



## Overview of HIV Infection and Care in Hawaii

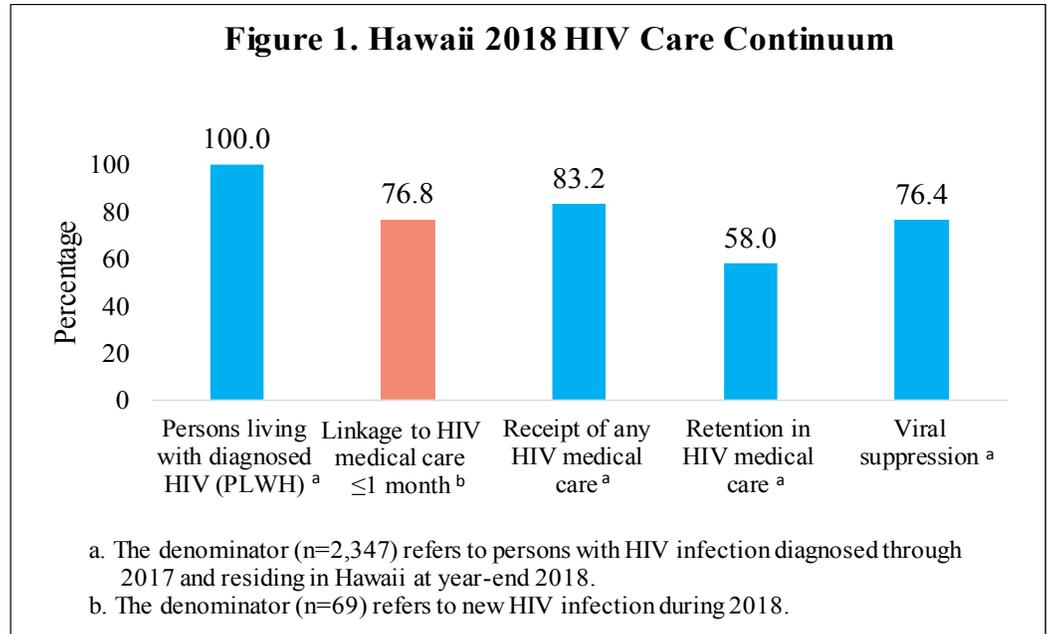
At the end of 2019, the cumulative number Hawaii residents diagnosed with HIV infection totaled 4,831, including 3,546 with stage 3 (AIDS). However, due to reporting delays and time needed for death verification and case de-duplication, the Hawaii HIV care continuum below is for 2018, not 2019. The population for this continuum is based on all persons living with HIV in Hawaii at year-end 2018, aged  $\geq 13$  years at year-end 2017 with HIV infection diagnosed through 2017. This estimated number is 2,347 persons.

### HIV Care Continuum among persons living with diagnosed HIV Infection, 2018, Hawaii

Hawaii's 2018 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 retained in HIV medical care and those who achieved a suppressed HIV viral load in 2018. Persons with suppressed HIV viral load live longer and healthier lives than those who are unsuppressed. Most importantly, persons with suppressed viral load cannot transmit HIV to others.

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

- ◆ **Linkage to HIV medical care within one month of initial diagnosis:** 76.8% (53/69). Defined as  $\geq 1$  CD4 and/or viral load (VL) test on or after the date of initial HIV diagnosis in 2018.
- ◆ **Receipt of HIV medical care:** 83.2% (1,953/2,347). Defined as  $\geq 1$  CD4 or viral load tests in 2018.
- ◆ **Retention in HIV medical care:** 58.0% (1,362/2,347). Defined as  $\geq 2$  CD4 or viral load tests performed at least 3 months apart in 2018.
- ◆ **Viral suppression:** 76.4% (1,794/2,347). Defined as the latest VL test in 2018 with a result of VL < 200 copies/ml.



### Notice for report change:

Beginning with the publication of 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 2019 report are based on HIV infection diagnosed by December 31, 2019 and reported to DOH as of June 30, 2020. Data for 2019 are considered preliminary because they are based on a 6-month reporting delay.

