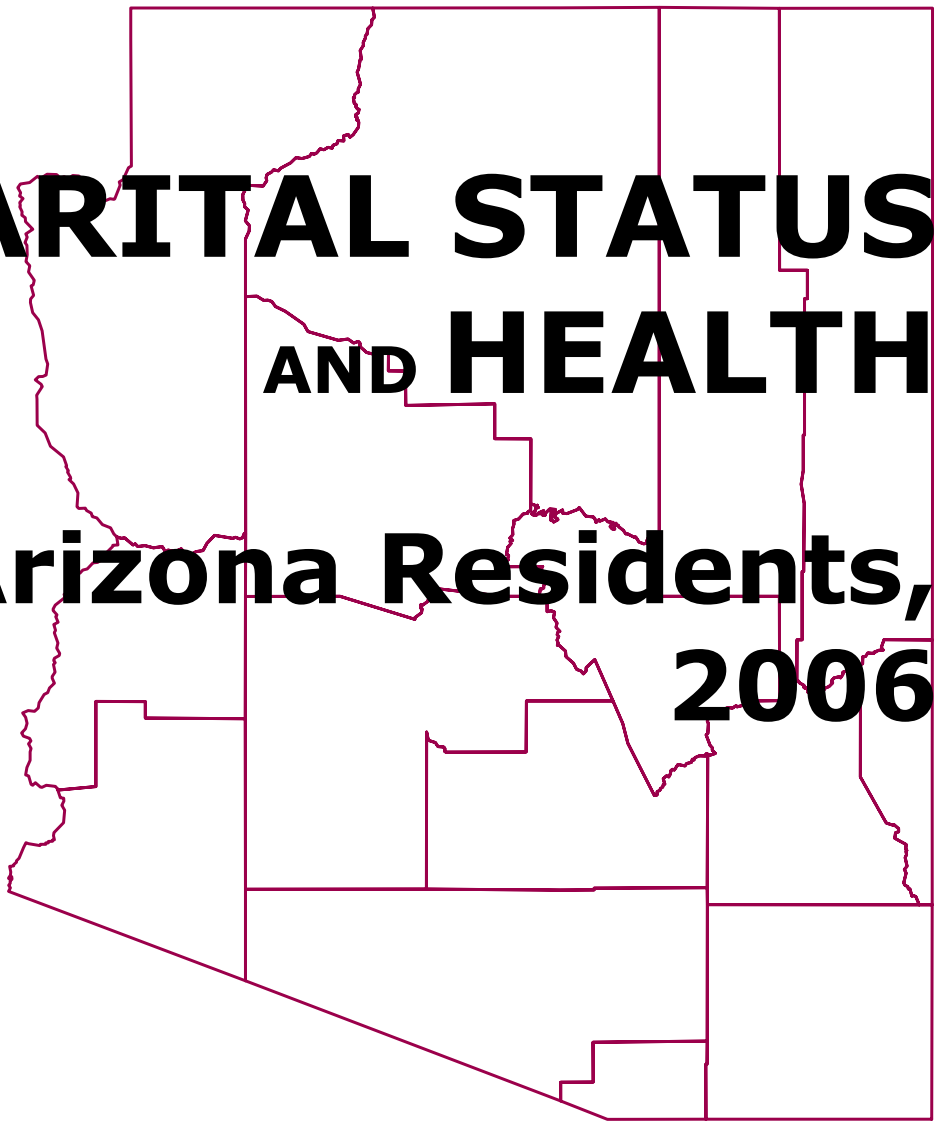
MARITAL STATUS AND HEALTH

Arizona Residents, 2006



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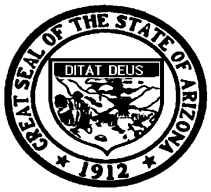

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Marital Status and Health
Arizona Residents, 2006

by

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May 2008

Acknowledgment

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MARITAL STATUS AND HEALTH, ARIZONA RESIDENTS, 2006

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INTRODUCTION

In the 110 years since Emile Durkheim published his classic, *"Suicide: A Study in Sociology"*[1] numerous studies have shown an association between marital status and health. For both men and women, mortality rates were found to be lower for married than they were for unmarried individuals.[2] Married adults were generally found healthier than unmarried adults, having lowest rates of acute conditions, of chronic conditions which limit social activity, and of disability for health problems.[3] Married adults generally use health care services less.[4] In addition, unmarried motherhood is associated with an elevated infant mortality rate,[5] and children in single-parent families are more likely to have fair or poor health status compared with children in two-parent families.[6]

These results usually are explained by selectivity into marital status because of health-related characteristics ("marital selection" theory) and/or by additional advantages that married people have in terms of economic resources, social and psychological support ("marriage protection" theory). The selection theory suggests that lifestyle and behavioral factors such as emotional stability and absence of disability, drug abuse, heavy drinking or body mass may play a role in determining the likelihood of getting married and divorced. "Healthy people are selected into marriage and, by extension, are less likely to be selected out of marriage via divorce or widowhood than the less healthy".[7] The protection theory underlines the social integrative function of marriage and the role of social control over risk-taking behavior. These two theories are not mutually exclusive. The selective and protective mechanisms most likely operate together.

PURPOSE

The findings that married people experience lower risk of morbidity and mortality but also are less likely to utilize health care services are of obvious public health interest. Even more so because of unprecedented sociodemographic changes that have been taking place in our society. The decline in the marriage rate is increasing the proportions of never married and divorced adults. Age at the first marriage has risen and living with a domestic partner outside of marriage is quite common. Gender differences in life expectancy in an ageing population are likely to continue to contribute to greater prevalence of widowhood among elderly females than males.

The purpose of our report is to provide Arizona-specific prevalence estimates by marital status for select health conditions and health risk behaviors; select characteristics of birth outcomes (including infant mortality) by mother's marital status; hospitalization rates for a variety of diagnostic categories; and cause-specific mortality rates.

Age-specific and age-adjusted prevalence estimates, hospitalization and mortality rates in this report are for ages 18 years or older. The majority of statistical information is provided for two groups of Arizonans, those who are married (including separated) vs. those who are unmarried. In addition, for several of the indicators we compare the following four marital status groups: married, never married, divorced, and widowed.

METHODS AND SOURCES

Six data sources are utilized in this publication: Arizona Behavioral Risk Factor Surveillance System (BRFSS) telephone survey, the hospital discharge database, the birth certificate database, the linked birth/infant death database, the death certificate database, and the population denominator database.

The BRFSS is a random sample telephone survey that uses disproportionate stratified sampling, random digit dialing (RDD), and a Computer Assisted Telephone Interviewing (CATI) system. A sample size of 4,700 interviews over a 12-month period was selected to achieve an acceptable confidence interval on risk factor prevalence estimates of the Arizona adult population (18 years of age or older). The collected data is compiled and weighted by the CDC. Weighted counts were based on the Arizona population to accurately reflect the population demographics. The weighting factor considered the number of adults and telephone lines in the household, cluster size, stratum size, and age/race/sex distribution of the general population. All analyses presented are based on cell counts of at least eight cases. The demographic information that was collected and presented in these results includes sex, age, education, household income, race, and ethnicity.

The hospital discharge database contains two types of records: inpatient hospitalizations and emergency room visits. An inpatient discharge occurs when a person who was admitted to a hospital leaves that hospital. A person who has been hospitalized more than once in a given calendar year will be counted multiple times as a discharge and included more than once in the hospital inpatient discharge data set; thus, the numbers we report here are for discharges, not persons. Up to nine diagnoses are coded for each discharge. Diagnostic groupings and code numbers are based on the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM). Information about the patient's marital status is available only for inpatient hospitalizations but not for emergency room visits.

Birth and death databases are compiled from the original documents filed with the Arizona Department of Health Services, Office of Vital Records and from transcripts of original death certificates filed in other states but affecting Arizona residents.

The birth certificate database contains maternal demographic characteristics (age, marital status, educational attainment); maternal lifestyle and health characteristics (medical risk factors, weight gain, alcohol and tobacco use); medical care utilization during pregnancy; and infant characteristics (period of gestation, weight at birth, congenital anomalies).

The linked birth/infant death database comprises the information from the death certificate linked to information from the birth certificate for each infant less than 1 year of age who died in 2006. The purpose of the linkage is to use additional variables available from the birth certificate (birthweight, mother's age, marital status, education, etc.), which are not available on the infant's death certificate.

The death certificate database contains demographic characteristics of the deceased (age, gender, race/ethnicity marital status, educational attainment), and cause of death. For the purpose of mortality statistics, every death is attributed to one underlying condition or underlying cause of death. The underlying cause is defined as the disease or injury that initiated the chain of events leading directly to death. It is selected from up to 20 causes and conditions entered by the physician on the death certificate. The totality of all these conditions is known as multiple cause of death. Since 2000, the causes of death are classified by the Tenth Revision of the International Classification of Diseases (ICD-10), replacing the Ninth Revision used during 1979-1999.

Two data sources were utilized in producing the 2006 population estimates by age group, gender and marital status. The estimated number of Arizona males and females who were 18 years or older in 2006 comes from our population denominator file used to calculate vital rates (detailed information about the estimation procedure is available at www.azdhs.gov/plan/menu/info/pop/pop06/pd06.htm The percentages of population breakdowns by marital status, age group and gender were derived from the U.S. Bureau of the Census 2000 Summary File 3 (*PCT7, Sex by marital status by age for the population 15 years and over*). The 2006 denominators used to calculate age-specific and age-adjusted rates by marital status and gender are in **Table 1-1**.

Age adjustment is important for any analysis of the association between marital status and health because both marital status and health vary by age[8]. In this report all rates that are not age-specific are age-adjusted. The rates were age-adjusted using the 2000 U.S. standard population (see **Technical Notes**).

LIMITATIONS OF THE DATA

It is important to note when interpreting the findings presented in this report that we use cross-sectional, not longitudinal data, therefore causality in the relationship of marital status and health cannot be established.

In each of the databases we use, marital status is either self-reported by the mother, survey respondent or patient, or provided for the deceased by an informant. Respondents "living with a partner" may report that they are "married" and the extent to which married persons are legally married cannot be determined. In addition, the information about marital status is limited to current marital status. The databases we use in this report do not store information about marital history of someone who is currently widowed and may have also been divorced or separated in the past.

The population denominators by marital status for 2006, used to calculate hospitalization and mortality rates are not exact enumerations but estimates. In addition, the age composition of the marital status groups reproduces the pattern from 2000.

Since the purpose of this publication is purely descriptive, marital status differences in health shown in our report have not been tested for statistical significance.

DATA ORGANIZATION

The charts and tables comprising *Marital Status and Health, Arizona Residents, 2006* are organized into nine major sections:

1. Trends and patterns in marital status
2. Risk behaviors
3. Health care coverage and health care practices
4. Prevalence of health conditions
5. Self-assessed health status and life satisfaction
6. Maternal and newborn health
7. Utilization of inpatient hospital care
8. Mortality
9. Family structure and child health

In the Technical Notes we provide information about the age-adjustment weights used to compute the age-adjusted rates by category of marital status, formulas used to compute standard errors and confidence intervals, and diagnostic categories used in **Section 7** and **Section 8** of this report.

SUMMARY OF FINDINGS

√ Married adults aged 18 years or older, both females and males, are generally healthier than unmarried adults;

√ Married adults share a lower risk of mortality than individuals in the unmarried category. The mortality disadvantage associated with being unmarried is seen for each of the leading causes of death and in every age group among Arizona females and males;

√ The prevalence of asthma, diabetes, glaucoma, and stroke is lower among married compared to unmarried Arizonans. In contrast, the prevalence rates of obesity are greater among married than unmarried;

√ Married persons make less use of inpatient hospital care than the unmarried;

√ Marital status differences in hospitalization rates associated with certain diagnostic categories such as mental disorders, drug dependence or alcohol abuse can be best understood within the framework of "marital selection" theory (those who are seriously mentally ill and/or drug dependent are less likely to be selected into marriage – and more likely to be selected out of marriage through divorce - than those who are free from mental illness and/or addiction).

√ "Marital protection" theory offers a better framework for the understanding of marital status differences in hospitalization and mortality rates for unintentional injuries, including motor vehicle accidents and falls. A spouse may deter risky behaviors such as drinking and driving or speeding and stimulate healthy behaviors.

√ Married Arizonans are less likely to engage in risky health behaviors, including heavy drinking and smoking, than unmarried Arizonans;

√ Married men and women are less likely to have unmet medical needs (i.e. unable to see a medical doctor due to cost) and more likely to follow the recommended health practices such as vaccination for influenza and pneumonia. Unmarried females are less likely to have mammograms and breast exams than married females;

√ Babies born to married mothers are at lower risk of infant death than newborns of unmarried mothers. The effect of marital status on infant mortality suggests that marital status is a proxy measure of factors traditionally related to infant mortality such as financial resources, access to health care, social and emotional support;

√ Relative to unmarried mothers, married mothers are less likely to use tobacco and/or drugs during pregnancy;

√ Children in married-couple families are less likely to be uninsured or to have unmet medical needs than children in single-parent families.

The above facts are increasingly important in view of the growing proportion of "singles" in Arizona. The decline in marriage rates is increasing the proportion of never married and divorced Arizonans. Gender differences in life expectancy in an ageing population continue to contribute to a much greater prevalence of widowhood among elderly females than males. Single motherhood continues to be a maternal and child-health policy issue in the State. Divorce and out-of-wedlock childbearing are estimated to cost U.S. taxpayers more than $112 billion a year.[*] Arizona-specific taxpayer costs of family fragmentation are estimated at $654 million per year.[#]

*Benjamin Scafidi: *The Taxpayer Costs of Divorce and Unwed Childbearing*. Georgia Family Council and Institute for American Values, 2008. The report is available online at http://www.marriagedebate.com/pdf/ec_div.pdf

#Ibidem: p.38, Table A5.

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Schoenborn CA, *Marital status and health: United States, 1999-2002*. Advance data from vital and health statistics; no 351. Hyattsville, Maryland: National Center for Health Statistics. 2004

Beckett M, Elliot MN, *Does the association between marital status and health vary by sex, race and ethnicity?* RAND Labor and Population Program. Working Paper series 02-8. September 2002.

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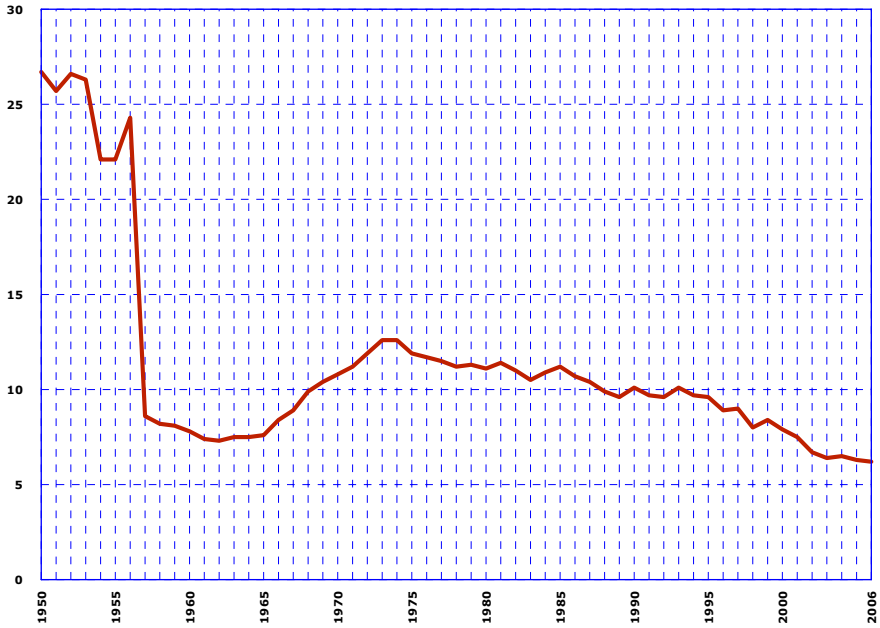
[7]Page 3 in Beckett M, Elliot MN, *Does the association between marital status and health vary by sex, race and ethnicity*? RAND Labor and Population Program. Working Paper series 02-8. September 2002.

[8]Page 4 in Schoenborn CA, *Marital status and health: United States, 1999-2002*. Advance data from vital and health statistics; no 351. Hyattsville, Maryland: National Center for Health Statistics. 2004

TRENDS AND PATTERNS IN MARITAL STATUS

Figure 1-1
Trends in Marriage Rates, Arizona, 1950-2006

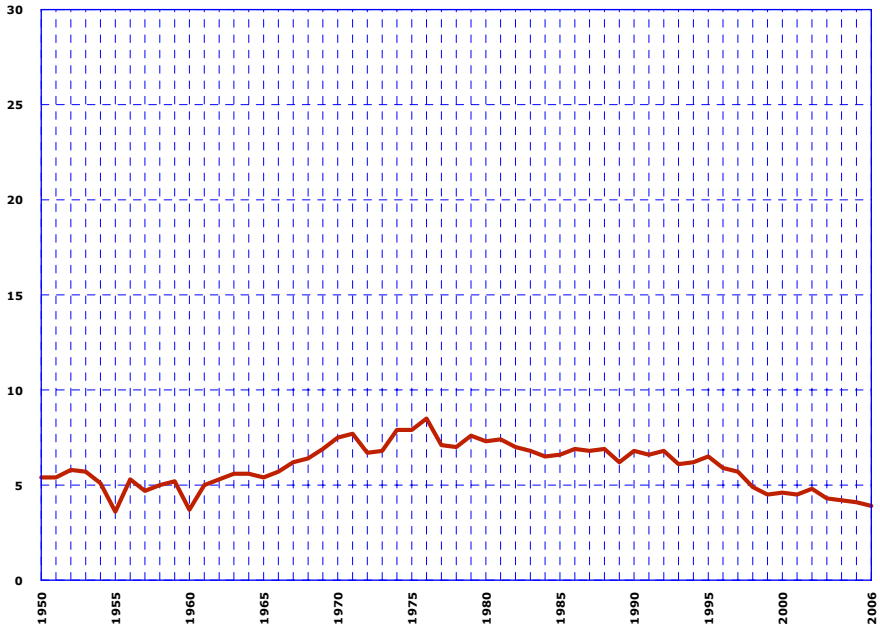


*The number of marriages occurring in Arizona per 1,000 population.

Since the association between marital status and health status was first identified, substantial social changes have taken place. Living with a domestic partner outside a legal union is now common, while formal marriage is finding fewer adherents. In Arizona, the marriage rate (the number of marriages per 1,000 population) declined by 76.8 percent from a peak of 26.7 marriages per 1,000 population in 1950 (**Figure 1-1**) to 6.2/1,000 in 2006.

The marriage rates shown in Figure 1 are from **Table 5G-2** and **Table 8D-2** of the "Arizona Health Status and Vital Statistics 2006" report, which is available online at http://www.azdhs.gov/plan/report/ahs/ahs2006/toc06.htm

Figure 1-2
Trends in Dissolutions of Marriage Rates, Arizona, 1950-2006

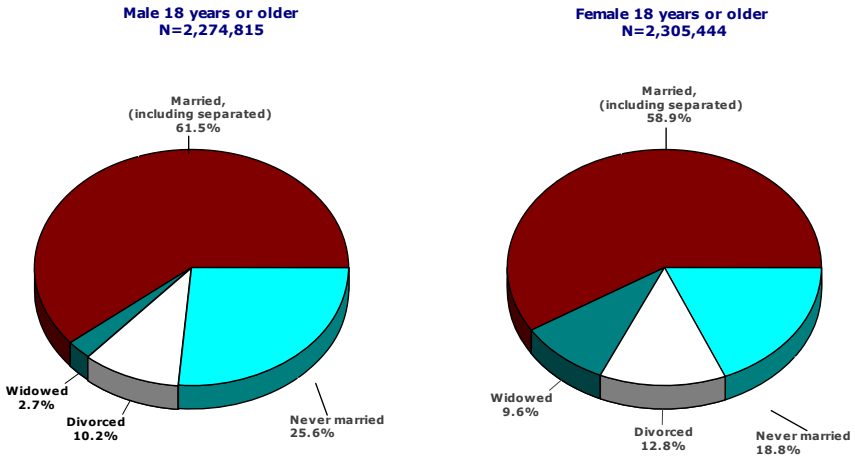


* The number of dissolutions of marriage occurring in Arizona per 1,000 population.

The dissolutions of marriage rates (the sum of divorces and annulments of marriage per 1,000 population) also declined by 54.1 percent from a peak rate of 8.5/1,000 in 1976 to 3.9/1,000 in 2006 (**Figure 1-2**). The declining number of dissolutions of marriage is directly related to the declining number of marriages.

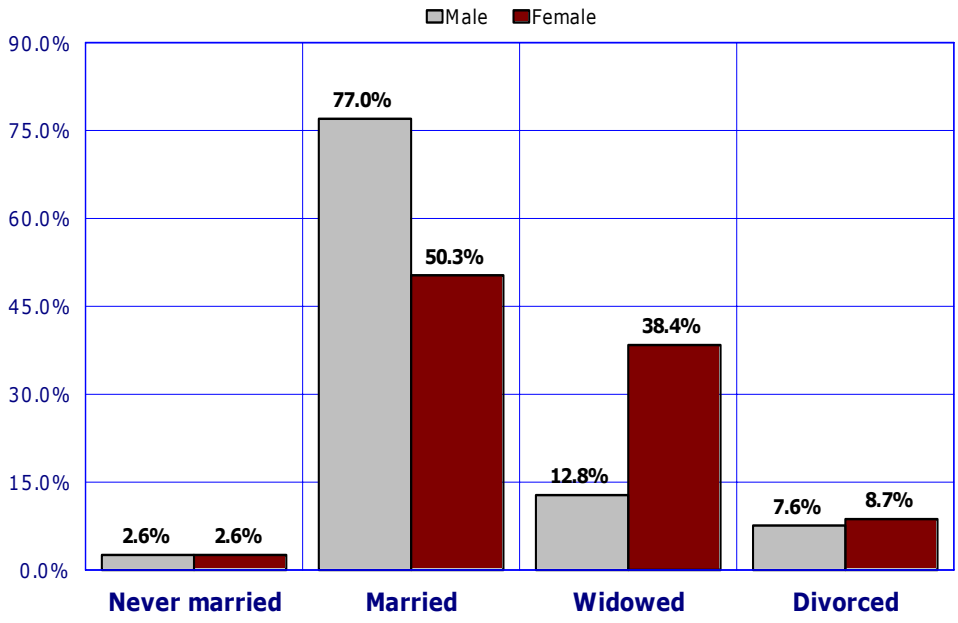
The dissolutions of marriage rates shown in **Figure 1-2** are from **Table 5G-5** and **Table 8E-2** of the "Arizona Health Status and Vital Statistics 2006" report.

Figure 1-3
Patterns in Marital Status by Gender and Age Group, Arizona, 2006



Overall, nearly 6 in 10 Arizona adult females (58.9) percent were married in 2006, 9.6 percent were widowed, 12.8 percent were divorced and 18.8 percent were never married (**Figure 1-3**). Among males 18 years or older in 2006, 61.5 percent were married, 2.7 percent were widowed, 10.2 percent were divorced and 25.6 percent were never married.

Figure 1-4
Percent Distribution of Marital Status Categories by Gender among Arizonans 65 Years or Older in 2006



Men and women differed substantially by age group in terms of marital status. Among adults aged 65 years or older, seven in ten men (77.0 percent) were currently married compared with 5 in 10 women (50.3 percent; **Figure 1-4**). Nearly 4 in 10 women aged 65 years or older were currently widowed compared with 12.8 percent of men. Overall, there were 3.6 times as many widowed women (221,294) than men (61,420). All percentages are based on frequency counts in **Table 1-1**.

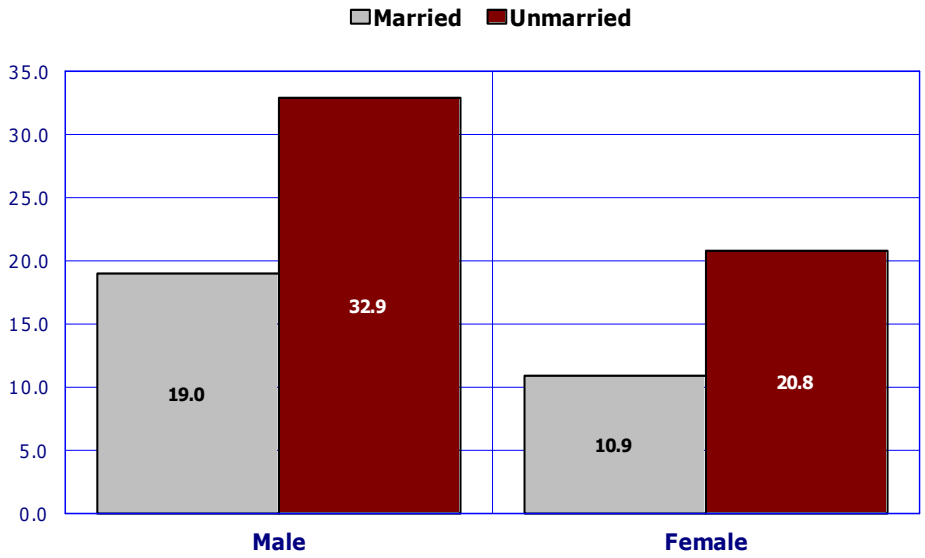
TABLE 1-1
POPULATION DENOMINATORS BY MARITAL STATUS, GENDER AND AGE GROUP,
ARIZONA RESIDENTS 18 YEARS OR OLDER IN 2000 AND 2006

			Total	Never married	Married	Widowed	Divorced
2000	**Male**	**18-24**	267,916	215,821	49,131	389	2,575
		25-34	384,120	144,153	212,549	1,044	26,374
		35-44	395,248	70,854	265,804	2,278	56,312
		45-64	514,518	38,080	381,926	9,107	85,405
		65+	296,109	7,535	229,011	37,347	22,216
		Total	1,857,911	476,443	1,138,421	50,165	192,882
	Female	**18-24**	243,831	171,833	67,079	430	4,489
		25-34	355,857	96,536	223,893	1,788	33,640
		35-44	387,793	47,274	268,485	5,787	66,247
		45-64	551,041	30,256	374,472	34,504	111,809
		65+	371,508	9,592	184,274	145,977	31,665
		Total	1,910,030	355,491	1,118,203	188,486	247,850
2006	**Male**	**18-24**	319,455	255,640	60,181	476	3,158
		25-34	472,663	178,682	260,353	1,278	32,350
		35-44	442,564	81,604	294,100	2,790	64,070
		45-64	683,489	56,545	511,040	11,150	104,754
		65+	356,644	9,210	274,459	45,726	27,249
		Total	2,274,815	581,681	1,400,133	61,420	231,581
	Female	**18-24**	297,200	210,347	80,905	521	5,427
		25-34	428,089	116,448	268,809	2,166	40,666
		35-44	419,428	52,025	295,308	7,011	65,084
		45-64	718,825	41,496	489,657	41,799	145,873
		65+	441,902	11,570	222,256	169,797	38,279
		Total	2,305,444	431,886	1,356,935	221,294	295,329

Two data sources were utilized in producing the 2006 population estimates by age group, gender and marital status. The estimated number of Arizona males and females who were 18 years or older in 2006 comes from our population denominator file used to calculate vital rates (detailed information about the estimation procedure is available at http://www.azdhs.gov/plan/menu/info/pop/pop06/pd06.htm). The percentages of population breakdowns by marital status, age group and gender were derived from the U.S. Bureau of the Census 2000 Summary File 3 (PCT7. Sex by marital status by age for the population 15 years and over).

RISK BEHAVIORS

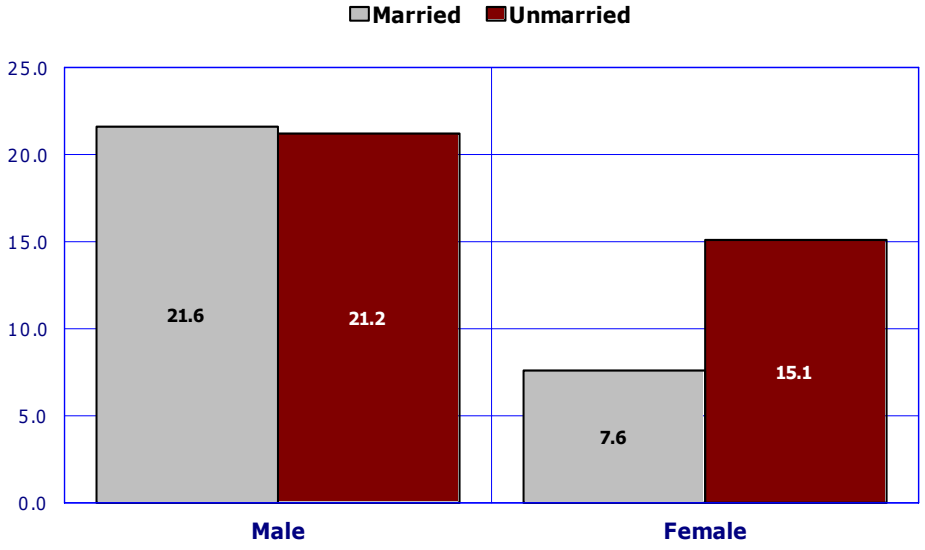
Figure 2-1
Age-adjusted Prevalence of Cigarette Smoking by Marital Status and Gender, Arizona Residents, 2006



Respondents are regarded as current smokers if they reported having smoked at least 100 cigarettes in their lifetime and currently smoke.

For both males and females, the age-adjusted prevalence of cigarette smoking was substantially greater for the unmarried than for the married (**Figure 2-1**). The prevalence of smoking was greater for males than females in each of the marital status categories. Relative to married females unmarried males were 3 times more likely to smoke 10.9 vs. 32.9 percent.

Figure 2-2
Age-adjusted Prevalence of Binge Drinking by Marital Status and Gender, Arizona Residents, 2006



Binge drinking is defined as having five or more drinks on one occasion.

Overall, after adjusting for age, rates of binge drinking were not markedly different for married or unmarried men (**Figure 2-2**). In contrast, unmarried women had a substantially higher prevalence of binge drinking (15.1 percent) compared with married women 7.6 percent.

Males having more than two drinks per day are defined as heavy drinkers. Females having more than one drink per day are defined as heavy drinkers.

In 2006, relative to married males and females, the age-adjusted prevalence rates of heavy drinking were approximately twice as high for the unmarried (**Figure 2-3**). Irrespective of gender, the self-reported prevalence rates of heavy drinking were identical in each of the marital status categories.

Figure 2-3
Age-adjusted Prevalence of Heavy Drinking by Marital Status and Gender, Arizona Residents, 2006

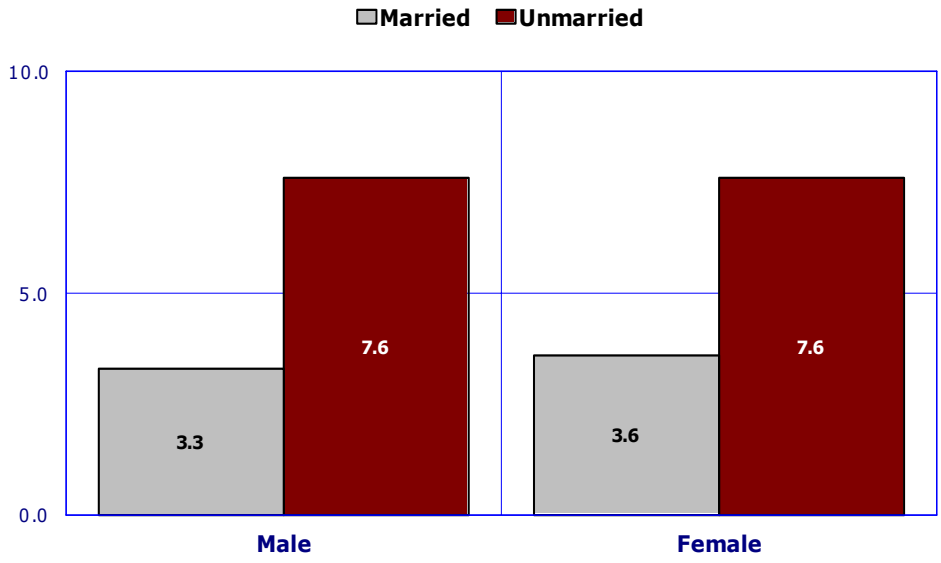


Figure 2-4
Age-adjusted Prevalence of Insufficient or No Physical Activity by Marital Status and Gender, Arizona Residents, 2006

Among males 18 years or older, after adjusting for age, married were equally likely as unmarried to be physically inactive (**Figure 2-4**). Among adult females, those who were married were slightly less likely to be physically inactive compared to unmarried females.

