

***Births to Asian Mothers by Specific Asian Races,
Minnesota 2005-2009***

The United States' Asian population is a diverse minority group with more than 30 racial groups. These race groups are distinguishable by differences in culture, religion, health practices and country of origin¹. Despite this diversity, national and Minnesota birth data on Asians are most commonly reported as one homogenous race. This Vital Signs will present Asian birth data by specific race groups. 2005-2009 Minnesota resident births to Asian women will be analyzed to show how these specific Asian race groups differ demographically from each other.

Race Categories on the Minnesota Birth Certificate

On the Minnesota birth certificate, mothers can specify their race (Table 1) by checking one or more of the 16 categories developed by National Center for Health Statistics². Asian mothers have 11 Asian race groups from which to choose. There are nine listed Asian race groups: Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, Native Hawaiian, Guamanian/Chamorro, and Samoan, and two write-in categories: Other Asian or Other Pacific Islander. If they check either of these latter two categories, they are asked to write in a race group. The homogenous presentation of Asian masks the diversity within the population.

**Table 1: Multiple Race Collection Form for Mother and Father
(Minnesota Birth Certificate)**

What is the mother's race (Please check one or more races to indicate what she considers herself to be).	
<input type="checkbox"/>	White
<input type="checkbox"/>	Black or African American
<input type="checkbox"/>	American Indian or Alaska Native (name of enrolled or principal tribe(s))
<input checked="" type="checkbox"/>	Asian Indian
<input type="checkbox"/>	Chinese
<input type="checkbox"/>	Filipino
<input type="checkbox"/>	Japanese
<input type="checkbox"/>	Korean
<input type="checkbox"/>	Vietnamese
<input type="checkbox"/>	Other Asian (specify) _____
<input type="checkbox"/>	Native Hawaiian
<input type="checkbox"/>	Guamanian or Chamorro
<input type="checkbox"/>	Samoan
<input type="checkbox"/>	Other Pacific Islander (specify) _____
<input type="checkbox"/>	Other (specify) _____
<input type="checkbox"/>	Unknown

Results

In Minnesota in 2005-2009 23,793 births were to women who checked one of the 11 Asian race categories. Of these women, 15.2 percent indicated they were Asian Indian, 7.9 percent said they were Vietnamese and 5.9 percent were Chinese. "Other Asian" was by far the most frequently checked Asian race, where 57.6 percent Asian mothers indicated they were "Other Asian" (Table 2).

Table 2: Births to Asian Mothers by Asian Races from the Minnesota Birth Certificate, Minnesota 2005-2009

Asian Race	Number	Percent
Asian Indian ¹	3,617	15.2
Vietnamese	1,889	7.9
Chinese	1,410	5.9
Korean	1,356	5.7
Filipina	848	3.6
Japanese ¹	283	1.2
Other Pacific Islander ¹	154	0.6
Samoaan	43	0.2
Hawaiian	35	0.1
Guamanian/Chamorro	25	0.1
Other Asian	13,707	57.6
Asian and Other Races ²	426	1.8
Total Asians	23,793	100.0

Source: Minnesota Department of Health Center for Health Statistics

¹Includes mothers who marked "Other Asian" and specified an race in the checkbox category (e.g. two mothers checked "Other Asian" and wrote in Asian Indian)

²Mother selected Asian and at least one other non Asian race (e.g. Asian and American Indian)

Other Asian and Other Pacific Islander

In total there were 13,861 women who checked either Other Pacific Islander or Other Asian. Of the 154 women who wrote in Other Pacific Islander, only eight women further specified their race, seven wrote in Pacific Islander and one wrote in Somali. Of the 13,707 women that indicated they were "Other Asian", 86.7 percent of these women wrote in a specific race. To categorize the races in the Other Asian category the following methodology was used:

If more than two Asian races were written (e.g. Cambodian/Laotian), the birth was coded as "Multi Asian Race" unless Hmong was one of the two, in these cases the birth was coded as Hmong. If the mother checked "Other Asian" and did not write in anything, the mother was coded as Blank/Unknown.

