



HEALTH DISPARITIES AND INEQUITIES AMONG YOUTH IN MISSOURI 2018

Teen Pregnancy and Prevention
Partnership

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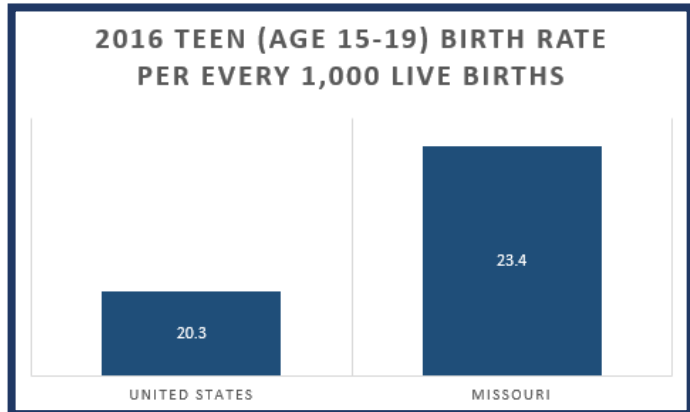
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Abstract

Missouri has higher rates of teen pregnancy, infant mortality, and sexual transmitted diseases (STDs) and sexually transmitted infections (STIs) than the national average. Awareness and understanding of these public health concerns is critical to guide community stakeholders in the work of decreasing health disparities. This report will define the terms health disparity, health inequity, and social determinant, and explain how these factors impact unintended teen pregnancy, infant mortality, and STDs/STIs among Missouri youth. The information in this report will compare data from the United States and Missouri. Access to healthcare is also addressed as a contributing factor. The final part of this report will discuss how increasing health equity can improve health outcomes in Missouri.

Introduction

Teen birth rates in the United States have been steadily decreasing over the past decade, but still remain higher than other developed countries such as Canada and the United Kingdom (U.S Department of Health & Human Services [HHS], 2016). According to the U.S. Department of Health & Human Services (2016), the national average for teen births in 2016 was 20.3 per every 1,000 females between the ages of 15-19. In Missouri, the average teen birth rate in 2016 was even higher at 23.4 per every 1,000 females aged 15-19 (HHS, 2016). The Centers for Disease Control and



Prevention ([CDC], 2017) reported that teen birth rates nearly dropped in half from 2007 (41.5 births per every 1,000 females ages 15-19) to 2015 (22.3 births per every 1,000 females ages 15-19). Although there continues to be a decline in unintended teen pregnancies, there are many health disparities and health inequities for not only teen pregnancies, but for infant mortalities

and sexual transmitted infections/diseases (STIs/STDs) as well.

Health Disparities and Inequities

Many wonder what the difference is between health disparities and health inequities. Health disparities are described as “a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group, religion, socioeconomic status, gender, age, mental health, cognitive, sensory, or physical disability, sexual orientation or gender identity, geographic location, or other characteristics historically linked to discrimination or exclusion” (Office of Disease Prevention and Health Promotion [ODPHP], 2018). If a health outcome is more or less common for a population there is a disparity, or difference, between the health outcome of the population and the general population. The following are characteristics associated with significant health disparities: race or ethnicity, sex, sexual identity, age, disability, socioeconomic status, and rural or urban geographic location (ODPHP, 2018).

Health inequities are similar to health disparities but are described as avoidable and unjust inequalities in

health between groups of people within countries or between countries (World Health Organization [WHO], 2018). Health inequities can be described as social and economic conditions which are unfair and make some populations more vulnerable to poorer health than other groups based on inequities (Boston Public Health Commission, n.d.). Some health inequities are: education level, income level, incarceration rates, safe housing, transportation, access to healthcare, poverty, and socioeconomic status. An example of a health disparity is that female babies are typically born weighing less than male babies. An example of a health inequity is that babies born to Black women are more likely to die their first year of life in comparison to babies born to White women (Boston Public Health Commission, n.d.). Health disparities and health inequities have similar definitions, but this report will be addressing these health differences as health disparities.

