

Women and Alcohol: Drinking to Cope in a Pandemic World

South Southwest Prevention Technology Transfer Center

Background

While alcohol drinking rates and alcohol-related deaths have been on the rise for women over the past couple decades, the COVID-19 pandemic created a perfect storm for increased alcohol availability and drinking to cope that propelled this trend. In this brief we argue that certain biological and environmental factors laid the groundwork for a burgeoning public health crisis for women, especially women of child-bearing age. We also examine the epidemiological trends both nationally and in the South Southwest Prevention Technology Transfer Center (SSW PTTC) region, and offer practical solutions for prevention professionals to address these concerning trends for women.



Alcohol Sales and Drinking Patterns for Women During the Pandemic

Women
had a
41% increase
in heavy drinking
episodes

Pollard et al. (2020) conducted a comparison of a nationally representative sample using the RAND Corporation American Life Panel (ALP) in 2019 to 2020, after social distancing had been in effect for a few months when the pandemic began. The study was conducted in response to Nielson (2020) reporting a 54% increase in alcohol sales in the weeks following the beginning of the pandemic, and a 262% increase in online alcohol sales during the same time period. Heavy drinking for women was defined as having four or more drinks within a couple hours. When comparing data from 2019 to 2020, women had a 41% increase in heavy drinking episodes, and a 39% increase in alcohol-related problems (Pollard et al., 2020). Women also had a 27% increase in alcohol-induced deaths from 2019 to 2020 (CDC Wonder).



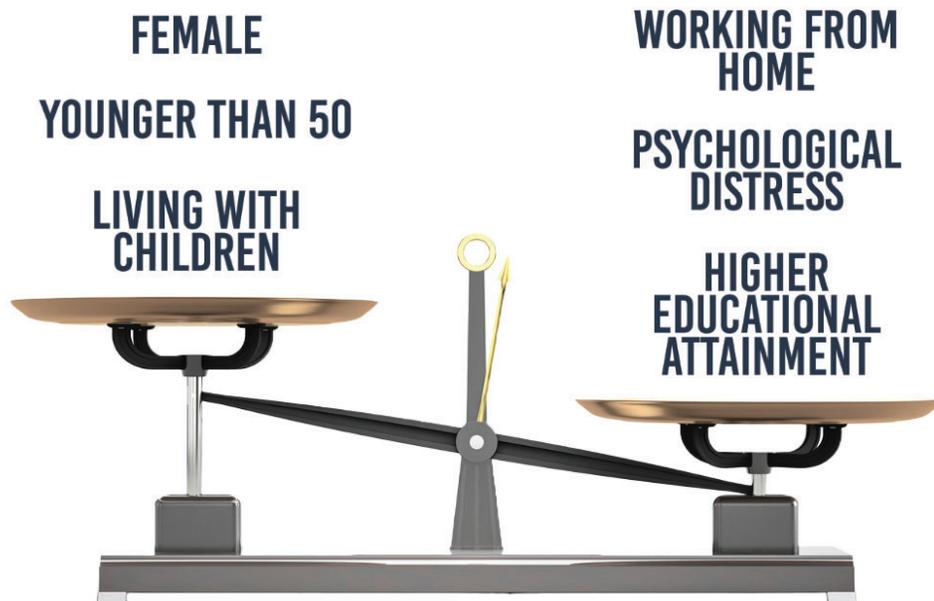
South Southwest (HHS Region 6)

PTTC

Prevention Technology Transfer Center Network
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Contributing Factors and Characteristics

Individuals who have higher rates of COVID-19-related stress have reported more frequent drinking and drinking to cope with stress during the pandemic (Cummings et al., 2021). Kyaw Hla et al. (2022) examined contributing factors and characteristics that put people at risk for high alcohol consumption during the pandemic. Across survey data from 38 countries, participant factors independently associated with higher rates of drinking during lockdown included female gender, less than 50 years old, higher educational attainment, living with children, working from home, and psychological distress. Overall, increased psychological distress, particularly among women during the early pandemic period, resulted in higher rates of drinking alcohol (Kyaw Hla et al., 2022). Cummings et al. (2021) also found that participants who lived in states with more strict stay-at-home orders had higher reports of frequent drinking and drinking to cope with stress during the pandemic.



