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PUBLIC HEALTH SERVICES

EPIDEMIOLOGY AND IMMUNIZATION SERVICES BRANCH

EPIDEMIOLOGY UNIT

HIV/HEPATITIS C EPIDEMOLOGY & SUREVEILLANCE PROGRAM

Hepatitis C Surveillance Annual Report, 2023 06/20/2024

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HEPATITIS C SURVEILLANCE ANNUAL REPORT, 2023

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HEPATITIS C SURVEILLANCE ANNUAL REPORT 2023

I. 2023 Executive Summary

A. Hepatitis C in San Diego County

Approximately 5,500 hepatitis C reports were received by the County of San Diego
Epidemiology Unit during 2023. Of those received, 822 confirmed and 1,387 probable
chronic cases, and 127 acute cases were identified. One confirmed and 2 probable
perinatal cases were identified this year. Approximately 1,400 disease reports were
forwarded for investigation to the HIV/HCV Epidemiology and Surveillance Program
(HHESP). This number represents all cases with detectable HCV RNA, persons aged 29 or
younger with positive anti-HCV, pregnant persons, and anyone experiencing acute
hepatitis C. Only cases meeting any of these criteria are investigated at this time.

B. By Gender

• In 2023, males accounted for 73 percent of newly reported chronic cases and 85 percent of acute cases; 26% of chronic cases and 12% of acute case were female. Four trans female (Assigned Male at Birth; AMAB) acute cases and 3 chronic cases were identified. Two non-binary chronic cases were reported.

C. By Age

Persons 60-69 years of age had the highest number of newly reported chronic infections among all age groups (177) while those aged 40-49 had the second highest number (155). Approximately 25 percent of newly identified chronic cases were reported in persons 34 and younger. Persons 40-49 years of age had the highest number of acute infections (31) while aged 30-34 had the second highest (22).

D. By Race/Ethnicity

 Of the approximately 65 percent of chronic cases with race/ethnicity reported in 2023, white persons accounted for the highest number (351, 37%) of newly reported chronic cases. Approximately 75 percent of acute cases had known race/ethnicity data. Hispanic or Latino persons accounted for 44 percent of newly reported acute cases.

E. By Geography

 Central region had the highest number of both newly reported chronic and acute cases followed by South region in 2023.

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II. Introduction

With the introduction of highly effective antiviral medications for hepatitis C interest has grown in developing programs and interventions to reach and treat those with chronic hepatitis C. For this to be effective, accurate data must be available to identify groups at higher risk for disease, to provide baseline information for comparison to post-intervention, and to have better understanding of the disease as it occurs in San Diego County. To that end, the HIV/Hepatitis C Epidemiology and Surveillance Program (HHESP) produces this annual report to provide a place for both internal and external customers to have access to data.

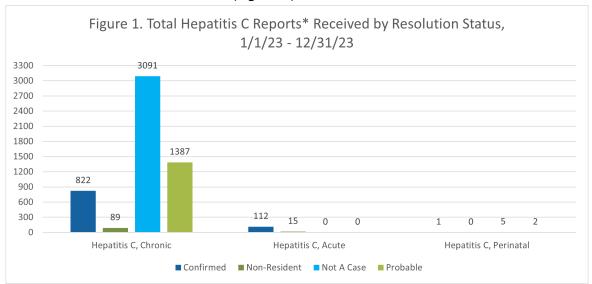
III. Methodology

- A. Disease Report and Investigations
- B. Population Demographics
- C. Risk Factors
- D. Viral Genotypes
- E. Donor-Derived Acute Hepatitis C

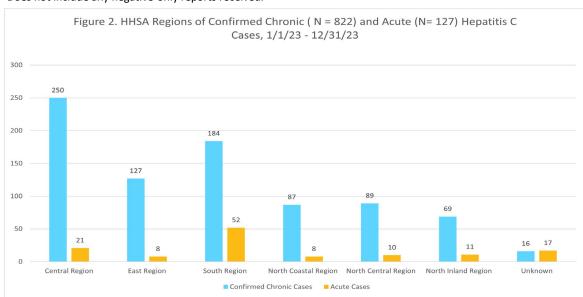
IV. 2023 Statistical Findings

A. Disease Reports and Investigations

• In 2023, the County of San Diego identified 822 confirmed cases of Chronic Hepatitis C and 127 cases of Acute Hepatitis C (*Figure 1*). Central Region and South Region had the highest numbers of identified confirmed Chronic Hepatitis C cases in 2023, with 250 and 184, respectively. South Region had the most Acute Hepatitis C cases, with 50 cases identified there (*Figure 2*).