Social determinants (places where people live, work, learn, and socialize) of health also have a remarkable impact on health outcomes. Do people in your community have access to healthcare, job opportunities,

safe housing, reliable transportation, healthy food, and education? If not, social determinants could be contributing to adverse health outcomes. People are more likely to make healthy choices if they have access to the necessities.

Report Overview

This report is intended to bring awareness to the health disparities, health inequities, and social determinants that result in unintended teen pregnancies, increased infant mortality rates, and STDs/STIs among youth in Missouri. Teen birth rates will be the first topic discussed in this report and Missouri will be compared with the United States and other industrialized countries. The next topic will be on infant mortality, both nationally and in Missouri, which will detail the major health inequities of infant mortality rates. The final discussion will be on sexually transmitted diseases and infections in the United States as well as in Missouri for an accurate comparison. The ending of this report will explain the importance of adequate access to healthcare and ways to reach the overall goal of health equity for all individuals in Missouri and nationwide. Health equity is “a state which can be obtained when every person has the opportunity to attain their

"Health disparities are preventable differences in the burden of disease. Injury, violence, or opportunities to achieve optimal health that are experienced by social disadvantaged populations."

CDC. Community Health and Program Services (CHAPS). Health Disparities Among Racial/Ethnic Populations. Atlanta: U.S. Department of Health and Human Services. 2009

"Health equity is achieved when everyone has the equal opportunity to be as healthy as possible."

Centers for Disease Control and Prevention [CDC] (2018). Retrieved from, <https://www.cdc.gov/healthyyouth/data/yrbs/results.htm>

full health potential and when no one is at a disadvantage from achieving this potential because of their social status or circumstance” (CDC, 2018).

United States Teen Birth Rates

Hispanic, African American, American Indian, and Alaska Native teens have higher rates of teen births in comparison to Caucasian adolescent females. In 2016, Hispanic females between the ages of 15-19 had a higher birth rate (31.9 per every 1,000 live births) than African Americans (29.3 per every 1,000 live births) and Caucasian females (14.3 per every 1,000 live births) (U.S. Department of Health and Senior Services [HSS], 2016). The Hispanic teen birth rate is more than double the teen birth rate for Caucasian females. Although the Hispanic teen birth rate is still higher than African Americans and Caucasians, it has declined by 58% whereas the teen birth rates for African Americans declined by

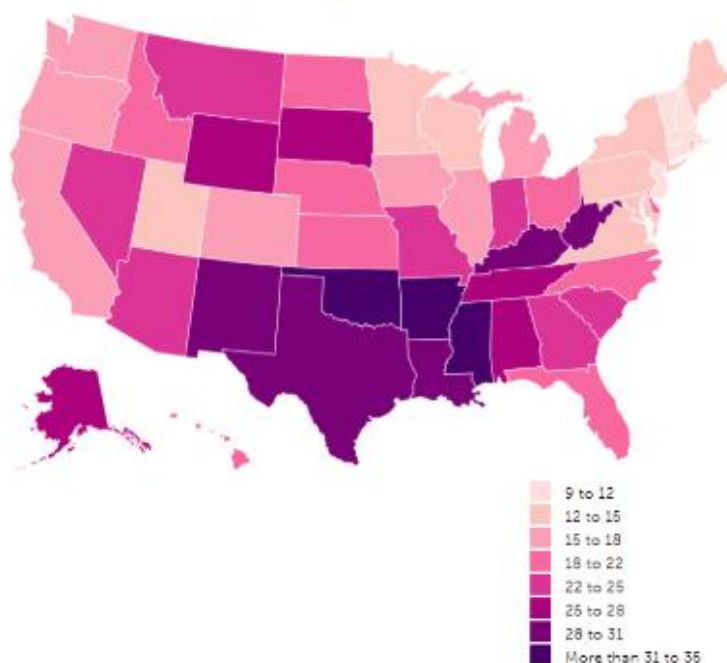
53% and 47% for Caucasians (U.S. Department of Health & Human Services [HSS], n.d.).

In 2016, unplanned pregnancies cost Missouri \$518 million dollars!