Table 3 shows the variety of races written by Asian mothers who checked “Other Asian”. In total there were 30 different write ins. Some of the categories were broad, such as Asian, Asian American and Southeast Asian and others were very specific such as Vientiane, Kurdish and Tai Lue. Hmong was overwhelmingly the most common write-in category, 54.5 percent of the women who checked “Other Asian” wrote in Hmong. The second and third most common write-in races (excluding Blank/Unknown and Asian) were Laotian at 7.2 percent and Cambodian with 5.2 percent.

Table 3: Write-ins for “Other Asian” Category, Minnesota 2005-2009

Write In	Number	Percent
Hmong	7,474	54.5
Blank/Unknown	1,826	13.3
Asian	1,525	11.1
Laotian	988	7.2
Cambodian	714	5.2
Thai	481	3.5
Burmese	217	1.6
Pakistani	122	0.9
Asian American	78	0.6
Nepalese	52	0.4
Bangladeshi	45	0.3
Tibetan	39	0.3
Indonesian	38	0.3
Malaysian	26	0.2
Sri Lankan	21	0.2
South Asian	17	0.1
Southeast Asian	12	0.1
Bhutanese	4	0.0
Mongolian	4	0.0
Singaporean	4	0.0
Singhalese	4	0.0
Multi Asian Race*	3	0.0
Kurdish	2	0.0
East Indies	2	0.0
Hispanic	2	0.0
Mexican	2	0.0
Taiwanese	1	0.0
Moslem	1	0.0
Vientiane	1	0.0
Tai Lue	1	0.0
South Indian	1	0.0
Other Asian Total	13,707	100.0

*Wrote in more than one Asian race (e.g. Cambodian/Laotian)

Table 4A ranks the most common Asian races leaving the “Other Asian” as one category. Table 4B includes the write ins with 20 or more births (excluding the broad categories such as Asian and Asian American). In Table 4A, Asian Indian is the largest race followed by Vietnamese, Chinese and Korean. When the write-in races are included the table expands from 10 races to 22 (Table 4B). As shown in Table 4B, Hmong is by far the largest race group. In addition, Laotian, Cambodian and Thai are added to the top 10 Asian races.

Tables 4A and 4B: Births to Asian Mothers by Asian Races from the Minnesota Birth Certificate, Minnesota 2005-2009

4A: Check Boxes Only, No Write Ins			4B: Check Boxes AND Write Ins		
Asian Race	Number	Percent	Asian Race	Number	Percent
Asian Indian ¹	3,617	15.2	Hmong	7,474	31.4
Vietnamese	1,889	7.9	Asian Indian ¹	3,617	15.2
Chinese	1,410	5.9	Vietnamese	1,889	7.9
Korean	1,356	5.7	Chinese	1,410	5.9
Filipino	848	3.6	Korean	1,356	5.7
Japanese ¹	283	1.2	Laotian	988	4.2
Samoaan	43	0.2	Filipina	848	3.6
Guamanian/Chamorro	25	0.1	Cambodian	714	3.0
Hawaiian	35	0.1	Thai	481	2.0
			Japanese ¹	283	1.2
			Burmese	217	0.9
			Pakistani	122	0.5
			Nepalese	52	0.2
			Bangladeshi	45	0.2
			Samoaan	43	0.2
			Tibetan	39	0.2
			Indonesian	38	0.2
			Hawaiian	35	0.1
			Malaysian	26	0.1
			Guam/Chamorro	25	0.1
			Sri Lankan	21	0.1
Asian and Other Races ²	426	1.8	Asian and Other Races ²	426	1.8
Other Pacific Islander ¹	154	0.6	Other Pacific Islander ¹	154	0.6
Other Asian	13,707	57.6	Other Asian	3,490	14.7
Total Asians	23,793	100.0	Total Asians	23,793	100.0

Source: Minnesota Department of Health Center for Health Statistics

¹Includes mothers who marked "Other Asian" and specified an race in the checkbox category (e.g. two mothers checked "Other Asian" and wrote in Asian Indian)

²Mother selected Asian and at least one other non Asian race (e.g. Asian and American Indian)

Write in races are shaded

Demographics

The Minnesota birth certificate provides demographic information on the mother including her residence at time of her infant's birth, age, educational status, and marital status. This section will look at these demographic characteristics for 15 Asian races, the 9 categories that are included on the birth certificate and 6 write in categories with 100 or more births for the time period 2005-2009.

