NON-HETEROSEXUAL RESIDENTS' HEALTH DISPARITIES: DATA PROFILE

Olmsted County, Minnesota

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Prepared By:

Olmsted County Public Health Services (OCPHS) Performance Management, Quality Improvement, and Accreditation Unit 2100 Campus Drive SE, Suite 100 Rochester, MN 55904-4722 (507) 328-7500 www.olmstedcounty.gov

This report has been approved by the following individuals:

Denise C Daniels	5/2/2023
Name and Title	Date

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Definitions For This Profile

Heterosexual

This refers to residents who answered, "heterosexual or straight" to the question, "what is your sexual orientation?" in the 2022 CHNA Mailed Survey.

Non-Heterosexual

This refers to residents who answered, "gay, lesbian, or homosexual, bisexual, asexual, pansexual, other, and/or don't know/questioning" to the sexual orientation question in the 2022 CHNA mailed survey.

LGBTQ

This is an abbreviation for, "Lesbian, Gay, Bisexual, Transgender, Queer/Questioning." It collectively describes the sexual orientations and gender identities of individuals who do not identify as "heterosexual".

Overview

In recent years, more attention has been paid to the experiences of non-heterosexual individuals who may face discrimination in different parts of their lives. While data on sexual orientation is limited due to underreporting and lack of a standard way of measuring sexual orientation, studies have shown that approximately 3-5% of adults in the United States identify as lesbian, gay, or bisexual (Casey et al., 2019). Olmsted County has a population of about 163,431, according to the United States Census Bureau's 2021 estimate. Around 7% of adult county residents identify as non-heterosexual, making them a minority population.

This data profile aims to understand the extent of the health disparities faced by this population in the county and identify opportunities for improvement. It provides a detailed analysis of the health status and needs of non-heterosexual individuals and highlights key disparities to be addressed.

Summary

Non-heterosexual residents of Olmsted County experience statistically significant health disparities in several key areas compared to heterosexual residents.

These disparities include higher rates of mental health disorders, substance use, and financial stress, as well as decreased access to care and social connectedness. Additionally, they face challenges in finding and maintaining healthy housing, neighborhood safety, education, and community mobility. Some of the key findings include:

- <u>Mental Health</u>: Non-heterosexual residents had significantly higher rates of self-reported anxiety and panic attacks (61% vs. 23%) and self-reported depression (58% vs. 26%) than heterosexual residents. They were also more likely to score 50 or lower on the World Health Organization Well-Being Index (WHO-5), indicating low mood or depression (63% vs. 17%).
- <u>Access to Care</u>: Non-heterosexual residents were significantly more likely to not have a personal doctor or healthcare provider (29% vs. 14%), not have health insurance (20% vs. 3%), not have prescription medication insurance coverage (33% vs. 5%) and have delayed accessing medical (31% vs. 14%), dental (39% vs. 20%), and mental health care (29% vs. 10%) in the past 12 months.
- <u>Substance Use</u>: Olmsted County non-heterosexual residents also have higher rates of substance use, as they are more likely to use various substances such as tobacco (23% vs. 7%), alcohol (three days vs. two days of binge drinking in the past 30 days), and marijuana (39% vs. 7%) when compared to heterosexual residents. Marijuana is the substance most used, with 39% of non-heterosexual residents indicating that they use it for non-medical purposes.
- <u>Financial Stress</u>: Non-heterosexual residents also have higher levels of financial stress, as they are more likely to have an income of less than \$15,000/year (23% vs. 3%) compared to heterosexual residents. They are also significantly more likely to worry about running out of food before they have money to buy more, with an average number of 3.4 days in the last 30 days compared to 0.4 days for heterosexual residents. Furthermore, they are significantly more likely to have financial worries about paying for necessities such as rent or mortgage (80% vs. 48%) and medical bills (66% vs. 39%).
- <u>Social Connectedness</u>: The data shows that a higher number of non-heterosexual residents experience situations where they feel unaccepted, unvalued, or unwelcomed compared to heterosexual residents (58% vs. 31%). This is particularly true for situations where they believe they are being judged based on physical appearance (45% vs. 22%), income (50% vs. 10%), and sexual orientation (42% vs. 2%).

