



ka puke 'Ikepili o nā 'ōiwi hawai'i
2011 NATIVE HAWAIIAN DATA BOOK

mauli ola
HEALTH

- Births
- Fetal Deaths
- Infant Deaths
- Abortions
- Pregnancy
- Chronic Diseases
- Injury
- Health Care
- Chronic Disease



Mai kāpae i ke a'o a ka mākua, aia he ola malaila.

Do not set aside the teachings of one's parents for there is life there.

7

MAULI OLA HEALTH

Mauli Ola (Health): To improve the quality and longevity of life, Native Hawaiians will enjoy healthy lifestyles and experience reduced onset of chronic diseases.

Native Hawaiians are perhaps the racial group with the highest health risk in the State of Hawai'i. This risk stems from 1) high stress in both economic and cultural, 2) their lifestyle and risk behaviors, and 3) their late or lack of access to health care. Accordingly, it is not surprising to find among Native Hawaiians a high incidence of diseases and ailments, early disability, and premature death.

An overall strategy to improve the well being of Native Hawaiians should focus on two key elements: a) a systematic identification of health risk factors early in their lives and b) timely, appropriate and readily accessible health care. Health statistics play a vital role in this strategy by 1) identifying high-risk segments of the Hawaiian population, 2) ascertaining causal relationships between risk factors and diseases, 3) identifying barriers precluding access to health care, and 4) assessing the adequacy of available health care services.

Consistent with this approach, Chapter 7 of the Native Hawaiian Data Book provides a profile of the health status of Native Hawaiians including statistics on major diseases, causes and factors determining incidence, current preventive and corrective strategies to curb mortality, and factors determining accessibility to current health care services.

BIRTHS

Table 7.01 | Live Births by Ethnicity of Mother and Selected Characteristics in Hawai‘i: 2009.

Race/ Ethnicity of Mother	Selected Characteristic										
	Live Births		Births to Mothers Under 18 yrs		Education None/ Grade 1–11 Years		Births to Unmarried Mothers		Prenatal Care		
	No.	%	No.	%	No.	%	No.	%	No.	%	
Caucasian	4,403	23.4%	26	0.6%	191	4.3%	832	18.9%	3,779	85.8%	
Native Hawaiian	5,369	28.5%	251	4.7%	653	12.2%	3,209	59.8%	4,040	75.2%	
Chinese	654	3.5%	(N)	(N)	24	3.7%	102	15.6%	562	85.9%	
Filipino	3,344	17.7%	73	2.2%	223	6.7%	1,316	39.4%	2,764	82.7%	
Japanese	1,881	10.0%	23	1.2%	49	2.6%	411	21.9%	1,576	83.8%	
All Others	3,192	16.9%	59	1.8%	452	14.2%	1,291	40.4%	2,132	66.8%	
Total	18,843	100.0%	432	2.3%	1,592	8.4%	7,161	38.0%	14,853	78.8%	
									2,974	15.8%	
										1,590	8.4%

(N) Not reported.

Source: Hawai‘i State, Department of Health, Office of Health Status Monitoring. (*Honolulu*)

Figure 7.01a Selected Characteristics of Native Hawaiian Births in Hawai‘i: 2009

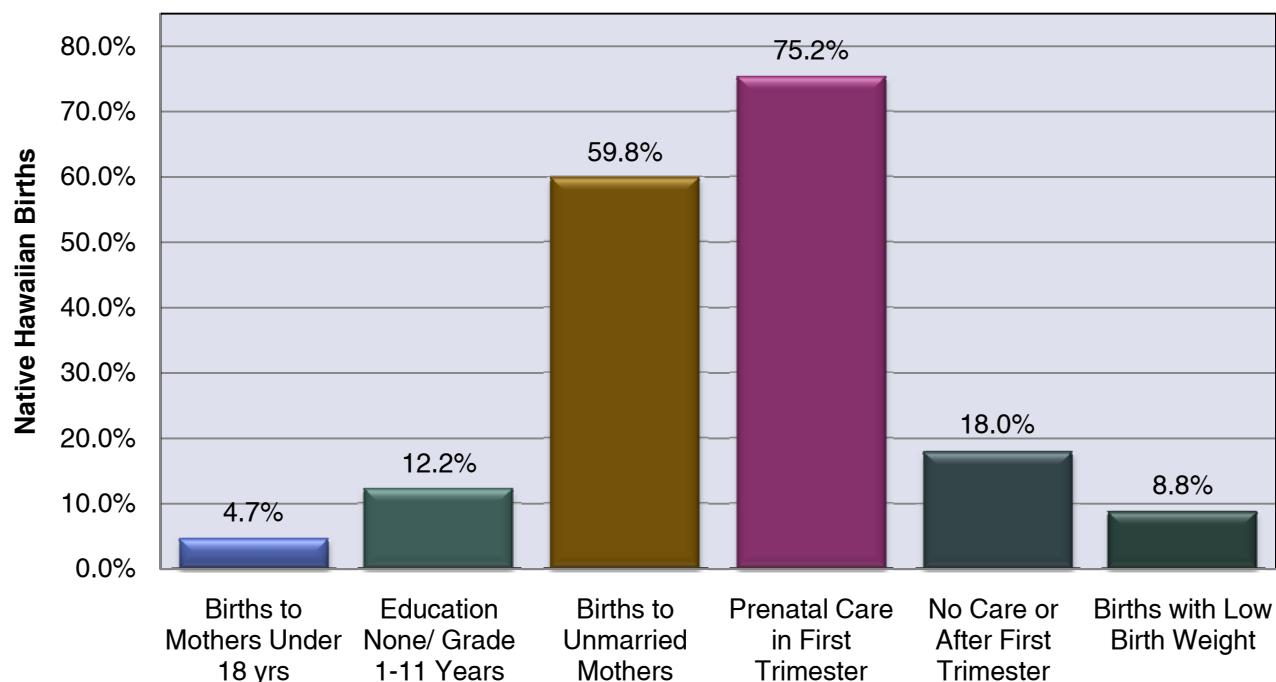
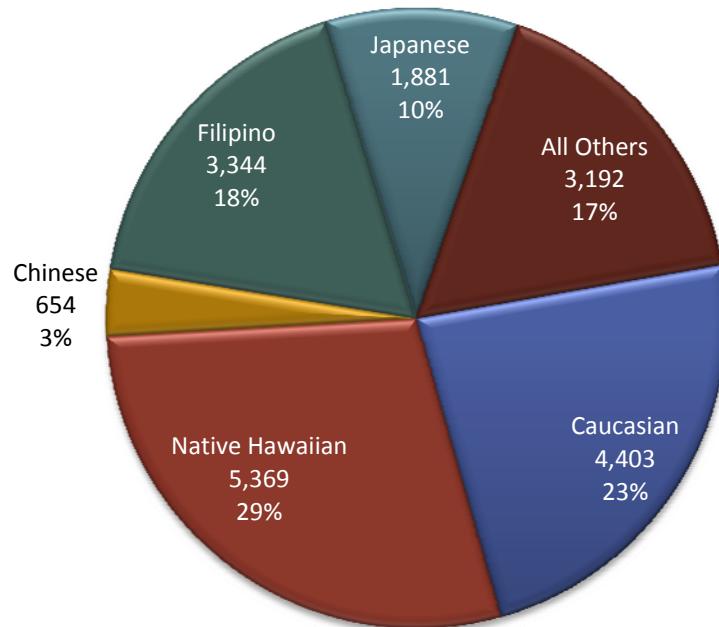


Figure 7.01b Live Births by Ethnicity of Resident Mothers in Hawai‘i: 2009



BIRTHS

Table 7.02a | Live Births by Age of Resident Native Hawaiian Mothers in Hawai'i: 2000-2009.

Year	Age of Native Hawaiian Mother						40 yrs+/ Unknown	Total
	Under 18 yrs	18-19 yrs	20-24 yrs	25-29 yrs	30-34 yrs	35-39 yrs		
2009	251	609	1,572	1,465	904	453	115	5,369
2008	258	627	1,561	1,445	937	435	107	5,370
2007	296	538	1,617	1,441	856	436	99	5,283
2006	293	535	1,602	1,386	816	423	121	5,176
2005	299	484	1,642	1,352	780	420	93	5,070
2004	249	489	1,681	1,277	868	383	82	5,029
2003	242	518	1,625	1,185	819	398	88	4,875
2002	237	538	1,566	1,171	791	358	83	4,744
2001	257	576	1,494	1,080	794	338	77	4,616
2000	307	597	1,493	1,154	736	345	75	4,707

Table 7.02b | Live Births by Ethnicity of Mother and Age of Resident Mothers in Hawai'i: 2009.

Race/ Ethnicity of Mother	Age of Resident Mother						40 yrs+/ Unknown	Total
	Under 18 yrs	18-19 yrs	20-24 yrs	25-29 yrs	30-34 yrs	35-39 yrs		
Caucasian	26	115	997	1,355	1,174	585	151	4,403
Native Hawaiian	251	609	1,572	1,465	904	453	115	5,369
Filipino	73	182	682	920	836	520	131	3,344
Japanese	23	46	164	396	605	513	134	1,881
All Others	59	172	960	1,131	879	526	119	3,846
Total	432	1,124	4,375	5,267	4,398	2,597	650	18,843

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring. (*Honolulu*)

Figure 7.02a Live Births by Age of Resident Native Hawaiian Mothers in Hawai'i: 2000-2009.

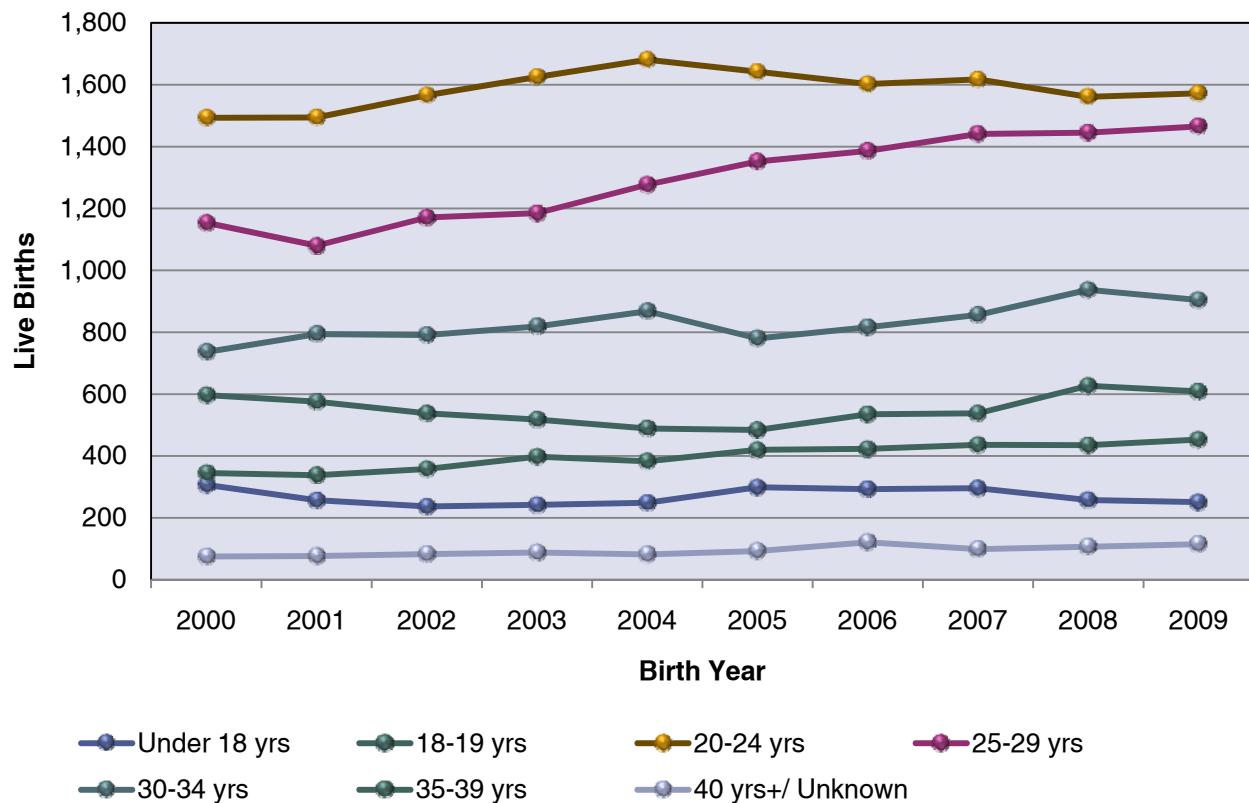
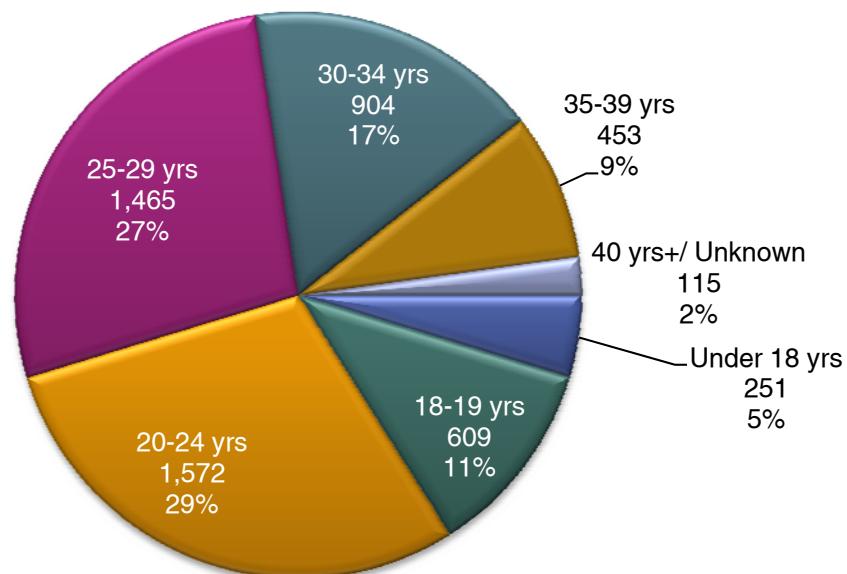


Figure 7.02b Live Births by Age of Resident Native Hawaiian Mothers in Hawai'i: 2009



BIRTHS

Table 7.03a | Live Births by Education of Resident Native Hawaiian Mothers in Hawai'i: 2000-2009.

Year	Education of Native Hawaiian Mothers					Total
	None/ Grade 1-11	Grade 12	1-4 Years College	>4 Years College	Unknown	
2009	653	2,816	1,503	305	92	5,369
2008	665	2,824	1,487	325	69	5,370
2007	708	2,727	1,514	247	87	5,283
2006	727	2,652	1,500	237	60	5,176
2005	701	2,641	1,403	268	57	5,070
2004	729	2,592	1,387	270	51	5,029
2003	648	2,598	1,283	292	54	4,875
2002	683	2,537	1,241	241	42	4,744
2001	722	2,447	1,211	198	38	4,616
2000	806	2,496	1,180	207	18	4,707

Table 7.03b | Live Births by Ethnicity of Mother and Education of Resident Mothers in Hawai'i: 2009.

Race/Ethnicity of Mother	Education of Mothers					Total
	None/ Grade 1-11	Grade 12	1-4 Years College	>4 Years College	Unknown	
Caucasian	191	1,426	2,107	596	83	4,403
Native Hawaiian	653	2,816	1,503	305	92	5,369
Chinese	24	151	314	153	12	654
Filipino	223	1,148	1,647	272	54	3,344
Japanese	49	356	970	480	26	1,881
All Others	452	1,273	1,156	210	101	3,192
Total	1,592	7,170	7,697	2,016	368	18,843

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring. (*Honolulu*)

Figure 7.03a Live Births by Education of Resident Native Hawaiian Mothers in Hawai'i: 2000-2009.

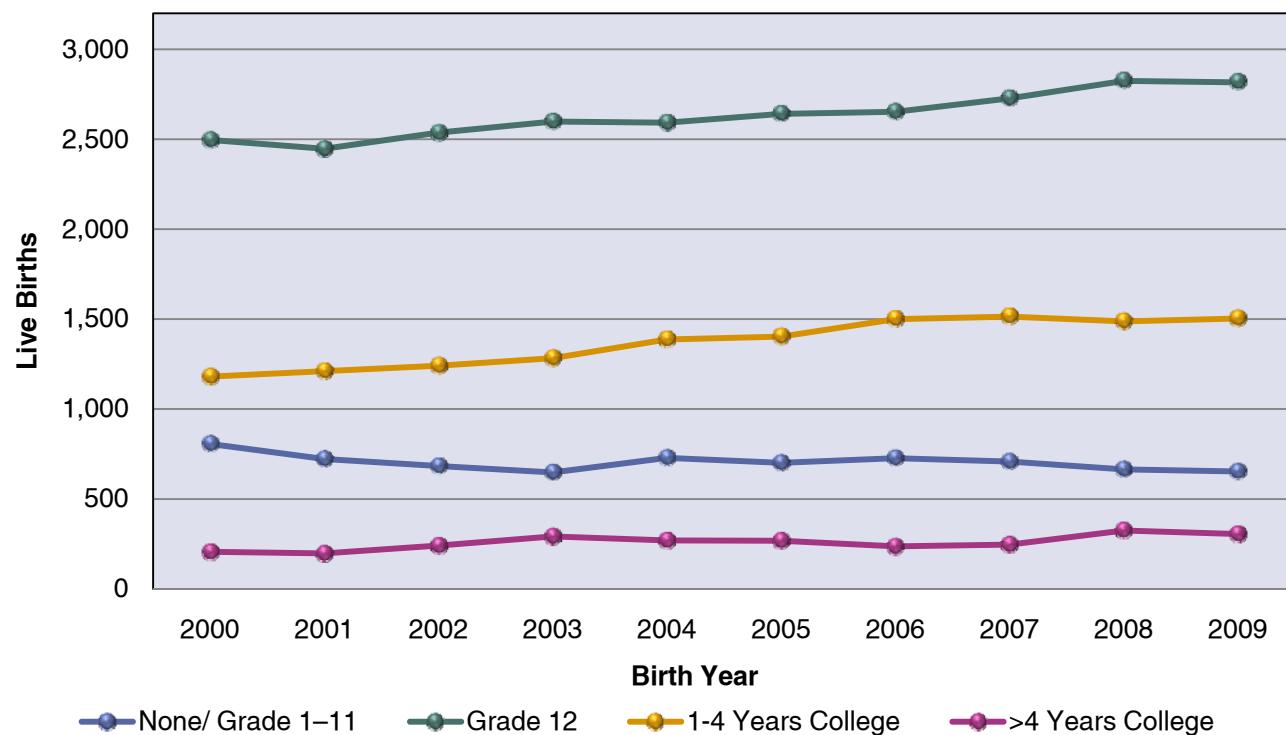
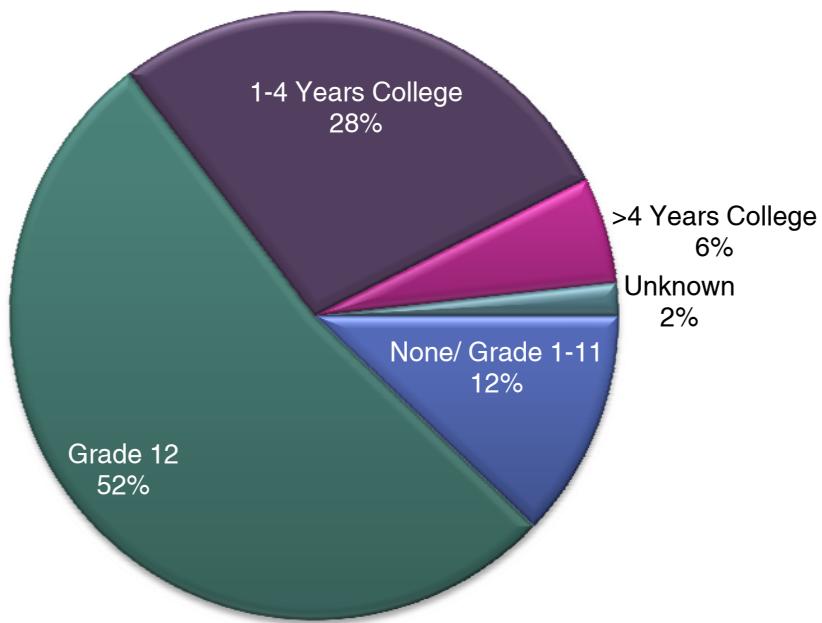


Figure 7.03b Live Births by Education of Resident Native Hawaiian Mothers in Hawai'i: 2009



BIRTHS

Table 7.04a | Live Births by County of Residence of Resident Native Hawaiian Mothers in Hawai'i: 2000-2009.

Year	Resident County of Native Hawaiian Mothers							Total
	Hawai'i		Honolulu		Kaua'i		Maui (Inc Kalawao)	
No.	Row %	No.	Row %	No.	Row %	No.	Row %	No.
2009	1,069	19.9%	3,311	61.7%	317	5.9%	672	12.5%
2008	1,137	21.2%	3,227	60.1%	321	6.0%	685	12.8%
2007	1,037	19.6%	3,274	62.0%	292	5.5%	680	12.9%
2006	1,028	19.9%	3,170	61.2%	303	5.9%	675	13.0%
2005	1,030	20.3%	3,178	62.7%	240	4.7%	622	12.3%
2004	1,018	20.2%	3,124	62.1%	295	5.9%	592	11.8%
2003	923	18.9%	3,119	64.0%	244	5.0%	589	12.1%
2002	928	19.6%	2,971	62.6%	255	5.4%	590	12.4%
2001	879	19.0%	2,925	63.4%	240	5.2%	572	12.4%
2000	875	18.5%	3,044	64.5%	235	5.0%	553	11.7%
								10
								4,717

Table 7.04b | Live Births by County of Residence of Resident Mothers in Hawai'i: 2009.

Race/ Ethnicity	County							Total
	Hawai'i		Honolulu		Kaua'i		Maui (Inc Kalawao)	
No.	Col %	No.	Col %	No.	Col %	No.	Col %	No.
Caucasian	566	21.6%	2,992	21.8%	241	25.6%	604	28.1%
Native Hawaiian	1,069	40.8%	3,311	24.1%	317	33.7%	672	31.3%
Chinese	29	1.1%	602	4.4%	9	1.0%	14	0.7%
Filipino	307	11.7%	2,351	17.1%	205	21.8%	481	22.4%
Japanese	145	5.5%	1,543	11.3%	56	6.0%	137	6.4%
All Others	357	13.6%	2,519	18.4%	53	5.6%	263	12.3%
Total	2,473	94.5%	13,318	97.1%	881	93.6%	2,171	101.2%
								18,843
								97.0%

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring, (Honolulu)

Figure 7.04a Live Births by County of Residence of Resident Native Hawaiian Mothers in Hawai'i: 2000-2009.

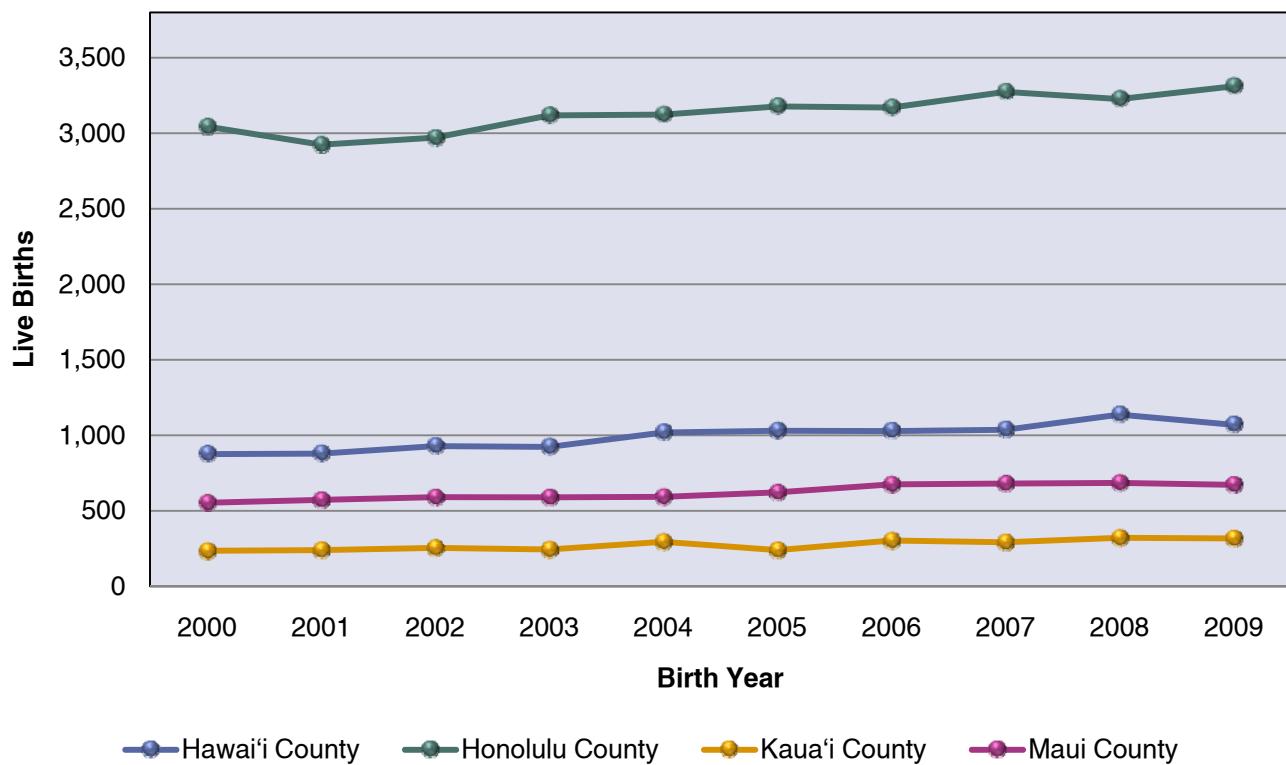
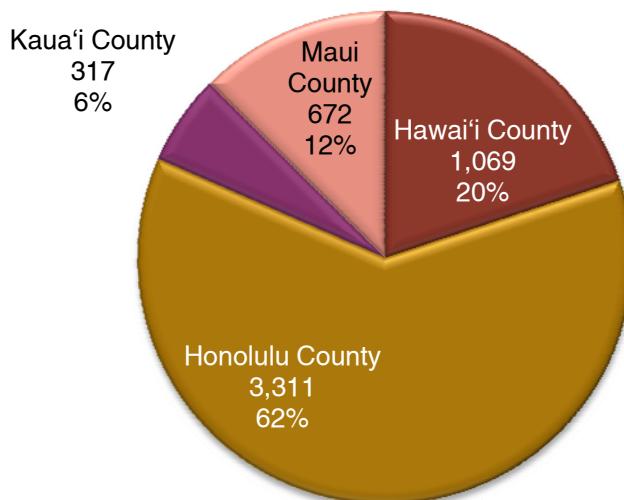


Figure 7.04b Live Births by County of Resident Native Hawaiian Mothers in Hawai'i: 2009



BIRTHS

Table 7.05a Live Births by Birthweight and Ethnicity of Resident Native Hawaiian Mothers in Hawai'i: 2000-2009.

Year	Infant Birthweight (in grams) to Native Hawaiian Mothers			Total			
	<2,000-2,499 grams No.	Col %	2,500-2,999 grams No.	3,000-3,499 grams No.	3,500-3,999 grams No.	4,000 grams+/ Unknown No.	
2009	472	8.8%	1,102	2,070	1,339	386	5,369
2008	395	7.4%	1,089	2,118	1,368	400	5,370
2007	438	8.3%	1,089	2,050	1,306	400	5,283
2006	427	8.2%	1,042	2,013	1,322	372	5,176
2005	409	8.1%	1,044	1,943	1,263	411	5,070
2004	407	8.1%	1,000	1,913	1,338	371	5,029
2003	429	8.8%	941	1,815	1,277	413	4,875
2002	397	8.4%	935	1,841	1,178	393	4,744
2001	368	8.0%	918	1,757	1,184	387	4,614
2000	345	7.3%	905	1,776	1,240	441	4,707

Table 7.05b Live Births by Birthweight and Ethnicity of Resident Mothers in Hawai'i: 2009.

Race/Ethnicity of Mother	Birthweight (in grams)			Total			
	<2,000-2,499 grams No.	Col %	2,500-2,999 grams No.	3,000-3,499 grams No.	3,500-3,999 grams No.	4,000 grams+/ Unknown No.	
Caucasian	296	6.7%	642	1,631	1,349	485	4,403
Native Hawaiian	472	8.8%	1,102	2,070	1,339	386	5,369
Chinese	62	9.5%	156	292	116	28	654
Filipino	355	10.6%	928	1,387	552	122	3,344
Japanese	168	8.9%	472	806	372	63	1,881
All Others	237	7.4%	655	1,209	830	261	3,192
Total	1,590	8.4%	3,955	7,395	4,558	1,345	18,843

Low birth weight (LBW): Birth weight less than 2,500 grams.

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring. (Honolulu)

Figure 7.05a Live Births by Birthweight for Resident Native Hawaiian Mothers in Hawai'i: 2000-2009.

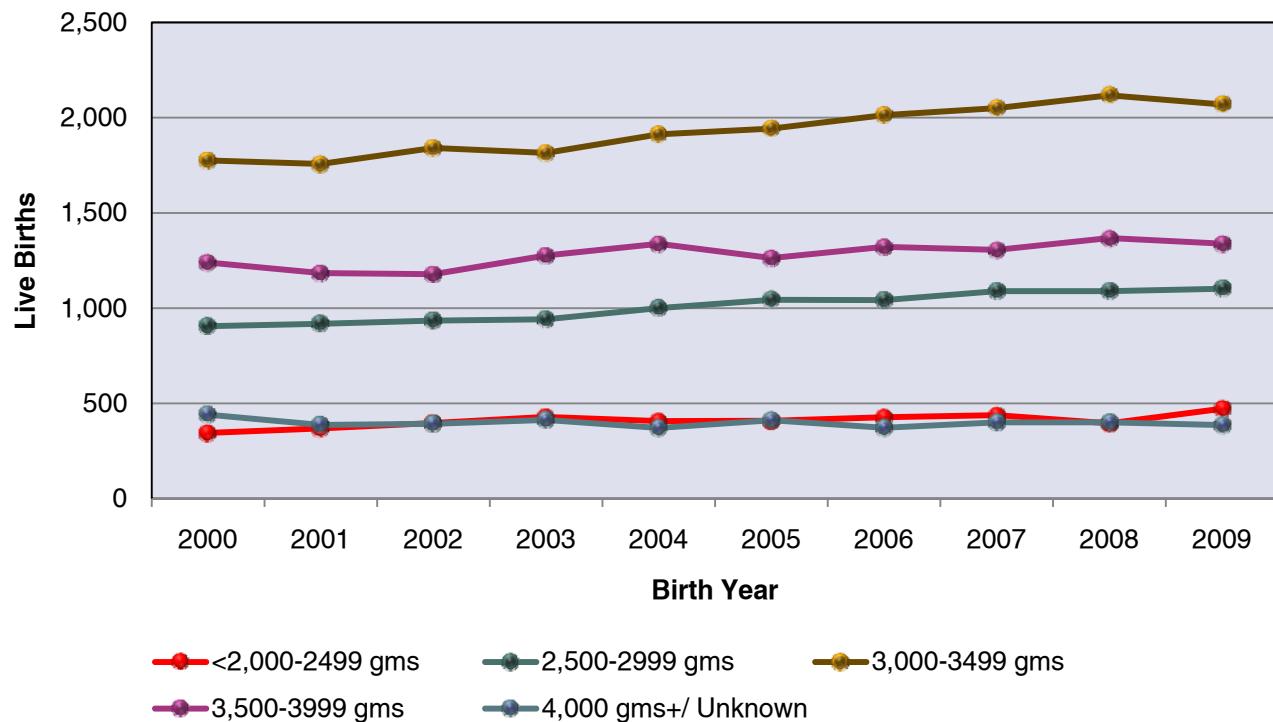
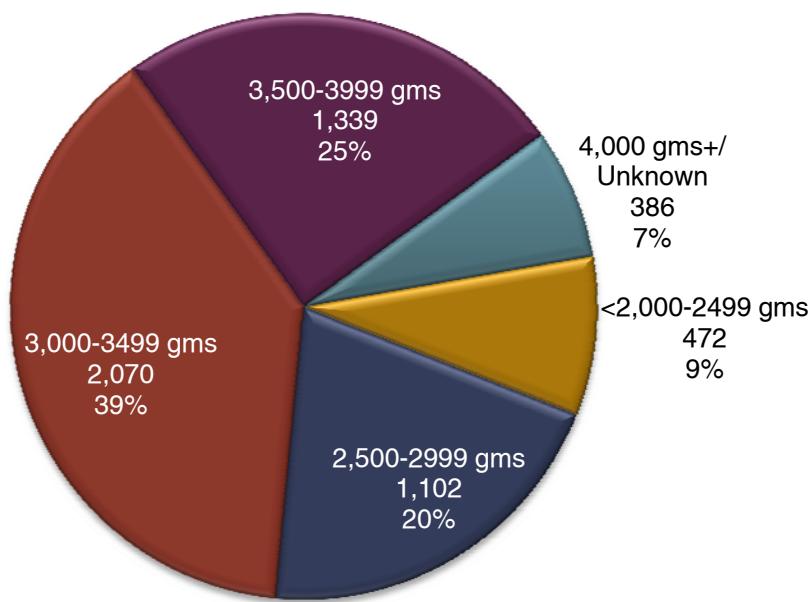


Figure 7.05b Live Births by Birthweight of Resident Native Hawaiian Mothers in Hawai'i: 2009



BIRTHS

Table 7.06a

**Live Births of Resident Native Hawaiian Mothers and
Trimester of First Prenatal Care Visit in Hawai'i: 2000-2009.**

Year	Trimester of First Prenatal Care Visit for Native Hawaiian Mothers					Total
	First Trimester		No Care or After First Trimester		Unknown	
	No.	Row %	No.	Row %	No.	
2009	4,040	75.2%	968	18.0%	361	5,369
2008	4,121	76.7%	998	18.6%	251	5,370
2007	3,931	74.4%	1,131	21.4%	221	5,283
2006	3,872	74.8%	1,081	20.9%	223	5,176
2005	3,826	75.5%	1,061	20.9%	183	5,070
2004	3,693	73.4%	1,142	22.7%	194	5,029
2003	3,644	74.7%	1,074	22.0%	157	4,875
2002	3,585	75.6%	1,028	21.7%	131	4,744
2001	3,546	76.8%	908	19.7%	162	4,616
2000	3,662	77.8%	876	18.6%	169	4,707

Table 7.06b

**Live Births by Ethnicity of Resident Mother and
Trimester of First Prenatal Care Visit in Hawai'i: 2009.**

Race/ Ethnicity of Mother	Trimester of First Prenatal Care Visit					Total
	First Trimester		No Care or After First Trimester		Unknown	
	No.	Row %	No.	Row %	No.	
Caucasian	3,779	85.8%	482	10.9%	142	4,403
Native Hawaiian	4,040	75.2%	968	18.0%	361	5,369
Chinese	562	85.9%	60	9.2%	32	654
Filipino	2,764	82.7%	459	13.7%	121	3,344
Japanese	1,576	83.8%	200	10.6%	105	1,881
All Others	2,132	66.8%	805	25.2%	255	3,192
Total	14,853	78.8%	2,974	15.8%	1,016	18,843

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring. (Honolulu)

Figure 7.06a Live Births of Resident Native Hawaiian Mothers and Trimester of First Prenatal Care Visit in Hawai‘i: 2000-2009.

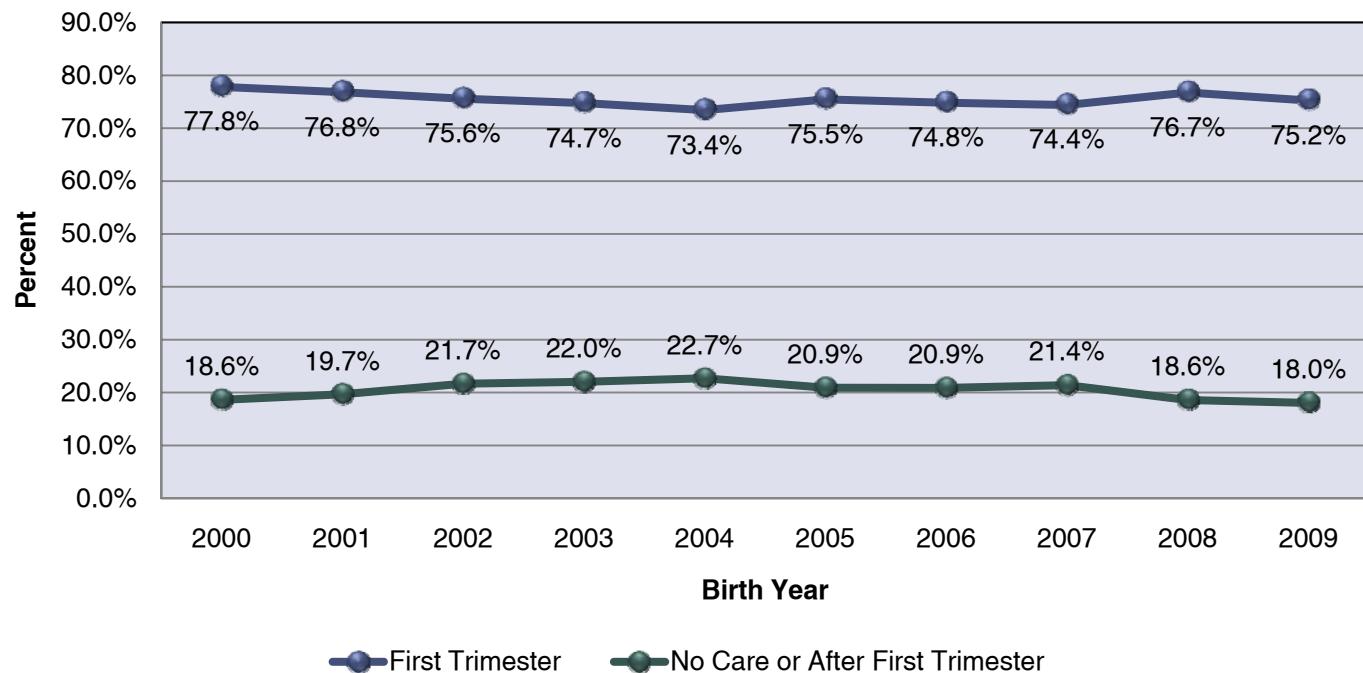
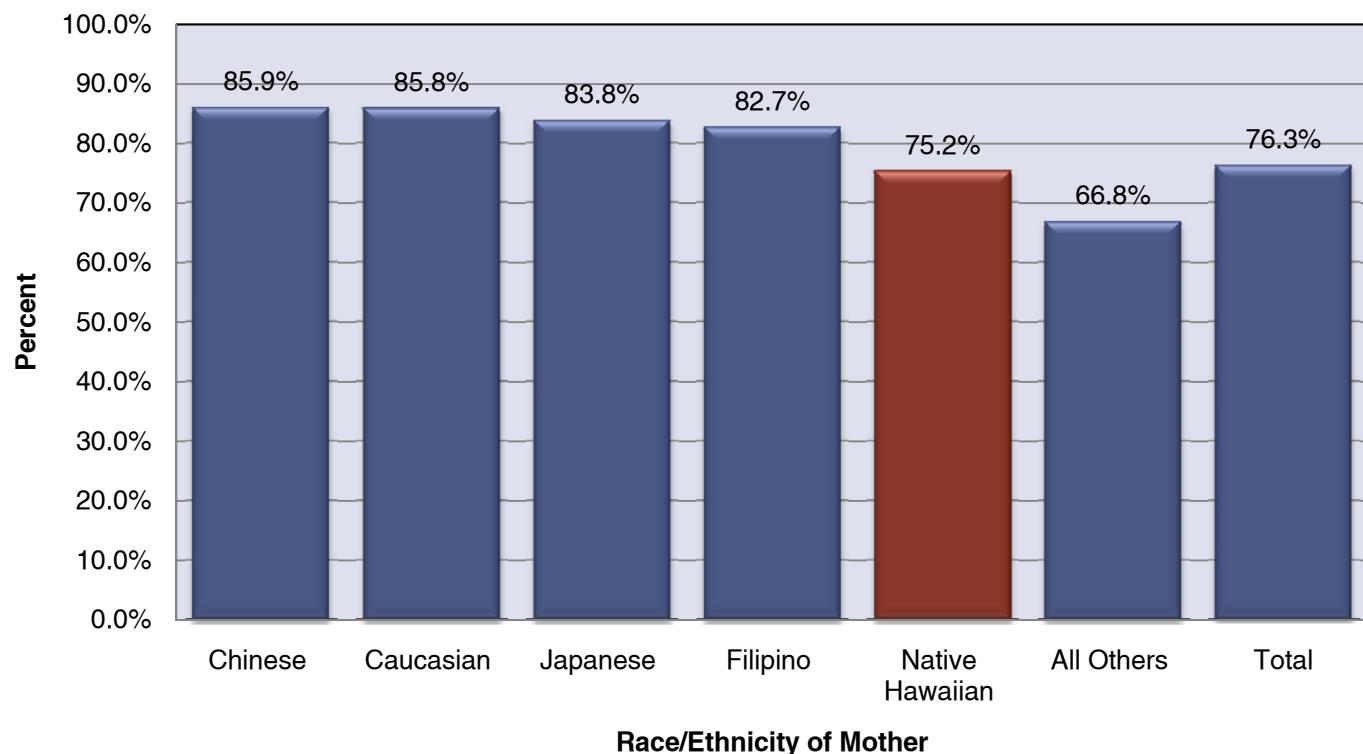


Figure 7.06b Live Births by Ethnicity of Resident Mother and Trimester of First Prenatal Care Visit in Hawai‘i: 2009



Source: Hawai‘i State, Department of Health, Office of Health Status Monitoring, 2008. (Honolulu)

BIRTHS

Table 7.07a

Live Births by Plurality, Sex of Child of Resident Native Hawaiian Mothers in Hawai'i: 2000-2009.

Year	Native Hawaiian Plurality *					
	Single		Multiple		Total	
	Male	Female	Male	Female	Male	Female
2009	2,627	2,573	94	75	2,721	2,648
2008	2,733	2,515	58	64	2,791	2,579
2007	2,633	2,509	69	72	2,702	2,581
2006	2,567	2,472	76	61	2,643	2,533
2005	2,586	2,356	79	49	2,665	2,405
2004	2,475	2,417	55	82	2,530	2,499
2003	2,522	2,225	64	64	2,586	2,289
2002	2,410	2,208	61	64	2,471	2,272
2001	2,235	2,250	55	74	2,290	2,324
2000	2,382	2,232	46	43	2,428	2,275

* Unknown Plurality classified as "Single"

Table 7.07b

Live Births by Plurality, Sex of Child and Ethnicity of Resident Mothers in Hawai'i: 2009.

Race/Ethnicity of Mother	Plurality *					
	Single		Multiple		Total	
	Male	Female	Male	Female	Male	Female
Caucasian	2,137	2,086	86	94	2,223	2,180
Native Hawaiian	2,627	2,573	94	75	2,721	2,648
Chinese	337	291	10	16	347	307
Filipino	1,733	1,533	34	44	1,767	1,577
Japanese	922	893	29	37	951	930
All Others	1,596	1,502	48	46	1,644	1,548
Total	9,352	8,878	301	312	9,653	9,190

* Unknown Plurality classified as "Single"

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring. (Honolulu)

Figure 7.07a Live Births by Plurality, Sex of Child of Resident Native Hawaiian Mothers in Hawai'i: 2000-2009.

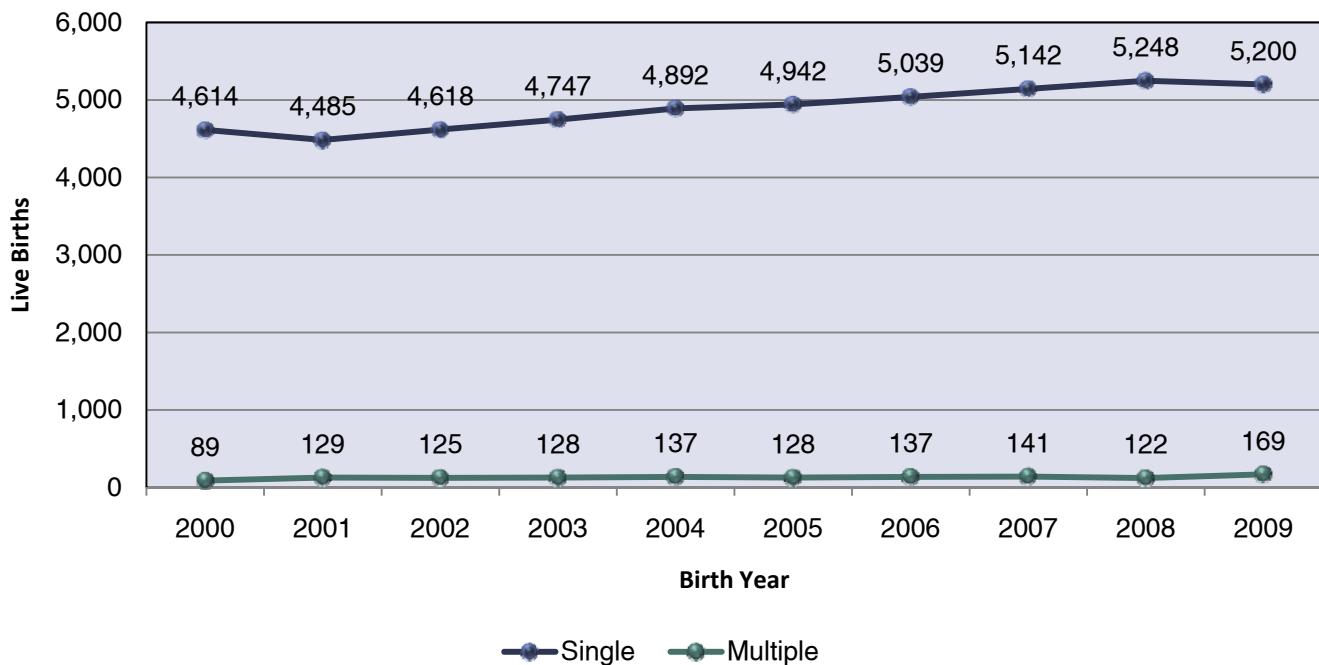
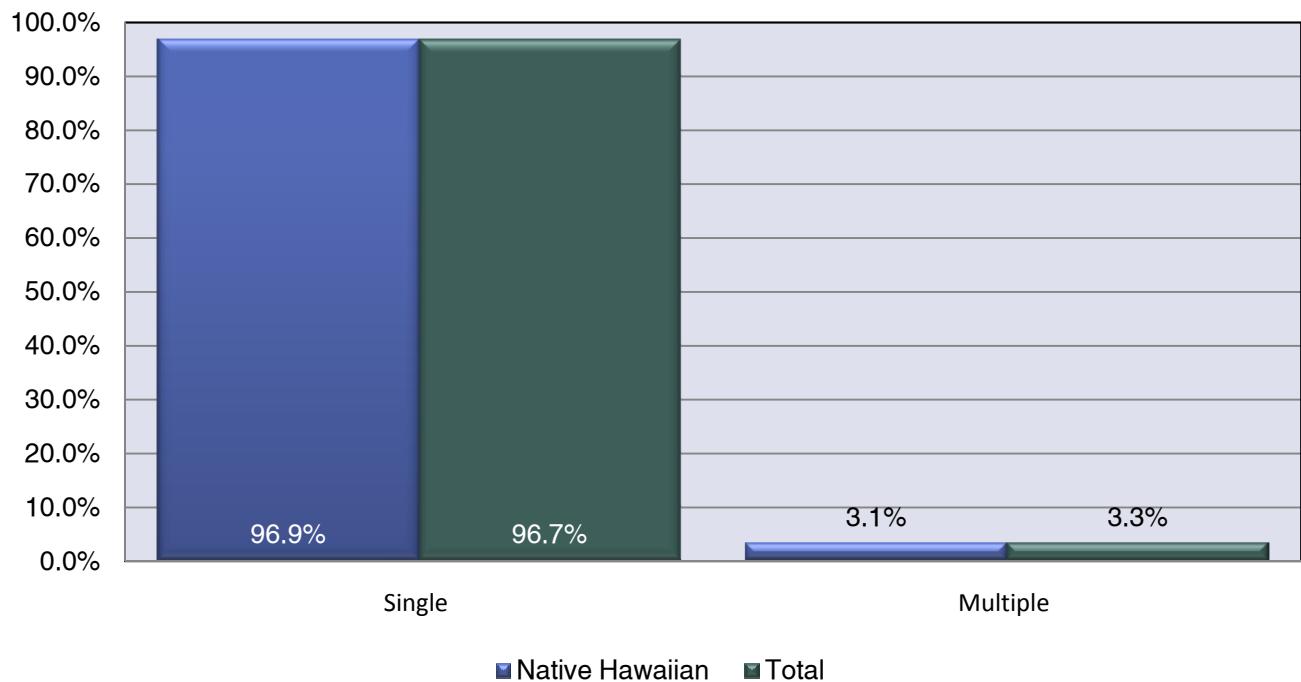


Figure 7.07b Live Births by Plurality, Sex of Child of Resident Native Hawaiian Mothers in Hawai'i: 2009.



BIRTHS

Table 7.08a

Live Births by Nonmarital Status of Resident Native Hawaiian Mothers in Hawai‘i: 2000–2009.

Year	Native Hawaiian Nonmarital Status *				Total	
	Non-Marital		Marital			
	No.	Row %	No.	Row %		
2009	3,209	59.8%	2,160	40.2%	5,369	
2008	3,242	60.4%	2,128	39.6%	5,370	
2007	3,151	59.6%	2,132	40.4%	5,283	
2006	3,029	58.5%	2,147	41.5%	5,176	
2005	2,934	57.9%	2,136	42.1%	5,070	
2004	2,856	56.8%	2,173	43.2%	5,029	
2003	2,694	55.3%	2,181	44.7%	4,875	
2002	2,696	56.8%	2,048	43.2%	4,744	
2001	2,561	55.5%	2,055	44.5%	4,616	
2000	2,585	55.0%	2,118	45.0%	4,703	

* Nonmarital births are defined here as those where the mother was not married

Table 7.08b

Live Births by Nonmarital Status and Ethnicity of Resident Mothers in Hawai‘i: 2009.

Year	Nonmarital Status *				Total	
	Non-Marital		Marital			
	No.	Col %	No.	Col %		
Caucasian	832	11.3%	3,571	29.7%	4,403	
Native Hawaiian	3,209	43.4%	2,160	18.0%	5,369	
Chinese	102	1.4%	552	4.6%	654	
Filipino	1,316	17.8%	2,028	16.9%	3,344	
Japanese	411	5.6%	1,470	12.2%	1,881	
All Others	1,291	17.5%	1,901	15.8%	3,192	
Total	7,161	96.9%	11,682	97.2%	18,843	

* Nonmarital births are defined here as those where the mother was not married

Source: Hawai‘i State, Department of Health, Office of Health Status Monitoring. (Honolulu)

Figure 7.08a Live Births by Matital Status of Resident Native Hawaiian Mothers in Hawai'i: 2009

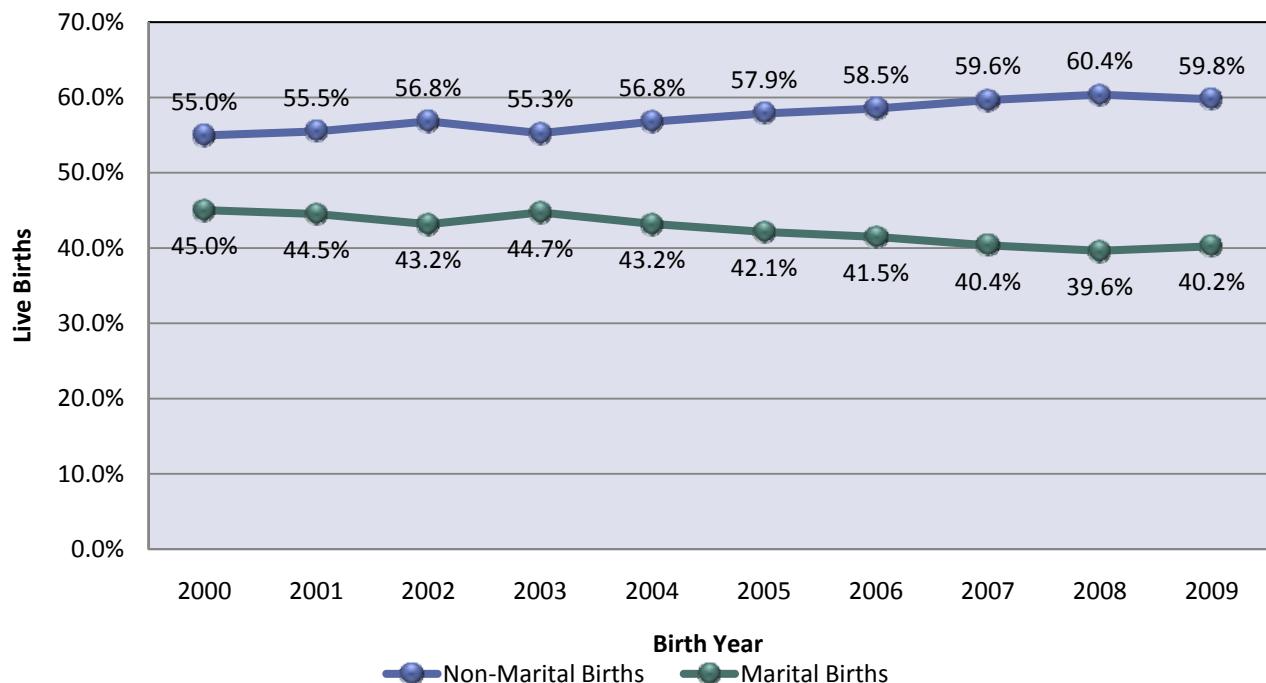
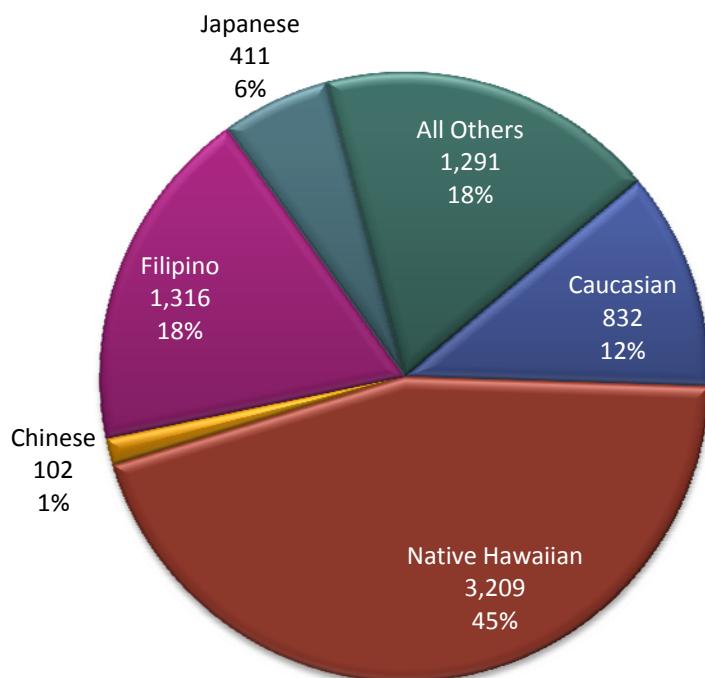


Figure 7.08b Live Births by Nonmarital Status of Resident Native Hawaiian Mothers in Hawai'i: 2009



BIRTHS

Table 7.09a Non-Marital Births by County of Mother of Resident Native Hawaiian Mothers in Hawaii: 2000-2009.

Year	Resident County of Native Hawaiian Mothers								Total
	Hawai'i		Honolulu		Kaua'i		Maui (Includes Kalawao)		
No.	%	No.	%	No.	%	No.	%	No.	%
2009	692	53.4	1,894	42.9	206	47.5	417	41.2	3,209 44.8
2008	770	54.7	1,830	40.5	207	45.2	435	43.0	3,242 43.9
2007	662	51.8	1,867	42.3	198	46.7	424	43.3	3,151 44.4
2006	689	54.0	1,730	40.7	193	47.1	417	45.2	3,029 44.2
2005	659	56.2	1,739	41.9	152	44.6	384	46.4	2,934 45.2
2004	651	57.0	1,688	42.0	172	50.9	345	43.1	2,856 45.4
2003	576	54.2	1,633	42.1	165	45.1	320	42.6	2,694 44.4
2002	614	59.1	1,586	41.7	160	49.2	336	44.2	2,696 45.5
2001	571	58.7	1,551	42.4	135	40.8	304	44.6	2,561 45.4
2000	562	58.4	1,587	43.2	135	42.5	301	43.1	2,585 45.7

Table 7.09b Non-Marital Births by County of Mother of Resident Mothers in Hawaii: 2009.

Race/Ethnicity of Mother	County					Total	
	Hawai'i	Honolulu	Kaua'i	Maui (Includes Kalawao)	No.	Col %	
No.	Col %	No.	Col %	No.	Col %	No.	Col %
Caucasian	189	14.6%	342	7.7%	93	21.4%	208 20.5%
Native Hawaiian	692	53.4%	1,894	42.9%	206	47.5%	417 41.2%
Filipino	133	10.3%	883	20.0%	92	21.2%	208 20.5%
Japanese	57	4.4%	284	6.4%	19	4.4%	51 5.0%
All Others	226	17.4%	1,014	23.0%	24	5.5%	129 12.7%
Total	1,297	100.0%	4,417	100.0%	434	100.0%	1,013 100.0%
							7,161 100.0%

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring, (Honolulu)

Figure 7.09a Non-Marital Births by County of Mother of Resident Native Hawaiian Mothers in Hawai'i: 2000-2009.

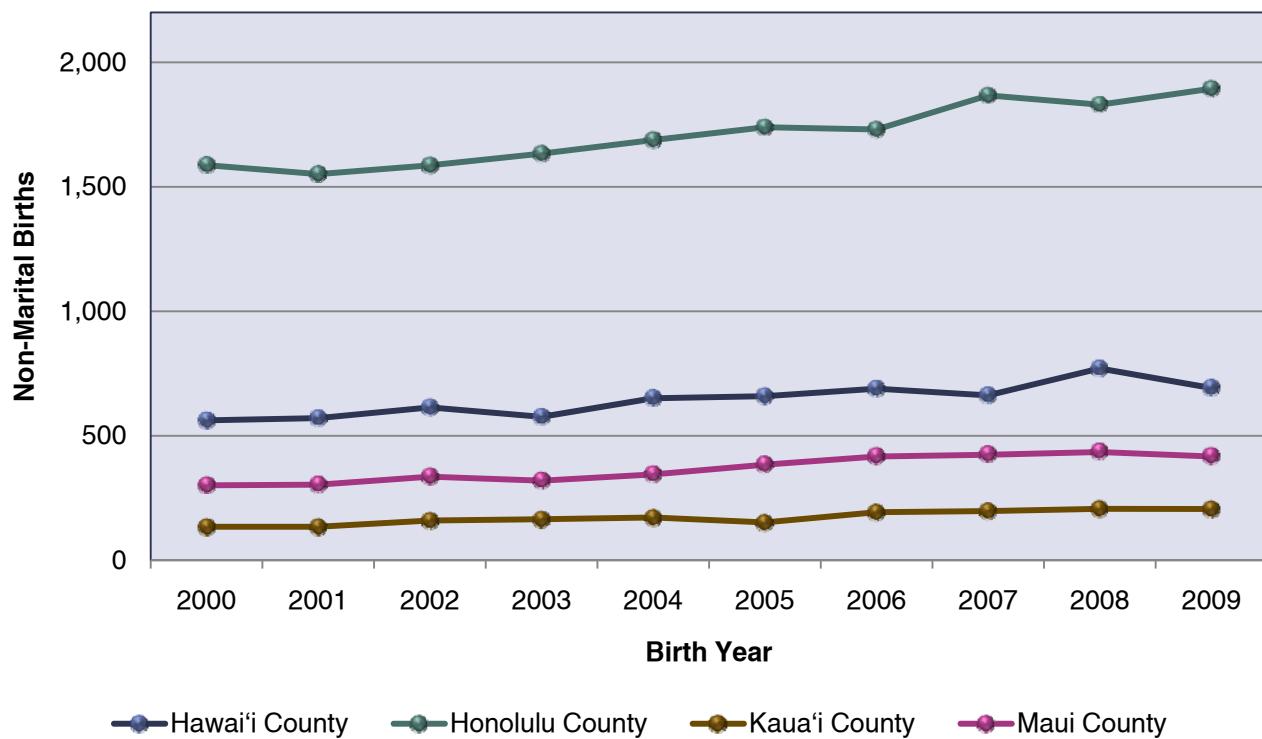
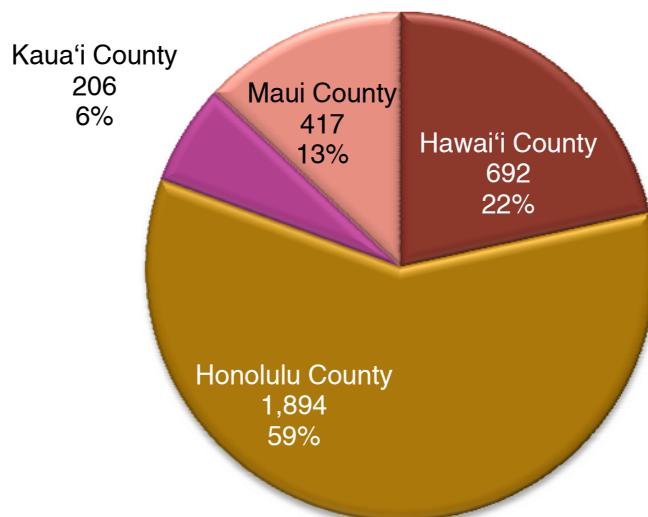


Figure 7.09b Non-Marital Births by County of Resident Native Hawaiian Mothers in Hawai'i: 2009



BIRTHS

Table 7.10a Non-Marital Births by Birth Weight of Resident Native Hawaiian Mothers in Hawai'i: 2000-2009.

Year	Infant Birthweight (in grams) to Native Hawaiian Mothers			4,000 grams+/ Unknown	Total
	No.	<2,000-2,499 grams Col %	2,500-2,999 grams	3,000-3,499 grams	
2009	282	8.8%	717	1,238	762
2008	258	8.0%	702	1,281	803
2007	283	9.0%	696	1,212	755
2006	260	8.6%	654	1,210	718
2005	263	9.0%	661	1,128	669
2004	245	8.6%	636	1,075	721
2003	258	9.6%	555	1,067	636
2002	229	8.5%	571	1,091	78
2001	221	8.6%	536	1,007	624
2000	215	8.4%	529	988	646

Table 7.10b Non-Marital Births by Birth Weight and Ethnicity of Resident Mothers in Hawai'i: 2009.

Race/Ethnicity of Mother	Birthweight (in grams)					Total	
	No.	Col %	<2,000-2,499 grams	2,500-2,999 grams	3,000-3,499 grams	3,500-3,999 grams	
Caucasian	55	8.7%	135	331	229	82	832
Native Hawaiian	282	44.5%	717	1,238	762	210	3,209
Filipino	146	23.1%	391	544	202	33	1,316
Japanese	39	6.2%	86	184	87	15	411
All Others	111	17.5%	321	557	319	85	1,393
Total	633	100.0%	1,650	2,854	1,599	425	7,161

Low birth weight (LBW): Birth weight less than 2,500 grams.

