

## Overview of HIV Infection and Care in Hawaii

At the end of 2021, the cumulative number of Hawaii residents diagnosed with HIV infection since the first cases in 1983 was 4,941. The cumulative number who ever had a stage 3 (AIDS) diagnosis was 3,581, and the number of deceased was 2,374. The total number of HIV diagnoses in 2021 was 64.

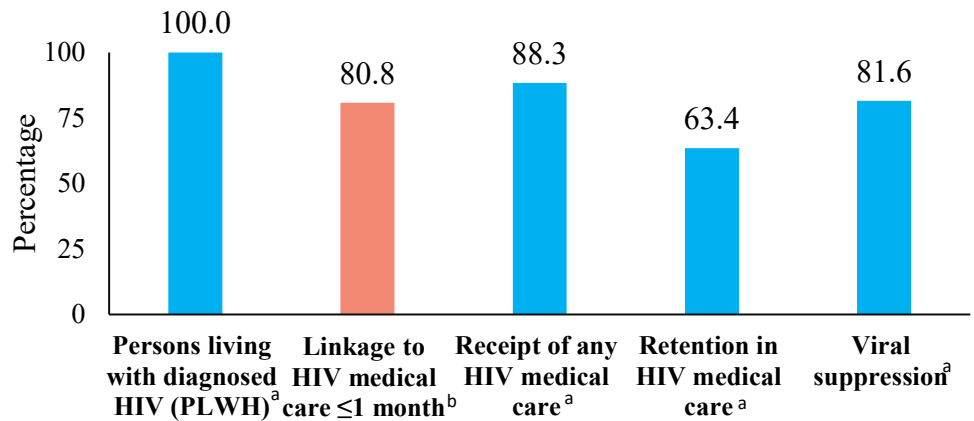
### HIV Care Continuum among persons living with diagnosed HIV Infection, 2020, Hawaii

Persons with suppressed HIV viral load live longer and healthier lives than those who are unsuppressed. In addition, persons with suppressed viral load cannot transmit HIV to others through sex. Hawaii’s 2020 care continuum illustrates the percentage of persons living with HIV in Hawaii who were linked to HIV medical care within one month ( $\leq 1$  month) after initial HIV diagnosis, those who received any HIV medical care, those who retained in HIV medical care, and those who had a suppressed HIV viral load in 2020. The population for this continuum is the estimated 2,207 persons living with HIV in Hawaii at year-end 2020, aged  $\geq 13$  years at year-end 2019 with HIV infection diagnosed through 2019.

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

- ◆ **Linkage to HIV medical care within one month of initial diagnosis:** 80.8% (42/52). Defined as  $\geq 1$  CD4 and/or viral load (VL) test on or after the date of initial HIV diagnosis in 2020.
- ◆ **Receipt of HIV medical care:** 88.3% (1,949/2,207). Defined as  $\geq 1$  CD4 or viral load tests in 2020.
- ◆ **Retention in HIV medical care:** 63.4% (1,399/2,207). Defined as  $\geq 2$  CD4 or viral load tests performed at least 3 months apart in 2020.
- ◆ **Viral suppression:** 81.6% (1,800/2,207). Defined as the latest VL test in 2020 with a result of  $VL < 200$  copies/ml.

Figure 1. Hawaii 2020 HIV Care Continuum



<sup>a</sup>. The denominator (n=2,207) refers to persons with HIV infection diagnosed through 2019 and residing in Hawaii at year-end 2020.

<sup>b</sup>. The denominator (n=52) refers to new HIV infection during 2020.

### Notes:

Beginning with the publication of 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 2021 report are based on HIV infection diagnosed by December 31, 2021 and reported to DOH as of June 30, 2022. Data for 2021 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 is for 2020, not 2021. Data for the year 2020 and 2021 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 2017-2021 and cumulative total, Hawaii**

	HIV Infection (HIV/AIDS)						
	1983-2016	2017	2018	2019	2020	2021	Cumulative
Cases by Year of Diagnosis <sup>1</sup>	4,607	81	72	66	51	64	4,941
Rate per 100,000 Population <sup>2</sup>	N/A	5.7	5.1	4.7	3.5	4.4	N/A

