

Working Toward a  
**Hep Free NYC**

**2023 Hepatitis A, B and C in NYC Report  
Supplemental Appendices**



## About the Hepatitis A, B and C Supplemental Appendices

This supplemental appendices document was developed by the New York City (NYC) Health Department as a supplemental document to the Hepatitis A, B and C in NYC: 2023 Annual Report and features additional hepatitis A, B, and C surveillance data in NYC from January 1, 2023, through December 31, 2023, or most recent available data. For more information, email [hep@health.nyc.gov](mailto:hep@health.nyc.gov).

For Hepatitis A, B and C in NYC: 2023 Annual Report and Technical Notes published separately, see [nyc.gov/site/doh/data/data-publications/hepatitis-abc-surveillance-data.page](https://nyc.gov/site/doh/data/data-publications/hepatitis-abc-surveillance-data.page).

## Suggested Citation

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**Appendix 1: Characteristics of people reported with hepatitis A in NYC, 2023**

Characteristics	Number	Percentage of each group	Rate per 100,000 people
Overall	61	100.0	0.7
<b>Sex</b>			
Female	21	34.4	0.5
Male	40	65.6	1.0
<b>Age at time of report</b>			
0–9	5	8.2	0.5
10–19	8	13.1	0.9
20–29	17	27.9	1.4
30–39	17	27.9	1.3
40–49	5	8.2	0.5
50–59	5	8.2	0.5
≥ 60	4	6.6	0.2
<b>Borough of residence</b>			
Bronx	13	21.3	0.9
Brooklyn	12	19.7	0.5
Manhattan	19	31.1	1.2
Queens	17	27.9	0.7
Staten Island	0	0.0	0.0
<b>Neighborhood poverty level by ZIP code</b>			
Very high	7	11.5.	0.7
High	15	24.6	1.0
Medium	25	41.0	0.7
Low	14	23.014.9	0.7
<b>Race and Ethnicity</b>			
Asian or Pacific Islander	16	26.2	1.2
Black	5	8.2	0.3
Latino/a	23	37.7	0.9
Underrepresented	2	3.3	1.1
White	14	23.0	0.5
Unknown	1	1.6	N/A
<b>Risk factors (not mutually exclusive)</b>			
International travel	40	65.6	N/A
MSM	14	23.0	N/A
Homelessness	13	21.3	N/A
Contact with a person with hepatitis A	6	9.8	N/A
Drug use	5	8.2	N/A
Incarceration within six months before diagnosis	0	0.0	N/A
Unknown	9	14.8	N/A

**Appendix 2: Characteristics of people reported with acute hepatitis B in NYC, 2023**

Characteristics	Number	Percentage of each group	Rate per 100,000 people
Overall	19	100.0	0.2
<b>Sex</b>			
Female	6	31.6	0.1
Male	13	68.4	0.3
<b>Age at time of first report</b>			
0–19	0	0	N/A
20–29	3	15.8	0.3
30–39	3	15.8	0.2
40–49	5	26.3	0.5
50–59	2	10.5	0.2
≥ 60	6	31.6	0.3
<b>Race and Ethnicity</b>			
Asian or Pacific Islander	6	31.6	0.5
Black	6	31.6	0.3
Latino/a	1	5.3	0.0
White	4	21.1	0.2
Unknown	2	10.5	N/A
<b>Borough of residence</b>			
Bronx	4	21.1	0.3
Brooklyn	6	31.6	0.2
Manhattan	1	5.3	0.1
Queens	6	31.6	0.3
Staten Island	2	10.5	0.4
<b>Neighborhood poverty level by ZIP code</b>			
Very high	4	21.1	0.4
High	1	5.3	0.1
Medium	8	42.1	0.2
Low	6	31.6	0.3

**Appendix 3: Characteristics of people reported with chronic hepatitis B in NYC, 2023**

Characteristics	People newly reported in 2023			All people reported 2020–2023, regardless of year of first report	
	Number	Percentage of each group	Rate per 100,000 people	Number	Percentage of each group
Overall	6,947	100.0	83.3	94,340	100.0
<b>Sex</b>					
Female	2,706	39.0	62.5	41,726	44.2
Male	4,240	61.0	105.8	52,601	55.8
Unknown	1	0.0	N/A	12	0.0
<b>Age at time of first report</b>					
0–19	149	2.1	8.0	4,172	4.4
20–29	847	12.2	71.3	19,209	20.4
30–39	1,812	26.1	137.3	25,921	27.5
40–49	1,695	24.4	163.1	21,369	22.7
50–59	1,169	16.8	112.1	13,942	14.8
60–69	782	11.3	84.0	7,043	7.5
≥ 70	493	7.1	51.3	2,684	2.8
<b>Race and Ethnicity</b>					
Asian or Pacific Islander	1,292	18.6	99.3	4,631	21.2
Black	894	12.9	49.3	2,673	12.3
Latino/a	373	5.4	15.4	1,068	4.9
Native American	12	0.2	7.5	29	0.1
Underrepresented	485	7.0	N/A	1,617	7.4
White	314	4.5	12.0	1,059	4.9
Unknown	3,577	51.5	N/A	10,733	49.2
<b>Borough of residence</b>					
Bronx <sup>1</sup>	1,065	15.3	77.2	9,910	10.5
Brooklyn	2,370	34.1	91.5	34,938	37.0
Manhattan	928	13.4	58.1	17,210	18.2
Queens	2,105	30.3	92.4	28,781	30.5
Staten Island	288	4.1	58.6	2,352	2.5
Unknown	191	2.7	N/A	1,149	1.2
<b>Neighborhood poverty level by ZIP code<sup>2</sup></b>					
Very high	945	13.6	93.4	10,911	11.6
High	1,869	26.9	120.7	25,987	27.6
Medium	2,752	39.7	74.5	37,489	39.8
Low	1,168	16.8	56.0	18,424	19.5
Unknown	203	2.9	N/A	1,440	1.5

<sup>1</sup> The Bronx includes 7 people reported in Rikers Island facilities and 75 people in 2020–2023.

<sup>2</sup> Neighborhood poverty level data excludes people incarcerated at the time of first report. In 2023, there were 10 newly reported people incarcerated at the time of first report. In 2020–2023, there were 89 people who were incarcerated at the time of their most recent report.