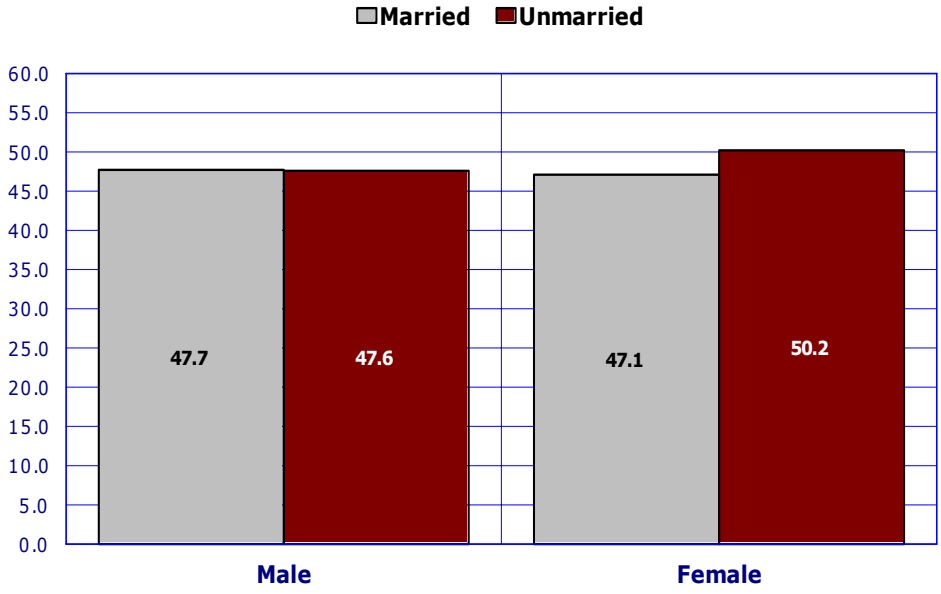
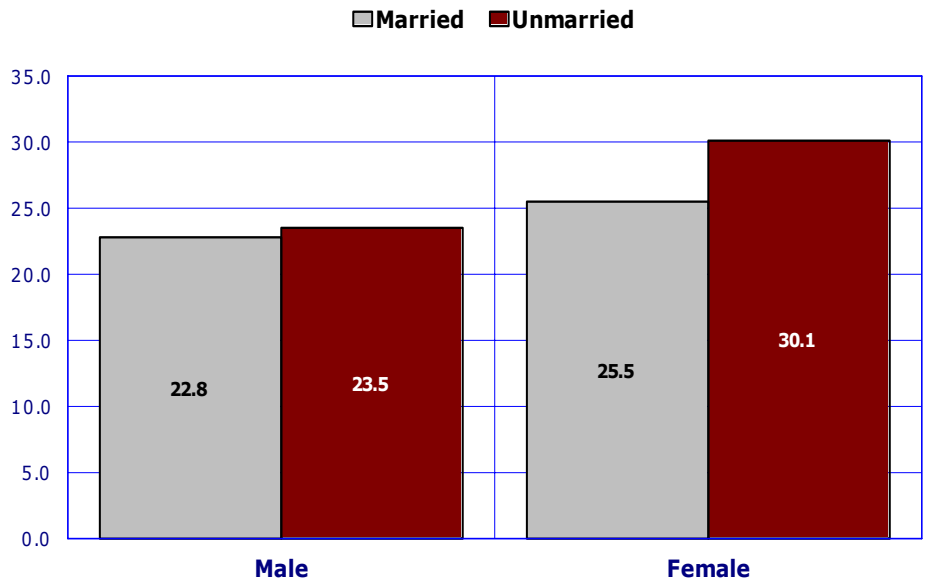


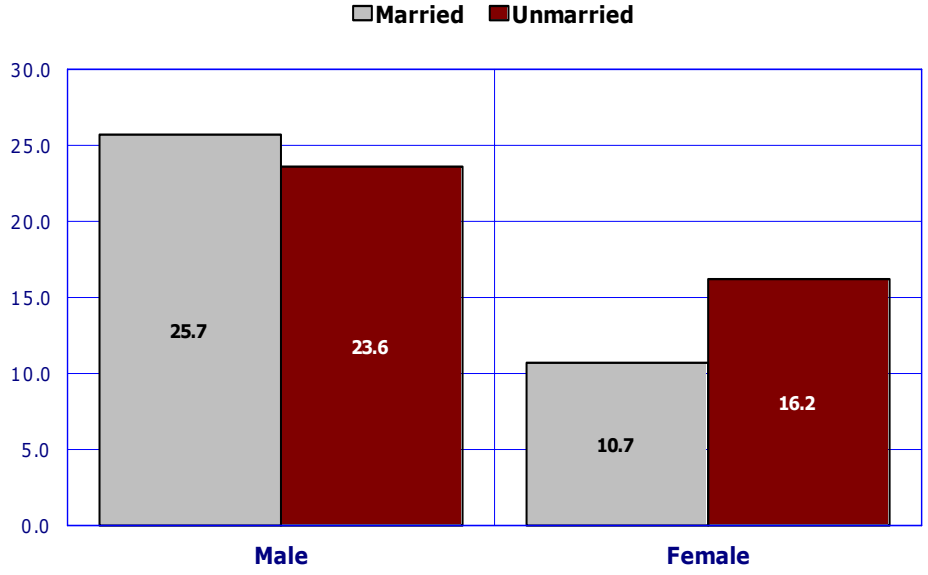
Figure 2-5
Age-adjusted Prevalence of No Leisure Time Physical Activity by Marital Status and Gender, Arizona Residents, 2006



Question: "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"

After adjusting for age, rates of no leisure time physical activity were not noticeably different for married or unmarried men (**Figure 2-5**). Conversely, unmarried women had a higher prevalence of no leisure time physical activity 30.1 percent compared with married women 25.5 percent.

Figure 2-6
Age-adjusted Prevalence of Not Always Wearing Seatbelt, Arizona Residents, 2006



Respondents were considered at risk if they sometimes, seldom or never use a seatbelt when they ride or drive in a car.

After adjusting for age, the rate of not always wearing a seatbelt, married males was slightly higher than that for unmarried men (**Figure 2-6**). In contrast, unmarried women had a substantially higher prevalence of not always wearing a seatbelt 16.2 percent compared with married women 10.7 percent.

TABLE 2-1
AGE-ADJUSTED PREVALENCE OF SELECTED RISK BEHAVIORS BY MARITAL STATUS AND GENDER, ARIZONA RESIDENTS, 2006

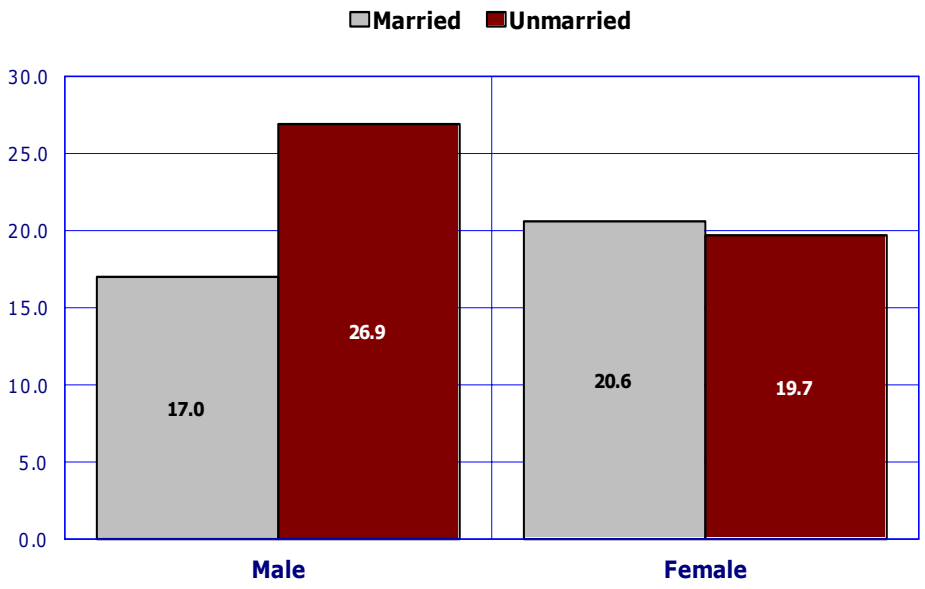
Gender	Marital status	Cigarette smoking	Binge drinking	Heavy drinking	Insufficient or no physical activity	No leisure time physical activity	Not always wearing seatbelt
Male	**Married**	19.0	21.6	3.3	47.7	22.8	25.7
	Unmarried	32.9	21.2	7.6	47.6	23.5	23.6
	Total	21.9	20.6	6.0	47.6	18.6	23.1
Female	**Married**	10.9	7.6	3.6	47.1	25.5	10.7
	Unmarried	20.8	15.1	7.6	50.2	30.1	16.2
	Total	14.7	10.6	5.3	49.0	26.2	12.8

TABLE 2-2
AGE-SPECIFIC PREVALENCE OF SELECTED RISK BEHAVIORS BY MARITAL STATUS AND GENDER, ARIZONA RESIDENTS, 2006

Gender	Marital status	Age group	Cigarette smoking	Binge drinking	Heavy drinking	Insufficient or no physical activity	No leisure time physical activity	Not always wearing seatbelt
Male	**Married**	**18-24**	45.0	51.2	0.0	38.2	32.8	46.5
		25-34	8.2	19.4	0.5	50.4	32.8	42.3
		35-44	15.2	25.6	2.9	51.5	15.4	19.0
		45-64	22.7	16.5	6.0	48.8	14.7	19.5
		65+	9.5	5.1	4.7	45.4	28.5	11.8
	Unmarried	**18-24**	30.1	38.5	18.1	37.0	5.1	26.7
		25-34	32.7	19.7	8.5	48.6	23.3	17.5
		35-44	51.4	26.3	6.8	28.5	12.4	35.3
		45-64	28.2	17.2	5.0	58.9	30.3	21.2
		65+	19.8	10.6	4.6	59.3	39.8	16.9
	Total	**18-24**	32.9	40.9	15.7	37.2	10.2	30.4
		25-34	17.5	19.5	3.5	49.7	17.8	32.9
		35-44	23.9	25.8	3.8	45.9	14.7	22.8
		45-64	24.1	16.7	5.7	51.2	18.5	19.9
		65+	11.9	6.4	4.7	48.8	31.1	13.0
Female	**Married**	**18-24**	3.4	7.5	0.0	52.4	32.4	24.4
		25-34	13.6	10.3	2.7	32.9	17.2	6.7
		35-44	15.1	11.5	5.6	50.3	24.6	11.9
		45-64	11.5	6.1	4.4	47.4	24.6	7.6
		65+	7.5	2.4	3.1	53.7	31.9	8.4
	Unmarried	**18-24**	13.1	24.6	9.6	66.9	19.5	30.0
		25-34	28.0	24.4	7.7	36.6	36.0	23.1
		35-44	14.0	20.2	9.9	39.4	27.7	10.5
		45-64	30.0	9.0	6.2	54.8	31.7	11.4
		65+	11.7	1.8	5.7	58.1	31.8	13.9
	Total	**18-24**	10.1	19.2	6.6	62.0	23.4	28.3
		25-34	17.8	14.5	4.1	33.9	22.7	11.5
		35-44	14.8	13.9	6.8	47.4	25.5	11.5
		45-64	17.6	7.0	5.0	49.8	27.0	8.9
		65+	9.6	2.1	4.5	55.9	31.8	11.2

HEALTH CARE COVERAGE AND HEALTH CARE PRACTICES

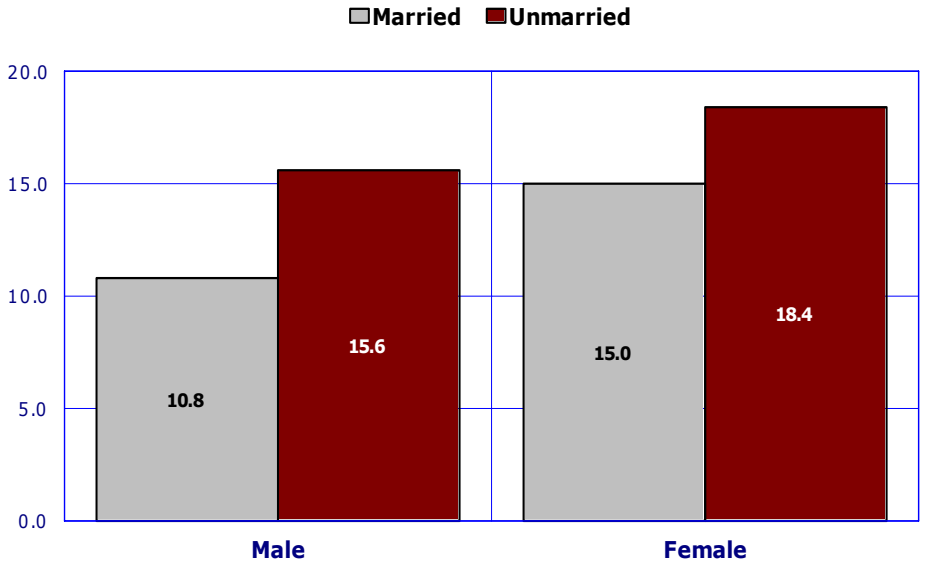
Figure 3-1
Age-adjusted Prevalence of Uninsured for Health Care by Marital Status and Gender, Arizona Residents, 2006



Question: "Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?"

The age-adjusted prevalence of uninsured for health care was substantially greater for the unmarried males than those who were married **(Figure 3-1**). In contrast, the rates for females did not vary substantially by marital status. In fact, relative to married females the prevalence of uninsured for health care was slightly lower for unmarried females. These findings may seem puzzling. However, there are striking differences in the age composition between married and unmarried women. In 2006, one in three (34.1 percent based on data in **Table 1-1**) unmarried females in Arizona was an elderly on Medicare (65 years or older). Among married females without health insurance, 98.1 percent were younger than 65 years old. The majority (92.9 percent) of unmarried females aged 18-64 years who were uninsured were either never married or divorced. Among the unmarried elderly women 65 years or older 77.3 percent were widowed.

Figure 3-2
Age-adjusted Prevalence of Unmet Medical Needs by Marital Status and Gender, Arizona Residents, 2006 (could not see doctor due to cost)



Question: "Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?"

The age-adjusted prevalence of unmet medical needs for males and females was markedly greater for those who were not married than for those who were married (**Figure 3-2**). In each of the marital status categories, the prevalence of unmet medical needs was lower for males than females.

Figure 3-3
Age-adjusted Prevalence of Not Having a Flu Shot by Marital Status and Gender, Arizona Residents, 2006

Question: "A flu shot is an influenza vaccine injected into your arm. During the past 12 months, have you had a flu shot?"

Among males and females, the age-adjusted prevalence of not having a flu shot was greater for those who were not married than for those who were married (**Figure 3-3**). Unmarried males were the least likely to have a flu shot 74.9 percent, followed by unmarried females 73.8 percent. The presence of a spouse may encourage healthy behaviors and compliance with preventive regimens.

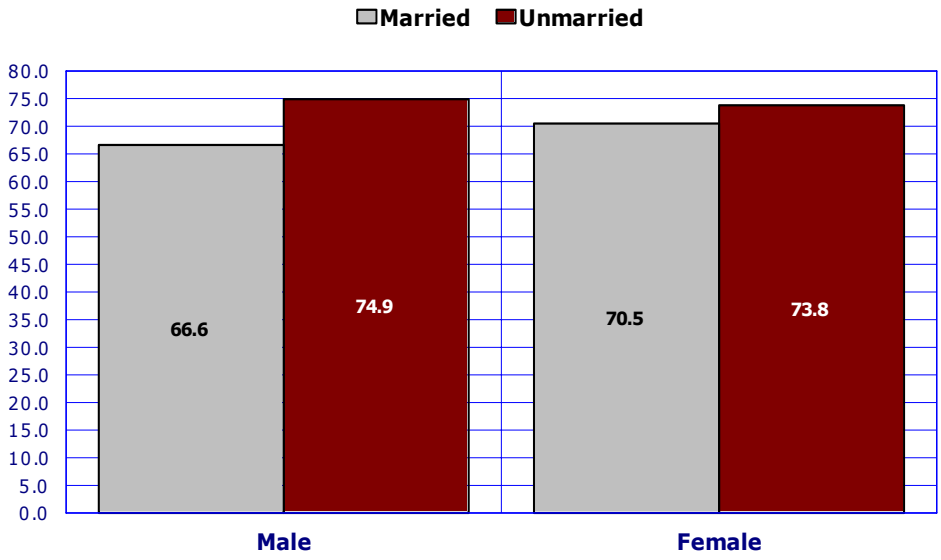


Figure 3-4
Age-adjusted Prevalence of Not Having a Pneumonia Shot by Marital Status and Gender, Arizona Residents, 2006

Question: "A pneumonia shot or pneumococcal vaccine is usually given only once or twice in a person's lifetime and is different from the flu shot. Have you ever had a pneumonia shot?"

After adjusting for age, unmarried males and females were less likely to have a pneumonia shot than their married counterparts (**Figure 3-4**). In each of the marital status categories, the prevalence of not having a pneumonia shot was higher for males than females.

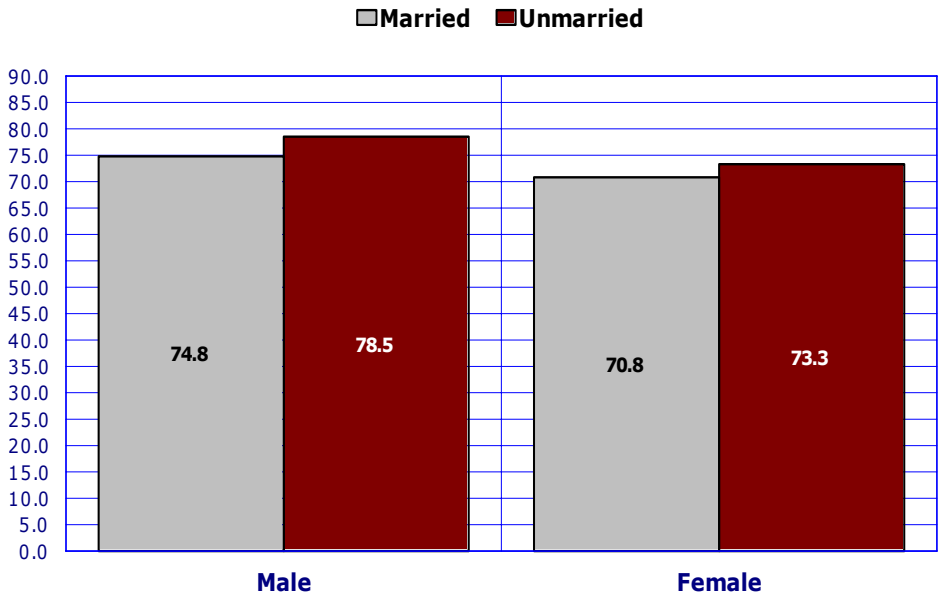
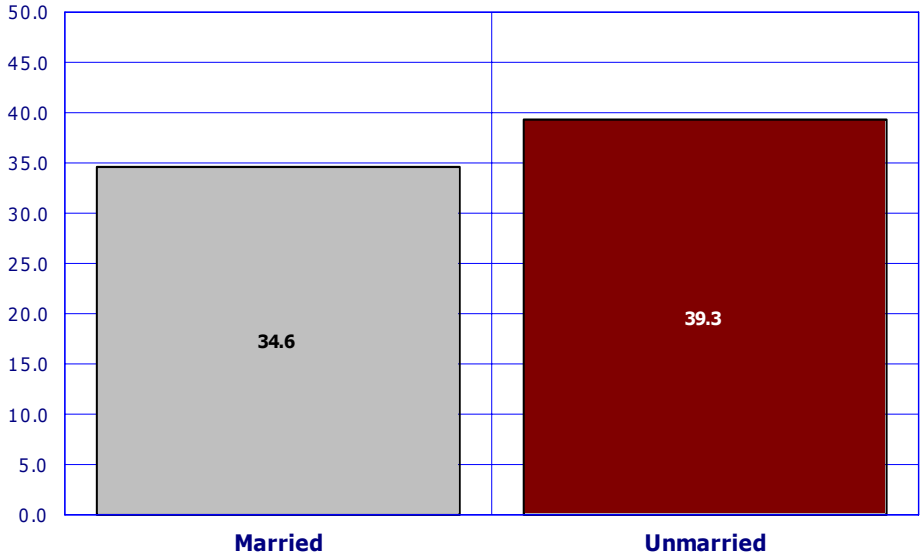


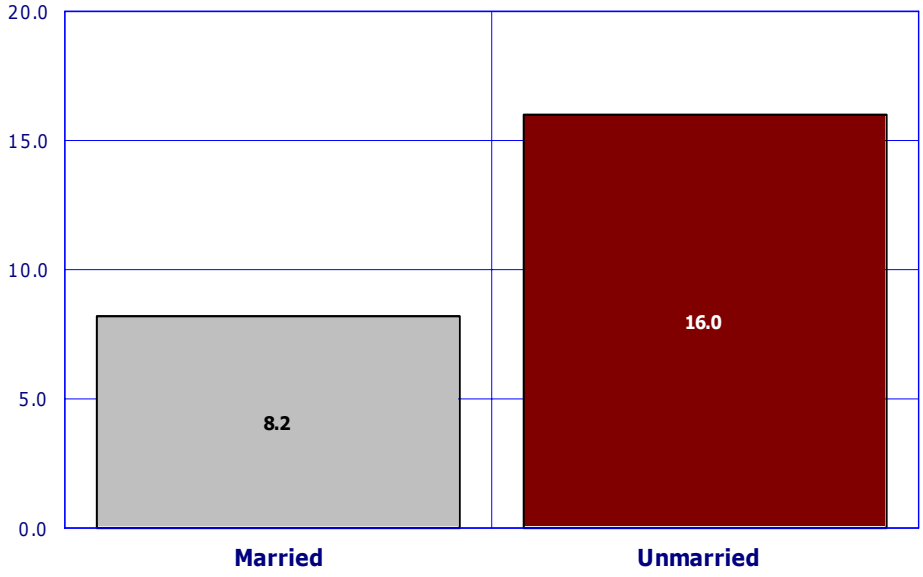
Figure 3-5
Age-adjusted Prevalence of Not Having a Mammogram
by Marital Status, Arizona Residents, 2006



Question: "A mammogram is an x-ray of each breast to look for breast cancer. Have you ever had a mammogram?"

Compared to married females, unmarried females were less likely to have a mammogram (**Figure 3-5**).

Figure 3-6
Age-adjusted Prevalence of Not Having a Breast Exam
by Marital Status, Arizona Residents, 2006



Question: "A clinical breast exam is when a doctor, nurse, or other health professional feels the breasts for lumps. Have you ever had a clinical breast exam?"

The age-adjusted prevalence of not having a breast exam was 2 times greater among unmarried than married females (**Figure 3-6**).

TABLE 3-1
AGE-ADJUSTED PREVALENCE OF SELECTED HEALTH CARE BY MARITAL STATUS AND GENDER, ARIZONA RESIDENTS, 2006

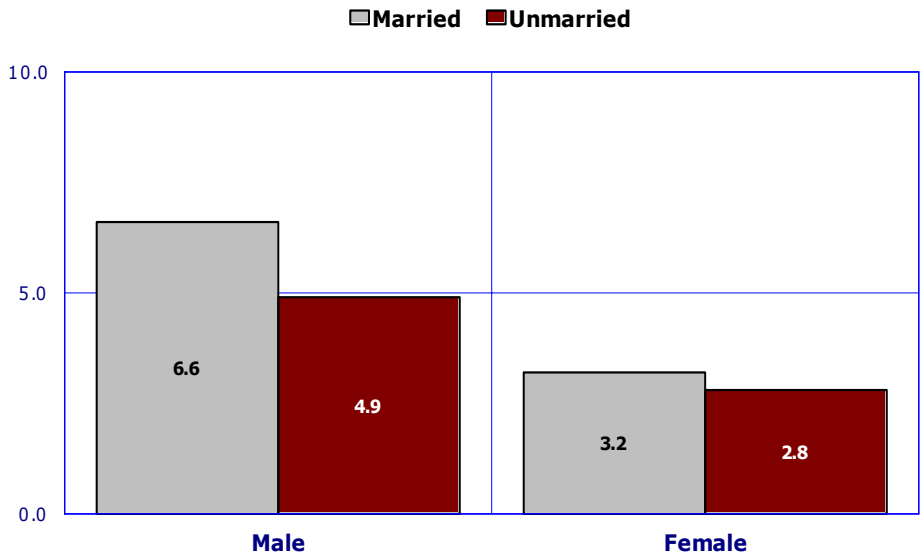
Gender	Marital status	Health insurance	Unmet medical needs	No flu shot	No pneumonia shot	No mammogram	No breast exam
Male	**Married**	17.0	10.8	66.6	74.8	0.0	0.0
	Unmarried	26.9	15.6	74.9	78.5	0.0	0.0
	Total	19.7	10.6	71.1	78.3	0.0	0.0
Female	**Married**	20.6	15.0	70.5	70.8	34.6	8.2
	Unmarried	19.7	18.4	73.8	73.3	39.3	16.0
	Total	19.8	15.5	71.8	72.1	36.4	11.7

TABLE 3-2
AGE-SPECIFIC PREVALENCE OF SELECTED HEALTH CARE BY MARITAL STATUS AND GENDER, ARIZONA RESIDENTS, 2006

Gender	Marital status	Age group	Health insurance	Unmet medical needs	No flu shot	No pneumonia shot	No mammogram	No breast exam
Male	**Married**	**18-24**	40.4	38.6	41.0	62.3	0.0	0.0
		25-34	25.2	11.0	92.1	88.2	0.0	0.0
		35-44	13.4	7.1	80.6	90.3	0.0	0.0
		45-64	11.7	4.8	73.6	82.6	0.0	0.0
		65+	4.2	4.7	28.6	36.0	0.0	0.0
	Unmarried	**18-24**	36.7	18.2	75.8	95.6	0.0	0.0
		25-34	51.1	17.5	89.8	90.0	0.0	0.0
		35-44	29.6	17.6	85.7	89.9	0.0	0.0
		45-64	19.3	18.5	74.9	78.0	0.0	0.0
		65+	3.3	4.0	44.3	39.4	0.0	0.0
	Total	**18-24**	37.4	22.0	69.4	90.4	0.0	0.0
		25-34	35.0	13.5	91.2	88.8	0.0	0.0
		35-44	17.2	9.5	81.8	90.2	0.0	0.0
		45-64	13.6	8.1	73.9	81.5	0.0	0.0
		65+	4.0	4.5	32.2	36.7	0.0	0.0
Female	**Married**	**18-24**	44.2	27.2	90.0	66.8	87.6	13.7
		25-34	22.8	15.0	80.2	83.7	71.8	10.3
		35-44	23.8	19.5	83.3	83.1	37.5	10.2
		45-64	18.0	12.4	68.4	77.4	4.5	5.0
		65+	1.0	4.4	32.3	32.7	3.7	4.6
	Unmarried	**18-24**	33.0	16.4	91.1	80.8	90.7	30.0
		25-34	27.4	31.6	89.8	92.6	76.9	19.7
		35-44	27.4	18.2	85.9	84.8	39.2	19.6
		45-64	12.1	19.9	66.6	75.0	10.6	5.4
		65+	5.0	3.4	40.6	29.5	10.5	15.6
	Total	**18-24**	36.3	19.7	90.7	76.4	89.7	25.1
		25-34	24.1	19.8	83.0	86.4	73.3	13.1
		35-44	24.8	19.1	84.0	83.5	37.9	12.7
		45-64	16.0	14.9	67.8	76.6	6.5	5.2
		65+	3.0	3.9	36.5	31.0	7.2	10.3

PREVALENCE OF HEALTH CONDITIONS

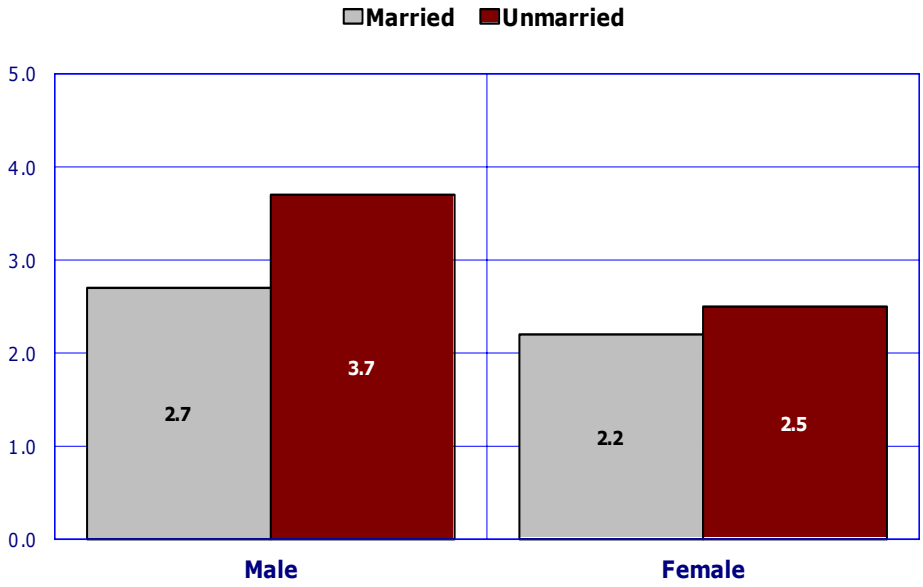
Figure 4-1
Age-adjusted Prevalence of Angina by Marital Status and Gender, Arizona Residents, 2006



Prevalence of certain chronic conditions is based on responses to questions in the form of: "Have you ever been told by a doctor that you have angina or coronary heart disease?"

For both males and females, the age-adjusted prevalence of angina was greater for the married than for the unmarried (**Figure 4-1**). The prevalence of angina was greater for males than females in each of the marital status categories. Relative to married females married males were more than twice as likely to report having angina 6.6 vs. 3.2 percent.

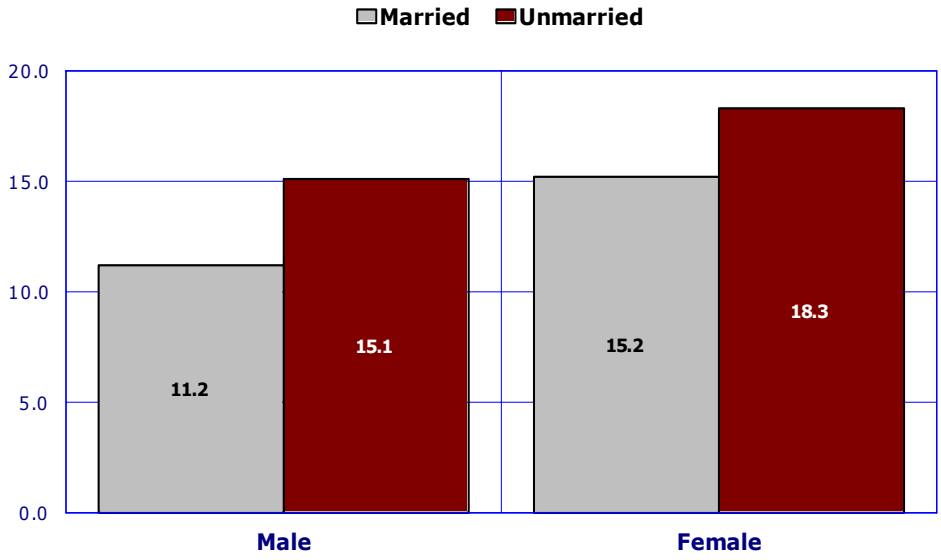
Figure 4-2
Age-adjusted Prevalence of Stroke by Marital Status and Gender, Arizona Residents, 2006



Question: "Ever told you had a stroke?"

The age-adjusted stroke prevalence of both males and females was greater for unmarried than for those who were married (**Figure 4-2**). The stroke prevalence was greater for males than females for both marital statuses. Unmarried males were almost 50 percent more likely than unmarried females to report having a stroke 3.7 vs. 2.5 percent.