Demographics/Risk	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
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<b>SEX</b>	Male	4,135	(90)	74	(91)	66	(92)	59	(89)	45	(88)	52	(81)	4,431	(90)
	Female	472	(10)	7	(9)	6	(8)	7	(11)	6	(12)	12	(19)	510	(10)

<b>AGE<sup>3</sup></b>	<13	25	(<1)	2	(2)	0	(0)	0	(0)	0	(0)	0	(0)	27	(1)
	13-14	7	(<1)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	7	(<1)
	15-24	409	(9)	12	(15)	10	(14)	10	(15)	1	(2)	9	(14)	451	(9)
	25-34	1,574	(34)	33	(41)	26	(36)	23	(35)	15	(29)	19	(30)	1,690	(34)
	35-44	1,521	(33)	11	(14)	21	(29)	15	(23)	11	(22)	16	(25)	1,595	(32)
	45-54	766	(17)	13	(16)	8	(11)	11	(17)	13	(25)	10	(16)	821	(17)
	55-64	226	(5)	8	(10)	6	(8)	6	(9)	9	(18)	8	(13)	263	(5)
	≥65	66	(1)	2	(2)	0	(0)	1	(2)	1	(2)	1	(2)	71	(1)

<b>RACE<sup>4</sup></b>	Non-Hispanic														
	Caucasian	2,467	(54)	20	(25)	21	(29)	13	(20)	12	(24)	18	(28)	2,551	(52)
	Asian	701	(15)	20	(25)	21	(29)	18	(27)	16	(31)	18	(28)	794	(16)
	Hawaiian/PI	515	(11)	9	(11)	6	(8)	12	(18)	7	(14)	8	(13)	557	(11)
	African American	226	(5)	5	(6)	7	(10)	3	(5)	1	(2)	6	(9)	248	(5)
	Amer. Indian/Alaska Nat.	15	(<1)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	15	(<1)
	Multiple Races	315	(7)	14	(17)	10	(13)	7	(11)	8	(16)	4	(6)	358	(7)
	Hispanic	368	(8)	13	(16)	7	(10)	13	(20)	7	(14)	10	(16)	418	(8)

<b>RISK</b>	Male to Male Sex (MSM)	3,290	(71)	52	(64)	49	(68)	48	(73)	24	(47)	26	(41)	3,489	(71)
	Injection Drug Use (IDU)	346	(8)	5	(6)	4	(6)	1	(2)	6	(12)	9	(14)	371	(8)
	MSM & IDU	333	(7)	4	(5)	5	(7)	1	(2)	1	(2)	1	(2)	345	(7)
	Heterosexual Contact	394	(9)	10	(12)	3	(4)	5	(8)	1	(2)	0	(0)	413	(8)
	Transfusion	23	(<1)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	23	(<1)
	Perinatal	15	(<1)	2	(2)	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	185	(4)	8	(10)	11	(15)	11	(17)	19	(37)	28	(44)	262	(5)

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

<sup>1</sup>The number of diagnosed HIV/AIDS cases in previous years may change each year due to the ongoing national deduplication project. Data for 2021 are considered preliminary because they are based on a 6-month reporting delay and might be affected by COVID-19.

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

<sup>3</sup> Age in years at the time of HIV diagnosis. Total of 16 cases with unknown age at diagnosis.

<sup>4</sup> A total of 4 cases reported as legacy Asian/Pacific Islanders were assigned to the Asian category.