Power to Decide (2018). Missouri Data. Retrieved from, <https://powertodecide.org/what-we-do/information/national-state-data/missouri>

There are many social and socioeconomic factors that cause significant differences in teen birth rates among different races. There are also many geographic differences in teen birth rates across the United States (CDC, 2017). Some of the differences are related to socioeconomic differences such as education level, individual income level, and family income level. Also, teens in child welfare programs are at a higher risk of teen pregnancy; for example, a teen female living in foster care is more than twice as likely to become pregnant than females not in foster care (CDC, 2017).

Teen Birth Rate Among Girls Age 15-19



Reference:

Power to Decide (2018). Retrieved from, <https://powertodecide.org/what-we-do/information/national-state-data/teen-birth-rates>

Missouri Teen Birth Rates and Disparities

In Missouri, 51% of pregnancies are unplanned for women of any age and 55% of women have been pregnant at least once by the age of 21 (Power to Decide, 2018). Unplanned pregnancies cost Missouri \$518 million dollars in 2016 (Power to Decide, 2018). In 2016, teens (aged 15-19) accounted for 23.4

births per every 1,000. There are five areas in Missouri with the highest unintended teen pregnancy rates that accounted for nearly a quarter of all Missouri teen births in 2015 including: Butler County, Dunklin County, Scott County, Jackson County, and St. Louis City.

Five areas in Missouri with the highest unintended teen pregnancy rates:

- Butler County
- Dunklin County
- Scott County
- Jackson County
- St. Louis County

Jackson County and St. Louis City are urban locations whereas Butler County, Dunklin County, and Scott County are located in the Missouri Bootheel and are more rural. The Bootheel is the Southeast corner of Missouri which is also one of the poorest areas in the state.

One reason for these disparities is that schools in Missouri are not required to teach sexual health education. If schools do opt to provide sexual health education, the school district can decide which curriculum to teach—including abstinence-only programs, which have not been shown to lower teen pregnancies rates but do increase the likelihood of teens not using any contraceptive method (McKeon, B, 2006). One of the priorities for the Teen Pregnancy and Prevention

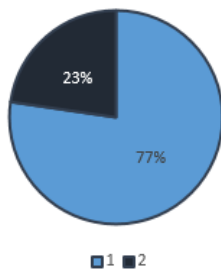
Partnership (TPPP) is to promote sexual education in schools. Teens need to receive medically accurate sexual health education (MASHE) provided by trained educators in order to reduce unintended teen pregnancies.



Another reason for high teen pregnancy rates in Missouri could be that some areas have limited access to healthcare. More than 19 million women in the United States do not have reasonable access to a public health clinic that offers a full range of contraceptive methods. Reasonable access to a health clinic is defined as “at least one clinic or provider for every 1,000 women in need of publicly funded contraception.” (Power to Decide, 2018). A majority of women who do not have access to a clinic that provides contraceptive methods live in ‘contraceptive deserts’ which are areas that create significant limitations to finding access to healthcare. Nationally, 3 million women do not reasonable access to a single public health clinic that offers contraception. In Missouri, there are 18 counties, out of 114, that

do not have a publicly funded clinic that provides contraceptive services and supplies. For example, in Lincoln County, there are 0 clinics in the area; the county has 11,210 women between the ages of 13-44 and 3,290 in need of publicly funded contraceptive services and supplies (Power to Decide, 2018).

3,290 (23%) out of 11,210 women in Lincoln County between the ages of 13-44 are in need of contraceptive services.



Below is a table which includes Missouri Counties without access to publicly funded clinics.

Counties in Missouri without publicly funded contraceptive services and supplies:

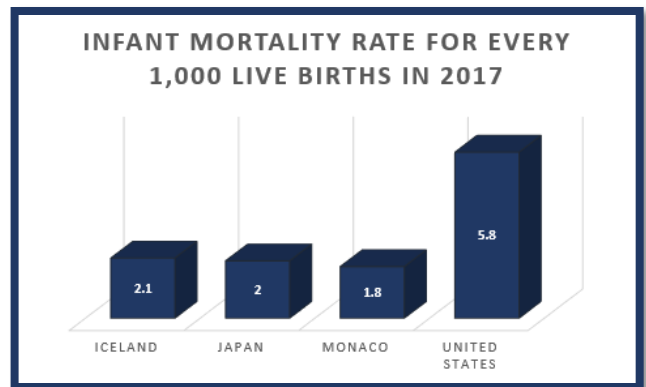
- Atchison County
- Cooper County
- Dent County
- Lincoln County
- Mercer County
- Schuyler County
- Cedar County
- Dauieess County
- Gasconade County
- Macon County
- Montgomery County
- Ste. Genevieve County
- Christian County
- Dekalb County
- Howard County
- Maries County
- Rallas County
- Worth County

