



# WALNUT HILLS

THE HEALTH OF OUR COMMUNITY

Results from the 2017  
Community Health Status Survey

INTERACT  
FOR HEALTH

A Catalyst for Health and Wellness

Copyright © 2019 by Interact for Health.

All rights reserved.

This report was produced by Interact for Health associates Jennifer Chubinski, Colleen Desmond, Susan Sprigg, Emily Gresham Wherle and Jeffrey Williams.

To cite this work, please use this format:

Interact for Health. (2019). Walnut Hills: The Health of Our Community. Cincinnati, OH: Author.

Permission is granted to reproduce this publication provided that these reproductions are not used for a commercial purpose; that you do not collect any fees for the reproductions; that our materials are faithfully reproduced (without addition, alteration or abbreviation); and that they include any copyright notice, attribution or disclaimer appearing on the original. Free copies of our publications are available; please call 513-458-6600 or toll-free 888-310-4904 or visit [www.interactforhealth.org](http://www.interactforhealth.org).

Thanks to United Way of Greater Cincinnati for its continued support of the Community Health Status Survey.

# ABOUT WALNUT HILLS

Walnut Hills boasts a rich history as a first suburb of Cincinnati. It's a unique community whose strength lies in the socio-economic, racial and religious diversity of its residents—the strongest threads of Walnut Hills' ever-evolving tapestry—and in its urban landscape, replete with architectural history and lore. During its heyday in the 1900s, with the Peebles Corner business district conveniently located on the streetcar line, Walnut Hills was known as Cincinnati's second downtown. The Comfort Station, built in the 1920s just off Gilbert Avenue on McMillan Street, provided bathrooms and a place to sit and rest for weary travelers of the streetcars, whose hub was Peebles Corner.

In the summer of 2019, we're looking forward to the Comfort Station re-opening with a new business, making it a community gathering spot once again. Walnut Hills is in the midst of a major renaissance, and the intersection of Gilbert Avenue and McMillan Street is surrounded by an investment of more than \$60 million in development. As a community, we're investing not only in our buildings and businesses but in the health of our residents.

We believe that Walnut Hills deserves access to affordable, healthy food choices. A holistic approach that improves food access, provides cooking and nutrition education and promotes an active lifestyle will give our residents the best chance of living healthier, happier lives. We're busy building partnerships with food growers, aggregators and distributors, retailers, producers, educators, and funders. The programs we're implementing are designed, through education and hands-on experience, to encourage people to lead healthier lives in order to create a sustainable, thriving community.

In the absence of a full-service grocery store, we've worked on alternative methods of providing our residents with convenient and affordable access to fruits and vegetables. Our garden network has grown to three community gardens and two foraging orchards. We also have helped to start and support several other growing spaces. We've tested three different styles of farmers market to see what residents would support. Some of our partners in these include Findlay Market Farmstand, Our Harvest, Easter Seals, and Produce Perks.



**Emily Sheckels  
Ahouse**

Executive Director,  
Walnut Hills  
Redevelopment  
Foundation



**Walnut Hills  
Redevelopment  
Foundation**



The Freestore Foodbank has been a great partner, bringing food access to Peebles Corner on Friday afternoon with its Healthy Harvest Mobile Market ever since our Kroger closed.

In 2018, we launched Walnut Wheels, our creative placemaking step van. It's a mobile unit that allows us to do fast, simple food and health-related activities throughout the neighborhood. We have partnered with Cincinnati Children's Hospital and Interact for Health to provide Walnut Wheels food samplings in the parking lot of the former Kroger store as well as at Frederick Douglass Elementary. We've made smoothies, salads, pizzas, and salsas. And, when possible, we've used produce harvested that morning from our gardens just a few blocks away.

Overall, we've been focused not only on providing access to healthy foods, but also on creating a complete ecosystem where we work as a group to grow food, learn how to prepare it and then enjoy it together. All of this makes us better individually and stronger together.

---

*This report focuses on survey responses from adults in the Walnut Hills area of Cincinnati, including Walnut Hills, East Walnut Hills and O'Bryonville. For perspective, the results for all adults in the region are also noted on each page. These regional results include responses from Walnut Hills adults as well as responses from all other adults in the surrounding 22-county survey region (see map on page 34). While changes from past results are important to note, please also note that small subgroups have a larger margin of error and are more likely to be volatile than the larger regional sample. It is important to monitor changes over time to see if trends continue.*



 **Passenger Parking**  
in Zone  
[m.park.com](http://m.park.com)  
**ZONE 513**

**NO STOPPING PARKING**  
**BUS STOP**  
← TOW ZONE

**NO STOPPING PARKING**  
**4-6 PM**  
MON. THRU FRI.  
TOW ZONE →

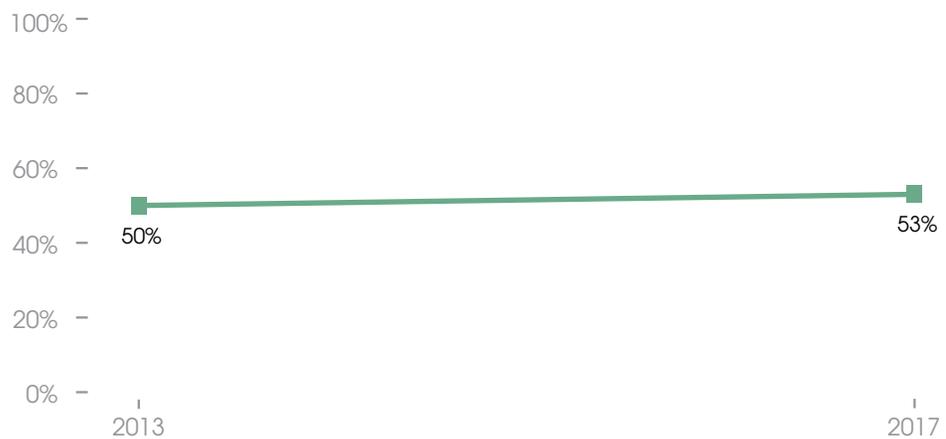
# GENERAL HEALTH

## About half of Walnut Hills adults report excellent or very good health

Adults' overall self-rated health status is an important indicator of well-being. Research has made a strong link between people's response to this question and their predicted length and quality of life. CHSS asked, "In general, would you say your health is excellent, very good, good, fair or poor?"

The percentage of Walnut Hills adults who report excellent or very good health has remained **STEADY** over time.

