# RHP 17 REGIONAL <br> HEALTH ASSESSMENT 2013 

## SUPPLEMENTAL REPORT: LEON COUNTY

PREPARED BY:

SCHOOL OF RURAL PUBLIC HEALTH

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## INTRODUCTION

The RHP 17 Regional Health Assessment, conducted by the Center for Community Health Development (CCHD) at the School of Rural Public Health (SRPH), covers the nine-county region of south-central Texas consisting of Brazos, Burleson, Grimes, Leon, Madison, Montgomery, Robertson, Walker, and Washington Counties. The Executive Report provides comprehensive descriptions of methodology, as well as regional findings. The supplemental reports are intended to provide specific regional and county-level data.

This report presents the health status assessment findings for Leon County. Most data and comparisons given will be compared to the Brazos Valley region (the seven counties comprising the Brazos Valley), the state, or the nation. For specific regional-level data, please refer to the regional Executive Report. Unless otherwise noted, the data presented are for Leon County respondents.

## FINDINGS

## Community Discussion Groups

Seven community discussion groups (CDGs) were conducted in Leon County with 63 total participants. Those participating represented the diversity of the county's population; attendees were 23.8 percent male and 76.2 percent female, and 74.6 percent White/Caucasian, 20.6 percent Black/African American, and 3.2 percent Hispanic/Latino. These discussion groups were conducted in February, March, and April 2013. Four audiences were targeted to attend these open meetings to provide a forum for community members to discuss various issues, challenges, and resources in their community related to health: key community leaders, health care providers, social service providers, and the general public (i.e., residents) of Leon County. Discussion groups were held at several donated locations throughout Leon County, including:

- Buffalo Civic Center,
- Leon County Community Health Center,
- St. Joseph Normangee Clinic,
- Leon County Annex, and
- Oakwood Church of Christ.


## Community

Leon County is described by its residents as a rural community that, while large and spread out in land mass, is very close knit, well-connected, and filled with friendly, caring, and supportive community members. Many mentioned that the county is traditional and rich in history, with families residing locally for many generations. However, some residents voiced that due to the community's deep roots and strong sense of tradition, it can be hard for new residents to penetrate existing networks and to feel connected to the rest of the community.

The county was also described as one that is steadily growing, with a substantial increase in the older adult population. The location and features of the county are attractive for retirees who move from the bigger cities in search of a more relaxed environment and lower crime rates. In addition to retirees, Leon County also attracts those interested in hunting, the oil and gas industry, and families who own property and ranches in the area. These families frequent the county on weekends and during holidays.

Discussion group participants highlighted the economic infrastructure of the county, mentioning that it is agriculturally-driven and that the community has many agriculture-related businesses that support local farmers. They said that the local business community works well together and that community members in general are supportive of local businesses. In contrast, some community members feel that it can be hard for new businesses to come in due to resistance to change, even though more businesses are needed for the continued development and growth of the county.

While there is an evident increase in the older adult population, many residents mentioned a decrease in the younger population and attributed this decline to the lack of available jobs in the county. Despite the presence of a younger generation of migrant workers within the county, the perception of a general decrease in the younger population overall persists.

## Community Issues \& Challenges

Several themes emerged from the discussion of community issues. One of the primary themes many residents emphasized was infrastructure concerns. Leon County is geographically large and has several cities and towns dispersed across the county. Residents are also unevenly dispersed across the county, which makes centralizing resources difficult without excluding communities. The lack of public transportation further compounds this issue for residents who cannot travel to certain parts of the county where resources and/or services are available. Other issues mentioned related to infrastructure included: the condition of county roads, lack
of a police force, lack of affordable housing, and technological issues related to television, internet, and cell phone services.

Communication is another theme that emerged across discussion groups. Community members stated that the lack of a local radio or television station contributes to the communication problems within the county. Residents mentioned that while local newspapers exist, they are not uniformly available across the county and many people still miss out on information. Other discussion group participants described the underutilization of resources within the community as an issue related to communication, stating that if there were better communication about the availability of those resources, more community members would use them.

A third major issue cited by residents was access to care; there are no local hospitals or facilities for emergency treatment and very few local physicians. Community members expressed their dissatisfaction with the need to travel far distances for services; many residents reported having difficulty accessing needed services due to the inadequacy of the current transportation system. It was also mentioned that local needs outstrip the available resources in the area. As a result, specific populations such as veterans and those with mental health conditions suffer. While many participants discussed access in the context of being physically unable to travel to needed services, others discussed affordability as a barrier to accessing care, stating that some services are just too expensive and health care coverage is too minimal.

Given the large population of retirees and older adults in the community, discussion group participants repeatedly expressed concern about the needs of this population, especially the lack of resources and services available for older adults and their caregivers. In particular, several discussion group members mentioned the need for respite care and senior recreational activities in the county.

Discussion groups also focused on specific health concerns: substance abuse, diabetes, and obesity were mentioned multiple times across the county. Substance abuse problems were said to be exacerbated by the lack of available counseling and rehabilitation services in the county. Diabetes was attributed to the large population of obese residents, and obesity was attributed to the lack of available recreational opportunities within the county.

Participants said their community as a whole lacks sufficient opportunity for physical activity; residents reported few outdoor places like parks and designated walking areas, no gyms or fitness centers, and limited structured exercise opportunities. Beyond the lack of physical activity options, residents mentioned a lack of recreational opportunities within the county. In particular, this was said to be a problem for the youth of the county who are often left with idle time. Residents perceived that the lack of recreational activity options is correlated with the teen pregnancy rate within the county. Residents stated that teen pregnancy is an issue for
which the county has limited resources; there is a need for education regarding reproductive health, parenting, nutrition, and child development.

