

**REPORT OF THE  
VIRGINIA DEPARTMENT OF HEALTH ON**

**WOMEN'S HEALTH STATUS  
IN VIRGINIA**

**TO THE GOVERNOR AND  
THE GENERAL ASSEMBLY OF VIRGINIA**



**HOUSE DOCUMENT NO. 53**

**COMMONWEALTH OF VIRGINIA  
RICHMOND  
1995**



# COMMONWEALTH of VIRGINIA

*Office of the Governor*

George Allen  
Governor

Kay Coles James  
Secretary of Health and Human Resources

February 21, 1995

TO: The Honorable George Allen

and

The General Assembly of Virginia

The report contained herein is pursuant to House Joint Resolution 173, agreed to by the 1994 General Assembly.

This report constitutes the response of the Virginia Department of Health to continue the Women's Health Study, established pursuant to House Joint Resolution 621 (1993), and its preparation of a statistical profile of women's health status in the Commonwealth.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Kay Coles James", written over a horizontal line.

Kay Coles James  
Secretary of Health and Human Resources

## **PREFACE**

The 1994 General Assembly, through House Joint Resolution No. 173, requested the Department of Health continue its review of women's health status in the Commonwealth, to include an assessment of (a) the current data systems measuring the health of women, including gaps in existing systems and recommendations for revisions to such systems to improve the data, (b) the health-related problems which disproportionately affect women, and (c) the incidence and effects of violence against women.

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Participation on this task force does not represent endorsement of the contents of the report for which the Department of Health is solely responsible.

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# EXECUTIVE SUMMARY

House Joint Resolution 173 requested the Department of Health to continue its review of women's health status in the Commonwealth to include an assessment of (a) the current data systems measuring the health of women, including gaps in existing systems and recommendations for revisions to such systems to improve data, (b) the health-related problems which disproportionately affect women, and (c) the incidence and effects of violence against women.

House Document No. 82, the *Statistical Profile of Women's Health Status in Virginia*, served as the basis for identifying the health-related problems which disproportionately affect women. Specific issues, problems, and recommendations were identified and formulated through focus groups, review of the literature, and individual contacts. A Women's Health Task Force of persons with expertise in women's issues reviewed the findings and recommendations. Participation on this task force does not represent endorsement of the contents of the report for which the Department of Health is solely responsible.

## Findings

### Women's Health Status

The importance of focusing attention on women's health has been recognized both by Virginia and the nation. Women's health issues differ from men's. Women's health issues are closely related to age, are more common in particular social and ethnic groups, and are influenced by behavior, education, and economic status. For most disease conditions, the major research has focused on men, with treatment modalities utilized less aggressively for women, particularly minority women.

### Current Data Systems

There are seven ongoing statewide data systems in Virginia that collect data which can be used to assess the status of women's health. From the survey of the existing surveillance systems, insufficient data are collected related to the health status of women to provide meaningful information for policy development. The absence of timely population estimates for the state and its political divisions prevents the department from being able to provide current analysis and reporting of health status indicators.

The data are available by age, race, and Hispanic ethnicity. The majority of the data are available at the local level. Trend data are reported or will be in the future.

Issues that emerge are:

- Reliability of data.
- Limitation of data due to the population base or methodology i.e., phone surveys or public sector focus.
- Definition of race and ethnicity.
- Delays in publishing reports because of the difficulty in obtaining timely and detailed population estimates which are needed to determine rates.

**Health Problems Which Disproportionately Affect Women**

**Breast Cancer**

- Breast cancer is the leading cause of cancer deaths among women under age 65 in Virginia, and the rate is increasing in both white and minority women.
- Factors which increase the risk of breast cancer include age older than 50, personal history of breast cancer, maternal or sibling history, never having given birth or pregnancy before age 30, and a long menstrual history.
- Mammography is accepted as an effective early detection method for breast cancer in women over 50 years. There is controversy over the use and cost benefit of mammography for women under age 50 years, even though many national professional groups support routine screening of women 40-49 years. Black women and women over 50 years are least likely to obtain mammograms.
- The Virginia Division of the American Cancer Society, the Virginia Breast Cancer Foundation, the state universities, and the Virginia Department of Health have programs dedicated to the prevention, early detection, and treatment of breast cancer.

**Lung Cancer**

- Lung cancer is the leading cause of cancer deaths among all women in Virginia, and the rate is increasing in both white and minority women.
- Cigarette smoking is the major risk factor for lung cancer, accounting for 75 percent of cases in women. Young women under the age of 23 are the fastest growing group of smokers. These young women tend to be poor, minority, and undereducated.
- Women with lung cancer experience more respiratory symptoms than men. Women develop cancer at an earlier age than men.
- Most interventions in the past, such as smoking cessation programs, have targeted men. Research now indicates that women's reasons for smoking and addiction differ from men.
- In Virginia, numerous public and private efforts address smoking prevention and smoking cessation in a variety of settings such as schools and the workplace, but few target women with the exception of those who are pregnant.

### **Cardiovascular Disease**

- Coronary heart disease, a type of cardiovascular disease, is the leading cause of deaths for all women in Virginia, but the rate of death is decreasing in both white and minority women.
- Risk factors for coronary heart disease include hypertension, elevated serum cholesterol, smoking, diabetes mellitus, obesity, sedentary life style, menopause, and stress.
- Women who have coronary heart disease often delay obtaining medical evaluation, present with atypical symptoms, and receive fewer treatment services than men, especially black women.
- Private providers, state-assisted facilities, and Virginia Department of Health district health departments provide screening, education, counseling, referral, and follow-up for cardiovascular disease with efforts targeting minorities.

### **HIV/AIDS**

- Although more men than women are infected with human immunodeficiency virus, the incidence is rapidly increasing in women and disproportionately affects minority women.
- The major risk factors for HIV/AIDS to which the increase among black women is attributed are heterosexual contact with IV drug users, multiple sex partners, limited education, and poor health.
- Women with AIDS have more medical complications than men, and therefore, their life span is shorter.
- Cooperative public and private services for women are provided in communities throughout the state but services are fragmented. Minority community-based organizations target black women through education.

### **Depression**

- Women have twice the incidence of depression compared to men. Minority women report symptoms of depression more than white women.
- Risk factors for depression include family history of depression, poor self-esteem, female gender, chronic non-mood disorders (substance abuse, eating disorders), loss or death of significant other or object, and other stressful life events.
- Women may seek medical intervention, but symptoms are often not initially recognized as depression; as a result, depression may be underreported and undertreated. Utilization of appropriate care is lowest among minority women.



**Reproductive Health**

Major issues that impact on the health of women in the area of reproductive health include teen pregnancy, adult pregnancies which are unplanned, sexually transmitted diseases, and abortion. Pregnancies and births to single women are of particular concern as the major demographic indicators contributing to the destabilization of the family and why so many women find themselves in conditions of poverty today. In 1992, there were 27,520 births to single women in Virginia. Also, during 1992, there were 29,357 divorces and annulments, 48 percent of which involved children under 18 (14,945).

Children of divorce and those born to single women are at higher risk for death, illness, abuse, and neglect. The relationship of poverty to women's health is twofold. Low income is tied to reduced purchasing power. Commodities which promote good health (housing, food, and medications) are out of reach for many, and affordable health care is not readily available.

**Teen Pregnancy**

- Births to teens represent 11.3 percent of total births in Virginia. The birth rate for minority teens is twice that for white teens.
- Virginia ranks slightly below the nation for births to teenage mothers ages 17 and younger.
- Teen pregnancy prevention programs are occurring at the community level with organizations and agency cooperation and state assistance. All programs have not been evaluated for effectiveness.

**Adult Pregnancy**

- Eighty percent of Virginia women 18 years and older report that they have been pregnant. Of these women, 86 percent were married and 44 percent report that their last pregnancy was unplanned.
- Reproductive health services are available to women in Virginia through primary care physicians including obstetricians/gynecologists, HMOs, primary care centers, and local health departments.
- Adult women at risk for unplanned pregnancies are those over 40 years, those who are poor, and those not using contraception.

**Sexually Transmitted Diseases**

- The rate of sexually transmitted diseases (STDs) is steadily growing among women, especially in teens 15-19 and minority women.
- Risk factors for STDs, as with HIV/AIDS, are: having sex with infected person, using or being stuck with a needle or syringe that has been used by or for an infected person.

- Intervention strategies are the same for STDs and HIV/AIDS: Abstinence, mutually faithful relationship with uninfected partner, education about prevention and signs and symptoms of STDs, and testing for STDs.

### **Abortion**

- Women aged 20-24 are the largest group obtaining abortions in Virginia with teens being the third largest group.

### **Violence Against Women**

Women are more likely than men to become victims of spouse homicide and abuse, rape, and other sexual assault.

#### **Domestic Violence**

- Women are more than twice as often assaulted by family members and friends than by strangers. Domestic homicides are generally preceded by a history of physical and emotional abuse directed at the woman.
- Risk factors for domestic violence are being abused as a child, poverty, and less than a college education.
- In addition to death and physical injury, victims of domestic violence suffer emotionally. When the woman is a mother and the violence takes place in front of her children, they also suffer, and the stage may be set for a cycle of violence that can be continued from generation to generation.
- Domestic violence is underreported, and health care providers and law enforcement officers may lack skills in recognizing and addressing abusive situations.
- There are 44 private, non-profit and public domestic violence programs in Virginia which provide emergency shelter for women seeking respite from domestic violence. Among programs for which data are available, over the past five years, 45 percent of women requesting emergency shelter were turned away due to lack of space.

