



Overview of HIV Infection and Care in Hawaii

From the beginning of the epidemic through 2022, the cumulative number of Hawaii residents ever diagnosed with HIV was 5,041 and those ever with a stage 3 (AIDS) diagnosis was 3,602. Of those diagnosed with HIV, 2,425 residents have died. The total number of new HIV diagnoses in 2022 was 76.

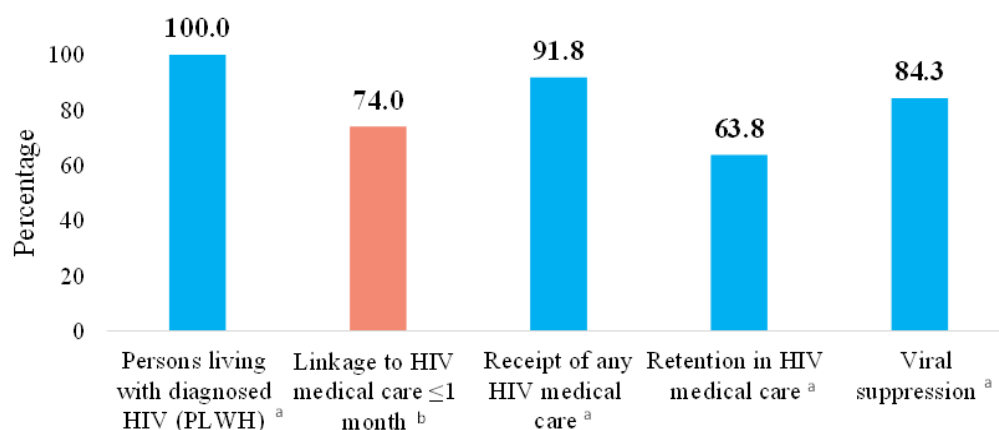
HIV care continuum among persons living with diagnosed HIV infection, 2021, Hawaii

Persons with suppressed HIV viral load live longer and healthier lives than those with unsuppressed viral load. In addition, persons with suppressed viral load cannot transmit HIV to others through sex. Hawaii's 2021 care continuum illustrates the percentage of persons living with HIV in Hawaii who: (1) were linked to HIV medical care within one month after initial HIV diagnosis; (2) received any HIV medical care; (3) were retained in HIV medical care; and (4) had a suppressed HIV viral load in 2021. The population for this continuum is the 2,235 persons living with HIV in Hawaii at year-end 2021, aged ≥ 13 years at year-end 2020, and with HIV infection diagnosed through 2020.

The HIV care continuum (Figure 1) consists of the following:

- ◆ **Linkage to HIV medical care within one month of initial diagnosis:** 74.0% (54/73). Defined as ≥ 1 CD4 and/or viral load test on or ≤ 1 month after the date of initial HIV diagnosis in 2021.
- ◆ **Receipt of HIV medical care:** 91.8% (2,051/2,235). Defined as ≥ 1 CD4 or viral load tests in 2021.
- ◆ **Retention in HIV medical care:** 63.8% (1,425/2,235). Defined as ≥ 2 CD4 or viral load tests performed at least 3 months apart in 2021.
- ◆ **Viral suppression:** 84.3% (1,883/2,235). Defined as the latest viral load test in 2021 with a result of < 200 copies/ml.

Figure 1. Hawaii 2021 HIV Care Continuum



^a The denominator (n=2,235) refers to persons with HIV infection diagnosed through 2020 and residing in Hawaii at year-end 2021.

^b The denominator (n=73) refers to new HIV diagnoses during 2021.

Notices:

Beginning with the 2018 report, data on diagnosed HIV infection reflect the date of initial HIV diagnosis, instead of the date reported to Department of Health (DOH). Similarly, data on stage 3 (AIDS) reflect the date when the criteria for stage 3 (AIDS) were met. Data included in the 2022 report are based on HIV infection diagnosed by December 31, 2022 and reported to DOH as of June 30, 2023. Data for 2022 are considered preliminary because of reporting delays. Due to reporting delays and time needed for death verification and case de-duplication, the Hawaii HIV care continuum reported here is for 2021, not 2022. Data for the years 2020-2022 should be interpreted with caution due to the impact of the COVID-19 pandemic on access to HIV testing, HIV care related services, and case surveillance activities in Hawaii.