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring, (Honolulu)

Figure 7.10a Non-Marital Births by Birth Weight of Resident Native Hawaiian Mothers in Hawai'i: 2000-2009

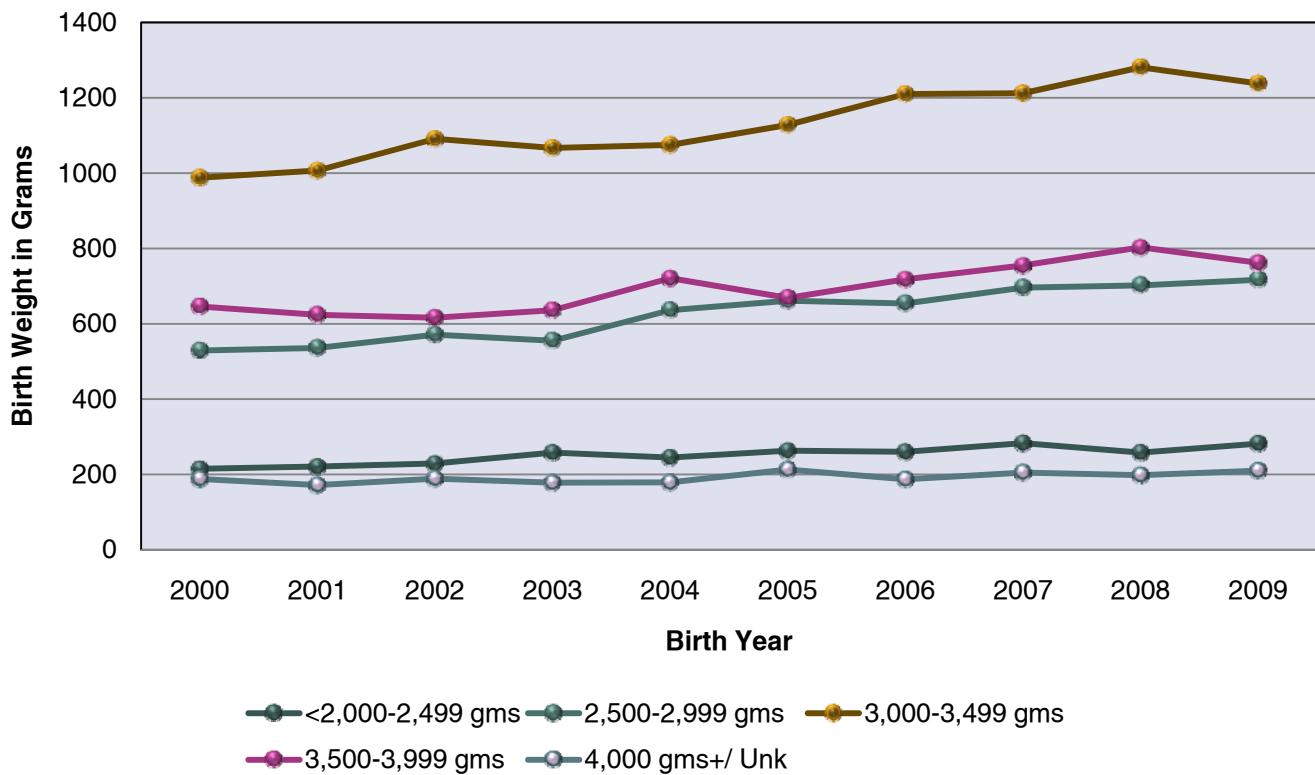
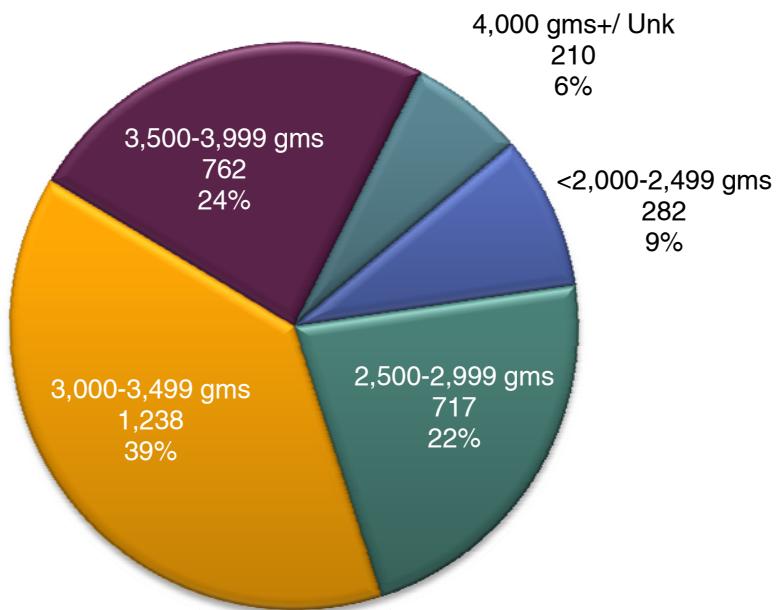


Figure 7.10b Non-Marital Births by Birth Weight of Resident Native Hawaiian Mothers in Hawai'i: 2009



FETAL DEATHS

Table 7.11a Standard Fetal Deaths by Age of Native Hawaiian Mothers in Hawai'i: 2000-2009.

Year	Age of Native Hawaiian Mother					
	Under 25	25-29	30-34	35-39	40+/Unknown	Total
2009	51	37	22	18	8	136
2008	41	40	27	11	9	128
2007	64	44	23	25	8	164
2006	52	29	36	15	5	137
2005	70	43	25	16	7	161
2004	70	37	21	22	16	166
2003	66	42	27	32	13	180
2002	68	29	25	22	5	149
2001	57	30	33	20	11	151
2000	66	49	31	20	12	178

Table 7.11b Standard Fetal Deaths by Age of Mothers in Hawai'i: 2009.

Race/Ethnicity of Mother	Age of Mother					
	Under 25	25-29	30-34	35-39	40+/Unknown	Total
Caucasian	43	37	49	40	35	204
Native Hawaiian	51	37	22	18	8	136
Filipino	30	37	24	32	12	135
Japanese	7	13	8	26	20	74
All Others	126	108	122	123	69	548
Total	257	232	225	239	144	1,097

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring. (Honolulu)

Figure 7.11a Standard Fetal Deaths by Age of Resident Native Hawaiian Mothers in Hawai'i: 2000-2009.

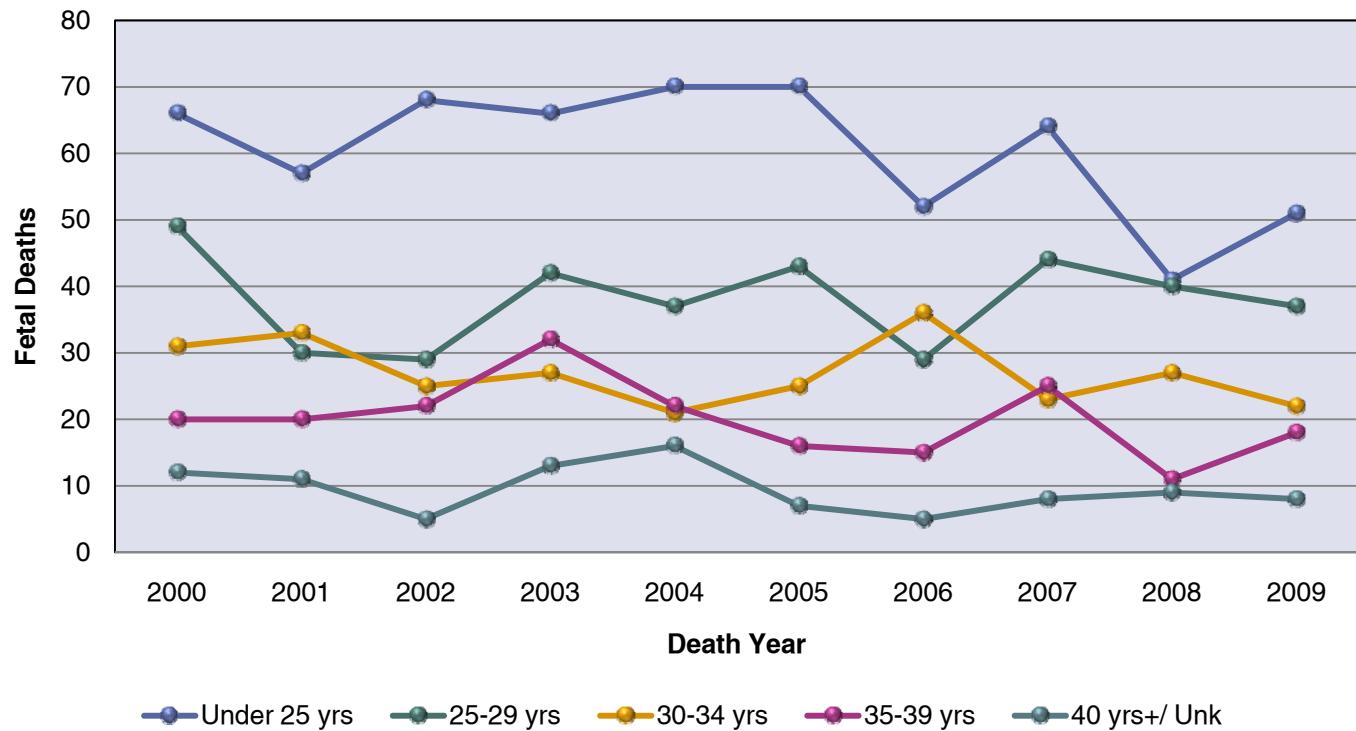
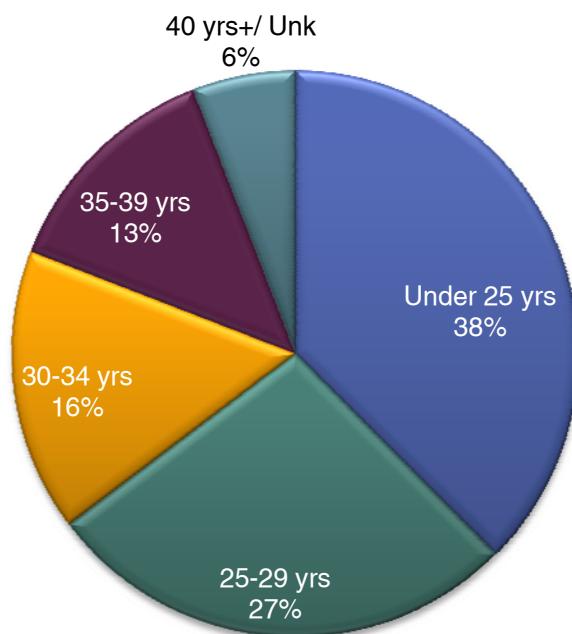


Figure 7.11b Standard Fetal Deaths by Age and Ethnicity of Resident Mother in Hawai'i: 2009



FETAL DEATHS

Table 7.12a

Standard Fetal Deaths by County of Residence of Native Hawaiian Mothers in Hawai'i: 2000-2009.

Year	Resident County of Native Hawaiian Mothers					Total
	Hawai'i	Honolulu	Kaua'i	Maui	All Others *	
2009	(N)	71	(N)	26	39	136
2008	(N)	74	(N)	29	25	128
2007	(N)	109	(N)	25	30	164
2006	(N)	85	(N)	(N)	52	137
2005	32	84	(N)	(N)	45	161
2004	30	104	(N)	(N)	32	166
2003	28	115	15	17	5	180
2002	21	106	10	13	0	150
2001	31	86	19	15	0	151
2000	44	100	17	15	0	176

* Includes Non-Residents

(N) = Not reported

Table 7.12b

Standard Fetal Deaths by Residence of Mother and Ethnicity of Mother In Hawai'i: 2009.

Race/Ethnicity	County					Total
	Hawai'i	Honolulu	Kaua'i	Maui	All Others *	
Caucasian	(N)	66	(N)	71	67	204
Native Hawaiian	(N)	71	(N)	26	39	136
Filipino	(N)	61	(N)	53	21	135
Japanese	(N)	51	(N)	13	10	74
All Others	(N)	342	(N)	82	124	548
Total	(N)	591	(N)	245	261	1,097

* Includes Non-Residents

(N) = Not reported

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring. (Honolulu)

FETAL DEATHS

Table 7.13a

Standard Fetal Deaths by Education of Resident Native Hawaiian Mothers in Hawai'i: 2000-2009.

Year	Education of Mother				Total
	Grades 1-12	College	Unknown		
2009	35	13	88		136
2008	30	13	85		128
2007	36	12	116		164
2006	33	12	92		137
2005	33	22	106		161
2004	35	15	116		166
2003	50	13	117		180
2002	53	13	84		150
2001	55	13	83		151
2000	63	15	100		178

Table 7.13b

Standard Fetal Deaths by Education of Mothers in Hawai'i: 2009.

Race/Ethnicity of Mother	Education of Mother				Total
	Grades 1-12	College	Unknown		
Caucasian	11	23	170		204
Native Hawaiian	35	13	88		136
Filipino	13	17	105		135
All Others	27	32	563		622
Total	86	85	926		1,097

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring. (Honolulu)

INFANT DEATHS

Table 7.14 Deaths of Native Hawaiian Infants, Age, Birth Weight and Race in Hawai'i: 2000-2009.

Year	Age of Native Hawaiian Infant (days)						No.	Rate*	Total	Birth Weight Under 2500 grams**
	Under 1 Day	1 to 6 days	7 to 27 days	Over 27 days/ Unk	Rate*	Rate*				
2009	3.3	0.6	1.1	2.1			51		7.1	32
2008	2.5	0.6	0.6	3.2			49		6.8	24
2007	2.4	1.0	0.7	2.9			50		7.0	30
2006	2.1	0.9	0.3	1.7			35		5.0	19
2005	2.2	1.2	2.5	2.9			60		8.8	31
2004	3.0	0.6	0.4	1.8			39		5.8	29
2003	4.0	1.5	1.4	3.4			67		10.2	45
2002	2.2	1.7	0.9	3.4			53		8.2	32
2001	1.3	0.8	0.6	2.9			35		5.6	26
2000	3.5	1.0	0.8	2.6			49		7.8	30

Race/Ethnicity of Infant	Age of Infant (days)						No.	Rate*	Total	Birth Weight Under 2500 grams**
	Under 1 Day	1 to 6 days	7 to 27 days	Over 27 days/ Unk	Rate*	Rate*				
Caucasian	1.8	0.6	0.3	0.6			11		3.3	8
Native Hawaiian	3.3	0.6	1.1	2.1			51		7.1	32
Filipino	3.6	0.7	1.1	0.4			16		5.8	12
Japanese	3.2	1.3	0.6	1.3			10		6.4	3
All Others	2.3	0.8	0.5	2.3			23		5.8	12
Total	2.9	0.7	0.8	1.5			111	5.9	67	

* Rates are number of infant deaths per 1,000 live births.
** Birth Weights under 2,500 grams are considered low Birth Weight.

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring, (Honolulu)

Figure 7.14a Deaths of Native Hawaiian Infants by Age in Hawai‘i: 2000-2009.

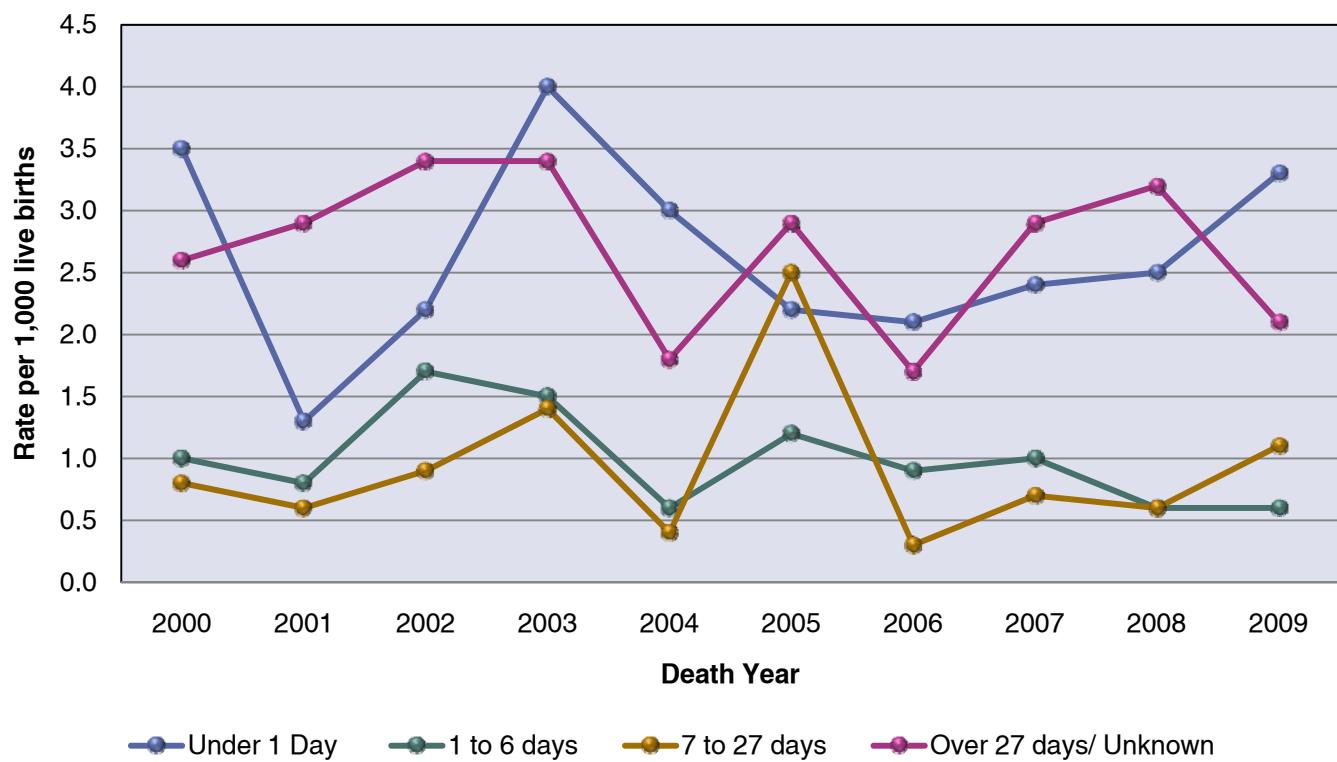
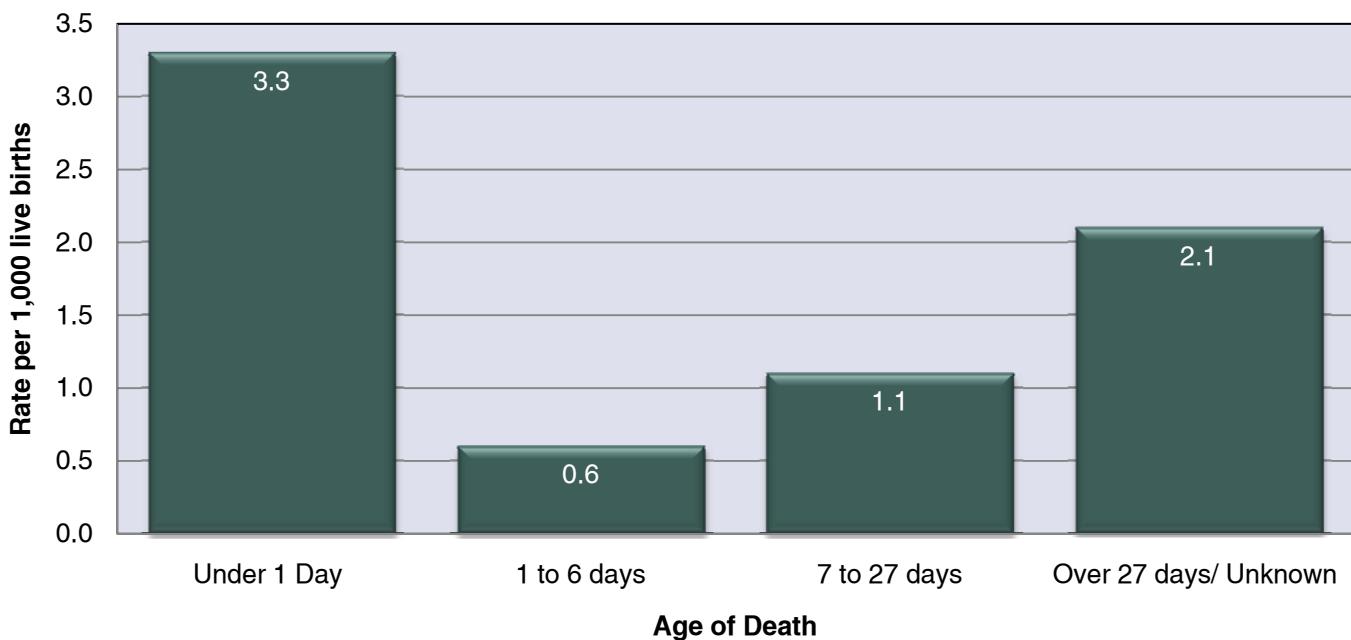


Figure 7.14b Deaths of Native Hawaiian Infants by Age in Hawai‘i: 2009.



Source: Hawai‘i State, Department of Health, Office of Health Status Monitoring, 2008. (Honolulu)

ABORTIONS

Table 7.15a | Abortions by Age for Native Hawaiian Patients in Hawai'i: 2000-2009.

Year	Age of Native Hawaiian Patient							Total
	Under 18 yrs	18-19 yrs	20-24 yrs	25-29 yrs	30-34 yrs	35 yrs+/ Unknown		
2009	58	105	179	125	59	43		569
2008	78	95	224	114	62	48		621
2007	112	107	239	150	88	60		756
2006	95	109	289	176	84	70		823
2005	92	105	263	176	82	73		791
2004	80	92	269	158	84	52		735
2003	98	94	228	149	73	61		703
2002	96	111	229	164	78	56		734
2001	99	126	231	146	83	59		744
2000	85	125	236	124	55	43		668

Table 7.15b | Abortions by Age and Ethnicity of Patient in Hawai'i: 2009.

Race/ Ethnicity of Patient	Age of Patient							Total
	Under 18 yrs	18-19 yrs	20-24 yrs	25-29 yrs	30-34 yrs	35 yrs+/ Unknown		
Caucasian	17	48	226	180	86	86		643
Native Hawaiian	58	105	179	125	59	43		569
Chinese	9	18	51	33	10	14		135
Filipino	34	62	158	76	45	53		428
Japanese	15	25	68	40	33	29		210
All Others	95	128	377	346	202	209		1,357
Total	228	386	1,059	800	435	434		3,342

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring. (Honolulu)

Figure 7.15a Abortions by Age for Native Hawaiian Patients in Hawai‘i: 2000-2009.

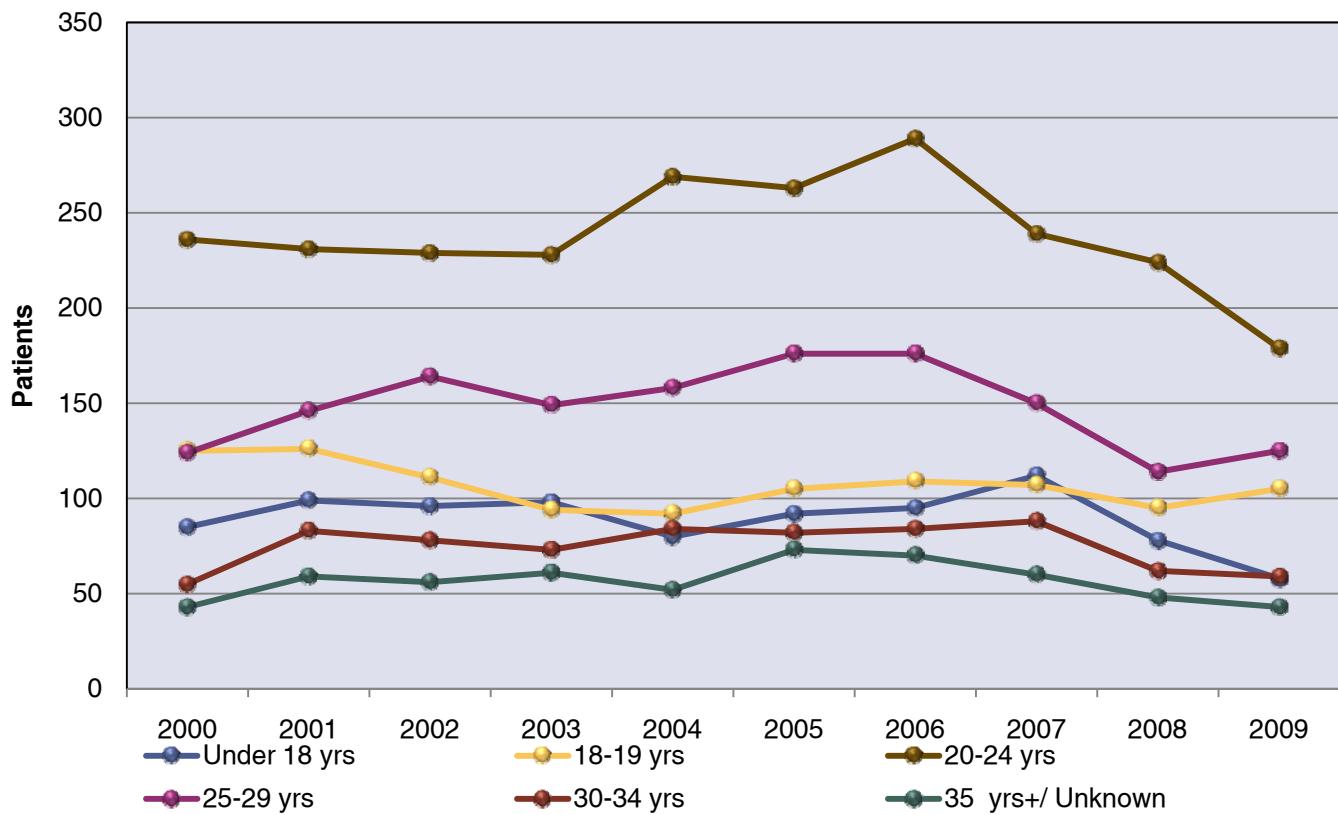
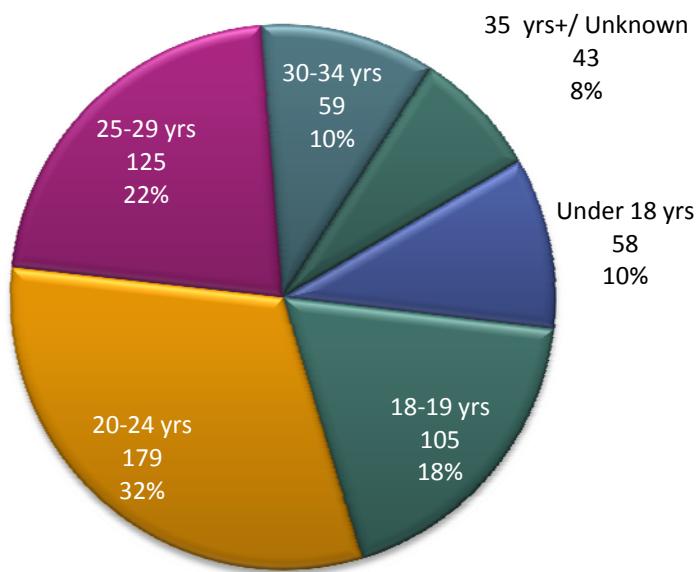


Figure 7.15b Abortions by Age for Native Hawaiian Patients in Hawai‘i: 2009.



ABORTIONS

Table 7.16a | Abortions by Marital Status of Native Hawaiian Patients in Hawai'i: 2000-2009.

Year	Marital Status of Native Hawaiian Patient		
	Unmarried	All Others	Total
2009	486	83	569
2008	544	77	621
2007	659	97	756
2006	723	100	823
2005	707	84	791
2004	624	111	735
2003	607	96	703
2002	635	91	726
2001	633	111	744
2000	581	82	663

Table 7.16b | Abortions by Marital Status of Patients in Hawai'i: 2009.

Race/Ethnicity of Patient	Marital Status		
	Unmarried	All Others	Total
Caucasian	506	137	643
Native Hawaiian	486	83	569
Chinese	115	20	135
Filipino	359	69	428
Japanese	172	38	210
All Others	1,050	307	1,357
Total	2,688	654	3,342

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring. (Honolulu)

Figure 7.16a Abortions by Marital Status of Native Hawaiian Patients in Hawai‘i: 2000-2009.

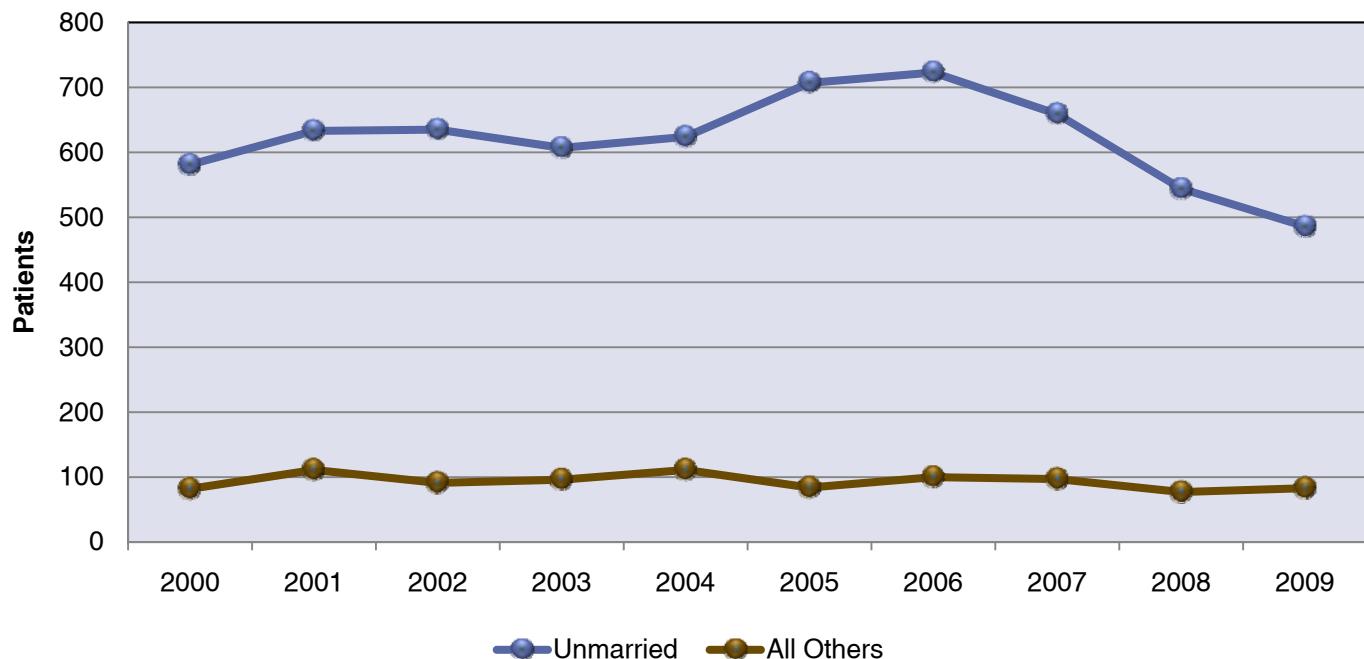
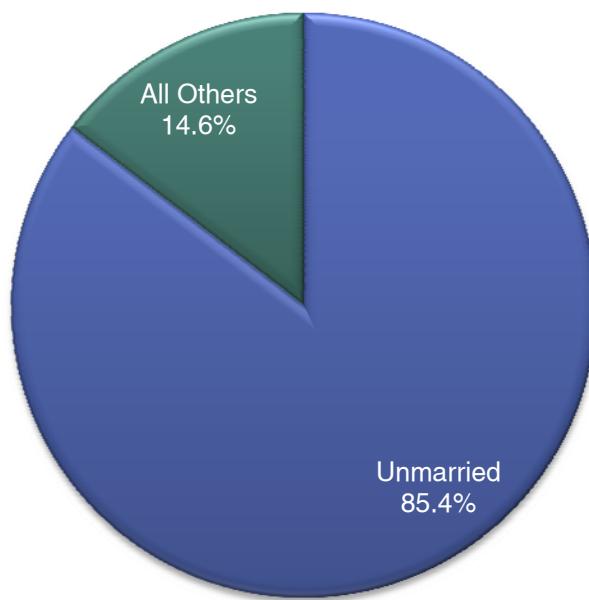


Figure 7.16b Abortions by Marital Status of Native Hawaiian Patients in Hawai‘i: 2009.



PREGNANCY

Table 7.17a | Characteristics of Pregnancies for Native Hawaiian Residents: 2000-2009.

Year	Characteristic for Native Hawaiian Pregnancies						
	Live Births		Fetal Deaths		Abortions		Total Pregnancies
	No.	No.	Ratio *	Rate **	No.	Ratio *	No.
2009	5,369	135	25.1	24.5	567	105.6	6,071
2008	5,370	125	23.3	22.7	612	114.0	6,107
2007	5,283	161	30.5	29.6	749	141.8	6,193
2006	5,176	137	26.5	25.8	815	157.5	6,128
2005	5,070	160	31.6	30.6	789	155.6	6,019
2004	5,029	165	32.8	31.8	731	145.4	5,925
2003	4,875	175	35.9	34.7	700	143.6	5,750
2002	4,744	150	31.6	30.6	733	154.5	5,627
2001	4,616	151	32.7	31.7	738	159.9	5,505
2000	4,707	176	37.4	36.0	664	141.1	5,547

* Ratio per 1,000 Live Births.

** Rate per 1,000 Live Births plus Fetal Deaths.

Table 7.17b | Characteristics of Pregnancies for Hawai'i Residents: 2009.

Race/Ethnicity	Characteristics of Pregnancies						
	Live Births		Fetal Deaths		Abortions		Total Pregnancies
	No.	No.	Ratio *	Rate **	No.	Ratio *	No.
Caucasian	4,403	176	40.0	38.4	633	143.8	5,212
Native Hawaiian	5,369	135	25.1	24.5	567	105.6	6,071
Chinese	654	22	33.6	32.5	134	204.9	810
Filipino	3,344	133	39.8	38.3	423	126.5	3,900
Japanese	1,881	70	37.2	35.9	210	111.6	2,161
All Others	3,192	509	159.5	137.5	1,345	421.4	5,046
Total	18,843	1,045	55.5	52.5	3,312	175.8	23,200

* Ratio per 1,000 Live Births.

** Rate per 1,000 Live Births plus Fetal Deaths.

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring. (Honolulu)

Figure 7.17a Characteristics of Pregnancies for Resident Native Hawaiian Women: 2000-2009

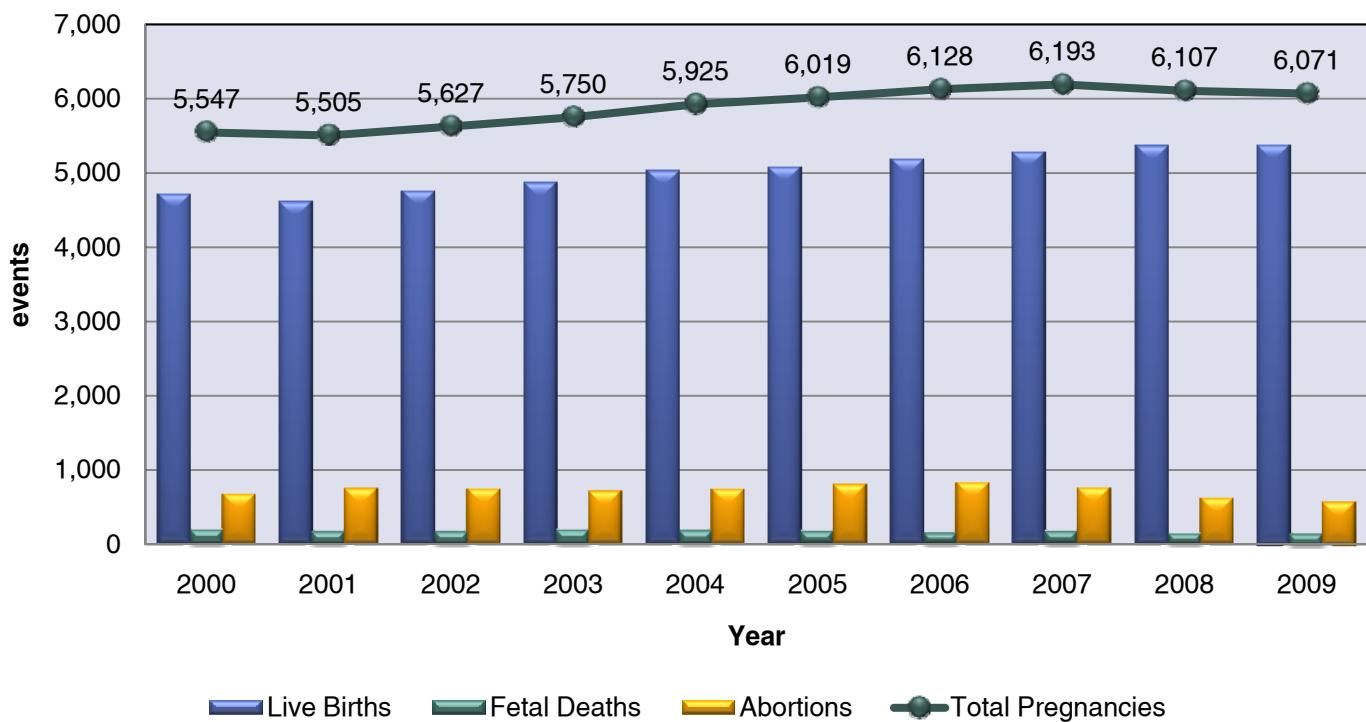
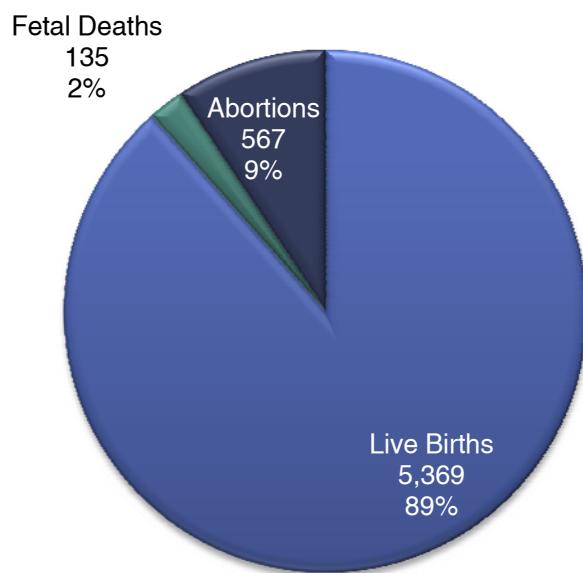


Figure 7.17b Characteristics of Pregnancies for Resident Native Hawaiian Women: 2009



PREGNANCY

Table 7.18

Breastfeeding at Eight Weeks by Mother's Race/Ethnicity in Hawai'i, Aggregate 2004–2008.

Race/Ethnicity	Prevalence (%)
Japanese	84.3
Chinese	83.0
Korean	82.1
White	76.6
All Others	74.7
Filipino	66.9
Native Hawaiian	62.6
Black	59.6
Samoan	54.9

Background:

"Breast milk is the most complete form of nutrition for infants, and offers a range of benefits for infant including prevention of childhood illnesses such as obesity and ear infections. Breastfeeding mothers report fewer sick visits and improved work productivity for mothers and society. The U.S. Healthy People 2010 objective is to increase the initiation of breastfeeding in the early postpartum period to 75% of newborns and to improve breastfeeding rates to 50% of infants at age 6 months and 25% at 1 year."

PRAMS Definition:

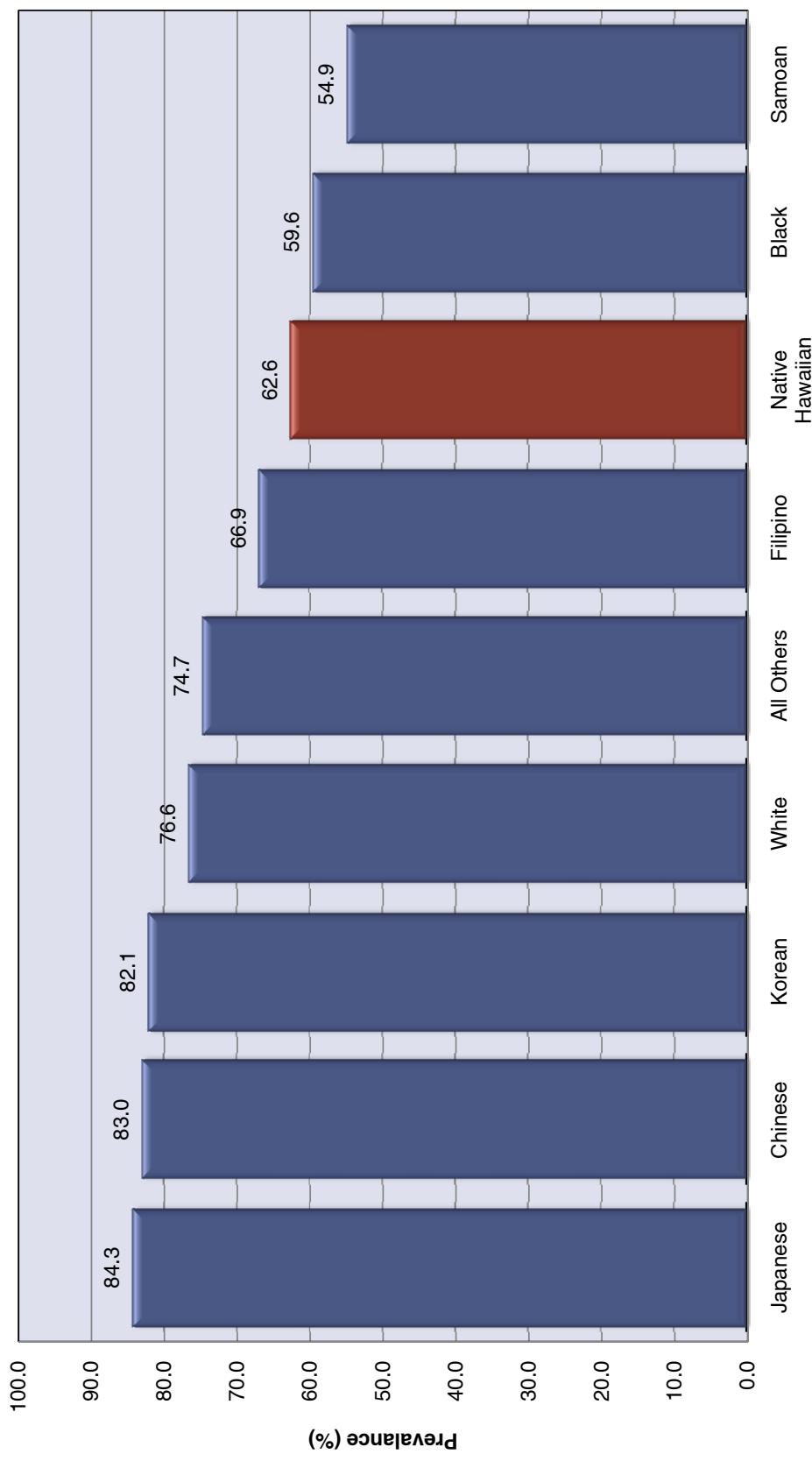
"Self-reported measures of timing of breastfeeding for at least 8 weeks was calculated. In women who reported no longer breastfeeding on the survey, the time that women reported stopping was used. Among mothers that were still breastfeeding at time the survey was completed, the number of weeks at that point was used. This measure did not include the degree of exclusive breastfeeding."

Differences Related to Maternal Race:

"Samoan, Hawaiian, Black, and Filipino mothers reported the lowest estimates of breastfeeding at least 8 weeks."

Source: Hawai'i State, Department of Health, Hawai'i Pregnancy Risk Assessment Monitoring System (PRAMS). (Honolulu)

Figure 7.18 Breastfeeding at Eight Weeks by Mother's Race/Ethnicity in Hawai'i, Aggregate 2004-2008.



Source: Hawai'i State, Department of Health, Pregnancy Risk Assessment Monitoring System. (Honolulu).



PREGNANCY

Table 7.19 Cesarean Deliveries by Mother's Race/Ethnicity in Hawai'i, Aggregate 2004-2008.

Race/Ethnicity	Prevalence (%)
Korean	29.4
Filipino	28.5
All Others	27.0
White	26.5
Japanese	26.2
Native Hawaiian	24.1
Chinese	22.4
Black	21.1
Samoan	17.6

Background:

"Cesarean delivery is the most common surgical procedure done in the United States and results in higher costs, longer hospitalization, and increased risks of short and long term morbidity compared to a normal vaginal delivery. The decision to have a cesarean delivery is complex and is made in consultation between the medical provider, the pregnant women, and her family. The decision to have a cesarean delivery considers specific indications including medical risks, complications during labor, previous pregnancy outcomes, and other factors that could impact the health of both the mother and her infant."

PRAMS Definition:

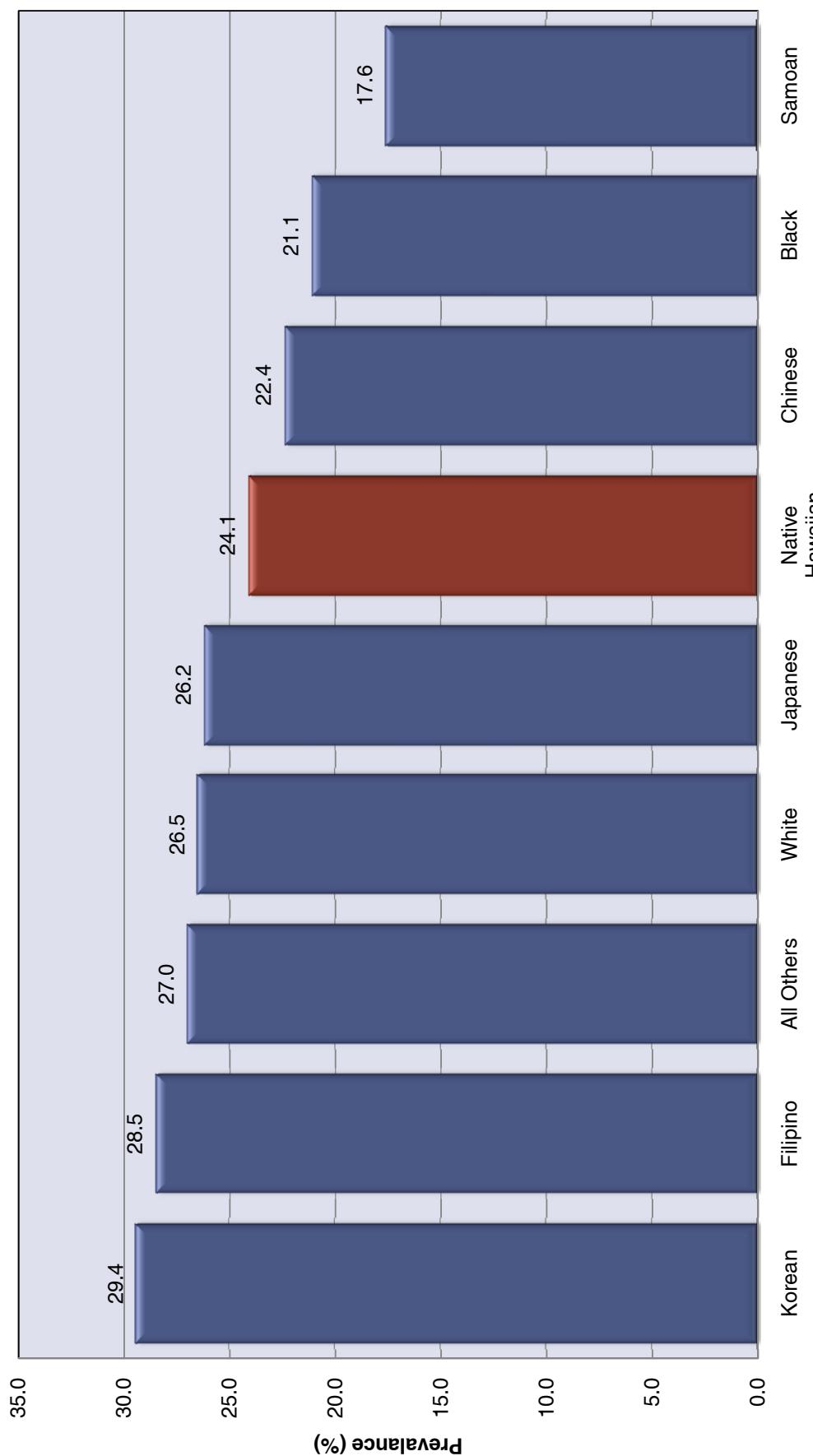
"A Cesarean delivery was defined from the birth certificate variable listing the occurrence of a repeat or primary cesarean delivery, with consideration that all other births are considered a vaginal delivery."

Differences Related to Maternal Race:

"Filipino, Korean, Japanese, and those in the 'All Others' group had the highest estimates of cesarean delivery. Samoan, Chinese, Black, and Hawaiian mothers had lower estimates of cesarean delivery."

Source: Hawai'i State, Department of Health, Hawai'i Pregnancy Risk Assessment Monitoring System (PRAMS). (Honolulu)

Figure 7.19 Cesarean Deliveries by Mother's Race/Ethnicity in Hawai'i, Aggregate 2004-2008.



Source: Hawai'i State, Department of Health, Pregnancy Risk Assessment Monitoring System. (Honolulu).



PREGNANCY

Table 7.20

**Postpartum Contraception by Mother's Race/Ethnicity
in Hawai'i, Aggregate 2004-2008.**

Race/Ethnicity	Prevalence (%)
Black	82.0
White	81.6
Native Hawaiian	79.4
Filipino	78.6
All Others	75.7
Japanese	75.6
Chinese	75.6
Korean	68.9
Samoan	65.2

Background:

“Sufficient spacing of births helps to promote optimal maternal and infant health outcomes. Effective use of contraception in the inter-conception period can promote birth spacing and help families address the challenges and experience the satisfaction in raising a new infant. Common reasons reported for not using postpartum contraception in PRAMS are not having sex, not wanting to use birth control, and other reasons (e.g. absent partner, breastfeeding, ambivalence).”

PRAMS Definition:

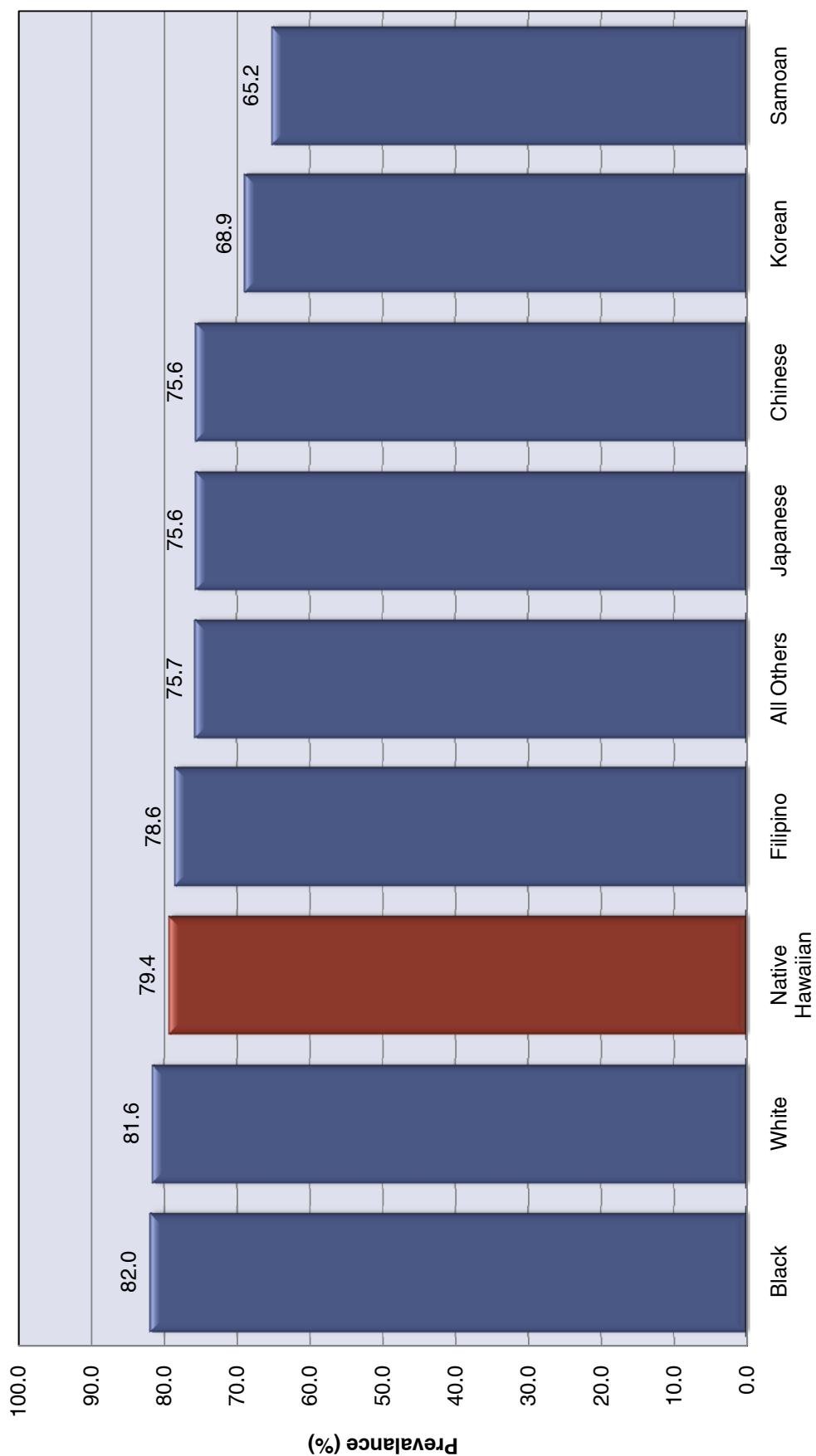
“Postpartum contraception was assessed among the response to the question ‘are you or your husband doing anything now to keep from getting pregnant?’ Accompanying text in the question included not having sex at certain times, withdrawal, using birth control methods such as pills, condoms, cervical ring, intrauterine device, having their tubes tied, or their partner having a vasectomy.”

Differences Related to Maternal Race:

“The highest estimates were seen in Black, White, and Hawaiian mothers.”

Source: Hawai'i State, Department of Health, Hawai'i Pregnancy Risk Assessment Monitoring System (PRAMS). (Honolulu)

Figure 7.20 Postpartum Contraception by Mother's Race/Ethnicity in Hawai‘i, Aggregate 2004-2008.



Source: Hawai‘i State, Department of Health, Pregnancy Risk Assessment Monitoring System. (Honolulu).



PREGNANCY

Table 7.21

Dental Visit During Pregnancy by Mother's Race/Ethnicity in Hawai'i, Aggregate 2004–2008.

Race/Ethnicity	Prevalance (%)
Japanese	49.6
Chinese	48.7
White	45.6
Korean	43.8
Black	40.5
Filipino	35.0
Native Hawaiian	33.6
All Others	32.8
Samoan	27.3

Background:

"Oral health is an essential and integral component of health throughout life and is associated with increased health care costs, decreased productivity, increased absenteeism, and can result in significant illness, disease, and even death. Regular dental visits provide an opportunity for early diagnosis, prevention, and treatment of oral and associated disease among persons of all ages. Pregnancy is an important time to visit the dentist for continuity of regular professional care and due to the potential increase of adverse birth outcomes associated with poor oral health."

PRAMS Definition:

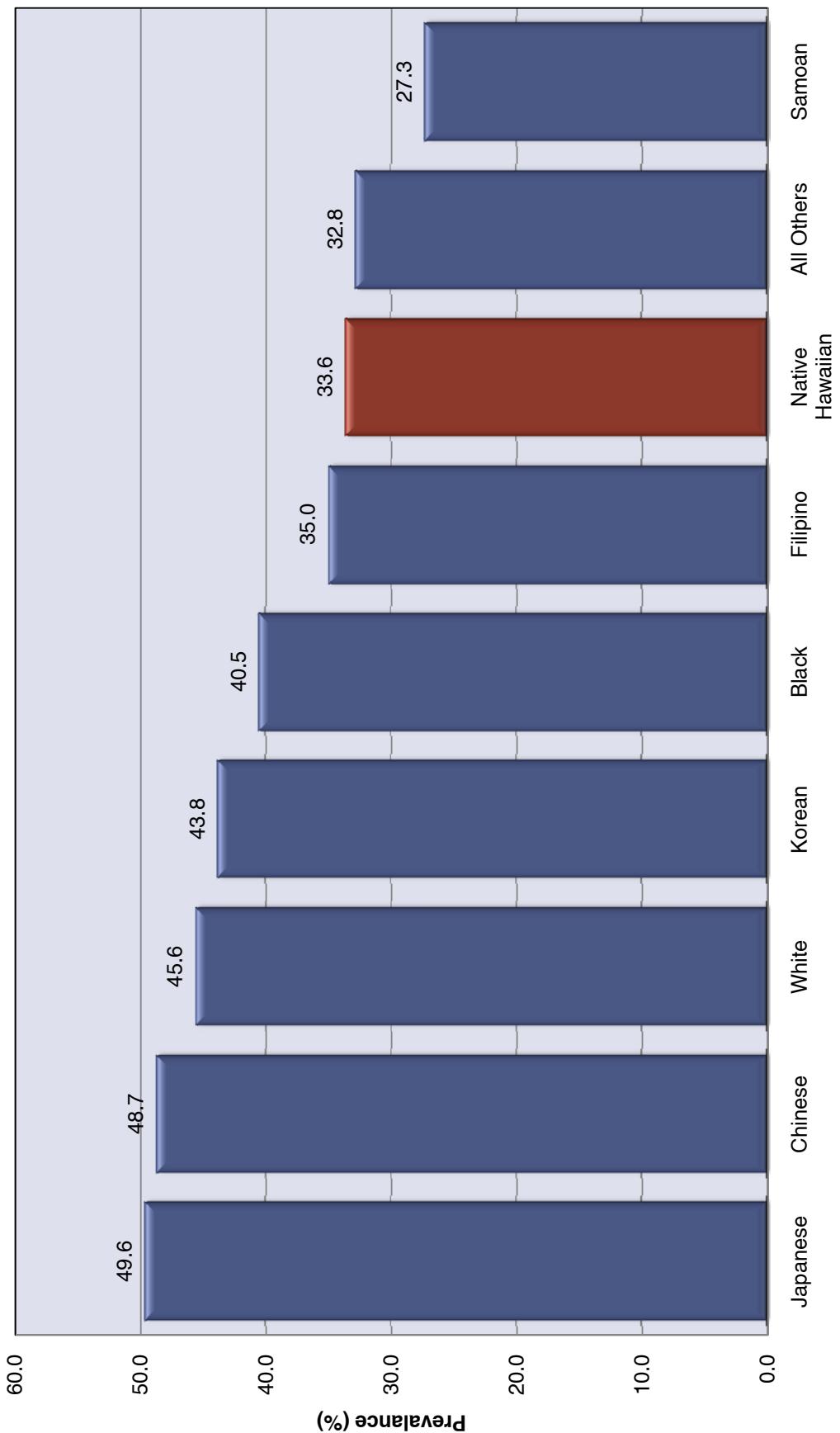
"This measure of utilization of oral health services was based on a self-reported visit to a dentist or dental clinic during pregnancy."

Differences Related to Maternal Race:

"Samoan, Hawaiian, Filipino, and those in the 'All Others' reported the lowest estimates of dental visits during pregnancy."

Source: Hawai'i State, Department of Health, Hawai'i Pregnancy Risk Assessment Monitoring System (PRAMS). (Honolulu)

Figure 7.21 Dental Visit During Pregnancy by Mother's Race/Ethnicity in Hawai‘i, Aggregate 2004-2008.



Source: Hawai‘i State, Department of Health, Pregnancy Risk Assessment Monitoring System. (Honolulu).



PREGNANCY

Table 7.22

Postpartum Depression by Mother's Race/ Ethnicity in Hawai'i, Aggregate 2004-2008.

Race/Ethnicity	Prevalance (%)
All Others	18.0
Samoan	17.9
Native Hawaiian	17.2
Filipino	16.2
Korean	16.1
Black	13.5
Chinese	12.6
Japanese	12.2
White	9.0

Background:

"Pregnancy and childbirth can be a very rewarding and exciting time, but it can also be a period of severe emotional stress. Postpartum depression can be disabling for the mother and limit her ability to care for her new infant resulting in increased use of health care services and more hospitalizations. Women with postpartum depression are less likely to do basic preventive services such as putting the infant to sleep on the back, attending well child visits, and keeping up to date on immunization coverage. In severe cases of postpartum depression, women may harm themselves, their infants, and others."

PRAMS Definition:

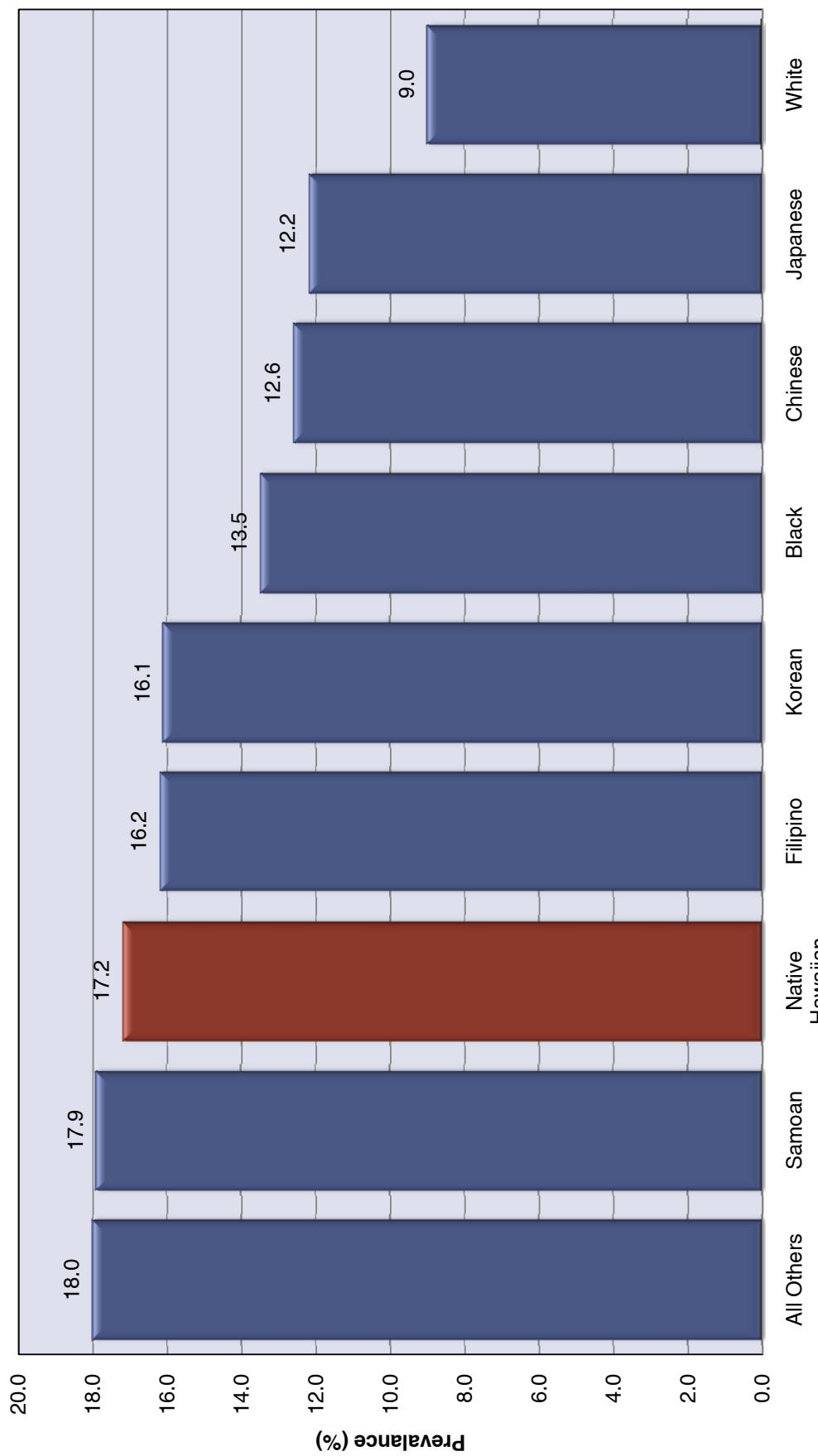
"Self-Reported Postpartum Depressive Symptoms was defined by a response of 'always' or 'often' to 'how often have you felt down, depressed, or hopeless?' or 'how often have you had little interest or little pleasure in doing things' since your new baby was born. These questions were not asked in Hawai'i PRAMS prior to 2004 so this report only includes data from 2004 to 2008."

Differences Related to Maternal Race:

"Filipino, Samoan, Hawaiian, Korean, and those in the 'All Others' group have the highest estimates of self-reported postpartum depressive symptoms."

Source: Hawai'i State, Department of Health, Hawai'i Pregnancy Risk Assessment Monitoring System (PRAMS). (Honolulu)

Figure 7.22 Postpartum Depression by Mother's Race/Ethnicity in Hawai‘i, Aggregate 2004-2008.



Source: Hawai‘i State, Department of Health, Pregnancy Risk Assessment Monitoring System. (Honolulu).



PREGNANCY

Table 7.23

Binge Drinking Prior to Pregnancy by Mother's Race/ Ethnicity in Hawai'i, Aggregate 2004-2008.

Race/Ethnicity	Prevalence (%)
Native Hawaiian	24.1
White	23.7
Samoan	20.9
Korean	18.7
Japanese	15.8
All Others	13.6
Black	12.9
Filipino	12.1
Chinese	7.5

Background:

"Any consumption of alcohol at any time during pregnancy is considered unsafe to the developing fetus. Research has determined that binge drinking during early pregnancy is especially deleterious for the fetus. Binge drinking before pregnancy may overlap with the critical exposure period for birth defects including those related to alcohol in the first trimester. Binge drinking may also be related to having an unintended pregnancy and the consequent impact on the mother, families, and society."