* Newly reported disease incidents only. Includes all resolution statuses and cases classified as chronic, acute, or perinatal. Does not include any negative-only reports received.

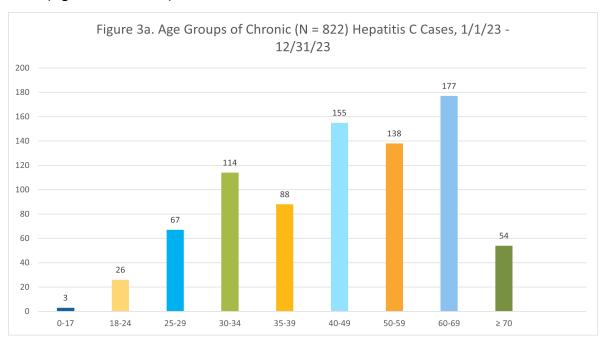


^{*} Includes confirmed chronic and acute cases following CDC/CSTE case criteria. Cases with unknown regions are individuals within San Diego County with a missing or misreported zip code. Acute cases with unknown region also include 15 non-resident donor-derived cases as HHESP completes these investigations for CDPH and the proper jurisdictions.

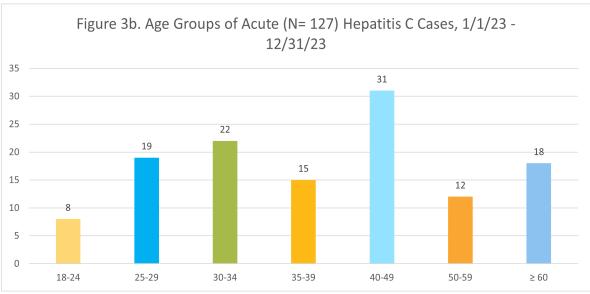
B. Population Demographics

1. Age

Most cases of Chronic Hepatitis C in occurred in people between the ages 40 and 69 while most cases of Acute Hepatitis C occurred in those ages 40 – 49 and 30 – 34 (Figures 3a and 3b).



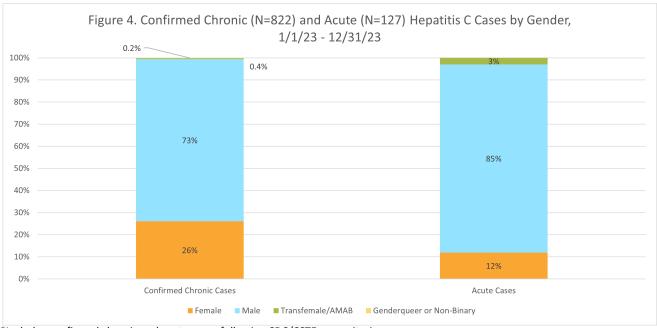
* Includes confirmed chronic cases following CDC/CSTE case criteria.



^{*} Includes acute cases following CDC/CSTE case criteria.

2. Gender

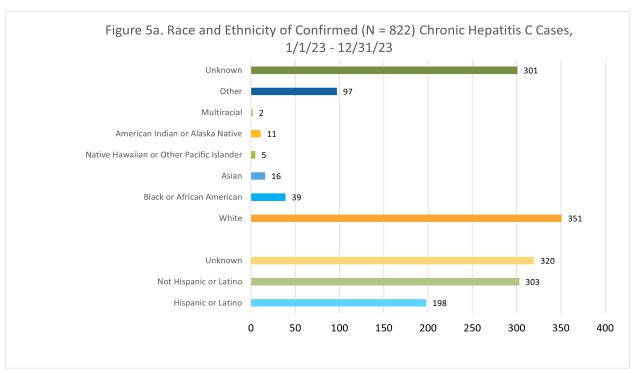
• In 2023, 73% of Chronic and 85% of Acute Hepatitis C cases were identified in men while 26% and 12% were identified in women, respectively (*Figure 4*).



