

Behavioral Health Disparities in Indiana

INTRODUCTION

The burden of illness, premature death, and disability is distributed unequally throughout the nation, leading to vast differences in health status or outcomes between specific groups. Such health disparities are persistent and occur across a wide range of physical and behavioral conditions.¹

The focus of this issue brief is on behavioral health disparities in Indiana. First, we discuss health disparities in general and how they affect vulnerable or minority populations. We then provide an overview of specific behavioral health disparities—i.e., disparities related to mental health and substance use. Data on these indicators, especially at the state-level, are limited, but we included national and Indiana-specific information whenever possible. In the last section of this brief, we suggest strategies for Indiana policymakers and the prevention community to reduce behavioral health disparities and promote equity within our state.

HEALTH DISPARITIES

Health disparities denote differences in health status or outcomes among certain segments of the population. The U.S. Department of Health and Human Services employs various initiatives designed to eliminate disparities, achieve health equity, and improve the health of all groups in the nation.^{2,3} In its Healthy People 2020 initiative, the U.S. Department of Health and Human Services⁴ defines health disparity 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 social or economic obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion.”

Carter-Pokras and Baquet (2002) suggest viewing health disparities as a “chain of events” indicated by: a difference in environment; access to, utilization of, and quality of care;

KEY POINTS

- The burden of illness, premature death, and disability is not distributed equally throughout the nation or our state.
- Behavioral health disparities refer to differences in mental health or substance use status or outcome in specific subpopulations.
- Certain racial and ethnic groups; lesbian, gay, bisexual, transgender, and questioning (LGBTQ) populations; people with disabilities; and transition-age youth and young adults experience high rates of health disparities.
- Based on available sources, we found that behavioral health disparities were evident among minority populations in Indiana and low-income Hoosiers were particularly impacted.
- Disproportionately high prevalence rates among minority populations were found in Indiana for:
 - Lifetime depressive disorder
 - Current smoking
 - No healthcare coverage
 - Couldn't afford to see a doctor
- Policy recommendations to reduce behavioral health disparities and promote equity among all Hoosiers: (1) Increase public awareness; (2) Develop a culturally and linguistically competent behavioral health workforce and increase workforce diversity; (3) Build collaborations with key stakeholders and local and statewide minority health coalitions; (4) Assist communities in building capacity to implement evidence-based policies and programs; (5) Develop, implement, and evaluate culturally and linguistically appropriate evidence-based initiatives; (6) Increase availability and quality of data; (7) Promote, fund, and engage in research; and (8) Increase public health funding.



RICHARD M. FAIRBANKS
SCHOOL OF PUBLIC HEALTH

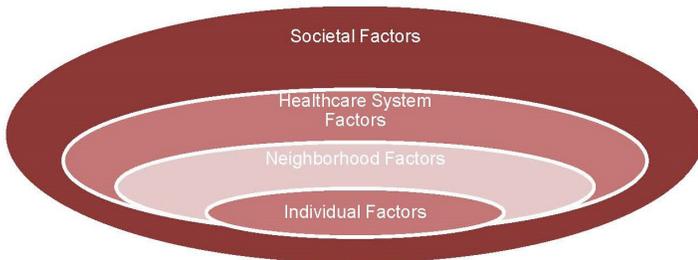
INDIANA UNIVERSITY
 Center for Health Policy
 IUPUI

health status; or a particular health outcome.⁵ The factors influencing health disparities are multilayered and complex. According to the World Health Organization, social determinants of health are primarily responsible for health inequities.⁶ This includes socioeconomic status,⁷ social conditions,⁷ level of education,⁸ available resources,⁷ racial residential segregation,⁹ and geographic heterogeneity.⁹ Furthermore, race, ethnicity, sex, sexual orientation, age, and disability also impact health conditions and outcomes.¹⁰

The socio-ecological approach can be applied to understand the dynamic interrelations among various personal and environmental aspects contributing to disparities. These include (see Graph 1):