Percentage of Walnut Hills adults who report excellent or very good health



**AMONG ALL ADULTS IN THE REGION:** 49% reported excellent or very good health in 2017.

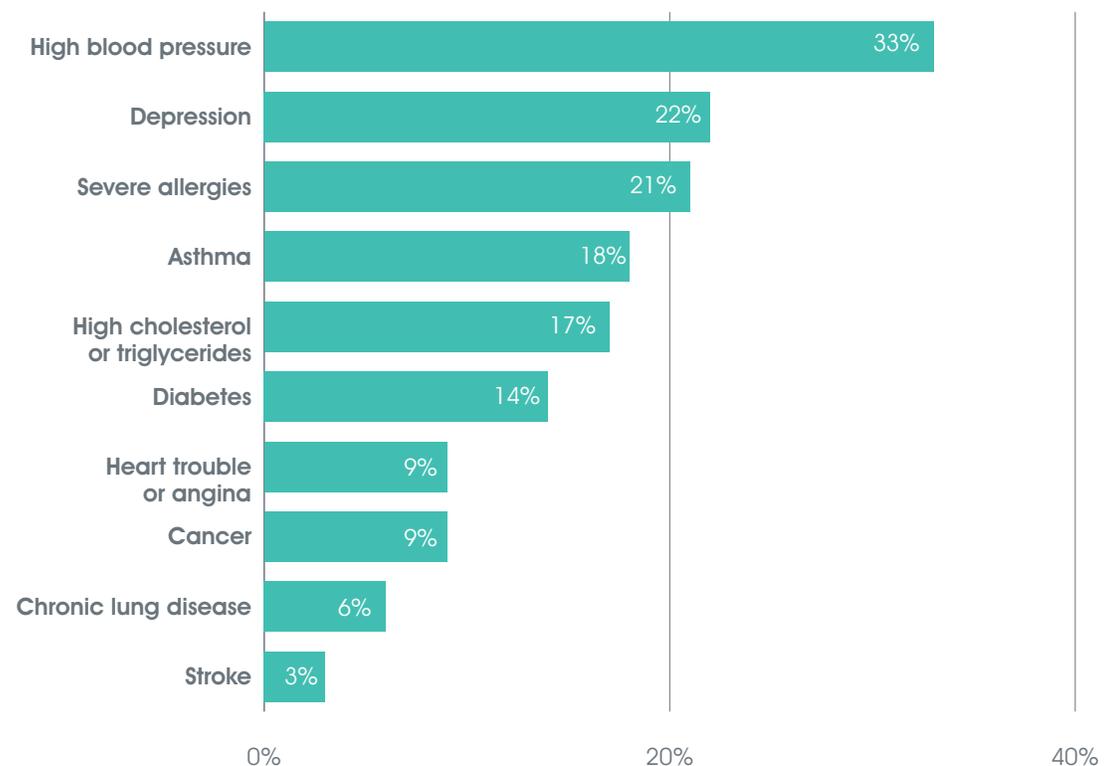


# CHRONIC CONDITIONS

## Walnut Hills adults most frequently report high blood pressure, depression, severe allergies

Chronic illness can create a physical, emotional and financial burden for people. If not monitored and managed well, these conditions can have a devastating impact on long-term health and survival. *CHSS* asked, "Has a doctor or other health care provider ever told you that you have ..."

### Percentage of Walnut Hills adults who have been diagnosed with:



### AMONG ALL ADULTS IN THE REGION in 2017:

- 30% reported having been told they had high blood pressure
- 27% reported high cholesterol or triglycerides
- 21% reported depression
- 18% reported asthma
- 14% reported severe allergies
- 13% reported diabetes
- 10% reported heart trouble or angina
- 9% reported cancer
- 6% reported chronic lung disease
- 3% reported stroke

# OBESITY

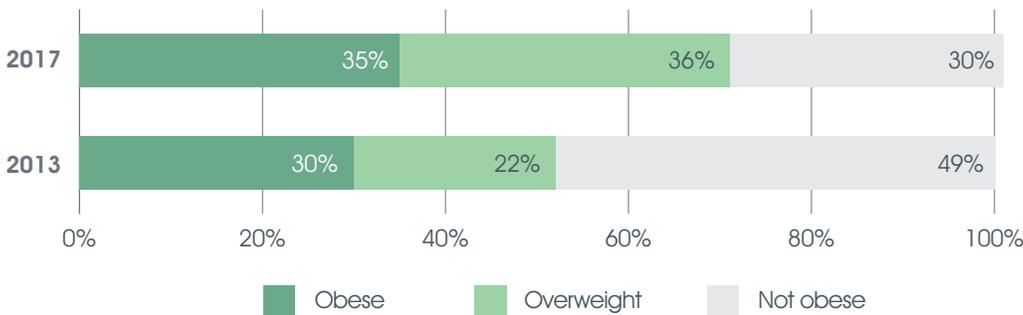
## 7 in 10 Walnut Hills adults overweight or obese

Maintaining a healthy weight can support good health. Being overweight or obese increases a person's risk for diabetes, heart disease, respiratory conditions and some cancers. It can also make it more difficult to engage in some daily activities.

CHSS asked adults their weight and height, and used these responses to determine if they were obese using the Body Mass Index (BMI).<sup>1</sup>

Based on BMI, a person who is 5 feet 4 inches tall would be considered overweight at 150 pounds and obese at 180 pounds. A person who is 6 feet tall would be considered overweight at 190 pounds and obese at 220 pounds.

**Walnut Hills adults who are obese or overweight** (Percentages may not add to 100 percent because of rounding.)



The percentage of Walnut Hills adults who are overweight or obese has **INCREASED** since 2013.

**AMONG ALL ADULTS IN THE REGION:** 32% were obese and 36% were overweight in 2017.



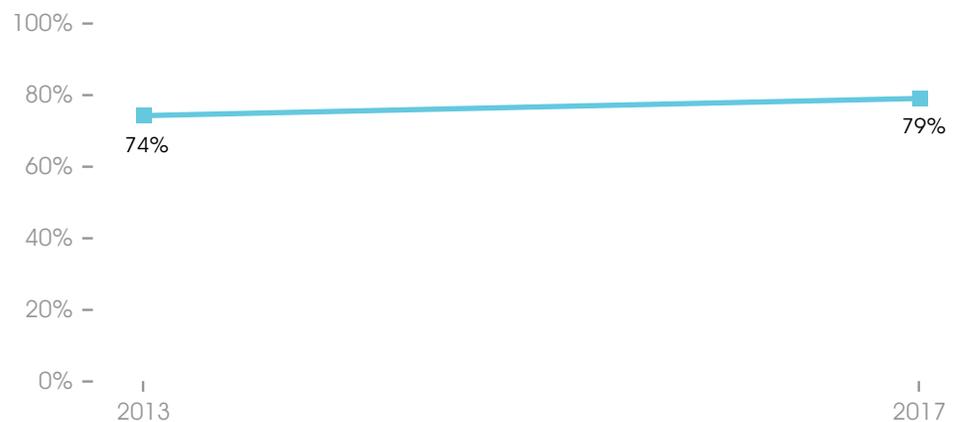
# PHYSICAL ACTIVITY

## 8 in 10 Walnut Hills adults report safe sidewalks and shoulders in their neighborhood

Being physically active is one of the most important things people can do to improve their health. According to the Centers for Disease Control and Prevention (CDC), regular physical activity can reduce the risk of chronic diseases, improve muscle and bone strength, improve mental health and increase life expectancy.<sup>2</sup> One thing that can influence physical activity, including walking, is access to sidewalks. Studies have shown that people are more likely to use sidewalks that are in good condition than sidewalks that are not.<sup>3</sup>

CHSS asked adults in the region whether they agreed or disagreed with the following statement: "There are sidewalks or shoulders on streets in my community that allow for safe walking, jogging, or biking."

### Percentage of Walnut Hills adults who report safe sidewalks or shoulders in their neighborhood



The percentage of Walnut Hills adults reporting safe sidewalks is the **SAME** as in 2013.