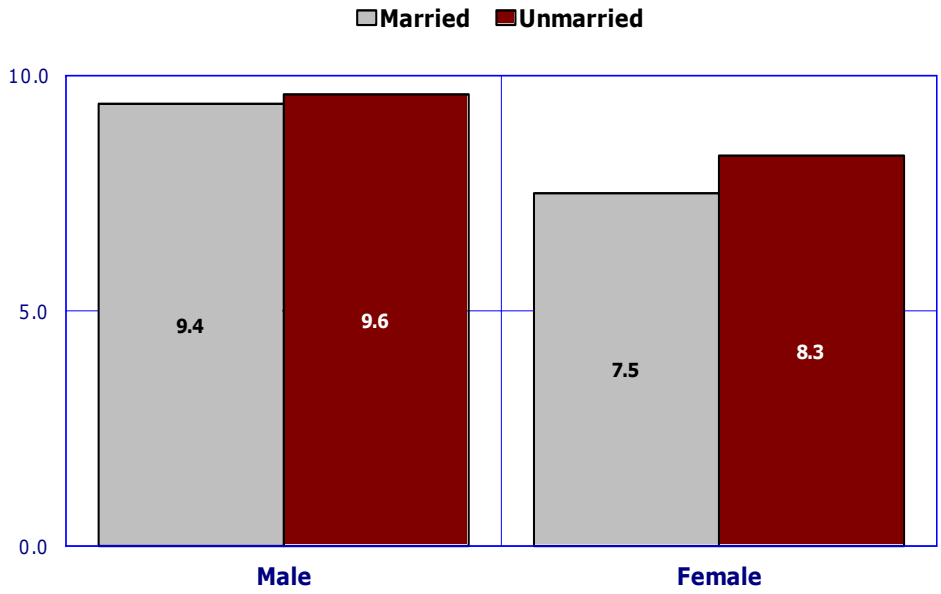
Figure 4-3
Age-adjusted Prevalence of Asthma by Marital Status and Gender, Arizona Residents, 2006



Question: "Have you ever been told by a doctor, nurse, or other health professional that you had asthma?"

For both males and females, the age-adjusted prevalence of asthma was greater for unmarried than for those who were married (**Figure 4-3**). The asthma prevalence was greater for females than males for both marital statuses. Unmarried females were over 20 percent more likely than unmarried males to report having asthma (18.3 vs. 15.1 percent).

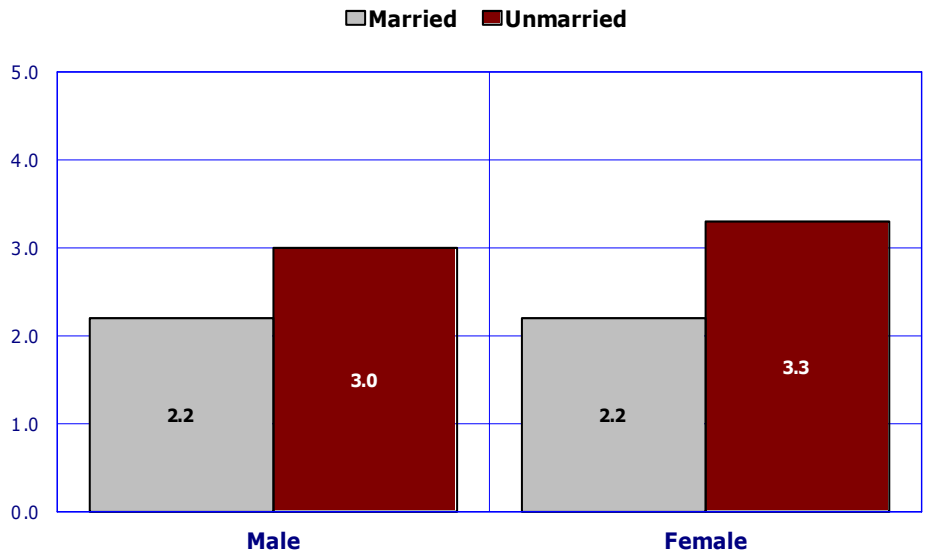
Figure 4-4
Age-adjusted Prevalence of Diabetes by Marital Status and Gender, Arizona Residents, 2006



Question: "Have you ever been told by a doctor that you have diabetes?"

The age-adjusted prevalence of diabetes for both males and females was slightly greater for those who were not married than for those who were married (**Figure 4-4**). Unmarried males were over 15 percent more likely than unmarried females to report having a stroke 9.6 vs. 8.3 percent.

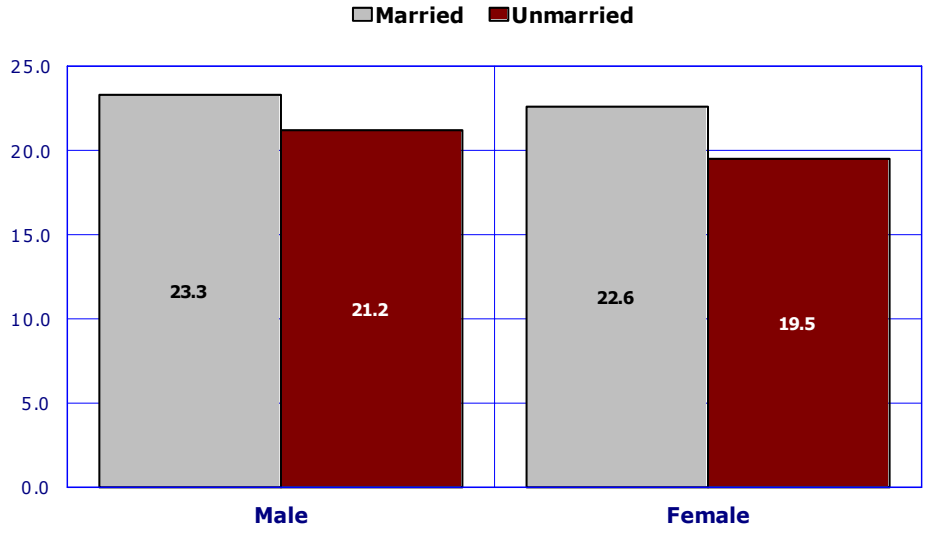
Figure 4-5
Age-adjusted Prevalence of Glaucoma by Marital Status and Gender, Arizona Residents, 2006



Question: "Have you ever been told by an eye doctor or other health care professional that you had glaucoma?"

The age-adjusted prevalence of glaucoma for both males and females was greater for unmarried than for those who were married (**Figure 4-5**). Interestingly, the prevalence rates were about the same for both genders within the marital status categories.

Figure 4-6
Age-adjusted Prevalence of Obesity by Marital Status and Gender, Arizona Residents, 2006



The body mass index (BMI) is a relationship between weight and height and is used to determine obesity and assess health risk. BMI is calculated using the following formula: (pounds * 0.454) ÷ (inches * 0.0254)² or (Kg/M²). A respondent was considered obese if their BMI was greater than or equal to 30.0.

For both males and females, the age-adjusted prevalence of obesity was greater for those who were married than for those who were not married (**Figure 4-6**). Males were slightly more likely than females to be obese, whether married or unmarried.

TABLE 4-1
AGE-ADJUSTED PREVALENCE OF SELECTED HEALTH CONDITIONS BY MARITAL STATUS AND GENDER, ARIZONA RESIDENTS, 2006

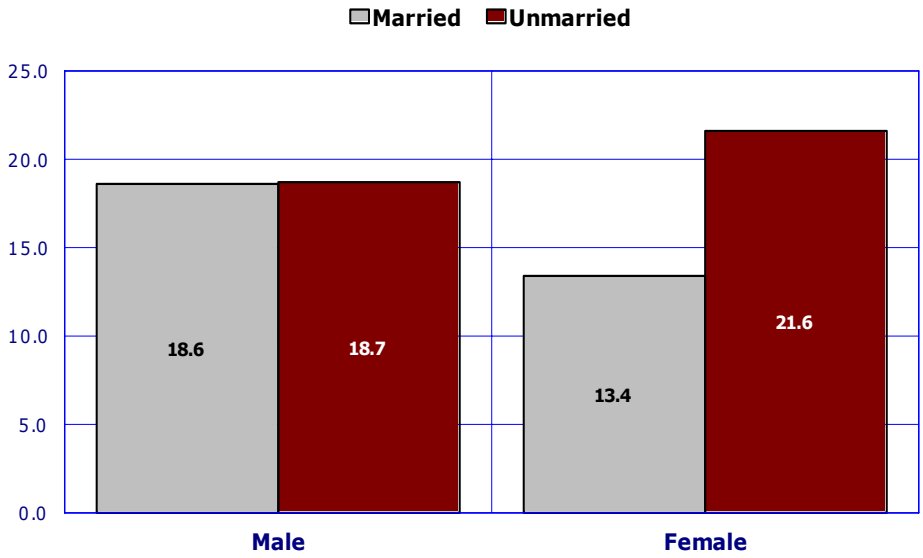
Gender	Marital status	Angina	Stroke	Asthma	Diabetes	Glaucoma	Obesity
Male	**Married**	6.6	2.7	11.2	9.4	2.2	23.3
	Unmarried	4.9	3.7	15.1	9.6	3.0	21.2
	Total	6.1	3.0	13.5	9.3	2.4	24.1
Female	**Married**	3.2	2.2	15.2	7.5	2.2	22.6
	Unmarried	2.8	2.5	18.3	8.3	3.3	19.5
	Total	3.2	2.5	16.3	7.0	2.7	22.2

TABLE 4-2
AGE-SPECIFIC PREVALENCE OF SELECTED HEALTH CONDITIONS BY MARITAL STATUS AND GENDER, ARIZONA RESIDENTS, 2006

Gender	Marital status	Age group	Angina	Stroke	Asthma	Diabetes	Glaucoma	Obesity
Male	**Married**	**18-24**	0.0	0.0	3.6	0.0	0.0	9.8
		25-34	5.6	0.0	4.6	6.9	0.0	17.2
		35-44	2.2	0.5	14.6	3.4	0.0	30.9
		45-64	6.6	1.4	16.2	14.4	3.5	31.4
		65+	18.6	13.0	11.0	18.1	6.5	16.1
	Unmarried	**18-24**	0.1	0.0	21.2	0.0	0.0	27.2
		25-34	0.0	0.0	7.3	0.0	0.0	17.2
		35-44	0.9	1.4	24.6	4.5	0.0	22.9
		45-64	4.7	1.8	9.9	16.8	1.9	22.0
		65+	19.4	16.8	15.6	21.2	14.3	17.4
	Total	**18-24**	0.1	0.0	17.9	0.0	0.0	23.9
		25-34	3.5	0.0	5.6	4.3	0.0	17.2
		35-44	1.9	0.7	16.9	3.7	0.0	29.1
		45-64	6.2	1.5	14.7	15.0	3.1	29.1
		65+	18.8	13.9	12.0	18.8	8.3	16.4
Female	**Married**	**18-24**	0.0	0.0	15.5	0.0	0.0	0.1
		25-34	0.0	0.0	13.8	2.1	0.0	21.3
		35-44	2.4	2.5	15.6	2.4	0.0	28.7
		45-64	4.9	1.0	16.0	13.5	3.2	34.0
		65+	7.1	8.2	14.4	14.8	7.5	13.4
	Unmarried	**18-24**	0.0	0.0	19.5	1.1	0.0	9.6
		25-34	0.0	0.0	23.0	3.1	0.0	20.0
		35-44	0.5	0.7	12.5	8.2	2.5	19.5
		45-64	2.4	1.7	23.7	13.0	2.5	26.2
		65+	11.5	10.9	10.4	11.3	11.6	14.6
	Total	**18-24**	0.0	0.0	18.3	0.8	0.0	6.8
		25-34	0.0	0.0	16.5	2.4	0.0	20.9
		35-44	1.9	0.9	14.8	0.8	0.7	26.3
		45-64	4.1	2.2	18.5	13.4	3.0	31.3
		65+	9.3	9.6	12.4	13.1	9.6	14.0

SELF-ASSESSED HEALTH STATUS AND LIFE SATISFACTION

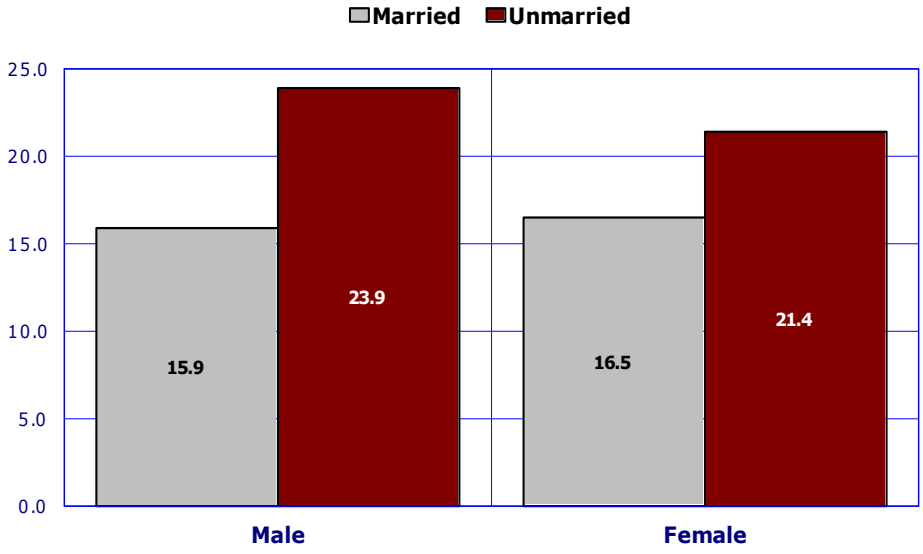
Figure 5-1
Age-adjusted Prevalence of Self-reported Fair or Poor Health Status by Marital Status and Gender, Arizona Residents, 2006



Question: "Would you say that in general your health is excellent, very good, good, fair, or poor?"

For males, there was very little difference by marital status in the age-adjusted prevalence of self-reported fair or poor health status. In contrast, unmarried females were 1.6 times as likely as married females to report fair or poor health (**Figure 5-1**). Married males were over 38 percent more likely than married females to report fair or poor health status (18.6 vs. 13.4 percent).

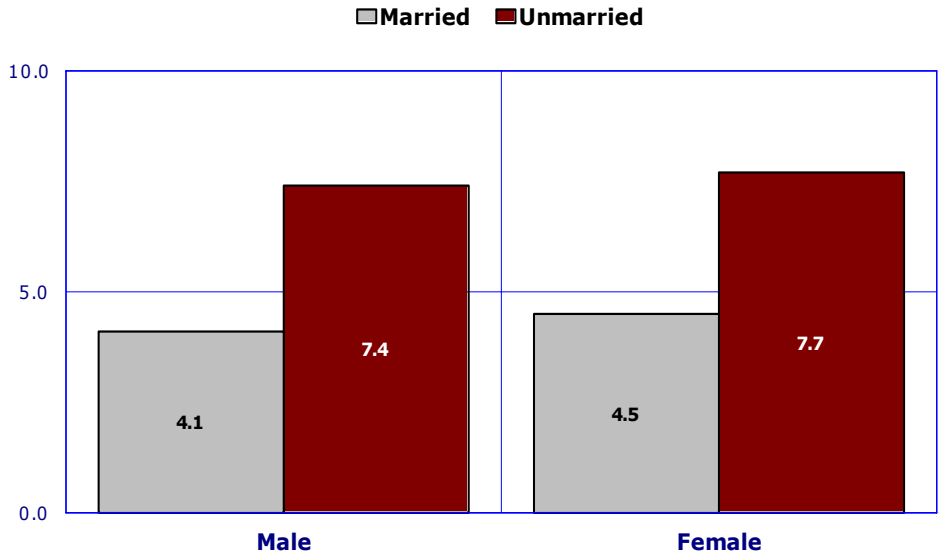
Figure 5-2
Age-adjusted Prevalence of Activity Limitations by Marital Status and Gender, Arizona Residents, 2006



Question: "Are you limited in any way in any activities because of physical, mental, or emotional problems?"

The age-adjusted prevalence of some type of activity limitation for both males and females was greater for unmarried than for those who were married (**Figure 5-2**). The age-adjusted prevalence was greater for unmarried males than unmarried females. Unmarried males were over 11 percent more likely than unmarried females to have some type of limitation (23.9 vs. 21.4 percent).

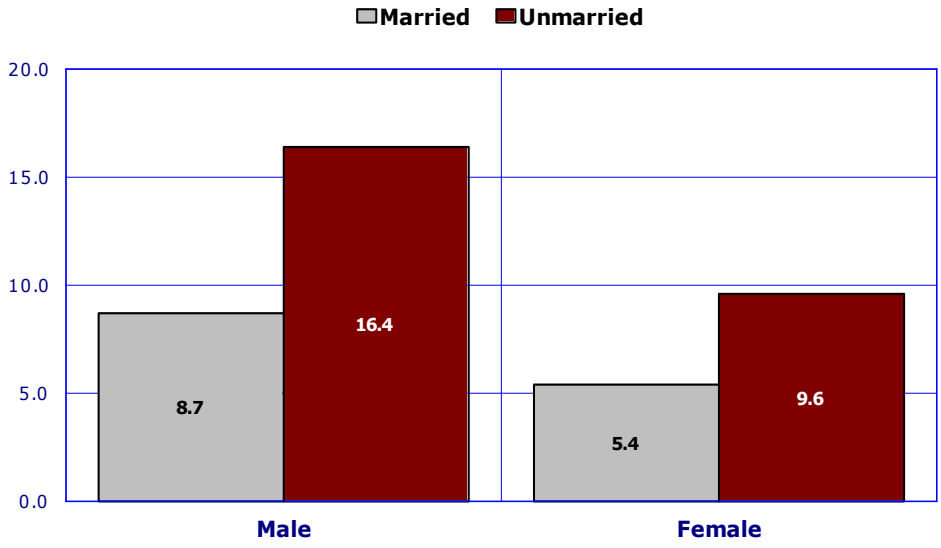
Figure 5-3
Age-adjusted Prevalence of Requiring Equipment by Marital Status and Gender, Arizona Residents, 2006



Question: "Do you now have any health problem that requires you to use special equipment, such as a cane, a wheelchair, a special bed, or a special telephone?"

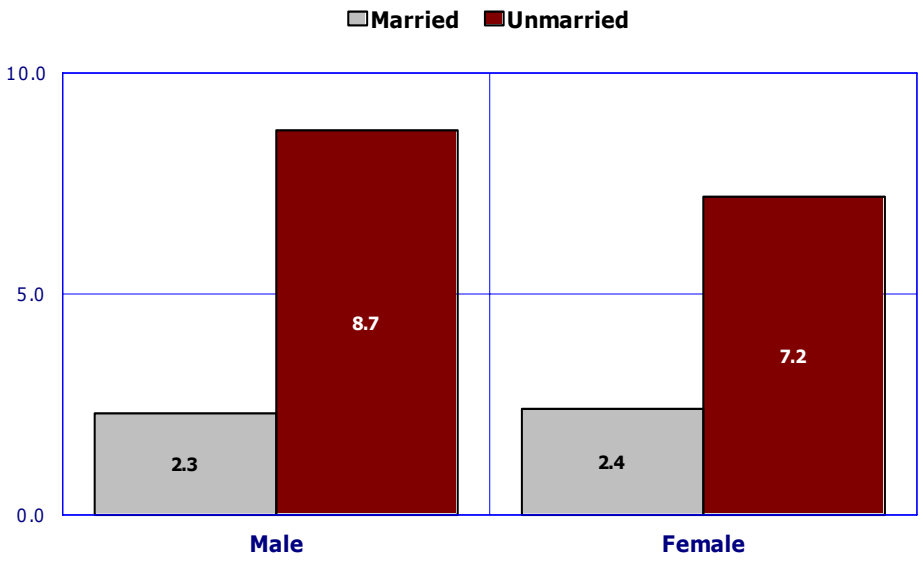
Unmarried males and females were more likely than their married counterparts to report that they required use of special equipment (**Figure 5-3**). The age-adjusted prevalence was about the same for both males and females within the marital status categories.

Figure 5-4
Age-adjusted Prevalence of Inadequate Emotional Support by Marital Status and Gender, Arizona Residents, 2006



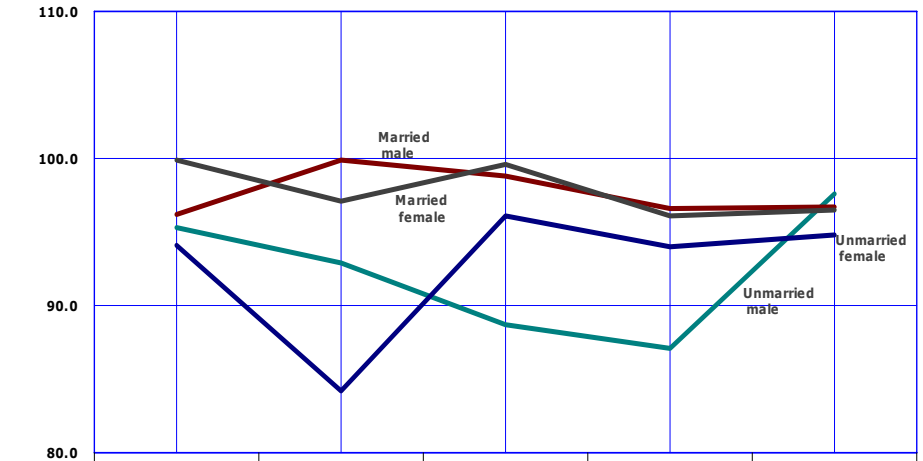
Marital status differences in the age-adjusted prevalence of inadequate emotional support (getting it rarely or never) were substantial for both males and females. Unmarried males were 1.9 times and unmarried females 1.8 times as likely as their married counterparts to receive inadequate social and emotional support. Overall, males compared to females were less likely to get the social and emotional support they need.

Figure 5-5
Age-adjusted Prevalence of Dissatisfaction with Life by Marital Status and Gender, Arizona Residents, 2006



Differences in marital status in the age-adjusted prevalence of low life satisfaction (dissatisfied or very dissatisfied) were considerable for both males and females. Unmarried males were almost 4 times and unmarried females 3 times as likely as their married counterparts to have low satisfaction with their lives.

Figure 5-5a
Age-specific Prevalence of Satisfaction with Life by Marital Status and Gender, Arizona Residents, 2006



	18-24	25-34	35-44	45-64	65+
Married female	99.9	97.1	99.6	96.1	96.5
Unmarried female	94.1	84.2	96.1	94.0	94.8
Married male	96.2	99.9	98.8	96.6	96.7
Unmarried male	95.3	92.9	88.7	87.1	97.6

There was little variation in each age group between married males and females in the age-specific prevalence of life satisfaction (satisfied or very satisfied). Whereas, there was greater dissimilarity between unmarried males and females, with the greatest variation in the 25-34 through the 45-64 age groups.

TABLE 5-1
AGE-ADJUSTED PREVALENCE OF SELECTED HEALTH STATUS BY MARITAL STATUS AND GENDER, ARIZONA RESIDENTS, 2006

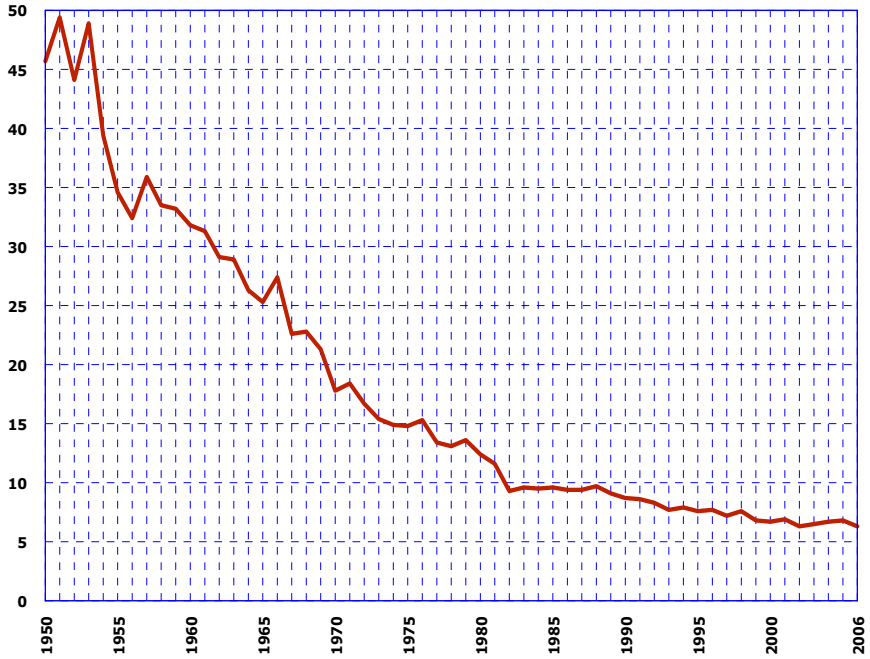
Gender	Marital status	Fair or poor health status	Limited activities	Equipment required	Emotional support	Life satisfaction
Male	Married	18.6	15.9	4.1	8.7	2.3
	Unmarried	18.7	23.9	7.4	16.4	8.7
	Total	15.4	18.1	5.0	11.5	4.1
Female	Married	13.4	16.5	4.5	5.4	2.4
	Unmarried	21.6	21.4	7.7	9.6	7.2
	Total	17.1	19.0	6.2	7.8	4.1

TABLE 5-2
AGE-SPECIFIC PREVALENCE OF SELECTED HEALTH STATUS BY MARITAL STATUS AND GENDER, ARIZONA RESIDENTS, 2006

Gender	Marital status	Age group	Fair or poor health status	Limited activities	Equipment required	Emotional support	Life satisfaction
Male	Married	18-24	22.5	3.7	0.0	3.8	3.8
		25-34	14.0	2.8	0.0	6.3	0.1
		35-44	22.5	13.2	3.6	8.0	1.2
		45-64	13.2	23.0	3.9	8.3	3.4
		65+	24.9	30.4	12.4	16.7	3.3
	Unmarried	18-24	6.8	5.2	0.0	8.9	4.7
		25-34	9.9	11.1	3.8	6.0	7.1
		35-44	10.8	23.8	6.1	17.2	11.3
		45-64	27.8	31.3	7.3	14.6	12.9
		65+	31.2	38.6	18.5	35.5	2.4
	Total	18-24	9.7	4.9	0.0	12.6	4.5
		25-34	12.4	6.0	1.4	6.2	2.7
		35-44	11.2	15.7	4.2	10.2	3.6
		45-64	16.7	25.0	4.8	9.8	5.7
		65+	26.3	32.3	13.8	21.0	3.1
Female	Married	18-24	0.0	0.8	0.0	.	0.1
		25-34	4.8	9.7	1.5	11.1	2.9
		35-44	12.9	14.3	2.4	6.2	0.4
		45-64	19.3	24.1	8.2	3.2	3.9
		65+	22.8	25.4	7.4	6.3	3.5
	Unmarried	18-24	22.0	15.0	5.0	12.4	5.9
		25-34	13.7	10.7	0.2	14.5	15.8
		35-44	18.0	12.0	3.3	4.7	3.9
		45-64	27.6	32.6	9.7	6.3	6.0
		65+	23.9	30.0	20.1	14.2	5.2
	Total	18-24	15.9	10.7	3.5	12.0	4.1
		25-34	7.4	10.0	1.2	8.7	6.6
		35-44	14.3	13.7	2.7	3.6	1.3
		45-64	22.1	26.9	8.7	6.3	4.6
		65+	23.4	27.7	13.8	11.5	4.3

MATERNAL AND NEWBORN HEALTH

Figure 6-1
Trends in Infant Mortality Rates, Arizona, 1950–2006

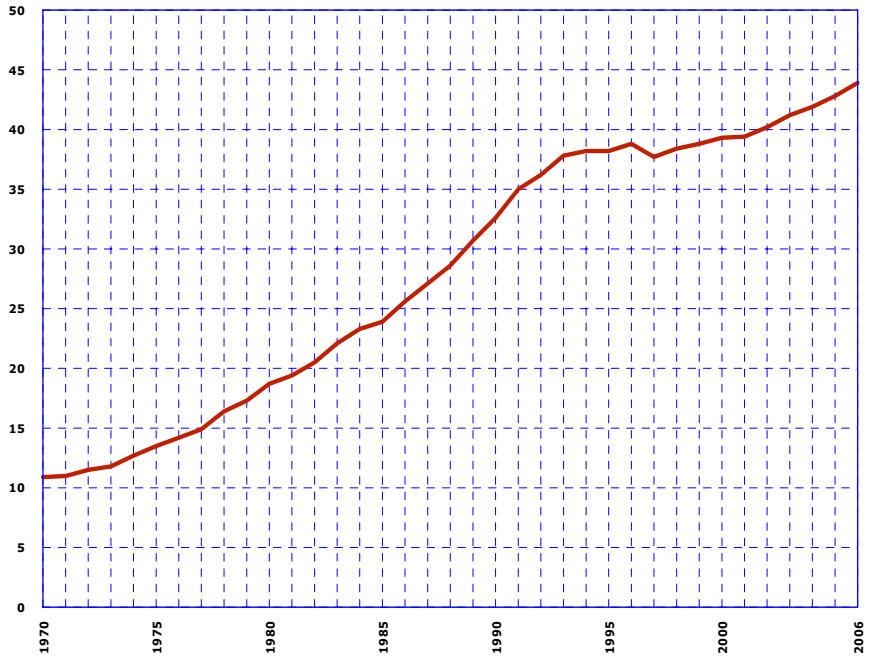


*Number of infant deaths (i.e., deaths within the first year of life) per 1,000 live births.

Infant mortality is defined as the number of deaths within the first year of life. The infant mortality rate (IMR) is computed as the number of infant deaths in a calendar year per 1,000 live births recorded for the same period.

In the 30 years from 1950 IMR 49.4/1,000 to 1981 11.6/1,000 the infant mortality rate in Arizona declined by 76.5 percent, 2.4 times as much as the 32.3 percent reduction of the infant mortality rate from 1982 11.6/1,000 to 2006 6.3/1,000 (**Figure 6-1**).

Figure 6-2
Trends in the Proportion of Births to Unwed Mothers, Arizona, 1970–2006



*The number of births to unmarried mothers per 100 births per year.

One of the contributing factors to the slowdown in the reduction of infant mortality rates is likely to be a concurrent and upward trend in the number (and proportion of) births to unwed mothers. Nationally, the proportion of births to unmarried mothers increased nine fold, from 4 percent in 1950 to 36.9 percent in 2005.

Out-of-wedlock childbearing is associated with adverse pregnancy and infant health outcomes. In Arizona, unmarried mothers have accounted for an increasing annual proportion of births throughout the 1970s, 1980s and 1990s, with 43.9 percent in 2006 marking a new historical high and 4 times greater than the ratio of 10.9 in 1970, (**Figure 6-2**). From 1982 to 2006, the proportion of births to unmarried mothers in Arizona increased 2.1 times, compared to 1.8 times between 1970 and 1981.

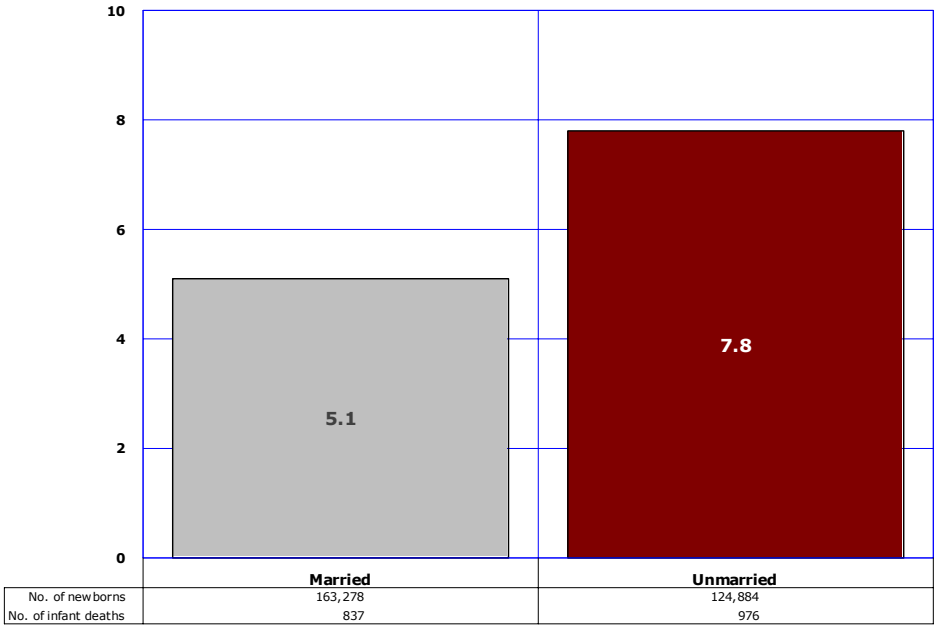
In 2006, 44,746 infants were born to unmarried mothers compared to 3,924 in 1970.

The characteristics of infant deaths analyzed below are based on the linked birth/infant death data set for 2004-2006. In the linked file, the information from the infant's death certificate is linked to information about maternal and pregnancy characteristics from the birth certificate. Infants born to unmarried mothers accounted for the absolute majority of infant deaths in 2004-2006 (976 vs. 837); while the number of births to married mothers exceeded by 30 percent the number of births to unmarried mothers (163,278 vs. 124,884).

In 2004-2006, infants of unmarried mothers had an average annual infant mortality rate of 7.8 deaths per 1,000 live births, 52.9 percent greater than the rate of 5.1/1,000 for infants of married mothers (**Figure 6-3, Table 6-1 and 6-2**).

The effect of marital status on infant mortality suggests that marital status is a proxy measure of factors traditionally related to infant mortality such as poverty conditions, access to health care or social support. Mother's marital status may signify the presence or absence of emotional, social, and financial resources.