Demographics

The table below compares the demographics between heterosexual and non-heterosexual residents of Olmsted County.

Table 1: Demographic Characteristics of Olmsted County Heterosexual and Non-Heterosexual	
Residents	

Demographic Indicator	Heterosexual Residents	Non-Heterosexual Residents
Sexual Orientation	93%	7%
Age (Mean)	51 Years	42 Years
Race And Ethnicity		
White	90%	80%
Hispanic/Latino	2%	15%
Black/African American	2%	7%
Asian	5%	9%
African	1%	1%
Other	4%	8%
Not Born in The Us	9%	24%
Gender		
Female	57%	54%
Male	43%	39%
Non-Binary	-	8%
Gender Non-Conforming	-	1%
Household Income		
< \$15,000/year	3%	23%
Level of Education		
Less than high school	1%	11%
High school diploma/GED	21%	33%
Bachelor's degree	29%	18%
Graduate/professional degree	23%	10%

Data source: Olmsted County Community Health Needs Assessment Survey, 2022

Sexual Orientation

93% of Olmsted County residents identified as heterosexual, and 7% identified as non-heterosexual. Among non-heterosexual residents:

- 11% identified as bisexual.
- 15% identified as gay, lesbian, or homosexual.
- 14% identified as "other".
- 12% identified as asexual.
- 8% identified as pansexual.

The remaining 30% of non-heterosexual residents don't know or are questioning their sexual orientation.

Age

The ages of the survey participants ranged from 18 - 100 years. The average age of non-heterosexual residents in Olmsted County is 42 years, while the average age of heterosexual residents is 51 years.

Compared to heterosexual residents, non-heterosexual residents are more likely to be 18 to 34 years old (47% vs. 24%).

Race and Ethnicity

Most non-heterosexual residents are white (80%). 15% of non-heterosexual residents are Hispanic, 9% are Asian, 7% are Black or African American, 1% are African, and 8% are of other races.

Most of the heterosexual residents are white as well (90%). However, there are significant differences within other races/ethnicities. For example, when compared to heterosexual residents, non-heterosexual residents are more likely to be:

- Hispanic/Latino (15% vs. 2%).
- Black/African American (7% vs. 2%).

Non-heterosexual residents are also more likely to have not been born in the United States (24% vs. 9%).

Gender

54% of non-heterosexual residents are female, 39% are male, 8% are non-binary, and 1% are gender non-conforming. The heterosexual residents only identified as female (57%) and male (43%).

Findings

Of the 29 indicators tracked using CHNA Mailed Survey data, non-heterosexual Olmsted County residents are statistically significantly more likely than heterosexual residents to experience disparities among 12 indicators. These include:

- 1. Mental Health.
- 2. Community Resiliency.
- 3. Social Connectedness.
- 4. Drug Use.
- 5. Tobacco Use.
- 6. Access to Care.
- 7. Insurance Coverage.
- 8. Financial Stress.
- 9. Food Security.
- 10. Motor Vehicle Injury Prevention.
- 11. Community Mobility.
- 12. Safe from Fear and Violence.

This data profile groups these indicators into the following themes:

- 1. Mental Health.
- 2. Substance Use.
- 3. Access to Care.
- 4. Social Connectedness.
- 5. Financial Stress.
- 6. Socioeconomic Wellbeing.
- 7. Other Indicators.

Mental Health

Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices.

Non-heterosexual individuals in the United States have higher rates of mental health issues such as depression, anxiety, and suicidality than heterosexual individuals (Fish et al., 2021). This is not different for Olmsted County non-heterosexual residents, who reported significantly more mental health issues than heterosexual residents.

There are many different factors that contribute to higher rates of depression in non-heterosexual individuals. For example, some studies have suggested that non-heterosexual individuals may be more likely to have hormonal imbalances or other physiological differences that can contribute to depression (Green et al., 2022). Also, the stress and stigma they face can lead to the development of internalized homophobia or transphobia, which can further worsen depression (Valdiserri, 2019).

Significant mental health issues among non-heterosexual residents include:

- a. Self-reported Depression: Non-heterosexual residents were more than twice as likely as heterosexual residents to have been diagnosed with depression (58% vs. 26%).
- b. Self-reported Anxiety: Non-heterosexual residents were more likely to have experienced anxiety or panic attacks (61% vs. 23%).