A final theme that arose was the need for further economic development within the county. Residents said that there is a need for businesses to come into the county so that more people can become employed locally. Many Leon County citizens currently travel for work in places such as Bryan/College Station and Huntsville, but other residents do not have this option due to transportation issues. As described earlier, the lack of available jobs in the county is seen as a reason for the younger population leaving the county. This out-migration of young people was also said to create a less diverse community.

## Resources

Despite the many challenges and issues identified, residents were also able to pull together an elaborate list of community resources. The community's emergency response organizations and outlets were mentioned as major resources. Specific organizations such as the Citizen's Emergency Response Team (CERT) and EMS crews such as the fire department, as well as the use of Amber Alerts, Senior Alerts, Reverse 911, and amateur (Ham) radio to communicate information about emergencies to residents were all seen as valuable community assets.

Throughout all of the discussion groups, participants referenced several community-based organizations that serve the county. Some of the organizations mentioned included the Domestic Violence Advocates and Safe House, Child Protective Services, Helping Hands of Oakwood, Mental Health Mental Retardation Authority of Brazos Valley, Sexual Assault Resource Center, senior centers, the Leon County Community Resource Coordination Group, and the Center for Community Health Development at Texas A\&M School of Rural Public Health. There was an overwhelming perception of the community's food distribution locations as being major community resources, namely Meals on Wheels, East Texas Food Bank, and the Lord's Pantry.

Health care organizations were also described as community assets and especially valuable to low-income and medically indigent populations within the county. Residents mentioned the Leon County Health Resource Center as a resource for transportation and mental health services, the Leon County Community Health Center as a resource for the availability of health care services at low costs, and the Department of State Health Services for providing a clinic and public health nurse. Lastly, the nursing homes within the county were said to be great assets as well.

In addition, the county's economic infrastructure was said to be a resource. Residents praised local businesses for being giving, the Chamber of Commerce and economic development offices for being very active, and local amenities such as Fort Boggy State Park and hunting venues for bringing people and revenue into the county. Other resources mentioned include schools, the Brazos Valley Transit, and churches.

Human capital in the form of community leaders and volunteers is also a tremendous resource in Leon County. Participants said that there is a core group of volunteers that assist with almost every initiative in the community; youth volunteers are very active in the county as well. While Leon County boasts an active group of volunteers, it was mentioned that these volunteers are often over-extended. Residents inferred that there are likely more residents who want to volunteer, but who are afraid to get involved because they are not approached with the opportunity. This is an untapped resource that could be a major help for the community.

## Household Survey

The household survey was developed and pilot tested by the Survey Committee (see Regional Report for more details). As typical in survey research, those who actually responded to the survey disproportionately represented older residents, Caucasians, and those more educated and affluent. To balance some of this bias, the analysis was performed on scientifically weighted data, weighting the responses to match the age and gender distribution by county based on current Census estimates. Even with the weighting, however, we also know by comparison to Census estimates that the current sample under-represents low-income residents. This should be considered when interpreting the results; what the survey analysis likely indicates is a more positive reflection of the community than actually exists. Regardless, the data provides us a useful snapshot of what residents are currently experiencing. This survey was used to collect comprehensive information regarding factors affecting health status from a random sample of RHP 17 residents, with 241 surveys completed in Leon County. What follows are the results from those Leon County surveys.

## Demographics

Age and Gender
The mean age of survey respondents from Leon County was 52.6 years. Leon County has an older population in comparison to the rural Brazos Valley, the Brazos Valley region, Texas, and the U.S. Figure 1 illustrates the age distribution for Leon County compared to the Brazos Valley region, the rural Brazos Valley counties, Texas, and the U.S.

Figure 1. Age distribution of Leon County, rural Brazos Valley counties, the Brazos Valley region, Texas, and U.S. ${ }^{1}$


## Race and Ethnicity

Survey respondents were asked to indicate the racial or ethnic group they felt best described them. A majority of Leon County survey respondents identified themselves as White/Caucasian (91.8\%), 3.9 percent indicated Black/African American, two percent Hispanic/Latino, and 2.4 percent reported Other. Comparing these figures to 2011 Census estimates indicates that minority groups are underrepresented in this survey sample. Figure 2 shows the racial/ethnic distribution of Leon County survey respondents.

[^0]Figure 2. Racial/ethnic distribution of survey respondents in Leon County, rural Brazos Valley counties, Brazos Valley region, Texas, and U.S. ${ }^{2}$


## Marital Status

The majority of Leon County survey respondents reported being married (72.9\%); 5.2 percent were widowed; 9.5 percent reported being separated or divorced; 9.6 percent reported their marital status as single (never married); and 2.9 percent indicated they were unmarried, living with a partner. In comparison, 49.6 percent of Texas residents and 48.3 percent of U.S. residents are married; a third (31.4\% in Texas and 32.5\% in the U.S.) of residents are single, while 13.7 percent of Texas residents and 13.2 percent of U.S. residents are separated or divorced. The remaining proportion of residents in Texas and the U.S. are widowed ( $5.2 \%$ and $6 \%$ respectively).

## Household Composition

The mean household size for Leon County survey participants was 2.8 persons, mirroring the state mean and approximating the national mean (2.6). Among respondents, 31.8 percent reported having children under 18 years of age living in their household. Statewide, 61.1

[^1]percent of households do not have children, and nationally, 64.4 percent of households are childless.

