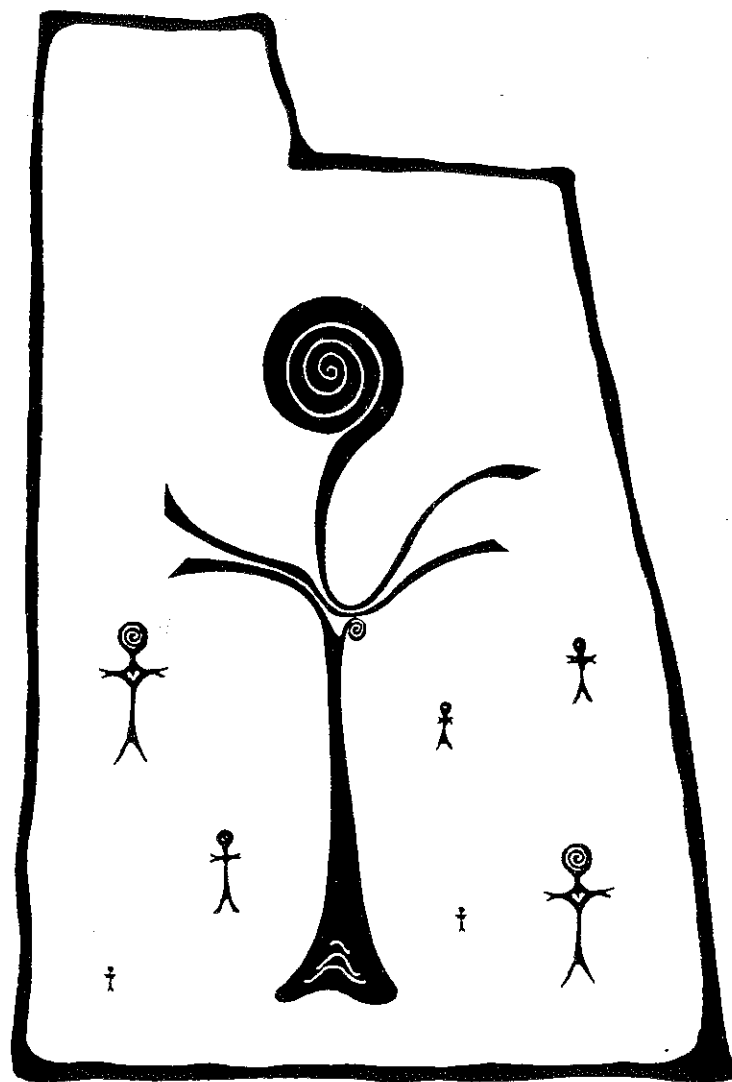


# Women's Health in Utah



*Utah Department of Health*



# **Women's Health in Utah**

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OLENE S. WALKER  
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To: Seminar Participants, The Women's Health Committee and Others Interested in  
Women's Health Care Issues and Challenges

From: Olene S. Walker  
Lieutenant Governor

Date: September 1996

Re: *Women's Health in Utah*

It is a great pleasure to provide you with a copy of *Women's Health in Utah*, prepared by the Ad Hoc Women's Health Committee and the Utah Department of Health. This committee included numerous dedicated individuals who contributed many hours of personal time to compile a report that provides information to women, communities, policy makers, and the medical profession concerning the importance of women's health care as it relates to health care reform.

I would like to take this opportunity to publicly congratulate and applaud the Ad Hoc Women's Health Committee and the Utah Department of Health for completing this difficult, yet very important product. Women's health is one of the components for a healthy community and the efforts for promoting women's health should continue to be a part of activities to foster healthy communities in Utah.

As co-chair of the Utah Health Care Commission, I plan to submit copies of *Women's Health in Utah* to the Utah Health Care Commission, and request that the report be given careful consideration.

For additional copies of the report, please contact Kathryn Draper at the Utah Department of Health, (801) 538-6172.



## Sociodemographics of Utah Women

- Utah women have been more likely to work outside their homes (65.5% in 1994) than other American women (58.8% in 1994) since 1980. The gender gap in median income is larger in Utah than in the U.S.
- In 1990, 11.3% of Utah families were headed by a single woman, nearly a 74% increase from 1960.
- Utah women have an average of 0.63 more children than do women in the U.S. as a whole.

## Gender Differentials in Health Status

- Both men and women in Utah live longer than their counterparts in the U.S. Life expectancy at birth for Utah women is 79.2 years, that is 6.8 years longer than that of Utah men and 1.8 years longer than that of other American women.
- On average, women report more days of poor physical and mental health than do men, and more days where they are limited in performing their usual activities.
- Injury or poisoning-related conditions were the fourth most common reason for women at all ages to seek inpatient care and the second top reason for girls under age 15.
- Women are more likely to be hospitalized for mental health conditions.

## Social Differentials in Women's Health Status

- African Americans, American Indians, and Hispanics were more likely to have teen pregnancies than were whites in 1989 through 1991.
- African Americans and Hispanics had relatively high rates of low birth weight babies in 1989 through 1991.

## Reproductive Health

- According to the American Public Health Association's Report Card, Utah ranks third best in the nation for adequate prenatal care.
- Of women not receiving prenatal care, 19% delivered a low birth weight infant, compared to less than 6% of women who received early prenatal care.
- Utah's overall maternal mortality ratio of 12.8 per 100,000 live births was somewhat higher than for the overall U.S. for the years of 1982 to 1994.
- The average length of stay for maternity hospitalizations slightly decreased in Utah from 1992 to 1994.

## Diseases and Conditions of Concern for Women

- Cancer is the leading cause of death among Utah women 25 to 64 years of age. Breast cancer is the leading cause of cancer death for Utah women.
- Since 1987, lung cancer has surpassed breast cancer as the leading cause of cancer death among U.S. women.

- Heart disease death rates are higher for men, but because women live longer than men, more women than men die of heart disease in Utah.

### **Risk and Preventive Behavior**

- There is a significant trend among Utah women to become less active as they age; 67% of women age 65 and over report living a sedentary lifestyle.
- The proportion of Utah women who are obese has increased over the last ten years.
- Between 1987 and 1994, the proportion of Utah women 50 and older who reported having received a screening mammogram within the past 2 years increased from 34 percent to 66 percent.

### **Social Illness: Violence Against Women**

- 1995 saw a 45 percent statewide increase of spouse abuse filings from the previous year.
- According to national studies, in 20 percent of domestic violence cases, the women who is assaulted is pregnant at the time of the assault.
- According to the Utah Department of Public Safety, 1.5 percent of Utah girls aged 18 and younger were reported victims of child abuse in 1995, compared to 1.2 percent of boys.
- Utah older women made up 62 percent of adult abuse victims in 1995.

### **Access to and Use of Health Care**

- Utahns without health insurance were more likely to be men, 18 to 22 years of age, without a high school degree, and with a total household income of under \$20,000 a year.
- The hysterectomy rate in Utah is higher than the national rate.
- In the U.S., 45 percent of women who reach age 65 use nursing home care at least once before death, but only 28 percent of men use such facilities.
- In FY96, female Medicaid recipients in Utah used about \$51 million for long-term care and male recipients nearly \$23 million.

### **Utah's Health Print and Women's Health**

- Utah women have benefited from expanding Medicaid coverage and small group and individual insurance reforms.

### **Where Do We Go From Here?**

- The Utah Department of Health has identified ten issues on which it can have a greater impact. These are:
  - Prenatal care
  - Breast and cervical cancer screening
  - Discrepancy between life expectancy and self-reported health status
  - Lack of gender specific information in some reporting systems
  - Unintended pregnancy
  - Women's mental health
  - Lack of exercise
  - Osteoporosis
  - Violence against women
  - Variability in cesarean section and hysterectomy rates



*This report represents the work of more than the Utah Department of Health. It is a product of the ad hoc Women's Health Committee that included many dedicated individuals who contributed many hours of personal time.*

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## About This Report

In the Summer of 1994, a group of Utah women gathered in Salt Lake City to discuss how to improve the access to and the comprehensiveness of health services for Utah women throughout their life cycles. The meeting established the Utah Women's Health Trust, a women's health coalition whose goals included sharing critical information relevant to women's health. The coalition's first annual meeting in May 1995, featured a presentation on "How Healthy are Utah's Women: A State of the State Address [on] Women's Health". A report, *Women's (and Men's) Health in Utah* was distributed by the Utah Department of Health following the meeting.

While only a few of the members of the coalition were able to participate in the preparation of this report, it represents a continuation of the pioneering efforts to educate "women, our communities, policymakers, and the medical profession concerning the importance of women's health care as it relates to health care reform."<sup>1</sup> An ad hoc Women's Health Committee of more than 30 volunteers from within and outside the Utah Department of Health carries on with the same concern for the health of Utah women. This report will help in the development of baseline indicators of Utah women's health status.

### What is Women's Health?

Health is a multidimensional concept that means much more than merely the absence of illness. In 1960, the World Health Organization defined health as "a complete state of physical, mental, and social well-being."<sup>2</sup> In 1985, the Public Health Service Task Force on Women's Health Issues defined women's health issues as diseases or conditions that were unique to women, were more prevalent or more serious in women, or for which specific risk factors or interventions differed for women.<sup>3</sup>

However, there is a growing awareness that improvement in women's health will require viewing it as more than merely "female diseases". Health, in a holistic sense, involves emotional, social, cultural, spiritual and physical well-being.<sup>4</sup> It is determined by the social, political, cultural and economic context of people's lives, as well as by their biological state. Therefore, throughout this report, the issue of women's health is viewed in a broad context and from various perspectives.

## Rationale for Research on Women's Health?

This report will show that, even outside the realm of reproductive health, improving women's health presents challenges that differ from those for men's health. Men and women are differently affected by the social, political, cultural and economic context in which they live. Some of the reasons for these differences are identified by the information contained in this report. Other questions remain and should be the subject of future research.

If men's and women's health and the determinants of their health were the same, there would be no need for research targeted at women's health.

Gender-neutral interventions, programs and methods of health care delivery would suffice. However, as this report illustrates, men and women differ in health status, health-related behavior, health-seeking behavior, and access to and utilization of health care. By understanding the factors that determine women's health status, public health agencies and health care providers can design effective programs and interventions to improve women's health and policymakers can address underlying issues that affect women's health. Hopefully, the information will also be of value to women and their families.

## The Organization of This Report

This report is intended to inform those men and women who make social and health policy as well as those who benefit or suffer because of it. It begins by presenting general social and demographic factors that affect women's health. Chapters 2 and 3 describe health status differences between Utah men and women and among women of different social, economic, and educational backgrounds. Chapters 4 through 6 describe specific issues and conditions that affect women's health and some of the lifestyles and behaviors that can affect women's health.

Chapter 7 describes violence against women, a social problem that is emerging as an important

public health concern though it is not a new problem.

Chapter 8 describes aspects of the health care system, including access and utilization issues, and Chapter 9 discusses how health care reform in Utah is important for women's health.

Finally, Chapter 10 attempts to synthesize the information provided here -Where We Are Now - and to describe where women want to be and what needs to be done to get there.

### Data and Methodology

The ad hoc committee faced three challenges: scarcity of data, enormity and multidimensionality of the issue, and lack of a model report, either from the past or at national level. Those challenges were magnified by the short time frame available to complete the report.

The scarcity of data sources has resulted in several weaknesses in the report. One weakness is that data are from different years and therefore one cannot draw a complete picture of women's health at a single point in time. Also, without detailed data on some factors, some of the findings could not be analyzed beyond a simple description. Finally, comparative information at the national level are not presented for many of the tabulations and graphs.

The enormity and multidimensionality of the women's health issue made it necessary to obtain the help of a great number of people from different backgrounds. While the content and substance of the report have been strengthened by

contributions from various perspectives, some readers may find the presentation uneven among the various sections, where more detailed information is given for some issues than for others. This should not be interpreted as indicating the relative importance of the topics.

Without a model report to follow, the group relied on collective knowledge and experience to design the report. This resulted in a report that is truly reflective of the issues that are of concern in Utah as recognized by the committee now.

It can be argued that this report raises more questions than it answers. That may be true, but it is not necessarily a shortcoming. This report is intended to raise awareness of women's health issues and to build a set of baseline indicators of women's health in Utah. To that end, it asks questions about facts and events that otherwise might have been taken for granted. This effort will continue and, in time, the questions will be answered.

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# 1 Sociodemographics of Utah Women

The overall health status of a population is influenced by the age, race, sex, and socioeconomic characteristics of the people of whom it is composed as much as by health care technology. Therefore, a review of the characteristics of Utah's population and of women's status in education, employment, and family life will provide background material for understanding the health issues of concern for women.

- By the year 2000, it is projected that there will be 132 women aged 65 and older per 100 men in the same age group.
- Utah women have been more likely to work outside their homes than other American women since 1980. The gender gap in median income is larger in Utah than in the U.S.
- In 1990, 11.3 percent of Utah families were headed by a single woman; that represents a nearly 74 percent increase from 1960.

## Overview

Utah's population has nearly tripled during the past 44 years (see table below). Utahns are younger, have more children, and are more likely to live in urban areas than other Americans on average. While the crude birth rate (number of live births per 1,000 population) in U.S. and Utah dropped by more than one third between 1950 and

1994, the Utah birth rate remains over 30 percent higher than the national birth rate (15.2 per 1,000). Utahns have also married and divorced more often than other Americans since 1970. They have lower per capita income than other Americans as well (see Appendix A).

**Population and Socioeconomic Profiles of Utah: 1950-1994**

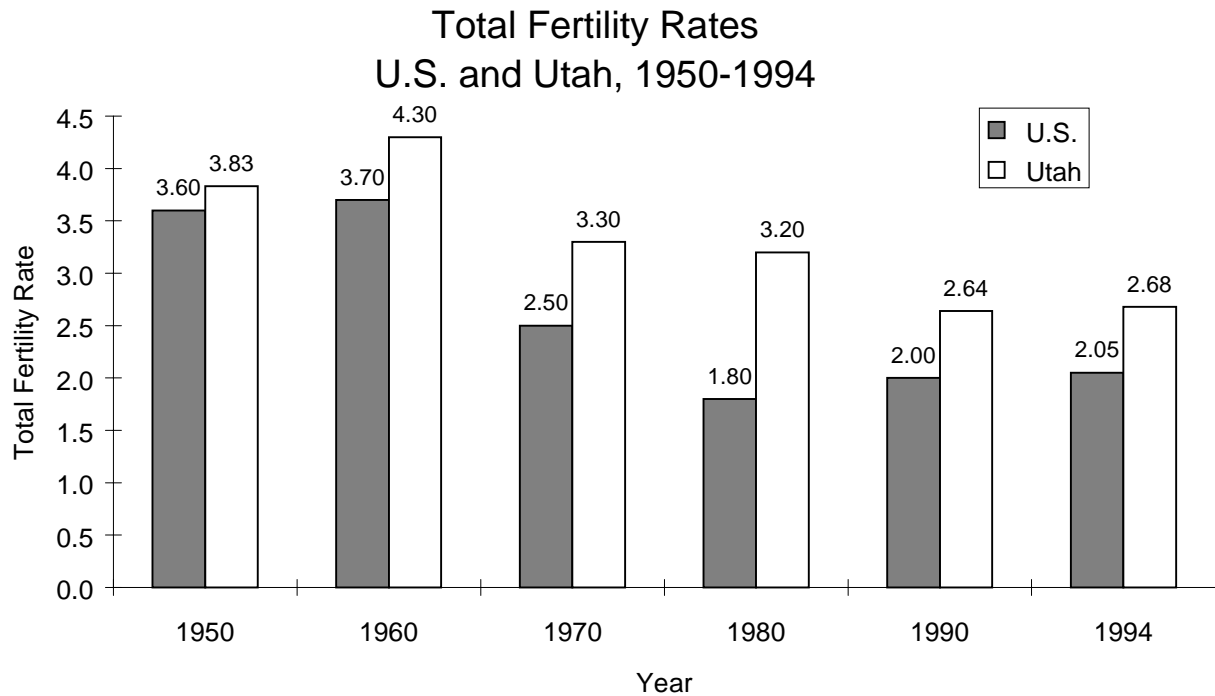
	<b>1950</b>	<b>1960</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>1994</b>
Total Population	668,860	890,627	1,059,273	1,461,037	1,723,000	1,991,811
Female Population	341,226	445,703	536,008	736,537	867,091	1,005,384
Males per 100 Females	101.88	99.83	97.62	98.37	98.69	98.11
Males per 100 Females Age 65+	92.97	86.91	78.04	74.33	75.05	75.70
Crude Birth Rate (per 1,000 population)	30.8	29.2	25.5	28.6	21.1	20.0
College graduates (% of women age 25+)	5.90%	7.10%	9.60%	14.50%	17.40%	N/A
Per Capita Income	\$1,266	\$1,921	\$3,220	\$4,272	\$12,237	\$13,181 (1993)
Marriage Rate ( per 1,000 population)	10.2	7.9	11.2	11.6	11.2	11.0 (1993)
Divorce Rate ( per 1,000 population)	3.1	2.4	3.7	5.4	5.2	4.7

Note: Appendix A contains data sources as well as additional information on Utah and the United States.

Fertility

Fertility has declined in the U.S. and Utah since 1960. The Total Fertility Rate (TFR)<sup>1</sup> is a measure that indicates the number of children an average woman can expect to have in her life-

time\*. Based on Total Fertility Rates in 1994, Utah women have, on average, 0.63 more children than do women in the United States as a whole.



Note: Total fertility rate means the average number of children expected to be born to each woman in a cohort at the time she completes fertility.

Source: Statistical Abstract of the U.S., 1953, No.50, p.55. Table 27: Total Fertility Rates, Utah and U.S. In Utah Demographic Report June 1993.

\* The Total Fertility Rate for a given year is calculated based on the fertility rates experienced by women of different ages during that year. For example, the 1994 United States TFR was 2.05. That means that women who experience the fertility rates of women of various ages in 1994 over their lifetimes would have, on average, 2.05 children.

## Female Labor Force Participation

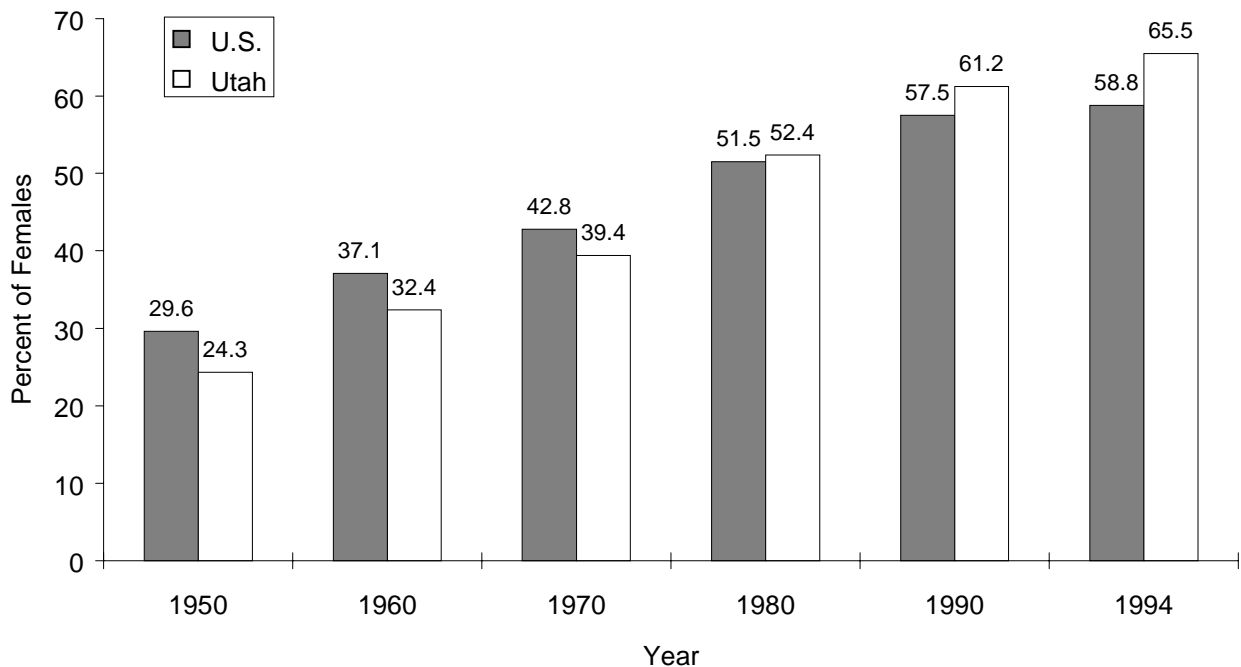
In 1950, only 24.3 percent of Utah women participated in the paid labor force; that was 5.4 percent lower than the U.S. rate. Since 1980, Utah women (65.5% in 1994) have been more likely to work outside their homes than other American women (58.8% in 1994).

Although most women are in the paid labor force and are working full-time, year-round, there are significant differences between women's and men's employment experiences. Occupational segregation exists, and men earn more than

women.<sup>3</sup> Women also face different challenges in how work and family roles interact than do men.<sup>4</sup>

Literature on how these factors affect women's health has been inconclusive. Some have argued that working outside of the home enhances self-esteem for women. Others have found that working mothers, who must take on multiple roles, experience more stress in their lives.<sup>4</sup> Specific studies on the working patterns of Utah women and on how those patterns influence their health are needed.

Percentage of Females Participating as Members of the Paid Labor Force, U.S. and Utah, 1950-1994



Source: Statistical Abstract of the United States, 1995.

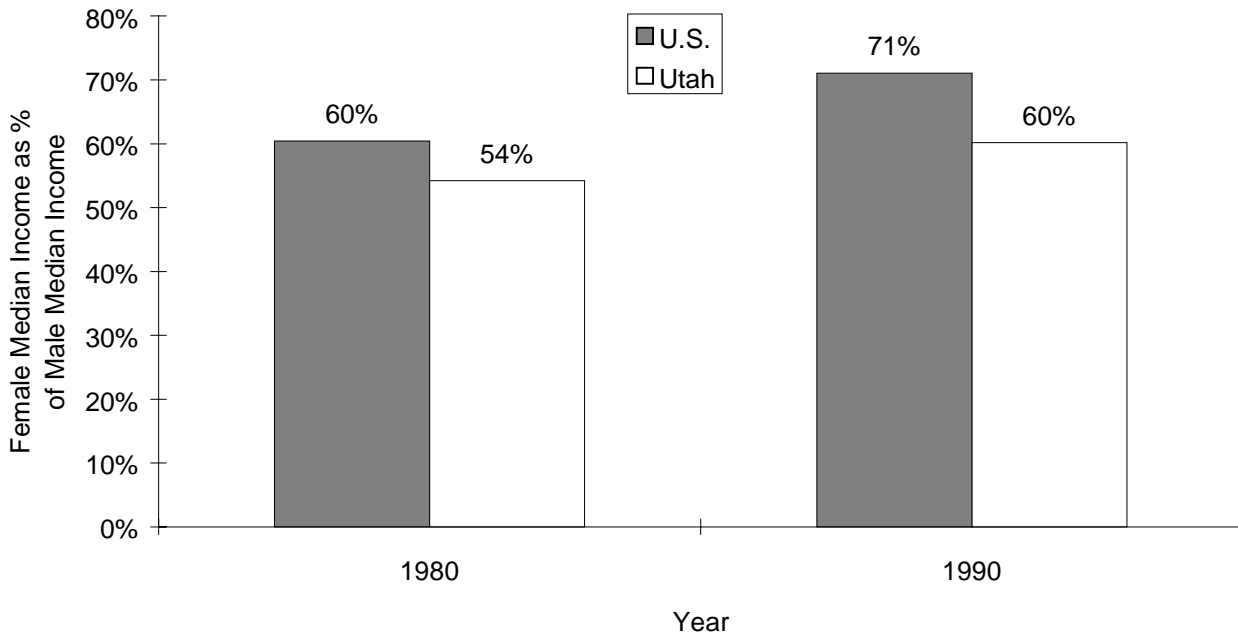
## Women's Wages and Cost of Child Care

Women still earn less than men in the U.S. and Utah. The gender gap in median income is larger in Utah than in the U.S. (see figure below).

Nearly 10 percent of Utahns were under five years of age in 1990 compared with 7.6 percent of the U.S. population. In September 1995, costs for

child care in Utah ranged from \$56 to \$120 weekly for children up to two years of age and \$48 to \$92 weekly for older pre-school children.<sup>5</sup> In 1993, low-income families typically spent over 20 percent of their income to pay for child care, while wealthier families spend much less (6% to 7%) in the U.S.<sup>6</sup>

Women's Median Income as a Percentage of Men's Median Income, U.S. and Utah, 1980 and 1990



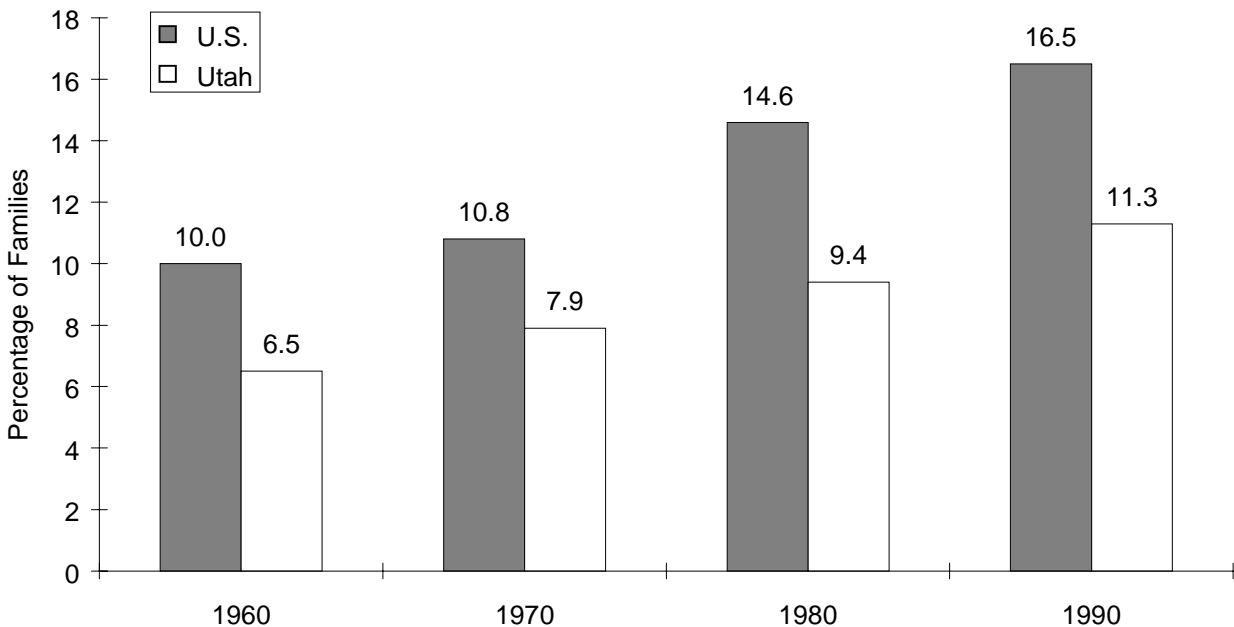
Note: Salary is based on full-time year-round employees aged 15 years and older.  
Source: Income, Poverty, and Valuation of Non-Cash Benefits: 1994 Statistical Abstract of the U.S.

## Families Headed by A Single Female

The proportion of families headed by a single woman has increased over the past three decades. In 1990, 11.3 percent of Utah families were headed by a single female, nearly a 74 percent

increase from 1960 (6.5%). In these families, the children, as well as the women themselves, may be vulnerable, financially and in other ways; such families are also at risk in the areas of nutrition and stress.

Percentage of Families Headed by a Single Female  
U.S. and Utah, 1960-1990



Source: Decennial Census of Population and Housing

## Sociodemographics of Utah Women

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# 2 Gender Differentials in Health Status

This chapter compares the health status of women with that of men. The gender differential is examined for different measures of health status: mortality rates, self-reported health status, hospitalization rates, prevalence of chronic diseases, limitations in performing usual activity, and mental health.

The findings show that even outside the realm of reproductive health, the health conditions that affect women are different from those that affect men. An important observation presented in this chapter is that women outlive men and that men’s mortality rates are higher than women’s for all major causes of death. On the surface, that

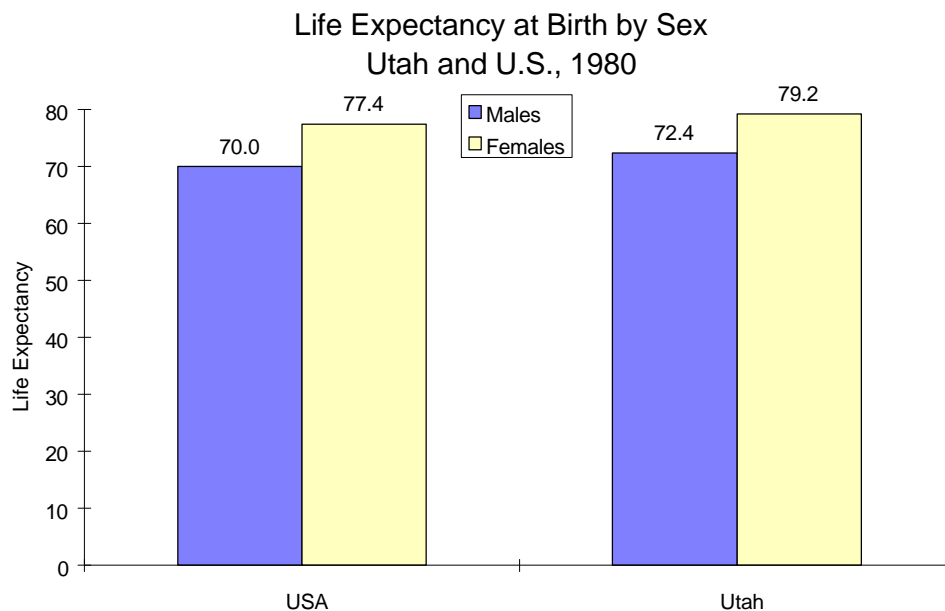
observation would suggest that men’s health, rather than women’s ought to be the focus of further research. However, an examination of other measures of health status reveals that:

- On average, women report more days of poor physical and mental health and more days where they are limited in performing usual activities.
- Women have higher prevalence rates for a number of chronic illnesses.
- Women are more likely to be hospitalized for mental health conditions.

## Mortality

In Utah, as in all contemporary industrialized societies, women die less often than men at all

ages. Consequently, the life expectancy for women is about seven years longer than for men.



Source: Table 25 Life Expectancy at Birth, National Center for Health Statistics. Unpublished Report, Statistical Abstract of the U.S. p. 60, Utah's Health: An Annual Review

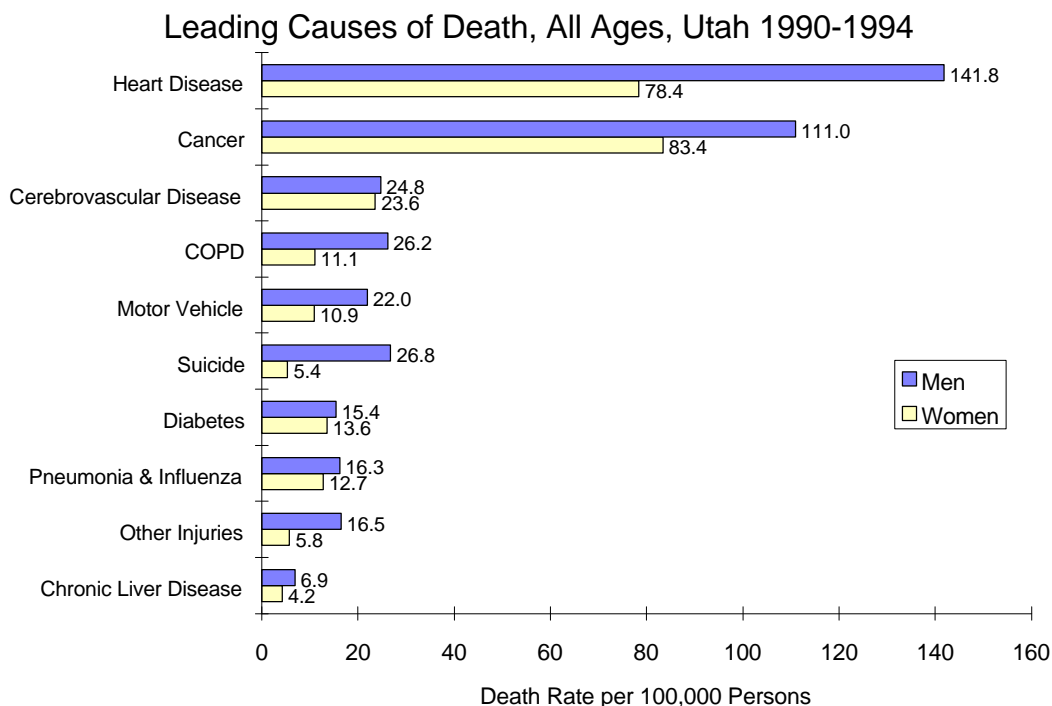
## Gender Differentials in Health Status

Death rates and life expectancy are among the most commonly used indicators of the health of populations. However, even over age 65, only four percent of the population dies in a given year. Thus, death rates tell us little about the health of most people. Other disorders that are less likely to kill, but cause suffering for more people over a longer time period also affect the overall health of a population. Those disorders may be more common for women than for men.

Historically, women have not always enjoyed lower death rates and longer life expectancy. Only after the transition from infectious to degenerative diseases (heart disease, cancer, stroke, etc.) and the drop in maternal mortality rates during the 20th century did women's life expectancy exceed men's.<sup>1</sup> The lower death rate for women also results in a large number of women who are widowed and living alone in their older years.

Cause-specific death rates are higher for men than for women for all the leading causes of death. While the leading causes of death are similar for men and women, important differences also exist. Heart disease and cancer are the two leading causes by a substantial margin, but cancer is the

leading cause for women while heart disease is first for men. Suicide is the third leading cause for men, but only ninth for women. Diabetes is the fourth leading cause for women, but only ninth for men.



Source: Office of Public Health Data, Utah Department of Health.



The importance of different causes also varies by age. Injuries, especially those related to motor vehicles, are the most important killers of young men and women. After age 25, cancer becomes the most important cause of death for women,

though injuries remain important. After age 45, a transition occurs with cancer, heart disease, and diabetes replacing injuries as the most important causes of death.

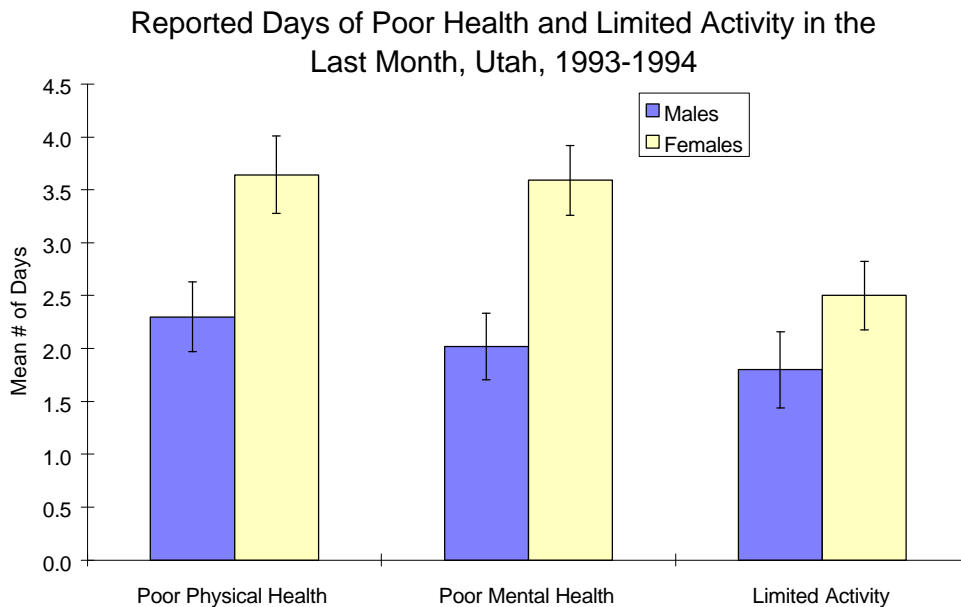
**Leading Causes of Death for Utah Women  
by Age, 1990-1994**

Rank	1-14	15-24	25-44	45-64	65 and Over
1	Motor Vehicle Crash Deaths 16 Rate 6.2	Motor Vehicle Crash Deaths 30 Rate 18.6	Cancer Deaths 64 Rate 24.3	Cancer Deaths 24.3 Rate 179.7	Heart Disease Deaths 1214 Rate 1334.7
2	Other Injuries Deaths 9 Rate 3.7	Suicide Deaths 6 Rate 4	Motor Vehicle Crash Deaths 25 Rate 9.6	Heart Disease Deaths 102 Rate 75.3	Cancer Deaths 604 Rate 664.1
3	Birth Defects Deaths 8 Rate 3.1	Cancer Deaths 4 Rate 2.8	Suicide Deaths 22 Rate 8.4	Diabetes Deaths 26 Rate 19.1	Cerebrovascular Disease Deaths 406 Rate 446.3

\* deaths are average annual number of deaths; rates are deaths per 100,000 women in that age group per year.