#### **Sexual Assault**

- The number of reported cases of rape has increased over the past several years. Reported offenders are usually strangers to the victim. This may reflect reluctance of victims of acquaintance and date rape to report their experience.
- Women most at risk for rape are young, unmarried, and poor.
- Twenty-two Sexual Assault Crisis Centers serve 84 percent of the cities and counties in Virginia. Approximately half of the centers offer the full range of services.

## **Legislative Recommendations**

### **General**

- The Governor and the General Assembly support those policies and proposals that strengthen Virginia's families, (i.e. Resource Mother's, abstinence programs and fatherhood initiative programs) and eliminate or revise those that contribute to the numerous personal and societal problems stemming from family dissolution.

### **Breast Cancer**

- The General Assembly support a resolution that the Secretary of Health and Human Resources be requested to assess the impact and risk factors of breast cancer on the women of Virginia and to study the need for appropriate state policies to facilitate the development and implementation of primary intervention strategies to promote the control and the early detection of the disease.

### **Reproductive Health**

- The General Assembly consider supporting parental notification for teens requesting abortion.

### **Violence**

- Because violence is a significant public health problem, the General Assembly designate the State Health Commissioner as a member of the Family Violence Prevention Commission established by the 1994 Senate Joint Resolution No. 56.

## **Private and/or Public Strategic Recommendations**

### **Data Collection, Information and Research**

- The Virginia Department of Health, Center for Health Statistics should provide yearly detailed and timely population estimates by race, by gender, by age, by ethnicity, and by locality in order that the health status of Virginia women may be more clearly assessed.
- The Virginia Department of Health, Center for Health Statistics should expand its role in the collection and analysis of data concerning the status of women's health for planning, monitoring, and evaluation and policy development.

- The Virginia universities and colleges of leadership, public policy, research, and social studies disciplines should coordinate their research efforts to address these major issues relating to women's health. Focus of this research should be on family stability, male involvement, reproductive health, and violence prevention.

**Breast Cancer**

- Organizations participating in the National Breast and Cervical Cancer Early Detection Program should ensure that all women have education about breast self-exam, that all women over age 40 receive an annual clinical exam, and that women over age 50 have annual mammography. Mammography should begin earlier for women at high risk for breast cancer.

**Lung Cancer**

- Virginia schools, the American Cancer Society, the Virginia Lung Association, the Virginia Department of Social Services, the Virginia Department of Health, and other private/public agencies and organizations that work with low-income and minority girls and teens should coordinate and target education efforts to prevent lung cancer.

**Cardiovascular Disease**

- Health care providers should offer all women risk reduction support education on tobacco use, dietary fat and cholesterol intake, and inadequate physical activity, and routinely screen for these cardiovascular behavioral risk factors. They should also screen all women for high blood pressure and high serum cholesterol.

**HIV/AIDS**

- The Virginia Department of Health should review the recommendations on preventive services for women in House Document No. 17, 1992 Report on the Task Force on AIDS on Development of Comprehensive HIV/AIDS Plan Pursuant to HJR 436 and report to the Secretary of Health and Human Resources on those recommendations that should be implemented.

**Depression**

- The Department of Mental Health, Mental Retardation and Substance Abuse Services in collaboration with the Virginia Department of Health and private organizations concerned about women's health should continue discussions and increase efforts to identify reasons minority and low-income women fail to seek mental health services and develop a plan to increase public awareness and acceptance that with early detection and intervention may prevent a more serious condition.

- Department of Mental Health, Mental Retardation and Substance Abuse Services should work with health care professionals to increase their knowledge and skills in identifying symptoms of depression in women and make appropriate referrals to community resources for education, supportive counseling, family therapy, psychotherapy, and/or medical treatment.
- Private employers, community organizations, and churches should develop the awareness needed to identify members with depressive symptoms and provide the appropriate support and encouragement for them to seek intervention when necessary.

**Reproductive Health**

- Upon release of the evaluation of the seven teen pregnancy programs, programs showing positive outcomes should be replicated in other high-risk communities.
- The Secretary of Health and Human Resources should develop a consolidation plan for all state-level teen pregnancy prevention support and coordination activities.
- The Department of Medical Assistance should obtain a federal waiver to extend Medicaid coverage to two years past delivery for those women currently covered at 133 percent of poverty and for only 60 days postpartum.
- The Departments of Education, Health, Mental Health and Mental Retardation and Substance Abuse Services, and Social Services should increase staff training on abstinence skills development for teens and require all family life programs in these agencies to use abstinence skills education as a major part of their sex education program. Staff training should include themes consistent with Campaign for Our Children to coordinate efforts with this program.
- All participating partners should continue to work together to expand the Campaign for Our Children strategy to other media markets and enhance with teaching materials for communities.
- The Virginia Department of Health should provide consultation to localities on how to organize teen pregnancy prevention coalitions and develop local community-based programs that are known to work to prevent teen pregnancy.
- Health care providers in both private and public health settings should screen for high risk sexual practices and provide counseling to prevent unintended pregnancies and to help ensure that all women are prepared for pregnancy before it occurs.
- Providers of services and programs to parenting teens should target their efforts to prevent repeat pregnancies in this high risk group.

**Violence**

- The Virginia Department of Health, in conjunction with other state agencies and universities, should develop a comprehensive public health surveillance system to: (a) assess the magnitude and impact of death and injury due to violence, (b) determine the type and quantity of resources needed to respond to the problem, and (c) develop baseline information for evaluating the effectiveness of violence prevention programs and policies.
- The Department of Health should work with the Virginians Against Domestic Violence and health professional organizations to increase the knowledge and skills of hospital emergency departments, primary care clinics, private physicians, including obstetricians/gynecologists, and other health care providers for identifying, addressing, and preventing domestic violence.

## I. INTRODUCTION

The perspective on women's health is changing in Virginia as well as nationally. In the past, women's health programs have focused almost exclusively on reproductive health, and most medical research was designed using males as the standard. It is now recognized that the special health concerns of women are broader than reproductive health and differ from the health concerns of men. Women have unique medical problems, and their physiologic and pathologic processes have not been adequately researched. Important health issues of particular significance to women may be masked when looking at the health of the population as a whole.

Recognizing the special health concerns of women and the need for effective allocation of resources, the 1993 General Assembly requested the Virginia Department of Health (VDH) to prepare a statistical profile of women's health status in the Commonwealth, focusing on women between the ages of 12 and 64. The profile was presented in the 1994 House Document No. 82. The 1994 General Assembly, through House Joint Resolution No. 173, requested VDH continue its review of women's health status in the Commonwealth to include an assessment of:

- The current data systems measuring the health of women, including gaps in existing systems and recommendations for revisions to such systems to improve the data.
- The health-related problems which disproportionately affect women.
- The incidence and effects of violence against women.

In determining the health-related problems which disproportionately affect women, both House Document 82 (94) and the criteria of the Public Health Service in defining women's health issues were used.<sup>1</sup> The criteria are as follows:

- Diseases or conditions unique to women or some subgroups of women.
- Diseases or conditions more prevalent in women or some subgroup of women.
- Diseases or conditions more serious among women or some subgroup of women.
- Diseases or conditions for which the risk factors are different for women or some subgroup of women.

or

- Diseases or conditions for which the interventions are different for women or some subgroup of women.

In addition to the above criteria, other factors which affect women's health such as behavior, environment, and culture were considered.

The methodology utilized for the women's health study includes a review of the literature, focus groups, and interviews. Both the focus groups and those interviewed included specialists within VDH, other state agencies, and the private sector. A Women's Health Task Force of persons with interest and expertise in women's issues reviewed the preliminary findings and recommendations and assisted VDH in preparing the final report. Task Force members and the organizations they represent are listed in the preface of this document.



## II. CURRENT DATA SYSTEMS

Building on the 1994 statistical profile, VDH, with the assistance of other state agencies and private organizations, reviewed the current availability and use of data and made a more in-depth assessment of selected health-related problems, including violence, which affect women.

In the *Statistical Profile of Women's Health Status in Virginia*, 1994 House Document No. 82, several observations were made:

- Data on the health status of women come from numerous sources that have various goals and purposes.
- When collected, health data are generally available by gender, age, race, and geographic location.
- Not all data systems collect and report information for specific minority groups.
- Analysis of data by subpopulations of women is limited.
- Trend data are not routinely reported.
- Indicators of socioeconomic status are not routinely collected.

In order to further assess the data systems available, a group of experts responsible for the various data collection systems was convened. (See Appendix B.) These existing data systems are described in House Document No. 82, *Statistical Profile of Women's Health Status in Virginia*. (See Appendix C.) The data system experts reexamined the various data collection systems to identify the gaps in existing systems and to make recommendations for revisions to such systems to improve the data. (See Appendix D.) The review revealed the following problems with Virginia's health data.

- The Behavioral Risk Factor Surveillance Survey conducted by VDH is a telephone survey designed to collect information regarding the prevalence of self-reported health problems and behaviors. It is a random sample of all adult Virginians between the ages 18-64. With only 1,800 interviews performed each year, it is not possible to provide any meaningful analysis of behavioral risk factors to localities. The number of observations would have to be increased by at least two to three times to provide any beneficial results for localities.
- Data from the Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS) are limited because they address the persons served through the public sector and neither reflect adequately the need for mental health services nor reflect accurately the mental health status of all Virginians. Some demographic data such as age, race, and diagnosis are not reported to DMHMRSAS because of confidentiality concerns by the local providers. The majority of mental health services are provided by private ambulatory care.