**Appendix 4: Number and rate of people newly reported with chronic hepatitis B by Neighborhood Tabulation Area (NTA) in NYC, 2023<sup>1</sup>**

NTA name (code)	Number of people	Rate per 100,000 people
Allerton-Pelham Gardens (BX31)	16	52.8
Annadale-Huguenot-Prince's Bay-Eltingville (SI01)	11	37.4
Arden Heights (SI48)	9	32.8
Astoria (QN70)	42	59.9
Auburndale (QN48)	27	130.6
Baisley Park (QN76)	17	43.7
Bath Beach (BK27)	50	151.3
Battery Park City-Lower Manhattan (MN25)	20	44.4
Bay Ridge (BK31)	50	61.4
Bayside-Bayside Hills (QN46)	38	85.6
Bedford (BK75)	27	33.6
Bedford Park-Fordham North (BX05)	52	92.0
Bellerose (QN43)	19	69.7
Belmont (BX06)	25	95.1
Bensonhurst East (BK29)	118	171.8
Bensonhurst West (BK28)	128	137.8
Borough Park (BK88)	109	107.0
Breezy Point-Belle Harbor-Rockaway Park-Broad Channel (QN10)	7	25.6
Briarwood-Jamaica Hills (QN35)	19	44.7
Brighton Beach (BK19)	54	158.3
Bronxdale (BX07)	20	56.0
Brooklyn Heights-Cobble Hill (BK09)	5	21.3
Brownsville (BK81)	52	105.7
Bushwick North (BK77)	25	46.5
Bushwick South (BK78)	29	40.5

NTA name (code)	Number of people	Rate per 100,000 people
Cambria Heights (QN33)	5	23.9
Canarsie (BK50)	50	58.3
Carroll Gardens-Columbia Street-Red Hook (BK33)	5	11.6
Central Harlem North-Polo Grounds (MN03)	81	95.4
Central Harlem South (MN11)	34	69.2
Charleston-Richmond Valley-Tottenville (SI11)	6	26.2
Chinatown (MN27)	99	223.7
Claremont-Bathgate (BX01)	32	100.5
Clinton (MN15)	36	69.2
Clinton Hill (BK69)	10	26.0
Co-op City (BX13)	22	48.1
College Point (QN23)	46	176.4
Corona (QN25)	41	71.3
Crotona Park East (BX75)	22	100.9
Crown Heights North (BK61)	85	77.1
Crown Heights South (BK63)	33	85.6
Cypress Hills-City Line (BK83)	25	51.0
Douglas Manor-Douglaston-Little Neck (QN45)	19	74.1
DUMBO-Vinegar Hill-Downtown Brooklyn-Boerum Hill (BK38)	20	43.1
Dyker Heights (BK30)	112	249.2
East Concourse-Concourse Village (BX14)	68	108.4
East Elmhurst (QN27)	6	33.5
East Flatbush-Farragut (BK91)	39	77.2

<sup>1</sup> Based on their address at first report, 316 people could not be assigned to an NTA.

**Appendix 4: Number and rate of people newly reported with chronic hepatitis B by NTA in NYC, 2023**

NTA name (code)	Number of people	Rate per 100,000 people
East Flushing (QN52)	96	377.6
East Harlem North (MN34)	31	52.1
East Harlem South (MN33)	33	56.8
East New York (BK82)	65	62.0
East New York (Pennsylvania Ave) (BK85)	35	122.3
East Tremont (BX17)	34	79.8
East Village (MN22)	14	34.5
East Williamsburg (BK90)	18	51.1
Eastchester-Edenwald-Baychester (BX03)	22	59.8
Elmhurst (QN29)	104	120.5
Elmhurst-Maspeth (QN50)	42	170.4
Erasmus (BK95)	19	71.5
Far Rockaway-Bayswater (QN15)	35	61.0
Flatbush (BK42)	86	84.0
Flatlands (BK58)	38	55.5
Flushing (QN22)	447	638.7
Fordham South (BX40)	24	87.9
Forest Hills (QN17)	42	48.1
Fort Greene (BK68)	11	33.4
Fresh Meadows-Utopia (QN41)	16	87.2
Ft. Totten-Bay Terrace-Clearview (QN47)	13	57.4
Georgetown-Marine Park-Bergen Beach-Mill Basin (BK45)	21	46.6
Glen Oaks-Floral Park-New Hyde Park (QN44)	11	44.7
Glendale (QN19)	21	62.3
Gramercy (MN21)	3	11.8
Grasmere-Arrochar-Ft. Wadsworth (SI14)	15	87.8
Gravesend (BK26)	44	142.9
Great Kills (SI54)	23	55.0

NTA name (code)	Number of people	Rate per 100,000 people
Greenpoint (BK76)	7	20.3
Grymes Hill-Clifton-Fox Hills (SI08)	21	92.8
Hamilton Heights (MN04)	19	36.9
Hammels-Arverne-Edgemere (QN12)	10	23.2
Highbridge (BX26)	32	85.4
Hollis (QN07)	12	58.8
Homecrest (BK25)	45	99.4
Hudson Yards-Chelsea-Flatiron-Union Square (MN13)	40	53.7
Hunters Point-Sunnyside-West Maspeth (QN31)	45	65.2
Hunts Point (BX27)	20	80.2
Jackson Heights (QN28)	58	60.6
Jamaica (QN61)	49	87.0
Jamaica Estates-Holliswood (QN06)	19	68.8
Kensington-Ocean Parkway (BK41)	24	69.4
Kew Gardens (QN60)	12	52.8
Kew Gardens Hills (QN37)	26	70.8
Kingsbridge Heights (BX30)	23	69.7
Laurelton (QN66)	17	60.8
Lenox Hill-Roosevelt Island (MN31)	25	32.2
Lincoln Square (MN14)	17	27.0
Lindenwood-Howard Beach (QN57)	8	27.8
Longwood (BX33)	19	71.1
Lower East Side (MN28)	50	72.0
Madison (BK44)	48	114.9
Manhattanville (MN06)	17	74.0
Marble Hill-Inwood (MN01)	12	22.7

**Appendix 4: Number and rate of people newly reported with chronic hepatitis B by NTA in NYC, 2023**

NTA name (code)	Number of people	Rate per 100,000 people
Mariner's Harbor-Arlington-Port Ivory-Graniteville (SI12)	15	43.4
Maspeth (QN30)	26	81.3
Melrose South-Mott Haven North (BX34)	33	82.2
Middle Village (QN21)	25	61.2
Midtown-Midtown South (MN17)	76	273.1
Midwood (BK43)	46	83.5
Morningside Heights (MN09)	23	43.1
Morrisania-Melrose (BX35)	60	149.0
Mott Haven-Port Morris (BX39)	35	67.9
Mount Hope (BX41)	49	93.2
Murray Hill (QN51)	99	198.4
Murray Hill-Kips Bay (MN20)	62	131.8
New Brighton-Silver Lake (SI35)	5	28.7
New Dorp-Midland Beach (SI45)	24	103.3
New Springville-Bloomfield-Travis (SI05)	27	60.6
North Corona (QN26)	26	48.9
North Riverdale-Fieldston-Riverdale (BX22)	8	29.6
North Side-South Side (BK73)	20	34.3
Norwood (BX43)	27	69.2
Oakland Gardens (QN42)	16	52.1
Oakwood-Oakwood Beach (SI25)	12	57.6
Ocean Hill (BK79)	21	55.4
Ocean Parkway South (BK46)	11	54.1
Old Astoria (QN71)	16	78.7