Source: Office of Public Health Data, Utah Department of Health

## Overall Health Status



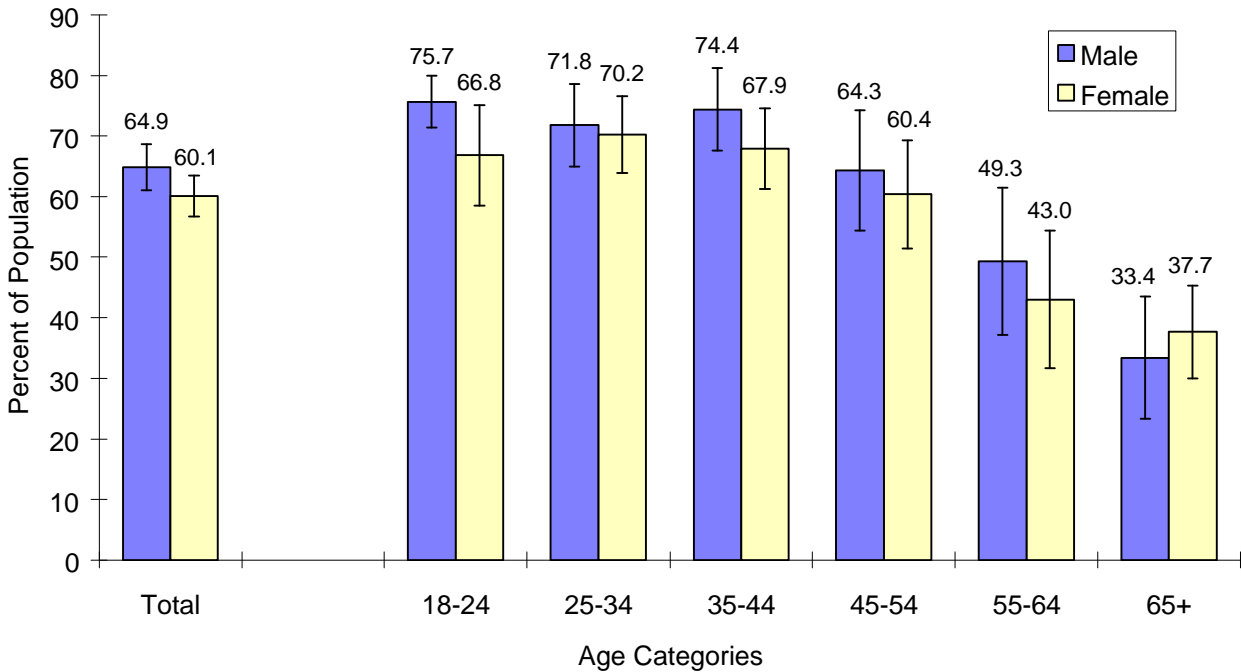
Source: 1993-1994 Behavioral Risk Factor Surveillance System

Although women outlive men, there is evidence that women's perceptions of their own health are not as positive as are men's. When asked in surveys, women are more likely than men to report having health problems. This effect has been found in various populations, across time, and is relatively independent of the measurement mechanism. It is found in all age groups except in older age groups (65 and over) where women tend to report being healthier than men. Women also make more health care visits than men, even excluding visits for reproductive health care.

Women also report having more sick days, whether for poor physical health, poor mental health, or functional limitation of activities.

The reasons for these differences are not clear. For example, it may be at least partly due to differences between men and women in educational attainment or income. Men and women may also have different ways of coping with illness that lead to different expressions of illness. A good example is suicide, where women are more likely to attempt, but men to complete suicide.

Proportion of Utah Men and Women Who Reported Their General Health as Excellent or Very Good, 1994



Source: 1994 Behavioral Risk Factor Surveillance System

One factor limiting our understanding is the greater availability of data on conditions that cause death than on those that are non-life threatening but crippling, such as arthritis. In addition, whether by chance or because more research has been performed, diseases such as heart disease, that preferentially affect men, are better characterized pathologically and easier to diagnose than diseases that preferentially affect women, such as arthritis and depression.

The health care and public health systems, including doctors, patients, managed care organizations, public health agencies, and other entities, could make advances in understanding and improving the health of people and populations by paying more attention to each person’s experience of his or her own health

**Morbidity**

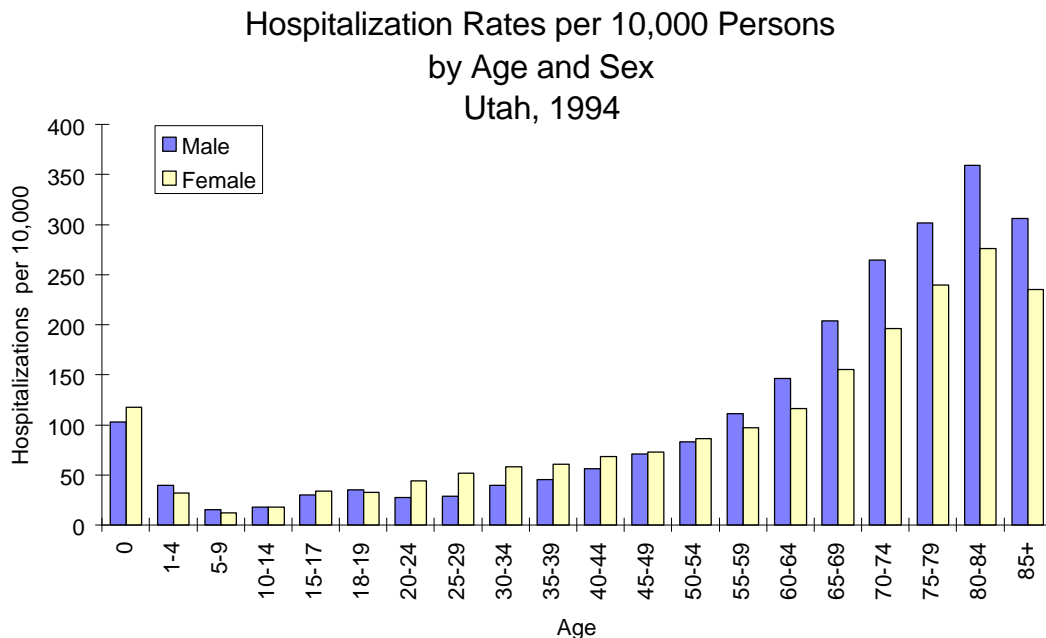
Morbidity means any departure, subjective or objective, from a state of physiological or psychological well-being,<sup>2</sup> that is, all sickness and illness. We have substantially less information on

non-fatal illness than on death, but a review of the reasons people seek health care can augment the picture of the population's health and well-being provided by death rates alone.

**Acute Conditions**

In 1994, Utah females were hospitalized nearly 118,400 times, compared to only 77,500 times for males. After excluding discharges related to pregnancy and childbirth, women 20 to 54 years

of age still had higher hospitalization rates than men in the same age groups. Males were more likely to be hospitalized than females 1 to 9 and 18 to 19 years of age.



Note: Newborns (principle diagnosis, ICD-9 V30-V39) and deliveries (DRG 370-375) were excluded.

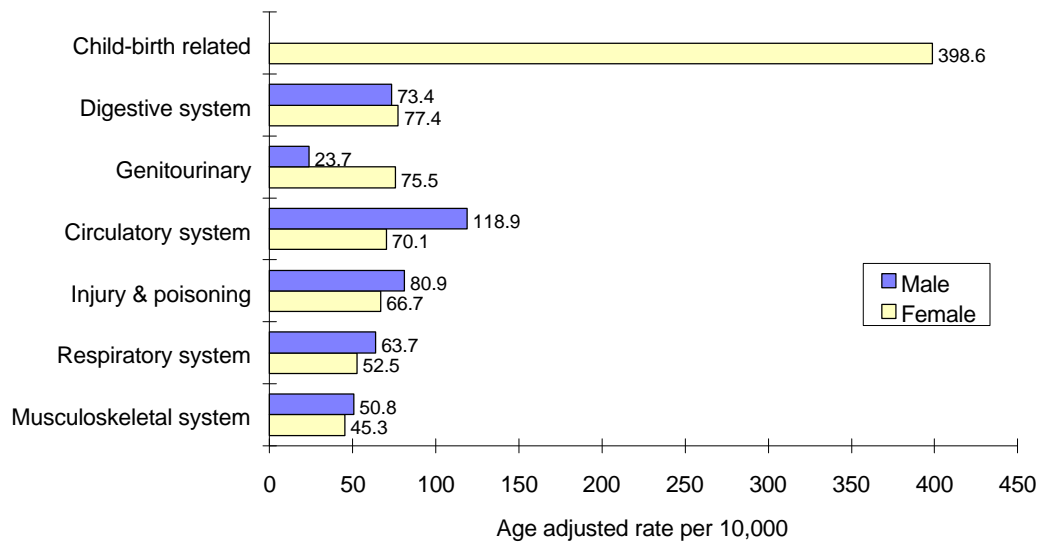
Source: Utah Hospital Discharge Database, Office of Health Data Analysis, Utah Department of Health

The leading reasons for hospitalization were categorized according to *Clinical Classifications for Health Policy Research, Version 2: Hospital Inpatient Statistics*, published by the Agency for Health Care Policy and Research, U.S. Department of Health and Human Services in 1996.

The leading reasons for hospitalization are somewhat different for men and women. After excluding childbirth-related hospitalizations, the top three reasons for hospitalization of Utah women in 1994 were diseases and conditions of the digestive, genitourinary, and circulatory systems.

Though a larger problem for males, “Injury and poisoning” was the fourth reason for women of all ages to seek inpatient care and the second most common reason for girls under age 15.

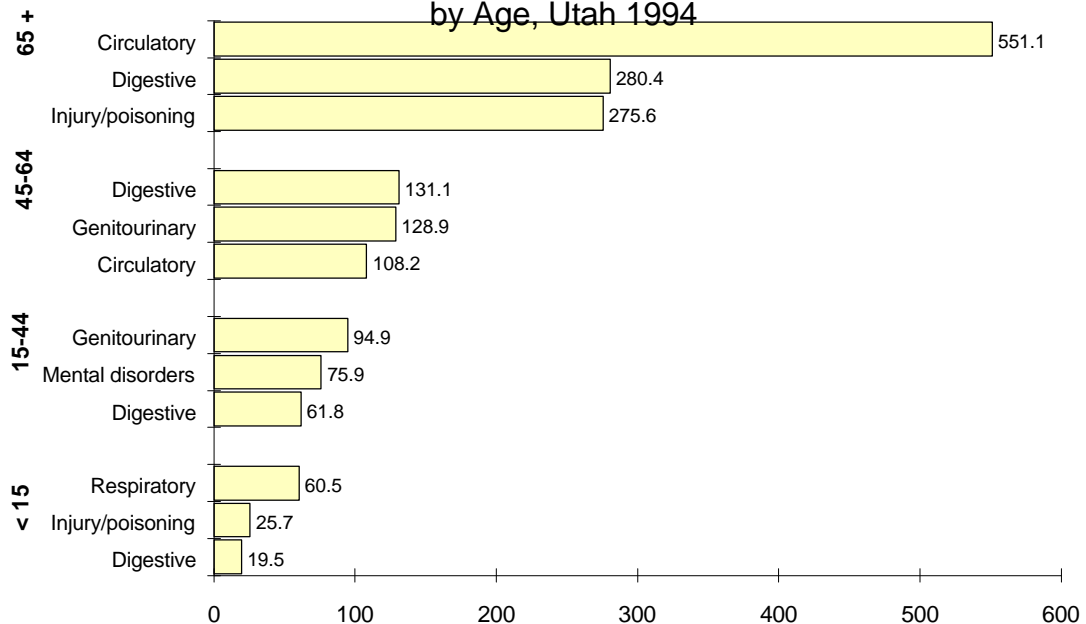
**Leading Reasons for Hospitalization by Gender  
Utah 1994**



Rates were age-adjusted to the Utah 1990 population.

Source: Utah Hospital Discharge Database, Office of Health Data Analysis, Utah Department of Health

**Top Three Reasons\* for Hospitalization of Females  
by Age, Utah 1994**



\* excluding childbirth-related hospitalizations

Source: Utah Hospital Discharge Database  
Office of Health Data Analysis, Utah Department of Health

## Gender Differentials in Health Status

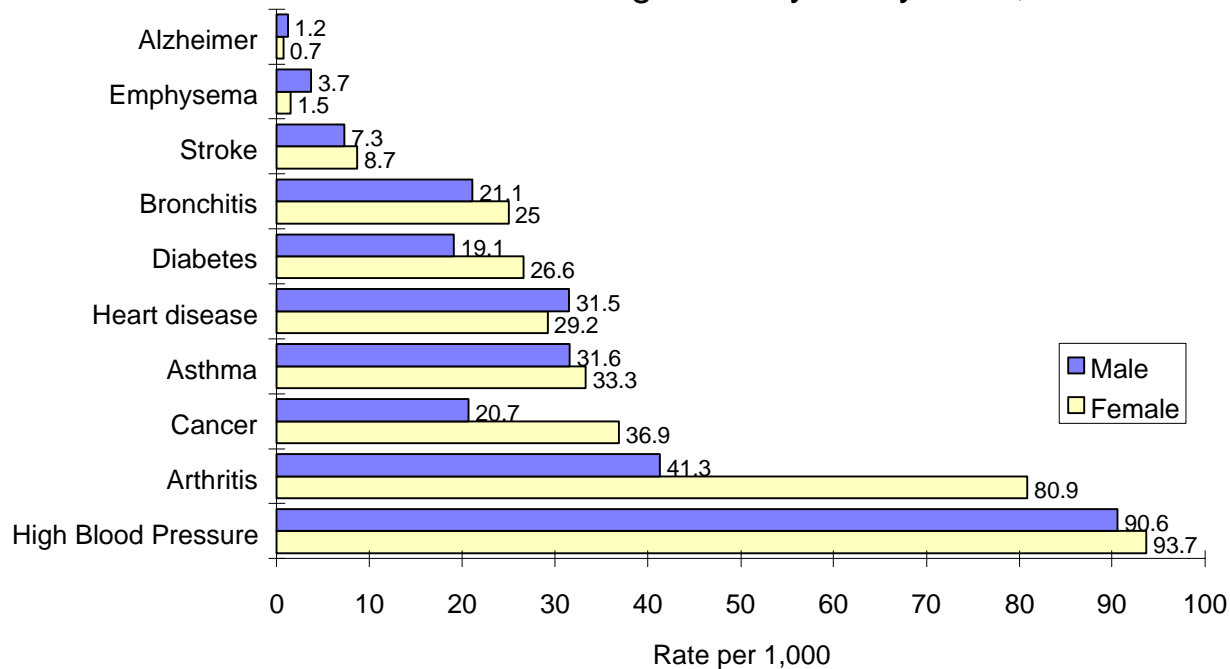
### Chronic Diseases

Chronic diseases are conditions that are long-lasting and require prolonged treatment or care. Chronic diseases often have longer latency periods, so that efforts to prevent them or modify their effects may need to begin years before the diseases become evident.

The figure below shows the proportions of Utahns who were reported to have selected chronic diseases (diagnosed by a physician) in 1991. Women reported higher prevalence rates for most of the chronic conditions shown. The differences between rates for men and women were greatest

for cancer and arthritis. Arthritis is an example of an illness that seldom causes death, but can cause substantial suffering and loss of function over many years. The arthritis prevalence rates were higher for women than men at all ages with the gender difference generally increasing with age.<sup>3</sup> Prevalence of cancer was also substantially higher for women than for men. Prevalence of cancer reflects both the rate at which new cases occur and how long those persons live. Chronic diseases affect women more often than men, partly because women live longer than men.

Frequency (Prevalence) Among Utah Men and Women of Chronic Diseases Ever Diagnosed by a Physician, 1991



Note: For diabetes, high blood pressure, Alzheimer's disease, cancer, stroke, and heart disease, prevalence indicates ever being diagnosed; for asthma, bronchitis, emphysema, and arthritis, prevalence indicates being currently under medical care for that condition.

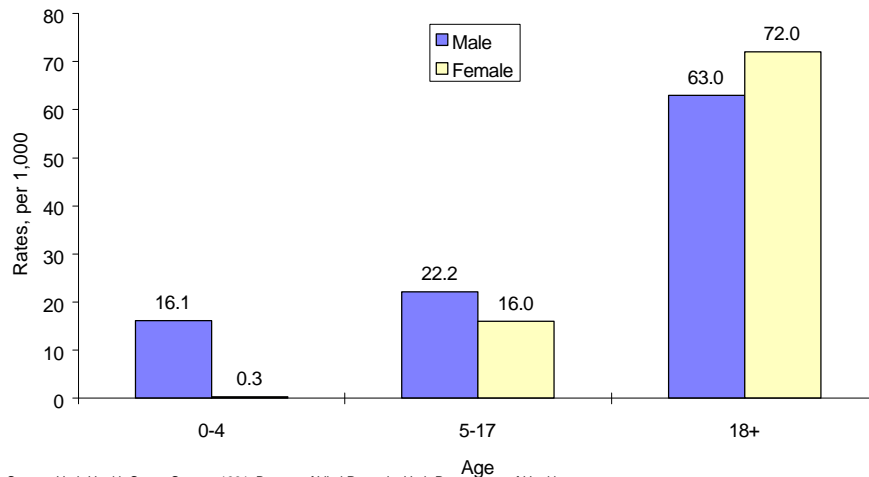
Source: Utah Health Status Survey, 1991, Bureau of Vital Records, Utah Department of Health

**Limitations of Usual Activities**

The following figure, from the 1991 Utah Health Status Survey, shows that women 18 years and older were more likely to report being limited in performing usual activities due to a health impairment, problem or injury than men in the same age range. Such a limitation was reported for 72 percent of women and 63 percent of men. The situation was reversed among Utahns under age

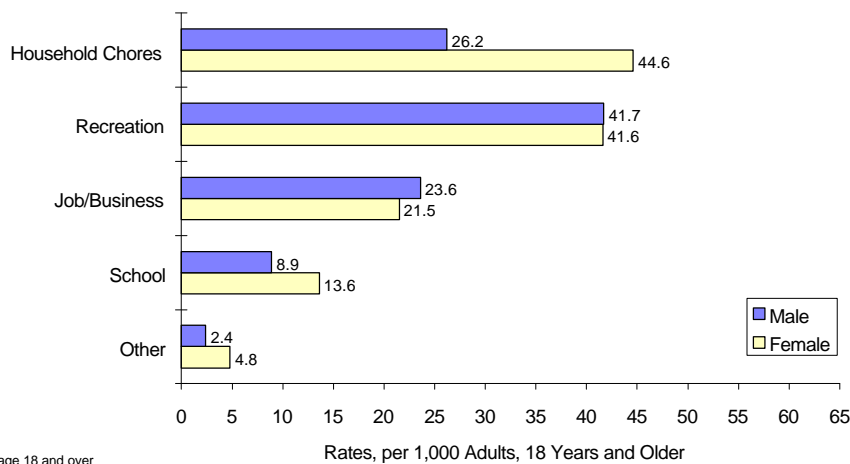
18, where boys were more likely to suffer a limitation in performing usual activities. Among those whose health impairment, health problem or injury prevented them from performing their usual activities, the greatest difference between men and women was in the proportion who reported being limited in performing household chores.

Limitation Rates of Usual Activities by Age and Gender  
Utah, 1991



Source: Utah Health Status Survey, 1991, Bureau of Vital Records, Utah Department of Health

Adults\* Whose Impairment, Health Problem, or Injury Limited Them From Usual Activities by Type of Activity and Gender, Utah, 1991



\*\* age 18 and over

Source: Utah Health Status Survey, 1991, Bureau of Vital Records, Utah Department of Health

## Gender Differentials in Health Status

### Mental Health

The American Psychiatric Association has estimated that 25 percent of women develop depression in their lifetime compared to 10 percent of men. It is not known to what extent that difference reflects a higher incidence of depression, a greater tendency to seek care for depression, or a greater tendency by health care providers to diagnose depression in women.

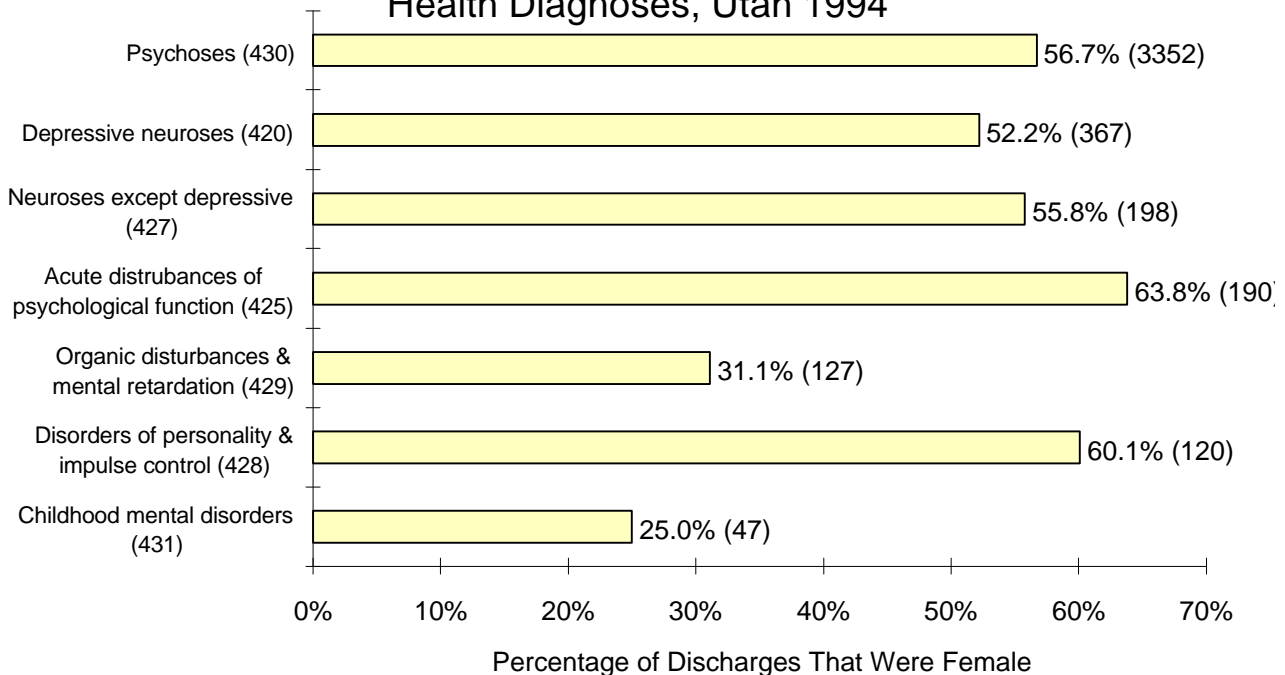
In Utah, as in the United States overall, hospitalization for psychosis accounts for the highest percentage of mental health hospitalizations. The category, "Psychosis," includes several different serious mental health disorders.

### *Mental Diseases And Disorders*

In 1994, 9,464 hospitalizations of Utahns occurred for treatment of mental illness. Fifty-three percent of such patients were females. The figure below shows that more hospitalizations of women than of men occurred for most mental health diagnoses. For each listed Diagnosis Related

Group (DRG), there were more discharges for women than men with the exception of Organic Disturbances and Mental Retardation and Childhood Disorders.

Percentage of All Discharges That Were of Females and the Number of Female Discharges for Selected Mental Health Diagnoses, Utah 1994



Numbers in parentheses indicate the Diagnosis Related Group (DRG) of that condition.

Source: Utah Hospital Discharge Database, Office of Health Data Analysis, Utah Department of Health



*Suicide*

Suicide death rates in Utah are among the highest in the United States, and boys and men are at a much higher risk of suicide death than are girls and women. Age-adjusted suicide rates in Utah during the period from 1989-1991 were 26 per 100,000 for men and 5.8 per 100,000 for women, compared to 18.8 and 4.5, respectively, for the United States.<sup>4</sup>

In contrast to suicide deaths, suicide attempts requiring hospitalization more commonly involved women than men. The suicide attempt rate was about 50 percent higher for women than men while the suicide death rate was about five times higher for men than for women (see table below).

**Suicide Attempts and Suicide Deaths by Sex, Utah 1992-93.**

	<u>Suicide Attempt</u> <u>Discharges*</u>	<u>Rate**</u>	<u>Suicide Deaths*</u>	<u>Rate**</u>
Women	1,217	65.6	83	4.5
Men	809	44.2	443	24.2
Total	2,026	55.0	526	14.3

\* 2 year total from 1992-93

\*\* crude rate per 100,000 per year

Source: ACTION-2000 accessed by Vital Records and Utah Hospital Discharge Database, Office of Health Data Analysis, Utah Department of Health

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References:

1. Omran, Abdel R. Epidemiologic transition in the United States: The health factor in population change. *Population Bulletin* 1977; 32:1-42.
2. Last, John M. ed. *A Dictionary of Epidemiology*. London: Oxford University Press. 1995.
3. Bureau of Vital Records, Utah Department of Health. *Utah's 1991 Health Status Survey: Chronic Disease*. Salt Lake City, Utah 1992.
4. Bureau of Surveillance and Analysis. Utah Department of Health. *Suicide in Utah: Descriptive Epidemiology*. Salt Lake City, Utah, 1995.

## **Gender Differentials in Health Status**

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# 3 Social Differentials in Women's Health Status

Recognizing that improving health for certain high-risk populations is essential if we are to achieve a healthier America, *Healthy People 2000* established specific targets to narrow the gap between the total population and those population groups that experience an above average inci-

dence of death, disease, and disability in the United States.<sup>1</sup> Those population groups include people with low incomes, people who are members of ethnic/racial groups, and people with disabilities.

“Special population groups often need targeted preventive efforts, and such efforts require understanding the needs and the particular disparities experienced by these groups. General solutions cannot always be used to solve specific problems.”

-- *Healthy People 2000*<sup>1</sup>

## Education

Education has a strong positive influence on health-related lifestyle and health status. People with more education are likely to have greater

health-related knowledge, health care resources, and problem-solving abilities, which lead to a healthier lifestyle and reduced risk of mortality.<sup>2</sup>

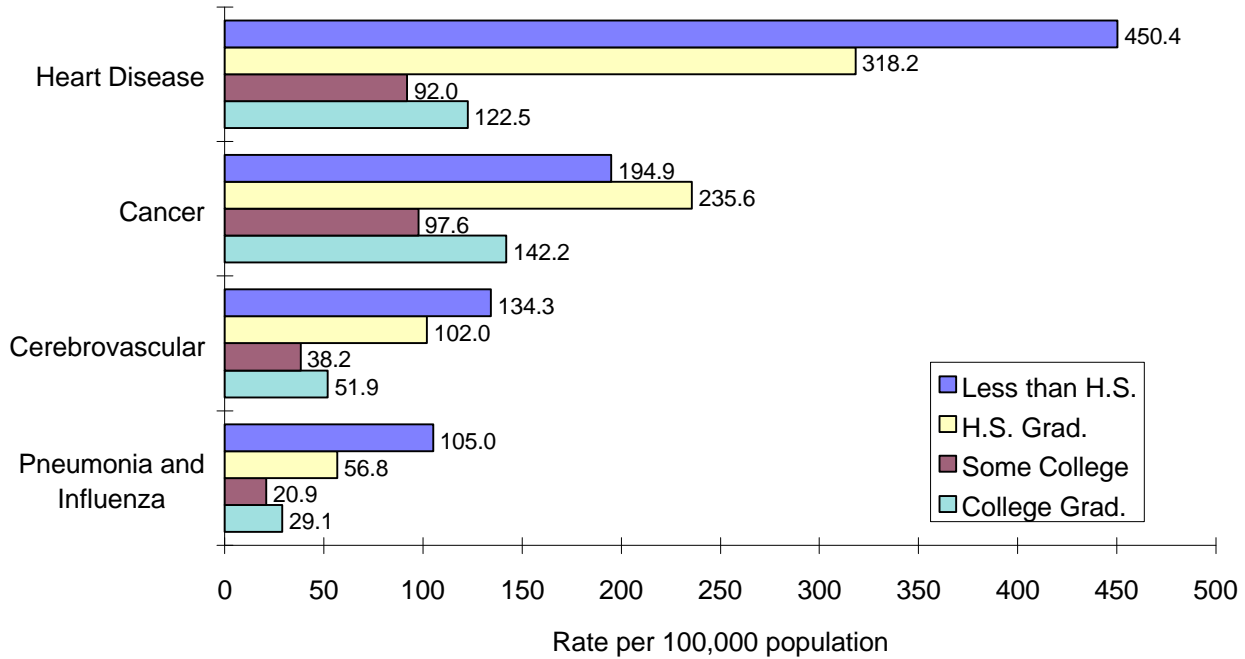
### Utah Women, 18 and Above by Level of Education, 1994

	<u>Number</u>	<u>Percent</u>
< High School	99,017	15.6%
High School Graduate	190,160	30.0%
Some College/Trade School	248,905	39.2%
College Graduate	96,366	15.2%

Note: Numbers of women in 1994 were estimated based on the percentage distribution by level of education in the 1990 census.

Source: Governor's Office of Planning and Budget

**Mortality Rates\* per 100,000 by Leading Causes of Death and Level of Education, Utah Females, 1994**



\* rates are not age-adjusted

Source: Bureau of Surveillance and Analysis, Utah Department of Health

Women with less than a high school education (see figure below) have considerably higher mortality rates than those of women with a higher level of education. However, women with some college education have lower mortality rates than those who are college graduates.

have different career paths from women with some college or trade education. These data also have not been adjusted for income or for age differences that may exist. Further research is needed to explain the relationship between the education and mortality among Utah women.

The underlying reasons for this are unknown. It is possible that female college graduates in Utah

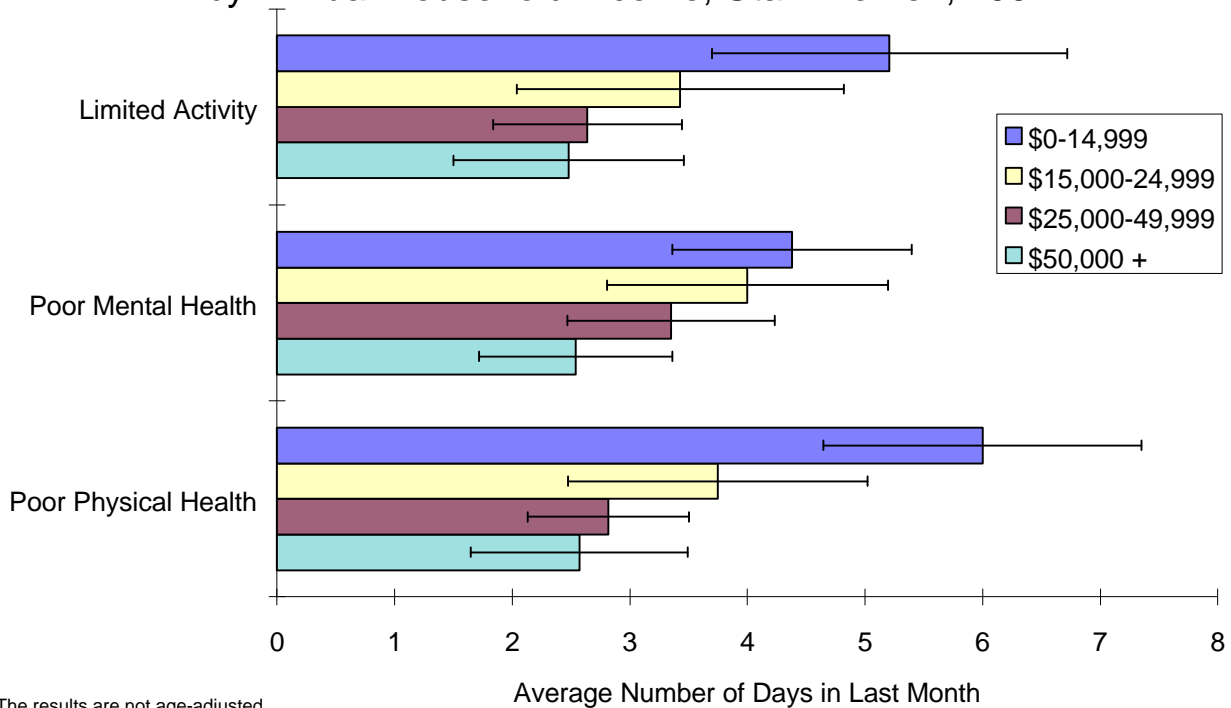
Poverty/Income

There is a strong correlation between income and health status; higher income is associated with better health and lower income with poorer health. The figure below, based on three measures of health status, illustrates significant differences among Utah women with different incomes. For each measure, women with lower income reported more days of poor health than those with higher income.

utes to poor health; for others, illness can limit their education or cause them to lose their jobs and as a result became impoverished. Economic conditions have a profound impact on people's health; research at the population level suggests that illness and mortality rates are higher during periods of unemployment and poor economic conditions.<sup>3</sup>

The relationship between health and income is bidirectional. For some people, poverty contrib-

Reported Days of Poor Health or Limited Activity by Annual Household Income, Utah Women, 1994



The results are not age-adjusted  
 For each measure, reported days of poor health was significantly associated with income level, p<0.01.  
 Source: Behavioral Risk Factor Surveillance System 1994

## Race and Ethnicity

Utah was racially and ethnically more diverse in 1994 than in previous years. In 1994, 89.4 percent of Utahns were whites not of Hispanic origin, 6.1 percent were Hispanics, 2.4 percent were Asian or Pacific Islanders, 1.4 percent were American Indians, and 0.7 percent were African American.<sup>4</sup>

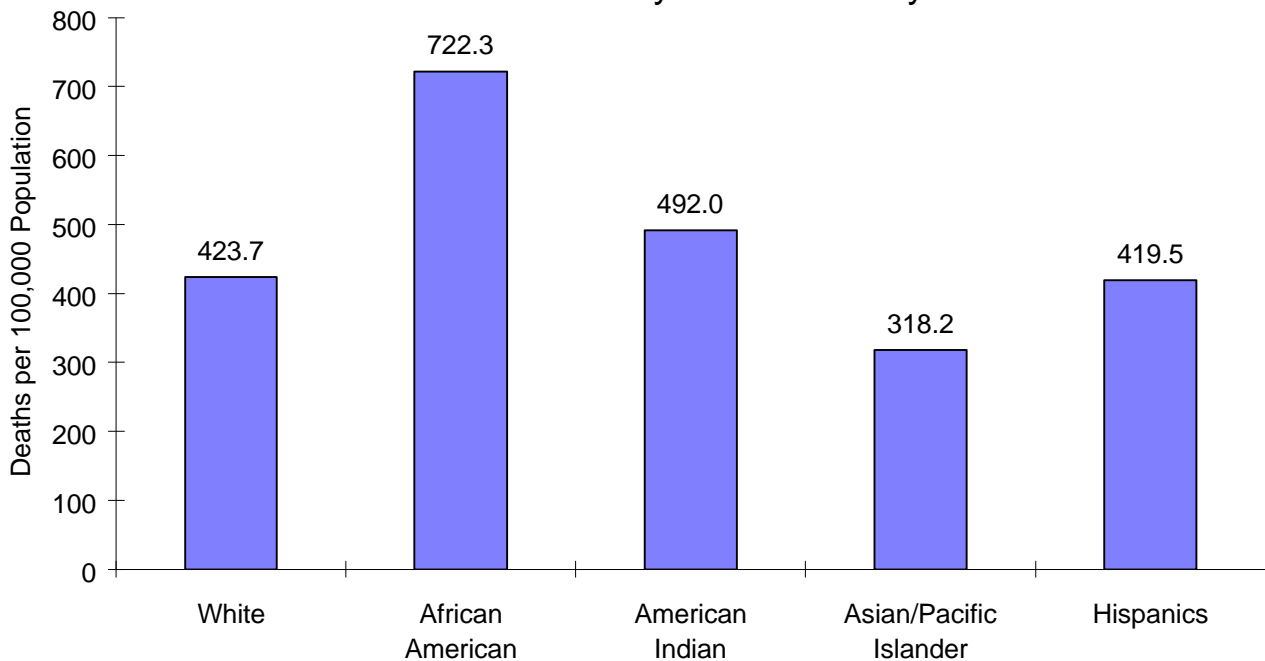
According to a 1993 Utah Department of Health report<sup>5</sup>, death rates for African Americans were nearly twice those for whites (see figure below).