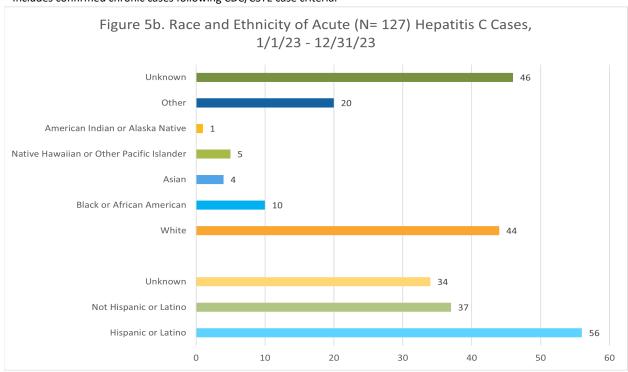
^{*}Includes confirmed chronic and acute cases following CDC/CSTE case criteria.

3. Race and Ethnicity

• In 2023, of the total 822 confirmed Chronic Hepatitis C cases, 301 had no race information provided while 320 had no ethnicity information reported. Of those with race information, 351 cases were white and 198 identified as Hispanic or Latino (*Figure 5a*). Of the 127 Acute Hepatitis C cases, 46 had no race information while 34 had no ethnicity information. Forty-four acute cases identified as white and 56 identified as Hispanic or Latino (*Figure 5b*). Race and ethnicity were not reported exclusively.



^{*} Includes confirmed chronic cases following CDC/CSTE case criteria.

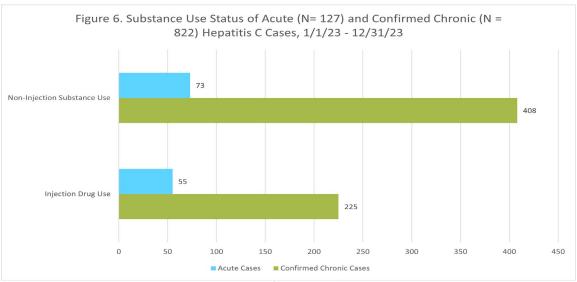


^{*} Includes acute cases following CDC/CSTE case criteria.

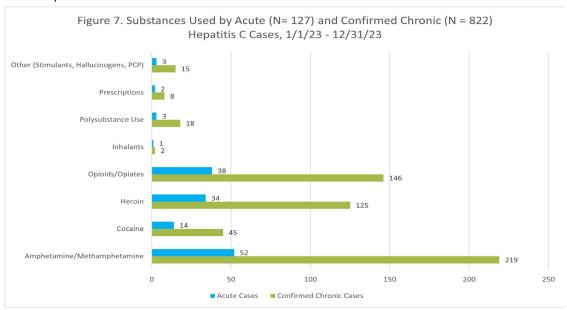
C. Risk Factors

1. Substance Use

In 2023, 408 confirmed Chronic Hepatitis C cases and 73 Acute cases reported non-injection substance use while 225 Chronic and 55 Acute cases reported injection drug use (*Figure 6*). Of all types of substances used reported by cases, opioids (heroin and opioids/opiates) were the most used substance type followed by amphetamines/methamphetamine (*Figure 7*).



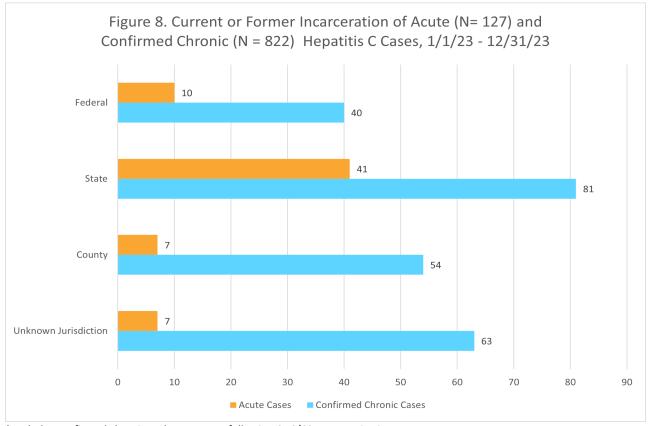
* Includes confirmed chronic and acute cases following CDC/CSTE case criteria. These categories are not exclusive, and some cases may be in both.