The survey also asked respondents how many people in their household earned wages that contributed to their household income. In response, 18.6 percent reported that no one living in the household was contributing to the household income, which reflects many of the concerns heard in the discussion groups about lack of employment opportunities. Forty-five percent of respondents said only one person contributed to the household income, while 34.8 percent said two people contributed to the household income, and only 1.7 percent said three people contributed.

## Education

Education is an important social factor that influences health status. The mean years of education for survey respondents in Leon County is 13.6, the equivalent of a high school diploma plus almost two years of college. Among survey participants, seven percent reported not completing high school, while 38.7 percent received their high school diploma, and 54.2 percent proceeded to complete at least some college credit. In comparison, 19.6 percent of Texans over the age of 25 did not complete high school, and nationally, this figure is 14.6 percent ${ }^{3}$. Figure 3 presents a comparison of educational attainment for Leon County compared to the rural Brazos Valley, the Brazos Valley Region, Texas, and the U.S.

[^2]Figure 3. Educational attainment in Leon County, rural Brazos Valley counties, the Brazos Valley region, Texas, and U.S. ${ }^{4}$


## Employment

Among Leon survey respondents, 44.9 reported they were currently employed. Of those who were employed, the vast majority said they only had one employer ( $87.8 \%$ ), 11 percent said they had two employers, and another 1.1 percent reported three or more employers.

According to the U.S. Bureau of Labor Statistics, the unemployment rate for the State of Texas was 6.5 percent in May 2013. Locally, the Texas Workforce Commission reports that the unemployment rate for Leon County in May 2013 was 6.7 percent. May 2013 rates were used to provide a more accurate comparison to the survey data, collected between February and July.

Of the participants who reported they were not currently employed, 45.5 percent said they were retired, 20.5 percent said they were full-time homemakers, 17.1 percent were disabled

[^3]and unable to work, and 17.1 percent were laid off or unemployed. Figure 4 illustrates the responses of participants who were not currently employed.

Figure 4. Percentage of responses regarding work situation if not currently employed


## Household Income

Among survey respondents in Leon County, the median household income was $\$ 44,770$ for 2012, which is lower than census estimates for Texas $(\$ 50,920)$ and the US $(\$ 52,762)$.

The Federal Poverty Guidelines set the federal poverty level (FPL) for 2012 at $\$ 23,050$ for a family of four. Among the survey respondents, 17.4 percent reported incomes at or below FPL, with another 24.4 percent between 101 and 200 percent FPL , which is generally considered low-income. Figure 5 compares the poverty status for Leon County survey respondents compared to other rural Brazos Valley counties, the Brazos Valley Region, Texas, and the U.S.

Figure 5. Poverty status for survey respondents in Leon County, rural Brazos Valley counties, the Brazos Valley region, Texas, and U.S. ${ }^{5}$


## Military Service

With a growing number of veterans and their unique health needs, the survey committee thought it wise to ask about military service. Among survey respondents, 12.6 percent reported ever having served in any branch of the United States Armed Forces, while none of those who completed the survey identified themselves as currently being active duty in the military. Of Leon County residents who reported having served in the U.S. Armed Forces, 31.8 percent reported serving in an active duty war zone. There are $1,618,413$ veterans in Texas, representing approximately six percent of the population.

## Health Status

The first four questions in the survey are taken from the Health Related Quality of Life scale developed and tested by the Centers for Disease Control and Prevention (CDC). These are simple, but powerful indicators of functional health status and its impact on daily life.

[^4]The first question simply asked respondents to rate their health; the possible responses were excellent, very good, good, fair, and poor. In Leon County, 12.3 percent of respondents indicated their health was excellent, and 36.6 percent said their health was very good. In contrast, 15.2 percent indicated their health was fair, and 4.6 percent said their health was poor. In comparison to the 2010 health assessment, the proportion reporting their health as excellent is slightly smaller, while the numbers for very good, fair and poor are slightly larger. Figure 6 compares self-reported health status for Leon County, rural Brazos Valley counties, the Brazos Valley Region, Texas, and the U.S.

Figure 6. Self-reported health status in Leon County, rural Brazos Valley counties, the Brazos Valley region, Texas and U.S. ${ }^{6}$


The second question asked how many days of the past 30 days was the respondent's physical health not good. Among Leon County respondents, the mean number of poor physical health days was 5.9, which is higher than the region (3.7). Leon County respondents were tied for the largest mean number of poor physical health days. Nearly one-quarter of respondents (24.4\%)

[^5]reported between one and five days of poor physical health in the past month. Compared to the other Brazos Valley counties, Leon County had the second largest percentage of respondents (22.1\%) that indicated more than 10 days of poor physical health. In contrast, 63.3 percent of Texans reported no days of poor physical health, with a 19.5 percent reporting between more than five days of poor physical health each month.

Similar to the previous question, the next question asked how many days of the past 30 days was the respondent's mental health not good. Among Leon County respondents, the mean number of poor mental health days was 4.2, which is about the same for the region (4.0). Over 27 percent of respondents reported between one and five days of poor mental health in the past month. Disturbingly, 16.7 percent indicated more than 10 days of poor mental health. In addition, 26.3 percent reported having been diagnosed with depression and 22.3 percent with anxiety. The self-reported depression rates are higher than the overall depression rates for Texas (8.6\%). Among Texans, 66.3 percent reported no days of poor mental health, and 14.4 percent reported experiencing between one and five days of poor mental health. Given the persistent lack of mental health services available in the region, these numbers are cause for concern.