Fig. 2. **Diagnosed HIV cases (all stages) by county, 1983-2021, Hawaii**

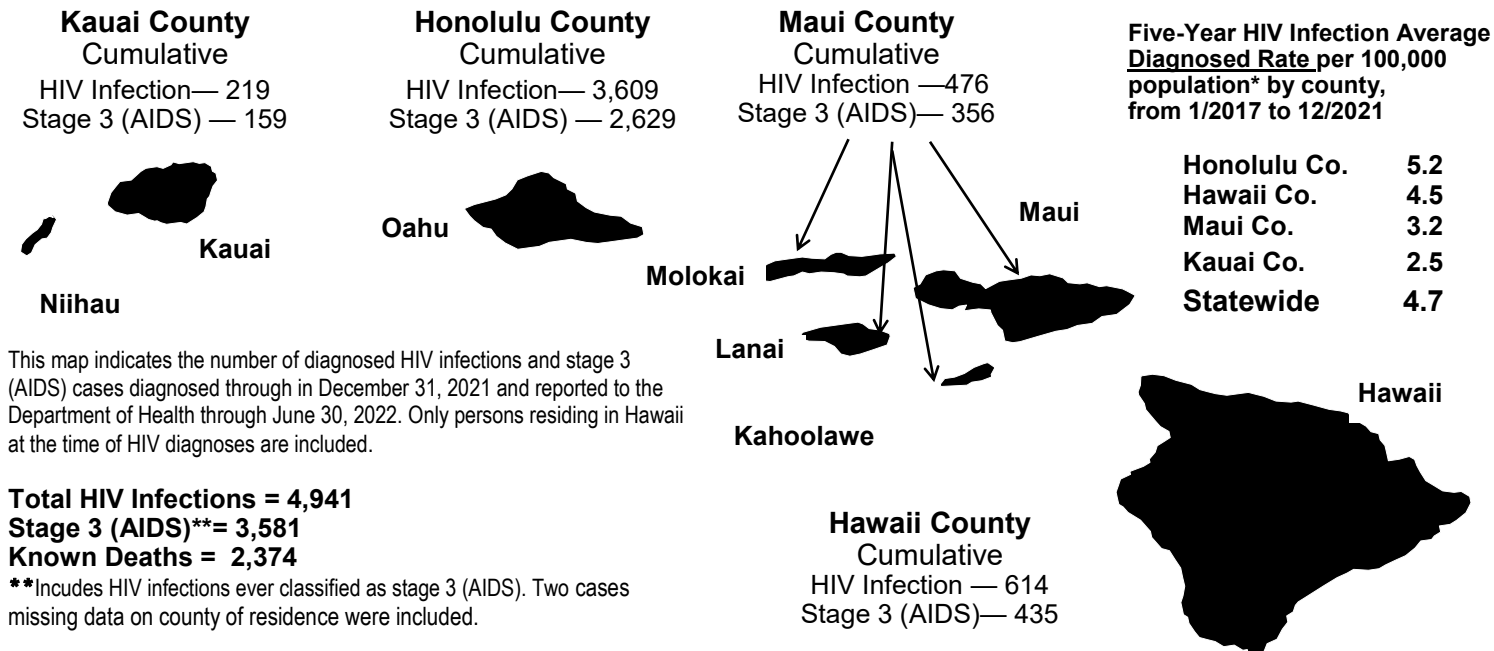


Table 2. **HIV cases (all stages) diagnosed in 2021, by county, Hawaii**

Diagnosed Cases	Honolulu Co.	Hawaii Co.	Maui Co.	Kauai Co.	Statewide
	No. (% row)	No. (% row)	No. (% row)	No. (% row)	No. (% row)
HIV Infection	43 (67)	16 (25)	5 (8)	0 (0)	64 (100)
Stage 3 (AIDS)	12 (63)	5 (26)	2 (11)	0 (0)	19 (100)

Table 3. **Cumulative HIV infection (all stages), diagnosed through 2021, by county, Hawaii**

Selected Variables		Honolulu Co.	Hawaii Co.	Maui Co.	Kauai Co.	Statewide
		No. (%)	No. (%)	No. (%)	No. (%)	No. (%)
SEX <sup>1</sup>	Male	3,245 (90)	545 (89)	430 (90)	188 (86)	4,431 (90)
	Female	364 (10)	69 (11)	46 (10)	31 (14)	510 (10)
Transgender (% row) <sup>2</sup>		49 (89)	5 (9)	DS <sup>3</sup> (DS)	DS (DS)	55 (100)
RISK	Male to Male Sex (MSM)	2,552 (71)	423 (69)	354 (74)	147 (67)	3,489 (71)
	Injection Drug Use (IDU)	270 (7)	58 (9)	22 (5)	20 (9)	371 (8)
	MSM & IDU	246 (7)	40 (7)	36 (8)	16 (7)	345 (7)
	Heterosexual Contact	300 (8)	56 (9)	34 (7)	22 (10)	410 (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	195 (5)	30 (5)	25 (5)	11 (5)	262 (5)
Total Cases (% row)		3,609 (73)	614 (12)	476 (10)	219 (4)	4,941 (100)
Estimated 2019 Population* (% row)		974,563 (69)	201,513 (14)	167,503 (12)	72,293 (5)	1,451,872 (100)

Due to rounding, percentages of each column may not add to 100. Data for 2021 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/what's-new-releases/2019-county-population-estimates/>; A total of 23 cases missing data on county of residence at the time of HIV diagnosis were included in state total.