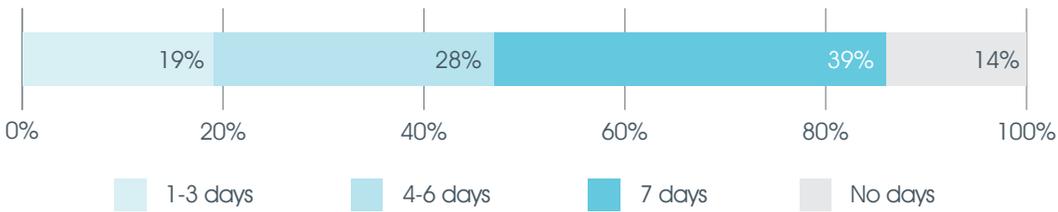


**AMONG ALL ADULTS IN THE REGION:** 73% reported safe sidewalks or shoulders in 2017.

## 4 in 10 Walnut Hills residents walk each day

One of the easiest ways to increase physical activity is by walking. Walking is especially accessible because it does not require any special skills or facilities. CHSS asked adults in the region how many days each week they walk for at least 10 minutes.

**Number of days each month that Walnut Hills adults report walking at least 10 minutes a day** (Percentages may not add to 100 percent because of rounding.)



4 in 10 Walnut Hills adults walk at least 10 minutes per day.

**AMONG ALL ADULTS IN THE REGION:** 57% reported that they walk at least 10 minutes every day in 2017.



## 3 in 10 Walnut Hills adults sit for eight or more hours each day

Long periods of time spent sitting, even when paired with moderate physical activity, can lead to poor health.<sup>4</sup> Studies have shown that sedentary behavior can increase the risk of cardiovascular disease, cancer and type 2 diabetes.<sup>5</sup>

**Percentage of Walnut Hills adults who report sitting eight or more hours per day**



**AMONG ALL ADULTS IN THE REGION:** 25% sit for eight hours or more per day in 2017.

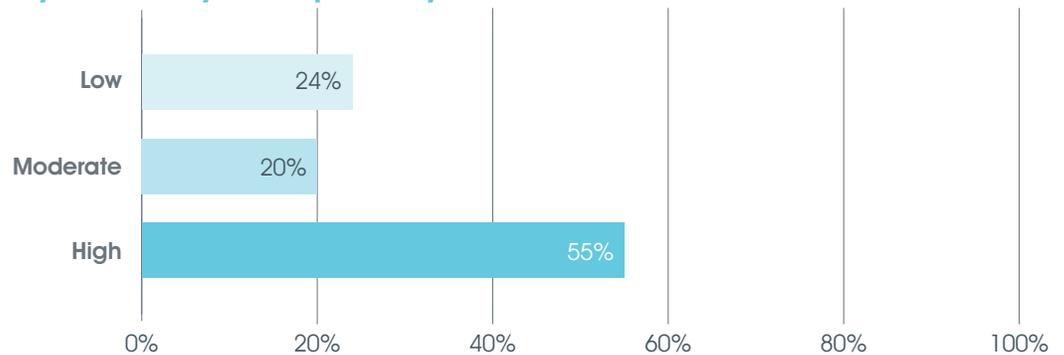


## Measuring physical activity at work and leisure

The 2017 CHSS incorporated the International Physical Activity Questionnaire (IPAQ), short form.<sup>6</sup> This form is designed to measure adults' physical activity throughout the entire day. Adults are asked to report their level of activity over the past seven days in four categories: vigorous activity, moderate activity, walking and sitting.

Nearly 6 in 10 Walnut Hills adults reported a high level of physical activity.

Physical activity level reported by Walnut Hills adults



**AMONG ALL ADULTS IN THE REGION:** 17% reported low levels of activity, 23% reported moderate levels of activity, and 60% reported high levels of activity in 2017.

Results for all adults in our region and for Walnut Hills adults show more self-reported physical activity than is sometimes reported. One possible reason for this is that measurements of physical activity often rely on self-reports of activity outside of working hours only. The IPAQ asks respondents to report about all activity, including at work, at home and at leisure. Using the IPAQ, people could qualify as “moderately” or “highly” active because of the time they spend on their feet as part of their job, even if they have little or no activity outside the workplace.

This is the first time CHSS has incorporated this tool to measure physical activity. Additional research is required to better understand how we can use self-reported measures to explore physical activity levels in both work and non-work environments.



# DIET & FOOD ACCESS

## More than 2 in 10 Walnut Hills adults eat the recommended daily amount of fruits and vegetables

People's weight and overall health are substantially affected by the food they eat. A healthy diet consists of balanced amounts of protein, carbohydrates and fats, with plenty of fruits and vegetables and limited fat and salt. According to the CDC, people who eat a healthy diet with generous amounts of fruits and vegetables have a reduced risk of stroke, type 2 diabetes and certain cancers.<sup>7</sup>

The Dietary Guidelines for Americans 2015-2020,<sup>8</sup> a joint project of the U.S. Departments of Agriculture (USDA) and Health and Human Services (HHS), recommends that each meal include half a plate of fruits and vegetables. This means adults should eat about two servings of fruits and three servings of vegetables per day.

*CHSS asked adults about how many fruits and vegetables they ate every day.*

---

More than 2 in 10 Walnut Hills adults eat the recommended daily amount of both fruits and vegetable, the **SAME** as in 2013.

---

### Percentage of Walnut Hills adults who eat the recommended daily amount of both fruits and vegetables



**AMONG ALL ADULTS IN THE REGION:** 23% ate the recommended amount of both fruits and vegetables in 2017.

## 4 in 10 Walnut Hills adults drink seven or more sodas or sugary beverages each week

According to the 2015-2020 Dietary Guidelines for Americans, almost half of all added sugar consumed in the nation comes from beverages.<sup>9</sup> Sugar adds calories to a person's diet without providing nutrients needed to be healthy. The guidelines recommend limiting added sugars to 10% of daily calories. If people consume more than that, they may not get the nutrients they need from fruits, vegetables, protein and dairy products.

Studies have shown that drinking one or more sugary beverage per day – equivalent to seven or more each week – can increase the risk of obesity,<sup>10</sup> diabetes<sup>11</sup> and heart disease.<sup>12, 13</sup> While most people know that soda has added sugar, other drinks such as sweet tea, sports drinks and fruit drinks also contain added sugar.

*CHSS asked adults how many sodas and other sugar-sweetened drinks they consumed each week.*

**Percentage of Walnut Hills adults who drink seven or more sugary beverages per week**



---

About 4 in 10 Walnut Hills adults drink 7 or more sugary beverages per week.

---

**AMONG ALL ADULTS IN THE REGION:** 40% drank seven or more sugary beverages each week in 2017.



## Nearly 7 in 10 Walnut Hills adults agree it is easy to purchase healthy foods nearby

Healthy eating is particularly challenging if there is not a place nearby to buy healthy foods. To have a healthy diet, it is crucial that people can buy healthy food such as fruits and vegetables, whole grains and low-fat items without having to travel far.

CHSS asked participants whether they agreed or disagreed with this statement: "It is easy to purchase healthy foods in my neighborhood such as whole grain foods, low-fat options and fruits and vegetables."

The percentage of Walnut Hills adults who agree it is easy to purchase healthy food is the **SAME** as in 2013.

