



Thomas Farley, MD, MPH
Commissioner

CHART



Hospitalizations for Infections related to Injection Drug Use

People who inject illicit drugs are at risk for skin and soft tissue infections, such as cellulitis and abscesses, as well as infections caused by the spread of microbial pathogens (primarily bacteria) through the blood. These include infective endocarditis (infection of the lining of the heart and/or heart valves), osteomyelitis (infection of the bone), bacteremia (infection in the blood) and sepsis (a life-threatening condition due to severe infection).

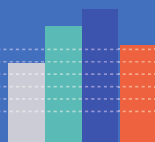
Patients often require hospitalization to treat these infections, which provides an opportunity to address their drug addiction. Unfortunately, some patients leave the hospital because of severe opioid withdrawal symptoms, prematurely stopping their antibiotic treatment. Treating withdrawal symptoms during a hospitalization can initiate long-term drug treatment and lead to more successful treatment of the infection. This issue of CHART highlights the increasing number of hospitalizations for bacterial infections among Philadelphia residents who use drugs.

KEY TAKEAWAYS

Hospitalizations for bacterial infections related to injection drug use are increasing.

People hospitalized for bacterial injections related to injection drug use often are co-infected with HIV or Hepatitis C virus.

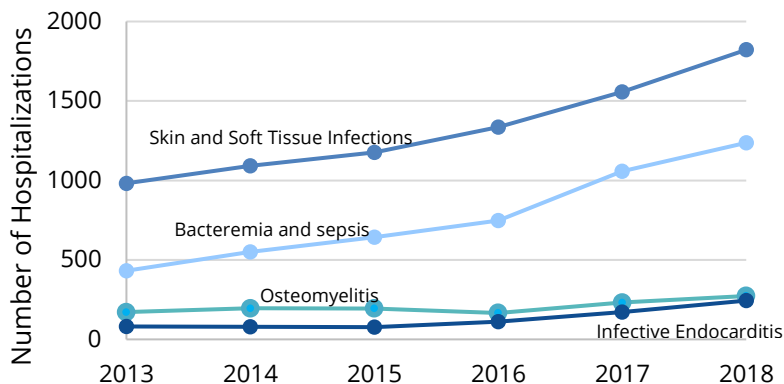
One in five people hospitalized for bacterial infections related to injection drug use leave against medical advice.



Hospitalizations for Bacterial Infections Related to Injection Drug Use Are Increasing

*Infections are not mutually exclusive; someone may be hospitalized for multiple bacterial infections at one time

Hospitalizations for Infections Related to Injection Drug Use Among People who use Drugs, 2013-2018

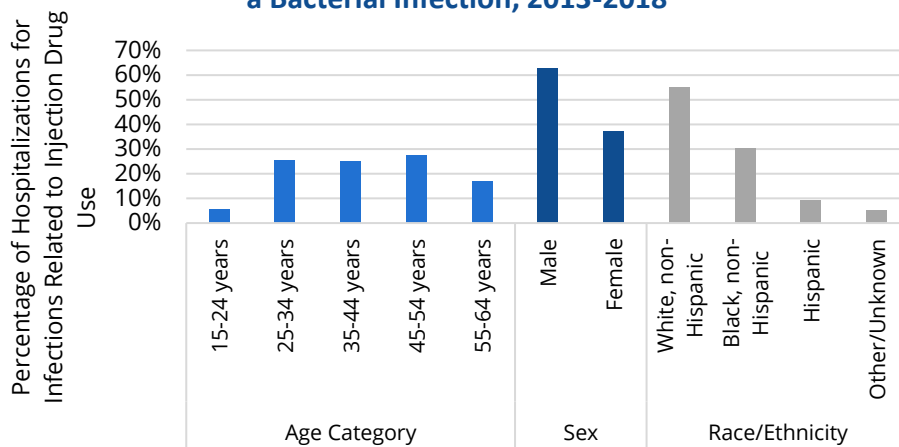


- Between 2013 and 2018, the number of hospitalizations for skin and soft tissue infections, osteomyelitis, bacteremia and sepsis, and infective endocarditis among people who use drugs increased by 91%, 73%, 253%, and 240%, respectively.
- Hospitalizations for bacterial infections among people who do not use drugs did not see similar increases between 2013 and 2018 (data not shown).