- Virginia Health Information, the Patient Level Data System of Virginia, is a much needed and new comprehensive system which in the future will provide demographic and diagnosis related data on hospital admissions and discharge. It is limited in that it reports data from records from those persons in Virginia who have received health care services from hospitals, excluding any ambulatory care facilities. Strict confidentiality policies are present to safeguard the identities of individuals when data are released.
- Virginia's Reportable Disease Surveillance (VDH) system is limited because reporting regulations are not practical to enforce, and resources at the Virginia Department of Health cannot support aggressive community outreach to improve reporting. This is a passive reporting system which is understood not to capture all cases. The data, even though incomplete, are still useful for examining trends in the occurrence of communicable diseases.
- The Virginia Cancer Registry (VDH) is a comprehensive data collection system on persons diagnosed and treated with cancer in Virginia. Because it is not a priority budget item, it is always subject to budget reductions or cuts.
- The Virginia Center for Health Statistics (VDH) collects information regarding vital statistics (births, induced pregnancy terminations, fetal deaths, marriages, divorces, and deaths) and the utilization of hospital beds and services. The Center is continually hampered in publishing reports because of the inability to obtain timely and detailed population estimates by race and age which are needed to determine rates. There is also a need to collect more socioeconomic data relating to these events. As it stands, education is the only socioeconomic variable collected. The birth records also collect information regarding the main payment source of delivery (Medicaid, private insurance, self-payment); however, these data have only been collected since 1993.

The Virginians Aligned Against Sexual Assault has a limited collecting data system which is not based upon population data and consequently does not report in rates. Virginia does not have a comprehensive violence data system. Data generally are available only for those violent events which result in death, hospitalization, or criminal conviction.

In 1994 the General Assembly recognized that the state's population diversity has changed and that data collection among state agencies in regard to race, ethnicity, national origin, and language varied. The General Assembly agreed to HJR No.77 by recommending that the Secretary of Health and Human Resources study race and ethnicity classifications used in data collection for state programs. Study recommendations should assure the uniformity of health-related data collection, by race and ethnicity, as it pertains to different populations of women in Virginia.

### **Conclusions**

From the survey of the existing surveillance systems in Virginia, insufficient data are collected related to the health status of women to provide meaningful information for policy development. Further problems exist in the dissemination of the available information to appropriate health care professionals and policy makers who have the need to make decisions and develop plans concerning women's health care. Data analyses are conducted by different groups that have little contact with each other to share and compare

results. There is no consensus as to what indices need to be collected or in what fashion data are to be organized for appropriate examination and interpretation concerning women's health.

The delays in the provision of population estimates prevent the timely analysis and reporting of health status indicators. The lack of population estimates prohibits the calculation of rates by age, race, and gender to determine the health status of specific population groups for various public health indicators. These population estimates are critical to allow localities to compare levels of risk in populations. This delay also impacts on the ability of all who use the data to assess, plan, and make recommendations about women's health. Currently, the State Center for Public Service (University of Virginia) produces annual population estimates on a limited basis. However, no state agency is responsible for producing the detailed population data necessary to analyze health status of specific populations.

**Private and/or Public Strategic Recommendations**

- The Virginia Department of Health, Center for Health Statistics should provide yearly detailed and timely population estimates by race, gender, age, ethnicity, and locality in order that the health status of Virginia women may be more clearly assessed.
- The Virginia Department of Health, Center for Health Statistics should expand its role in the collection and analysis of data concerning the status of women's health for planning, monitoring, and evaluation and policy development.

### III. HEALTH PROBLEMS WHICH DISPROPORTIONATELY AFFECT WOMEN

Women are living longer than men but are not necessarily healthier. Women have more frequent contacts with physicians than men, but this number includes visits related to childbearing.<sup>1</sup> Even though women use health services more frequently, the extent of illness, perception of need, or accessibility of services cannot be assumed. In the Commonwealth Fund, 13 percent of the women compared to 9 percent of the men reported not getting the needed medical care in a given year.<sup>2</sup> Women of reproductive age are more likely to have health insurance of some type than are men, largely because more women have Medicaid coverage. Unfortunately, many health plans fail to adequately cover preventive and reproductive services resulting in women of reproductive age spending a larger proportion of their income on health care than men spend.<sup>3</sup>

Women's health is associated with economic status. Poor health can result from poor nutrition, poor living conditions, high level of stress, and reduced access to health care. Illness in turn may lead to cycle of poverty which develops with missed work or loss of a job.

Poverty is a major predictor of poor health status. Poverty is defined as those living at or below 100% of the federal income poverty level. For example, the poverty level for a single woman is \$6,970. In 1989, the household income of 10 percent of Virginia women 18 to 64 was below the federal poverty level. Six percent of white women, 17 percent of black women, and 10 percent of women of other races in this age group were below poverty. The household income was below poverty in 5 percent of married couples with children under 18 years of age, 36 percent of female-only headed households, and 48 percent of black female-only headed households. Because poor health status is associated with poverty, the disparity among racial groups for many measures of health status may reflect differences in economic status among racial groups.<sup>4</sup>

Nationally, the rise in the number of women in poverty can be attributed to an increase in the number of single-mother households, a decline in the purchasing power of minimum wage workers, and the declining value of federal income assistance to low-income families.<sup>4</sup>

In 1991, there were 27,066 births to single women in Virginia. This means an out-of-wedlock birth rate of 279.7 per 1000 live births compared to 196.3 in 1982, a sharp rise. Black women out-of-wedlock birth rate was almost 4 times higher than the white rate in 1991.<sup>4</sup>

After a divorce many men in Virginia take with them the income used to support their families, leaving many women with minimum support, uncollectible child support, or no income at all. In 1992, 29,357 divorces and annulments were granted in Virginia. Since 1961, there has been a 400% increase in divorce, from just over 7,000 to 29,000. Women of divorce not only lose income, but frequently lose their health insurance, resulting in loss of access to medical services previously available.<sup>4</sup>

In 1992, 48% of the total divorces and annulments in Virginia involved children less than 18 (14,945) with women having primary custody of these children<sup>4</sup>

Women are less likely to be practicing preventive health care. The reasons given are lack of knowledge about their health risks and lack of knowledge about strategies to decrease these health risks.<sup>5</sup> Women with less education fail to obtain preventive health services, such as pap smears, mammograms, and prenatal care, as frequently as other more educated women.<sup>1,2</sup> Addiction, depression, improper diet, lack of exercise, and smoking also have major impact on women's health. After reviewing the conditions that disproportionately affect women as presented in 1994 House Document No. 82, and applying the criteria of the Public Health Service, the following women's health issues were identified to be addressed in more detail: breast cancer, lung cancer, cardiovascular disease, HIV/AIDS, depression, and reproductive health issues.

### **Breast Cancer**

Breast cancer is the leading cause of cancer deaths among women in Virginia under age 65. The death rate is increasing in both white and minority women in Virginia. The death rate for white women in Virginia exceeds that for minority women in Virginia and white women in the nation.

### **Lung Cancer**

Lung cancer is the leading cause of cancer deaths among women of all ages in Virginia. While the incidence of lung cancer is higher in men than women, it is increasing in both minority and white women while decreasing in men. The rate for white women in Virginia exceeds that of minority women in Virginia and white women in the nation. The causes of the disease and the symptoms are different for women than for men.

### **Cardiovascular Disease**

Although coronary heart disease (CHD) affects more men than women in the study age group, it is included for three reasons. First, CHD remains the leading cause of death for women in Virginia, even though the rate is progressively declining. Second, women present with atypical symptoms of CHD, and third, studies indicate that women are not as aggressively treated as men.

### **HIV/AIDS**

More men than women are infected with the human immunodeficiency virus (HIV), but the incidence is increasing in women, especially minority women. Black women are disproportionately affected and account for 75 percent of all cases in women. The seriousness of the disease and risk factors differ in men and women.

### **Depression**

Twice as many women will have a major depressive episode in their lifetime as compared to men. In a self-reporting poll, more minority women reported symptoms of depression than white women. An important subgroup of women are those who have major depression associated with pregnancy.

**Reproductive Health**

Reproductive health, especially pregnancy, is of prime importance to most women, and women assume major responsibility for pregnancy prevention. Sexually transmitted diseases (STDs) affect women differently and more severely than men; they affect primarily younger women and teenagers, and the reported cases are highest in the minority female.

## Breast Cancer

### Overview

The breast represents a women's ability to nourish and nurture offspring as well as symbolizing sexuality and femininity. A breast cancer diagnosis threatens not only the loss of life but also the fulfillment of these roles. Breast cancer is an overgrowth of neoplastic cells of the breast and is classified based upon cell type. (See Appendix E for types of breast cancer.) The cell type and the degree of spread of the cancer determine prognosis and guide treatment plans.