**Table 1. Diagnosed HIV cases (all stages),  
annually 2015-2019 and cumulative total, Hawaii**

	HIV Infection (HIV/AIDS)						
	1983-2014	2015	2016	2017	2018	2019	Cumulative
<b>Cases by Year of Diagnosis<sup>1</sup></b>	4,419	118	79	82	69	64	4,831
<b>Rate per 100,000 Population<sup>2</sup></b>	N/A	8.3	5.5	5.8	4.9	4.5	N/A

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

<b>SEX</b>	<b>Male</b>	3,956	(90)	109	(92)	71	(90)	75	(91)	63	(91)	58	(91)	4,332	(90)
	<b>Female</b>	463	(10)	9	(8)	8	(10)	7	(9)	6	(9)	6	(9)	499	(10)

<b>AGE<sup>3</sup></b>	<b>&lt;13</b>	25	(1)	0	(0)	0	(0)	2	(2)	0	(0)	0	(0)	27	(1)
	<b>13-14</b>	7	(<1)	1	(<1)	0	(0)	0	(0)	0	(0)	0	(0)	8	(<1)
	<b>15-24</b>	384	(9)	12	(10)	14	(18)	12	(15)	9	(13)	8	(13)	439	(9)
	<b>25-34</b>	1,490	(34)	46	(39)	35	(44)	33	(40)	26	(38)	24	(38)	1,654	(34)
	<b>35-44</b>	1,487	(34)	22	(19)	13	(16)	11	(13)	20	(29)	13	(20)	1,566	(32)
	<b>45-54</b>	740	(17)	26	(22)	6	(8)	13	(16)	8	(12)	11	(17)	804	(17)
	<b>55-64</b>	226	(5)	7	(6)	9	(11)	9	(11)	6	(9)	7	(11)	269	(5)
	<b>≥65</b>	60	(1)	4	(3)	2	(3)	2	(2)	0	(0)	1	(2)	69	(1)

<b>RACE<sup>4</sup></b>	<b>Non-Hispanic</b>														
	<b>Caucasian</b>	2,426	(55)	39	(33)	21	(27)	23	(28)	21	(30)	13	(20)	2,543	(53)
	<b>Asian</b>	683	(15)	21	(18)	18	(23)	21	(26)	20	(29)	15	(23)	778	(16)
	<b>Hawaiian/PI</b>	498	(11)	17	(14)	9	(11)	10	(12)	6	(9)	12	(19)	552	(11)
	<b>African American</b>	210	(5)	12	(10)	10	(13)	5	(6)	5	(7)	2	(3)	244	(5)
	<b>Amer. Indians/Alaska Native</b>	13	(<1)	1	(1)	1	(1)	0	(0)	0	(0)	1	(2)	16	(<1)
	<b>Multiple Races</b>	252	(6)	17	(14)	11	(14)	10	(12)	10	(14)	8	(13)	308	(6)
	<b>Hispanic</b>	337	(8)	11	(9)	9	(11)	13	(16)	7	(11)	13	(20)	390	(8)

<b>RISK</b>	<b>Male to Male Sex (MSM)</b>	3,148	(71)	80	(68)	60	(76)	52	(63)	48	(70)	48	(75)	3,436	(71)
	<b>Injection Drug Use (IDU)</b>	334	(8)	11	(9)	3	(4)	5	(6)	4	(6)	0	(0)	357	(7)
	<b>MSM &amp; IDU</b>	328	(7)	2	(2)	3	(4)	4	(5)	4	(6)	1	(2)	342	(7)
	<b>Heterosexual Contact</b>	357	(8)	24	(20)	12	(15)	10	(12)	2	(3)	5	(8)	410	(8)
	<b>Transfusion</b>	23	(1)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	23	(<1)
	<b>Perinatal</b>	15	(<1)	0	(0)	0	(0)	2	(2)	0	(0)	0	(0)	17	(<1)
	<b>Hemophiliac</b>	21	(<1)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	21	(<1)
	<b>Undetermined</b>	193	(4)	1	(1)	1	(1)	9	(11)	11	(16)	10	(16)	225	(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 on-going national de-duplication project.

<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.

<sup>4</sup> A total of 8 cases reported as legacy Asian/Pacific Islanders were assigned to the Asian category.