Additionally, non-heterosexual residents were more likely to score 50 or below on the World Health Organization Well-Being Index (WHO-5) indicating low mood or depression (63% vs. 17%). The WHO-5 measures general wellbeing, asking residents to rate their interest, engagement, and mood. There are five specific questions, with answer choices being "all of the time/most of the time" and "some of the time/at no time" over the past two weeks.

The graph below breaks down the WHO-5 results and shows the percent of heterosexual and nonheterosexual residents that selected "some of the time/at no time" when asked whether they felt like the listed statements in the two weeks before they answered the survey. For example, 28% of nonheterosexual residents felt like their daily lives were filled with things that interested them only sometimes or at no time in the past two weeks, compared with 9% of heterosexual residents. Additionally, 53% of nonheterosexual residents felt that they woke up feeling fresh and rested only sometimes or at no time in the past two weeks, compared to 12% of heterosexual residents.

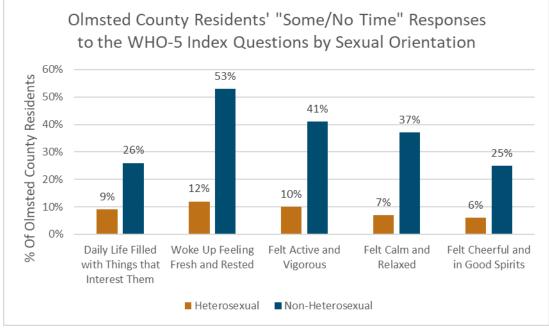


Figure 1. WHO-5 Index Responses

Data source: Olmsted County Community Health Needs Assessment Survey, 2022

These differences highlight the fact that non-heterosexual individuals experience stressors in their day-to-day lives that cause significant mental and emotional distress.

Substance Use

Substance use refers to the consumption of drugs or other substances for non-medical purposes. Substance use can involve the use of legal substances such as alcohol and tobacco, as well as illegal substances such as marijuana, cocaine, and heroin. It can range from occasional use to addictive use and can have physical, psychological, and social consequences.

Research has shown that non-heterosexual individuals in the United States experience higher rates of substance abuse and drug dependency, particularly among LGBTQ youth (Krueger et al., 2020). There are many possible reasons for this. Some researchers suggest that the stress of experiencing stigma and

discrimination may cause increased substance use as a way to cope with negative emotions. Others suggest that their social environments may encourage it (Felner et al., 2020; Krueger et al., 2020).

The findings among Olmsted County residents are similar. Non-heterosexual residents are more likely to use substances such as tobacco, alcohol, and marijuana when compared to heterosexual residents. Marijuana appears to be the substance most used, with 39% of non-heterosexual residents indicating that they use it for non-medical purposes.

a. Tobacco: As shown in the graph below, non-heterosexual residents are more likely to use cigarettes and e-cigarettes daily or some days (23% for cigarettes and 13% for e-cigarettes) compared to heterosexual residents (7% for cigarettes and 2% for e-cigarettes), which is a cause for concern due to the link between smoking and health problems, including heart disease, lung cancer and respiratory illness.

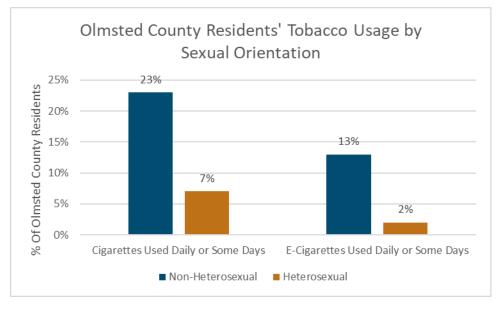
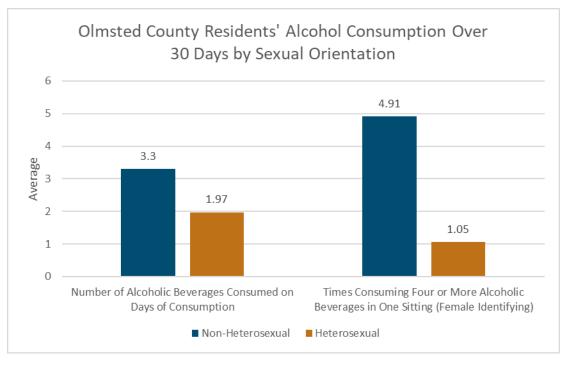