- Individual factors (e.g., minority race or ethnicity, educational attainment, employment/occupation, income, lifestyle, behaviors, sexual orientation)
- Neighborhood factors (e.g., access to food, housing, safety, transportation, recreational amenities, schools, and businesses)
- Healthcare system factors (e.g., insurance coverage, language barriers, trust, health literacy, workforce diversity/cultural competence, physical access)
- Societal factors (e.g., discrimination, racism, stigma)

Graph 1: Socio-ecological Framework of Factors Contributing to Health Disparities



Healthcare access is one of the most utilized indicators of health disparities. With its most recent National Healthcare Quality and Disparities Report, the Agency for Healthcare Research and Quality (AHRQ) found access to care improved as a result of the Affordable Care Act insurance expansion. However, disparities in access-to-care disparities, though on the decline, remained.¹¹ One of the most pressing issues affecting healthcare access is insurance coverage. According to Smith and Medalia (2015), 19.9% of Hispanics and 11.8% of Blacks did not have health insurance coverage in 2014; rates considerably higher than for non-Hispanic Whites (7.6%). Disparities in health insurance were also evident by educational attainment and household income. For instance, 94.9% of Americans with a graduate or professional degree were insured; a rate noticeably higher than for high school

graduates only (82.3%) and individuals without a high school diploma (69.4%). Similarly, 94.7% of Americans with annual household incomes of \$100,000 or more had health insurance, compared to 89.3% of individuals with incomes ranging from \$50,000 to \$74,999 and 83.4% of those with incomes less than \$25,000.¹²

Health disparities also have a significant economic impact on our nation. According to a study by LaVeist, Gaskin, and Richard (2011), the estimated excess costs due to health disparities was \$316.2 billion in 2006, including \$61.1 billion for direct medical care expenditures and \$255.1 billion for indirect costs due to lost productivity and premature death. Most of these excess costs were incurred by African Americans. The authors concluded that eliminating health disparities would not only be cost-effective, but also a matter of social justice.¹³

BEHAVIORAL HEALTH DISPARITIES

Behavioral health disparities refer to differences in mental health or substance use status or outcome in specific subpopulations. Significant behavioral health disparities persist among diverse groups across the United States. The Substance Abuse and Mental Health Services Administration (SAMHSA) reports certain racial and ethnic groups; lesbian, gay, bisexual, transgender, and questioning (LGBTQ) populations; people with disabilities; and transition-age youth and young adults experience elevated levels of mental and substance use disorders as well as higher rates of suicide. These disparities may be linked to factors such as limited access to care, a lack of information, and the need for a diverse healthcare workforce and culturally and linguistically competent care and programs.¹⁴

NATIONAL DATA

Behavioral health problems are widely prevalent, but unevenly distributed in the United States. U.S. data on behavioral health disparities are available more readily for some groups (e.g., by gender, race/ethnicity, or socio-economic indicators) than for others (e.g., by LGBTQ status). However, individual studies have identified differences in mental health and substance use conditions within the LGBTQ community. In one study, both lesbians and bisexual women, who were not “out”, were more likely to have had a suicide attempt compared with heterosexual women. Additionally, lesbians used psychotherapy for depression more often than did heterosexual or bisexual women.¹⁵ Similarly, depression, mental disorder, or suicide attempts were more common among gay men and youth than among heterosexual men.¹⁶⁻¹⁸ This may be explained by emotional stressors, verbal and physical harassment, substance use, isolation and negative experiences relevant to disclosing sexual orientation.^{15,19} Among the gay group, the probability

of depression or anxiety may be higher, and the problem may be more severe for those men who do not disclose their sexual orientation (“in the closet”) or who do not have adequate social support.²⁰

Transgendered people were also at high risk for suffering from depression, alcohol use disorder, drug abuse, and suicide when under the oppression from sexism.²¹ Nearly one-third of the transgendered participants had attempted suicide.²² The male-to-female group had a higher risk of being classified as depressed than the female-to-male group (66% vs. 55%).²²

Mental Health

Mental health issues affect a large proportion of Americans; nearly one in five U.S. adults experience a mental illness in a given year. According to estimates from the 2014 National Survey on Drug Use and Health (NSDUH), 43.6 million adults (18.1%) were reported to have had a mental illness and about 9.8 million adults (4.1%) were reported to have had a serious mental illness in the past year.²³