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

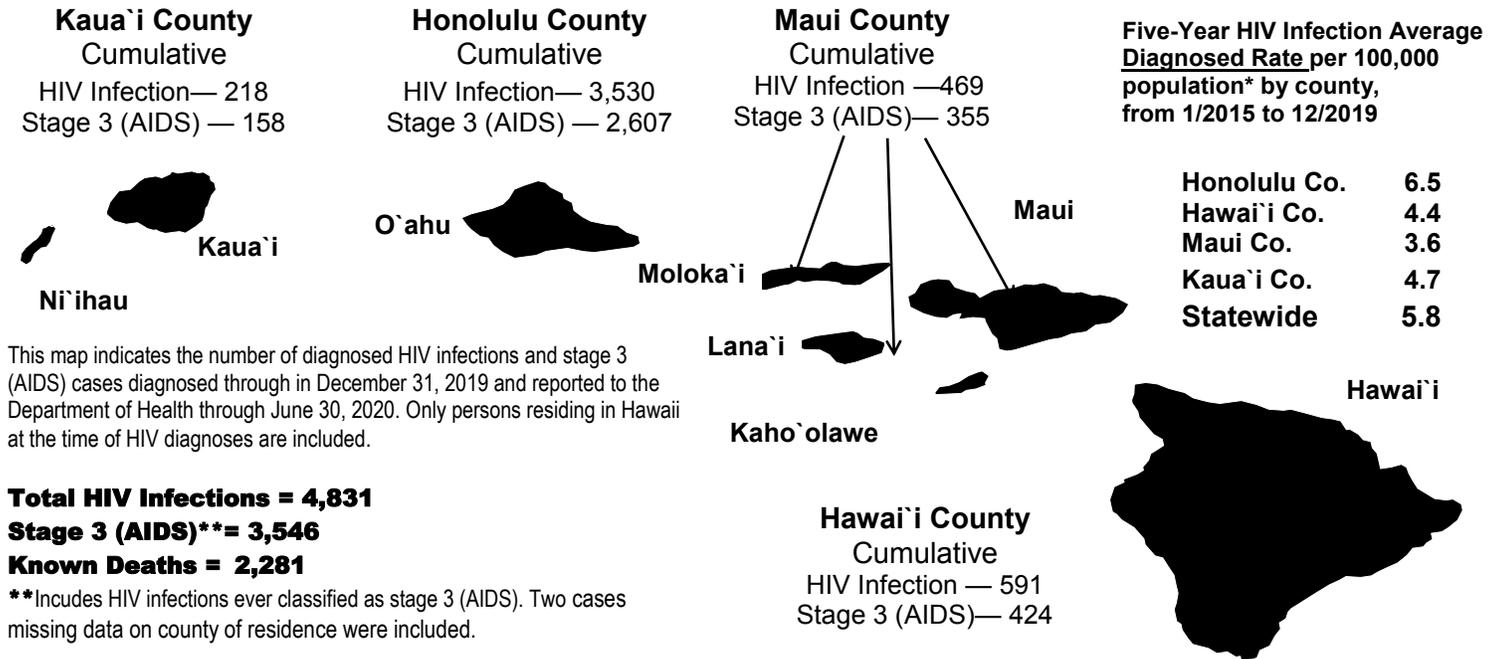


Table 2. **HIV cases (all stages) diagnosed in 2019, by county, Hawaii**

Diagnosed Cases	Honolulu Co.		Hawai'i Co.		Maui Co.		Kaua'i Co.		Statewide	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
HIV Infection	50	(78)	9	(14)	3	(5)	2	(3)	64	(100)
Stage 3 (AIDS) <sup>1</sup>	15	(65)	5	(22)	1	(4)	1	(4)	23	(100)

Table 3. **Cumulative HIV infection (all stages), diagnosed through 2019, by County, Hawaii**

Selected Variables		Honolulu Co.		Hawai'i Co.		Maui Co.		Kaua'i Co.		Statewide	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
SEX	Male	3,177	(90)	524	(89)	422	(90)	186	(85)	4,332	(90)
	Female	353	(10)	67	(11)	47	(10)	32	(15)	499	(10)
Transgender <sup>3</sup>		45	(100)	DS <sup>4</sup>	(DS)	DS	(DS)	DS	(DS)	48	(100)
RISK	Male to Male Sex (MSM)	2,522	(71)	408	(69)	348	(74)	145	(67)	3,436	(71)
	Injection Drug Use (IDU)	258	(7)	55	(9)	22	(5)	21	(10)	357	(7)
	MSM & IDU	241	(7)	41	(7)	38	(8)	15	(7)	342	(7)
	Heterosexual Contact	296	(8)	57	(10)	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	167	(5)	23	(4)	22	(5)	12	(6)	225	(5)
Total Cases (%)		3,530	(73)	591	(12)	469	(10)	218	(5)	4,831	(100)
Estimated 2018 Population*		980,080	(69)	200,983	(14)	167,207	(12)	72,133	(5)	1,420,491	(100)