Feelings of anxiety and depression are also important indicators residents' mental health. Table 1 shows common problems that residents reported bothering them over the past two weeks.

Table 1. Common mental health problems among Leon County respondents

| Type of Mental Health Problem | Percentage of <br> Leon County <br> Respondents | Percentage of <br> Brazos County <br> Respondents | Percentage of <br> Brazos Valley <br> Region <br> Respondents |
| :--- | :---: | :---: | :---: |
| Becoming easily annoyed or irritable | $43.1 \%$ | $44.9 \%$ | $41.7 \%$ |
| Worrying too much about different things | $40.2 \%$ | $44.2 \%$ | $42.2 \%$ |
| Feeling nervous, anxious, or on edge | $39.1 \%$ | $43.2 \%$ | $41.6 \%$ |
| Trouble Relaxing | $39.1 \%$ | $38.7 \%$ | $37.2 \%$ |
| Little interest or pleasure in doing things | $34.6 \%$ | $31.1 \%$ | $31.1 \%$ |
| Not being able to stop or control <br> worrying | $31.8 \%$ | $25.4 \%$ | $23.7 \%$ |
| Being so restless that it is hard to sit still | $24.5 \%$ | $25.1 \%$ | $25.1 \%$ |
| Feeling down, depressed, or hopeless | $21.2 \%$ | $24.7 \%$ | $25.8 \%$ |
| Feeling afraid as if something awful might <br> happen | $17.2 \%$ | $21.2 \%$ | $19.7 \%$ |

The fourth question in this set sought to understand the extent to which physical and mental health limited one's daily activities. It asked respondents how many days of the past 30 days did poor physical or mental health keep them from their usual activities. In Leon County, the mean number of days in which usual activities were limited by poor physical or mental health was 3.0 , which is about the same as the regional mean (2.9). Over 36 percent of respondents reported some interruption of their usual activities, with 18.6 percent indicating between one and five days, four percent reporting six to 10 days, and 10.5 percent reporting more than 10 days. In comparison, 27.7 percent of Texans reported between one and five days of limited activities and 12.2 percent reported six or more days of limited activities due to poor physical or mental health.

Many residents reported being limited in their activities due to an impairment and/or health problem. Commonly reported issues are listed in Table 2. Participants could identify more than one impairment; therefore, percentages in the table are the percentages of the total number of responses instead of the percentage of respondents who reported the impairment.

Table 2. Major impairments or health problems among Leon County responses

| Major Impairment or Health Problem | Percentage of Leon County <br> Responses |
| :--- | :---: |
| Back or Neck problem | $15.7 \%$ |
| Cardiovascular issues (heart problems, hypertension, <br> high blood pressure) | $15.7 \%$ |
| Arthritis/rheumatism | $8.3 \%$ |
| Fractures, bone/joint injury | $8.3 \%$ |
| Diabetes | $7.4 \%$ |
| Problems with balance or falling | $6.6 \%$ |
| Eye/vision problem | $6.6 \%$ |
| Limited use of arm or leg | $5.8 \%$ |
| Lung/breathing problem | $5.0 \%$ |

The most commonly reported impairments or health problems were related to joint and bone health issues - back or neck problems represented 15.7 percent of the responses, followed by arthritis/rheumatism (8.3\%) and fractures, bone/joint injury (8.3\%). Other commonly reported issues were related to mobility: problems with balance or falling and limited use of limbs together compose 12.4 percent of responses.

For the given impairments and health problems, the duration of having limited activities varied among survey respondents. Pain contributed to respondents' reduced ability to complete their
usual activities, with 50.5 percent of respondents saying they experienced pain once or more in the past 30 days. Of those who did experience pain that impacted activity during the past 30 days, 17.8 percent reported pain for between one and five days, 11 percent had pain between six to ten days, and 21.7 percent reported more than 10 days of pain. Fourteen percent of participants reported their daily activities were limited for less than one year. Daily activities were reported as limited for one to five years by nearly half of respondents (47.6\%). Another 19.1 percent reported limitations for the past six to 10 years and 19.7 percent had limitations to their daily activities for more than 10 years.

In the final question about residents' overall health, respondents' listed a range of days in the past month that they got a sufficient amount of sleep and felt very healthy and full of energy. Almost one-third of participants (31.6\%) reported that they felt they had enough rest or sleep every night of the past 30 days. Twenty-eight percent (28.2\%) of participants reported not feeling rested between one and five days in the past month, 10.4 percent reported the same for between six to ten days, and nine percent reported not having enough rest or sleep for between 11 and 15 days. One in five participants (20.7\%) reported not feeling rested for at least half of the days for the past month.

More than one-third of participants (37.2\%) reported feeling healthy and full of energy for at least 21 days of the past month. Twenty-eight percent of participants reported feeling good for 11 to 20 days of the past month and 15.8 percent did not feel very healthy and full of energy for at least one third of the month. Disturbingly, 18.4 percent reported never feeling healthy or full of energy.

## Risk Factors

Several sets of survey questions asked about health behaviors or characteristics that often place individuals at greater risk of disease or injury. The risk factors of interest are those that individuals can sometimes control or manage to prevent development of related illnesses or complications.

## Obesity

Being overweight or obese increases an individual's risk for developing many chronic diseases and other conditions such as depression and chronic pain. The way that overweight and obesity is typically assessed is through the calculation of the body mass index (BMI), which is a simple ratio of weight to height $\left(\mathrm{kg} / \mathrm{m}^{2}\right)$. This measure does not account for individual variations in bone mass or muscle mass, but is a good general indicator of weight status for the population.