The occurrence of mental illness was distributed disproportionately within the population. Determining which groups are at the highest risk is crucial for the development and implementation of strategies to reduce mental health disparities. Significant differences in prevalence were seen by age, gender, race, employment status, type of health insurance, and poverty level:

- Overall, rates of mental illness declined with age and older adults 65 years and above had the lowest prevalence (13.0%);
- Females reported higher rates of mental illness (21.8%) than males (14.1%);
- Racial minority groups experienced higher rates of mental illness, particularly those who self-identified as two or more races (27.1%), Native Hawaiians/other Pacific Islander (22.3%), and American Indians/Alaska Natives (21.2%);
- One-fourth (25.1%) of U.S. adults who were unemployed reported mental illness compared to 14.8% with full-time employment;
- Nearly one-third (29.7%) of Americans on Medicaid/CHIP experienced a mental illness in the past year; a rate substantially higher than for those with private health insurance (15.4%) and even those without insurance coverage (20.9%); and
- Poorer adults had higher rates of mental illness; one-fourth (25.7%) of Americans who were at less than 100% at the federal poverty level (FPL) reported mental illness compared to 15.4% who were at FPL of 200% or more.²⁴

Tobacco, Alcohol, and Illicit Drug Use

Tobacco use continues to be the primary cause of preventable death in America.⁴ Findings from the 2014 NSDUH showed nearly one-third (32.5%) of U.S. adults reported consuming a tobacco product in the past year. Differences in past-year tobacco consumption were seen by gender, race, educational attainment, and employment status:²³

- Males were more likely to use tobacco (40.4%) than females (25.1%)
- Rates were highest for American Indians/Alaska Natives (45.6%) and individuals who self-identified as having two or more races (41.5%); the lowest rate was among Asians (15.5%)
- Lower educational attainment was associated with more tobacco use; i.e., U.S. adults who did not graduate from high school had the highest prevalence rate (40.1%) and college graduates had the lowest (21.5%)
- Half (50.4%) of those who are currently unemployed used a tobacco product in the past year compared to one-third (34.9%) of those with fulltime employment

Furthermore, people with mental illness were more likely to use tobacco than those with no mental illness. Specifically speaking, the consumption of tobacco products advanced with the degree of mental illness in the past year. For instance, people with a serious mental illness were more likely to report past-year tobacco use (51.0%) than those with only mild mental illness (38.9%).

Nearly one-fourth (24.7%) of U.S. adults engaged in binge drinking (i.e., having had five or more drinks on the same occasion on at least one day in the past month). NSDUH data from 2014 showed the following patterns of disparity:²³

- Males were more likely to binge drink (32.6%) than females (17.4%)
- Rates were highest for American Indians/Alaska Natives (30.0%) and for Asians (15.8%)
- Binge drinking rates were higher among unemployed (31.4%) and fulltime employed (30.4%) adults, compared to those with part-time employment (24.5%)
- Educational attainment did not impact binge drinking rates noticeably

Binge alcohol rates increased with the degree of mental illness. For instance, people with serious mental illness were more likely to report binge alcohol use (27.4%) than those with mild mental illness (26.5%).²³

Illicit drug use is a prevalent public health issue associated with considerable negative outcomes including increased morbidity and mortality. Based 2014 NSDUH estimates, 27.0 million Americans (10.2%) ages 12 or older used an

illicit substance in the past month. Marijuana was the most prevalent illicit drug, with 13.3% of Americans reporting past-month use; followed by nonmedical use of psychotherapeutics (5.6%). The distribution of illicit drug consumption was not proportional to the population, i.e., some groups had higher rates of use compared to other groups, suggesting the existence of health disparities. Racial minority groups were more likely to engage in illicit drug use, particularly Native Hawaiians/other Pacific Islanders and those who self-identified as two or more races, with 16.6% and 16.1%, respectively, reporting past-month use.²³

Age was also a contributing factor, and young adults ages 18 to 25 had the highest rate of illicit drug use (22.0%) in the past month; considerably higher than adolescents ages 12 to 17 (9.4%) or adults ages 26 and older (8.3%).²³