Figure 2. Tobacco Usage

Data source: Olmsted County Community Health Needs Assessment Survey, 2022

b. Alcohol: Similarly, on the days they drank alcohol, non-heterosexual residents drank more alcohol on average and were more likely to binge drink (consumed four or more drinks on a single occasion) in the past 30 days (three days vs. two days). Moreover, non-heterosexual female residents were found to be particularly at risk of binge drinking. They consumed four or more alcoholic drinks on a single occasion an average of five days in the past 30 days, compared with heterosexual female residents who did so on one day.





Data source: Olmsted County Community Health Needs Assessment Survey, 2022

c. Marijuana: Non-heterosexual residents were more likely to use marijuana for non-medical purposes (39% vs. 7%). The use of marijuana has been linked to mental health problems, including depression, anxiety, and psychosis, and its long-term effects on physical health are not yet fully understood.

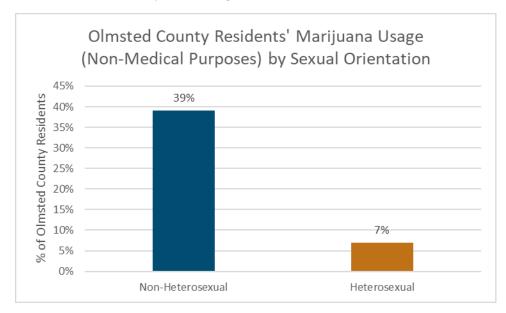


Figure 4. Non-Medical Marijuana Usage

Data source: Olmsted County Community Health Needs Assessment Survey, 2022

Access to Care

Access to health care is defined as "the timely use of personal health services to achieve the best health outcomes." For this data profile, access to care includes medical, dental, and mental health care. This includes access to preventive services such as regular check-ups and screenings, as well as access to treatment for acute or chronic conditions. The data presented highlights significant disparities in access to care for non-heterosexual residents compared to heterosexual residents.

Firstly, the data shows that non-heterosexual residents have experienced poorer overall health and more health conditions on average. Out of 15 health conditions listed in the survey, non-heterosexual residents had an average of 3.1, while heterosexual residents had an average of 2.3. Additionally, on a 5-point scale about overall health status where 5 = excellent and 1 = poor, non-heterosexual residents rated themselves an average of 3.3, while heterosexual residents rated themselves an average of 3.3, while heterosexual residents rated themselves an average of 3.7. This suggests that non-heterosexual residents may require more medical attention and care than heterosexual residents.

However, the data also indicates that non-heterosexual residents are less likely to have a personal doctor or health care provider, health insurance, and prescription medication insurance coverage. This lack of access to health care support and coverage can result in delays in seeking necessary medical attention, which can lead to more severe health issues and even death in some cases.

The data also highlights that non-heterosexual residents are more likely to delay medical, dental, and mental health care because of the high costs associated with these services.

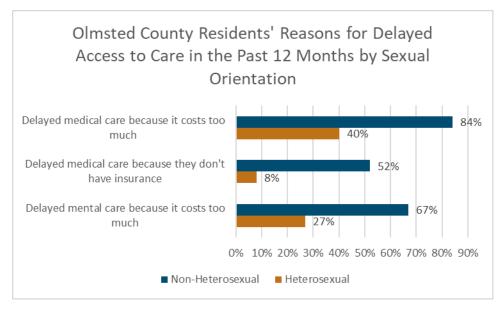
The table below shows some significant differences related to access to care between heterosexual and nonheterosexual residents.

Table 2: Disparities in Access to Care Among Olmsted County Heterosexual and Non-Heterosexual Residents

Percentage of residents who:	Non-heterosexual residents (%)	Heterosexual residents (%)
Do not have a personal doctor or	29	14
health care provider		
Do not have health insurance	20	3
Do not have prescription	33	5
medication insurance coverage		
Have delayed medical care in the	31	14
past 12 months		
Have delayed dental care in the	39	20
past 12 months		
Have delayed mental health care	29	10
in the past 12 months		

Data source: Olmsted County Community Health Needs Assessment Survey, 2022

The graph below shows differences in residents who have delayed care in the past 12 months based on sexual orientation and reason for delay. Of those who reported having delayed medical care and were non-heterosexual, 84% delayed because it costs too much while for heterosexual residents only 40% delayed because it costs too much while for heterosexual residents only 40% delayed because it costs too much.



