Ranking in the lower 10% of the Texas counties, Liberty County’s access to clinical care is conspicuously poor. Of the population under 65 years of age, 26% are lacking health insurance. While access to health insurance in Texas is slowly improving, it is a cause for concern that in Liberty County the measure has been getting worse over the past ten years. Access to primary care physicians is severely lacking with a ratio of 3,850 patients to 1 primary care physician, reflecting a wide margin from 1,680:1 statewide in Texas. Similarly, the access to mental health providers including psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists and advanced practice nurses specializing in mental health care is poor enough to be designated as a Mental Health Professional Shortage Area with a ratio of 5,580 patients to 1 mental health provider. Texas overall fares significantly better with access to mental health providers as shown in the 990:1 ratio. Although preventable hospitals stays in Liberty County are nearly double that of Texas, the measure has improved by nearly 30%. Lastly, diabetic monitoring has improved from 73% in 2003 to 80% in 2013, but is still behind the 90% monitoring of top 10% of U.S. counties.

One of the highest mortality factors that effects Liberty County is coronary heart disease. The age adjusted coronary heart disease death rate for Liberty County, TX is 193.2 per 100,000 persons compared to the US median at 126.7.[CDC] This figure is concerning as not only is it higher than the US median, but cardiovascular disease is a leading cause of death in the US.[https://www.ncbi.nlm.nih.gov/books/NBK83160/] Cardiovascular disease, a broader topic area that includes coronary heart disease as well as high blood pressure, stroke, and others, was shown on Viz Hub to affect both sexes in 2014 as 379.98 deaths per 100,000, with males more impacted at 433.11 compared to females at 329.15 deaths per 100,000.[VizHub] In addition to the impact on a large number of males and females, it also is spread throughout the diverse racial population of Liberty County. The race/ethnicities that are most impacted by coronary heart disease are non-Hispanic African Americans at 197.4, 194.2 for non-Hispanic whites, and 87.6 Hispanic or Latino.[CDC] As noted earlier in the paper, this combined group of people accounts for 97.6% of the population, reflecting a large section of the population being impacted. The vast majority of the population affected is aged 65 years and over at 1084.1 per 100,000, although 45-64 year olds and 18-44 year olds are also impacted with 185.6 and 12.4 per 100,000, respectively.[CDC] This reflects a disease that has a wide community impact, affecting young and old.

There are numerous risk factors associated with coronary heart disease including a diet high in saturated fat and sodium, tobacco smoke, physical inactivity, obesity, excessive alcohol consumption, and diabetes.[ https://www.ncbi.nlm.nih.gov/books/NBK83160/ and http://jamanetwork.com.offcampus.lib.washington.edu/journals/jama/fullarticle/183974 ] Liberty County is faring worse than Texas in terms of 5 of the 6 risk factors noted above. Adult smoking is seen in 17% of the population, above Texas with only 15%. The food environment index, or limited access to health food and food insecurity, on a scale of 1 (worst) to 10 (best) for Liberty County is estimated at 6.2, below Texas at 6.4. Physical inactivity is 28% and is partially reflected in the 47% access to exercise opportunities, while Texas sees 24% physical inactivity and a much higher 84% access to exercise opportunities. Excessive drinking including binge drinking and heavy drinking in Liberty County is 18%, higher than the top US performer with 12%.[ http://www.countyhealthrankings.org/app/texas/2016/rankings/liberty/county/outcomes/overall/snapshot ] The only risk factor that Liberty County performs better on than Texas is diabetes, with 10.8% of the population as opposed to statewide 11.4%.[ http://www.americashealthrankings.org/explore/2016-annual-report/measure/CVDDeaths/state/TX and https://datausa.io/profile/geo/liberty-county-tx/ ]

The risk factors associated with coronary heart disease present many opportunities available to address this high mortality factor. Beyond screening procedures conducted by a doctor such as an EKG, stress test, chest X-ray, and blood tests, effective interventions can be implemented for different risk factors. It is important to Increase the county’s access to fruits and veggies, whole grains, and lean meats which will not only assist in possibly lowering LDL and triglycerides, but will have a positive impact on obesity.[http://jamanetwork.com.offcampus.lib.washington.edu/journals/jama/fullarticle/183974 ] Other public health interventions include increased access to exercise opportunities, anti-smoking measures, and healthier habits around drinking.