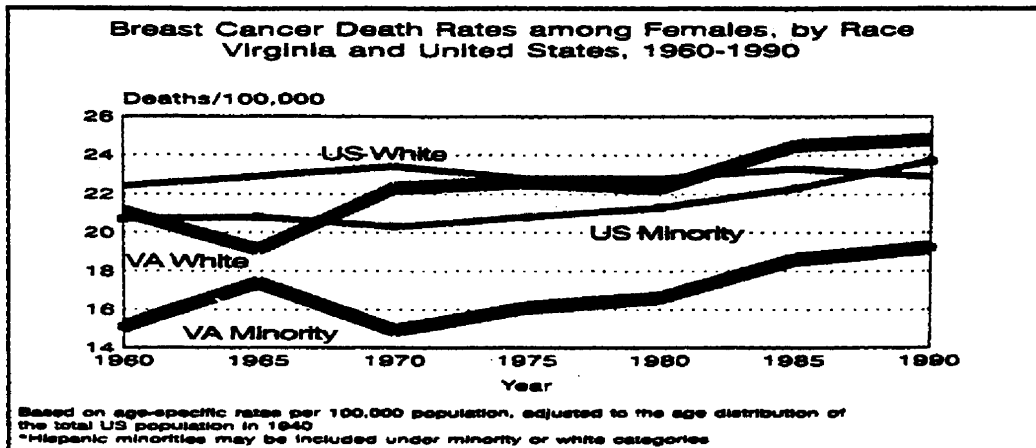
### Incidence

Breast cancer is the most common form of cancer among American women, accounting for 30 percent of all cancers in women. Breast cancer incidence rates have increased since 1973 but have leveled since 1987.<sup>1</sup> One reason for the increased incidence of breast cancer may be related to the widespread use of screening mammography, but this does not explain the overall worldwide increase.<sup>2</sup> Incidence rates vary among cultural groups, but studies of migrant populations support environmental factors rather than genetic factors as being responsible for international variation.<sup>3</sup> Clearly, there is an increased incidence in postmenopausal women, but the specific factors to explain the long-term increase in all women are poorly understood. This year about 48,000 women in the U.S. will die from breast cancer. In recent years, mortality from breast cancer has increased, as the mortality in white women under the age of 50 years has declined. The rate of deaths from breast cancer in black women and older women has increased.<sup>3,4</sup> By the early nineties, the rate of deaths in black women had surpassed that of white women. (Figure 1)

A difference in the survival rate for black women compared to white women has been observed in the United States since the 1950s. The five-year survival rate in 1990 was 64.1 percent for blacks and 80.5 percent for whites.<sup>5</sup> Some of the reasons suggested for this disparity include differences in socioeconomic status, cultural attitudes, limited access to health care for minority women, less aggressive treatment of minority women, differences in tumor biology, and other concurrent conditions and illnesses which render treatment less effective. The National Cancer Institute (NCI) is presently conducting the Black/White Cancer Survival Study to explore the reasons for the poorer survival in blacks, including the social, behavioral, cultural, and clinical factors.<sup>6</sup>

In Virginia, breast cancer is the leading cause of cancer deaths among women under age 65. In 1991, 2,272 women under age 65 were diagnosed with breast cancer, and 480 died from disease.<sup>7</sup> Of these women diagnosed with breast cancer, 85 percent were white, 14 percent black, 1 percent Asian, and less than 1 percent other races.<sup>7</sup> In Virginia, the death rate for breast cancer in black women is lower than white women. The trends in Virginia show breast cancer deaths increasing for white and black women. (Figure 1.)

Figure 1



Source: VDH, Center for Health Statistics, Figure 1 shows the long-term trend for breast cancer. Rates are shown only for census and one mid-census year in order to minimize the effect of imprecise population projections late in the decade.

Those factors most commonly suggested which increase the risk of breast cancer are:

- Older than age 50
- Personal history of breast cancer
- Maternal or sibling history
- Never having given birth or first pregnancy after age 30
- Long menstrual history

Benign fibrocystic disorders without proliferative lesions are associated with little or no increased breast cancer risk. This condition can delay early detection because it can interfere in performing accurate breast examinations. A subtype of benign breast disorders, or atypical hyperplasia, may be associated with a fourfold increase in risk and is presently under investigation.<sup>2,3</sup> Risk factors related to diet, alcohol consumption, breast trauma, viral infections, tallness, and obesity have been associated with increased breast cancer risk, but these relationships are poorly understood.<sup>3</sup> There have been reports that early pregnancy termination is associated with increased risk of breast cancer. There is not enough information at this point to form any conclusions about the effects of spontaneous or induced abortions and the risk of breast cancer.<sup>8,9</sup> Sixty to 70 percent of the women who are diagnosed with breast cancer do not have any of these listed risk factors.

**Interventions**

Because the risk factors for breast cancer are unalterable, secondary prevention strategies are necessary to reduce the mortality of this disease. With early detection and treatment, the number of deaths from breast cancer can be reduced by about 33 percent.



### Self-Breast Exam and Medical Exam

There are very few warning signs and symptoms to herald the presence of breast cancer. Most of the time the cancer is in the form of a lump which is either detected through breast self-exam, breast exam by a professional, or mammography. The time from inception of breast cancer to its detection using current methods is estimated to be several years. The role of breast self-exam and breast exam by a professional as ways to detect breast cancer early has been challenged. The effectiveness of physical breast examinations must be determined by sound, biologically based research, but all the past studies of these methods have been only observational. In some studies of women with diagnosed breast cancer, there was no difference in breast cancer mortality whether or not breast self-exam was performed. In other studies, breast self-exam was crucial for detecting the estimated 10-15 percent of breast cancers that are not discernible by mammography.<sup>10</sup> The accuracy of professionally performed breast exam is not assured by any national mechanism. Whether the provider is proficient in breast exam is dependent upon numerous factors based on education, gender, experience, and attitudes. These issues have not been scientifically researched. There are suggested national standards, and the American Cancer Society and the insurance industry have an active program in training professionals and consumers to perform breast exam appropriately.

### Mammography

A major issue concerning early breast cancer detection is the role of mammography. Much controversy exists as to the appropriate age and interval for screening mammography. It is generally accepted that mammography in women 50 years and older can detect cancer earlier and reduce mortality by 25-30 percent. Currently, the National Cancer Institute states that information is lacking to support routine screening for women between the ages of 40-49 because mortality is not decreased in this age group by obtaining mammograms.<sup>11</sup> Breast tissue in premenopausal women tends to be more dense which makes mammography less reliable. Other national groups such as American College of Obstetricians and Gynecologists (ACOG), American Cancer Society (ACS), American Medical Association (AMA), and 17 others disagree with this recommendation and support the current protocol that women aged 40-49 should receive routine mammography screening every one to two years. These groups are examining other benefits that may result from earlier detection such as opportunity for more conservative treatment and positive impact on trends in prevalence and morbidity.<sup>12</sup>

Those women at greatest risk of developing breast cancer are not the women who are getting mammograms. Women over 65 years of age are at greater risk but are least likely to obtain a mammogram. The percentage of black women who have ever had a mammogram is lower than for white women. Black women practice breast self-exam, however, at a higher rate than white women. Reasons given for not obtaining a mammogram are lack of family history of breast cancer, cost, and lack of a physician referral.<sup>13</sup> In one survey, 40 percent of women stated their physician had never recommended a screening mammogram.<sup>14</sup> Most women on public and private insurance are covered for mammograms, but the reimbursement is quite variable across the country. The average cost of a screening mammogram is \$50. In Virginia, most private insurance covers screening mammography but has limitations based upon age. Medicaid covers screening mammography annually for women over 50 years of age but is limited to those below 38 percent of poverty who meet eligibility requirements.

Mobile vans for mammography screening have been used in Virginia and other parts of the country for hard-to-reach and minority women. The success of these programs has varied depending upon funding and the ability to do the appropriate follow-up which mammography can generate. At present in Virginia, five private hospitals provide mobile van screening as a part of community service.

#### Other Medical Diagnostic Tools and Treatment

When a suspicious lump is detected, several diagnostic procedures, such as ultrasound, needle aspiration or incisional biopsy, are done to determine the presence of malignancy. Once the diagnosis is made, several treatment modalities are available. Treatment decisions are difficult because the information is incomplete, and conflict and disagreement exist in the medical community concerning the best treatment. Treatment choice is usually based upon the type of cancer and size of tumor, the stage or extent of the disease, a woman's age and general health, and her willingness to accept certain side effects of treatment. Surgical approaches, ranging from conservative lumpectomy to radical mastectomy, are usually part of the treatment plan. (See table of surgical procedures - Appendix F.) Chemotherapy, hormonal therapy, radiation, ovarian obliteration, and autologous bone marrow transplant are used to augment the effectiveness of surgery, especially in the occurrence of metastasis or recurrence of the malignancy.

Survival rates for breast cancer depend on the size of the tumor and its spread outside the breast at the time of diagnosis. The five-year survival rate for disease contained within the breast is about 93 percent. If the cancer has spread to the lymph nodes outside the breast then survival is about 71 percent. For more advanced disease, the survival drops to below 20 percent.<sup>15</sup> Therefore, early detection and treatment are imperative.

#### Private Efforts

In response to the growing need for early breast cancer detection and treatment, several private hospitals in Virginia have developed women's centers which feature breast cancer screening, education, and treatment. Nationally there are 53 comprehensive diagnosis, treatment, research and education centers which have the NCI affiliation. The Massey Cancer Center at the Medical College of Virginia in Richmond is one of them.

The Virginia Division of the American Cancer Society is the local organization of the American Cancer Society which raises money to address cancer issues through research, education, and patient services. A priority issue is early detection. In collaboration with several other local and national organizations, the Cancer Society advocates for a strong government research program for breast cancer, for access to care for all women, and for the concerns of the breast cancer patient. The American Cancer Society publishes professional journals, numerous documents, and materials for use for both professionals and consumers. Support and counseling groups, such as Reach to Recovery, are available throughout Virginia through the American Cancer Society.

The Virginia Breast Cancer Foundation (VBCF) is a non-profit coalition of citizens concerned about adequate breast cancer research whose mission is to prevent breast cancer and to identify the cause of breast cancer. The group in Richmond started in 1991 and consisted of women diagnosed with breast cancer. It has grown to include not only women with breast cancer but family, friends, health care professionals, and women at risk for the disease. VBCF holds a seat on the National Breast Cancer Coalition. This group has helped disseminate information about breast cancer, supported public awareness activities, and advocated

for the support of funding for research, treatment, and statistical monitoring in the Virginia General Assembly.