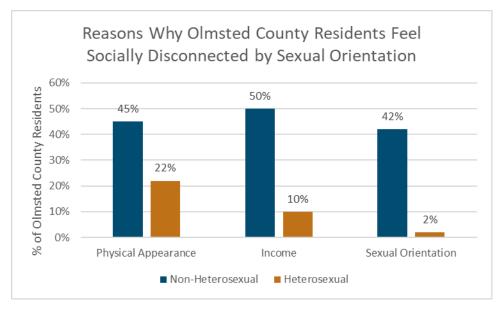
Data source: Olmsted County Community Health Needs Assessment Survey, 2022

Social Connectedness

Social connectedness measures how people come together to support each other as individuals, neighbors, and communities.

Non-heterosexual residents in Olmsted County face significant challenges related to social connectedness and community resiliency. They are more likely to experience situations where they feel unaccepted, unvalued, or unwelcomed compared heterosexual residents (58% vs. 31%). This is particularly true for situations where they are judged based on physical appearance, income, and sexual orientation. As seen in the graph below, 42% of non-heterosexual residents felt unaccepted, unvalued, or unwelcomed because of their sexual orientation, while 2% of heterosexual residents felt the same way. Also, 50% of non-heterosexual residents felt unaccepted, unvalued, or of heterosexual residents felt the same way. Also, 50% of non-heterosexual residents felt that way.

Figure 6. Reasons for Feelings of Social Disconnection



Data source: Olmsted County Community Health Needs Assessment Survey, 2022

Additionally, the data suggests that non-heterosexual residents in Olmsted County also have limited social support. A significantly higher portion of non-heterosexual residents report having no one to count on if they called for practical help, such as picking up groceries, talking about a problem, or providing care to a household member (18% vs. 4%). This lack of social support can negatively impact mental and physical health outcomes.

They are also less likely to feel connected to and helped by their community during an unpredictable event, such as a natural disaster. Specifically, a significantly higher percentage of non-heterosexual residents disagree or strongly disagree that they would have access to resources they can use to help their family (38% vs. 11%) or that they could count on their community to respond (31% vs. 15%) and fully recover (35% vs. 16%) from such an event. These results suggest that non-heterosexual residents may lack social networks and resources that could help them in times of crisis.

Financial Stress

Financial stress is a condition that occurs whenever household income is less than the desired expenditure. It refers to the difficulty that a household may have in meeting basic financial commitments. In the US, non-heterosexual residents are more likely to experience financial stress, insecurity, and worry. This stress appears in various ways, from concerns about basic needs like food to broader concerns about overall financial security (Bosley-Smith, 2022).

The survey results clearly show the financial stress disparity faced by non-heterosexual Olmsted County residents compared to heterosexual residents. Regarding income levels, non-heterosexual residents were more likely to have one person earn all income for the household (56% vs. 29%). They were also more likely to have a household income of less than \$15,000/year (23% vs. 3%) or between \$35,000 to \$49,999 (24% vs. 9%) compared to heterosexual residents.

Non-heterosexual residents were significantly more likely to worry about running out of food before they have money to buy more, with an average number of 3.4 days in the last 30 days compared to 0.4 days for heterosexual residents. Additionally, non-heterosexual residents eat fewer vegetables, suggesting that financial stress impacts their ability to access healthy food options.

Financial stress also impacts non-heterosexual residents' ability to afford the things they want in life, with 23% saying that they feel like they never have the things they want due to their money situation, compared to only 6% of heterosexual residents. Non-heterosexual residents are also significantly more likely to feel like they are just getting by financially (48% vs. 16%) and to worry that their money will not last (43% vs. 11%).