PRAMS Definition:

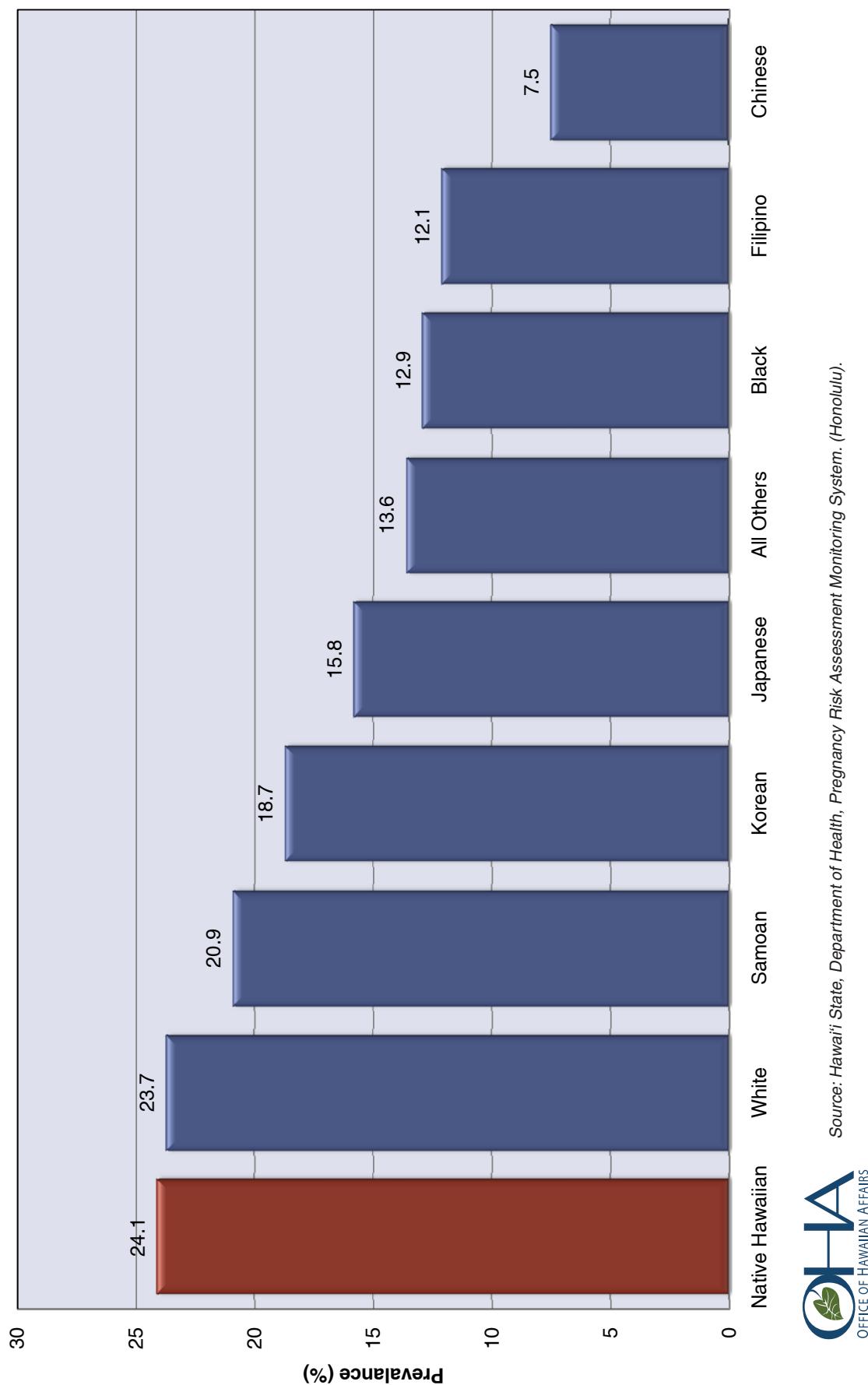
"Binge drinking was defined by the reported intake of 5 or more drinks in one sitting at least once in the 3 months before becoming pregnant. The question changed significantly in the survey in 2004 so this report only includes data from 2004 to 2008."

Differences Related to Maternal Race:

"Nearly a quarter of Hawaiian, White, and Samoan mothers, reported binge drinking in the 3 months prior to pregnancy."

Source: Hawai'i State, Department of Health, Hawai'i Pregnancy Risk Assessment Monitoring System (PRAMS). (Honolulu)

**Figure 7.23 Binge Drinking Prior to Pregnancy by Mother's Race/Ethnicity in Hawai'i,
Aggregate 2004-2008.**



PREGNANCY

Table 7.24

Drug Use During by Mother's Race/ Ethnicity Pregnancy in Hawai'i, Aggregate 2004–2008.

Race/Ethnicity	Prevalence (%)
Black	6.8
Native Hawaiian	3.9
White	2.7
All Others	2.4
Korean	2.3
Japanese	2.1
Samoan	1.5
Filipino	1.3
Chinese	1.1

Background:

"The use of drugs during pregnancy can have significant impacts on the developing fetus and cause adverse birth outcomes including prematurity, low birth weight, birth defects, and developmental delays. Those that use drugs often have other conditions and factors that may place their infant and families at increased risks for poor outcomes. Drug use is often under reported due to societal perceptions and this is likely even greater among women who are pregnant. The U.S. Healthy People 2010 objective is to abstain from drugs during pregnancy. Illicit drug use is often under-reported due to societal concerns and this under-reporting is likely even greater among women while they are pregnant."

PRAMS Definition:

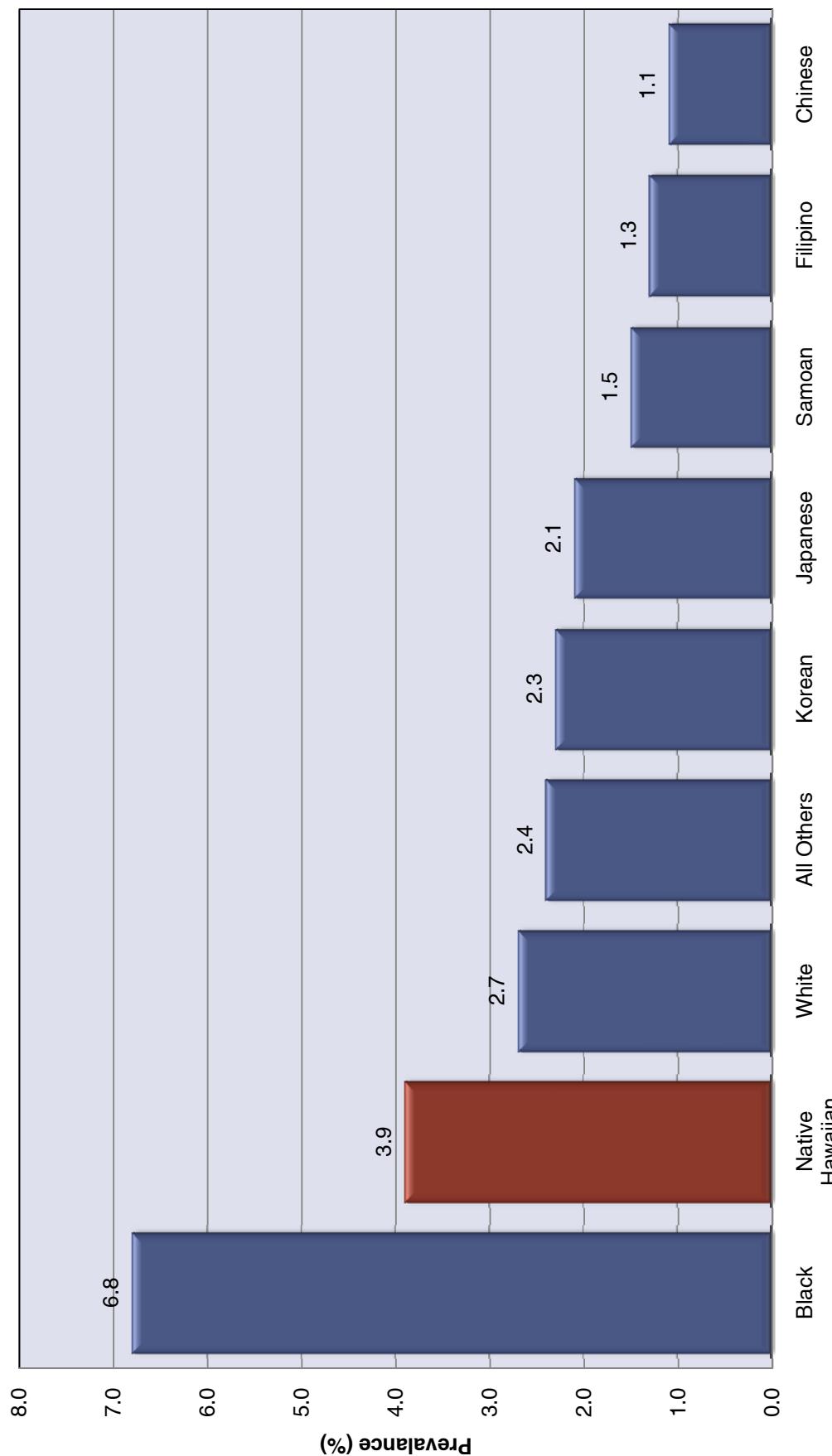
"Drug use during pregnancy was defined by the report of using 'marijuana,' 'amphetamines,' 'cocaine,' 'tranquilizers or hallucinogens,' or 'sniffing products such as gasoline, glue, hairspray, or other aerosols' at least one time during the pregnancy."

Differences Related to Maternal Race:

"Black and Hawaiian mothers reported the highest estimates of drug use during pregnancy."

Source: Hawai'i State, Department of Health, Hawai'i Pregnancy Risk Assessment Monitoring System (PRAMS). (Honolulu)

**Figure 7.24 Drug Use During by Mother's Race/Ethnicity Pregnancy in Hawai‘i, Aggregate
2004-2008.**



Source: Hawai‘i State, Department of Health, Pregnancy Risk Assessment Monitoring System. (Honolulu).



PREGNANCY

Table 7.25 | Infant Exposure to Secondhand Smoke in Hawai'i, Aggregate 2004-2008.

Race/Ethnicity	Prevalence (%)
Korean	4.8
Native Hawaiian	4.7
Japanese	4.1
Black	3.1
Chinese	3.0
Samoan	2.9
Filipino	2.9
All Others	2.4
White	2.0

Background:

"Exposure to secondhand smoke increases the risk of childhood respiratory illnesses, ear infections, and sudden infant death. Exposure to secondhand smoke could come from being in the same room as a smoker including the parents, other family members, and caregivers. There is also concern related to contact with someone who has a residual amount of smoke on the clothes that they were wearing while smoking elsewhere. Although more than half of smokers quit by the last three months of pregnancy, only a third remained smoke free in the postpartum period when infants can suffer respiratory afflictions and other health problems related to secondhand smoke exposure."

PRAMS Definition:

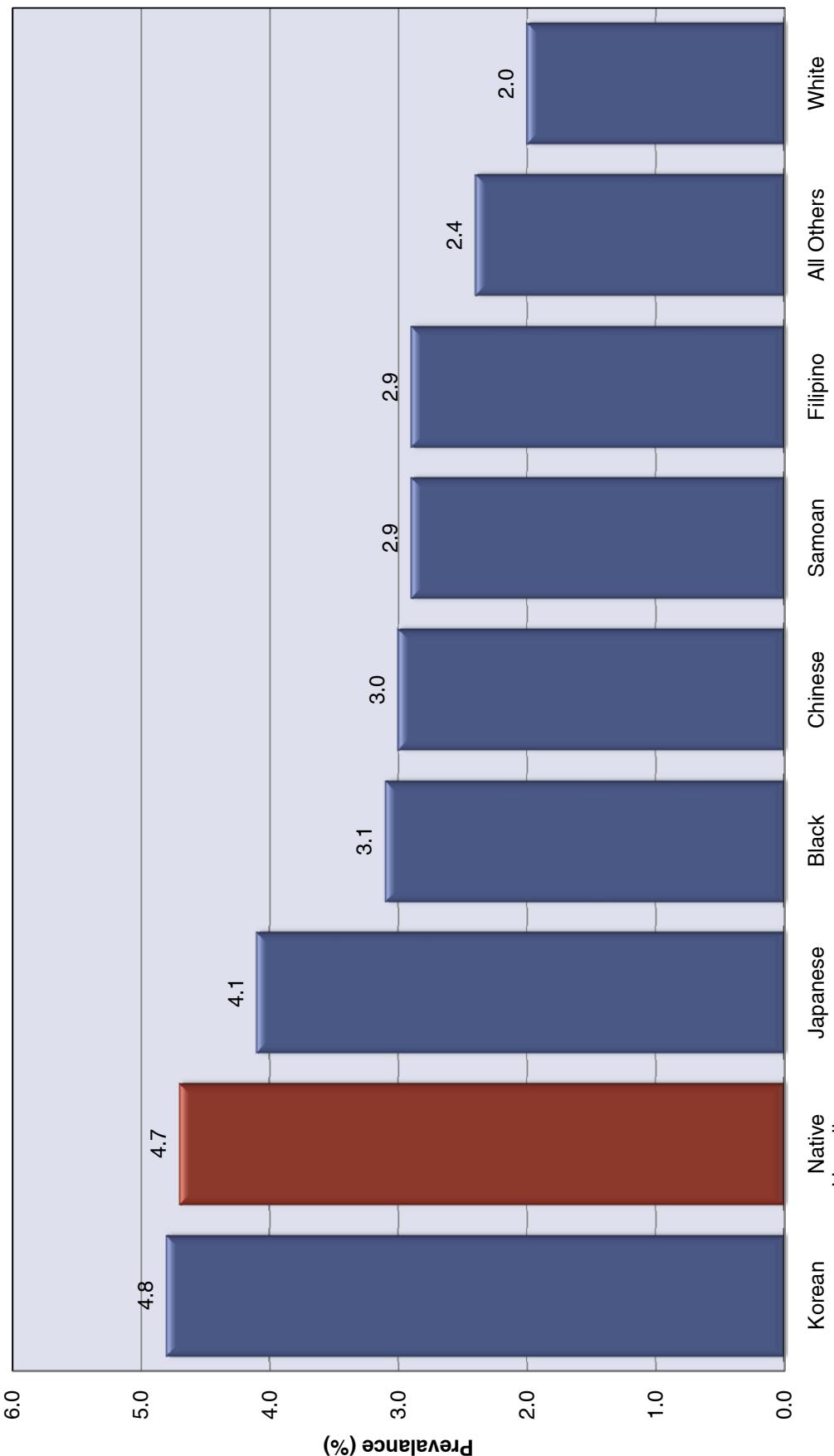
"Infant exposure to smoke was determined by the self-report of the infant being present in the same room with someone who is smoking for at least one hour on an average day. This definition does not include those who have family members or care givers who closely handle an infant after smoking in a different area."

Differences Related to Maternal Race:

"Hawaiian, Korean, and Japanese mothers reported high estimates of infant exposure to smoke."

Source: Hawai'i State, Department of Health, Hawai'i Pregnancy Risk Assessment Monitoring System (PRAMS). (Honolulu)

Figure 7.25 Infant Exposure to Secondhand Smoke in Hawai‘i, Aggregate 2004-2008.



Source: Hawai‘i State, Department of Health, Pregnancy Risk Assessment Monitoring System. (Honolulu).



PREGNANCY

Table 7.26 Preconception Obesity by Mother's Race/Ethnicity in Hawai'i, Aggregate 2004-2008.

Race/Ethnicity	Prevalence (%)
Samoan	50.2
Native Hawaiian	23.3
All Others	17.9
Black	16.5
White	11.4
Filipino	10.1
Japanese	9.1
Korean	6.2
Chinese	5.4

Background:

"Obesity is associated with multiple health consequences including the leading causes of death such as coronary heart disease, stroke, cancers of the breast and colon, and type 2 diabetes. Additionally, obesity is associated with poor female reproductive health and pre-pregnancy obesity has been found to be an independent risk factor for adverse pregnancy and neonatal outcomes. Pregnancy complications associated with obesity include gestational diabetes, gestational hypertension, pre-eclampsia, and cesarean delivery."

PRAMS Definition:

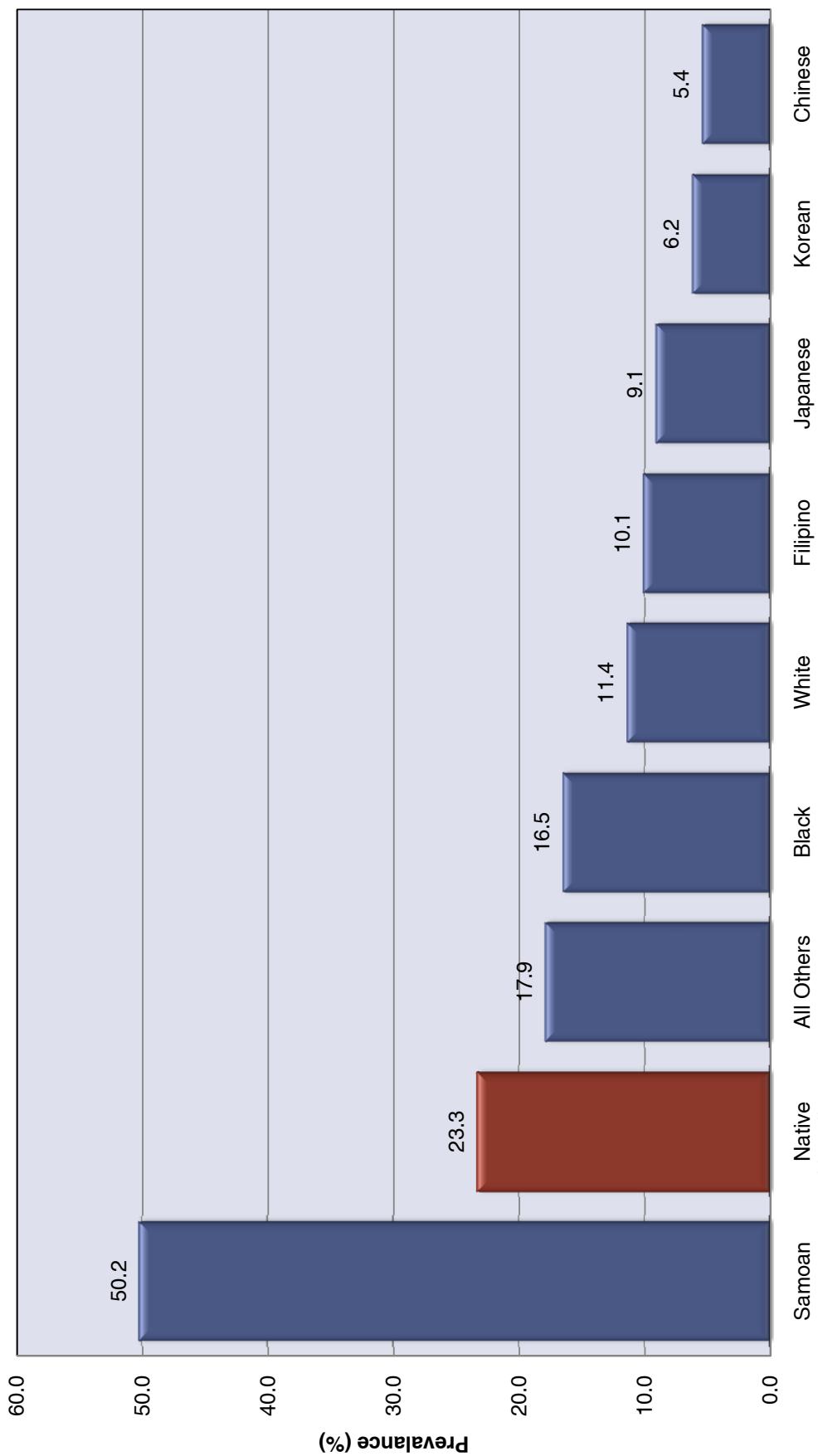
"Self-reported height and weight prior to pregnancy was used to calculate a body mass index (weight in kilograms divided by the height in meters squared). A level of 30.0 or higher was considered preconception obesity. Since these are based on self-reported information several months after the pregnancy about her weight before the pregnancy, these estimates may be somewhat underestimated."

Differences Related to Maternal Race:

"Half of Samoan and nearly a quarter of Hawaiian mothers had preconception obesity."

Source: Hawai'i State, Department of Health, Pregnancy Risk Assessment Monitoring System. (Honolulu)

Figure 7.26 Preconception Obesity by Mother's Race/Ethnicity in Hawai‘i, Aggregate 2004-2008.



Source: Hawai‘i State, Department of Health, Pregnancy Risk Assessment Monitoring System. (Honolulu).



PREGNANCY

Table 7.27 | Infant Back Sleep Position in Hawai'i, Aggregate 2004-2008.

Race/Ethnicity	Prevalence (%)
Japanese	80.6
Chinese	79.5
White	75.6
Korean	75.6
Filipino	70.6
All Others	64.0
Native Hawaiian	61.5
Samoan	53.8
Black	51.2

Background:

"Sudden Infant Death Syndrome (SIDS), the sudden, unexplained death of an infant under 1 year of age, is the leading cause of post-neonatal mortality (death between 1 month and 1 year of age). Putting infants to sleep on their back, can decrease the risks for sudden infant death syndrome (SIDS). This is because infants are more likely to suffocate when placed on their stomach or side to sleep. The 'Back to Sleep' public health campaign in the United States dramatically improved back sleep position from 13% in 1992 to 67% in 1999 with a corresponding 50% decline in SIDS. The U.S. Healthy People 2010 goal is to increase the proportion of infants placed on their backs to sleep to 70%."

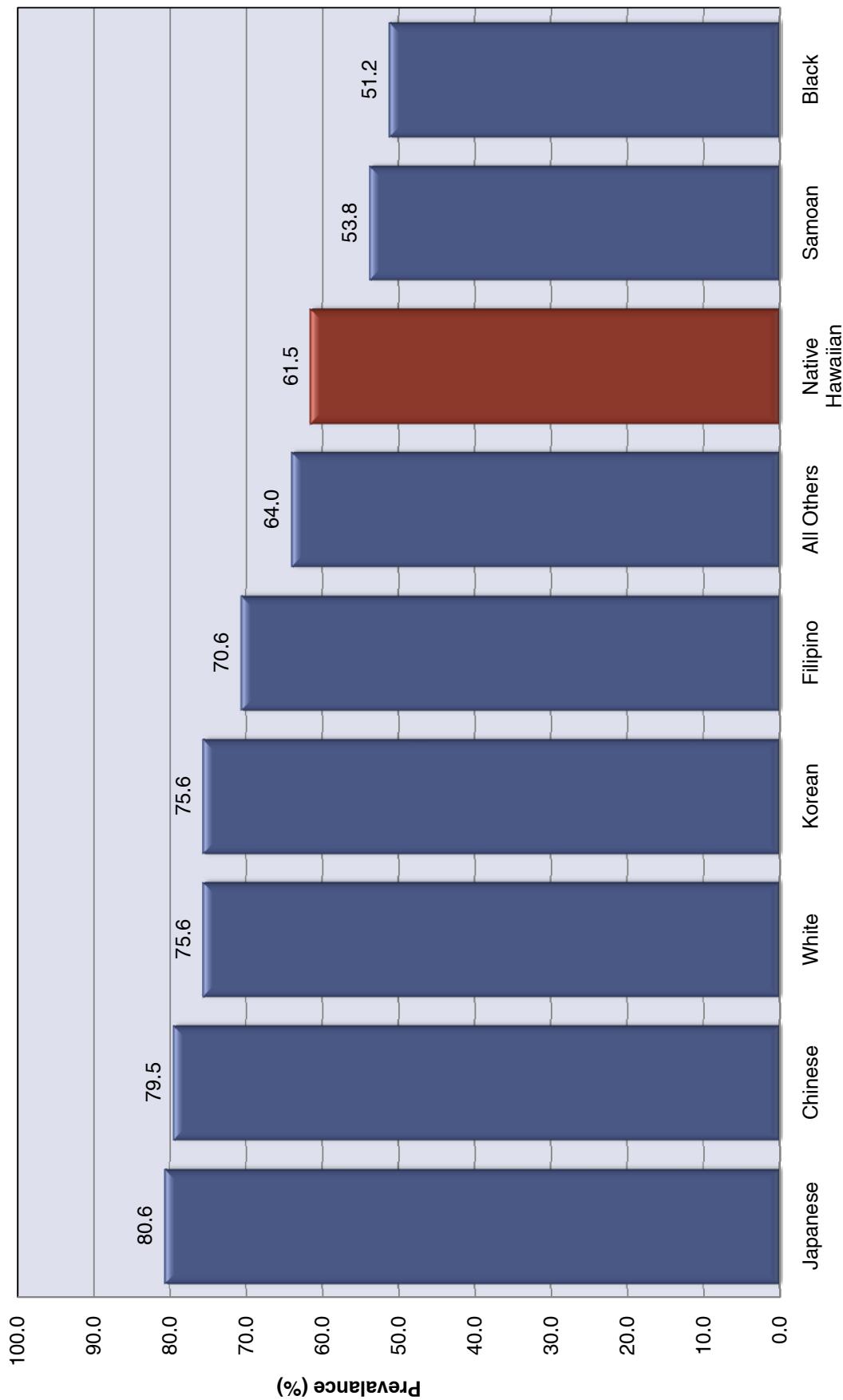
PRAMS Definition:

"Back sleep positioning was determined from the self-reported measure of 'how do you most often lay your baby down to sleep,' was categorized as back only compared to all other positions or combinations."

Differences Related to Maternal Race:

"Samoan, Black, Hawaiian mothers, and those in the 'All Others' group reported the lowest estimates of back sleep position."

Source: Hawai'i State, Department of Health, Hawai'i Pregnancy Risk Assessment Monitoring System (PRAMS). (Honolulu)

Figure 7.27 Infant Back Sleep Position in Hawai‘i, Aggregate 2004-2008.

Source: Hawai‘i State, Department of Health, Pregnancy Risk Assessment Monitoring System. (Honolulu).



PREGNANCY

Table 7.28

Smoking During Pregnancy by Mother's Race/ Ethnicity in Hawai'i, Aggregate 2004-2008.

Race/Ethnicity	Prevalence (%)
Samoan	16.1
Native Hawaiian	13.9
White	7.4
Korean	7.4
Japanese	7.0
All Others	6.2
Black	5.4
Filipino	4.8
Chinese	1.8

Background:

“Smoking is one of the most preventable causes of neonatal morbidity and mental retardation in developed countries. Research has determined that smoking during pregnancy is associated with premature delivery, low birth weight, and other adverse perinatal outcomes. In Hawai'i, there has been significant legislation to create smoke-free work places and restaurants, and increase taxation in an effort to reduce the overall rate of smoking. The U.S. Healthy People 2010 Objective is for women to abstain from smoking during pregnancy. Smoking is often underreported due to societal concerns and this under-reporting is likely even greater among women while they are pregnant.”

PRAMS Definition:

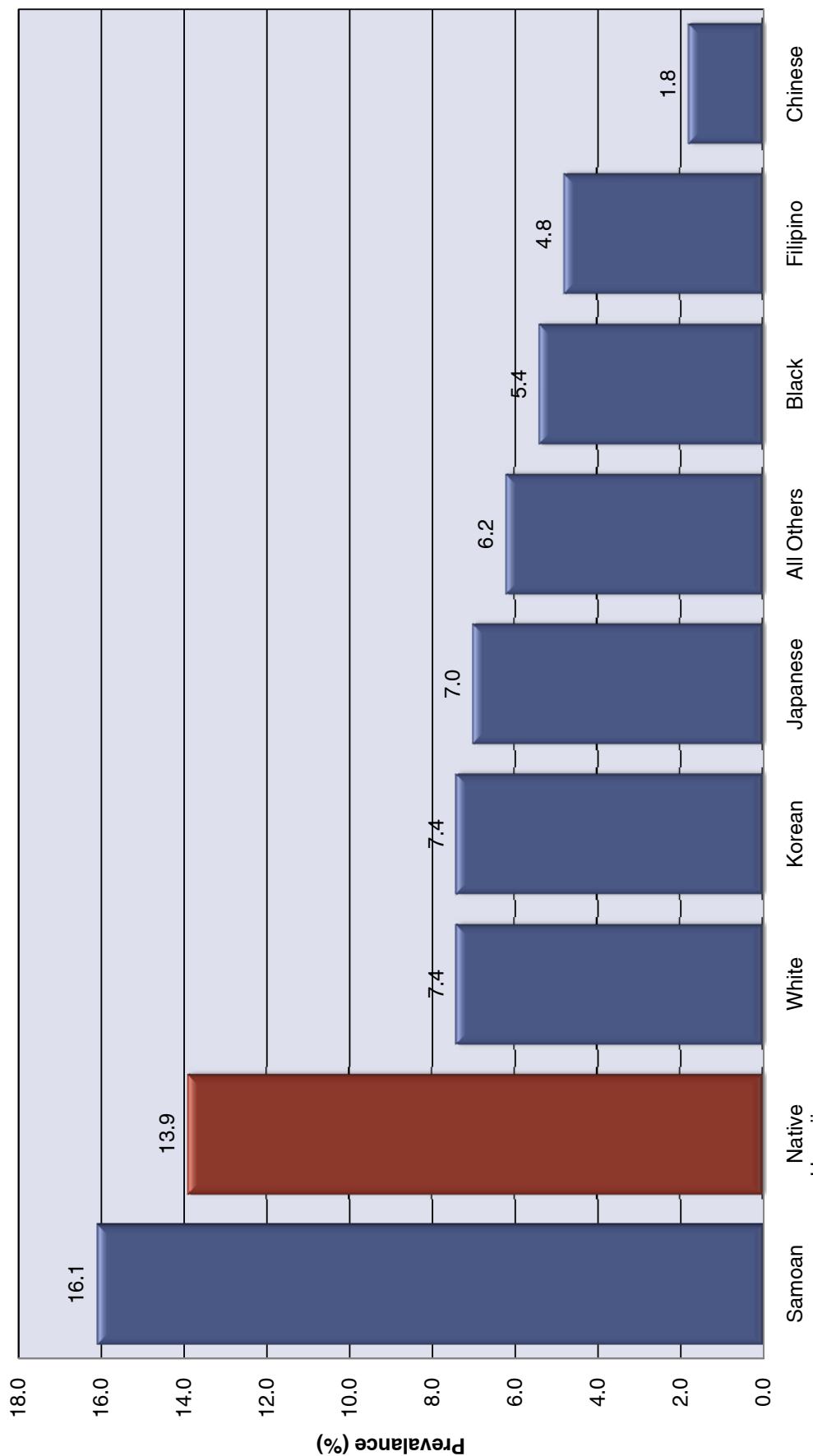
“Smoking during pregnancy was defined by the report of smoking at least one cigarette per day in the last 3 months of the pregnancy.”

Differences Related to Maternal Race:

“Samoan and Hawaiian mothers reported the highest estimates of smoking during the last 3 months of pregnancy.”

Source: Hawai'i State, Department of Health, Pregnancy Risk Assessment Monitoring System. (Honolulu)

Figure 7.28 Smoking During Pregnancy by Mother's Race/Ethnicity in Hawai'i, Aggregate 2004-2008.



Source: Hawai'i State, Department of Health, Pregnancy Risk Assessment Monitoring System. (Honolulu).



PREGNANCY

Table 7.29 Stressful Life Events by Mother's Race/Ethnicity in Hawai'i, Aggregate 2004-2008.

Race/Ethnicity	Prevalence (%)
Samoan	24.5
Native Hawaiian	22.8
Black	17.4
All Others	15.5
White	12.5
Filipino	9.7
Japanese	7.7
Korean	7.6
Chinese	4.2

Background:

"Experiencing stressful life events can affect a woman's health and result in poor health practices as a way to alleviate the stress. Poor health practices such as smoking, drinking, poor diet, lack of exercise, unsafe sexual activity, and poor hygienic practices, can adversely affect an unborn child. In addition, there are several theories that stress may be biologically linked with prematurity and other adverse outcomes."

PRAMS Definition:

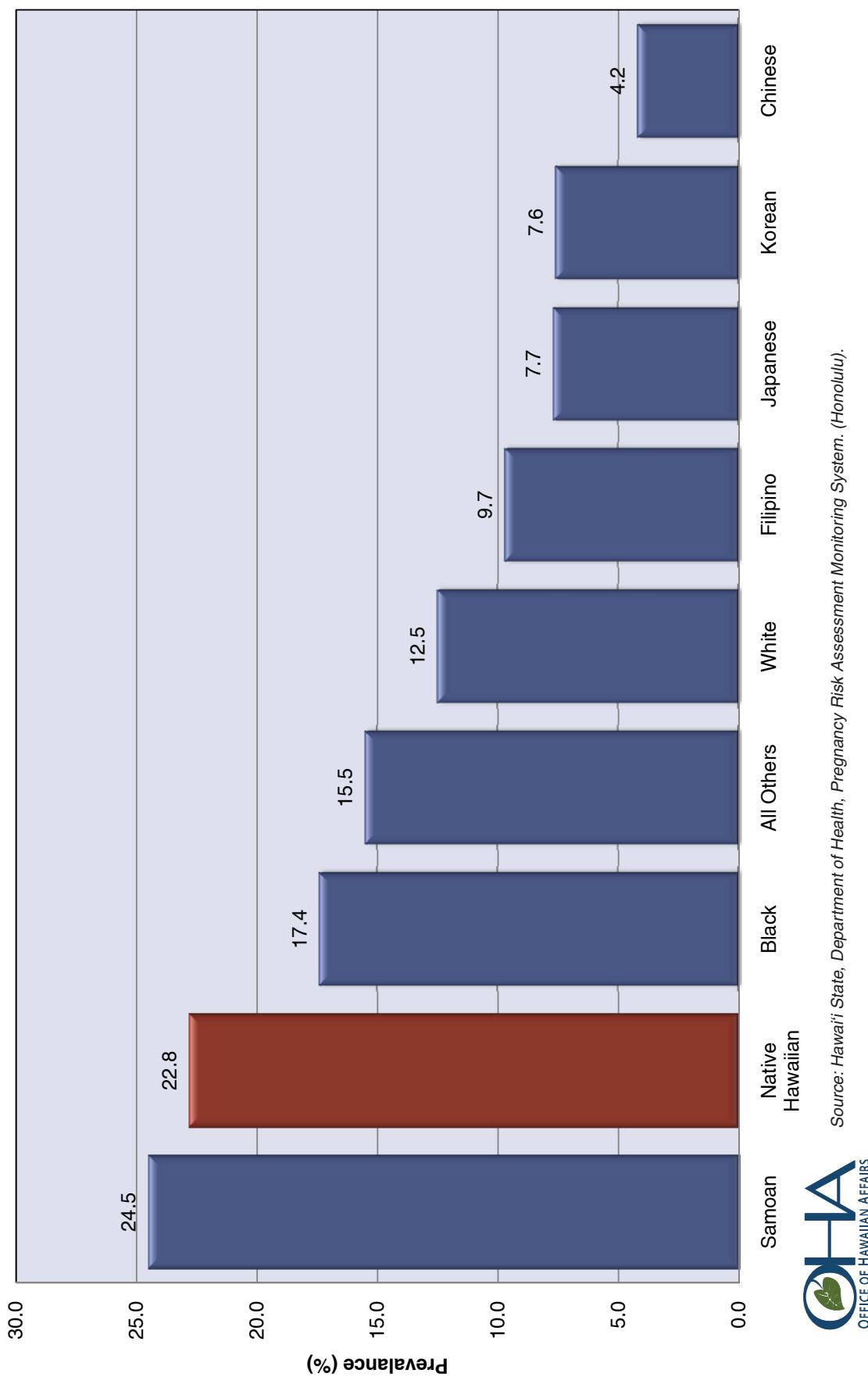
"Stressful life events was defined by the occurrence of at least 4 of the following self reported situations during the 12 months before the baby was born: 'close family member hospitalized,' 'separation/divorce,' 'moved to a new address,' 'was homeless,' 'husband/partner/mother lost job,' 'argued with partner/ husband more than usual,' 'husband/partner said he did not want me to be pregnant,' 'couldn't pay bills,' 'was in a physical fight,' 'partner/ husband went to jail,' 'someone close had bad problem with drinking or drugs,' or 'someone very close died.'"

Differences Related to Maternal Race:

"Samoan and Hawaiian mothers reported the highest estimates of stressful life events"

Source: Hawai'i State, Department of Health, Pregnancy Risk Assessment Monitoring System. (Honolulu)

Figure 7.29 Stressful Life Events by Mother's Race/Ethnicity in Hawai'i, Aggregate 2004-2008.



Source: Hawai'i State, Department of Health, Pregnancy Risk Assessment Monitoring System. (Honolulu).



PREGNANCY

Table 7.30

First Trimester Prenatal Care by Mother's Race/ Ethnicity in Hawai'i, Aggregate 2004–2008.

Race/Ethnicity	Prevalence (%)
Japanese	89.8
Chinese	88.4
White	87.6
Korean	85.0
Filipino	84.4
Black	83.7
Native Hawaiian	78.7
All Others	68.7
Samoan	67.9

Background:

"Early identification of maternal disease and risks for complications of pregnancy or birth are the primary reasons for first trimester entry into prenatal care. This can help ensure that women with complex problems and women with chronic illness or other risks are seen by specialists if required. Early high quality prenatal care is critical to improving pregnancy outcomes. The U.S. Healthy People 2010 Objective is to increase the proportion of pregnant women who receive prenatal care in the first trimester of pregnancy to 90%."

PRAMS Definition:

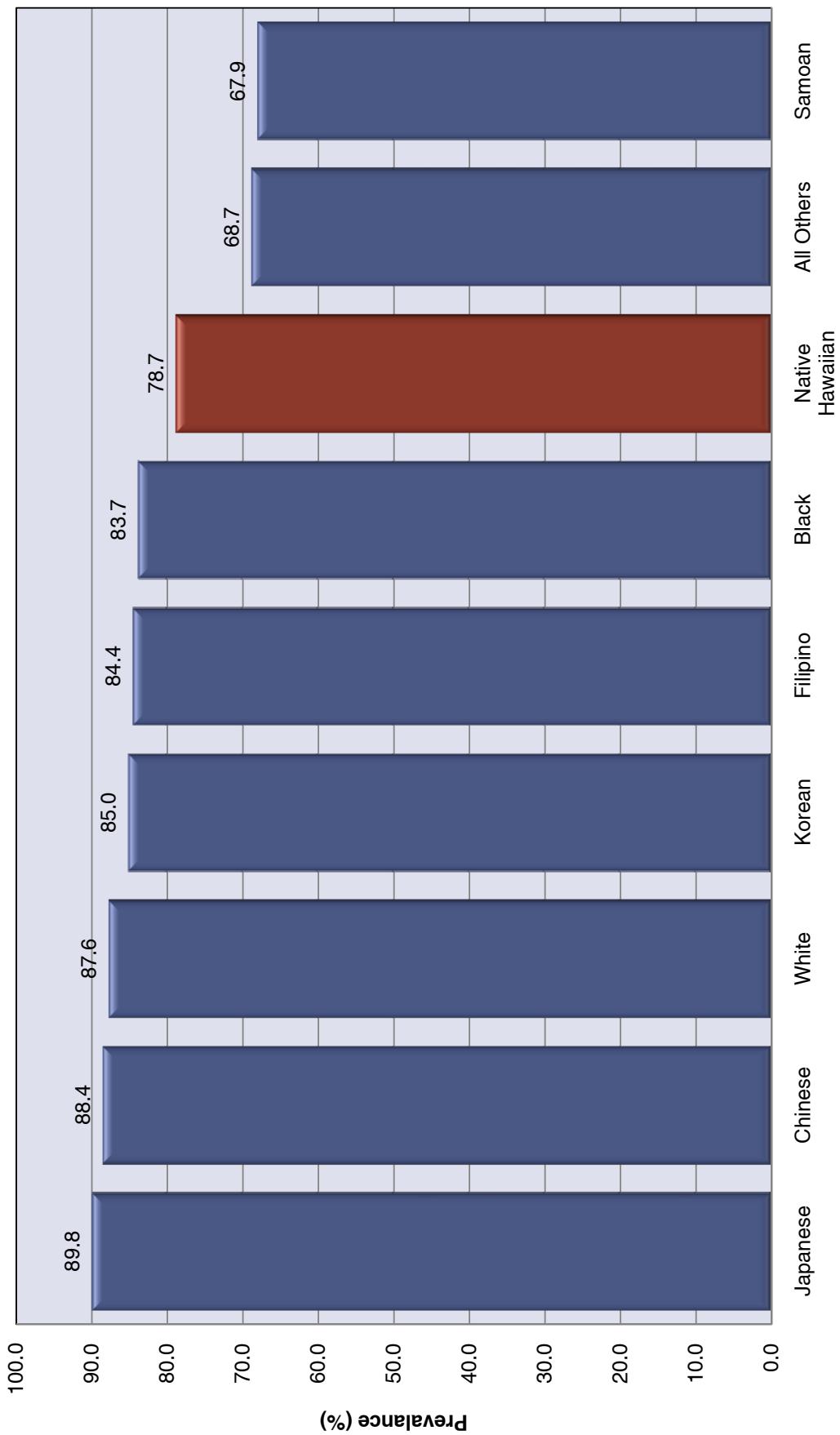
"First trimester prenatal care was defined by the birth certificate variable for the month that prenatal care began within the first three months. If the response was missing from the birth certificate, the PRAMS variable for number of weeks (<13) or months (<3) that they reported as their first prenatal care visit was used."

Differences Related to Maternal Race:

"Samoan, Hawaiian, and those reporting 'All Others' race reported the lowest estimates of first trimester prenatal care."

Source: Hawai'i State, Department of Health, Hawai'i Pregnancy Risk Assessment Monitoring System (PRAMS). (Honolulu)

Figure 7.30 First Trimester Prenatal Care by Mother's Race/Ethnicity in Hawai'i, Aggregate 2004-2008.



Source: Hawai'i State, Department of Health, Pregnancy Risk Assessment Monitoring System. (Honolulu).



PREGNANCY

Table 7.31

Unintended Pregnancy by Mother's Race/ Ethnicity in Hawai'i, Aggregate 2004-2008.

Race/Ethnicity	Prevalence (%)
Black	55.8
Native Hawaiian	54.1
Samoan	53.1
All Others	52.3
Filipino	48.0
Korean	37.6
White	35.5
Japanese	33.3
Chinese	32.0

Background:

"When pregnancies are intended and planned, there is greater opportunity and motivation for women and their partners to adopt or maintain positive health behaviors, often leading to improved infant outcomes. An unintended pregnancy is associated with late or inadequate prenatal care, intimate partner violence, low birth weight, infant deaths, and other adverse consequences to the mother and her infant. The U.S. Healthy People 2010 objective is to increase the proportion of intended pregnancies to 70%."

PRAMS Definition:

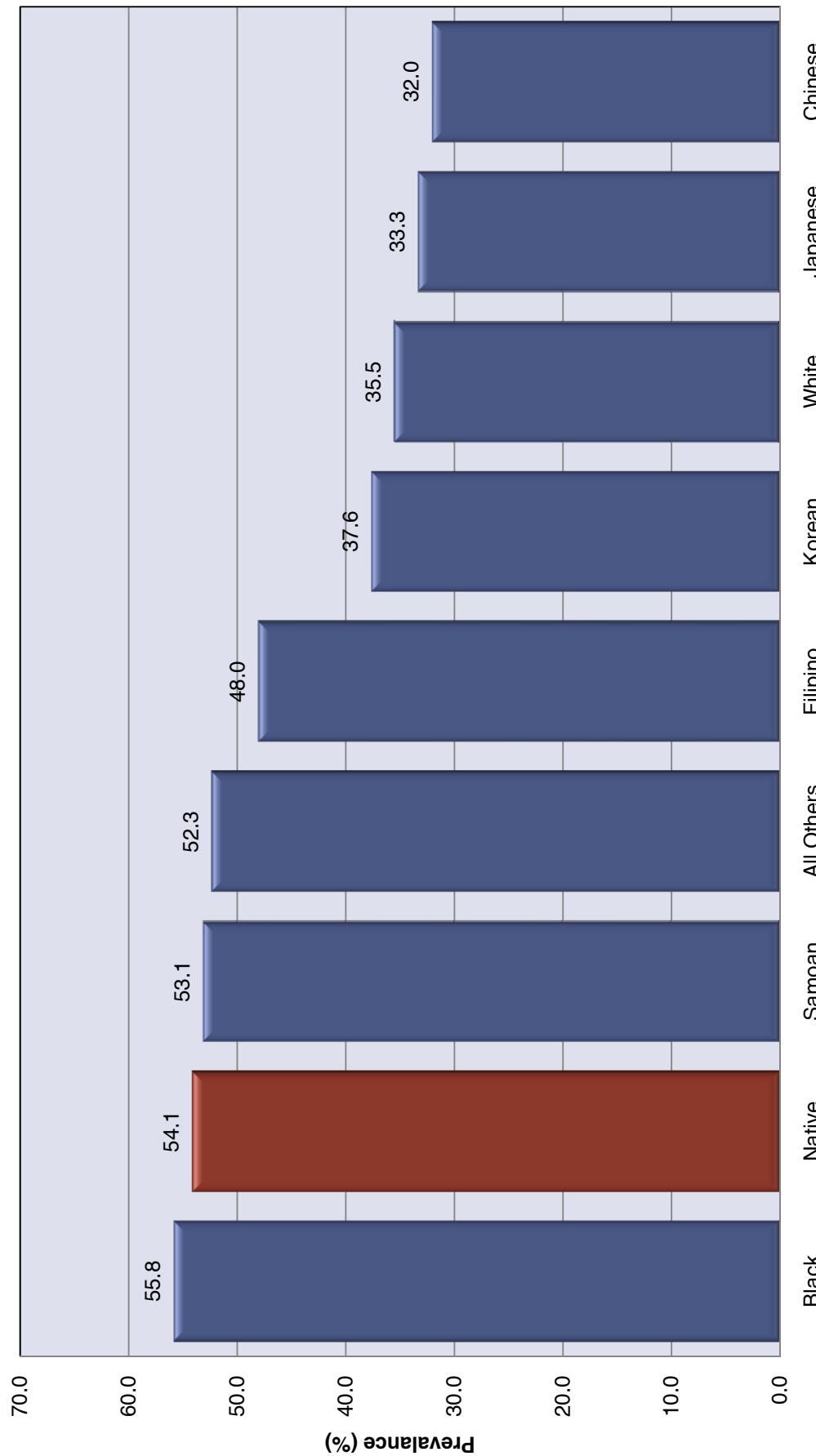
"An Unintended pregnancy was defined by a question among women who had a live birth about timing of the pregnancy. A report of wanting it 'then' or 'sooner' was considered an intended pregnancy, while wanting it 'later' or 'did not want then or at anytime in the future' was considered an unintended pregnancy. PRAMS data does not allow a determination of unintendedness among those pregnancies that did not result in a live birth."

Differences Related to Maternal Race:

"Hawaiian, Black, Samoan, and the 'All Others' mothers reported the highest estimates of unintendedness."

Source: Hawai'i State, Department of Health, Pregnancy Risk Assessment Monitoring System. (Honolulu)

Figure 7.31 Unintended Pregnancy by Mother's Race/Ethnicity in Hawai‘i, Aggregate 2004-2008.



Source: Hawai‘i State, Department of Health, Pregnancy Risk Assessment Monitoring System. (Honolulu).



PREGNANCY

Table 7.32 Intimate Partner Violence Before or During Pregnancy by Mother's Race/Ethnicity in Hawai'i, Aggregate 2004-2008.

Race/Ethnicity	Prevalence (%)
Native Hawaiian	10.0
Samoan	8.0
Black	6.9
All Others	6.6
Filipino	6.2
Korean	4.6
Japanese	4.5
White	3.9
Chinese	2.3

Background:

"Violence between intimate partners whether physical and psychological has important health consequences. Intimate partner violence is related to adverse outcomes such as depression, premature labor, and low birth weight infants. Intimate partner violence is often under reported due to societal perceptions and this under-reporting is likely even greater among women that are pregnant."

PRAMS Definition:

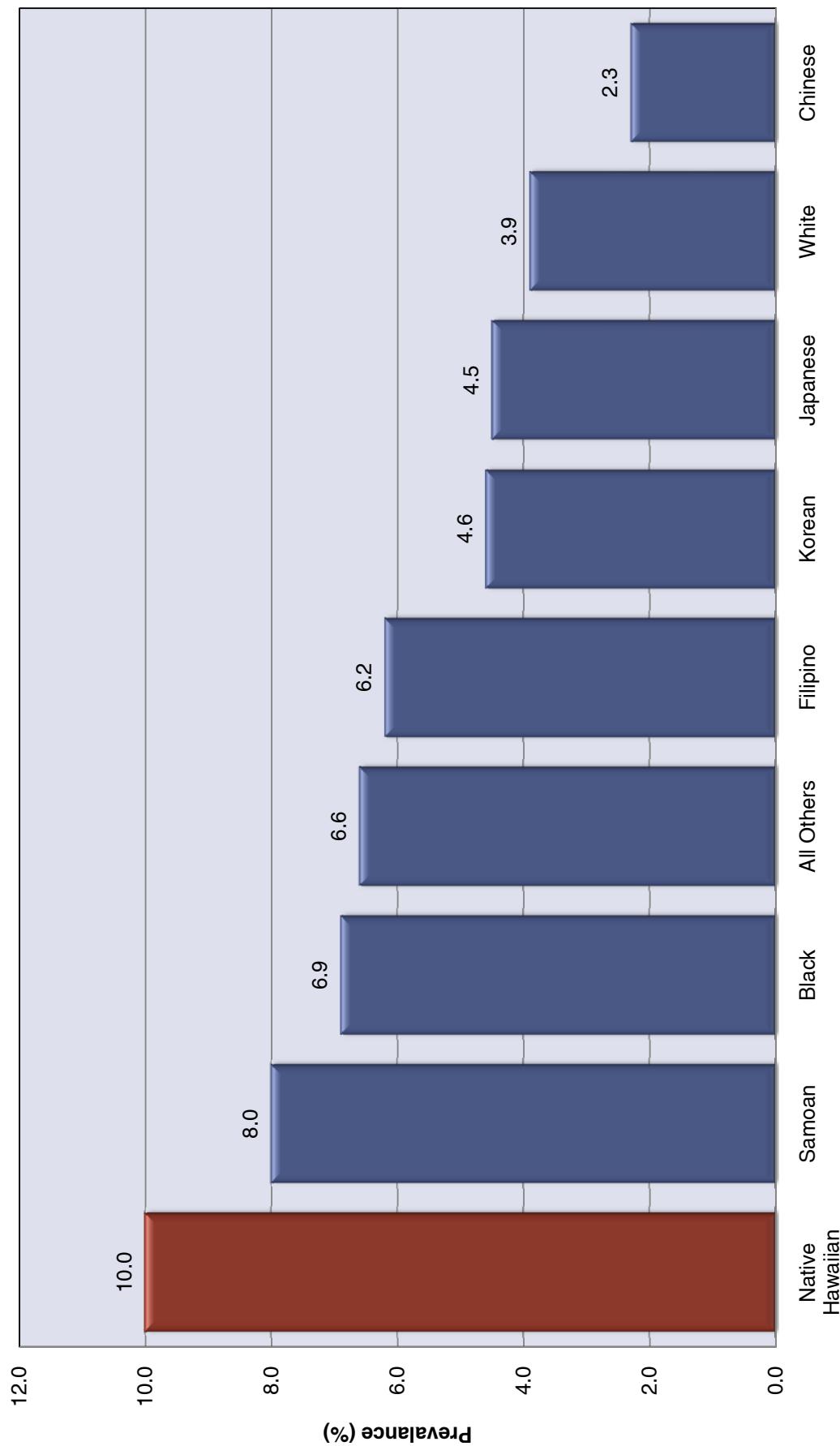
"Intimate partner violence was defined by self-report from a mother who recently had a live birth that her husband, ex-husband, partner, or ex-partner ever 'physically hurt' or 'push, hit, slap, kick, choke, or physically hurt you in any other way?' in the 12 months before getting pregnant or during the most recent pregnancy."

Differences Related to Maternal Race:

"Hawaiian, Samoan, Black, Filipino, and in those in the 'All Others' group reported the highest estimates of intimate partner violence."

Source: Hawai'i State, Department of Health, Hawai'i Pregnancy Risk Assessment Monitoring System (PRAMS). (Honolulu)

Figure 7.32 Intimate Partner Violence Before or During Pregnancy by Mother's Race/Ethnicity in Hawai'i, Aggregate 2004-2008.



Source: Hawai'i State, Department of Health, Pregnancy Risk Assessment Monitoring System. (Honolulu).

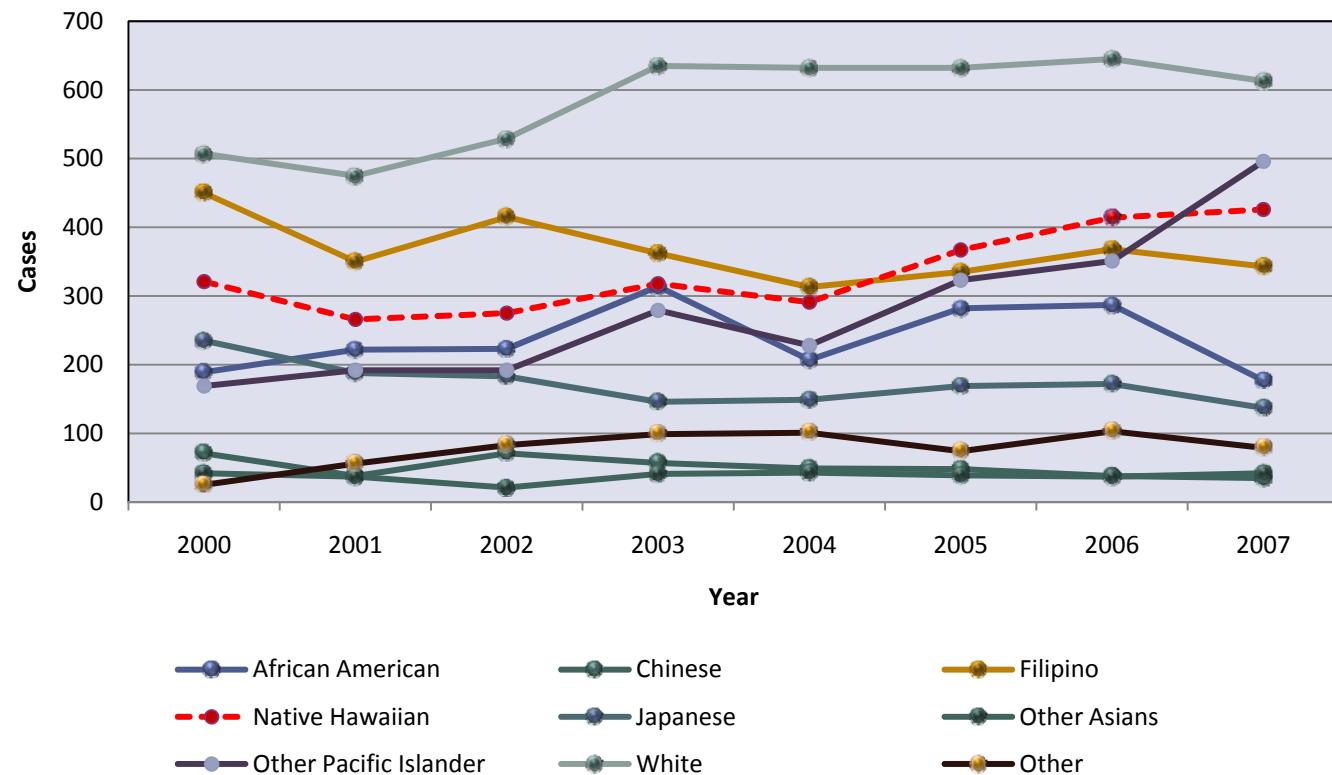
INFECTIONS

Table 7.33 Number of Reported Cases of Chlamydia by Race Hawai'i: 2000-2007.

Race/Ethnicity	Year							
	2000	2001	2002	2003	2004	2005	2006	2007
African American	189	222	223	314	207	282	287	177
Chinese	71	38	71	57	49	48	38	35
Filipino	450	350	415	362	313	335	368	343
Native Hawaiian	321	266	275	318	291	367	414	426
Japanese	235	188	183	146	149	169	172	137
Other Asians	42	37	21	41	43	39	37	42
Other Pacific Islander	169	192	192	279	228	323	351	496
White	507	475	529	635	632	632	645	613
Other	25	56	83	99	101	74	103	79

Source: Hawai'i State, Department of Health, STD/AIDS Prevention Branch. (Honolulu)

Figure 7.33 Reported Cases of Chlamydia by Race Hawai'i: 2000-2007



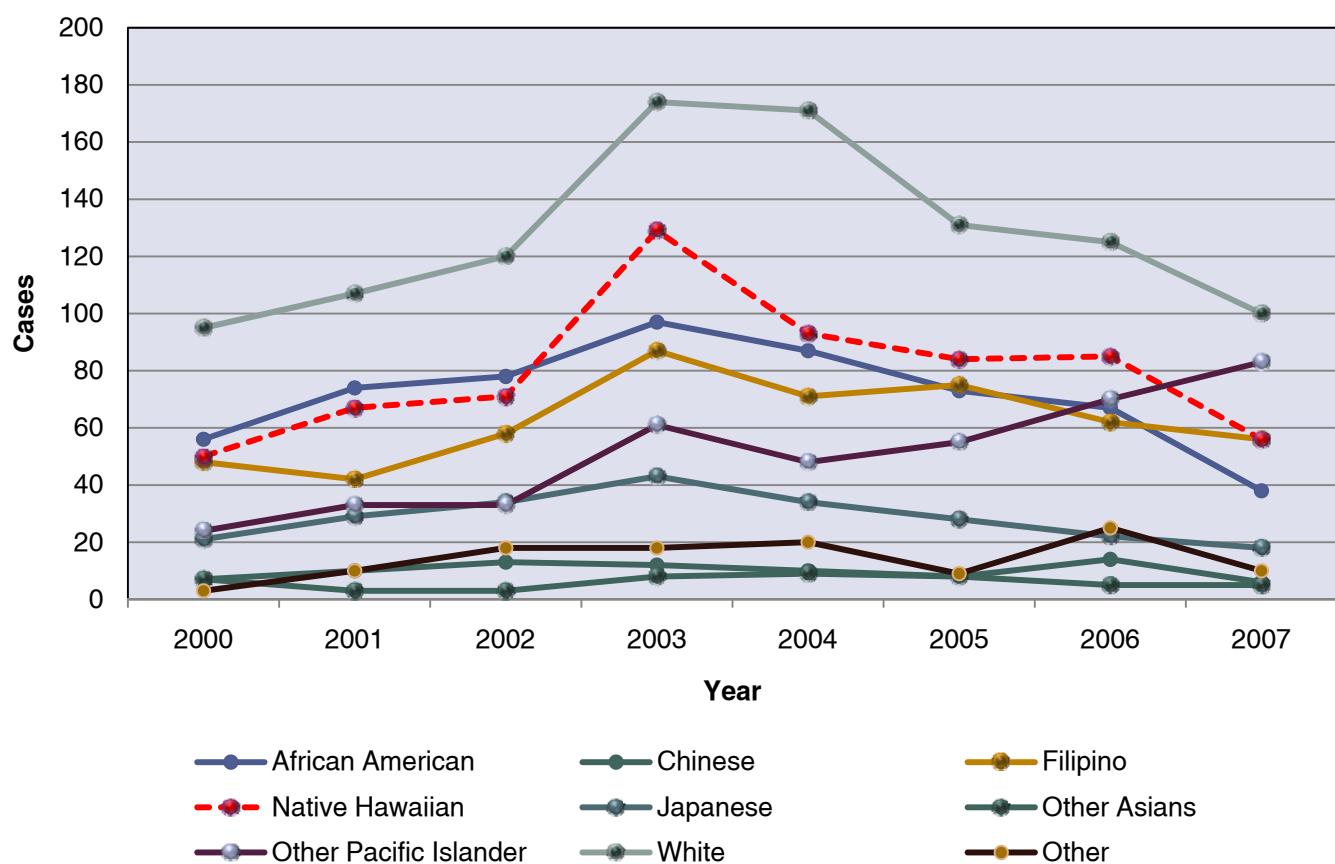
INFECTIONS

Table 7.34 Number of Reported Cases of Gonorrhea by Race Hawai‘i: 2000-2007.

Race/Ethnicity	Year							
	2000	2001	2002	2003	2004	2005	2006	2007
African American	56	74	78	97	87	73	67	38
Chinese	7	10	13	12	10	8	14	6
Filipino	48	42	58	87	71	75	62	56
Native Hawaiian	50	67	71	129	93	84	85	56
Japanese	21	29	34	43	34	28	22	18
Other Asians	7	3	3	8	9	8	5	5
Other Pacific Islander	24	33	33	61	48	55	70	83
White	95	107	120	174	171	131	125	100
Other	3	10	18	18	20	9	25	10

Source: Hawai‘i State, Department of Health, STD/AIDS Prevention Branch. (Honolulu)

Figure 7.34 Reported Cases of Gonorrhea by Race Hawai‘i: 2000-2007



Source: Hawai‘i State, Department of Health, STD/AIDS Prevention Branch. (Honolulu)

INFECTIONS

Table 7.35

Cumulative HIV (not AIDS) Infection by Race/ Ethnicity and Gender in Hawai'i: 2005-2009.

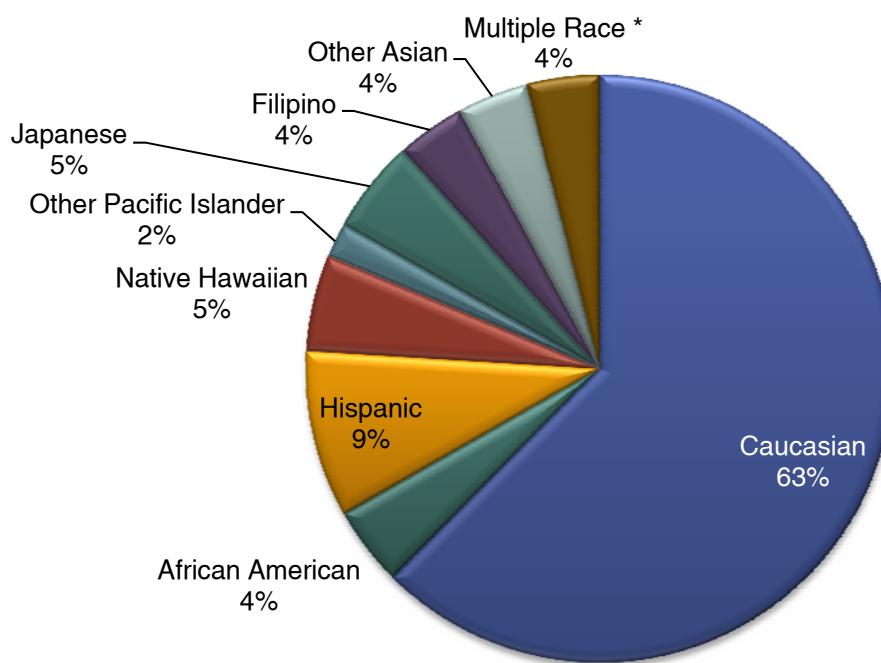
Race/Ethnicity	Cumulative HIV (not AIDS) Infection					
	Male		Female		Total	
	Cases	%	Cases	%	Cases	%
Caucasian	470	88.7%	60	11.3%	530	61.4%
African American	31	83.8%	6	16.2%	37	4.3%
Hispanic	71	91.0%	7	9.0%	78	9.0%
Native Hawaiian	31	68.9%	14	31.1%	45	5.2%
Other Pacific Islander	12	75.0%	4	25.0%	16	1.9%
Japanese	33	75.0%	11	25.0%	44	5.1%
Filipino	24	75.0%	8	25.0%	32	3.7%
Other Asian	22	66.7%	11	33.3%	33	3.8%
Multiple Race *	24	70.6%	10	29.4%	34	3.9%
Total **	728	84.4%	135	15.6%	863	100.0%

* Data collection of multiple races since 2003.

** Total HIV (not AIDS) cases include 11 unknown race cases and 3 American Indian/Alaskan cases; total five-year AIDS cases include 1 American Indian/ Alaskan case; total cumulative HIV/AIDS cases include 8 legacy Asian/Pacific Islander cases, 14 American Indian/Alaskan cases, and 11 unknown race cases.

Source: Hawai'i State, Department of Health, STD/AIDS Prevention Branch. (Honolulu)

Figure 7.35 Cumulative HIV (not AIDS) Infection



INFECTIONS

Table 7.36 | Cumulative HIV (not AIDS) Infection by Race/Ethnicity and Risk in Hawai‘i: 2005-2009.

Race/Ethnicity	Male to Male Sex			Cumulative HIV (not AIDS) Infection			Male/Male Sex & IDU	Heterosexual Contact	Transfusion	
	Cases	%	Cases	%	Cases	%				
Caucasian	373	70.4%	41	7.7%	22	4.2%	23	4.3%	0	0.0%
African American	14	37.8%	8	21.6%	1	2.7%	2	5.4%	0	0.0%
Hispanic	64	82.1%	3	3.8%	5	6.4%	1	1.3%	0	0.0%
Native Hawaiian	21	46.7%	8	17.8%	2	4.4%	7	15.6%	0	0.0%
Other Pacific Islander	5	31.3%	1	6.3%	1	6.3%	3	18.8%	0	0.0%
Japanese	25	56.8%	2	4.5%	3	6.8%	6	13.6%	1	2.3%
Filipino	21	65.6%	3	9.4%	0	0.0%	3	9.4%	0	0.0%
Other Asian	19	57.6%	2	6.1%	0	0.0%	6	18.2%	0	0.0%
Multiple Race *	20	58.8%	1	2.9%	0	0.0%	3	8.8%	0	0.0%
Total **	571	66.2%	69	8.0%	34	3.9%	57	6.6%	1	0.1%

Source: Hawai‘i State, Department of Health, STD/AIDS Prevention Branch. (Honolulu)

Continued ...

Continued ...

INFECTIONS**Table 7.36****Cumulative HIV (not AIDS) Infection by Race/Ethnicity and Risk in Hawai'i: 2005-2009.**

Race/Ethnicity	Cumulative HIV (not AIDS) Infection						Total	
	Perinatal		Hemophilic		Undetermined			
	Cases	%	Cases	%	Cases	%	Cases	%
Caucasian	1	0.2%	2	0.4%	68	12.8%	530	61.4%
African American	0	0.0%	0	0.0%	12	32.4%	37	4.3%
Hispanic	0	0.0%	0	0.0%	5	6.4%	78	9.0%
Native Hawaiian	0	0.0%	0	0.0%	7	15.6%	45	5.2%
Other Pacific Islander	0	0.0%	0	0.0%	6	37.5%	16	1.9%
Japanese	0	0.0%	0	0.0%	7	15.9%	44	5.1%
Filipino	0	0.0%	0	0.0%	5	15.6%	32	3.7%
Other Asian	0	0.0%	0	0.0%	6	18.2%	33	3.8%
Multiple Race *	0	0.0%	0	0.0%	10	29.4%	34	3.9%
Total **	1	0.1%	2	0.2%	128	14.8%	863	100.0%

* Data collection of multiple races since 2008.