From <https://wwwn.cdc.gov/CommunityHealth/profile/currentprofile/TX/Liberty/> :

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Problem** | **Demographic RF** | **Environmental RF** | **Health behavior** | **Social Risk Factor** |
| CHD | Age (>=65); Race (Black, White, Not Hispanic/Latino); Male | Access to parks; Limited access to healthy food; Living near highways | Adult smoking; (Diabetes?, Physical Inactivity?- both found <http://www.americashealthrankings.org/explore/2016-annual-report/measure/CVDDeaths/state/TX> ) | Inadequate social support |

**Introduction**

Located on the eastern side of the state, Liberty County covers approximately 1,158 square miles and is one of 254 counties within Texas.[CITATION] As reported by the July 2015 U.S. Census Population Estimate, Liberty County is home to 79,654 people.[CITATION] The racial/ethnic makeup of Liberty County is 66.5% non-Hispanic white, 20.7%  Hispanic, 10.4% non-Hispanic African American, 1.0% American Indian and Alaskan Native, 0.7% Asian, and 0.1% Native Hawaiian/Other Pacific Islander.[CITATION] This distribution shows a notable difference from the state population, which is 43.5% non-Hispanic white, 38.6% Hispanic, and 4.5% Asian.[CITATION] There are 25,319 households with a median household income of $48,729, lower than both the Texas and national medians of $53,207 and $53,889, respectively.[CITATION]

This gap between median household incomes is also seen in the unemployment rate. Liberty County having 6.9% unemployment rate compared to the 5.1% and 3.5% rates from the state and national averages respectively. Although the trend for unemployment has been getting better over the past 5 years.[[citation]](http://www.countyhealthrankings.org/app/texas/2016/rankings/liberty/county/outcomes/overall/snapshot) There is an income inequality between average male and female salaries at $78,093 to $40,078 respectfully.[[citation]](https://datausa.io/profile/geo/liberty-county-tx/#income_ethnicity) Liberty County has a high school graduation rate at 91%, which is lower than the state average, but higher than the national average. Post-secondary education in Liberty County falls in comparison with the state and rest of the nation at 41% of adults 25-44 compared to the 72% and 59% from the state and national rates. Another social factor that has risen consistently since 2004 is violent crimes. Starting at roughly 280 crimes at 2004 to 422 crimes at 2011 for every 100,000 individuals. This is the exact opposite of the violent crime rates at the state and national levels, which have been steadily decreasing. Liberty County is ranked in the lower half of counties at 199 out of 241 based on social and economic factors. [[citation]](http://www.countyhealthrankings.org/app/texas/2016/rankings/liberty/county/outcomes/overall/snapshot)

Ranking in the lower 10% of the Texas counties, Liberty County’s access to clinical care is conspicuously poor. Of the population under 65 years of age, 26% are lacking health insurance. While access to health insurance in Texas is slowly improving, it is a cause for concern that in Liberty County the measure has been getting worse over the past ten years. Access to primary care physicians is severely lacking with a ratio of 3,850 patients to 1 primary care physician, reflecting a wide margin from 1,680:1 statewide in Texas. Similarly, the access to mental health providers including psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists and advanced practice nurses specializing in mental health care is poor enough to be designated as a Mental Health Professional Shortage Area with a ratio of 5,580 patients to 1 mental health provider. Texas overall fares significantly better with access to mental health providers as shown in the 990:1 ratio. Although preventable hospitals stays in Liberty County are nearly double that of Texas, the measure has improved by nearly 30%. Lastly, diabetic monitoring has improved from 73% in 2003 to 80% in 2013, but is still behind the 90% monitoring of top 10% of U.S. counties.

According to the CDC’s Health Status Indicators, the top three leading causes of mortality in Liberty County are cancer deaths, coronary heart disease, and unintentional injury (including motor vehicle accidents).[CITATION] Along with other primary indicators, these three topic areas were ranked and divided into quartiles, based on a comparison with peer counties. The indicators can then be used to prioritize health problems. All three leading causes of mortality were assigned to the least favorable quartile “worse.”[CITATION] The other primary indicators were in the two middle quartiles “moderate” or the most favorable quartile “better.”[CITATION] \*\*THIS SECTION NEEDS GENERAL MORBIDITY INFORMATION.\*\* The mortality rankings are supported by the US county health rankings from the University of Wisconsin’s Population Health Institute, the IHME Viz Hub US Health Map, and the 2012 Liberty County Community Report Card.[CITATION] All six mortality and morbidity health concerns will be addressed in this paper, with a primary focus on the top three key public health problems. The final selection of the three key public health problems to monitor and address is based on the severity of the problem in terms of magnitude and damage to health, as well as the existence of known interventions to prevent or treat the problem.

**Key Health Problems**

**All-Cause Cancer**

**Coronary Heart Disease**

**Unintentional Injury**

**Mental and Substance Use Disorders**

**Conclusion**

References

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