<sup>1</sup> Sex refers to sex at birth.

<sup>2</sup> 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.

<sup>3</sup> 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)<sup>1</sup>, annually 2017-2021 and cumulative total, Hawaii**

		1983-2016	2017	2018	2019	2020	2021	Cumulative
<b>Cases by Year of Report <sup>2</sup></b>		3,458	32	22	26	24	19	3,581
<b>Rate per 100,000 Population</b>		N/A	2.2	1.5	1.8	1.7	1.3	N/A
<b>Demographics and Risk</b>		<b>No. (%)</b>	<b>No. (%)</b>	<b>No. (%)</b>	<b>No. (%)</b>	<b>No. (%)</b>	<b>No. (%)</b>	<b>No. (%)</b>
<b>S E X</b>	<b>Male</b>	3,152 (91)	25 (78)	22 (100)	23 (88)	23 (96)	15 (79)	3,260 (91)
	<b>Female</b>	306 (9)	7 (22)	0 (0)	3 (12)	1 (4)	4 (21)	321 (9)
<b>A G E<sup>3</sup></b>	<b>&lt;13</b>	18 (1)	2 (6)	0 (0)	0 (0)	0 (0)	0 (0)	20 (1)
	<b>13-24</b>	115 (3)	1 (3)	0 (0)	0 (0)	0 (0)	1 (5)	117 (3)
	<b>25-34</b>	944 (27)	7 (22)	6 (27)	5 (19)	3 (13)	3 (16)	968 (27)
	<b>35-44</b>	1,382 (40)	4 (13)	9 (41)	4 (15)	2 (8)	4 (21)	1,405 (39)
	<b>45-54</b>	713 (21)	9 (28)	4 (18)	11 (42)	9 (38)	7 (37)	753 (21)
	<b>55-64</b>	220 (6)	7 (22)	3 (14)	6 (23)	9 (38)	4 (21)	249 (7)
	<b>≥65</b>	57 (2)	2 (6)	0 (0)	0 (0)	0 (0)	0 (0)	59 (2)
<b>R A C E</b>	<b>Caucasian</b>	1,904 (55)	8 (25)	9 (41)	6 (23)	7 (29)	3 (16)	1,937 (54)
	<b>Asian</b>	522 (15)	7 (22)	11 (50)	11 (42)	9 (38)	10 (53)	570 (16)
	<b>Hawaiian/ PI</b>	418 (12)	7 (22)	0 (0)	2 (8)	2 (8)	4 (21)	433 (12)
	<b>African American</b>	162 (5)	1 (3)	0 (0)	2 (8)	1 (4)	0 (0)	166 (5)
	<b>Amer. Indian/Alaska Nat.</b>	7 (<1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	7 (<1)
	<b>Multiple Races</b>	184 (5)	7 (22)	0 (0)	3 (12)	3 (13)	1 (5)	198 (6)
	<b>Hispanic</b>	261 (8)	2 (6)	2 (9)	2 (8)	2 (8)	1 (5)	270 (8)
<b>R I S K</b>	<b>Male to Male Sex (MSM)</b>	2,483 (72)	20 (63)	15 (68)	16 (62)	9 (38)	6 (32)	2,549 (71)
	<b>Injection Drug Use (IDU)</b>	283 (8)	1 (3)	2 (9)	2 (8)	2 (8)	0 (0)	290 (8)
	<b>MSM &amp; IDU</b>	281 (8)	0 (0)	3 (14)	1 (4)	2 (8)	0 (0)	287 (8)
	<b>Heterosexual Contact</b>	250 (7)	6 (19)	0 (0)	3 (12)	1 (4)	0 (0)	260 (7)
	<b>Other/Unknown</b>	161 (5)	5 (16)	2 (9)	4 (15)	10 (42)	13 (68)	195 (5)
<b>C O U N T Y<sup>4</sup></b>	<b>Honolulu</b>	2,539 (73)	27 (84)	16 (73)	18 (69)	17 (71)	12 (63)	2,629 (73)
	<b>Hawaii</b>	416 (12)	1 (3)	2 (9)	5 (19)	6 (25)	5 (26)	435 (12)
	<b>Maui</b>	348 (10)	2 (6)	2 (9)	1 (4)	1 (4)	2 (11)	356 (10)
	<b>Kauai</b>	154 (4)	2 (6)	2 (9)	1 (4)	0 (0)	0 (0)	159 (4)