** Total HIV (not AIDS) cases include 11 unknown race cases and 3 American Indian/Alaskan cases; total five-year AIDS cases include 1 American Indian/ Alaskan case; total cumulative HIV/AIDS cases include 8 legacy Asian/Pacific Islander cases, 14 American Indian/Alaskan cases, and 11 unknown race cases.

Source: Hawai'i State, Department of Health, STD/AIDS Prevention Branch. (Honolulu)

INFECTIONS

Table 7.37 | Five-Year (2005-2009) and AIDS Cases by Race/Ethnicity and Gender in Hawai'i.

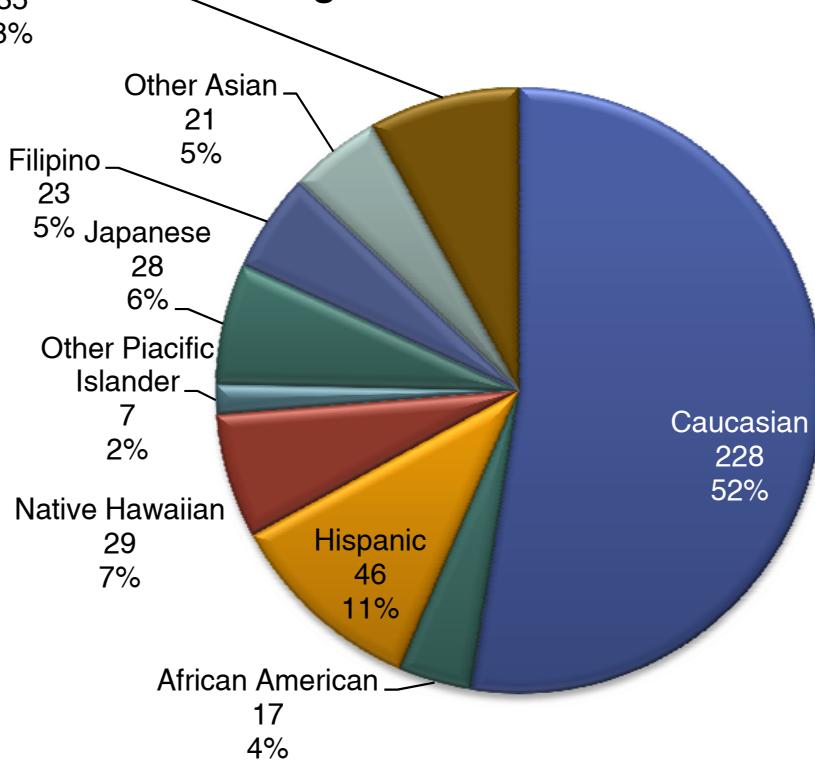
Race/Ethnicity	Five-Year AIDS					
	Male		Female		Total	
Cases	%	Cases	%	Cases	%	
Caucasian	208	91.2%	20	8.8%	228	52.4%
African American	12	70.6%	5	29.4%	17	3.9%
Hispanic	40	87.0%	6	13.0%	46	10.6%
Native Hawaiian	20	69.0%	9	31.0%	29	6.7%
Other Pacific Islander	6	85.7%	1	14.3%	7	1.6%
Japanese	25	89.3%	3	10.7%	28	6.4%
Filipino	20	87.0%	3	13.0%	23	5.3%
Other Asian	17	81.0%	4	19.0%	21	4.8%
Multiple Race *	26	74.3%	9	25.7%	35	8.0%
Total **	375	86.2%	60	13.8%	435	100.0%

* Data collection of multiple races since 2003.

** Total HIV (not AIDS) cases include 11 unknown race cases and 3 American Indian/Alaskan cases; total five-year AIDS cases include 1 American Indian/ Alaskan case; total cumulative HIV/AIDS cases include 8 legacy Asian/Pacific Islander cases, 14 American Indian/Alaskan cases, and 11 unknown race cases.

Source: Hawai'i State, Department of Health, STD/AIDS Prevention Branch. (Honolulu)

Figure 7.37 Five-Year AIDS



Source: Hawai'i State, Department of Health, STD/AIDS Prevention Branch. (Honolulu)

INFECTIONS

Table 7.38 | Five-Year (2005-2009) and AIDS Cases by Race/Ethnicity and Risk in Hawai‘i.

Race/Ethnicity	Five-Year AIDS						Five-Year AIDS						Transfusion	
	Male to Male Sex		Injection Drug Use		Male/Male Sex & IDU		Heterosexual Contact		Cases		%		Cases	
Cases	%	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%	
Caucasian	171	75.0%	21	9.2%	12	5.3%	4	1.8%	0	0.0%	0	0.0%		
African American	9	52.9%	4	23.5%	2	11.8%	1	5.9%	0	0.0%	0	0.0%		
Hispanic	27	58.7%	5	10.9%	2	4.3%	0	0.0%	0	0.0%	0	0.0%		
Native Hawaiian	12	41.4%	6	20.7%	3	10.3%	4	13.8%	0	0.0%	0	0.0%		
Other Pacific Islander	4	57.1%	0	0.0%	1	14.3%	1	14.3%	0	0.0%	0	0.0%		
Japanese	18	64.3%	2	7.1%	1	3.6%	2	7.1%	0	0.0%	0	0.0%		
Filipino	10	43.5%	4	17.4%	5	21.7%	2	8.7%	0	0.0%	0	0.0%		
Other Asian	13	61.9%	3	14.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%		
Multiple Race *	18	51.4%	6	17.1%	3	8.6%	5	14.3%	0	0.0%	0	0.0%		
Total **	283	65.1%	51	11.7%	29	6.7%	19	4.4%	0	0.0%				

INFECTIONS

Table 7.38

Five-Year (2005-2009) and AIDS Cases by Race/Ethnicity and Risk in Hawai‘i.

Race/Ethnicity	Five-Year AIDS			Five-Year AIDS			Total		
	Cases	Perinatal %	Cases	Hemophiliac %	Cases	Undetermined %	Cases	Total %	
Caucasian	0	0.0%	0	0.0%	20	8.8%	228	52.4%	
African American	0	0.0%	0	0.0%	1	5.9%	17	3.9%	
Hispanic	0	0.0%	0	0.0%	12	26.1%	46	10.6%	
Native Hawaiian	0	0.0%	0	0.0%	4	13.8%	29	6.7%	
Other Pacific Islander	0	0.0%	0	0.0%	1	14.3%	7	1.6%	
Japanese	0	0.0%	0	0.0%	5	17.9%	28	6.4%	
Filipino	0	0.0%	0	0.0%	2	8.7%	23	5.3%	
Other Asian	0	0.0%	0	0.0%	5	23.8%	21	4.8%	
Multiple Race *	0	0.0%	0	0.0%	3	8.6%	35	8.0%	
Total **	0	0.0%	0	0.0%	53	12.2%	435	100.0%	

* Data collection of multiple races since 2003.

** Total HIV (not AIDS) cases include 11 unknown race cases and 3 American Indian/Alaskan cases; total five-year AIDS cases include 1 American Indian/Alaskan case; total cumulative HIV/AIDS cases include 8 legacy Asian/Pacific Islander cases, 14 American Indian/Alaskan cases, and 11 unknown race cases.

Source: Hawai‘i State, Department of Health, STD/AIDS Prevention Branch. (Honolulu)

CHRONIC DISEASE

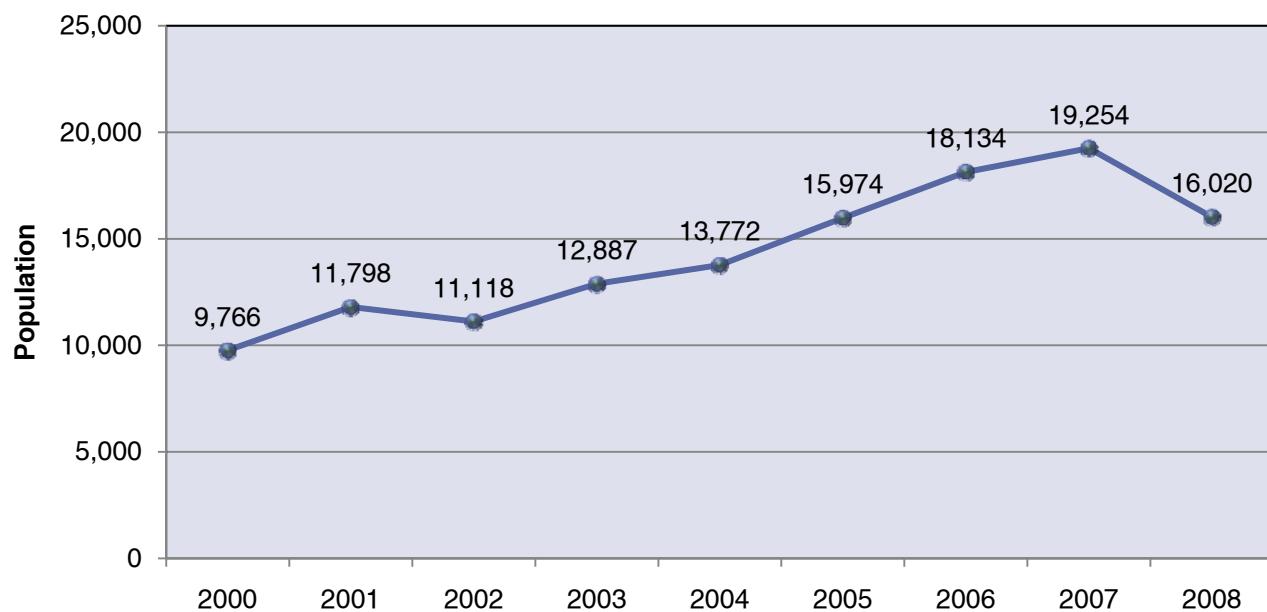
Table 7.39 Native Hawaiians with Arthritis by Age in Hawai'i: 2000-2008.

Year	Native Hawaiian							Total		
	Age in Years									
0-14	15-17	18-24	25-34	35-44	45-54	55-64	65-74	75+		
2000	*	—	*	*	864	2,650	2,013	2,530		
2001	*	*	*	873	1,419	1,969	2,960	2,703		
2002	—	—	*	1,102	2,455	1,746	1,787	1,980		
2003	*	*	177	370	1,879	2,217	3,185	2,938		
2004	75	—	260	714	1,193	3,372	4,357	2,300		
2005	15	78	369	365	2,046	2,997	4,394	3,285		
2006	50	40	82	392	1,679	3,785	4,763	3,712		
2007	55	—	346	1,221	1,786	3,916	5,102	3,779		
2008	—	—	115	748	1,579	2,266	5,602	3,104		
Total Population										
Year	0-14	15-17	18-24	25-34	35-44	45-54	55-64	65-74	75+	Total
2000	*	*	788	2,164	5,254	14,468	16,025	20,346	23,650	82,878
2001	*	*	681	3,830	6,741	13,330	15,631	21,102	20,011	81,575
2002	*	*	1,061	2,230	8,428	17,531	17,612	19,510	25,329	92,291
2003	171	148	690	3,591	5,781	15,128	23,295	22,072	30,033	100,909
2004	257	—	786	2,613	8,844	16,396	26,612	21,040	27,098	103,646
2005	301	209	1,041	2,821	8,351	16,645	27,890	20,403	27,277	104,938
2006	307	180	268	3,111	8,324	19,238	31,047	22,364	34,164	119,004
2007	341	317	1,003	2,921	5,971	20,160	33,429	23,223	33,042	120,407
2008	—	—	478	2,081	5,456	16,723	31,973	21,036	27,259	105,006

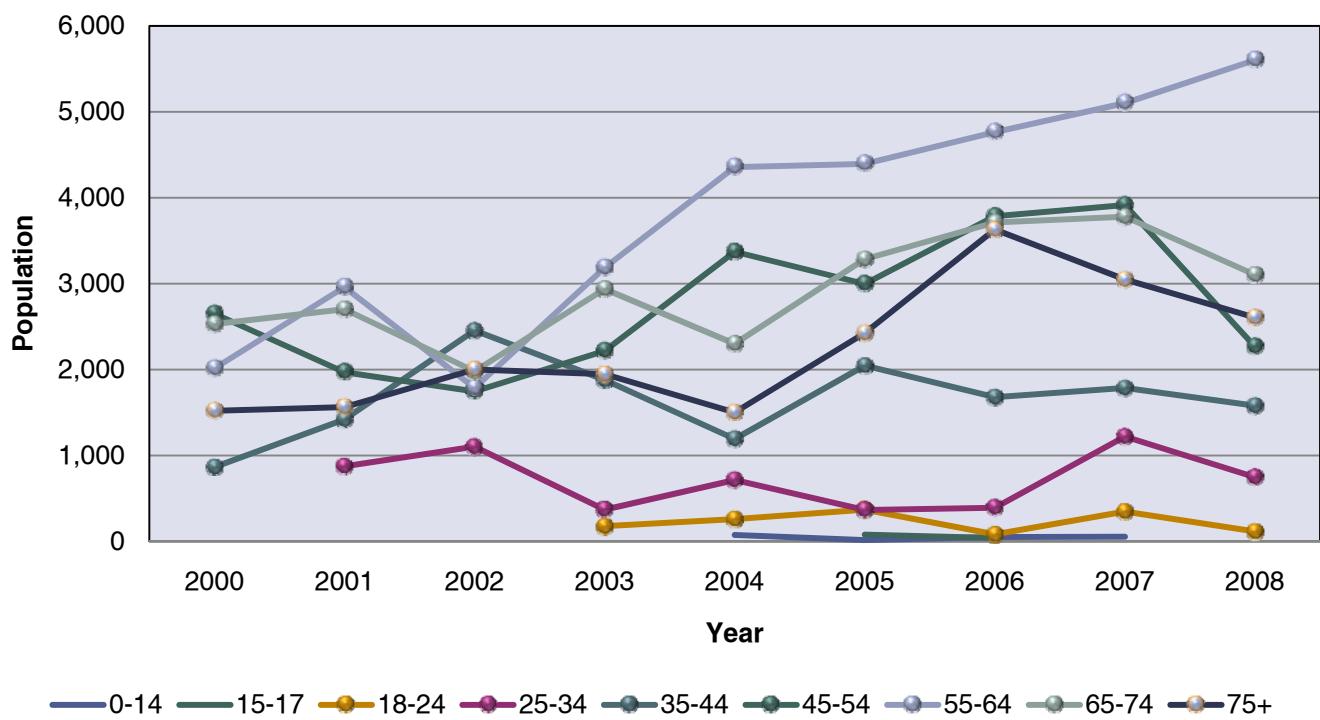
* Number of cases in sample numerator or denominator too small for reliability.
— No reported cases

Source: Hawai'i State, Department of Health, Hawai'i Health Survey. (Honolulu)

**Figure 7.39a Native Hawaiians with Arthritis in Hawai‘i:
2000-2008**



**Figure 7.39b Native Hawaiians with Arthritis by Age in Hawai‘i:
2000-2008.**



CHRONIC DISEASE

Table 7.40 Native Hawaiians With Asthma by Age in Hawai'i: 2000-2008.

Year	Native Hawaiian							Total
	Age in Years							
0-14	15-17	18-24	25-34	35-44	45-54	55-64	65-74	75+
2000	15,575	2,532	4,067	2,550	4,284	2,934	1,607	1,456
2001	15,245	2,864	4,098	5,619	3,886	3,209	1,998	1,278
2002	13,725	1,749	3,755	2,666	3,458	2,056	1,233	1,747
2003	13,636	2,051	3,984	3,151	5,968	4,567	2,036	1,457
2004	15,165	2,287	4,329	4,497	4,560	2,776	3,320	1,448
2005	15,948	2,367	4,052	4,345	4,125	4,603	2,954	1,532
2006	18,754	3,222	4,186	5,479	3,584	4,250	2,742	1,916
2007	20,847	3,274	6,962	4,685	3,712	6,945	3,973	1,877
2008	16,135	3,858	6,122	4,576	5,949	5,373	4,400	1,852
								974
								49,239

Year	Total Population							Total
	Age in Years							
0-14	15-17	18-24	25-34	35-44	45-54	55-64	65-74	75+
2000	30,798	7,728	9,006	9,853	12,789	13,580	6,372	5,285
2001	32,812	6,564	9,991	13,062	14,129	14,048	6,711	5,585
2002	26,776	6,328	12,665	10,685	12,529	12,409	9,000	7,594
2003	29,911	5,674	9,415	11,538	13,561	16,668	9,660	5,286
2004	31,786	6,656	12,280	14,898	13,696	14,194	12,468	6,916
2005	32,963	7,932	11,444	11,950	14,042	17,259	14,750	7,157
2006	40,073	7,435	12,171	14,475	14,282	19,092	14,182	8,386
2007	34,047	7,969	14,091	12,771	12,113	19,688	18,075	7,111
2008	32,873	8,590	15,088	13,160	14,853	22,052	18,893	7,687
								6,916
								140,112

* Number of cases in sample numerator or denominator too small for reliability.

Source: Hawai'i State, Department of Health, Hawai'i Health Survey. (Honolulu)

Figure 7.40a Native Hawaiians With Asthma by Age in Hawai‘i: 2000-2008.

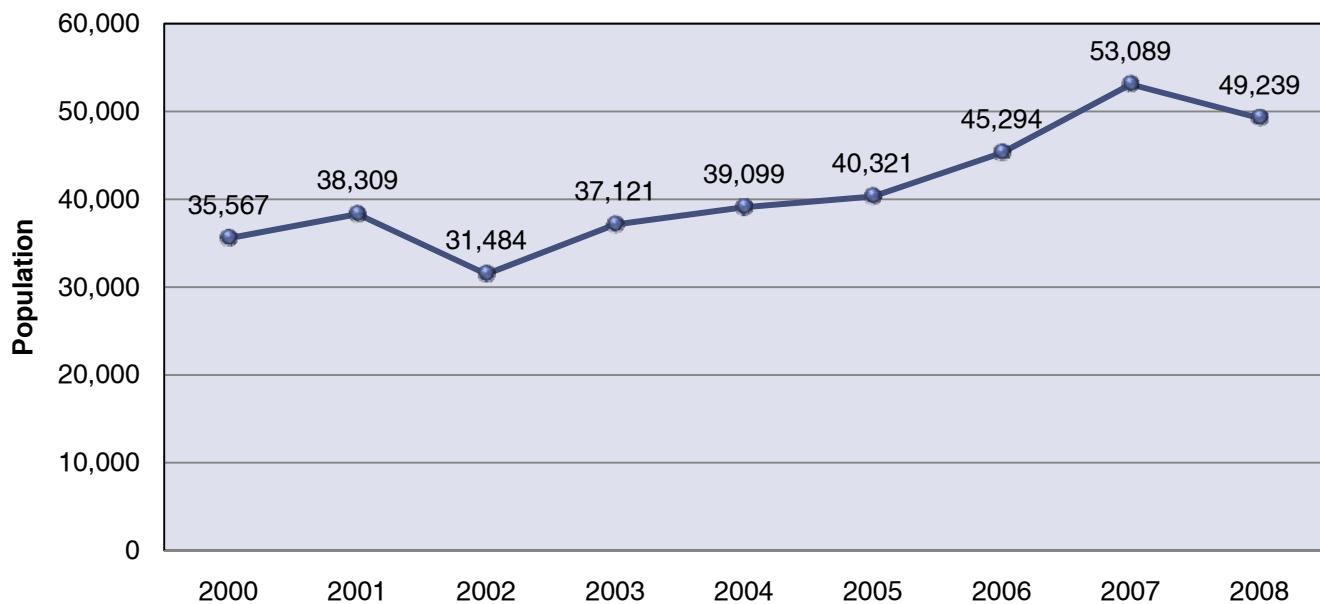
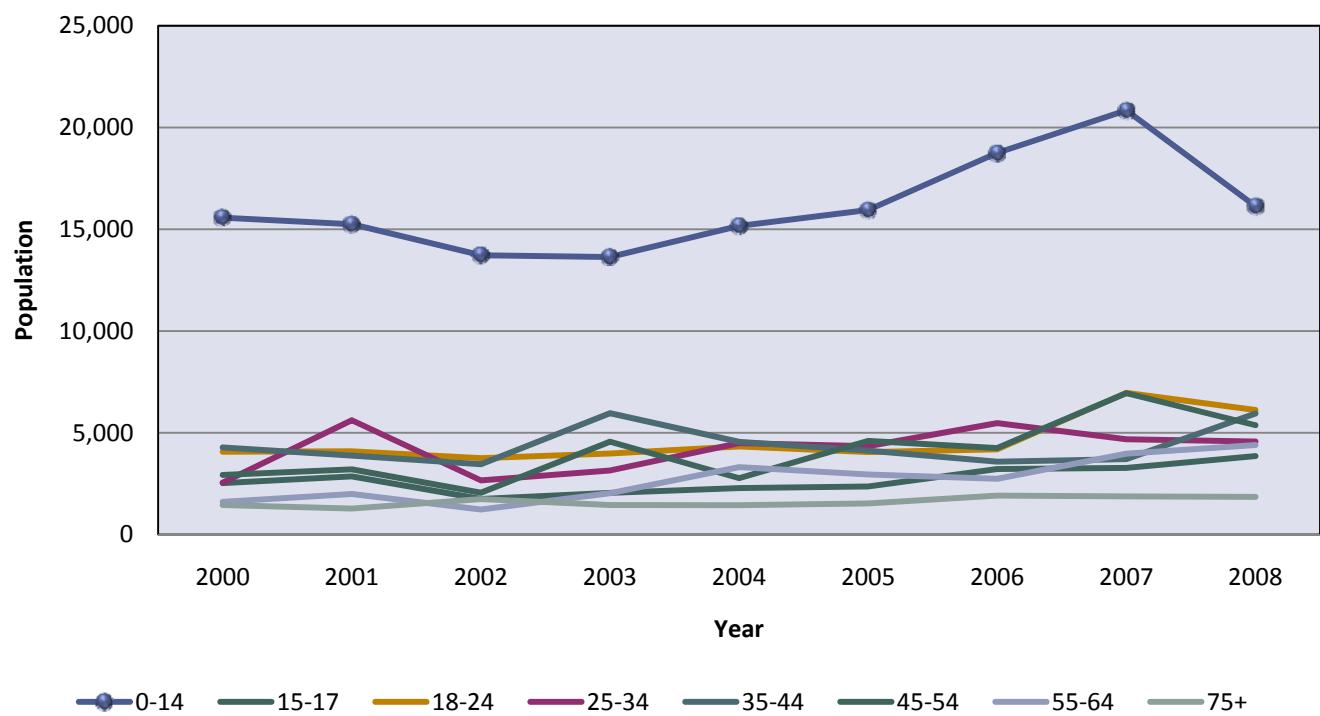


Figure 7.40b Native Hawaiians with Asthma by Age in Hawai‘i: 2000-2008.



Source: Hawai‘i State, Department of Health, Hawai‘i Health Survey. (Honolulu).

CHRONIC DISEASE

Table 7.41 Native Hawaiians With High Blood Cholesterol by Age in Hawai'i: 2000-2008.

Year	Native Hawaiian							Total
	Age in Years							
0-14	15-17	18-24	25-34	35-44	45-54	55-64	65-74	75+
2000	458	*	392	880	3,355	5,984	4,440	4,478
2001	*	—	806	2,585	3,180	4,569	4,680	4,251
2002	*	*	281	1,564	4,507	4,786	4,300	3,059
2003	*	*	*	509	4,030	5,038	5,333	4,256
2004	34	9	454	1,567	2,999	7,745	8,461	3,835
2005	273	—	28	701	2,079	3,505	3,210	2,426
2006	151	210	1,111	2,547	5,352	8,365	9,177	6,082
2007	98	346	1,574	3,979	10,315	10,449	4,738	3,763
2008	456	286	1,161	1,383	5,255	7,674	8,108	5,215
								3,070
								32,608
Total Population								
Year	Age in Years							Total
0-14	15-17	18-24	25-34	35-44	45-54	55-64	65-74	75+
2000	1,079	184	1,421	6,377	20,974	33,498	34,699	31,664
2001	1,183	*	2,739	8,868	19,777	34,691	33,101	33,602
2002	369	*	2,380	7,728	21,478	39,162	35,500	33,978
2003	927	*	2,221	6,884	21,329	42,438	44,192	35,336
2004	741	34	2,398	7,971	23,171	45,027	53,864	35,520
2005	669	86	1,138	3,805	9,685	25,912	31,437	19,504
2006	711	242	2,191	8,783	26,455	52,276	63,833	37,144
2007	461	704	937	5,502	20,268	48,457	69,374	39,053
2008	1,340	1,277	2,699	6,585	21,280	46,973	59,229	34,885
								29,698
								203,966

* Number of cases in sample numerator or denominator too small for reliability - shown for consistency only
— No reported cases

Source: Hawai'i State, Department of Health, Hawai'i Health Survey. (Honolulu)

Figure 7.41a Native Hawaiians With High Blood Cholesterol Hawai‘i: 2000-2008.

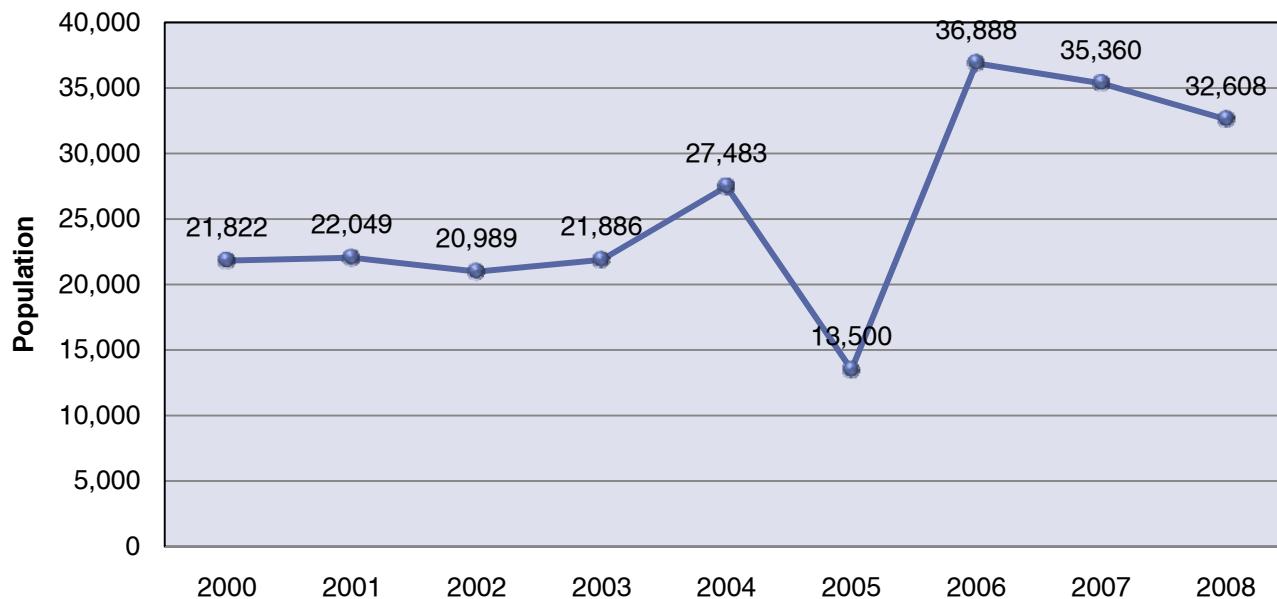
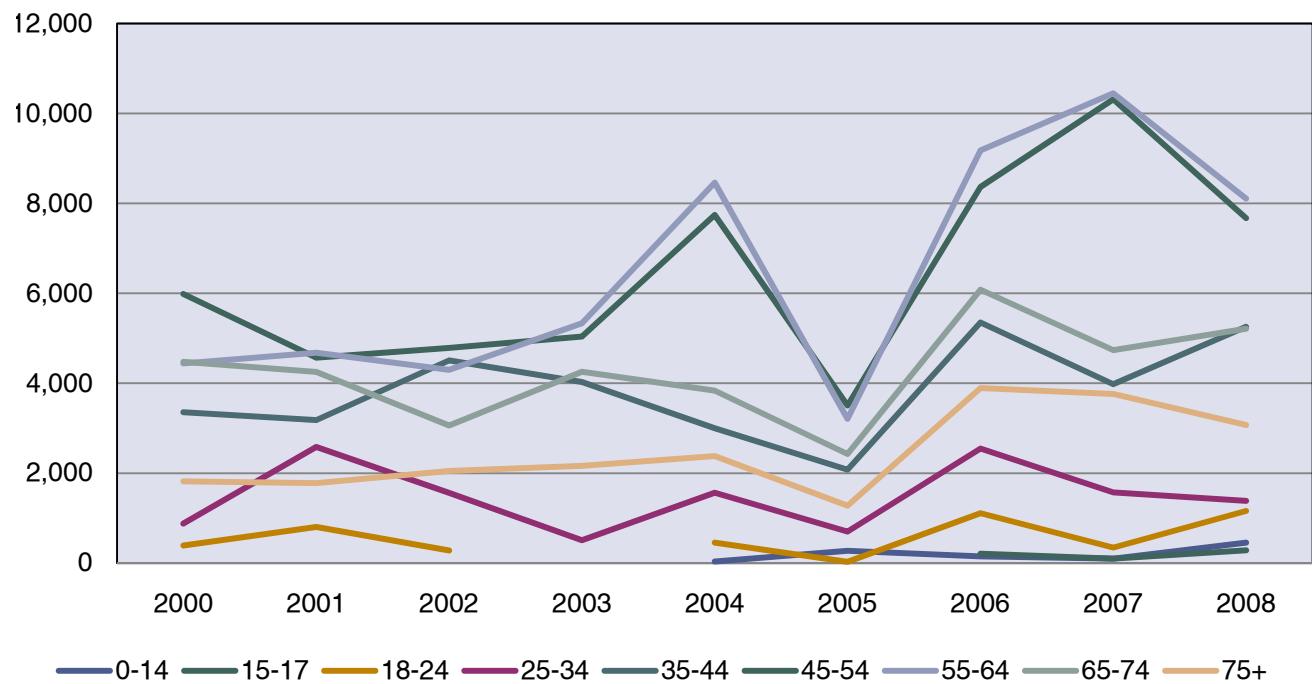


Figure 7.41b Native Hawaiians with High Blood Cholesterol by Age in Hawai‘i: 2000-2008.



Source: Hawai‘i State, Department of Health, Hawai‘i Health Survey. (Honolulu).

CHRONIC DISEASE

Table 7.42a Selected Chronic and Other Health Conditions (Prevalence per 1,000)
for Native Hawaiians (NOT AGE ADJUSTED): 2000-2008.

Chronic Condition	Native Hawaiian							2008
	2000	2001	2002	2003	2004	2005	2006	
Arthritis	38.3	44.1	45.3	49.9	56.2	58.4	62.9	62.7
Asthma	139.5	143.2	128.3	143.6	159.5	147.4	157.1	172.9
Diabetes	49.0	48.4	46.5	58.3	59.0	56.5	65.6	68.4
High Blood Cholesterol	85.6	82.4	85.6	84.7	137.1	49.4	127.9	115.2
Hypertension	116.7	95.4	111.0	118.4	112.2	119.1	148.1	140.7
Cancer	—	—	—	—	19.5	23.1	22.6	—
Heart	—	—	—	—	26.3	29.0	39.2	—
Lung	—	—	—	—	6.3	7.5	9.6	—

Chronic Condition	Total Population							2008
	2000	2001	2002	2003	2004	2005	2006	
Arthritis	71.7	69.4	76.9	82.6	84.0	84.3	83.9	94.9
Asthma	86.5	90.4	85.4	87.0	94.9	98.6	98.2	103.7
Diabetes	45.9	50.6	48.9	57.2	56.2	60.1	59.8	71.6
High Blood Cholesterol	133.1	135.9	137.0	152.4	164.3	89.2	88.8	175.7
Hypertension	144.2	131.0	136.1	154.9	156.8	162.2	161.5	179.0
Cancer	—	—	—	—	26.9	33.9	161.5	—
Heart	—	—	—	—	34.0	35.7	161.5	—
Lung	—	—	—	—	9.3	10.2	161.5	—

NOTE: Data is NOT age adjusted.

* Number of cases in sample numerator or denominator too small for reliability.

— No reported cases

Source: Hawai'i State, Department of Health, Hawai'i Health Survey. (Honolulu)

Figure 7.42a Prevalence of Arthritis (NOT AGE ADJUSTED) in Hawai'i: 2000-2008

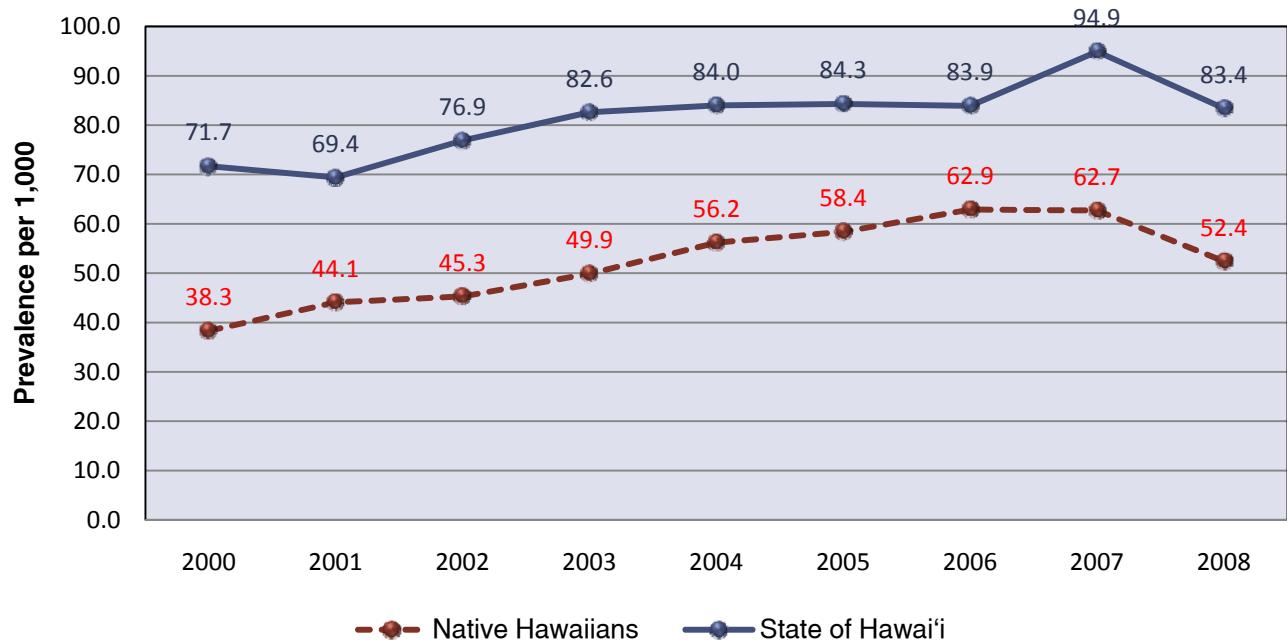
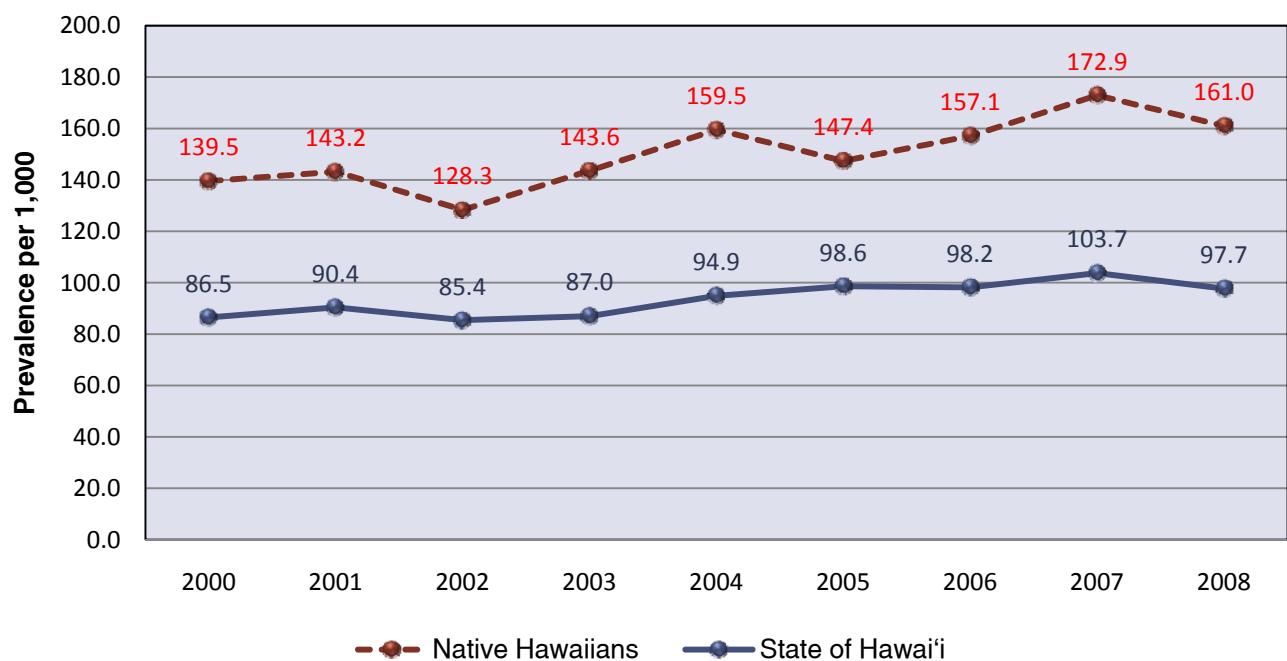


Figure 7.42b Prevalence of Asthma (NOT AGE ADJUSTED) in Hawai'i: 2000-2008



Source: Hawai'i State, Department of Health, Hawai'i Health Survey. (Honolulu).

Figure 7.42c Prevalence of Diabetes (NOT AGE ADJUSTED) in Hawai‘i: 2000-2008

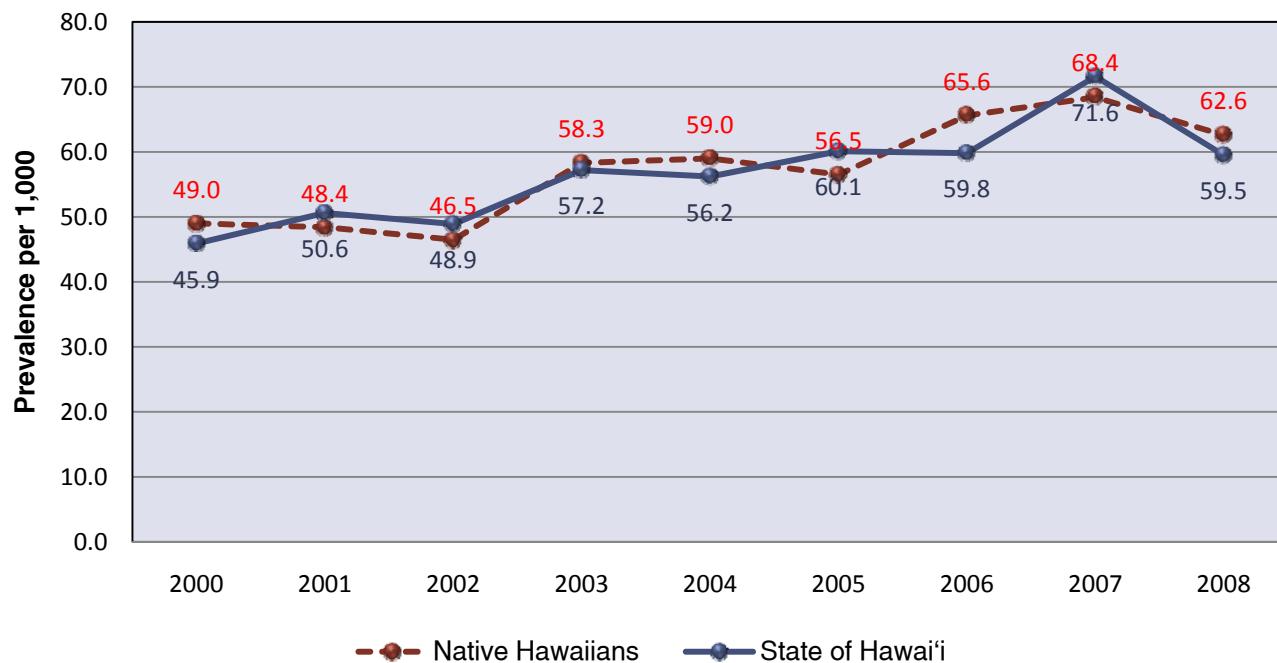


Figure 7.42d Prevalence of High Blood Cholesterol (NOT AGE ADJUSTED) in Hawai‘i: 2000-2008

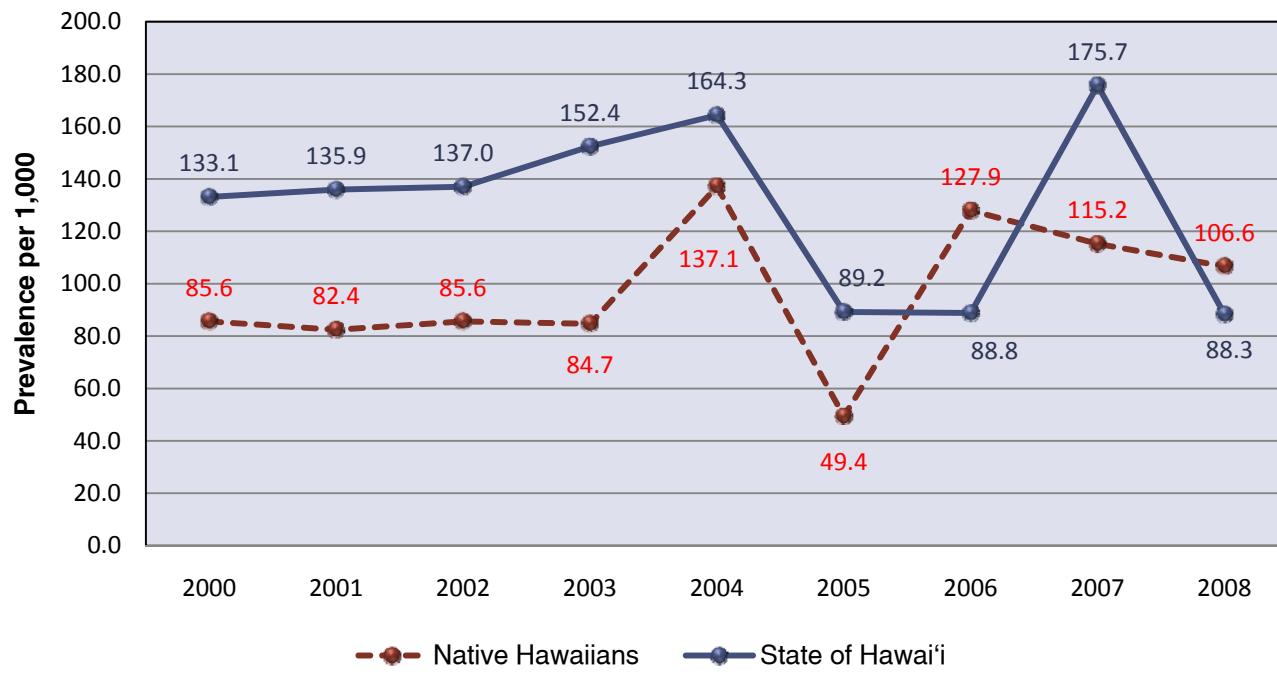
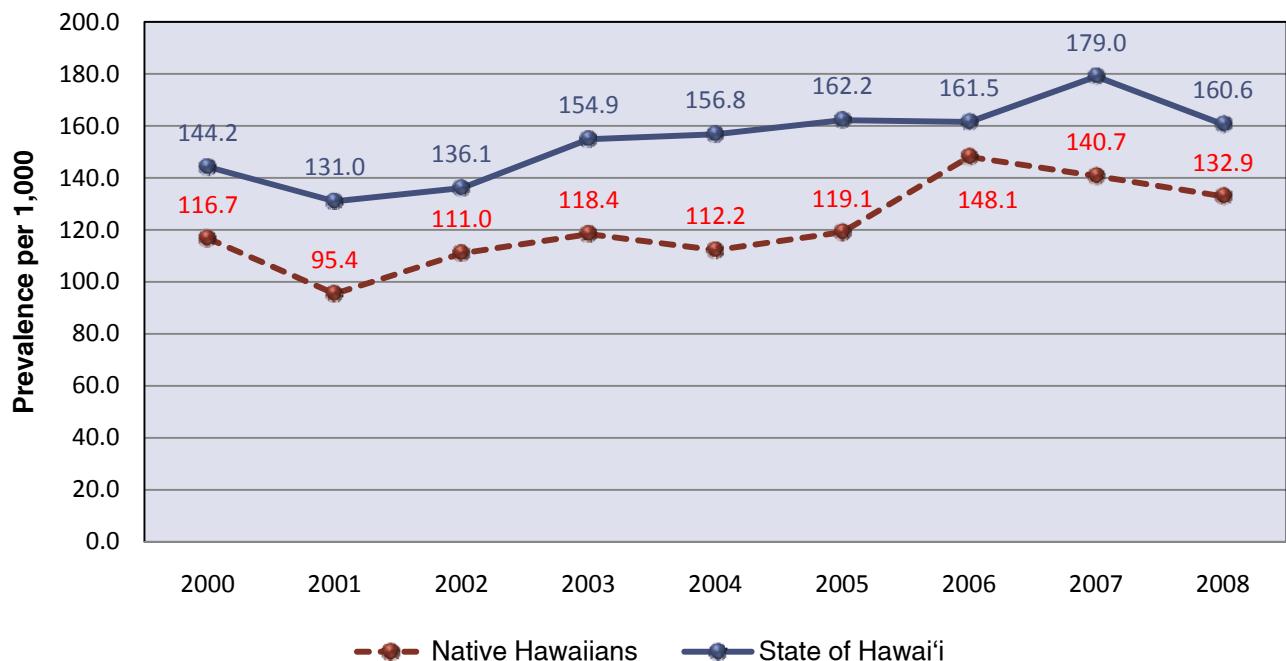


Figure 7.42e Prevalence of Hypertension (NOT AGE ADJUSTED) in Hawai‘i: 2000-2008



Source: Hawai‘i State, Department of Health, Hawai‘i Health Survey. (Honolulu).

CHRONIC DISEASE

Table 7.42b | Selected Chronic and Other Health Conditions (Prevalence per 1,000) for Native Hawaiians (AGE ADJUSTED): 2000-2008.

Age-adjustment is a technique used to eliminate the effect of the age distribution of the population on mortality or morbidity rates. Since the frequency of mortality or morbidity varies with age, a measure free of the influences of population composition is needed to make comparisons between areas or over time.

Chronic Condition	Native Hawaiian						
	2000	2001	2002	2003	2004	2005	2006
Arthritis	(N)	(N)	(N)	(N)	73.9	79.3	82.4
Asthma	(N)	(N)	(N)	(N)	152.7	139.8	150
Diabetes	(N)	(N)	(N)	(N)	76.8	74.7	81.4
High Blood Cholesterol	(N)	(N)	(N)	(N)	143.4	64.4	160
Hypertension	(N)	(N)	(N)	(N)	178.8	156.5	186
Cancer	(N)	(N)	(N)	(N)	29.9	31.5	27.4
Heart	(N)	(N)	(N)	(N)	36.6	38.9	50
Lung	(N)	(N)	(N)	(N)	9.7	9.1	12.2

Chronic Condition	Total Population						
	2000	2001	2002	2003	2004	2005	2006
Arthritis	(N)	(N)	(N)	(N)	74.3	73	81.2
Asthma	(N)	(N)	(N)	(N)	97.2	100.5	113
Diabetes	(N)	(N)	(N)	(N)	50.5	52.4	57.8
High Blood Cholesterol	(N)	(N)	(N)	(N)	146.2	77.3	162
Hypertension	(N)	(N)	(N)	(N)	141.1	142.1	154
Cancer	(N)	(N)	(N)	(N)	26.6	29.3	28.5
Heart	(N)	(N)	(N)	(N)	33.5	31.3	34.3
Lung	(N)	(N)	(N)	(N)	9.3	8.9	9.6

* Number of cases in sample numerator or denominator too small for reliability - shown for consistency only
— No reported cases (N) Not reported

Source: Hawai'i State, Department of Health, Hawai'i Health Survey. (Honolulu)

Figure 7.42f Prevalence of Arthritis (AGE ADJUSTED) in Hawai‘i: 2004-2008

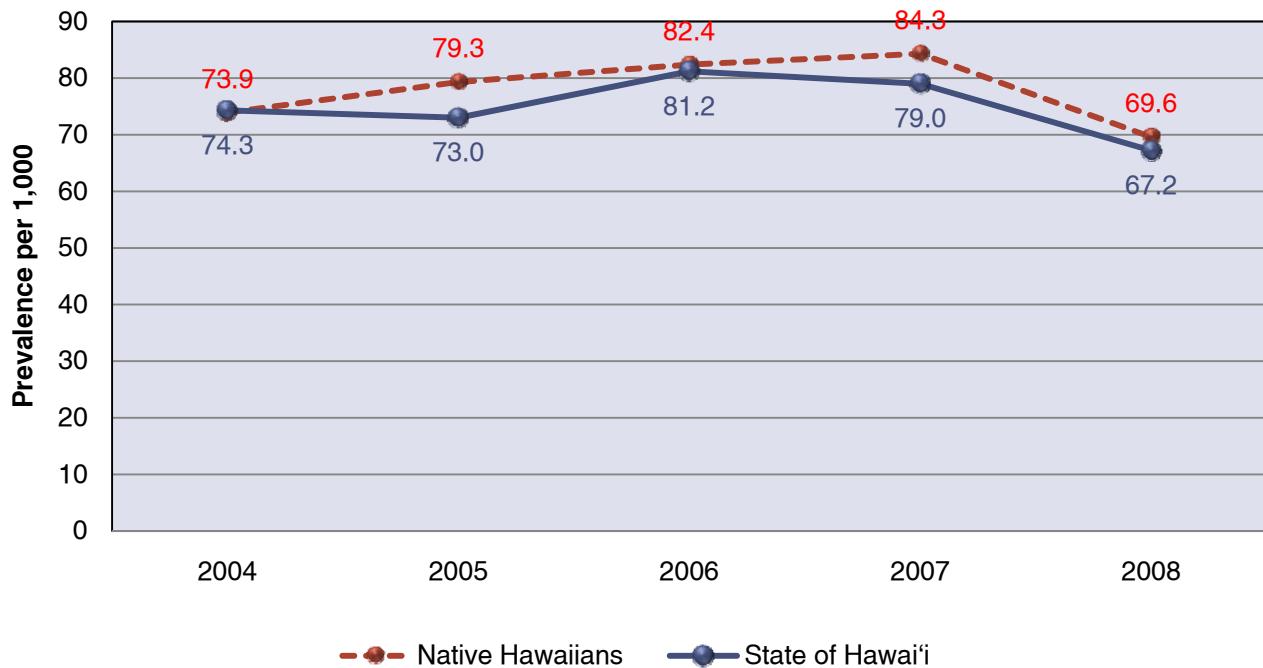


Figure 7.42g Prevalence of Asthma (AGE ADJUSTED) in Hawai‘i: 2004-2008

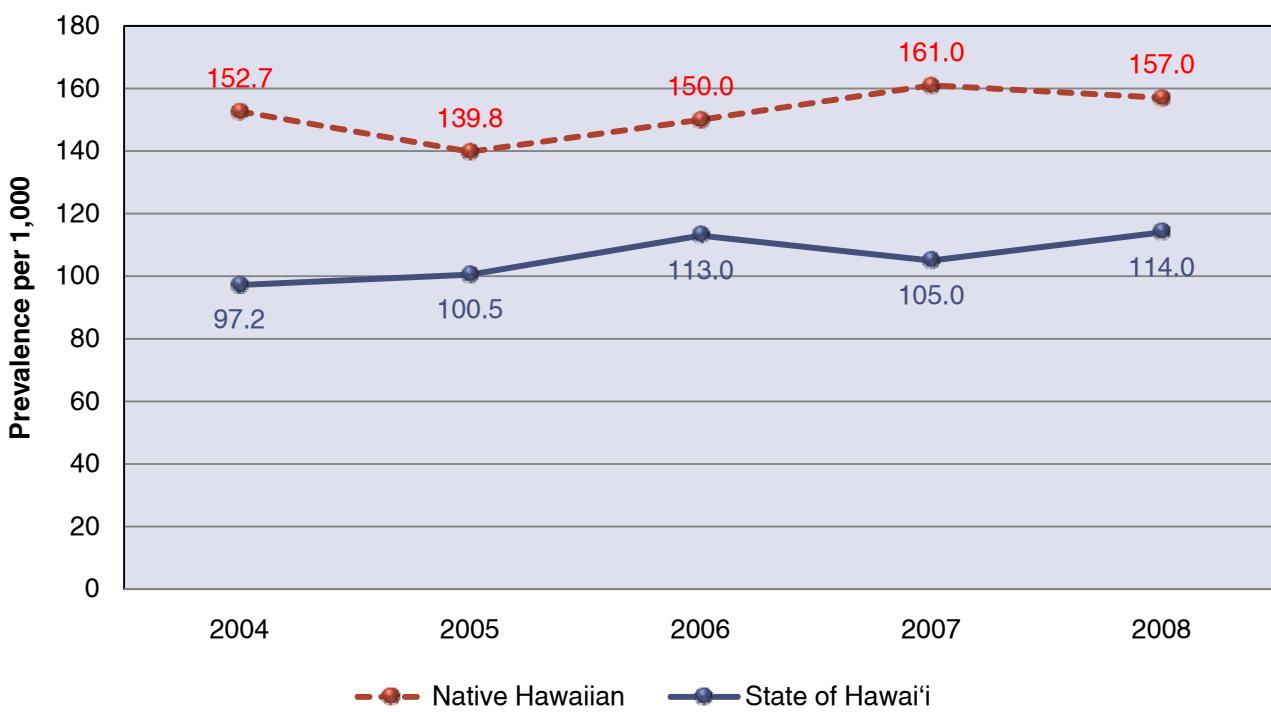


Figure 7.42h Prevalence of Diabetes (AGE ADJUSTED) in Hawai'i: 2004-2008

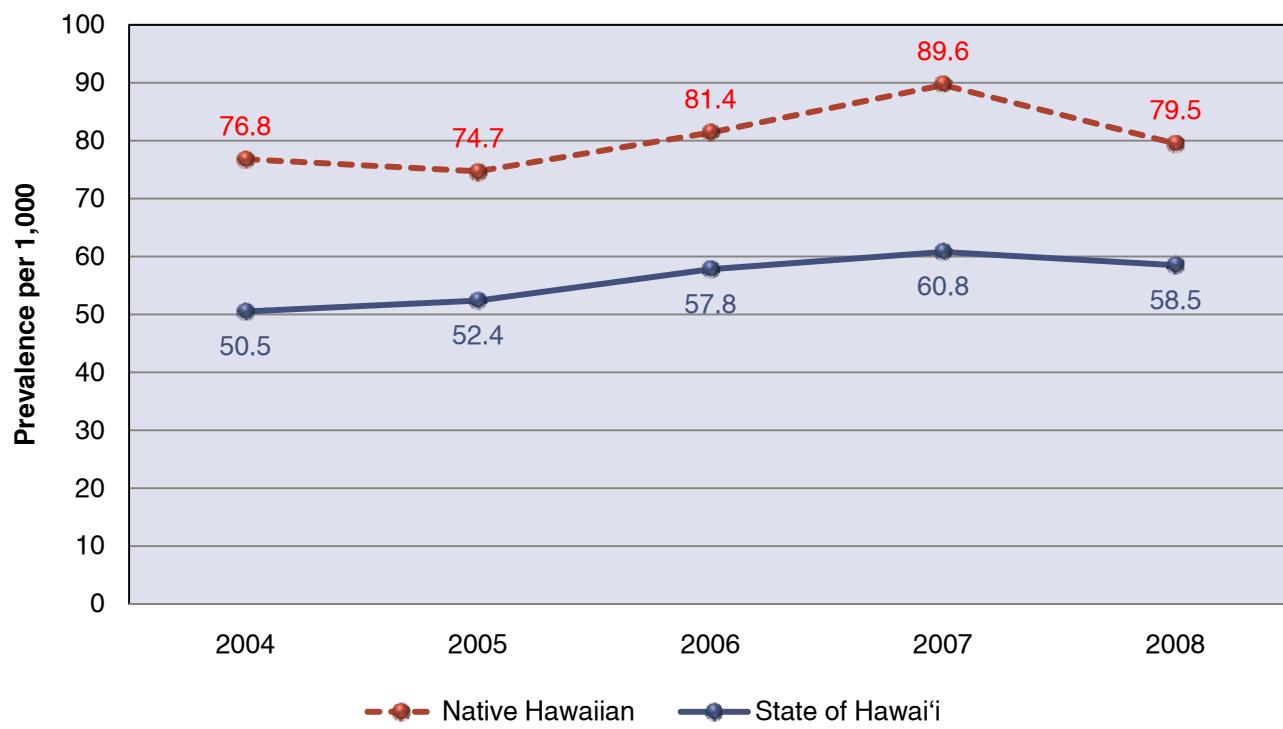


Figure 7.42i Prevalence of High Blood Cholesterol (AGE ADJUSTED) in Hawai'i: 2004-2008

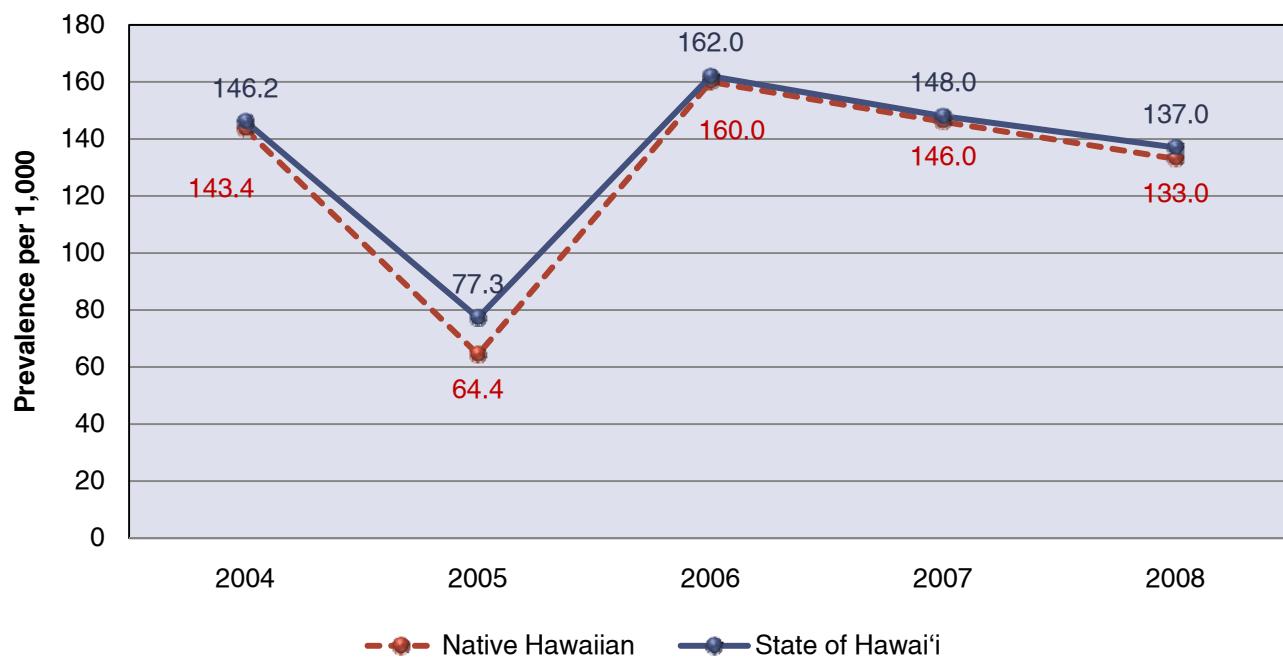
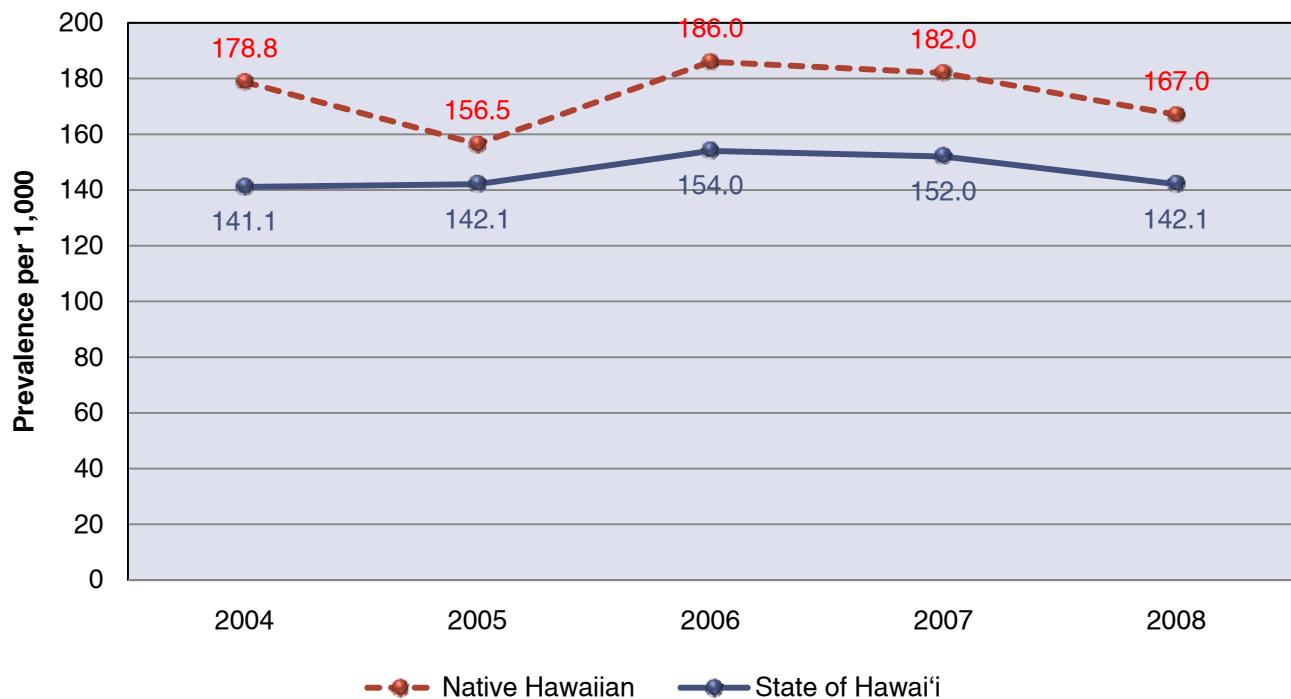


Figure 7.42j Prevalence of Hypertension (AGE ADJUSTED) in Hawai'i: 2004-2008



Source: Hawai'i State, Department of Health, Hawai'i Health Survey. (Honolulu).



CHRONIC DISEASE

Table 7.43 Native Hawaiians With Diabetes by Age in Hawai'i: 2000-2008.

Year	Native Hawaiian							Total
	Age in Years							
0-14	15-17	18-24	25-34	35-44	45-54	55-64	65-74	75+
2008	226	65	265	1,162	3,094	4,001	4,901	3,934
2007	110	—	188	919	2,679	5,049	6,097	3,255
2006	402	57	940	1,664	2,002	3,682	4,110	3,995
2005	202	26	325	614	2,883	3,062	3,847	2,546
2004	65	—	508	860	1,479	3,374	4,417	2,246
2003	*	—	*	317	3,028	3,463	4,631	2,074
2002	*	—	*	666	915	2,671	2,131	3,232
2001	*	*	*	921	1,889	3,188	3,469	2,557
2000	*	—	*	637	1,532	3,158	2,788	3,238

Year	Total Population							Total
	Age in Years							
0-14	15-17	18-24	25-34	35-44	45-54	55-64	65-74	75+
2008	563	443	895	2,719	8,214	15,875	23,338	17,817
2007	236	50	526	3,375	8,494	15,792	27,806	17,346
2006	1,001	110	1,376	3,744	7,885	15,722	19,866	16,525
2005	584	71	1,387	2,686	6,142	14,556	21,027	13,798
2004	544	64	1,382	3,748	7,374	12,841	17,694	12,762
2003	542	*	1,217	3,387	7,590	13,534	17,908	13,283
2002	*	*	452	3,147	4,910	10,346	12,932	13,338
2001	*	*	760	3,095	6,455	11,512	12,748	13,883
2000	*	—	363	2,028	6,063	9,047	12,596	13,625

* Number of cases in sample numerator or denominator too small for reliability - shown for consistency only
— No reported cases

Source: Hawai'i State, Department of Health, Hawai'i Health Survey. (Honolulu)

Figure 7.43a Native Hawaiians With Diabetes in Hawai'i: 2000-2008.