The relationship between race/ethnicity and health is complex and controversial. In some situations,

race/ethnicity is a proxy for socioeconomic status.<sup>6</sup> In addition to being a proxy for socioeconomic status, race/ethnicity may be associated with inherited health risks,<sup>7</sup> such as sickle-cell anemia. Race/ethnicity may also relate to culturally determined health beliefs, behaviors, and norms that affect diet, fertility, and health care seeking behaviors.

Examples of gender and race-specific health data are presented below.

All Cause Death Rate  
Utah 1989-1991 by Race/Ethnicity



Age-adjusted to U.S. 1940 population

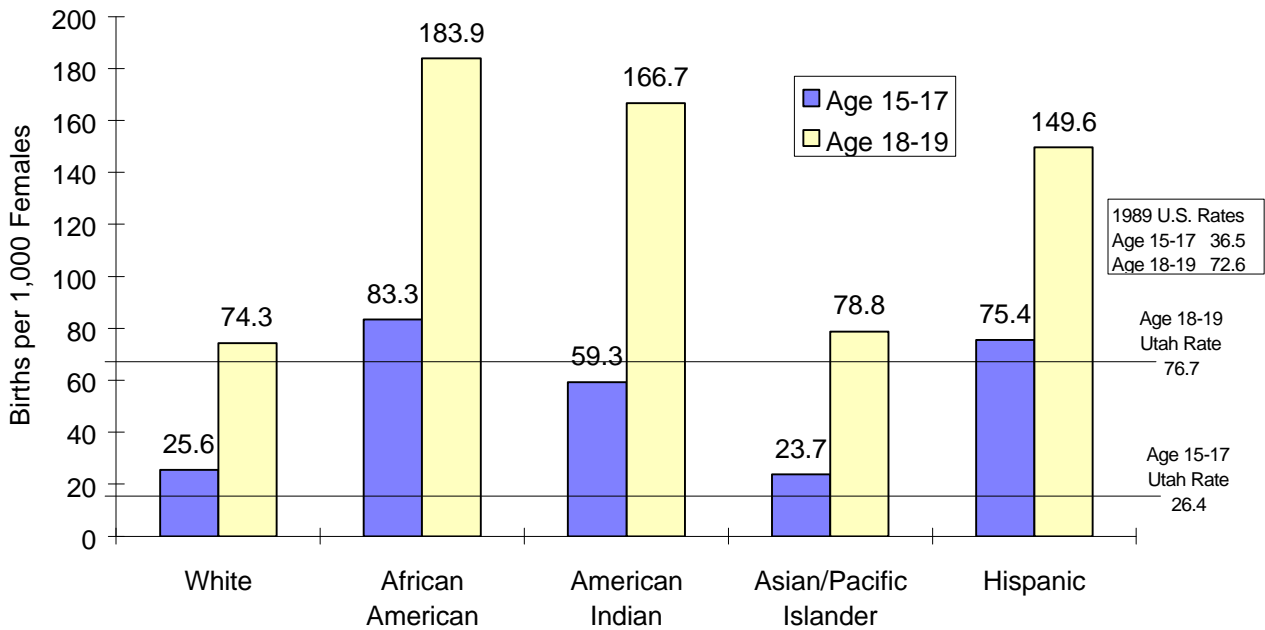
Source: Adapted from *Utah's Healthy People 2000: Health Status Indicators by Race and Ethnicity*, Bureau of Surveillance and Analysis, Utah Department of Health

**Births to Adolescents**

Teen birth rates were higher for some minorities in Utah in 1989 through 1991. For the age group 15 to 17, the birth rates for African Americans, American Indians, and Hispanics were two to three times higher than for whites and Asian/

Pacific Islanders. Higher teen birth rates were also found in the age group 18 to 19 among African Americans, American Indians and Hispanics.<sup>5</sup>

**Births per 1,000 Female Adolescents by Age and Race/Ethnicity, Utah 1989-1991\***



\* 95% confidence intervals were calculated to indicate statistical significance, but not reported here.  
 \* annual average rate

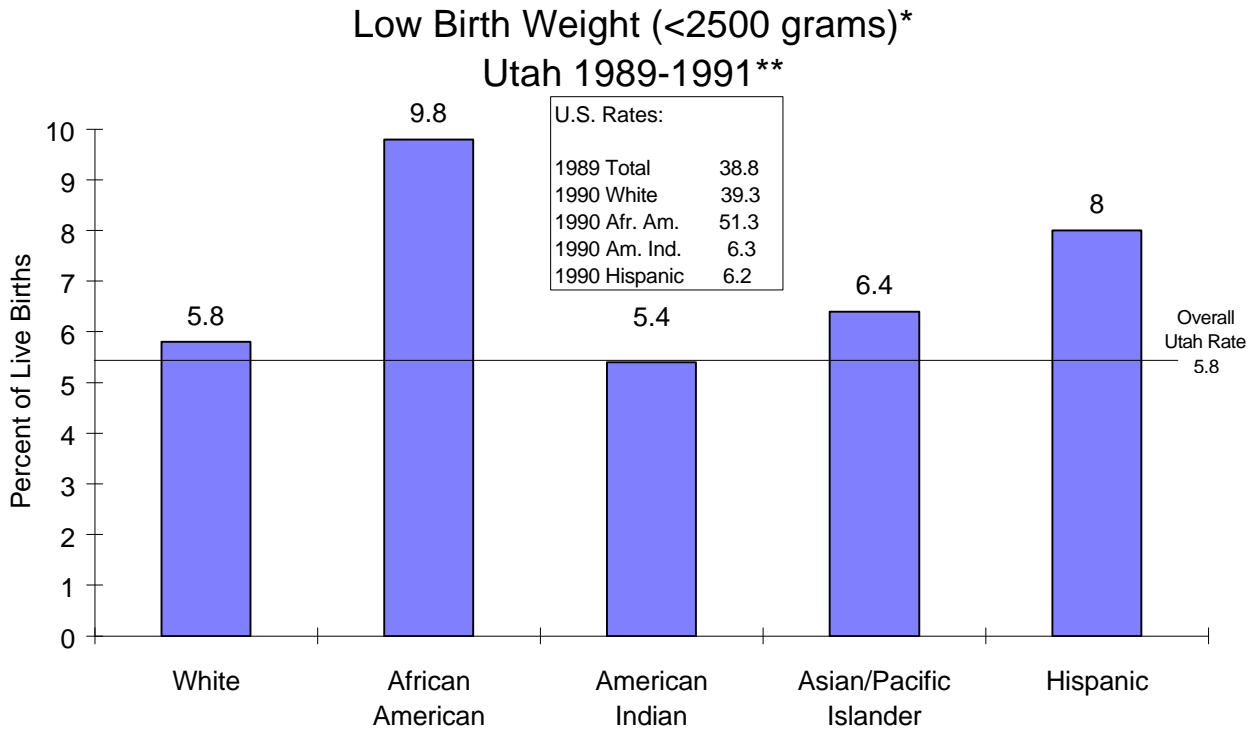
Source: Utah's Healthy People 2000 Health Status Indicators by Race and Ethnicity  
 Bureau of Surveillance and Analysis, Utah Department of Health

## Social Differentials in Women's Health Status

### Prevalence of Low Birth Weight

Low birth weight is an indicator of access problems and/or the need for prenatal care. Among whites, the prevalence of low birth weight children was similar for Utah and the U.S. However, African Americans in Utah were less likely to have low birth weight children than African

Americans in the U.S. Nonetheless, the prevalence of low birth weight children is a significant health problem among African Americans in Utah as is true elsewhere. Additionally, Utah Hispanics appear to have a relatively high rate of low birth weight children.<sup>5</sup>



\* a 95% confidence interval was calculated to indicate statistical significance, but not reported here.

\*\* annual average rates

Source: Utah's Healthy People 2000 Health Status Indicators by Race and Ethnicity  
Bureau of Surveillance and Analysis, Utah Department of Health



### References:

1. U.S. Department of Health and Human Services, Public Health Service. 1991. *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. Washington, D.C.: U.S. Government Printing Office.
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3. M. Harvey Brenner. *Mental Illness and the Economy*. Harvard University Press, 1973.
4. Utah Governor's Office of Planning and Budget. *Race and Ethnicity Data: Understanding the Issues Meeting the Demand in Utah*. Salt Lake City, Utah: Demographic and Economic Analysis, 1996.
5. Bureau of Surveillance and Analysis, Utah Department of Health. *Utah's Healthy People 2000: Health Status Indicators by Race and Ethnicity*. Salt Lake City, Utah, 1993.
6. Kessler, Ronald C. and Harold W. Neighbors. A New Perspective on the Relationships Among Race, Social Class, and Psychological Distress. *Journal of Health and Social Behavior* 1986; 27:107-15.
7. Ekelund, Lars-Goran, C.M. Suchrindran, R.P. McMahon, et al. Coronary Heart Disease Morbidity and Mortality in Hypercholesterolemic Men Predicted From an Exercise Test. *Journal of the American College of Cardiology* 1989; 14:556-63.

## **Social Differentials in Women's Health Status**

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# 4 Reproductive Health

The concept of reproductive health represents a new approach to research and policy regarding maternal and infant health and women’s health in the 1990s. This approach articulates the totality of health needs in reproduction by women and men. It encompasses, among other things, family planning, quality of health care services, prevention and treatment of sexually transmitted diseases and other reproductive tract infections, and prevention and management of infertility.<sup>1</sup> Also, socioeconomic factors are considered along with health factors.<sup>2</sup> Evidence suggests that the various

elements of reproductive health are strongly interrelated, and that improvements in one area will result in gains in other areas as well.

Reproductive health is an important topic for Utah women. In 1994, Utah ranked first in the U.S. with a general fertility rate of 85.9. (The general fertility rate is the number of live births per 1,000 females, 15 to 44 years of age.) Utah’s fertility rate has been higher than the national rate since 1970.

## Prenatal Care

The Healthy People 2000 goal is for 90 percent of all pregnant women to begin prenatal care in the first trimester. According to the American Public Health Association’s Public Health Report Card, Utah ranks third in the nation for adequate prenatal care. During 1995, 84 percent of mothers delivering in Utah received prenatal care in the first trimester, 13 percent in the second, and 3

percent in the third trimester. Women who received no prenatal care accounted for 0.4 percent (152 births) of all live births during 1995.<sup>3</sup> While the Utah rate of first trimester prenatal care remains below the Healthy People 2000 goal, some health care delivery systems have achieved or are close to achieving that goal (see figure below).

**Percentage of Mothers Receiving Prenatal Care in the First Trimester, Utah 1995**

	<u>Percent</u>
State Total	84%
Healthy People 2000 Goal	90%
Two Utah Health Plans	88-91%

Source: Bureau of Vital Records, Utah Department of Health; FHP of Utah and IHC Health Plans, Inc.

## Reproductive Health

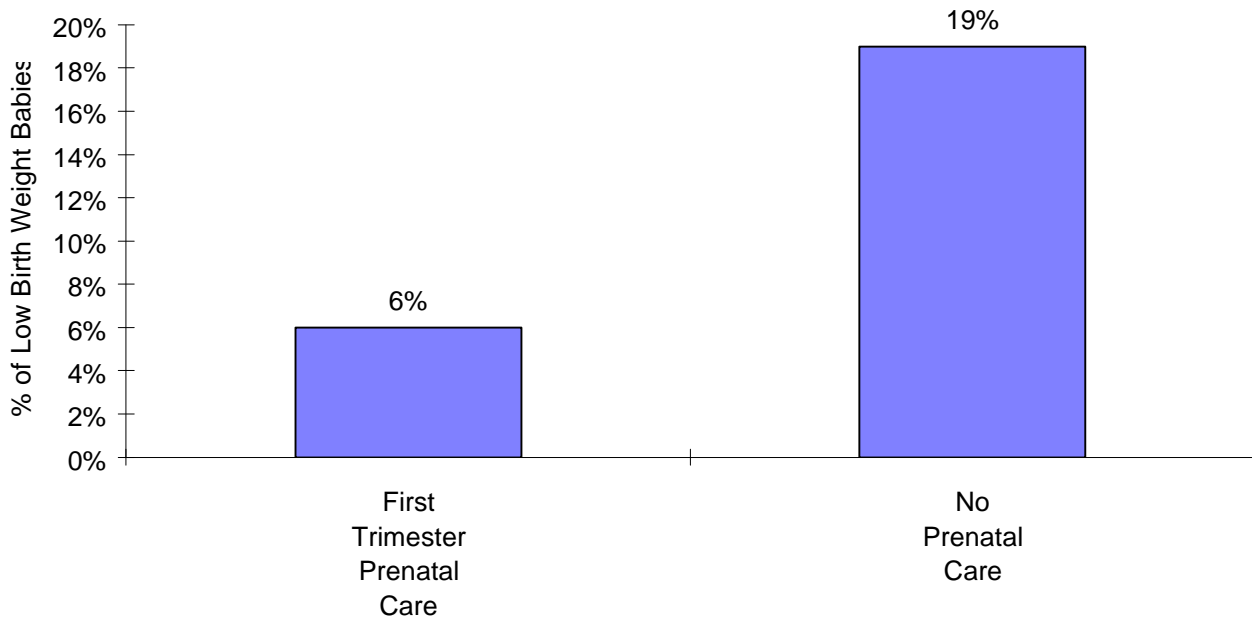
Women of other racial/ethnic backgrounds are less likely to receive early prenatal care than are white women. Among white women, 86 percent enter care early, while only 71 percent of Asian/Pacific Islander, 70 percent of African American, and 59 percent of American Indian women enter care in the first trimester.<sup>3</sup>

Women who enter care late or not at all are more likely to be less educated, from racial/ethnic minority populations, unmarried, to report alcohol and tobacco use during pregnancy, and have had more pregnancies than women who enter care early. Among white women, 0.2 percent reported no prenatal care, while 2 percent of American Indian, 1 percent Asian/Pacific Islander, and 0.7 percent of African American women reported no

care. Of women entering prenatal care in the first trimester, 87 percent were married and 13 percent unmarried. Women receiving no prenatal care, were equally divided between married (48%) and unmarried (52%) women. Early entry into prenatal care is also related to age; mothers under age 18 and those older than 44 are less likely to enter prenatal care early. Women in rural communities are also less likely to access early prenatal care.

Prenatal care is an important predictor of pre-term delivery and low birth weight, which strongly influence infant health. The risk of a low birth weight infant is three times higher for women not receiving prenatal care as for women who begin prenatal care in the first trimester (19% versus 6%).

Percentage of Babies That Were Low Birth Weight by the Mother's Prenatal Care Status, Utah, 1992-1994



Source: Bureau of Vital Records, Utah Department of Health

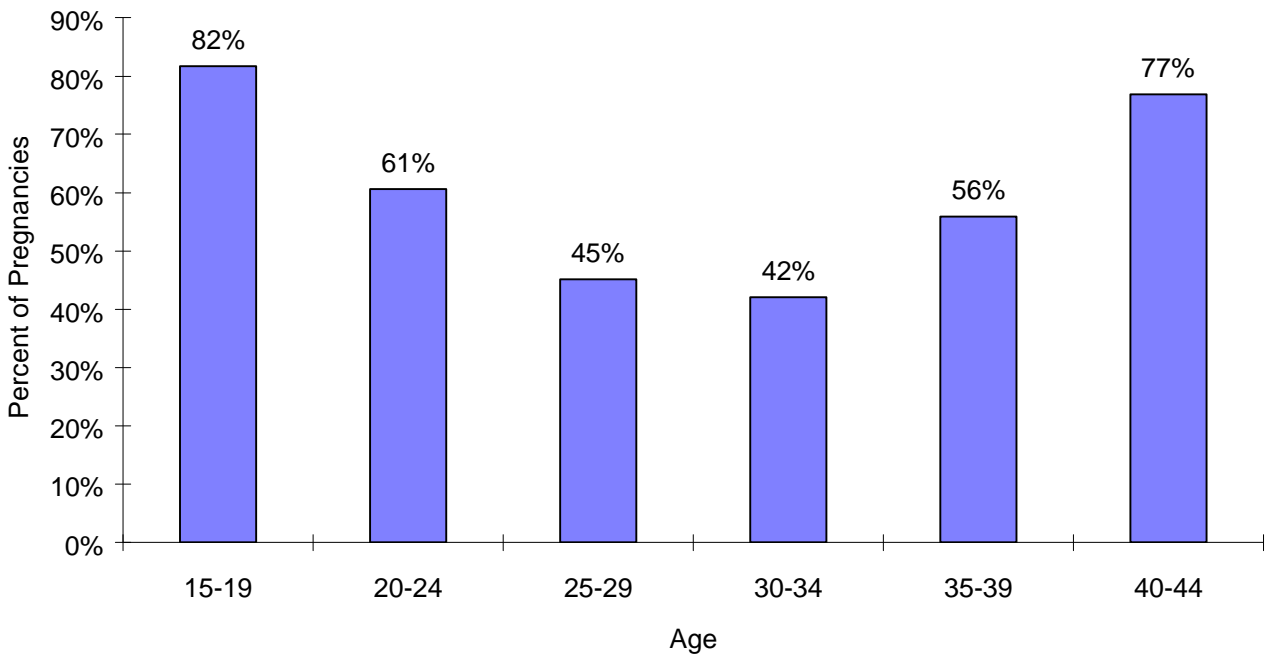
## Family Planning

### Unintended Pregnancies

Unintended pregnancy includes those that are not planned, but desired (mistimed), and those that are unplanned and not desired (unwanted). National data for 1987 indicate that 57 percent of all pregnancies were unintended at the time of conception.<sup>4</sup> In that study, a little more than half (51%) of unintended pregnancies ended in abortion.

Unintended pregnancies occur among women of all childbearing years, but higher proportions of pregnancies are unintended for older and younger women. The percentage of births from unintended pregnancies has been increasing. Of unintended pregnancies, 47 percent occur among women using reversible contraception and 53 percent occur among women using no contraception.<sup>4</sup>

Proportion of All Pregnancies That Were Unintended by Age of Mother, United States, 1987



Sources: USA Data: The Best Intentions Unintended Pregnancy and the Well-Being of Children and Families, Institute of Medicine, 1995, Table 2-2, p. 32.

**Spacing of Pregnancies**

Close spacing of pregnancies can contribute to poor pregnancy outcomes. In a recent study, short intergestational periods resulted in an increased incidence of low birth weight and preterm births.<sup>5</sup> Appropriate spacing of pregnancies can contribute to a healthy outcome for mother and infant, optimize the parent-child relationship, and contribute to the child’s development.

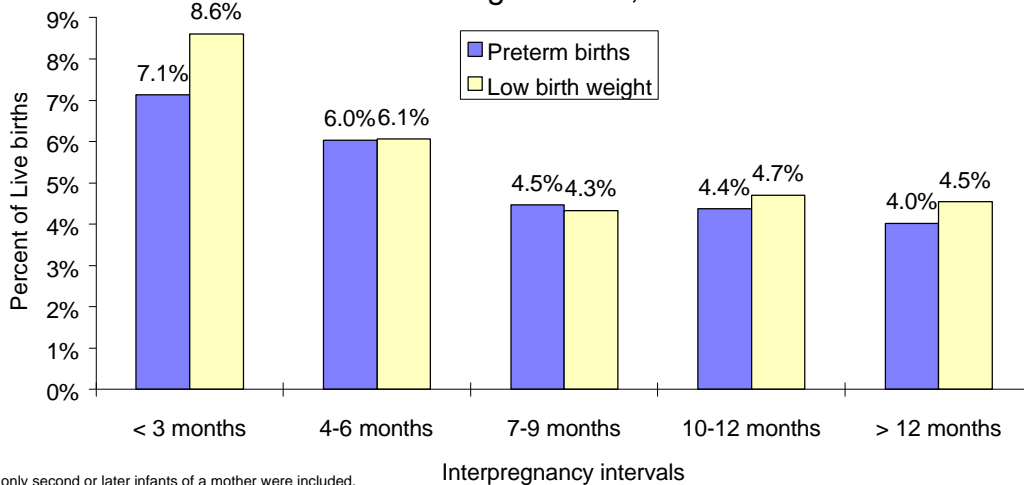
Of 79,312 (other than first born) infants born between 1992 and 1995 for whom the date of the previous child’s birth was known, 19 percent (15,316) were born within 12 months of an older sibling’s birth. Infants born after a short interpregnancy interval were at higher risk of preterm birth and low birth weight. Utah mothers who were delivered of infants after a short interpregnancy interval were more likely to be unmarried, to have less education, gained less weight during pregnancy, and were more likely to use tobacco or alcohol than other Utah mothers.

Family planning allows women and their partners to choose the timing of a pregnancy. Family

planning services in Utah are available through local health departments and community and private providers. In 1991, oral contraceptives were the most frequently selected method of contraception among women seeking family planning services.

Utah Medicaid covers family planning services for eligible women. Women of child-bearing years are eligible for Medicaid if they are receiving a financial payment such as Aid for Families with Dependent Children (AFDC), have a disability, or are pregnant. Women who qualify for Medicaid because they are pregnant only maintain eligibility for two months after the birth of the baby. They can only receive family planning services through Medicaid for those two months and are not eligible again until they become pregnant once again. Hence, many women in need of family planning services to adequately space pregnancies, cannot receive family planning through Medicaid.

Proportion of Utah Live Born Infants<sup>a</sup> With Low Birth Weight<sup>b</sup> or Who Were Delivered Prematurely<sup>c</sup> According to Interval Between Pregnancies<sup>d</sup>, Utah 1992--1995



<sup>a</sup> only second or later infants of a mother were included.  
<sup>b</sup> < 2500 grams  
<sup>c</sup> < 36 weeks gestation  
<sup>d</sup> interval between pregnancies is the time from one live birth to the estimated date of conception of the pregnancy resulting in the next live born infant

Source: Bureau of Vital Records, Utah Department of Health

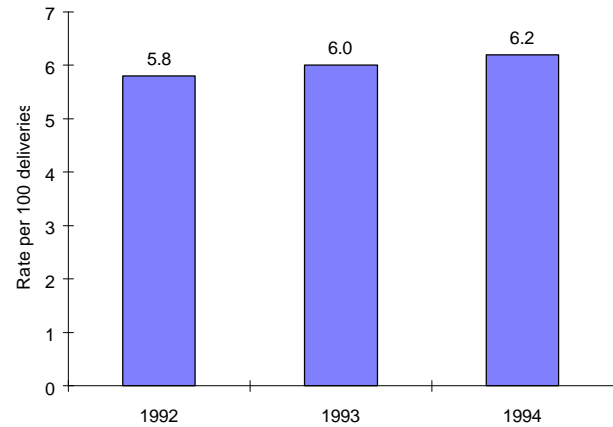
## Obstetric Complications

Obstetric complications may contribute to maternal, fetal, and neonatal morbidity and mortality. Such complications are largely preventable through appropriate prenatal and obstetric care.

A recent study by the Agency for Health Care Policy and Research (AHCPR) compiled obstetric complication rates from 13 states. The rate of complications of obstetric care was defined as the number of patients out of every 100 deliveries with a diagnosis or procedure code indicating fourth degree lacerations, hemorrhage or transfusions, pulmonary, cardiac, central nervous system, or anesthesia complications obstetric shock, renal failure, puerperal infection, air embolism, disruption of cesarean or perineal wound, breast abscess, or other obstetric complications. (Note: This definition differs from that used for the Healthy People 2000 objective for obstetric complications.)

Illinois had the lowest obstetric complication rate among the thirteen selected states in that 1992

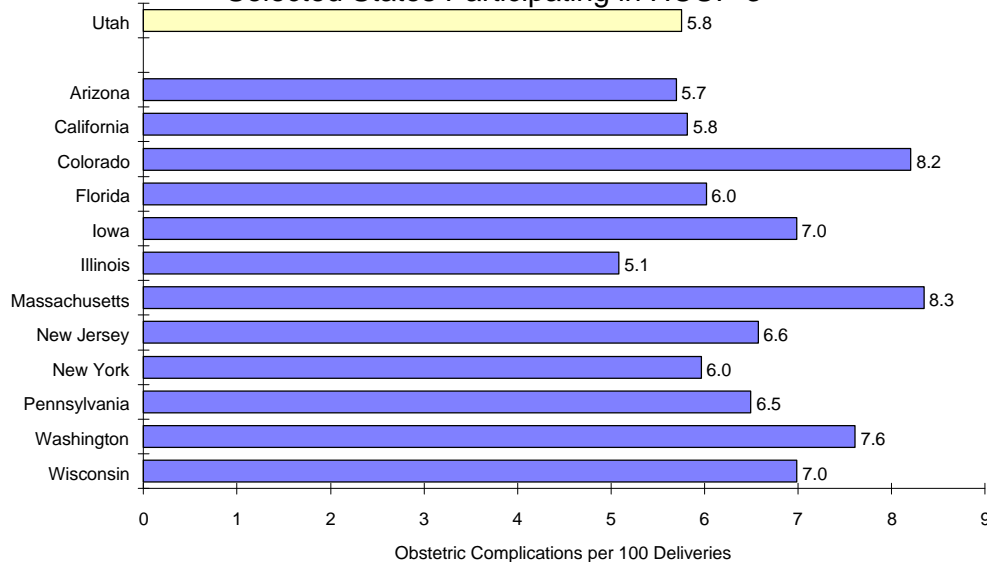
Trend of Obstetric Complication Rate in Utah 1992-1994



Obstetric complications were defined as for HCUP-3, AHCPR study.  
Source: Utah Hospital Discharge Database.  
Office of Health Data Analysis, Utah Department of Health

study. Of western states participating in that study, the rates for Utah, Arizona, and California were comparable, ranging from 5.70 to 5.82 per 100 deliveries, while Colorado and Washington rates were substantially higher. The rate of obstetric complications in Utah increased slightly from 1992 to 1994.

1992 Rates of Obstetric Complications for Utah and Selected States Participating in HCUP-3\*



Source: AHCPR HCUP-3 Quality Indicators Project, Utah Hospital Discharge Database

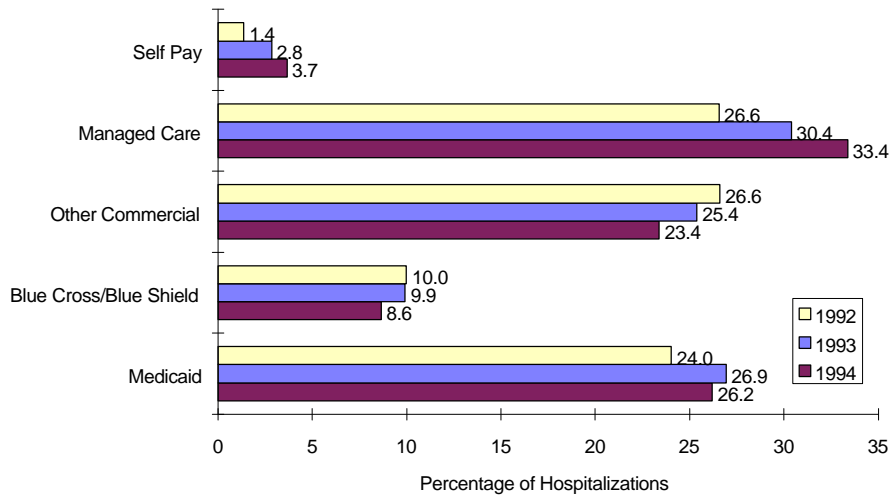
\* Note: This indicator was developed by the Agency for Health Care Policy and Research (AHCPR) through the Healthcare Cost and Utilization Project (HCUP-3). The benchmark results for the twelve states that participated in HCUP-3 are reprinted here with permission from AHCPR.

## Insurance and Hospital Care

Most Utah women have insurance that covers maternity care. In 1994, managed care health plans covered 33.4 percent and Medicaid 26.2 percent of maternity hospitalizations in Utah; indemnity insurance (Blue Cross/Blue Shield and other commercial) covered 32.0 percent. The proportion covered by indemnity insurance declined from 36.6 percent in 1992. Self-paid maternity hospitalizations increased from 1.4 percent in 1992 to 3.7 percent in 1994.

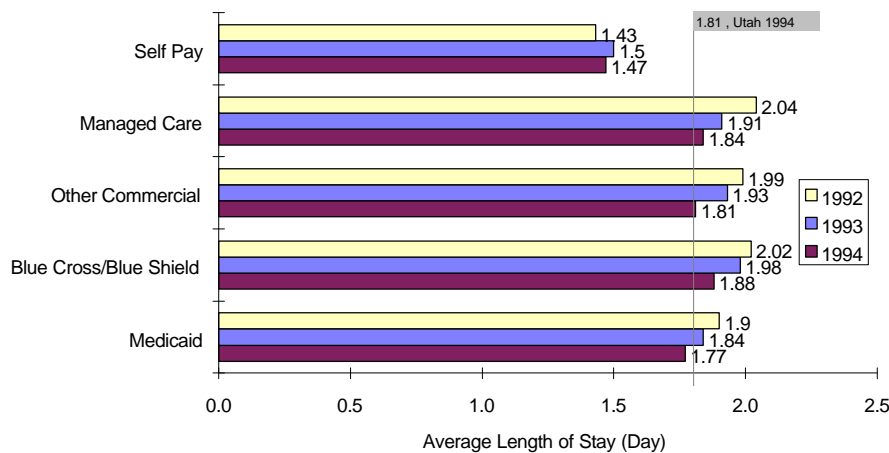
The average length of stay for maternity hospitalizations decreased in Utah from 1992 to 1994. On average, Utah women spent 2 days in the hospital for maternity-related conditions in 1992, and 1.8 days in 1994. Self-paid mothers had the shortest hospital stays. Medicaid mothers were also discharged slightly earlier than those covered by other types of payers. This decrease has caused public concern about the health impact that shorter hospital stays might have on mothers and infants.

Percentage of Maternity Hospitalizations by the Primary Payer, Utah 1992-1994



Source: Utah Hospital Discharge Database.  
Maternity Hospitalization is defined as major diagnostic category (MDC) 14.

Average Length of Stay For Maternity Hospitalization by Primary Payer, Utah 1992-1994



Source: Utah Hospital Discharge Database.  
Maternity Hospitalization is defined as major diagnostic category (MDC) 14.  
Outliers were excluded.



## Maternal Mortality

Maternal death is a devastating event due to the relatively young age and lost potential of its victims. Children of families experiencing maternal death are left without the support and guidance of their mothers. Thorough identification and review of maternal deaths is critical in order to define strategies for prevention. This section compares the results of maternal death reviews for the United States and Utah.

The 1991 Centers for Disease Control and Prevention (CDC) maternal mortality review guidelines defined a maternal death as any death occurring during pregnancy, or within one year after termination of pregnancy, resulting from complications of the pregnancy itself, by a chain of events initiated by the pregnancy, or by the aggravation of an unrelated condition by the physiologic or pharmacologic effects of the pregnancy.<sup>6</sup>

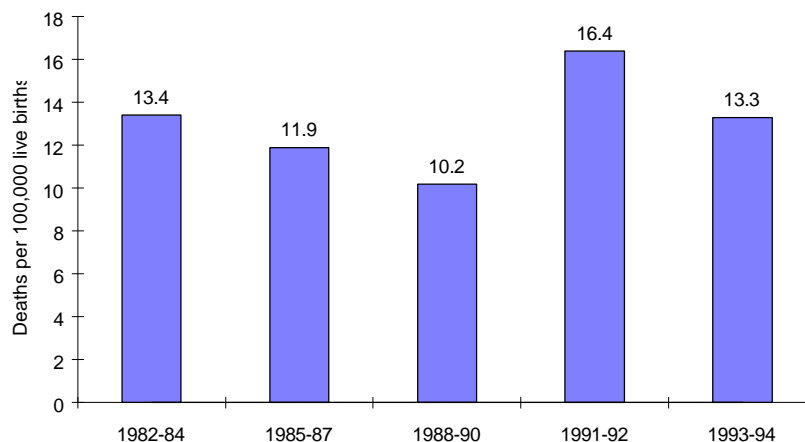
The CDC study reviewed all maternal deaths identified in the U.S. from 1979 through 1986. The maternal mortality ratio for that time period was 9.1 deaths per 100,000 live births. The risk of maternal death increased with age and was higher among women of black and other minority races than among white women for all age groups. The

risk of maternal death was higher for those with less education in all age groups. The leading cause of death after the delivery of a live birth was pulmonary embolism.<sup>7</sup>

The CDC published findings from their ongoing review of maternal deaths for the years 1987 through 1990.<sup>6</sup> From 1987 to 1990, the maternal mortality ratio increased from 7.2 to 10.0 per 100,000 live births. It is thought that increased efforts to improve reporting of maternal deaths contributed to that increase.

A retrospective review of maternal deaths in Utah for the years of 1982 to 1994 was recently completed. The CDC's definition of maternal mortality was used to allow comparisons between Utah and U.S. data. During the thirteen years included in this review 62 maternal deaths were identified in Utah. During that same interval, 484,789 live births were registered in the state of Utah, resulting in an overall maternal mortality ratio of 12.8 per 100,000 live births, somewhat higher than for the overall U.S.<sup>8</sup> The higher risk of maternal mortality found in Utah may be due to more complete ascertainment of pregnancy-related deaths.

Maternal Deaths per 100,000 Live Births\*  
Utah, 1982-1994

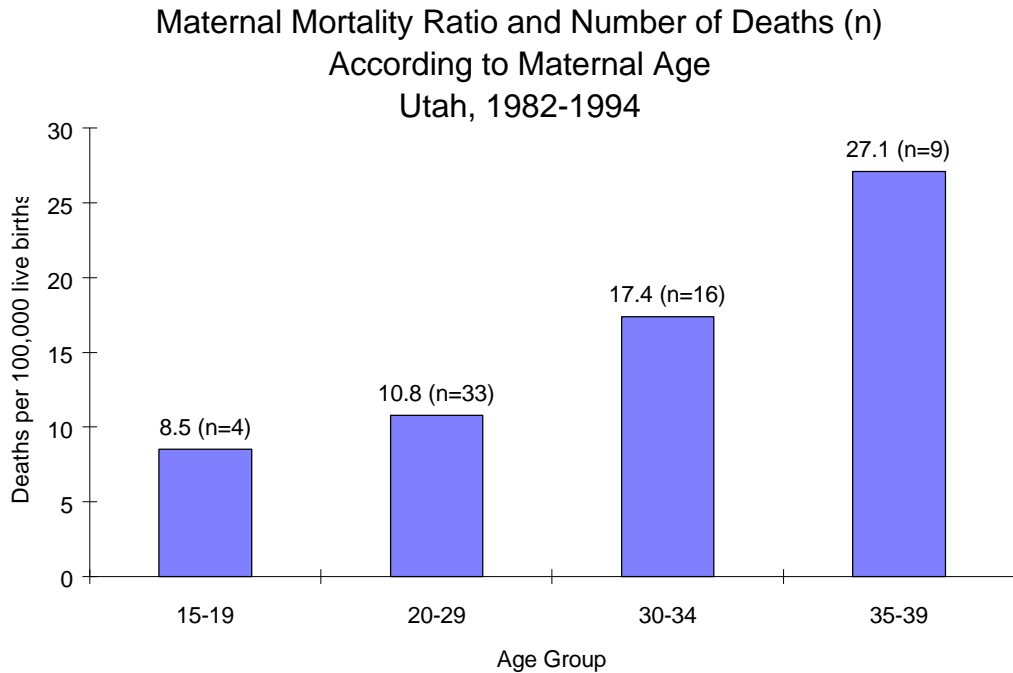


\* maternal mortality ratio  
Source: Perinatal Mortality Review Database, Utah Department of Health

## Reproductive Health

The ages of women who died of pregnancy related complications during the Utah review ranged from 15 to 39, with a mean of 27.7 years.