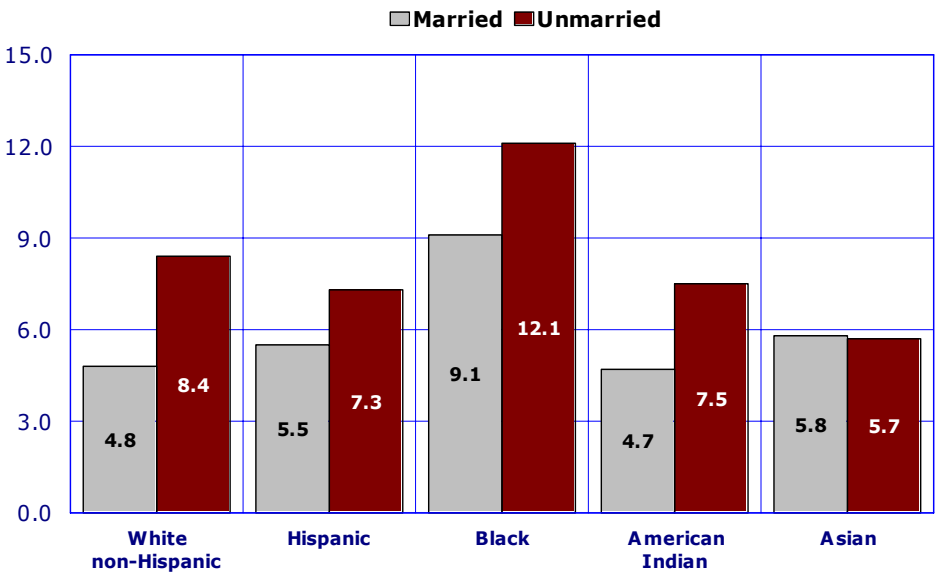
Figure 6-3
Average Annual Infant Mortality Rates* by Mother's Marital Status, Arizona, 2004–2006



*The number of infant deaths per 1,000 live births by category of marital status.

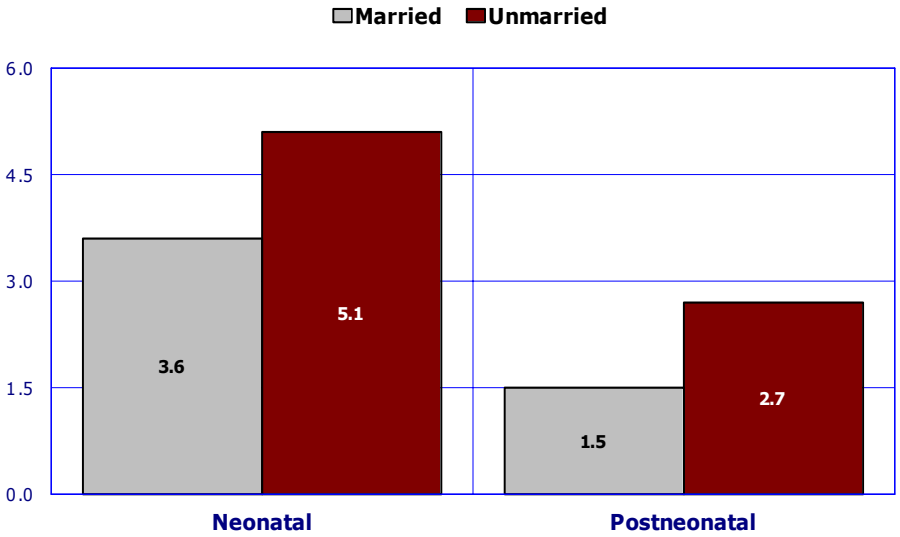
Marital status differences in infant mortality rates vary by mother's race/ethnicity (**Figure 6-4**). In 2004-2006, newborns of White non-Hispanic mothers who were married (IMR 4.8/1,000) experienced a 42.9 percent lower risk of death during the first year of life compared to newborns of unmarried mothers (IMR 8.4/1,000). The differential in infant mortality rates of newborns to married and unmarried Hispanic and Black mothers was lower than among White non-Hispanics. Only among Asian mothers marital status did not seem to have any effect on infant mortality in 2004-2006. However, the occurrence of non-marital childbearing is relatively rare among Asians (16.2 percent of total births), and the lowest among race/ethnic groups. Only 8 Asian infants who died in 2004-2006 were born to unmarried mothers. The mortality rate based on such a small number of cases is not statistically reliable.

Figure 6-4
Average Annual Infant Mortality Rates* by Mother's Marital Status and Race/Ethnicity, Arizona, 2004–2006



Number of infant deaths per 1,000 live births in specified group.

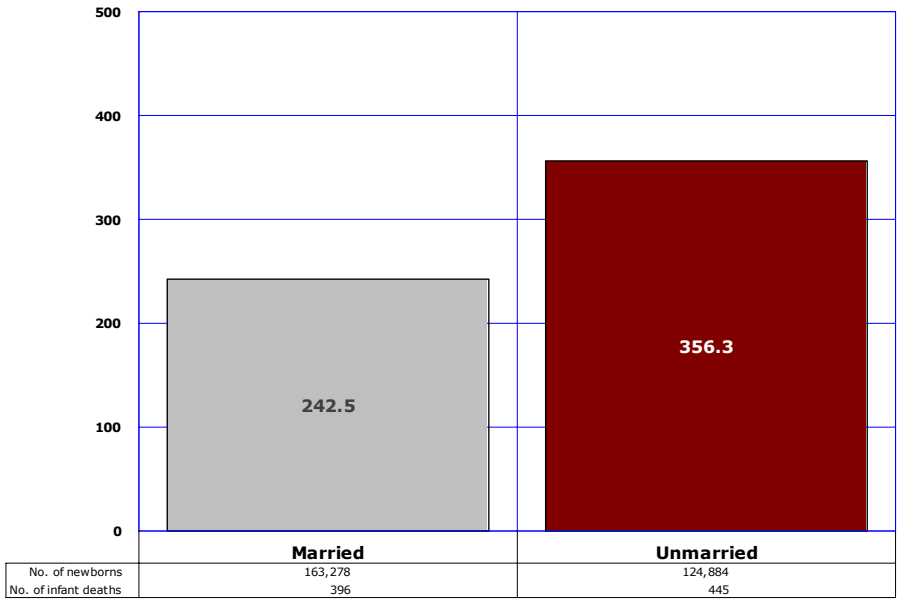
Figure 6-5
Average Annual Neonatal and Postneonatal Mortality Rates* by Mother's Marital Status, Arizona, 2004–2006



In 2004-2006, unmarried motherhood was associated with elevated infant mortality rates in both neonatal (0-27 days) and postneonatal (28-364 days) period (**Figure 6-5**).

Neonatal = 0-27 days.
Postneonatal = 28-364 days.
*Number of deaths in specified group per 1,000 live births.

Figure 6-6
Average Annual Infant Mortality Rates for Certain Conditions Originating in the Perinatal Period by Mother's Marital Status, Arizona, 2004-2006



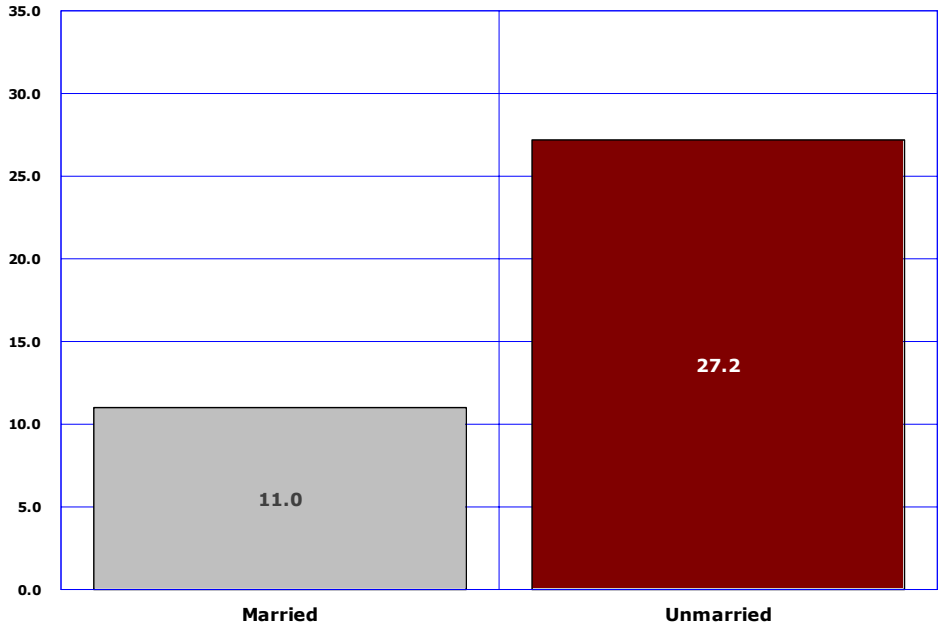
Certain conditions originating in the perinatal period (**Figure 6-6**), *accidents* (**Figure 6-7**), *homicide* (**Figure 6-8**) *influenza and pneumonia* (**Figure 6-9**), *congenital malformations* (**Figure 6-10**), are among the leading causes of infant mortality.

Certain conditions originating in the perinatal period are a number one cause of infant deaths. It is a broad cause-of-death category, which includes maternal complications, short gestation and low birth weight, intrauterine hypoxia or birth asphyxia, bacterial sepsis of newborn and respiratory distress syndrome. In 2004-2006, infants born to unmarried mothers were 46.9 percent more likely to die from certain conditions originating in the perinatal period than infants born to married mothers (**Figure 6-6**).

*The number of infant deaths per 100,000 live births by category of marital status.

The average annual infant mortality rate for accidents (unintentional injuries) was 2.5 times greater for infants born to unmarried mothers (27.2 deaths per 100,000 live births), than it was for babies of married mothers (11.0/100,000; **Figure 6-7**).

Figure 6-7
Average Annual Infant Mortality Rates for Accidents (unintentional injuries) by Mother's Marital Status, Arizona, 2004–2006

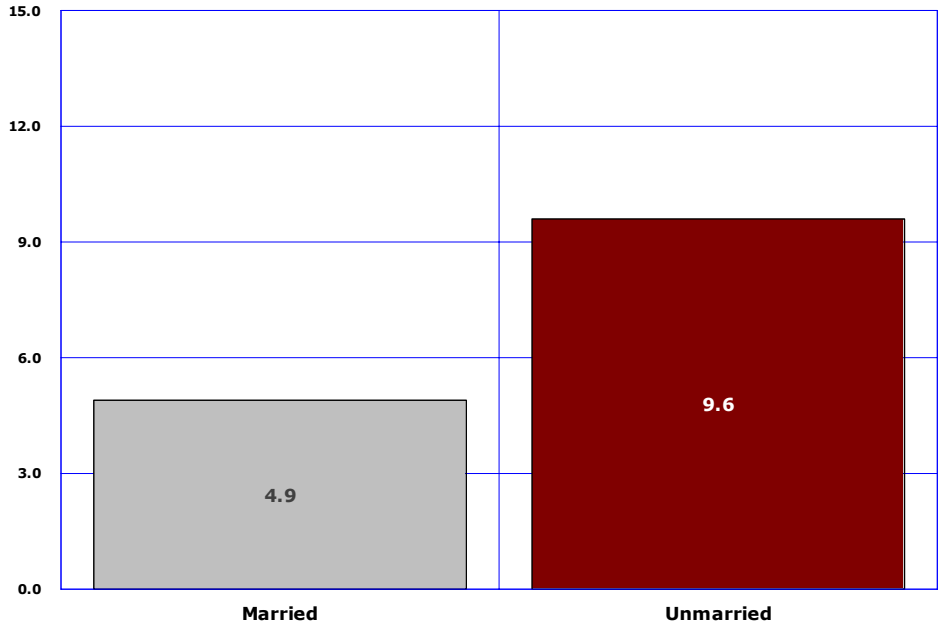


*The number of infant deaths per 100,000 live births by category of marital status.

In 2004-2006, 23 infants were murdered. In 2006 alone, the number of infants who were fatally assaulted exceeded the number of those who died from suffocation, septicemia or birth defects of the respiratory system.

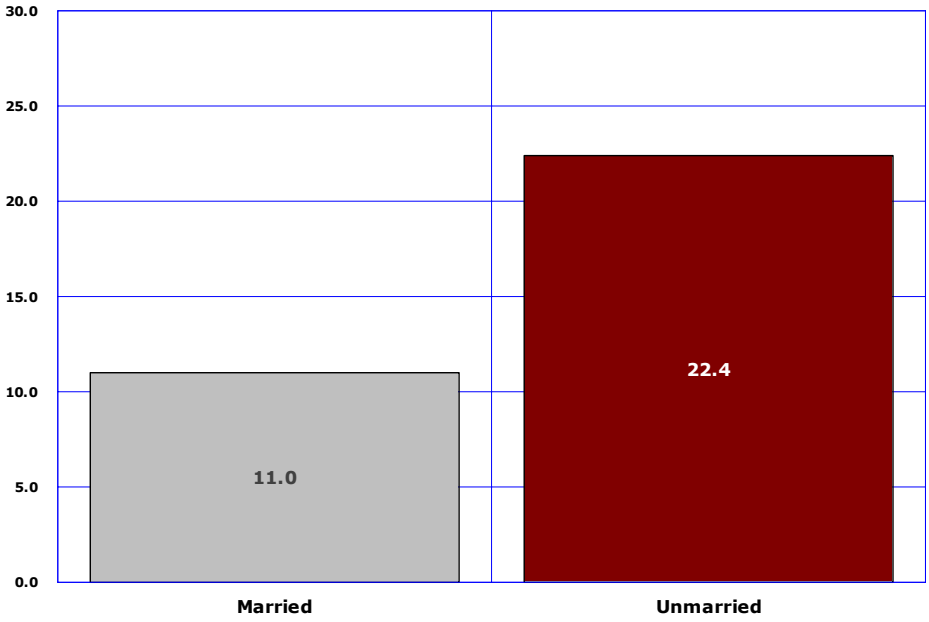
Compared to infants born to married mothers, the average annual risk of homicide was twice as high among infants born to unmarried mothers (**Figure 6-8**).

Figure 6-8
Average Annual Infant Mortality Rates for Homicide by Mother's Marital Status, Arizona, 2004–2006



*The number of infant deaths per 100,000 live births by category of marital status.

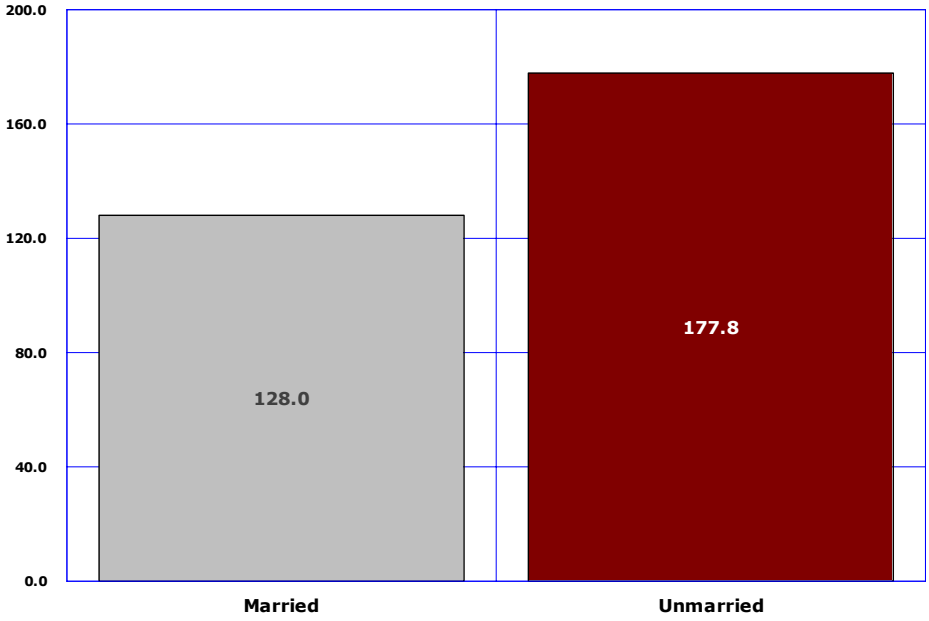
Figure 6-9
Average Annual Infant Mortality Rates for Influenza and Pneumonia by Mother's Marital Status, Arizona, 2004–2006



*The number of infant deaths per 100,000 live births by category of marital status.

In 2004-2006, 49 infants died from influenza and pneumonia. The majority of these 28 deaths were infants born to unmarried mothers. The average annual infant mortality rate in 2004-2006 for influenza and pneumonia was twice as high among infants born to unmarried mothers (**Figure 6-9**), as it was among infants born to married mothers.

Figure 6-10
Average Annual Infant Mortality Rates for Congenital Malformations by Mother's Marital Status, Arizona, 2004–2006

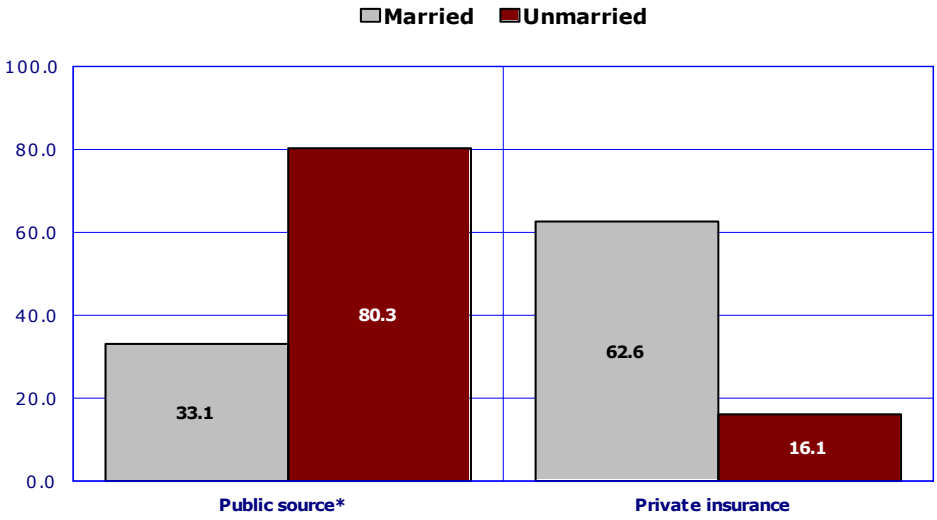


*The number of infant deaths per 100,000 live births by category of marital status.

In 2004-2006, 441 infants died from congenital malformations or birth defects. Newborns of unmarried mothers were 38.9 percent more likely to die from this cause (177.8/100,000) than babies born to married mothers (128.0/100,000; **Figure 6-10**).

There is more information about health characteristics of newborns and their mothers, as well as specific causes of infant mortality in (**Table 6-1**).

Figure 6-11
Average Annual Proportion of Births by Payer and Mother's Marital Status, Arizona, 2004–2006

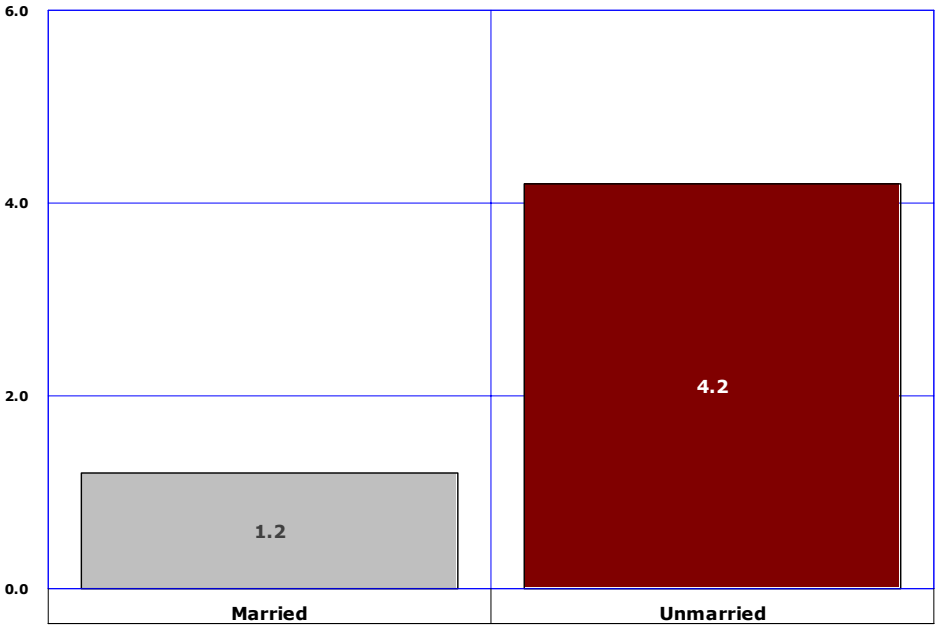


*The Arizona Health Care Cost Containment System (AHCCCS) is the State's Medicaid program; or the Indian Health Service.

The proportion of unmarried mothers was 5 times greater among births paid for by the public sources in 2004-2006 (the Arizona Health Care Cost Containment System or the Indian Health Service) than it was among births paid for by private insurance (**Figure 6-11**). Only 16.1 percent of births paid for by private health insurance were to unmarried mothers compared to 80.3 percent births paid for by a public payer.

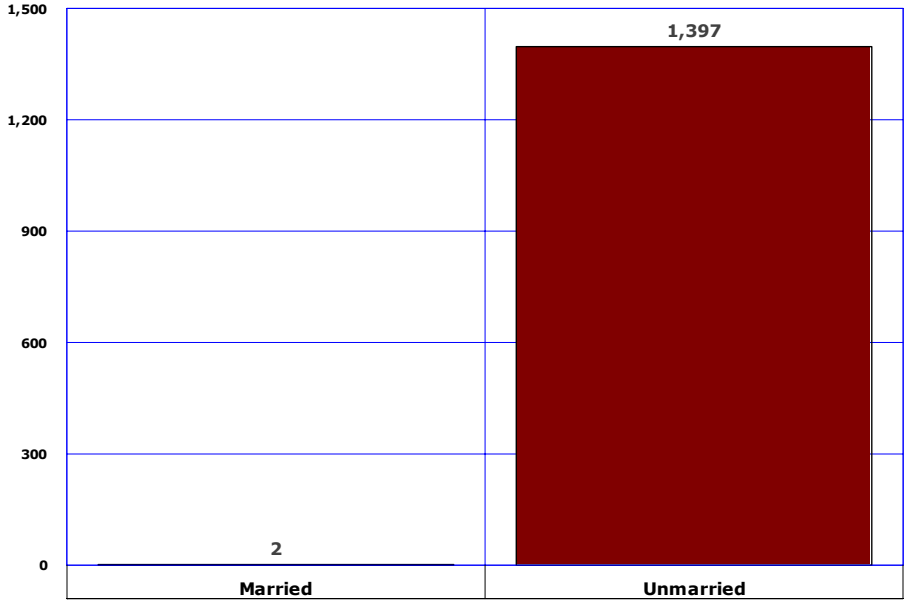
Public payer versus private health insurance compares mothers of lower and higher socioeconomic status (SES).

Figure 6-12
Average Annual Proportion of Women Giving Birth Who Received No Prenatal Care During Pregnancy by Marital Status, Arizona, 2004–2006



Among women giving birth who were married in 2004-2006, a small proportion of 1.2 percent received no prenatal care during pregnancy (**Figure 6-13**). Among unmarried mothers, the proportion of those who received no prenatal care was 3.5 times as high (4.2 percent).

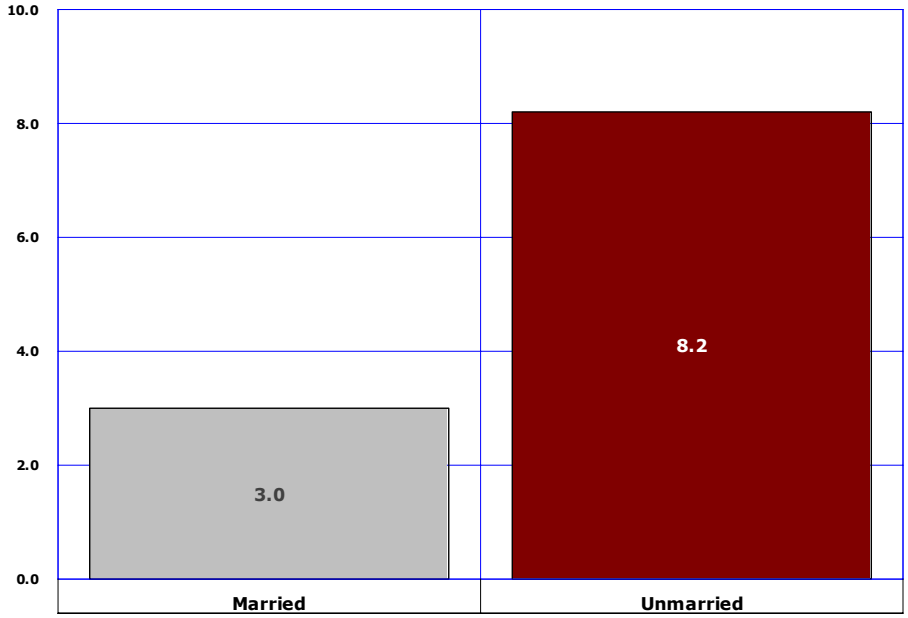
Figure 6-13
Number of Newborns Who Were Hospitalized After Birth Because They Were Affected by Maternal Use of Drugs during Pregnancy, Arizona, 2006



Information about maternal drug use during pregnancy is not reported on Arizona birth certificates. However, it can be obtained from the hospital discharge database. There are several diagnostic codes which identify exposure of fetus or newborn to specific noxious substances (such as narcotics, hallucinogenic agents, or cocaine) transmitted via placenta or breast milk. In 2006, there were 1,399 inpatient hospitalizations related to noxious influences affecting the fetus. All but 2 of the 1,399 babies were born to unmarried mothers (**Figure 6-13**). Ten percent or 144 of the 1,399 babies born to drug dependent mothers were also diagnosed with drug withdrawal syndrome. All of the babies diagnosed with drug withdrawal syndrome were born to unmarried mothers.

The diagnostic codes and additional information about hospitalizations related to noxious influences affecting the fetus are available online on the Health Status and Vital Statistics website at http://www.azdhs.gov/plan/hip/for/substance/2006drugc206xls

Figure 6-14
Average Annual Proportion of Women Giving Birth who Reported Smoking during Pregnancy by Marital Status, Arizona, 2004–2006



In 2004-2006, unmarried mothers were 2.7 times as likely to report smoking during pregnancy as their married counterparts 8.2 percent vs. 3.0 percent (**Figure 6-14**).

TABLE 6-1
SELECTED CHARACTERISTICS OF INFANT DEATHS BY MOTHER'S MARITAL STATUS, ARIZONA RESIDENTS, 2004-2006

		TOTAL	Married	Unmarried	Other*
Total infant deaths		1,896	837	976	83
Infant's age at death	**Neonatal (0-27 days)**	1,275	587	639	49
	Postneonatal (28-364 days)	621	250	337	34
Mother's age group	**<15**	9	0	9	0
	15-17	124	6	118	0
	18-19	184	29	152	3
	20-24	555	183	361	11
	25-29	465	255	194	16
	30-34	310	209	91	10
	35-39	168	123	40	5
	40-44	50	33	15	2
	45+	5	5	0	0
	Unknown	2	0	1	1
Mother's race/ethnicity	**White non-Hispanic**	707	423	268	16
	Hispanic or Latino	837	310	506	21
	Black or African American	115	35	79	1
	American Indian or Alaska Native	131	22	104	5
	Asian	49	41	8	0
	Unknown	33	12	16	5
Payee for birth	**AHCCCS**	1,140	330	779	31
	IHS	28	5	22	1
	Private insurance	602	464	129	9
	Self	68	34	32	2
	Unknown	68	10	19	39
Weight gain during pregnancy	**None**	86	39	44	3
	1-15 pounds	488	211	263	14
	16-20 pounds	254	121	127	6
	21-24 pounds	117	44	73	0
	25-30 pounds	333	164	159	10
	31+ pounds	392	191	197	4
	Unknown	237	73	118	46

TABLE 6-1
SELECTED CHARACTERISTICS OF INFANT DEATHS BY MOTHER'S MARITAL STATUS, ARIZONA RESIDENTS, 2004-2006

		TOTAL	Married	Unmarried	Other*
Gestational age	**<24 weeks**	513	235	266	12
	24-27 weeks	311	136	169	6
	28 thru 31 weeks	138	62	73	3
	32 thru 35 weeks	214	105	105	4
	36 weeks	108	43	61	4
	37-41 weeks	579	259	304	16
	42 weeks or more	4	2	2	0
	Unknown	40	1	1	38
Newborn's weight at birth	**<500 grams**	375	172	192	11
	501-749 grams	315	138	169	8
	750-999 grams	127	55	71	1
	1000-1499 grams	129	64	64	1
	1500-1999 grams	130	65	61	4
	2000-2499 grams	169	87	78	4
	2500+ grams	614	255	341	18
	Unknown	48	7	5	36
Singleton/multiple delivery	**Singleton births**	1,624	690	893	41
	Twin births	207	119	84	4
	Triplet or higher order multiples	38	34	4	0
	Unknown	38	0	0	38
Substance use during pregnancy	**Drinker, nonsmoker**	7	3	4	0
	Smoker, nondrinker	162	39	113	10
	Smoker and drinker	12	0	11	1
	Nonsmoker and nondrinker	1,690	801	853	36
	Unknown	1	0	0	1
Prenatal care	**No care**	157	37	111	9
	1st trimester	1,368	697	644	27
	2nd trimester	273	86	179	8
	3rd trimester	52	16	35	1
	Unknown	22	7	12	3

TABLE 6-1
SELECTED CHARACTERISTICS OF INFANT DEATHS BY MOTHER'S MARITAL STATUS, ARIZONA RESIDENTS, 2004-2006

		TOTAL	Married	Unmarried	Other*
Prenatal visits	**No visits**	157	37	111	9
	1-4 visits	395	141	246	8
	5-8 visits	490	215	267	8
	9-12 visits	518	273	232	13
	13+ visits	282	161	114	7
	Unknown	65	16	11	38
Selected causes of death	**Accident (unintentional injury)**	56	18	34	4
	Choked on food	7	3	4	0
	Choked on other objects	1	0	1	0
	Mechanical suffocation	29	8	19	2
	Motor vehicle accident	4	1	3	0
	Assault (homicide)	23	8	12	3
	Sudden infant death syndrome	93	37	50	6
	Certain conditions originating in the perinatal period	882	396	445	41
	Maternal complications	125	58	62	5
	Complications of placenta, cord and membrane	98	53	43	2
	Short gestation and low birth weight	252	105	131	16
	Intrauterine hypoxia or birth asphyxia	32	17	14	1
	Respiratory distress syndrome	31	12	17	2
	Other respiratory condition	60	35	18	7
	Bacterial sepsis of newborn	77	37	37	3
	Atelectasis	19	12	7	0
	Congenital malformations	441	209	222	10
	of heart	91	50	41	0
	of respiratory system	38	13	24	1
	of brain, spinal cord or nervous system	66	29	37	0
	Diseases of the circulatory system	39	21	17	1
	Influenza and pneumonia	49	18	28	3
	Nephritis, nephrotic syndrome and nephrosis	15	6	9	0

**'Refused', 'Yes, divorced', 'Unknown'

TABLE 6-2
SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH BY MARITAL STATUS, ARIZONA RESIDENTS, 2004-2006

		TOTAL	Marital status		
			Unmarried	Married	Other*
Total births		291,236	163,278	124,884	3,074
Mother's age group	**<15**	543	9	534	0
	15-17	12,856	918	11,922	16
	18-19	23,313	4,448	18,774	91
	20-24	80,460	33,759	45,874	827
	25-29	80,787	52,826	27,002	959
	30-34	59,423	45,160	13,578	685
	35-39	27,642	21,562	5,690	390
	40-44	5,846	4,322	1,422	102
	45+	353	267	83	3
	Unknown	13	7	5	1
Mother's race/ethnicity	**White non-Hispanic**	121,941	88,728	32,019	1,194
	Hispanic or Latino	127,840	56,681	69,783	1,376
	Black or African American	10,530	3,855	6,538	137
	American Indian or Alaska Native	18,777	4,702	13,818	257
	Asian or Pacific Islander	8,555	7,120	1,396	39
	Unknown	3,593	2,192	1,330	71
Payee for birth	**AHCCCS**	151,351	52,749	96,421	2,181
	IHS	5,197	1,276	3,876	45
	Private insurance	122,916	102,243	20,085	588
	Self	7,988	4,905	3,012	71
	Unknown	3,784	2,105	1,490	189
Weight gain	**None**	6,006	2,879	3,037	90
	1-15 pounds	29,555	15,193	13,994	368
	16-20 pounds	33,170	17,502	15,303	365
	21-24 pounds	19,200	11,421	7,606	173
	25-30 pounds	73,751	43,143	29,932	676
	31+ pounds	114,955	66,142	47,688	1,125
	Unknown	14,599	6,998	7,324	277
Length of gestation	**<24 weeks**	813	372	424	17
	24-27 weeks	1,142	510	608	24
	28 thru 31 weeks	2,540	1,266	1,215	59
	32 thru 35 weeks	13,283	7,098	5,957	228
	36 weeks	13,600	7,474	5,946	180
	37-41 weeks	258,180	145,798	109,906	2,476
	42 weeks or more	1,274	533	726	15
	Unknown	404	227	102	75