NTA name (code)	Number of people	Rate per 100,000 people
Old Town-Dongan Hills-South Beach (SI36)	26	95.1
Ozone Park (QN56)	9	36.9
Park Slope-Gowanus (BK37)	18	24.6
Parkchester (BX46)	19	64.0
Pelham Bay-Country Club-City Island (BX10)	14	54.2
Pelham Parkway (BX49)	26	94.0
Pomonok-Flushing Heights-Hillcrest (QN38)	27	78.5
Port Richmond (SI28)	4	20.6
Prospect Heights (BK64)	8	35.8
Prospect Lefferts Gardens-Wingate (BK60)	30	44.9
Queens Village (QN34)	21	37.4
Queensboro Hill (QN62)	88	430.9
Queensbridge-Ravenswood-Long Island City (QN68)	21	117.8
Rego Park (QN18)	21	72.4
Richmond Hill (QN54)	34	54.4
Ridgewood (QN20)	28	39.6
Rikers Island (BX98)	10	49.7
Rosedale (QN05)	12	45.9
Rossville-Woodrow (SI32)	11	49.5
Rugby-Remsen Village (BK96)	42	77.5
Schuylerville-Throgs Neck-Edgewater Park (BX52)	18	39.2
Seagate-Coney Island (BK21)	21	64.7



**Appendix 4:** Number and rate of people newly reported with chronic hepatitis B by NTA in NYC, 2023

NTA name (code)	Number of people	Rate per 100,000 people
Sheepshead Bay-Gerritsen Beach-Manhattan Beach (BK17)	38	57.0
SoHo-TriBeCa-Civic Center-Little Italy (MN24)	17	39.0
Soundview-Bruckner (BX55)	30	85.8
Soundview-Castle Hill-Clason Point-Harding Park (BX09)	30	56.8
South Jamaica (QN01)	28	61.6
South Ozone Park (QN55)	45	54.7
Springfield Gardens North (QN02)	11	41.1
Springfield Gardens South-Brookville (QN03)	12	53.0
Spuyten Duyvil-Kingsbridge (BX29)	9	29.6
St. Albans (QN08)	29	52.9
Stapleton-Rosebank (SI37)	27	96.3
Starrett City (BK93)	0	0.0
Steinway (QN72)	21	47.5
Stuyvesant Heights (BK35)	36	50.9
Stuyvesant Town-Cooper Village (MN50)	8	38.3
Sunset Park East (BK34)	474	724.5
Sunset Park West (BK32)	64	121.6
Todt Hill-Emerson Hill-Heartland Village-Lighthouse Hill (SI24)	22	66.0
Turtle Bay-East Midtown (MN19)	14	28.0
University Heights-Morris Heights (BX36)	44	81.9

NTA name (code)	Number of people	Rate per 100,000 people
Upper East Side-Carnegie Hill (MN40)	5	9.4
Upper West Side (MN12)	34	35.8
Van Cortlandt Village (BX28)	21	44.3
Van Nest-Morris Park-Westchester Square (BX37)	32	115.7
Washington Heights North (MN35)	39	54.4
Washington Heights South (MN36)	40	45.4
West Brighton (BK23)	11	61.4
West Concourse (BX63)	25	64.4
West Farms-Bronx River (BX08)	23	70.5
West New Brighton-New Brighton-St. George (SI22)	18	54.6
West Village (MN23)	10	16.6
Westchester-Unionport (BX59)	18	66.9
Westerleigh (SI07)	11	42.6
Whitestone (QN49)	20	60.0
Williamsbridge-Olinville (BX44)	61	95.2
Williamsburg (BK72)	3	9.2
Windsor Terrace (BK40)	3	13.0
Woodhaven (QN53)	38	64.6
Woodlawn-Wakefield (BX62)	30	68.5
Woodside (QN63)	41	96.4
Yorkville (MN32)	16	21.1

# Appendix 5: NYC NTAs



**Appendix 6:** Demographic characteristics of pregnant people with hepatitis B in NYC who delivered a live infant in 2023

Characteristics	Number	Percentage of each group
Overall	620	100.0
<b>Borough of residence</b>		
Bronx	116	18.7
Brooklyn	247	39.8
Manhattan	53	8.6
Queens	172	27.7
Staten Island	32	5.2
<b>Race and ethnicity</b>		
Asian or Pacific Islander	346	55.7
Black	188	30.4
Latino/a	18	3.1
Underrepresented	3	0.3
White	62	10.0
Unknown	3	0.5
<b>Country of birth</b>		
China	238	38.4
Senegal	31	5.0
Uzbekistan	26	4.2
Ghana	25	4.0
United States	25	4.0
Guinea	24	3.9
Bangladesh	19	3.1
Albania	17	2.7
Guyana	11	1.8
Dominican Republic	10	1.6
Liberia	10	1.6
Philippines	10	1.6
Unknown	3	0.5
Underrepresented	171	27.6
<b>Region of birth<sup>1</sup></b>		
China	238	38.4
Western Africa	147	23.7
South Asia	39	6.3
Europe	36	5.8
West and Central Asia	36	5.8
Caribbean	27	4.4
U.S.	25	4.0
Southeast Asia	21	3.4
Mexico, Central and South America	20	3.2
East Asia (excluding China)	13	2.1
Middle East	5	0.8
Africa (excluding Western Africa)	9	1.4
Canada	1	0.2
Unknown	3	0.5

<sup>1</sup> Includes countries counted as separate regions for comparison with larger regions. Excludes the following regions that were not reported as a region of birth for any reported person (Australia/Oceania and Pacific Islands)

**Appendix 7: Hepatitis B postexposure prophylaxis (PEP), vaccination, and testing among infants born in 2022 to pregnant people with hepatitis B, NYC**

Characteristics	Number	Percentage of each group
Overall	643	100.0
<b>Hepatitis B PEP<sup>1</sup> and vaccination status<sup>2</sup></b>		
Received hepatitis B PEP	637	99.1
Completed vaccine series <sup>3</sup>	620	96.4
Received hepatitis B PEP and completed vaccine series	615	95.6
<b>Testing status<sup>4</sup></b>		
Tested	534	83.0
Not tested	109	17.0
<b>Test results<sup>5</sup></b>		
Immune	519	97.2
Susceptible	6	1.1
Indeterminate	9	1.7
Infected	0	0.0

<sup>1</sup> Defined as administration of both hepatitis B immune globulin and hepatitis B vaccine within one day of birth.

<sup>2</sup> Not mutually exclusive.

<sup>3</sup> Defined as receiving three valid doses of hepatitis B vaccine including a dose given at age greater than or equal to 164 days.

<sup>4</sup> The 'Not Tested' category includes 92 infants < 2 years of age who were still being followed by the NYC Health Department for testing completeness as of December 31, 2023.

<sup>5</sup> Percentages calculated out of those tested (n=534).