Missouri teens require adequate access to healthcare that provides contraceptive options and preventative services for adolescents and teens; in combination with medically accurate

sexual health education, access to contraception helps teens prevent unintended pregnancies and make healthy decisions.

Infant Mortality Rates in the United States

Infant mortality rates reflect health disparities as well. In 2017, the United States had an infant mortality rate of 5.8 deaths out of 1,000 live births which puts the country at rank of 170 out of 225 total countries (Central Intelligence Agency [CIA], 2017). This means that 54 other countries have a lower infant mortality rate than the United States. To put that number in perspective, Monaco had the lowest infant mortality rate of 1.8 deaths per every 1,000 live births followed by Japan having 2.0 deaths per 1,000 live births, and Iceland having 2.1 deaths per every 1,000 live births (CIA, 2017).



In 2016, there were over 23,000 infant deaths in the United States and the leading causes were: birth defects, preterm birth/low birth weight, sudden infant death syndrome (SIDS), maternal

pregnancy complications, and injuries such as suffocation (CDC, 2018). There were significant differences in infant mortality rates based on race. For every 1,000 live births there were 11.3 infant deaths for African Americans, 8.3 for American Indian/Alaska Native, 5.0 for Hispanics, 4.9 for Caucasians, and 4.2 for Asian/Pacific Islanders (CDC, 2018).

Missouri Infant Mortality Rates

Missouri is one of the U.S. states experiencing devastating infant mortality rates, especially in St. Louis and the Bootheel (the Southeast part of Missouri). In Missouri, 33% of infant deaths occur in St. Louis or the Bootheel (Missouri Foundation for Health [MFFH], 2018). There are many factors which can lead to infant deaths including: limited or no access to healthcare, lack of education, risky behaviors, health of the mother, and outdated safe sleep and infant care information. These factors, along with systemic inequalities, impact the social determinants of health which can cause stress in women. Pregnant women who experience high stress are 60% more likely to have a premature baby (MFFH, 2018).

Pregnant women who experience high stress during pregnancy are 60% more likely to have a premature baby.

Missouri Foundation for Health [MFFH] (2018). Retrieved from, <https://www.mffh.org>

Healthcare is another important part of pregnancy because healthcare professionals can provide women with the resources they need including specialty care, educational seminars, medical interventions, and specific medications. Unfortunately, 20% of pregnant women in St. Louis do not have access to healthcare until late in their pregnancy (Flourish STL, 2018). Having adequate access to healthcare is necessary from the beginning of pregnancy because there is a strong correlation between a healthy mother and a healthy baby. If the pregnant mother has untreated health conditions, there is a higher chance that her baby will be unhealthy as well. Women who do not have access to healthcare during their pregnancy are five times more likely to lose their baby than if they did receive healthcare (Flourish STL, 2018). Many areas in the Missouri Bootheel do not have dedicated health services for pregnant women, making it difficult to receive prenatal and postnatal care. Prenatal and postnatal care increases the likelihood of having a healthy pregnancy and baby.

There are also health disparities among races. For example, Black women are 49% more likely to have a premature baby than all other races (Flourish STL, 2018). Flourish STL (2018) explains that in St. Louis city, Black babies are 4 times more likely to die from SIDS (sudden infant death syndrome) than White babies which is a devastating health disparity. SIDS is

Sudden Infant Death Syndrome (SIDS) is the leading cause of death among infants in St. Louis, Missouri.