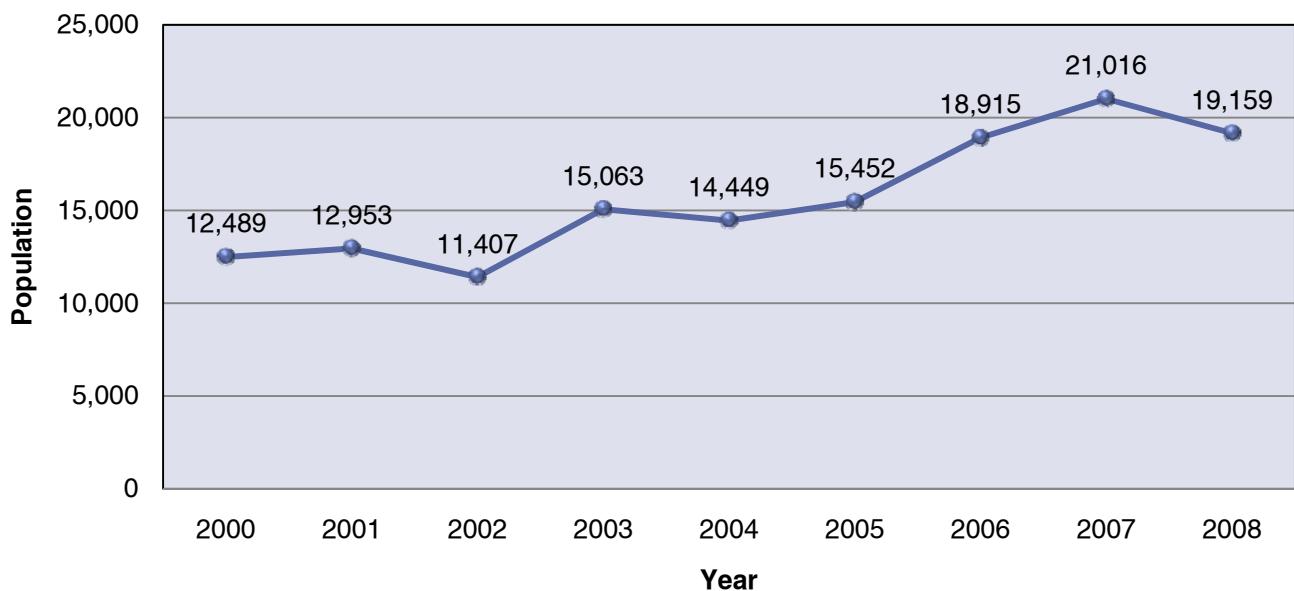
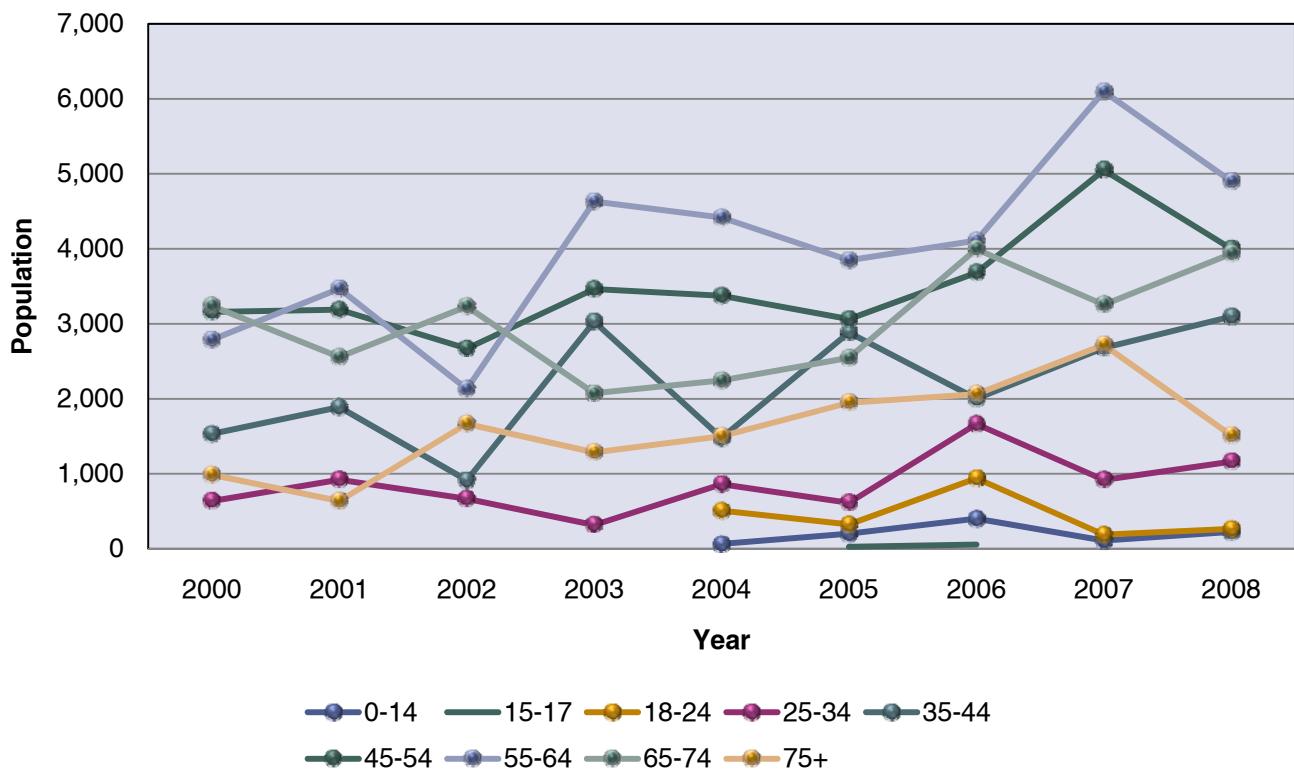


Figure 7.43b Native Hawaiians With Diabetes by Age in Hawai'i: 2000-2008.



CHRONIC DISEASE

Table 7.44 Native Hawaiians with Heart Disease by Age in Hawai'i: 2004-2006.

Year	Native Hawaiian							Total
	Age in Years							
0-14	15-17	18-24	25-34	35-44	45-54	55-64	65-74	75+
2008	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)
2007	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)
2006	46	44	397	504	954	2,314	2,732	2,424
2005	339	48	255	453	722	1,372	1,716	1,901
2004	264	—	—	334	98	1,633	2,409	889

Year	Total Population							Total
	Age in Years							
0-14	15-17	18-24	25-34	35-44	45-54	55-64	65-74	75+
2008	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)
2007	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)
2006	973	44	752	959	1,189	6,732	11,828	10,712
2005	673	156	289	1,731	2,087	5,753	9,950	10,105
2004	438	38	259	581	1,967	6,394	9,459	10,270

* Number of cases in sample numerator or denominator too small for reliability - shown for consistency only

— No reported cases

(N) Not reported

Note: The question concerning heart disease was not asked in the survey after 2006.

Source: Hawai'i State, Department of Health, Hawai'i Health Survey. (*Honolulu*)

Figure 7.44a Native Hawaiians with Heart Disease by Age in Hawai'i: 2004-2006

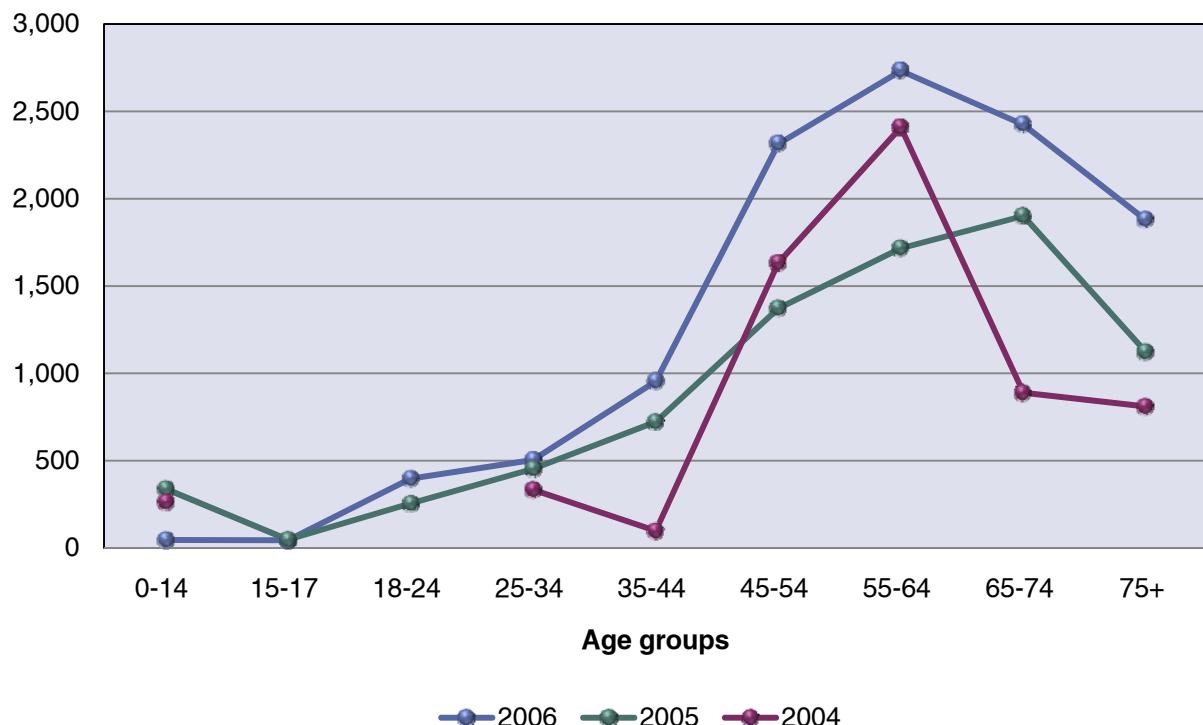
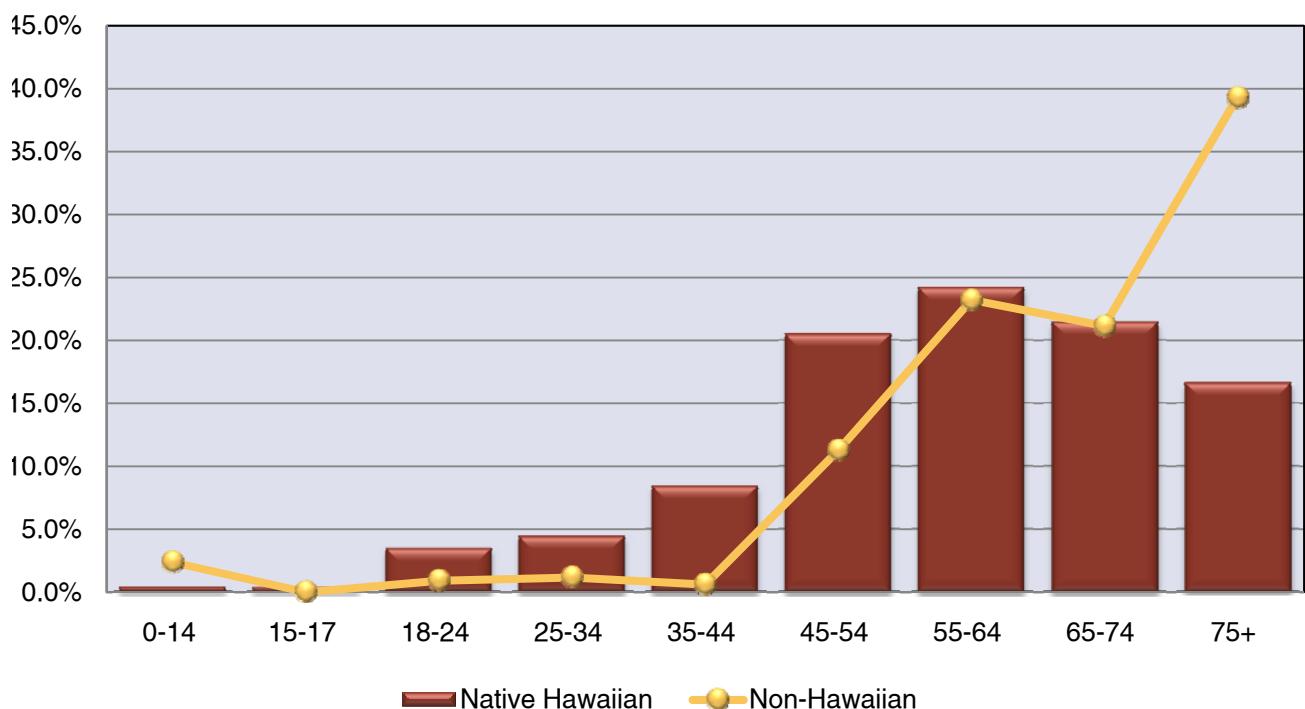


Figure 7.44b Heart Disease by Age in Hawai'i: 2006



CHRONIC DISEASE

Table 7.45 Native Hawaiians With Hypertension by Age: 2000-2008.

Year	Native Hawaiian						Total			
	0-14	15-17	18-24	25-34	35-44	45-54	55-64	65-74	75+	
2008	248	48	708	3,055	6,233	8,960	11,235	6,489	3,667	40,643
2007	294	28	641	2,968	4,742	10,337	12,047	7,063	5,081	43,201
2006	251	177	775	3,417	6,857	10,190	9,817	6,719	4,506	42,709
2005	405	147	487	1,772	5,171	7,612	7,885	5,280	3,819	32,578
2004	50	17	553	2,078	5,476	6,783	10,257	5,152	3,221	33,587
2003	*	*	*	987	5,138	7,040	9,058	4,831	2,950	30,615
2002	*	*	228	1,247	4,428	6,381	6,439	4,649	3,540	27,228
2001	*	*	598	1,550	4,485	5,323	6,084	4,624	2,589	25,510
2000	*	*	817	1,599	4,823	7,490	5,979	6,403	2,369	29,760

Year	Total Population						Total			
	0-14	15-17	18-24	25-34	35-44	45-54	55-64	65-74	75+	
2008	711	253	2,216	8,142	20,632	42,245	53,558	33,242	36,440	197,439
2007	553	268	2,174	7,557	21,331	46,383	64,076	39,497	45,339	227,178
2006	872	649	1,439	7,033	24,322	45,781	58,633	37,569	46,059	222,357
2005	797	499	2,513	6,971	20,318	40,990	51,248	35,949	42,699	201,984
2004	503	28	1,813	9,621	23,578	36,994	46,309	35,297	39,409	193,552
2003	*	*	2,338	5,939	20,292	36,634	47,458	35,374	41,095	189,306
2002	619	*	2,065	5,345	19,447	34,618	34,664	32,367	34,217	163,457
2001	422	423	2,102	5,584	16,283	33,978	30,890	33,128	31,239	154,049
2000	684	*	2,107	6,977	19,127	33,614	34,147	37,934	31,661	166,645

* Number of cases in sample numerator or denominator too small for reliability - shown for consistency only
— No reported cases

Source: Hawai'i State, Department of Health, Hawai'i Health Survey. (Honolulu)

Figure 7.45a Native Hawaiians With Hypertension in Hawai‘i: 2000-2008.

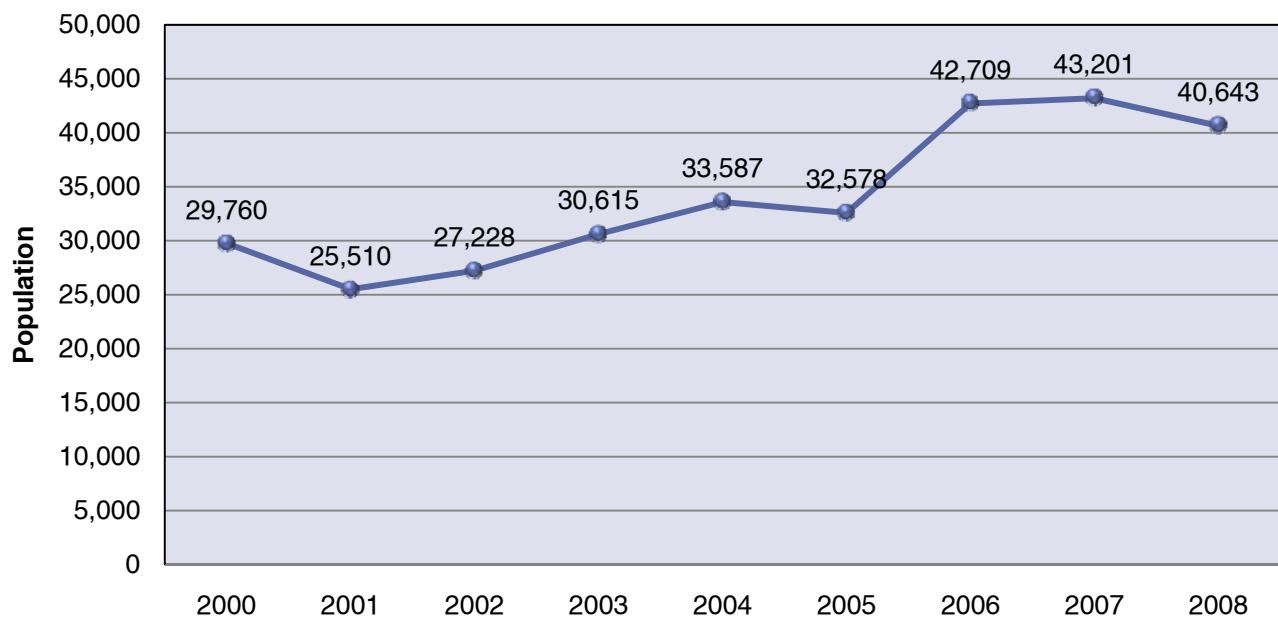
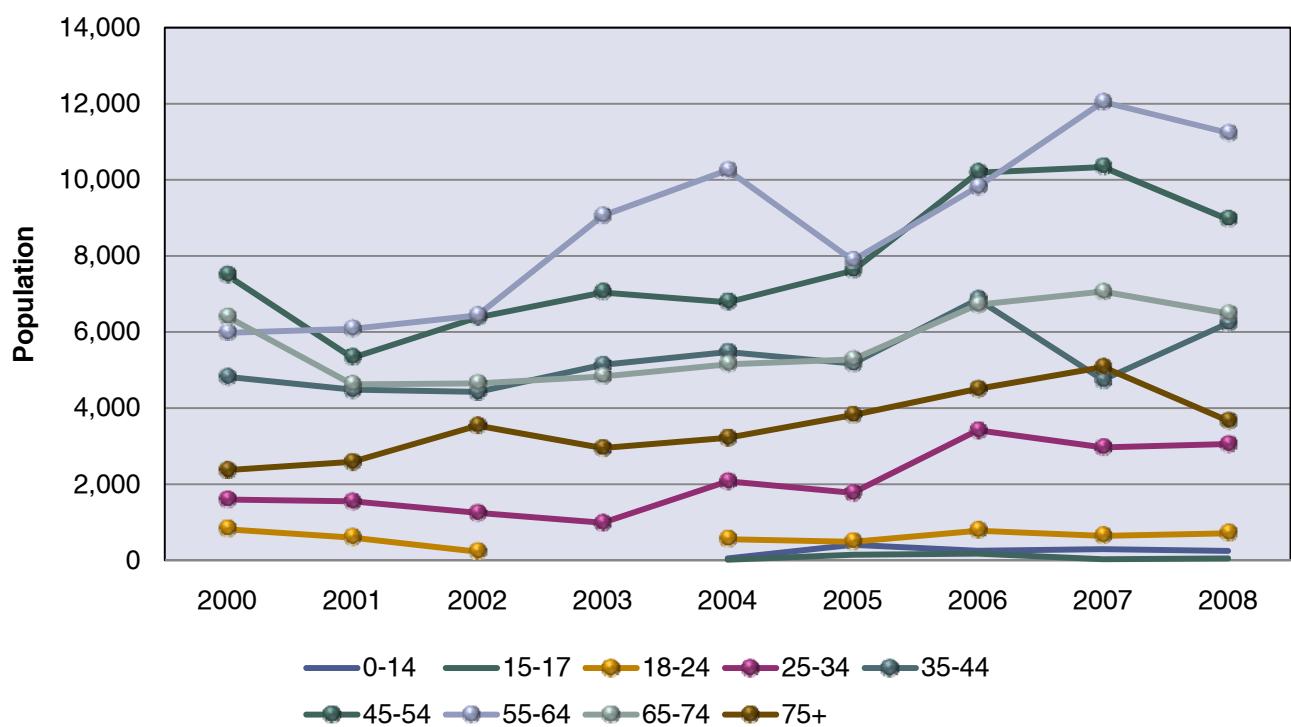


Figure 7.45b Native Hawaiians With Hypertension by Age in Hawai‘i: 2000-2008.



CHRONIC DISEASE

Table 7.46 Native Hawaiians With Lung Disease by Age in Hawai'i: 2004-2008.

Year	Native Hawaiian							Total
	Age in Years							
0-14	15-17	18-24	25-34	35-44	45-54	55-64	65-74	75+
2008	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)
2007	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)
2006	40	—	—	—	471	779	539	858
2005	443	—	—	302	35	396	338	282
2004	—	30	5	57	38	324	491	357

Year	Total Population							Total
	Age in Years							
0-14	15-17	18-24	25-34	35-44	45-54	55-64	65-74	75+
2008	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)
2007	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)
2006	71	—	—	—	693	3,045	3,405	3,240
2005	473	—	117	574	537	2,104	2,924	2,084
2004	389	30	5	163	456	1,922	2,581	3,679

* Number of cases in sample numerator or denominator too small for reliability - shown for consistency only

— No reported cases

(N) Not reported

Note: The question concerning lung disease was not asked in the survey after 2006.

Source: Hawai'i State, Department of Health, Hawai'i Health Survey. (*Honolulu*)

Figure 7.46a Native Hawaiians with Lung Disease by Age in Hawai'i: 2004-2006

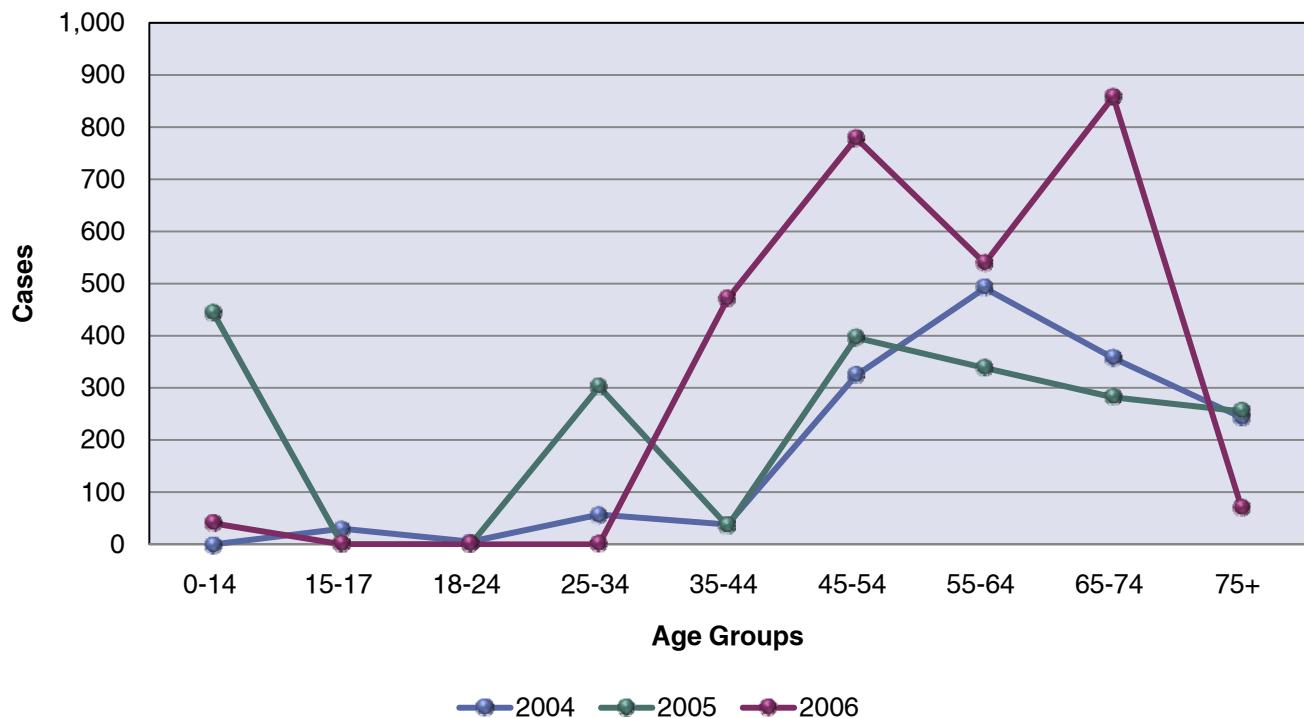
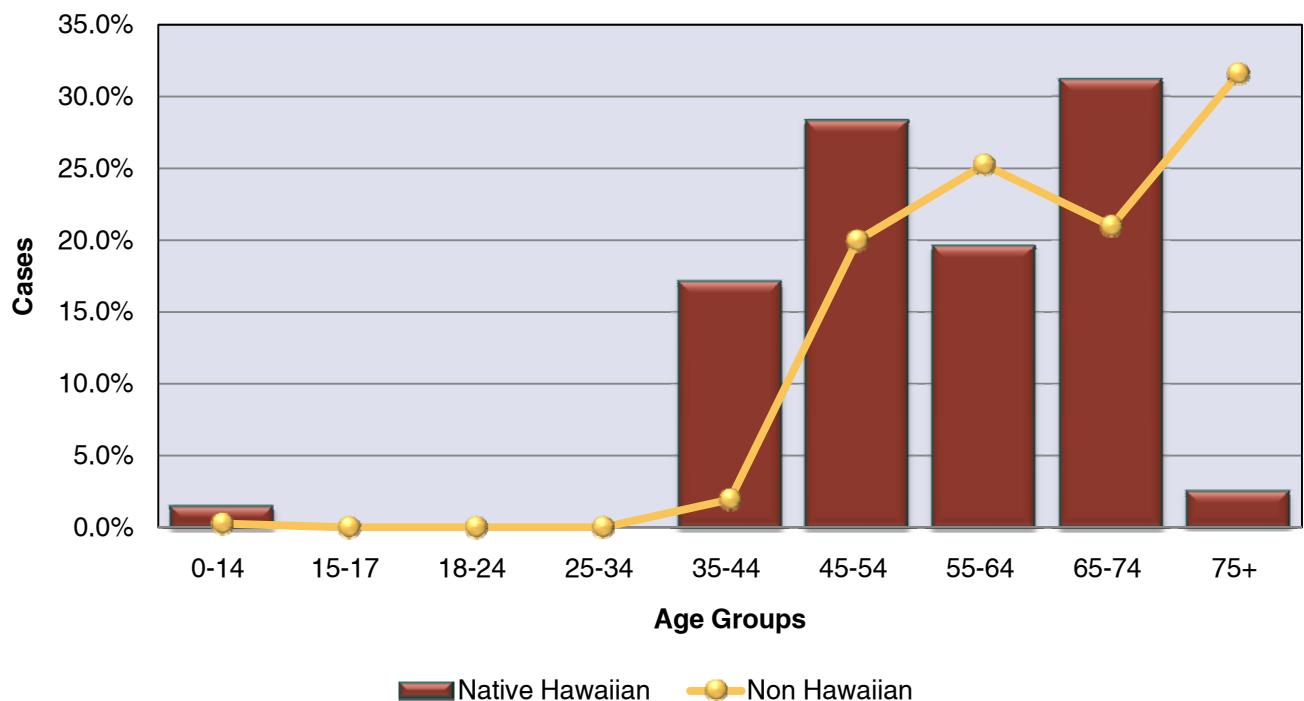


Figure 7.46b Lung Disease by Age in Hawai'i: 2006



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Table 7.47

Average Annual Incidence and Mortality Counts and Rates for All Cancer Sites by Sex and Race/Ethnicity, Hawai'i, 1995-2000.

Race/Ethnicity	Incidence			
	Male		Female	
	Incidence Count	Incidence Rate	Incidence Count	Incidence Rate
Caucasian	830	576.5	672	442.6
Chinese	168	414.6	153	326.7
Filipino	391	476.2	274	318.0
Japanese	780	421.9	728	350.3
Native Hawaiian	300	443.4	359	463.6
Total, All Races	2,637	471.8	2,385	378.8

Race/Ethnicity	Mortality			
	Male		Female	
	Mortality Count	Mortality Rate	Mortality Count	Mortality Rate
Caucasian	272	198.8	203	134.7
Chinese	60	146.2	52	104.1
Filipino	144	175.5	77	95.6
Japanese	300	160.8	218	92.9
Native Hawaiian	144	220.1	137	193.1
Total, All Races	981	179.0	745	117.0

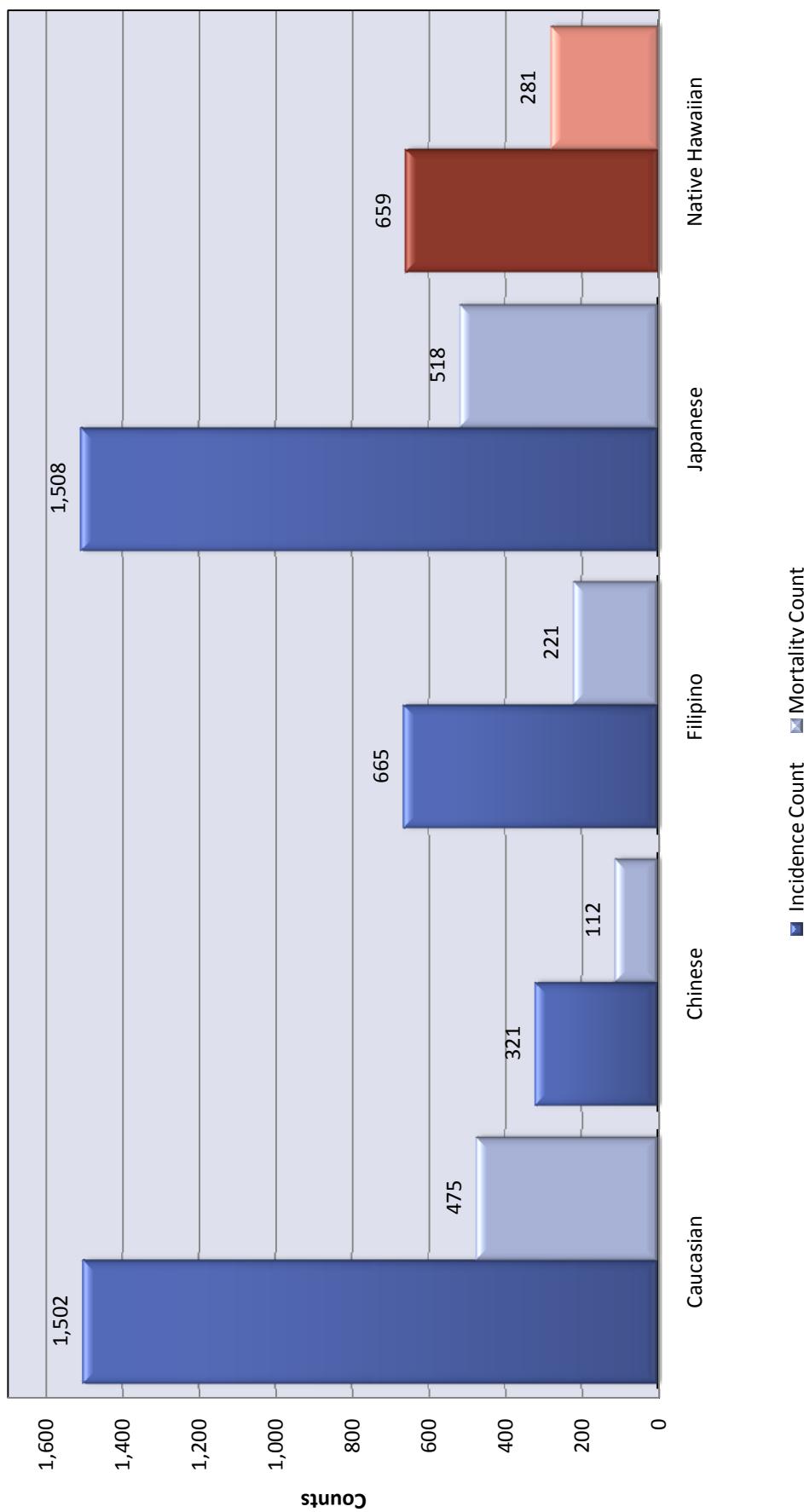
Note: Counts are 6 year average annual, rounded to the nearest whole. All Races include race/ethnic groups listed plus all other race/ethnic groups combined.

Rates are average annual and are per 100,000 population, age-adjusted to the 2000 U.S. standard population.

All Sites includes all invasive cancers. In-situ cases are excluded.

Source: Hawai'i State, University of Hawai'i, Cancer Research Center of Hawai'i, Hawai'i Tumor Registry, Hawai'i Cancer Facts & Figures 2003-2004. (Honolulu)

Figure 7.47 Average Annual Incidence and Mortality Counts for All Cancer Sites by Race/Ethnicity, Hawai`i, 1995-2000



Source: Hawai'i State, University of Hawai'i, Cancer Research Center of Hawai'i, Hawai'i Tumor Registry, Hawaii Cancer Facts & Figures 2003-2004. (Honolulu)



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Table 7.48

Trends In Female Breast Cancer Incidence Rates by Race/Ethnicity, Hawai'i, 1975-2000.

Race/Ethnicity	Incidence				
	Time Period				
	1975-1979	1980-1984	1985-1989	1990-1994	1995-2000
Caucasian	123.2	126.0	159.0	145.6	149.6
Chinese	81.4	76.6	92.5	99.5	109.8
Filipino	43.6	48.3	74.0	82.6	93.1
Japanese	60.5	71.8	97.7	109.3	133.2
Native Hawaiian	117.1	131.6	138.9	139.6	162.4
Total	82.7	89.2	113.8	116.0	128.3

Race/Ethnicity	Morbidity				
	Time Period				
	1975-1979	1980-1984	1985-1989	1990-1994	1995-2000
Caucasian	29.8	31.0	34.6	31.0	25.4
Chinese	19.5	20.5	17.9	16.5	14.9
Filipino		14.7	14.7	19.1	14.2
Japanese	13.1	11.3	13.9	17.0	12.2
Native Hawaiian		42.9	40.2	31.0	31.0
Total	20.5	22.1	22.9	22.4	18.1

Rates are per 100,000 population and are age-adjusted to the 2000 U.S. standard population.

** Rates based on small numbers (<20 per time period) may be unstable and are not presented.

Source: Hawai'i State, University of Hawai'i, Cancer Research Center of Hawai'i, Hawai'i Tumor Registry, Hawai'i Cancer Facts & Figures 2003-2004. (Honolulu)

Figure 7.48a Trends In Female Breast Cancer Incidence Rates by Race/Ethnicity, Hawai'i, 1975-2000.

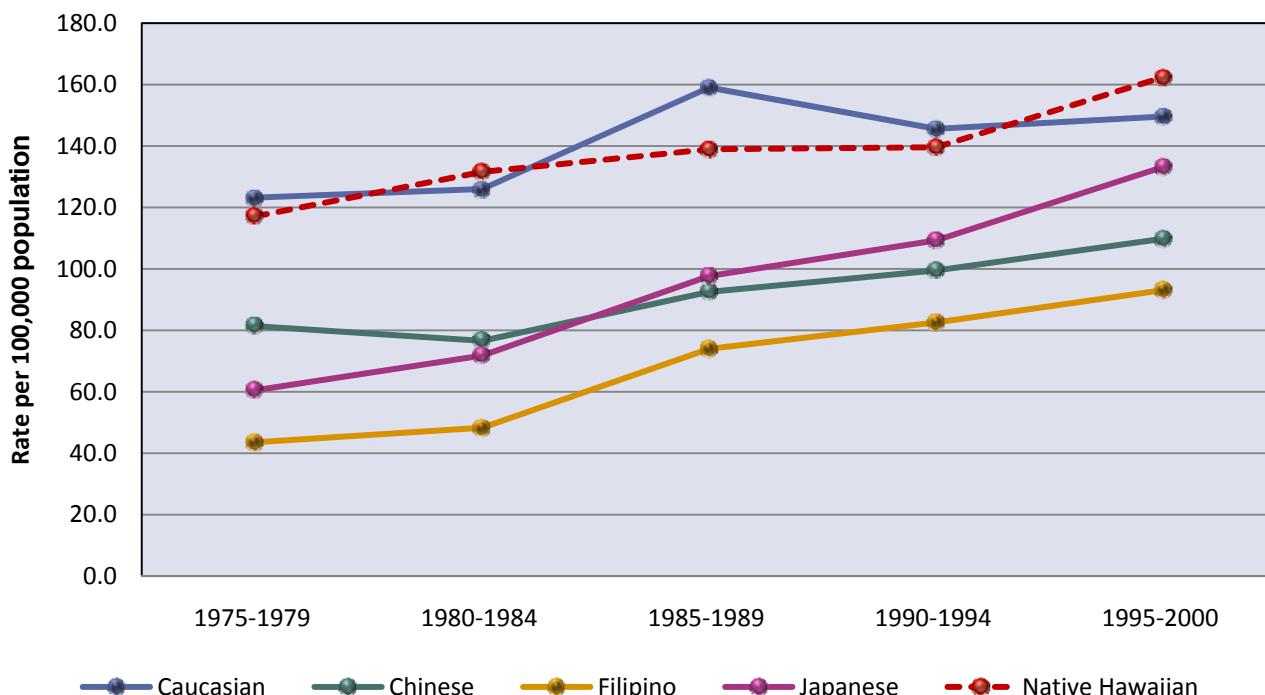
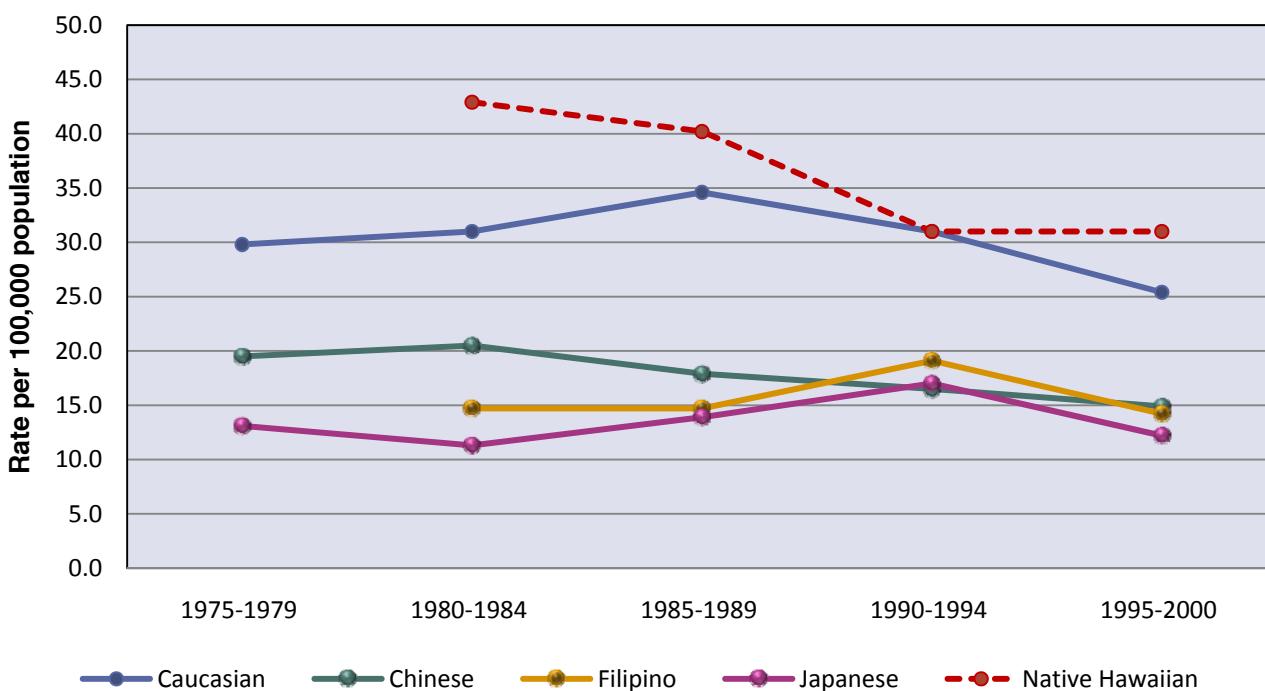


Figure 7.48b Trends In Female Breast Cancer Morbidity Rates by Race/Ethnicity, Hawai'i, 1975-2000.



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Table 7.49 Cancer Incidence Rates* (leading sites) in Hawai'i: 1995-2000.

Leading Cancer Sites	Race/Ethnicity										Total Rate		
	Caucasian Rate		Chinese Rate		Filipino Rate		Hawaiian Rate		Japanese Rate		Male	Female	Male
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Lung	78.3	53.0	61.2	29.9	85.4	32.3	96.9	64.1	55.8	23.2	71.8	37.6	
Colorectum	65.3	43.3	52.3	45.5	70.9	33.7	55.9	41.4	82.8	52.0	67.8	44.4	
Stomach	13.1	6.9	12.6	10.2	18.2	8.1	21.8	12.4	33.0	14.6	22.6	11.6	
Melanoma	62.8	29.8	0.4	1.2	3.1	0.7	2.6	2.2	1.7	2.2	20.5	10.2	
Breast	149.6		109.8		93.1		162.4		133.2		128.3		
Corpus Uteri	22.2		16.0		22.5		33.6		25.0		24.1		
Prostate	155.6		130.9		143.5		100.5		113.0		127.4		

* Rates are average annual rates per 100,000, age-adjusted to the 2000 US standard population. Incidence Rates: 6 year average 1995-2000.

Source: Hawai'i State, University of Hawai'i, Cancer Research Center of Hawai'i, Hawai'i Tumor Registry, Hawai'i Cancer Plan 2004-2009. (Honolulu)

Figure 7.49a Cancer Incidence (age adjusted) Rates (leading sites) for Native Hawaiians in Hawai‘i: 1995-2000.

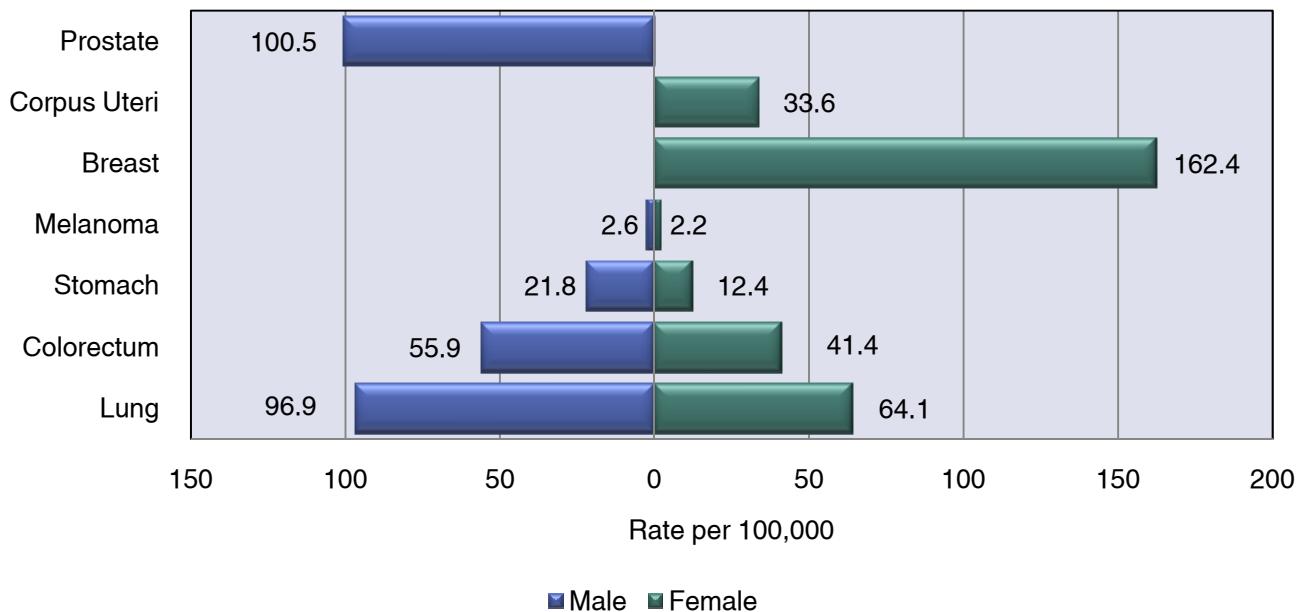


Figure 7.49b Cancer Incidence (age adjusted) Rates (Lung) in Hawai‘i: 1995-2000.

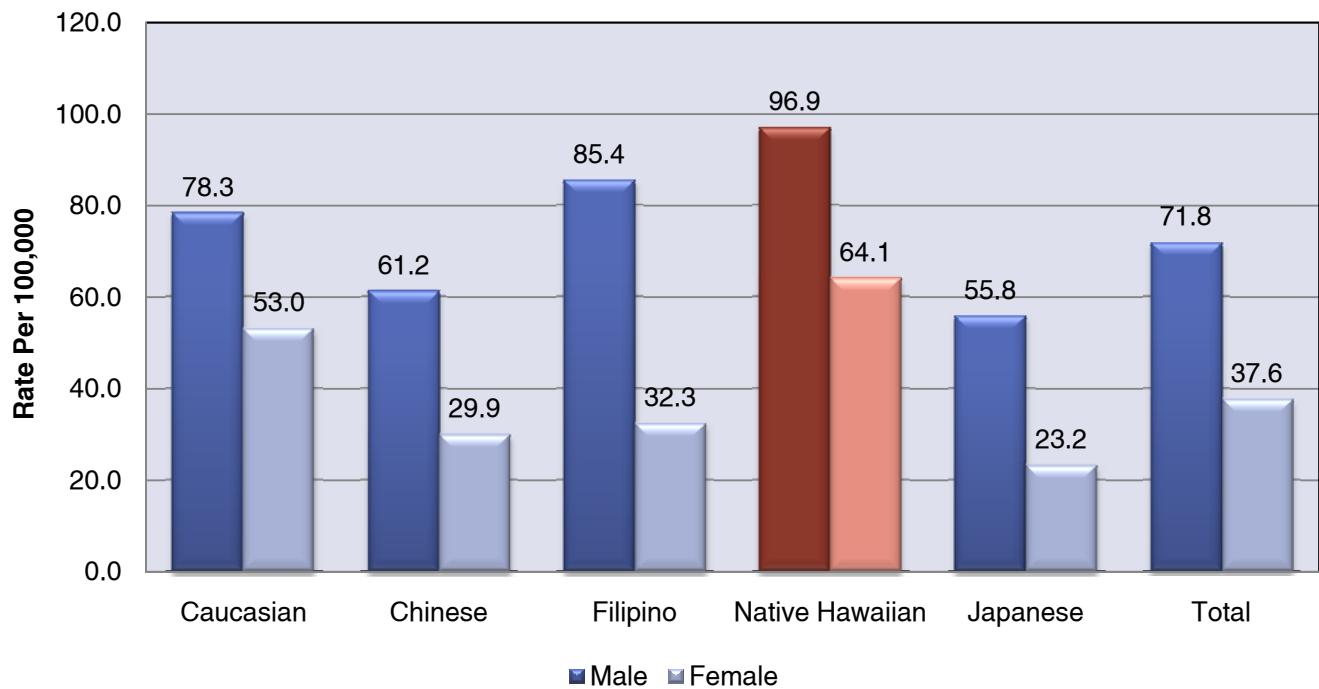


Figure 7.49c Cancer Incidence (age adjusted) Rates (Colorectum) in Hawai'i: 1995-2000.

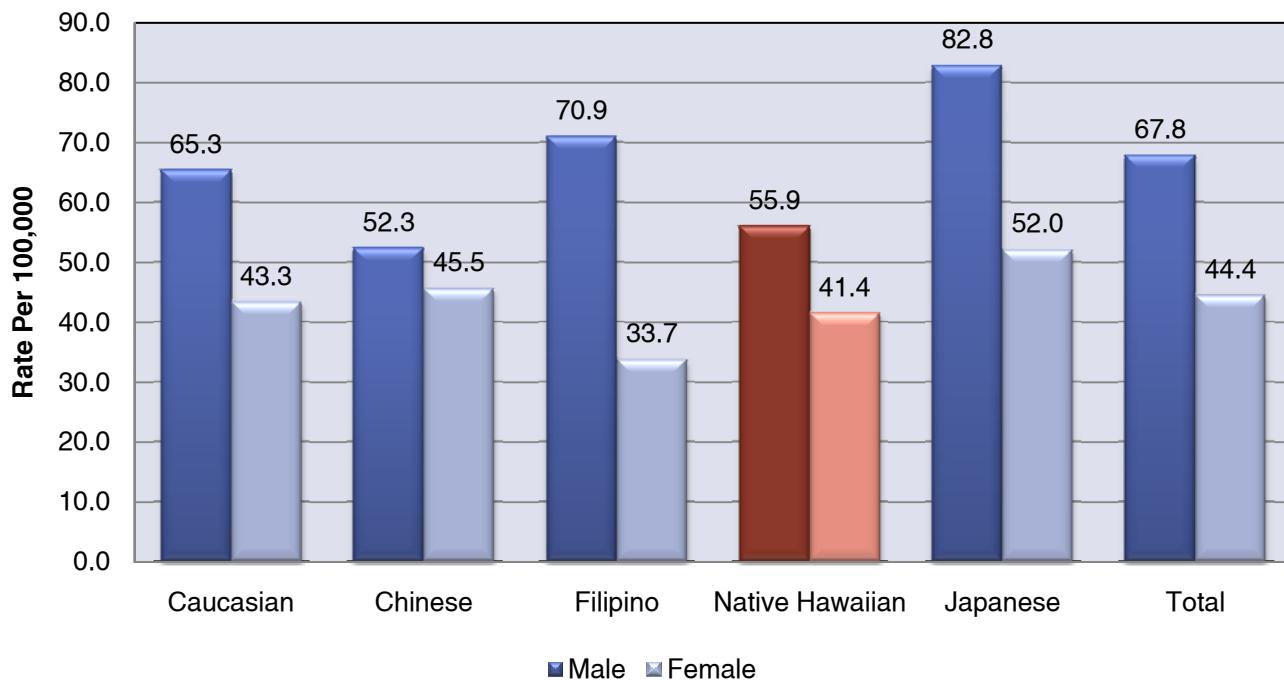


Figure 7.49d Cancer Incidence (age adjusted) Rates (Stomach) in Hawai'i: 1995-2000.

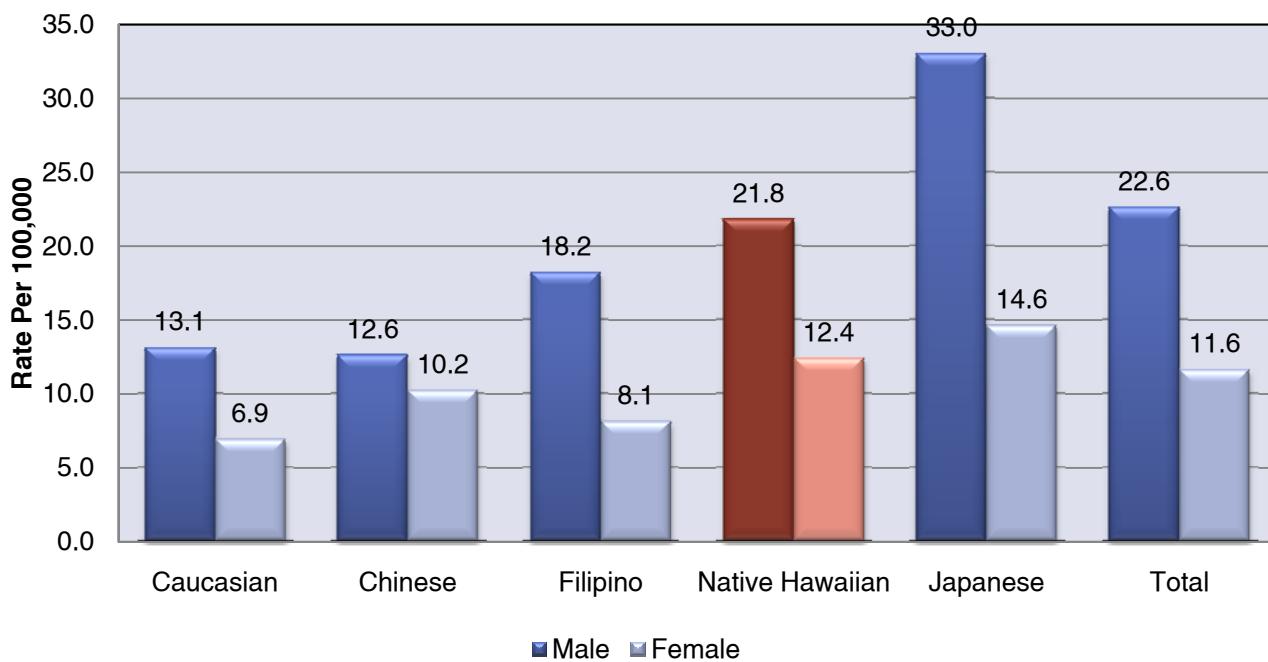


Figure 7.49e Cancer Incidence Rates (Prostate) in Hawai‘i: 1995-2000.

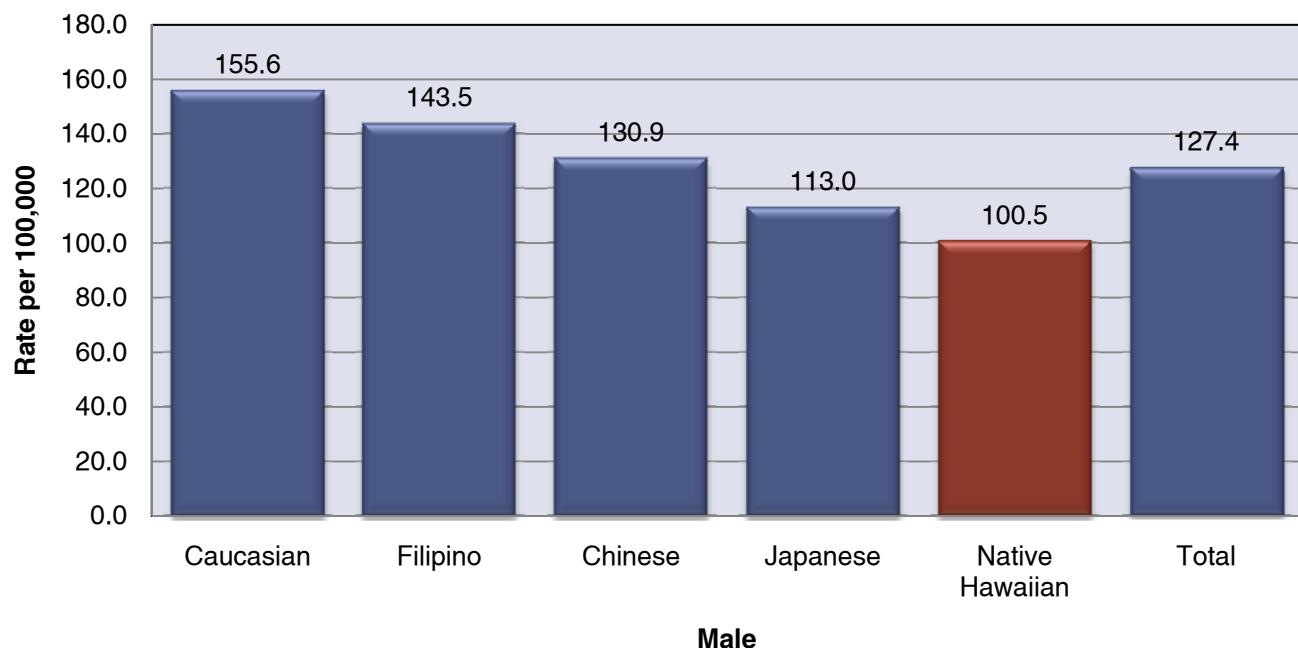
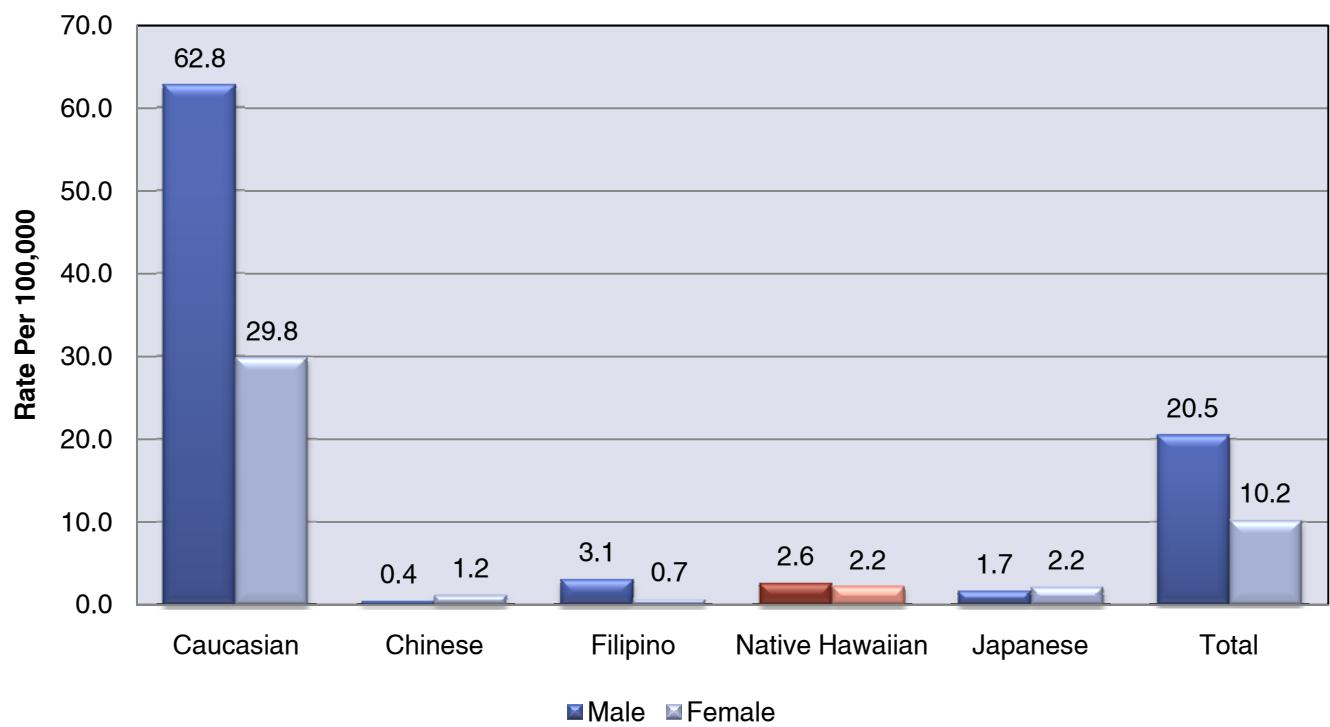
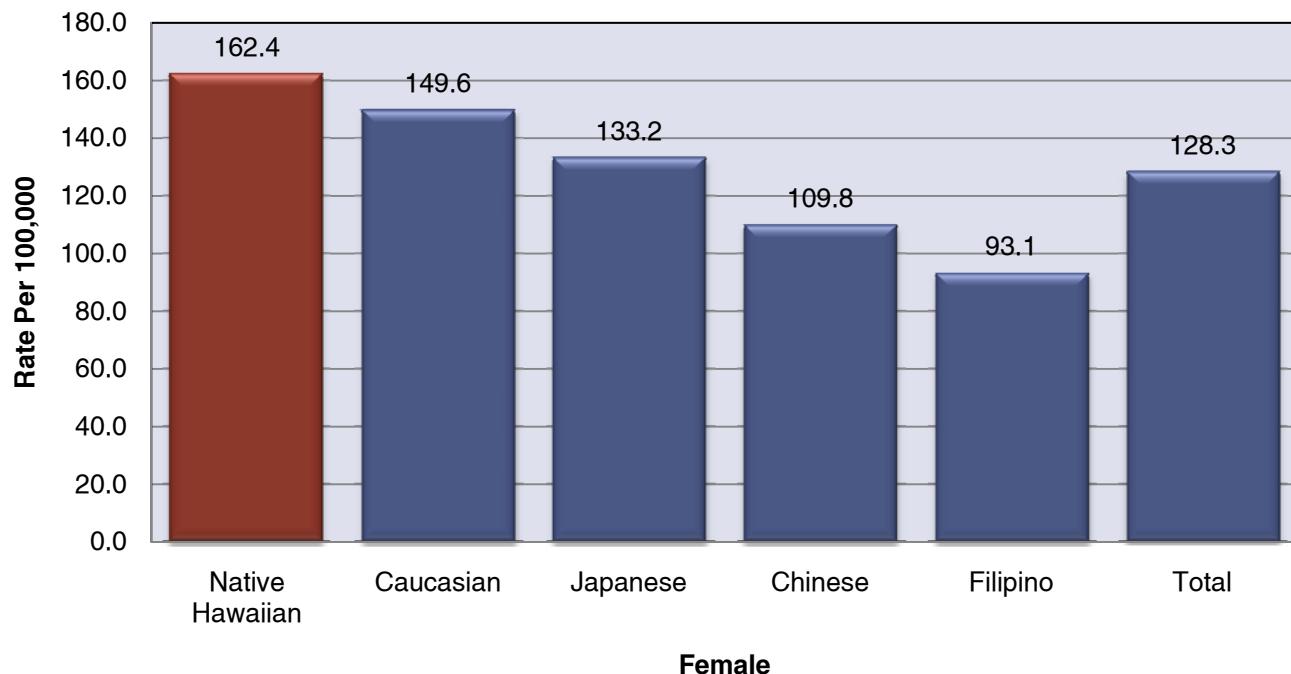


Figure 7.49f Cancer Incidence (age adjusted) Rates (Melanoma) in Hawai‘i: 1995-2000.

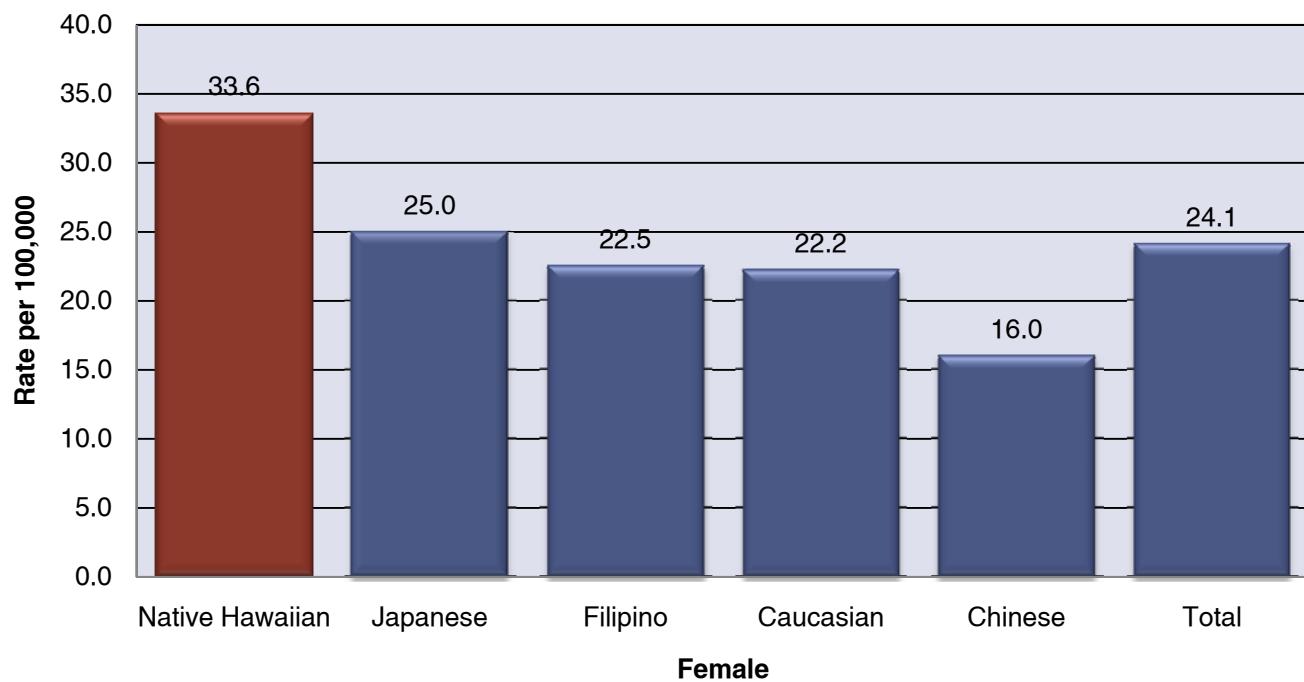


Source: Hawai‘i State, University of Hawai‘i, Cancer Research Center of Hawai‘i, Hawai‘i Tumor Registry, Hawai‘i Cancer Facts & Figures 2003-2004. (Honolulu)

**Figure 7.49g Cancer Incidence Rates (Breast) in Hawai‘i:
1995-2000.**



**Figure 7.49h Cancer Incidence Rates (Corpus Uteri) in Hawai‘i:
1995-2000.**



CANCER**Table 7.50** Cancer Mortality Rates* (leading sites) in Hawai'i: 1995-2000.