In addition, even prior to the pandemic, women who worked in male-dominated places of employment who experienced a negative work climate were found to be more likely to drink than men who also worked in a negative work climate (Svare et al., 2004). Related to this phenomenon, prior to the pandemic, women who had more work family conflict (WFC) were found to be more likely to drink heavily than those who experienced less WFC (Roos et al., 2006). The special issues that occur in places of work with women balancing childcare during a pandemic and working from home in male-dominated places of employment could have created a more negative work environment for women, leading to increased WFC and higher rates of drinking to cope among women.

Gender Convergence and Health Consequences for Women

Over the last several decades, alcohol consumption and heavy drinking have been experiencing what is termed gender convergence, where alcohol consumption of women is approaching the rates of men as women are experiencing more gender equality (McKetta, et al., 2022). With the additional distress associated with the pandemic, Rodriguez et al. (2020) caution that greater monitoring of women and alcohol should be conducted as studies have shown that women are at greater risk of increased drinking when experiencing psychological distress, especially given the additional burden on women with childcare, working from home, etc. Wardell et al. (2020) found that having a child under the age of 18 was uniquely associated with more binge drinking. Additionally, drinking rates have been increasing the highest among women with children under five years old (Knopf, 2021a). In fact, Knopf (2021b) points out that excessive drinking, binge drinking, and consumption have all increased for women with children in the home, but not for men.

At the same time, women are more vulnerable physiologically to the effects of alcohol than men and effective public health messaging about these adverse effects should be prioritized (Rodriguez et al. 2020). Physiologically, women take longer to absorb alcohol, and alcohol metabolizes more slowly than in men (CDC, 2022). While public health messaging has done a relatively good job of relaying that alcohol can negatively affect an unborn child, (fetal alcohol spectrum disorders (FASD), miscarriage, Sudden Infant Death Syndrome (SIDS), and premature delivery), there are many other health consequences that affect women related to the overconsumption of alcohol. Women are more at risk than men for certain health consequences associated with excessive alcohol use, such as cirrhosis and other liver disease, heart conditions, cognitive decline, and breast cancer (CDC, 2022). Additionally, women who drink excessively are more at risk for sexual violence (CDC, 2022).

WOMEN ARE MORE AT RISK THAN MEN FROM EXCESSIVE DRINKING FOR:



COGNITIVE DECLINE



BREAST CANCER



HEART CONDITIONS



**CIRRHOSIS/
LIVER CONDITONS**



Epidemiology of Alcohol Death Rates in Women: National and Regional Data

While there was a sharp increase nationally in drinking among women and men from 2019 to 2020 when the pandemic began, women also saw a 100% increase in alcohol induced deaths from 2010 to 2020 compared to 58% for men. While the SSW did not see the sharp uptick in deaths for women between 2019 and 2020 that was seen at the national level, the region has seen a greater increase in alcohol-related deaths for women (133%) since 2010.

Alcohol-induced deaths in the **U.S. increased 58% for males** and **100% for females** from 2010 to 2020

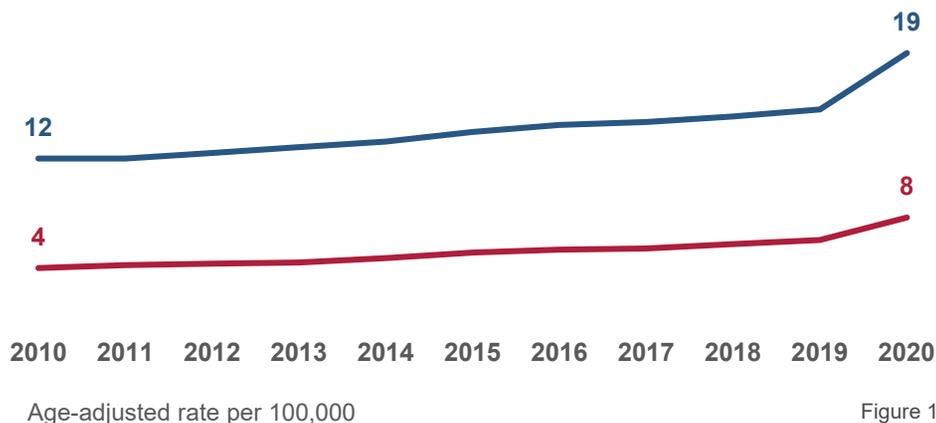


Figure 1.

