# Prescription Opioid Misuse Among Adults and Childhood Homelessness South Carolina Behavior Risk Factor Surveillance System (BRFSS)

#### What is Prescription Opioid Misuse?

**Prescription Opioid Misuse (POM**) occurs when an individual:

- uses a prescription opioid without having been prescribed them,
- uses them more often or at higher doses than prescribed by a physician, or
- uses them to feel good or get high.

In 2018, approximately 47,000 individuals lost their lives to opioids in the United States, with 15,000 of those deaths due to prescription opioids. In South Carolina (SC), 816 deaths involved opioids in 2018.<sup>1,2,3</sup>

### Risk Factors and Protective Factors for Prescription Opioid Misuse

Key risk factors for POM include being prescribed opioids, experiencing multiple adverse childhood experiences, and substance use. Protective factors for POM include experiencing close and nurturing relationships with parents during childhood, being in a relationship, and being employed as an adult.<sup>4,5,6</sup>

# Complications from Prescription Opioid Misuse

- Side effects include drowsiness, confusion, nausea, constipation, and slowed breathing.
- Withdrawal symptoms can include muscle and bone pain, sleep problems, diarrhea and vomiting, and severe cravings for opioids.
- In severe cases, overdose and death can occur from misusing prescription opioids.

# Childhood Homelessness and Prescription Opioid Misuse

Childhood homelessness occurs when a child's parent cannot afford a place to live. In SC, homeless housing is defined as "emergency, transitional, or permanent residential housing shelter for a person needing special assistance and shelter because he/she is homeless as defined by the US Department of Housing and Urban Development (HUD) or consistent with another definition of homelessness under which a person may receive federal financial assistance, state financial assistance, or another supportive service".<sup>7</sup> Experiencing childhood homelessness has been associated with negative health behaviors and outcomes for adults, including substance misuse.

Research on the relationship between childhood homelessness and adult POM is lacking. Using 2018 data from the SC Behavioral Risk Factor Surveillance System (BRFSS), the association between childhood homelessness and POM in adults was examined.

#### **Key Points:**

There was no significant increase in odds of adult **POM** based on experiencing childhood homelessness. Our analysis suggests that childhood homelessness increased odds of adult **POM** by 118%; however, this was no longer significant after adjusting for sex, race, age, sexual orientation. We recommend further research on the relationship between these two public health issues.

#### **Prevalence of POM**

**Table 1.** Prevalence of Prescription Opioid Misuse, 2018SC BRFSS

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Population	YES (%)	
Total	11.84	
Male	4.95	
Female	3.36	
NH White	4.23	
NH Black	3.56	
Hispanic	2.47	
Ages 18-24	8.78	
Ages 25-34	5.47	
Ages 35-44	5.16	
Ages 45-54	3.67	
Ages 55-64	3.65	
Ages 65+	0.99	
Straight	3.85	
LGB & Other	10.19	
NH: Non-Hispanic; LGB & Other: Lesbian, Gay, Bisexual,		

H: Non-Hispanic; LGB & Other: Lesbian, Gay, Bisexual, something other than straight

Approximately 11% of South Carolinians reported misuse of prescription opioids. Non-Hispanic white individuals and males tend to report misuse at a higher frequency as compared to their counterparts. Individuals aged 18-24 report the highest misuse compared to other age groups. Individuals identifying as something other than heterosexual also reported POM at higher rates. These SC trends are what have been observed nationally

#### POM, Childhood Homelessness, and Demographics

**Table 2.** Crude and adjusted odds ratios (OR) with 95%confidence intervals for POM, 2018 SC BRFSS

SC BRFSS 2018 Prescription Opioid Misuse			
	Crude OR	Adjusted OR	
Childhood	2.18 (1.17, 4.09)	1.13 (0.65, 2.74)	
Homelessness			
Race			
NH White	REF	REF	
NH Black	0.71 (0.48,1.08)	0.62 (0.41, 0.94)	
Hispanic	0.58 (0.19, 1.76)	0.37 (0.12, 1.17)	
Other	1.14 (0.31, 0.75)	0.88 (0.37, 2.07)	
Sex			
Male	REF	REF	
Female	0.64 (0.46,0.90)	0.70 (0.50, 0.98)	
Sexual Orientation			
Straight	REF	REF	
LGB & Other	2.32 (1.25, 4.32)	1.17 (0.91,3.45)	
Age			
18-24	REF	REF	
25-34	0.66 (0.35, 1.27)	0.72 (0.37, 1.39)	
35-44	0.60 (0.33, 1.09)	0.63 (0.34, 1.16)	
45-54	0.44 (0.24, 0.79)	0.47 (0.25, 0.86)	
55-64	0.43 (0.24, 0.77)	0.48 (0.26, 0.87)	
65+	0.12 (0.06, 0.21)	0.12 (0.07, 0.23)	

NH: Non-Hispanic; LGB & Other: Lesbian, Gay, Bisexual, something other than straight. Adjusted for sex, race, age, sexual orientation

**Bold** = Statistically significant at alpha level .05

Individuals who experience homelessness during childhood had 118% higher odds to misuse prescription opioids in adulthood, but this was no longer significant after adjusting on demographic differences. Similarly, individuals who identify as something other than straight had 132% higher odds to misuse opioids, but this was no longer significant after adjusting.

Females had 36% lower odds to misuse prescription opioids. This association prevailed after adjustment for demographic differences. Individuals aged 45 or older had 53-88% lower odds to misuse prescription opioids after adjustment when compared to 18–24year-olds.

Non-Hispanic black individuals had 38% lower odds to misuse prescription opioids when compared to white individuals

# Public Health Initiative: what you can do to help?

Little research has been conducted on childhood homelessness and its effect on **POM** in adulthood

however, public health organizations such as the National Institute of Health, Centers for Disease Control, and South Carolina Department of Health and Environmental Control are making efforts to reduce prescription opioid misuse. Prescription medication takeback programs and prescribing guidelines have been set in place to help reduce **POM.** 

#### For more information about prescription opioid misuse and public health initiative for POM in SC please visit the following websites:

https://www.drugabuse.gov/publications/drugfacts/pr escription-opioids https://justplainkillers.com/ https://scdhec.gov/opioid-epidemic

#### **Data Details**

The data presented here is from the 2018 South Carolina Behavioral Risk Factor Surveillance System. Adjusted models include childhood homelessness, sex, race, age, sexual orientation. For more information visit:

https://scdhec.gov/health/sc-public-health-statisticsmaps/behavioral-risk-factor-surveys

#### References

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