Leading Cancer Sites	Race/Ethnicity												Total Rate			
	Caucasian Rate		Chinese Rate		Filipino Rate		Hawaiian Rate		Japanese Rate		Male	Female	Male	Female	Male	Female
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Lung	47.4	30.2	49.7	22.6	54.1	20.4	75.9	48.2	38.5	14.4	50.6	24.8				
Colorectum	15.7	10.7	11.3	11.2	15.6	9.0	24.0	14.2	20.8	12.3	18.3	11.7				
Stomach	3.6	3.2	4.7	5.9	6.9	3.3	14.8	9.1	19.9	8.5	12.3	6.6				
Melanoma	7.5	4.9	10.9	8.5	10.2	6.4	11.0	12.0	10.8	9.0	10.5	8.2				
Breast	22.6		14.9		14.2		31.0		12.2							
Prostate	23.5		13.7		22.6		21.9		14.2							
															19.9	

* Rates are average annual rates per 100,000, age-adjusted to the 2000 US standard population. Incidence Rates: 6 year average 1995-2000.

Source: Hawai'i State, University of Hawai'i, Cancer Research Center of Hawai'i, Hawai'i Tumor Registry, Hawai'i Cancer Plan 2004-2009, (Honolulu)

Figure 7.50a Cancer Mortality (age-adjusted) Rates (leading sites) for Native Hawaiians in Hawai'i: 1995-2000.

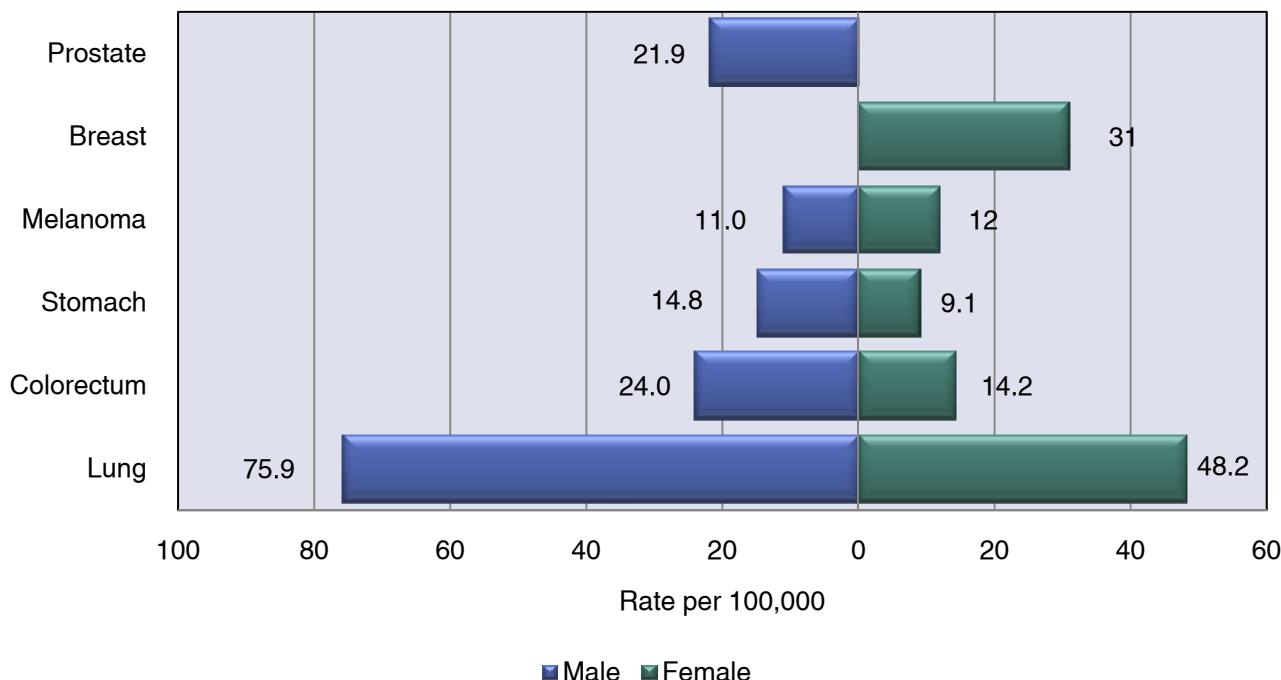


Figure 7.50b Cancer Mortality (age adjusted) Rates (Lung) in Hawai'i: 1995-2000.

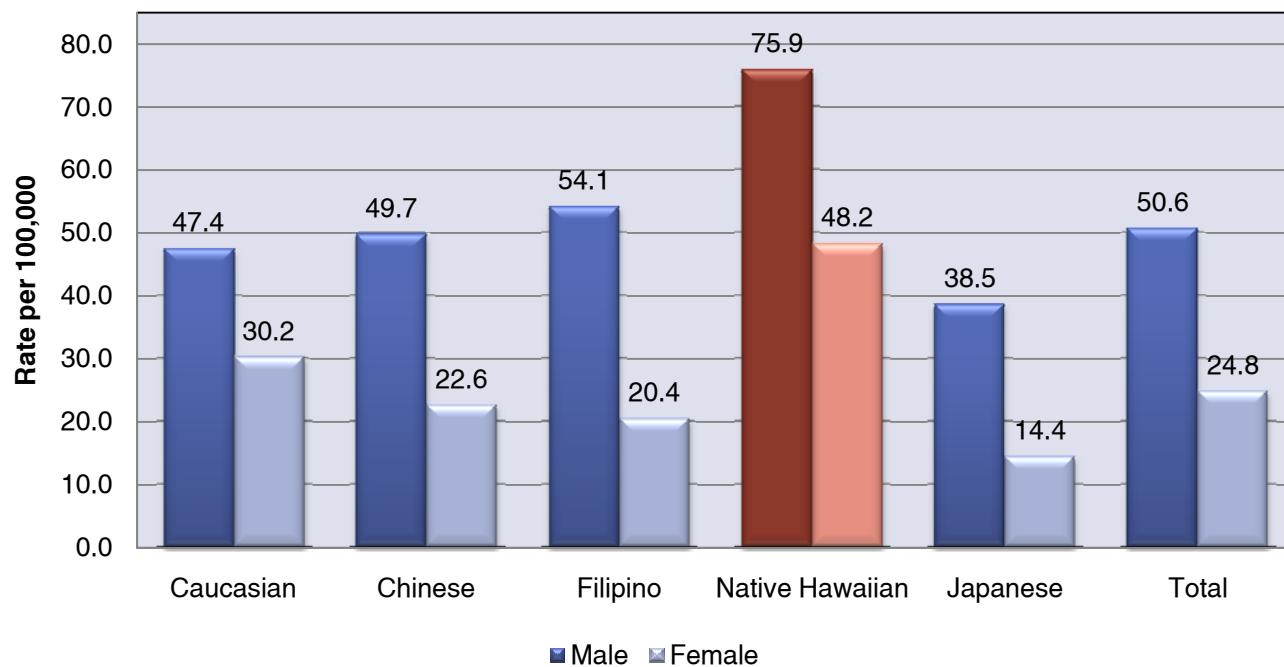


Figure 7.50c Cancer Mortality (age adjusted) Rates (Colorectum) in Hawai'i: 1995-2000.

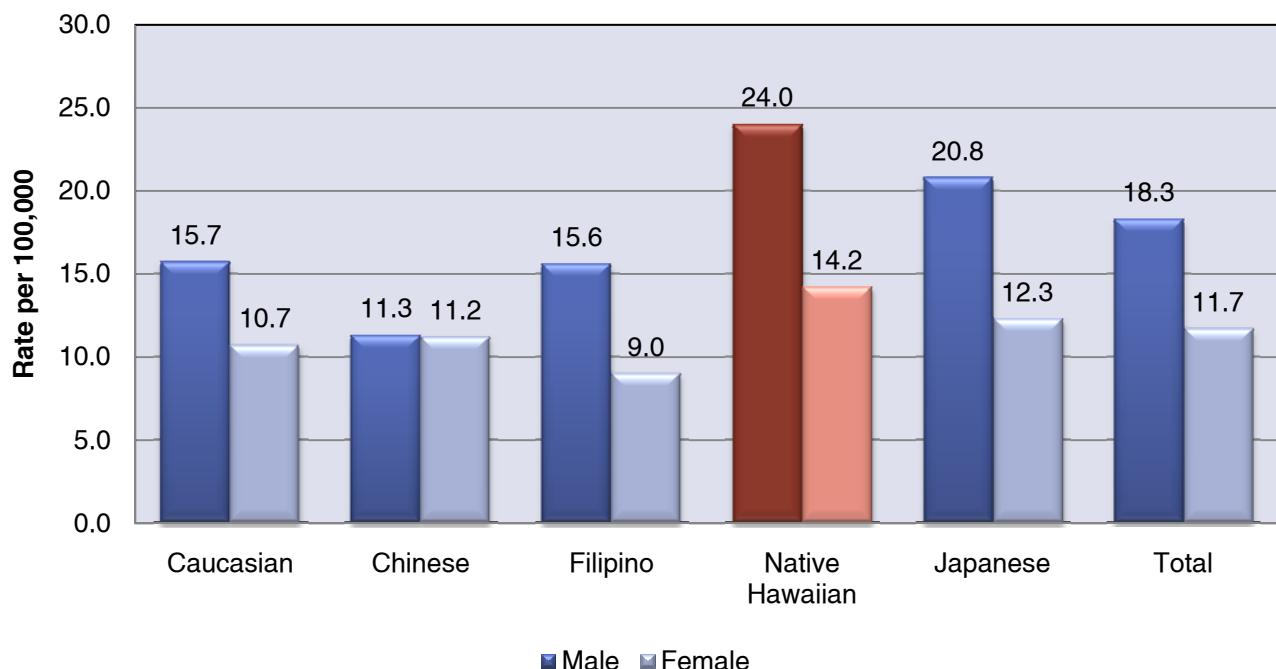


Figure 7.50d Cancer Mortality (age adjusted) Rates (Stomach) in Hawai'i: 1995-2000.

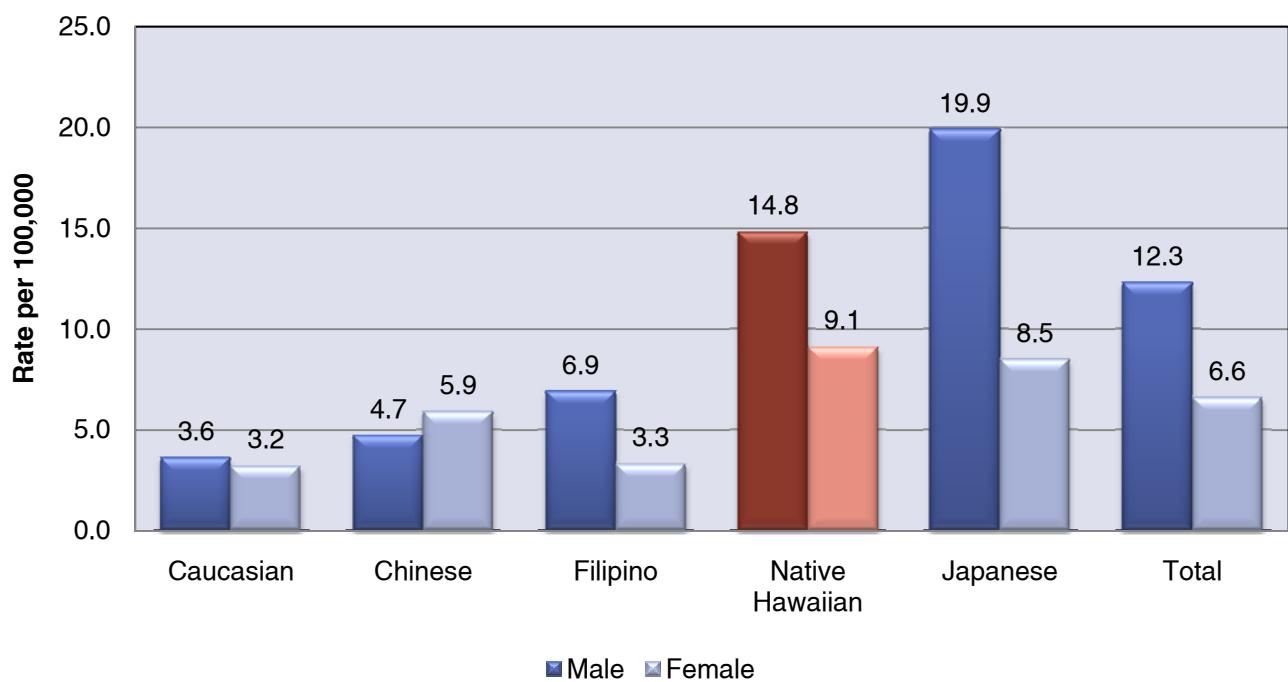


Figure 7.50e Cancer Mortality (age adjusted) Rates (Melanoma) in Hawai‘i: 1995-2000.

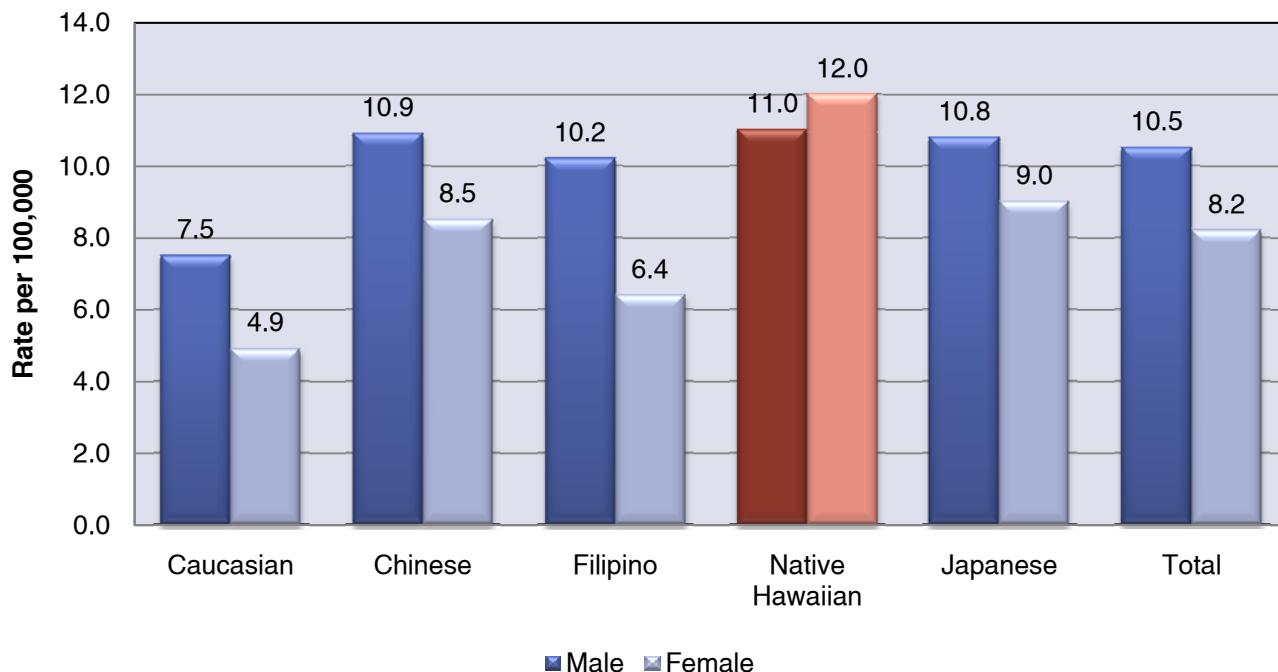


Figure 7.50f Cancer Mortality (age adjusted) Rates (Breast) in Hawai‘i: 1995-2000.

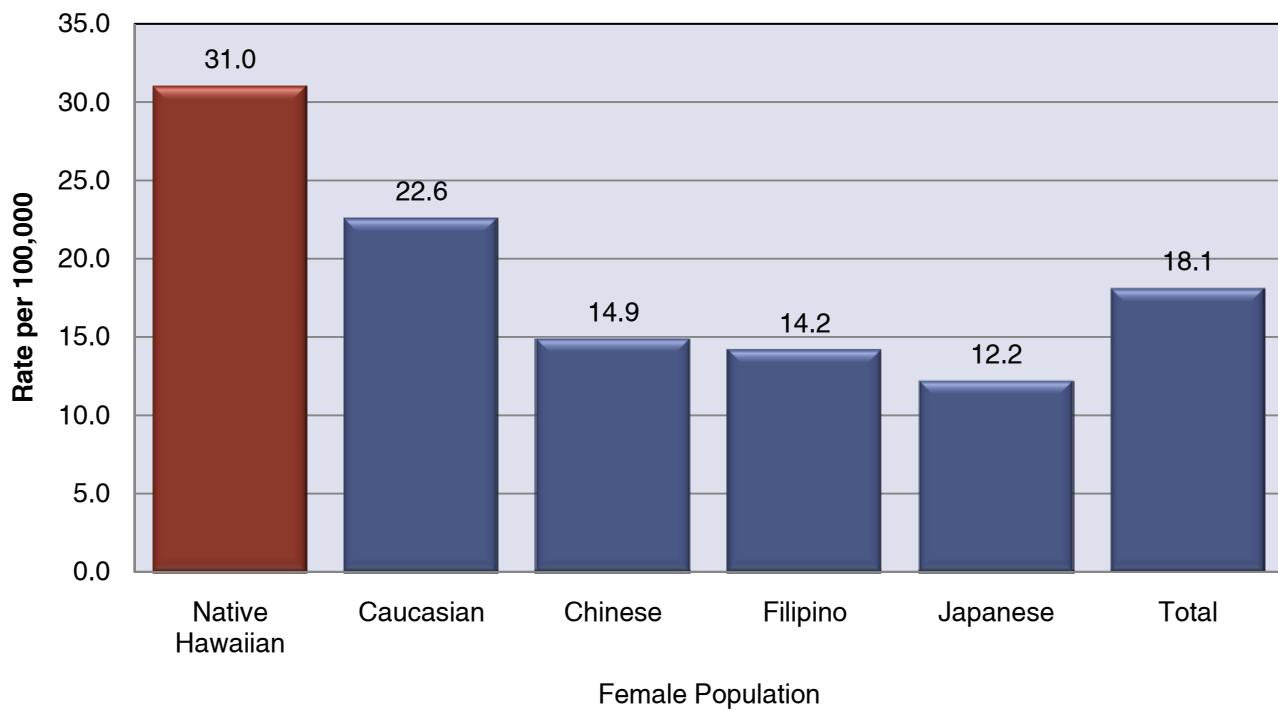
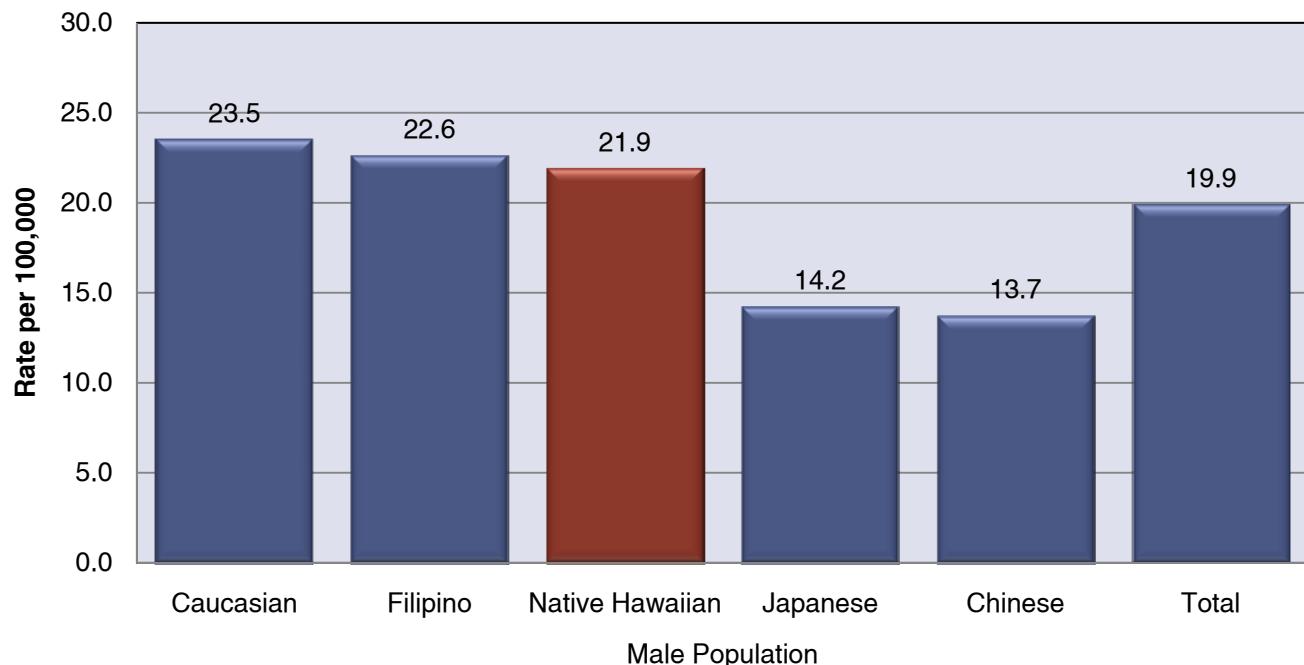


Figure 7.50g Cancer Mortality (age adjusted) Rates (Prostate) in Hawai'i: 1995-2000.



Source: Hawai'i State, University of Hawai'i, Cancer Research Center of Hawai'i, Hawai'i Tumor Registry, Hawai'i Cancer Facts & Figures 2003-2004. (Honolulu)

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Table 7.51 Cancer Incidence Counts for Thirteen Race/Ethnic Groups, Selected Cancer Sites, Hawai'i, 1995-2000.

Cancer Type	Gender		Race/Ethnicity												
			African American	American Indian	Asian Non-Hispanic	Chinese	Filipino	Japanese	Korean	Native Hawaiian	Samoan	Tongan and Other Pacific Islander	Vietnamese and Other Asian		
All Sites	Male	137	290	4,978	1,007	2,343	4,680	296	1,798	130	72	92	92		
	Female	95	336	4,034	916	1,646	4,370	378	2,153	161	92	127	127		
Breast	Female	29	101	1,379	297	502	1,573	88	769	39	23	30	30		
Colon and Rectum	Male	10	15	550	127	344	906	42	226	9	6	10	10		
	Female	14	20	378	131	167	703	53	177	10	3	15	15		
Lung and Bronchus	Male	19	17	671	152	416	638	58	383	20	20	20	20		
	Female	9	18	483	91	165	340	51	271	13	13	9	9		
Prostate	Male	45	77	1,294	327	704	1,326	53	352	33	8	13	13		

Source: Hawai'i State, University of Hawai'i, Cancer Research Center of Hawai'i, Hawai'i Tumor Registry, Hawai'i Cancer Facts & Figures 2003-2004. (Honolulu)

Figure 7.51a Cancer Incidence Counts for Native Hawaiians, Selected Cancer Sites, Hawai'i, 1995-2000

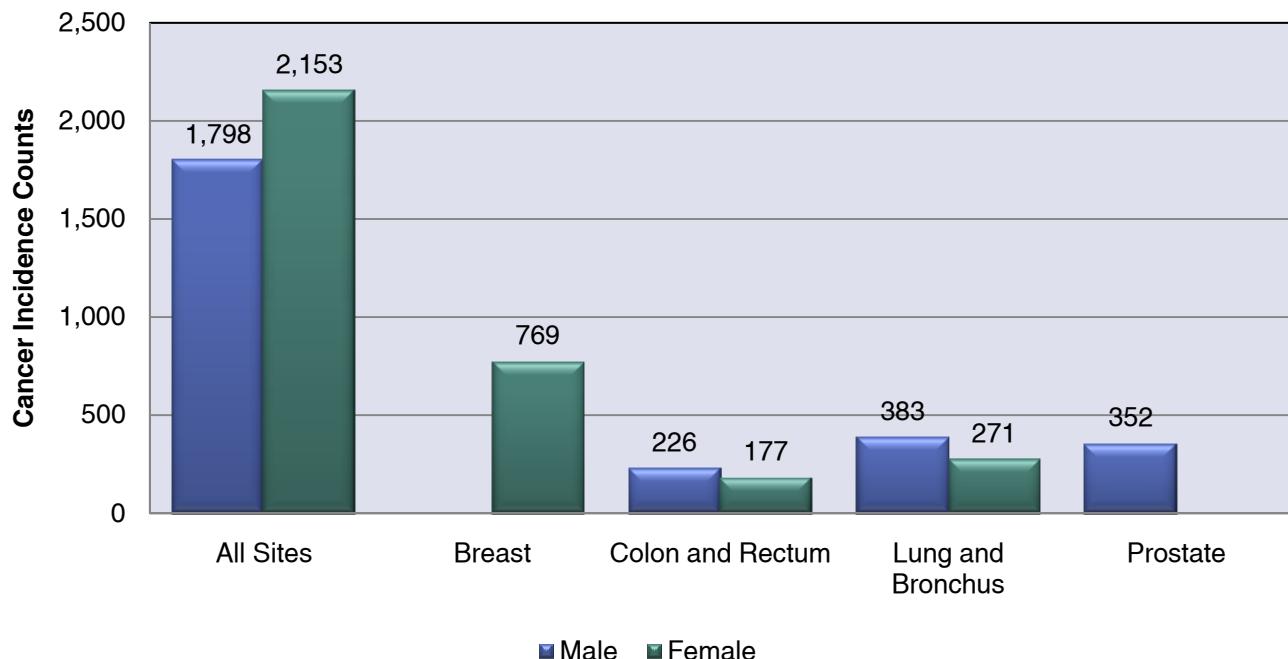
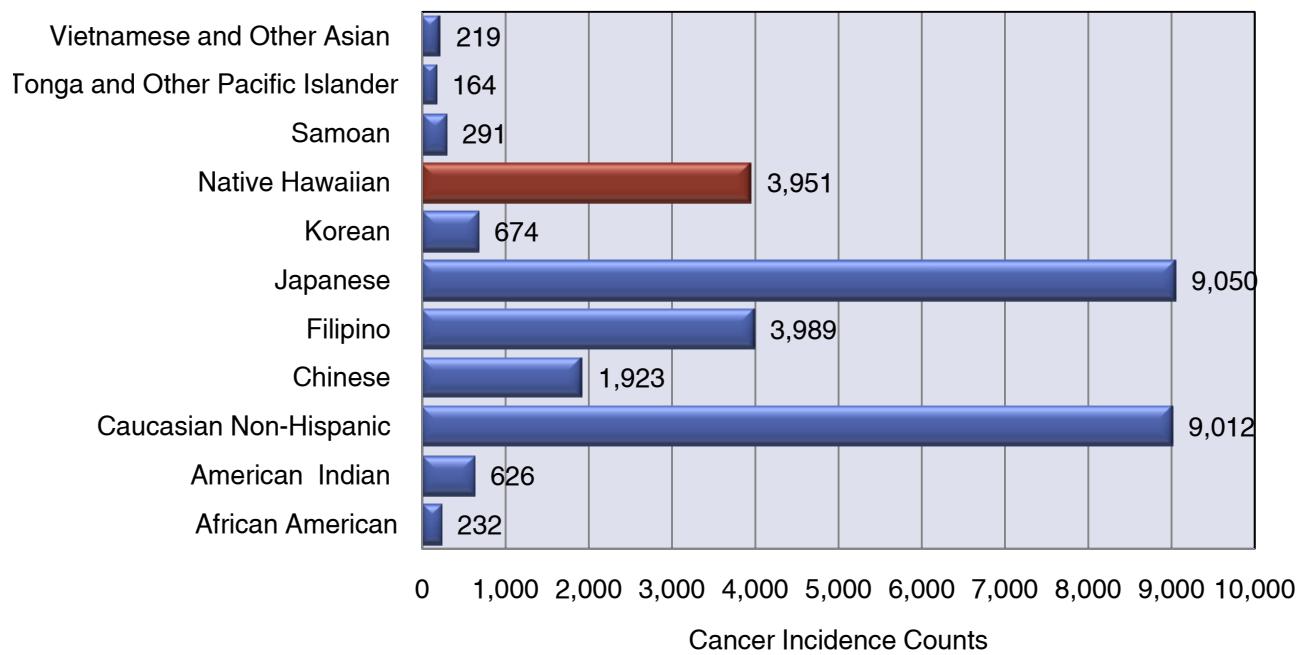


Figure 7.51b Cancer Incidence Counts for Selected Race/Ethnic Groups, Selected Cancer Sites, Hawai'i, 1995-2000



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Table 7.52a | Five Leading Cancer Sites for Morbidity by Males and Race/Ethnicity, Hawai'i, 1995-2000.

Morbidity	Race/Ethnicity								Native Hawaiian % Total
	Caucasian		Chinese		Filipino		Japanese		
Male	Deaths	% Total	Deaths	% Total	Deaths	% Total	Deaths	% Total	
Colon and Rectum	148	9.1	27	7.6	77	8.9	233	12.9	93 10.8
Liver			23	6.4	55	6.4			43 5.0
Lung and Bronchus	453	27.8	122	34.2	263	30.4	441	24.5	295 34.3
NHL	74	4.5							
Pancreas	79	4.8	28	7.8	51	5.9	120	6.7	
Prostate	209	12.8	36	10.1	113	13.0	163	9.1	71 8.2
Stomach							227	12.6	57 6.6
Total, All Sites	1,630	100.0	357	100.0	866	100.0	1,800	100.0	861 100.0

Most frequently diagnosed or leading cause of cancer death
 Second most frequently diagnosed or second leading cause of cancer death
 Third most frequently diagnosed or third leading cause of cancer death
 Note: Counts are 6 year totals. NHL = Non-Hodgkin lymphomas. Liver includes hepatic bile duct.

Source: Hawai'i State, University of Hawai'i, Cancer Research Center of Hawai'i, Hawai'i Tumor Registry, Hawai'i Cancer Facts & Figures 2003-2004. (Honolulu)

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Table 7.52b | Five Leading Cancer Sites for Morbidity by Females and Race/Ethnicity, Hawai‘i, 1995-2000.

Morbidity	Race/Ethnicity							Native Hawaiian Deaths	% Total
	Caucasian		Chinese		Filipino		Japanese		
Female	Deaths	% Total	Deaths	% Total	Deaths	% Total	Deaths		
Breast	231	19.0	42	13.6	76	16.5	149	11.4	139
Colon and Rectum	106	8.7	33	10.7	42	9.1	172	13.2	58
Corpus Uteri									7.1
Lung and Bronchus	306	25.1	71	23.0	98	21.3	219	16.8	201
Melanomas of the Skin									24.5
NHL	53	4.4			25	5.4			
Ovary	66	5.4							4.8
Pancreas			25	8.1	28	6.1	135	10.3	39
Stomach			18	5.8			124	9.5	50
Thyroid									6.1
Total, All Sites	1,217	100.0	309	100.0	461	100.0	1,306	100.0	821

Most frequently diagnosed or leading cause of cancer death

Second most frequently diagnosed or second leading cause of cancer death

Third most frequently diagnosed or third leading cause of cancer death

Note: Counts are 6 year totals. NHL = Non-Hodgkin lymphomas. Liver includes hepatic bile duct.

Source: Hawai‘i State, University of Hawai‘i, Cancer Research Center of Hawai‘i, Hawai‘i Tumor Registry, Hawai‘i Cancer Facts & Figures 2003-2004. (Honolulu)

CANCER

Table 7.53a | Five Leading Cancer Sites for Incidence by males and Race/Ethnicity, Hawai'i, 1995-2000.

Incidence	Race/Ethnicity						Native Hawaiian % Total	
	Caucasian		Chinese		Filipino			
Male	Cases	% Total	Cases	% Total	Cases	% Total	Cases	% Total
Colon and Rectum	550	11.0	127	12.6	344	14.7	906	19.4
Liver			41	4.1			226	12.6
Lung and Bronchus	671	13.5	152	15.1	416	17.8	638	13.6
Melanomas of the Skin	574	11.5					383	21.3
NHL	168	3.4	55	5.5	93	4.0	156	3.3
Pancreas							67	3.7
Prostate	1,294	26.0	327	32.5	704	30.0	1,326	28.3
Stomach					90	3.8	375	8.0
Thyroid							89	4.9
Total, All Sites	4,978	100.0	1,007	100.0	2,343	100.0	4,680	100.0

Most frequently diagnosed or leading cause of cancer death

Second most frequently diagnosed or second leading cause of cancer death

Third most frequently diagnosed or third leading cause of cancer death

Note: Counts are 6 year totals. NHL = Non-Hodgkin lymphomas. Liver includes hepatic bile duct.

Source: Hawai'i State, University of Hawai'i, Cancer Research Center of Hawai'i, Hawai'i Tumor Registry, Hawai'i Cancer Facts & Figures 2003-2004. (Honolulu)

CANCER

Table 7.53b | Five Leading Cancer Sites for Incidence by Females and Race/Ethnicity, Hawai'i, 1995-2000.

Incidence	Race/Ethnicity							
	Caucasian				Japanese			
Female	Cases	% Total	Cases	% Total	Cases	% Total	Cases	% Total
Breast	1,379	34.2	297	32.4	502	30.5	1,573	36.0
Colon and Rectum	378	9.4	131	14.3	167	10.1	703	16.1
Corpus Uteri	208	5.2	46	5.0	126	7.7	278	6.4
Lung and Bronchus	483	12.0	91	9.9	165	10.0	340	7.8
Melanoma of the Skin	273	6.8					271	12.6
Ovary								
Stomach								
Thyroid							224	5.1
Total, All Sites	4,034	100.0	916	100.0	1,646	100.0	4,370	100.0

Most frequently diagnosed or leading cause of cancer death

Second most frequently diagnosed or second leading cause of cancer death

Third most frequently diagnosed or third leading cause of cancer death

Note: Counts are 6 year totals. NHL = Non-Hodgkin lymphomas. Liver includes hepatic bile duct.

Source: Hawai'i State, University of Hawai'i, Cancer Research Center of Hawai'i, Hawai'i Tumor Registry, Hawai'i Cancer Facts & Figures 2003-2004. (Honolulu)

CANCER

Table 7.54 Trends In Cervical Cancer Incidence Rates by Race/Ethnicity, Hawai'i, 1975-2000.

Race/Ethnicity	Cervical Cancer Incidence				
	Time Period				
	1975-1979	1980-1984	1985-1989	1990-1994	1995-2000
Caucasian	12.1	10.3	13.6	11.4	9.5
Chinese	**	**	**	**	7.6
Filipino	**	12.3	12.7	9.4	11.5
Japanese	9.0	6.1	6.5	9.3	6.5
Native Hawaiian	20.0	14.7	13.1	12.7	13.5
Total	12.2	10.1	10.8	10.9	10.1

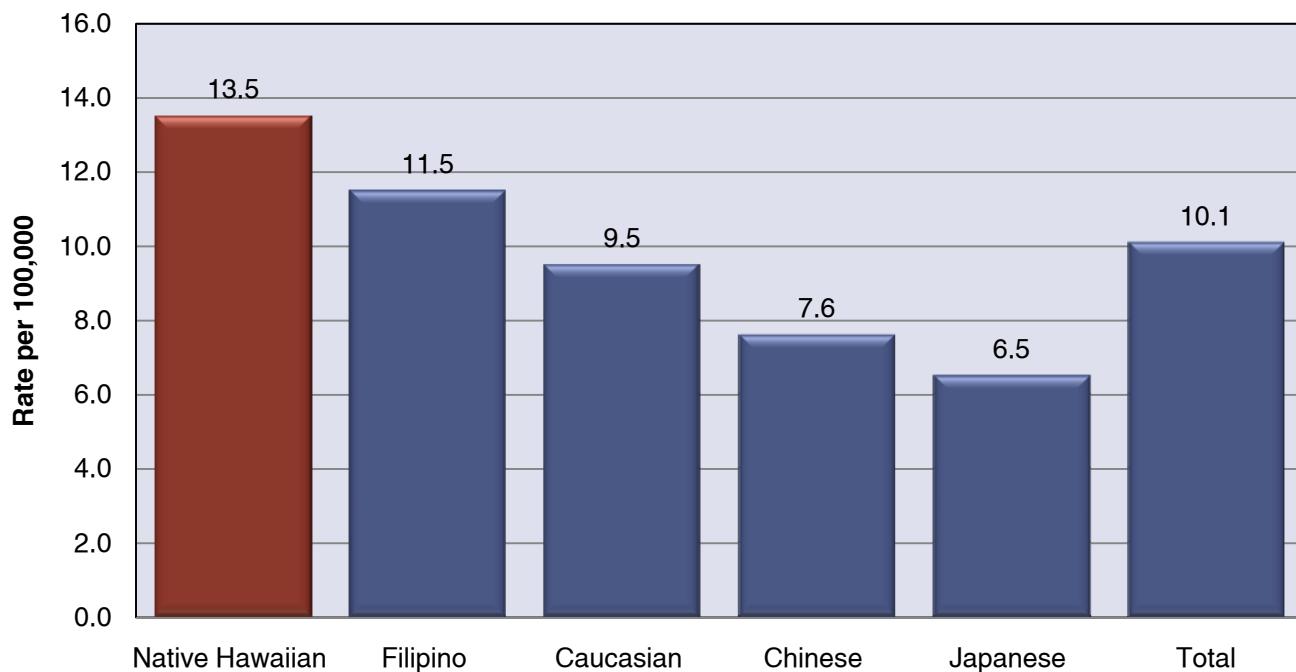
Rates are per 100,000 population and are age-adjusted to the 2000 U.S. standard population.

** Rates based on small numbers (<20 per time period) may be unstable and are not presented.

Trends in mortality not presented due to small numbers (< 20 per time period) in all race/ethnic groups.

Source: Hawai'i State, University of Hawai'i, Cancer Research Center of Hawai'i, Hawai'i Tumor Registry, Hawai'i Cancer Facts & Figures 2003-2004. (Honolulu)

Figure 7.54 Cervical Cancer Incidence Rates by Race/Ethnicity, Hawai'i, 1995-2000



CANCER

Table 7.55 Trends In Colon and Rectum Cancer Incidence and Mortality Rates by Sex and Race/Ethnicity, Hawai‘i, 1975-2000.

Incidence	COLON CANCER						RECTUM CANCER			
	Males		Females		Males		Females		Females	
	Caucasian	Chinese	Filipino	Japanese	Native Hawaiian	Caucasian	Chinese	Filipino	Japanese	Native Hawaiian
1975-1979	45.9	44.6	35.9	49.3	22.3	40.1	36.7	20.6	29.2	19.7
1980-1984	49.0	40.5	36.3	61.4	37.8	39.3	37.3	22.1	36.9	20.3
1985-1989	55.8	43.8	36.5	60.6	38.9	47.5	35.9	22.2	38.8	25.3
1990-1994	56.1	44.8	35.9	55.8	34.2	40.0	31.4	27.6	35.3	31.3
1995-2000	47.5	33.4	43.2	52.0	35.6	30.5	33.1	21.9	37.6	27.9

COLON CANCER

Morbidity	Males						Females			
	Caucasian	Chinese	Filipino	Japanese	Native Hawaiian	Caucasian	Chinese	Filipino	Japanese	Native Hawaiian
1975-1979	17.4	**	22.3	23.6	**	21.6	19.8	**	13.2	**
1980-1984	22.4	24.1	17.8	22.4	14.9	18.6	12.2	**	14.2	14.6
1985-1989	21.0	15.6	22.1	21.2	22.6	20.5	11.7	**	15.1	12.4
1990-1994	21.9	15.8	14.7	21.9	20.5	14.5	14.0	10.2	12.1	13.6
1995-2000	15.1	8.8	11.7	17.3	19.7	10.1	9.3	7.6	10.2	12.0

Source: Hawai‘i State, University of Hawai‘i, Cancer Research Center of Hawai‘i, Hawai‘i Tumor Registry, Hawai‘i Cancer Facts & Figures 2003-2004. (Honolulu)

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COLON AND RECTUM CANCER

Incidence	Males					Females				
	Caucasian	Chinese	Filipino	Japanese	Native Hawaiian	Caucasian	Chinese	Filipino	Japanese	Native Hawaiian
1975-1979	68.0	72.4	59.5	82.3	43.2	53.2	50.0	30.7	42.8	31.8
1980-1984	68.9	61.3	58.9	85.9	58.4	54.9	47.7	33.5	50.2	28.0
1985-1989	77.3	65.9	65.4	91.4	59.8	61.0	49.7	34.7	51.5	32.9
1990-1994	76.1	65.0	57.3	82.1	57.4	51.3	43.3	40.0	45.9	42.6
1995-2000	64.8	52.3	70.5	82.7	55.3	41.9	44.2	33.3	51.7	40.3

COLON AND RECTUM CANCER

Morbidity	Males					Females				
	Caucasian	Chinese	Filipino	Japanese	Native Hawaiian	Caucasian	Chinese	Filipino	Japanese	Native Hawaiian
1975-1979	19.4	16.1	30.1	35.2	**	24.5	21.7	11.6	16.4	**
1980-1984	27.6	30.0	21.6	27.9	23.4	20.2	13.2	8.1	16.8	15.7
1985-1989	24.1	19.0	28.1	28.7	29.1	23.8	14.6	9.9	18.4	16.5
1990-1994	27.0	19.3	18.8	27.2	25.3	16.6	17.0	11.6	13.6	15.8
1995-2000	18.0	11.3	15.6	20.8	24.0	11.9	11.2	8.9	12.3	14.0

Source: Hawai'i State, University of Hawai'i, Cancer Research Center of Hawai'i, Hawai'i Tumor Registry, Hawai'i Cancer Facts & Figures 2003-2004. (Honolulu)

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RECTUM CANCER

Incidence	Males				Females			
	Caucasian	Chinese	Filipino	Japanese	Native Hawaiian	Caucasian	Chinese	Native Hawaiian
1975-1979	22.0	27.8	23.6	33.0	20.8	13.1	13.3	10.1
1980-1984	19.9	20.8	22.6	24.5	20.5	15.5	10.4	11.4
1985-1989	21.6	22.1	28.9	30.7	20.9	13.6	13.8	12.5
1990-1994	20.1	20.2	21.5	26.4	23.2	11.4	11.9	12.4
1995-2000	17.3	18.9	27.3	30.7	19.7	11.4	11.2	11.4

Note: Colon and rectum cancer excluding anus

Rates are per 100,000 population and are age-adjusted to the 2000 U.S. standard population.

** Rates based on small numbers (<20 per time period) may be unstable and are not presented.

Trends in rectum mortality not presented due to small numbers (< 20 per time period) in majority of race/ethnic groups (exception: male Caucasian and male/female Japanese).

Source: Hawai'i State, University of Hawai'i, Cancer Research Center of Hawai'i, Hawai'i Tumor Registry, Hawai'i Cancer Facts & Figures 2003-2004. (Honolulu)

CANCER

Table 7.56 Trends in Lung and Bronchus Cancer Incidence and Mortality Rates by Sex and Race/Ethnicity, Hawai'i 1975-2000.

Incidence	LUNG and BRONCHUS CANCER						Females			
	Males				Females					
	Caucasian	Chinese	Filipino	Japanese	Native Hawaiian	Caucasian	Chinese	Filipino	Japanese	Native Hawaiian
1975-1979	98.3	58.4	43.9	62.8	126.6	41.5	25.4	33.7	20.4	48.0
1980-1984	103.1	51.5	44.9	64.5	110.6	47.9	26.8	23.9	15.9	54.4
1985-1989	102.9	48.7	55.5	54.1	114.7	58.3	28.8	23.4	17.1	57.1
1990-1994	95.3	70.5	69.0	55.7	112.5	58.0	36.2	35.1	20.6	58.4
1995-2000	78.3	61.2	85.4	55.8	96.9	53.0	29.9	32.3	23.2	64.1

LUNG AND BRONCHUS CANCER

Morbidity	Males						Females			
	Caucasian	Chinese	Filipino	Japanese	Native Hawaiian	Caucasian	Chinese	Filipino	Japanese	Native Hawaiian
1975-1979	59.1	45.3	35.1	47.0	43.1	28.7	18.1	19.1	14.2	**
1980-1984	78.3	38.9	37.6	52.3	80.9	33.7	19.7	18.1	12.4	43.0
1985-1989	78.7	36.4	41.8	40.6	105.6	40.1	19.6	14.5	13.9	44.0
1990-1994	65.8	49.6	43.7	42.4	103.0	40.2	30.1	24.9	14.4	46.9
1995-2000	54.3	49.7	54.1	38.5	75.9	33.7	22.6	20.4	14.4	48.2

** Rates based on small numbers (<20 per time period) may be unstable and are not presented.
Rates are per 100,000 population and are age-adjusted to the 2000 U.S. standard population.

Source: Hawai'i State, University of Hawai'i, Cancer Research Center of Hawai'i, Hawai'i Tumor Registry, Hawai'i Cancer Facts & Figures 2003-2004. (Honolulu)

Figure 7.56a Lung and Bronchus Cancer Incidence Rates by Sex and Race/Ethnicity, Hawai‘i 1995-2000.

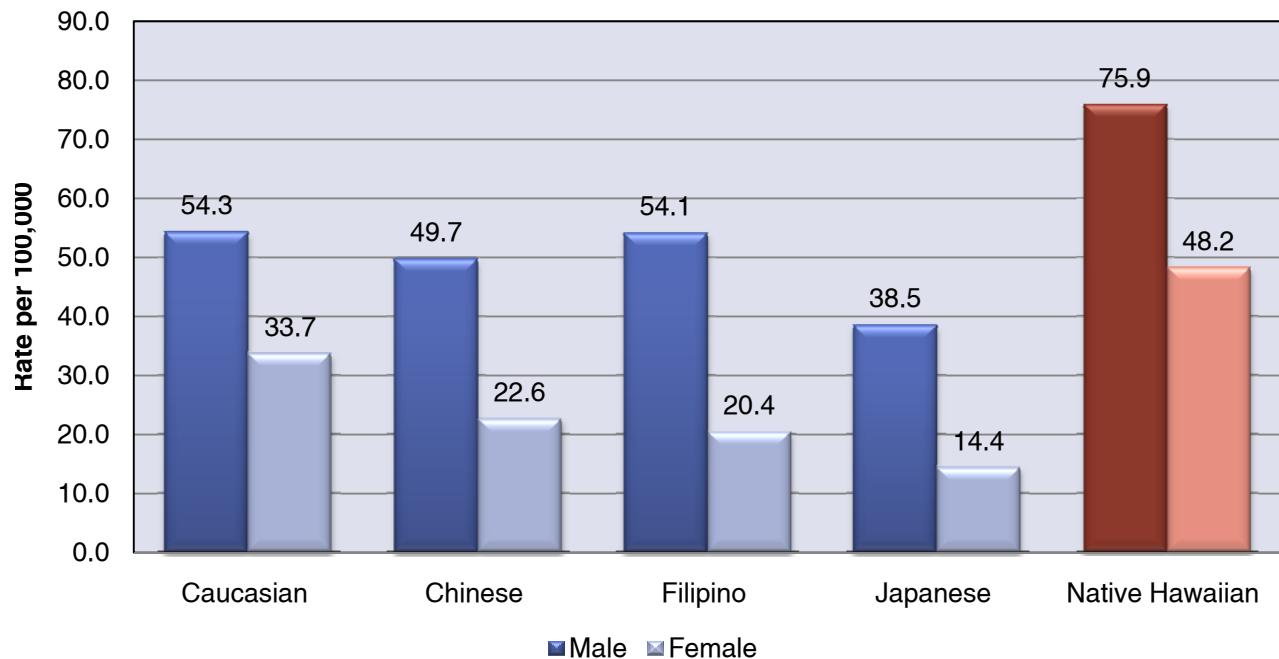
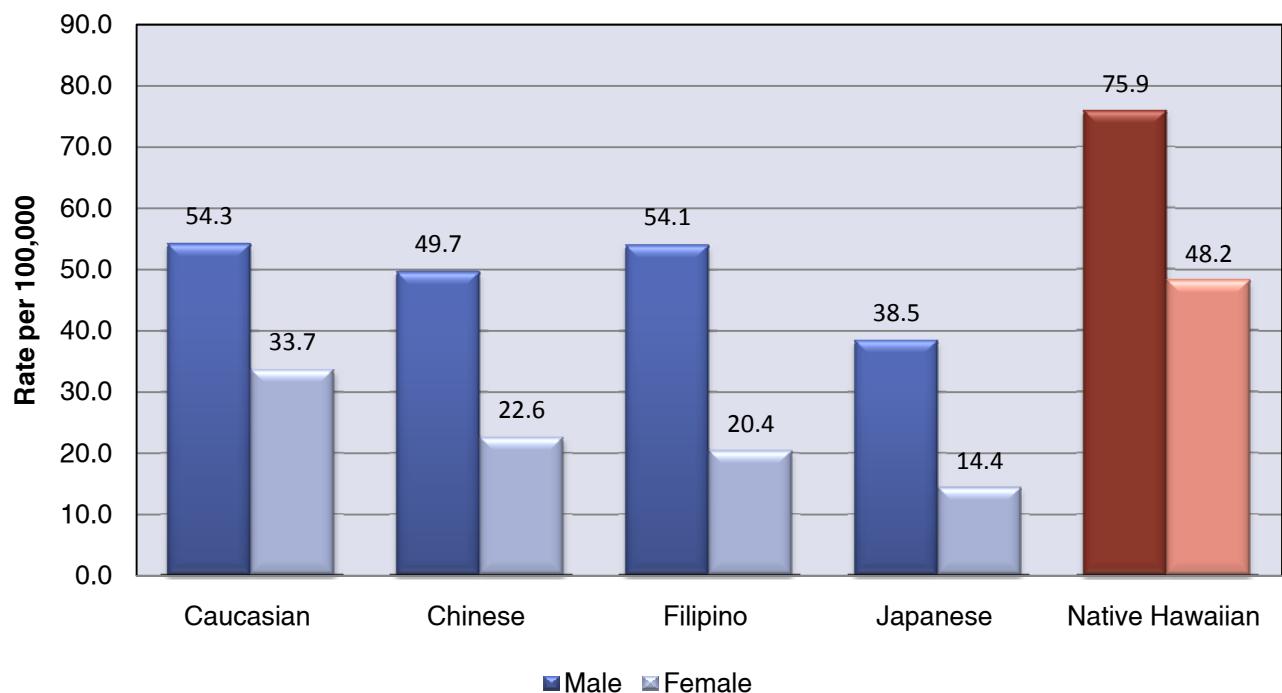


Figure 7.56b Lung and Bronchus Cancer Mortality Rates by Sex and Race/Ethnicity, Hawai‘i 1995-2000.



CANCER

Table 7.57

Prostate Cancer Incidence and Mortality Trends by Race/Ethnicity, Hawai'i, 1975-2000.

Race/Ethnicity	Prostate Cancer Incidence				
	Time Period				
	1975-1979	1980-1984	1985-1989	1990-1994	1995-2000
Caucasian	98.9	105.0	155.4	203.3	155.7
Chinese	50.8	59.4	68.4	145.8	130.9
Filipino	67.6	58.6	86.7	154.5	143.5
Japanese	66.1	65.7	73.6	141.8	113.0
Native Hawaiian	74.7	74.7	87.5	93.8	100.5

Race/Ethnicity	Prostate Cancer Mortality				
	Time Period				
	1975-1979	1980-1984	1985-1989	1990-1994	1995-2000
Caucasian	29.8	32.6	37.3	34.4	28.5
Chinese	**	**	14.1	15.7	13.7
Filipino	12.0	18.5	24.7	26.4	22.6
Japanese	14.0	13.4	15.7	18.2	14.2
Native Hawaiian	**	17.9	16.7	34.8	21.9

** Rates based on small numbers (<20 per time period) may be unstable and are not presented.

Rates are per 100,000 population and are age-adjusted to the 2000 U.S. standard population.

Source: Hawai'i State, University of Hawai'i, Cancer Research Center of Hawai'i, Hawai'i Tumor Registry, Hawai'i Cancer Facts & Figures 2003-2004. (Honolulu)

Figure 7.57 Prostate Cancer Incidence and Mortality Trends by Race/Ethnicity, Hawai‘i, 1995-2000.



Source: Hawai‘i State, University of Hawai‘i, Cancer Research Center of Hawai‘i, Hawai‘i Tumor Registry, Hawai‘i Cancer Facts & Figures 2003-2004. (Honolulu)



CANCER

Table 7.58a

Mammograms Among Women in Hawai'i: 2010.

Race/Ethnicity	Women Aged 18+		Women Aged 40+	
	Ever had a mammogram	Last mammogram Within 2 Years	Ever had a mammogram	Most recent mammogram Within 2 Years
White	70.0	54.2	93.0	72.9
Hawaiian	60.6	45.2	95.0	73.1
Filipino	55.0	44.1	89.7	74.5
Japanese	75.7	62.1	96.7	79.9
Others	64.4	53.0	93.9	80.4

Source: Hawai'i State, Department of Health, Behavioral Risk Factor Surveillance System. (Honolulu).

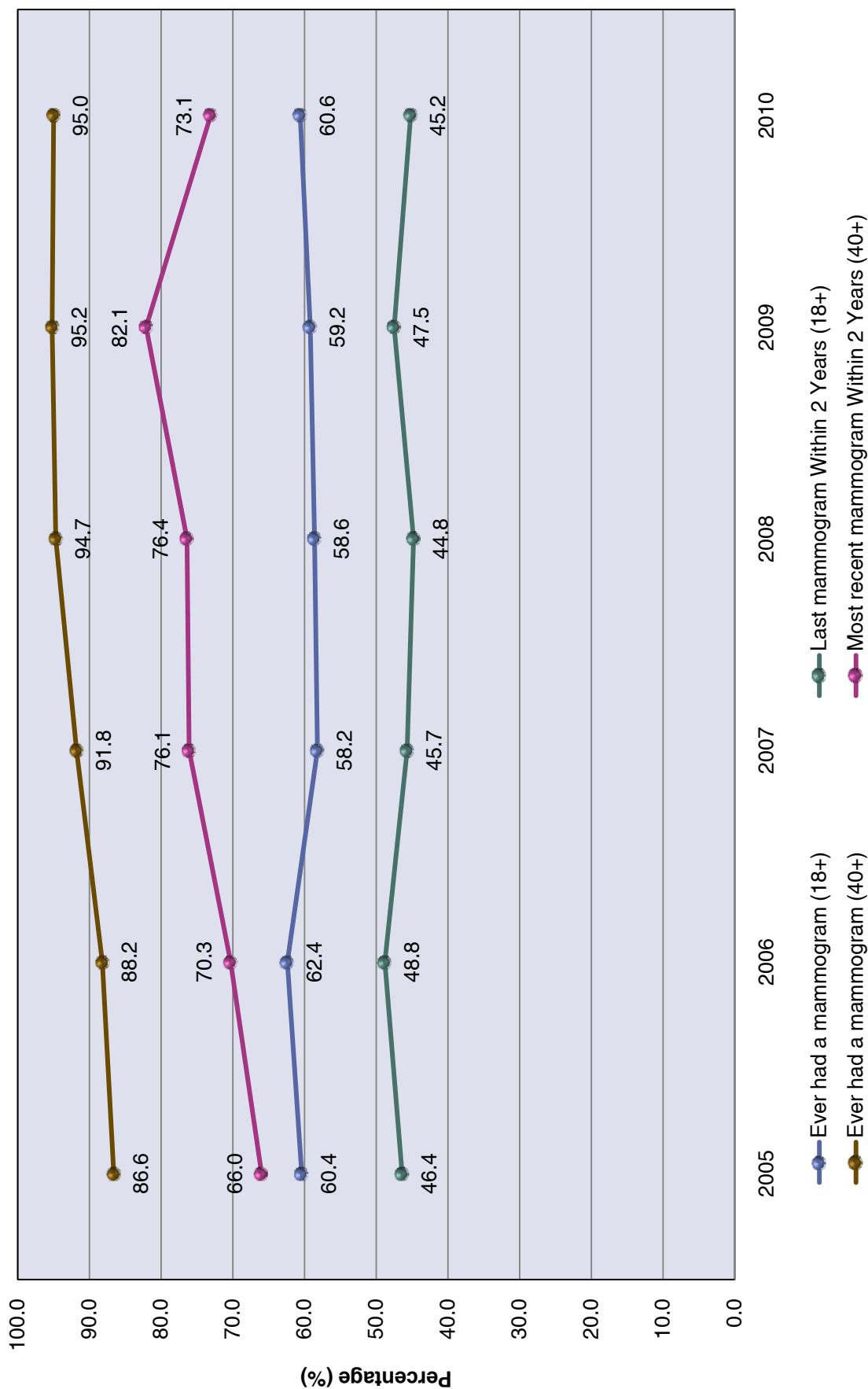
CANCER

Table 7.58b

Mammograms Among Native Hawaiian Women in Hawai'i: 2005-2010.

Year	Native Hawaiian Women			
	Women Aged 18+		Women Aged 40+	
	Ever had a mammogram	Last mammogram Within 2 Years	Ever had a mammogram	Most recent mammogram Within 2 Years
2010	60.6	45.2	95.0	73.1
2009	59.2	47.5	95.2	82.1
2008	58.6	44.8	94.7	76.4
2007	58.2	45.7	91.8	76.1
2006	62.4	48.8	88.2	70.3
2005	60.4	46.4	86.6	66.0

Source: Hawai'i State, Department of Health, Behavioral Risk Factor Surveillance System. (Honolulu).

Figure 7.58 Mammograms Among Native Hawaiian Women in Hawai'i: 2005-2010

Source: Hawai'i State, Department of Health, Behavioral Risk Factor Surveillance System. (Honolulu).



CANCER

Table 7.59a

Percentage Among Women Aged 18+ in Hawai'i Who had a recent Pap Smear: 2010.

Race/Ethnicity	Ever had a Pap Smear	Last Pap Smear Within Last 3 Years
White	96.1	78.6
Hawaiian	94.9	79.4
Filipino	82.8	72.9
Japanese	93.6	78.6
Others	87.8	74.3

Source: Hawai'i State, Department of Health, Behavioral Risk Factor Surveillance System. (Honolulu).

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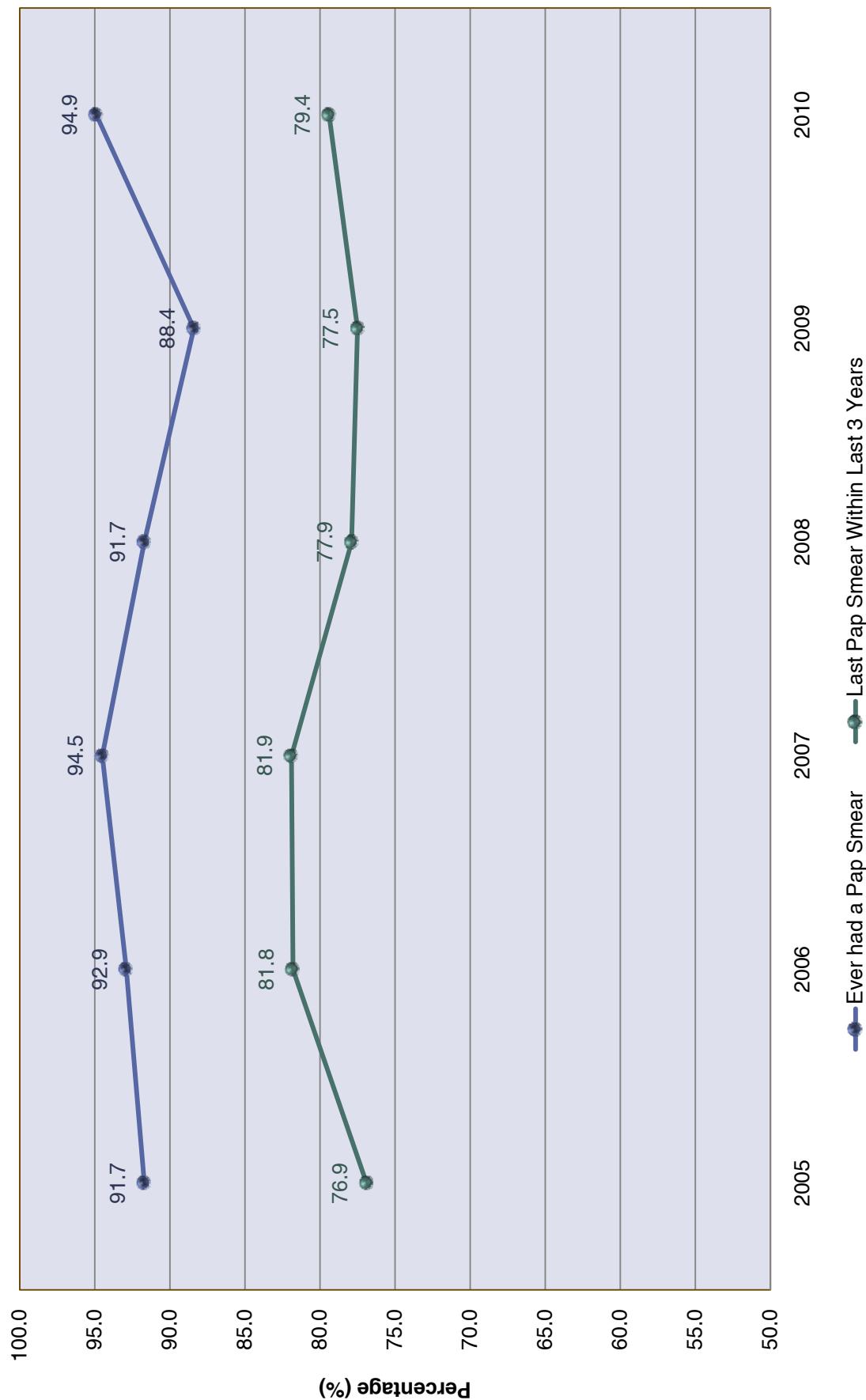
Table 7.59b

Percentage Among Native Hawaiian Women Aged 18+ in Hawai'i Who had a recent Pap Smear: 2005-2010.

Year	Native Hawaiian Women	
	Ever had a Pap Smear	Last Pap Smear Within Last 3 Years
2010	94.9	79.4
2009	88.4	77.5
2008	91.7	77.9
2007	94.5	81.9
2006	92.9	81.8
2005	91.7	76.9

Source: Hawai'i State, Department of Health, Behavioral Risk Factor Surveillance System. (Honolulu).

Figure 7.59 Native Hawaiian Women Aged 18+ in Hawai‘i Who had a Recent Pap Smear: 2005-2010



Source: Hawai‘i State, Department of Health, Behavioral Risk Factor Surveillance System. (Honolulu).

CANCER

Table 7.60a

Men Aged 40+ in Hawai'i Who had a Digital Rectal Exam (DRE) and Prostate Specific Antigen (PSA) Test: 2010.

Race/Ethnicity	Percentage Who Had a Digital Rectal Exam		Percentage Who Had a Prostrate Specific Antigen Test	
	Ever had a DRE	Last DRE within Past Year	Ever had a PSA Test	Last PSA test within Last Year
White	75.5	21.4	62.9	35.0
Hawaiian	58.0	22.7	49.0	30.2
Filipino	41.1	13.1	28.3	14.7
Japanese	69.1	24.6	50.5	35.1
Others	54.2	20.0	47.0	32.3

Source: Hawai'i State, Department of Health, Behavioral Risk Factor Surveillance System. (Honolulu).

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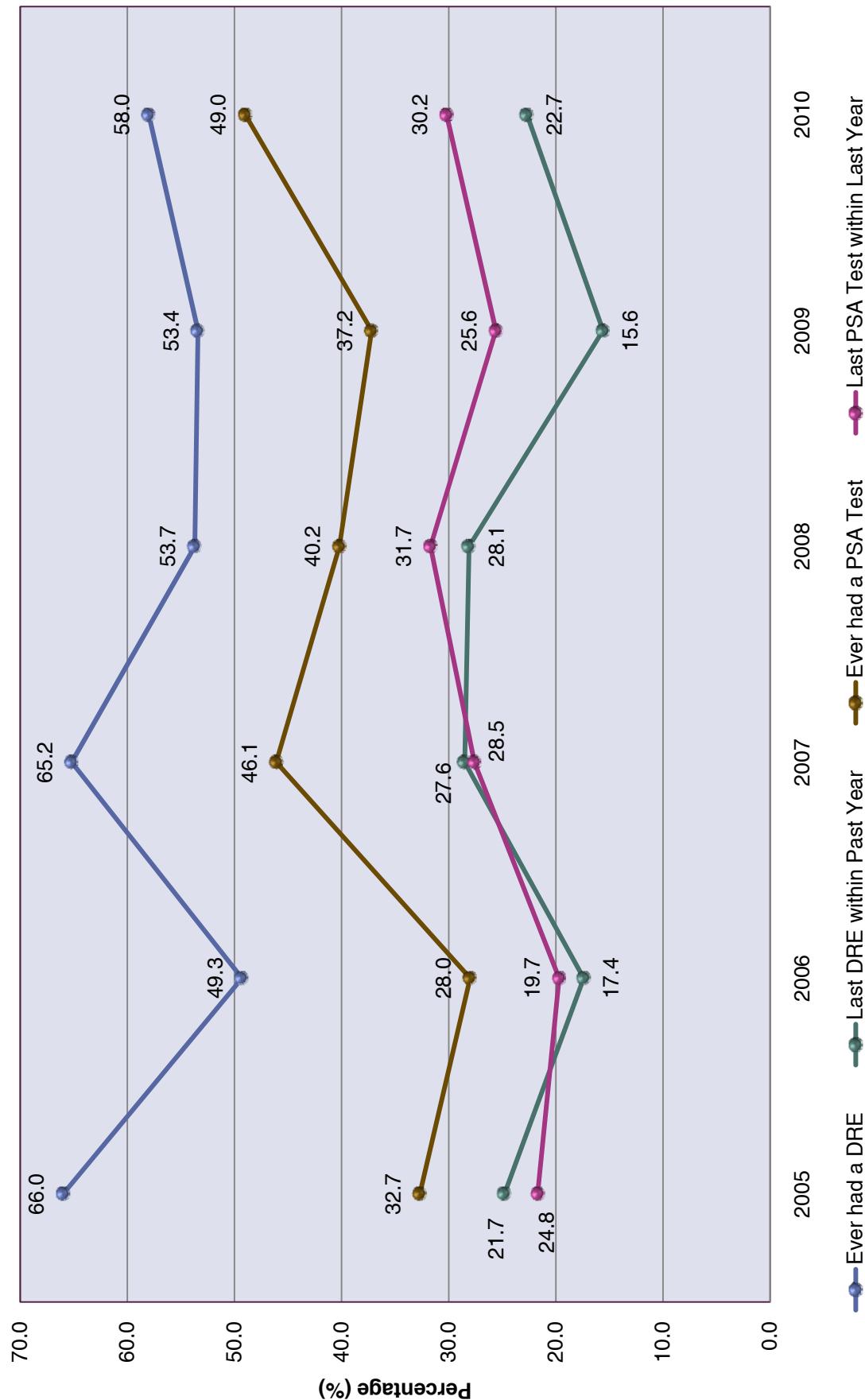
Table 7.60b

Native Hawaiian Men Aged 40+ in Hawai'i Who Had a Digital Rectal Exam and Prostrate Specific Antigen Test: 2005-2010.