### Percentage of Walnut Hills adults who agree it is easy to purchase healthy foods in their neighborhood



**AMONG ALL ADULTS IN THE REGION:** 80% agreed it was easy to purchase healthy foods in their neighborhood in 2017.



ing  
age  
250  
more  
apples on  
Sourdough  
cheese \$5  
ough off Dark rye  
0  
gluten free  
e butter

Pumba \$8.00

1/4 lb. all beef frank, pulled pork, home made apple butter, carolina BBQ sauce,  
chopped onion, on a pretzel bun

Comrad Kraut \$7.00

1/4 lb. beef frank, spicy brown mustard, horse radish, <sup>homemade</sup> KRAUT, pretzel bun

Twisted Sister \$6.00

1/4 lb. beef frank, white chicken chili, shredded cheddar, frites

Simple Jack \$5.00

1/4 lb. all beef frank...simple

Naked Taters \$3.00

grilled seasoned red potatoes <sup>+1.00 Add cheddar + sauce</sup>

\*\*\*We take\*\*\*  
all Credit Cards!

HES

Tips

Muo

SP

# FOOD INSECURITY

## 3 in 10 Walnut Hills residents have experienced food insecurity in the past year

Access to nutritious food is important for health. Food insecurity occurs when people do not have access to healthy food. It may include both eating less food or reduced quality or variety of food.<sup>14</sup> Adults who experience food insecurity are at increased risk for poor overall health and chronic diseases.<sup>15</sup>

CHSS asked adults whether they agreed or disagreed with two statements:

1. Within the past 12 months we worried whether our food would run out before we got money to buy more.
2. Within the past 12 months the food we bought just didn't last and we didn't have money to get more.

Agreeing with one or both statements indicates that a family is likely to be food insecure.

**Percentage of Walnut Hills adults who are food insecure** (Graph shows those who agreed with one or both statements.)



**AMONG ALL ADULTS IN THE REGION:** 24% experienced food insecurity in the past year.



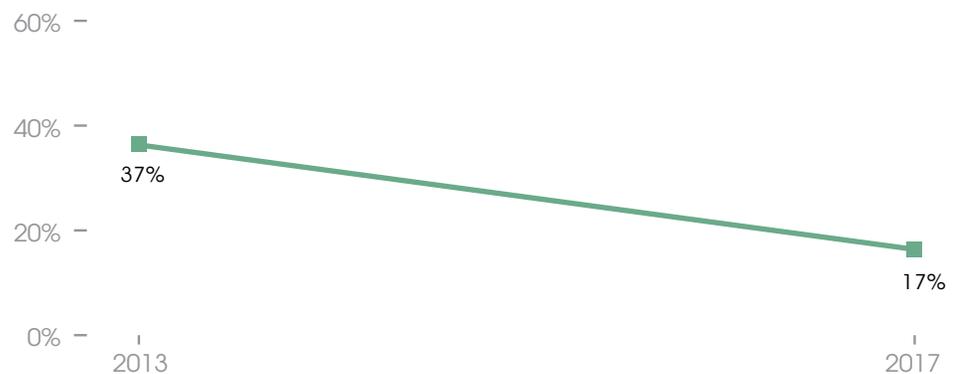
# SMOKING

## About 2 in 10 Walnut Hills adults report they are current smokers

According to the CDC's Behavioral Risk Factor Surveillance System (BRFSS), 17% of adults in the United States were current smokers in 2017. This percentage is higher than the Healthy People 2020 goal of 12%. Tobacco use has an impact on all aspects of an individual's health. Smokers who can quit can add 10 years to their lives.<sup>16</sup>

The percentage of current smokers in Walnut Hills has **DROPPED** since 2013.

Percentage of Walnut Hills adults who are current smokers



**AMONG ALL ADULTS IN THE REGION:** 23% reported that they were current smokers in 2017.

Between 2013 and 2017 Walnut Hills saw a large drop in the percentage of adults who report being current smokers. Because small neighborhood samples can be more variable than larger samples, it will be important to assess again in future surveys to confirm this trend.

## 2 in 10 Walnut Hills adults allow people to smoke in their home

Secondhand smoke or environmental tobacco smoke (ETS) is a serious danger that does not often get enough attention. According to the CDC, 1 in 4 nonsmokers in the U.S. is exposed to ETS, which is responsible for approximately 41,000 deaths among nonsmoking adults and 400 deaths in infants each year. ETS has been linked to serious negative health outcomes in adults and children, such as stroke, lung cancer, coronary heart disease and sudden infant death syndrome (SIDS).<sup>17</sup>

*CHSS asked adults whether or not they allow people to smoke in their home.*

### Percentage of Walnut Hills adults who allow people to smoke in their home



**AMONG ALL ADULTS IN THE REGION:** 18% allowed people to smoke in their home in 2017.



# STRESS

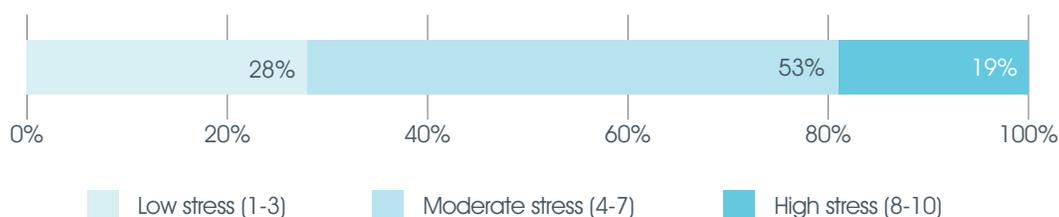
## About 2 in 10 Walnut Hills adults report high stress

Stress is a normal part of life. It may be short-term (acute), caused by situations such as a presentation or a big test. Stress may also be long-term (chronic), caused by situations such as extended unemployment or a long illness. Stress is the way the body reacts to these stimuli by releasing hormones, increasing heart rate and tensing muscles.<sup>18</sup>

CHSS asked, "On a scale of 1 to 10, where 1 means you have 'little or no stress' and 10 means you have 'a great deal of stress,' how would you rate your average level of stress during the past month?"

3 in 10 Walnut Hills adults report low stress, 5 in 10 report moderate stress and 2 in 10 report high stress.

**On a scale of 1 to 10 ... how would you rate your average level of stress during the past month?** (Percentages do not add to 100 percent because of rounding.)

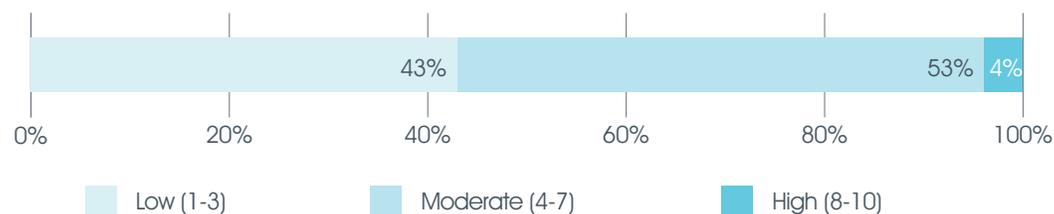


**AMONG ALL ADULTS IN THE REGION:** 29% reported low stress, 50% reported moderate stress and 20% reported high stress in 2017.

## Most consider low, moderate stress healthy

CHSS also asked, "On a scale of 1 to 10, where 1 means 'little or no stress' and 10 means you have 'a great deal of stress,' what would you consider a healthy level of stress?"

**On a scale of 1 to 10 ... what would you consider a healthy level of stress?** (Percentages may not add to 100 percent because of rounding.)



More than 4 in 10 Walnut Hills adults think a low level of stress is healthy.