Due to rounding, percentages of each column may not add to 100. \*Population estimate was based on data available at <http://census.hawaii.gov/home/population-estimate/>; 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> One case missing county information for 2019 was included in the state total.

<sup>2</sup> Sex refers to sex at birth.

<sup>3</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. The reported cases here are included in the sex category.

<sup>4</sup> DS: Data is suppressed if the total count at the county level is <5 with stratification.

Table 4. **Diagnosed AIDS cases (stage 3)<sup>1</sup>, 2015-2019 and cumulative total, Hawai'i**

		1983-2014	2015	2016	2017	2018	2019	Cumulative
<b>Cases by Year of Report<sup>1</sup></b>		3,101	38	28	32	22	23	3,546
<b>Rate per 100,000 Population</b>		N/A	2.7	2.0	2.2	1.5	1.6	N/A
<b>Demographics and Risk</b>		<b>No. (%)</b>						
<b>S E X</b>	<b>Male</b>	3,101 (91)	34 (89)	24 (89)	25 (78)	22 (100)	21 (91)	3,227 (91)
	<b>Female</b>	302 (9)	4 (11)	4 (11)	7 (22)	0 (0)	2 (9)	319 (9)
<b>A G E<sup>3</sup></b>	<b>&lt;13</b>	18 (1)	0 (0)	0 (0)	2 (6)	0 (0)	0 (0)	20 (1)
	<b>13-24</b>	111 (3)	2 (5)	3 (11)	1 (3)	0 (0)	0 (0)	117 (3)
	<b>25-34</b>	940 (28)	4 (11)	3 (11)	7 (22)	7 (32)	5 (22)	966 (27)
	<b>35-44</b>	1,364 (40)	10 (26)	11 (39)	4 (13)	8 (36)	3 (13)	1,400 (39)
	<b>45-54</b>	697 (20)	13 (34)	7 (25)	9 (28)	4 (18)	10 (43)	740 (21)
	<b>55-64</b>	219 (6)	7 (18)	3 (11)	7 (22)	3 (14)	5 (22)	244 (7)
	<b>≥65</b>	54 (2)	2 (5)	1 (4)	2 (6)	0 (0)	0 (0)	59 (2)
<b>R A C E</b>	<b>Caucasian</b>	1,893 (56)	13 (34)	9 (32)	8 (25)	9 (41)	6 (26)	1,938 (55)
	<b>Asian</b>	521 (15)	7 (18)	5 (18)	8 (25)	10 (45)	10 (43)	561 (16)
	<b>Hawaiian/ PI</b>	413 (12)	8 (21)	2 (7)	8 (25)	0 (0)	2 (9)	433 (12)
	<b>African American</b>	164 (5)	3 (8)	2 (7)	1 (3)	0 (0)	1 (4)	171 (5)
	<b>Amer. Indian/Alaskan Native</b>	7 (<1)	0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	8 (<1)
	<b>Multiple Races</b>	159 (5)	3 (8)	5 (18)	5 (16)	1 (5)	1 (4)	174 (5)
	<b>Hispanic</b>	246 (7)	4 (11)	5 (18)	2 (6)	2 (9)	2 (9)	261 (7)
<b>R I S K</b>	<b>Male to Male Sex (MSM)</b>	2,446 (72)	20 (53)	18 (64)	20 (63)	16 (73)	15 (65)	2,535 (71)
	<b>Injection Drug Use (IDU)</b>	273 (8)	5 (13)	4 (14)	1 (3)	2 (9)	1 (4)	286 (8)
	<b>MSM &amp; IDU</b>	278 (8)	1 (3)	0 (0)	0 (0)	2 (9)	1 (4)	282 (8)
	<b>Heterosexual Contact</b>	237 (7)	10 (26)	5 (18)	6 (19)	0 (0)	3 (13)	261 (7)
	<b>Other/Unknown</b>	169 (5)	2 (5)	1 (4)	5 (16)	2 (9)	3 (13)	182 (5)
<b>C O U N T Y<sup>4</sup></b>	<b>Honolulu</b>	2,500 (73)	31 (82)	18 (64)	27 (84)	16 (13)	15 (65)	2,607 (74)
	<b>Hawai'i</b>	407 (12)	6 (16)	3 (11)	1 (11)	2 (9)	5 (22)	424 (12)
	<b>Maui</b>	348 (10)	0 (0)	2 (7)	2 (7)	2 (9)	1 (4)	355 (10)
	<b>Kaua'i</b>	147 (4)	1 (3)	5 (18)	2 (18)	2 (9)	1 (4)	158 (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 time of stage 3 (AIDS) classification