**Table 1. Diagnosed HIV cases (all stages),
annually 2018-2022 and cumulative total, Hawaii**

	HIV Infection (HIV/AIDS)						
	Before 2018	2018	2019	2020	2021	2022	Cumulative
Cases by Year of Diagnosis ¹	4,698	72	65	56	73	76	5,040
Rate per 100,000 Population ²	N/A	5.1	4.6	3.9	5.0	5.3	N/A

Demographics/Risk	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
-------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

S E X	Male	4,220	(90)	66	(92)	58	(89)	48	(86)	58	(79)	65	(86)	4,515	(90)
	Female	478	(10)	6	(8)	7	(11)	8	(14)	15	(21)	11	(14)	525	(10)

A G E 3	<13	27	(<1)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	27	(<1)
	13-14	7	(<1)	0	(0)	0	(0)	1	(2)	0	(0)	0	(0)	8	(<1)
	15-24	421	(9)	10	(14)	10	(15)	2	(4)	12	(16)	10	(13)	465	(9)
	25-34	1,612	(34)	26	(36)	23	(35)	15	(27)	21	(29)	27	(36)	1,724	(34)
	35-44	1,537	(33)	21	(29)	14	(22)	12	(21)	17	(23)	19	(25)	1,620	(32)
	45-54	778	(17)	8	(11)	11	(17)	14	(25)	13	(18)	11	(14)	835	(17)
	55-64	235	(5)	6	(8)	6	(9)	9	(16)	8	(11)	5	(7)	269	(5)
	≥65	68	(1)	0	(0)	1	(2)	1	(2)	1	(1)	3	(4)	74	(1)

R A C E 4	Non-Hispanic														
	Caucasian	2,482	(53)	21	(29)	11	(17)	12	(21)	19	(26)	22	(29)	2,567	(51)
	Asian	713	(15)	21	(29)	18	(28)	15	(27)	19	(26)	17	(22)	803	(16)
	Hawaiian/PI	511	(11)	6	(8)	12	(18)	9	(16)	8	(11)	12	(16)	558	(11)
	African American	227	(5)	7	(10)	3	(5)	1	(2)	7	(10)	4	(5)	249	(5)
	Amer. Indian/Alaska Nat.	14	(<1)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	14	(<1)
	Multiple Races	356	(8)	10	(14)	8	(12)	8	(14)	4	(5)	5	(7)	391	(8)
	Hispanic	390	(8)	7	(10)	13	(20)	7	(13)	12	(16)	11	(14)	440	(9)

R I S K	Male to Male Sex (MSM)	3,351	(71)	50	(69)	47	(72)	27	(48)	28	(38)	31	(41)	3,534	(70)
	Injection Drug Use (IDU)	352	(7)	4	(6)	1	(2)	6	(11)	12	(16)	9	(12)	384	(8)
	MSM & IDU	343	(7)	5	(7)	1	(2)	1	(2)	1	(1)	5	(7)	356	(7)
	Heterosexual Contact	408	(9)	3	(4)	5	(8)	2	(4)	0	(0)	2	(3)	420	(8)
	Transfusion	23	(<1)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	23	(<1)
	Perinatal	17	(<1)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	17	(<1)
	Hemophiliac	21	(<1)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	21	(<1)
	Undetermined	183	(4)	10	(14)	11	(17)	20	(36)	32	(44)	29	(38)	285	(6)

Due to rounding, percentages for each column may not add to 100.

¹The number of diagnosed HIV/AIDS cases in previous years may change each year due to the ongoing national deduplication project. Data for 2022 are considered preliminary because they are based on a 6-month reporting delay and might be affected by COVID-19.

² Each year's estimated population is from the State of Hawaii's latest population estimate data: <http://census.hawaii.gov/home/population-estimate/>

³ Age in years at the time of HIV diagnosis. A total of 18 cases with unknown age at diagnosis.

⁴ A total 4 cases reported as legacy Asian/Pacific Islanders were assigned to the Asian category. A total of 18 cases with unknown race/ethnicity.

