

ALASKA VITAL SIGNS

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**Fact
Sheet**

SMOKING DURING PREGNANCY IN THE 1990s: ALASKA AND U.S.

A recent report published by the National Center for Health Statistics (NCHS) examined rates of smoking during pregnancy in the United States during the decade of the 1990s. The report showed that maternal smoking in the U.S. declined by nearly one-third from 1990 to 1999. This is an important downward trend, since maternal smoking is associated with many adverse outcomes, including low birth weight, growth retardation in the womb, infant mortality, and negative consequences for child health and development.



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HOW DID ALASKA COMPARE?

In Alaska, the percent of mothers who reported smoking during pregnancy declined by about 23 percent during the decade of the 1990s, lagging the nearly 33 percent decline in the national rate. (See Table 1.) In 1999, just under 18 percent of Alaska's births were by mothers who reported smoking, down from about 23 percent in 1990. For the same period, the U.S. rate fell from 18.4 to 12.3 percent.

On the one hand, Alaska's significant decline in the maternal smoking rate is encouraging. On the other hand, since Alaska's decline was not as great as the nationwide decline, its rate relative to the U.S. has grown from about 1.3 times the national rate to about 1.5 times the national rate.

Teens had the highest rate

The maternal smoking rate declined for all age groups at the national level, and—with the exception of mothers over the age of 40—Alaska followed suit. (See Figure 1.) However, with the important exception of teen mothers ages 15-19, Alaska's decline in the percentage of smoking mothers lagged the U.S. decline. Moreover, Alaska's maternal smoking rate remains higher than the national rate for all age groups. At the national level, mothers ages 20-24 had the highest smoking rate until 1996. Since then, teens (ages 15-19) became the age group with the highest smoking rate. (Both groups' rates declined during the decade, but mothers 20-24 declined much more

Table 1
**Percent of Mothers Who
Reported Smoking, 1990-1999**

Year	Alaska	U.S.
1990	23.2	18.4
1991	23.2	17.7
1992	23.3	16.9
1993	21.5	15.8
1994	21.6	14.6
1995	19.3	13.9
1996	20.5	13.6
1997	19.3	13.2
1998	18.4	12.9
1999	17.9	12.3
Percent change: 1990-1999:	-22.8	-32.9

steeply). In Alaska, teens had the highest maternal smoking rate of any age group throughout the entire decade. From 1990 to 1999, Alaska's teen maternal smoking rate fell more steeply than the U.S. rate, but was still nearly 1.5 times the national rate at the end of the decade. (See Figure 2.) In 1999, over 25 percent of Alaska's teen mothers reported smoking during their pregnancy, compared with the U.S. rate of 17.5%.

For most other age groups, Alaska's rate of smoking during pregnancy did not fall nearly as steeply as the U.S. rate, especially for mothers between ages 25 and 39. This means that Alaska's rate for 25-29 year-olds was 24% higher than the U.S. rate in 1990, but 49% higher in 1999; for 35-39 year-olds Alaska's rate was 20% higher than the U.S. rate in 1990, but 55% higher in 1999; and for 30-34 year-olds Alaska's rate was 28% higher than the U.S. rate in 1990, but 71% higher in 1999. (See Figure 2.)

The smoking rate for Alaskan White teens dropped below the U.S. rate

All of Alaska's races showed significant declines in maternal smoking rates during the 1990s. (See Figure 3.) This followed the general trend for the nation. However, Alaska's race profile for maternal smoking is strikingly different than the U.S., particularly for teens.

For the U.S., Non-Hispanic Whites had the highest reported smoking rate among teenage mothers throughout the 1990s, and their rate dropped only marginally from 1990 to 1999.

Figure 1

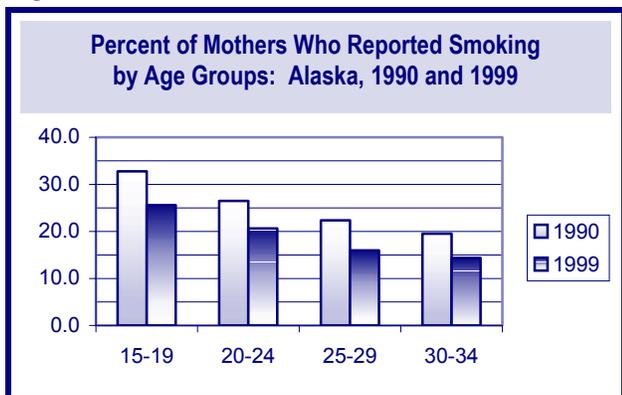
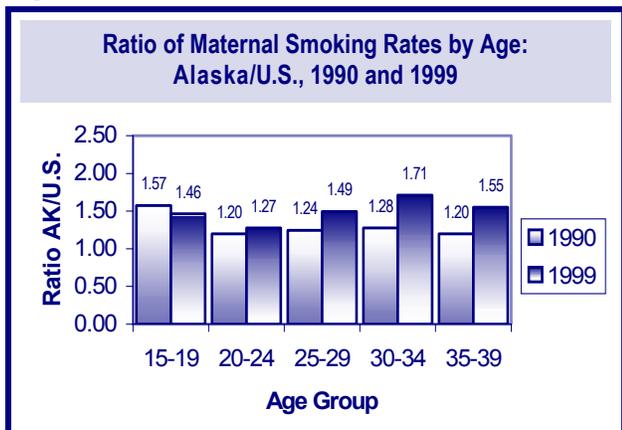


Figure 2



By contrast, Alaska Natives had the highest smoking rate among Alaskan teenage mothers during the 1990s. Their rate dropped by about 9 percent over the decade (from 40.4% in 1990 to 36.7% in 1999).