The National Institutes of Health have published the following guidelines:

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Underweight = BMI score < 18.5
Normal weight = BMI score between 18.5-24.9
Overweight = BMI score between 25-29.9
Obese = BMI score between 30 and 34.9
Morbidly Obese = BMI score \geq35
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In Leon County, only 31.5 percent of residents were assessed to be at a normal weight for their height. The majority of survey respondents were overweight or obese; about one-third were overweight (33.4\%), nearly one in five was obese (17.1\%), and alarmingly, 17.7 percent were morbidly obese. Given the number and types of conditions that are related to obesity, these statistics are cause for concern in this community.

## Nutrition

Nutrition is an important aspect of achieving and maintaining a healthy weight and overall health. Accordingly, the survey asked questions about individuals' grocery shopping and eating habits.

In Leon County, one-quarter of residents do their grocery shopping within 10 miles of the community where they live ( $25.2 \%$ ); this is lower than the 76.8 percent reported in the Brazos Valley. The mean distance Leon County residents travel to buy groceries is 28.8 miles, much higher compared to the regional average of 8.9 miles traveled by other residents in the Brazos Valley.

Concerns about the economy have a pronounced impact on residents' overall nutrition. Across Leon County, 17.2 percent of respondents said that sometimes or often, the food they bought did not last and they did not have money to get more, and 9.2 percent reported not being able to afford to eat complete meals sometimes or often. Twelve percent reported eating less than they should because there was not enough money for food, while 6.9 percent reported skipping meals because of financial concerns. These rates were higher than the rates reported for the Brazos Valley.

Additionally, food pantries and food banks serve over one in 10 members of the community; 12.4 percent of residents reported receiving food from a food pantry or food bank in Leon County in the past six months compared to 4.7 percent of residents throughout the Brazos Valley.

## Physical Activity

Physical activity is also a key aspect of maintaining a healthy weight and good health. The National Institutes of Health recommend 150 minutes of moderate or 75 minutes of vigorous
physical activity each week, in addition to engaging in strengthening exercises twice weekly. Across Leon County, only 52.3 percent of respondents meet this recommendation, while 19.4 percent reported they rarely do any physical activity. These rates are slightly worse than the rates found across the Brazos Valley.

The survey also sought to assess Leon County residents' sedentary time. In a seven day period, respondents reported sitting an average of 318.9 minutes ( 5.3 hours) on weekdays and 291.8 minutes ( 4.9 hours) on weekends. Overall, Leon County residents reported sitting about the same amount of time on average compared to the region.

In addition to obesity, nutrition, and physical activity, several other behavioral risk factors are key determinants of subsequent health and safety issues.

## Cigarette Smoking

Slightly better than the State of Texas (19.2\%) and the U.S. (19.3\%) , 15.2 percent of Leon County survey respondents report being a current smoker, most of whom (96.8\%) smoke a pack of cigarettes or less per day. In addition, some Leon County residents (5.7 \%) reported using other tobacco products, including chewing tobacco, snuff, or dip.

## Substance Use \& Abuse

When asked about their alcohol consumption habits, more than half of Leon County survey respondents (53.7\%) reported that they do not drink alcohol in a typical week. Nearly one in three (32.8\%) said that they typically consume one to five alcoholic drinks in a week. The percentage of respondents who reported having driven after drinking at least two drinks in the past month is 2.5 .

In the past 30 days (2.8\%) and in the past year (5.3\%), few Leon County residents reported using prescription medications for nonmedical reasons or not as prescribed. Reported rates of marijuana consumption were 3.7 percent for both the past 30 days and past year, while no Leon County respondents reported consuming other illegal drugs in that time period.

## Chronic Diseases and Conditions

Survey respondents were asked to report if they had ever been diagnosed with a list of chronic diseases/condition by a health care provider. The six most frequently reported conditions for Leon County survey respondents were:

1) Hypertension (high blood pressure) $49.2 \%$
2) High Cholesterol 44.4\%
3) Overweight/obesity 41.2\%
4) Arthritis or rheumatism 28.0\%
5) Anxiety 26.3\%
6) Depression 22.3\%

Only 41.2 percent of respondents reported being told by a health care professional that they were overweight or obese, yet when calculating BMI from reported heights and weights of respondents who had not been diagnosed as such, 50.6 percent of respondents are overweight or obese. Of undiagnosed respondents, 40.9 percent were overweight, 8.6 percent were obese, and 1.1 percent were morbidly obese. This raises serious concern regarding doctor patient communication with respect to health weight, overweight and obesity.

These disease rates are not surprising given the proportion of obesity and older adults in Leon County. Table 3 provides the rates of several commonly reported chronic conditions, with comparisons to the region, and the U.S.