Flourish STL, Missouri Department for Health (2018). Retrieved from, <http://www.flourishstlouis.org/>

actually the leading cause of infant deaths in St. Louis and eight out of ten SIDS deaths are due to unsafe infant sleeping conditions (Flourish STL, 2018). SIDS usually occurs in infants between 1-4 months and 90% of SIDS occur within the first 6 months (Safe to Sleep, n.d). Overall, Black babies are 3 times more likely to die during infancy than White babies. Higher education usually correlates with better health outcomes, but for Black mothers that is not the case. Black babies born to Black mothers with graduate degrees still have a higher infant mortality rate than White babies born to White mothers with high school diplomas (Flourish STL, 2018). A reason for this is that racism can result in stress and stress results in poorer health outcomes. It is shown that stress due to racism can contribute to adverse health outcomes in maternal health as well (American Psychological Association, 2018).

There are ways to improve health disparities for infant mortalities. One of the ways to improve infant mortality rates is by making sure all women and infants have adequate access to healthcare. Access to healthcare can also replace outdated information which

can result in inaccurate health information being passed on for generations through family members and social circles. Healthcare providers can provide parents with ways to attend educational seminars to prevent infant mortalities. For example, there are SIDS prevention opportunities which educate parents on how babies should be sleeping and can reduce the number of sleep-related infant deaths.

SIDS can be prevented by educating the community on correct sleeping positions for infants.

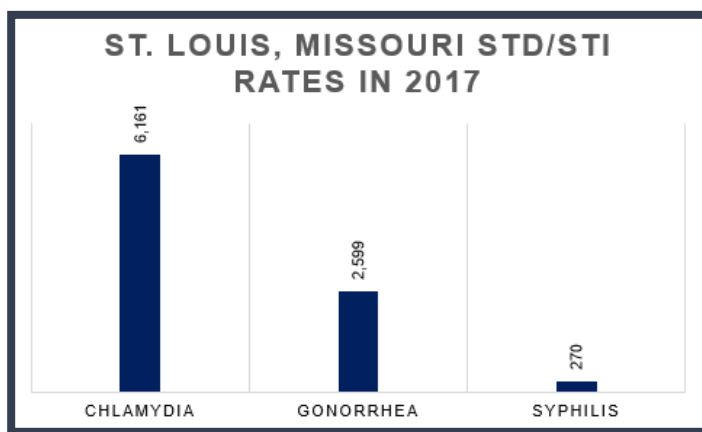
Also, smoking, drug use, and unhealthy eating can cause life threatening health problems for both the mother and baby, which some may be unaware of. Educating the community on the harmful health effects of these habits, and providing support for changing unhealthy habits, can work towards decreasing infant deaths by creating a culture that supports the health of all community members, including teen parents. In addition, families require access to transportation, jobs, and healthy living conditions to improve their quality of life.

Sexually Transmitted Disease and Infections

Unintended teen pregnancies and infant mortalities directly impact

women and children, but sexually transmitted diseases and infections have health disparities that impact the entire community. In 2014, African Americans accounted for 55.4% of all gonorrhea diagnoses and 38.1% of all syphilis diagnoses (CDC, 2016). The CDC (2016) also noted that African American women were 5.7 times more likely to be diagnosed with chlamydia in comparison to Caucasian women; African American men were 7.3 times more likely than Caucasian men to be diagnosed with chlamydia. In 2014, the diagnosis rate for HIV in African Americans was 49.4 per every 100,000 in comparison to the total United States population which was 13.8 per every 100,000. During 2015, African Americans accounted for 12% of the U.S. population and 44% of all new HIV diagnoses; Hispanics/Latinos accounted for 18% of the U.S. population and 25% of new HIV diagnoses (CDC, 2018).

40% of HIV diagnosis among men in the United States. A majority (78%) of African American men diagnosed with HIV contracted the disease through male-to-male sexual contact while 15% contracted HIV through heterosexual exposure” (CDC, 2016). These disparities are the result of a combination of inadequate access to healthcare and relevant health information, biases in the systems that support the health of the community, and individual factors.



St. Louis, Missouri is notorious for having one of the highest rates of STIs in the United States each year. In 2017, St. Louis had 6,161 chlamydia cases, 2,599 cases of gonorrhea, and 270 syphilis cases (Missouri Department of Health & Senior Services, 2017).

