

# TRAUMATIC RE-INJURY IN UNHOUSED INDIVIDUALS

JONATHAN PEREZ, MSII  
UNIVERSITY OF CALIFORNIA, DAVIS  
SCHOOL OF MEDICINE

**Introduction:**  
The impact of being unhoused on the likelihood of being violently injured and reinjured (+ financial burden) has become more significant as the unhoused population continues to increase.

**Hypothesis:**  
Being unhoused is associated with an increased likelihood of being re-assaulted (recidivism) after an initial violent assault compared to the housed population.

**Methods:**  
A systematic review was conducted to assess the likelihood of unhoused patients who have suffered intentional violent injuries to being re-assaulted (recidivism), compared to the general population.

Title	Authors	Study Population	Conclusions	Evidence Level
Recurrent violent injury:	Kaufman E, Rising K, Wiebe DJ, Ebler DJ, Crandall ML, Delgado MK. (2016)	State-wide databases for ED visits in Florida (n=53 908) in 2010 for recurrence through 2012. A retrospective cohort of all ED visits due to interpersonal violent injury.	Homeless patients had <b>60% increased odds</b> of any recurrence. <b>1.8 Odds Ratio</b> of any recurrent injury.	2A
Another “Lethal Triad” (poverty, mental health, substance abuse)	Laytin A.D., Shumway M., Boccellari A., Juillard C.J., Dicker R.A. (2018)	<b>Adults with violent injuries</b> who presented to SFGH (between 2001 to 2004) for treatment. (n = 541)	41% of patients enrolled in the study were homeless. <b>2.07 OR : 10-year all-cause mortality</b> for all ages of homeless patients who were violently injured.	2B
Hospital readmission and emergency	Miyawaki, A., Hasegawa, K., Figueroa, J.F. et al. (2020)	2014 State Inpatient Database (SID) and State ED Databases (SEDD) of four states: Florida, Maryland, Massachusetts, and New York. <b>+18 adults admitted to ED</b> and followed for 30-day return rates. The final analytic sample consisted of <b>3,527,383 hospital discharges</b>	Unhoused are more likely to be readmitted within 30 days after discharge, especially when treated at hospitals that treat a small portion of the homeless vs those that treat higher numbers. Homeless also more <b>likely</b> to be <b>substance and alcohol misusers</b> .	2B
Brief violence interventions	Aboutanos M.B., Jordan A., Cohen R., Foster R.L., Goodman K. ... (2011)	Intentionally injured patients, aged 10 years to 24 years, admitted to a Level I trauma center were randomized to receive a brief in-hospital <b>psychoeducational violence intervention alone (Group I)</b> or in combination with a <b>6-months wraparound CCMS (Group II)</b> that included vocational, employment, educational, <b>housing</b> , mental health, and recreational assistance.	Violent injury patients involved in WAP are more likely to utilize community resources, including housing. An <b>increase in community resource</b> use was correlated to <b>decreased self-reported alcohol and substance use</b> .	1B
Hospital-centered violence intervention programs (HVIP): a cost-effectiveness analysis	Chong VE, Smith R, Garcia A, Lee WS, Ashley L, Marks A, Liu TH, Victorino GP (2015)	<b>Cost-utility analysis</b> using a state-transition (Markov) decision model. Participation in <b>HVIP vs standard risk reduction</b> for injured patients due to violence. Highland Hospital in Oakland.	HVIP <b>decreased rate of recidivism</b> (reinjury): 2.5% vs 4% . Per-person cost of violence prevention was similar: \$3574 (HVIP referral) vs \$3515 (standard referral). <b>Decreased recidivism -&gt; decreased yearly cost</b> .	Level 3: Cost-effectiveness study



## Main Finding:

**Unhoused patients who have suffered an intentional interpersonal violence injury are more likely to be reinjured (recidivist) and impose a higher medical cost compared to housed individuals.**

**Discussion:**  
The increased risks for recidivism in the unhoused population are likely multi-factorial. They likely include the factor of no change in environmental circumstances, poverty, higher likelihood of substance use, and mental health disorders. A higher cost of medical treatment has also been associated with this group. This highlights the priority to understand the risks and the need to develop specific interventions based on these risk factors to reduce the rate of recidivism among the unhoused population.