Alcohol-induced deaths in the **SSW increased 58% for males** and **133% for females** from 2010 to 2020

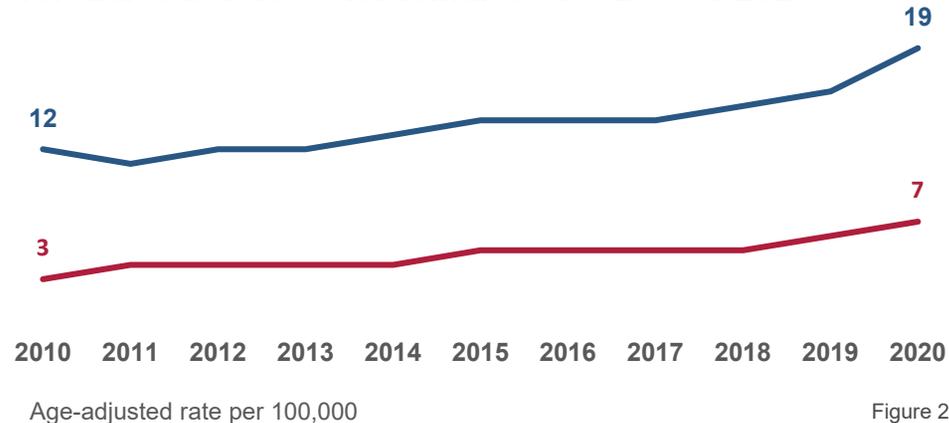


Figure 2.

Understanding Rates

In this brief, county data are characterized as having low-death rates or high-death rates. Age-adjusted death rates for the nation, across all counties, ranged 1.2 to 124.8 deaths per 100,000. The blue counties are the low age-adjusted death rates and range from 1.2 to 5.5 deaths per 100,000 population. The red counties are the high age-adjusted death rates and range from 5.6 to 124.8 deaths per 100,000 population. Some of the counties have missing, suppressed (less than 10 counts), or unreliable (less than 19 counts) data and are coded gray. All rates in this brief are age-adjusted death rates per 100,000.

Rates are an important tool for understanding the relativity of death or disease on a population. Say, for example, we have a large city with 1 million people and 500 people die and we also have a small town with 10,000 people and 500 people die in that town. Relative to population, this means different outcomes to each city. To calculate the rate for the larger city, you divide the number of deaths (500) by the number in the population at risk (1,000,000) and multiply by 100,000. This rate for the larger city would be 50 per 100,000. The smaller city, using the same calculation would be 5,000 per 100,000. The number of people who died in the smaller town is greater than the larger city relative to population. This allows us to compare geographic settings of different population sizes.

National Trends

National alcohol death rates for women in every U.S. county are depicted in Figure 3. A majority of the high-death rates are centered in the southwest and northwest parts of the country. There are clusters in Florida and the upper Northeast. States with a high percentage of their counties with high-death rates (red) are: Arizona (80%), Rhode Island (80%), California (67%), Washington (67%), Oregon (64%), New Hampshire (60%), New Mexico (48%), Nevada (47%), Florida (46%), Maine (44%), Vermont (36%), Colorado (31%), and Wisconsin (29%).