Fig. 2. **Diagnosed HIV cases (all stages) by county, 1983-2022, Hawaii**

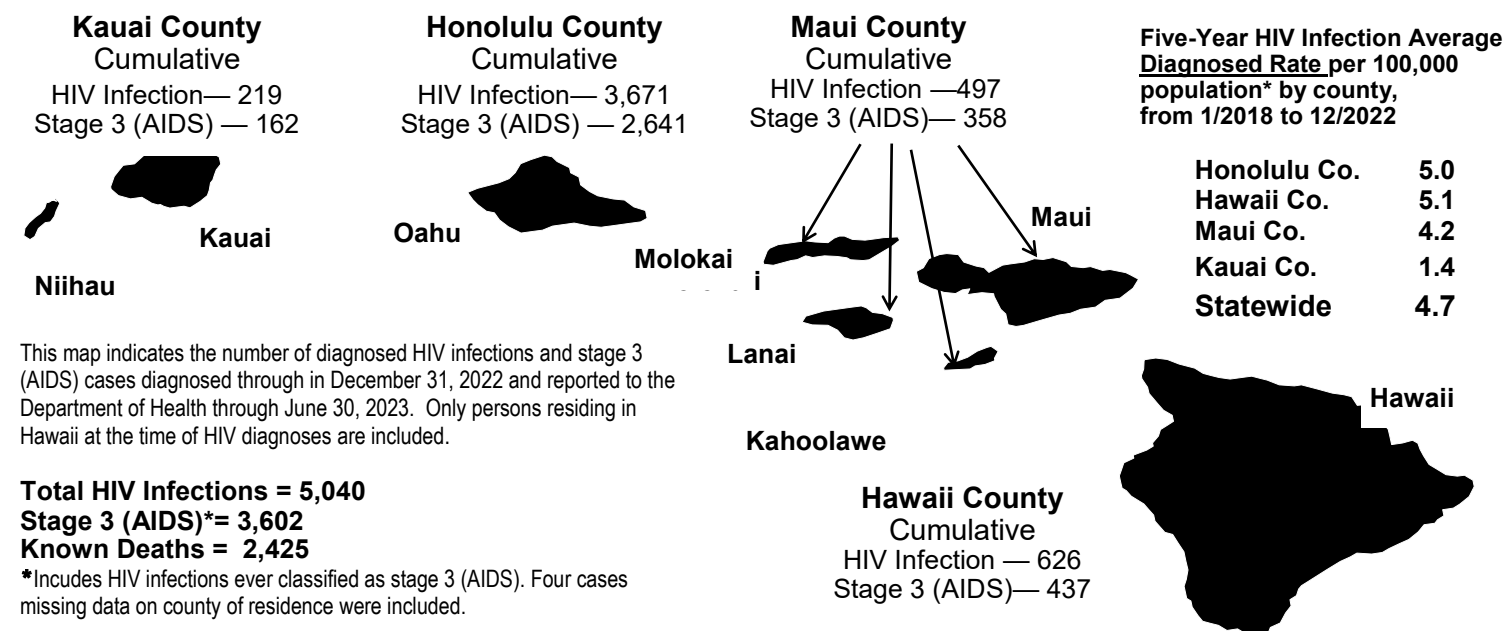


Table 2. **HIV cases (all stages) diagnosed in 2022, by county, Hawaii**

Diagnosed Cases	Honolulu Co.	Hawaii Co.	Maui Co.	Kauai Co.	Statewide* *
	No. (% row)	No. (% row)	No. (% row)	No. (% row)	No. (% row)
HIV Infection	49 (65)	12 (16)	14 (18)	1 (1)	76 (100)
Stage 3 (AIDS)	14 (78)	2 (11)	1 (6)	1 (6)	20 (100)

Table 3. **Cumulative HIV infection (all stages), diagnosed through 2022, by county, Hawaii**

Selected Variables		Honolulu Co.	Hawaii Co.	Maui Co.	Kauai Co.	Statewide ***
		No. (%)	No. (%)	No. (%)	No. (%)	No. (%)
SEX	Male	3,293 (90)	558 (89)	449 (90)	188 (86)	4,515 (90)
	Female	378 (10)	68 (11)	48 (10)	31 (14)	525 (10)
Transgender (% row) ²		52 (90)	5 (9)	DS ³ (DS)	DS (DS)	58 (100)
RISK	Male to Male Sex (MSM)	2,580 (70)	428 (68)	363 (73)	146 (67)	3,534 (70)
	Injection Drug Use (IDU)	279 (8)	61 (10)	23 (5)	20 (9)	384 (8)
	MSM & IDU	251 (7)	43 (7)	39 (8)	16 (7)	356 (7)
	Heterosexual Contact	302 (8)	60 (10)	35 (7)	22 (10)	420 (8)
	Transfusion	16 (<1)	DS (DS)	DS (DS)	DS (DS)	23 (<1)
	Perinatal	14 (<1)	DS (DS)	DS (DS)	DS (DS)	17 (<1)
	Hemophiliac	16 (<1)	DS (DS)	DS (DS)	DS (DS)	21 (<1)
	Undetermined	213 (6)	27 (4)	32 (6)	12 (5)	285 (5)
Total Cases (% row)		3,671 (73)	626 (12)	497 (10)	219 (4)	5,040 (100)
Estimated 2020 Population* (% row)		1,012,305 (70)	200,712 (14)	168,840 (12)	73,186 (5)	1,451,043 (100)