Breast cancer is a complex disease which has a major impact on any woman and her family. Various types of support groups and networks for women and their families have emerged to address the stress of coping with such a life-threatening disease and to help women sort out all the conflicting information. Through the efforts of these volunteer organizations and the sensitization of policy makers at the national and state level, breast cancer research funding and public awareness of the problem have increased. Through efforts of all those involved, there is hope that questions regarding the early detection, prevention, and appropriate treatment of breast cancer will be addressed.

### Public Efforts

The Virginia Department of Health is participating in the National Breast and Cervical Cancer Early Detection Program through the Centers for Disease Control and Prevention (CDC) to increase the early detection for cancer in women over 50 years of age, minorities, and women with low-income status. Twenty-six of the 35 health districts have chosen to participate in the three-year project to conduct a comprehensive needs assessment, develop a plan, convene an advisory group, conduct public and professional educational activities locally, and participate in a statewide coalition. The statewide coalition, lead by a coordinator and staff from the Office of Health Promotion, Division of Chronic Disease Control, will develop a comprehensive plan to address the early detection and control of breast cancer. These projects are in the process of conducting needs assessments and local planning. The Virginia Division of the American Cancer Society, the Massey Cancer Center of Virginia Commonwealth University, and other organizations interested in the early detection and control of breast cancer have been involved in the planning and implementation of this project. Also included in this project will be an assessment of the current surveillance capabilities and the development of a plan to ensure the monitoring of trends in disease prevalence and screening behavior of women in Virginia.

### **Conclusions**

A diagnosis of breast cancer threatens a woman's life and has major impact on everything she does. Over the past 20 years, there has been an increase in the incidence of breast cancer which has not been adequately explained. Risk factors are identified but are not reliable indicators of those women who eventually have breast cancer. Even though early detection does seem to have a positive impact on survival, there are no clear strategies women can do in order to prevent the development of the disease. Mammography has a major role in the early detection of breast cancer, but conflict exists as to its usefulness in women younger than 50 years. Breast self-exam and clinical breast exam continue to be appropriate procedures for early breast cancer detection. Treatment includes several modalities including various surgical procedures, chemotherapy, and radiation. Virginia is fortunate to have several organizations, universities, and state programs dedicated to the prevention, early detection, and treatment of breast cancer.

**Legislative Recommendation**

- The General Assembly support a resolution that the Secretary of Health and Human Resources be requested to assess the impact and risk factors of breast cancer on the women in Virginia and to study the need for appropriate state policies to facilitate the development and implementation of primary intervention strategies to promote the control and the early detection of the disease.

**Private and/or Public Strategic Recommendation**

- Organizations participating in the National Breast and Cervical Cancer Early Detection Program should ensure that all women have education about breast self-exam, that all women over age 40 receive an annual clinical exam, and that women over age 50 have annual mammography. Mammography should begin earlier for women at high risk for breast cancer.

## LUNG CANCER

### Overview

Although lung cancer has historically been a disease that primarily affected men, over the past 30 years lung cancer mortality rates have increased dramatically in women. Today, lung cancer is the leading cause of cancer deaths in females. The increase in deaths follows the increase in smoking among women that began in the early decades of this century. It is hoped that recent decreases in smoking prevalence will lead to a decrease in lung cancer in women in the 21st century, a decrease that is already being observed in men.

### Incidence of Lung Cancer

While breast cancer is the most commonly diagnosed cancer among women, lung cancer causes more deaths among women of all ages in Virginia. In 1992, the Center for Health Statistics reports that 401 women under age 65 died from lung cancer in Virginia. In 1992, 522 new cases of lung cancer were diagnosed among women under age 65. Of these women, 80 percent were white, 19 percent black, 1 percent Asian and less than 1 percent other races. The rate of lung cancer deaths in women continues to increase, although it is decreasing in men.<sup>1</sup>

Among U. S. women, this increase in the lung cancer mortality rates has occurred in most age groups except for the 35-to-44 age group which has decreased since the 1980s. The rate for the 45-to-54 age group also has leveled during the same time period. (See Figure 2.) Although lung cancer incidence rates are increasing in women, the rates of increase have begun to slow down but not to the extent seen in men.<sup>2</sup> In Virginia women, lung cancer deaths overall are still increasing. (See Figure 3) Historically, men began smoking before women. The rates for lung cancer in men began to increase in the 1930s while in women, rates began to increase in the 1960s. By the 1960s the lung cancer rate for men began to level off.<sup>9</sup>

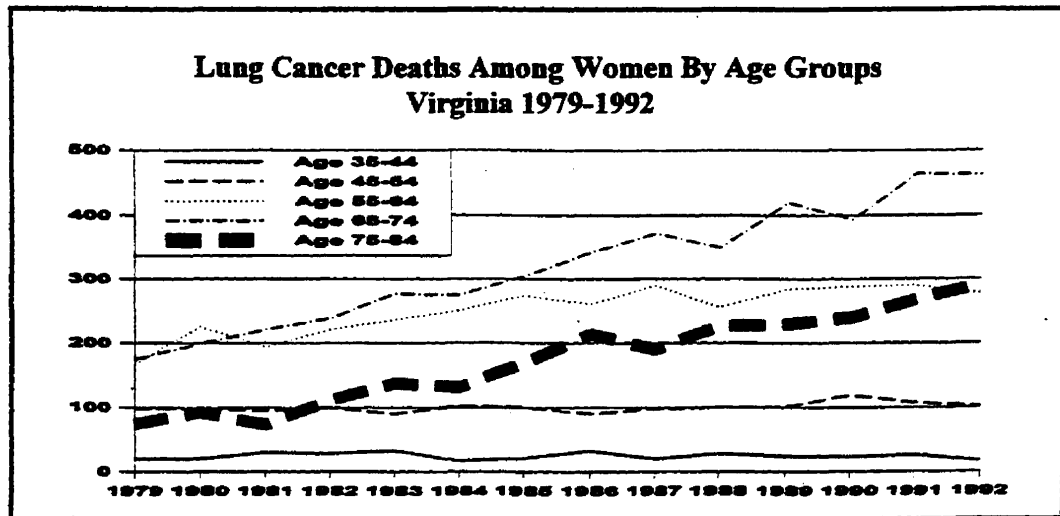
Research shows that women's experience of lung cancer may be different from men's. Women develop lung cancer at a younger age than men and may have more respiratory symptoms even though they smoked fewer cigarettes in their lifetimes. In one study of lung cancer in women, fatigue was reported as the most distressing symptom followed by pain, shortness of breath, and insomnia. Other major concerns, were difficulty with household chores and worry about self-care. Younger women, women with recurrent disease, and women with low incomes report the most severe disruptions in their activities, including the ability to continue work.<sup>3</sup>

### Prevalence of Smoking

The increase in lung cancer among women is attributed to the increase in smoking by women over the past 30 years. Cigarette smoking is the major risk factor for lung cancer, accounting for 75 percent of cases in women.<sup>1</sup> Other environmental causes of lung cancer are asbestosis and radon. In 1992, 20.7 percent of women ( 20.3 percent white and 21.9 percent black) in Virginia 20+ years of age or older reported that they were regular smokers.<sup>4</sup>

There seem to be racial patterns of smoking in women. White women begin smoking at younger ages than blacks but are more likely to quit and at a younger age. Black women tend to delay initiation of smoking and fail to quit. Black women continue to increase their smoking through their 20s and then plateau.<sup>14</sup>

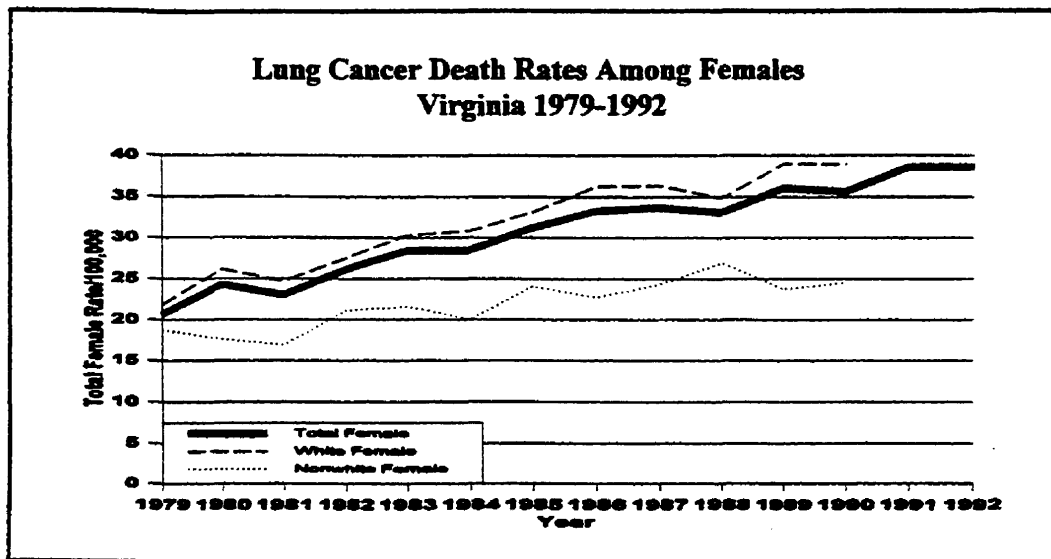
Figure 2



Source: Virginia Center for Health Statistics, VDH

In Virginia women, the rate of lung cancer has almost doubled since 1979. This rise is most evident among women 65-84 years of age. (See Figure 2.) These are women who, following an adequate dose of tobacco smoke which includes both the frequency and duration of tobacco smoking, now suffer from the carcinogenic effects of this habit.