TABLE 6-2
SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH BY MARITAL STATUS, ARIZONA RESIDENTS, 2004-2006

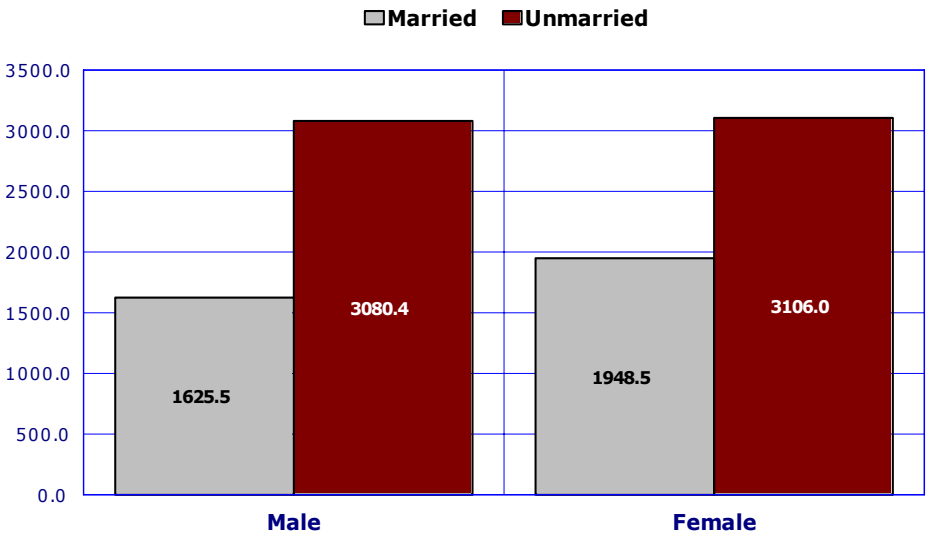
		TOTAL	Marital status		
			Unmarried	Married	Other*
Newborn's weight at birth	**<500 grams**	434	197	223	14
	501-749 grams	597	268	318	11
	750-999 grams	644	301	329	14
	1000-1499 grams	1,779	899	839	41
	1500-1999 grams	3,988	2,060	1,848	80
	2000-2499 grams	13,174	6,691	6,281	202
	2500+ grams	270,562	152,833	115,022	2,707
	Unknown	58	29	24	5
Substance use during pregnancy	**Drinker, nonsmoker**	1,221	703	504	14
	Smoker, nondrinker	14,805	4,674	9,659	472
	Smoker and drinker	927	248	638	41
	Nonsmoker and nondrinker	274,283	157,653	114,083	2,547
Prenatal care	**No care**	7,282	1,926	5,201	155
	1st trimester	225,020	139,058	83,852	2,110
	2nd trimester	46,874	18,174	28,085	615
	3rd trimester	11,485	3,891	7,425	169
	Unknown	575	229	321	25
Prenatal visits	**No visits**	7,282	1,926	5,201	155
	1-4 visits	12,392	3,688	8,499	205
	5-8 visits	48,596	21,024	26,964	608
	9-12 visits	143,196	86,149	55,780	1,267
	13+ visits	78,636	49,885	27,944	807
	Unknown	1,134	606	496	32
Newborn intensive care	**Yes**	16,033	8,773	6,997	263
	No	274,576	154,152	117,710	2,714
	Unknown	627	353	177	97
Obstetric procedures	**Amniocentesis**	2,013	1,503	491	19
	Electronic Fetal Monit.	264,900	146,413	115,696	2,791
	Induction of labor	50,695	31,547	18,665	483
	Stimulation of labor	38,121	20,861	16,868	392
	Tocolysis	3,889	2,266	1,580	43
	Ultrasound	197,878	112,700	83,296	1,882
	Other	22,719	12,714	9,685	320
Method of delivery	**Vaginal**	216,621	117,801	96,599	2,221
	Vaginal after C-Section	2,038	1,290	721	27
	Primary C-Section	41,449	23,991	17,063	395
	Repeat C-Section	31,125	20,193	10,501	431
	Forceps	1,766	1,035	721	10
	Vacuum	9,121	5,253	3,809	59

TABLE 6-2
SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH BY MARITAL STATUS, ARIZONA RESIDENTS, 2004-2006

		TOTAL	Marital status		
			Unmarried	Married	Other*
Births with medical risk factors	**Total**	80,526	44,286	35,161	1,079
Medical risk factors	**Anemia**	5,980	3,123	2,774	83
	Cardiac disease	448	280	165	3
	Lung disease	866	482	362	22
	Diabetes	8,359	5,009	3,219	131
	Genital herpes	2,068	1,375	673	20
	Hydramnios	2,092	1,119	946	27
	Hemoglobinopathy	43	26	17	0
	Chronic hypertension	1,372	857	489	26
	Pregnancy associated hypertension	8,588	5,014	3,477	97
	Eclampsia	1,313	688	610	15
	Previous infant 4000+g	1,138	818	301	19
	Previous SGA infant	1,948	1,308	608	32
	Renal disease	360	191	164	5
	RH sensitization	1,245	893	338	14
	Uterine bleeding	1,167	693	448	26
	Incompetent cervix	262	187	66	9
	Other	57,896	30,546	26,554	796
Abnornal conditions of the newborn	**Total**	20,739	11,244	9,141	354
Abnormal conditions	**Anemia**	116	61	53	2
	Birth injury	390	220	162	8
	Fetal Alcohol Syndrome	10	1	9	0
	Membrane disease	767	441	307	19
	Meconium aspiration	233	120	108	5
	Assissted vent. <30 min	4,492	2,864	1,599	29
	Assisted vent. >30 min.	1,532	847	662	23
	Newborn seizures	318	170	147	1
	Other	18,354	9,960	8,079	315
Births with congenital anomalies	**Total**	2,782	1,498	1,241	43
Congenital anomalies	**Anencephalus**	18	13	5	0
	Spina Bifida/meningocele	25	11	14	0
	Hydrocephalus	32	14	18	0
	Microcephalus	6	2	4	0
	Other CNS Anomaly	17	5	12	0
	Heart Malformations	108	60	48	0
	Other Respiratory/Circulatory	500	242	247	11
	Rectal Atresia/stenosis	13	9	4	0
	Fistula/Esophageal atresia	17	12	5	0

UTILIZATION OF INPATIENT HOSPITAL CARE

Figure 7-1
Age-adjusted Inpatient Hospitalization Rates by Marital Status and Gender, Arizona Residents 18 Years or Older in 2006

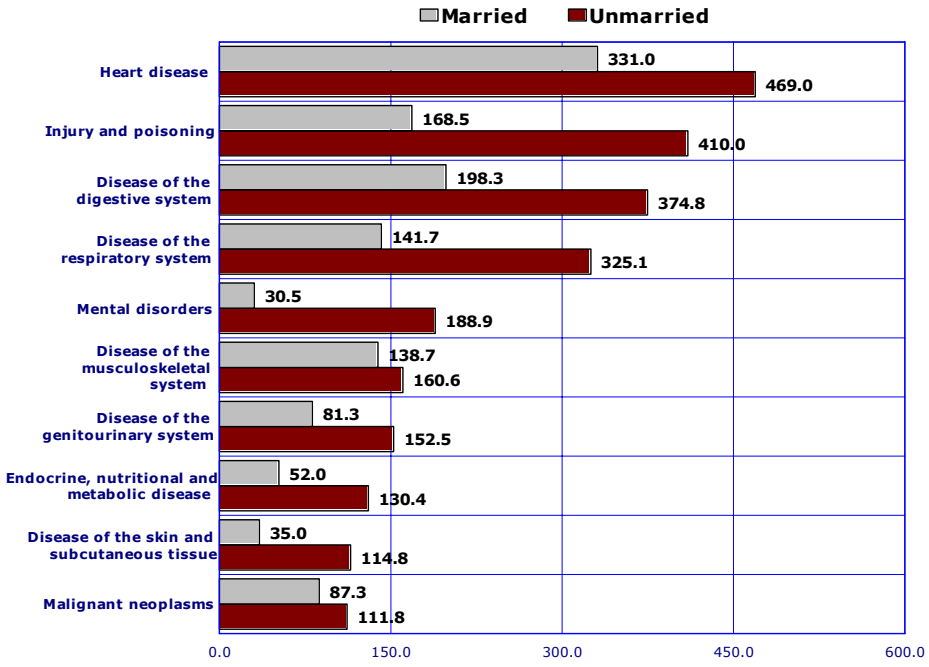


In Arizona, information about the patient's marital status is available for inpatient hospitalizations but not for emergency room visits. For consistency, the majority of data in this section is presented by gender for two groups of patients: those who were married and those who were unmarried in 2006.

For both males and females, the age-adjusted inpatient hospitalization rates were substantially greater for the unmarried than for the married (**Figure 7-1, Table 7-1**). The hospitalization rates were greater for females than males in each of the marital status categories.

All hospitalization rates in this section are per 100,000 resident population in specified group. Inpatient hospitalizations exclude labor and delivery.

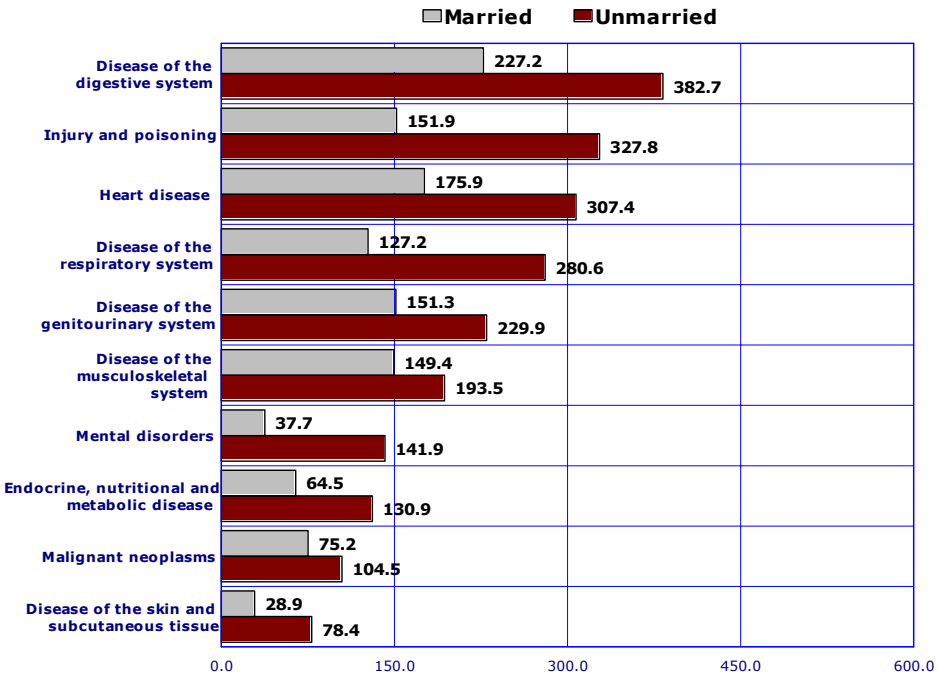
Figure 7-2
Age-adjusted Inpatient Hospitalization Rates by Category of First-listed Diagnosis and Marital Status, Arizona Male Residents 18 Years or Older in 2006



Marital status differences in the inpatient hospitalization rates for males vary by the category of first-listed diagnosis (**Figure 7-2, Table 7-2**). The hospitalization rate for mental disorders was 6.2 times greater among the unmarried (188.9/100,000), than it was among the married male residents of Arizona (30.5/100,000). In contrast, marital status differences were relatively small in the inpatient hospitalization rates for malignant neoplasms (cancer) or the diseases of the musculoskeletal system.

Marital status differences in the inpatient hospitalization rates for females also vary by the category of first-listed diagnosis (**Figure 7-3, Table 7-2**). Unmarried females were 3.8 times more likely to be hospitalized mental disorders than married females. Their inpatient hospitalization rate for diseases of the skin and subcutaneous tissue was 2.7 times greater, while it was 1.4 times greater for cancer.

Figure 7-3
Age-adjusted Inpatient Hospitalization Rates by Category of First-listed Diagnosis and Marital Status, Arizona Female Residents 18 Years or Older in 2006



Up to nine diagnoses are collected on the hospital discharge record. This report distinguishes between the **first-listed diagnosis** and **all-listed diagnoses** or **any mention** of the specific diagnosis on the medical record. The number of first-listed diagnoses is the same as the number of discharges (**Table 7-6**). All-listed diagnoses include first-listed diagnoses and secondary diagnoses for total number of times certain conditions have been reported for hospitalized patients (**Table 7-7**).

Relative to married male residents, the unmarried were 5.7 times more likely to have drug dependence diagnosis mentioned on the hospital discharge record (**Figure 7-4, Table 7-3**). The rate ratio for alcohol abuse was 5.3 times greater for unmarried than married males. It was 4.5 greater for any mention of suicide attempt, and 3.3 times for any mention of mental disorders.

Figure 7-4
Age-adjusted Inpatient Hospitalization Rates by Category of All-listed Diagnoses and Marital Status, Arizona Male Residents 18 Years or Older in 2006

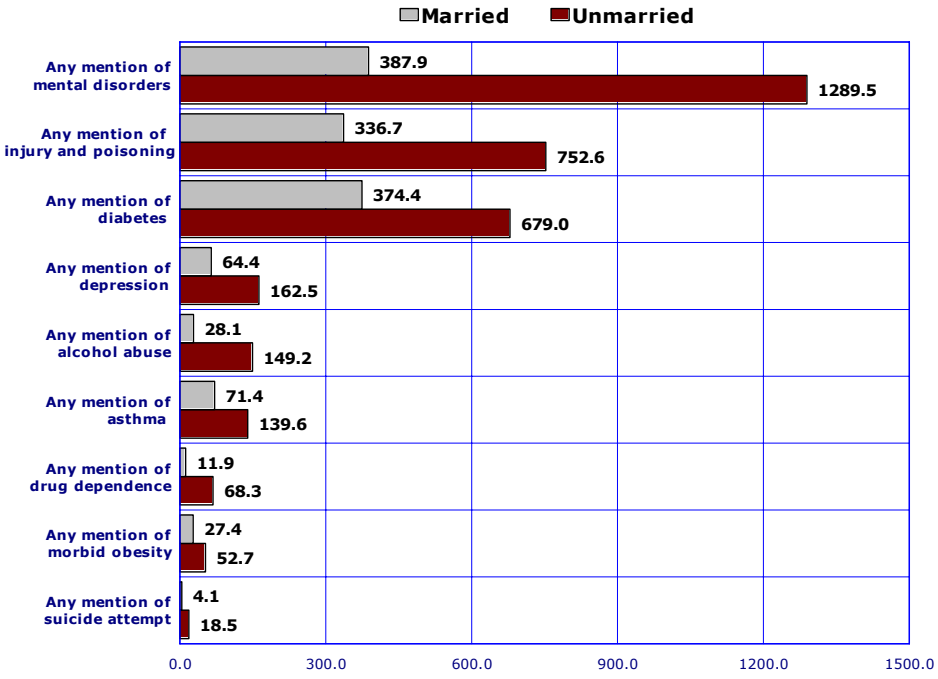
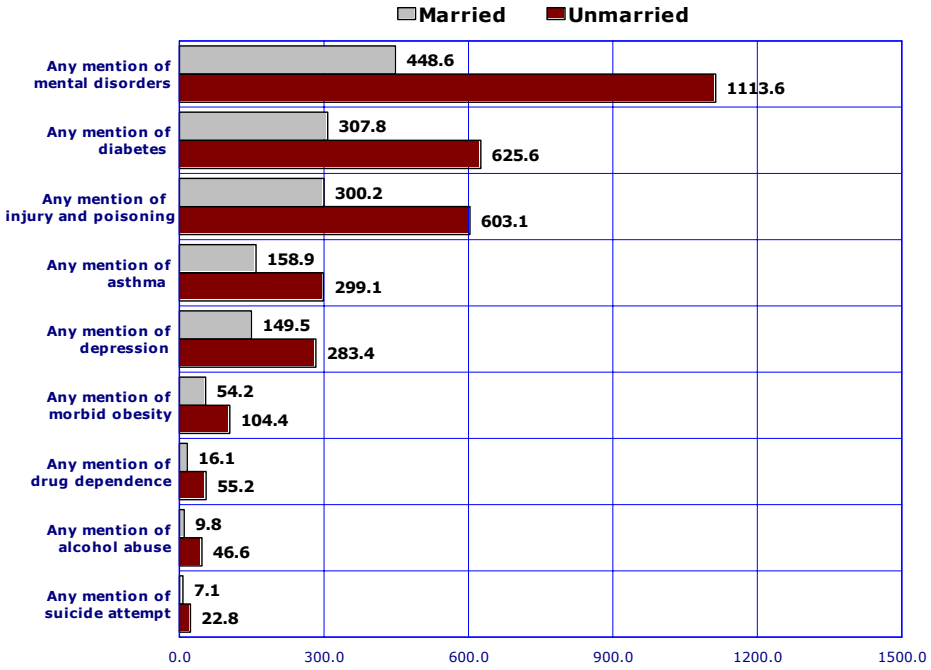
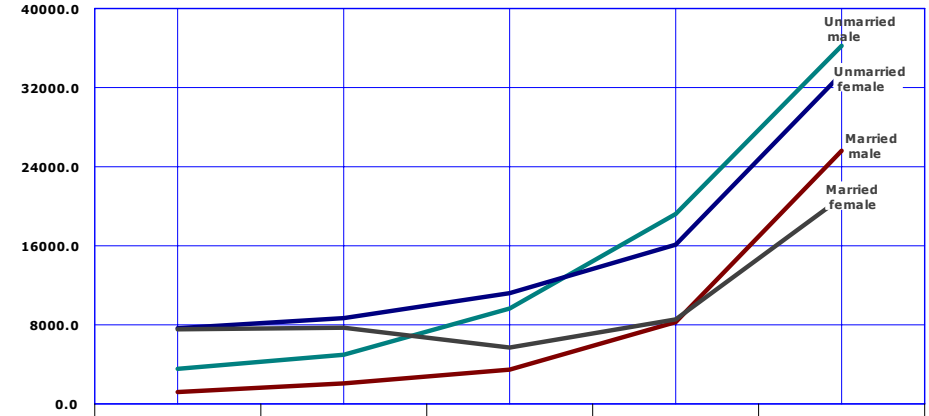


Figure 7-5
Age-adjusted Inpatient Hospitalization Rates by Category of All-listed Diagnoses and Marital Status, Arizona Female Residents 18 Years or Older in 2006



Among Arizona resident females aged 18 years or older who were hospitalized in 2006, the marital status differences by category of all-listed diagnoses were much less pronounced than they were among males. The highest rate ratio was for any mention of alcohol abuse; relative to married females, the hospitalization rate was 4.8 times greater for unmarried females. It was followed by the rate ratio for any mention of drug dependence reported 3.4 times more frequently for unmarried than married females, suicide attempt 3.2 times greater, and mental disorders 2.5 times greater; (**Figure 7-5**, **Table 7-3**).

Figure 7-6
Age-specific Inpatient Hospitalization Rates by Marital Status and Gender, Arizona Residents 18 Years or Older in 2006



	18-24	25-34	35-44	45-64	65+
Married female	7544.7	7712.9	5695.4	8554.8	20876.8
Unmarried female	7665.0	8672.1	11201.3	16102.2	33400.6
Married male	1206.4	2073.7	3466.5	8277.8	25620.2
Unmarried male	3546.1	4972.0	9658.9	19226.6	36228.0

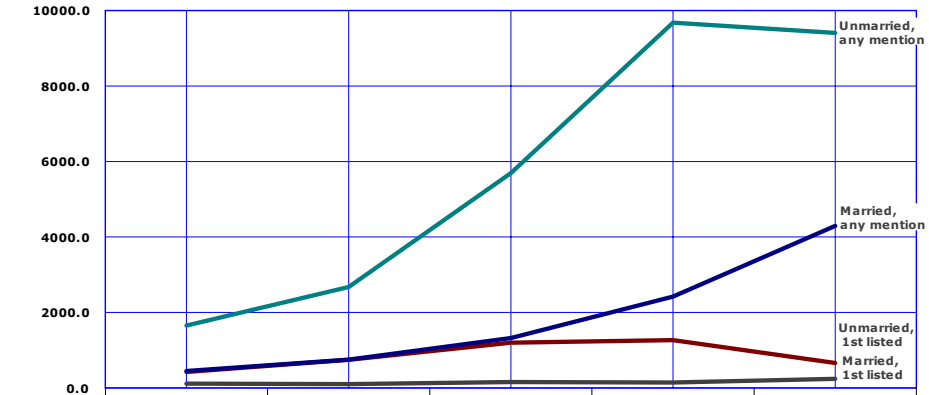
*The number of inpatient hospitalizations per 100,000 population in specified group.

The inpatient hospitalization rates tend to increase with age (**Figure 7-6, Table 7-4**). Only among married females the hospitalization rate for those who were 35-44 years old in 2006 was lower than the rate for those younger than 35 years old.

Married males aged 18-64 years had the lowest hospitalization rates among the marital status by gender groups.

Figure 7-7
Age-specific Inpatient Hospitalization Rates for Mental Disorders by First-listed Diagnosis and any mention of Mental Disorders on the Medical Record by Marital Status, Arizona Male Residents 18 Years or Older in 2006

Unmarried males compared to married males were substantially more likely to have the primary or secondary diagnosis of mental disorders mentioned on the medical record (**Figure 7-7, Table 7-4 and 7-5**). Among males 45-64 years old, the rate of hospitalizations related to mental disorders (i.e. any mention of mental disorders regardless of the immediate reason for admission) exceeded 7.6 times the hospitalization rate for mental disorders as first-listed diagnosis.



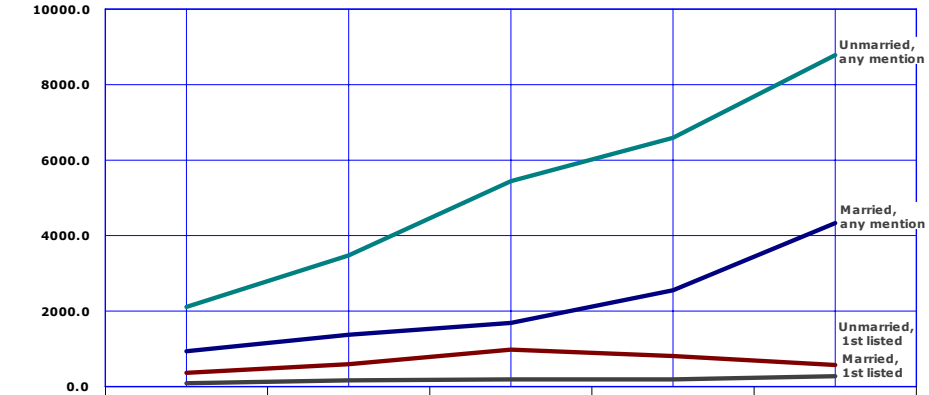
	18-24	25-34	35-44	45-64	65+
Married, 1st listed	116.3	101.8	155.0	146.0	241.9
Married, any mention	448.6	748.6	1323.0	2419.8	4295.0
Unmarried, 1st listed	424.6	745.6	1198.9	1265.9	659.5
Unmarried, any mention	1656.2	2676.3	5694.3	9680.5	9406.8

*The number of inpatient hospitalizations per 100,000 population in specified group. Any mention of mental disorders includes not only the first-listed, but also any secondary diagnosis.

Figure 7-8
Age-specific Inpatient Hospitalization Rates for Mental Disorders by First-listed Diagnosis and any mention of Mental Disorders on the Medical Record by Marital Status, Arizona Female Residents 18 Years or Older in 2006

Among females the all-listed hospitalization rates for mental disorders were positively associated with age in each of the marital status categories.

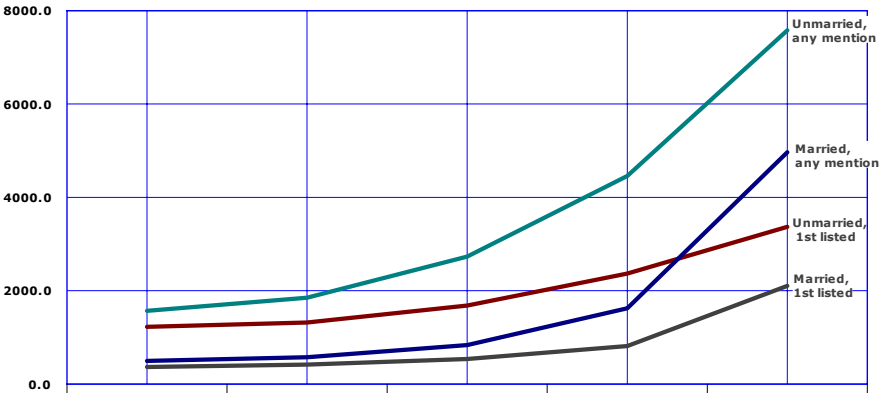
In each age group, the hospitalization rates for unmarried females exceeded the rates for married females (**Figure 7-8, Table 7-4 and 7-5**).



	18-24	25-34	35-44	45-64	65+
Married, 1st listed	89.0	165.2	192.7	191.4	278.1
Married, any mention	938.1	1373.1	1687.7	2553.0	4331.5
Unmarried, 1st listed	365.7	593.3	977.3	809.9	572.3
Unmarried, any mention	2110.1	3476.3	5444.7	6593.4	8784.6

The number of inpatient hospitalizations per 100,000 population in specified group. Any mention of mental disorders includes not only the first-listed, but also any secondary diagnosis.

Figure 7-9
Age-specific Inpatient Hospitalization Rates for Injury and Poisoning by First-listed Diagnosis and any mention of Injury and Poisoning on the Medical Record by Marital Status, Arizona Male Residents 18 Years or Older in 2006



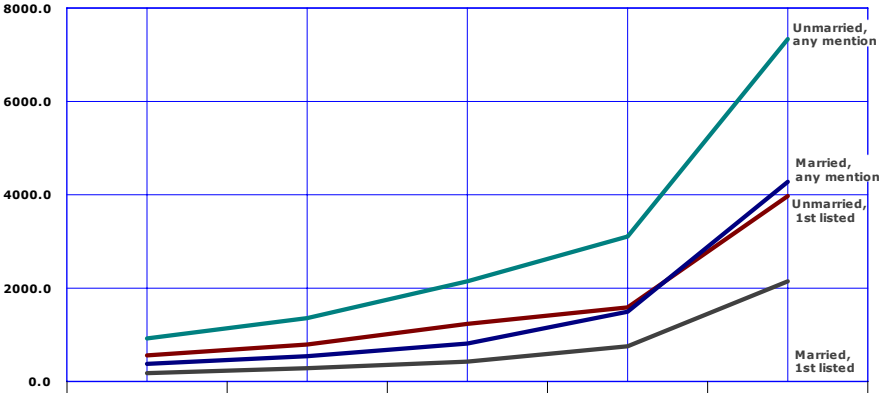
	18-24	25-34	35-44	45-64	65+
Married, 1st listed	367.2	417.1	536.2	814.0	2103.0
Married, any mention	496.8	575.8	836.8	1622.6	4967.2
Unmarried, 1st listed	1226.1	1320.2	1681.9	2367.7	3370.4
Unmarried, any mention	1567.8	1849.7	2731.3	4459.9	7579.2

*The number of inpatient hospitalizations per 100,000 population in specified group. Any mention of injury/poisoning includes the first-listed and any secondary diagnosis.

In 2006, the ICD-9-CM diagnostic codes 800-999 for injury and poisoning appeared on 52,151 hospital inpatient discharge records for Arizona male residents aged 18 years or older (**Table 7-7**).

Regardless of age, married male Arizonans had the lowest inpatient hospitalization rates for injury and poisoning as first-listed diagnosis (**Figure 7-9**). In contrast, unmarried males regardless of age were the most likely to have injury and poisoning mentioned on the medical record.

Figure 7-10
Age-specific Inpatient Hospitalization Rates for Injury and Poisoning by First-listed Diagnosis and any mention of Injury and Poisoning on the Medical Record by Marital Status, Arizona Female Residents 18 Years or Older in 2006



	18-24	25-34	35-44	45-64	65+
Married, 1st listed	180.5	283.5	425.0	755.8	2144.8
Married, any mention	378.2	540.9	814.1	1494.1	4277.5
Unmarried, 1st listed	559.0	793.6	1234.3	1587.5	3973.7
Unmarried, any mention	922.4	1359.2	2147.1	3104.7	7335.9

*The number of inpatient hospitalizations per 100,000 population in specified group. Any mention of injury/poisoning includes the first-listed and any secondary diagnosis.

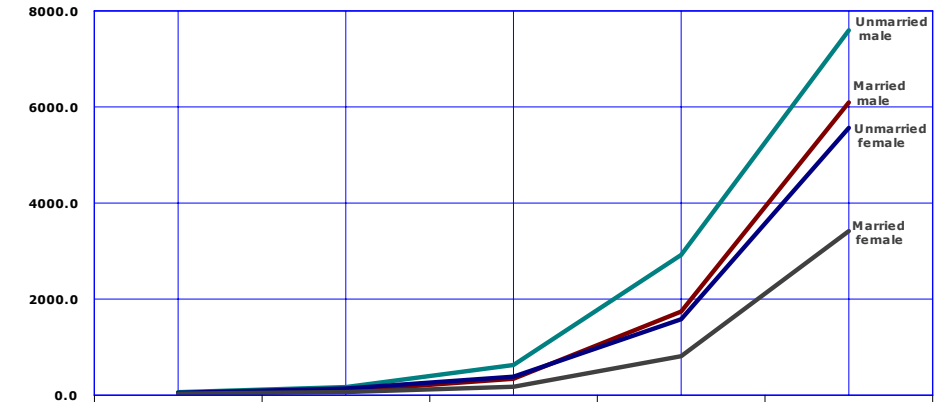
In 2006, there were 51,040 (**Table 7-7**) inpatient discharges with injury and poisoning-related diagnosis among Arizona resident females. Injury and poisoning appeared as first-listed (or primary) diagnosis on 27,002 hospital discharge records for females (**Table 7-6**).

Same as married males, married females had the lowest age-specific inpatient hospitalization rates for injury and poisoning as first-listed diagnosis (**Figure 7-10**). Unmarried females regardless of age were the most likely to have injury and poisoning diagnosis mentioned on the medical record.

In 2006, there were almost 40,000 hospital discharges with first-listed diagnosis of heart disease among males (**Table 7-6**). The corresponding number of hospital discharges among females was below 30,000.

The disparity in hospitalization rates for heart disease by marital status was twice as high for elderly females as elderly males. The hospitalization rate for heart disease among elderly females 65 years or older was 39 percent lower among those who were married (3416.3/100,000) than unmarried (5564.9/100,000). Among elderly males, those who were married had a 19.8 percent lower hospitalization rate for heart disease than those who were unmarried (**Figure 7-11, Table 7-4**).

Figure 7-11
Age-specific Inpatient Hospitalization Rates for Heart Disease as First-listed Diagnosis by Marital Status and Gender, Arizona Residents 18 Years or Older in 2006



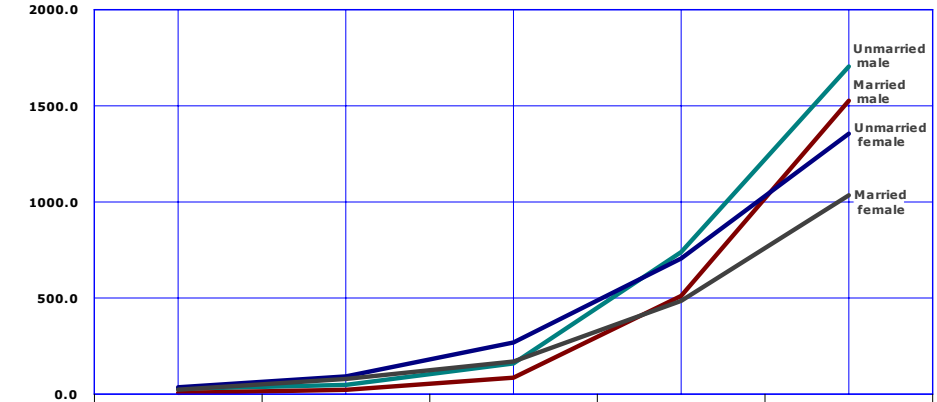
	18-24	25-34	35-44	45-64	65+
Married female	32.1	66.6	175.4	812.4	3416.3
Unmarried female	49.5	138.7	386.7	1580.5	5564.9
Married male	31.6	90.3	342.1	1742.9	6096.0
Unmarried male	64.8	170.0	630.5	2920.9	7596.3

*The number of inpatient hospitalizations per 100,000 population in specified group.