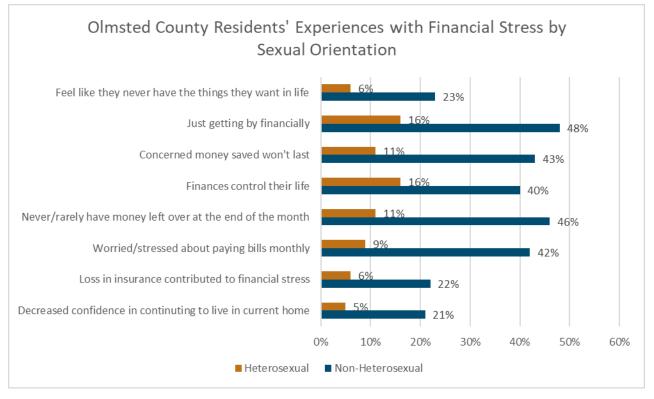
Non-heterosexual residents are also significantly more likely to have financial worries about paying for necessities such as:

- Rent or mortgage (80% vs. 48%). ٠
- Medical bills (66% vs. 39%).

Non-heterosexual residents are also more likely to have difficulty managing their money (12% vs. 2%) and are more likely not to have any money left to save at the end of the month (46% vs. 11%), which can further exacerbate financial stress.

As seen in the graph below, non-heterosexual residents were more likely to say that they have decreased confidence in their ability to continue to live in their current home (21%) when compared to heterosexual residents (5%).

Figure 7. Experiences with Financial Stress



Data source: Olmsted County Community Health Needs Assessment Survey, 2022

These financial stressors can lead to poorer overall health outcomes, as non-heterosexual residents are less likely to have access to healthy food options and may delay medical care due to costs. Financial stress can also affect their mental health, leading to anxiety and depression.

Socioeconomic Well-being

Socioeconomic well-being refers to the extent to which an individual or group has access to resources and opportunities that contribute to their overall economic and social prosperity. It is determined by various factors including income, education, employment status, social status, and access to health care and other resources. The following are the significant socioeconomic disparities noted between heterosexual and non-heterosexual residents.

a. Healthy Housing

The survey results present several differences in housing conditions and resources available to address home concerns between non-heterosexual and heterosexual residents. These differences may have significant implications for the socioeconomic well-being of non-heterosexual individuals, as inadequate housing can lead to physical and mental health issues and impact their ability to participate fully in society (Fish et al., 2021).

According to the data, a significantly higher percentage of non-heterosexual Olmsted County residents (26%) disagreed or strongly disagreed that they have resources, including money, to address concerns about their homes, compared to only 5% of heterosexual residents. This suggests that non-heterosexual individuals may face greater financial or social barriers that limit their ability to address issues with their housing, which may lead to further negative consequences for their well-being.

The data also suggests that non-heterosexual residents experience more negative impacts on their physical health due to housing conditions than heterosexual residents. 67% of non-heterosexual residents said they have felt extremely or uncomfortably cold inside their homes in the past 12 months compared to 25% of heterosexual residents. Also, 54% of them felt extremely or uncomfortably hot inside their homes in the past 12 months compared to 27% of heterosexual residents. In addition, 31% of them reported water leaking into their homes from the outside over the past 12 months, compared to 12% of heterosexual residents.

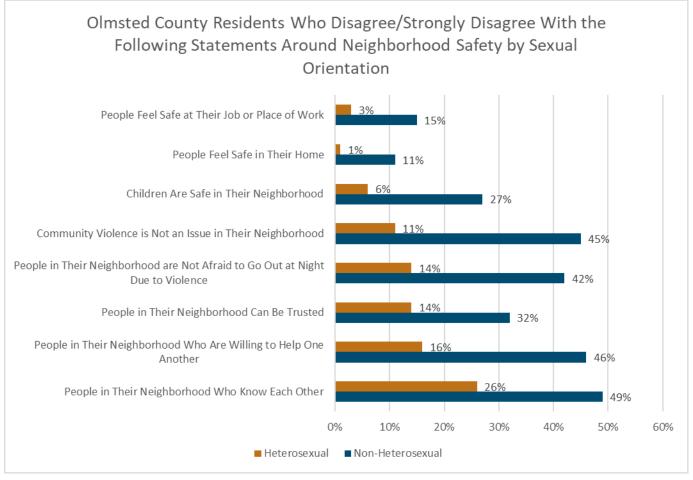
Finally, the data shows that a higher percentage of non-heterosexual residents (52%) rent their homes compared to heterosexual residents (19%). Renting a home may indicate that non-heterosexual residents have less control over their living conditions and may be more susceptible to housing instability or financial stress due to rising rents and limited control over repairs or upgrades.

b. Neighborhood Safety

The data on neighborhood safety for non-heterosexual residents compared to heterosexual residents shows some significant disparities that can impact their socioeconomic well-being.