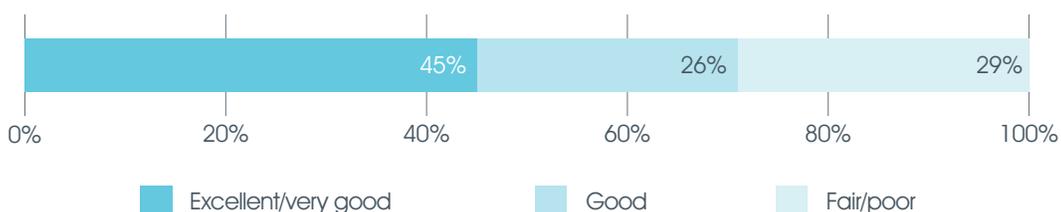
**AMONG ALL ADULTS IN THE REGION:** 55% thought a low level of stress was healthy in 2017.

## Nearly 5 in 10 Walnut Hills adults report doing an excellent or very good job managing their stress

According to the National Institute of Mental Health, taking steps to manage stress can reduce its negative health impacts.<sup>19</sup> Steps could include exercise, social connection, mindfulness, relaxation or help from a health care provider.

CHSS asked, "How good a job do you think you do managing your stress?"

**How good a job do you think you do managing your stress?** (Percentages do not add to 100 percent because of rounding.)



**AMONG ALL ADULTS IN THE REGION:** 44% report an excellent or very good job managing their stress in 2017.



# COMMUNITY SUPPORT

## Walnut Hills adults' perceptions of support from their community

Research has shown strong ties between people's health and the social support they find in their community.<sup>20</sup>

CHSS asked people whether they agreed or disagreed with three statements about social support in their community:

1. People can depend on each other in my community.
2. Living in my community gives me a secure feeling.
3. People in my community know they can get help from the community if they are in trouble.

---

More than half of Walnut Hills adults agree people can depend on each other in their community, fewer than in 2013.

---

### People can depend on each other in my community

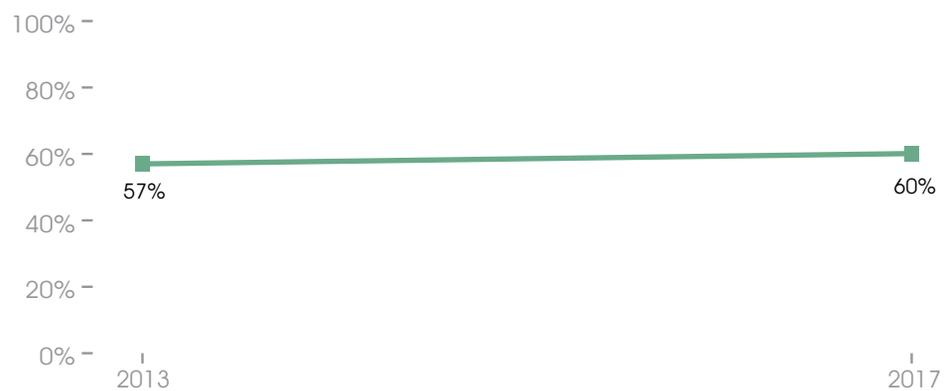


---

6 in 10 Walnut Hills adults agree living in their community gives them a secure feeling.

---

### Living in my community gives me a secure feeling





**People in my community know they can get help from the community if they are in trouble**



6 in 10 Walnut Hills adults agree they can get help from their community.

**AMONG ALL ADULTS IN THE REGION:**

- 78% agreed that people can depend on each other in their community in 2017.
- 86% agreed that living in their community gave them a secure feeling in 2017.
- 83% thought people could get help from the community if they were in trouble in 2017.



# THE COMMUNITY

## Walnut Hills adults rate Greater Cincinnati and their neighborhood as a healthy place to live

Choices we make every day affect our health, but so does the community in which we live. The physical and social environment is an important determinant of health. A neighborhood that feels safe can encourage residents to engage in healthy outdoor activities. A neighborhood that feels unsafe can force residents to stay indoors. CHSS asked adults in the region to evaluate their environment.

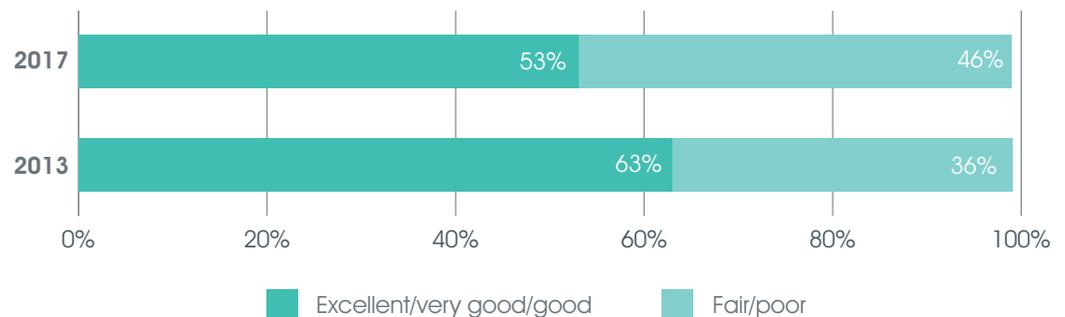
CHSS asked, "How would you rate Greater Cincinnati as a healthy place to live?"

**How would you rate Greater Cincinnati as a healthy place to live?** (Percentages may not add to 100 percent because the response 'don't know' is not included.)



CHSS also asked, "How would you rate your neighborhood as a healthy place to live?"

**How would you rate your neighborhood as a healthy place to live?** (Percentages may not add to 100 percent because the response 'don't know' is not included.)



7 in 10 Walnut Hills adults rate Greater Cincinnati highly as a healthy place to live.

About half of Walnut Hills adults rate their neighborhood a healthy place to live.



**AMONG ALL ADULTS IN THE REGION:** 71% rated Greater Cincinnati excellent, very good or good as a healthy place to live. Seventy-five percent rated their own neighborhood excellent, very good or good as a healthy place to live in 2017.



# HOUSING

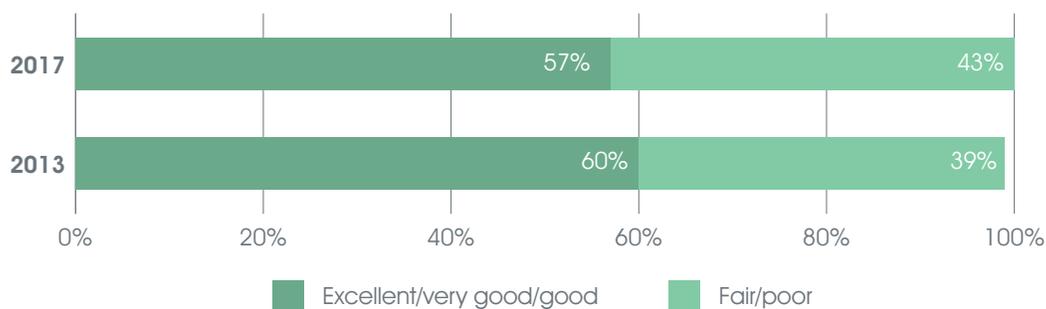
## Nearly 6 in 10 Walnut Hills adults rate neighborhood homes highly; nearly 8 in 10 rate own home highly

The condition of people's homes and the homes in their neighborhood can have an impact on their health.