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

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

<sup>2</sup> Diagnosed cases in most recent years (2019 to 2021) are incomplete due to delays in reporting and the ongoing national deduplication project.

<sup>3</sup> Age in years at the time of AIDS diagnosis. There were a total of 10 cases missing data on age at the time of stage 3 (AIDS) diagnosis.

<sup>4</sup> County of residence at the time of AIDS diagnosis. Two cases missing county information were excluded in the total.

Table 5. Linkage to HIV medical care and viral suppression after HIV diagnosis in 2020, by selected characteristics, Hawaii <sup>1</sup>

		Diagnosed HIV infection in 2020		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
<b>Total</b>		52	(100)	42	(80.8)	47	(90.4)	38	(73.1)
<b>SEX</b>	Male	46	(88.5)	38	(82.6)	42	(91.3)	33	(71.7)
	Female	6	(11.5)	4	(66.7)	5	(83.3)	5	(83.3)
<b>AGE<sup>2</sup></b>	13-24	1	(1.9)	DS <sup>3</sup>	(DS)	DS	(DS)	DS	(DS)
	25-34	15	(28.9)	10	(66.7)	12	(80.0)	10	(66.7)
	35-44	11	(21.2)	6	(54.6)	9	(81.8)	7	(63.6)
	45-54	14	(26.9)	14	(100.0)	14	(100.0)	11	(78.6)
	55-64	10	(19.2)	10	(100.0)	10	(100.0)	8	(80.0)
	≥65	1	(1.9)	DS	(DS)	DS	(DS)	DS	(DS)
<b>RACE</b>	Caucasian	12	(23.1)	12	(100.0)	12	(100.0)	6	(50.0)
	Asian	16	(30.8)	13	(81.3)	14	(87.5)	14	(87.5)
	Hawaiian/PI	7	(13.5)	6	(85.7)	7	(100.0)	5	(71.4)
	African-American	1	(1.9)	DS	(DS)	DS	(DS)	DS	(DS)
	Hispanic, all races	7	(13.5)	5	(71.4)	5	(71.4)	4	(57.1)
	Multiple races	8	(15.4)	4	(50.0)	7	(87.5)	7	(87.5)
<b>RISK</b>	Male to Male Sex (MSM)	25	(48.1)	20	(80.0)	23	(92.0)	20	(80.0)
	Injection drug use (IDU)	6	(11.5)	5	(83.3)	6	(100.0)	5	(83.3)
	MSM & IDU	1	(1.9)	DS	(DS)	DS	(DS)	DS	(DS)
	Heterosexual	1	(1.9)	DS	(DS)	DS	(DS)	DS	(DS)
	Other/Unknown	19	(36.5)	16	(84.2)	17	(89.5)	12	(63.2)
<b>COUNTY<sup>4</sup></b>	Honolulu	38	(73.1)	31	(81.6)	35	(92.1)	28	(73.7)
	Hawaii	8	(15.4)	8	(100.0)	8	(100.0)	6	(75.0)
	Maui	4	(7.7)	DS	(DS)	DS	(DS)	DS	(DS)
	Kauai	2	(3.9)	DS	(DS)	DS	(DS)	DS	(DS)

<sup>1</sup> Data for the year 2020 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.

<sup>2</sup> 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.

<sup>3</sup> DS: data is suppressed if it is based on cells with a total count <5;

<sup>4</sup> Excluding one case with unknown race/ethnicity. County of residence reflects the 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](mailto:hiv_aids_surveillance@doh.hawaii.gov).