**Appendix 8: Characteristics of decedents where hepatitis B is listed as the underlying or non-underlying (multiple) cause of death, NYC, 2022**

Characteristics	Number	Percentage of each group	Age-adjusted rate per 100,000 people <sup>1</sup>
Overall	72	100	0.7
<b>Sex</b>			
Female	23	31.9	0.4
Male	49	68.1	1.1
<b>Race and ethnicity</b>			
Asian or Pacific Islander	34	47.2	2.1
Black	18	25.0	0.8
Latino/a	9	12.5	0.4
White	10	13.9	0.3
Underrepresented /Unknown	1	1.4	N/A
<b>Age</b>			<b>Age-specific rate per 100,000 population<sup>1</sup></b>
0-24	0	0.0	0.0
25-44	6	8.3	0.2
45-64	28	38.9	1.4
65-84	35	48.6	2.9
≥ 85	3	4.2	1.6

<sup>1</sup> Rates stratified by age group are presented as age-specific rates.

**Appendix 9: Characteristics of people reported with chronic or acute hepatitis C in NYC, 2023**

Characteristics	People newly reported in 2023			All people reported 2020–2023, regardless of year of first report	
	Number	Percentage of each group	Rate per 100,000 people	Number	Percentage of each group
Overall	2,520	100.0	31.3	69,485	100.0
<b>Sex<sup>1</sup></b>					
Female	934	37.1	22.3	25,822	37.1
Male	1,583	62.8	41.0	43,629	62.8
Unknown	2	0.1	N/A	29	0.1
<b>Age at time of first report<sup>2</sup></b>					
3–19	29	1.2	1.8	705	1.0
20–29	269	10.7	22.6	5,881	8.5
30–39	546	21.7	41.4	12,879	18.5
40–49	522	20.7	50.2	20,400	29.4
50–59	438	17.4	42.0	18,801	27.1
60–69	382	15.2	49.1	8,015	11.5
≥ 70	334	13.3	31.8	2,777	4.0
Unknown	N/A	N/A	N/A	27	<0.1
<b>Race and Ethnicity</b>					
Asian or Pacific Islander	139	5.5	10.7	3186	4.6
Black	374	14.8	20.6	18,337	26.4
Latino/a	355	14.1	14.7	17,779	25.6
Native American	9	0.4	5.6	121	0.2
Underrepresented	196	7.8	N/A	4417	6.4
White	439	17.4	16.8	15,945	23.0
Unknown	1008	40.0	N/A	9700	14.0
<b>Borough of residence</b>					
Bronx <sup>3</sup>	554	22.0	41.7.	18,147	26.1
Brooklyn	860	34.1	34.5	20,822	30.0
Manhattan	466	18.5	30.0	15,245	21.9
Queens	511	20.3	23.2	12,183	17.5
Staten Island	125	5.0	26.3	3,080	4.4
Unknown	4	0.2	N/A	8	<0.1
<b>Neighborhood poverty level by ZIP code<sup>4</sup></b>					
Very high	454	18.4	46.9	15,161	21.6
High	429	17.3	28.8	14,819	21.6
Medium	1,187	48.0	33.2	26,876	39.1
Low	394	15.9	19.5	10,405	15.2
Unknown	10	0.4	N/A	1,406	2.1

<sup>1</sup> The number of people who identify as transgender is likely an underestimate. Gender identity is not consistently reported by laboratories.

<sup>2</sup> Children ages 2–36 months who are newly reported in 2023 are classified using the 2018 CDC perinatal hepatitis C case definition and are reported in Appendix 12.

<sup>3</sup> The Bronx includes 46 people reported from Rikers Island facilities.

<sup>4</sup> Neighborhood poverty level data excludes people incarcerated at the time of first report. In 2023, there were 46 newly reported people incarcerated at the time of first report. In 2020–2023, there were 818 people incarcerated at time of their most recent report.

**Appendix 10: Number and rate of people newly reported with chronic hepatitis C by NTA in NYC, 2023<sup>1</sup>**

NTA name (code)	Number of people	Rate per 100,000 people	NTA name (code)	Number of people	Rate per 100,000 people
Allerton-Pelham Gardens (BX31)	7	23.8	Cambria Heights (QN33)	0	0.0
Annadale-Huguenot-Prince's Bay-Eltingville (SI01)	7	24.5	Canarsie (BK50)	34	41.0
Arden Heights (SI48)	2	7.5	Carroll Gardens-Columbia Street-Red Hook (BK33)	2	4.8
Astoria (QN70)	16	23.5	Central Harlem North-Polo Grounds (MN03)	27	32.8
Auburndale (QN48)	2	9.9	Central Harlem South (MN11)	13	27.3
Baisley Park (QN76)	19	50.5	Charleston-Richmond Valley-Tottenville (SI11)	5	22.5
Bath Beach (BK27)	13	40.8	Chinatown (MN27)	7	16.1
Battery Park City-Lower Manhattan (MN25)	3	6.9	Claremont-Bathgate (BX01)	20	65.9
Bay Ridge (BK31)	21	26.7	Clinton (MN15)	19	37.3
Bayside-Bayside Hills (QN46)	6	13.9	Clinton Hill (BK69)	6	16.3
Bedford (BK75)	19	35.1	Co-op City (BX13)	5	11.2
Bedford Park-Fordham North (BX05)	19	35.1	College Point (QN23)	8	31.8
Bellerose (QN43)	8	30.2	Corona (QN25)	14	25.3
Belmont (BX06)	9	35.6	Crotona Park East (BX75)	6	28.7
Bensonhurst East (BK29)	47	70.8	Crown Heights North (BK61)	24	22.5
Bensonhurst West (BK28)	44	49.1	Crown Heights South (BK63)	3	8.1
Borough Park (BK88)	20	21.4	Cypress Hills-City Line (BK83)	12	25.5
Breezy Point-Belle Harbor-Rockaway Park-Broad Channel (QN10)	8	30.2	Douglas Manor-Douglaston-Little Neck (QN45)	5	20.0
Briarwood-Jamaica Hills (QN35)	12	29.1	DUMBO-Vinegar Hill-Downtown Brooklyn-Boerum Hill (BK38)	15	33.7
Brighton Beach (BK19)	54	163.1	Dyker Heights (BK30)	11	25.3
Bronxdale (BX07)	10	29.1	East Concourse-Concourse Village (BX14)	16	26.7
Brooklyn Heights-Cobble Hill (BK09)	4	17.7	East Elmhurst (QN27)	7	40.7
Brownsville (BK81)	32	67.9	East Flatbush-Farragut (BK91)	9	18.4
Bushwick North (BK77)	15	28.8			
Bushwick South (BK78)	24	34.5			

<sup>1</sup> Based on their address at first report, 103 people could not be assigned to an NTA.