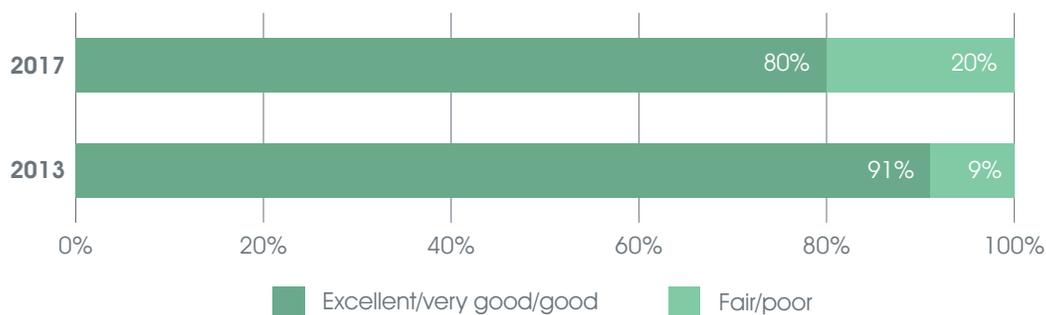
CHSS asked, "How would you rate the condition of the houses and apartments in your neighborhood?" and "How would you rate the condition of the house or apartment where you live?"

About 6 in 10 Walnut Hills adults rate neighborhood homes highly, 8 in 10 rate own home highly.

### Condition of houses and apartments in neighborhood



### Condition of own house or apartment



**AMONG ALL ADULTS IN THE REGION:** 83% rated houses and apartments in their neighborhood as excellent, very good, or good. Ninety percent rated their own home as excellent, very good or good in 2017.



2600

# ACCESS & BARRIERS TO CARE

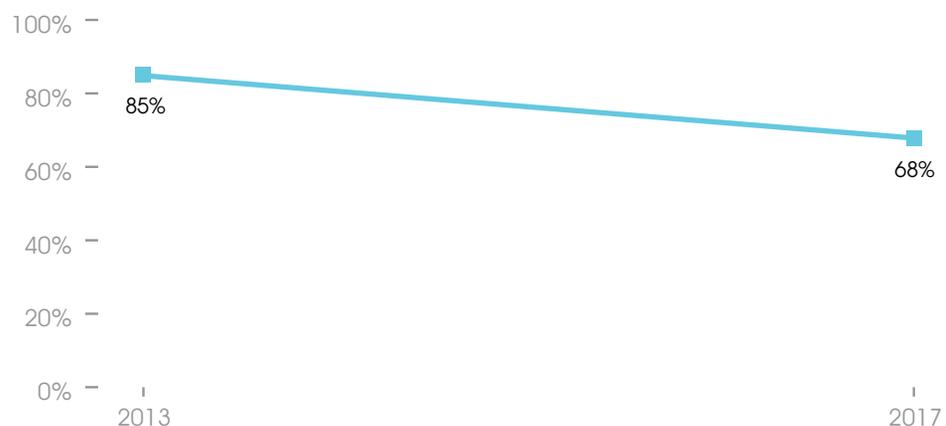
## Nearly 7 in 10 Walnut Hills adults have a usual and appropriate source for care

One essential element for maintaining good health is regular visits with a doctor or other health care provider. Ideally, patients see the same provider or practice over time so they can receive coordinated, comprehensive health care and preventive health guidance.

*CHSS asked adults whether they had a usual source for health care, and where. A private doctor's office, community-based health center, clinic at a retail store or hospital outpatient department are considered appropriate sources of care.*

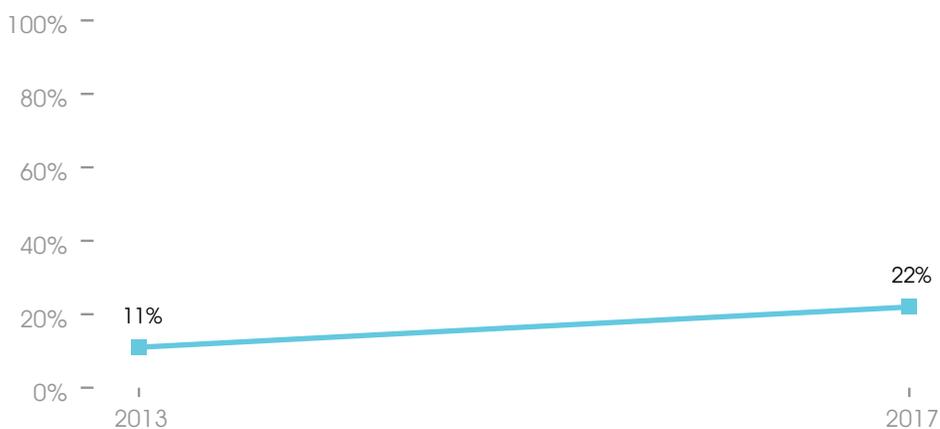
The percentage of Walnut Hills adults reporting a usual and appropriate source of care **DROPPED** in 2017.

### Walnut Hills adults who have a usual and appropriate source of care



In 2017 adults throughout the region were less likely than in previous years to report a usual and appropriate source of care. This was the first time CHSS has collected these data since the Affordable Care Act (ACA) was implemented in 2014. Many adults in the region who had previously been uninsured gained insurance through the ACA. Research suggests that newly insured adults may not be as settled into a preventive health care routine.<sup>21</sup> This may be one explanation for why the percentage of adults with a usual source of care in our region has decreased.

### Walnut Hills adults who have no usual source of care



The percentage of Walnut Hills adults with no source of care has **INCREASED** since 2013.

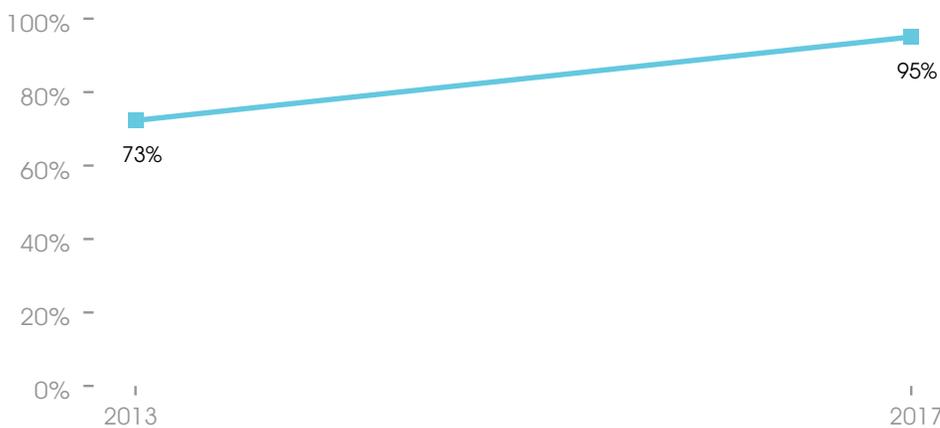
**AMONG ALL ADULTS IN THE REGION:** 71% reported a usual and appropriate source of care in 2017, down from 82% in 2013. Also in 2017, 20% reported no usual source of health care.



### More than 9 in 10 Walnut Hills adults have health insurance

Cost can be a barrier to receiving regular health care. Access to appropriate care helps prevent illness, control outbreaks and manage chronic conditions.<sup>22</sup> People without health insurance are less likely than those with health insurance to get the care they need in a timely manner.