Source: Pennsylvania Health Care Cost Containment Council, 2013-2018

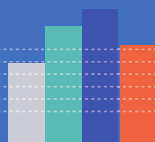
Younger, Non-Hispanic White Adults are the Predominant Demographic Group Hospitalized for Injection-Related Bacterial Infections

Demographics of People who use Drugs Hospitalized for a Bacterial Infection, 2013-2018



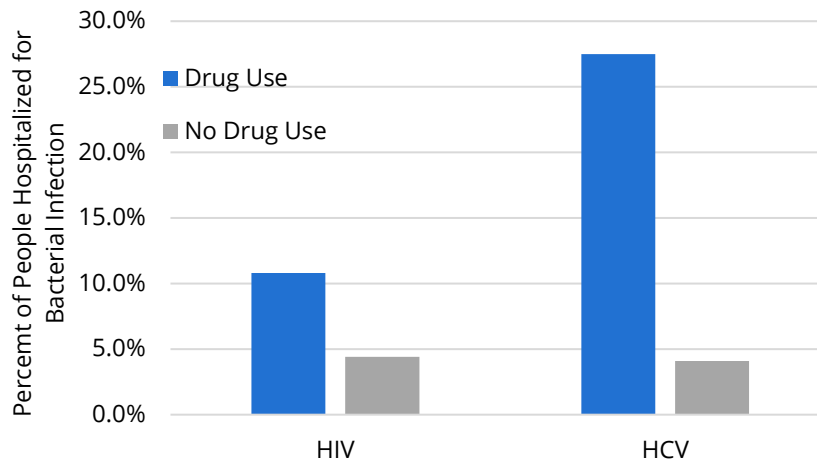
- People hospitalized for bacterial infections related to drug use were predominantly between the ages of 25-44 years old (51%), whereas people hospitalized for similar infections who did not use drugs were mostly between the ages of 45-64 years old (64%; data not shown).
- Males (63%) were more likely to be hospitalized for bacterial infections related to drug use than females.
- White, non-Hispanic individuals (55%) were the predominant race/ethnic group of people who use drugs hospitalized for bacterial infections.

Source: Pennsylvania Health Care Cost Containment Council, 2013-2018



People Hospitalized for Bacterial Infections Related to Injection Drug Use Often are Co-Infected with HIV or Hepatitis C Virus

Co-infection Status of People Hospitalized for a Bacterial Infection, 2013 - 2018

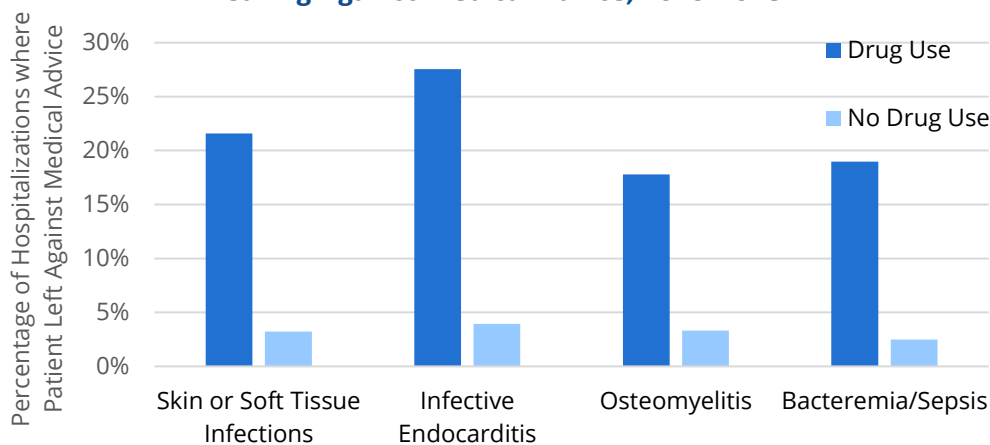


- Among people who use drugs hospitalized for a bacterial infection, 11% were HIV positive whereas among people hospitalized who did not use drugs, only 4% were HIV positive.
- In total, 28% of people who use drugs hospitalized for a bacterial infection were co-infected with hepatitis C virus (HCV) whereas only 4% of those hospitalized for bacterial infections who did not use drugs had HCV.