Due to rounding, percentages of each column may not add to 100. Data for 2022 are considered preliminary because they are based on a 6-month reporting delay and might be affected by COVID-19. *Population estimate was based on data available at <https://census.hawaii.gov/>, 2022_dbedt_subcounty tables. ** Two AIDS cases without county were included in 2022. ***A total of 27 cases missing data on county of residence at the time of HIV diagnosis were included in the state total.

¹ Sex refers to sex at birth.

² Transgender refers to a person whose gender identity or expression is different from their sex assigned at birth. The number of transgender cases is probably underreported.

³ DS: Data is suppressed if the total count at the county level is <5 with stratification.

Table 4. **Diagnosed AIDS cases (stage 3, ever classified as)¹, annually 2018-2022 and cumulative total, Hawaii**

		Before 2018	2018	2019	2020	2021	2022	Cumulative
Cases by Year of Diagnosis²		3,487	22	27	24	22	20	3,602
Rate per 100,000 Population		N/A	1.5	1.9	1.7	1.5	1.2	N/A
Demographics and Risk		No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)
S E X	Male	3,174 (91)	22 (100)	24 (89)	23 (96)	17 (77)	17 (85)	3,277 (91)
	Female	313 (9)	0 (0)	3 (11)	1 (4)	5 (23)	3 (15)	325 (9)
A G E³	<13	20 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	20 (1)
	13-24	116 (3)	0 (0)	1 (4)	0 (4)	1 (5)	2 (10)	120 (3)
	25-34	950 (27)	6 (27)	5 (19)	3 (13)	4 (18)	4 (20)	972 (27)
	35-44	1,384 (40)	9 (41)	4 (15)	2 (8)	5 (23)	6 (30)	1,410 (39)
	45-54	722 (21)	4 (18)	11 (41)	9 (38)	8 (36)	6 (30)	760 (21)
	55-64	236 (7)	3 (14)	6 (22)	10 (38)	4 (18)	2 (10)	261 (7)
	≥65	59 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	59 (2)
R A C E⁴	Caucasian	1,903 (55)	9 (41)	5 (19)	7 (29)	2 (9)	5 (25)	1,931 (54)
	Asian	523 (15)	11 (50)	11 (41)	9 (38)	9 (41)	7 (35)	570 (16)
	Hawaiian/ PI	416 (12)	0 (0)	2 (7)	2 (8)	5 (23)	2 (10)	427 (12)
	African American	159 (5)	0 (0)	2 (7)	1 (4)	0 (0)	1 (5)	163 (5)
	Amer. Indian/Alaska Nat.	7 (<1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	7 (<1)
	Multiple Races	209 (6)	0 (0)	5 (19)	3 (13)	4 (18)	2 (10)	223 (6)
	Hispanic	270 (8)	2 (9)	2 (7)	2 (8)	2 (9)	1 (5)	279 (8)
R I S K	Male to Male Sex (MSM)	2,501 (72)	15 (68)	17 (63)	10 (42)	7 (32)	5 (25)	2,555 (71)
	Injection Drug Use (IDU)	286 (8)	2 (9)	2 (7)	2 (8)	1 (5)	2 (10)	295 (8)
	MSM & IDU	281 (8)	3 (14)	1 (4)	2 (8)	1 (5)	2 (10)	290 (8)
	Heterosexual Contact	258 (7)	0 (0)	3 (11)	2 (8)	0 (0)	0 (0)	263 (7)
	Other/Unknown	161 (5)	2 (9)	4 (15)	8 (33)	13 (59)	11 (55)	199 (6)
C O U N T Y⁵	Honolulu	2,563 (74)	16 (73)	18 (69)	17 (71)	13 (62)	14 (70)	2,641 (73)
	Hawaii	417 (12)	2 (9)	5 (19)	6 (25)	5 (24)	2 (10)	437 (12)
	Maui	349 (10)	2 (9)	1 (4)	1 (4)	2 (10)	3 (15)	358 (10)
	Kauai	156 (4)	2 (9)	2 (8)	0 (0)	1 (5)	1 (5)	162 (5)

Due to rounding, percentages of each column may not add to 100.