<sup>2</sup> Diagnosed cases in most recent years (2017 to 2019) are incomplete due to delays in reporting and the ongoing national de-duplication project.

<sup>3</sup> Age at the time of HIV diagnosis.

<sup>4</sup> County of residence at the time of HIV diagnosis. A total of 2 cases missed county information were excluded in the cumulative total.

Table 5. Linkage to HIV medical care after HIV diagnosis in 2018, by selected characteristics, Hawaii

		Diagnosed HIV infection in 2018		Linkage to HIV medical care (≥1 CD4 or viral load test) within:					
				1 month		3 months		12 months	
				No.	(%) col.	No.	(%) row	No.	(%) row
<b>Total</b>		69	(100)	53	(76.8)	62	(89.9)	68	(98.6)
<b>SEX</b>	Male	63	(91.3)	47	(74.6)	56	(88.9)	62	(98.4)
	Female	6	(8.7)	6	(100.0)	6	(100.0)	6	(100.0)
<b>AGE<sup>1</sup></b>	13-24	9	(13.0)	7	(77.8)	9	(100.0)	9	(100.0)
	25-34	26	(37.7)	16	(61.5)	21	(80.8)	25	(96.2)
	35-44	20	(29.0)	19	(95.0)	19	(95.0)	20	(100.0)
	45-54	8	(11.6)	6	(75.0)	8	(100.0)	8	(100.0)
	55-64	6	(8.7)	5	(83.3)	5	(83.3)	6	(100.0)
	≥65	0	(0)	N/A <sup>2</sup>	(N/A)	N/A	(N/A)	N/A	(N/A)
<b>RACE</b>	Caucasian	21	(30.4)	16	(76.2)	19	(90.5)	21	(100.0)
	Asian	20	(29.0)	18	(90.0)	19	(95.0)	19	(95.0)
	Hawaiian/PI	6	(8.7)	5	(83.3)	6	(100.0)	6	(100.0)
	African-American	5	(7.3)	4	(80.0)	5	(100.0)	5	(100.0)
	Hispanic, all races	7	(10.1)	5	(71.4)	6	(85.7)	7	(100.0)
	Multiple races	10	(14.5)	5	(50.0)	7	(70.0)	10	(100.0)
<b>RISK</b>	Male to Male Sex (MSM)	48	(69.6)	37	(77.1)	46	(95.8)	47	(97.9)
	Injection drug use (IDU)	4	(5.8)	DS <sup>2</sup>	(DS)	DS	(DS)	DS	(DS)
	MSM & IDU	4	(5.8)	DS	(DS)	DS	(DS)	DS	(DS)
	Heterosexual	2	(2.9)	DS	(DS)	DS	(DS)	DS	(DS)
	Other/Unknown	11	(15.9)	8	(72.7)	8	(72.7)	11	(100.0)
<b>COUNTY<sup>3</sup></b>	Honolulu	57	(82.6)	46	(80.7)	51	(89.5)	56	(98.3)
	Hawaii	6	(8.7)	2	(33.3)	5	(83.3)	6	(100.0)
	Maui	5	(7.3)	4	(80.0)	5	(100.0)	5	(100.0)
	Kauai	1	(1.4)	DS	(DS)	DS	(DS)	DS	(DS)

<sup>1</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>2</sup>N/A: Not applicable; DS: data is suppressed if it is based on cells with a total count <5;

<sup>3</sup>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.

