# aisoner OPPORTUNITY

## TBI Screening and Referral for Southeastern Idaho's Homeless Population

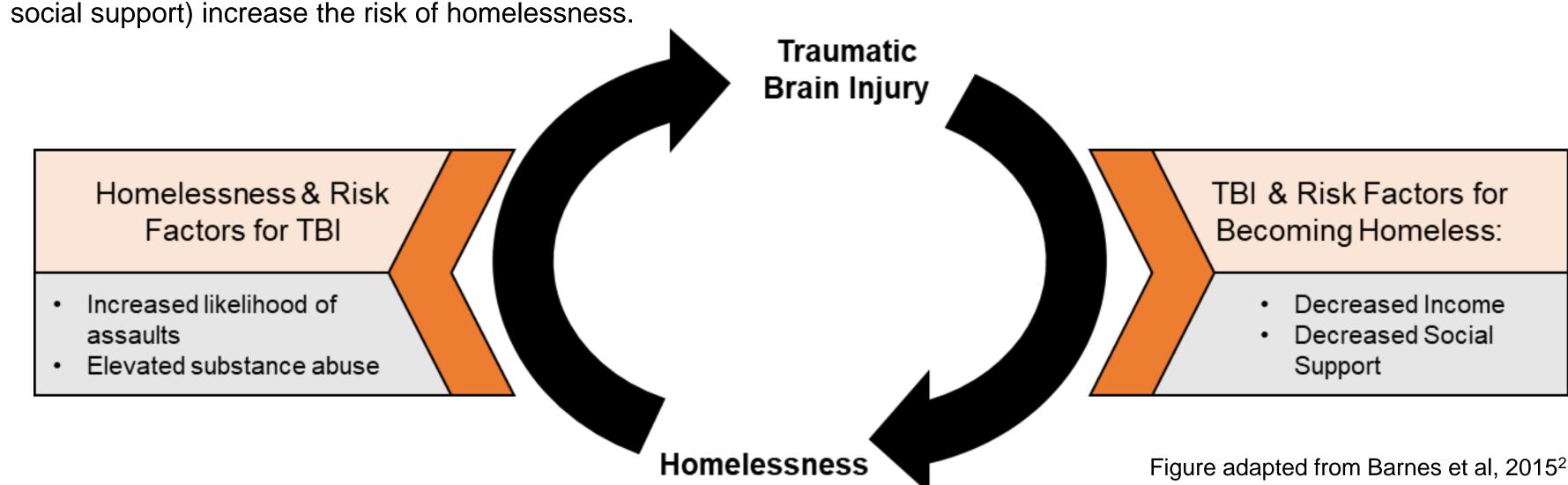
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#### BACKGROUND

- Traumatic Brain Injuries (TBI) can have devastating effects on individuals' cognitive, physical, and behavioral/emotional health.
- The lack of signs of injury make TBIs difficult to diagnose, which can translate into individuals not receiving treatment for their injuries.
- Recent reports have shown that homelessness and sustaining a TBI are potentially related: individuals who are homeless are up to 5 times more likely to have sustained a TBI compared to the general population, and a large majority of homeless adults with a reported TBI history sustained the TBI prior to becoming homeless.<sup>1</sup>

Figure 1: Potential Relationship Between Homelessness and Traumatic Brain Injury. Homelessness and traumatic brain injury (TBI) likely share a bi-directional relationship in which factors associated with homelessness (e.g. assault risk, substance abuse) increase the risk of sustaining a TBI, and factors associated with a TBI (e.g., decreased income and