In 2006, 20,775 Arizona residents aged 18 years or older were discharged from short-stay, non-federal hospitals with first-listed diagnosis of cancer (**Table 7-6**). Among Arizonans younger than 45 years old, married males had the lowest hospitalization rates for cancer (**Figure 7-12, Table 7-4**). However, the hospitalization rates for married males sharply increased with age for those older than 44 years old. Relative to males aged 35-44, the hospitalization rate was 6 times greater for those aged 45-64 years, and additional 3 times greater for the elderly 65 years old or older.

The health disadvantage associated with being unmarried was particularly striking among males aged 18-24 years. Relative to married males in this age group, the hospitalization rate for cancer was 4.2 times greater for the unmarried males (27.8 vs. 6.6).

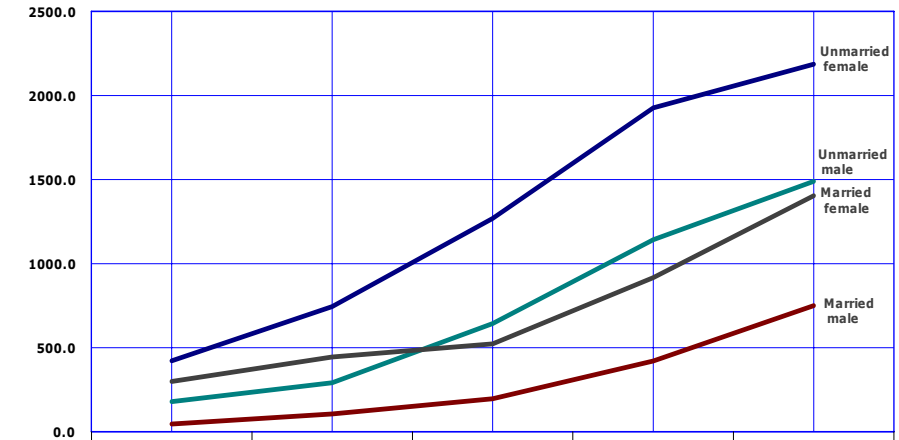
Figure 7-12
Age-specific Inpatient Hospitalization Rates for Malignant Neoplasm (cancer) as First-listed Diagnosis by Marital Status and Gender, Arizona Residents 18 Years or Older in 2006



	18-24	25-34	35-44	45-64	65+
Married female	23.5	79.2	170.0	485.6	1034.8
Unmarried female	36.1	92.9	269.1	706.0	1355.4
Married male	6.6	22.7	85.7	511.7	1526.3
Unmarried male	27.8	48.5	160.3	739.3	1704.7

*The number of inpatient hospitalizations per 100,000 population in specified group.

Figure 7-13
Age-specific Inpatient Hospitalization Rates for any mention of Depression on the Medical Record by Marital Status, Arizona Residents 18 Years or Older in 2006



	18-24	25-34	35-44	45-64	65+
Married female	299.1	444.9	522.5	916.2	1403.8
Unmarried female	422.1	744.6	1268.9	1926.1	2186.2
Married male	46.5	106.0	196.5	420.7	749.8
Unmarried male	179.3	292.0	643.9	1141.8	1489.3

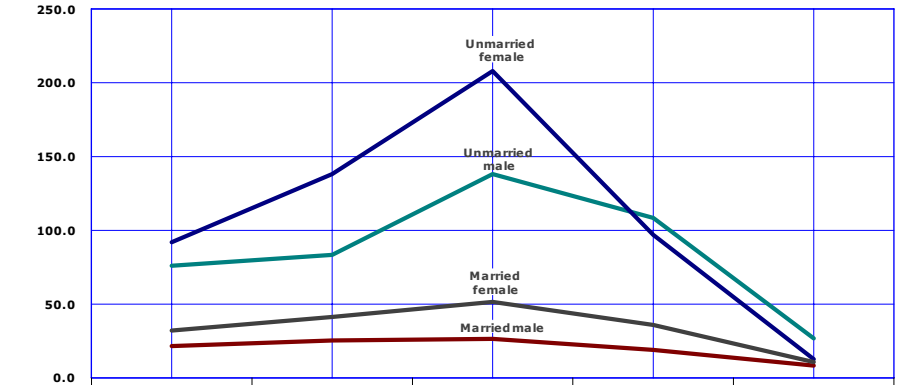
*The number of inpatient hospitalizations per 100,000 population in specified group.

In Arizona, unmarried females aged 18 years or older were more likely than any other group (**Figure 7-13, Table 7-5**) to have the primary or secondary diagnosis of depression reported on the medical record. The lowest depression-related hospitalization rates were among married males.

Depression-related hospitalization rates tend to increase with age. Depression was 16 times more likely to be mentioned on the medical record of married elderly males 65 years or older (749.8/100,000) than married males aged 18-24 years (46.5/100,000) in 2006. The rate ratio for married females was 4.7:1.

In 2006, females accounted for 69.5 percent of the 33,801 depression-related inpatient hospitalizations among Arizona residents (**Table 7-7**).

Figure 7-14
Age-specific Inpatient Hospitalization Rates for any mention of Suicide Attempt on the Medical Record by Marital Status, Arizona Residents 18 Years or Older in 2006



	18-24	25-34	35-44	45-64	65+
Married female	32.1	41.3	51.5	35.9	10.8
Unmarried female	92.0	138.1	207.9	96.9	12.7
Married male	21.6	25.4	26.5	19.0	8.4
Unmarried male	76.0	83.4	138.1	108.4	26.8

*The number of inpatient hospitalizations per 100,000 population in specified group.

In 2006, 1,416 females and 1,065 males aged 18 years or older were admitted to Arizona hospitals following a suicide attempt. Arizonans aged 35-44 years had the highest age-specific hospitalization rates related to attempted suicide for both males and females, married or not (**Figure 7-14, Table 7-5**).

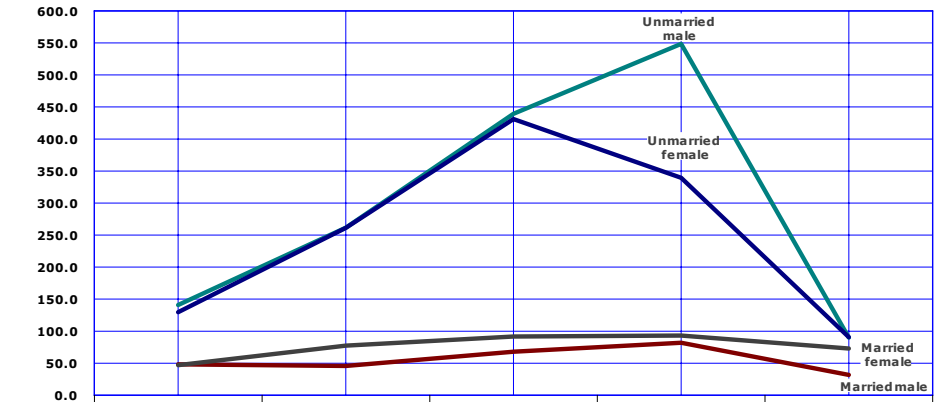
Relative to married females 35-44 years old the hospitalization rate was 4 times greater for unmarried females (51.5/100,000 vs. 207.9/100,000).

The age-specific rates of hospitalizations related to suicide attempt were lower among married males than there were among married females.

Among the elderly 65 years or older, the suicide-related hospitalization rate was 3.2 times greater for the unmarried (26.8/100,000) than it was for married males (8.4/100,000).

Figure 7-15
Age-specific Inpatient Hospitalization Rates for any mention of Drug Dependence on the Medical Record by Marital Status and Gender, Arizona Residents 18 Years or Older in 2006

The highest occurrence of primary or secondary diagnoses of drug dependence was among unmarried males who were hospitalized in 2006 (**Figure 7-15, Table 7-5**). The highest age-specific hospitalization rate related to drug-dependence was among unmarried males 45-64 years old (548.6/100,000). Unmarried females aged 35-44 had the second highest occurrence of drug dependence-related diagnoses

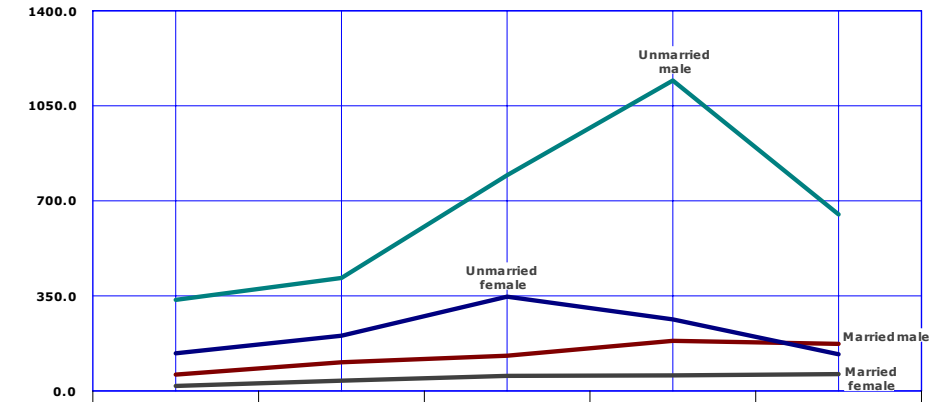


	18-24	25-34	35-44	45-64	65+
Married female	47.0	77.4	91.8	93.1	72.9
Unmarried female	129.5	261.2	431.0	339.5	90.6
Married male	48.2	45.7	68.0	82.0	31.7
Unmarried male	140.8	261.4	439.2	548.6	90.0

*The number of inpatient hospitalizations per 100,000 population in specified group.

Figure 7-16
Age-specific Inpatient Hospitalization Rates for any mention of Alcohol Abuse on the Medical Record by Marital Status and Gender, Arizona Residents 18 Years or Older in 2006

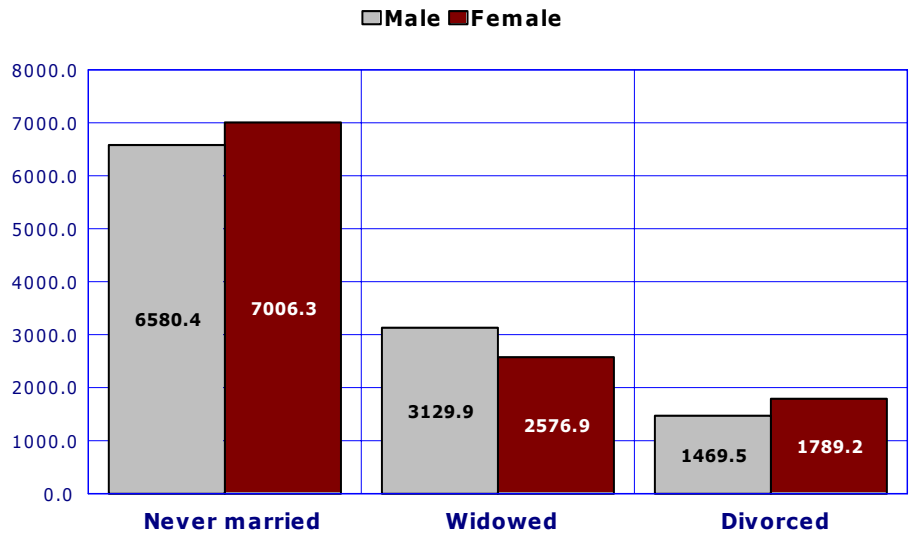
Alcohol abuse as the primary or secondary diagnosis was most likely to be mentioned on hospital discharge records for unmarried adult males of any age (**Figure 7-16, Table 7-5**). Unmarried females younger than 65 years old had the second highest occurrence of any mention of alcohol abuse. The lowest age-specific hospitalization rates related to alcohol abuse were those of married females.



	18-24	25-34	35-44	45-64	65+
Married female	18.5	37.6	55.2	57.4	62.1
Unmarried female	138.7	203.4	347.2	263.6	135.2
Married male	59.8	105.6	129.9	184.7	173.4
Unmarried male	335.6	416.4	794.1	1143.5	649.8

*The number of inpatient hospitalizations per 100,000 population in specified group.

Figure 7-17
Age-adjusted Inpatient Hospitalization Rates by Category of Marital Status, Unmarried Arizona Residents 18 Years or Older in 2006

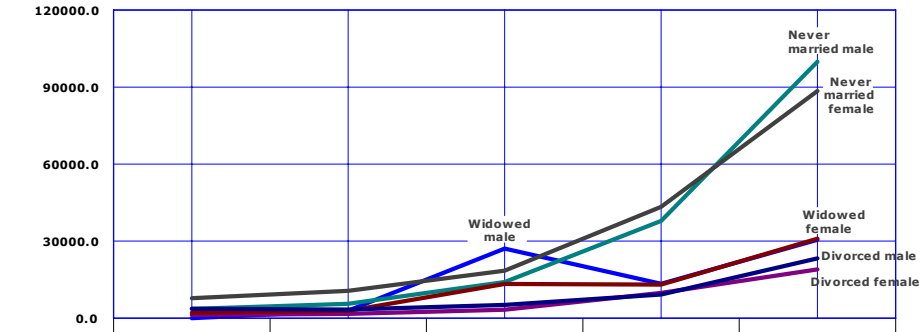


The unmarried people are a highly heterogeneous category encompassing never married, widowed, and divorced individuals. Among these three marital statuses, divorce was associated with the lowest likelihood of inpatient hospitalization for both men and women (**Figure 7-17, Table 7-8**). In fact, the inpatient hospitalization rates for divorced Arizonans were lower than the hospitalization rates for those who were married in 2006.

Interestingly, only among the widowed the hospitalization rates were greater for males than females.

Relative to married males, the hospitalization rate was 4 times greater for never married males (6580.4 vs. 1625.5). Never married females compared to married females had a 3.6 times greater hospitalization rate in 2006 (7006.3 vs. 1948.5).

Figure 7-18
Age-specific Inpatient Hospitalization Rates by Category of Marital Status, Unmarried Arizona Residents 18 Years or Older in 2006



	18-24	25-34	35-44	45-64	65+
Never married female	7782.4	10628.8	18479.6	43363.2	88478.8
Divorced female	3648.4	3378.7	5159.5	9212.1	23328.7
Widowed female	2111.3	2862.4	13279.1	13084.0	30927.5
Never married male	3581.6	5580.3	14070.4	37863.6	99902.3
Divorced male	1203.3	1694.0	3282.3	9789.6	18998.9
Widowed male	0.0	2895.1	27060.9	13372.2	30488.1

*The number of inpatient hospitalizations per 100,000 population in specified group.

For ages 18-64, the age-specific hospitalization rates were higher for never married females than for any other group shown in (**Figure 7-18**) except widowed males aged 35-44 years.

Looking at the hospitalization rates for never married elderly males and females, readers may be tempted to interpret the findings that 99.9 percent of males (99902.3/100,000) and 88.5 percent of females (88478.8/100,000) in this category were hospitalized in 2006. In fact, the numerators used to compute these rates are hospital discharges, not individuals. A person who has been hospitalized more than once in a given calendar year will be counted multiple times as a discharge and included more than once in the hospital inpatient discharge data set; thus, the numbers used to compute the hospitalization rates are for discharges, not persons.

TABLE 7-1

TOTAL AGE-ADJUSTED INPATIENT HOSPITALIZATION* RATES, STANDARD ERRORS AND 95 PERCENT CONFIDENCE LIMITS BY MARITAL STATUS AND GENDER, ARIZONA RESIDENTS 18 YEARS OR OLDER IN 2006

Category of marital status	Gender	Age-adjusted mortality rate**	Standard error	95 percent confidence limits	
				Lower	Upper
Married	**Male**	**1626.5**	46.9	1534.6	1718.4
	Female	**1948.5**	60.9	1829.1	2067.9
Unmarried	**Male**	**3080.4**	141.2	2803.3	3357.2
	Female	**3106.0**	167.5	2777.7	3434.3
All groups	**Male**	**2062.6**	206.3	1658.3	2467.0
	Female	**2391.2**	234.7	1931.2	2851.2

*Excluding labor/delivery.

**The number of inpatient hospitalizations for all conditions per 100,000 population in specified group age-adjusted to the 2000 standard U.S. population.

TABLE 7-2
AGE-ADJUSTED INPATIENT HOSPITALIZATION* RATES FOR SELECTED FIRST-LISTED DIAGNOSES BY MARITAL STATUS AND GENDER, ARIZONA RESIDENTS 18 YEARS OR OLDER IN 2006

	Male			Female		
	Married	Unmarried	Total	Married	Unmarried	Total
All conditions	1626.5	3080.4	2062.6	1948.5	3106.0	2391.2
Heart disease	331.0	469.0	366.8	175.9	307.4	231.0
Disease of the digestive system	198.3	374.8	251.8	227.2	382.7	286.0
Disease of the respiratory system	141.7	325.1	190.9	127.2	280.6	189.0
Disease of the musculoskeletal system and connective tissue	138.7	160.6	146.9	149.4	193.5	164.4
Disease of the genitourinary system	81.3	152.5	101.1	151.3	229.9	183.6
Malignant neoplasms (cancer)	87.3	111.8	94.1	75.2	104.5	86.6
Injury and poisoning	168.5	410.0	251.5	151.9	327.8	223.2
Endocrine, nutritional and metabolic disease, and immunity disorders	52.0	130.4	76.1	64.5	130.9	90.6
Mental disorders	30.5	188.9	83.0	37.7	141.9	75.6
Disease of the skin and subcutaneous tissue	35.0	114.8	60.6	28.9	78.4	46.8

*Number of inpatient hospitalizations (excluding labor/delivery) per 100,000 population in specified group adjusted to the 2000 U.S. standard population.

TABLE 7-3
AGE-ADJUSTED INPATIENT HOSPITALIZATION* RATES FOR SELECTED ALL-LISTED DIAGNOSES BY MARITAL STATUS AND GENDER, ARIZONA RESIDENTS 18 YEARS OR OLDER IN 2006

	Male			Female		
	Married	Unmarried	Total	Married	Unmarried	Total
All conditions	1626.5	3080.4	2062.6	1948.5	3106.0	2391.2
Any mention of diabetes	374.4	679.0	457.7	307.8	625.6	428.2
Any mention of asthma	71.4	139.6	93.6	158.9	299.1	209.7
Any mention of injury and poisoning	336.7	752.6	471.2	300.2	603.1	421.3
Any mention of fall-related injury	31.4	71.7	42.3	41.9	95.3	66.6
Any mention of mental disorders	387.9	1289.5	658.8	448.6	1113.6	700.3
Any mention of obesity	27.4	52.7	35.2	54.2	104.4	70.8
Any mention of suicide attempt	4.1	18.5	9.3	7.1	22.8	12.8
Any mention of drug dependence	11.9	68.3	30.3	16.1	55.2	29.6
Any mention of depression	64.4	162.5	93.5	149.5	283.4	198.0
Any mention of alcohol abuse	28.1	149.2	66.9	9.8	46.6	23.3

*Number of inpatient hospitalizations (excluding labor/delivery) per 100,000 population in specified group adjusted to the 2000 U.S. standard population.

TABLE 7-4
AGE-SPECIFIC INPATIENT HOSPITALIZATION* RATES FOR SELECTED FIRST-LISTED DIAGNOSES BY MARITAL STATUS AND GENDER, ARIZONA RESIDENTS 18 YEARS OR OLDER IN 2006

				First-listed diagnosis									
			All diagnoses	Heart disease	Disease of the digestive system	Disease of the respiratory system	Disease of the muscosceletal system and connective tissue	Disease of the genitourinary system	Malignant neoplasms (cancer)	Injury and poisoning	Endocrine, nutritional and metabolic disease, and immunity disorders	Mental disorders	Disease of the skin and subcutaneous tissue
Male	**Married**	**18-24**	1206.4	31.6	252.6	94.7	46.5	28.2	6.6	367.2	33.2	116.3	61.5
		25-34	2073.7	90.3	429.8	91.0	134.4	73.0	22.7	417.1	86.4	101.8	94.1
		35-44	3466.5	342.1	673.6	191.8	294.8	139.1	85.7	536.2	147.2	155.0	152.0
		45-64	8277.8	1742.9	1055.9	553.2	807.4	351.8	511.7	814.0	301.7	146.0	205.9
		65+	25620.2	6096.0	2448.5	2772.7	2096.9	1490.9	1526.3	2103.0	690.4	241.9	322.8
	Unmarried	**18-24**	3546.1	64.8	548.8	214.8	121.5	93.3	27.8	1226.1	178.6	424.6	188.2
		25-34	4972.0	170.0	777.2	299.6	220.9	181.3	48.5	1320.2	275.1	745.6	367.9
		35-44	9658.9	630.5	1490.6	596.8	495.1	355.0	160.3	1681.9	484.3	1198.9	663.5
		45-64	19226.6	2920.9	2499.3	1790.1	1101.2	733.0	739.3	2367.7	905.8	1265.9	821.1
		65+	36228.0	7596.3	3448.3	5149.4	1816.6	2468.8	1704.7	3370.4	1185.1	659.5	537.8
	Total	**18-24**	3105.3	58.5	493.0	192.2	107.4	81.1	23.8	1064.3	151.2	366.6	164.3
		25-34	3375.6	126.1	585.8	184.7	173.3	121.7	34.3	822.8	171.2	391.0	217.1
		35-44	5543.8	438.8	947.7	327.6	362.0	211.5	110.7	920.5	260.3	505.2	323.6
		45-64	11040.3	2040.1	1420.1	865.3	881.5	448.0	569.1	1206.0	454.1	428.5	361.1
		65+	28064.7	6441.7	2678.9	3320.4	2032.3	1716.3	1567.4	2395.1	804.4	338.2	372.4
Female	**Married**	**18-24**	7544.7	32.1	504.3	93.9	39.6	206.4	23.5	180.5	96.4	89.0	39.6
		25-34	7712.9	66.6	618.7	137.6	99.7	514.1	79.2	283.5	157.4	165.2	69.6
		35-44	5695.4	175.4	791.7	224.8	241.8	884.8	170.0	425.0	241.8	192.7	121.6
		45-64	8554.8	812.4	1250.3	656.6	841.4	769.1	485.6	755.8	379.4	191.4	177.9
		65+	20876.8	3416.3	2412.1	2072.4	2460.7	1245.9	1034.8	2144.8	674.4	278.1	274.5
	Unmarried	**18-24**	7665.0	49.5	724.5	220.5	78.6	414.7	36.1	559.0	240.9	365.7	98.9
		25-34	8672.1	138.7	1138.9	331.5	221.0	729.5	92.9	793.6	328.4	593.3	267.5
		35-44	11201.3	386.7	1658.1	664.7	518.9	1253.6	269.1	1234.3	530.1	977.3	460.8
		45-64	16102.2	1580.5	2170.9	1633.7	1225.7	1129.3	706.0	1587.5	792.4	809.9	470.4
		65+	33400.6	5564.9	3520.7	3991.9	2563.2	2058.3	1355.4	3973.7	1235.6	572.3	519.9
	Total	**18-24**	7632.2	44.8	664.5	186.1	68.0	358.0	32.6	455.9	201.5	290.4	82.8
		25-34	8069.8	93.4	812.2	209.8	144.8	594.3	84.3	473.3	221.0	324.5	143.2
		35-44	7324.7	237.9	1048.1	355.0	323.8	994.0	199.3	664.5	327.1	424.9	222.0
		45-64	10960.9	1057.3	1543.8	968.1	963.9	883.9	555.9	1021.0	511.1	388.6	271.1
		65+	27101.7	4484.3	2963.1	3026.5	2511.6	1649.7	1194.2	3053.8	953.4	424.3	396.5

*Number of inpatient hospitalizations per 100,000 persons in specified group.

TABLE 7-5
AGE-SPECIFIC INPATIENT HOSPITALIZATION RATES FOR SELECTED ALL-LISTED* DIAGNOSES BY MARITAL STATUS AND GENDER, ARIZONA RESIDENTS 18 YEARS OR OLDER IN 2006

			Any mention of									
			Diabetes	Asthma	Injury and poisoning	Fall injury	Morbid obesity	Mental disorders	Suicide attempt	Drug dependence	Depression	Alcohol abuse
Male	**Married**	**18-24**	48.2	88.1	496.8	36.6	16.6	448.6	21.6	48.2	46.5	59.8
		25-34	192.0	112.5	575.8	39.9	64.1	748.6	25.4	45.7	106.0	105.6
		35-44	555.9	198.6	836.8	51.7	117.6	1323.0	26.5	68.0	196.5	129.9
		45-64	2186.9	368.5	1622.6	90.8	221.9	2419.8	19.0	82.0	420.7	184.7
		65+	6194.7	1005.3	4967.2	625.6	183.3	4295.0	8.4	31.7	749.8	173.4
	Unmarried	**18-24**	213.7	249.2	1567.8	72.9	48.2	1656.2	76.0	140.8	179.3	335.6
		25-34	500.2	337.2	1849.7	86.2	128.1	2676.3	83.4	261.4	292.0	416.4
		35-44	1595.0	535.5	2731.3	140.1	265.4	5694.3	138.1	439.2	643.9	794.1
		45-64	4757.3	939.4	4459.9	317.8	455.2	9680.5	108.4	548.6	1141.8	1143.5
		65+	8827.6	1209.5	7579.2	1220.4	231.2	9406.8	26.8	90.0	1489.3	649.8
	Total	**18-24**	182.5	218.8	1366.1	66.0	42.3	1428.7	65.7	123.3	154.3	283.6
		25-34	330.5	213.5	1148.0	60.7	92.9	1614.5	51.4	142.6	189.6	245.2
		35-44	904.5	311.6	1472.3	81.3	167.2	2789.4	63.9	192.5	346.6	352.7
		45-64	2835.5	512.5	2338.4	148.1	280.8	4251.7	41.6	199.7	602.6	426.6
		65+	6801.5	1052.3	5569.1	762.7	194.3	5473.0	12.6	45.1	920.2	283.2
Female	**Married**	**18-24**	238.6	495.6	378.2	9.9	118.7	938.1	32.1	47.0	299.1	18.5
		25-34	374.6	540.9	540.9	18.2	224.0	1373.1	41.3	77.4	444.9	37.6
		35-44	636.3	527.9	814.1	33.5	275.3	1687.7	51.5	91.8	522.5	55.2
		45-64	1852.7	875.3	1494.1	124.8	369.4	2553.0	35.9	93.1	916.2	57.4
		65+	4383.2	1493.8	4277.5	942.2	258.3	4331.5	10.8	72.9	1403.8	62.1
	Unmarried	**18-24**	346.3	687.9	922.4	23.1	143.8	2110.1	92.0	129.5	422.1	138.7
		25-34	839.4	998.9	1359.2	38.3	388.0	3476.3	138.1	261.2	744.6	203.4
		35-44	1838.5	1386.6	2147.1	85.4	616.3	5444.7	207.9	431.0	1268.9	347.2
		45-64	4238.8	1851.9	3104.7	258.3	810.3	6593.4	96.9	339.5	1926.1	263.6
		65+	7393.7	2153.5	7335.9	2175.3	322.8	8784.6	12.7	90.6	2186.2	135.2
	Total	**18-24**	317.0	635.6	774.2	19.5	136.9	1791.0	75.7	107.0	388.6	106.0
		25-34	547.5	711.3	845.4	25.7	285.0	2155.6	77.3	145.8	556.4	99.3
		35-44	992.1	782.0	1208.6	48.9	376.2	2799.5	97.8	192.2	743.4	141.6
		45-64	2613.4	1186.7	2007.6	167.4	510.0	3841.1	55.4	171.7	1238.1	123.1
		65+	5879.6	1821.7	5797.7	1555.1	290.3	6544.9	11.8	81.7	1792.7	98.4

*All-listed diagnoses include first-listed diagnoses and secondary diagnoses for diabetes, asthma, etc. The rate is the number of all occurrences of diagnoses related to diabetes or asthma per 100,000 persons in specified group.