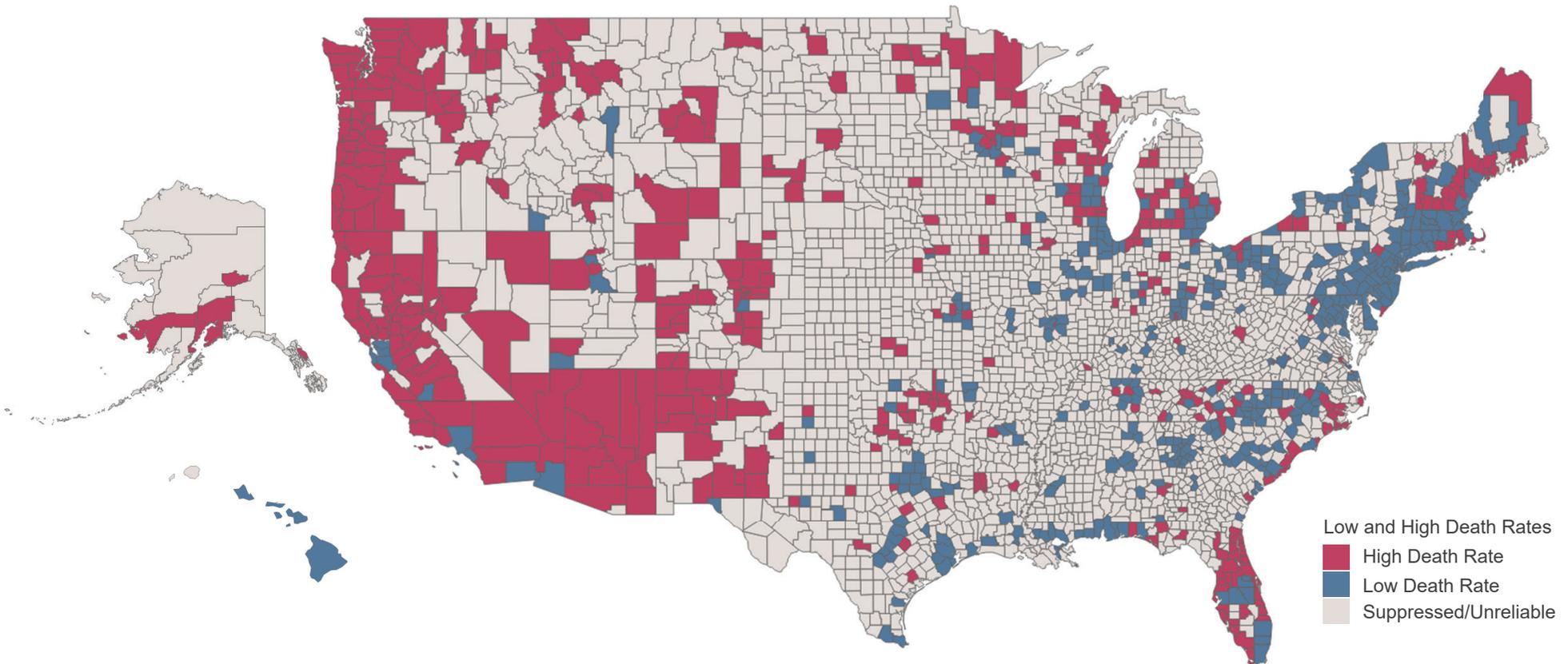


Figure 3. Low and high death rates by alcohol for women in the U.S. Population, 2010 to 2020 (per 100,000).



Regional Trends

In SSW, there are five states represented: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. Each county in the state is color coded blue to reflect low-death rates or red to reflect high-death rates. Gray indicates missing, suppressed or unreliable county data. The high-death rate counties or parishes are also listed for each state.

Percentage Change of Alcohol-Induced Deaths and County/Parish by State with High-Death Rates for Alcohol in Females, 2010-2020 (per 100,000)

ARKANSAS

▲ **145%** increase for female alcohol-related deaths, 2010-2020.

High-Death Rate Counties

Sebastian
Garland

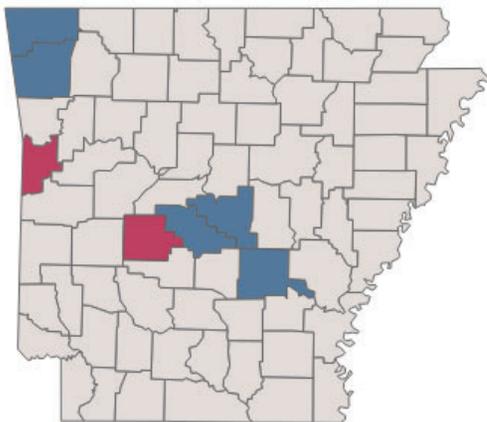


Figure 4.

Low and High Death Rates

- High Death Rate
- Low Death Rate
- Suppressed/Unreliable

LOUISIANA

▲ **104%** increase for female alcohol-related deaths, 2010-2020.

High-Death Rate Parishes

Bossier
Caddo
Ouachita

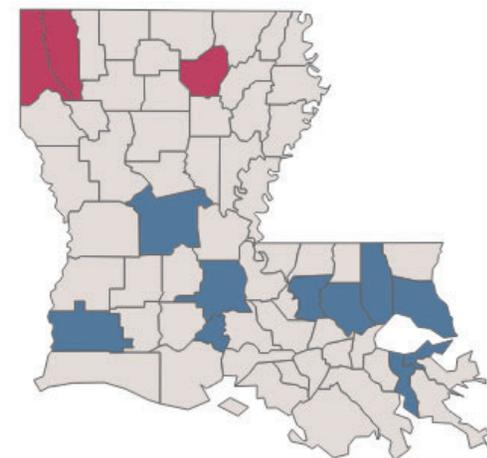


Figure 5.