As shown in the graph below, many non-heterosexual residents disagreed or strongly disagreed that people in their neighborhood know each other, are willing to help each other and can be trusted (49%). In contrast, a significantly lower percentage of heterosexual residents expressed the same feelings (26%). The data also shows that a larger percentage of non-heterosexual residents disagreed or strongly disagreed that people in their neighborhood feel safe going out at night due to violence (42% vs. 14%) and that community violence is not an issue in their neighborhood (45% vs. 11%). This indicates that non-heterosexual residents may feel isolated and disconnected from their community, impacting their social and emotional well-being.

Figure 8. Experiences with Neighborhood Safety



Data source: Olmsted County Community Health Needs Assessment Survey, 2022

These feelings can impact non-heterosexual residents' daily lives and may affect their ability to engage in community activities, such as shopping, exercising, and socializing. Furthermore, non-heterosexual residents were significantly more likely to disagree that children are safe in their neighborhood (27% vs. 6%), which may impact family life and their sense of security.

Regarding personal safety, non-heterosexual residents were significantly more likely to disagree or strongly disagree that they feel safe in their homes or at their job or place of work compared to heterosexual residents (15% vs. 3%).

c. Education

The data indicates less education among non-heterosexual individuals compared to heterosexual residents. It shows that non-heterosexual individuals are more likely to have less than a high school education (11% vs. 1%). Similarly, 6% of non-heterosexual individuals have not completed the 8th grade, while this percentage is 0% for heterosexual individuals. These findings suggest that non-heterosexual individuals may face more significant barriers to accessing education, such as discrimination or lack of resources.

Other Indicators

a. Community Mobility

The data profile reveals that non-heterosexual residents are more likely to have a lack of transportation prevent them from accessing work compared to their heterosexual counterparts. Specifically, 10% of non-heterosexual residents have had a lack of transportation prevent them from accessing work sometimes, often, or always, compared to only 1% of heterosexual residents.

Lack of transportation can significantly impact community mobility, which is the ability to move around within one's community to access goods, services, and social activities. Without transportation, individuals may struggle to access work, health care, education, and other vital resources. This can lead to social isolation, reduced opportunities, and decreased quality of life.

Conclusion

In conclusion, this data profile highlights the significant disparities experienced by non-heterosexual residents in Olmsted County.

The findings reveal that non-heterosexual residents have poorer mental health, higher rates of substance use, less access to care, lower levels of social connectedness, more significant financial stress, and are more likely to experience unhealthy housing, unsafe neighborhoods, lower educational attainment, and less community mobility.

Addressing these disparities will require a comprehensive approach that includes targeted interventions. By taking action, we can work towards creating a more equitable and healthier community for all residents of Olmsted County.