Figure 3



\*(rates for white and nonwhite not available for 1991 and 1992)

Source: Virginia Center for Health Statistics, VDH, rates per 100,000 population by race

Smoking prevalence is decreasing each year but at a faster rate for men than for women. If this trend continues, the smoking rates for men and women will converge at the end of the 1990s.<sup>5,6</sup> Due to the targeted promotion of smoking by the tobacco industry, the fastest growing group of smokers in this country is young women under the age of 23.<sup>7</sup> The tobacco industry heavily advertises and promotes smoking in women's magazines, and tobacco companies sponsor women's sports, fashion, artistic, and political activities.<sup>7,8</sup> Smoking prevalence rates in the youngest groups of adult women are beginning to exceed those in men, at least among whites. Among high school seniors, the prevalence of daily smoking has been higher among females than among males each year since 1977.<sup>9</sup> Eighty-nine percent of adult daily smokers tried their first cigarette by age 18.<sup>10</sup> Educational attainment appears to be the best single sociodemographic predictor of smoking.<sup>9</sup> If a young, college-bound woman does not smoke before age 18, there is very little likelihood that she will ever smoke.<sup>11</sup> Data show that smoking is increasing among young women who do not go beyond a high school education, while young men in this same group showed a decrease in prevalence.<sup>12</sup>

In 1992, the prevalence of smoking among persons living below the poverty level was higher than in 1991. This was attributable to a substantial increase in the prevalence of smoking among women who live below the poverty level and to a smaller increase among men.<sup>13</sup>

Women smoke for a variety of reasons and for different reasons from men. As discussed earlier, most women begin smoking when they are children or teens. Cigarette smoking in teens is associated with image, feeling adult, and asserting independence. For many, smoking results from peer pressure. Many of these young women are low income and without a sense of future. Many young women feel they can control their weight through smoking.<sup>7</sup> Weight control is the most compelling reason women smoke. A recent study reported that most women who stopped smoking averaged about an eight-pound weight gain, and about 13

percent of women gained an average of 29 pounds.<sup>15</sup> Many women relapse in their effort to quit smoking because of their concern about gaining weight. There is scientific research that explains this tendency of some to gain weight. This research demonstrated that nicotine increases basal metabolism without a corresponding increase in appetite. While smoking, women can eat and maintain a desired weight. Once they quit smoking, their metabolism is lowered and their weight increases.<sup>16</sup> With society's pressure on women to be slim, this is a powerful reason not to quit smoking. There are other reasons women smoke such as the sense of energy, feelings of pleasure and relaxation, creation of an activity that gives something to do with the hands, and reduction of tension. All these reasons contribute to addiction.<sup>17</sup>

Once women start to smoke they find it more difficult to stop than men and have more intense withdrawal symptoms. Women often lack the social support to stop smoking, especially if their husbands, boyfriends, or friends smoke.<sup>8</sup> Women who smoke are at risk for not only lung cancer but heart disease. In addition, smoking increases their risk of miscarriage, of delivering a low-birthweight infant, and of having cervical cancer and osteoporosis. Women smokers are more likely to experience irregular menstrual periods and aggravated symptoms of menopause. Women who smoke and use oral contraceptives increase their risk of heart attack ten times and run a risk of strokes and blood clots in their legs.<sup>8</sup> Girls and teens who smoke have significant health problems such as respiratory illness, decreased physical fitness, retarded lung growth, and periodontal degeneration.<sup>18</sup>

## Interventions

### Smoking Prevention/Cessation

Intervention activities to help stop smoking or to avoid starting to smoke must begin at an early age. Efforts must target young girls and women who are of low income and have less than a high school education.<sup>2</sup> Most teenage women who smoke want to quit, and 77 percent of them have tried. When surveyed, most teens who smoke said they did not expect to be smoking a year later.<sup>19</sup> Most smoking cessation programs are geared to men, and some studies have documented that it is easier for men to stop smoking than for women. Women benefit greatly from social support when they are quitting smoking. This is not true for men. Women experience more difficulties in getting the support they need and face barriers to attending smoking cessation classes because of problems such as child care or transportation. Black women seem to be less successful in quitting smoking than white women.<sup>20</sup>

There are many efforts in Virginia devoted to smoking prevention and smoking cessation in schools, workplaces, health care facilities, and other community-based groups and organizations. A school program, the IAAS program - I AM ALWAYS SPECIAL, has a tobacco prevention component in addition to drug prevention activities. There is a peer leader program called SODA, Student Organization for Developing Attitudes. High school students work with middle school students to prevent tobacco, alcohol, and drug use. The Department of Education (DOE) has encouraged all schools to implement total smoke-free schools. DOE school administrators are working with students who smoke to get them to stop. Smoking is one of the focus topics at the annual Blue Ridge Conference devoted to providing teachers with the latest resources and information on health education, health promotion and prevention for their students.

The American Cancer Society (ACS) Virginia affiliate has a staff person devoted to tobacco control activities in Virginia. Two of the focus groups for these activities are girls and women. ACS has a school program called "Smoke-free Teens," that encourages and assists teens to stop smoking. ACS has other cessation programs that are for teens, blacks, and the retired. ACS works jointly with the Virginia



Department of Health and the National Cancer Institute (NCI) funded project ASSIST (American Stop Smoking Intervention Study for Cancer Prevention), which is a seven-year project that supports local coalitions for a smoke-free Virginia. Minorities, women, and youth are targeted for activities especially in schools, worksites, and health care settings.

The Virginia Lung Association (VLA) provides smoking cessation education through printed/audiovisual materials and Freedom from Smoking clinics. The association does not target women other than to provide a booklet to pregnant women entitled "Freedom From Smoking for You and Your Baby." VLA also provides some public service announcements on radio and television that target women.

The Virginia Department of Health receives National Cancer Institute funds to work collaboratively with the American Cancer Society on Project ASSIST in Virginia. The goal of Project ASSIST is to reduce the smoking prevalence in Virginia to 17 percent by the year 1998 and to reduce smoking by youth by 50 percent by 1998. The Virginia ASSIST Project has received \$6,000,000 over seven years. The priority groups are populations with higher smoking prevalence or higher health risks related to tobacco use such as women, youth, and minorities. The strategy to accomplish the ASSIST goals is to develop a broad base of support through diverse memberships on both state and local coalitions. The coalitions will focus on the development and implementation of policies which will impact the smoking prevalence in the state. The media will be used to foster support for policy development, and program services will be made available to respond to the needs as a result of policy implementation.

### **Conclusions**

In Virginia women, the lung cancer deaths have been steadily rising since the 70s. Most women begin to smoke when they are young, and socioeconomic status is the major determinate for smoking. In Virginia, the deaths due to lung cancer in black women are still increasing but may be leveling off for white women. Most smoking cessation programs are not designed exclusively to target women and do not consider the cessation strategies unique to women's needs.

### **Private and or Public Strategic Recommendation**

- Virginia schools, the American Cancer Society, the Virginia Lung Association, the Virginia Department of Social Services, the Virginia Department of Health, and other private/public agencies and organizations that work with low-income and minority girls and teens should coordinate and target education efforts to prevent lung cancer.

## CARDIOVASCULAR DISEASES

### Overview

Cardiovascular disease has traditionally been thought of as a man's condition and has indirectly impacted women through the loss of a father, brother or spouse due to heart attacks or strokes. However, the last 30 years show heart diseases have become an increasingly important women's health issue. Fewer women have died of childbirth as medical technology improved pregnancy outcome, and as a result, more women live to experience menopause. Lifestyles changed from hard farm work to more sedentary style as more families moved to the cities. The diets remained the same which generally had a high fat content. As income improved, fewer vegetables and more meat products were consumed, resulting in an increase in obesity. Social values changed and the stresses of women increased. All of these changes have resulted in making cardiovascular disease (CVD) one of the most important women's health issues and the most expensive.

Cardiovascular disease care from inpatient hospital costs, prescription costs, and home-health care costs accounts for 14 percent of the escalating expense of health care. Medical spending for well-care, including preventive care costs, compares at 3 percent of the total costs.<sup>1</sup>

Women often delay seeking medical evaluation because they may not perceive their symptoms as serious. Factors such as self-medication, being alone, seeking the advice of family/friends, and lack of transportation may contribute to the delay as well as negative associations with health care and access to care.<sup>2</sup> Early medical evaluation is critical since delayed treatment diminishes the effectiveness of new therapies. Chest pain and shortness of breath are the classic symptoms of a heart attack, but women may have other symptoms. When women do seek medical care, they may complain of pressure, fullness in the chest lasting two or more minutes, choking sensation, lightheadedness, and/or fainting.<sup>3,4</sup>

Studies have shown that women are not treated as aggressively as men.<sup>3</sup> Women are less likely than men to undergo major diagnostic or therapeutic procedures, and black women receive less specialized care.<sup>5</sup> Sixty-two percent of men have additional diagnostic testing compared to only 38 percent for women.<sup>5</sup> Cardiac fluoroscopy has been found to have a higher sensitivity in women than the exercise electrocardiogram which is still being utilized to evaluate them. Coronary angiography is the gold standard and the most definitive of the diagnostic tests but is less likely to be given to black women.<sup>6</sup> They receive fewer treatment services such as coronary artery bypass surgery even after the disease severity is controlled.<sup>6</sup> Women, if referred, have a more advanced stage of the disease than men resulting in higher mortality rates. Treatment decisions seem to depend on the patient's race and sex instead of the clinical status. These procedures are generally overused in men and underused in women, especially black women. (See Table 1.) Treatment data are not available on women in Virginia.