Table 5 provides information on mother's residence at the time of her infant's birth. 87.9 percent of Asian mothers in Minnesota gave birth in the 7-county metro area of Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington counties. And the majority of these mothers lived in suburbs of Minneapolis and St. Paul at the time of their infant's birth. There were only two Asian races in which the majority of births occurred in St. Paul: Burmese (84.3 percent) and Hmong (55.0 percent). Only one of the 15 Asian races listed, Guamanian/Chamorro, had more births outside the 7-county metro area (for this time period there were only 25 births to Guamanian/Chamorro women, and 12 lived in the 7-county metro area).

Table 5: Selected Demographics of Mother, Asian Race Groups and All Asians, Minnesota 2005-2009

Asian Race Group	Residence at Birth (Percent of Total Births)				
	7-County Metro Area ¹	Non Metro	Minneapolis	St. Paul	Suburbs
Asian Indian	89.9	10.1	6.0	5.4	78.5
Burmese	97.7	2.3	1.4	84.3	12.0
Cambodian	73.1	26.9	3.5	17.2	52.4
Chinese	83.0	17.0	10.9	12.5	59.6
Filipina	70.3	29.7	5.4	8.0	56.8
Guamanian/Chamorro	48.0	52.0	4.0	4.0	40.0
Hawaiian	68.6	31.4	5.7	5.7	57.1
Hmong	97.4	2.6	8.5	55.0	33.9
Japanese	78.1	21.9	12.7	13.4	51.9
Korean	78.6	21.4	12.0	9.4	57.2
Laotian	74.4	25.6	13.2	4.9	56.4
Pakistani	83.6	16.4	1.6	9.0	73.0
Samoaan	62.8	37.2	9.3	7.0	46.5
Thai	99.7	0.3	25.2	10.9	63.7
Vietnamese	83.7	16.3	6.1	10.5	67.2
All Asian	87.9	12.1	9.2	24.0	54.7

Source: Minnesota Department of Health, Center for Health Statistics

¹ Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties

Figures 1A and 1B show the distribution of births of the two Asian race groups with the most births, Asian Indian and Hmong, for the 7-county metro area. In 2005-2009 the majority of the 7,474 births to Hmong women were in the city of St. Paul (4,109 births), Minneapolis had the second highest number of births (632), followed by Brooklyn Park (380) and Maplewood (259). The 3,617 births to Asian Indian women were spread throughout the 7-county metro area. Eden Prairie had the highest number of Asian Indian births at 360, followed by Edina (245), Woodbury (240), Minneapolis (218) and St. Paul (196).

Figure 1A and B: Births in the Minnesota 7-County Metro Area by Residence of Mother, 2005-2009
Figure 1A: Hmong Mothers **Figure 1B: Asian Indian Mothers**