**Appendix 10: Number and rate of people newly reported with chronic hepatitis C by NTA in NYC, 2023**

NTA name (code)	Number of people	Rate per 100,000 people
East Flushing (QN52)	4	16.2
East Harlem North (MN34)	23	39.8
East Harlem South (MN33)	33	58.5
East New York (BK82)	37	36.7
East New York (Pennsylvania Ave) (BK85)	9	32.7
East Tremont (BX17)	25	61.2
East Village (MN22)	14	35.0
East Williamsburg (BK90)	11	32.1
Eastchester-Edenwald-Baychester (BX03)	8	22.6
Elmhurst (QN29)	15	17.9
Elmhurst-Maspeth (QN50)	5	20.9
Erasmus (BK95)	8	31.2
Far Rockaway-Bayswater (QN15)	13	23.8
Flatbush (BK42)	38	38.4
Flatlands (BK58)	8	12.0
Flushing (QN22)	17	24.9
Fordham South (BX40)	14	53.7
Forest Hills (QN17)	21	25.0
Fort Greene (BK68)	9	28.4
Fresh Meadows-Utopia (QN41)	3	16.9
Ft. Totten-Bay Terrace-Clearview (QN47)	2	9.0
Georgetown-Marine Park-Bergen Beach-Mill Basin (BK45)	7	16.0
Glen Oaks-Floral Park-New Hyde Park (QN44)	0	0.0
Glendale (QN19)	3	9.2
Gramercy (MN21)	5	20.1
Grasmere-Arrochar-Ft. Wadsworth (SI14)	6	36.3
Gravesend (BK26)	14	47.0
Great Kills (SI54)	5	12.3

NTA name (code)	Number of people	Rate per 100,000 people
Greenpoint (BK76)	9	27.0
Grymes Hill-Clifton-Fox Hills (SI08)	5	22.8
Hamilton Heights (MN04)	20	40.0
Hammels-Arverne-Edgemere (QN12)	11	26.6
Highbridge (BX26)	21	58.3
Hollis (QN07)	4	20.2
Homecrest (BK25)	27	62.5
Hudson Yards-Chelsea-Flatiron-Union Square (MN13)	20	27.5
Hunters Point-Sunnyside-West Maspeth (QN31)	10	15.0
Hunts Point (BX27)	15	62.5
Jackson Heights (QN28)	12	12.9
Jamaica (QN61)	14	25.8
Jamaica Estates-Holliswood (QN06)	5	18.7
Kensington-Ocean Parkway (BK41)	12	36.2
Kew Gardens (QN60)	6	27.3
Kew Gardens Hills (QN37)	5	14.3
Kingsbridge Heights (BX30)	8	25.2
Laurelton (QN66)	3	11.0
Lenox Hill-Roosevelt Island (MN31)	10	13.3
Lincoln Square (MN14)	15	24.6
Lindenwood-Howard Beach (QN57)	5	17.9
Longwood (BX33)	12	47.1
Lower East Side (MN28)	14	20.6
Madison (BK44)	27	67.1
Manhattanville (MN06)	10	44.8
Marble Hill-Inwood (MN01)	11	21.5

**Appendix 10: Number and rate of people newly reported with chronic hepatitis C by NTA in NYC, 2023**

NTA name (code)	Number of people	Rate per 100,000 people
Mariner's Harbor-Arlington-Port Ivory-Graniteville (SI12)	12	35.9
Maspeth (QN30)	5	16.1
Melrose South-Mott Haven North (BX34)	29	75.2
Middle Village (QN21)	13	32.8
Midtown-Midtown South (MN17)	32	118.0
Midwood (BK43)	27	51.4
Morningside Heights (MN09)	23	44.0
Morrisania-Melrose (BX35)	22	57.0
Mott Haven-Port Morris (BX39)	17	34.4
Mount Hope (BX41)	30	59.7
Murray Hill (QN51)	15	30.8
Murray Hill-Kips Bay (MN20)	19	41.2
New Brighton-Silver Lake (SI35)	5	29.6
New Dorp-Midland Beach (SI45)	7	31.0
New Springville-Bloomfield-Travis (SI05)	12	27.9
North Corona (QN26)	14	27.3
North Riverdale-Fieldston-Riverdale (BX22)	7	26.7
North Side-South Side (BK73)	9	16.1
Norwood (BX43)	15	40.1
Oakland Gardens (QN42)	6	20.1
Oakwood-Oakwood Beach (SI25)	5	24.7
Ocean Hill (BK79)	22	60.1
Ocean Parkway South (BK46)	5	26.2
Old Astoria (QN71)	7	35.4

NTA name (code)	Number of people	Rate per 100,000 people
Old Town-Dongan Hills-South Beach (SI36)	7	26.3
Ozone Park (QN56)	3	12.8
Park Slope-Gowanus (BK37)	14	19.9
Parkchester (BX46)	7	24.6
Pelham Bay-Country Club-City Island (BX10)	9	36.1
Pelham Parkway (BX49)	9	33.9
Pomonok-Flushing Heights-Hillcrest (QN38)	4	12.0
Port Richmond (SI28)	6	32.0
Prospect Heights (BK64)	0	0.0
Prospect Lefferts Gardens-Wingate (BK60)	20	31.0
Queens Village (QN34)	10	18.3
Queensboro Hill (QN62)	1	5.1
Queensbridge-Ravenswood-Long Island City (QN68)	9	52.0
Rego Park (QN18)	13	46.3
Richmond Hill (QN54)	26	43.0
Ridgewood (QN20)	8	11.7
Rikers Island (BX98)	46	228.5
Rosedale (QN05)	2	7.9
Rossville-Woodrow (SI32)	8	37.1
Rugby-Remsen Village (BK96)	13	4.72
Schuylerville-Throgs Neck-Edgewater Park (BX52)	10	22.5
Seagate-Coney Island (BK21)	21	66.8



**Appendix 10: Number and rate of people newly reported with chronic hepatitis C by NTA in NYC, 2023**

NTA name (code)	Number of people	Rate per 100,000 people
Sheepshead Bay-Gerritsen Beach-Manhattan Beach (BK17)	40	61.9
SoHo-TriBeCa-Civic Center-Little Italy (MN24)	4	9.5
Soundview-Bruckner (BX55)	11	32.9
Soundview-Castle Hill-Clason Point-Harding Park (BX09)	14	27.4
South Jamaica (QN01)	15	34.1
South Ozone Park (QN55)	20	25.0
Springfield Gardens North (QN02)	9	34.7
Springfield Gardens South-Brookville (QN03)	5	23.0
Spuyten Duyvil-Kingsbridge (BX29)	7	23.8
St. Albans (QN08)	10	18.8
Stapleton-Rosebank (SI37)	11	40.6
Starrett City (BK93)	7	56.6
Steinway (QN72)	14	32.6
Stuyvesant Heights (BK35)	11	16.0
Stuyvesant Town-Cooper Village (MN50)	1	4.9
Sunset Park East (BK34)	11	17.5
Sunset Park West (BK32)	10	19.7
Todt Hill-Emerson Hill-Heartland Village-Lighthouse Hill (SI24)	5	15.4
Turtle Bay-East Midtown (MN19)	5	10.2
University Heights-Morris Heights (BX36)	22	42.6