Furthermore, prevalence differed by current employment status; i.e., Americans who were unemployed had a higher rate of illicit drug use (18.7%) than those with full-time employment (10.6%) or part-time employment (13.2%).²³

Similar to tobacco use and binge drinking, illicit drug use was more prevalent among those with mental illness and rates increased with the severity of mental illness. For example, 14.1% of U.S. adults without mental illness reported past-year illicit drug use, compared to 33.8% of Americans with a serious mental illness.²³

Co-occurring Mental Health and Substance Use Disorders

Mental illness and substance use disorders often co-occur; i.e., individuals who abuse alcohol or drugs are more likely to also have a mental health condition and vice versa. For example, among U.S. adults with a substance use disorder in the past year, 39.1% suffered from a mental illness. In comparison, the occurrence of mental illness was lower among those without a substance use disorder (16.2%). Similarly, 18.2% of U.S. adults with a mental illness in the past year also had a substance use disorder; while only 6.3% of Americans without mental illness met criteria for substance use disorder.²³ Based on 2014 NSDUH results, 7.9 million U.S. adults had a co-occurring disorder (COD) in the past year, representing a prevalence rate of 3.3% within the general population.²³

COD prevalence rates differed by age, race, and employment status. Young adults ages 18 to 25 were more likely to suffer from COD (5.9%) than individuals 50 years and older (1.6%); and Americans who were unemployed had a higher rate (7.0%) than those with fulltime employment (3.1%). The highest prevalence rate, however, was found among American Indians/Alaska Natives (8.8%).²³

Table 1: Co-Occurring Substance Use Disorder and Any Mental Illness (COD) in the Past Year among Persons Ages 18 or Older, by Age Group and Demographic Characteristics (NSDUH, 2014)

		Total	Aged 18-25	Aged 26-49	Aged 50+
Gender	Male	3.6%	5.7%	4.8%	1.7%
	Female	3.0%	6.0%	3.7%	1.5%
Hispanic Origin and Race	Not Hispanic or Latino	3.3%	6.0%	4.4%	1.6%
	White	3.2%	6.3%	4.7%	1.4%
	Black	3.8%	4.5%	3.7%	3.5%
	American Indian/Alaska Native	8.8%	8.4%	8.7%	*
	Native Hawaiian/Other Pacific Islander	3.1%	*	1.4%	*
	Asian	1.9%	4.6%	2.0%	0.3%
	Two or More Races	6.0%	8.6%	8.7%	1.8%
	Hispanic or Latino	3.3%	5.6%	3.6%	1.1%
Current Employment	Full-Time	3.1%	5.3%	3.6%	1.5%
	Part-Time	4.0%	6.2%	5.1%	1.5%
	Unemployed	7.0%	8.9%	7.5%	3.1%
	Other	2.7%	5.0%	5.3%	1.7%
Total		3.3%	5.9%	4.2%	1.6%

* Low precision; no estimate reported.

Source: Substance Abuse and Mental Health Services Administrations²³

INDIANA DATA

Data on behavioral health disparities in Indiana are limited and state-level NSDUH estimates are not broken down by demographics other than age group. However, the Behavioral Risk Factor Surveillance System (BRFSS) provides information on certain disparity indicators among Indiana subpopulations ages 18 and older.

In this section, we first present an overview of Hoosiers' insurance coverage, because access to healthcare is one of the most utilized general indicators of health disparities. We then provide more specific information on behavioral health variables such as depression, binge drinking, and tobacco use, and show how the prevalence rates differ among specific groups, hence, indicating disparity.

General Indicators of Health Disparity

Based on findings from the 2013 BRFSS, the availability of healthcare coverage was unevenly distributed among Indiana

residents. Overall, 17.3% (95% Confidence Interval [CI]*: 16.2-18.3) of Indiana adults did not have healthcare coverage.²⁵ Rates were higher among younger adults, those with less education, and low-income Hoosiers (see Table 2).

Also, 15.5% (95% CI: 14.5-16.5) of Indiana adults reported needing to see a doctor in the past 12 months but could not afford it.²⁵ This percentage, too, was disproportionately high for Hispanics and multi-racial Hoosiers, and those with lower education or household income (see Table 2).