TABLE 7-6

NUMBER OF INPATIENT HOSPITALIZATIONS FOR SELECTED FIRST-LISTED DIAGNOSES BY MARITAL STATUS AND GENDER, ARIZONA RESIDENTS 18 YEARS OR OLDER IN 2006

			All inpatient hospitalizations	First-listed diagnosis									
				Heart disease	Disease of the digestive system	Disease of the respiratory system	Disease of the muscosceletal system and connective tissue	Disease of the genitourinary system	Malignant neoplasms (cancer)	Injury and poisoning	Endocrine, nutritional and metabolic disease	Mental disorders,	Disease of the skin and subcutaneous tissue
Male	**Married**	**18-24**	726	19	152	57	28	17	4	221	20	70	37
		25-34	5,399	235	1,119	237	350	190	59	1,086	225	265	245
		35-44	10,195	1,006	1,981	564	867	409	252	1,577	433	456	447
		45-64	42,303	8,907	5,396	2,827	4,126	1,798	2,615	4,160	1,542	746	1,052
		65+	70,317	16,731	6,720	7,610	5,755	4,092	4,189	5,772	1,895	664	886
		Total	128,940	26,898	15,368	11,295	11,126	6,506	7,119	12,816	4,115	2,201	2,667
	Unmarried	**18-24**	9,194	168	1,423	557	315	242	72	3,179	463	1,101	488
		25-34	10,556	361	1,650	636	469	385	103	2,803	584	1,583	781
		35-44	14,340	936	2,213	886	735	527	238	2,497	719	1,780	985
		45-64	33,156	5,037	4,310	3,087	1,899	1,264	1,275	4,083	1,562	2,183	1,416
		65+	29,774	6,243	2,834	4,232	1,493	2,029	1,401	2,770	974	542	442
		Total	97,020	12,745	12,430	9,398	4,911	4,447	3,089	15,332	4,302	7,189	4,112
	Total	**18-24**	9,920	187	1,575	614	343	259	76	3,400	483	1,171	525
		25-34	15,955	596	2,769	873	819	575	162	3,889	809	1,848	1,026
		35-44	24,535	1,942	4,194	1,450	1,602	936	490	4,074	1,152	2,236	1,432
		45-64	75,459	13,944	9,706	5,914	6,025	3,062	3,890	8,243	3,104	2,929	2,468
		65+	100,091	22,974	9,554	11,842	7,248	6,121	5,590	8,542	2,869	1,206	1,328
		Total	225,960	39,643	27,798	20,693	16,037	10,953	10,208	28,148	8,417	9,390	6,779
Female	**Married**	**18-24**	6,104	26	408	76	32	167	19	146	78	72	32
		25-34	20,733	179	1,663	370	268	1,382	213	762	423	444	187
		35-44	16,819	518	2,338	664	714	2,613	502	1,255	714	569	359
		45-64	41,889	3,978	6,122	3,215	4,120	3,766	2,378	3,701	1,858	937	871
		65+	46,400	7,593	5,361	4,606	5,469	2,769	2,300	4,767	1,499	618	610
		Total	131,945	12,294	15,892	8,931	10,603	10,697	5,412	10,631	4,572	2,640	2,059
	Unmarried	**18-24**	16,579	107	1,567	477	170	897	78	1,209	521	791	214
		25-34	13,813	221	1,814	528	352	1,162	148	1,264	523	945	426
		35-44	13,903	480	2,058	825	644	1,556	334	1,532	658	1,213	572
		45-64	36,901	3,622	4,975	3,744	2,809	2,588	1,618	3,638	1,816	1,856	1,078
		65+	73,363	12,223	7,733	8,768	5,630	4,521	2,977	8,728	2,714	1,257	1,142
		Total	154,559	16,653	18,147	14,342	9,605	10,724	5,155	16,371	6,232	6,062	3,432
	Total	**18-24**	22,683	133	1,975	553	202	1,064	97	1,355	599	863	246
		25-34	34,546	400	3,477	898	620	2,544	361	2,026	946	1,389	613
		35-44	30,722	998	4,396	1,489	1,358	4,169	836	2,787	1,372	1,782	931
		45-64	78,790	7,600	11,097	6,959	6,929	6,354	3,996	7,339	3,674	2,793	1,949
		65+	119,763	19,816	13,094	13,374	11,099	7,290	5,277	13,495	4,213	1,875	1,752
		Total	286,504	28,947	34,039	23,273	20,208	21,421	10,567	27,002	10,804	8,702	5,491

TABLE 7-7
NUMBER OF INPATIENT HOSPITALIZATIONS FOR SELECTED ALL-LISTED* DIAGNOSES BY MARITAL STATUS, GENDER, AND AGE GROUP, ARIZONA RESIDENTS 18 YEARS OR OLDER IN 2006

			Any mention of									
			Diabetes	Asthma	Injury and poisoning	Fall injury	Mental disorders	Morbid obesity	Suicide attempt	Drug dependence	Depression	Alcohol abuse
Male	Married	18-24	29	53	299	22	270	10	13	29	28	36
		25-34	500	293	1,499	104	1,949	167	66	119	276	275
		35-44	1,635	584	2,461	152	3,891	346	78	200	578	382
		45-64	11,176	1,883	8,292	464	12,366	1,134	97	419	2,150	944
		65+	17,002	2,759	13,633	1,717	11,788	503	23	87	2,058	476
		Total	30,342	5,572	26,184	2,459	30,264	2,160	277	854	5,090	2,113
	Unmarried	18-24	554	646	4,065	189	4,294	125	197	365	465	870
		25-34	1,062	716	3,927	183	5,682	272	177	555	620	884
		35-44	2,368	795	4,055	208	8,454	394	205	652	956	1,179
		45-64	8,204	1,620	7,691	548	16,694	785	187	946	1,969	1,972
		65+	7,255	994	6,229	1,003	7,731	190	22	74	1,224	534
		Total	19,443	4,771	25,967	2,131	42,855	1,766	788	2,592	5,234	5,439
	Total	18-24	583	699	4,364	211	4,564	135	210	394	493	906
		25-34	1,562	1,009	5,426	287	7,631	439	243	674	896	1,159
		35-44	4,003	1,379	6,516	360	12,345	740	283	852	1,534	1,561
		45-64	19,380	3,503	15,983	1,012	29,060	1,919	284	1,365	4,119	2,916
		65+	24,257	3,753	19,862	2,720	19,519	693	45	161	3,282	1,010
		Total	49,785	10,343	52,151	4,590	73,119	3,926	1,065	3,446	10,324	7,552
Female	Married	18-24	193	401	306	8	759	96	26	38	242	15
		25-34	1,007	1,454	1,454	49	3,691	602	111	208	1,196	101
		35-44	1,879	1,559	2,404	99	4,984	813	152	271	1,543	163
		45-64	9,072	4,286	7,316	611	12,501	1,809	176	456	4,486	281
		65+	9,742	3,320	9,507	2,094	9,627	574	24	162	3,120	138
		Total	21,893	11,020	20,987	2,861	31,562	3,894	489	1,135	10,587	698
	Unmarried	18-24	749	1,488	1,995	50	4,564	311	199	280	913	300
		25-34	1,337	1,591	2,165	61	5,537	618	220	416	1,186	324
		35-44	2,282	1,721	2,665	106	6,758	765	258	535	1,575	431
		45-64	9,714	4,244	7,115	592	15,110	1,857	222	778	4,414	604
		65+	16,240	4,730	16,113	4,778	19,295	709	28	199	4,802	297
		Total	30,322	13,774	30,053	5,587	51,264	4,260	927	2,208	12,890	1,956
	Total	18-24	942	1,889	2,301	58	5,323	407	225	318	1,155	315
		25-34	2,344	3,045	3,619	110	9,228	1,220	331	624	2,382	425
		35-44	4,161	3,280	5,069	205	11,742	1,578	410	806	3,118	594
		45-64	18,786	8,530	14,431	1,203	27,611	3,666	398	1,234	8,900	885
		65+	25,982	8,050	25,620	6,872	28,922	1,283	52	361	7,922	435
		Total	52,215	24,794	51,040	8,448	82,826	8,154	1,416	3,343	23,477	2,654

*All-listed diagnoses include first-listed diagnoses and secondary diagnoses for diabetes, asthma, etc

TABLE 7-8

TOTAL AGE-ADJUSTED INPATIENT HOSPITALIZATION* RATES, STANDARD ERRORS AND 95 PERCENT CONFIDENCE LIMITS BY CATEGORY OF MARITAL STATUS AND GENDER, FOR UNMARRIED ARIZONA RESIDENTS 18 YEARS OR OLDER IN 2006

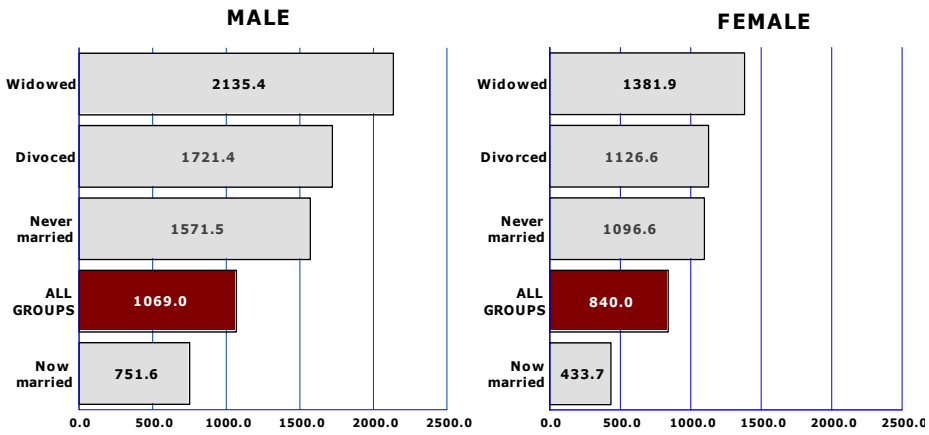
Category of marital status	Gender	Age-adjusted mortality rate**	Standard error	95 percent confidence limits	
				Lower	Upper
Never married	**Male**	**6580.4**	298.6	5995.1	7165.7
	Female	**7006.3**	312.2	6394.4	7618.2
Divorced	**Male**	**1469.5**	127.9	1218.9	1720.2
	Female	**1789.2**	135.4	1523.8	2054.6
Widowed	**Male**	**3129.9**	450.4	2247.1	4012.7
	Female	**2576.9**	319.7	1950.3	3203.5
Total	**Male**	**3080.4**	141.2	2803.3	3357.2
	Female	**3106.0**	167.5	2777.7	3434.3

*Excluding labor/delivery.

**The number of inpatient hospitalizations for all conditions per 100,000 population in specified group age-adjusted to the 2000 standard U.S. population.

MORTALITY

Figure 8-1
Age-adjusted Mortality Rates for All Causes by Category of Marital Status, Arizona Residents 18 years or Older in 2006

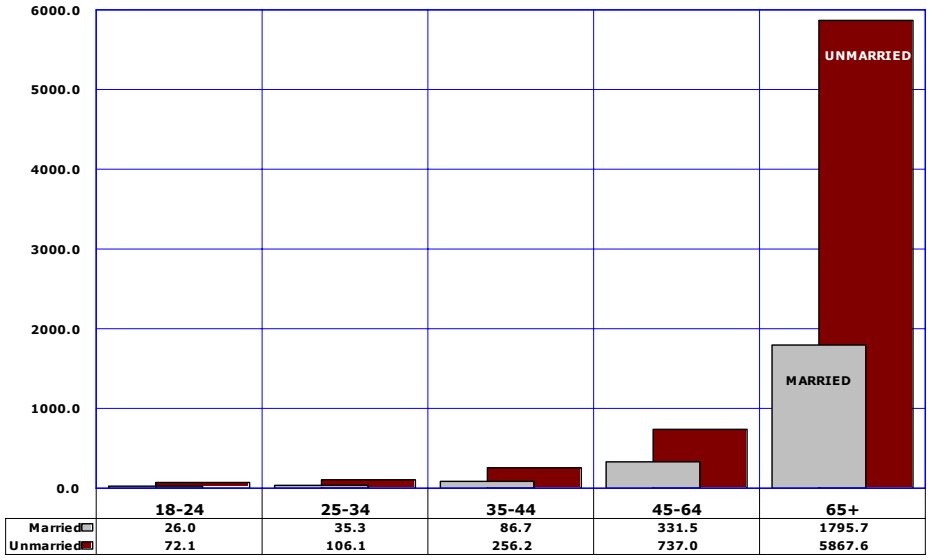


Numerous studies have shown association between marital status and mortality, with the majority of them finding a higher mortality risk in unmarried compared to married men and women.

In 2006, relative to married males or females, the mortality rates were substantially greater for the never-married, the divorced, and the widowed (**Figure 8-1, Table 8-1**).

Compared to married females aged 18 years or older in 2006, the age-adjusted mortality rate was 3.2 times greater among the widowed. The mortality risk of widowed relative to married males was 2.8 times greater.

Figure 8-2
Age-specific Total Mortality Rates* by Marital Status among Arizona Females 18 Years or Older in 2006

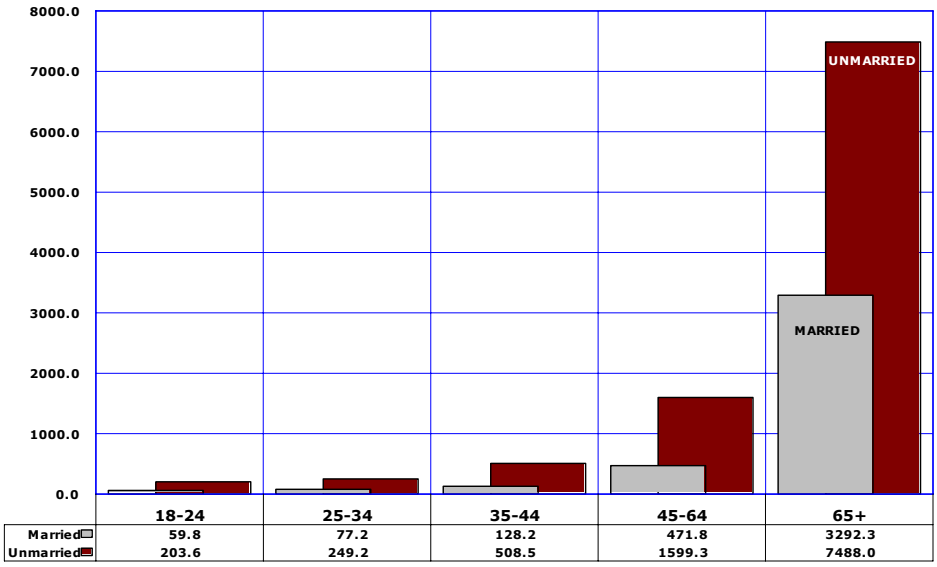


The mortality disadvantage associated with being unmarried was seen in every age group among Arizona females (**Figure 8-2, Table 8-3**). In particular, the mortality rate was 3.3 times greater for the unmarried than the married females aged 65 years or older 5867.6/100,000 vs. 1795.7/100,000.

*The number of deaths from all causes per 100,000 females in specified group.

Figure 8-3
Age-specific Total Mortality Rates* by Marital Status among Arizona Males 18 Years or Older in 2006

The same age-specific pattern of mortality applied to Arizona males 18 years or older in 2006 (**Figure 8-3, Table 8-3**). In particular, the mortality rate was 4 times greater for the unmarried than the married males aged 35-44 years (508.5/100,000 vs. 128.2/100,000).



	18-24	25-34	35-44	45-64	65+
Married	59.8	77.2	128.2	471.8	3292.3
Unmarried	203.6	249.2	508.5	1599.3	7488.0

*The number of deaths from all causes per 100,000 males in specified group.

Figure 8-4
Age-adjusted Mortality Rates* for the Leading Causes of Death by Marital Status among Arizona Males 18 Years or Older in 2006

Leading causes of death are the most frequent causes of mortality. (**Figure 8-4, Table 8-4**) shows the age-adjusted mortality rates among married and unmarried males for the top 10 causes of death of Arizona residents in 2006. Mortality rates were higher for unmarried than married males for each of the 10 leading causes of death.

The magnitude of marital status differences for males varied by the underlying cause of death. Unmarried compared to married males had a 4.4 times greater mortality rates for chronic liver disease and cirrhosis, 3.7 times greater for suicide, and 3.4 times for accidents.

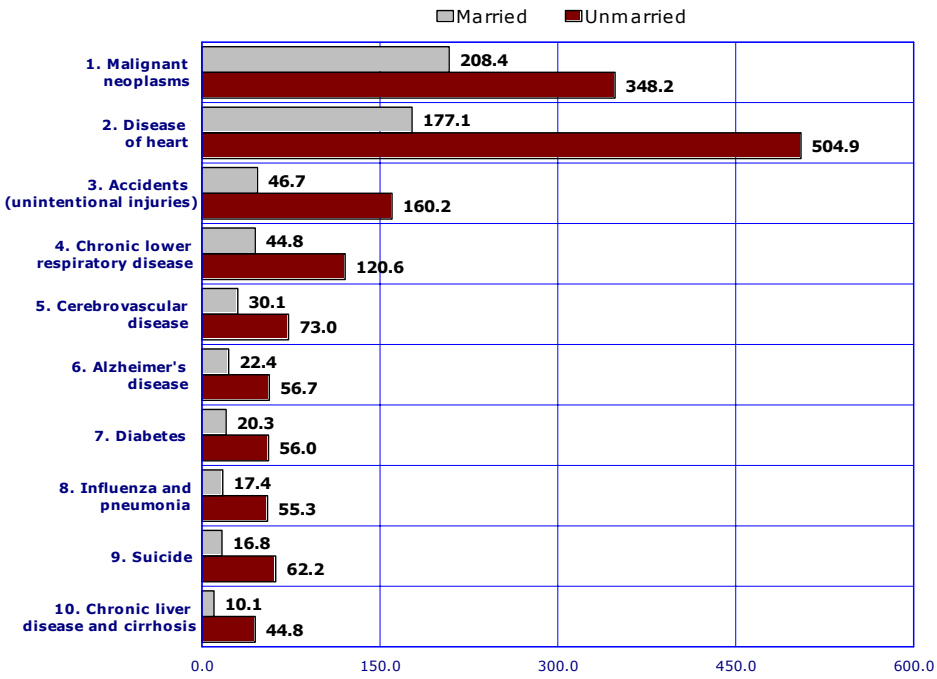
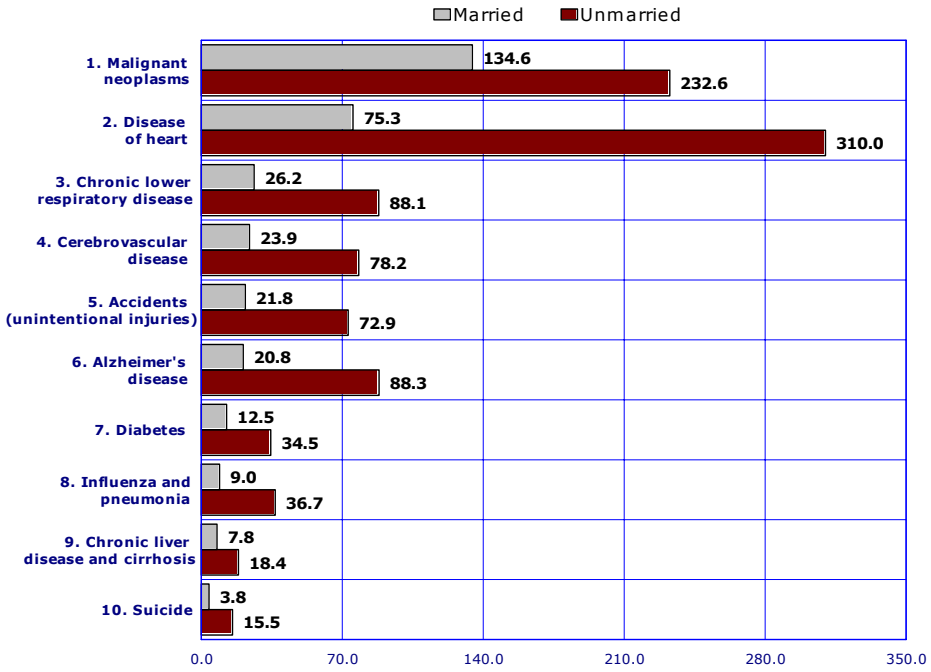
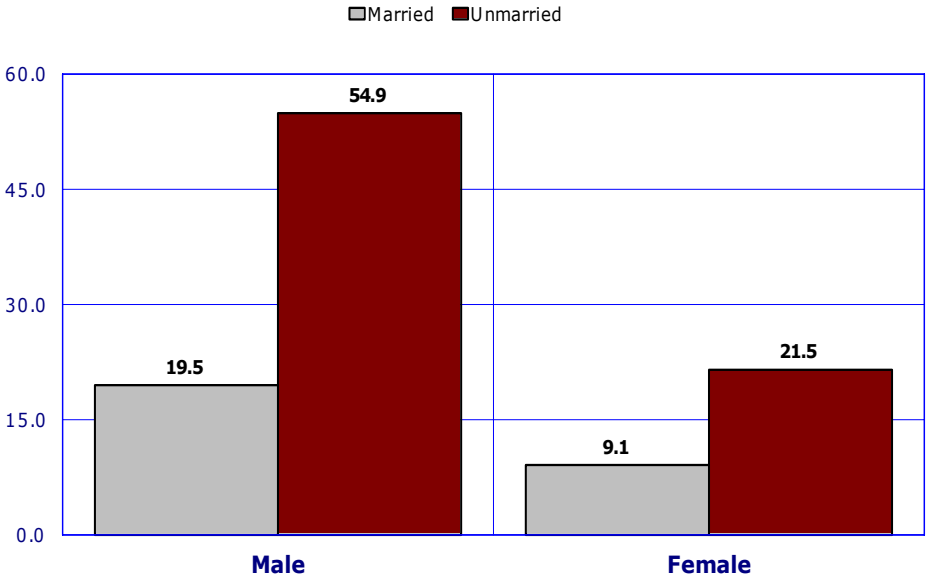


Figure 8-5
Age-adjusted Mortality Rates* for the Leading Causes of Deaths by Marital Status among Arizona Females 18 Years or Older in 2006



(**Figure 8-5, Table 8-4**) compares the age-adjusted mortality rates by marital status among Arizona females. All cause-specific mortality rates were higher for unmarried than married females. The mortality differences by marital status were particularly pronounced for Alzheimer's disease, unmarried compared to married females had a 4.2 times greater mortality risk; influenza and pneumonia, diseases of heart and suicide 4.1 times greater; accidents and cerebrovascular disease 3.3 times greater.

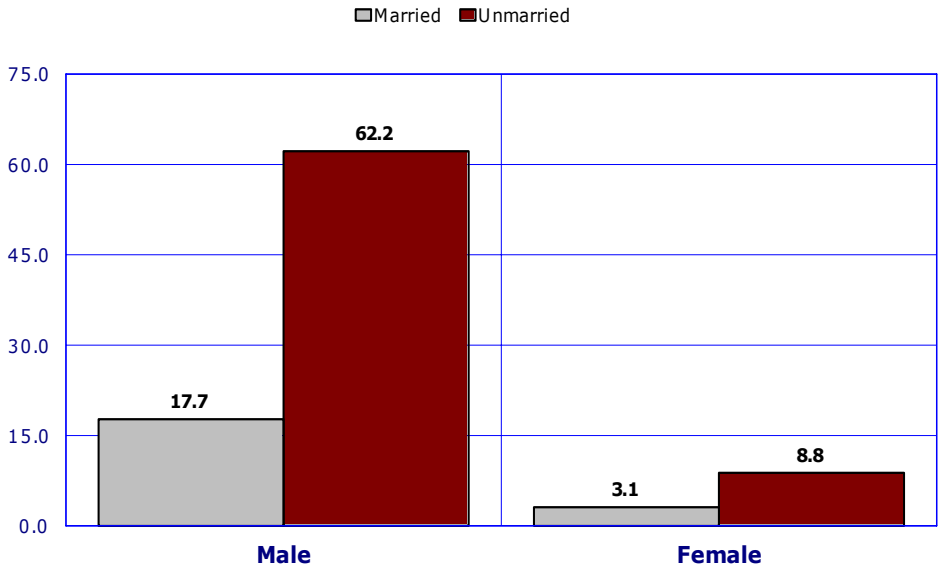
Figure 8-6
Age-adjusted Mortality Rates for Motor Vehicle-Related Injuries by Marital Status and Gender among Arizonans 18 Years or Older in 2006



The premiums charged by insurance companies are higher for unmarried male or female drivers, particularly those under the age of 25. Evidently, the insurance companies use certain assumptions about the presence of a spouse and the effects of discouraging certain risky behaviors like drinking and driving or speeding.

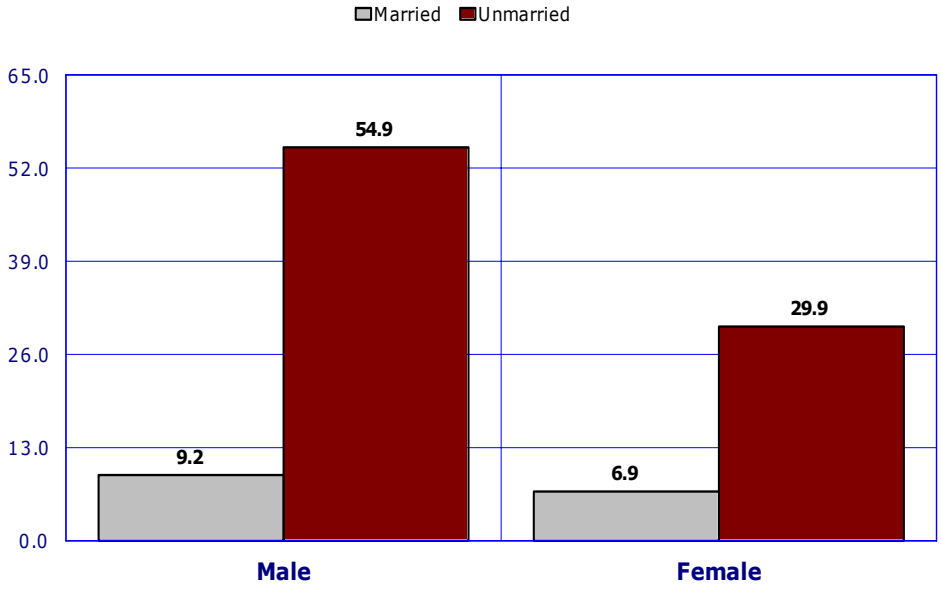
Compared with married men, unmarried men had a 2.8 times greater risk of mortality from motor vehicle-related injuries (54.9/100,000 vs. 19.5/100,000; **Figure 8-6, Table 8-4**). The risk of unmarried females relative to married females was 2.4 times greater.

Figure 8-7
Age-adjusted Mortality Rates for Injury by Firearms by Marital Status and Gender among Arizonans 18 Years or Older in 2006



Deaths from injury by firearms include accidental discharge of firearms, suicide by firearms, and homicide by discharge of firearms; discharge of firearms, undetermined intent, and legal intervention involving firearm discharge. The age –adjusted mortality rates for injury by firearms were higher for unmarried than they were for married males and females (**Figure 8-7, Table 8-4**).

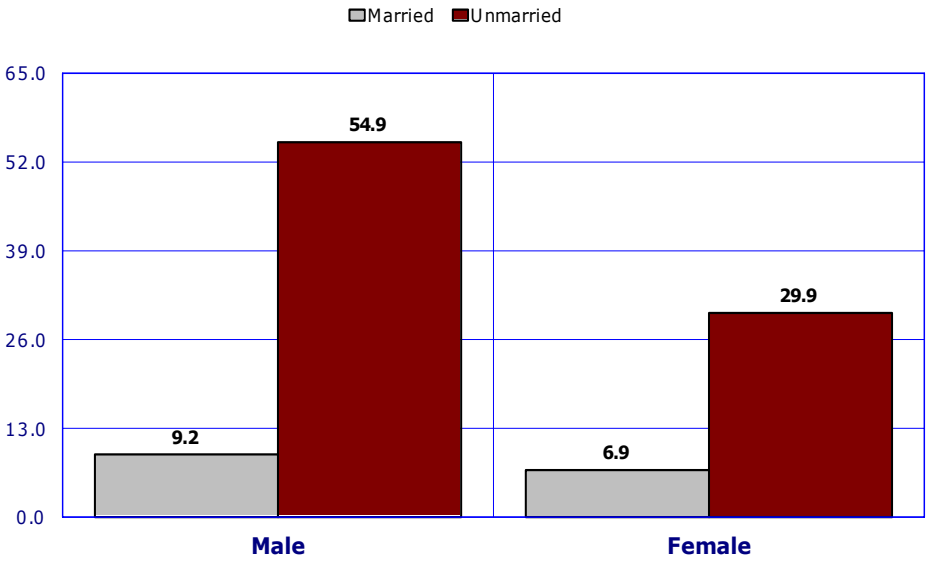
Figure 8-8
Age-adjusted Mortality Rates for Drug-Induced Deaths by Marital Status and Gender among Arizonans 18 Years or Older in 2006



*The number of suicides per 100,000 population in specified group.

The category of drug-induced deaths includes drug overdose and other accidents, suicides, homicides and other causes directly related to drug use. In 2006, relative to married males the age-adjusted mortality rate for drug-induced deaths was 6 times greater for unmarried males (54.9/100,000 vs. 9.2/100,000). Unmarried compared to married females had a 4.3 times greater mortality rate for drug-induced deaths (29.9/100,000 vs. 6.9/100,000; **Figure 8-8, Table 8-4**).

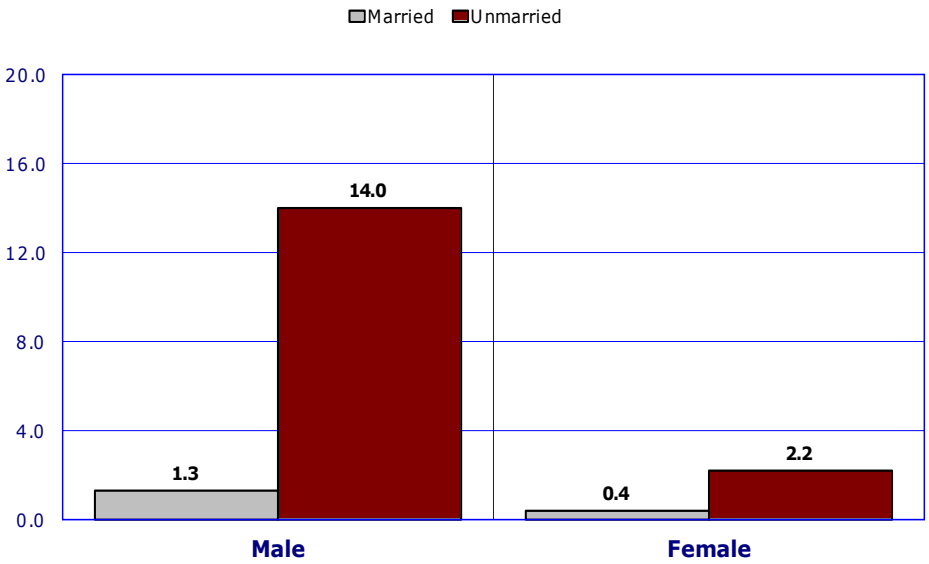
Figure 8-9
Age-adjusted Mortality Rates for Alcohol-Induced Deaths by Marital Status and Gender among Arizonans 18 Years or Older in 2006



The category of alcohol-induced deaths includes accidents, suicides, homicides, and other causes directly related to alcohol use.

In 2006, relative to married males the age-adjusted mortality rate for alcohol-induced deaths was 6 times greater for unmarried males (52.0/100,000 vs. 8.7/100,000). Unmarried compared to married females had a 3.3 times greater mortality rate for alcohol-induced deaths (14.0/100,000 vs. 4.3/100,000; **Figure 8-9, Table 8-4**).

Figure 8-10
Age-adjusted Mortality Rates for HIV Disease by Marital Status and Gender among Arizonans 18 Years or Older in 2006



The Human Immunodeficiency Virus (HIV) disease is not among the leading causes of death in Arizona. In 2006, among the 45,415 resident deaths, 133 or 0.3 percent had HIV disease as the underlying cause of death. Males accounted for 82.7 percent of deaths from this cause.

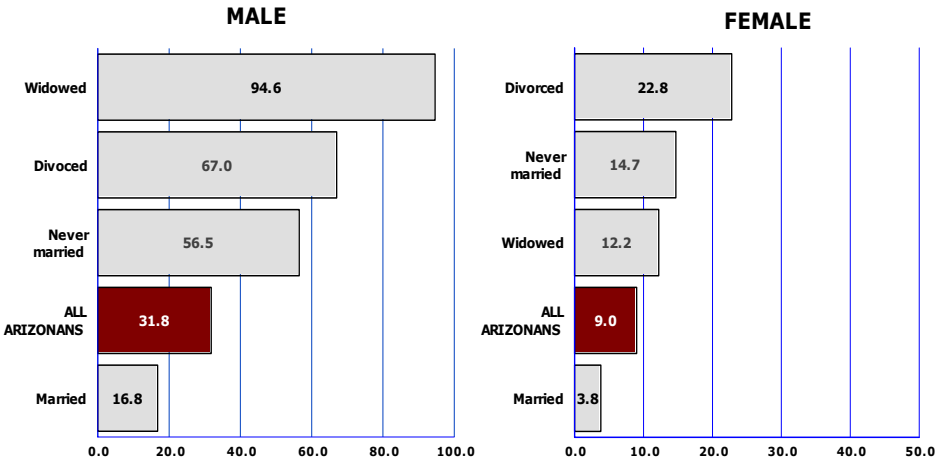
Since the incidence of HIV continues to be concentrated among MSM (men who have sex with men), the number of deaths among married persons is low (17 married males and 5 married females died from HIV disease in 2006).

Relative to married males the age-adjusted mortality rate for HIV disease was 10.8 times greater for unmarried males (14.0/100,000 vs. 1.3/100,000). Unmarried compared to married females had a 5.5 times greater mortality rate for HIV disease (2.2/100,000 vs. 0.4/100,000; **Figure 8-10, Table 8-4**).

In his classic 1897 work "Suicide: A Study in Sociology"[1], Emile Durkheim proposed that we need to look beyond individual characteristics in explaining the act of suicide. Durkheim found out that suicide rates are higher for those who are widowed, never married and divorced compared to married. He proposed that suicide is directly linked to a person's feeling of social integration. Marital disruption in the form of divorce or death of a spouse is a factor that increases the risk of committing suicide.

As in the past, married Arizonans clearly were the least likely to end their own lives in 2006 compared to Arizonans in other marital statuses (**Figure 8-11, Table 8-6**). A divorced female was 6 times, never married female 3.9 times, and a widowed female 3.2 times more likely to end her own life than a married female. Unlike for females, the suicide rate for widowed males 94.6/100,000 was the highest among the four marital status categories. In each of the marital status categories, the suicide rates were substantially higher for men than women.

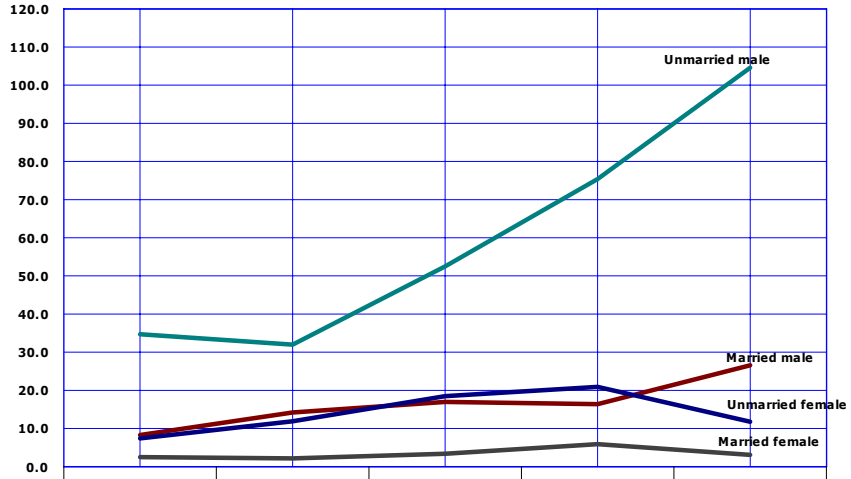
Figure 8-11
Age-adjusted Mortality Rates for Suicide by Category of Marital Status and Gender among Arizonans 18 Years or Older in 2006



In 2006, the age-specific suicide rates for married females were consistently lower than the rates for unmarried females (**Figure 8-8, Table 8-5**). Females have the highest suicide rates in midlife (ages 45-64), but even in this age group the risk of suicide for those who were unmarried was 3.5 times greater than for those who were married 20.9 suicides per 100,000 vs. 5.9 per 100,000.

In 2006, the age-specific suicide rates for married males were also consistently lower than the rates for unmarried males. Among married males, the 2006 suicide mortality curve by age was bimodal, reaching the first peak at ages 18-24, tapering off at ages 25-34, and rising to a second peak among the elderly 65 or older. Among those aged 18-24 years, the risk of suicide for those who were unmarried was 4.2 times greater than for those who were married 34.7 suicides per 100,000 vs. 8.3/100,000. The rate ratio of 3.9 times greater for those unmarried was only slightly lower among Arizona males 65 or older in 2006 104.6 : 26.6 = 3.9.

