

Drug use and severe outcomes among adults hospitalized with influenza, 2016-2019

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Abstract

Background: Influenza is a persistent public health problem associated with severe morbidity and mortality. Drug use is related to myriad health complications, but the relationship between drug use and severe influenza outcomes is not well understood. The study objective was to evaluate the relationship between drug use and severe influenza-associated outcomes. Methods: Data were collected by the Influenza Hospitalization Surveillance Network (FluSurv-NET) from the 2016-2017 through 2018-2019 influenza seasons. Among persons hospitalized with influenza, descriptive statistics and logistic regression models were used to analyze differences in demographic characteristics, risk and behavioral factors, and severe outcomes (intensive care unit [ICU] admission, mechanical ventilation, or death) between people who used drugs (PWUD), defined as having documented drug use within the past year, and non-PWUD. Results: Among 48,430 eligible hospitalized influenza cases, 2,019 were PWUD and 46,411 were non-PWUD. PWUD were younger than non-PWUD and more likely to be male, non-Hispanic Black or Hispanic/Latino, smoke tobacco, abuse alcohol, and have chronic conditions including asthma, chronic liver disease, chronic lung disease, or immunosuppressive conditions. PWUD had greater odds of ICU admission and mechanical ventilation, but not death compared with non-PWUD. Opioid use specifically was associated with increased risk of ICU admission and mechanical ventilation. Conclusion: PWUD had greater odds of ICU admission and mechanical ventilation than non-PWUD hospitalized with influenza. These results support targeted initiatives to prevent influenza and associated severe outcomes among this

population.

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