Table 3. Chronic condition rates for Leon County, Brazos Valley and U.S.

| Disease/Condition | Leon <br> County | Brazos <br> Valley | U.S. ${ }^{7,8,9}$ |
| :--- | :---: | :---: | :---: |
| Anxiety | $22.3 \%$ | $23.7 \%$ | $17 \%$ |
| Arthritis/Rheumatism | $28.0 \%$ | $19.9 \%$ | $22 \%$ |
| Asthma | $13.1 \%$ | $17.3 \%$ | $13 \%$ |
| Cancer (not skin) | $8.9 \%$ | $6.0 \%$ | $8 \%$ |
| Congestive Heart Failure | $5.7 \%$ | $2.9 \%$ | $2 \%$ |
| Depression | $26.3 \%$ | $24.6 \%$ | $12 \%$ |
| Diabetes (type 2) | $12.4 \%$ | $8.4 \%$ | $9 \%$ |
| Emphysema/COPD | $4.4 \%$ | $5.5 \%$ | $2 \%$ |
| High Cholesterol | $44.4 \%$ | $30.3 \%$ | $13 \%$ |
| Hypertension | $49.2 \%$ | $33.9 \%$ | $24 \%$ |
| Overweight/ Obesity ${ }^{10}$ | $68.2 \%$ | $64.5 \%$ | $62 \%$ |
| Stroke | $3.1 \%$ | $1.8 \%$ | $3 \%$ |

The survey asked residents if their health care providers had ever referred them to a chronic disease management programs. The majority of respondents ( $95.8 \%$ ) said no, and only 4.2 percent reported attending a program to prevent or manage a chronic illness.

## Preventive Screenings

The survey also collected information regarding individuals' participation in recommended preventive screenings. Figure 7 summarizes information regarding those who meet general preventive health guidelines.

[^6]Figure 7. Percent of survey respondents meeting preventive guidelines in Leon County


For women, a test for cervical cancer ("Pap test") is recommended every three years beginning at 21 years of age. In Leon County, only 36.6 percent of women report having had a Pap test in the past year, and 37.8 percent indicated their last Pap test was between one and three years ago. An additional 18.4 percent reported having had their last Pap test more than five years ago.

## Health Insurance

The Healthy People 2020 goal for health insurance was that by 2020, every resident would have some type of health insurance. The 2010 Patient Protection and Affordable Care Act ${ }^{11}$ was intended to advance this goal, but currently, many residents are still uninsured. Eighteen percent of Americans under the age of 65 lack health insurance ${ }^{12}$, and Texas ranks last among the 50 states in access to care, with a 24 percent overall uninsurance rate ${ }^{13}$.

[^7]The survey question "What type of health insurance do you have?" allowed for multiple response options to be selected. Among Leon County survey respondents, 17.4 percent reported not having health insurance of any kind-the highest rate of uninsured in the Brazos Valley. None of the participants indicated that they had been uninsured at least one month in the past three years. Figure 8 displays the types of health insurance coverage in Leon County.

Figure 8. Health insurance coverage in Leon County ${ }^{14}$


As illustrated in Figure 8, 42.9 percent of survey respondents reported being covered by a health insurance plan through a current or former employer or union. Relatively small proportions of the population report other sources of coverage.

## Health Resources and Medical Home

Issues with access to health care go deeper than whether one is covered by health insurance or not. The availability of providers and services and the ability to get to those services also influence access.

[^8]In Leon County, 20.3 percent of respondents rated their access to health care as excellent, versus 42.8 percent of respondents in the Brazos Valley.

## Outpatient Care

In terms of having a regular place for care, over three-quarters of Leon County respondents (78.4\%) reported having a provider they considered their regular health care provider. Although some did not indicate having a regular health care provider, 73.2 percent reported a private doctor's office or clinic as the place where they usually go for medical care. For outpatient care, 8.3 percent said a community health center, three percent said a Veterans Affairs clinic, and 2.9 percent named the emergency room of a hospital as a place they usually go for medical care. Of those respondents without health insurance, the percent with a medical home drops to 57.6 percent. Nationwide, 53 percent of uninsured adults had no usual source of care ${ }^{15}$.

## Health Care Utilization

During the past 12 months, Leon County residents accessed a range of venues for their own health care. A majority of residents ( $80.6 \%$ ) reported using a doctor's office or clinic for their health care. In the same time frame, 21 percent respondents reported visiting a hospital emergency room for their own medical care. The most common reason given for visiting an emergency room was having an injury or being very sick (10.4\%).

The survey also asked about residents' health literacy and preparation for medical visits. Among Leon County respondents, only 17 percent fairly often, very often, or always prepare a list of questions for their health care provider. Most residents appear to communicate well with their health care providers, asking questions about medications and treatment, and discussing personal problems (see Table 4).

Table 4. Communication with healthcare providers among Leon County respondents

| Behavior | Never/ <br> Almost Never | Sometimes | Fairly Often/Very <br> Often/Always |
| :--- | :---: | :---: | :---: |
| Ask questions about meds | $13.3 \%$ | $27.1 \%$ | $59.6 \%$ |
| Ask questions about treatment | $9.1 \%$ | $24.3 \%$ | $66.6 \%$ |
| Discuss personal problems | $22.2 \%$ | $24.2 \%$ | $53.7 \%$ |
| Prepare a list of questions | $47.6 \%$ | $35.4 \%$ | $17.0 \%$ |

[^9]
## Delayed Care

With numerous barriers that inhibit access to care, the survey asked respondents about occasions in which they delay seeking the care they need. The most common reason for delaying care in Leon County was cost-related. Other reasons for delaying care included not being able to miss work and not having transportation. In Leon County, almost one-half of respondents (46.2\%) report delaying seeing their health care provider, and 46.1 percent put off obtaining dental care. Additionally, 20.7 percent indicated that they had experienced times when they had to choose between buying food, paying rent or bills, and paying for medications.

## Caregiving

Many residents of Leon County act as caregivers, providing regular care or assistance to a friend or family member at home who has a long-term health problem or disability. During the past month, 18.2 percent of residents reported providing care for at least one person.