¹ Persons with infection ever classified as stage 3 (AIDS) and based on residence at the time of stage 3 (AIDS) classification.

² Diagnosed cases in most recent years (2020 to 2022) are incomplete due to delays in reporting and the ongoing national deduplication project.

³ Age in years at the time of AIDS diagnosis.

⁴ A total two cases with unknown race/ethnicity.

⁵ County of residence at the time of AIDS diagnosis. There were a total of 4 cases missing data on county of residence at the time of AIDS diagnosis.

Table 5. **Linkage to HIV medical care and viral suppression after HIV diagnosis in 2021, by selected characteristics, Hawaii**

		Diagnosed HIV infection in 2021		Linkage to HIV medical care (≥1 CD4 or viral load test) within:				Achieving viral suppression within	
				1 month		3 months		6 months	
				No.	(%) col.	No.	(%) row	No.	(%) row
Total ¹		73	(100)	54	(74.0)	59	(80.8)	45	(61.6)
S E X	Male	58	(79.5)	44	(75.9)	48	(82.8)	37	(63.8)
	Female	15	(20.5)	10	(66.7)	11	(73.3)	8	(53.3)
A G E¹	13-24	12	(16.4)	5	(41.7)	5	(41.7)	3	(25.0)
	25-34	21	(28.8)	15	(71.4)	18	(85.7)	16	(76.2)
	35-44	17	(23.3)	13	(76.5)	14	(82.4)	11	(64.7)
	45-54	13	(17.8)	12	(92.3)	12	(92.3)	8	(61.5)
	55-64	9	(12.3)	8	(88.9)	9	(100.0)	6	(66.7)
	≥65	1	(1.4)	DS ²	(DS)	DS	(DS)	DS	(DS)
R A C E³	Caucasian	19	(27.5)	13	(68.2)	15	(79.0)	10	(52.6)
	Asian	19	(27.5)	16	(84.2)	17	(89.5)	15	(79.0)
	Hawaiian/PI	8	(11.6)	5	(62.5)	6	(75.0)	4	(50.0)
	African-American	7	(10.1)	3	(42.9)	3	(42.9)	2	(28.6)
	Hispanic, all races	12	(17.4)	11	(91.7)	12	(100.0)	10	(83.3)
	Multiple races	4	(5.8)	DS	(DS)	DS	(DS)	DS	(DS)
R I S K	Male to Male Sex (MSM)	28	(38.4)	20	(71.4)	22	(78.6)	17	(60.7)
	Injection drug use (IDU)	12	(16.4)	11	(91.7)	12	(100.0)	9	(75.0)
	MSM & IDU	1	(1.4)	DS	(DS)	DS	(DS)	DS	(DS)
	Other/Unknown	32	(43.8)	23	(71.9)	25	(78.1)	19	(59.4)
C O U N T Y³	Honolulu	49	(67.1)	33	(67.4)	36	(73.5)	28	(57.1)
	Hawaii	17	(23.3)	16	(94.1)	16	(94.1)	13	(76.5)
	Maui	7	(9.6)	5	(71.4)	7	(100.0)	4	(57.1)
	Kauai	0	(0)	NA ²	(NA)	NA	(NA)	NA	(NA)

¹ Age is based on the person's age in years at the time of HIV diagnosis. Only persons residing in Hawaii and aged ≥13 years at HIV diagnosis are included.

² DS: data is suppressed if the total number of HIV diagnosis for this group is less than 5; NA: not applicable.

³ Excluding four cases with unknown race/ethnicity. County of residence reflects residential address at the time of HIV diagnosis.

If you need more information, please visit the Hawaii HIV/AIDS Surveillance Program website:

<https://health.hawaii.gov/harmreduction/hiv-aids-surveillance/>

If the information you are looking for is not on the website or you have questions regarding forms, reporting requirements, or this report, please contact the Hawaii HIV/AIDS Surveillance Program by mail: 3627 Kilauea Avenue, Suite 306, Honolulu, HI 96816, by phone: (808) 733-4079, by fax: (808) 733-9015, or by e-mail: hiv_aids-surveillance@doh.hawaii.gov.