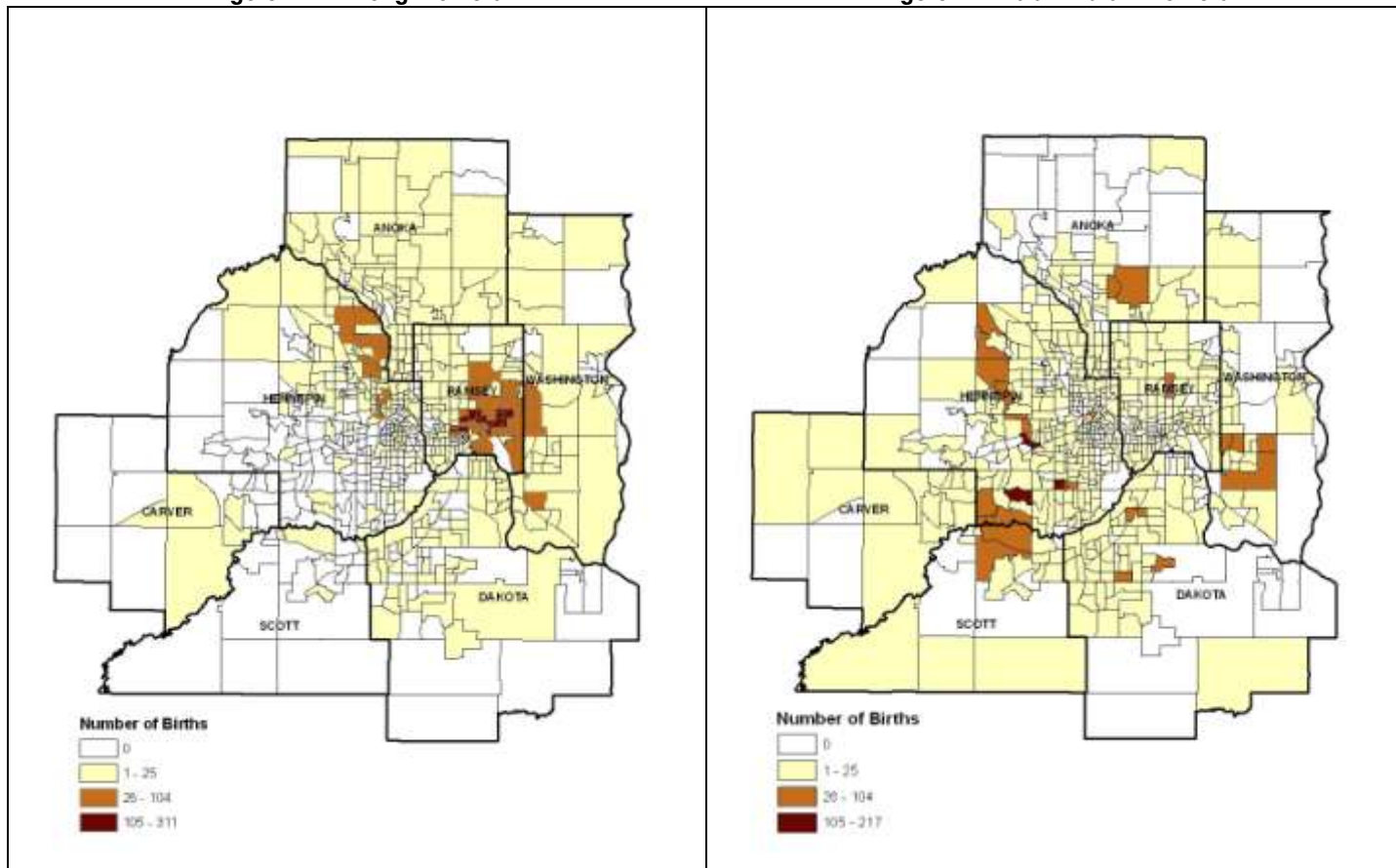


Table 6 compares the marital status, education and age of mother at the time of her infant's birth for the time period 2005-2009. Note that the education indicator includes only women 20 years and older.




There was a wide range in the percent of women who were unmarried at the time of their child's birth. Among women had the highest unmarried rate at 50.3 percent and Pakistani the lowest at 1.6 percent. In all there were four Asian races above 40 percent, Cambodian, Hmong, Laotian and Thai and five races that were under 10 percent, Asian Indian, Burmese, Chinese, Japanese and Pakistani. When looking at years of education completed, there were seven races that were higher than the All Asian rate of 10.8 percent. Burmese, Guam/Chamorro, and Hmong had the highest rates at 77.3, 25.0 and 19.6 respectively. There were six races with rates lower than the All Asian rate. The Chinese, Filipina, and Korean rates were the lowest at 3.9, 2.8 and 0.6 respectively.

Table 6: Selected Demographics of Mother, Asian Race Groups and All Asians, Minnesota 2005-2009

Asian Race Group	Demographic Characteristics of Mother (Percent of Births)		
	Unmarried	Less than 12 Years Education (Age 20+ Years)	Age - Less than 20 Years ³
Asian Indian	4.7	1.8	0.8
Burmese	8.3	77.3	7.4
Cambodian	44.8	16.5	8.7
Chinese	7.0	3.9	0.6
Filipina	13.2	2.8	1.8
Guam/Chamorro	48.0	25.0	4.0
Hawaiian	34.3	3.1	5.7
Hmong	50.3	19.6	16.4
Japanese	6.4	1.1	0.4
Korean	17.3	0.6	1.3
Laotian	44.4	13.7	8.1
Pakistani	1.6	8.4	0.0
Samoaan	32.6	9.8	4.7
Thai	46.7	13.0	9.4
Vietnamese	19.5	11.4	1.7
All Asian	30.0	10.8	8.0

Source: Minnesota Department of Health, Center for Health Statistics
95% confidence intervals were used to determine significant differences