^{*} Includes confirmed chronic and acute cases following CDC/CSTE case criteria. These categories are not exclusive, and some cases may be in both.

2. Incarceration

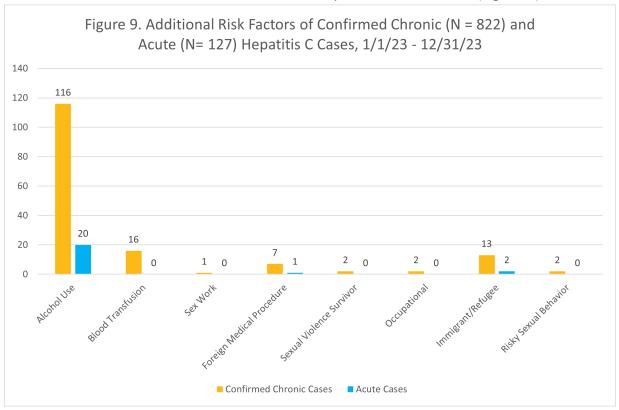
• Sixty-five of 127 Acute Hepatitis C cases had some form of incarceration history (current or former) while 238 Chronic Hepatitis C cases had incarceration history. Cases were most commonly in State or County jurisdictions (*Figure 8*).



 $[\]ensuremath{^{*}}$ Includes confirmed chronic and acute cases following CDC/CSTE case criteria.

3. Additional Risk Factors

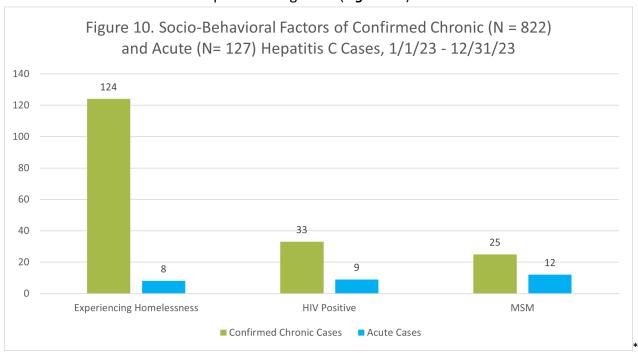
 Many additional risk factors were reported by cases including alcohol use, blood transfusions, immigrant/refugee status, and foreign medical procedure; of these factors, alcohol use was the most reported additional risk (*Figure 9*).



^{*}Includes confirmed chronic and acute cases following CDC/CSTE case criteria.

4. Socio-Behavioral Factors

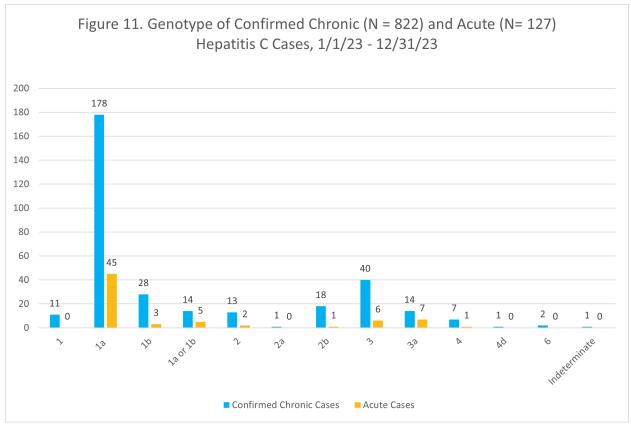
 In 2023, 124 confirmed Chronic Hepatitis C cases reported experiencing homelessness while 8 Acute cases reported experiencing homelessness. Of those that reported being HIV positive, 33 cases were Chronic, and 9 cases were Acute.
 Twenty-five Chronic cases reported being men who have sex with men (MSM) while 12 Acute cases reported being MSM (*Figure 10*).