The majority of the people being cared for were aged 65 or older ( $88.8 \%$ ); 9.2 percent of respondents reported caring for someone between the ages of 45 and 64. Less than five percent of respondents (1.3\%) reported caregiving for a child between the ages of one and 17. Across the county, 57.2 percent reported caring for a parent or a spouse. The other relationships between caregiver and charge most commonly reported were caring for a child (11.3\%), non-relative (9.3\%), or extended relative (8.9\%).

The survey also asked caregivers how many hours they provided care weekly, how long they had provided care, the areas in which the person they care for most requires help, and how much difficulty they faced in caregiving. Most caregivers (86.5\%) reported providing care between one and two days per week (1-47 hours). An additional 2.8 percent reported providing care between three and six days per week (48-167 hours) and two percent said they cared for someone every day of the week (168 hours). Almost three-quarters of participants had cared for someone for less than five years (48.3\% reported one to five years; 22.9\% reported less than one year). Less than 10 percent of caregivers reported caring for someone for more than 20 years. Caregivers most commonly reported the person they cared for needing assistance in taking care of themselves (31.7\%) with respect to activities of daily living (for example, bathing, eating, and getting dressed) and with mobility (24.4\%).

Across the county, survey participants reported on caregiving's impact on personal finances, time, family, work, relationships, creating stress and health problems. Table 5 displays the reported impact of caregiving on the life of Leon County resident caregivers.

Table 5. Reported difficulties associated with caregiving

| Difficulties associated with caregiving | A lot | Some | A little |
| :--- | :---: | :---: | :---: |
| Affects family relationships | $21.7 \%$ | $22.6 \%$ | $64.7 \%$ |
| Creates/aggravates health problems | $11.5 \%$ | $21.7 \%$ | $66.8 \%$ |
| Creates stress | $18.6 \%$ | $36.7 \%$ | $44.7 \%$ |
| Financial burden | $13.2 \%$ | $26.8 \%$ | $60.0 \%$ |
| Interferes with work | $12.0 \%$ | $26.3 \%$ | $61.8 \%$ |
| Not enough time for self | $20.5 \%$ | $27.1 \%$ | $52.4 \%$ |
| Not enough time for family | $15.3 \%$ | $25.5 \%$ | $59.2 \%$ |
| Other difficulty | $43.4 \%$ | $0.0 \%$ | $56.6 \%$ |

## Transportation

Transportation continues to pose a formidable challenge for all segments of the population and can be a significant barrier when it comes to accessing health care and related services. This issue was mentioned in every community discussion group, regardless of community sector represented.

Given that Leon County lacks a local hospital and has poor access to health care and other resources, the travel times and distances for Leon County residents are substantially longer than the other counties. Among Leon County survey respondents, the median travel distance to medical care was 37.3 miles, and median travel time was 45 minutes. For dental care, the median distance was 35 miles, and travel time was 40 minutes. To fill a prescription, the median distance was 10 miles, and travel time was 15 minutes.

## Housing

For the first time, the 2013 survey asked residents about the condition of their housing. The majority of respondents across Leon County reported living in a one-family home (65\%) or a mobile home (28.6\%). Figure 9 illustrates housing situations for Leon County.

Figure 9. Type of housing in Leon County


Residents reported their buildings' estimated ages as well as how long they had lived there. Most residents (35\%) lived in a building built between 1980 and 1999. Additionally, the condition of respondents' homes varied. Approximately one third (33.9\%) of residents reported living in a building constructed prior to 1980 and slightly less than a third (31.1\%) reported living in a building constructed after 2000. Across the Brazos Valley, more than half of residents (58.7\%) have lived in their current home for less than 10 years. When asked if their residence had experienced a severe problem in the past 12 months, survey respondents described a range of issues listed in Table 6. Across the county, the most reported problem with residents' homes was related to plumbing, heating/cooling, or electricity (going more than 24 hours without service).

Table 6. Severe housing problems reported in Leon County

| Housing problems | Percentage of Leon <br> County Respondents |
| :--- | :---: |
| Plumbing, heating/cooling, electricity | $20.5 \%$ |
| Mice, rats, or cockroaches | $15.7 \%$ |
| Broken windows | $9.7 \%$ |
| Roof problems (such as holes, leaks, or sagging) | $9.3 \%$ |
| Broken plaster or peeling paint (interior) | $8.1 \%$ |
| Holes in the floor | $6.6 \%$ |
| Mold | $5.3 \%$ |

## Community Services

Discussion regarding the health of a community should never be limited to only medical services or health insurance. Numerous social and community issues impact health, and various organizations exist in the community to address these issues.

The current survey included a set of questions asking about individuals' need for and utilization of a broad range of services with response options of did not need, needed and used, and needed but did not use. Although the survey did not gather information on the reasons why people did not get the services they needed, information about needs is still useful.

The top five community services needed (this included needed and used and needed but did not use) as reported by survey respondents were:

1) The care of a medical specialist (41.8\%),
2) Work-related or employment services (23.1\%),
3) Utility assistance (22.5\%),
4) Financial assistance for auto, appliance, or home repair or weatherization (22.5\%), and
5) Information and referral services (15.9\%).

While identifying needs is important, examining gaps in service delivery when people do not get the needed services is also critical. These data offer a snapshot of the top unmet needs in Leon County. Table 7 summarizes the data of those who needed a service but could not get it.