## **PURPOSE**

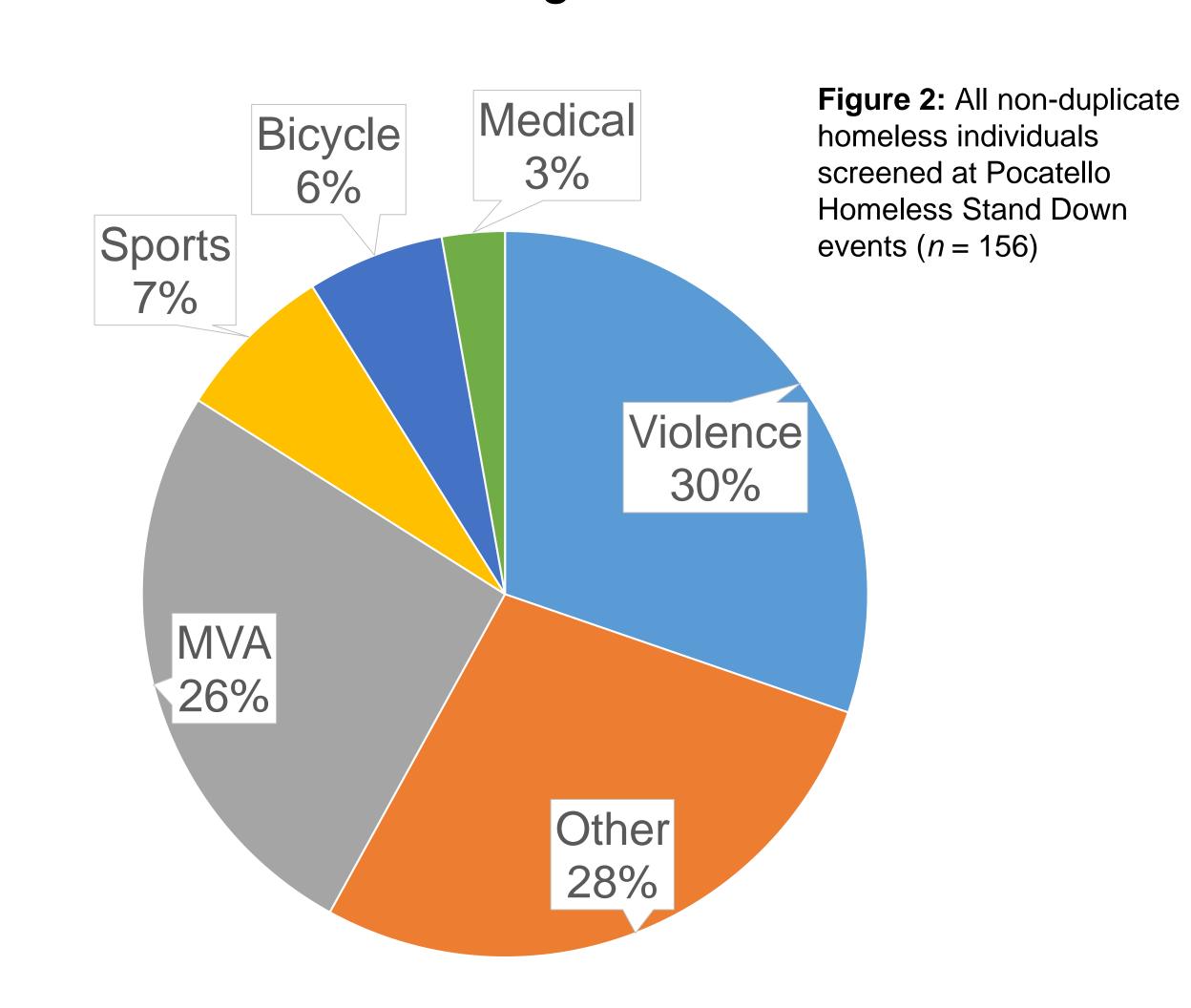
The purpose of this study is to further investigate the effects of TBI and homelessness in Southeastern Idaho.