NEW MEXICO

↑ **222%** increase for female alcohol-related deaths, 2010-2020.

High-Death Rate Counties

Dona Ana	Valencia
Curry	San Miguel
Chaves	Taos
Eddy	San Juan
Sandoval	Socorro
Otero	Cibola
Santa Fe	Rio Arriba
Bernalillo	McKinley

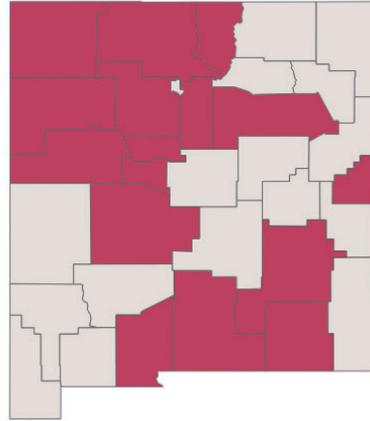


Figure 6.

OKLAHOMA

↑ **53%** increase for female alcohol-related deaths, 2010-2020.

High-Death Rate Counties

Cleveland	Oklahoma
Payne	Stephens
Washington	Okmulgee
Creek	Pittsburg
Muskogee	Carter
Tulsa	Comanche
Wagoner	Caddo
Pottawatomie	

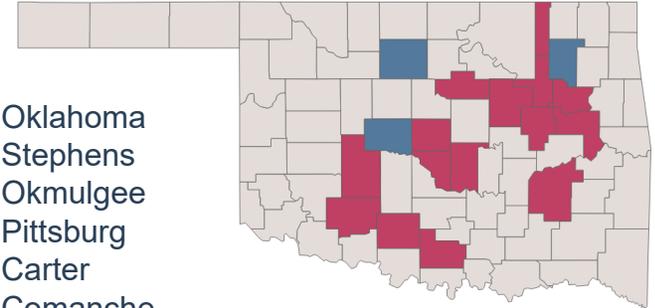


Figure 7.

TEXAS

↑ **115%** increase for female alcohol-related deaths, 2010-2020.