Table 1

Rates (%) of Coronary Heart Disease Care Received by Subjects Who Sought Medical Care, by Race and Sex, 1988-1989				
Type of Care	Black Men (n = 136)	White Men (n = 120)	Black Women (n = 305)	White Women (n = 142)
Recommended diagnostic procedures				
Electrocardiogram	88.0	86.7	91.4	92.2
Treadmill test	43.0	50.8	42.8	38.7
Echocardiogram	29.7	28.4	32.1	25.7
Treatments				
Recommended invasive procedures	20.3*	31.1	16.9	14.1
Medication	19.1	28.3	17.7	16.9
Hospitalization for myocardial infarction	18.4	22.5	9.8	13.4
Other contacts				
Referral to a cardiologist	26.9*	40.0	19.3*	29.8
Received diagnosis of heart problem	42.9	43.3	42.6	41.6

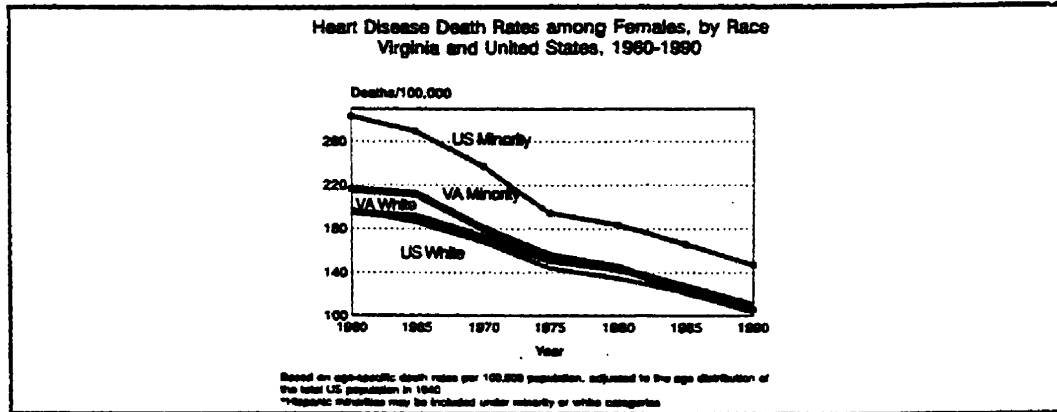
\*Within-sex racial difference significant,  $P < .05$ .

Source: American Journal of Public Health

### Incidence

Cardiovascular disease (CVD) is the second leading cause of death among women 40 to 69 years of age and the leading cause of death for all women in Virginia. It is a new women's health issue because interventions can decrease the mortality rate. CVD includes coronary heart disease (angina, myocardial infarction, coronary insufficiency, congestive heart failure) and cerebral vascular disease (thrombotic stroke, cerebral embolism, transient ischemic attacks).<sup>7</sup> Death rates from coronary heart disease (CHD) are decreasing for whites but incidence remains high for the black woman in the United States. ( See Figure 4.)

Figure 4



Source: Virginia Department of Health, Center for Health Statistics, Figure 4 shows the long-term trend for heart disease. Rates are shown only for census and one mid-census year in order to minimize the effect of imprecise population projections late in the decade.

Women have a higher risk for CVD because of family history, age, race, sex, prior history of cardiac disease, and early natural or surgically induced menopause. The changeable/manageable risk factors include hypertension, elevated serum cholesterol (hyperlipidemia), smoking, diabetes mellitus, obesity, sedentary life style, menopausal status (hormone replacement therapy), and stress. The multiple roles women perform and the consequences of the added stress may contribute to other risks factors, such as drinking and other substance abuse.<sup>4</sup>

A woman's failure to seek health care may depend on actual or perceived barriers and include:

- Lack of knowledge about the disease, including risk factors.
- Concern about payment of medical bills.
- Distrust of health authorities from past experiences.

System Barriers include:

- Less aggressive medical treatments for women.
- Limited access to care due to lack of health insurance.

**Interventions**

In Virginia, 14 health districts have initiated the Virginia Cardiovascular Risk Reduction Programs (VCRR) which target minorities through monies received from the Preventive Health and Human Services (PHHS) Block Grant which is an ongoing grant. Blood pressure screening, diet counseling, referrals, follow-up, professional education and public education/awareness are components of this program which has been operational as a comprehensive program since 1987. Cholesterol testing was added to the program in 1992.

The Virginia Branch of the American Heart Association, which offers educational programs, launched their initial programs in 1990 targeting women and cardiovascular diseases with a statewide conference for professional women followed by five regional conferences for the general public. Their educational efforts include media coverage, health fairs, and support to other organizations. Future plans include specific programs that target black females.

There are numerous organizations that conduct health fairs, special programs, and health awareness promotions to offer blood pressure screening, educational materials on the risk of cardiovascular diseases, and the importance of a healthy diet and exercise. The majority of medical evaluations, treatments, and counseling are provided by the private sector.

### **Conclusions**

The Virginia Department of Health is currently sponsoring a limited number of risk reduction programs to address the high incidence of CVD in minorities. Many physicians still are not aware of the different symptoms a woman may have with the onset of a heart attack, and they may evaluate based on the classic symptoms only. Women are not being treated aggressively when accurately diagnosed and the medical condition is stable. Increased education efforts need to be directed to physicians and to women.

### **Private and/or Public Strategic Recommendation**

- Health care providers should offer all women risk reduction support education on tobacco use, dietary fat and cholesterol intake, and inadequate physical activity and routinely screen for these cardiovascular behavioral risk factors. They should also screen all women for high blood pressure and high serum cholesterol.

## HIV/AIDS

### Overview

Human immunodeficiency virus (HIV) is the virus that causes Acquired Immunodeficiency Syndrome (AIDS). AIDS is a disease which attacks the body's ability to fight off illnesses. An HIV infection is often asymptomatic and has a long latency period from three months to ten years before symptoms appear or the HIV infection converts to AIDS.<sup>1</sup> At the present time, AIDS has no cure and no vaccine that prevents the disease.

HIV/AIDS is spread in three main ways:

- Having sex with an infected person.
- Using or being stuck with a needle or syringe that has been used by or for an infected person.
- Infecting a baby by the infected mother during pregnancy or through breast feeding after birth.

Prevention is the only way to totally manage this disease. Abstaining from sex, or maintaining a mutually faithful sexual relationship with a known uninfected partner, and refraining from using IV drugs are the most effective strategies to avoid contracting HIV/AIDS.<sup>2</sup>

Some women do not perceive they are at risk of a HIV infection and continue their high-risk behavior. In the earlier years, most cases of AIDS in black women were the result of intravenous drug use.<sup>2</sup> Currently, the major mode of transmission is heterosexual contact. Sexual behavior in several monogamous relationships over a period of time may not be perceived as a risk factor. The risk of becoming infected with HIV/AIDS from a partner who is an IV drug user/seller may not be considered important by a woman when other life problems such as poverty, unemployment, educational disadvantages, and lack of access to adequate care are present.<sup>1</sup>

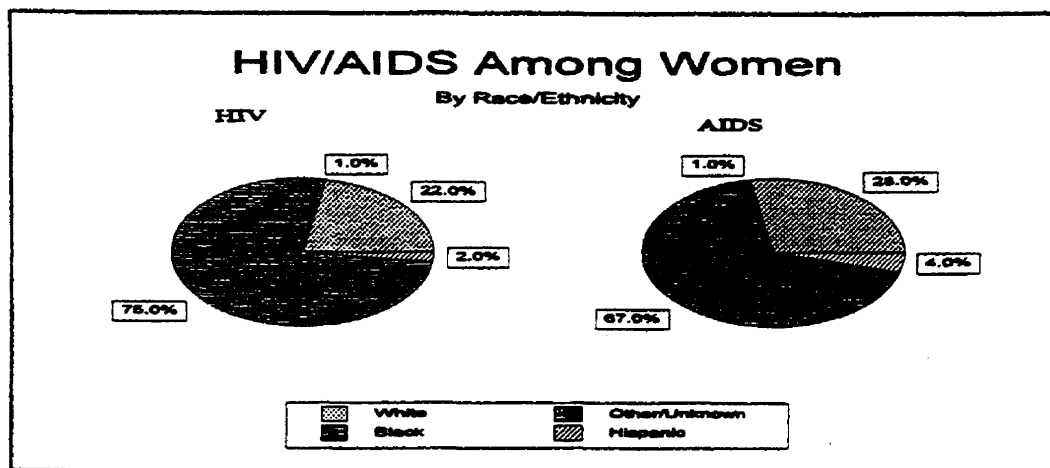
AIDS for a woman can be devastating. Women are traditionally the caretakers and care givers. Their primary concern is for their children and other family members. Women are known to keep appointments for their children but neglect their own medical concerns/problems until they feel ill.<sup>4</sup> Substance abusing women cannot make rational decisions about their health care. When medical care is obtained, often the disease is not aggressively treated.

Not all primary care providers are knowledgeable about HIV/AIDS infections and the associated conditions. They are not all comfortable discussing the sexual behavior and lifestyles of their female clients; therefore, education may be limited. Some primary care providers limit their evaluations to the minority population or economically disadvantaged. Prescribing practices may vary depending on the patient's socioeconomic status rather than offering confidential HIV education and testing to all patients.<sup>5</sup>

**Incidence**

More men are infected with the virus, but the incidence is rapidly increasing in women and is disproportionately affecting minority women, especially black women. (See Figure 5.)