NTA name (code)	Number of people	Rate per 100,000 people
Upper East Side-Carnegie Hill (MN40)	7	13.5
Upper West Side (MN12)	21	16.4
Van Cortlandt Village (BX28)	13	28.4
Van Nest-Morris Park-Westchester Square (BX37)	10	37.8
Washington Heights North (MN35)	13	18.7
Washington Heights South (MN36)	29	33.7
West Brighton (BK23)	8	45.5
West Concourse (BX63)	9	24.2
West Farms-Bronx River (BX08)	12	38.4
West New Brighton-New Brighton-St. George (SI22)	11	34.6
West Village (MN23)	9	15.2
Westchester-Unionport (BX59)	8	31.0
Westerleigh (SI07)	4	16.0
Whitestone (QN49)	2	6.2
Williamsbridge-Olinville (BX44)	16	25.9
Williamsburg (BK72)	1	3.4
Windsor Terrace (BK40)	1	4.5
Woodhaven (QN53)	20	35.3
Woodlawn-Wakefield (BX62)	12	28.4
Woodside (QN63)	12	29.0
Yorkville (MN32)	6	8.1

**Appendix 11:** Characteristics of children ages 2 to 36 months newly reported with hepatitis C in NYC, 2023

Characteristics	Number	Percentage of each group
Overall	16	100.0
<b>Hepatitis C infection status</b>		
Confirmed <sup>1</sup>	1	6.3
Exposed (infection status unknown) <sup>2</sup>	5	31.3
Not currently infected <sup>3</sup>	10	62.5
<b>Sex</b>		
Female	10	62.5
Male	6	37.5
<b>Race and Ethnicity</b>		
Asian or Pacific Islander	1	6.3
Black	1	6.3
Latino/a	1	6.3
Underrepresented	3	18.8
White	3	18.8
Unknown	7	43.8
<b>Borough of residence</b>		
Bronx	1	6.3
Brooklyn	6	37.5
Manhattan	4	25.0
Queens	3	18.8
Staten Island	2	12.5
<b>Birth parent information</b>		
Birth parent previously reported to NYC Health Department with hepatitis C	4	25.0

<sup>1</sup> Hepatitis C RNA positive between ages 2 and 36 months.

<sup>2</sup> Hepatitis C antibody positive between ages 2 and 36 months with no hepatitis RNA result available, or RNA positive between birth and 2 months.

<sup>3</sup> Hepatitis C RNA negative between ages 2 and 36 months or hepatitis C antibody negative between ages 18 and 36 months.

**Appendix 12:** RNA and genotype test results of people newly reported with chronic hepatitis C in NYC, 2023

Characteristics	Number	Percentage of each group
All new reports of hepatitis C	8,421	100.0
Any RNA test performed <sup>1</sup>	7,556	89.7
<b>Case definition</b>		
Not currently infected: antibody positive, RNA negative only	6,059	72.0
Probable: antibody positive only	908	10.8
Confirmed: antibody positive, RNA positive or genotype tested <sup>2</sup>	1454	17.3
<b>Genotype test performed</b>		
Yes	726	49.9
No	728	50.1

<sup>1</sup> Based on the NYC Health Department's hepatitis C surveillance data as of April 30, 2023. Reporting of negative RNA test results to the NYC Health Department was mandated on July 21, 2014.

<sup>2</sup> Only a genotype result with no RNA positive result was found in 25 people.

**Appendix 13:** Hepatitis C cure and clearance among people newly reported with a positive hepatitis C RNA test in NYC by year of first report as of April 30, 2024, 2015–2023

Report year	Cured or cleared after hepatitis C diagnosis				Not cured or cleared after hepatitis C diagnosis				Deceased before cure or clearance	
	Within 1 year		> 1 year		Last report <3 years		Last report ≥3 years			
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
2015	1306	30.0	1186	27.2	1501	5.0	1284	29.5	365	8.4
2016	1378	33.9	965	23.7	1396	5.3	1181	29.1	325	8.0
2017	1305	36.3	757	21.1	1311	5.9	1100	30.6	221	6.1
2018	1262	38.8	536	16.5	1245	8.0	985	30.3	211	6.5
2019	1085	37.2	491	16.8	1181	11.0	860	29.5	163	5.6
2020	689	37.1	268	14.4	779	15.8	485	26.1	122	6.6
2021	634	35.9	222	12.6	826	36.1	188	10.7	83	4.7
2022	686	36.7	124	6.6	1005	53.8	N/A	N/A	52	2.8
2023 <sup>1</sup>	276	36.8	17	2.3	457	60.9	N/A	N/A	1	0.1

<sup>1</sup> People newly diagnosed in 2023 excludes those who were newly diagnosed with hepatitis C after April 30, 2023, to allow for a minimum of 1 year follow-up time

**Appendix 14:** Conditional proportions, time frame and definitions for the 2023 hepatitis C virus clearance cascade

Conditional Proportions for 2023 Laboratory-Based Hepatitis C Virus Clearance Cascade by Subpopulation

Characteristics	Ever infected	Viral testing		Initial infection		Cured/cleared		Persistent infection/reinfection	
	Number (1)	Number (2b)	Percentage (2b/1)	Number (3b)	Percentage (3b/2b)	Number (4b)	Percentage (4b/3b)	Number (5b)	Percentage (5b/4b)
Total	119,513	109,977	92.0	57,524	52.3	39,497	68.7	1,210	3.1
<b>Gender<sup>1</sup></b>									
Female	50,932	46,728	91.7	21,034	45.0	15,043	71.5	303	2.0
Male	68,459	63,149	92.2	36,432	57.7	25,226	67.1	907	3.7
Transgender	8	8	100.0	5	62.5	1	20.0	0	0.0
<b>Age</b>									
0–19	407	335	82.3	99	29.6	54	54.5	0	0.0
20–39	18,671	16,596	88.9	6,302	38.0	3,496	55.5	253	7.2
40–59	38,912	35,732	91.8	18,353	51.4	12,129	66.1	532	4.4
≥ 60	61,523	57,314	93.2	32,770	57.2	23,818	72.7	425	1.8
<b>Race and Ethnicity</b>									
Asian or Pacific Islander <sup>2</sup>	5,476	5,038	92.0	1,967	39.0	1,580	80.3	25	1.6
Black <sup>2</sup>	27,853	26,156	93.9	15,897	60.8	11,328	71.3	288	2.5
Latino/a	24,167	22,955	95.0	13,077	57.0	9,506	72.7	405	4.3
Native American <sup>2</sup>	172	158	91.9	77	48.7	53	68.8	2	3.8
White <sup>2</sup>	25,674	24,063	93.7	13,318	55.3	9,491	71.3	292	3.1
Underrepresented / Unknown	36,171	31,607	87.4	13,188	41.7	7,539	57.2	198	2.6

<sup>1</sup> Gender was missing for 114 patients.

<sup>2</sup> Non-Latino/a.

## Time Frame and Definitions for the 2023 Laboratory-Based Hepatitis C Virus Clearance Cascade

### Time frame:

- Cascade starting point: July 1, 2014, the date when hepatitis C virus RNA negative/“not detected” reporting was fully implemented in New York City.
- Evaluation time frame: the time period from the starting point (July 1, 2014) to the analysis point.