Table 2: Indiana Adults without Healthcare Coverage and Who Could Not See a Doctor due to Cost, by Demographic Characteristics (BRFSS, 2013)

		No healthcare coverage		Couldn't afford doctor	
		Percent	95% CI	Percent	95% CI
Gender	Male	18.0%	(16.4-19.7)	12.7%	(11.2-14.1)
	Female	16.5%	(15.0-18.0)	18.2%	(16.7-19.6)
Race/Ethnicity	White	14.0%	(13.0-15.1)	13.4%	(12.3-14.4)
	Black	25.4%	(20.3-30.4)	22.8%	(18.0-27.5)
	Hispanic	46.0%	(39.6-52.4)	30.3%	(24.3-36.3)
	Other	25.3%	(17.2-33.4)	21.5%	(14.0-28.9)
	Multi-racial	25.3%	(13.9-36.8)	29.1%	(17.5-40.7)
Age Group	18-24	26.3%	(22.1-30.6)	15.6%	(12.1-19.1)
	25-34	28.0%	(24.5-31.5)	22.5%	(19.2-25.8)
	35-44	20.5%	(17.6-23.4)	18.5%	(15.8-21.2)
	45-54	17.4%	(15.2-19.6)	19.8%	(17.5-22.2)
	55-64	13.1%	(11.3-14.8)	12.9%	(11.2-14.6)
	65+	2.0%	(1.4-2.6)	4.6%	(3.7-5.5)
Education	Less than H.S.	35.6%	(31.4-39.9)	30.1%	(26.0-34.1)
	H.S. or GED	17.3%	(15.6-19.0)	14.9%	(13.3-16.5)
	Some post-H.S.	16.0%	(14.1-17.9)	15.6%	(13.8-17.4)
	College graduate	6.3%	(5.1-7.4)	6.4%	(5.3-7.5)
Household Income	Less than \$15,000	35.7%	(31.4-39.9)	34.9%	(30.7-39.1)
	\$15,000-\$24,999	32.6%	(29.3-35.8)	29.5%	(26.5-32.6)
	\$25,000-\$34,999	21.4%	(17.9-25.0)	19.9%	(16.5-23.3)
	\$35,000-\$49,999	13.3%	(10.5-16.0)	11.3%	(8.8-13.8)
	\$50,000 or more	4.4%	(3.4-5.4)	5.0%	(4.0-6.0)
Total		17.3%	(16.2-18.3)	15.5%	(14.5-16.5)

Source: Centers for Disease Control Prevention ²⁵

Mental Health

Based on findings from the 2013 BRFSS, about one-fifth (19.5%; 95% CI: 18.5-20.5) of Indiana adults have been told by a healthcare professional at some point in their life that they have a depressive disorder (including depression, major/minor depression, or dysthymia). Rates were higher for females, individuals who self-identify as multi-racial and whites, and those with less than a high school degree. The disparity, however, was particularly evident by household income, ranging from 14.1% (95% CI: 12.5-15.6) in Hoosiers with incomes of \$50,000 or more to 33.4% (95% CI: 29.6-37.3) in those who make less than \$15,000 annually²⁵ (see Table 3).

Alcohol and Tobacco Use

According to 2013 BRFSS results, 15.0% (95% CI: 14.0-16.0) of Indiana adults reported binge drinking in the past month. Prevalence rates were significantly higher for males and younger adults. While Hispanics seemed to have an elevated rate compared to other races/ethnicities, findings were not statistically significant. There was an upward trend for binge drinking based on higher levels of education and income, but again findings were not statistically different, except for the rate difference between Hoosiers with annual household incomes of \$15,000--\$24,999 (11.8%; 95% CI: 9.5-14.2) and those who make \$50,000 or more (17.8%; 95% CI: 16.0-19.5) (see Table 3). Overall, the data seemed to suggest that being more educated and having a greater income was associated with higher rates of binge drinking; however, statistical significance was not observed, which could either mean that there were no true differences between the groups or that the sample size was too small and did not have enough power to reach significance.²⁵