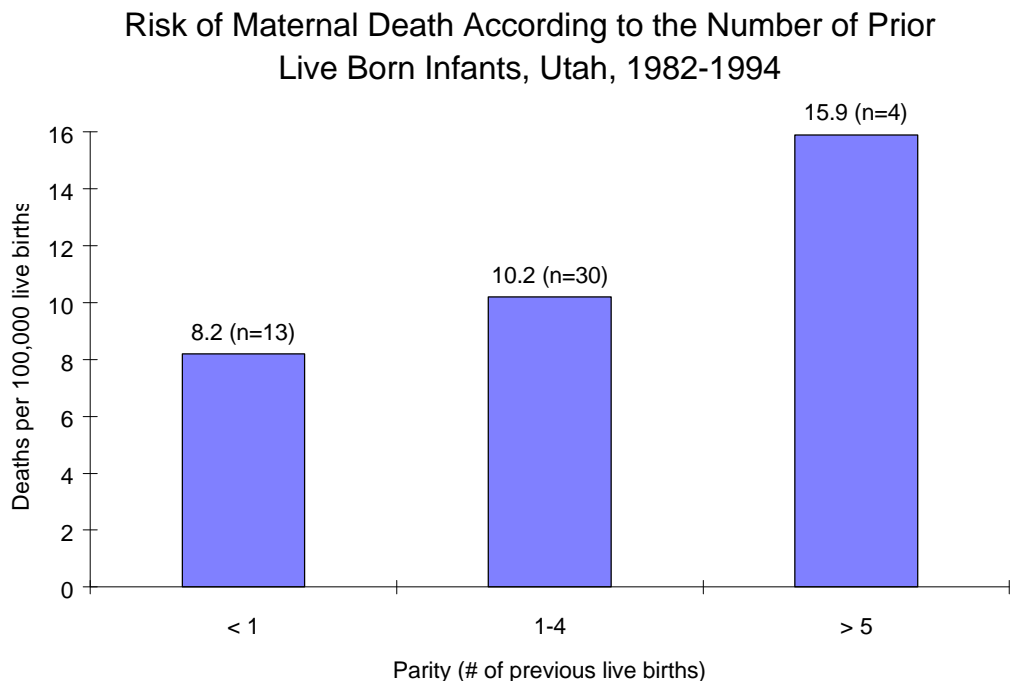
The risk of maternal death increased with increasing maternal age (see figure below).



Source: Perinatal Mortality Review Database, Utah Department of Health

On average, women dying of pregnancy related complications had been pregnant 3.1 times (including the pregnancy resulting in death). The

risk of maternal death increased with an increasing number of previous births (see figure below).



Source: Perinatal Mortality Review Database, Utah Department of Health

Of the 62 women who died, 85.5% (N=53) were married; 87.3% (N=54) were white, 4.8% (N=3) Asian-American, 4.8% (N=3) Hispanic, 1.6% (N=1) Native American and 1.6% (N=1) Iranian. The average education was 12.4 years for women in this review.

The classic triad of causes of maternal death; hemorrhage (N=8), infection (N=5) and pre-eclampsia/eclampsia (N=3) remained important

contributors (16/62 or 26%). However, trauma (N=10), pulmonary embolism (N=10) and maternal cardiac disease (N=9) accounted for 47% (29/62) of maternal deaths in the Utah study. Improvements in prevention, earlier diagnosis and aggressive treatment of these conditions will be needed to achieve the Public Health Service objective, a 50 percent reduction in the maternal mortality ratio by the year 2000.

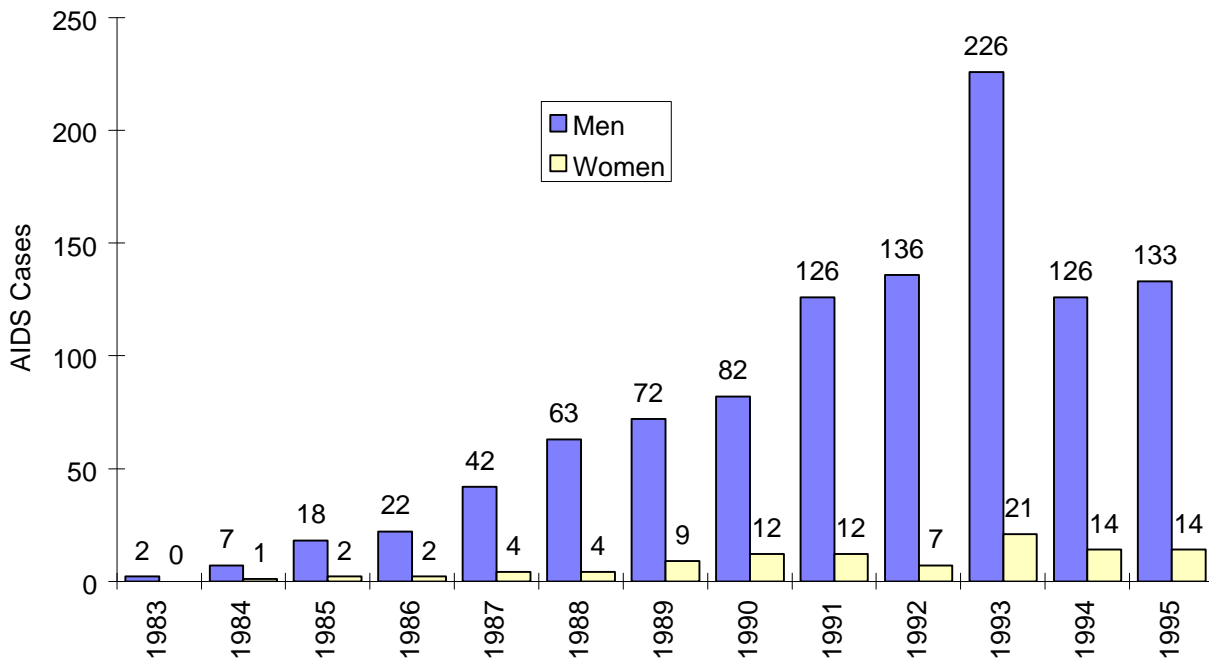
## HIV/AIDS and Other Sexually Transmitted Diseases

### HIV/AIDS

Through June 30, 1996, 111 Utah women have been reported to have AIDS; this represents 8.6 percent of the 1,289 AIDS cases reported in Utah since 1983. An additional 76 HIV infections have been reported in Utah women, 12.2 percent of the 622 total HIV infection cases reported.

Nationally, AIDS and HIV infection rates have been increasing more rapidly among women than among men. In Utah, the proportion of AIDS occurring among women has remained stable, at about 10 percent, since the beginning of the epidemic.

Reported AIDS Cases in Utah, by Gender, 1983-1995

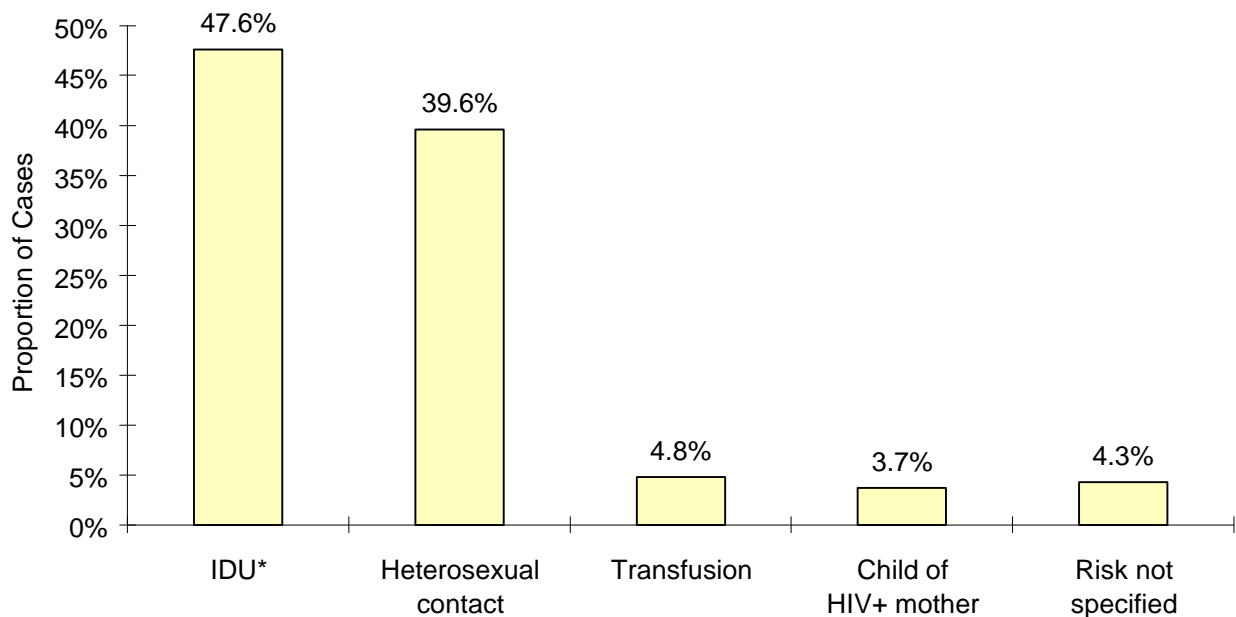


Source: Bureau of HIV/AIDS, Tuberculosis/Refugee Health, Utah Department of Health

HIV/AIDS among Utah men is most often acquired by same-sex contact (68 percent of 1,724 HIV and AIDS cases reported through June 1996). In contrast, HIV/AIDS among Utah women is most often acquired by heterosexual contact or

injecting drug use (IDU) (see figure on next page). Most women who acquired HIV through heterosexual contact had a sex partner who injected drugs.

### Reported Cases of HIV or AIDS Among Utah Females by Risk Group, 1983 to June 1996



\* Injection drug use

Source: Bureau of HIV/AIDS, Tuberculosis/Refugee Health, Utah Department of Health

HIV and AIDS disproportionately affect Utah women of color. Of HIV and AIDS cases reported through June 1996, 19 percent were among

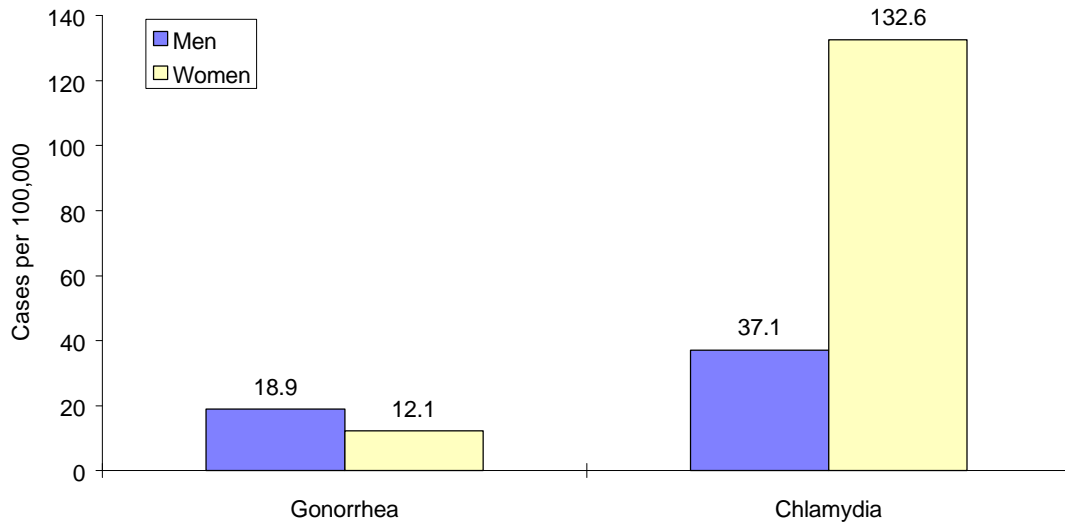
black women, and 11.8 percent among Hispanic women. By contrast, of the estimated 1994 Utah population, only 0.7 percent were black and 6.1 percent Hispanic.

### Gonorrhea and Chlamydia

Gonorrhea and chlamydia cause female cervical infections that are usually asymptomatic, but if untreated, those infections can progress to pelvic inflammatory disease (PID). PID can result in tubal scarring and infertility, increase the risk of ectopic pregnancy, and cause chronic pelvic pain that can necessitate hysterectomy.<sup>9</sup>

In 1995, 120 uncomplicated gonorrhea cases (12.1 per 100,000 women) and 1,310 chlamydia cases (132.6 per 100,000 women) were reported in Utah women (see figure on next page). Despite its serious sequelae, chlamydia has been an under-recognized problem, partly because diagnostic tests have not been widely available until recently.

**Reported Gonorrhea and Chlamydia Rates  
Utah Men and Women, 1995**

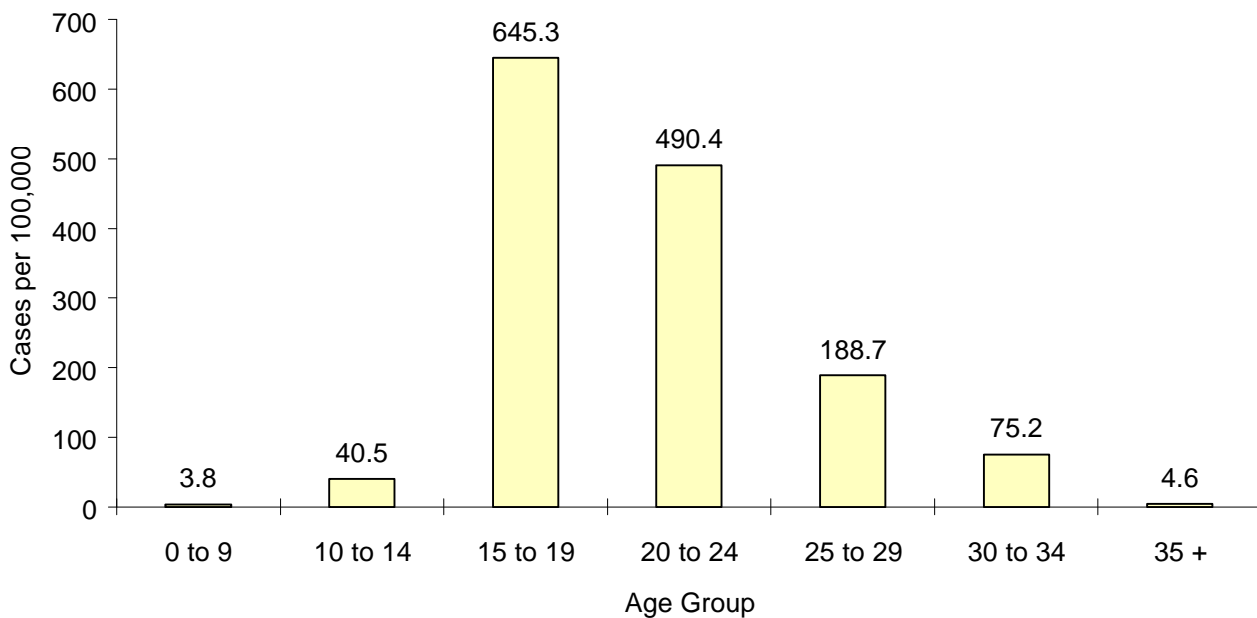


Source: Bureau of Epidemiology, Utah Department of Health

The actual number of Utah women affected by chlamydia is certainly much higher, because most women are asymptomatic, screening tests are underutilized, and currently used tests miss up to

one third of infections. Both chlamydia and gonorrhea rates are highest among adolescent girls and young women (see figure below).

**Reported Chlamydial Infection Rates Among Utah Womer  
by Age, 1995**



Source: Bureau of Epidemiology, Utah Department of Health

Pelvic inflammatory disease is also substantially under-recognized. While some women become severely ill and require hospitalization, others have much less severe symptoms, although the damage to fertility can be just as serious for women with apparently mild illness as for those who are severely ill.<sup>10</sup>

In 1992 through 1993, about 2 in every 10,000 Utah women were hospitalized for PID, resulting in nearly \$1.7 million in hospital charges.<sup>9</sup>

**Sexual Behavior**

Data on sexual behavior of Utah women and girls are inadequate. An important source might be the CDC-sponsored Youth Risk Behavior Survey, but in Utah, that survey does not ask questions about sexual behavior that are asked in other states.

Bureau of HIV/AIDS, Utah Department of Health, in conjunction with an anonymous HIV seroprevalence study (1988 to 1992). Characteristics of the women in that survey are provided in the table below.

A survey of women receiving reproductive health care services in Utah was conducted by the

**Characteristics of Women in the Utah Department of Health's  
Anonymous HIV Seroprevalence and Sexual Behavior Survey,  
1988-1992**

<u>Respondents'</u> <u>Characteristics</u>	<u>Percent of</u> <u>Respondents</u>
White Race	85%
Age	
< 20 years	24%
20-24 years	34%
25-29 years	21%
30 + years	21%
Education	
Less than High School	21%
High School Graduate	35%
Some College	33%
College Graduate	12%
Married	16%
HIV-infected*	0.03%

\* HIV seroprevalence rate is for the entire survey; not all participated in the sexual behavior study.

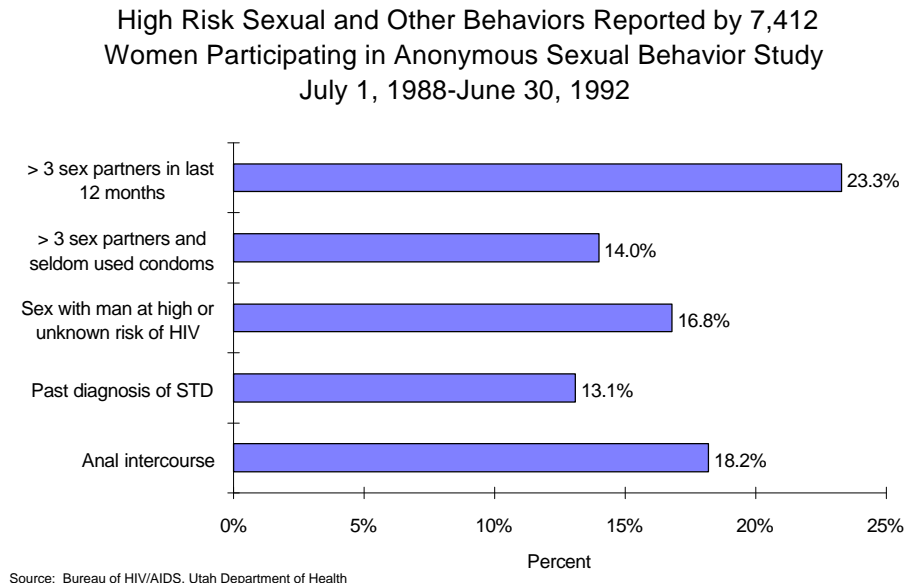
Source: Bureau of HIV/AIDS, Utah Department of Health

## Reproductive Health

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Though only 0.03 percent of women in the seroprevalence survey were HIV-infected, a substantial proportion of those who participated in the behavioral survey reported sexual behaviors

that would place them at risk of acquiring HIV or other sexually transmitted diseases (see figure below).



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7. Koonin, L. Astrash, H., Lawson, H., and Simtiy, J. Maternal Mortality Surveillance, United States, 1979-1986. *Morbidity and Mortality Weekly Report* 1991; 40:1-13.
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# 5 Diseases and Conditions of Concern for Women

This chapter examines diseases, such as uterine and ovarian cancers, that uniquely affect women, conditions such as osteoporosis that affect women more than men, and others, such as heart disease that affect women in somewhat different ways than they affect men.

Important findings that emerge include:

- Cancer is the leading cause of death for women age 25 to 64.

- Breast cancer is the leading cause of cancer death for Utah women, but lung cancer death rates are increasing and nationally lung cancer has surpassed breast cancer as the leading cancer killer of women.

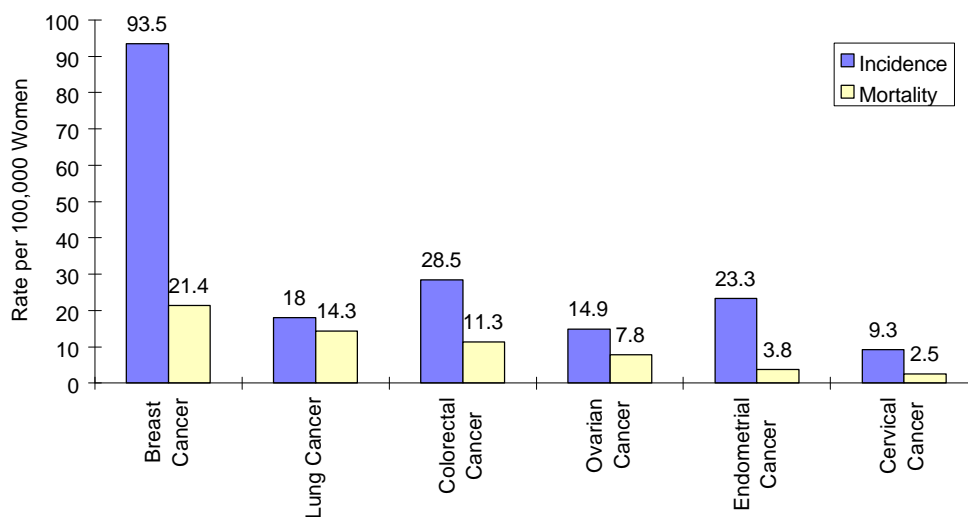
- Heart disease death rates are higher for men, but because women live longer, after age 65, more women than men die of heart disease.

## Cancer

Cancer is a major cause of morbidity and mortality among women. The American Cancer Society estimates that 594,850 new cases of cancer will be diagnosed among U.S. women in 1996 and that 262,440 women will die of cancer in the same year.<sup>1</sup> Cancer is the leading cause of death among Utah women 25 to 64 years of age.<sup>2</sup> While there

are many body sites of cancer origin, five sites comprise 69.3 percent of all cancer cases diagnosed in women.<sup>3</sup> These body sites are: breast, lung, colon (including the rectum), ovary, and uterus (includes the cervix and endometrium of the uterus).

Cancer Incidence\* and Mortality Rates, 1992-93



\* Incidence measures the rate at which new cases occur

\*\* Rates have been age-adjusted to the 1970 U.S. population

Source: Utah Cancer Registry; Bureau of Vital Records, Utah Department of Health; accessed through ACTION-2000.

**Breast Cancer**

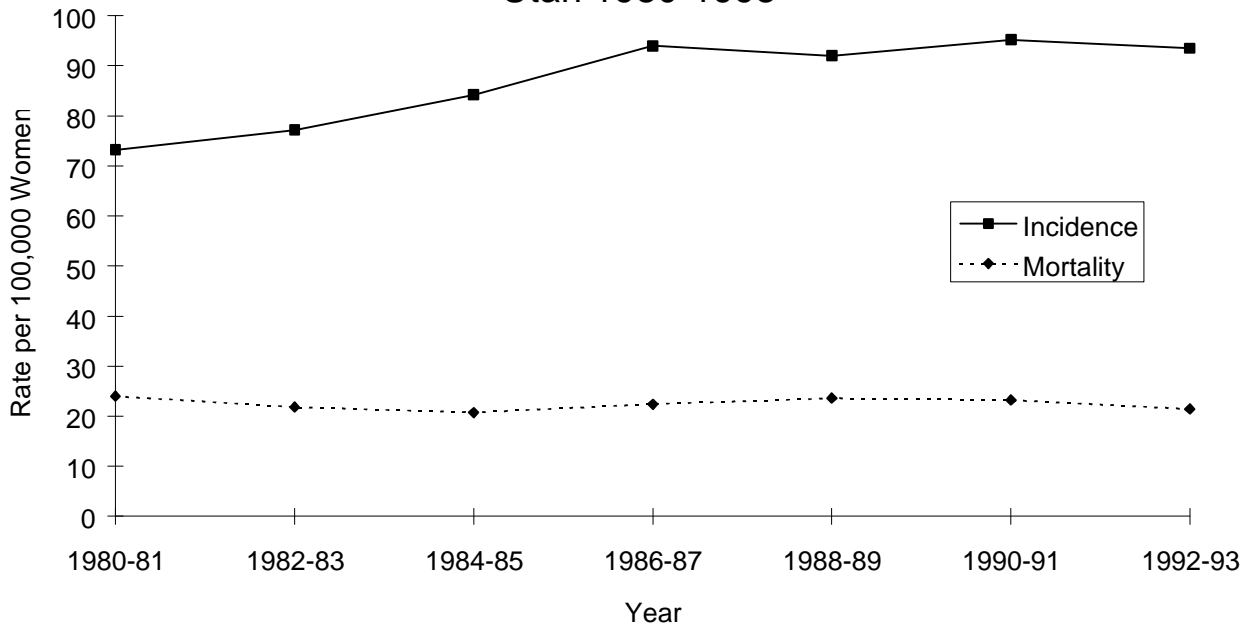
Breast cancer is the most commonly diagnosed female cancer and the second leading cause of cancer death among U.S. women. Breast cancer is the leading cause of cancer death among Utah women. In 1993, 802 new cases of breast cancer were diagnosed in Utah women and 184 Utah women died of breast cancer.<sup>4</sup>

Risk factors for breast cancer include older age, history of breast cancer in a first degree relative, personal history of breast cancer, carcinoma in situ or atypical hyperplasia on breast biopsy, some forms of benign breast disease, early age at onset of menses, late age at menopause, never having children or having the first live birth at a later age, high socioeconomic status, and a history of exposure to high-dose radiation.<sup>5,6</sup> Associations have also been suggested between breast cancer and oral contraceptives, estrogen replacement therapy, obesity, and a diet high in fat, but these possible risk factors require further study.<sup>5</sup>

Since many of the known risk factors for breast cancer cannot be modified by preventive behavior, early detection by mammography or clinical and self breast examination is the key to preventing deaths from breast cancer. Use of mammography appears to be increasing among Utah women over age 50<sup>7</sup> (see page 63).

Annual age-adjusted incidence (new cases) and death rates for breast cancer in Utah women for the period 1980 through 1993 are shown in the figure below. While incidence rates appear to have increased over this time period, mortality rates have remained relatively stable. This increase in incidence during the 1980s has also been observed nationally and is probably due to increased use of screening mammography.<sup>8,1</sup> According to the most recent national data, death rates have begun to fall for white women but not for African American women.<sup>1</sup> This decline among white women may be due to earlier detection and improved treatment.

**Age-adjusted Incidence and Mortality Rates  
Female Breast Cancer  
Utah 1980-1993**



\* Rates have been age-adjusted to the 1970 U.S. population

Source: Utah Cancer Registry; Bureau of Vital Records, Utah Department of Health; accessed through ACTION-2000.

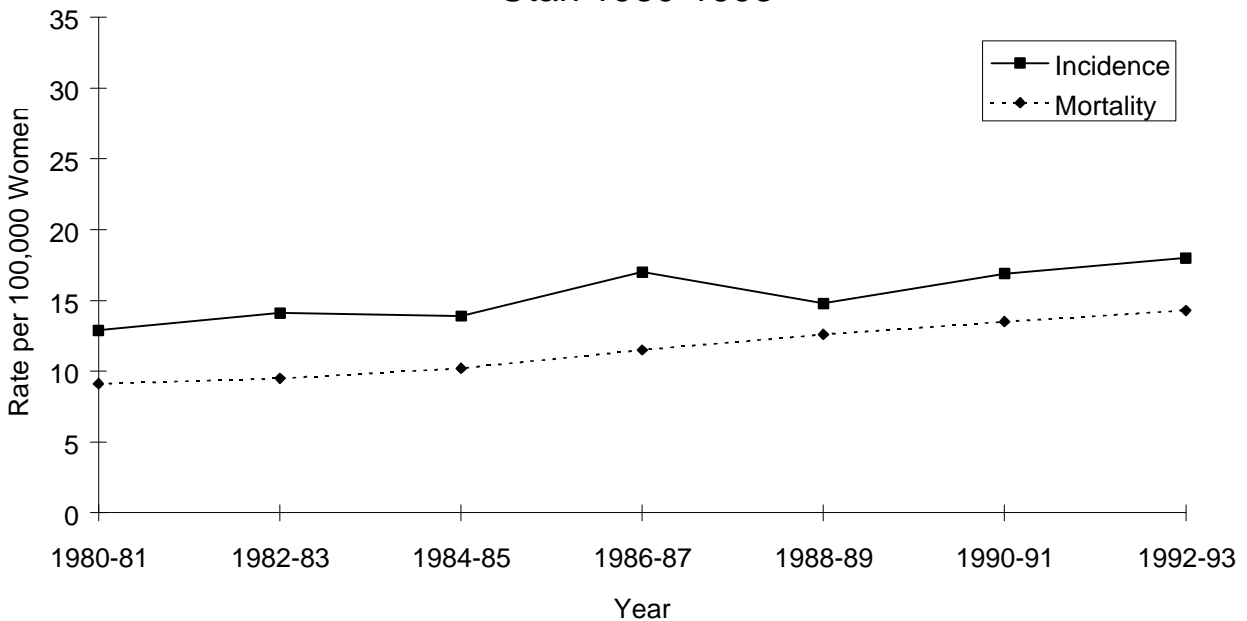
**Lung Cancer**

In 1987, lung cancer surpassed breast cancer as the leading cause of cancer death among U.S. women.<sup>1</sup> Lung cancer is the second leading cause of female cancer death in Utah. There were 148 new cases of lung cancer diagnosed and 126 deaths due to lung cancer in Utah women in 1993.<sup>4</sup>

Cigarette smoking is responsible for 80 percent of all lung cancers in women.<sup>9</sup> In 1994, 14 percent of Utah women 18 years of age and older reported being current smokers (see page 58).<sup>7</sup> Other risk factors for lung cancer include exposure to asbestos, certain organic substances, household radon, and environmental tobacco smoke.

Early detection of lung cancer is difficult and symptoms usually do not appear until the disease is advanced. For example, the cancer had already spread to distant sites of the body at the time of diagnosis in 44% of all lung cancer cases diagnosed during the period 1986 through 1991.<sup>10</sup> Studies have not indicated significant evidence that screening for lung cancer can reduce deaths from this disease.<sup>5</sup> Annual age-adjusted incidence and mortality rates for lung cancer in Utah women are shown in the figure below. Both incidence and mortality rates appear to have increased among Utah women since 1980.

Age-adjusted Incidence and Mortality Rates  
Female Lung Cancer  
Utah 1980-1993



\* Rates have been age-adjusted to the 1970 U.S. population

Source: Utah Cancer Registry; Bureau of Vital Records, Utah Department of Health; accessed through ACTION-2000.

**Colorectal Cancer**

Colorectal cancer is the third most common cancer diagnosed in U.S. women and is expected to cause 27,500 female deaths in 1996.<sup>1</sup> In 1993 there were 245 new cases among Utah women and 97 women lost their lives to colorectal cancer.<sup>4</sup>

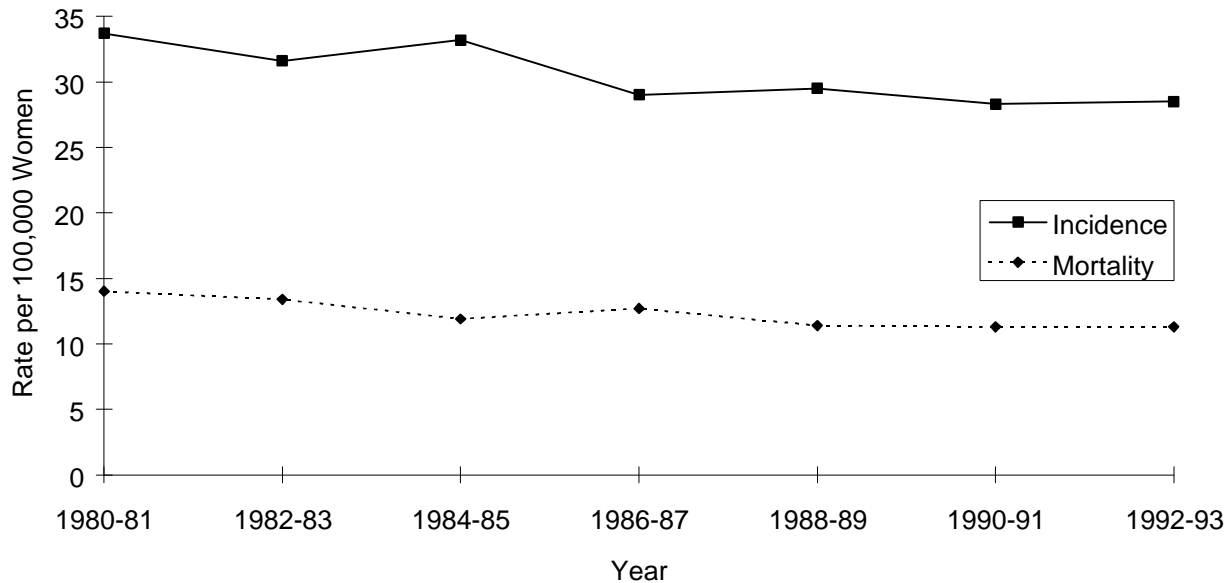
Risk factors for colorectal cancer include a personal or family history of colorectal cancer or polyps, a prior diagnosis of endometrial, ovarian or breast cancer, and inflammatory bowel disease. Other possible risk factors include physical inactivity and a high-fat and/or low-fiber diet.<sup>1,5</sup>

Screening for colorectal cancer with annual fecal occult blood testing (FOBT), sigmoidoscopy, or

both is recommended for all persons aged 50 and older.<sup>5</sup> A Minnesota study demonstrated a 33 percent reduction in deaths from colorectal cancer among men and women over age 50 who underwent annual FOBT.<sup>11</sup> In addition to the above screening tests, the American Cancer Society also recommends that individuals over age 40 have a digital rectal examination annually.<sup>1</sup>

Annual age-adjusted incidence and mortality rates for colorectal cancer in Utah women are shown in the figure below. Both incidence and mortality rates have declined since 1980--a trend that has been observed nationally as well. In fact, mortality rates for colorectal cancer have fallen 31 percent for U.S. women over the last 30 years.<sup>1</sup>

**Age-adjusted Incidence and Mortality Rates  
Female Colorectal Cancer  
Utah 1980-1993**



\* Rates have been age-adjusted to the 1970 U.S. population

Source: Utah Cancer Registry; Bureau of Vital Records, Utah Department of Health; accessed through ACTION-2000.

**Ovarian Cancer**

Ovarian cancer is the fifth most common cancer in U.S. women.<sup>1</sup> Ovarian cancer is often called the “silent cancer” because symptoms usually do not appear until the cancer is in an advanced stage.