HIV (human immunodeficiency virus which causes AIDS, acquired immune deficiency syndrome) is another health issue facing Missouri. There are 10,000 people living with HIV in Missouri and approximately 500 new infections occur each year (Missouri Department of Health & Senior Services, 2017). In 2016, there were 12,518 people living

Individuals between the ages of 13-24 account for 30% of all new HIV infections.

Garwood, Sarah., and Fox, Elizabeth. Sexually Transmitted Infection in St. Louis. Generate Health (2017). Retrieved from. <http://generatehealthstl.org/immunization/MeetingMaterials/Feb2017-STDs%20and%20HPV%20in%20St%20Louis%20Presentation.pdf>

There are sexual orientation disparities among individuals diagnosed with HIV and other STDs. In 2015, 70% of the annual HIV diagnoses were men who identified as gay or bisexual. “African American men accounted for

with HIV which means that many people living with the virus are living longer due to access to healthcare and more effective medications. While we celebrate that people are living longer, healthier lives with the HIV virus, individuals between the ages of 13-24 account for 30% of all new HIV infections and African Americans and Latinos have the highest rate of infections (Garwood & Fox, 2017). This information can inform prevention efforts and continue to reduce infection rates.

It is easier and more beneficial to prevent the spread of infection rather than to treat the infection which is why awareness on the issue continues to be important. Another astonishing fact was that White teens between the ages of 15-19 account for 25% of the sexually active population and account for one-half of all new STDs/STIs (Garwood & Fox, 2017). According to Garwood & Fox (2017), sexually active adolescents have the highest rate of gonorrhea and chlamydia infections compared to other age groups.

A majority of STDs/STIs are completely preventable by the use of effective barrier methods such as condoms. Using condoms during sexual intercourse is a relatively easy strategy to prevent STDs, yet a significant percentage of adolescents and young adults do not use condoms. Barrier methods, such as internal/external condoms, are the most common and most reliable way to prevent STDs/STIs. Social determinants, such as where

teens work, learn, and live, impact if and how often teens use condoms during sexual encounters. It is important to promote condom use with social determinants in mind. One way to promote condom use would be by providing condoms in high schools and at colleges. This will give young people the opportunity to be provided with condoms and can also normalize condom usage.

“School-based health centers (SBHCs) can deliver accessible, confidential, and comprehensive medical and mental health care specifically designed for and at little cost to teens” (Fothergill, K., 1999). According to Fothergill (1999), there is a correlation between students using SBHCs and the reduction of school absenteeism, improved health knowledge, increased use of healthcare, decreased use of emergency rooms for non-urgent issues, and improvements in their school academics. Some school-based health centers successfully provide contraceptive services for teens at a convenient location, which removes transportation barriers (Fothergill, K., 1999).

In St. Louis, the Jennings School District has placed a clinic in its high school so that students can seek convenient health care services. According to Edwards (2017), the Jennings School District has noticed increased academic performances as a result of addressing students' health care needs. It appears that teens are responding positively to having clinics in

schools and it gives teens the convenience and confidentiality needed to utilize healthcare services. There is also a positive correlation between teens having access to school clinics and decreases in absenteeism, which can result in better academic performance.

Reasons for Disparities

One of the major causes of health disparities is related to social factors. A person's education level, income level, and access to healthcare greatly influences health outcomes especially in relation to infant mortality, unintended teen pregnancies, and the STD/STI rate. Other social determinants that influence health outcomes are age, gender, and race. Education level is a key determinant of health status and mortality in the United States. Along with better health outcomes, education also influences other social factors such as our experiences, choice in partner(s), and social position. Throughout the United States, there is a large gap in health status and education level. Life expectancies can vary up to 25 years in certain cities throughout the United States (Haley, A., Woolf, S., Zimmerman, E., 2014). According to For the Sake of All (2018), St. Louis is among the 10 most segregated metropolitan regions in the country. Children born in Clayton are expected to live 18 years longer than children born in the Jeff-Vander-Lou neighborhood in North St. Louis. "Death rates are

declining among the most educated Americans, accompanied by steady or increasing death rates among the least educated" (Haley, A. et. al, 2014). Adults in the U.S. without a high school diploma have a life expectancy of 9 years less than those who graduated from college. Adults with post-secondary education are less likely to engage in risky behaviors such as unprotected sexual intercourse which can lead to unintended pregnancies and STDs/STIs.