High-Death Rate Counties

Victoria
McLennan
Hood
Ector
Bastrop
Kerr
Anderson
Taylor
Wichita
Potter

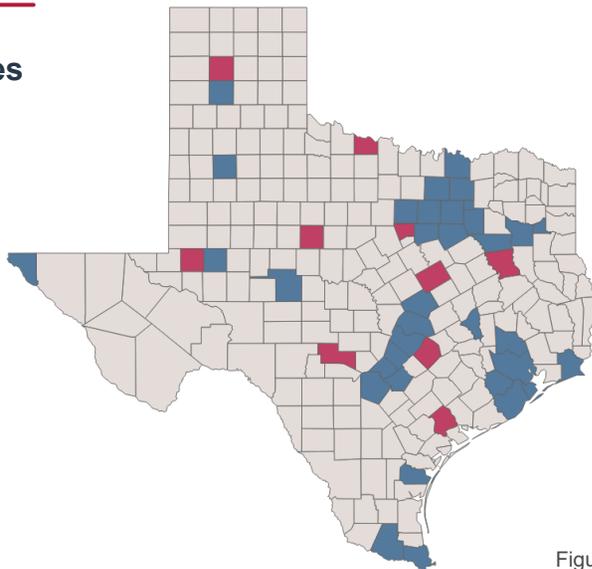


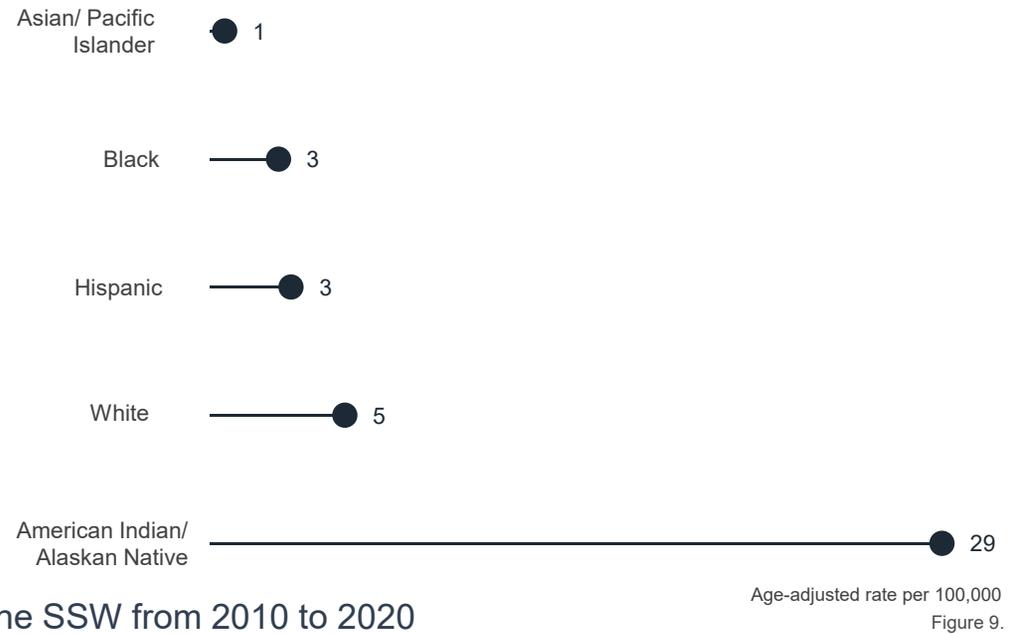
Figure 8.

Low and High Death Rates

■	High Death Rate
■	Low Death Rate
■	Suppressed/Unreliable

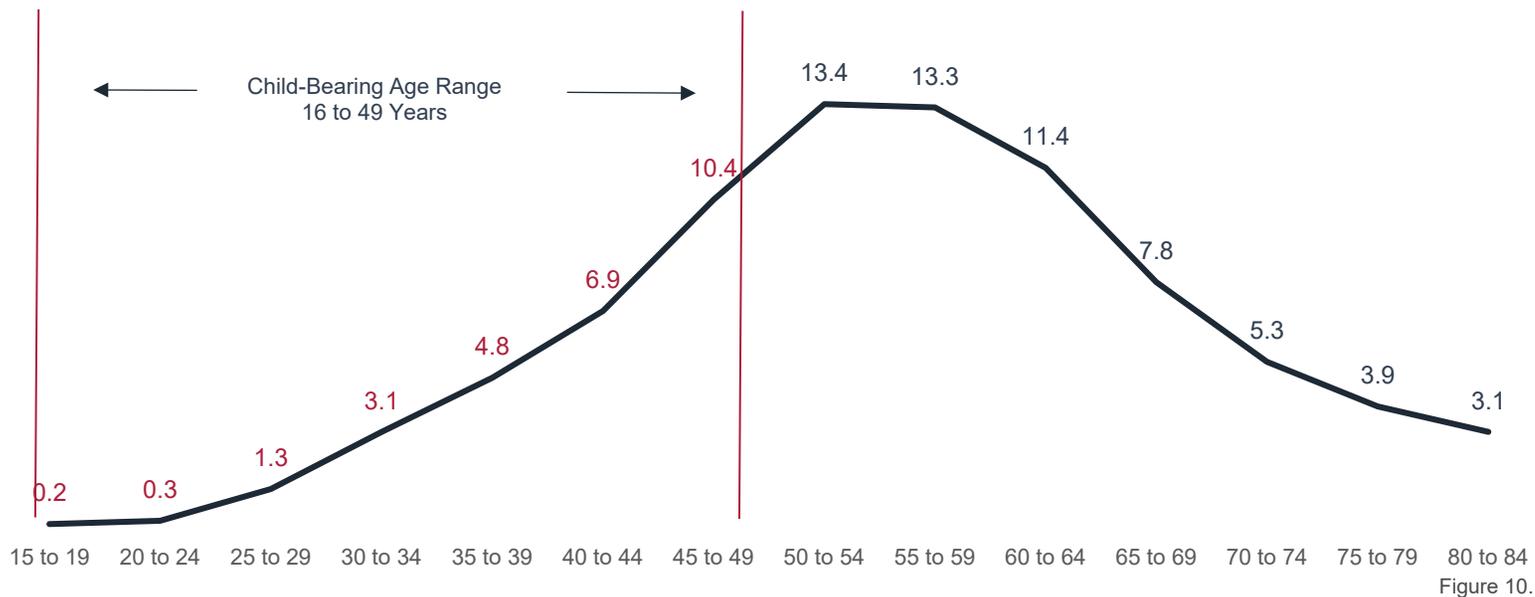
Figure 9 shows the variation of alcohol deaths for women who identify as Asian or Pacific Islander, Black, Hispanic, White, or American Indian or Alaska Native. American Indian/Alaskan Native shows the highest age-adjusted death rate by alcohol (29 per 100,000), followed by White women (5 per 100,000).