### Walnut Hills adults who are currently insured, all ages



The percentage of Walnut Hills adults who are insured has **INCREASED** since 2013.

**AMONG ALL ADULTS IN THE REGION:** 92% of all adults had health insurance in 2017.

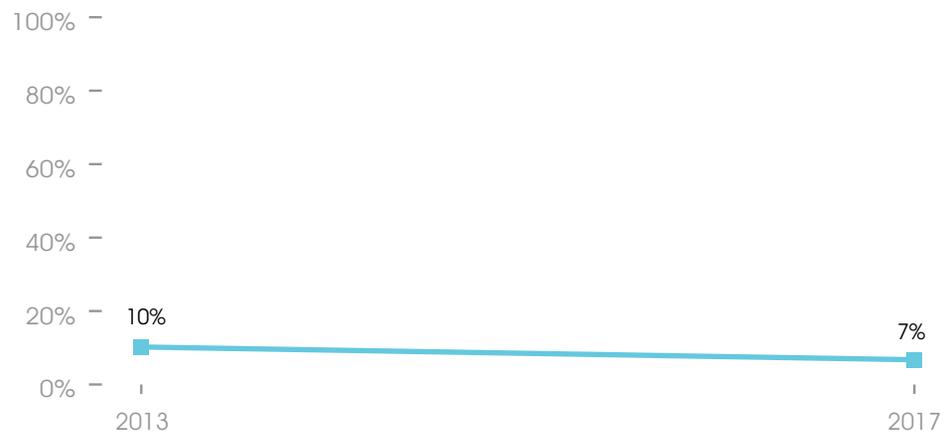


## Fewer than 1 in 10 Walnut Hills adults delayed care due to cost

Even with insurance, health care can be expensive. CHSS asked adults if they had delayed or gone without a doctor's care in the past 12 months because they needed the money to buy food, clothing or to pay for housing.

*CHSS asked, "During the last year, did any household member not receive a doctor's care because the household needed the money to buy food, clothing or to pay for housing?"*

### Percentage of Walnut Hills adults who said a member of their household went without a doctor's care in the past year because they needed the money for something else



The percentage of Walnut Hills adults delaying care in 2017 has remained steady since 2013.



**AMONG ALL ADULTS IN THE REGION:** 8% did not receive care in the past year due to cost in 2017.



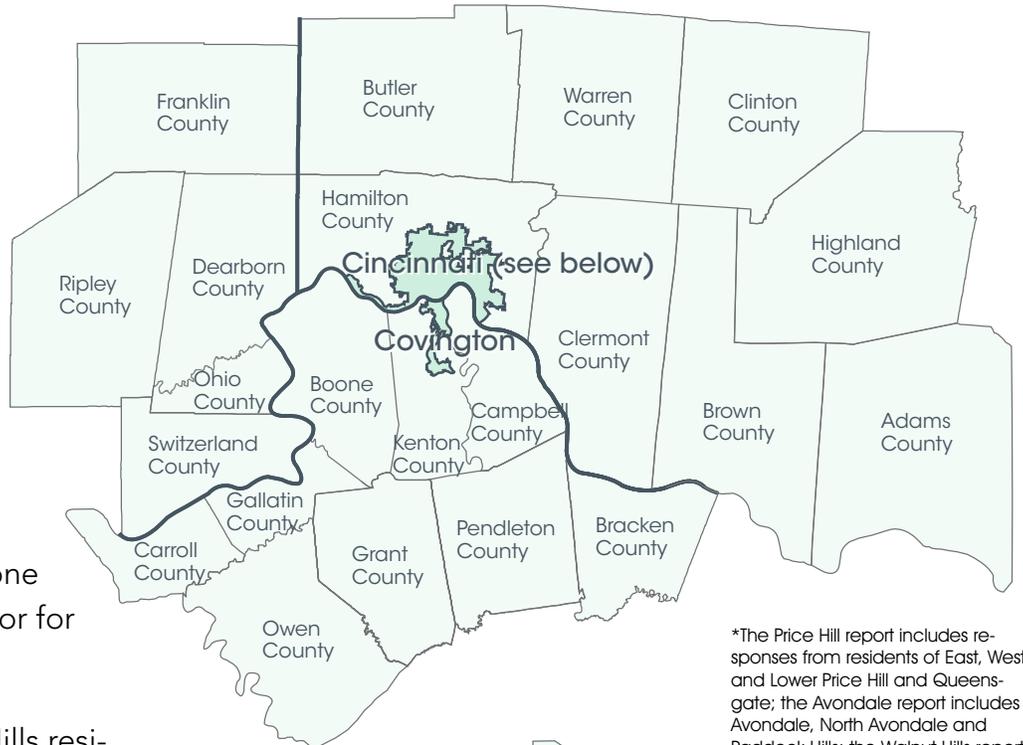
# ABOUT THE SURVEY

The *Community Health Status Survey (CHSS)*, a project of Interact for Health, is conducted by the Institute for Policy Research at the University of Cincinnati. A total of 4,929 randomly selected adults residing in the counties at right were interviewed by telephone between Aug. 10, 2016, and March 8, 2017. This included 1,906 landline interviews and 2,355 cell phone interviews. The margin of error for the overall survey is  $\pm 1.5\%$ .

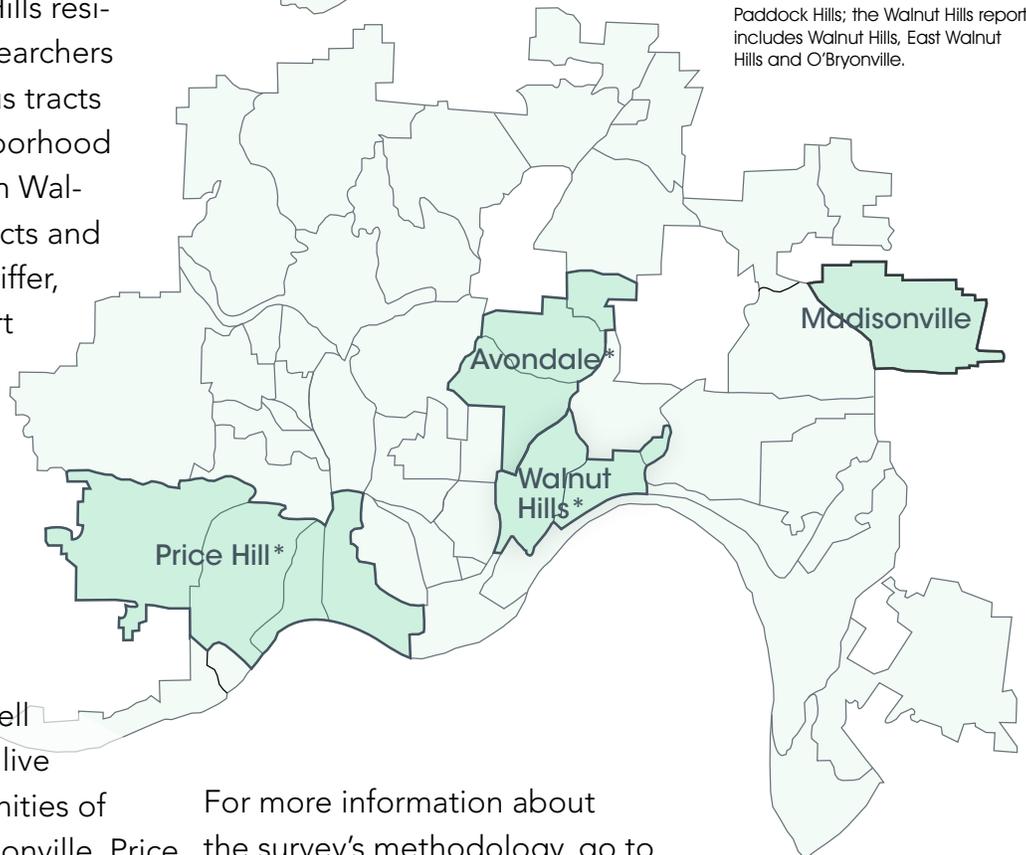
For this report, 215 Walnut Hills residents were interviewed. Researchers contacted residents in census tracts corresponding to the neighborhood and asked them if they live in Walnut Hills. Because census tracts and neighborhood boundaries differ, the survey area for this report extended into East Walnut Hills and O'Bryonville. The margin of error for the Walnut Hills sample is  $\pm 6.7\%$ .