## METHODS

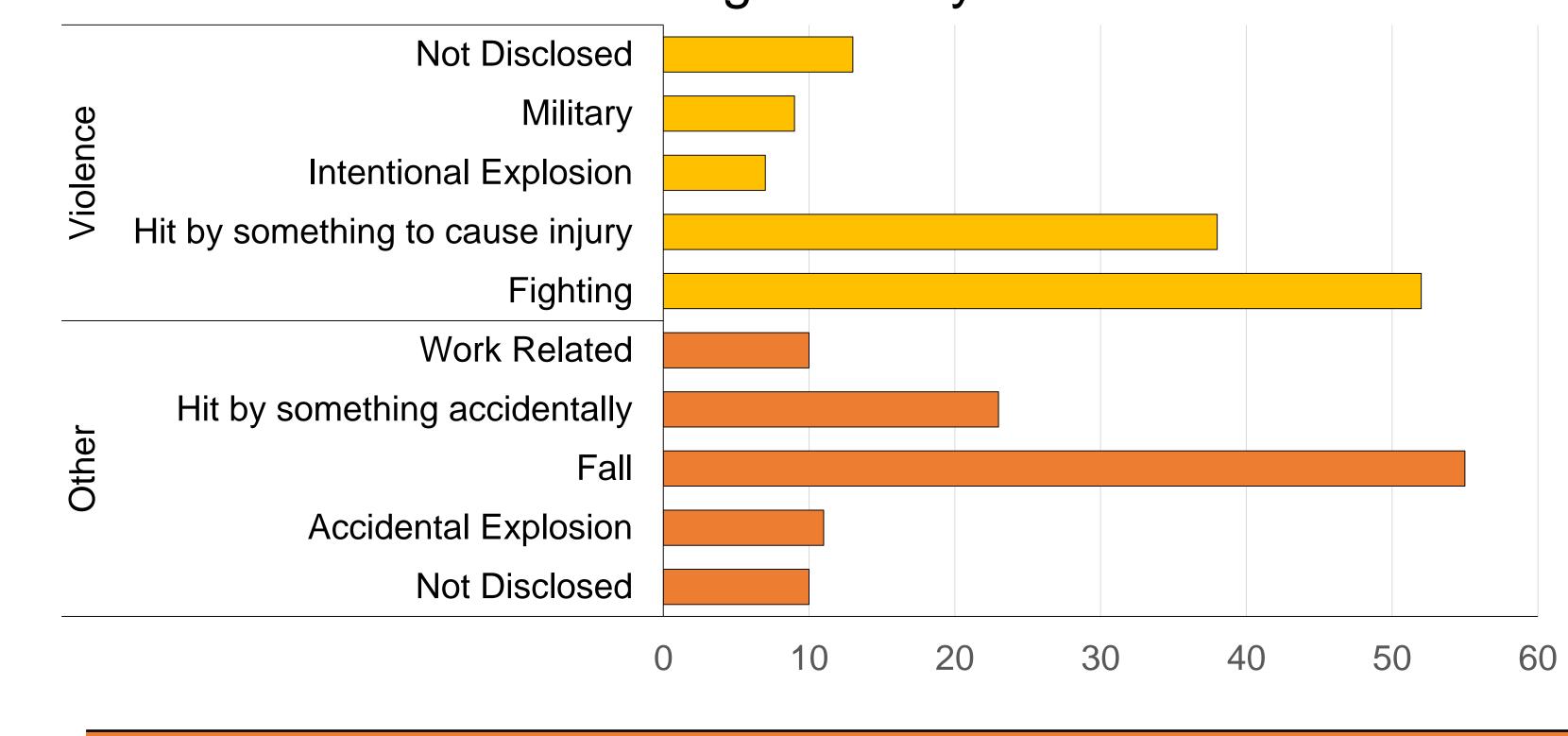
- Idaho State University has hosted the annual Southeast Idaho
   Homeless Stand Down from 2015-2019
- The Idaho Institute of Rural Health at ISU has screened or partially screened over 150 homeless individuals for traumatic brain injuries using the Ohio State University TBI Identification Screening Method (OSU-TBI)<sup>3</sup>
- Individuals who screened likely were offered a primary care referral to Healthwest (Pocatello, ID)

#### RESULTS

Head/Neck Injuries Reported at Pocatello Homeless Stand Down Screenings, 2015-2019