Includes confirmed chronic and acute cases following CDC/CSTE case criteria.

D. Viral Genotypes

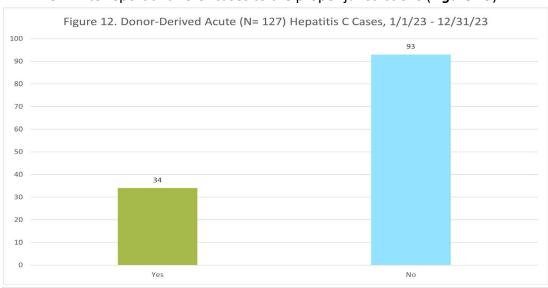
• The most common genotype reported in both Chronic and Acute Hepatitis C cases in 2023 was 1a, followed by 3, 3a, and 1b (*Figure 11*).

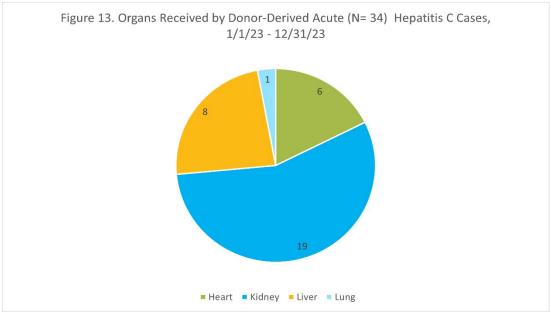


^{*} Includes confirmed chronic and acute cases following CDC/CSTE case criteria.

E. Donor-Derived Acute Hepatitis C

- In recent years, CSTE and CDC have adjusted the definition of acute hepatitis C to include individuals diagnosed post-organ transplant. These individuals are classified as acute cases, as they were not Hepatitis C positive before the transplant and have subsequently tested positive after transplantation of an HCV positive organ (*Figure* 12).
- In 2023, 34 acute cases were identified by the HIV/HCV Epidemiology and Surveillance Program. These include 15 non-resident donor-derived cases as the HHESP team identified and fully investigates these cases before collaborating with CDPH to report and refer cases to the proper jurisdictions (*Figure 13*).





^{*}Includes acute cases following CDC/CSTE case criteria. Some cases received multiple organs; categories are not exclusive.

V. Summary

In 2023, about 1,400 hepatitis C case reports were investigated by the HIV/Hepatitis C Epidemiology and Surveillance Program. The information gathered about these cases contributes to both the development of interventions and an understanding of the disease as it occurs in San Diego County. Our surveillance data was limited due to incomplete medical records, internal staffing limitations, and lack of medical system compliance with California state public health regulations. The HCV surveillance infrastructure within San Diego County is limited by unreported negative tests, preventing us from reporting a true prevalence of HCV in San Diego County. Through medical reviews, we have been able to identify a gap in provider compliance with state testing and CDC treatment guidelines as well as a lack of education regarding Hepatitis C. Our recommendations include required reporting of negative Hepatitis C tests and system-wide provider reeducation.

This surveillance also provides compliance with disease reporting laws in California. As surveillance continues and expands, and the system matures, data on this disease will provide more information for use by groups both internal and external to the County.

VI. Glossary

Abbreviations

CDC = Centers for Disease Control and Prevention

CSTE = Council of State and Territorial Epidemiologists

ELR = electronic laboratory report

HCV = hepatitis c virus

HHESP = HIV/HCV Epidemiology and Surveillance Program

HHSA = Health and Human Services Agency

HIV = human immunodeficiency virus

MSM = men who have sex with men

PEH = persons experiencing homelessness

PWID = people who inject drugs

SANDAG = San Diego Association of Governments

Source: HIV/HCV Epidemiology and Surveillance Program, Epidemiology and Immunizations Services Branch, Health and Human Services Agency, County of San Diego. Current as of 10/3/2023. Data are provisional and subject to change as more information becomes available. CDC/CSTE criteria for acute, chronic, and perinatal hepatitis C cases are used for classification.