Source: Pennsylvania Health Care Cost Containment Council, 2013-2018

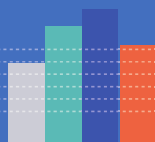
One in Five People Hospitalized for Bacterial Infections Related to Injection Drug Use Leave Against Medical Advice

Percentage of People Hospitalized with a Bacterial Infection Leaving Against Medical Advice, 2013-2018



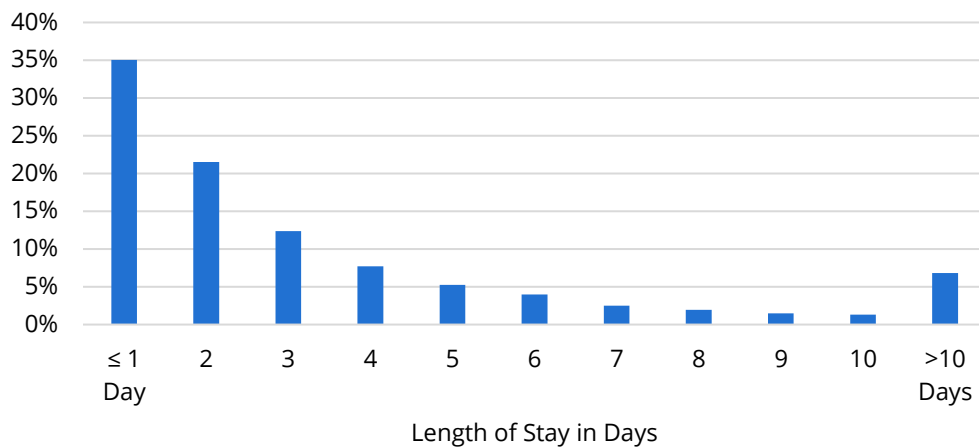
- Between 2013 and 2018, among people hospitalized for bacterial infections related to injection drug use, 22% of those with skin or soft tissue infections, 28% of those with infective endocarditis, 18% of those with osteomyelitis, and 19% of those with bacteremia or sepsis left against medical advice.
- Only 3% of people who did not use drugs hospitalized for similar bacterial infections left against medical advice.

Source: Pennsylvania Health Care Cost Containment Council, 2013-2018



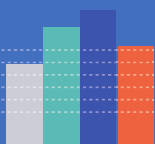
Most People Leave Against Medical Advice within the First Few Days of Hospitalization

Percentage of People Who Use Drugs Leaving Against Medical Advice by Length of Stay, 2013-2018



- More than 50% of people who use drugs who were hospitalized for a bacterial infection left against medical advice within two days of being hospitalized.

Source: Pennsylvania Health Care Cost Containment Council, 2013-2018



WHAT CAN BE DONE

The Health Department is:

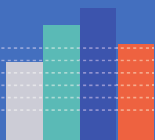
- Increasing access to medication-assisted treatment (medications for treating opioid use disorder) in primary care practices, specialized substance use treatment providers, and the jail system.
 - Expanding syringe exchange programs to reduce the risk of infections among people who inject drugs.
 - Supporting mobile medical services that care for and treat injection-related skin infections.
-

Health care providers should:

- Manage withdrawal symptoms among people hospitalized for complications of opioid use disorder by providing immediate and continuous medication-assisted treatment.
 - Screen all individuals with a history or current use of injection drug use for HIV, hepatitis B, and hepatitis C. If these tests are negative, rescreen individuals every 6 months.
-

People can:

- If dependent on opioids, seek drug treatment, especially medication-assisted treatment
- If experiencing an injection-related infection, seek treatment at either an emergency department or [Prevention Point Philadelphia's Wound Care Clinic](#).
- If dependent on opioids and hospitalized, request medication-assisted treatment during the hospital stay.
- If injecting drugs, use a new syringe and equipment with every use, clean the injection site before use, avoid licking the needle before injection, and avoid subcutaneous injection (i.e. skin popping).



RESOURCES

Drug treatment referrals and education:

888-545-2600;

<http://dbhids.org/addiction-services/>

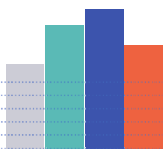
Harm reduction resources and education, including syringe exchange and infectious disease screening:

Prevention Point of Philadelphia
215-634-5272

www.pponline.org

Suggested citation:

Philadelphia Department of Public Health. Hospitalizations for Infections Related to Injection Drug Use, 2013–2018. CHART 2020; 5(1), 1-6.



Thomas Farley, MD, MPH

Commissioner

Philadelphia Department of Public Health

1101 Market Street, 13th floor

Philadelphia, PA 19107

215-686-5200

healthdept@phila.gov

@phlpublichealth

All PDPH charts are available at
<https://www.phila.gov/departments/departments-of-public-health/data/>