Meanwhile, the maternal smoking rate for Alaska's Non-Hispanic White teens dropped by nearly 37 percent (from 32.3% in 1990 to 20.5% in 1999). (See Figure 4.) In 1990, the smoking rate of Alaska's White teenage mothers was slightly above the national rate, but by 1999 it was about 30 percent lower than the national rate. Consequently, in 1999, the rate of Alaska Native teens smoking during pregnancy was about 80% higher than Alaska's White teens—up from about 25% higher in 1990.

Figure 3

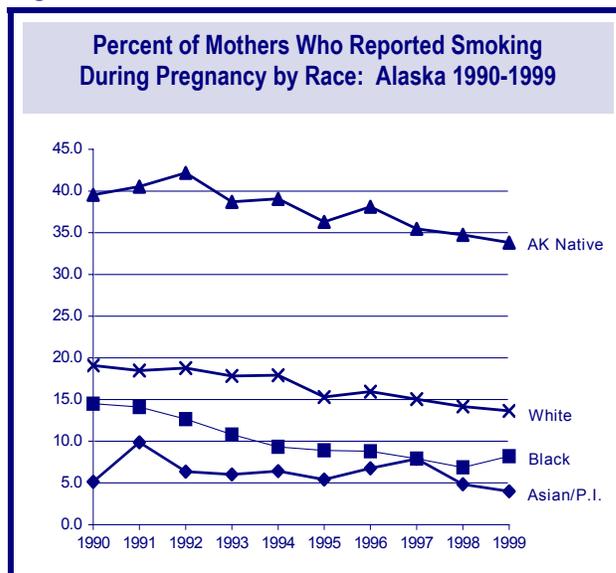
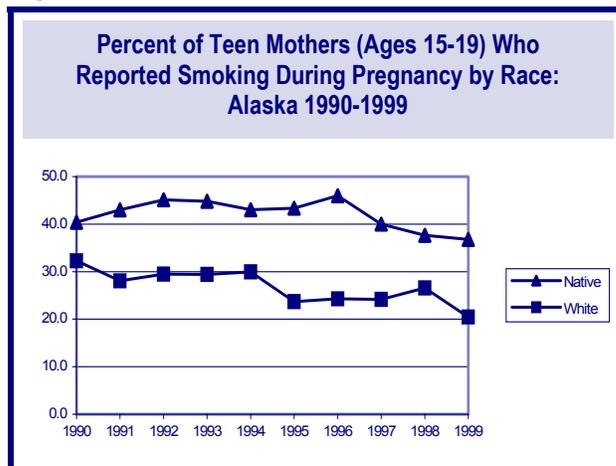


Figure 4



Over half of Alaska Natives in the Northern region smoked during pregnancy

Regionally, there were important differences in the maternal smoking rates of Alaska Natives. Throughout the 1990s, the Northern region of the state had the highest rate (53 percent in 1999); while the Southwest region had the lowest rate (22 percent in 1999). (See Table 2.)

The Interior region of the state showed the greatest reduction in the Alaska Native smoking rate, down to about one-third of mothers in 1995-1999 from over 45 percent of mothers in 1990-1994. In 1999, less than a quarter of Alaska Native mothers in the Interior region reported smoking during pregnancy.

Mothers not completing high school had the highest maternal smoking rates

Mothers failing to complete high school had the highest rate of smoking during pregnancy in the 1990s, both in Alaska and the U.S. The smoking rate declined in Alaska from 1990 to 1999 for all education levels. (See Table 3.) In 1999, only about two percent of Alaskan mothers with four or more years of college reported smoking during pregnancy, on par with the U.S. rate. At the other end of the spectrum, over 39 percent of Alaskan mothers in the group with 9 to 11 years of education smoked during pregnancy—well above the national rate of 29 percent.

Table 2	
Percent of Alaska Native Mothers Who Reported Smoking During Pregnancy by Region, 1999	
Region	Percent
Anchorage/Mat-Su	36.2
Gulf Coast	37.5
Interior	24.7
Northern	53.0
Southeast	36.3
Southwest	21.6

Table 3		
Percent of Mothers Who Reported Smoking by Educational Attainment, Alaska, 1990 and 1999		
Education Group	Year	
	1990	1999
< 9 yrs	36.6	32.3
9-11 years	45.4	39.3
HS or GED	28.3	21.8
1 yr college	16.5	12.2
2 yrs college	12.7	9.2
3 yrs college	9.7	6.6
4+ yrs college	4.9	2.2

Notes: Maternal smoking rates are based on information reported by the mother for the child's birth certificate registration. Because some mothers may be unwilling to admit a negative behavior, smoking during pregnancy may be under-reported. The potential for under-reporting may increase over time as more mothers become aware of the negative impact of their behavior. Some studies suggest that birth certificate data underestimate smoking rates during pregnancy, while other studies suggest consistency with other data sources. Data obtained from birth certificates does not provide information about if or when the mother may have quit smoking during the pregnancy; some mothers may have smoked throughout their pregnancy while others may have quit smoking shortly after conception.

Some percentages for Alaska in this report may not match the percentages reported by NCHS due to subsequent additions, deletions, and/or revisions of the Alaska Bureau of Vital Statistics birth records database.