**Table 6. Receipt of HIV medical care and viral suppression in 2020,  
by selected characteristics, Hawaii <sup>1</sup>**

		Living with HIV <sup>1</sup> (Year-end 2020 and diagnosed through year-end 2019)		Received or Retained in HIV Medical Care				HIV Viral Load 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
<b>Total</b>		2,207	(100.0)	1,949	(88.3)	1,399	(63.4)	1,922	(87.1)	1,800	(81.6)
<b>S E X</b>	<b>Male</b>	1,977	(89.6)	1,751	(88.6)	1,251	(63.3)	1,728	(87.4)	1,622	(82.0)
	<b>Female</b>	230	(10.4)	198	(86.1)	148	(64.4)	194	(84.4)	178	(77.4)
<b>A G E<sup>2</sup></b>	<b>13-24</b>	37	(1.7)	24	(64.9)	20	(54.1)	24	(64.9)	23	(62.2)
	<b>25-34</b>	246	(11.2)	202	(82.1)	137	(55.7)	201	(81.7)	181	(73.6)
	<b>35-44</b>	328	(14.9)	275	(83.8)	189	(57.6)	271	(82.6)	246	(75.0)
	<b>45-54</b>	549	(24.9)	483	(88.0)	332	(60.5)	475	(86.5)	443	(80.7)
	<b>55-64</b>	682	(30.9)	624	(91.5)	455	(66.7)	613	(89.9)	582	(85.3)
	<b>≥65</b>	365	(16.5)	341	(93.4)	266	(72.9)	338	(92.6)	325	(89.0)
<b>R A C E</b>	<b>Caucasian</b>	1,000	(45.3)	903	(90.3)	640	(64.0)	890	(89.0)	856	(85.6)
	<b>Asian</b>	365	(16.5)	322	(88.2)	237	(64.9)	318	(87.1)	297	(81.4)
	<b>Hawaiian/PI</b>	217	(9.8)	189	(87.1)	140	(64.5)	187	(86.2)	174	(80.2)
	<b>African American</b>	111	(5.1)	88	(79.3)	58	(52.3)	84	(75.7)	74	(66.7)
	<b>Hispanic</b>	252	(11.4)	220	(87.3)	159	(63.1)	218	(86.5)	201	(79.8)
	<b>Multiple Races</b>	255	(11.6)	221	(86.7)	162	(63.5)	219	(85.9)	193	(75.7)
	<b>Other/Unknown</b>	7	(0.3)	6	(85.7)	3	(42.9)	6	(85.7)	5	(71.4)
<b>R I S K</b>	<b>Male to Male Sex (MSM)</b>	1,623	(73.5)	1,443	(88.9)	1,041	(64.1)	1,425	(87.8)	1,344	(82.8)
	<b>IDU</b>	130	(5.9)	111	(85.4)	74	(56.9)	109	(83.9)	101	(77.7)
	<b>MSM &amp; IDU</b>	150	(6.8)	134	(89.3)	93	(62.0)	131	(87.3)	114	(76.0)
	<b>Heterosexual</b>	224	(10.1)	195	(87.1)	147	(65.6)	191	(85.3)	179	(79.9)
	<b>Unknown/Other</b>	71	(3.2)	58	(81.7)	38	(53.5)	58	(81.7)	55	(77.5)
	<b>Perinatal</b>	9	(0.4)	8	(88.9)	6	(66.7)	8	(88.9)	7	(77.8)
<b>C O U N T Y<sup>3</sup></b>	<b>Honolulu</b>	1,416	(64.2)	1,248	(88.1)	929	(65.6)	1,232	(87.0)	1,142	(80.7)
	<b>Hawaii</b>	414	(18.8)	374	(90.3)	252	(60.9)	368	(88.9)	347	(83.8)
	<b>Maui</b>	297	(13.5)	255	(85.9)	167	(56.2)	250	(84.2)	243	(81.8)
	<b>Kauai</b>	80	(3.6)	72	(90.0)	51	(63.8)	72	(90.0)	68	(85.0)

<sup>1</sup> Data for the year 2020 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. Only persons aged ≥13 years at year-end 2019 with HIV infection diagnosed through 2019 and residing in Hawaii at year-end 2020 were included. A total of 106 persons whose HIV infections were diagnosed in 2010 or earlier and who had no documented CD4/viral load data since 2011 were excluded.

<sup>2</sup> Refers to age in years at year-end 2019.

<sup>3</sup> Refers to county of residence at year-end 2020.