Table 7. Unmet needs in Leon County

| Service Category | Percent Who Needed <br> and DID NOT Get |
| :--- | :---: |
| Child care services (such as information and referral or <br> assistance with payments or child care subsidy) | $86.7 \%$ |
| Utility assistance | $78.4 \%$ |
| Food, meal, and nutrition services (Meals-On-Wheels) | $76.9 \%$ |
| Financial assistance for auto, appliance, or home repair or <br> weatherization | $75.0 \%$ |
| Work-related or employment services | $47.4 \%$ |
| Information and referral services (such as 211) | $46.2 \%$ |
| Services for children with emotional problems or delinquent <br> behavior | $42.9 \%$ |
| Services for the disabled or their families | $40.0 \%$ |
| Financial Assistance or welfare | $33.3 \%$ |
| Early childhood programs | $33.3 \%$ |

## Community Characteristics

Specific community characteristics can influence perceptions of safety and the likelihood for community members to engage in activities outside their home. Leon County respondents varied in their perception in how closely their fellow community members shared their values. Almost two-thirds (61.9\%) of Leon County residents felt that their community had shared values. Table 8 summarizes these perceived characteristics of Leon County, listing the percentage of respondents who reported agree or strongly agree with each statement.

Table 8. Leon County community characteristics

| Community Characteristics | Percentage of Leon <br> County Respondents |
| :--- | :---: |
| People are willing to help their neighbors | $88.5 \%$ |
| This is a close knit community | $82.7 \%$ |
| Most people can be trusted in the community | $73.3 \%$ |
| Neighbors would help someone who fell | $51.4 \%$ |
| Problems in neighborhoods make it hard to go outside and walk | $45.5 \%$ |
| Many people are physically active in local neighborhoods | $23.3 \%$ |
| People are concerned they will be a victim of crime if they <br> walk/bike in their neighborhood | $13.4 \%$ |

## Community Issues

Survey respondents were asked to rate the severity of a list of community issues, on a scale ranging from not at all a problem to a very serious problem. The top five issues rated a serious problem or very serious problem across the region were as follows:

1) Poor or inconvenient public transportation (75.7\%)
2) Lack of jobs for unskilled workers (62.3\%)
3) Lack of recreational and cultural activities (54.6\%)
4) Illegal drug use (53.9\%)
5) Unemployment (53.6\%)
6) Access to mental health services (49.9\%)
7) Risky youth behaviors (such as alcohol use, drug use, truancy, etc.) (45.3\%)
8) Poverty (43.8\%)
9) Access to affordable, healthful food (38.6\%)
10) Teen pregnancy (38.1\%)

## Community Advice

Community discussion group participants were asked to offer advice for anyone attempting to address issues in Leon County. The following recommendations were offered in most of the discussions:
> Communicate your efforts. Discussion group participants recommended clear and frequent communication for anyone wanting to work in the community. Doing so will reduce confusion and duplication, as well as get information to other individuals who may want to collaborate. The best ways to disseminate information were said to be by word of mouth, through local churches, and by physically visiting local establishments and talking with community members about upcoming events.

Know the community. The community wants to work with those who truly show an interest in them and their priorities. There is no better way to illustrate intent and commitment than to learn the history and complexities of the community where you plan to work. Take time and get to know the county and the people who live in it, and then address issues that they deem important.
> Work with local champions. Key leaders and community residents are seen as champions for different issues in the county and were suggested as essential partners in local efforts to improve health. County Judge Byron Ryder, the county commissioners, city council, the Chamber of Commerce, Leon County Health Resource Center, and school leadership personnel were mentioned specifically as important partners.

Regional analysis yielded a set of key findings that are presented in the regional Executive Report. It is important to understand that the data contained in this supplemental report should be considered as a whole; that is, the statistics should be interpreted with the insights offered by the community discussion groups. These reports are intended to be utilized for planning and resource development to benefit all members of the community.


[^0]:    ${ }^{1}$ http://quickfacts.census.gov/qfd/states/48000.html

[^1]:    ${ }^{2}$ http://quickfacts.census.gov/qfd/states/48000.html

[^2]:    ${ }^{3}$ http://quickfacts.census.gov/qfd/states/48000.html

[^3]:    ${ }^{4}$ http://quickfacts.census.gov/qfd/states/48000.html

[^4]:    ${ }^{5}$ http://quickfacts.census.gov/qfd/states/48000.html

[^5]:    ${ }^{6}$ http://apps.nccd.cdc.gov/brfss/display.asp?cat=HS\&yr=2011\&qkey=8001\&state=UB

[^6]:    ${ }^{7}$ http://www.cdc.gov/nchs/data/series/sr 10/sr10 242.pdf.
    ${ }^{8}$ http://www.cdc.gov/nchs/data/databriefs/db92.pdf
    9 http://apps.nccd.cdc.gov/NCVDSS DTM/LocationSummary.aspx?state=United+States
    ${ }^{10}$ Overweight/obesity percentages reported in Table 3 are calculated from reported height and weight of survey participants NOT the percentage who reported being diagnosed by a health care professional.

[^7]:    ${ }^{11}$ Patient Protection and Affordable Care Act (HR 3590) signed into law on March 22, 2010
    ${ }^{12}$ http://kff.org/state-category/health-coverage-uninsured/
    ${ }^{13}$ http://kff.org/other/state-indicator/total-population/

[^8]:    ${ }^{14}$ Note that the percentages add up to more than 100 percent because some individuals are covered by more than one plan.

[^9]:    ${ }^{15}$ http://kff.org/health-reform/fact-sheet/the-uninsured-and-the-difference-health-insurance/