**Table 6. Receipt of HIV medical care and viral suppression in 2021,
by selected characteristics, Hawaii**

		Living with diagnosed HIV ¹		Received or Retained in HIV Medical Care				HIV Viral Load (VL) Test			
				≥ 1 CD4/VL Test		≥ 2 CD4/VL Tests (At least 3 months apart)		≥ 1 Test (All values)		Viral Suppression (At latest VL test) VL < 200 copies/mL	
		No.	(%) Column	No.	(%) Row	No.	(%) Row	No.	(%) Row	No.	(%) Row
Total		2,235	(100.0)	2,051	(91.8)	1,425	(63.8)	2,017	(90.3)	1,883	(84.3)
S E X	Male	2,002	(89.6)	1,835	(91.7)	1,273	(63.6)	1,805	(90.2)	1,693	(84.6)
	Female	233	(10.4)	216	(92.7)	152	(65.2)	212	(91.0)	190	(81.6)
A G E ²	13-24	30	(1.3)	28	(93.3)	14	(46.7)	28	(93.3)	27	(90.0)
	25-34	240	(10.7)	212	(88.3)	134	(55.8)	207	(86.3)	190	(79.2)
	35-44	339	(15.2)	298	(87.9)	195	(57.5)	293	(86.4)	261	(77.0)
	45-54	497	(22.2)	447	(89.9)	293	(59.0)	438	(88.1)	405	(81.5)
	55-64	738	(33.0)	694	(94.0)	512	(69.4)	684	(92.7)	643	(87.1)
	≥65	391	(17.5)	372	(95.1)	277	(70.8)	367	(93.9)	357	(91.3)
R A C E ²	Caucasian	989	(44.3)	926	(93.6)	637	(64.4)	911	(92.1)	868	(87.8)
	Asian	370	(16.6)	337	(91.1)	248	(67.0)	334	(90.3)	324	(87.6)
	Hawaiian/PI	207	(9.3)	187	(90.3)	140	(67.6)	184	(88.9)	160	(77.3)
	African American	113	(5.1)	95	(84.1)	59	(52.2)	91	(80.5)	81	(71.7)
	Hispanic	275	(12.3)	250	(90.9)	167	(60.7)	245	(89.1)	226	(82.2)
	Multiple Races	271	(12.1)	248	(91.5)	169	(62.4)	244	(90.0)	217	(80.1)
	Unknown	8	(0.4)	6	(75.0)	4	(50.0)	6	(75.0)	5	(62.5)
R I S K	Male to Male Sex (MSM)	1,639	(73.3)	1,511	(92.2)	1,055	(64.4)	1,490	(90.9)	1,414	(86.3)
	IDU	128	(5.7)	115	(89.8)	72	(56.3)	112	(87.5)	99	(77.3)
	MSM & IDU	145	(6.5)	138	(95.2)	88	(60.7)	136	(93.8)	115	(79.3)
	Heterosexual	224	(10.0)	202	(90.2)	148	(66.1)	197	(88.0)	179	(79.9)
	Unknown/Other	88	(3.9)	75	(85.2)	54	(61.4)	72	(81.8)	68	(77.3)
	Perinatal	11	(0.5)	10	(90.9)	8	(72.7)	10	(90.9)	8	(72.7)
C O U N T Y ²	Honolulu	1,413	(63.2)	1,296	(91.7)	960	(67.9)	1,275	(90.2)	1,184	(83.8)
	Hawai'i	437	(19.6)	406	(92.9)	256	(58.6)	399	(91.3)	376	(86.0)
	Maui	305	(13.7)	277	(90.8)	168	(55.1)	271	(88.9)	258	(84.6)
	Kaua'i	80	(3.6)	72	(90.0)	41	(51.3)	72	(90.0)	65	(81.3)

¹Only persons aged ≥13 years at year-end 2020 with HIV infection diagnosed through 2020 and residing in Hawaii at year-end 2021 were included. A total of 105 persons were excluded because their initial HIV diagnosis date, last known Hawaii address date, and last documented CD4/viral load test date were all before July 1, 2013. In other words, those persons were out of care over 10 years.

²Age refers to age in years at year-end 2020. A total of two American Indian /Alaska Native were excluded from the analysis. County refers to county of residence at year-end 2021.