About one-fifth (21.9%; 95% CI: 20.8-23.1) of Indiana adults currently smoke. Health disparities were most evident for individuals who self-identify as multi-racial, those with lower educational attainment, and low-income Hoosiers. In fact, individuals with a household income of less than \$15,000 were nearly three times as likely to smoke (38.3%; 95% CI: 34.2-42.5) than those who made \$50,000 or above (13.2%; 95% CI: 11.7-14.7) and Indiana adults without a high school degree or GED were more than four times as likely to smoke (37.6%; 95% CI: 33.4-41.8) than college graduates (9.0%; 95% CI: 7.7-10.3).²⁵ For detailed prevalence rates, see Table 3.

*See explanation of confidence interval following the *Conclusion* on page 7.

Table 3: Lifetime Depressive Disorder, Current Binge Drinking, and Current Smoking in Indiana Adults, by Demographic Characteristics (BRFSS, 2013)

		Ever depression		Current binge drinking		Current smoking	
		Percent	95% CI	Percent	95% CI	Percent	95% CI
Gender	Male	13.1%	(11.7-14.4)	20.2%	(18.5-21.9)	23.6%	(21.8-25.3)
	Female	25.7%	(24.1-27.2)	10.3%	(9.1-11.5)	20.4%	(19.0-21.9)
Race/Ethnicity	White	20.5%	(19.4-21.7)	15.0%	(13.9-16.1)	22.1%	(20.8-23.3)
	Black	13.3%	(10.0-16.7)	12.6%	(8.9-16.3)	24.8%	(20.1-29.5)
	Hispanic	12.1%	(8.0-16.2)	21.1%	(15.4-26.9)	15.2%	(10.1-20.2)
	Other	15.9%	(9.3-22.4)	16.3%	(7.9-24.6)	19.6%	(12.2-26.9)
	Multi-racial	28.8%	(18.2-39.4)	N/A	N/A	36.0%	(24.7-47.4)
Age Group	18-24	17.9%	(14.0-21.7)	23.4%	(19.3-27.4)	19.7%	(15.9-23.5)
	25-34	20.1%	(17.1-23.1)	23.8%	(20.6-27.0)	29.5%	(25.9-33.1)
	35-44	20.2%	(17.6-22.9)	21.1%	(18.2-23.9)	28.6%	(25.5-31.7)
	45-54	21.3%	(19.0-23.5)	13.5%	(11.6-15.4)	26.1%	(23.6-28.6)
	55-64	21.8%	(19.8-23.8)	8.9%	(7.4-10.4)	19.1%	(17.1-21.1)
	65+	15.9%	(14.4-17.4)	3.1%	(2.4-3.9)	9.6%	(8.4-10.8)
Education	Less than H.S.	24.6%	(21.0-28.2)	13.0%	(9.8-16.1)	37.6%	(33.4-41.8)
	H.S. or GED	18.8%	(17.2-20.4)	13.9%	(12.2-15.5)	24.3%	(22.4-26.2)
	Some post-H.S.	20.7%	(18.7-22.7)	16.0%	(14.1-18.0)	20.9%	(18.9-22.9)
	College graduate	15.6%	(14.0-17.2)	16.9%	(15.1-18.7)	9.0%	(7.7-10.3)
Household Income	Less than \$15,000	33.4%	(29.6-37.3)	15.5%	(12.3-18.7)	38.3%	(34.2-42.5)
	\$15,000-\$24,999	25.3%	(22.4-28.1)	11.8%	(9.5-14.2)	31.9%	(28.7-35.1)
	\$25,000-\$34,999	19.6%	(16.6-22.5)	13.9%	(10.8-17.1)	25.0%	(21.3-28.7)
	\$35,000-\$49,999	17.3%	(14.8-19.9)	16.8%	(14.0-19.6)	20.4%	(17.5-23.4)
	\$50,000 or more	14.1%	(12.5-15.6)	17.8%	(16.0-19.5)	13.2%	(11.7-14.7)
Total		19.5%	(18.5-20.5)	15.0%	(14.0-16.0)	21.9%	(20.8-23.1)