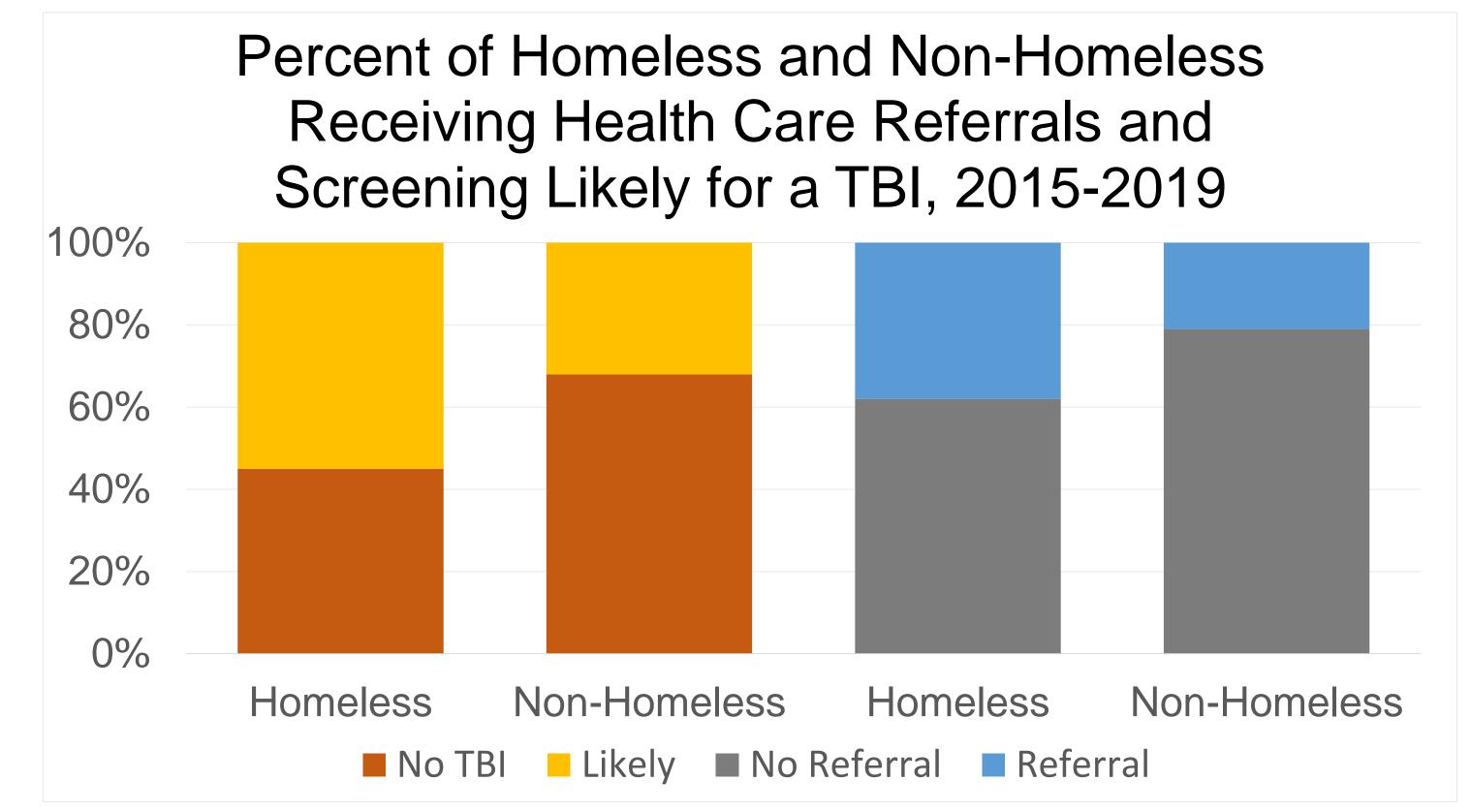
#### Causes of TBI Categorized by Violence or Other



Reasons for Not Acting on a Referral		
Had a primary care physician	Recovering from an unrelated injury	Did not disclose their reason
Old injury, did not feel a referral was necessary	Lack of transportation/ Difficulty being on-time for appointments	Did not provide follow up information

## RESULTS (cont)

From 2015-2019, 156 non-duplicated homeless individuals were screened at the Pocatello Homeless Stand Down. Of those screened, 55% screened "likely" for sustaining a TBI compared to the non-homeless population (32%). Of all homeless individuals screened, 38% received primary care referrals compared to 21% of non-homeless individuals.



**Figure 3**: Non-Homeless TBI data was collected from all other community screening locations (n = 979).

## CONCLUSIONS

The Institute of Rural Health's TBI Program's involvement in the Pocatello Homeless Stand Down Event has

- Increased the knowledge and skills of future health care professionals with interdisciplinary training
- Raised awareness of the need for further screening for lifetime history of TBI in the homeless population
- Identified individuals reasons for not following through or acting on a referral

## REFERENCES

- Topolovec-Vranic, J., Ennis, N., Howatt, M., Ouchterlony, D., Michalak, A., Masanic, C., ... & Cusimano, M. D. (2014). Traumatic brain injury among men in an urban homeless shelter: observational study of rates and mechanisms of injury. *CMAJ Open*, 2(2), E69.
- 2. Barnes, S. M., Russell, L. M., Hostetter, T. A., Forster, J. E., Devore, M. D., & Brenner, L. A. (2015). Characteristics of traumatic brain injuries sustained among veterans seeking homeless services. *Journal of health care for the poor and underserved*, 26(1), 92-105.
- Corrigan, J. D., & Bogner, J. (2007). Initial reliability and validity of the Ohio State University TBI identification method. *The Journal of head trauma rehabilitation*, 22(6), 318-329.





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