Year	Percentage Who Had a Digital Rectal Exam		Percentage Who Had a Prostrate Specific Antigen Test	
	Ever had a DRE	Last DRE within Past Year	Ever had a PSA Test	Last PSA test within Last Year
2010	58.0	22.7	49.0	30.2
2009	53.4	15.6	37.2	25.6
2008	53.7	28.1	40.2	31.7
2007	65.2	28.5	46.1	27.6
2006	49.3	17.4	28.0	19.7
2005	66.0	24.8	32.7	21.7

Source: Hawai'i State, Department of Health, Behavioral Risk Factor Surveillance System. (Honolulu).

Figure 7.60 Native Hawaiian Men Aged 40+ in Hawai‘i Who Had a Digital Rectal Exam (DRE) and Prostrate Specific Antigen (PSA) Test: 2005-2010



Source: Hawai‘i State, Department of Health, Behavioral Risk Factor Surveillance System. (Honolulu).

CANCER**Table 7.61** Native Hawaiians with Cancer by Age in Hawai'i: 2004-2008.

		Native Hawaiians with Cancer by Age in Hawai'i: 2004-2008.						
		Native Hawaiian						
Year		Age in Years						Total
		0-14	15-17	18-24	25-34	35-44	45-54	
2008	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)
2007	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)
2006	25	—	768	435	231	1,511	1,637	751
2005	68	168	28	24	576	1,539	1,423	1,584
2004	—	—	118	47	474	1,033	1,509	938

		Total Population						
		Age in Years						
Year		Age in Years						Total
		0-14	15-17	18-24	25-34	35-44	45-54	
2008	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)
2007	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)
2006	100	—	1,267	752	2,668	8,001	11,784	6,639
2005	281	203	208	1,101	1,983	7,245	10,468	9,292
2004	49	28	418	1,090	2,433	4,726	8,278	7,359

* Number of cases in sample numerator or denominator too small for reliability - shown for consistency only

— No reported cases

(N) Not available

Note: The question concerning cancer was not asked in the survey after 2006.

Source: Hawai'i State, Department of Health, Hawai'i Health Survey. (Honolulu)

Figure 7.61a Native Hawaiians With Cancer by Age in Hawai‘i: 2004-2006.

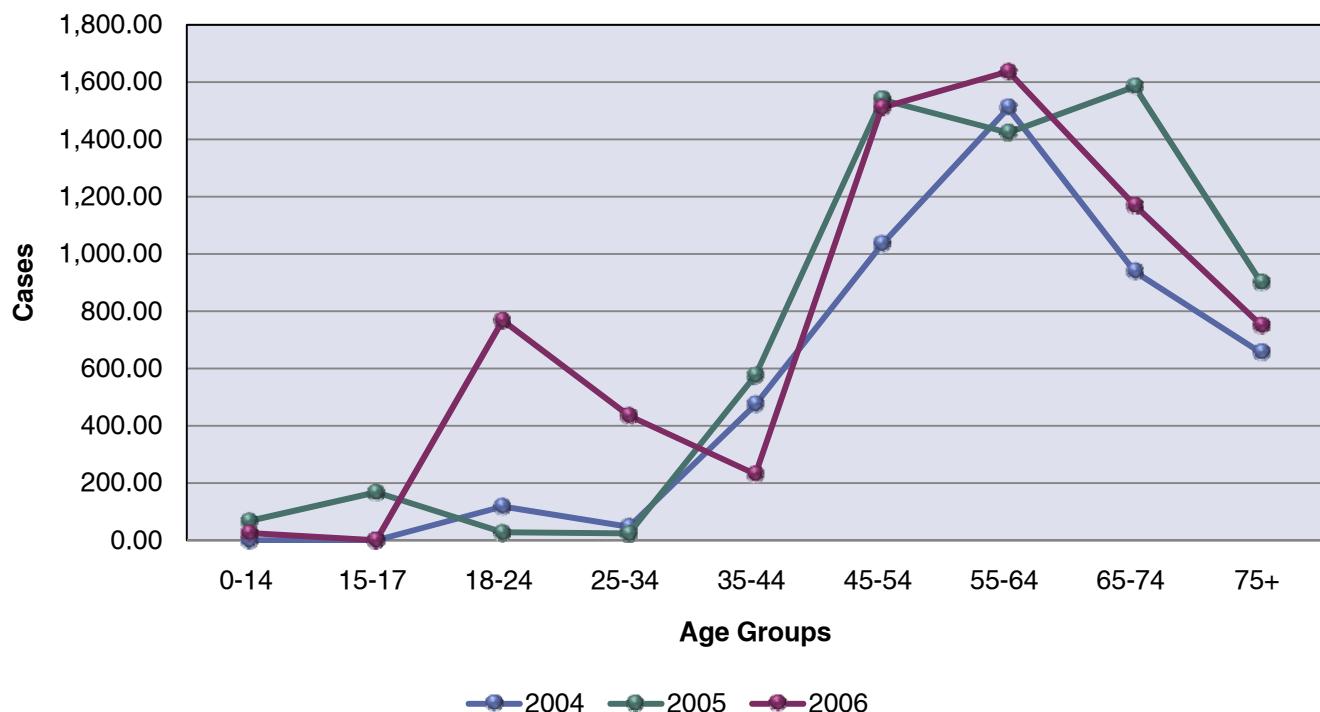
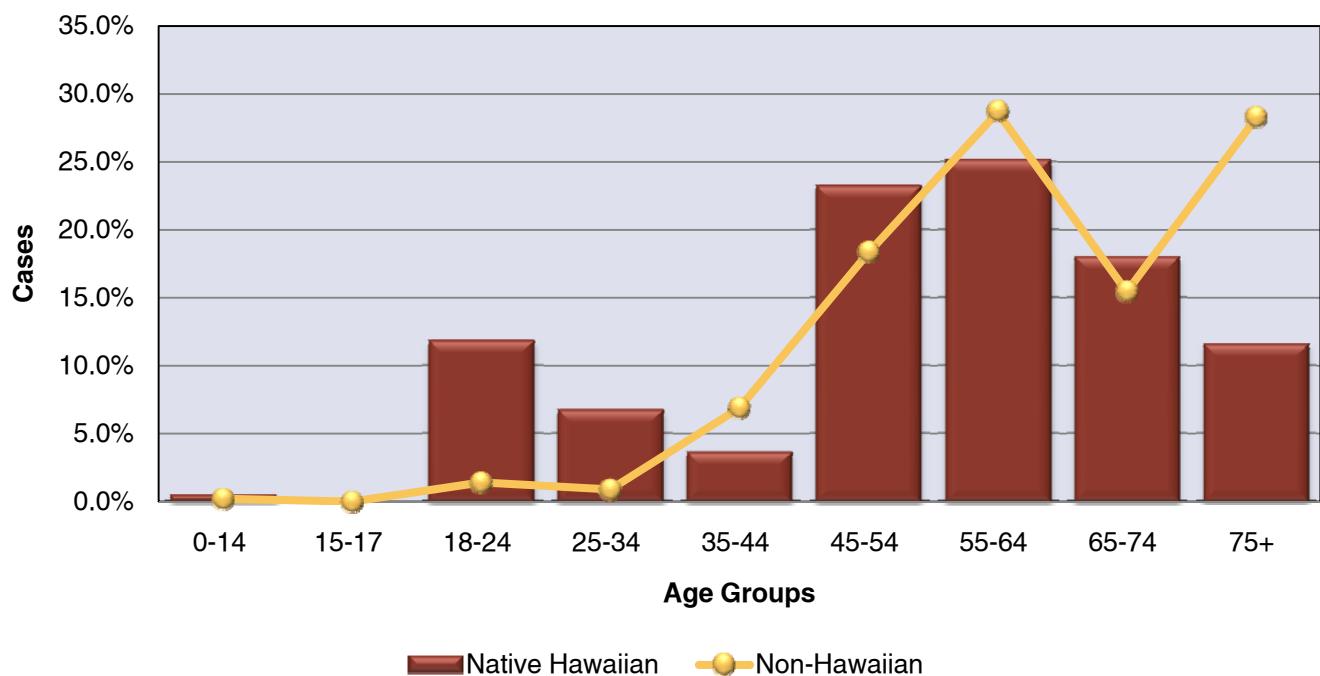


Figure 7.61b Native Hawaiians With Cancer by Age in Hawai‘i: 2006.



Source: Hawai‘i State, Department of Health, Hawai‘i Health Survey. (Honolulu).

RISKS

Table 7.62a Percentages of Adults 18 and Older in Hawai'i and Their Smoking Status: 2010.

Race/Ethnicity	Smoker Status		
	Current Smoker	Former Smoker	Never Smoked
White	10.8	34.3	50.9
Hawaiian	20.6	20.8	52.4
Filipino	7.7	15.9	72.7
Japanese	7.2	26.1	63.9
Others	10.9	19.8	66.6

Source: Hawai'i State, Department of Health, Behavioral Risk Factor Surveillance System, 2009 Data. (Honolulu).

RISKS

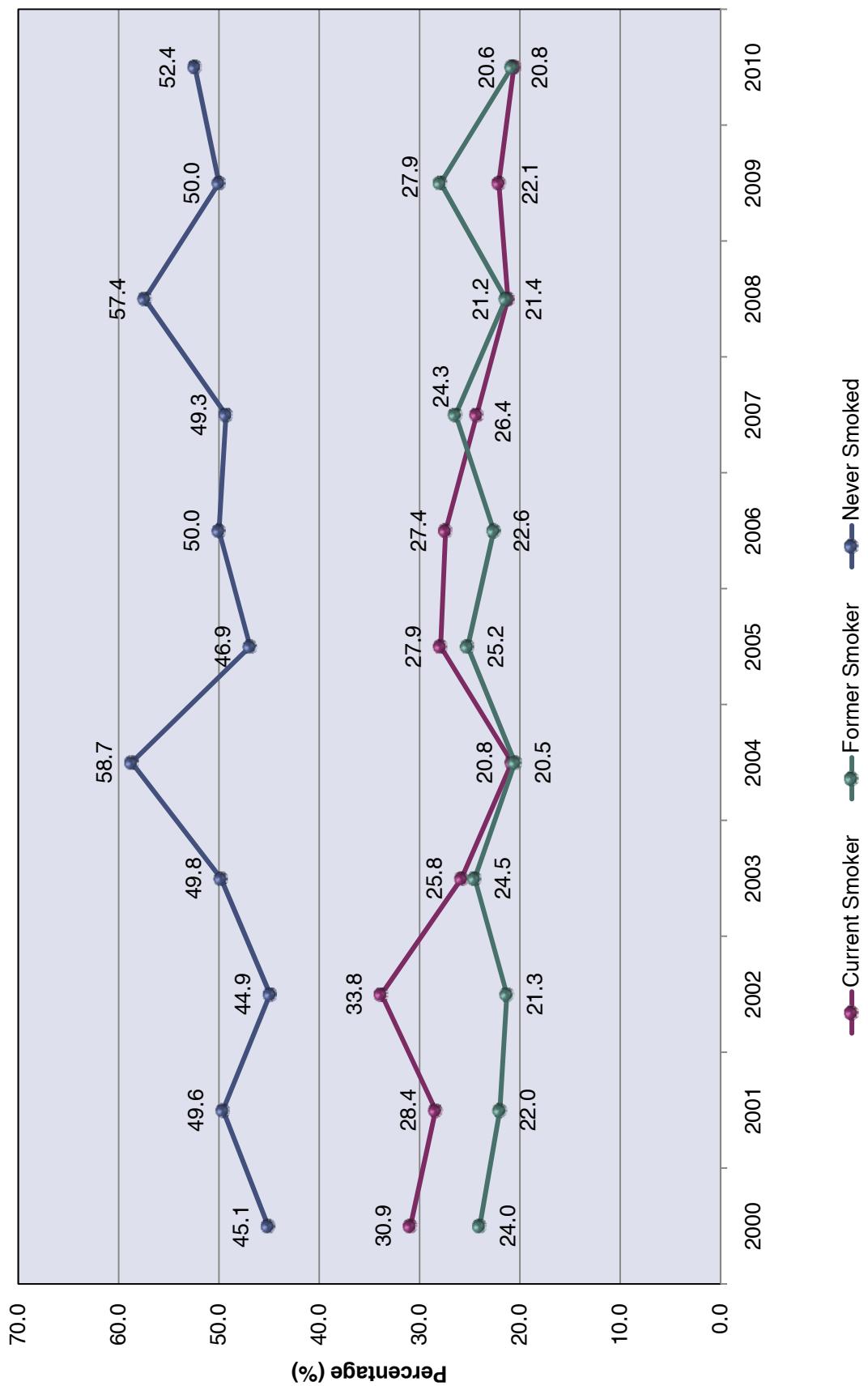
Table 7.62b Percentages of Native Hawaiian Adults 18 and Older in Hawai'i and Their Smoking Status: 2005-2010.

Year	Native Hawaiian Adults		
	Current Smoker	Former Smoker	Never Smoked
2010	20.6	20.8	52.4
2009	22.1	27.9	50.0
2008	21.2	21.4	57.4
2007	24.3	26.4	49.3
2006	27.4	22.6	50.0
2005	27.9	25.2	46.9
2004	20.8	20.5	58.7
2003	25.8	24.5	49.8
2002	33.8	21.3	44.9
2001	28.4	22.0	49.6
2000	30.9	24.0	45.1

Note: In 2010 the "current smoker" question was split into two responses 1) current smoker (smokes everyday) and 2) current smoker (smokes some days), consequently the data for 2010 is not completely compatible with data from previous years.

Source: Hawai'i State, Department of Health, Behavioral Risk Factor Surveillance System, (Honolulu).

Figure 7.62 Smoking Status of Native Hawaiian Adults 18 and Older in Hawai‘i : 2000-2010



Source: Hawai‘i State, Department of Health, Behavioral Risk Factor Surveillance System. (Honolulu).

RISKS

Table 7.63 | Selected Risk Behaviors Among Native Hawaiians and Other Race/Ethnic Groups in Hawai'i: 2009, 2010.

Risk Behaviors	Race/Ethnicity				Others
	White	Native Hawaiian	Filipino	Japanese	
Current Smoker	10.8%	20.6%	7.7%	7.2%	10.9%
Binge Drinking	20.3%	28.3%	14.6%	12.6%	16.0%
Heavy Drinking	8.7%	11.8%	2.6%	4.1%	5.8%
Overweight (25<=BMI<30)	36.7%	31.8%	35.0%	32.7%	31.8%
Obese I (30<=BMI<35)	13.9%	25.4%	13.3%	9.9%	17.6%
Obese II (35<=BMI<40)	4.5%	10.4%	4.2%	3.0%	7.3%
Obese III (Morbid obesity 40<=BMI)	2.2%	7.9%	2.4%	1.1%	3.6%
High Blood Pressure (2009)	25.6%	36.3%	31.2%	36.5%	24.5%
Diabetes	5.5%	11.4%	10.1%	9.8%	7.1%
High Blood Cholesterol (2009)	36.7%	37.7%	35.9%	45.9%	35.6%

Binge drinking defined as having 5+ drinks for men or 4+ drinks for women on an occasion
 Heavy drinking defined as: greater than 2 drinks per day for men or 1 drink per day for women

Source: Hawai'i State, Department of Health, Behavioral Risk Factor Surveillance System. (*Honolulu*).

Figure 7.63a Risk Behaviors by Race/Ethnicity in Hawai‘i - Current Smoker: 2010

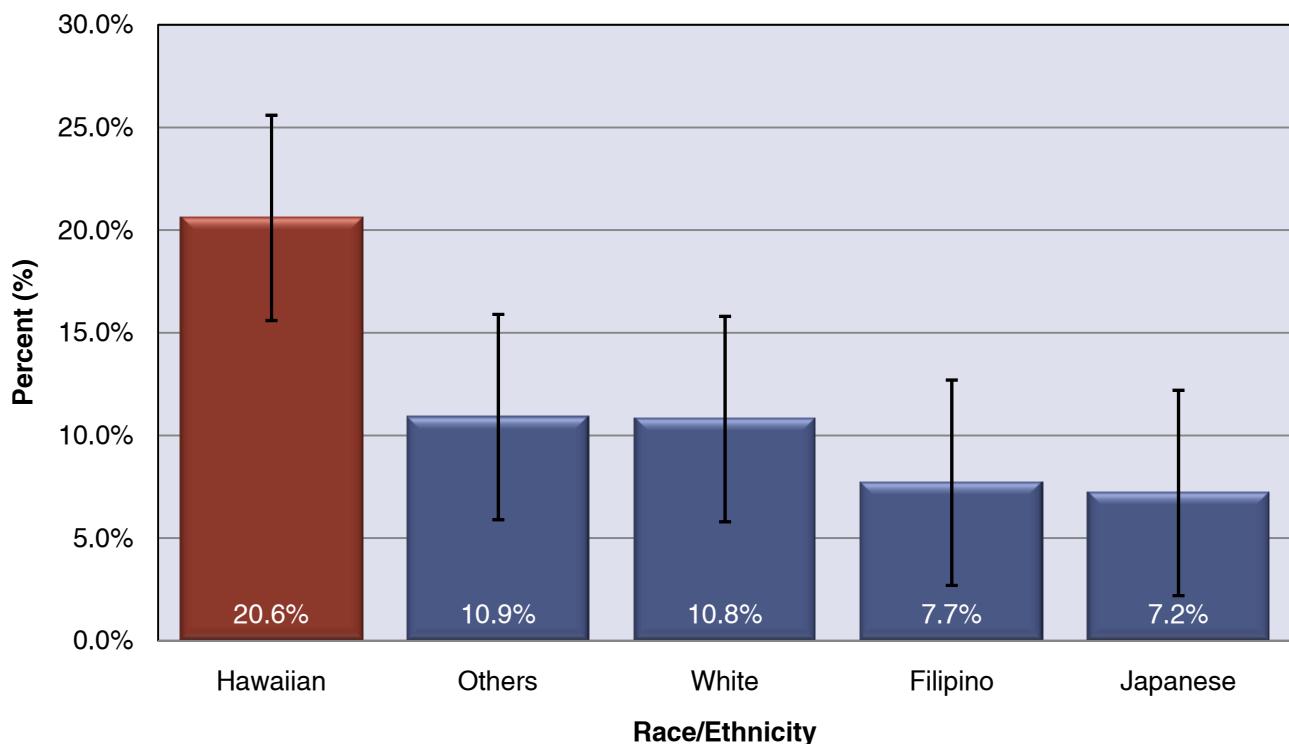


Figure 7.63b Risk Behaviors by Race/Ethnicity in Hawai‘i - Diabetes: 2010

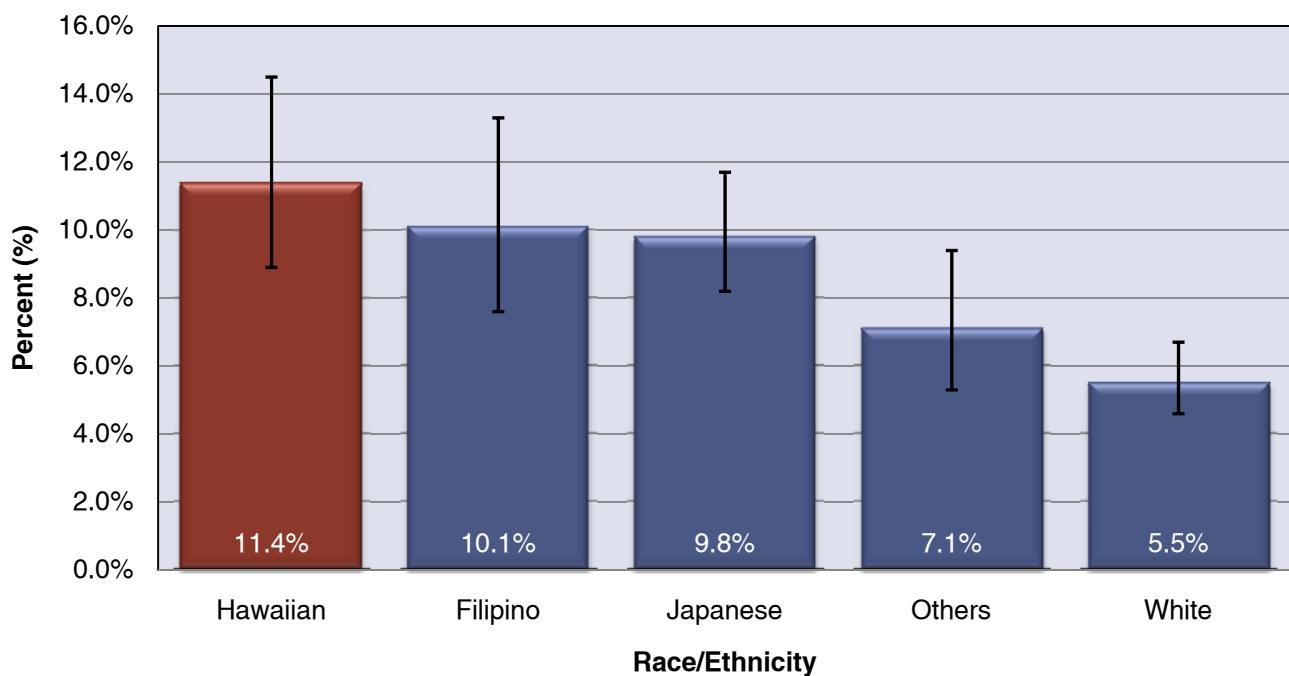


Figure 7.63c Risk Behaviors by Race/Ethnicity in Hawai‘i - Binge Drinking: 2010

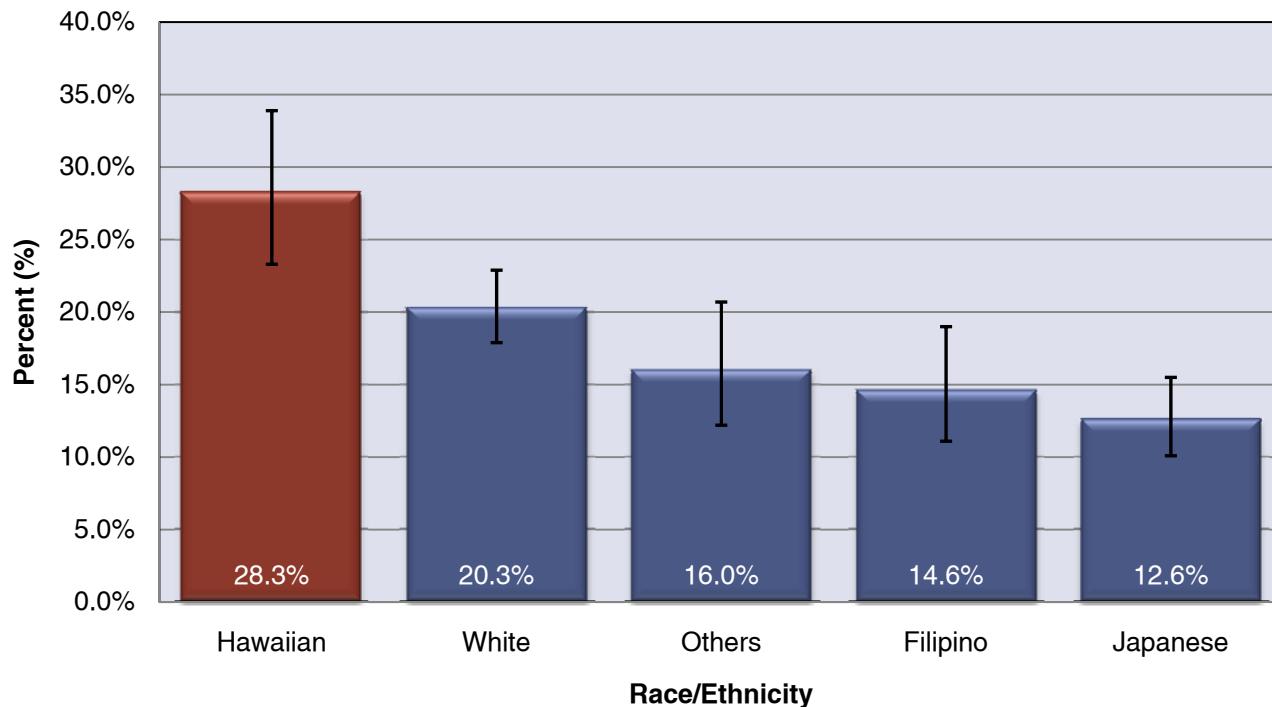


Figure 7.63d Risk Behaviors by Race/Ethnicity in Hawai‘i - Heavy Drinking: 2010

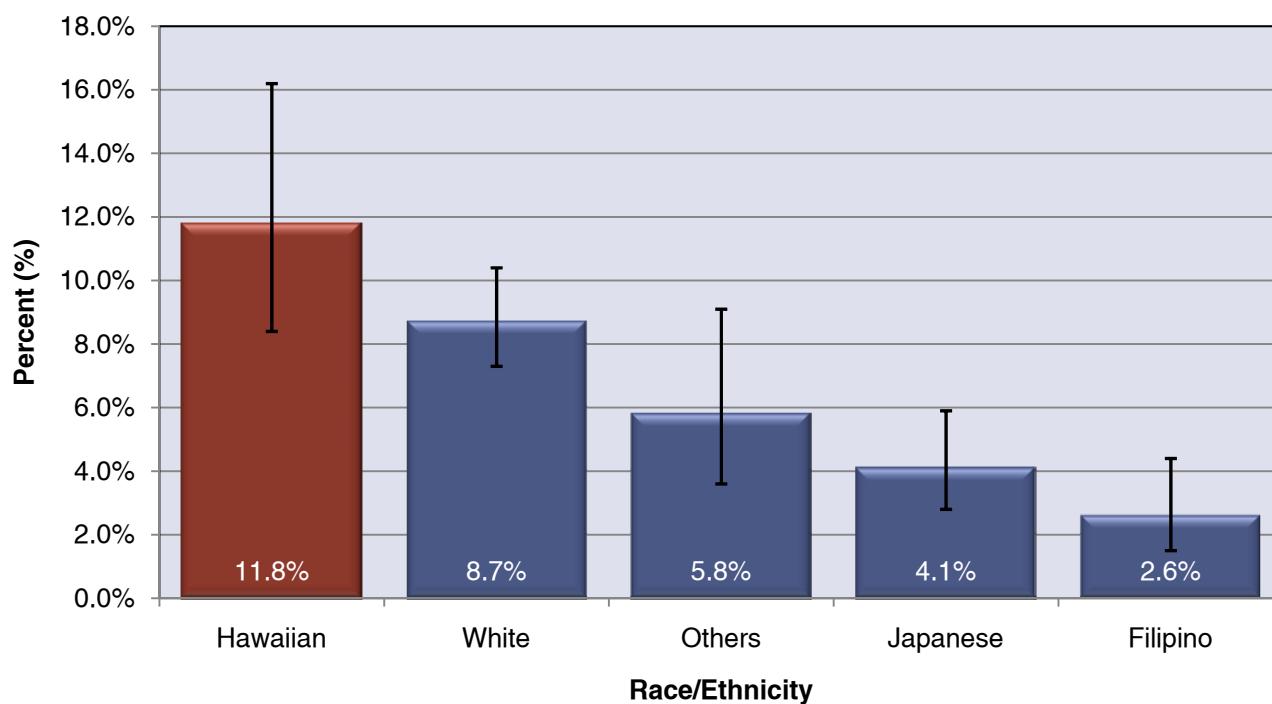


Figure 7.63e Risk Behaviors by Race/Ethnicity in Hawai‘i - Overweight ($25 \leq \text{BMI} < 30$): 2010

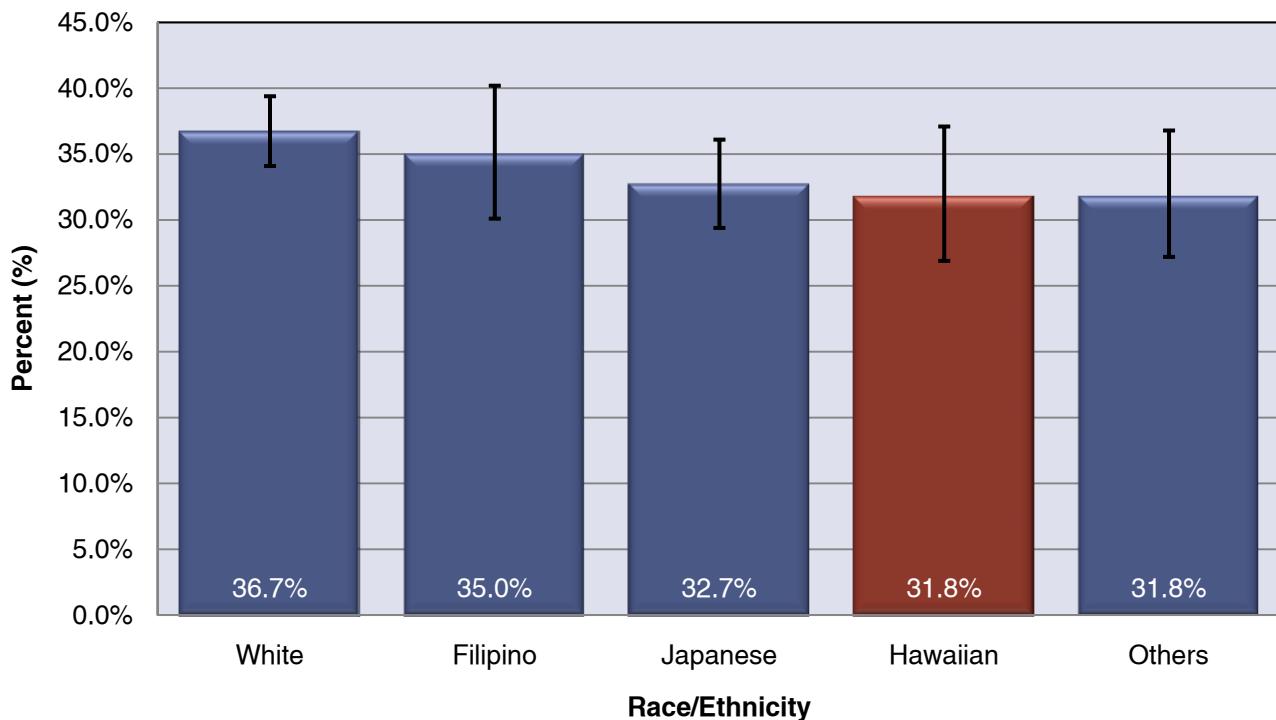
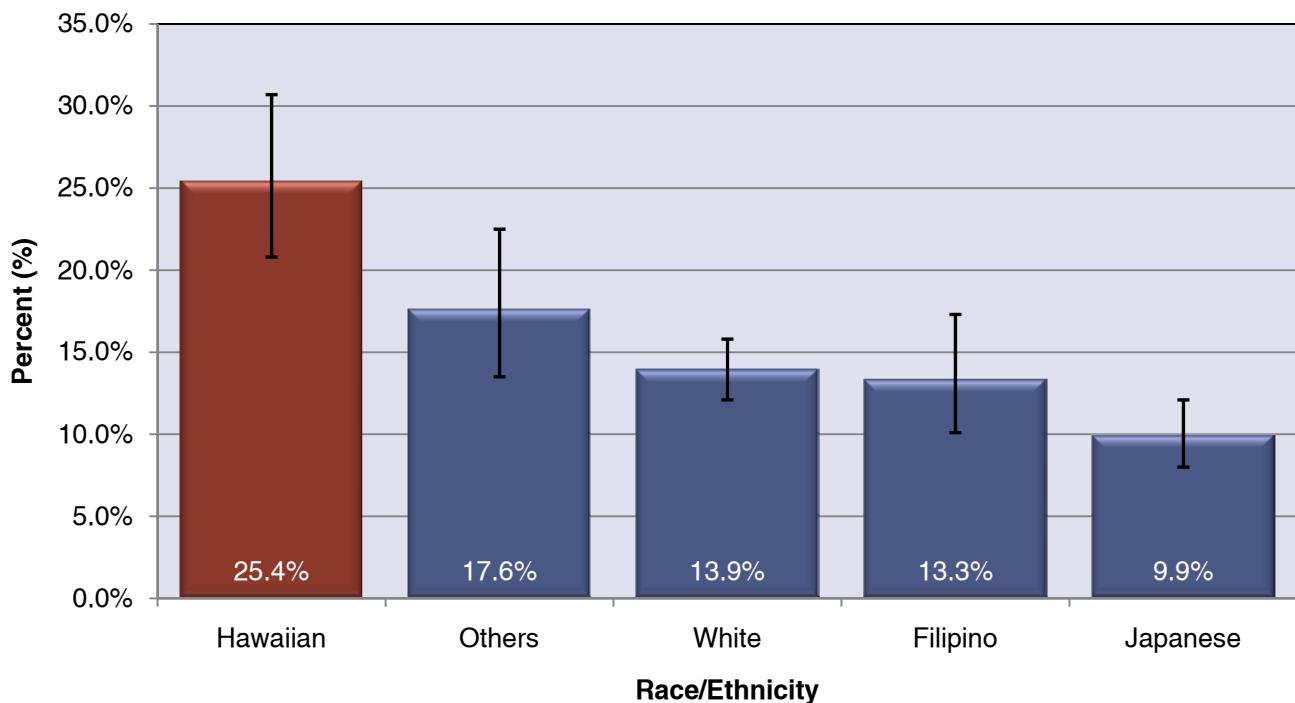
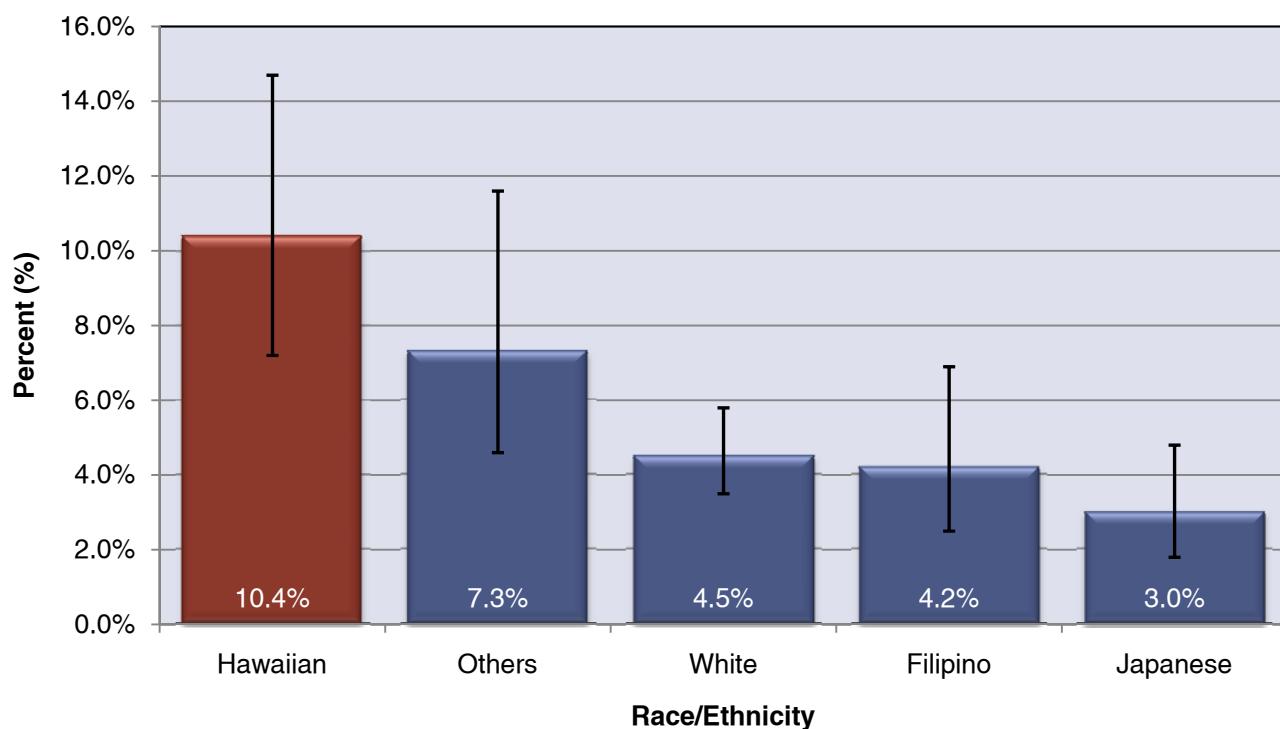


Figure 7.63f Risk Behaviors by Race/Ethnicity in Hawai‘i - Obese I ($30 \leq \text{BMI} < 35$): 2010



Source: Hawai‘i State, Department of Health, Behavioral Risk Factor Surveillance System. (Honolulu).

**Figure 7.63g Risk Behaviors by Race/Ethnicity in Hawai‘i -
Obese II (35<=BMI<40): 2010**



**Figure 7.63h Risk Behaviors by Race/Ethnicity in Hawai‘i -
Obese III (Morbid obesity 40<=BMI): 2010**

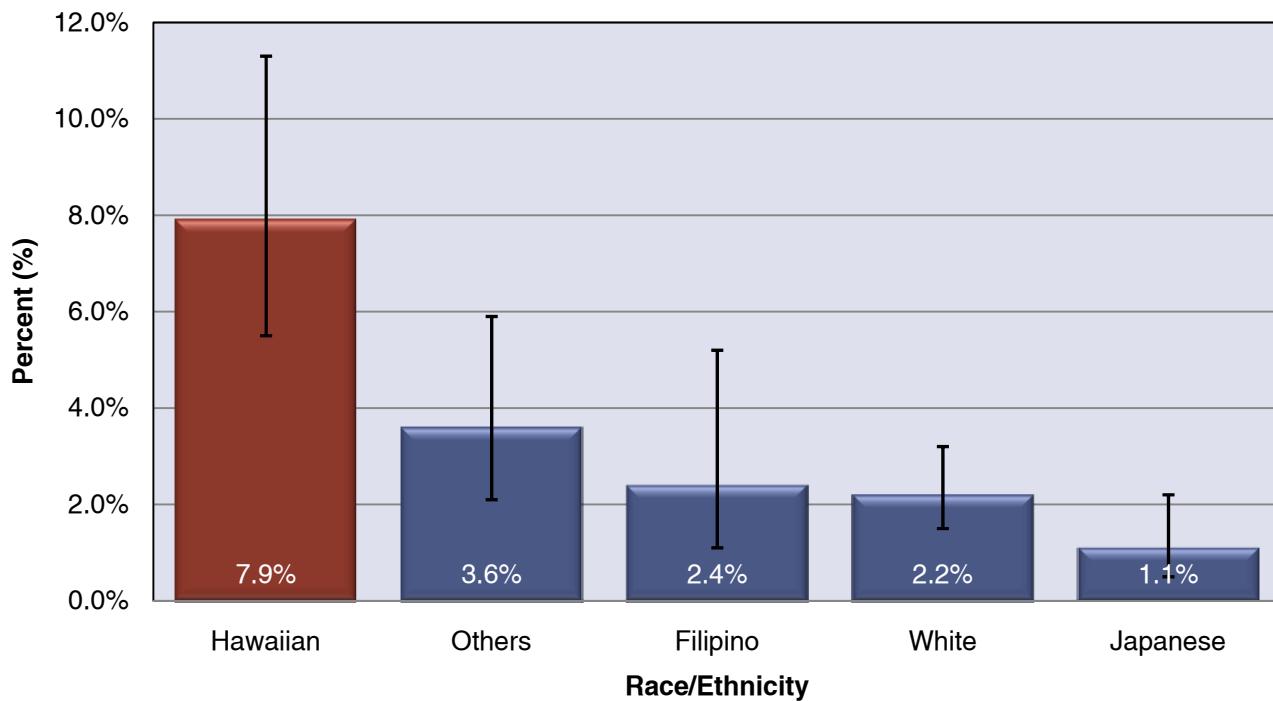


Figure 7.63i Risk Behaviors by Race/Ethnicity in Hawai‘i - High Blood Pressure: 2009

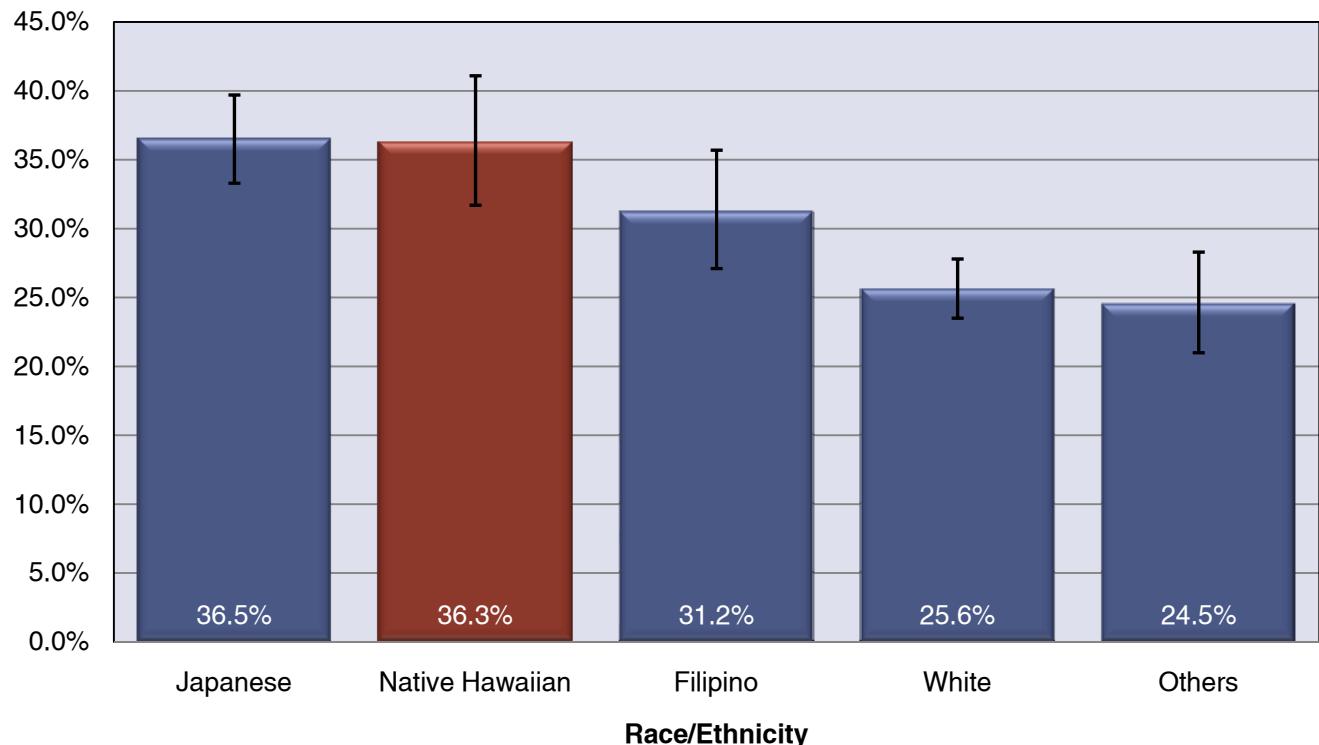
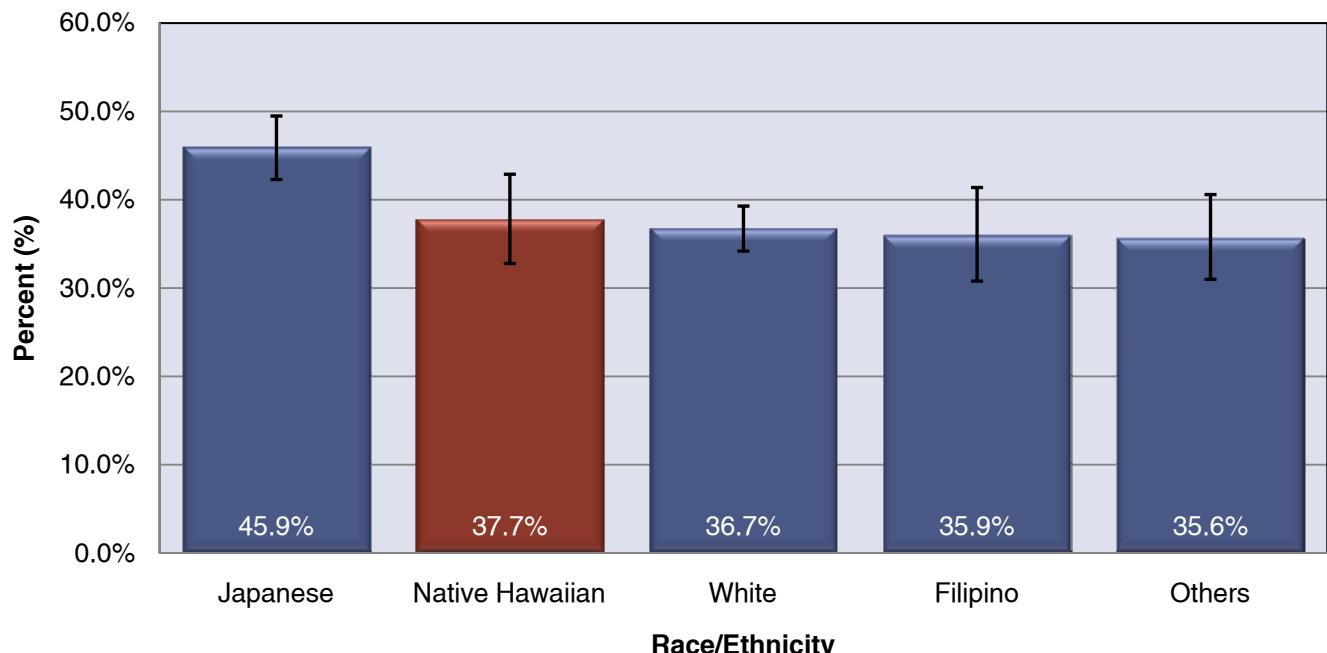


Figure 7.63j Risk Behaviors by Race/Ethnicity in Hawai‘i - High Blood Cholesterol: 2009



RISKS**Table 7.64** Overweight (including Obese) Native Hawaiians By County in Hawai'i: 2000-2008.

Year	Native Hawaiian								State of Hawai'i			
	County				Maui							
	C & C of Honolulu	No.	Hawai'i	%	Kaua'i	No.	%	Overweight	No.	%	Overweight	No.
Year	C & C of Honolulu	No.	%	Overweight	No.	%	Overweight	No.	%	Overweight	No.	%
2008	88,390	70.1	21,091	73.2	5,767	58.8	14,651	67.1	129,899	69.6	129,899	69.6
2007	84,421	71.0	20,442	71.2	5,796	64.6	14,579	64.9	125,238	70.0	125,238	70.0
2006	85,881	74.1	19,702	71.2	4,168	65.0	13,580	71.1	123,331	73.0	123,331	73.0
2005	79,806	69.0	17,513	66.6	5,712	71.6	13,263	71.6	116,294	69.0	116,294	69.0
2004	62,466	68.5	13,975	59.8	4,728	67.7	11,578	69.9	92,747	67.2	92,747	67.2
2003	70,361	70.4	18,554	70.8	4,580	63.0	10,028	63.5	103,523	69.3	103,523	69.3
2002	56,788	58.9	15,463	62.6	3,950	58.7	11,231	61.0	87,432	59.8	87,432	59.8
2001	63,682	63.4	14,722	64.2	4,599	58.6	10,078	61.5	93,081	63.0	93,081	63.0
2000	57,195	59.9	14,203	58.8	3,973	57.5	9,649	62.5	85,020	59.9	85,020	59.9

Source: Hawai'i State, Department of Health, Hawai'i Health Survey, (Honolulu)

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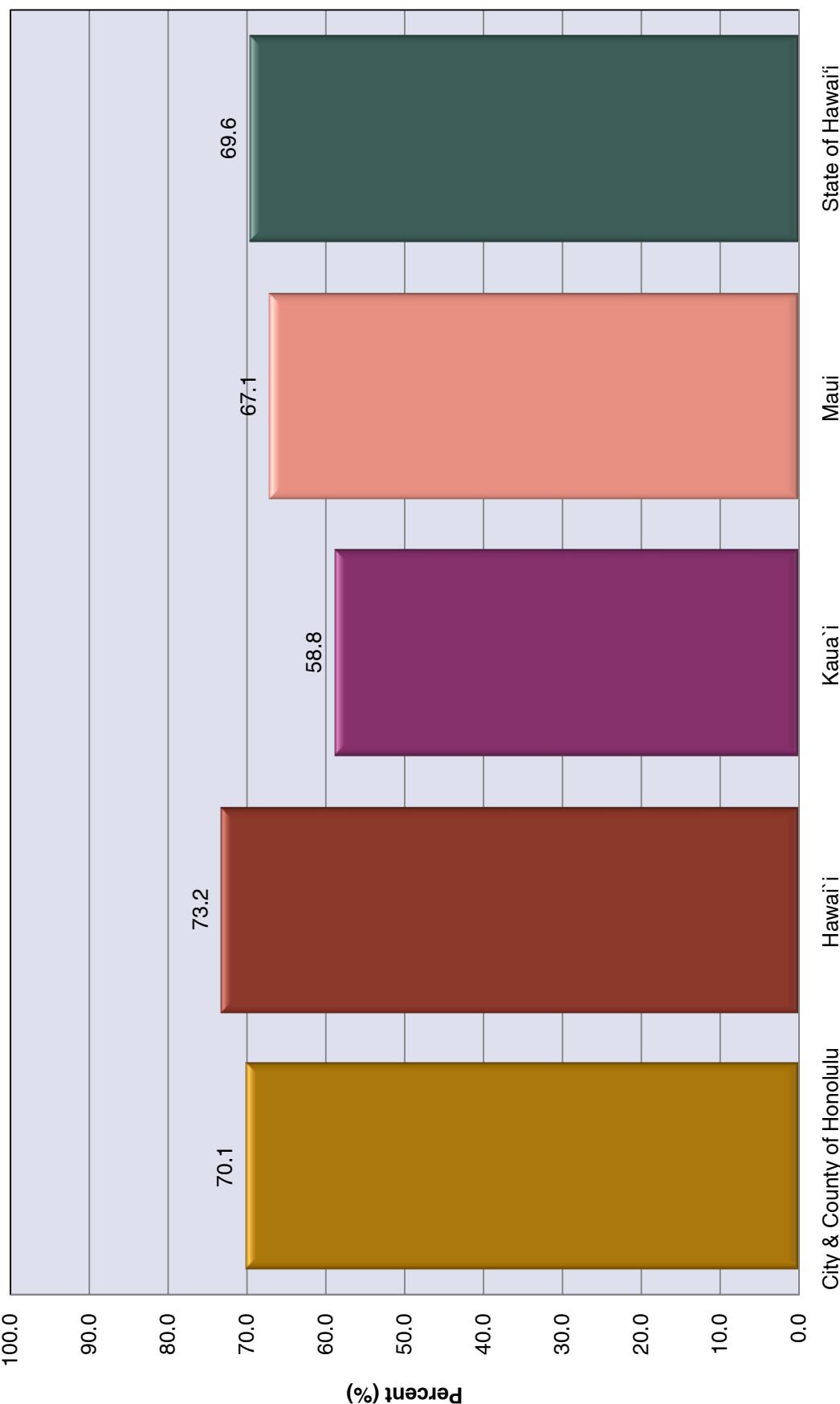
Year	C & C of Honolulu				Hawai'i				County				Total Population				State of Hawai'i			
	No.		% Overweight		No.		% Overweight		No.		% Overweight		No.		% Overweight		No.		% Overweight	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
2008	348,308	51.3	73,804	55.5	25,414	52.3	57,832	52.4	505,358	52.1										
2007	368,697	54.0	74,677	55.4	26,313	53.7	57,303	52.7	526,990	54.0										
2006	336,237	49.8	68,094	53.6	23,942	50.0	55,521	52.0	483,794	50.5										
2005	353,890	52.8	64,372	51.6	24,602	51.7	53,482	51.1	496,346	52.4										
2004	329,168	49.5	61,354	50.4	23,451	50.5	51,257	48.5	465,230	49.5										
2003	351,939	52.7	62,052	53.2	20,376	45.1	49,048	48.4	483,415	51.9										
2002	298,318	45.6	54,883	48.4	20,317	46.3	47,033	47.1	420,551	46.2										
2001	303,356	47.6	54,227	50.6	19,779	46.7	42,336	45.0	419,698	47.6										
2000	295,608	46.9	51,578	50.4	20,330	49.5	41,715	47.1	409,231	47.4										

* Number of cases in sample numerator or denominator too small for reliability - shown for consistency only
— No reported cases

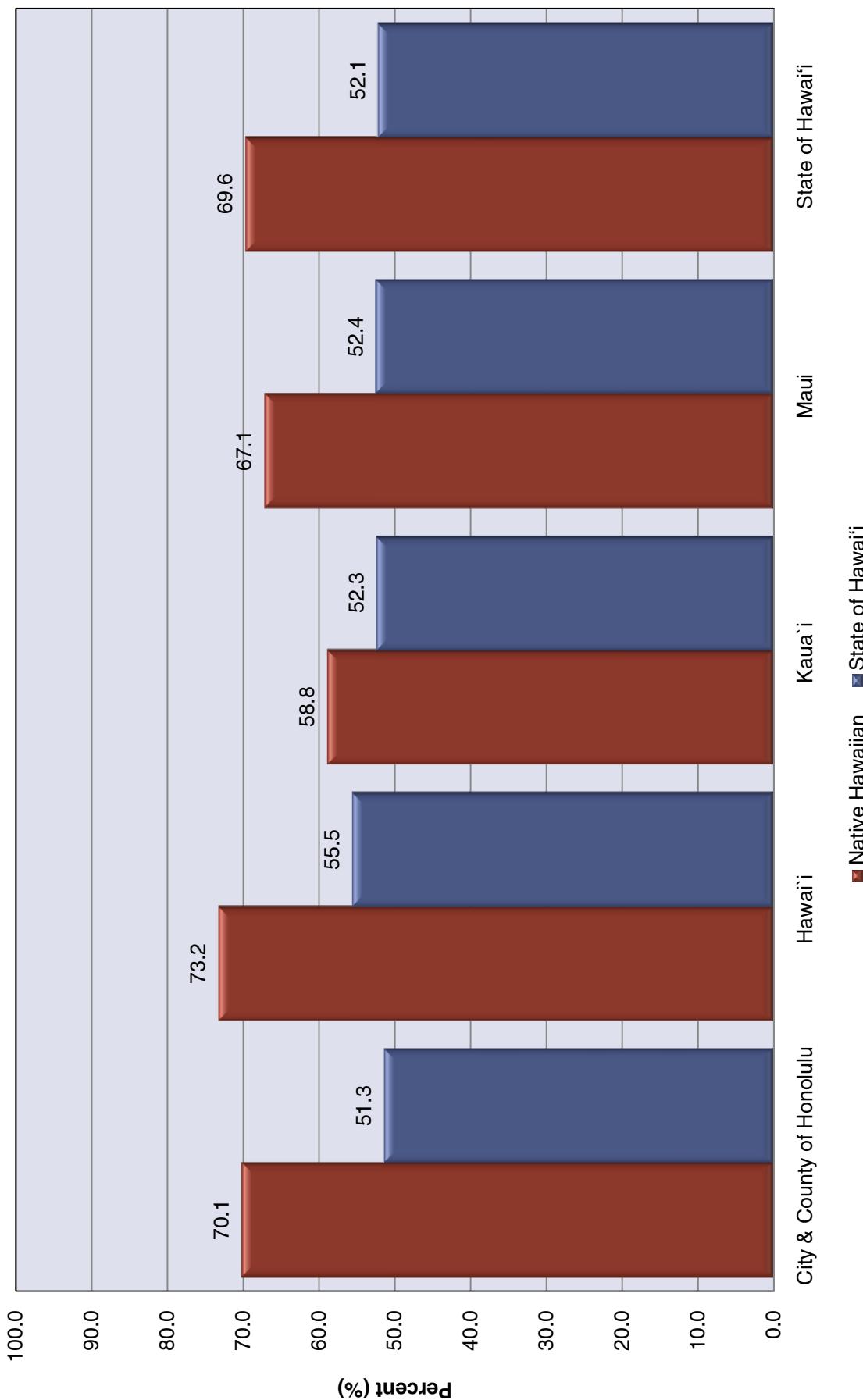
Overweight (BMI 25-29.9) Obese (BMI 30 and above) by Clinical Guidelines, NIH 1998.

Source: Hawai'i State, Department of Health, Hawai'i Health Survey. (Honolulu)

Figure 7.64a Overweight (including Obese) Native Hawaiians by County in Hawai‘i: 2008.



Source: Hawai‘i State, Department of Health, Hawai‘i Health Survey (Honolulu), (Honolulu)

Figure 7.64b Overweight (including Obese) by County in Hawai‘i: 2008.

Source: Hawai‘i State, Department of Health, Hawai‘i Health Survey. (Honolulu). (Honolulu)

INJURIES

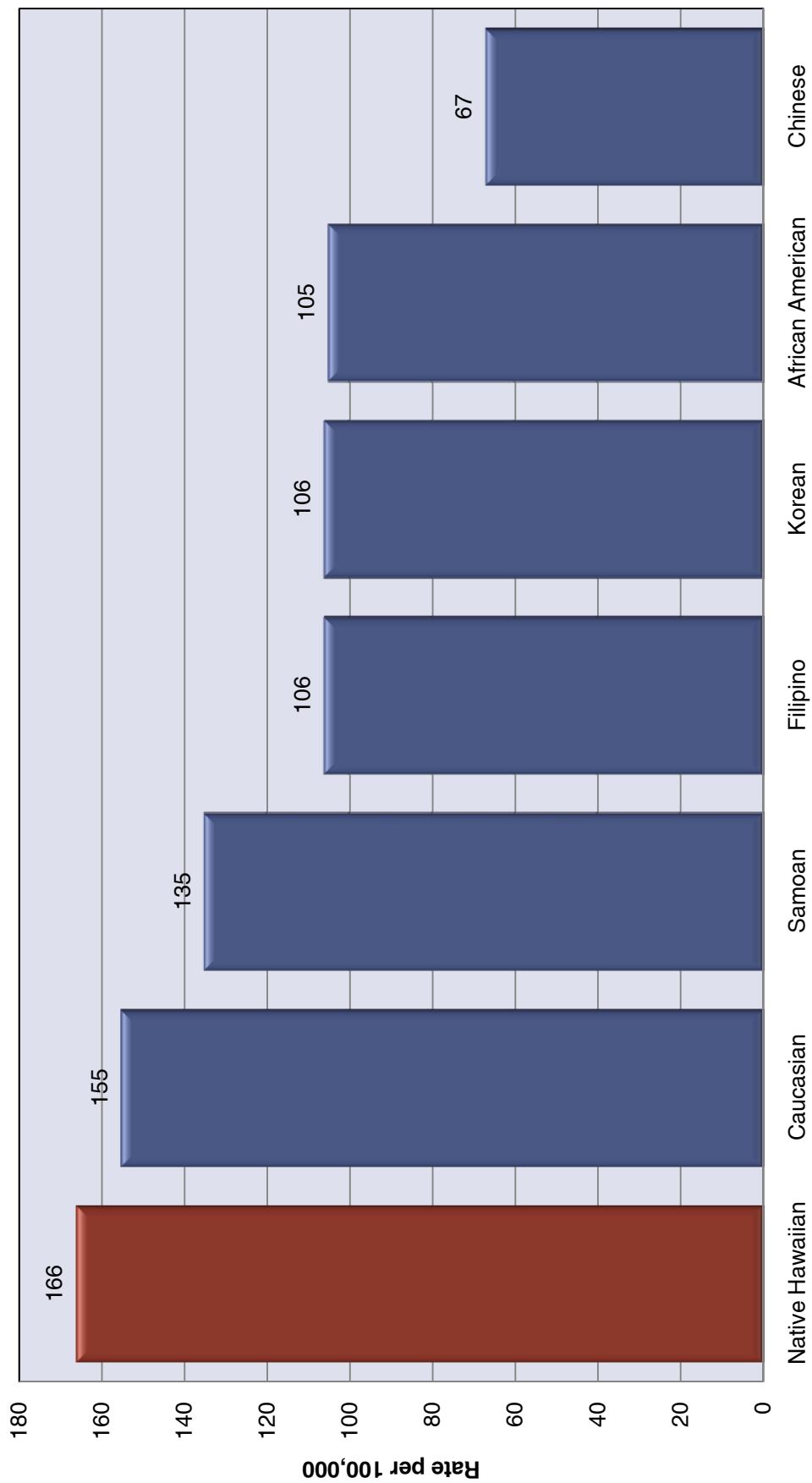
Table 7.65

**Unadjusted Rates (per 100,000) of Fatal
Unintentional Injuries by Race/Ethnicity: 2001–2006.**

Race/Ethnicity	Fatal Unintentional Injuries	
	Rate	Deaths
Japanese	177	524
Native Hawaiian	166	399
Caucasian	155	738
Samoan	135	38
Filipino	106	291
Korean	106	44
African American	105	35
Chinese	67	114

Source: Hawai'i State, Department of Health, Injury Prevention and Control Program, *Injuries in Hawai'i 2001-2006*. (Honolulu)

Figure 7.65 Unadjusted Rates (per 100,000) of Fatal Unintentional Injuries by Race/Ethnicity: 2001-2006



Source: Hawaii State, Department of Health, Injury Prevention and Control Program, *Injuries in Hawaii: 2001-2006. (Honolulu)*

CHILD ABUSE AND NEGLECT

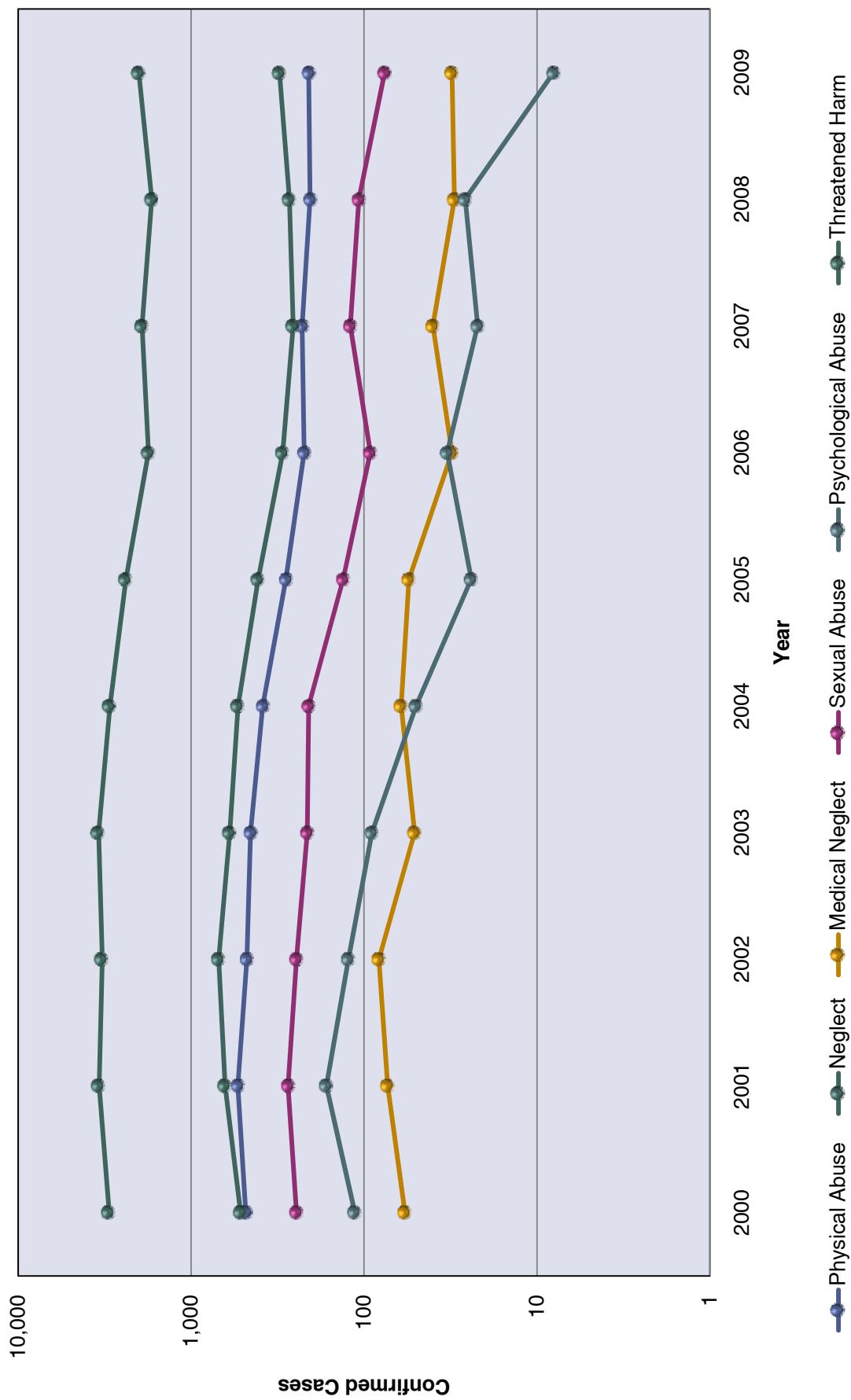
Table 7.66 Confirmed Child Abuse and Neglect Cases, Duplicated Counts a in Hawai'i: 2000-2009.