Source: Centers for Disease Control Prevention ²⁵

THOUGHTS FOR POLICYMAKERS

Health disparities, which are closely linked to social, economic, and environmental disadvantage, continue to persist in our nation. The U.S. Department of Health and Human Services engages in multiple initiatives to reduce disparity, building on the Affordable Care Act, which was signed into law by President Barack Obama on March 23, 2010. The statute represents a reform of the healthcare system and contains provisions related to reducing health disparities.²

Based on a review of national and state-level resources, the following recommendations are being made to help Indiana reduce behavioral health disparities and promote equity among all of its residents:

1. Increase awareness

Increase public awareness of behavioral health disparities and their impact on minority populations and on the state as a whole.

2. Develop workforce

Develop a culturally and linguistically competent behavioral health workforce and increase workforce diversity.

3. Build collaboration

Engage key stakeholders in endeavors to raise awareness and promote initiatives to reduce disparities; build strong relationships with local and statewide minority health coalitions.

4. Build capacity

Assist communities in building capacity to implement evidence-based policies and programs designed to reduce behavioral health disparities.

5. Emphasize evidence-based programs

Develop, implement, and evaluate culturally and linguistically appropriate evidence-based initiatives.

6. Collect data

Increase availability and quality of data collected on minority populations, including racial and ethnic minorities, LGBTQ populations, and other underserved groups.

7. Encourage research

Promote, fund, and engage in behavioral health disparities research.

8. Increase funding

Increase public health funding designated to improve the behavioral health of minority populations.

CONCLUSION

Access to care has and continues to improve as a result of the Affordable Care Act. Unfortunately, health disparities, though on the decline, persist among specific segments of the population. Implementing evidence-based strategies to eliminate disparity at the local and state level is essential and a necessary measure to achieve social justice and good public health.

Confidence Interval: In many instances, data are collected from a subset or sample of a population and not from the entire population. Based on the sample, estimates (e.g., prevalence rates) are calculated. These estimates may be close to the “true values”, or they may be higher or lower. To address this uncertainty, confidence intervals (CI) are computed. A CI is a range within which the “true value” is likely to fall, based on the data used in the analysis. For example, Indiana’s adult smoking rate in 2013 was 21.9%, with a 95% CI ranging from 20.8% to 23.1%. This means we are 95% confident that the true smoking rate (estimated at 21.9%) was between 20.8% and 23.1%.

REFERENCES

- Centers for Disease Control Prevention, CDC health disparities and inequalities report—United States, 2013. *Morbidity and Mortality Weekly Report*, 2013. 62: p. 1-186.
- US Department of Health and Human Services, HHS action plan to reduce racial and ethnic health disparities: A nation free of disparities in health and health care. 2011, U.S. Department of Health and Human Services, : Washington, D.C.
- U.S. Department of Health and Human Services. Disparities. 2015 [December 10, 2015]; Available from: <http://www.healthypeople.gov/2020/about/foundation-health-measures/Disparities#6>.
- U.S. Department of Health and Human Services, The Secretary’s Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020. Phase I report: Recommendations for the framework and format of Healthy People 2020. 2008, U.S. Department of Health and Human Services: Rockville, MD.
- Carter-Pokras, O. and C. Baquet, What Is a “health disparity”? *Public Health Reports*, 2002. 117(5): p. 426-434.