Note: 32.2% of Minnesota mothers were unmarried when they gave birth, 8.5% had less than 12 years education (age 20+ years), and 6.8 % were less than 20 years old (2005-2009)

	Better than all Asian percentage
	Worse than all Asian percentage
	Not significantly different from the All Asian percentage

The last column in Table 5 shows the percentage of women who were under 20 years old when they gave birth. For all Asians, 8.0 percent of women were under 20 years old when they gave birth, only the percentage for Hmong women (16.4) was higher than the all Asian rate. There were 7 races (Filipina, Vietnamese, Korean, Asian Indian, Chinese, Japanese and Pakistani) in which less than 2 percent of their births were to women under 20 years old.

Conclusion

The 2005-2009 Minnesota birth data confirm that Asian mothers are a very diverse group. More than 20 different races are represented in the 2005-2009 birth cohort. Hmong, a write-in category, is the most common race: almost one third of Asian mothers reported they were Hmong. These groups are also demographically diverse. Hmong, Thai, Cambodian, and Laotian women are more likely to be unmarried and younger than the other Asian races. And when controlling for age, Hmong, Cambodian, Laotian, Thai and Vietnamese are more likely to have less than 12 years education than Chinese, Filipina, Asian Indian, Japanese and Korean women.

The results of this Vital Signs indicate that there are sufficient numbers of births among Hmong, Cambodians, Laotians and Thai to conduct a more granular analysis of Asian birth outcomes. In addition, the demographic variations between the Asian races merit further analysis of birth outcomes by Asian races. Vital Signs Volume 7, Number 2, "Birth Outcomes of Infants Born to Asian Mothers" looks at the differences in birth outcomes to infants born to Asian mothers by specific Asian races. This publication can be found on the Minnesota Center for Health Statistics website:

www.health.state.mn.us/divs/chs/vitalsigns/asianbirthoutcomes.pdf

Note on the New Birth Certificate

In March of 2011, the Minnesota Department of Health, Office of the State Registrar began using a new birth certificate with expanded race categories including Hmong, Cambodian, and Laotian (Table 7). These new race categories should facilitate the analysis of Asian birth outcomes. It is expected that 2012 birth data will be the first full year of data collection using the expanded race categories.

**Table 7: Multiple Race Collection Form for Mother and Father
(Minnesota Birth Certificate beginning March 2011)**

Race – check all that apply to you

- White
- Black or African American
 - Somali
 - Liberian
 - Kenyan
 - Nigerian
 - Ethiopian
 - Ghanaian
 - Sudanese
 - Other African (specify) _____
- American Indian or Alaska Native (name of enrolled or principal tribe) _____
- Asian
 - Asian Indian
 - Chinese
 - Filipino
 - Japanese
 - Korean
 - Hmong
 - Cambodian
 - Laotian
 - Vietnamese
 - Other Asian (specify) _____
- Other Pacific Islander (specify) _____
 - Native Hawaiian
 - Guamanian or Chamorro
 - Samoan
- Other (specify) _____

Shaded areas are new additions to the birth record

Endnotes

¹Qin, C, Gould JB. The Asian birth outcome gap. *Paediatric and Perinatal Epidemiology* 2006; 20: 279-289.

²The 2003 revision of the standards for vital certificates recommended the race and ethnicity categories listed in Table 1, which are in principle the same as those for the 2000 decennial census, with minor wording changes. Both the 2003 vital certificate standards and the 2000 decennial census questionnaires incorporated the 1997 revision of the Federal Office Management and Budget race and ethnicity category definitions, albeit the below go well beyond the OMB minimum requirements.

Confidence Intervals and Significance Testing for a Standardized Ratio
www.portal.state.pa.us/portal/server.pt?open=514&objID=556449&mode=2
Pennsylvania Department of Health

The Minnesota Center for Health Statistics collects, analyzes and disseminates data on the health of Minnesotans to help develop public health policies and programs.

For more information, contact the Center for Health Statistics at (651) 201-3504 or healthstats@state.mn.us. This issue, as well as other Center for Health Statistics publications, can be found on our website: www.health.state.mn.us/divs/chs

Minnesota Department of Health
Center for Health Statistics
PO Box 64882
St. Paul, MN 55164-0882