The American Cancer Society estimates that 26,700 new cases of ovarian cancer will be diagnosed nationally in 1996 and that 14,800 women will die from this disease in the same year.<sup>1</sup> In 1993, 124 new cases of ovarian cancer were diagnosed in Utah women and 69 Utah women died from ovarian cancer.<sup>4</sup>

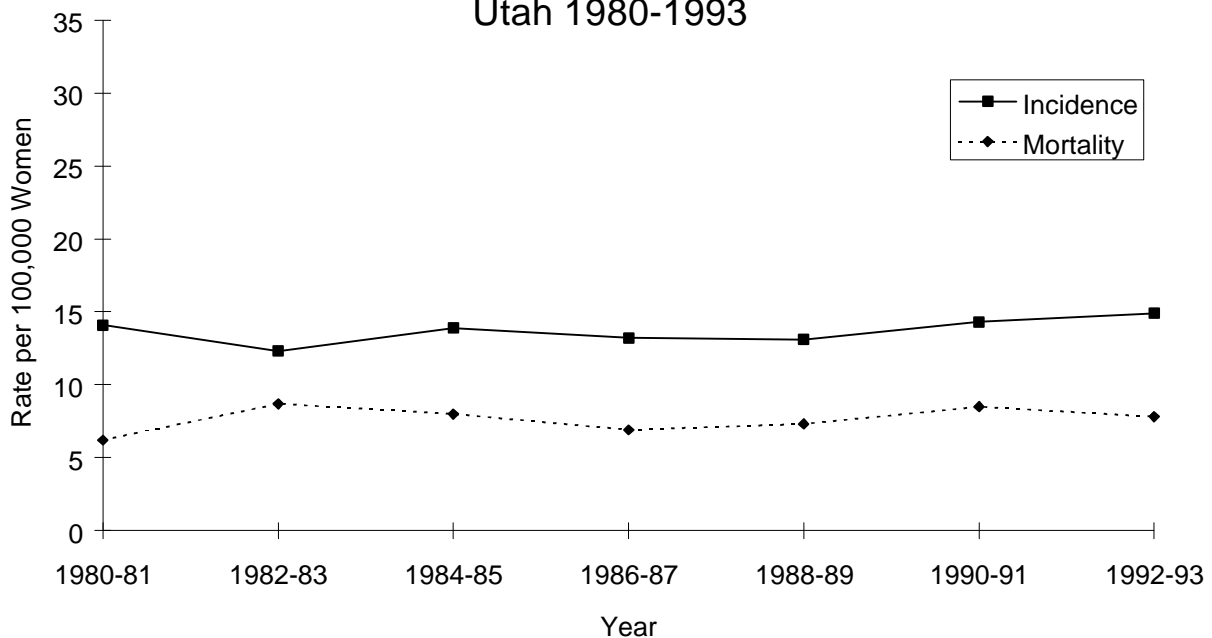
The risk for ovarian cancer increases with age. Other risk factors include never having children, having a personal history of breast cancer, and

having a family history of ovarian cancer. Pregnancy and the use of oral contraceptives appear to protect against the development of ovarian cancer.<sup>1,12</sup>

Potential screening tests for ovarian cancer include the Pap test, bimanual pelvic examination, tumor markers (such as CA-125), and ultrasound imaging, but these screening tests require further study before they can be routinely recommended for asymptomatic women.<sup>5</sup>

The annual age-adjusted incidence and mortality rates for ovarian cancer in Utah women are shown in the figure below. Utah rates are lower than national rates. This may be due, in part, to Utah’s higher fertility rate.

Age-adjusted Incidence and Mortality Rates  
Ovarian Cancer  
Utah 1980-1993



\* Rates have been age-adjusted to the 1970 U.S. population

Source: Utah Cancer Registry; Bureau of Vital Records, Utah Department of Health; accessed through ACTION-2000.

## Diseases and Conditions of Concern for Women

### Uterine Cancer

The American Cancer Society estimates that 49,700 cases of uterine cancer will be diagnosed among U.S. women and that 10,900 U.S. women

will die of uterine cancer in 1996.<sup>1</sup> Uterine cancers include cancers of the cervix and of the endometrium or lining of the uterus.

### Cervical Cancer

In 1993, 76 new cases of cervical cancer were diagnosed in Utah women and 16 Utah women died of this cancer.<sup>4</sup>

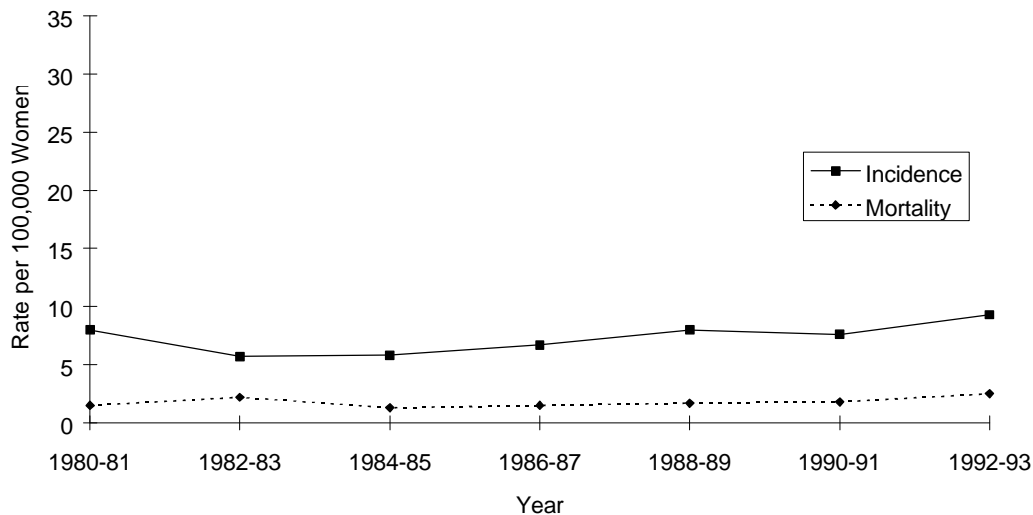
Infection with human immunodeficiency virus (HIV) and certain types of human papilloma virus (HPV) increase cervical cancer risk.<sup>5</sup> Although all sexually active women are at risk for cervical cancer, the disease is more common among women of low socioeconomic status, cigarette smokers, women who began sexual intercourse at a young age, and women who have had multiple sexual partners, or whose partners have had multiple sexual partners.<sup>1</sup>

The Pap test is the principal screening test for cervical cancer. Studies of cervical cancer deaths

over time have shown a 20 to 60 percent reduction in cervical cancer death rates after the implementation of Pap test screening programs.<sup>5</sup> In 1994, about 90 percent of Utah women 18 years of age and older reported having received a screening Pap test at least once in their life.<sup>7</sup> (see page 64 for more information about Pap test utilization in Utah.)

Annual age-adjusted incidence and mortality rates for cervical cancer in Utah women are shown in the figure below. There have been minor fluctuations in the incidence rates during this time period; but, mortality rates have remained relatively stable.

Age-adjusted Incidence and Mortality Rates  
Cervical Cancer  
Utah 1980-1993



\* Rates have been age-adjusted to the 1970 U.S. population

Source: Utah Cancer Registry; Bureau of Vital Records, Utah Department of Health; accessed through ACTION-2000.

*Endometrial Cancer*

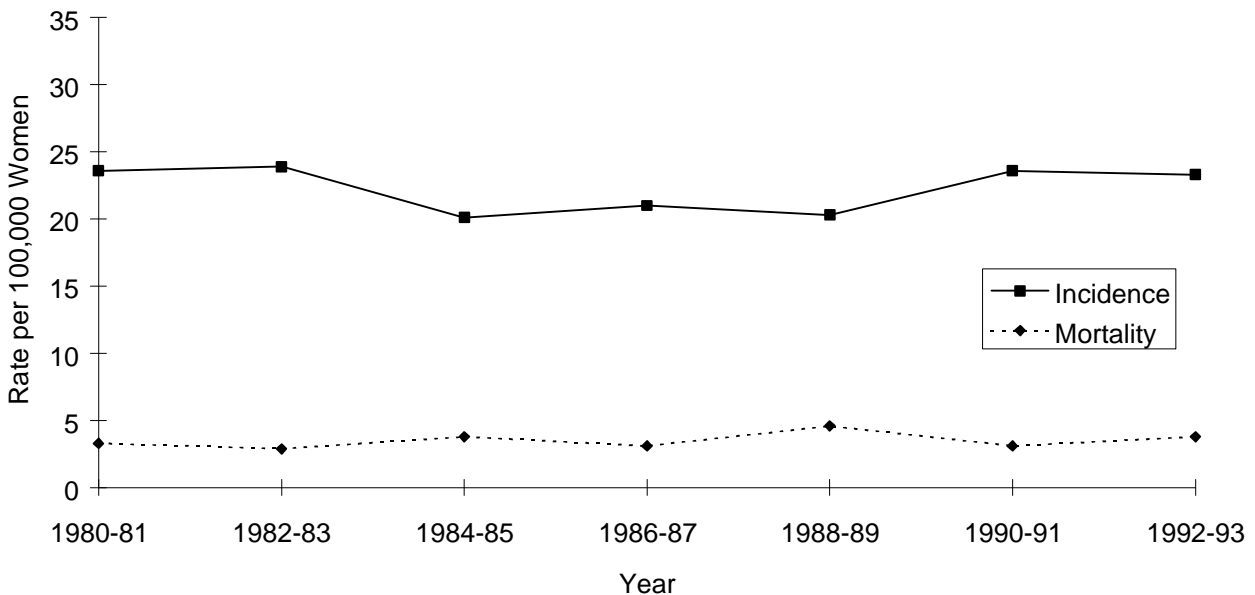
In 1993, 175 new cases of endometrial cancer were diagnosed among Utah women and 33 Utah women died from this disease.<sup>4</sup>

Endometrial cancer most often occurs in women over the age of 50. Exposure to estrogen, especially unopposed estrogen replacement therapy (rarely prescribed today in a woman who has not had a hysterectomy), tamoxifen, early menarche, late menopause, never having children, a history of infertility or failure to ovulate, and obesity are considered risk factors for endometrial cancer. Pregnancy and the use of oral contraceptives appear to protect against endometrial cancer.<sup>1</sup>

There is currently no specific screening test for endometrial cancer. Women are encouraged to undergo periodic screening with the Pap test, as this test can sometimes detect endometrial cancer. Women 40 years and older should also have an annual pelvic examination.

The annual age-adjusted incidence and mortality rates for endometrial cancer in Utah women are shown in the figure below. Utah's relatively high hysterectomy rate (see page 85) may decrease the number of women at risk for endometrial cancer. If so, these rates might underestimate the risk of this cancer for Utah women who do have an intact uterus.

Age-adjusted Incidence and Mortality Rates  
Endometrial Cancer  
Utah 1980-1993



\* Rates have been age-adjusted to the 1970 U.S. population

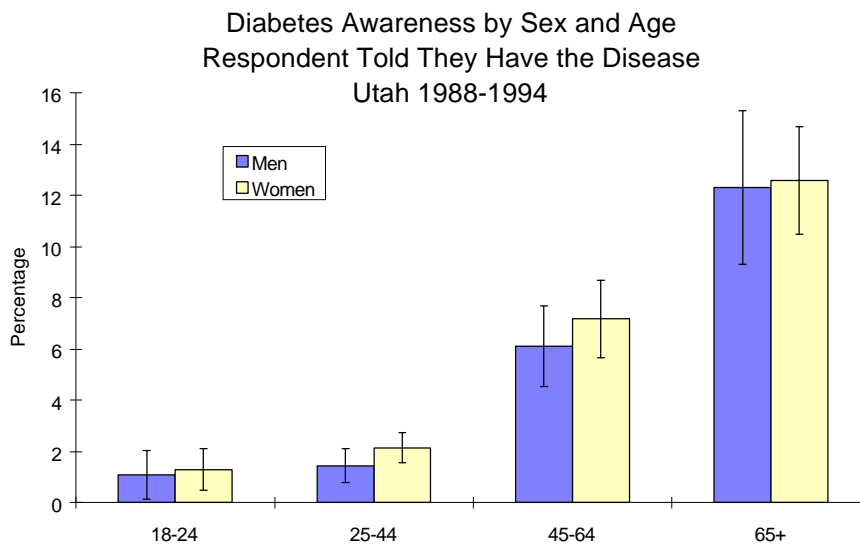
Source: Utah Cancer Registry; Bureau of Vital Records, Utah Department of Health; accessed through ACTION-2000.

## Diabetes

Diabetes is a serious chronic condition that disproportionately affects women. Data from the 1991 Utah Health Status Survey indicated that diabetes was more prevalent among persons with lower income and less educational attainment.

Lifestyle factors, such as obesity and lack of exercise, increase the risk of developing diabetes.

In Utah, women with diabetes are more than twice as likely to be obese as women without diabetes (43% vs. 18%). Women with diabetes are also more likely to report being physically inactive than other Utah women (35% vs. 23%).



Source: Behavioral Risk Factor Surveillance System 1988-1994

Diabetes causes substantial morbidity directly, but it also increases the risk of cardiovascular disease. The risk for cardiovascular disease (CVD) among persons with diabetes is two to three times higher than among persons without diabetes, and CVD accounts for 48 percent of all deaths among persons with diabetes. The excess risk of heart disease occurs with both insulin-dependent diabetes mellitus (Type I) and non-insulin-dependent diabetes mellitus (Type II). In contrast to people without diabetes, heart disease in diabetic individuals appears earlier in life, affects women almost as often as men, and is more often fatal.

Diabetes was listed as the underlying or a contributing cause of death for over 4,500 Utah women

during the period 1980 through 1992. For 39 percent of those women, diabetes directly caused death. For 33 percent of those deaths, the underlying cause was heart disease. The increased risk of CVD among persons with diabetes is partly due to the higher frequency of hypertension, obesity, lipid abnormalities, and lack of exercise. A recent Utah study found that hypertension was about 2.5 times as common among persons with diabetes as among other Utahns.<sup>25</sup>

During 1994, diabetes was the principal reason for 847 hospitalizations of women (87 per 100,000 women) and a secondary diagnosis for an additional 4,716 hospitalizations of women (489 per 100,000 women).



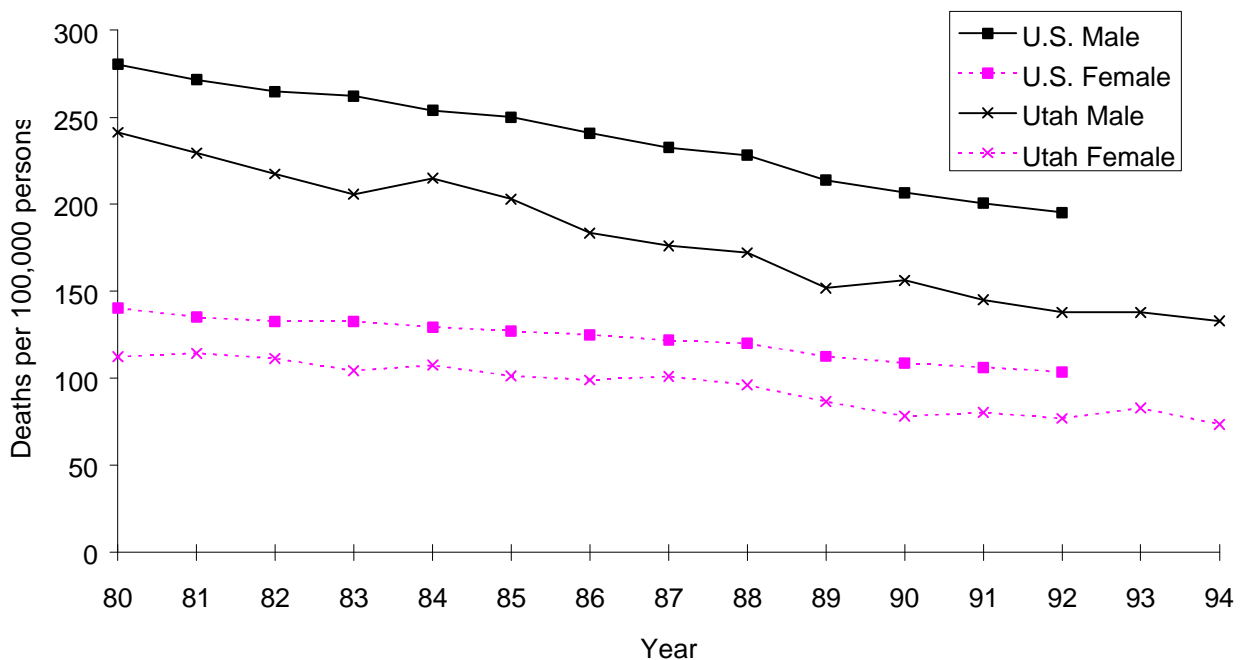
## Heart Disease

Heart disease is the second leading cause of death for women and becomes increasingly important after the menopause; it is the leading cause of death for women 65 years and over. In 1994, 1,349 Utah women died from heart disease.

Heart disease also causes substantial non-fatal illness and disability. Of women over age 65, 17.1% reported having been diagnosed with heart

disease in the 1991 Health Status Survey. In that survey, Utahns who had been diagnosed with heart disease were 3 to 4 times more likely to be limited in performing usual activities than other Utahns.<sup>26</sup> Heart disease is also a leading reason for hospitalization of Utah women, accounting for 3,350 discharges per year in 1992-93, a rate of 41.4 per 10,000 women.

Heart Disease Death Rates by Sex, United States and Utah, 1980 -1994 (ICD codes 390-398, 402, 404-429)



Rates are age-adjusted to 1940 U.S. population. Heart disease is defined as ICD codes 390-398, 402, 404-429.

Source: Bureau of Vital Records, Utah Department of Health (accessed by ACTION-2000, CDC WONDER compressed mortality file)

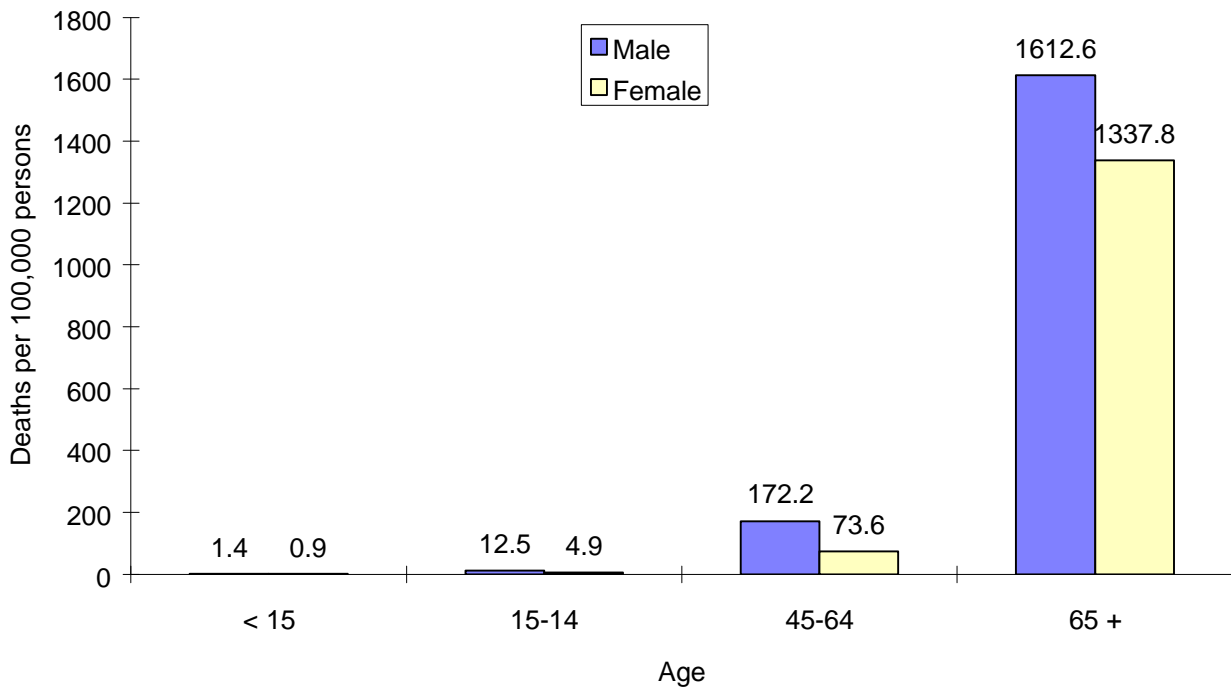
## Diseases and Conditions of Concern for Women

Most heart disease is caused by coronary artery disease, a condition in which the arteries that supply oxygen to the heart muscle become progressively narrowed. Modifiable risk factors for coronary artery disease include cigarette smoking and environmental tobacco smoke, high blood pressure, elevated blood cholesterol, physical inactivity, obesity, and diabetes.<sup>27</sup> Part of the decrease in heart disease death rates shown in the figure on the previous page is due to improve-

ments in the above risk factors through improved dietary habits and exercise. Improvements in medical care have also been important.

Women are substantially protected from coronary artery disease before menopause by exposure to estrogen, but their rate of disease rises after menopause, and after age 65, more women die from heart disease than men (in 1993-94, 2,531 women compared to 2,306 men).

Heart Disease Death Rates Among Utah Men and Women by Age, 1993-1994



Source: Bureau of Vital Records, Utah Department of Health, accessed through ACTION-2000.

Several studies have suggested that estrogen replacement therapy after menopause might reduce the risk of heart disease for women.

As described elsewhere (p. 51, 53), estrogen replacement therapy (ERT) also reduces the risk of fractures due to osteoporosis and has other beneficial effects. Unfortunately, some forms of ERT also increase the risk of endometrial cancer

and may increase the risk of breast cancer. These conflicting benefits and risks make large, rigorous prospective studies to determine the actual benefits and risks of ERT for prevention of heart disease critically important. Until such results are available, decisions about use of this potentially life saving and quality of life improving treatment will remain difficult for women and their health care providers.

## After Menopause

### Menopause

Menopause is a part of the normal female aging process. During the period of menopause, women experience physiologic, psychological, and social transitions from their reproductive years to their non-reproductive years. Menopausal age has increased slightly over the last century; it is

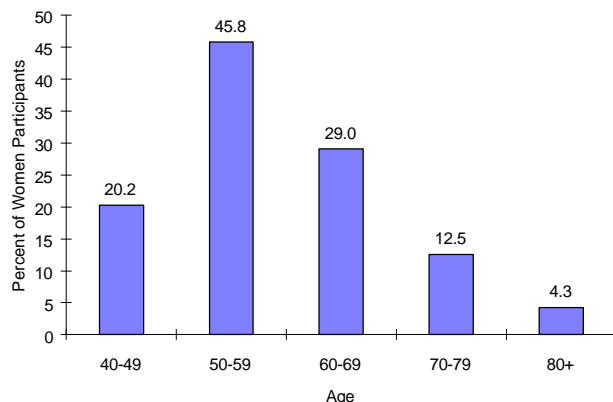
unrelated to number of pregnancies, but is related to smoking. Median age at menopause is 52 among nonsmokers and 50 among smokers in the United States.<sup>28</sup> Menopause is a natural process, rather than a disease. Knowledge about menopause can help women to cope with it.

### Estrogen replacement

Research shows that the loss of ovarian hormones plays a significant role in the development of age-related problems among postmenopausal women.<sup>29</sup> Estrogen replacement can improve the quality of women's lives after menopause. For example, several case-control studies have shown that fractures are only a third as common among postmenopausal women with more than five years of estrogen use.<sup>28</sup>

About one-third of the female participants in the 1995 Healthy Utah Blood Pressure and Cholesterol Screening Programs reported that they were taking estrogen or another hormone at the time of screening. Female participants aged 50 to 59 reported the highest percentage (46%) of estrogen and other hormone use during the period of 1990 to 1995 (see figure below).

Use of Estrogen and Hormones by Age Among Women Participants in Health Screening Programs Utah, 1990-1995



Source: Bureau of Chronic Diseases, Utah Department of Health and Local Health Districts Blood Pressure/Cholesterol Screening Data Files

### Estrogen Prescriptions by Medicaid Clients: Utah, January-June 1996

Number of Prescriptions: 11,713  
 Average Cost per Prescription: \$18.24  
 Total Expenditure: \$213,626

Source: Division of Health Care Financing  
 Utah Department of Health

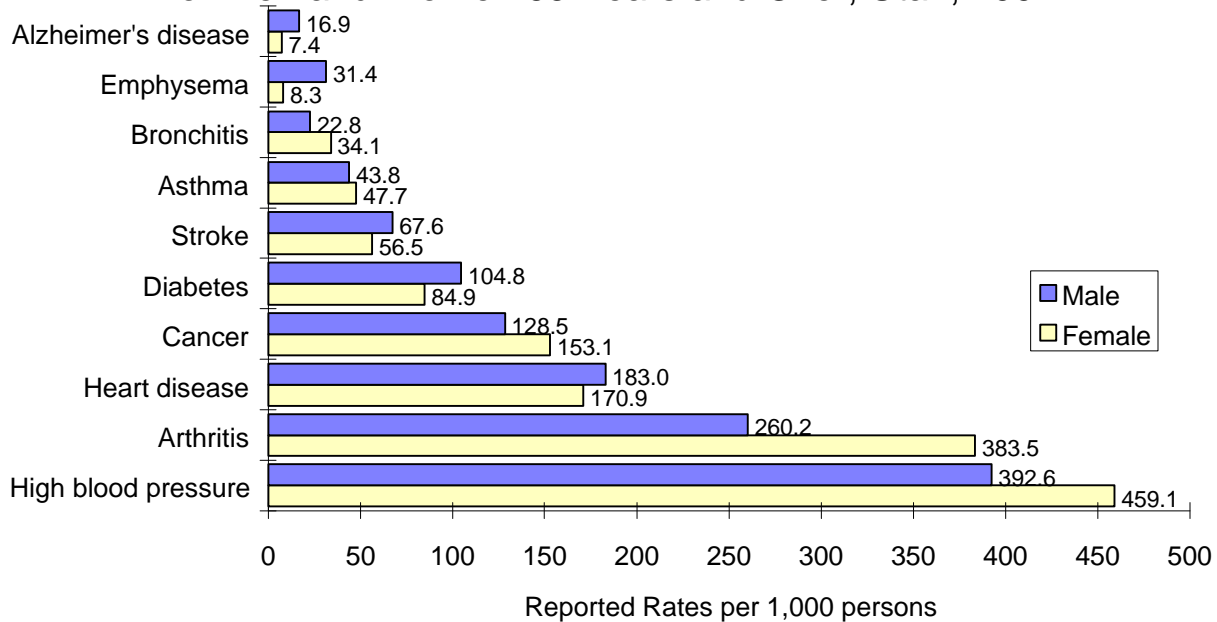
**Chronic Diseases Among Older Women**

The most common causes of death in postmenopausal women are cardiovascular disease (coronary heart disease and stroke) and malignant neoplasms; these account for 50 percent or more of deaths in the United States among postmenopausal women.<sup>29</sup> The following figure shows reported prevalence rates of selected chronic

diseases among older Utahns in 1991. In comparison with older men, women were more likely to have high blood pressure, arthritis, cancer, and chronic bronchitis. Nearly half of Utah women aged 65 or above reported that they had been diagnosed with high blood pressure. Almost 40 percent of older Utah women were under medical care for arthritis in 1991.

**Reported Prevalence Rates of Chronic Diseases Diagnosed by a Physician**

**for Men and Women 65 Years and Over, Utah, 1991**



Note: For diabetes, high blood pressure, Alzheimer's disease, cancer, stroke, and heart disease prevalence indicates ever being diagnosed; for asthma, bronchitis, emphysema, and arthritis, prevalence indicates being currently under medical care for that condition.

Source: Utah Health Status Survey, 1991.

### Osteoporosis and Hip Fracture

Osteoporosis is a loss of bone mass that can cause fractures. Osteoporosis is common in postmenopausal women,<sup>30</sup> but unfortunately it is usually not diagnosed until after a fracture has occurred.

The risk of osteoporosis and of osteoporotic fractures is related to bone mineral density achieved in younger life and the rate of loss after menopause. The use of postmenopausal estrogen replacement therapy can prevent bone loss and the resultant fractures. Increasing calcium intake and weight bearing physical activity also can reduce the risk of osteoporosis.<sup>30</sup> Other specific treatments are available when osteoporosis is recognized.

#### Hospitalized Women with Osteoporosis Conditions\*: Utah, 1992-1994

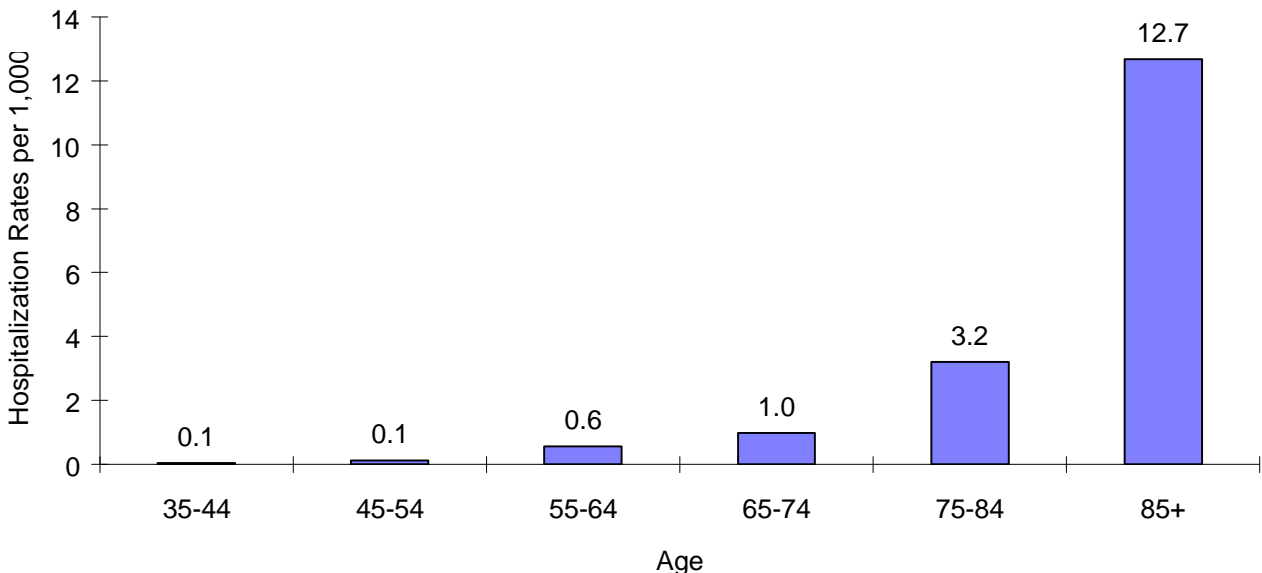
Total Discharges: 1,016  
 Total Hospital Charges: \$6,803,136  
 Average Charges\*\*: \$6,696

\* Defined as ICD-9 733.0 in any of the 9 diagnosis codes. \*\* Excluding outliers.

Source: Utah Hospital Discharge Database, Office of Health Data Analysis, Utah Department of Health

Hip fracture is the one of the most serious consequences of osteoporosis.<sup>31</sup> The following figure shows the age-specific hospitalization rates for hip fracture for Utah women in 1992 to 1994.

Hip Fracture Hospitalization Rates for Women  
 Utah, 1992-1994



Note: Hip fracture is defined as a primary or secondary diagnosis code of ICD-9 820, excluding rehabilitation, breast, prostate, trachea, bronchus, and lung cancer cases.

Source: Utah Hospital Discharge Database, Office of Health Data Analysis, Utah Department of Health

## **Diseases and Conditions of Concern for Women**

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## **Diseases and Conditions of Concern for Women**

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## 6 Risk and Prevention Behaviors

Over the years, promotion of healthy lifestyles has moved to the forefront of strategies to improve public health. The Utah Department of Health has conducted the Behavioral Risk Factor Surveillance System (BRFSS), funded by a grant from the Centers for Disease Control and Prevention, since 1985. Based on the BRFSS data, this chapter presents gender specific information on smoking, physical activity, obesity, elevated blood cholesterol, hypertension, mammography utilization, and Pap smear tests.

- There is a significant trend among women to become more sedentary as they age; the proportion reporting a sedentary lifestyle increases among women aged 18 to 24, and 65 and over.
- The proportion of Utah women who are obese has increased over the last ten years.
- Between 1987 and 1994, the proportion of Utah women 50 and older who reported having ever received a screening mammogram increased from 34 percent to 66 percent.

### Selected Diseases and Related Behavioral Risk Factors are Listed Below:

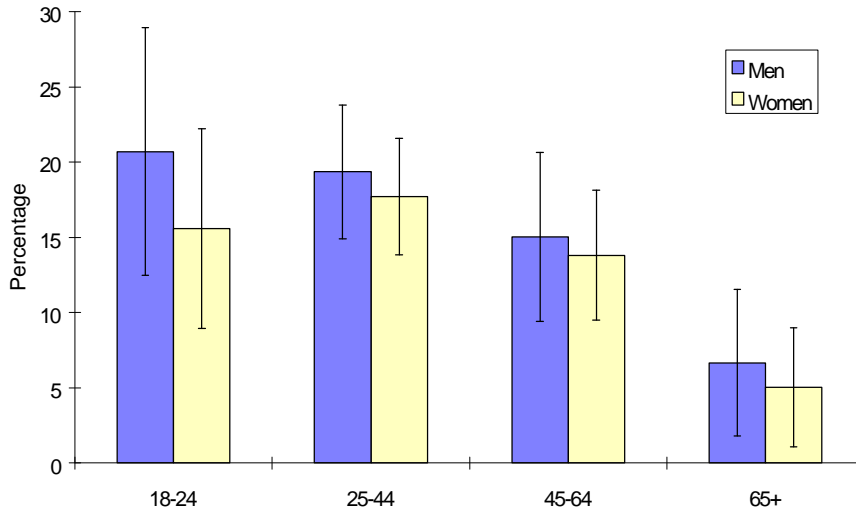
Cardiovascular disease	(tobacco, diet, activity)
Cerebrovascular disease	(tobacco, diet, activity)
Hypertension	(tobacco, diet, activity, alcohol)
Cancer	(tobacco, diet, alcohol)
Diabetes and its complications	(diet, activity)
Chronic liver disease	(alcohol)
Sexually transmitted diseases & HIV	(sexual behavior, drug use)
Chronic obstructive pulmonary disease	(tobacco)
Pneumonia & Influenza	(tobacco, also vaccine-preventable)
Injuries	(alcohol, drug misuse, others)

Note: "Activity" refers to the protective effect of exercise against these conditions.

Source: *Hospitalizations for Conditions Related to Lifestyle or Behavior*, Utah Health Data Committee and Utah Department of Health, 1995

# Smoking

Reported Current Smoking by Sex and Age  
Utah 1994

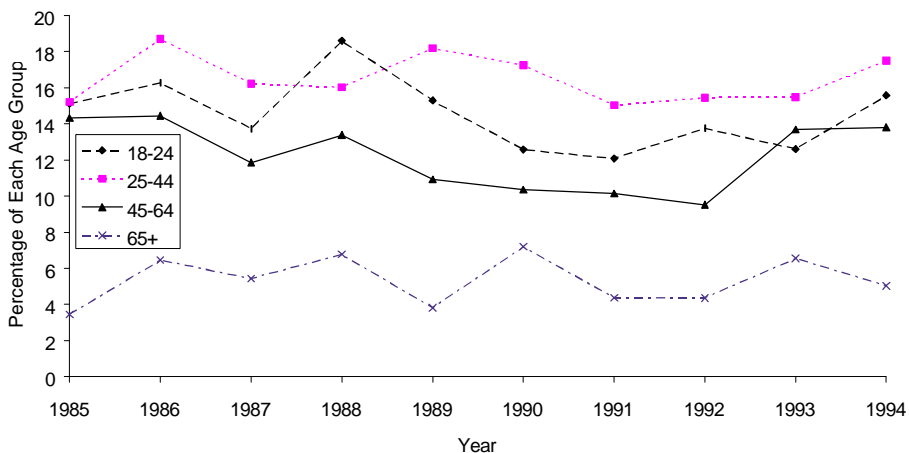


Source: Behavioral Risk Factor Surveillance System 1994

Smoking is a major risk factor for cancer, especially lung cancer, and for cardiovascular disease, both stroke and heart attack. In Utah, men are more likely to smoke than women; in 1994, 17 percent of men and 14 percent of women reported being current smokers. There is a significant

decline in smoking rates among both men and women as they age. This is in large part because smokers die at younger ages than non-smokers.<sup>1</sup> The proportion of Utah women who smoke remained fairly constant from 1985 to 1994 in all age groups.

