



## **New Infections among Persons Who Inject Drugs Metric**

### **Objective**

As one of the three primary metrics designed to track hepatitis C elimination, the new Infections among persons who inject drugs (PWID) metric aims to monitor new infections in this priority population.<sup>i</sup>

### **Background**

Along with diagnosing and treating individuals who are currently infected with hepatitis C, achieving elimination of hepatitis C will require a significant reduction in ongoing transmission of the virus. A diagnosis of acute hepatitis C can be a marker of recent infection. In New York State (NYS) in 2022, among newly reported acute cases of hepatitis C with reported risk factors, 81% reported injection drug use. Additionally, reported injection drug use was more common among people diagnosed with hepatitis C who were under the age of 40 than among those aged 40 or older.<sup>ii</sup> Recent studies have also indicated that injection drug use is most common in adults aged 18-40 nationally.<sup>iii</sup> Because most new hepatitis C infections are related to injection drug use, monitoring and reducing new infections among people who inject drugs is crucial for achieving elimination goals. However, New York's ability to directly track new hepatitis C infections among people who use drugs is limited both by the fact that injection drug use is a stigmatized and criminalized behavior, and because information on risk factors is often not available for people newly reported to have hepatitis C. Therefore, due to the evidence that new infections among individuals aged 18-40 are likely attributable to injection drug use, acute hepatitis C infections in this age group may be used as a proxy for new infections among all persons who inject drugs.

### **Methodology**

The methodology for this metric has been adapted from the Centers for Disease Control and Prevention's (CDC) disparity indicator that looks at new infections among persons who inject drugs.<sup>iv</sup> This metric will utilize NYS's Hepatitis Elimination and Epidemiology Dataset (HEED), a statewide registry of all individuals with a history of or current hepatitis C, to identify all individuals aged 18-40 known to meet the CDC definition of confirmed acute hepatitis C.<sup>v</sup> The baseline rate of new infections among persons who inject drugs will be the observed acute case rate in 2020. This baseline year was chosen to coincide with the 2020 change in the CDC's acute hepatitis C case definition. Statewide annual targets will be set based on achieving a linear 25% reduction in acute case rates from baseline by 2025, and a linear 90% reduction in acute case rates from baseline by 2030. Jurisdiction-specific annual targets will also be set for New York City and the rest of NYS (excluding New York City).

## New Infections among People Who Inject Drugs Outcome Measure

Primary Outcome Measure: Number of individuals aged 18-40 diagnosed with acute hepatitis C in NYS		
<i>Measure specification</i>	<i>Definition</i>	<i>Monitoring</i>
Rate per 100,000 of newly reported diagnosed acute hepatitis C among people aged 18-40 years.	Meets clinical and laboratory criteria in CDC case definition of confirmed acute hepatitis C. <sup>1</sup>	Baseline: 2020 Frequency: Annual

The new infections among PWID metric will be calculated annually by dividing the numerator by the denominator described below and multiplying the result by 100,000 to yield the rate of acute hepatitis C in this age group for NYS, NYS (excluding New York City), and New York City. The rate will be compared to the annual targets set for each of the three geographic areas. Numerator: Annual number of newly reported confirmed diagnoses of acute hepatitis C among individuals aged 18-40 years old.

Denominator: Total number of residents aged 18-40 as per the National Center for Health Statistics bridged-race population estimates for the year 2020.<sup>vi</sup>

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<sup>i</sup> New York State Department of Health. New York State Hepatitis C Elimination Plan.

[https://www.health.ny.gov/diseases/communicable/hepatitis/hepatitis\\_c/docs/hepatitis\\_c\\_elimination\\_plan.pdf](https://www.health.ny.gov/diseases/communicable/hepatitis/hepatitis_c/docs/hepatitis_c_elimination_plan.pdf)

<sup>ii</sup> New York State Department of Health. Hepatitis B and C Annual Report 2022.

[https://www.health.ny.gov/statistics/diseases/communicable/docs/2022\\_hepatitis\\_b\\_c\\_annual\\_report.pdf](https://www.health.ny.gov/statistics/diseases/communicable/docs/2022_hepatitis_b_c_annual_report.pdf)

<sup>iii</sup> Bradley H, Hall EW, Asher A, Furukawa NW, Jones CM, Shealey J, Buchacza K, Handanagic S, Crepax N, Rosenberg ES. Estimated Number of People Who Inject Drugs in the United States. Clin. Infect. Dis. 2023 Jan 1; 76(1): 96-102. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10202436/>

<sup>iv</sup> U.S. Department of Health and Human Services. 2020. Viral Hepatitis National Strategic Plan for the United States: A Roadmap to Elimination (2021–2025). Washington, DC. <https://www.hhs.gov/sites/default/files/Viral-Hepatitis-National-Strategic-Plan-2021-2025.pdf>

<sup>v</sup> CDC. Hepatitis C, Acute 2020 Case Definition. <https://ndc.services.cdc.gov/case-definitions/hepatitis-c-acute-2020/>

<sup>vi</sup> CDC Wonder. National Center for Health Statistics Bridged-Race Population Estimates. <https://wonder.cdc.gov/bridged-race-population.html>

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