Reports in this series examine the health of African Americans and Latinos, as well as the health of people who live in the Place Matters communities of Avondale, Covington, Madisonville, Price Hill and Walnut Hills.

Survey region of the CHSS (darker regions indicate oversample areas)



\*The Price Hill report includes responses from residents of East, West and Lower Price Hill and Queensgate; the Avondale report includes Avondale, North Avondale and Paddock Hills; the Walnut Hills report includes Walnut Hills, East Walnut Hills and O'Bryonville.



For more information about the survey's methodology, go to [www.interactforhealth.org/aboutchss2017](http://www.interactforhealth.org/aboutchss2017).

## OBESITY

1. BMI is calculated by dividing a person's weight in pounds by his height in inches squared and then multiplying that result by 703.

## PHYSICAL ACTIVITY

2. CDC. (2018). Physical Activity Basics. Retrieved February 2018 from <https://www.cdc.gov/physicalactivity/basics/index.htm>.
3. Kwarteng, J. L., Schulz, A. J., Mentz, G. B., Zenk, S. N., & Opperman, A. A. (2013). Associations between Observed Neighborhood Characteristics and Physical Activity: Findings from a Multiethnic Urban Community. *Journal of Public Health, 36*(3), 358-367.
4. Chau, J.Y., Grunseit, A.C., Chey, T., Stamatakis, E., Brown, W.J., Matthews, C.E.,...Ploeg, H.P.(2013). Daily Sitting Time and All-Cause Mortality: A Meta-Analysis. *PLoS One, 8*(11). Doi: 10.1371/journal.pone.0080000.
5. Biswas, A., Oh, P.I., Faulkner, G.E., Bajaj, R.R., Silver, M.A., Mitchell, M.S., & Alter, D.A. (2015). Sedentary Time and Its Association with Risk for Disease Incidence, Mortality, and Hospitalization in Adults. *Annals of Internal Medicine, 16*, 123-132.
6. Craig, C.L., Marshall, A.L., Sjostrom, M., Bauman, A.E., Booth, M.L., Ainsworth, B.E...Oja, P. (2003). International physical activity questionnaire: 12-country reliability and validity. *Med Sci Sports Exerc 35* (8): 1381-95. Full instrument at <https://sites.google.com/site/theipaq/home>.

## DIET AND FOOD ACCESS

7. United States Department of Agriculture. (2016). Why is it important to eat vegetables? Retrieved February 2019 from <https://www.choosemyplate.gov/vegetables-nutrients-health>.
8. U.S. Department of Health and Human Services and U.S. Department of Agriculture. 2015-2020 Dietary Guidelines for Americans, 8th Edition. December 2015. Retrieved from <https://health.gov/dietaryguidelines/2015/guidelines/>.
9. U.S. Department of Health and Human Services and U.S. Department of Agriculture. 2015-2020 Dietary Guidelines for Americans, 8th Edition. December 2015. Retrieved from <https://health.gov/dietaryguidelines/2015/guidelines/>.
10. Mozaffarian, D., Hao, T., Rimm, E.B., Willett, W.C., & Hu, F.B. (2011). Changes in diet and lifestyle and long-term weight gain in women and men. *N Engl J Med, 364*, 2392-2404.
11. Malik, V.S., Popkin, B.M., Bray, G.A., Despres, J.P., Willett, W.C., & Hu, F.B. (2010). Sugar-sweetened beverages and risk of metabolic syndrome and type 2 diabetes: A meta-analysis. *Diabetes Care, 33*, 2477-2483.
12. De Koning, L., Malik, V.S., Kellogg, M.D., Rimm, E.B., Willett, S.C., & Hu, F.B. (2012). Sweetened beverage consumption, incident coronary heart disease, and biomarkers of risk in men. *Circulation, 125*, 1735-1741.

13. Fung, T.T., Malik, V., Rexrode, K.M., Manson, J.E., Willett, W.C., & Hu, F.B. (2009). Sweetened beverage consumption and risk of coronary heart disease in women. *Am J Clin Nutr, 89*, 1037-1042.

## FOOD INSECURITY

14. United States Department of Agriculture. Economic Research Service. (2016) Definitions of Food Security. Retrieved from <http://bit.ly/2nkSgcW>.
15. Gregory, C.A. and Coleman-Jensen, A. (2017). Food insecurity, chronic disease, and health among working age adults. ERR-235. U.S. Department of Agriculture, Economic Research Service.

## SMOKING

16. Jha, P., Ramasundarahettige, C., Landsman, V., Rostron, B., Thun, M., Anderson, R.N....Peto, R. (2013). 21st-Century hazards of smoking and benefits of cessation in the United States. *New England Journal of Medicine 368* (4): 341-50.
17. Centers for Disease Control and Prevention. (2017). Secondhand Smoke. Retrieved June 15, 2017, from [https://www.cdc.gov/tobacco/basic\\_information/secondhand\\_smoke/index.htm](https://www.cdc.gov/tobacco/basic_information/secondhand_smoke/index.htm).

## STRESS

18. American Psychological Association. (n.d.). Stress effects on the body. Retrieved Aug. 1, 2017, from <https://www.apa.org/help-center/stress/index>.
19. National Institute of Mental Health. (n.d.). 5 things you should know about stress. Retrieved Aug. 1, 2017, from [www.nimh.nih.gov/health/publications/stress/index.shtml](http://www.nimh.nih.gov/health/publications/stress/index.shtml).

## COMMUNITY SUPPORT

20. Reblin, M., & Uchino, B. N. (2008). Social and Emotional Support and its Implication for Health. *Current Opinion in Psychiatry, 21*(2), 201-205. <http://doi.org/10.1097/YCO.0b013e3282f3ad89>.

## ACCESS &amp; BARRIERS TO CARE

21. Garfield, R. and Young, K. (2015) "How Does Gaining Coverage Affect People's Lives? Access, Utilization, and Financial Security among Newly Insured Adults." Retrieved May 16, 2017, at <https://www.kff.org/health-reform/issue-brief/how-does-gaining-coverage-affect-peoples-lives-access-utilization-and-financial-security-among-newly-insured-adults/>.
22. National Center for Health Statistics. (2017, February). Health Insurance and Access to Care. Retrieved July 1, 2017, from [https://www.cdc.gov/nchs/data/factsheets/factsheet\\_hiac.pdf](https://www.cdc.gov/nchs/data/factsheets/factsheet_hiac.pdf).