Table 6. Receipt of HIV medical care and viral suppression in 2018, by selected characteristics, Hawaii <sup>1</sup>

		Living with HIV <sup>1</sup> (Year-end 2018 and diagnosed through year-end 2017)		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>		2,347	(100.0)	1,953	(83.2)	1,362	(58.0)	1,923	(81.9)	1,794	(76.4)
<b>SEX</b>	<b>Male</b>	2,094	(89.2)	1,753	(83.7)	1,216	(58.1)	1,723	(82.3)	1,608	(76.8)
	<b>Female</b>	253	(10.8)	200	(79.1)	146	(57.7)	200	(79.1)	186	(73.5)
<b>AGE<sup>2</sup></b>	<b>13-24</b>	48	(2.1)	31	(64.6)	23	(47.9)	30	(62.5)	30	(62.5)
	<b>25-34</b>	293	(12.5)	212	(72.4)	131	(44.7)	205	(70.0)	177	(60.4)
	<b>35-44</b>	351	(15.0)	275	(78.3)	180	(51.3)	267	(76.1)	236	(67.2)
	<b>45-54</b>	652	(27.8)	566	(86.8)	392	(60.1)	560	(85.9)	526	(80.7)
	<b>55-64</b>	701	(29.9)	612	(87.3)	437	(62.3)	608	(86.7)	578	(82.5)
	<b>≥65</b>	302	(12.9)	257	(85.1)	199	(65.9)	253	(83.8)	247	(81.8)
<b>RACE</b>	<b>Caucasian</b>	1,112	(47.4)	929	(83.5)	651	(58.5)	914	(82.2)	869	(78.2)
	<b>Asian</b>	371	(15.8)	329	(88.7)	245	(66.0)	327	(88.1)	308	(83.0)
	<b>Hawaiian/PI</b>	212	(9.0)	189	(89.2)	138	(65.1)	187	(88.2)	167	(78.8)
	<b>African American</b>	147	(6.3)	91	(61.9)	56	(38.1)	87	(59.2)	77	(52.4)
	<b>Hispanic</b>	258	(11.0)	212	(82.2)	131	(50.8)	207	(80.2)	195	(75.6)
	<b>Multiple Races</b>	236	(10.1)	195	(82.6)	134	(56.8)	193	(81.8)	170	(72.0)
	<b>Other/Unknown</b>	11	(0.5)	8	(72.7)	7	(63.6)	8	(72.7)	8	(72.7)
<b>RISK</b>	<b>Male to Male Sex (MSM)</b>	1,722	(73.4)	1,455	(84.5)	1,013	(58.8)	1,431	(83.1)	1,343	(78.0)
	<b>IDU</b>	141	(6.0)	112	(79.4)	76	(53.9)	109	(77.3)	98	(69.5)
	<b>MSM &amp; IDU</b>	158	(6.7)	130	(82.3)	83	(52.5)	130	(82.3)	117	(74.1)
	<b>Heterosexual</b>	246	(10.5)	205	(83.3)	153	(62.2)	203	(82.5)	190	(77.2)
	<b>Unknown/Other</b>	70	(3.0)	43	(61.4)	30	(42.9)	42	(60.0)	39	(55.7)
	<b>Perinatal</b>	10	(0.4)	8	(80.0)	7	(70.0)	8	(80.0)	7	(70.0)
<b>COUNTY<sup>3</sup></b>	<b>Honolulu</b>	1,571	(66.9)	1,302	(82.9)	935	(59.5)	1,285	(81.8)	1,188	(75.6)
	<b>Hawai'i</b>	402	(17.1)	333	(82.8)	209	(52.0)	325	(80.8)	308	(76.6)
	<b>Mau'i</b>	289	(12.3)	248	(85.8)	164	(56.7)	243	(84.1)	231	(79.9)
	<b>Kaua'i</b>	85	(3.6)	70	(82.4)	54	(56.7)	70	(82.4)	67	(78.8)

<sup>1</sup>Only persons aged ≥13 years at year-end 2017 with HIV infection diagnosed through 2017 and residing in Hawaii at year-end 2018 were included. A total of 183 persons whose HIV infections were diagnosed in 2008 or earlier and who had no documented CD4/viral load data since 2008 were excluded.

<sup>2</sup>Refers to age in years at year-end 2017.

<sup>3</sup>Refers to county of residence at year-end 2018.