### Definitions for cascade steps:

- Step 1: Ever infected with hepatitis C. All individuals with any positive/“detected” hepatitis C virus test (anti-HCV, RNA, detectable genotype or core antigen) performed from the starting point through the end of the “ever infected” period (December 31, 2022). The test performance date is the specimen collection date (or laboratory result date if specimen collection date is not available).
- Step 2: Viral testing performed. This category includes all individuals who were ever infected (Step 1):
  - 2a – No hepatitis C viral test reported. All individuals who have no hepatitis C viral test performed by the end of the follow-up period (December 31, 2023).
  - 2b – Hepatitis C viral test performed. All individuals who have any hepatitis C viral test performed by the end of the follow-up period (December 31, 2023), regardless of result.
- Step 3: Initial infection status. This category includes all individuals with viral testing performed (Step 2b):
  - 3a – Initial hepatitis C virus infection cured or cleared. All individuals whose initial hepatitis C viral test result performed during the follow-up period (through December 31, 2023) was “not detected.”
  - 3b – Initial hepatitis C virus infection present. All individuals whose initial hepatitis C viral test result performed during the follow-up period (through December 31, 2023) was “detected.”
- Step 4: Cured or cleared. This category includes all individuals with an initial hepatitis C viral test result “detected” (Step 3b):
  - 4a – Hepatitis C virus infection not cured or cleared during the cascade time frame. All individuals where no subsequent hepatitis C viral test results were performed or where all subsequent hepatitis C viral test results during the follow-up period (through December 31, 2023) were “detected.”
  - 4b – Hepatitis C virus infection cured or cleared during the cascade time frame. All individuals where a subsequent hepatitis C viral test result “not detected” was performed during the follow-up period (through December 31, 2023).
  - Note: The cascade is unable to distinguish between cured (referring to successful treatment response) and cleared (referring to natural, spontaneous clearance).
  - Note: A patient with a single, detectable hepatitis C RNA result would populate all the first four Steps: Step 1, Step 2b, Step 3b, and Step 4a.
- Step 5: Persistent infection or reinfection.
  - 5a – Persistent infection or reinfection. All individuals where a negative/“not detected” result (Step 3a) is followed by an hepatitis C viral test result positive/“detected.”
  - 5b – Persistent infection or reinfection. All individuals where a negative/“not detected” result (Step 4b) is followed by an hepatitis C viral test result positive/“detected.”

- Note: The cascade is unable to distinguish among the reasons for persistent infection (for example, incomplete treatment, treatment failure, viral breakthrough), reinfection or false positive reports (rare). For simplicity, there is no minimum time period after a hepatitis C viral negative/“not detected” test result (cured or cleared) and before a subsequent hepatitis C viral positive/“detected” test result occurs to qualify as a persistent infection or reinfection. Regardless of whether these infections represent persistent infections or reinfections, this group represents an important opportunity for linkage to care and treatment.

General notes:

- Pre-direct acting antiviral (DAA) medication treatment and cure rates are not included in the cascade.
- All individuals who are known to be living outside the jurisdiction or deceased as of the end of the follow-up period (December 31, 2023) were excluded from the cascade.

**Appendix 15:** Number and percentage of people who ever had a recurrent positive hepatitis C RNA test after cure and those who were still infected in 2023 by year of reported recurrence, 2015-2023

Year of reported recurrence	People who had a recurrent positive hepatitis C RNA test after cure or clearance	People who are still infected with hepatitis C <sup>1</sup>		People who are no longer infected with hepatitis C <sup>1</sup>	
	Number	Number	Percentage	Number	Percentage
2015	14	1	7.1	13	92.9
2016	51	8	15.7	43	84.3
2017	98	17	17.3	81	82.7
2018	115	36	31.3	79	68.7
2019	163	52	31.9	111	68.1
2020	166	49	29.5	117	70.5
2021	148	54	36.5	94	63.5
2022	145	56	38.6	89	61.4
2023	135	72	53.3	63	46.7

<sup>1</sup> Based on the NYC Health Department’s hepatitis C surveillance data as of April 30, 2024.

**Appendix 16:** Characteristics of people who ever had a recurrent positive hepatitis C RNA test after cure or clearance, 2015–2023

Interpretation	Number	Percentage of each group
Overall	1,073	100.0
<b>Gender</b>		
Female	252	23.5
Male	820	76.4
Transgender	1	0.1
<b>Age at recurrence</b>		
3-19	1	0.1
20–29	149	13.9
30–39	337	31.4
40–49	248	23.1
50–59	186	17.3
60-69	104	9.7
≥ 70	48	4.5
<b>Race and Ethnicity</b>		
Asian or Pacific Islander	48	4.5
Black	213	19.9
Latino/a	309	28.8
Native American	1	0.1
Underrepresented	79	7.4
White	341	31.8
Unknown	82	7.6
<b>Borough of residence</b>		
Bronx	296	27.6
Brooklyn	273	25.4
Manhattan	281	26.2
Queens	170	15.8
Staten Island	53	4.9
<b>Time to recurrence</b>		
≤ 1 year from cure date	579	55.6
> 1 year from cure date	476	44.4



**Appendix 17: Characteristics of people reported with hepatitis C and HIV coinfection in NYC by end of 2022<sup>1,2</sup>**

Characteristics	Total		Initiated hepatitis C treatment by end of 2022 <sup>3</sup>		Had not initiated hepatitis C treatment by end of 2022	
	Number	Percentage (column)	Number	Percentage (row)	Number	Percentage (row)
Overall	9184	100.0	7186	78.2	1998	21.8
<b>Gender</b>						
Male	6,805	74.1	5,337	78.4	1,468	21.6
Female	2189	23.8	1,713	78.3	476	21.7
Transgender	190	2.1	136	71.6	54	28.4
<b>Age</b>						
0–19	3	0.0	3	100.0	0	0.0
20–29	120	1.3	51	42.5	69	57.5
30–39	810	8.8	500	61.7	310	38.3
40–49	1,102	12.0	765	69.4	337	30.6
50–59	2,325	25.3	1845	79.4	480	20.6
60–69	3,486	38.0	2,888	82.8	598	17.2
≥ 70	1,338	14.6	1134	84.8	204	15.2
<b>Current borough of residence</b>						
Bronx	3,296	35.9	2,570	78.0	726	22.0
Brooklyn	2,315	25.2	1,830	79.0	485	21.0
Manhattan	2,195	23.9	1,717	78.2	478	21.8
Queens	1,108	12.1	853	77.0	255	23.0
Staten Island	270	2.9	216	80.0	54	20.0
<b>Neighborhood poverty level by ZIP code<sup>4</sup></b>						
Very high	2,804	30.5	2,179	77.7	625	22.3
High	2,340	25.5	1,836	78.5	504	21.5
Medium	2,948	32.1	2,313	78.5	635	21.5
Low	1,078	11.7	848	78.7	230	21.3
Unknown	14	0.2	10	71.4	4	28.6
<b>Race and Ethnicity</b>						
Asian or Pacific Islander	139	1.5	110	79.1	29	20.9
Black	3,674	40.0	2,826	76.9	848	23.1
Latino/a	3,934	42.8	3,083	78.4	851	21.6
Underrepresented <sup>5</sup>	43	0.5	33	76.7	10	23.3
White	1,388	15.1	1,131	81.5	257	18.5
Unknown	6	0.1	3	50.0	3	50.0