References

- Adelson, S. L., Reid, G., Miller, A. M., & Sandfort, T. G. M. (2021). Health justice for LGBT youths: Combining public health and human rights. *Journal of the American Academy of Child and Adolescent Psychiatry*, 60(7), 804-807. <u>https://pubmed.ncbi.nlm.nih.gov/33711378/</u>
- Bosley-Smith, E. R. (2022). Anxious adulthood: The unequal financial lives of young adults across genders and sexualities (Doctoral dissertation, The Ohio State University). https://onlinelibrary.wiley.com/doi/abs/10.1111/soin.12533
- Casey, L. S., Reisner, S. L., Findling, M. G., Blendon, R. J., Benson, J. M., Sayde, J. M., & Miller, C. (2019). Discrimination in the United States: Experiences of lesbian, gay, bisexual, transgender, and queer Americans. *Health services research*, *54*, 1454-1466. https://onlinelibrary.wiley.com/doi/full/10.1111/1475-6773.13229
- Day, J. K., Ioverno, S., & Russell, S. T. (2019). Safe and supportive schools for LGBT youth: Addressing educational inequities through inclusive policies and practices. *Journal of School Psychology*, 74, 29-43. <u>https://www.sciencedirect.com/science/article/pii/S0022440519300329</u>
- Felner, J. K., Wisdom, J. P., Williams, T., Katuska, L., Haley, S. J., Jun, H. J., & Corliss, H. L. (2020). Stress, coping, and context: Examining substance use among LGBTQ young adults with probable substance use disorders. *Psychiatric Services*, 71(2), 112-120. https://ps.psychiatryonline.org/doi/full/10.1176/appi.ps.201900029
- Fish, J. N., Salerno, J., Williams, N. D., Rinderknecht, R. G., Drotning, K. J., Sayer, L., & Doan, L. (2021). Sexual minority disparities in health and well-being as a consequence of the COVID-19 pandemic differ by sexual identity. *LGBT Health*, 8(4), 263-272. <u>https://pubmed.ncbi.nlm.nih.gov/33887160/</u>
- Green, A. E., DeChants, J. P., Price, M. N., & Davis, C. K. (2022). Association of gender-affirming hormone therapy with depression, thoughts of suicide, and attempted suicide among transgender and nonbinary youth. *Journal of Adolescent Health, 70*(4), 643-649. https://www.sciencedirect.com/science/article/pii/S1054139X21005681
- Hatzenbuehler, M. L., & Pachankis, J. E. (2016). Stigma and minority stress as social determinants of health among lesbian, gay, bisexual, and transgender youth: Research evidence and clinical implications. Pediatric Clinics of North America, 63(6), 985-997. https://pubmed.ncbi.nlm.nih.gov/27865340/
- Jorgenson, J. L. (2016). Mental health of gay, lesbian, bisexual, heterosexual, and questioning youth in rural, micropolitian, and metropolitan regions in Minnesota: Assessing internalizing and externalizing self-report behaviors. <u>https://cornerstone.lib.mnsu.edu/etds/588/</u>
- Krueger, E. A., Fish, J. N., & Upchurch, D. M. (2020). Sexual orientation disparities in substance use: Investigating social stress mechanisms in a national sample. *American Journal of Preventive Medicine*, 58(1), 59-68. <u>https://pubmed.ncbi.nlm.nih.gov/31761516/</u>
- Mattioli, G., Roberts, C., Steinberger, J. K., & Brown, A. (2020). The political economy of car dependence: A systems of provision approach. *Energy Research & Social Science, 66*, 101486. <u>https://www.sciencedirect.com/science/article/pii/S221462962030063</u>

- Stewart, T. (2022, March). Overview of motor vehicle crashes in 2020 (Report No. DOT HS 813 266). National Highway Traffic Safety Administration. <u>https://www.nhtsa.gov/risky-driving/distracted-driving</u>
- Valdiserri, R. O., Holtgrave, D. R., Poteat, T. C., & Beyrer, C. (2019). Unraveling health disparities among sexual and gender minorities: A commentary on the persistent impact of stigma. *Journal of Homosexuality, 66*(5), 571-589. <u>https://pubmed.ncbi.nlm.nih.gov/29297774/</u>

Technical Notes

Statistical Significance

The graphs and tables within this document contain statistically significant data (Chi-Square: P-value < .05).

Methods of Analysis

Population

Olmsted County, Minnesota residents aged 18 years and older.

Data Source(s):

a. Community Health Needs Assessment (CHNA) Mailed Survey: 2013, 2015, 2018, 2021

The CHAP process developed the survey instrument with technical assistance from the Minnesota Department of Health (MDH) Centers for Health Statistics (for the 2013, 2015, and 2018 assessments) and the Wilder Foundation (for the 2021 assessment). Existing questions from previous community surveys, the Behavioral Risk Factor Surveillance System (BRFSS) survey, other national, validated health surveys and recent county-level surveys in Minnesota were used to design the questions on the instrument. The survey was formatted by the survey vendor as a scannable, self-administered, English questionnaire. In 2021, there were 1,045 residents in Olmsted County that responded to the survey.

Methods

The data was cleaned using SPSS version 28.00 and analyzed using WinCross version 22. Graphs were created using Microsoft Excel.

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