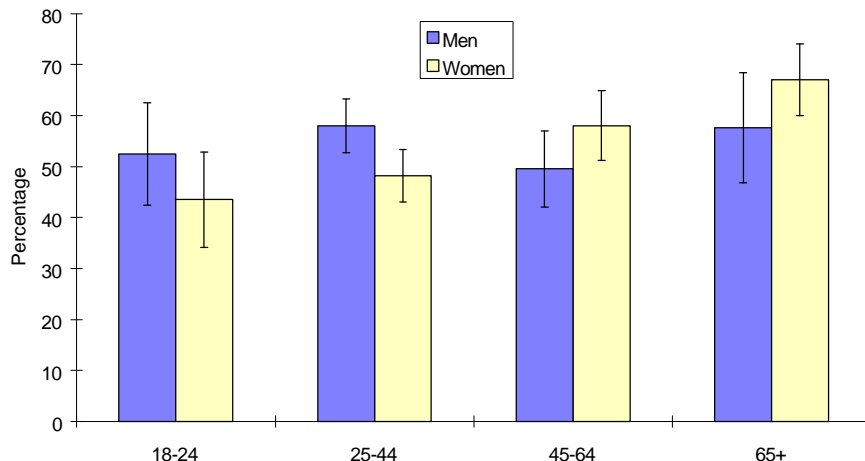
Percentage of Women Who Reported Being Current Smokers, by Age and Year, Utah, 1985-1994



Source: Behavioral Risk Factor Surveillance System

# Physical Activity

Sedentary Lifestyle\* by Sex and Age  
Utah 1994

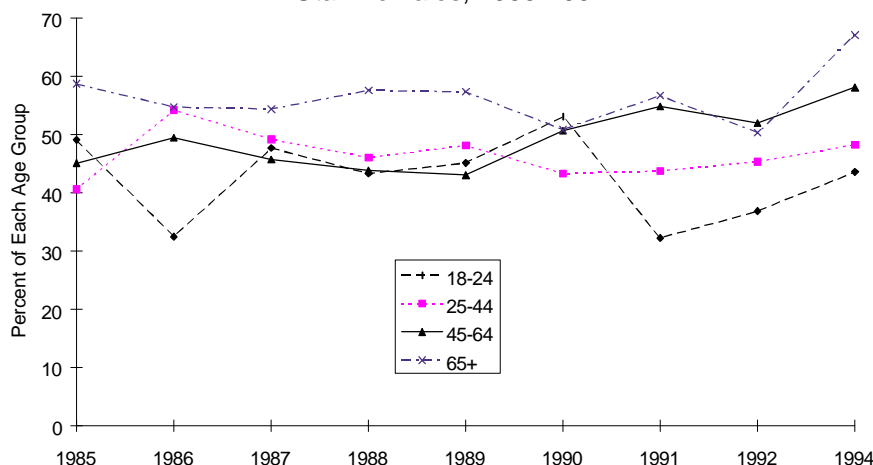


\* Less Than 20 Minutes Exercise, 3 Times per Week  
Source: Behavioral Risk Factor Surveillance System 1994

Regular physical activity can help prevent cardiovascular disease, diabetes, osteoporosis, and certain types of cancer. On average, physically active people outlive those who are inactive. Regular exercise also protects against the effects of stress, helps to maintain functional independence of older adults, and can improve the overall quality of life at all ages.<sup>2</sup> It is generally acknowledged that everyone should exercise.

Sedentary lifestyle is defined as failing to exercise at least three times a week for at least 20 minutes a session. The proportion of men who report a sedentary lifestyle ranges from 50 to 58 percent, depending on the age group, with no significant trend across age groups. There is a significant trend among women to become more sedentary as they age; the proportion reporting a sedentary lifestyle increases from 44 percent among 18 to 24 year-olds to 67 percent among women aged 65 and over. The frequency of sedentary lifestyle has been fairly consistent over time.

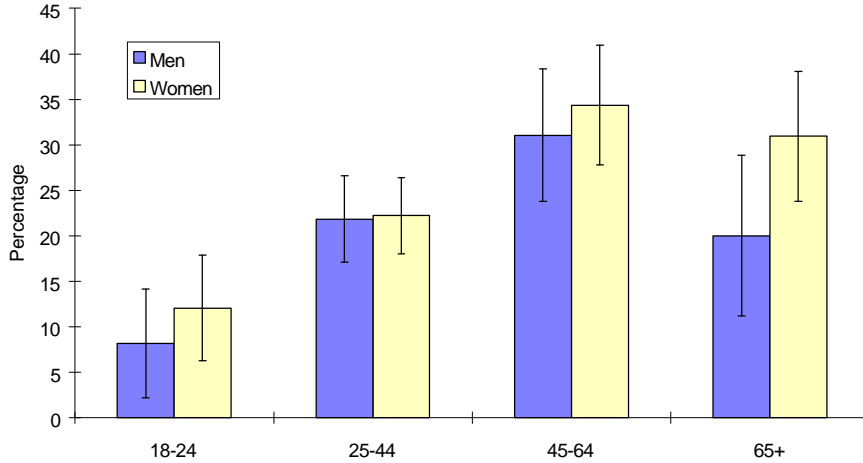
Sedentary Lifestyle\* by Age and Year  
Utah Females, 1985-1994



\* Less than 20 minutes exercise 3 times per week  
Source: Behavioral Risk Factor Surveillance System 1985-1994

# Obesity

Reported Frequency of Obesity\* by Sex and Age  
Utah 1994



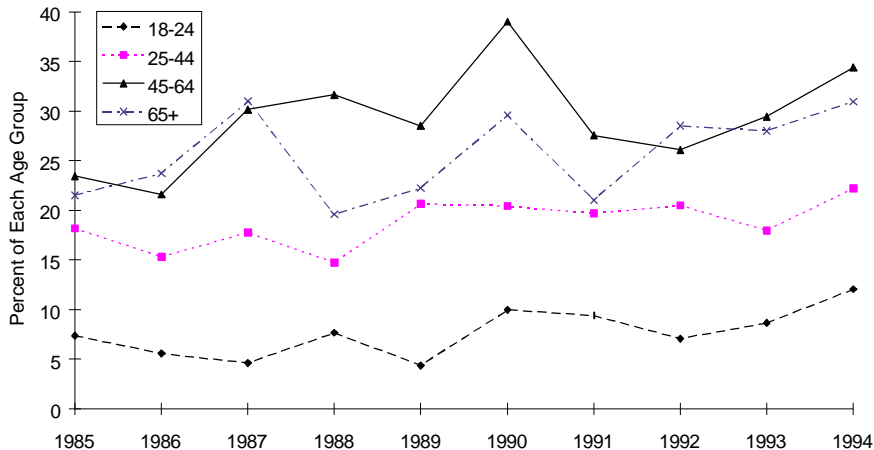
\* Body Mass Index  $\geq$  27.8 for Males, 27.3 for Females  
Source: Behavioral Risk Factor Surveillance System 1994

Obesity is a risk factor for many health problems, including diabetes, cardiovascular disease, certain types of cancer, and osteoarthritis.<sup>2</sup> Although it is difficult to lose weight, obesity is considered a modifiable risk factor. The best treatment is generally considered to be long term lifestyle changes, including both regular exercise and a healthy diet.

Obesity here is defined as having a high Body Mass Index (BMI). Body Mass Index is a ratio of

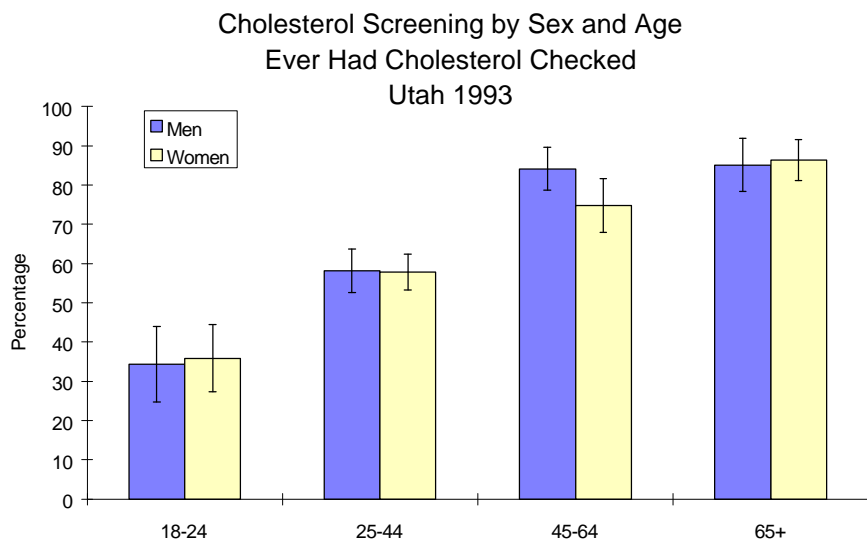
weight (in kilograms) to height (in meters) squared. A high BMI indicates a person who is heavy for their height. Obesity is common among both men and women in Utah and becomes progressively more common among older age groups up to the age group 45 to 64. The lower prevalence of obesity above age 65 is probably due to the higher death rates of obese people. There is some suggestion that Utah women have become more likely to be obese over the last ten years.

Obesity\* by Age and Year  
Utah Females, 1985-1994



\* Body Mass Index  $>$  27.3 for Females  
Source: Behavioral Risk Factor Surveillance System 1985-1994

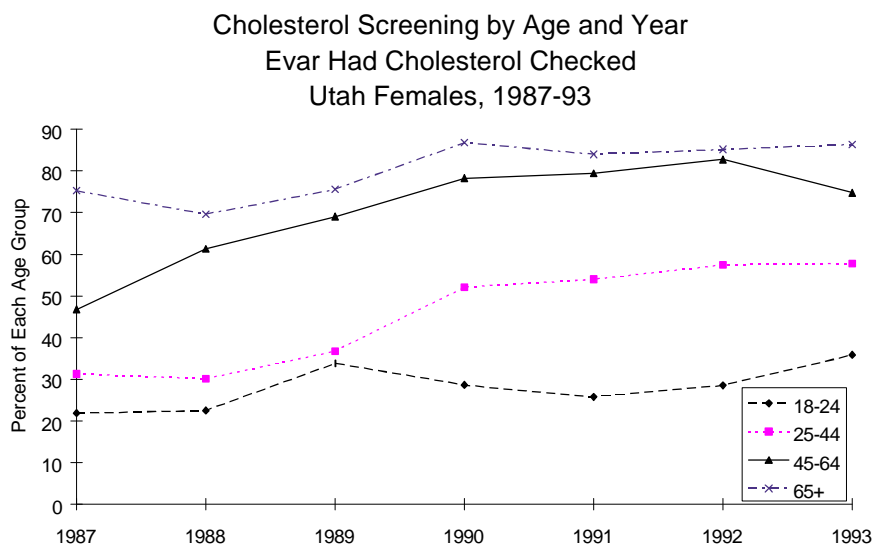
# Elevated Blood Cholesterol



Source: Behavioral Risk Factor Surveillance System 1993

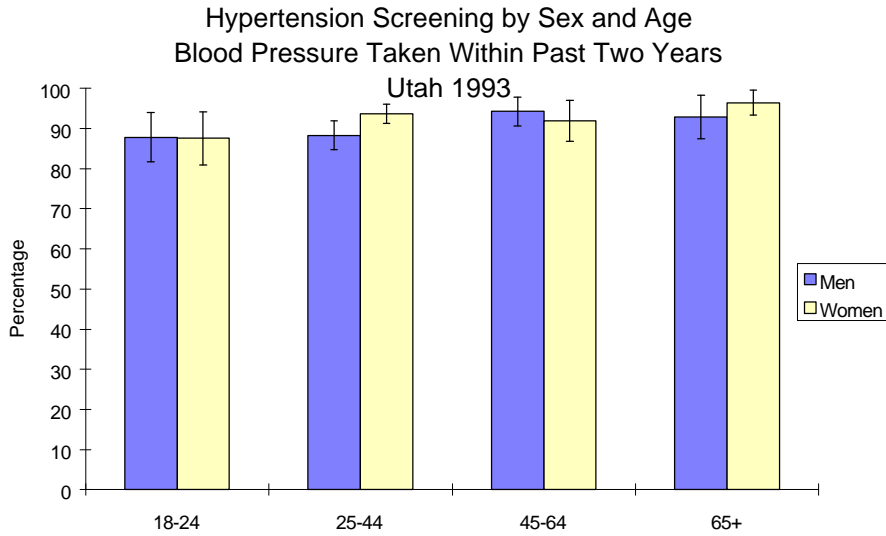
Cholesterol is a substance found in the blood that when elevated increases the risk for atherosclerosis, or blockage of blood vessels, leading to cardiovascular disease, including heart attack and stroke. Cholesterol levels can be decreased by eating less dietary fat, increasing exercise, or by cholesterol-lowering medication. Testing for elevated blood cholesterol has been recommended by several authorities.<sup>3</sup> Men and women in Utah

are about equally likely to have had their cholesterol checked, and the likelihood increases with age for both sexes. In the six year period from 1987 to 1993 the proportion of Utah women who have had their cholesterol checked increased. Unfortunately we have little information on whether those who were found to have high cholesterol successfully acted to reduce their risk.



Source: Behavioral Risk Factor Surveillance System 1987-1993

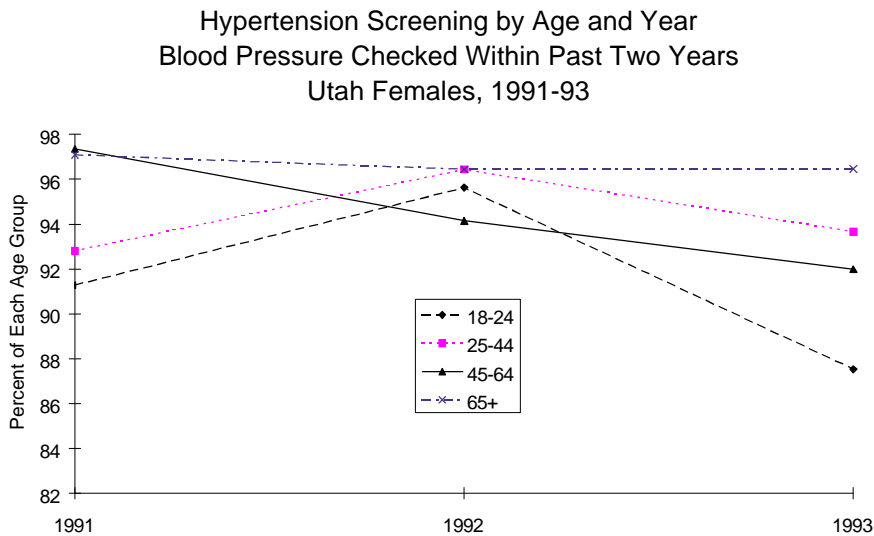
# Hypertension



Source: Behavioral Risk Factor Surveillance System 1993

Hypertension, also known as high blood pressure, is a very common condition (see p. 14 and 55). Hypertension damages blood vessels and increases the risk of stroke, heart attack, and kidney failure. Hypertension can be controlled by lifestyle changes, medication, or both, but it usually causes no symptoms and must be detected

by blood pressure testing. Most men and women in Utah (about 90 percent) report having had their blood pressure checked within the last two years. Despite this fact, it is estimated that about 15 percent of those with hypertension are currently unaware of it, and that over 40 percent have hypertension that is not currently under control.<sup>4</sup>



Source: Behavioral Risk Factor Surveillance System 1991-1993

## Mammography Utilization

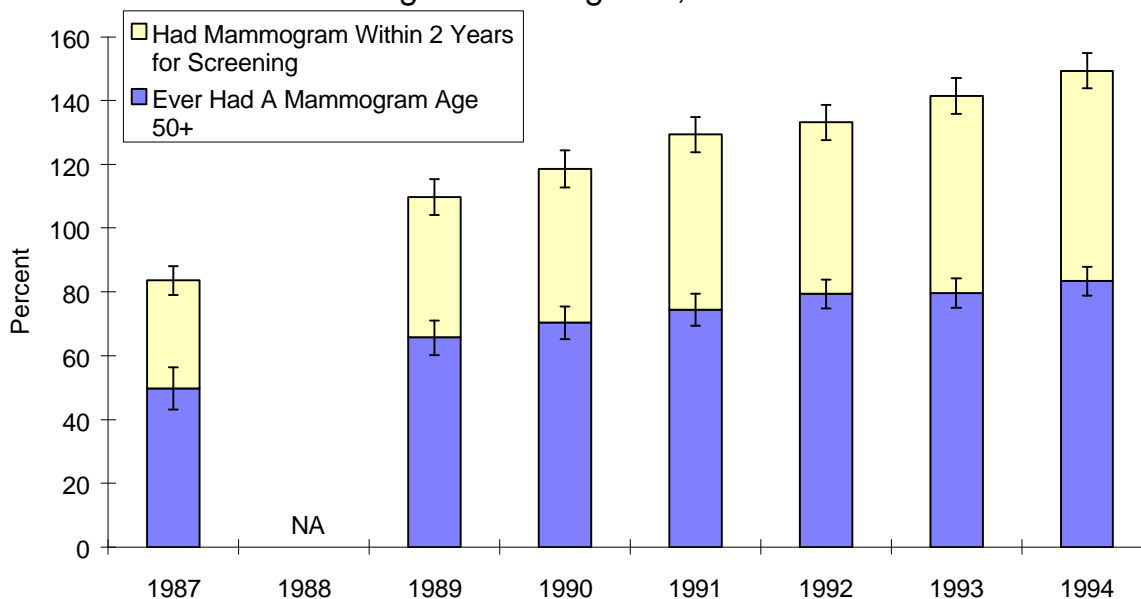
The chance of curing breast cancer is substantially improved by early detection. Randomized controlled trials that compare health outcomes in a group of women offered screening to health outcomes in a group of women not offered screening are the best way to assess the value of periodic screening for breast cancer. Since 1963, seven such trials have studied the efficacy of mammography alone or in combination with clinical breast exam (CBE).<sup>5-14</sup> Six of the seven trials included women 50 years of age and older and demonstrated a 20 to 30 percent reduction in mortality from breast cancer among women who received mammography or mammography plus CBE.<sup>15</sup>

In 1994, the National Cancer Institute stated that routine screening with mammography and CBE can reduce breast cancer mortality by about one-third for women 50 and older.<sup>16</sup> Annual mam-

mography and CBE are recommended for women 50 and older.<sup>15</sup> However, we do not know whether screening is effective for women 40 to 49 years of age. A British trial is evaluating the effectiveness of annual mammography for women between 40 and 50.

Between 1987 and 1994, the proportion of Utah women 50 and older who reported having ever received a screening mammogram increased from 40 percent to 76 percent.<sup>17</sup> Screening rates among Utah women differ by education and income as well as by urban, rural and frontier county of residence. Women with 12 or more years of education, women with annual household incomes of \$20,000 or more, and women living in urban areas reported greater use of screening mammography in 1994.<sup>17</sup>

Utah Women 50 Years of Age and Older Who Reported Having A Mammogram\*, 1987-1994



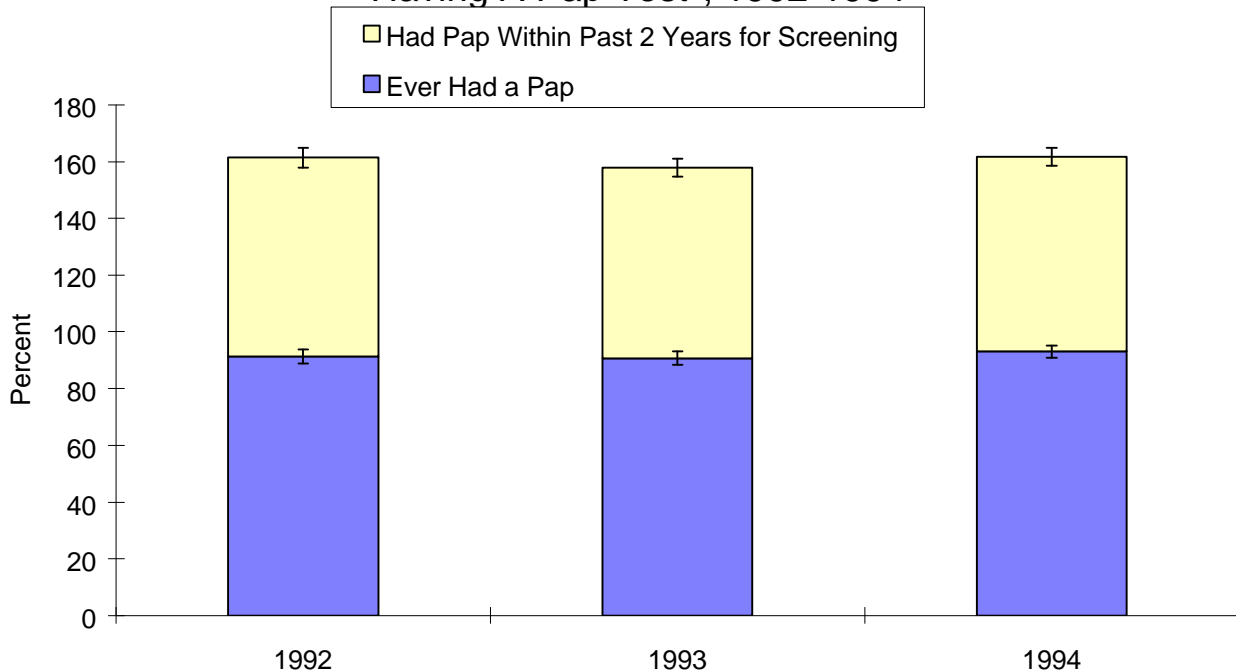
NA = Question not asked  
 \* a screening mammogram is one performed as part of a routine checkup  
 Source: BRFSS 1987, 1989-1994

## Pap Smear Test Utilization

Early detection and treatment of precancerous lesions by routine Pap smear testing can prevent deaths from cervical cancer. Many organizations, including the American Cancer Society, the National Cancer Institute, the American College of Obstetrics and Gynecology and the American Medical Association recommend that women who have reached age 18 or who have been sexually active should have annual Pap smear testing.<sup>17</sup> Pap smear testing may be performed less often after three or more annual tests have been found normal, but this decision is left to the discretion of a woman and her physician.

Percentages of Utah women 18 years of age and older who reported ever having received a screening Pap smear test are shown in the figure below. From 1992 to 1994, that percentage increased from 86 percent to 90 percent.<sup>17</sup> Screening rates among Utah women do not vary much by education or geographic area of residence; however, rates were lower for women with annual household incomes of \$20,000 or less.<sup>17</sup>

Utah Women 18 Year of Age and Older Who Reported Having A Pap Test\*, 1992-1994



\* a screening Pap test is defined as a Pap test performed as part of a routine check-up.

Source: BRFSS 1992-1994



## Managed Care and Preventive Care

Managed care refers to a range of initiatives, from organized health care delivery systems to features of health care plans, that attempt to control or coordinate enrollees use of services.<sup>18</sup> Managed care health plans vary greatly in the kinds of benefit coverage offered, monitored, and conditioned upon criteria being met by enrollees and their primary care clinicians. The concept of managed care received attention in the 1980s from public and private payers interested in containing health care costs. Since then, managed care has become an increasingly important part of the health care industry. The Utah Association of Health Care Providers reports that enrollment of the general population in managed care is evol-

ing rapidly in Utah. During the past six years, the percentage of Utahns enrolled in managed care doubled from 34 percent in 1990 to about 69 percent in 1996. The 1996 percentage is even higher among Wasatch Front residents, at 89 percent.<sup>19</sup>

A notable feature of managed care organizations is the emphasis placed on preventive care, including mammography and pap smear test screening. The National Committee for Quality Assurance (NCQA), which provides accreditation to managed care organizations, has included rates of mammography and pap smear test screening as indicators of health plan quality.

**Data from FHP of Utah, IHC Health Plans, and United HealthCare of Utah show that on average, about 68% of their female enrollees aged 52-64 have had mammography screening over the preceding two-year period and 71% of their female enrollees aged 21-64 have had a pap smear test over the preceding three-year period.**

## Risk Behavior

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## **Risk Behavior**

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# 7 Social Illness: Violence Against Women

Violence against women is increasingly being recognized as a public health problem that affects women's health and the quality of women's lives. Violence against women is defined as any violent act that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women.<sup>1</sup> Violence against women can take many forms. Physical violence, sexual assaults, and child and older adult abuse are discussed here because those data are available in Utah.

- Approximately one in ten Utah residents have been victims of domestic violence.
- In 1995, spouse abuse filings increased by 45 percent statewide compared to 1994.

- In 20 percent of domestic violence cases, the woman who was assaulted was pregnant at the time of the assault, according to national studies.
- According to the Utah DPS's report, 1.5 percent of Utah girls aged 18 and younger were reported victims of child abuse, compared to 1.2 percent of boys.
- Utah older women made up 62 percent of adult abuse victims in 1995.

## Domestic Violence

Domestic violence is characterized as a pattern of coercive behaviors that may include battering, psychological abuse, sexual assault, isolation, deprivation and intimidation, when those behaviors are perpetrated by someone who is or was in an intimate relationship with the individual experiencing the violence. Data are insufficient to portray a psychological or sociodemographic profile of victims of domestic violence. However, certain individuals are at greater risk for abuse: divorced or separated women, women between the ages of 17 and 28, women who are pregnant, and women who abuse alcohol or drugs or whose

partners do.<sup>2</sup> Since women and children are most often the victims of domestic violence, the discussion of domestic violence often focuses on violence against women.

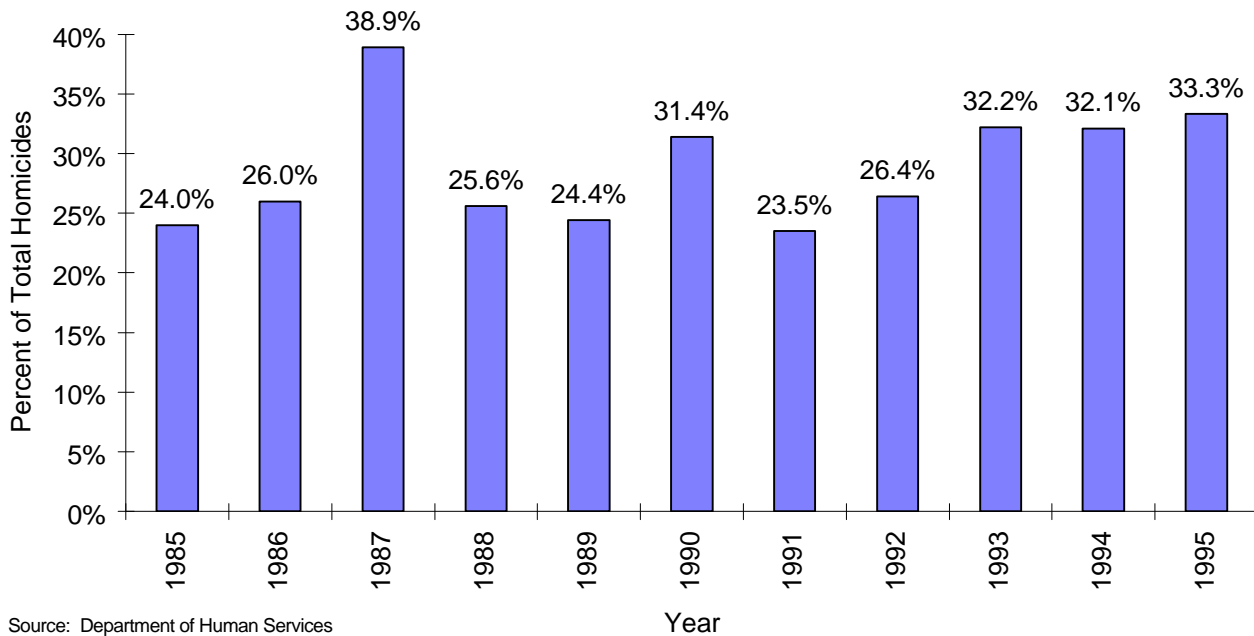
A study in Utah conducted by Dan Jones and Associates in 1996 found that approximately one in ten Utah residents have been victims of domestic violence.<sup>3</sup> According to the Utah Department of Public Safety, domestic violence accounted for 31.6 percent of all assaults filed in 1995.<sup>4</sup>

**Homicides**

Nationally, it is reported that 52 percent of female murder victims were killed by a current or former partner or husband.<sup>2</sup> According to the Utah Department of Public Safety, domestic violence

accounted for 25 murders in Utah during 1995, that is, one-third of all homicides. The proportion of homicides that were due to domestic violence increased from 24 percent of all homicides in 1985 to 33 percent in 1995.

**Domestic Violence Homicides as Percentage of Total Homicides, Utah, 1985-1995**



Source: Department of Human Services  
Division of Family Services.  
Crime in Utah 1994, p. 58

**Spouse Abuse**

Violence between spouses accounted for 45 percent of offenses committed between family members in Utah in 1995.<sup>4</sup> About 5,700 spouse abuse cases, including protective orders, were filled in Utah in 1995; that is a 45 percent increase over the previous year. The increase among Wasatch jurisdictional districts was 48 percent, ranging from 37 percent in Davis to 53 percent in Provo. The reporting of spouse abuse in other

parts of Utah had a large variation and the overall increase was 33 percent. The underlying reasons for the increases and regional variations cannot be explained at this time. In 1995, a new law (Criminal Code 30-6-A) was implemented that made it possible to file a spouse abuse case for no charge. This law removed a barrier that might have prevented some spouse abuse victims from asking for public help.

**Number and Percentage Change of Spouse Abuse Filings: Utah, 1994-1995**

<u>Spouse Abuse Filings</u>	<u>1994</u>	<u>1995</u>	<u>% Change</u>
State	3,956	5,738	45.0
Davis District	397	545	37.3
Ogden District	814	1,146	40.8
Provo District	256	392	53.1
Salt Lake District	1,756	2,679	52.6
<b>Wasatch Front Area</b>	<b>3,223</b>	<b>4,762</b>	<b>47.8</b>
Brigham City	125	148	18.4
Coalville District	17	50	194.1
Logan District	98	151	54.1
Moab District	43	59	37.2
Price District	104	133	27.9
San Juan District	22	22	0.0
St. George District	157	224	42.7
Tooele District	84	93	10.7
Vernal District	83	96	15.7
<b>Non Wasatch Front Area</b>	<b>733</b>	<b>976</b>	<b>33.2</b>

Source: Utah Department of Human Services, Administrative Office of the Courts.

## Social Illness: Violence Against Women

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### Injuries

According to national studies, the woman who was assaulted was pregnant at the time of the assault in 20 percent of domestic violence cases.<sup>5</sup> The abuse of pregnant women affects not only the women but the children as well. Studies have

shown a correlation between domestic violence and low birth weight babies.<sup>6</sup>

The following table reports the numbers of different types of injuries which were caused by domestic violence in Utah in 1995.

### Reported Number of Physical Injuries Caused by Domestic Violence Utah, 1995

Apparent Minor Injury	1415
Possible Internal Injury	27
Severe Laceration	24
Apparent Broken Bones	20
Other Major Injury	15
Unconsciousness	9
Loss of Teeth	3

Note: Incident Based Reporting (IBR) statistics include crimes reported by only 44 out of the 120 reporting agencies.

Source: IBR Program, Department of Public Safety Bureau of Criminal Identification, Crime in Utah 1995 p. 57.

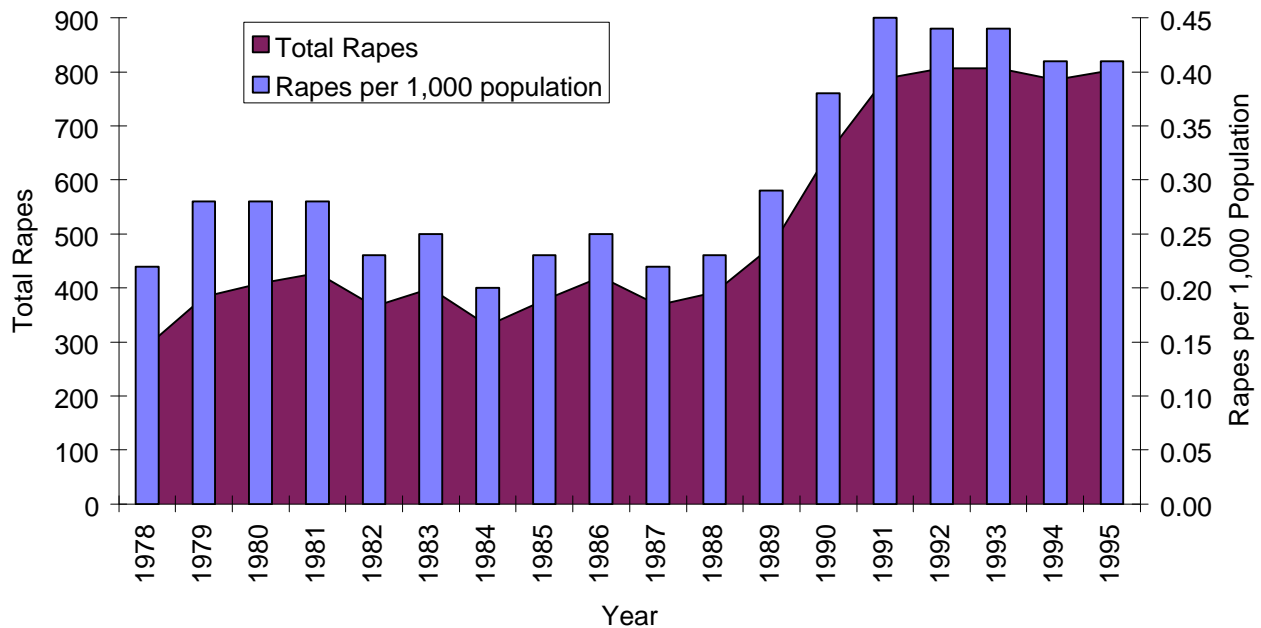


# Rape

The National Crime Victimization Survey found that, based on reported rapes, women were more likely to be raped by someone they knew (55% of reported rapes) than by a stranger (45%).<sup>7</sup> The National Institute of Justice recently released a

report on rape victims, including the costs and consequences. About 259,000 rape incidents were recorded nationwide in 1993, the estimated cost was about \$25 billion.<sup>8</sup>

Number of Total Rapes and Rape Rate per 1,000 Total Population, Utah, 1978-1994



Source: Department of Public Safety Bureau of Criminal Identification. *Crime in Utah 1995*, p. 39.

In Utah, the annual number of reported rapes and rape rate per 1,000 population have increased since 1978. The Rape Recovery Center in Salt Lake City assisted 3,637 clients in 1995. Of these clients, 13 percent (486 clients) was seen in hospitals. In the northern part of the state, Citizens Against Physical and Sexual Assault

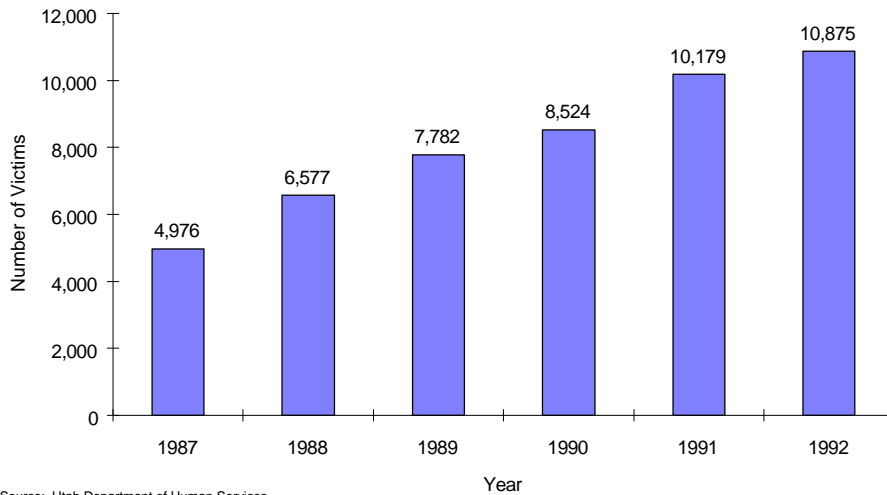
(CAPSA) in Logan reported providing direct services for 37 victims of sexual assaults in 1995. Of those clients, only 14 (38%) reported the incident to law enforcement. Of the 37 assaults, 21 (61.7%) were listed as date/acquaintance rape; 6 (17.6%) as marital rape; and 5 (14.7%) as rape by a stranger.