**Appendix 17: Characteristics of people reported with hepatitis C and HIV coinfection in NYC by end of 2022 (continued)<sup>1,2</sup>**

Characteristics	Total		Initiated hepatitis C treatment by end of 2022 <sup>3</sup>		Had not initiated hepatitis C treatment by end of 2022	
	Number	Percentage (column)	Number	Percentage (row)	Number	Percentage (row)
<b>Birth cohort</b>						
Before 1945	469	5.1	390	83.2	79	16.8
1945–1965	6,228	67.8	5,133	82.4	1,095	17.6
1966–1983	2,025	22.1	1,412	69.7	613	30.3
1984–2017	462	5.0	251	54.3	211	45.7
<b>Years since HIV diagnosis</b>						
< 5	324	3.5	167	51.5	157	48.5
5–9	597	6.5	375	62.8	222	37.2
10–19	2,190	23.9	1,629	74.4	561	25.6
≥ 20	6073	66.1	5,015	82.6	1,058	17.4
<b>HIV viral load &lt;200 copies per mL at most recent lab in 2022</b>						
Yes	6,567	71.5	5,590	85.1	977	14.9
No	1,039	11.3	663	63.8	376	36.2
Unknown (no HIV viral loads in 2022)	1,578	17.2	933	59.1	645	40.9

<sup>1</sup> Individuals were diagnosed with HIV and hepatitis C and living as of December 31, 2022, with at least one HIV or hepatitis C lab reported since January 1, 2014. Individuals with a residential address outside NYC were excluded, as the NYC Health Department only receives hepatitis C lab results for NYC residents. Individuals were considered to have a history of confirmed hepatitis C infection if they had at least one positive hepatitis C RNA test reported prior to the end of 2022.

<sup>2</sup> Demographic characteristics and HIV clinical characteristics were obtained from the NYC HIV surveillance registry. Hepatitis C outcomes were obtained from the NYC hepatitis C surveillance registry.

<sup>3</sup> Individuals were considered to have initiated hepatitis C treatment if they had at least one negative hepatitis C RNA result reported after a positive RNA result prior to the end of 2022.

<sup>4</sup> Based on ZIP code at most recent report.

<sup>5</sup> Underrepresented race/ethnicity includes Native American and multirace categories.

**Appendix 18:** Conditional proportions, time frame and definitions for the 2023 hepatitis C virus clearance cascade for people coinfectd with hepatitis C and HIV

Conditional Proportions for the 2023 Laboratory-Based Hepatitis C Virus Clearance Cascade for People Coinfectd with Hepatitis C and HIV by Subpopulation

Characteristics	Ever infected	Viral testing		Initial infection		Cured/cleared		Persistent infection/ reinfection	
	Number (1)	Number (2b)	Percentage (2b/1)	Number (3b)	Percentage (3b/2b)	Number (4b)	Percentage (4b/3b)	Number (5b)	Percentage (5b/4b)
Total	10,230	9,896	96.7	8,203	82.9	6,778	82.6	221	3.3
<b>Gender<sup>1</sup></b>									
Female	2,508	2,429	96.9	1,946	80.1	1,630	83.8	38	2.3
Male	7,713	7,458	96.7	6,248	83.8	5,146	82.4	183	3.6
Transgender	4	4	100.0	4	100.0	1	25.0	0	0.0
<b>Age</b>									
0–19	3	3	100.0	3	100.0	3	100.0	0	0.0
20–39	921	867	94.1	774	89.3	536	69.3	36	6.7
40–59	3,497	3,363	96.2	2,779	82.6	2,220	79.9	111	5.0
≥ 60	5,809	5,663	97.5	4,647	82.1	4,019	86.5	74	1.8
<b>Race and Ethnicity</b>									
Asian or Pacific Islander <sup>2</sup>	118	117	99.2	89	76.1	73	82.0	1	1.4
Black <sup>2</sup>	3,867	3,740	96.7	3,257	87.1	2,688	82.5	78	2.9
Latino/a	3,740	3,678	98.3	2,906	79.0	2,496	85.9	103	4.1
Native American <sup>2</sup>	17	17	100.0	16	94.1	15	93.8	0	0.0
White <sup>2</sup>	1,613	1,580	98.0	1,261	79.8	1,046	83.0	27	2.6
Underrepresented / Unknown	875	764	87.3	674	88.2	460	68.2	12	2.6

<sup>1</sup> Five patients had missing gender identity.

<sup>2</sup> Non-Latino/a.

**Appendix 19:** Characteristics of decedents where hepatitis C is listed as the underlying or nonunderlying (multiple) cause of death, NYC, 2022

Characteristics	Number	Percentage of each group	Age-adjusted rate per 100,000 people <sup>1</sup>
Overall	179	100	1.7
<b>Sex</b>			
Female	48	26.8	0.8
Male	131	73.2	2.9
<b>Race and Ethnicity</b>			
Asian or Pacific Islander	11	6.1	0.7
Black	58	32.4	2.5
Latino/a	63	35.2	2.5
White	42	23.5	1.3
Underrepresented/Unknown	5	2.8	N/A
<b>Age</b>			Age-specific rate per 100,000 population <sup>1</sup>
0–24	0	0.0	0.0
25–44	4	2.2	0.2
45–64	62	34.6	3.0
65–84	102	57.0	8.4
≥ 85	11	6.1	6.0

<sup>1</sup> Rates stratified by age group are presented as age-specific rate.

**Appendix 20:** Number of hepatitis A and B vaccines provided by NYC Health Department facilities, 2023

Vaccine	Total hepatitis vaccine doses <sup>1</sup>	Completed hepatitis vaccine series <sup>2</sup>
<b>Immunization clinics</b>		
Hepatitis A only, ages 4 to 18 years	2,237	640
Hepatitis A only, ages 19 years and older	257	62
Hepatitis B only, ages 4 to 18 years	2,375	637
Hepatitis B only, ages 19 years and older	2,035	275
<b>NYC Sexual Health Clinics</b>		
Hepatitis A only	570	62
Hepatitis B only	1,000	212

**Appendix 21:** Number of hepatitis A and B vaccines provided by NYC providers, 2023

Vaccine	Total hepatitis vaccine doses <sup>1</sup>	Completed hepatitis vaccine series <sup>2</sup>
Hepatitis A only, ages 0 to 18 years	217,790	96,143
Hepatitis A only, ages 19 years and older	18,012	2,000
Hepatitis B only, ages 0 to 18 years	351,146	99,892
Hepatitis B only, ages 19 years and older	131,902	24,108

<sup>1</sup> Total of hepatitis A and hepatitis B vaccine doses.

<sup>2</sup> Total number of individuals who completed either hepatitis A or hepatitis B vaccine series in 2023.