St. Louis is among the 10 most segregated metropolitan regions in the country.

For the Sake of All (2018). Retrieved from, <https://forthesakeofall.org/>

Access to Healthcare

Having adequate access to healthcare can reduce the public health concerns that have been discussed in this report, including decreasing unintended teen pregnancies, decreasing infant mortality rates, and decreasing STDs/STIs nationally and in Missouri. Currently, United States citizens do not have readily available access to healthcare. According to the Kaiser Family Foundation [KFF] (2018), 51% of Missouri citizens received their health insurance from their employer, 15% have healthcare through Medicaid, 17% through Medicare, and 8% are uninsured. In Missouri, more than half of

the population receives their health insurance from their employer. If a person is unemployed he or she can apply for government programs such as Medicaid, or, if a person under the age of 65 is disabled or has end-stage renal disease they can apply for Medicare. The citizens who do not have a job and do not qualify for Medicaid or Medicare in their state are often completely uninsured. Having access to healthcare is important, and some citizens, especially those in low-income and low-education areas, do not have that privilege. Fortunately, under the Affordable Care Act, children and teens are eligible for CHIP (Children's Health Insurance Program) which is a government funded Medicaid health insurance program for people under the age of 19.

Action Plan for Health Equity

HEALTH EQUITY IS THE GOAL!

The overall goal is to improve health equity, which is accomplished when everyone has an equal opportunity to live a healthy life. As a community, we must improve the social determinants of health to reach the goal of health equity for all. The populations that are the most affected by inadequate social determinants are: African American and Hispanic children, racial/ethnic minority groups, people with disabilities, men who have sex with men, Native American and Alaska

Native populations, low income populations, and Hispanic and Latino immigrant men. The Department of Health and Senior Services ([HSS], n.d.) has implemented an action plan which includes ways to improve social determinants of health to reach the goal of health equity.

Below are some of the actions designed by HSS to improve social determinants:

- Increase the proportion of people with health insurance and provide patient protections in Medicaid, CHIP, Medicare, Health Insurance Exchanges, and other forms of health insurance.
- Increase the proportion of people with a primary care provider.
- Build community capacity to implement evidence-based policies and environmental, programmatic, and infrastructure change strategies.
- Implement an education and outreach campaign regarding preventive benefits.
- Increase education programs, social support, and home-visiting programs to improve prenatal, early childhood, and maternal health.

Individuals should also have access to healthy food options, so it would be beneficial to open more grocery stores in low-income areas. Reliable transportation is another problem that people in low-income areas face, so it is important to improve the quality and safety of the public transportation systems so that individuals can access healthcare facilities, grocery stores, and educational opportunities.

Health disparities are affecting the health of youth in Missouri. It is important to bring awareness to the major disparities that result in unintended teen pregnancies, infant mortalities, and STD/STI diagnoses. Making these disparities known and having an action plan to improve these disparities, is essential to improve health outcomes for youth and the broader community. By creating a shared understanding that not everyone has equal access to healthcare, transportation, education, and health insurance, the community, including

businesses, nonprofits and government agencies, can work together to provide citizens with the necessary services they need to live a long, healthy life.

Another change that should be implemented is providing medically accurate sexual health education in all schools in Missouri. Education programs, such as the medically accurate sexual health education (MASHE) programs/curricula promoted by the Teen Pregnancy and Prevention Partnership (TPPP), provide students with ways to prevent unintended pregnancies and STDs/STIs. Education can decrease infant mortality rates by increasing awareness of family planning and birth spacing, as well as, familiarizing future parents and the community on how to keep expectant mothers and infants healthy. By implementing new education programs, access to healthcare, and clinics in schools, Missouri can continue working towards decreasing unintended teen pregnancies, infant mortalities, and STDs/STIs.

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