**Gender and Child Abuse**

Children, as well as women, are often victims of abuse in violent families. Reported and investi-

gated incidents of child abuse in Utah increased during the period from 1987 to 1992.

Number of Reported Child Abuse Victims in Utah, 1987-1992

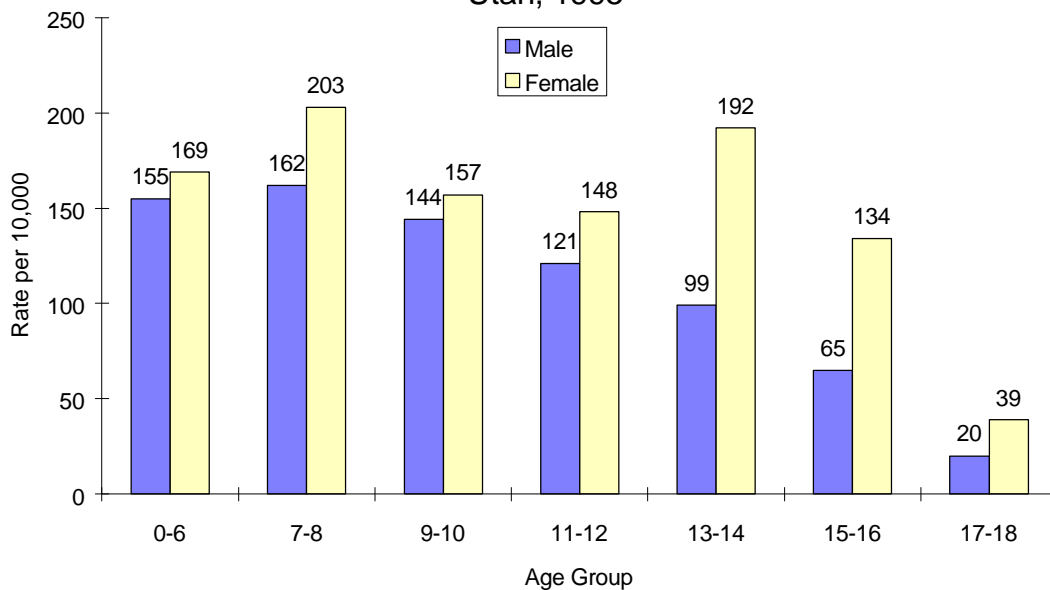


Source: Utah Department of Human Services  
Division of Family Services

According to the Utah Department of Public Safety, 1.5 percent of Utah girls aged 18 and younger were victims of child abuse, compared to

1.2 percent of boys in the same age group. The following figure provides detailed age and sex specific rates of child abuse.

Reported Child Abuse Victim Rates by Age Utah, 1995

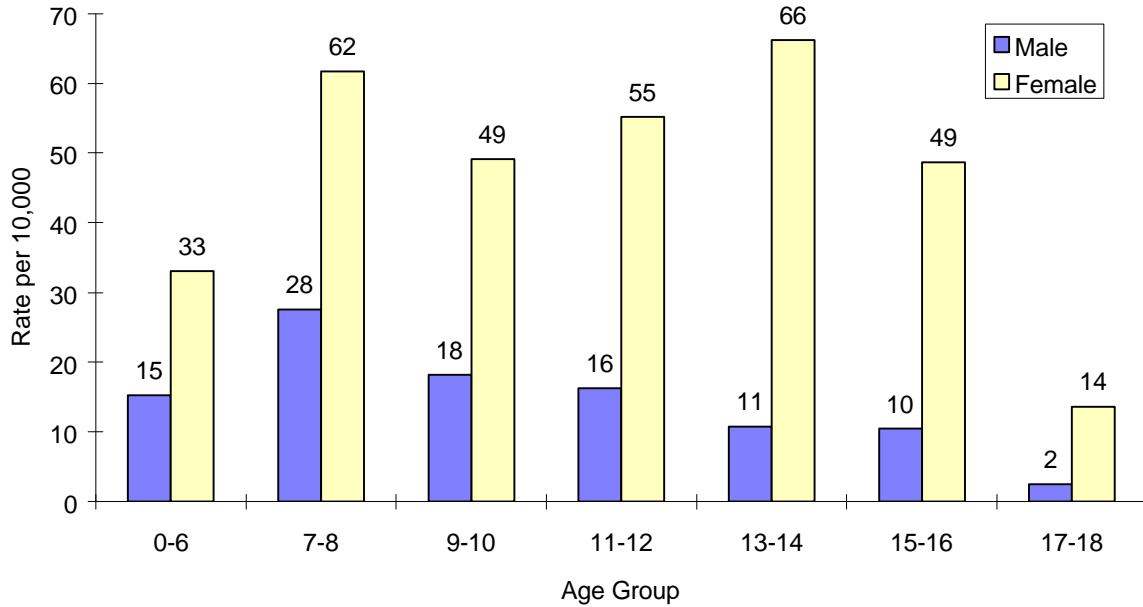


Source: Department of Public Safety Bureau of Criminal Identification.  
*Crime in Utah 1995* p. 59.  
Rates were calculated by the Utah Department of Health

In Utah, children have a similar risk of being physically abused regardless of gender; however,

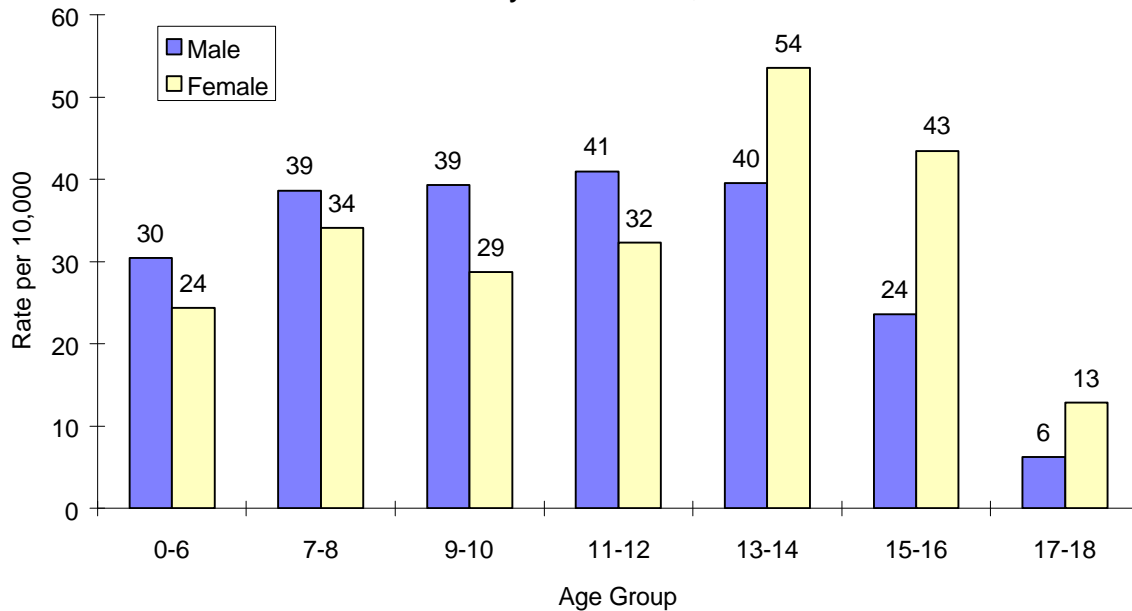
girls are at greater risk than boys for sexual abuse and negligence.

**Reported Sexual Abuse Rates by Age  
Utah Boys and Girls, 1995**



Source: Department of Public Safety Bureau of Criminal Identification.  
 Crime in Utah 1995, p. 59.  
 Rates were calculated by Utah Department of Health

**Reported Physical Abuse Rates by Age  
Utah Boys and Girls, 1995**



Source: Department of Public Safety Bureau of Criminal Identification.  
 Crime in Utah 1995, p. 59.  
 Rates were calculated by Utah Department of Health

## Older Adult Abuse

Nationally, reported domestic abuse against older people increased from about 117,000 cases in 1986 to 241,000 in 1994.<sup>9</sup> In 1995, referrals to Utah Adult Protective Services for abuse, neglect, or exploitation of disabled or older adults increased 20 percent compared to 1994.<sup>10</sup> In 1995,

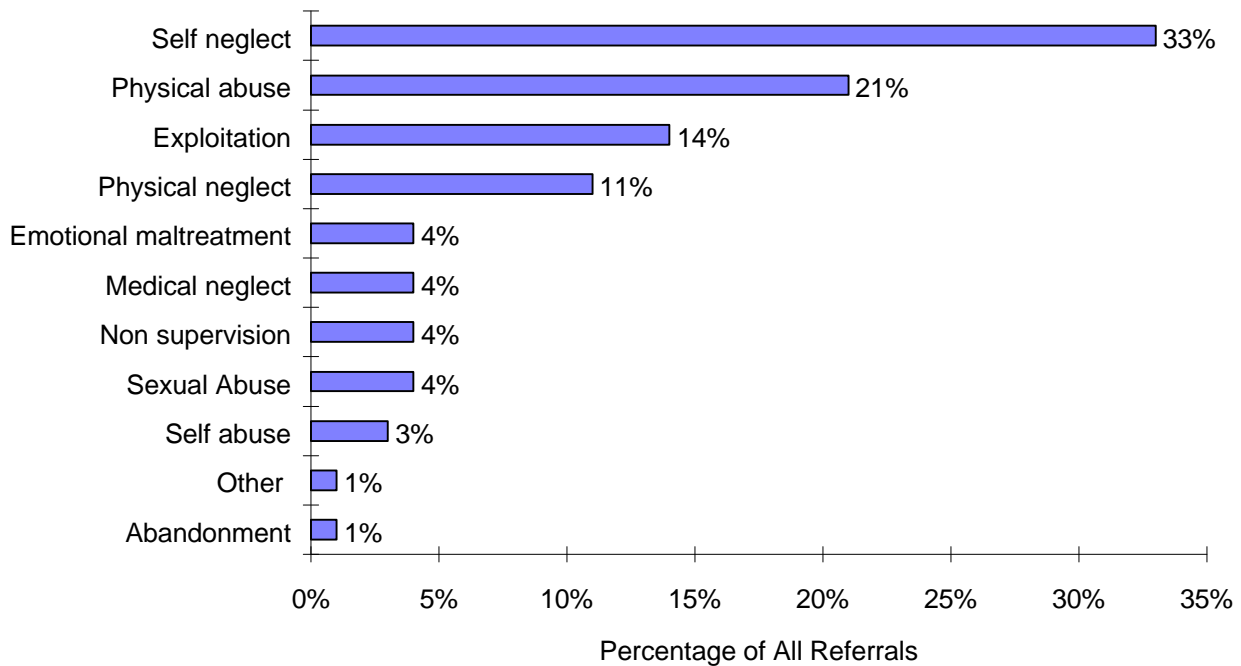
older women made up 62 percent of adult abuse victims Utah. Of the perpetrators, 53.4 percent were males and 46.6 percent were females.<sup>10</sup>

Utah Adult Protection Referrals: 1995		
	Victim	Perpetrator
Male:	38.4%	53.4%
Female:	61.6%	46.6%

Source: Utah State Division of Aging and Adult Services.

Gender specific data on older adult abuse in Utah are scarce. The following figure describes the types of older adult abuses that were investigated in Utah in 1995. Self neglect, physical abuse, exploitation, and physical neglect are the most common types of abuses experienced by older Utahns.

**Percentage Distribution of Completed Adult Abuse Investigations by Referral Reason, Utah, 1995**



Source: Utah State Division of Aging and Adult Services, 1996.

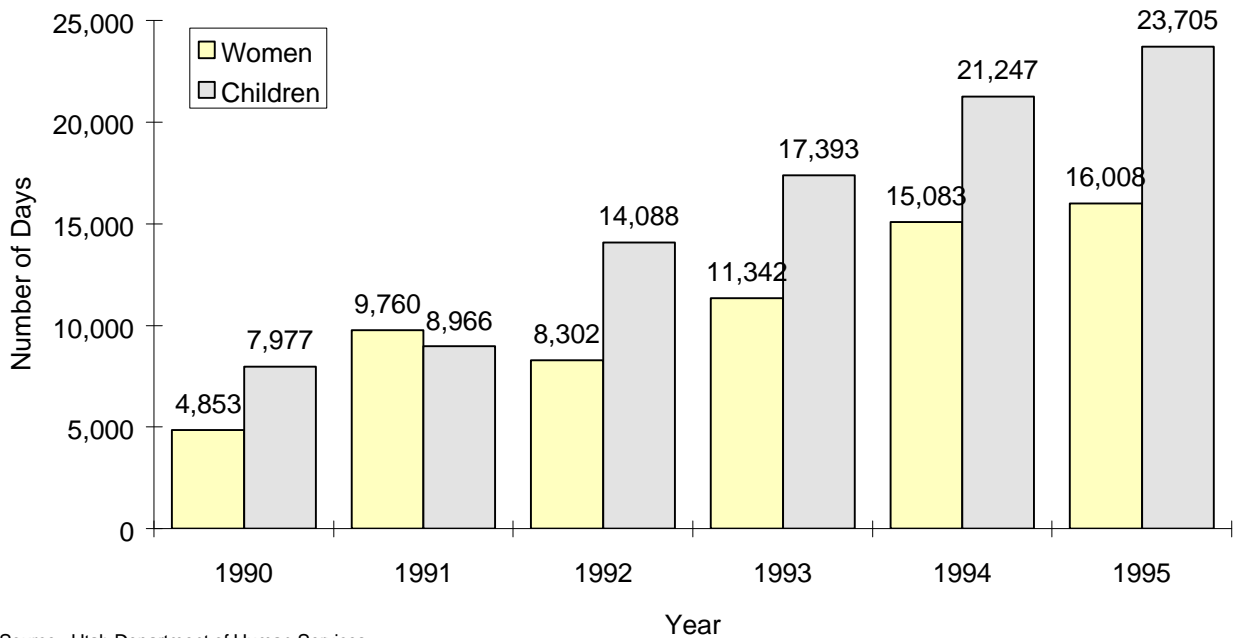
\* Percentages do not total 100 because of rounding.

Public and Community Efforts

During the period July 1, 1994 through June 30, 1995, 1,974 abused women were served in Utah shelters for a total of 16,008 days. Those shelters

also served 2,722 children during that period for a total of 23,705 days. Only about 12 percent of victims who reported abuse entered the shelters.

Number of Days Served in Shelters for Abused Women and Children: Utah, 1990-1995



Source: Utah Department of Human Services  
Division of Family Services

There is considerable variability, both nationally and locally, in estimates of violence against women. The information provided here is based on reported data. These data provide conservative estimates because they rely only on those incidents that were reported.

## **Social Illness: Violence Against Women**

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# 8 Access to and Use of Health Care

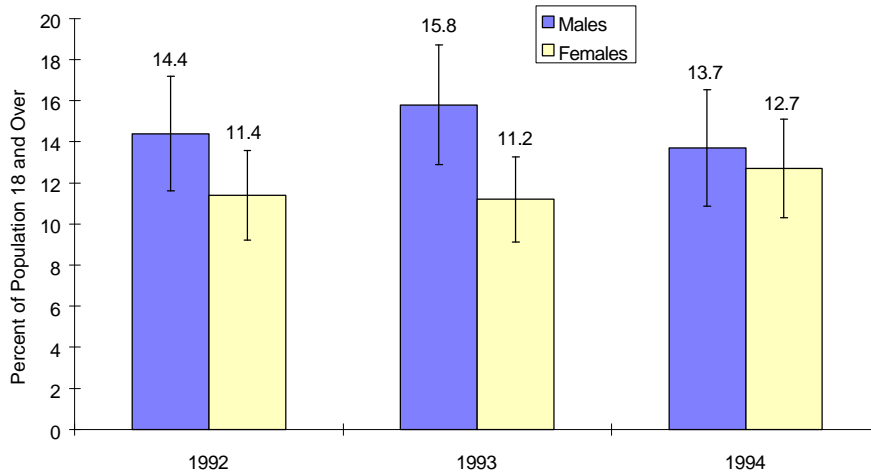
Access to care is an important issue in health policy. Lack of access may result from economic barriers (no insurance, poverty), supply and distributional barrier (services not appropriate or not nearby), sociocultural barriers (problems of understanding between providers and clients of different backgrounds).<sup>1</sup> As discussed in the previous chapters, there are gender differentials in socioeconomic status and the needs for health care. Therefore, it can be argued that women's ability to access health care and their use of health care differ from men's. Lack of access leads people to use fewer health services and may lead to poorer health outcomes.<sup>1</sup>

This chapter will provide baseline information comparing women to men, on access to health care and patterns of health care utilization. This chapter presents information on health insurance, use of health care services, HMO enrollment among the Medicaid population, and long-term care. Women's visible and invisible roles in providing health care are discussed at the end of the chapter.

- Utahns without health insurance were more likely to be males, 18 to 22 years of age, without a high school degree, and with a total household income of under \$20,000 a year in 1991.
- Women made up 58 percent of Utah enrollees in Medicaid HMOs in June, 1996.
- Utah has a higher hysterectomy rate than all other 12 states in the quality indicators project sponsored by American Health Care Providers Research.
- In FY96, female Medicaid recipients in Utah used about \$51 million for long-term care and male recipients nearly \$23 million.
- For every female physician in Utah in 1993, there were 6.9 male physicians. The corresponding sex ratio for the U.S. was 4.3.

# Insurance Coverage

Reported No Health Care Plan, 1992-1994



Source: Behavioral Risk Factor Surveillance System

Lack of health insurance is a considerable barrier to accessing health care, especially preventive care and early detection activities. For women, this often means going without Pap smears, mammograms, prenatal care, and family planning. For uninsured children, dental care and immunizations are harder to obtain. Persons with limited access to health care are more likely to be hospitalized for conditions such as asthma and diabetes that could have been treated earlier in an ambulatory care setting. Women without health insurance are at risk for having problems (such as breast or cervical cancer) that go undiagnosed until they are symptomatic and more difficult to treat successfully.

The 1991 Utah Health Status Survey found that 9.5 percent of Utahns were without health insurance.\* Public health insurance, such as Medicaid or Medicare, was used by about 18.5 percent of the state’s population. Utahns without health insurance were more likely to be males, 18 to 22 years of age, without a high school degree, and with a total household income of under \$20,000 a

year. The survey also found that households with children, especially in the lower income categories, were least likely to have health insurance. Over 35 percent of households with four or more children and an income less than \$10,000 had no health insurance. The most frequently cited reason for lacking health insurance was “Can’t afford it.” The 1996 Utah Health Status Survey will be completed soon and will provide current information on this important problem.

The above figure shows the percentage of adult Utahns, 18 years old and over, reporting having no health insurance coverage during 1992 to 1994, based on the Behavioral Risk Factor Surveillance System (BRFSS). In 1994, the percentage of women without insurance coverage increased and that for men declined from the previous years. The results from BRFSS were somewhat different from that of the 1991 Utah Health Status Survey due to different sampling methodologies and questionnaire designs. BRFSS results provide trend data for this issue, but do not include people under age 18.

\* This percentage underestimates those without insurance coverage because poorer households without telephones were not surveyed. Adjusted for households without telephones, the percent was estimated to be 10.8%.

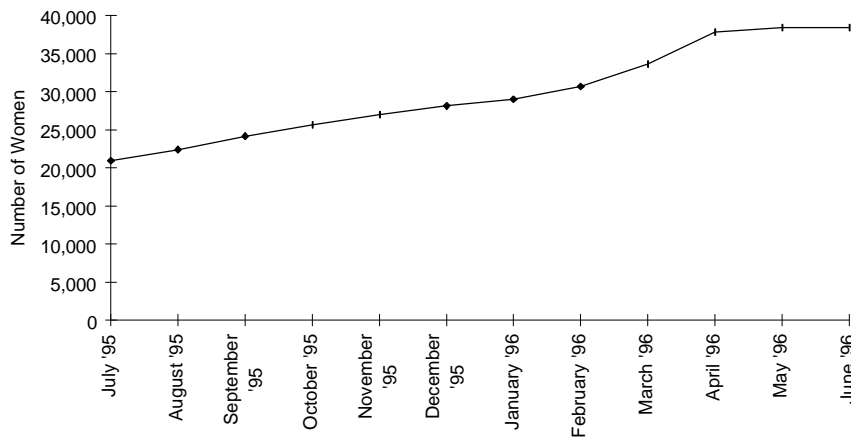


### Medicaid Population and Managed Care

The Utah Legislature directed the Utah Department of Health, Division of Health Care Financing (DHCF), to enroll Medicaid recipients living in the four Wasatch Front counties (Weber, Davis, Salt Lake, and Utah) in health maintenance organizations (HMO). DHCF intends to use savings generated to expand Medicaid coverage to

more low income individuals. As of July 1, 1996, nearly all individuals mandated to enroll in an HMO were receiving medical care through HMOs. Medicaid has established criteria allowing some recipients whose medical needs cannot be met through an HMO to be exempt from mandatory enrollment.

Number of Medicaid Women Enrolled in HMOs Under Medicaid Coverage by Month, July 1995-June 1996



#### Medicaid HMOs Enrollees: Utah, June 1996

Male:	31,325	42%
Female:	43,258	58%

Source: Division of Health Care Financing, Utah Department of Health

Source: Division of Health Care Financing, Utah Department of Health

Persons enrolled in HMOs in most cases have a wider scope of benefits, especially in the area of preventive care, than other Medicaid recipients. However, there has been some opposition to mandatory enrollment in HMOs because of concerns that some low income individuals will be unable to navigate a managed care system and will not get needed services.

Medicaid purchases mental health care for 95 percent of Medicaid recipients through pre-paid health plans. Those contracts have increased the number of Medicaid individuals who receive mental health services because a great deal of education was provided to inform recipients about this benefit, and mental health services were reorganized to provide easier access.

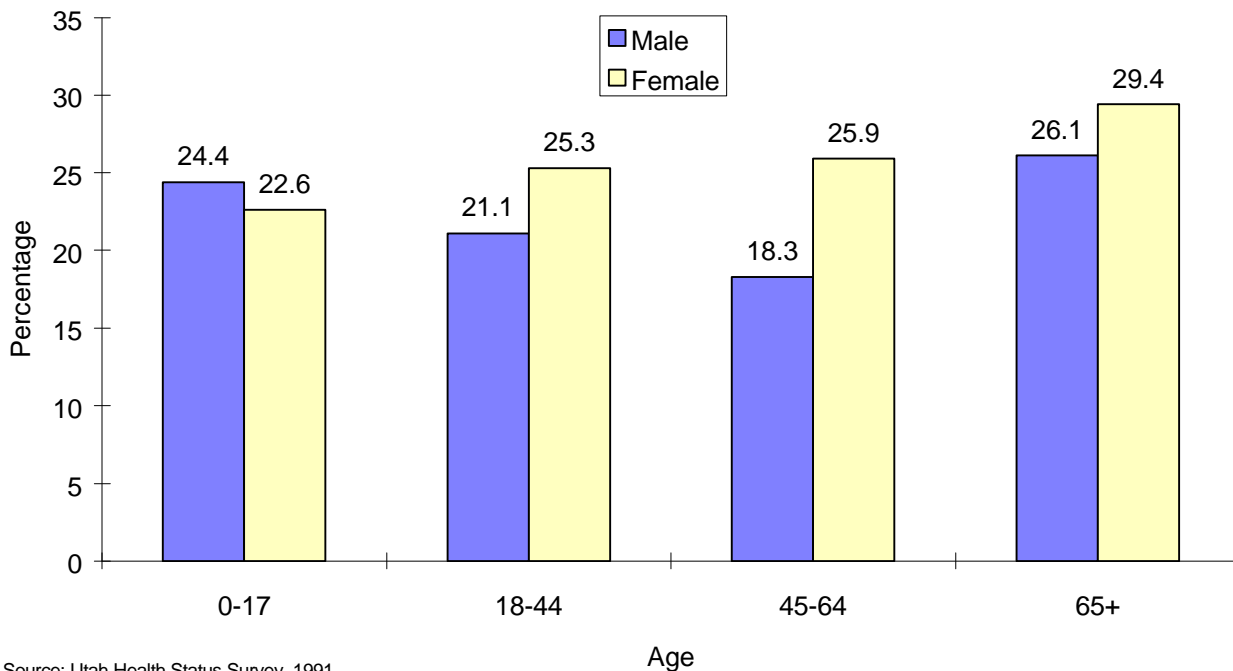
## Use of Health Care

Utah women, 18 and over, are more likely to report their health as fair to poor (see page 11), make a physician visit (see figure below), have a usual place for medical care (see table at right), undergo surgery, and be hospitalized (see table on next page) than men.

Women use the health care system more frequently than men, but some researchers argue that women receive less diagnostic or therapeutic procedures than men under comparable conditions.<sup>2</sup> In Utah, the overall hospital charges to female inpatients are higher than that to male inpatients (see table on next page). However, after excluding newborns and maternal-related conditions, the total charges and average charges to men are higher than those to women. The descriptive statistics reported here cannot explain the underlying reasons for these differences.

Proportion of Utahns reporting they have a usual place for medical care: Utah, 1993	
Men:	76.0%
Women:	83.1%
Source: Utah Behavioral Risk Factor Surveillance System, 1993	

Percentage of Utah Men and Women Utilizing Out-Patient Health Care During the Past Twelve Months by Age, 1991



**Number of Hospitalizations and Total Charges by Gender  
Utah, 1994**

	<u>All</u>	<u>Excluding Newborns and Maternal Conditions</u>	
<i>Discharges</i>		<i>Number of Discharges</i>	<i>Crude Rate per 10,000</i>
Male	77,515	58,685	618
Female	118,380	61,587	637
 <i>Total Charges</i>			<i>Average Charge</i>
Male	\$544,983,000	\$505,297,000	\$9,713
Female	\$628,574,000	\$494,432,000	\$8,276

Note: Only Utah residents were included. Maternal-related hospitalizations were defined as Major Diagnostic Category 14. Newborns were discharges with a principle diagnosis of ICD-9 codes V30-V39.

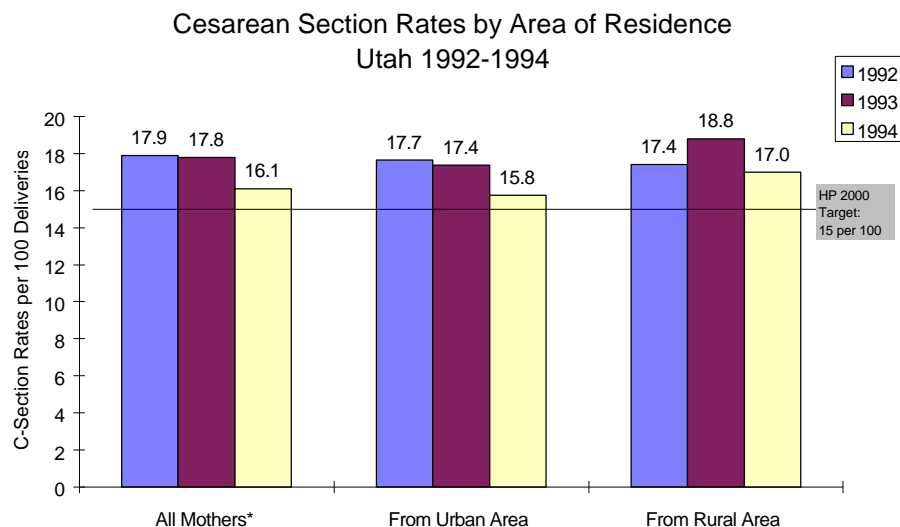
Source: Utah Hospital Discharge Database, Office of Health Data Analysis, Utah Department of Health

**Cesarean Section**

Over the past 25 years, cesarean section rates in the U.S. increased nearly five-fold from 5 percent of deliveries in 1968 to 24 percent in 1992.<sup>3</sup> Cesarean section is the most common procedure for hospitalized women both in the U.S and in Utah.

About 16 percent of deliveries in Utah are cesarean births. Cesarean rates in Utah have declined from 17.9 in 1992 to 16.1 in 1994 (see figure below). Although Utah’s cesarean rate is lower

than the national rate, the current rate is still higher than the Healthy People 2000 target (15% of all deliveries). Also, there are variations in rates among geographic areas and payer types. Women from rural areas had significantly higher cesarean rates than those from urban areas in both 1993 and 1994. There was a decline in cesarean rates among urban inpatients from 1992 to 1994; however, a similar decline was not observed for rural inpatients.



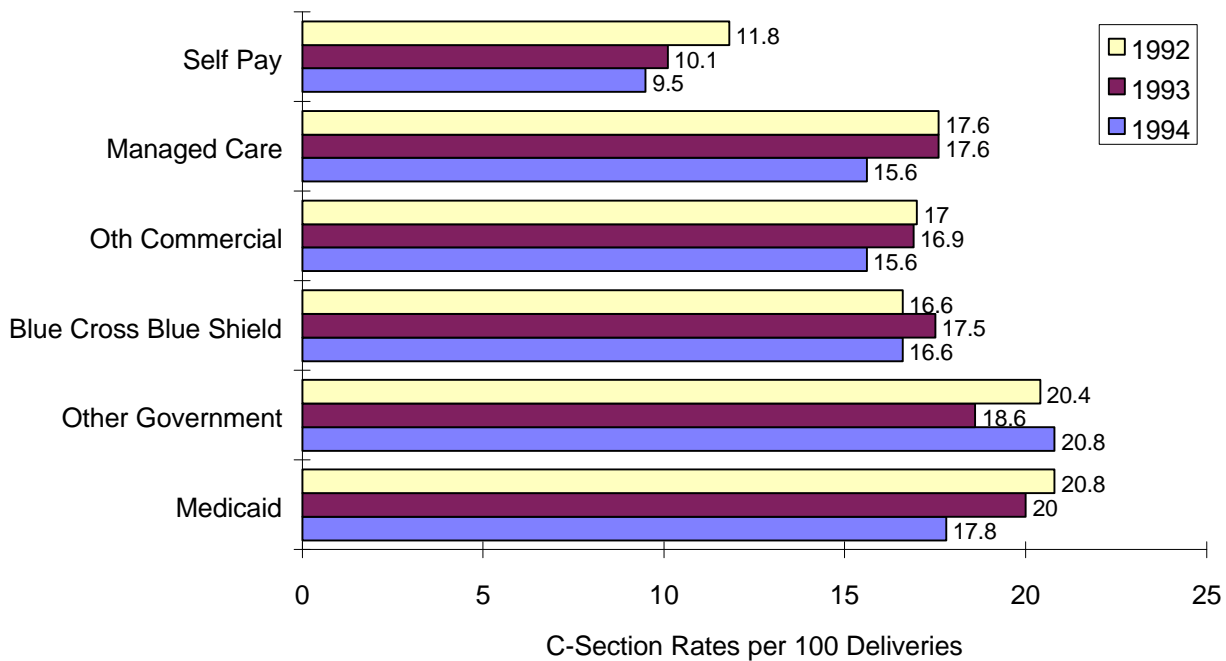
\* Included those from other states  
Source: Utah Hospital Discharge Database. Office of Health Data Analysis

**Access to and Use of Health Care**

Cesarean rates were significantly different across different types of payers (see figure below). Mothers with Medicaid and other types of public health insurance had the highest age-adjusted cesarean rates in 1992 (20.7 and 20.4 per 100 deliveries, respectively). In 1994, age-adjusted cesarean rate for Medicaid patients declined to 17.8 per 100 deliveries, which was still higher than the rates of other insurance carriers, except for other government payers. Self-paid hospital

deliveries were significantly less likely to result in a cesarean section than all other deliveries over the three years. Besides Blue Cross/Blue Shield's fee-for-service and non-Medicaid government insurance, a decline in cesarean rates has been observed among all other payer categories. Further research is necessary to examine the reasons for the variation in cesarean rates among payers.

**Cesarean Section Rates by Primary Payer Category  
Utah 1992-1994**



Note: All rates were adjusted to the age composition of delivery mothers (age 10 to 54) in 1992 hospital discharge data.  
Source: Utah Hospital Discharge Database, Office of Health Data Analysis

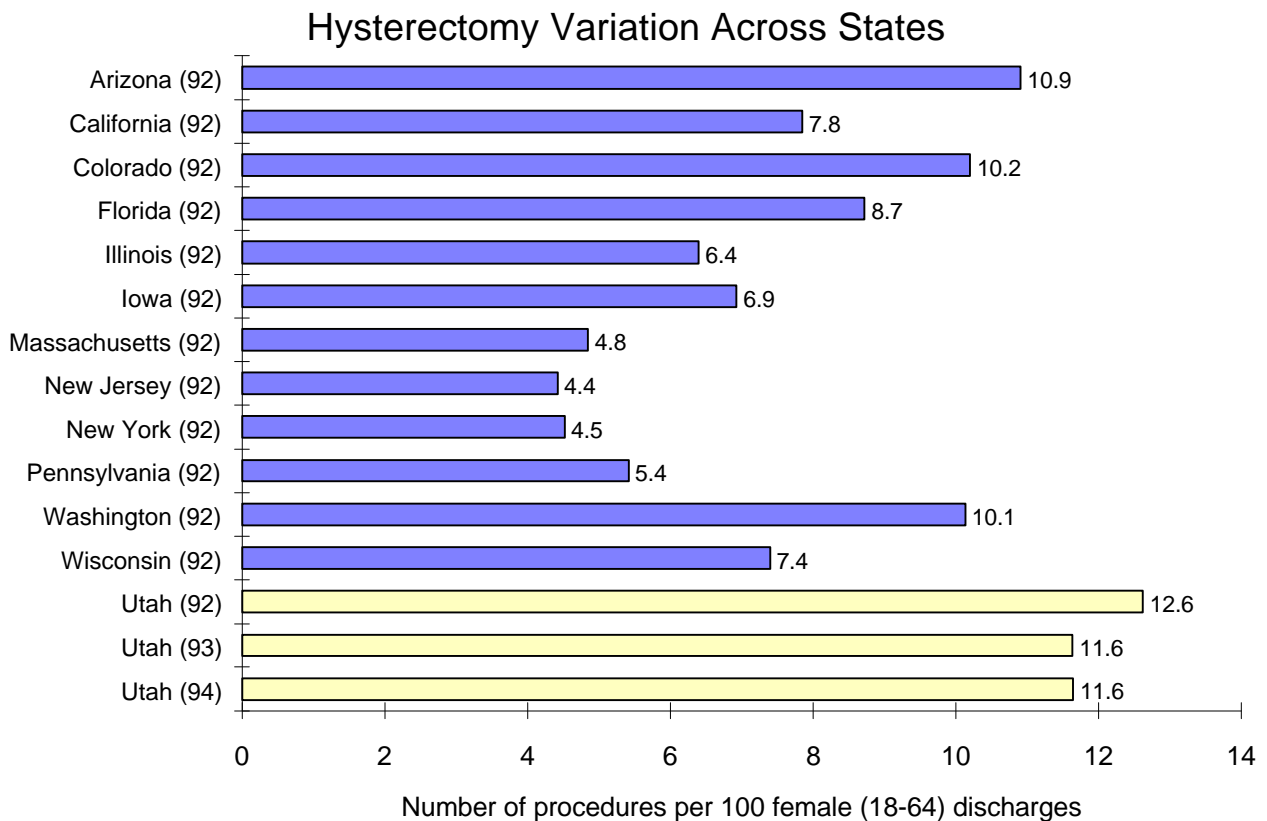
## Hysterectomy

Hysterectomy (surgical removal of the uterus) is the second most frequently performed major operation in the United States, with about 590,000 procedures done each year. Annual costs exceed \$5 billion. By age 60, more than one-third of women in the United States have had a hysterectomy.<sup>4</sup>

It is widely recognized that the rate of hysterectomy in the U. S. is too high and that some hysterectomies are performed for inappropriate reasons. In a follow-up study of women who had undergone hysterectomy, the surgery had provided significant relief of pelvic pain and an improved quality of life one year after surgery for some women. However, some women reported new problems, including hot flashes, weight gain, depression, anxiety, and lack of interest in sex.<sup>5</sup>

Although variation in hysterectomy rates does not by itself indicate inappropriate use, examining that variation may identify areas where hysterectomy rates can be reduced.<sup>6</sup>

The figure below shows that Utah has a higher hysterectomy rate than all other 12 HCUP-3 project<sup>6</sup> participating states. The denominator for the hysterectomy rate excluded elderly, deliveries, and anyone with a diagnosis of genital cancer or pelvic trauma. These exclusions remove from the study population women for whom hysterectomy is more likely to be appropriate treatment, leaving a group of women for whom high hysterectomy rates may be more suspect. The relatively high hysterectomy rate for Utah suggests the need for further research.