Year	Physical Abuse	Neglect	Medical Neglect	Sexual Abuse	Psychological Abuse	Threatened Harm	Total							
2000	483	37.5%	517	37.6%	58	50.4%	246	46.1%	113	29.4%	2,977	59.5%	4,394	50.5%
2001	537	38.2%	636	37.1%	73	47.1%	275	42.0%	165	32.9%	3,400	55.2%	5,086	48.0%
2002	476	33.6%	692	37.6%	82	54.3%	246	41.6%	123	25.2%	3,262	50.8%	4,881	44.7%
2003	453	30.5%	598	33.0%	51	31.3%	213	34.9%	90	23.6%	3,426	49.3%	4,831	42.4%
2004	385	31.9%	535	33.9%	61	41.2%	209	41.9%	50	23.1%	2,947	49.5%	4,187	43.6%
2005	283	30.4%	409	37.5%	55	48.2%	132	38.7%	24	23.3%	2,381	49.5%	3,284	44.5%
2006	222	29.2%	295	32.4%	31	35.6%	92	34.6%	33	37.1%	1,765	48.4%	2,438	42.3%
2007	228	26.1%	257	30.7%	40	53.3%	120	36.7%	22	28.6%	1,922	43.7%	2,589	39.3%
2008	205	24.1%	270	30.7%	30	39.5%	107	32.2%	26	40.6%	1,690	38.9%	2,328	35.6%
2009	209	21.2%	308	30.5%	31	38.3%	76	25.4%	8	13.8%	2,007	35.5%	2,639	32.7%

a A child may have more than one type of abuse/neglect per report and may have been reported more than once within the reporting period. Therefore, the sum of the abuse/neglect types exceeds the count of children.

Source: Hawai'i State, Department of Human Services. A Statistical Report on Child Abuse and Neglect in Hawaii; 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009. (Honolulu).

Figure 7.66 Confirmed Child Abuse and Neglect Cases, Duplicated Counts in Hawai‘i: 2000-2009.



Source: Hawai‘i State, Department of Human Services. A Statistical Report on Child Abuse and Neglect in Hawaii, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009. (Honolulu).

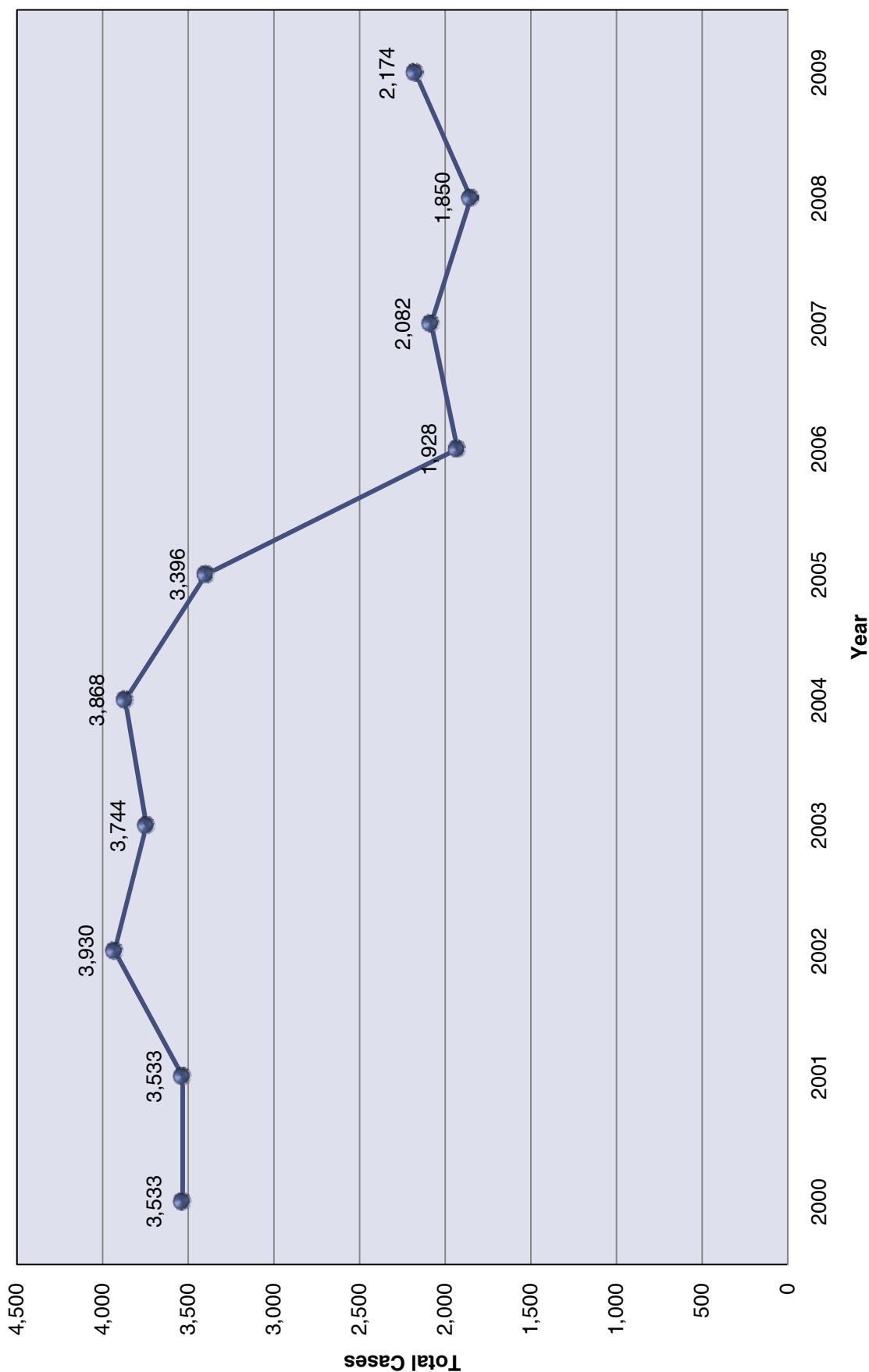
CHILD ABUSE AND NEGLECT

Table 7.67 | Confirmed Reports of Child Abuse and Neglect in Hawai'i by Age Distribution: 2000-2009.

Age of Victim	Confirmed Duplicated Counts									
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Under 1	470	470	563	548	535	534	353	316	294	292
1 Year	212	212	272	218	231	225	117	148	130	182
2 Years	207	207	258	199	235	226	112	139	113	149
3 Years	197	197	224	215	230	200	87	126	99	125
4 Years	200	200	226	211	225	158	94	118	87	158
5 Years	201	201	225	221	194	174	121	105	99	126
6 Years	194	194	207	204	215	183	84	95	110	116
7 Years	208	208	233	208	208	161	78	103	91	105
8 Years	199	199	199	210	183	177	86	107	92	114
9 Years	211	211	191	189	220	158	78	93	93	89
10 Years	197	197	226	193	198	156	86	82	82	103
11 Years	180	180	166	202	202	157	79	84	87	97
12 Years	160	160	192	183	216	165	103	102	68	93
13 Years	154	154	184	185	182	192	92	101	75	92
14 Years	189	189	173	155	190	175	92	105	99	105
15 Years	120	120	142	154	149	145	108	100	85	86
16 Years	133	133	147	135	140	129	80	97	91	70
17 Years	73	73	85	99	93	63	65	53	54	71
Unspecified	28	28	17	15	22	18	13	8	1	1
Median Age	7	7	7	7	7	6	6	6	6	6
Total	3,533	3,533	3,930	3,744	3,868	3,396	1,928	2,082	1,850	2,174

Source: Hawai'i State, Department of Human Services. A Statistical Report on Child Abuse and Neglect in Hawai'i, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009. (Honolulu).

Figure 7.67 Confirmed Reports of Child Abuse and Neglect in Hawai‘i: 2000-2009.



Source: Hawai‘i State, Department of Human Services. A Statistical Report on Child Abuse and Neglect in Hawaii, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009. (Honolulu).

CHILD ABUSE AND NEGLECT

Table 7.68 | Geographical Distribution of Reports of Child Abuse and Neglect in Hawai'i: 2009.

Incident	Cases	Reporting Branch ^a				
		Hawai'i	O'ahu	Kaua'i	Maui	Total
Physical Abuse	Reported	191	608	52	127	978
	Confirmed	46	140	10	13	209
	% Confirmed	24.1%	23.0%	19.2%	10.2%	21.4%
Neglect	Reported	250	609	50	100	1,009
	Confirmed	86	183	8	31	308
	% Confirmed	34.4%	30.0%	16.0%	31.0%	30.5%
Medical Neglect	Reported	16	50	2	13	81
	Confirmed	8	20	0	3	31
	% Confirmed	50.0%	40.0%	0.0%	23.1%	38.3%
Sexual Abuse	Reported	63	170	19	47	299
	Confirmed	16	49	5	6	76
	% Confirmed	25.4%	28.8%	26.3%	12.8%	25.4%
Psychological Abuse	Reported	8	40	2	8	58
	Confirmed	2	5	1	0	8
	% Confirmed	25.0%	12.5%	50.0%	0.0%	13.8%
Threatened Harm	Reported	1,012	3,579	287	772	5,650
	Confirmed	387	1,251	89	280	2,007
	% Confirmed	38.2%	35.0%	31.0%	36.3%	35.5%
Total	Reported	1,540	5,056	412	1,067	8,075
	Confirmed	545	1,648	113	333	2,639
	% Confirmed	35.4%	32.6%	27.4%	31.2%	32.7%

^a A child may have more than one type of abuse/neglect per report and may have been reported more than once within the reporting period. Therefore, the sum of the abuse/neglect types exceeds the count of children.

Source: Hawai'i State, Department of Human Services. *A Statistical Report on Child Abuse and Neglect in Hawaii, 2009.* (Honolulu).

Figure 7.68a Confirmed Reports of Child Abuse and Neglect in Hawai‘i: 2009

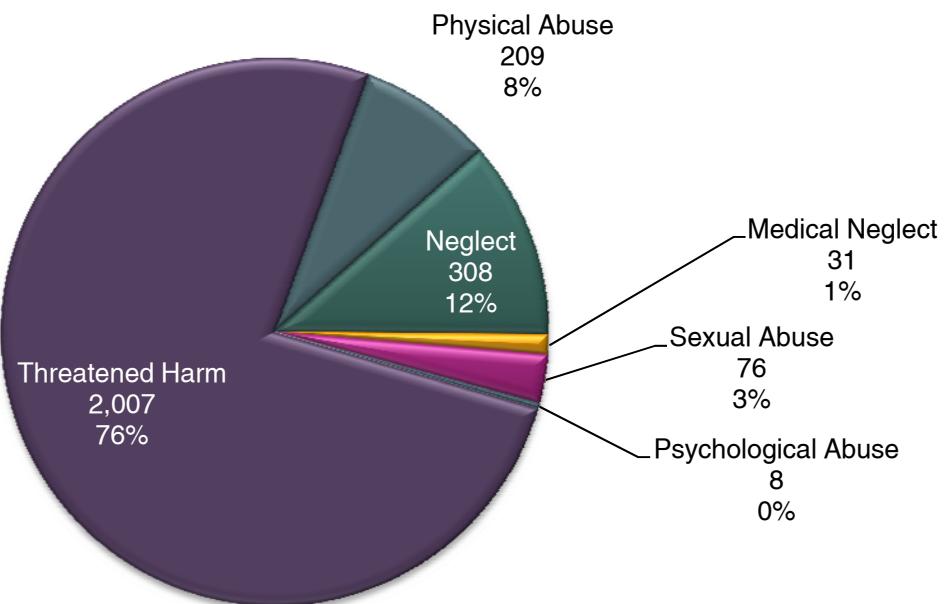
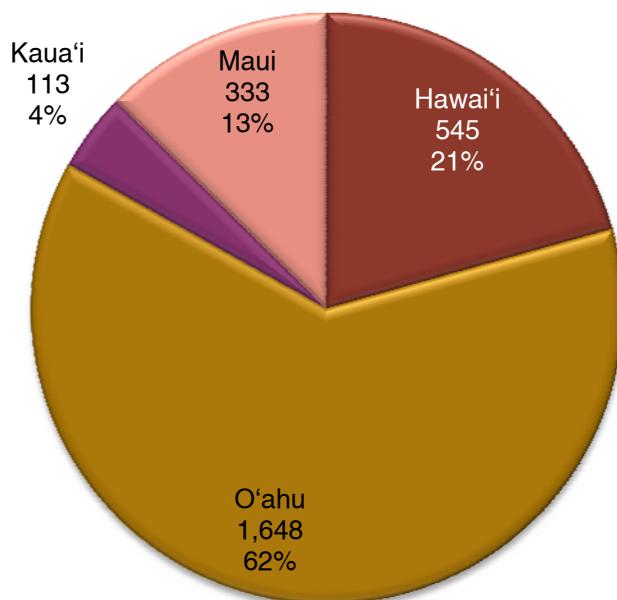


Figure 7.68 Geographical Distribution of Confirmed Reports of Child Abuse and Neglect in Hawai‘i: 2009.



CHILD ABUSE AND NEGLECT

Table 7.69**Racial Distribution of Child Abuse and Neglect in Hawai'i: 2000-2009.**

Race of Victim	Confirmed Duplicated Counts									
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Hawaiian/ Part Hawaiian	1,456	1,718	1,621	1,588	1,302	1,092	728	641	662	856
Mixed	563	663	508	486	455	358	283	345	272	347
White	378	311	398	395	352	247	220	228	231	222
Filipino	260	264	243	223	230	200	125	148	115	169
Samoan	124	121	121	103	127	90	72	45	100	54
Black	61	59	61	83	78	52	40	29	40	45
Japanese	73	43	52	49	46	31	34	35	34	17
Korean	13	19	9	7	16	6	5	1	6	6
American Indian	15	31	20	27	25	20	10	11	6	17
Chinese	8	27	5	16	14	10	10	9	6	14
Other Pacific Islander	55	60	84	79	66	55	56	66	69	106
Hispanic/Spanish	69	80	59	62	95	65	56	55	67	88
Vietnamese	6	20	20	6	9	7	7	11	3	3
Laotian	7	3	2	3	5	3	3	0	2	3
Cambodian	2	6	2	0	2	0	1	1	0	1
Alaskan Native					5	1	0	0	0	1
Unable to Determine	173	87	93	115	108	64	59	97	56	50
Missing	270	418	446	626	461	344	219	360	181	175
Total	3,533	3,930	3,744	3,868	3,396	2,645	1,928	2,082	1,850	2,174

Source: Hawai'i State, Department of Human Services. A Statistical Report on Child Abuse and Neglect in Hawaii, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009. (Honolulu).

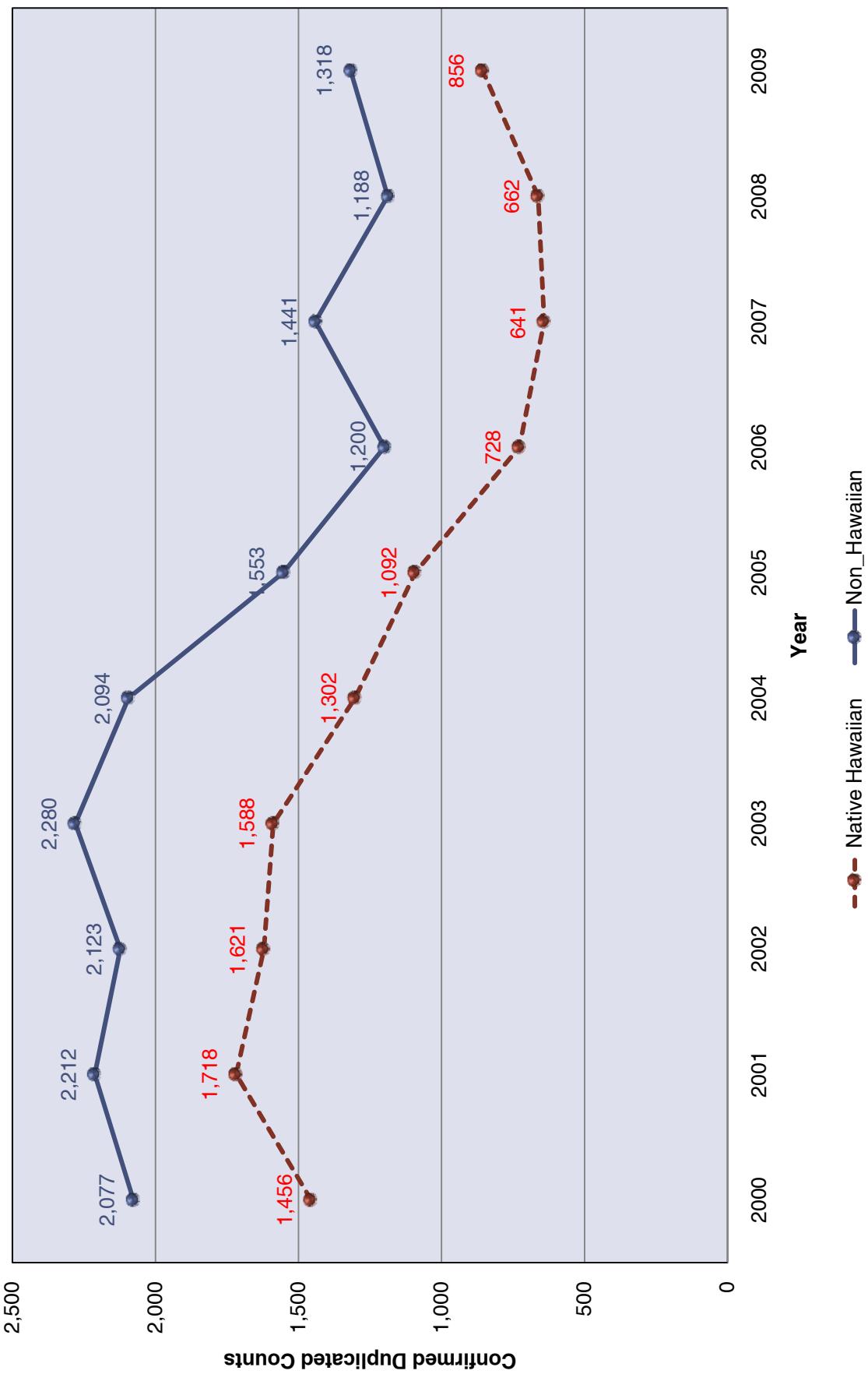
Nearly 39.4% (856) of the victims in confirmed child abuse and neglect cases reported in 2009 were Native Hawaiian children.

Victim Profile: (as determined by the State Department of Human Services for 2009)

AGE: 6 years (Median)

SEX: Female (51.7%)

RACE: Hawaiian or Part-Hawaiian (39.4%)

Figure 7.69 Racial Distribution of Child Abuse and Neglect in Hawai‘i: 2000-2009.

Source: Hawai‘i State, Department of Human Services. A Statistical Report on Child Abuse and Neglect in Hawaii, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009. (Honolulu).

CHILD ABUSE AND NEGLECT

Table 7.70 Confirmed Reports of Child Abuse and Neglect in Hawai'i by Perpetrator^a Relationship to Victim: 2000-2009.

Relationship	Confirmed Duplicated Reports							
	2000	2001	2002	2003	2004	2005	2006	2007
Parent	3,925	4,714	4,617	5,040	4,244	3,417	2,588	2,752
Other relative	307	301	281	249	233	176	83	94
Foster parent	91	89	63	115	62	(N)	(N)	7
Relative foster parent	(N)	(N)	(N)	(N)	58	6	18	4
Non-Relative Foster parent	(N)	(N)	(N)	(N)	21	26	2	0
Group home/Residential facility staff	6	48	8	6	1	2	3	46
Legal guardian	21	33	51	39	53	102	56	(N)
Foster parent, relationship unspecified	(N)	(N)	(N)	(N)	(N)	(N)	2	0
Other	320	368	354	352	312	210	151	157
Unknown/missing	68	56	46	52	48	37	16	10
Total	4,737	5,609	5,420	5,853	4,953	4,023	2,931	3,086
							2,810	3,309

^a A perpetrator was counted each time that he/she was associated with a child victim, therefore one perpetrator may have been counted more than once. For example, if an intake had 2 confirmed victims and 2 perpetrators, then the count of perpetrators would be 4.
(N) – Not reported

Source: Hawai'i State, Department of Human Services. A Statistical Report on Child Abuse and Neglect in Hawaii, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009. (Honolulu).

Perpetrator Profile: (as determined by the State Department of Human Services for 2009)

RELATIONSHIP TO VICTIM: Parent (88.3%)

AGE: Between 30 - 39 years (38.9%)

SEX: Either Male (45.7%) or Female (53.9%)

DISABILITIES

Table 7.71a

Sex by Age by Types of Disability for the Native Hawaiian Civilian Noninstitutionalized Population 5 Years and over in Hawai'i: 2000.

Types of Disability	Native Hawaiian Civilian Noninstitutionalized Population 5 Years							
	5 to 15 years		16 to 20 years		21 to 64 years		65 years and over	
	Male	Female	Male	Female	Male	Female	Male	Female
With one type of disability:								
Sensory disability	1,706	999	950	825	6,363	6,374	1,476	1,600
Physical disability	119	122	89	47	820	462	359	215
Mental disability	129	130	88	80	1,158	1,486	526	801
Self-care disability	1,453	735	194	76	388	538	107	125
Go-outside-home disability	5	12	9	0	9	17	2	10
Employment disability	—	—	266	220	461	555	482	449
With two or more types of disability:								
Includes self-care disability	320	271	484	372	5,484	4,793	1,370	2,229
Does not include self-care disability	169	179	101	41	1,069	965	501	976
Go-outside home and employment only	151	92	383	331	4,415	3,828	869	1,253
Other combination	—	—	172	193	1,556	1,500	—	—
No disability	28,546	26,886	10,109	9,985	46,162	49,557	3,449	4,361

Source: U.S. Bureau of the Census. *Census 2000 Summary File 4 (SF 4)* (April 29, 2003)

DISABILITIES

Table 7.71b | Sex by Age by Types of Disability for the Noninstitutionalized Population 5 Years and over in Hawai'i: 2000.

Types of Disability	5 to 15 years				State Noninstitutionalized Population 5 Years and over				65 years and over			
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<i>With one type of disability:</i>												
Sensory disability	4,768	2,287	2,952	2,629	33,323	30,364	15,052	16,413				
Physical disability	290	314	210	222	3,953	2,356	4,226	2,304				
Mental disability	291	263	172	220	5,623	6,340	4,877	6,624				
Self-care disability	4,148	1,656	558	376	2,241	2,164	890	1,160				
Go-outside-home disability	39	54	30	22	90	131	64	78				
Em nt disability	—	—	839	683	2,083	3,158	4,995	6,247				
<i>With two or more types of disability:</i>												
Includes self-care disability	979	685	1,501	1,319	29,113	25,755	14,187	18,492				
Does not include self-care disability	602	451	220	201	4,794	4,465	5,555	7,943				
Go-outside home and employment only	377	234	1,281	1,118	24,319	21,290	8,632	10,549				
Other combination	—	—	703	738	11,817	10,367	—	—				
No disability	89,255	86,202	33,257	33,968	263,988	287,148	41,164	52,689				

Source: U.S. Bureau of the Census. *Census 2000 Summary File 4 (SF 4) (April 29, 2003)*

DISABILITIES

Table 7.72a | Sex by Age by Disability Status by Poverty Status for the Native Hawaiian Civilian Noninstitutionalized Population 5 Years and Over: 2000.

Disability Status	Native Hawaiian Civilian Noninstitutionalized Population 5 Years									
	5 to 15 years		16 to 20 years		21 to 64 years		65 years and over		Male	Female
	Male	Female	Male	Female	Male	Female	Male	Female		
With a disability:										
Income in 1999 below poverty level	1,913	1,173	1,420	1,197	11,847	11,167	2,846	3,829		
	527	226	252	328	2,232	2,806	229	523		
Income in 1999 at or above poverty level	1,386	947	1,168	869	9,615	8,361	2,617	3,306		
No disability:	27,865	26,294	9,948	9,794	46,063	49,488	3,449	4,361		
Income in 1999 below poverty level	5,284	4,882	1,645	2,179	4,521	6,633	202	371		
Income in 1999 at or above poverty level	22,581	21,412	8,303	7,615	41,542	42,855	3,247	3,990		

Source: US. Bureau of the Census. *Census 2000 Summary File 4 (SF 4) (April 29, 2003)*

DISABILITIES

Table 7.72b | Sex by Age by Disability Status by Poverty Status for the Civilian Noninstitutionalized Population 5 Years and Over: 2000.

Disability Status	State of Hawai'i							
	5 to 15 years		16 to 20 years		21 to 64 years		65 years and over	
	Male	Female	Male	Female	Male	Female	Male	Female
With a disability:								
Income in 1999 below poverty level	5,461	2,829	4,378	3,870	62,351	56,037	29,239	34,905
Income in 1999 at or above poverty level	1,102	418	632	848	9,409	9,724	2,299	3,986
No disability:								
Income in 1999 below poverty level	4,359	2,411	3,746	3,022	52,942	46,313	26,940	30,919
Income in 1999 at or above poverty level	87,614	84,387	32,239	32,648	262,797	285,870	41,164	52,684

Source: US. Bureau of the Census. *Census 2000 Summary File 4 (SF 4) (April 29, 2003)*

INSURED**Table 7.73a** | **Health Insurance Status of Native Hawaiians By County in Hawai'i: 2000-2008.**

Year	Native Hawaiian										State of Hawai'i		
	County					Maui					No.	%	
	C & C of Honolulu	No.	Hawai'i	No.	%	Kaua'i	No.	%	Uninsured	No.			
2008	6,674	3.3	3,630	7.0		1,102	6.4		1,797	5.1	13,203	4.3	
2007	7,872	3.9	3,805	7.1		766	5.0		2,031	5.3	14,474	4.7	
2006	6,668	3.5	3,772	7.6		582	4.6		1,741	4.8	12,763	4.4	
2005	6,843	3.8	2,323	5.1		568	3.8		1,400	4.1	11,134	4.1	
2004	8,268	5.4	3,029	6.3		1,154	8.9		1,983	6.3	14,434	5.9	
2003	11,008	6.5	3,831	8.6		1,091	8.1		2,206	7.3	18,136	7.0	
2002	7,739	4.9	3,159	7.7		951	7.6		2,458	7.3	14,307	5.8	
2001	14,117	7.8	2,468	5.9		652	4.7		2,901	9.2	20,138	7.5	
2000	7,616	4.5	2,873	6.7		1,080	8.2		1,507	5.0	13,076	5.1	

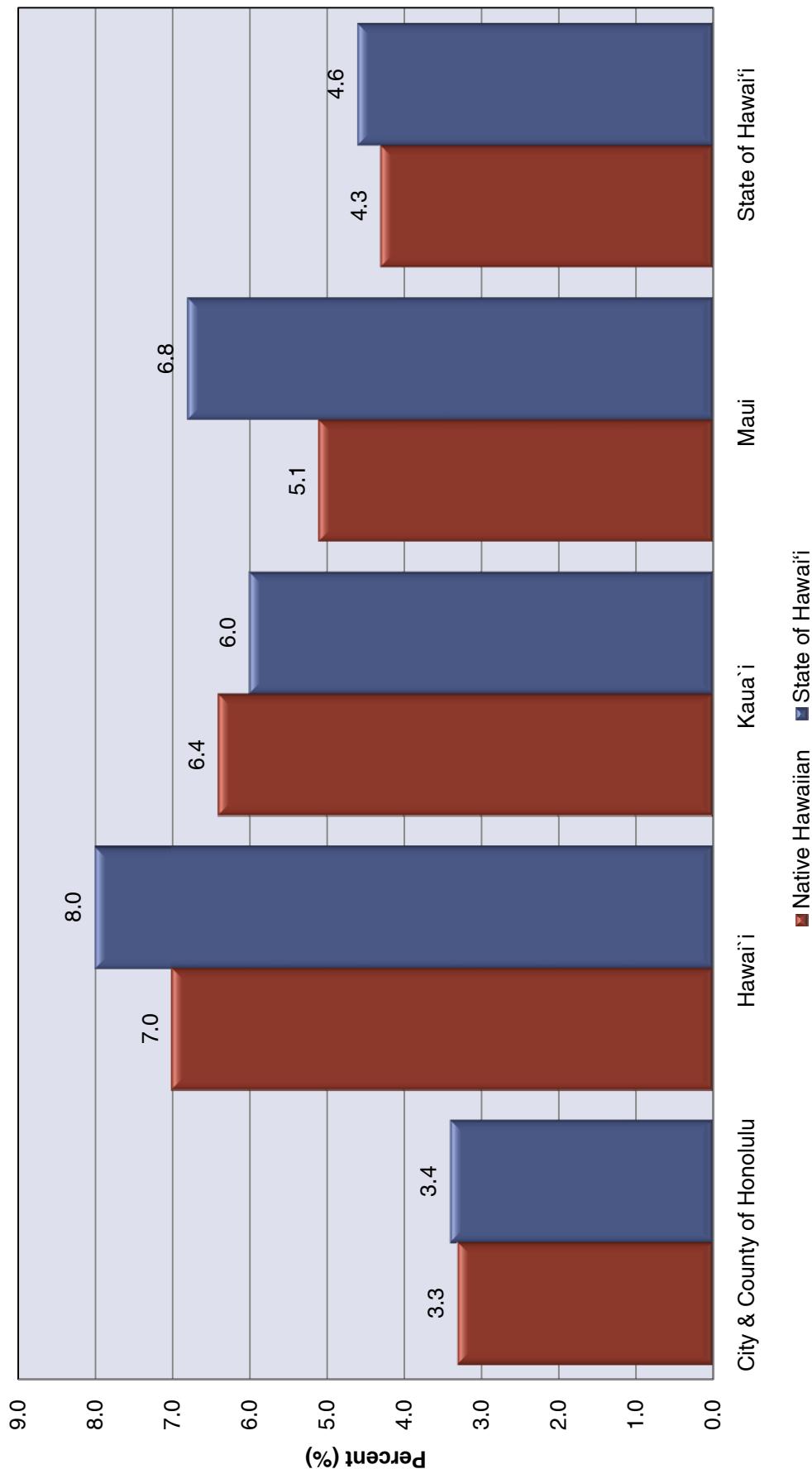
Source: Hawai'i State, Department of Health, Hawai'i Health Survey. (Honolulu)

INSURED**Table 7.73b** | Health Insurance Status of Native Hawaiians By County in Hawai'i: 2000-2008.

Year	Health Insurance Status of Native Hawaiians By County in Hawai'i: 2000-2008.													
	C & C of Honolulu					County					Total Population			
	No.	%	No.	Hawai'i	%	No.	Kaua'i	%	No.	Maui	%	No.	%	
Year	C & C of Honolulu No.	C & C of Honolulu % Uninsured	Hawai'i No.	Hawai'i % Uninsured	County No.	County % Uninsured	Kaua'i No.	Kaua'i % Uninsured	Total Population No.	Total Population % Uninsured	Maui No.	Maui % Uninsured	State of Hawai'i No.	State of Hawai'i % Uninsured
2008	30,131	3.4	13,794	8.0	3,743	6.0	9,747	6.8	57,415	4.6				
2007	36,171	4.1	14,854	8.5	4,217	6.6	11,230	7.9	66,472	5.2				
2006	30,191	3.4	14,330	8.6	4,610	7.4	9,271	6.7	58,402	4.7				
2005	29,898	3.4	12,072	7.3	4,100	6.6	10,528	7.6	56,598	4.5				
2004	34,751	4.0	13,475	8.4	5,170	8.4	10,559	7.6	63,955	5.2				
2003	34,430	3.9	14,196	9.2	4,214	7.0	10,853	8.1	63,693	5.2				
2002	31,438	3.7	10,614	7.0	4,359	7.4	10,193	7.6	56,604	4.7				
2001	37,977	4.5	11,407	7.8	3,555	6.2	11,501	9.1	64,440	5.5				
2000	37,757	4.5	10,511	7.4	5,084	9.0	9,544	7.9	62,896	5.4				

* Number of cases in sample numerator or denominator too small for reliability - shown for consistency only
— No reported cases

Source: Hawai'i State, Department of Health, Hawai'i Health Survey. (Honolulu)

Figure 7.73 Health Insurance Uninsured Status By County in Hawai‘i: 2008.

Source: Hawai‘i State, Department of Health, Hawai‘i Health Survey. (Honolulu). (Honolulu)



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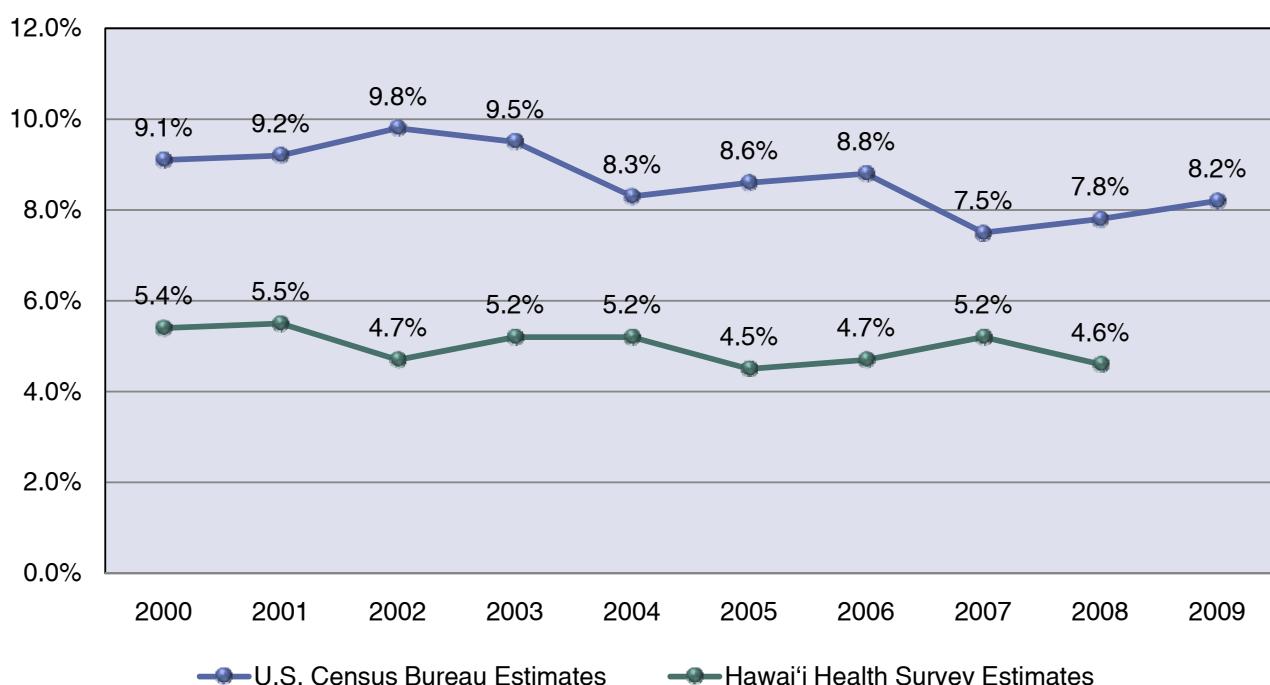
INSURED

Table 7.74**Health Insurance Coverage-Uninsured: 2000-2009.**

Year	Uninsured			
	U.S. Census Bureau Estimates		Hawai'i Health Survey Estimates	
	United States	State of Hawai'i	State of Hawai'i	Hawai'i Native Hawaiians
2009	16.7%	8.2%		
2008	15.4%	7.8%	4.6%	4.3%
2007	15.3%	7.5%	5.2%	4.7%
2006	15.8%	8.8%	4.7%	4.4%
2005	15.3%	8.6%	4.5%	4.1%
2004	14.9%	8.3%	5.2%	5.9%
2003	15.1%	9.5%	5.2%	7.0%
2002	14.7%	9.8%	4.7%	5.8%
2001	14.1%	9.2%	5.5%	7.5%
2000	13.7%	9.1%	5.4%	5.1%

Source: Hawai'i State, Department of Health, Hawai'i Health Survey. (Honolulu) US, Bureau of the Census, Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC)

- As with population estimates for the State of Hawai'i, there are two major sources for data on the uninsured each presenting different estimates for the same population. The differences are the results of different procedures and methodologies used in data collection and processing.

Figure 7.74 Health Insurance Coverage-Uninsured Estimates: 2000-2009

DEATHS

Table 7.75a | Resident Native Hawaiian Deaths by County in Hawai'i: 2000-2009.

Year	County of Residence of Native Hawaiians					
	Hawai'i	Honolulu	Kaua'i	Maui (Includes Kalawao)	Non- Resident/ Unknown	Total
2009	304	1,052	85	213	0	1,654
2008	294	981	81	178	0	1,534
2007	285	987	73	200	0	1,545
2006	274	976	70	184	0	1,504
2005	263	1,005	81	183	0	1,532
2004	250	969	71	169	0	1,459
2003	261	954	68	162	0	1,445
2002	232	977	55	177	0	1,441
2001	233	873	67	144	10	1,327
2000	220	895	73	164	0	1,352

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring. (Honolulu)

DEATHS

Table 7.75b | Resident Deaths by County in Hawai'i: 2009

Race/Ethnicity	County of Residence					
	Hawai'i	Honolulu	Kaua'i	Maui (Includes Kalawao)	Non- Resident/ Unknown	Total
Caucasian	559	1,450	191	365	0	2,565
Native Hawaiian	304	1,052	85	213	0	1,654
Filipino	129	832	95	154	0	1,210
Japanese	318	2,308	140	210	0	2,976
All Others	75	1,148	12	37	0	1,272
Total	1,385	6,790	523	979	0	9,677

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring. (Honolulu)

Figure 7.75a Resident Native Hawaiian Deaths by County in Hawai'i: 2000-2009.

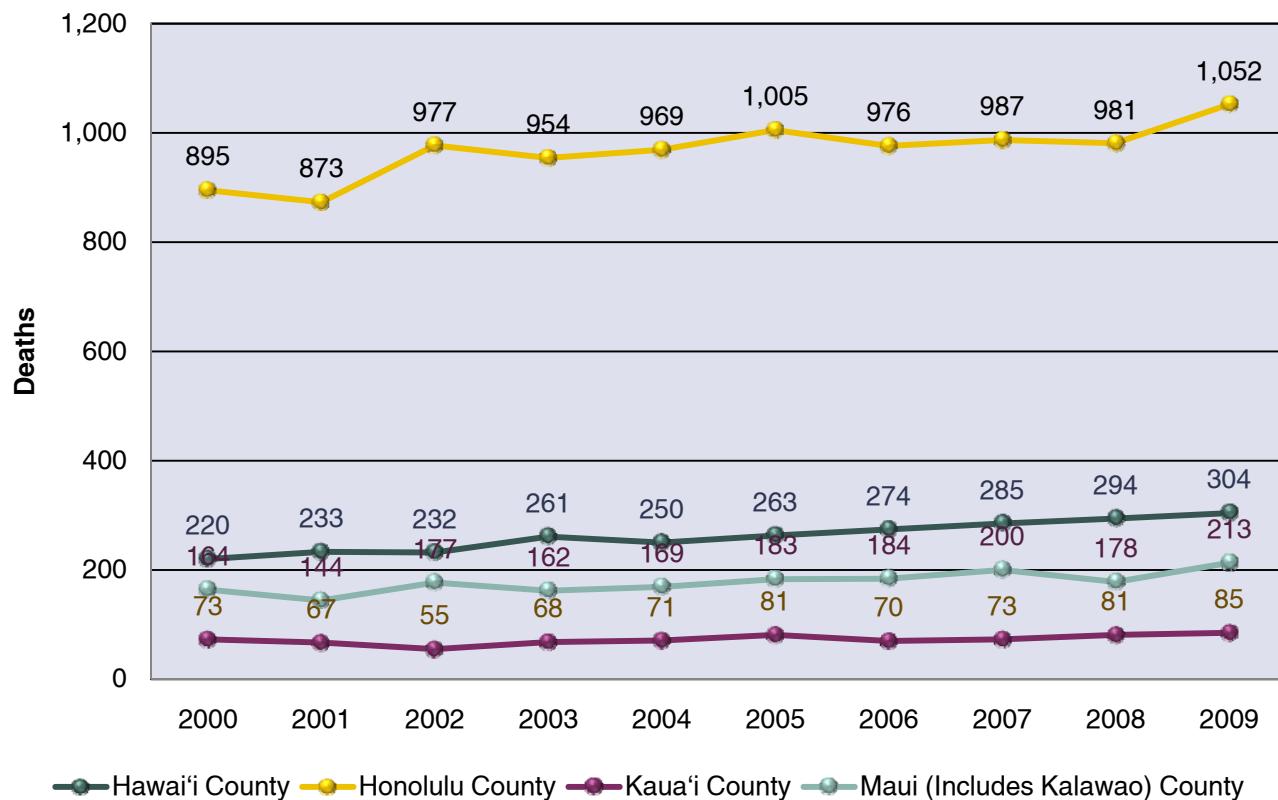
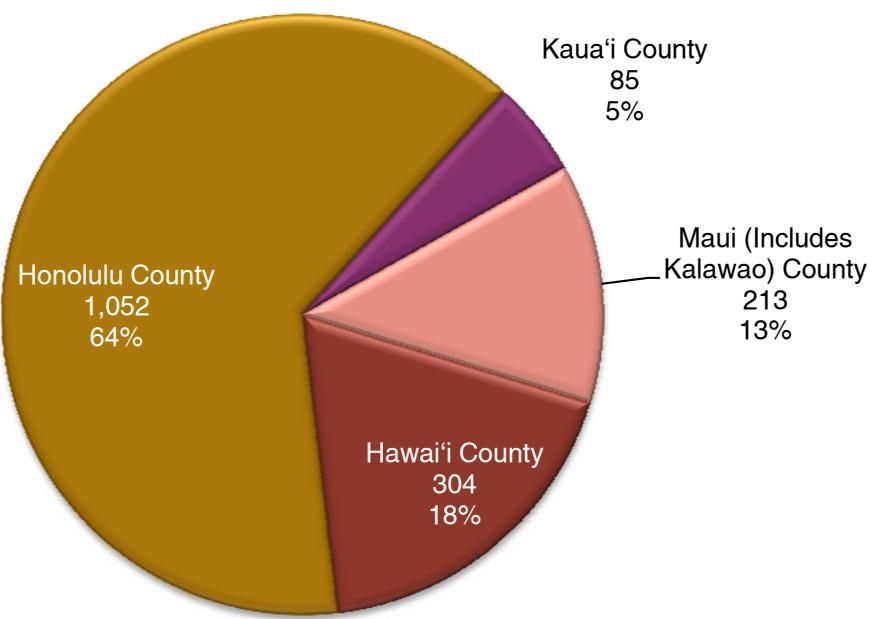


Figure 7.75b Resident Deaths by County in Hawai'i: 2009

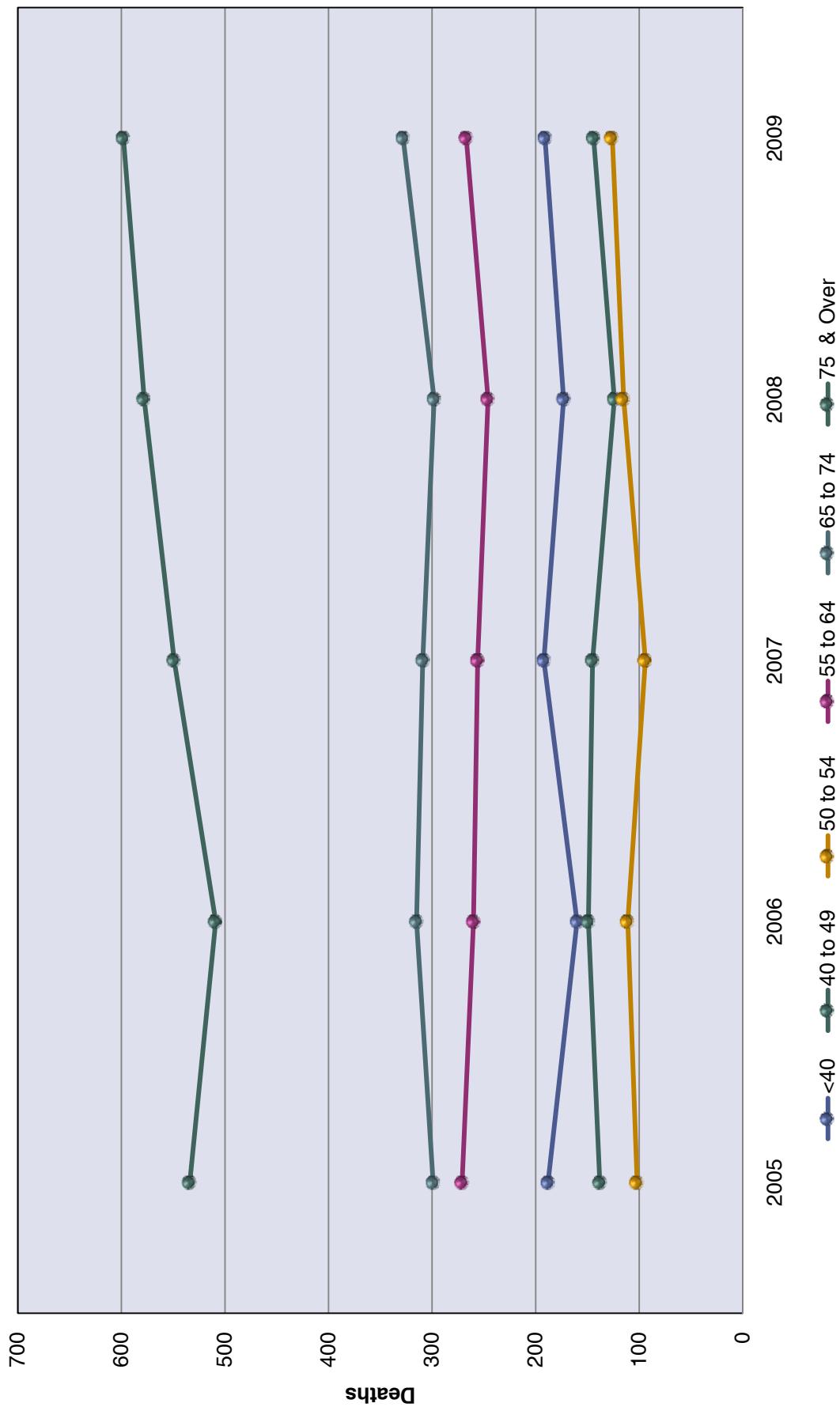


DEATHS

Table 7.76		Native Hawaiian Resident Deaths by Sex and Age in Hawai'i: 2005-2009.				
Sex	Age	Year				
		2005	2006	2007	2008	2009
Both Sexes	<40	188	160	192	173	191
	40 to 49	138	149	145	124	144
	50 to 54	102	111	94	115	126
	55 to 64	271	260	256	246	267
	65 to 74	299	315	309	298	328
	75 & Over	534	509	549	578	598
	Total	1,532	1,504	1,545	1,534	1,654
Male	<40	120	89	121	120	131
	40 to 49	81	88	89	73	92
	50 to 54	69	67	59	75	78
	55 to 64	157	153	148	139	163
	65 to 74	165	162	159	178	196
	75 & Over	223	235	238	253	283
	Total	815	794	814	838	943
Female	<40	68	71	71	53	60
	40 to 49	57	61	56	51	52
	50 to 54	33	44	35	40	48
	55 to 64	114	107	108	107	104
	65 to 74	134	153	150	120	132
	75 & Over	311	274	311	325	315
	Total	717	710	731	696	711

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring. (Honolulu)

Figure 7.76 Native Hawaiian Resident Deaths by Age in Hawai'i: 2005-2009.



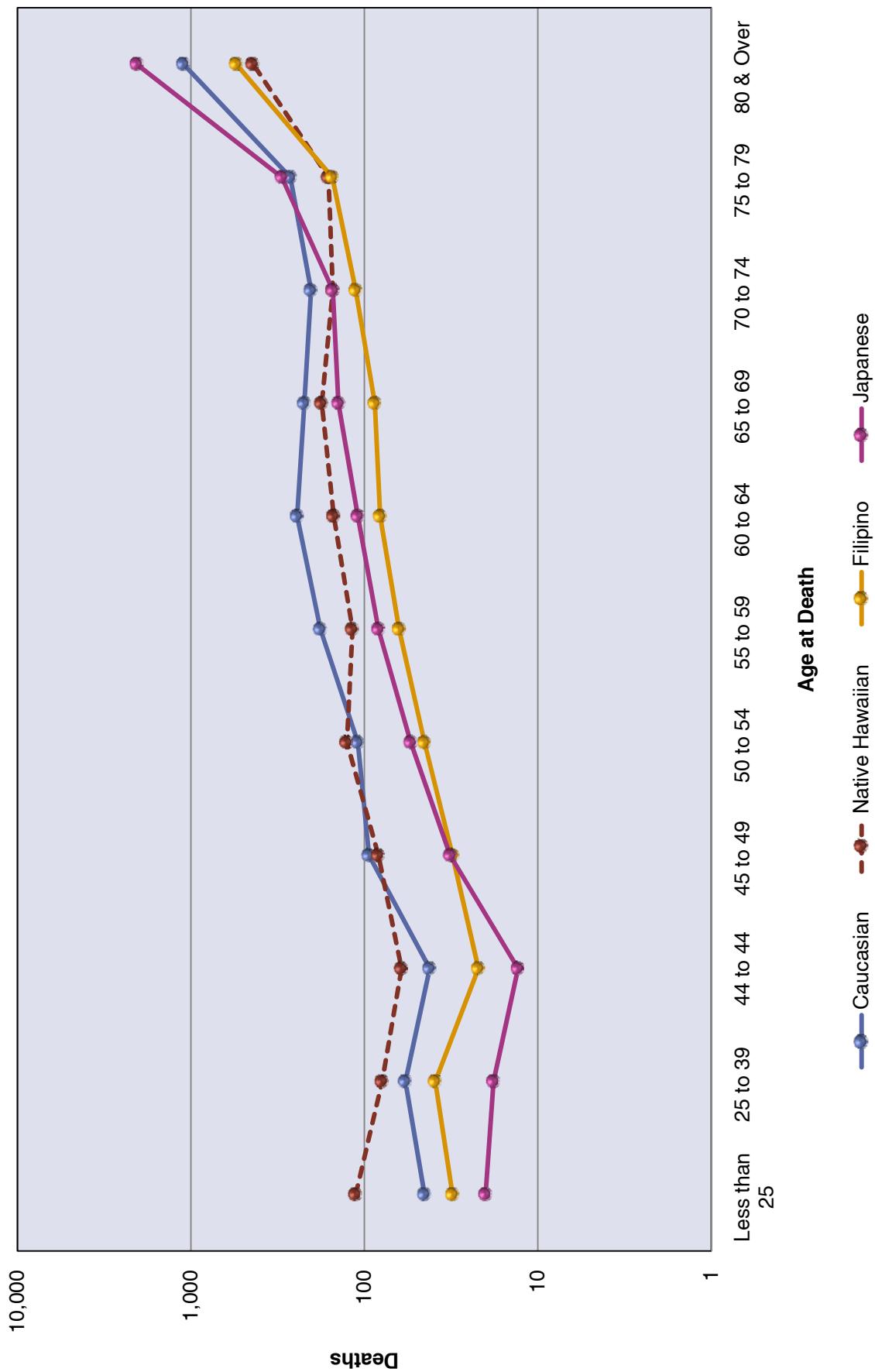
Source: Hawai'i State, Department of Health, Office of Health Status Monitoring, 2008. (Honolulu)



DEATHS**Table 7.77****Resident Deaths by Ethnicity, Sex and Age in Hawai'i: 2009**

Sex	Age	Race/Ethnicity						Total
		Caucasian	Native Hawaiian	Filipino	Japanese	All Others		
Both Sexes	Less than 25	45	112	31	20	49	257	
	25 to 39	58	79	39	18	56	250	
	44 to 44	42	61	22	13	29	167	
	45 to 49	94	83	31	32	39	279	
	50 to 54	109	126	45	54	61	395	
	55 to 59	179	117	63	83	92	534	
	60 to 64	244	150	81	109	72	656	
	65 to 69	222	176	87	141	84	710	
	70 to 74	203	152	112	152	105	724	
	75 to 79	267	161	153	299	125	1,005	
	80 & Over	1,102	437	546	2,055	560	4,700	
	Total	2,565	1,654	1,210	2,976	1,272	9,677	
	Less than 25	34	72	18	14	27	165	
Male	25 to 39	44	59	27	11	36	177	
	44 to 44	28	40	16	6	20	110	
	45 to 49	67	52	17	25	27	188	
	50 to 54	73	78	28	36	36	251	
	55 to 59	125	72	38	61	66	362	
	60 to 64	150	91	49	70	46	406	
	65 to 69	152	114	51	92	53	462	
	70 to 74	136	82	65	88	51	422	
	75 to 79	165	89	75	176	57	562	
	80 & Over	496	194	309	926	254	2,179	
	Total	1,470	943	693	1,505	673	5,284	
	Less than 25	11	40	13	6	22	92	
Female	25 to 39	14	20	12	7	20	73	
	44 to 44	14	21	6	7	9	57	
	45 to 49	27	31	14	7	12	91	
	50 to 54	36	48	17	18	25	144	
	55 to 59	54	45	25	22	26	172	
	60 to 64	94	59	32	39	26	250	
	65 to 69	70	62	36	49	31	248	
	70 to 74	67	70	47	64	54	302	
	75 to 79	102	72	78	123	68	443	
	80 & Over	606	243	237	1,129	306	2,521	
	Total	1,095	711	517	1,471	599	4,393	

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring. (Honolulu)

Figure 7.77 Resident Deaths by Ethnicity and Age in Hawai'i: 2009Source: Hawai'i State, Department of Health, Office of Health Status Monitoring, 2008. (*Honolulu*)

DEATHS**Table 7.78** Resident Deaths by Ethnicity, Sex and Age in Hawai‘i: 2009.

Age	Native Hawaiian						State of Hawai‘i					
	Male		Female		Both		Male		Female		Both	
	Deaths	%	Deaths	%	Deaths	%	Deaths	%	Deaths	%	Deaths	%
Less than 25	72	7.6%	40	5.6%	112	6.8%	165	3.1%	92	2.1%	257	2.7%
25 to 39	59	6.3%	20	2.8%	79	4.8%	177	3.3%	73	1.7%	250	2.6%
40 to 49	40	4.2%	21	3.0%	61	3.7%	110	2.1%	57	1.3%	167	1.7%
50 to 54	52	5.5%	31	4.4%	83	5.0%	188	3.6%	91	2.1%	279	2.9%
55 to 59	78	8.3%	48	6.8%	126	7.6%	251	4.8%	144	3.3%	395	4.1%
60 to 64	72	7.6%	45	6.3%	117	7.1%	362	6.9%	172	3.9%	534	5.5%
65 to 69	91	9.7%	59	8.3%	150	9.1%	406	7.7%	250	5.7%	656	6.8%
70 to 74	114	12.1%	62	8.7%	176	10.6%	462	8.7%	248	5.6%	710	7.3%
75 to 79	82	8.7%	70	9.8%	152	9.2%	422	8.0%	302	6.9%	724	7.5%
80 & Over	89	9.4%	72	10.1%	161	9.7%	562	10.6%	443	10.1%	1,005	10.4%
Total	194	20.6%	243	34.2%	437	26.4%	2,179	41.2%	2,521	57.4%	4,700	48.6%

Source: Hawai‘i State, Department of Health, Office of Health Status Monitoring. (*Honolulu*)

DEATHS**Table 7.79 Deaths of Resident Native Hawaiian Males by Selected Causes of Death State of Hawai'i: 2000-2009.**

Cause of Death	Race/Ethnicity							2009
	2000	2001	2002	2003	2004	2005	2006	
Total Deaths	745	719	763	760	820	815	794	814
DISEASES:								
Malignant Neoplasms	160	164	154	170	185	201	183	178
Diabetes Mellitus	26	22	22	21	24	22	29	34
Major Cardiovascular Diseases:	317	295	320	284	306	256	279	293
Diseases of the Heart	264	233	263	238	250	206	233	244
Cerebrovascular Disease	39	39	42	34	44	36	32	35
Other Circulatory Diseases (Incl. Atherosclerosis & Hypertension)	14	23	15	12	12	14	14	10
Influenza/Pneumonia	(N)	9	16	8	10	18	13	(N)
Chronic Lower Respiratory Diseases	5	21	(N)	24	26	24	24	26
Nephritis, Nephrotic Syndrome & Nephrosis	18	13	9	9	18	17	15	16
Symptoms, Signs & Ill-Defined Conditions (Including SIDS)	(N)	(N)	(N)	11	6	(N)	11	14
All Other Diseases	127	(N)	144	118	148	170	162	158
EXTERNAL CAUSES:								
All Accidents and Adverse Effects (Including Motor Vehicle Accidents)	48	(N)	28*	79	26*	32	24	27
All Other External Causes	44	195	70	36	71	75	65	67
* Motor Vehicle Accidents only							63	76
(N) Not reported								

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring, (Honolulu)

DEATHS**Table 7.80****Male Resident Deaths by Ethnicity and Selected Causes of Death State of Hawai'i: 2009.**

Cause of Death	Race/Ethnicity				Total
	Caucasian	Native Hawaiian	Filipino	Japanese	
Total Deaths	1,470	943	693	1,505	673
DISEASES:					
Malignant Neoplasms	373	213	157	324	160
Diabetes Mellitus	25	60	17	62	22
Alzheimer's Disease	28	5	6	28	6
Major Cardiovascular Diseases:	388	314	256	525	244
Diseases of the Heart	300	258	189	386	185
Cerebrovascular Disease	64	44	50	111	50
Other Circulatory Diseases (Incl Atherosclerosis & Hypertension)	24	12	17	28	9
Influenza/Pneumonia	23	23	27	56	21
Chronic Lower Respiratory Diseases	64	13	25	43	18
Nephritis, Nephrotic Syndrome & Nephrosis	29	19	23	36	10
All Other Diseases	339	165	134	366	136
EXTERNAL CAUSES:					
All Accidents and Adverse Effects (Including Motor Vehicle Accidents)	83	55	28	37	28
All Other External Causes	118	76	20	28	270

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring, (Honolulu)

DEATHS**Table 7.81 Deaths of Resident Native Hawaiian Females by Selected Causes of Death State of Hawai'i: 2000-2009.**

	Cause of Death	Race/Ethnicity									2009
		2000	2001	2002	2003	2004	2005	2006	2007	2008	
Total Deaths	607	598	678	685	639	717	710	731	696	711	
DISEASES:											
Malignant Neoplasms	155	145	153	174	159	186	180	172	177	179	
Diabetes Mellitus	28	17	23	25	24	19	41	43	29	29	
Major Cardiovascular Diseases:	267	238	296	259	236	267	204	241	218	229	
Diseases of the Heart	206	181	219	195	166	202	141	174	165	172	
Cerebrovascular Disease	47	42	54	56	53	55	52	48	43	38	
Other Circulatory Diseases (Incl. Atherosclerosis & Hypertension)	14	15	23	8	17	10	11	19	10	19	
Influenza/Pneumonia	(N)	11	12	17	10	9	18	(N)	16	21	
Chronic Lower Respiratory Diseases	20	31	(N)	14	16	26	20	25	31	26	
Nephritis, Nephrotic Syndrome & Nephrosis	(N)	12	16	17	21	16	14	17	25	31	
Symptoms, Signs & Ill-Defined Conditions (Including SIDS)	(N)	(N)	(N)	13	6	(N)	(N)	10	10	(N)	
All Other Diseases	108	144	152	137	138	(N)	185	175	154	137	
EXTERNAL CAUSES:											
All Accidents and Adverse Effects (Including Motor Vehicle Accidents)	(N)	(N)	12	23	6*	32	34	34	22	12	
All Other External Causes	29	144	14	6	23	16	14	14	14	25	

* Motor Vehicle Accidents only
(N) Not reported

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring, (Honolulu)

DEATHS**Table 7.82** Female Resident Deaths by Ethnicity and Selected Causes of Death State of Hawai‘i: 2009.

Cause of Death	Race/Ethnicity				Total
	Caucasian	Native Hawaiian	Filipino	Japanese	
Total Deaths	1,095	711	517	1,471	599
DISEASES:					
Malignant Neoplasms	257	179	117	262	148
Diabetes Mellitus	20	29	23	33	16
Alzheimer's Disease	43	22	11	81	18
Major Cardiovascular Diseases:	337	229	165	496	186
Diseases of the Heart	254	172	113	324	120
Cerebrovascular Disease	71	38	40	137	49
Other Circulatory Diseases (Incl Atherosclerosis & Hypertension)	12	19	12	35	17
Influenza/Pneumonia	35	21	15	47	19
Chronic Lower Respiratory Diseases	57	26	15	23	13
Nephritis, Nephrotic Syndrome & Nephrosis	16	31	16	23	16
All Other Diseases	272	137	135	472	157
EXTERNAL CAUSES:					
All Accidents and Adverse Effects (Including Motor Vehicle Accidents)	20	12	9	28	10
All Other External Causes	38	25	11	6	16
					96

Source: Hawai‘i State, Department of Health, Office of Health Status Monitoring, (Honolulu)

MARRIAGES

Table 7.83

Native Hawaiian Out-Marriages in Hawai'i: 2000-2009.

Year	Resident Native Hawaiian Groom			Resident Native Hawaiian Bride		
	Out Marriage	In Marriage	Total	Out Marriage	In Marriage	Total
2009	652	681	1,333	746	685	1,431
2008	715	773	1,488	801	771	1,572
2007	751	790	1,541	833	790	1,623
2006	725	735	1,460	815	735	1,550
2005	708	711	1,419	770	713	1,483
2004	767	749	1,516	835	751	1,586
2003	780	781	1,561	826	787	1,613
2002	751	718	1,469	781	719	1,500
2001	728	752	1,480	811	756	1,567
2000	732	836	1,568	880	840	1,720

MARRIAGES

Table 7.84

Ethnic Out-Marriages by Ethnicity in Hawai'i: 2009.

Race/Ethnicity	Resident Native Hawaiian Groom			Resident Native Hawaiian Bride		
	Out Marriage	In Marriage	Total	Out Marriage	In Marriage	Total
Caucasian	1,169	2,033	3,202	549	1,645	2,194
Native Hawaiian	652	681	1,333	746	685	1,431
Chinese	160	97	257	221	97	318
Filipino	376	526	902	649	527	1,176
Japanese	410	398	808	589	381	970
Korean	62	79	141	167	78	245
Samoan	102	90	192	56	91	147
Black	258	149	407	87	130	217
Vietnamese	18	23	41	53	23	76
Other	177	187	364	189	179	368
Unknown	66	1,041	1,107	73	961	1,034
Total	3,450	5,304	8,754	3,379	4,797	8,176

Source: Hawai'i State, Department of Health, Office of Health Status Monitoring. (Honolulu)

SUMMARY AND CONCLUSIONS

Disease incidence and mortality are strongly associated with lifestyle and risk factors. Of all racial groups living in Hawai'i, Native Hawaiians are the racial group with the highest proportion of multiple risk factors leading to illness, disability, and premature death.

Native Hawaiians suffer disproportionately from the significant chronic diseases.

- The prevalence rate for Native Hawaiian is slightly higher than the arthritis prevalence rate for the State of Hawai'i. (96.6 per 1,000 age adjusted 2008)
- The prevalence rate for Native Hawaiian with asthma is higher than the asthma prevalence rate for the State of Hawai'i. (157 per 1,000 age adjusted 2008)
- The prevalence rate for Native Hawaiian with hypertension is higher than the hypertension prevalence rate for the State of Hawai'i. (167 per 1,000 age adjusted 2008)
- Native Hawaiians have a higher prevalence rate for diabetes than the state. (79.5 per 1,000 age adjusted 2008)
- Native Hawaiians adults who are overweight (BMI 25-29.9) or obese (BMI 30 and above) number about 69.6% (2008). Highest among the major ethnic groups in the State.

Native Hawaiians have the highest numbers of child abuse and neglect in the State of Hawai'i.

Leading Causes of Native Hawaiian Deaths:

- Malignant Neoplasms (includes malignant neoplasms of the digestive and respiratory types, breast, genital, urinary, leukemia, and other malignant neoplasms.): 17.9% of Native Hawaiian deaths (2009)
- Major Cardiovascular Diseases (includes diseases of the heart, hypertension, cerebrovascular, arteriosclerosis, and other circulatory diseases.): 17.3% of Native Hawaiian deaths (2009)
- Diabetes Mellitus: 28.3% of Native Hawaiian deaths (2009)
- Respiratory (includes influenza/pneumonia, chronic obstructive pulmonary, and other respiratory diseases.): 14.2% of Native Hawaiian deaths (2009)

In summary, the above statistics depict Native Hawaiians experiencing high rates of circulatory diseases and malignant neoplasms, particularly digestive and respiratory types, which appear to be strongly associated to risk factors such as smoking, alcohol consumption, obesity, sedentary life, and so on. Also the statistics indicate that large segments of the Native Hawaiian population were recipients of state- and federal-sponsored health care services, a clear indication that low income is a barrier to full access to health care systems.