Figure 8-12
Comparison of Age-specific Suicide Rates by Marital Status and Gender among Arizonans 18 Years or Older in 2006



	18-24	25-34	35-44	45-64	65+
Married female	2.5	2.2	3.4	5.9	3.1
Unmarried female	7.4	11.9	18.5	20.9	11.8
Married male	8.3	14.2	17.0	16.4	26.6
Unmarried male	34.7	32.0	52.5	75.4	104.6

Note: Figure 8-11, Figure 8-12 and Table 8-6 were originally published in the report on "Intentional Self-Harm (Suicide), Arizona Residents, 1996-2006. This publication is available online at http://www.azdhs.gov/plan/report/im/im/im06/3/index.htm

TABLE 8-1
TOTAL AGE-ADJUSTED MORTALITY RATES, STANDARD ERRORS AND 95 PERCENT CONFIDENCE LIMITS BY MARITAL STATUS AND GENDER, ARIZONA RESIDENTS 18 YEARS OR OLDER IN 2006

Category of marital status	Gender	Age-adjusted mortality rate*	Standard error	95 percent confidence limits	
				Lower	Upper
Never married	**Male**	**1571.5**	65.8	1442.4	1700.5
	Female	**1096.6**	54.3	990.2	1203.0
Married	**Male**	**751.6**	12.5	727.1	776.1
	Female	**433.7**	9.9	414.3	453.1
Widowed	**Male**	**2135.4**	145.7	1849.9	2420.9
	Female	**1381.9**	68.9	1246.8	1516.9
Divorced	**Male**	**1721.4**	56.0	1611.5	1831.2
	Female	**1126.6**	39.1	1049.9	1203.3
All groups	**Male**	**1069.0**	12.8	1043.9	1094.0
	Female	**840.0**	9.9	820.5	859.5

*The number of deaths per 100,000 population in specified group age-adjusted to the 2000 standard U.S. population.

TABLE 8-2
NUMBER OF DEATHS FROM ALL CAUSES, TOTAL MORTALITY RATES AND STANDARD ERRORS BY MARITAL STATUS, GENDER AND AGE GROUP, ARIZONA RESIDENTS 18 YEARS OR OLDER IN 2006

Category of marital status	Gender	Age group	Number of death	Mortality rate per 100,000 population	Standard error	95 percent confidence limits	
						Lower	Upper
Never married	**Male**	**18-24**	522	**204.2**	8.9	186.7	221.7
		25-34	467	**261.4**	12.1	237.7	285.1
		35-44	476	**583.3**	26.7	530.9	635.7
		45-64	866	**1531.5**	52.0	1429.5	1633.5
		65+	493	**5352.9**	241.1	4880.4	5825.4
	Female	**18-24**	148	**70.4**	5.8	59.0	81.7
		25-34	129	**110.8**	9.8	91.7	129.9
		35-44	140	**269.1**	22.7	224.5	313.7
		45-64	331	**797.7**	43.8	711.7	883.6
		65+	523	**4520.3**	197.7	4132.9	4907.7
Married	**Male**	**18-24**	36	**59.8**	10.0	41.9	82.8
		25-34	201	**77.2**	5.4	66.5	87.9
		35-44	377	**128.2**	6.6	115.2	141.1
		45-64	2,411	**471.8**	9.6	453.0	490.6
		65+	9,036	**3292.3**	34.6	3224.4	3360.2
	Female	**18-24**	21	**26.0**	5.7	16.1	39.7
		25-34	95	**35.3**	3.6	28.2	42.4
		35-44	256	**86.7**	5.4	76.1	97.3
		45-64	1,623	**331.5**	8.2	315.3	347.6
		65+	3,991	**1795.7**	28.4	1740.0	1851.4
Widowed	**Male**	**18-24**	2	**420.2**	297.1	50.9	1517.8
		25-34	2	**156.5**	110.7	19.0	565.3
		35-44	12	**430.1**	124.2	222.2	751.3
		45-64	187	**1677.1**	122.6	1436.7	1917.5
		65+	3,912	**8555.3**	136.8	8287.2	8823.4
	Female	**18-24**	1	**191.9**	191.9	4.9	1069.4
		25-34	1	**46.2**	46.2	1.2	257.2
		35-44	15	**213.9**	55.2	119.7	352.9
		45-64	348	**832.6**	44.6	745.1	920.0
		65+	10,498	**6182.7**	60.3	6064.4	6300.9
Divorced	**Male**	**18-24**	4	**126.7**	63.3	34.5	324.3
		25-34	60	**185.5**	23.9	141.5	238.7
		35-44	267	**416.7**	25.5	366.7	466.7
		45-64	1,705	**1627.6**	39.4	1550.4	1704.9
		65+	1,749	**6418.6**	153.5	6117.8	6719.4
	Female	**18-24**	7	**129.0**	48.8	35.1	330.3
		25-34	39	**95.9**	15.4	68.2	131.1
		35-44	163	**250.4**	19.6	212.0	288.9
		45-64	1,010	**692.4**	21.8	649.7	735.1
		65+	1,867	**4877.3**	112.9	4656.1	5098.6
All groups	**Male**	**18-24**	566	**177.2**	7.4	162.6	191.8
		25-34	737	**155.9**	5.7	144.7	167.2
		35-44	1,156	**261.2**	7.7	246.1	276.3
		45-64	5,283	**772.9**	10.6	752.1	793.8
		65+	15,272	**4282.1**	34.7	4214.5	4350.3
	Female	**18-24**	180	**60.6**	4.5	51.7	69.4
		25-34	265	**61.9**	3.8	54.4	69.4
		35-44	577	**137.6**	5.7	126.3	148.8
		45-64	3,335	**464.0**	8.0	448.2	479.7
		65+	16,921	**3829.1**	29.4	3771.0	3886.4

TABLE 8-3

NUMBER OF DEATHS FROM ALL CAUSES, TOTAL MORTALITY RATES AND STANDARD ERRORS BY MARITAL STATUS, GENDER AND AGE GROUP, ARIZONA RESIDENTS 18 YEARS OR OLDER IN 2006

Marital status	Gender	Age group	Total deaths from all causes	Total mortality rate from all causes	Standard error	95 percent confidence limits	
						Lower limit	Upper limit
Married	**Male**	**18-24**	36	**59.8**	10.0	40.3	79.4
		25-34	201	**77.2**	5.4	66.5	87.9
		35-44	377	**128.2**	6.6	115.2	141.1
		45-64	2,411	**471.8**	9.6	453.0	490.6
		65+	9,036	**3292.3**	34.6	3224.4	3360.2
	Female	**18-24**	21	**26.0**	5.7	14.9	37.1
		25-34	95	**35.3**	3.6	28.2	42.4
		35-44	256	**86.7**	5.4	76.1	97.3
		45-64	1,623	**331.5**	8.2	315.3	347.6
		65+	3,991	**1795.7**	28.4	1740.0	1851.4
Unmarried	**Male**	**18-24**	528	**203.6**	8.9	186.3	221.0
		25-34	529	**249.2**	10.8	227.9	270.4
		35-44	755	**508.5**	18.5	472.3	544.8
		45-64	2,758	**1599.3**	30.5	1539.6	1659.0
		65+	6,154	**7488.0**	95.5	7300.9	7675.1
	Female	**18-24**	156	**72.1**	5.8	60.8	83.4
		25-34	169	**106.1**	8.2	90.1	122.1
		35-44	318	**256.2**	14.4	228.0	284.4
		45-64	1,689	**737.0**	17.9	701.9	772.2
		65+	12,888	**5867.6**	51.7	5766.3	5968.9
Total	**Male**	**18-24**	566	**177.2**	7.4	162.6	191.8
		25-34	737	**155.9**	5.7	144.7	167.2
		35-44	1,156	**261.2**	7.7	246.1	276.3
		45-64	5,283	**772.9**	10.6	752.1	793.8
		65+	15,272	**4282.1**	34.7	4214.2	4350.1
	Female	**18-24**	180	**60.6**	4.5	51.7	69.4
		25-34	265	**61.9**	3.8	54.4	69.4
		35-44	577	**137.6**	5.7	126.3	148.8
		45-64	3,335	**464.0**	8.0	448.2	479.7
		65+	16,921	**3829.1**	29.4	3771.4	3886.8

Note: All rates are per 100,000 population in specified group.

TABLE 8-4
AGE-ADJUSTED MORTALITY RATES* BY MARITAL STATUS AND GENDER FOR THE 10 LEADING AND SELECTED OTHER CAUSES OF DEATH, ARIZONA RESIDENTS 18 YEARS OR OLDER IN 2006

	Male			Female		
	Married	Unmarried	Total	Married	Unmarried	Total
Total mortality from all causes	751.6	1936.6	1068.9	433.7	1304.4	840.0
Disease of heart	177.1	504.9	258.4	75.3	310.0	187.6
Malignant neoplasms (cancer)	208.4	348.2	243.7	134.6	232.6	179.9
Unintentional injury	46.7	160.2	84.8	21.8	72.9	43.4
Motor-vehicle-related	19.5	54.9	33.1	9.1	21.5	14.2
Cerebrovascular disease	30.1	73.0	40.9	23.9	78.2	50.1
Chronic lower respiratory disease	44.8	120.6	63.2	26.2	88.1	55.5
Alzheimers disease	22.4	56.7	30.6	20.8	88.3	54.6
Diabetes	20.3	56.0	29.4	12.5	34.5	22.1
Influenza and pneumonia	17.4	55.3	26.7	9.0	36.7	21.9
Suicide	16.8	62.2	31.8	3.8	15.5	8.0
Chronic liver disease and cirrhosis	10.1	44.8	19.4	7.8	18.4	11.5
HIV disease	1.3	14.0	5.0	0.4	2.2	1.0
Injury by firearms	17.7	62.2	33.8	3.1	8.8	5.4
Drug-induced deaths	9.2	54.9	25.1	6.9	29.9	14.7
Alcohol-induced deaths	8.7	52.0	20.8	4.3	14.0	7.5

*The number of deaths per 100,000 population in specified group age-adjusted to 2000 U.S. standard for ages 18 years and over.

TABLE 8-5

AGE-SPECIFIC MORTALITY RATES* BY MARITAL STATUS AND GENDER FOR SELECTED LEADING CAUSES OF DEATH, ARIZONA RESIDENTS 18 YEARS OR OLDER IN 2006

			Total mortality from all causes	Disease of heart	Malignant neoplasms (cancer)	Cerebrovascular disease	Chronic lower respiratory disease	Unintentional injury	Motor vehicle-related	Alzheimers disease	Suicide	Homicide	Injury by firearms	Drug-induced deaths	Alcohol-induced deaths
Married	**Male**	**18-24**	59.8	1.7	0.0	0.0	0.0	26.6	18.3	0.0	8.3	13.3	23.3	1.7	1.7
		25-34	77.2	3.8	5.8	0.0	0.4	28.4	18.8	0.0	14.2	13.4	19.6	7.3	1.2
		35-44	128.2	15.3	13.3	2.0	1.0	43.2	19.7	0.0	17.0	7.8	16.0	17.3	5.1
		45-64	471.8	112.9	156.7	11.3	14.7	42.7	21.3	0.6	16.4	3.5	12.9	10.6	14.3
		65+	3292.3	816.9	925.1	154.5	235.7	93.3	17.9	130.8	26.6	1.1	21.9	4.0	17.1
	Female	**18-24**	26.0	1.2	3.7	1.2	0.0	11.1	8.7	0.0	2.5	3.7	2.5	3.7	1.2
		25-34	35.3	1.1	8.6	1.9	0.4	10.4	7.8	0.0	2.2	1.5	2.2	3.7	0.7
		35-44	86.7	5.4	26.8	2.4	0.3	14.2	6.4	0.0	3.4	2.4	3.0	9.1	3.4
		45-64	331.5	41.3	146.4	11.0	11.0	23.5	10.8	1.2	5.9	1.2	3.9	10.8	7.4
		65+	1795.7	360.4	486.8	114.7	133.6	49.0	11.2	120.1	3.1	3.1	3.1	2.7	6.3
Unmarried	**Male**	**18-24**	203.6	4.6	5.0	0.8	0.0	88.3	55.9	0.0	34.7	44.7	64.0	19.7	0.8
		25-34	249.2	13.2	6.1	2.4	0.5	104.1	54.6	0.0	32.0	39.6	52.8	40.0	8.0
		35-44	508.5	56.6	33.0	17.5	2.0	135.4	49.2	0.7	52.5	31.7	51.2	76.1	33.0
		45-64	1599.3	393.7	287.6	42.3	47.6	184.4	60.3	3.5	75.4	28.4	61.5	88.7	105.5
		65+	7488.0	2182.9	1486.9	328.5	621.8	264.0	52.3	326.1	104.6	1.2	86.4	11.0	68.1
	Female	**18-24**	72.1	1.8	3.2	0.9	0.0	31.4	25.4	0.0	7.4	9.2	9.7	6.9	0.5
		25-34	106.1	3.1	11.3	1.9	0.6	37.0	20.7	0.0	11.9	6.3	6.3	17.0	3.8
		35-44	256.2	20.9	37.1	5.6	2.4	66.1	23.4	0.0	18.5	8.1	10.5	50.8	16.1
		45-64	737.0	117.8	206.8	27.1	42.8	59.8	20.9	2.2	20.9	3.9	10.9	41.9	26.2
		65+	5867.6	1581.6	940.6	402.0	438.4	174.4	18.2	514.9	11.8	1.4	5.0	13.2	10.9
Total	**Male**	**18-24**	177.2	4.1	4.1	0.9	0.0	77.0	48.8	0.0	29.7	38.8	56.3	16.3	0.9
		25-34	155.9	8.3	5.9	1.1	0.4	62.6	34.9	0.0	22.4	25.6	34.9	22.2	4.2
		35-44	261.2	30.3	20.1	7.2	1.4	74.8	29.6	0.2	29.8	16.0	28.0	37.5	15.1
		45-64	772.9	186.7	192.2	19.5	24.0	81.2	31.9	1.3	31.9	10.1	25.8	32.0	38.9
		65+	4282.1	1138.7	1057.9	195.2	326.7	133.7	25.8	176.9	45.7	1.1	37.0	6.4	29.2
	Female	**18-24**	60.6	1.7	3.4	1.0	0.0	26.6	20.9	0.0	6.1	7.7	7.7	6.1	0.7
		25-34	61.9	1.9	9.6	2.1	0.5	20.3	12.6	0.0	5.8	3.3	3.7	8.6	1.9
		35-44	137.6	10.3	30.0	3.3	1.0	29.8	11.4	0.0	7.9	4.1	5.2	21.7	7.2
		45-64	464.0	66.4	166.1	16.1	21.6	35.8	14.2	1.5	10.7	2.1	6.1	21.0	13.4
		65+	3829.1	969.0	713.3	258.7	286.3	111.8	14.7	317.9	7.5	2.3	4.1	7.9	8.8

*Number of deaths per 100,000 population in specified group.

TABLE 8-6
AGE-SPECIFIC AND AGE-ADJUSTED SUICIDE RATES BY CATEGORY OF MARITAL STATUS AND GENDER, ARIZONA RESIDENTS AGED 18 YEARS OR OLDER IN 2006

			Number of suicides	Suicide rate	Standard error	95% confidence interval	
						Lower limit	Upper limit
Never married	**Male**	**18-24**	88	34.4	3.7	27.6	42.4
		25-34	55	30.8	4.2	23.2	40.1
		35-44	37	45.3	7.5	31.9	62.5
		45-64	41	72.5	11.3	52.0	98.4
		65+	8	86.9	30.7	37.5	171.2
	Age-adjusted rate for never married males 18 or older			**56.5**	**6.3**	**44.1**	**68.8**
	Female	**18-24**	13	6.2	1.7	3.3	10.6
		25-34	14	12.0	3.2	6.6	20.2
		35-44	7	13.5	5.1	5.4	27.7
		45-64	8	19.3	6.8	8.3	38.0
		65+	2	17.3	12.2	2.1	62.4
	Age-adjusted rate for never married females 18 or older			**14.7**	**2.8**	**9.1**	**20.2**
Married	**Male**	**18-24**	5	8.3	3.7	2.7	19.4
		25-34	37	14.2	2.3	10.0	19.6
		35-44	50	17.0	2.4	12.6	22.4
		45-64	84	16.4	1.8	13.1	20.4
		65+	73	26.6	3.1	20.8	33.4
	Age-adjusted rate for married males 18 or older			**16.8**	**7.1**	**2.8**	**30.8**
	Female	**18-24**	2	2.5	1.7	0.3	8.9
		25-34	6	2.2	0.9	0.8	4.9
		35-44	10	3.4	1.1	1.6	6.2
		45-64	29	5.9	1.1	4.0	8.5
		65+	7	3.1	1.2	1.3	6.5
	Age-adjusted rate for married females 18 or older			**3.8**	**3.4**	**0.0**	**10.4**
Widowed	**Male**	**18-24**	1	210.1	210.1	5.3	1,170.5
		25-34	0	0.0	0.0	0.0	0.0
		35-44	3	107.5	62.1	22.2	314.2
		45-64	10	89.7	28.4	43.0	164.9
		65+	46	100.6	14.8	73.7	134.2
	Age-adjusted rate for widowed males 18 or older			**94.6**	**2.6**	**89.5**	**99.7**
	Female	**18-24**	0	0.0	0.0	0.0	0.0
		25-34	0	0.0	0.0	0.0	0.0
		35-44	1	14.3	14.3	0.4	79.5
		45-64	10	23.9	7.6	11.5	44.0
		65+	19	11.2	2.6	6.7	17.5
	Age-adjusted rate for widowed females 18 or older			**12.2**	**1.9**	**8.4**	**15.9**

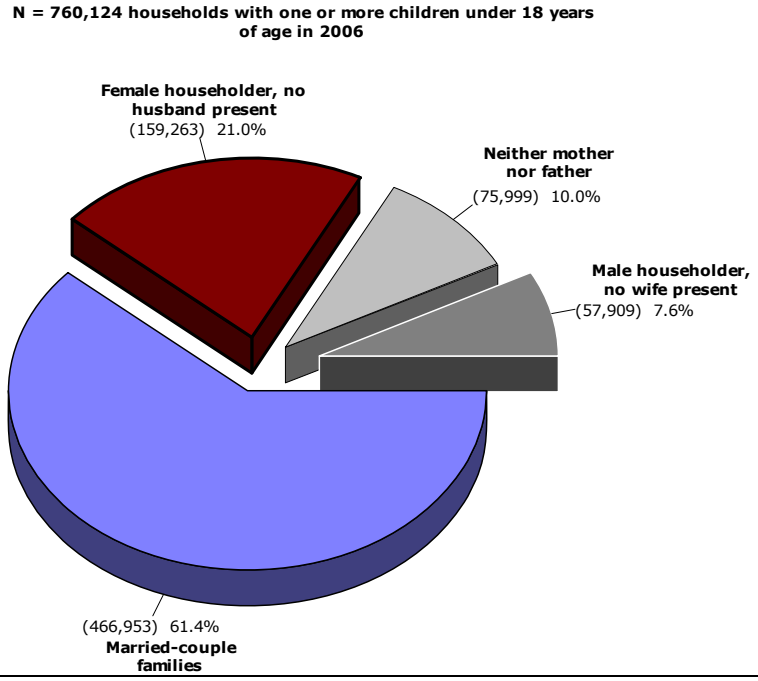
TABLE 8-6
AGE-SPECIFIC AND AGE-ADJUSTED SUICIDE RATES BY CATEGORY OF MARITAL STATUS AND GENDER, ARIZONA RESIDENTS AGED 18 YEARS OR OLDER IN 2006

			Number of suicides	Suicide rate	Standard error	95% confidence interval	
						Lower limit	Upper limit
Divorced	**Male**	**18-24**	1	31.7	31.7	0.7	176.4
		25-34	13	40.2	11.1	21.4	68.7
		35-44	38	59.3	9.6	42.0	81.4
		45-64	79	75.4	8.5	59.7	94.0
		65+	32	117.4	20.8	80.3	165.8
	Age-adjusted rate for divorced males 18 or older			**67.0**	**5.8**	**55.7**	**78.3**
	Female	**18-24**	3	55.3	31.9	11.4	161.5
		25-34	5	12.3	5.5	4.0	28.7
		35-44	15	23.0	6.0	12.9	38.0
		45-64	30	20.6	3.8	13.9	29.4
		65+	5	13.1	5.8	4.2	30.5
	Age-adjusted rate for divorced females 18 or older			**22.8**	**3.5**	**15.9**	**29.7**
All groups	**Male**	**18-24**	95	29.7	3.1	24.1	36.4
		25-34	106	22.4	2.2	18.2	26.7
		35-44	132	29.8	2.6	24.7	34.9
		45-64	218	31.9	2.2	27.7	36.1
		65+	163	45.7	3.6	38.7	52.7
	Age-adjusted rate for males 18 or older			**31.8**	**12.2**	**7.8**	**55.8**
	Female	**18-24**	18	6.1	1.4	3.6	9.6
		25-34	25	5.8	1.2	3.8	8.6
		35-44	33	7.9	1.4	5.4	11.0
		45-64	77	10.7	1.2	8.5	13.4
		65+	33	7.5	1.3	5.1	10.5
	Age-adjusted rate for females 18 or older			**8.0**	**6.3**	**0.0**	**20.4**

Note: Originally published as Table 3-6 in "Intentional Self-Harm (Suicide), Arizona Residents, 1996-2006". This report is available online at http://www.azdhs.gov/plan/report/im/im/im06/3/index.htm

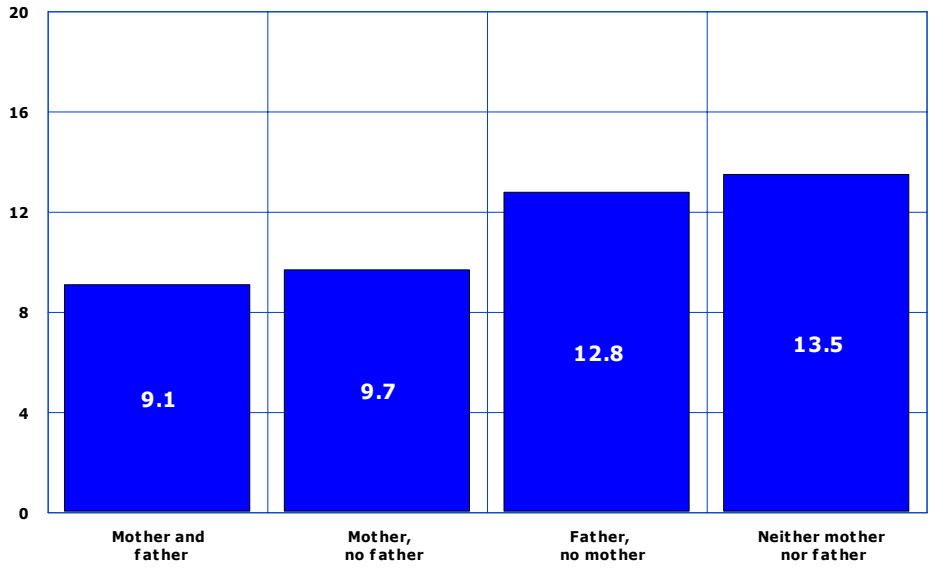
FAMILY STRUCTURE AND CHILD HEALTH

Figure 9-1
Arizona Households with Children Under 18 Years of Age, by Type of Household, in 2006



The 2006 American Community Survey (http://factfinder.census.gov) estimated that there were 760,124 Arizona households with one or more children less than 18 years. The absolute majority of these households (61.4 percent) were married-couple families (**Figure 9-1**). Households where there was a mother but no father accounted for 21 percent of all households with children in Arizona in 2006. In addition, there were 57,909 households 7.6 percent where there was a male householder and no wife was present. Approximately 10 percent of all households with children, 75,999 were non-family households with neither mother nor father present.

Figure 9-2
Estimated Prevalence of Children Uninsured for Health Care by Family Structure in 2006*



The latest "Summary Health Statistics for U.S. Children: National Health Interview Survey (NHIS) 2006" provides the prevalence of selected health measures as well as measures of health care access and utilization for children under 18 years of age by a variety of sociodemographic characteristics, including family structure.

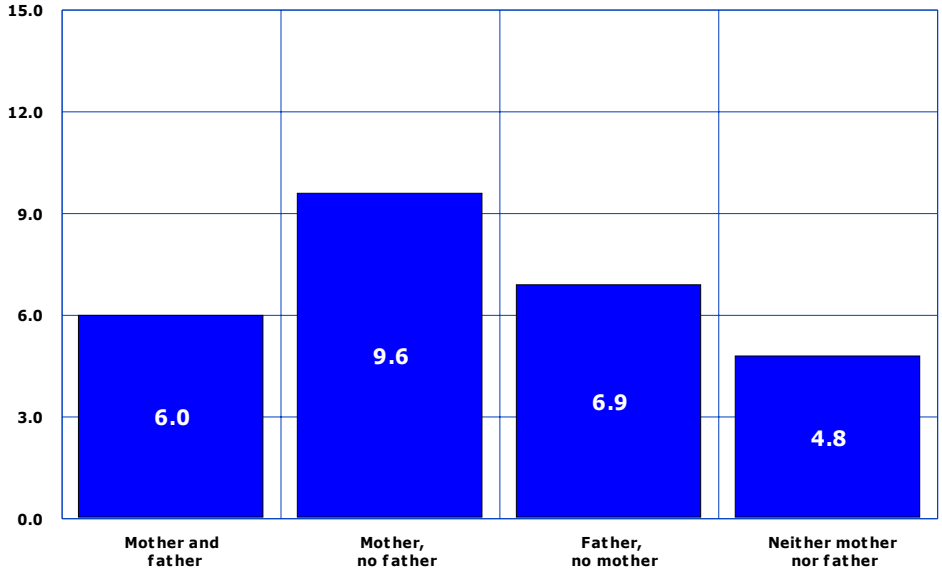
The data in **Figure 9-2**, **Figure 9-3**, and **Figure 9-4** are not Arizona-specific. However, there is no reason to believe Arizona-specific data would contradict the national pattern.

Children in single-parent families were more likely to be uninsured than children in married-couple families (9.1 percent; **Figure 9-2**). Children in non-family households, without mother and father, were the most likely to be uninsured (13.5 percent).

*Source: "Summary Health Statistics for U.S. Children: National Health Interview Survey, 2006".

Figure 9-3
Estimated Prevalence of Children who had Unmet Dental Needs, by Family Structure in 2006*

Children in single-mother families were the most likely to have unmet dental needs (9.6 percent) followed by children in single-father families (6.9 percent; **Figure 9-3**). Overall, 4.5 million children aged 2-17 years nationally (7 percent) had unmet dental needs in 2006.

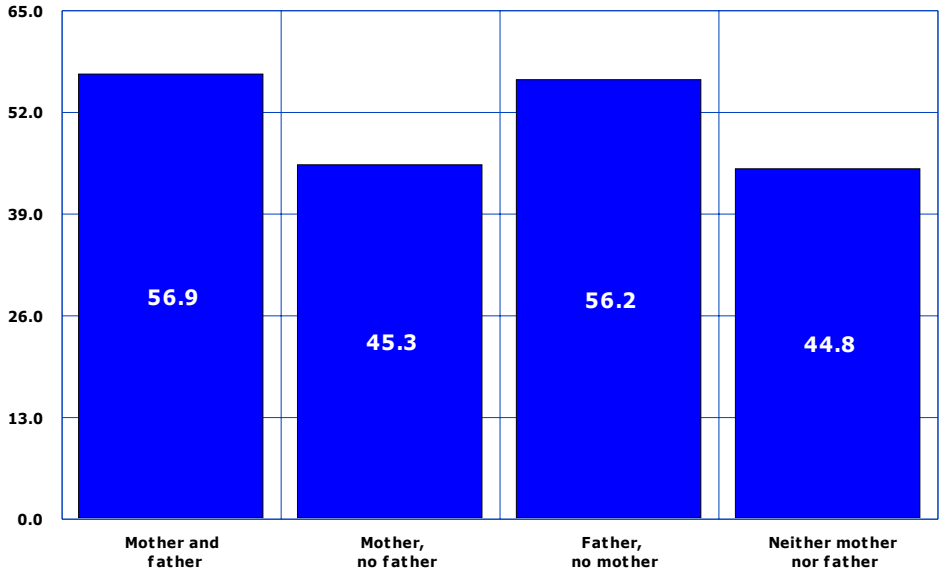


*Source: "Summary Health Statistics for U.S. Children: National Health Interview Survey, 2006".

Figure 9-4
Estimated Prevalence of Children whose Self-assessed Health Status was Excellent, by Family Structure in 2006*

Children in two parent families (56.9 percent) were the most likely to enjoy excellent health, followed by children in single-father families (56.2 percent; **Figure 9-4**). Overall, 53.8 percent of U.S. children less than 18 years of age had excellent health.

A few exemplifications from NHIS were not intended to be an exhaustive overview of the relationship between family structure and child's health. There is more data about the prevalence of *asthma*, *allergies*, *learning disability* and *attention deficit hyperactivity disorder*, *prescription medication use*, *usual place of health care* and other measures available at http://www.cdc.gov/nchs/nhis.htm



*Source: "Summary Health Statistics for U.S. Children: National Health Interview Survey, 2006".

Technical Notes

Age-adjustment weights used to compute age-adjusted rates by category of marital status

Age-adjusted prevalence estimates, inpatient hospitalization and mortality rates by marital status were computed based on the age-specific rates and the standard population for ages 18 years or older. Ages 17 years or younger were excluded because of their high variability, particularly for the widowed population. The age-adjustment weights shown below follow the Distribution #9 (See: Klein RJ, Schoenborn CA. Age-adjustment using the 2000 projected U.S. population. Healthy People Statistical Note, no. 20. Hyattsville, Maryland: National Center for Health Statistics. January 2007).

Age-adjustment weights based on the 2000 projected U.S. population

	Population in thousands	Adjustment weight
Total	**203,851**	**1.000000**
18-24	26,258	0.128810
25-34	37,233	0.182648
35-44	44,659	0.219077
45-64	60,991	0.299194
65+	34,710	0.170271

Computation of standard errors and confidence intervals

Both mortality and inpatient hospitalization data may be affected by random variation. Standard errors and 95 percent confidence limits are shown in **Table 7-1**, **Table 7-8**, **Table 8-1**, **Table 8-2**, **Table 8-3**, and **Table 8-6**.

Our computations are based on the following formulas published in Minino AM, Heron MP, Murphy SL, Kochanek, KD "Deaths: Final Data for 2004". National vital statistics reports: vol. 55 no 19. Hyattsville, MD. National Center for Health Statistics. 2007:

- Formula 2, p. 113 for standard errors associated with age-specific hospitalization and mortality rates;
- Formula 4, p. 114 for standard errors associated with the age-adjusted hospitalization and mortality rates;
- When the number of deaths is 100 or greater;

  $L(R) = R - 1.96\ (SE(R))$ and $U(R) = R + 1.96\ (SE(R))$
  where *L(R)* and *U(R)* are the lower and upper limits of the confidence interval, respectively. The resulting 95 percent confidence interval can be interpreted to mean that the chances are 95 out of 100 that the "true" death rate falls between *L(R)* and *U(R);*
- For the number of deaths and death rates when the number of deaths is less than 100, 95 percent confidence limits were estimated using the lower and upper confidence limit factors shown in Table XIV on p. 118.

Diagnostic categories

The inpatient hospitalization data **Section 7** use diagnostic groupings and codes based on the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM). Detailed information about the diagnostic categories we analyze in this report is provided on our website at http://www.azdhs.gov/plan/index.htm.

The death certificate database **Section 8** uses diagnostic groupings and codes based on the Tenth Revision of the International Classification of Diseases (ICD-10). Detailed information about the ICD-10 codes for all of the cause-of-death categories analyzed in this report also is available online at http://www.azdhs.gov/plan/report/ahs/ahs2006/pdf/compratios.pdf.

Our Web site at http://www.azdhs.gov/plan provides instantaneous access to a wide range of statistical information about health status of Arizonans. The *Arizona Health Status and Vital Statistics* annual report examines trends in natality, mortality and morbidity towards established health objectives. Additional reports and studies include *Differences in the Health Status Among Race/Ethnic Groups*, *Advance Vital Statistics by County of Residence*, *Mortality from Alzheimer's Disease*, *Injury Mortality among Arizona Residents* (accidents, suicides, homicides, legal intervention, firearm-related fatalities, drug-related deaths, drowning deaths, falls among Arizonans 65 years or older), hospital inpatient and emergency department statistics for *mental disorders*, *asthma*, *diabetes*, *influenza and pneumonia* and *substance abuse*, *Community Vital Statistics*, *Teenage Pregnancy*, *Selected Characteristics of Newborns and Mothers Giving Birth by Census Tract* in Maricopa County, Pima County and South Phoenix Area, *Health Status Profile of American Indians in Arizona* and *Deaths from Exposure to Excessive Natural Heat Occurring in Arizona*.

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