6. World Health Organization. Social determinants of health. n.d. December 10, 2015]; Available from: http://www.who.int/social_determinants/sdh_definition/en/.
7. Phelan, J.C., B.G. Link, and P. Tehranifar, Social Conditions as Fundamental Causes of Health Inequalities: Theory, Evidence, and Policy Implications. *Journal of Health and Social Behavior*, 2010. 51: p. S28-40.
8. Kennedy, B.M., et al., Socioeconomic status and health disparity in the United States. *Journal of Human Behavior in the Social Environment*, 2007. 15(2-3): p. 13-23.
9. Subramanian, S.V., D. Acevedo-Garcia, and T.L. Osypuk, Racial residential segregation and geographic heterogeneity in black/white disparity in poor self-rated health in the US: A multilevel statistical analysis. *Social Science & Medicine*, 2005. 60(8): p. 1667-1679.
10. Meyer, P.A., et al., Introduction: CDC Health Disparities and Inequalities Report-United States, 2013, in *MMWR* 2013. p. 3-5.
11. Agency for Healthcare Research and Quality, 2014 National Healthcare Quality and Disparities Report. 2014, Agency for Healthcare Research and Quality: Rockville, MD.
12. Smith, J.C. and C. Medalia, Health Insurance Coverage in the United States: 2014, in *Current Population Reports*. 2015, U.S. Census Bureau: Washington, D.C. .
13. LaVeist, T.A., D. Gaskin, and P. Richard, Estimating the economic burden of racial health inequalities in the United States. *International Journal of Health Services*, 2011. 41(2): p. 231-238.
14. Substance Abuse and Mental Health Services Administrations. Health disparities. 2014 December 10, 2015]; Available from: <http://www.samhsa.gov/health-disparities>.
15. Koh, A.S. and L.K. Ross, Mental health issues: A comparison of lesbian, bisexual and heterosexual women. *Journal of homosexuality*, 2006. 51(1): p. 33-57.
16. Cochran, S.D., et al., Mental health and substance use disorders among Latino and Asian American lesbian, gay, and bisexual adults. *Journal of consulting and clinical psychology*, 2007. 75(5): p. 785-794.
17. Gilman, S.E., et al., Risk of psychiatric disorders among individuals reporting same-sex sexual partners in the National Comorbidity Survey. *American Journal of Public Health*, 2001. 91(6): p. 933-939.
18. Berg, M.B., M.J. Mimiaga, and S.A. Safren, Mental health concerns of gay and bisexual men seeking mental health services. *Journal of Homosexuality*, 2008. 54(3): p. 293-306.
19. Substance Abuse and Mental Health Services Administrations, Top health issues for LGBT populations information & resource kit, in HHS Publication No.(SMA) 12-4684. 2012, Substance Abuse and Mental Health Services Administration Rockville, MD.
20. Winn, R.J. Ten things gay men should discuss with their healthcare provider 2012 May 2012 [cited 2015 Oct. 13]; Available from: <http://www.glma.org/index.cfm?fuseaction=Page.viewPage&pageID=690>.
21. Mathy, R.M., Transgender identity and suicidality in a nonclinical sample: Sexual orientation, psychiatric history, and compulsive behaviors. *Journal of Psychology & Human Sexuality*, 2003. 14(4): p. 47-65.
22. Clements-Nolle, K., et al., HIV prevalence, risk behaviors, health care use, and mental health status of transgender persons: Implications for public health intervention. *American journal of public health*, 2001. 91(6): p. 915-921.
23. Substance Abuse and Mental Health Services Administrations, National Survey on Drug Use and Health (NSDUH). 2014, Substance Abuse and Mental Health Services Administration: Rockville, MD.
24. Center for Behavioral Health Statistics and Quality, Behavioral health trends in the United States: Results from the 2014 National Survey on Drug Use and Health (HHS Publication No. SMA 15-4927, NSDUH Series H-50). 2015, Substance Abuse and Mental Health Services Administration: Rockville, MD.
25. Centers for Disease Control Prevention, Behavioral Risk Factor Surveillance System (BRFSS). 2013, Centers for Disease Control Prevention: Atlanta, GA.

The mission of the Center for Health Policy is to conduct research on critical health-related issues and translate data into evidence-based policy recommendations to improve community health. The CHP faculty and staff collaborate with public and private partners to conduct quality data driven program evaluation and applied research analysis on relevant public health issues. The Center serves as a bridge between academic health researchers and federal, state and local government as well as healthcare and community organizations.

Authors: Ling Tao, MA; Marion Greene, MPH, PhD(c)

Edit and Layout: Lyndy Kouns

Please direct all correspondence and questions to: Marion Greene, MPH, PhD(c), Center for Health Policy, IU Richard M Fairbanks School of Public Health at IUPUI, 1050 Wishard Blvd, RS5163, Indianapolis, IN 46202; Email: mrgreene@iu.edu; Phone: (317)278-3247.