What are the social determinants of health? [online]. 2012. [cited 2016 Aug 2]. Available from URL: [http://www.who.int/social\\_determinants/sdh\\_definition/en](http://www.who.int/social_determinants/sdh_definition/en).
3. Spokane Regional Health District. Odds Against Tomorrow: Health Inequities in Spokane County [online]. 2012. [cited 2016 Aug 8]. Available from URL: <https://www.srhd.org/documents/PublicHealthData/HealthInequities-2012.pdf>.
4. U.S. Department of Health and Human Services. Healthy People 2020: 2020 Topics & Objectives, Social Determinants of Health [online]. 2014. [cited 2016 Aug 8]. Available from URL: <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>.
5. Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Questionnaire. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2013.
6. Washington State Department of Health. Self-reported Health Status [online]. 2012. [cited 2016 May 9]. Available from URL: <http://www.doh.wa.gov/portals/1/documents/5500/ghs-srhs2012.pdf>.
7. Spokane Regional Health District. Spokane Counts 2015: General Health (adult) [online]. 2015. [cited 2016 Aug 2]. Available from URL: <http://www.srhd.org/spokane-counts/indicator/29/general-health-adult>.
8. There was indication that these differences existed but there were insufficient data to confirm.
9. Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2014.
10. U.S. Census Bureau. Health Insurance Coverage Status by Sex by Age American Community Survey 1-year estimates [online]. 2014. [cited 2016 May 9]. Retrieved from URL: [https://censusreporter.org/data/table/?table=C27001&geo\\_ids=05000US53063&primary\\_geo\\_id=05000US53063](https://censusreporter.org/data/table/?table=C27001&geo_ids=05000US53063&primary_geo_id=05000US53063).
11. Smith J, Medalia C, U.S. Census Bureau. Current Population Reports - Health Insurance Coverage in the United States: 2014 [online], 2015. [cited 2015 May 9]. U.S. Government Printing Office, Washington, DC, 2015. Available from URL: <https://www.census.gov/content/dam/Census/library/publications/2015/demo/p60-253.pdf>.
12. NB: Statistics on food security by neighborhood were not adjusted by income or other related factors.
13. Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2014.
14. U.S. Food and Drug Administration, Department of Health and Human Services. Eat for a health heart [online]. 2016. [cited 2016 Jun 6]. Washington, DC 2016. Available from URL: <http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm199058.htm>.
15. Washington State Department of Health. Washington State Smile Survey 2010 [online]. DOH Pub No 160-099. [cited 2016 May 9]. Available from URL: [http://www.doh.wa.gov/Portals/1/Documents/Pubs/160-099\\_SmileSurvey2010.pdf](http://www.doh.wa.gov/Portals/1/Documents/Pubs/160-099_SmileSurvey2010.pdf).
16. Gallup. Gallup Healthways Well-being Index Survey [online]. 2014. [cited 2016 May 9]. Available from URL: <http://www.gallup.com/poll/168716/one-third-americans-haven-visited-dentist-past-year.aspx>.
17. Agency for Healthcare Research and Quality. Medical Expenditures Survey (MEPS): Oral health care system use (indicator) [online]. 2012 [cited 2016 May 9]. Available from URL: [http://www.healthindicators.gov/Indicators/Oral-health-care-system-use\\_1266/Profile/ClassicData](http://www.healthindicators.gov/Indicators/Oral-health-care-system-use_1266/Profile/ClassicData).
18. U.S. Department of Health and Human Services. Healthy People 2020: An Opportunity to Address Societal Determinants of Health in the United States, Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020 [online]. 2010. [cited 2016 Jul 21]. Available from URL: <http://www.healthypeople.gov/2010/hp2020/advisory/societal-determinants-health.htm>.
19. While it would seem natural to conclude that improving an individual's education, for example, would improve their health, the results of this survey alone give no evidence that intervening on any of these factors would cause a change in health.
20. Braveman P, Gottlieb L. The Social Determinants of Health: It's Time to Consider the Causes of the Causes. *Public Health Rep* 2014;129(Suppl 2):19-31.
21. Kelly M, Morgan A, Bonnefoy J, Butt J, Bergman V. The Social Determinants of Health: Developing an Evidence Base for Political Action, Final Report to World Health Organization Commission on the Social Determinants of Health [online]. 2007. [cited 2016 Jul 21]. Available from URL: [http://www.who.int/social\\_determinants/resources/mekn\\_final\\_report\\_102007.pdf](http://www.who.int/social_determinants/resources/mekn_final_report_102007.pdf).
22. U.S. Department of Housing and Urban Development. Move to Opportunity for Fair Housing Demonstration Program: Final Impacts Evaluation [online]. 2011. [cited 2016 Jul 1]. Available from URL: [https://www.huduser.gov/portal/publications/pdf/MTOF-HD\\_fullreport\\_v2.pdf](https://www.huduser.gov/portal/publications/pdf/MTOF-HD_fullreport_v2.pdf).
23. Brownell M, Chartier M, Nickel N, Chateau D, Martens P, Sarkar J, et al. Unconditional Prenatal Income Supplement and Birth Outcomes. *Pediatrics* 2016;137(6):2992.
24. Marmot M, Allen J. Social Determinants of Health Equity. *Am J Public Health*. 2014; 104(S4):S517-19.
25. Faricy A, Minnesota Department of Health. Understanding Policy, Systems, and Environmental Change to Improve Health [online]. 2012. [cited 2016 Jul 21]. Available from URL: <http://www.health.state.mn.us/healthreform/ship/techassistance/pse02222012.pdf>.
26. The Health Trust. Policy, Systems and Environmental Change [online]. 2012. [cited 2016 Jul 21]. Available from URL: [http://healthtrust.org/wp-content/uploads/2013/11/2012-12-28-Policy\\_Systems\\_and\\_Environmental\\_Change.pdf](http://healthtrust.org/wp-content/uploads/2013/11/2012-12-28-Policy_Systems_and_Environmental_Change.pdf).

---

## Photography Credits

8: U.S. Navy Photographer - 090717-N-6326B-005 SAN DIEGO (July 17, 2009) Staff members from Naval Medical Center, San Diego provide medical care to homeless veterans during the 22nd annual Homeless Veterans Stand Down. (U.S. Navy photo)

10: Droigheann - SC9-226 - cupboard empty after Barrhead 10-shift row

29: osseous - Dental Cleaning





1101 W. College Ave., Spokane, WA 99201 | [srhd.org](http://srhd.org)