Alcohol-induced deaths for females in the SSW by race and ethnicity from 2010 to 2020



Differences in death rates by age cohorts is the focus of Figure 10. The trend line starts at an upward trend about age 25 until about 54 years of age it declines. Note the age of childbearing years for women is ages 16 to 49 years (Parker et al., 2013).

Alcohol-induced death for females by age cohort in the SSW from 2010 to 2020 (per 100,000)



Implications

The data presented have several important implications for substance misuse prevention professionals in the SSW. While the trend data for women in the SSW do not show the steep rise from 2019 to 2020 that is seen at the national level, the increase in drinking rates and alcohol deaths for women in the SSW from 2010 to 2020 show trends prevention professionals need to address. In the SSW alcohol death rates accelerate throughout women's child bearing and raising years and then slowly decline after age 50-54. Data from the SSW region also show significant differences in women's alcohol death rates by race and ethnicity. The following recommendations include strategic planning steps, policy changes, interventions, and research that has the potential to curb further harm to women from alcohol and its consequences.

Using the Strategic Prevention Framework (SPF) to Address Alcohol and Women

Assessment. Gather data to understand the epidemiological trends and factors that put women at risk for alcohol in your community.

Capacity. Build community resources and readiness to support alcohol prevention strategies that address the unique needs of women.

Planning. Create a data-driven strategic plan that includes effective strategies for addressing women and alcohol.

Implementation. Deliver evidence-based practices for women and alcohol with appropriate adaptation and fidelity.

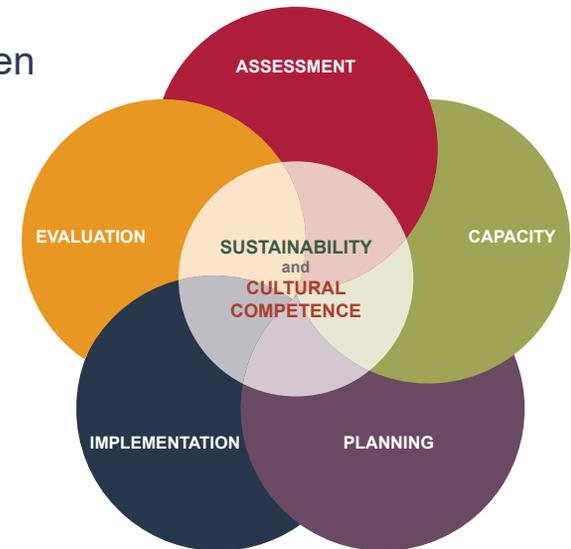
Evaluation. Evaluate interventions and programs for women to monitor effectiveness and success toward intended outcomes. Add evidence to the body of research on women and alcohol.

Sustainability. Embed alcohol misuse prevention interventions for women into existing women's health efforts and services that have a long track record of effectiveness and inclusiveness.

Cultural competence. Pay attention to intersectionality and involve a diverse population of women in the design and delivery of prevention programs. Adapt and/or tailor evidence-based practices to reduce barriers for women (e.g., provide childcare onsite).

Policy

Esser et al. (2022) recommends implementing evidence-based alcohol policies, including increasing alcohol taxes and regulating alcohol density. Encouraging employment policies that provide family leave, flexible hours, and associated benefits that reduce work family conflict, especially among women of child bearing age.



Interventions



Educate health care providers on the importance of providing more alcohol screening and brief intervention services for women (Esser et al., 2022).



Implement workplace drinking prevention programs in male-dominated occupations, addressing negative work environments for women (Svare et al., 2004).



Develop and sustain coalition work at the local level to advocate for policy change and implement strategies that reduce risk factors for early initiation of alcohol use and binge drinking among girls and young women, including strategies that target advertising and sales of alcohol.



Partner with stakeholders to reduce the stigma and normalize women seeking help for alcohol use related problems.

Research

While prevention professionals may not be conducting research themselves in their work, they can help advocate for more treatment research that is specifically for women, and insist on further research into women drinking to cope (Wardell, et al., 2020).



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