Source: AHCPH HCUP-3 Quality Indicators Project. Utah Hospital Discharge Database, Office of Health Data Analysis

## Long-term Care

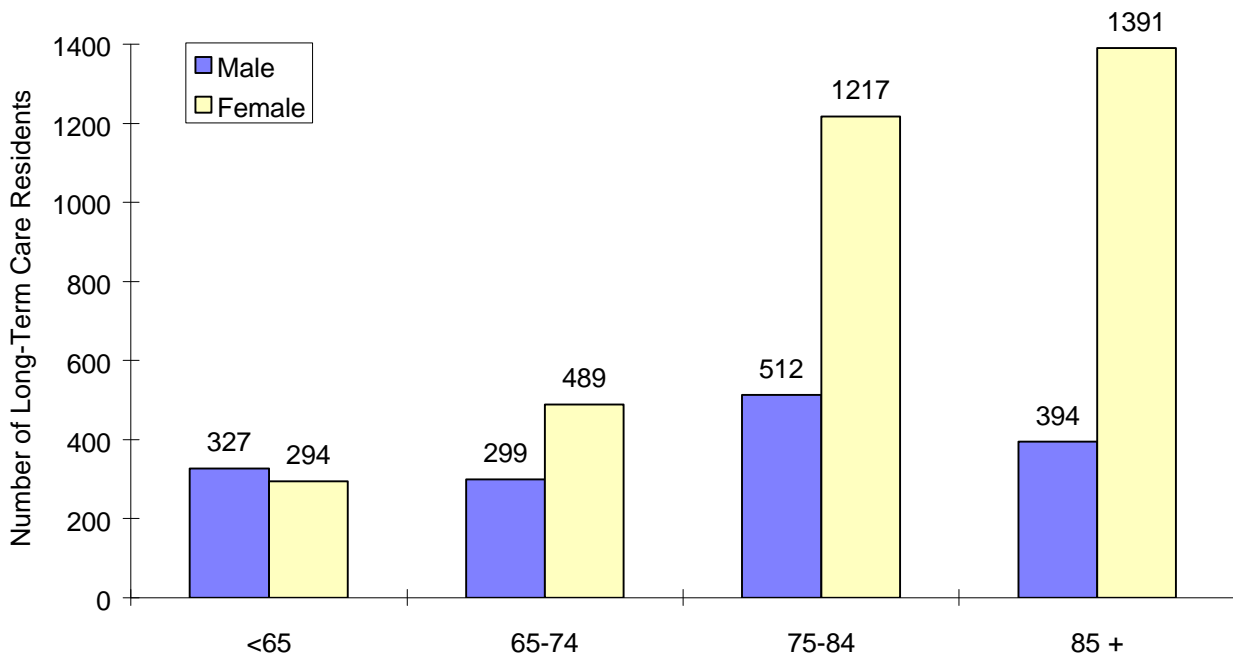
By the year 2000, Utahns over 65 will number 190,000 and represent 8.8 of the population. The number of people potentially requiring long-term care is projected to continue increasing.<sup>7</sup>

Users of long-term care services include individuals of all ages who suffer from chronic illnesses and functional limitations. However, older people, especially women, are the primary users of long-term care services. Women live longer than men and are more likely to survive their

spouses. In the United States, 45 percent of women who reach age 65 use nursing home care at least once before death, but only 28 percent of men use such facilities.<sup>8</sup>

In 1994, 12 percent of Utah nursing home residents were under age 65. The number of male residents in this age group was slightly higher than that of females. About 70 percent of all long-term care residents were women and 36 percent of the residents were aged 85 or older.

Number of Long-Term Care Residents by Sex and Age  
Utah, 1994

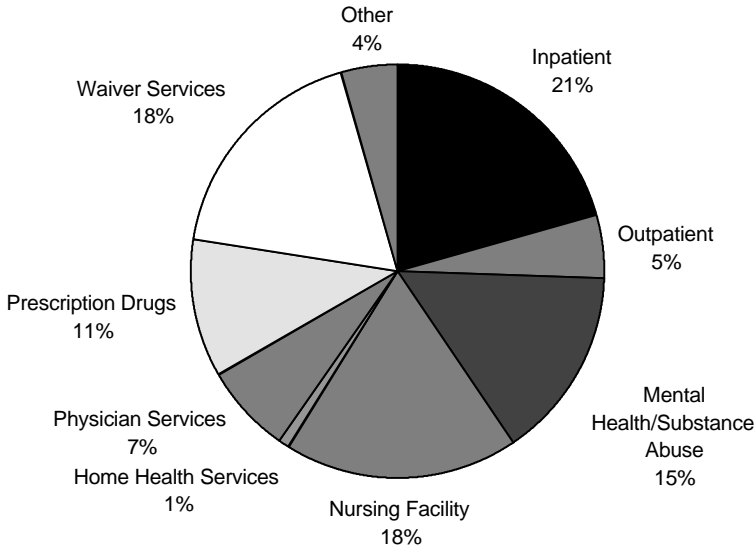


Source: Utah Nursing Home Facility Annual Survey  
Office of Health Data Analysis, Utah Department of Health

In 1991, \$59.9 billion--close to 8 percent of all national health expenditures--was spent on nursing home care.<sup>8</sup> Medicare only pays for a total of 100 days of long-term care. Medicaid covers about 60 percent of the costs of long-term care

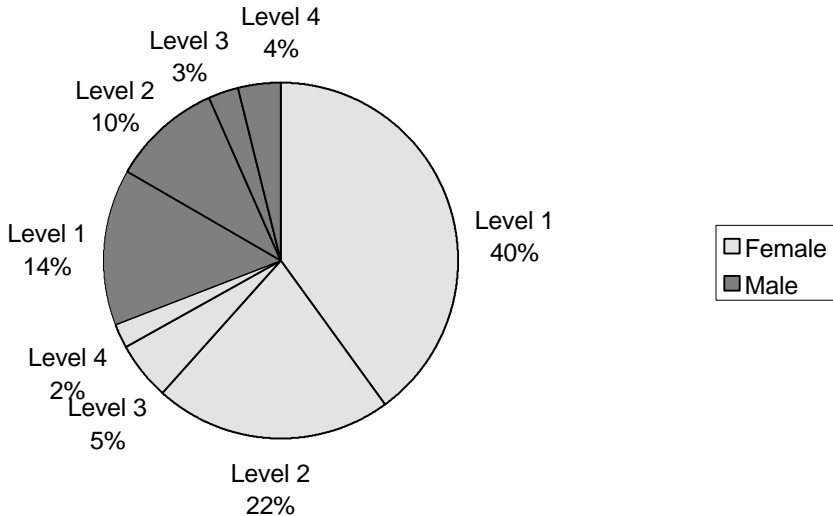
utilization. Long-term care costs represented 18 percent (about \$73,400,000) of Utah's Medicaid expenditures in FY96. During the same period, female Medicaid recipients used about \$51 million for long-term care, and male recipients nearly \$23 million.

Medicaid Expenditures by Type of Service  
Utah, FY96\*



\* fiscal year covers the period from July 1, 1995 to June 30, 1996  
 These expenditures only included the payment for services; expenditures on HMO premiums were not included.  
 Source: Division of Health Care Financing, Utah Department of Health

Medicaid Expenditures on Nursing Home Care by Gender  
and Level\* of Care, Utah, FY96\*\*



\* level of care describes the intensity of care provided to the patient. Level of care is based on the severity of the illness, intensity of service needed, anticipated outcome, and setting for the service. Levels of care are ranked in order of intensity from the least intense (level 1) to the most intense, (level 4).  
 \*\* fiscal year covers the period from July 1, 1995 to June 30, 1996  
 Note: Expenditures are in thousands.  
 Source: Division of Health Care Financing, Utah Department of Health

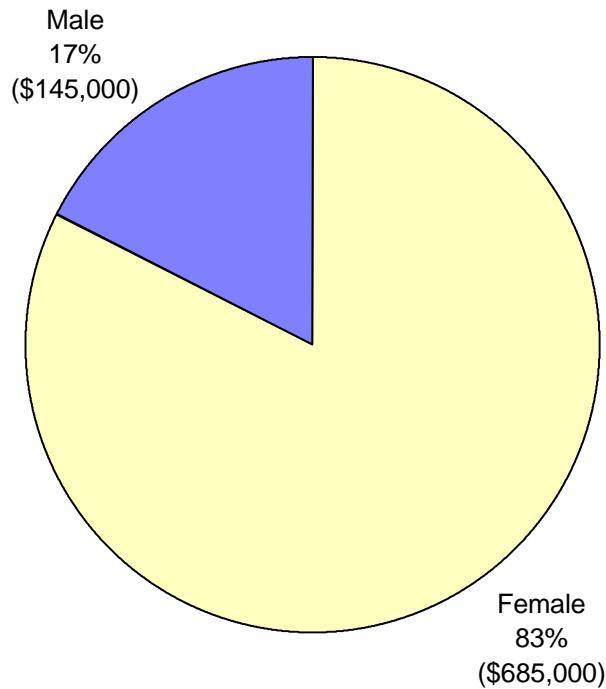
## Access to and Use of Health Care

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Home- and community-based health services have rapidly grown since the last decade.<sup>9</sup> Nationally, women were more likely than men to be under the care of a home health agency. Among persons 65 to 74 years of age, the rate of home health care utilization was 36 percent higher for women than for men, and this differential increased to 65

percent among those 85 years of age and over.<sup>10</sup> Medicaid paid a total of \$829,000 on home health services under the Federal aging waiver for low income Utahns over age 65 in FY 1996. Of those expenditures, female clients received 83 percent of the funding.

Medicaid Expenditure for Home Health Services Under Federal Aging Waiver by Gender, FY 1996



Source: Utah Department of Health, Division of Health Care Financing



## Women’s Visible and Invisible Roles in Health Care

Women’s contribution to health care services has not been well documented. Limited information on female health professionals presented below indicates some of women’s visible roles in health

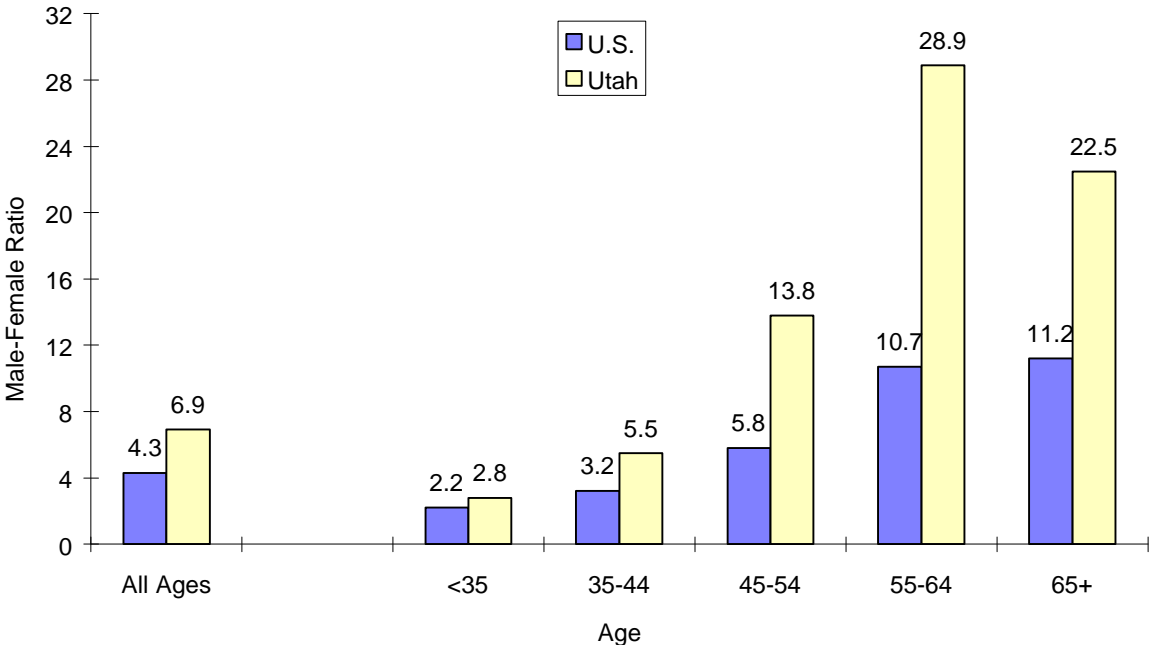
care service. There is almost no local data available on women’s roles in health care within families, although we know that role has always been substantial.

### Health Care Professionals

For every female physician in Utah in 1993, there were 6.9 male physicians. The corresponding sex ratio for the U.S. was 4.3. The gap in the gender composition is smaller among younger physicians, and larger among physicians over age 55.

Women doctors made up 14.5 percent of all Utah doctors in 1993.<sup>11</sup> Of those women doctors, 57 percent practiced in office-based settings, 30 percent in hospitals, and 13 percent were involved in other professional activities.

Male-Female Ratio Among Physicians  
U.S. and Utah, 1993

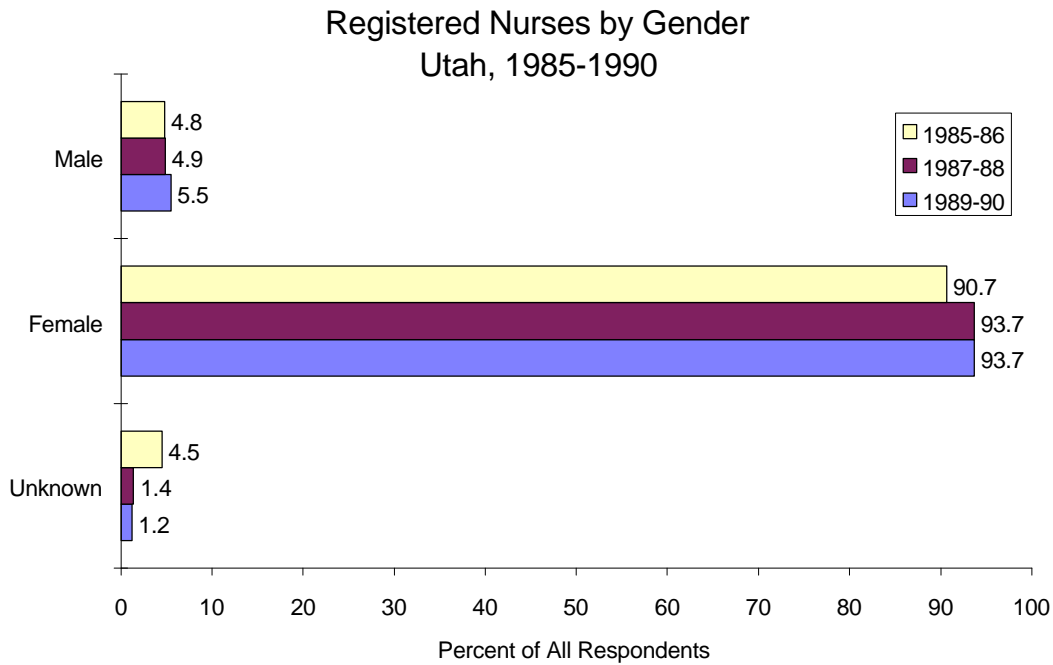


Source: American Medical Association: Physician Characteristics and Distribution in the U.S. 1994.

## Access to and Use of Health Care

In contrast to the gender profile of physicians, nursing in Utah is mainly a female occupation. Women made up 90 to 94 percent of registered nurses from 1985 through 1990. According to the Utah Division of Occupational and Professional

Licensing, Utah had over 6,000 licensed physicians or surgeons, and over 14,000 registered nurses in 1995. More recent information on the gender distributions of physicians and nurses are not available at this time.



Source: Utah Licensed Registered Nurses Report, 1990. Utah Department of Health

## Women as Caregivers

Women are more likely to be caregivers for health of family members, especially nurturing younger children and caring for chronically ill elderly, than men. However, women's role in caregiving at home is usually invisible. According to a Cana-

dian study, over 85 percent of care given to elderly Canadians is provided by family members, especially women at midlife.<sup>12</sup> It is also unknown how the caregiving role affects the health of women themselves.

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## **Access to and Use of Health Care**

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# 9 Health Care Reform and Women's Health

In the context of health care reform, policies on women's health must consider more than reproductive health. Many of the leading causes of morbidity and mortality for women are due to causes outside of the reproductive tract. Assuring health policies that empower women and improve women's health will require diligence and persistence, and a vision of what the ideal health care system should look like.

Though federal health care reform failed in 1993, it stimulated reform at the state and local level that has continued. The corporatization of health care, which involves intense competition among managed care plans for market share and shifting of care to outpatient settings (including the home), is occurring nationally and in Utah.

In this evolving environment, it is critical for women to become informed consumers and to take an active role in shaping a system that integrates women's health needs into health care delivery. Articulating an agenda for system reform that incorporates women's particular needs and concerns is a challenge in a market-based system dominated by business interests. Women must communicate their needs to those in the

board room and in public office---in other words, they must become advocates for their own and their family's health needs. This is a role many women are not accustomed to assuming.

Unanswered questions about the current and future health care system include the following issues:

- Public policy lags behind market developments, with many decisions settled in board rooms instead of through public debate. How can women assure that their needs are met in a corporate environment?
- As mergers and acquisitions consolidate providers and health plans into large systems, will patient care become depersonalized and secondary in importance to business interests? Will the pressure to increase market share reduce the quality of care and limit investment in improvement of internal systems?

## Utah's HealthPrint and Utah Women

In 1994, Governor Michael O. Leavitt and the Utah Legislature joined forces to adopt HealthPrint--a seven year, incremental plan to guide health care reform in Utah. HealthPrint and

the 13-member Health Policy Commission have enacted market-oriented policies to strengthen and improve Utah's health care systems in the areas of cost, quality, and access.

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### Access

1) Expanding Insurance coverage to thousands of Utahns, especially children, by expanding Medicaid coverage. This expansion is funded on a cost-neutral basis from savings generated through managed care contracts and other efficiencies in managing Medicaid programs.

*This expansion, or increased safety net, is especially important to low-income Utahns. Many women, especially single mothers and elderly women with less pension and benefits, are low-income Utahns. Therefore, this policy is considered to be an important step in improving women's health.*

2) A grant program was established to strengthen the health safety net in Utah. One-time funding for existing community based health care organizations to provide primary care services has been appropriated for individuals not eligible for Medicaid, but whose incomes prohibit them from purchasing health care.

3) Strengthening of the business community's purchasing power. A regulatory body providing anti-trust and consumer protections is formed to encourage small employers to form alliances to leverage health care purchasing-bargaining power.

4) Small group and individual insurance reforms. The state of Utah has expanded insurance coverage to medically uninsurable individuals working for small employers and individuals, and their dependents under the age of 26 years,

while offering protections to insurers that will prevent sharp increases in premiums. A basic benefit package is defined that establishes the minimum benefits. Carriers must offer to those individuals enrolled under these insurance reforms.

*Female enrollees made up 56 percent of all Health Insurance Pool for Disabled and Chronic Ill (HIP) enrollment as of December 31, 1995.*

*Women bear an increased burden for disabilities, chronic illness, and care giving. Women are also more likely to be employed in small businesses or service-related businesses that are less likely to provide insurance coverage. In addition, women are more likely to drop in and out of the workforce due to family and care giving responsibilities. This policy, that allows insurance to be transferred with employment while still some way from universal coverage, is a step towards it by providing access to basic insurance that is transferable between employers for Utah people.*

5) Establishment of Medical Savings Accounts (MSAs) will permit individuals up to \$2,000 in tax credits for funds spent on medical care. A recent federal legislation reinforces and strengthens the HealthPrint insurance reforms.

*The effect of this policy on women and women's health is uncertain, as experience with MSAs are limited. MSAs can*

*encourage individuals to have more control over their first dollar for medical care or MSAs could lead employers to put fewer dollars for their employees' health care. People with special needs, such as*

*people with disabilities and women with needs of reproductive health care, have to spend more of their own money for health services.*

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### **Cost**

HealthPrint promoted and strengthened managed care delivery systems among Medicaid eligibles in the State of Utah. Managed care penetration has increased to approximately 60 to 70 percent of the general insured population in 1996.

As of June 30, 1996, a total of 43,258 Utah women and girls had enrolled in Health Maintenance Organizations (HMOs) under Medicaid Coverage, they accounted for 59 percent of all Medicaid HMOs' enrollees.

Managed care is affecting Utah's health care system greatly. According to some studies,

market success may be only weakly linked to the quality of care provided by a managed care plan, with the pressure to grow over-riding quality of care. Reimbursement policies are changing from a claims payment system to a capitated system, in some cases financial risk is being shifted from the health plan to the physician. Women, as consumers and brokers of health care for their families, need education in how to use the new health care delivery system and how to become an equal partner in their care. Obtaining that education is difficult, as the information needed to be an informed consumer is not readily available.

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### **Quality**

How is managed care influencing the quality of health care for Utahns? Data collection and public availability of comparative reports will be enhanced through legislation that strengthens the Utah Health Data Committee's mandate to collect, analyze, and report health data. Publicly available information will increase the accountability of providers and health plans to pursue quality improvement. Health plan report cards will be made available early in 1997.

Women can use objective information, demand additional information, and make informed choices to leverage improved care.

Gender-specific analyses and data collection that emphasizes women's health concerns must be integrated into statewide reporting. Statewide reporting, as well as quality improvement initiatives and clinical practice guideline development should include women consumers in their design.

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### **Rural Issues**

Women in rural Utah have some what different health care concerns such as travel time to the closest health care provider, whether an appropriately affiliated hospital and needed services are available, and primary care provider availability.

HealthPrint is studying the impact of managed care on rural Utah and women. The Department of Health needs to listen to and communicate the strategies to meet rural women's needs.

### Provider Education

In an era of managed care, it is uncertain which entities bear the costs of educating health professionals. Studies to better understand the costs of educating health professionals and to better forecast the health workforce requirements under managed care delivery are underway. Women's representation in the physician workforce is increasing, but little is known about the distribution and career patterns of female physicians.

Managed care delivery provides a unique opportunity to re-evaluate the traditional medical model

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of health care delivery. Cost containment strategies include utilization of mid-level practitioners, such as nurse practitioners and midwives, and integration of wellness and prevention practices into health care delivery. Women must make their preferences known to managed care organizations, hospitals, and state agencies who will be surveying consumers to determine satisfaction with care.

### Mental Health

Mental health is an important concern for women. A reformed mental health care system should ensure that women and children in need have access to a broad array of health and mental health treatment, rehabilitation and prevention

services and should emphasize treatment in the least restrictive setting, consistent with the patient's needs. A two-year study group was organized to examine these issues as a result of HealthPrint, the governor's market based health care reform plan.

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### Long Term Care

As more care is moving from acute settings to home and community based settings, the scope of long term care has expanded. Long term care includes rehabilitation, home care, assisted living, and full nursing home service.

A reformed long term care system should determine how best to meet the needs of women who require long term care services, and whether medical insurance policies should be changed to accommodate long term care needs.

HealthPrint is studying this daunting task and addressing the increasing demand for publicly funded care that meets the needs of more individuals, but controls the costs of care. In addition, the two-year study group is examining what the industry has already done in the area of long term care insurance, examples of what has worked in other states and the costs associated with those reforms, and whether a different type of product is needed to meet present and future needs.



# 10 Where Do We Go From Here?

This examination of the health status of women raises issues that cut across existing programs, agencies, and policies. Some of the issues affecting women's health identified by this report are related to fundamental aspects of the social and economic structure of our society. These issues include income disparities between men and women, differences in educational status, and women's disproportionate share of the responsibility for maintaining families (whether as a single mother or as the principal care giver for an elderly relative). The Department of Health and the individuals who contributed to this report will actively work to address those issues, but these concerns will require a societal commitment and time to correct.

The Department of Health has identified ten issues on which it can have the greatest impact.

These issues include two that have been the focus of substantial ongoing attention: prenatal care and breast and cervical cancer screening. The Department will continue to focus resources on those two important issues and monitor the success of those efforts. The other eight issues are new or emerging problems that call for new or enhanced strategies. The criteria considered in identifying these issues included that they be primarily health issues (rather than economic or social), that they have an important impact on women's health, and that an effective intervention be identifiable and feasible. Those ten issues and the approaches the Department will take to address them are outlined below.

## Ongoing Issues

- Prenatal care - The risk of a low birth weight infant is three times higher for women not receiving prenatal care compared to those who received first trimester prenatal care. Utah ranks third in the nation for early entry into prenatal care. The Utah Department of Health is working to achieve the Healthy People 2000 Objective (90% of mothers receiving first trimester prenatal care). However, challenges remain in reducing prenatal risk and improving the quality of prenatal care.

- Breast and Cervical Cancer Screening - Cancer is the leading cause of death among Utah

women 25 to 64 years of age. Breast cancer is the leading cause of cancer death for Utah women. The proportion of Utah women 50 and older who reported having ever received a screening mammogram increased from 40 % to 76% ; however, this suggests that a quarter of Utah women have never had even a baseline test. Increasing the proportions of women who obtain mammograms and Pap smears at recommended intervals is an ongoing priority of the Utah Department of Health.

## New or Emerging Issues

◦ Discrepancy between Life Expectancy and Self-reported Health Status - Though women have longer life expectancy, and lower mortality from most causes of death at most ages, they report poorer health status (e.g., measured by self-reported well being, or number of days per month of poor mental and physical health). Women have higher prevalence rates of nonfatal conditions that affect quality of life, such as arthritis and depression. Traditional health status assessment tools used by public health have emphasized death rates and life expectancy, which may inadequately represent the actual health status of women. The Department of Health will increasingly emphasize methods of health status assessment that are more sensitive to the unique health issues of women and will advocate for those changes at a national level as well.

◦ Lack of Gender Specific Information in Some Reporting Systems - Producing this report identified several data sources that did not contain gender-specific information. Also, some data categories or coding standards limited our analysis of women's health. For example, women are more likely to be prescribed antidepressant medicines than are men according to literature, but antidepressants are not coded as a separate category in the Medicaid pharmaceutical database. Improvements in these data systems will help future efforts at assessing women's health.

◦ Unintended Pregnancy - Outcomes of unintended pregnancies include abortion, increased risk of maternal mortality, failure to obtain adequate prenatal care, low birth weight, and preterm birth. Preventing unintended pregnancy will require public and private strategies to improve access to and utilization of family planning services.

◦ Women's Mental Health - Mental health problems, especially depression, affect large numbers of women in Utah. The effects at the

individual level are often devastating, and the costs to society in terms of lost potential, employee sick days, and damaged parent-child relationships are enormous. Although this is a serious problem with extremely broad consequences, there is currently no public agency in Utah charged with the responsibility for assessing and assuring the mental health of all people in Utah. The Department of Health will work with the Division of Mental Health, Department of Human Services to develop that role. The first step will be an assessment of the mental health of Utahns and the resources directed at this problem.

◦ Lack of Exercise - Exercise promotes longevity, decreases the risk of heart disease, osteoporosis, and other serious diseases, and promotes overall good mental and physical health. It is generally acknowledged that everyone should exercise; however, roughly half of all women in Utah fail to exercise at levels that will provide those benefits. Lack of exercise is a problem for men and women, but women often have less opportunities for involvement in sports, and also bear a disproportionate share of the tasks required to raise a family. Thus, factors specific to women limit their opportunities for beneficial physical activity.

◦ Osteoporosis - Osteoporosis is a loss of bone mass that can lead to fractures. It very disproportionately affects women and leads to substantial morbidity. It is preventable and to some extent treatable. It lends itself to a public health approach because many of the prevention measures must be provided on a population basis many years before the disease becomes evident. Examples of prevention measures include increased physical activity, adequate dietary calcium, and post-menopausal estrogen replacement therapy.

◦ Violence Against Women - Data indicate that the numbers of women who are victims of

some form of violence (including rape, domestic violence, and other forms of abuse) are increasing. Violence impacts the health and well being of women and of families. Addressing this problem will require collaboration among several agencies, but the Department of Health can play an important role because of its expertise in epidemiology and by convening health care providers to improve identification and intervention in health care settings.

◦ Variability in Cesarean Section and Hysterectomy Rates - Cesarean section is the

most common procedure for hospitalized women both in the US and in Utah, about 17% of live birth deliveries. The rate for women living in rural parts of Utah is even higher. Hysterectomy is the second most frequently performed major operation in the US. The relatively high hysterectomy rate in Utah will require further study, but may indicate that women are being unnecessarily subjected to this surgery. Addressing these and other examples of variability in health care delivery practices provide important opportunities for public and private collaboration to improve the health of Utahns.



## Population and Socioeconomic Profiles of Utah and the U.S.: 1950-2000

	1950	1960	1970	1980	1990	1994	2000	Source
Population								
USA in 1,000s	150697	178464	203235	226546	248718	260341	276241	1
Utah	668860	890627	1059273	1461037	1723000	1992000	2130008	2
Female Population								
USA in 1,000s	76139	90992	104309	116493	127474	134749	141140	3
Utah	341226	445703	536008	736537	867091	1005384	1074784	4
Male Population								
USA in 1,000s	75187	88331	98926	110053	121244	128685	135101	5
Utah	347636	444924	523265	724501	855759	986427	1055224	6
Males per 100 Females								
USA	98.6	97.1	94.8	94.5	95.1	95.4	95.7	7
Utah	101.88	99.83	97.62	98.37	98.69	98.11	98.18	8
Males per 100 Females Age 65+								
USA	89.6	82.8	72.1	67.9	67.2	68.5	70.5	9
Utah	92.97	86.91	78.04	74.33	75.05	75.70	75.82	10
Life Expectancies at Birth - Males								
USA	65.6	66.6	67.1	70	71.8	(1995) 72.8	73.2	11
Utah			69.5	72.4				12
Life Expectancies at Birth - Females								
USA	71.1	73.1	74.7	77.4	78.8	(1995) 79.7	80.2	13
Utah			76.6	79.2				14
Crude Birth Rate (per 1,000 population)								
USA	23.6	23.6	18.4	15.9	16.7	15.2		57
Utah	30.8	29.2	25.5	28.6	21.1	20		58
Total Fertility Rate								
USA	3.6	3.7	2.5	1.8	2	2.05	(2010) 2.1	15
Utah	3.83	4.3	3.3	3.2	2.64	2.68		16
Female Paid Labor Force Participation (%)								
USA	29.6	37.1	42.8	51.5	57.5	58.8	61.6	17
Utah	24.3	32.4	39.4	52.4	61.2	65.5		18
% women who are college graduates (25+ years old)								
USA	5.06%	7.70%	10.70%	16.20%	21.30%	22.20%		19
Utah	5.90%	7.10%	9.60%	14.50%	17.40%			20
% residents who voted in national elections								
USA		63.80%	43.80%	52.60%	33.10%	36.00%		61
Utah		79.90%	63.90%	64.60%	40.10%	40.50%		62
% women who are registered voters								
USA				67.10%	63.10%	63.20%		21
Utah								22
Number of Female state legislators								
USA						(Jan 1995) 1535		23
Utah						15		24
Median Age (in years)								
USA	30.2	29.5	28	30	32.9	34	35.5	25
Utah	25.1	22.9	23.1	24.2	26.2	26	26	26

## Appendix

**Table 1: Population and Socioeconomic Profiles of Utah: 1950-2000 (cont.)**

	1950	1960	1970	1980	1990	1994	2000	
% population - Urban								
USA	64.00%	69.90%	73.50%	73.70%	75.20%			27
Utah	65.30%	74.90%	80.40%	84.40%	87.00%			28
Average Family size								
USA	3.54	3.67	3.58	3.29	3.17	3.2		29
Utah	3.83	4	3.87	3.67	3.66			30
% of population under 5 years of age								
USA	10.78%	11.26%	8.44%	7.22%	7.54%	7.60%	6.00%	31
Utah	13.54%	14.17%	10.55%	13.00%	9.85%	9.82%	9.86%	32
Marriage Rate ( per 1,000 population)								
						(1993)		
USA	11.1	8.5	10.6	10.6	9.8	9		33
Utah	10.2	7.9	11.2	11.6	11.2	11		34
Divorce Rate ( per 1,000 population)								
						(1993)		
USA	2.6	2.2	3.5	5.2	4.7	4.6		35
Utah	3.1	2.4	3.7	5.4	5.2	4.7		36
% of women who smoke cigarettes								
		(1965)		(1979)		(1992)		
USA		33.9%		29.9%	22.8%	24.6%		55
Utah			(1985)====>		13.4%	13.2%	12.1%	6
Median Income - Men (Full-Time, Yr-Rnd 15+ yrs) (1951 14+)								
USA	\$3,083	\$5,435	\$9,184	\$19,173	\$28,983	\$31,612		37
Utah				\$18,147	\$28,597			38
Median Income - Women (FT, Yr-Round 15+ yrs) (1951 14+)								
USA	\$1,361	\$3,296	\$5,440	\$11,591	\$20,597	\$23,265		39
Utah				\$9,835	\$17,208			40
Per Capita Income								
USA	\$1,439	\$2,215	\$3,945	\$5,303	\$16,245	\$16,867		59
Utah	\$1,266	\$1,921	\$3,220	\$4,272	\$12,237	\$13,181		60
%/# Females Living Below Poverty Line - All Ages								
						(1992)		
USA				13.46		16.3		41
Utah					10.54			42
%/# People Living Below Poverty Line - 65+ years								
						(1993)		
USA		35.2	24.6	15.2	12.2	12.2		43
Utah			16.5	11.8	8.8			44
% of families headed by single Female - All Races (1952)								
USA	0.20142	10	10.8	14.6	16.5	18.1		45
Utah		6.5	7.9	9.4	11.3			46
% of families headed by a single Female - Whites								
USA			8.9%	11.6%	12.9%	14.0%		47
Utah			7.8%	9.1%	10.8%			48
% of families headed by a single Female - Blacks (nonwhite)								
USA		22.4%	28.0%	40.3%	43.8%	47.9%		49
Utah		14.7%	22.9%	20.8%	30.0%			50
% of families headed by a single Female - Native American								
USA				23.4%	29.4%			51
Utah				18.9%	27.6%			52
% of families headed by a single Female - Hispanic								
USA			15.3%	20.1%	23.1%	25.2%		53
Utah			10.2%	16.6%	19.7%			54

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For More Information:

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Cancer and Cancer Prevention .....	Cancer Control Program Community and Family Health Services Utah Department of Health 288 North 1460 West Salt Lake City, Utah 84114-2868 (801) 538-6712 or 1-800-717-1811

## Appendix

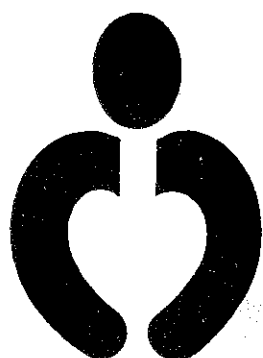
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Heart and Cerebrovascular Disease .....	Cardiovascular Disease Program Community and Family Health Services Utah Department of Health 288 North 1460 West Salt Lake City, Utah 84114-2868 (801) 538-6141
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Physical Activity .....	Lynne Nilson Health Education Community and Family Health Services Utah Department of Health 288 North 1460 West Salt Lake City, Utah 84114-2872 (801) 538-6256  Cardiovascular Disease Program Community and Family Health Services Utah Department of Health 288 North 1460 West Salt Lake City, Utah 84114-2868 (801) 538-6141
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Long-term Care .....	Sara Sinclair, Director Division of Health Systems Improvement Utah Department of Health 288 North 1460 West Salt Lake City, Utah 84114-2851 (801) 538-7024

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