Figure 5



Source: Stats/Data Management, VDH

HIV/AIDS can have an incubation period up to ten years. The majority of women in Virginia have been diagnosed between the ages of 20-39 years of age; therefore, the infections may have occurred when they were teenagers or young adults. (See Table 2.)

Table 2

HIV CASES IN WOMEN BY AGE AT DIAGNOSIS, GENDER, AND RACE/ETHNICITY										
FEMALE	WHITE		BLACK		OTHER		UNKNOWN		TOTAL	
Age at Diagnosis (Years)	No.	%	No.	%	No.	%	No.	%	No.	%
0-12	6	1.8	17	1.5	0	0.0	1	5.3	24	1.5
13-19	19	5.6	67	5.8	2	5.1	1	5.3	89	5.7
20-29	145	42.9	456	39.5	17	43.6	9	47.4	627	40.4
30-39	118	34.9	458	39.7	13	33.3	8	42.1	597	38.5
40-49	33	9.8	129	11.2	6	15.4	0	0.0	168	10.8
50 and Over	17	5.0	27	2.3	1	2.6	0	0.0	45	2.9
Unknown	0	0.0	1	0.1	0	0.0	0	0.0	1	0.1
Sub-Total	338	100.0	1155	100.0	39	100.0	19	100.0	1551	100.0
Total	2119	32.6	4122	63.4	169	2.6	89	1.4	6499	100.0

Virginia Cumulative Data through August 13, 1994

HIV reporting began July 1, 1989. (See Table 3.) In 1993, women had 25.7 percent of the reported cases of HIV and 15.3 percent of the reported AIDS cases.<sup>3</sup> (See Table 4.)

Table 3

HIV Infection among Women by Race - Va.  
Cumulative by Year of Report

	White	Black	Hispanic	Asian	American Indian	Unknown	Total for year	Total of All Cases	Female % of all Cases
1989*	6	14	<3	<3	<3	<3	22	195	11.3%
1990	62	204	7	<3	<3	5	261	1,131	23.1%
1991	149	484	15	<3	<3	9	374	1,635	22.9%
1992	223	743	25	<3	<3	11	345	1,358	25.4%
1993	304	1,027	31	<3	<3	16	378	1,470	25.7%
1994**	337	1,143	35	3	<3	19	158	653	24.2%
						Total	1,538	6,442	23.9%

\* HIV reporting began July 1, 1989.  
\*\* Data through July 1994.

Table 4

AIDS among Women by Race - Va.  
Cumulative by Year of Report

	White	Black	Hispanic	Asian	Total for Year	Total of All Cases	Female% of all Cases
1983-84	<3	<3	<3	<3	3	69	4.3%
1985	6	<3	<3	<3	5	102	4.9%
1986	10	10	<3	<3	12	167	7.2%
1987	18	22	3	<3	23	268	8.6%
1988	36	40	3	<3	36	376	9.6%
1989	48	61	5	<3	35	445	7.9%
1990	66	104	7	<3	64	648	9.9%
1991	89	154	10	<3	77	665	11.6%
1992	115	229	13	3	105	747	14.1%
1993	173	410	23	4	250	1,632	15.3%
1994*	201	471	25	5	92	693	13.3%
				Total	702	5,812	12.1%

\* Data through July 1994.

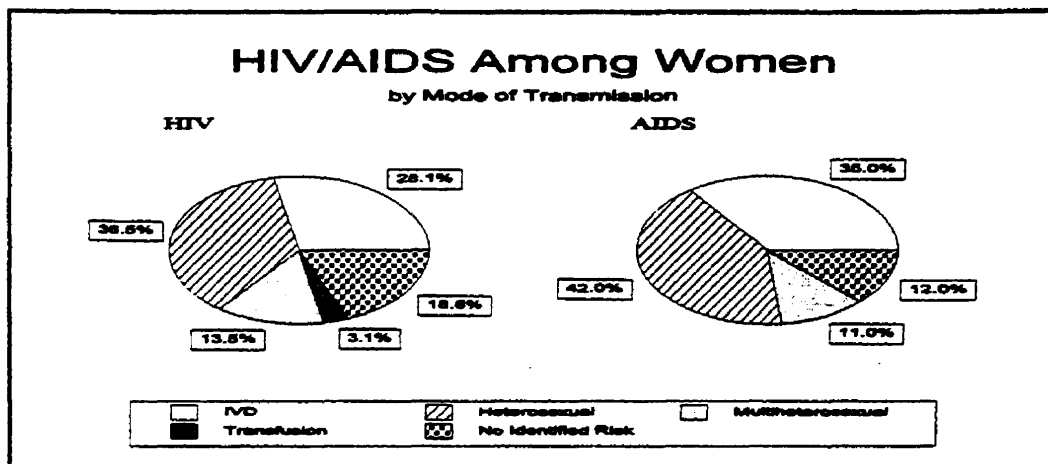
(Source: Statistics/Data Management, VDH)



The HIV virus affects women differently from men. An HIV infection is more easily transmitted to women through sexual intercourse because of the large area of vulnerable tissue in the vagina. The presence of concomitant sexually transmitted diseases that promote genital ulcers, such as herpes, chancroid, and syphilis increases the risk.<sup>1</sup> There is a shorter time span between diagnosis of AIDS and death for women when compared to men. Survival is shorter among patients with *Pneumocystis carinii* pneumonia which is found in 65 percent of women and 53 percent of men. Blacks are significantly less likely than whites to receive antiretroviral therapy or *Pneumocystis carinii* pneumonia (PCP) prophylaxis when they are first referred to an HIV clinic. Racial prejudice appears to be the reason for this disparity.<sup>6</sup> Women also have a higher incidence (72 percent) of *Mycobacterium avium* intracellulare (MAI) than men (44 percent), which further compromises the immune system. Autopsies of HIV infected women showed that 44 percent were infected with MAI; only 32 percent of the autopsied men were similarly infected.<sup>7</sup>

The significant increase in HIV/AIDS in black women currently is attributed to sexual contact with black males who are IV drug users. Heterosexual contact now accounts for 35 percent of the total cases of HIV and 42 percent of total cases of AIDS. (See Figure 6.) Other risk factors are multiple sex partners, limited education, frequent mobility, and poor health due to lack of access to health care and cultural beliefs.<sup>5</sup>

Figure 6



Source: Stats/Data Management, VDH

Limited knowledge and barriers still prevent some women from seeking health care. Some barriers specific to women are:

- Misconceptions about HIV disease and AIDS.
- A distrust of health authorities from past experiences.
- Trying to hide symptoms of an abusive relationship.

System barriers include:

- Lack of a support system.
- Access to medical care, especially early diagnostic care.
- Limited resources available for women in Virginia without insurance.

### **Interventions**

The Virginia Department of Health funds a variety of programs across the state to address HIV. The STD/AIDS Hot Line provides statewide toll-free information to answer questions regarding STDs, HIV, and AIDS, along with the dissemination of information and referrals by trained counselors. Other programs provide testing, counseling, education, training, medical treatments, support groups, and case management.

The programs include:

- Resource and Consultation Centers which provide regional and local training to increase the knowledge base of practitioners as well as increase their comfort level in caring for the HIV positive individuals. The centers are located at Medical College of Virginia, Medical College of Hampton Roads, Inova Health System, and the University of Virginia, which subcontracts with the Community Hospitals of Roanoke Valley.
- The AIDS Service Organizations, which are community-based groups, provide AIDS education outreach and patient support services, i.e. psychosocial counseling, legal assistance, and medical referral.
- Some local health departments collaborate with a community-based organization to provide education and increase awareness.

Minority community-based organizations, such as the Minority Health Consortium (MHC) and the Urban League, are also making efforts to reach the black woman through education.

- Minority Health Consortium provides HIV risk reduction education to black women from public housing developments and substance abuse centers through home health parties.
- Helping Educate African Americans for Life, (HEAL) Inc. of Virginia, targets the black family through outreach with prevention, education, and AIDS awareness information, and provides HIV prevention education to black youth and young adults in secondary schools, colleges, neighborhoods, community organizations, and churches.
- Central Virginia AIDS Services and Education (CVASE) targets black youth with HIV prevention messages and provides a telephone support group for women.

Currently, there are a few free clinics that offer services for women, but these can only accept a limited number of patients. Alexandria Health Department is the only state-supported locality that has a support group for HIV positive women.

**Conclusions**

The Virginia Department of Health sponsors programs in localities with community-based organizations, but the services are fragmented. There is a need for comprehensive services at more sites around the state, including family-oriented programs. Targeted women, especially teenagers and young adults, are not responding to the educational messages for whatever reasons or may not have the power to change their lifestyles in order to prevent the increases in HIV/AIDS exposure. Physicians need to be aware of their prescribing practices to dispel past experiences of distrust. All clients need aggressive quality care. Access to medical care needs to be available to all Virginians regardless of their financial status. There is a need to determine the course of the disease process which appears to be more rapid and cause death earlier in women. A data base which would offer an opportunity to conduct specific research and surveillance of all cases would also assist in determining and projecting cost of the disease in Virginia.

The report of the Task Force on AIDS on the Development of Comprehensive HIV/AIDS Plan Pursuant to HJR 436 (House Document No. 17) further outlines additional plans needed in Virginia. The lives of future generations depend on our efforts to prevent the continuing increases in the spread of the HIV and the development of AIDS.

**Private and/or Public Strategic Recommendation**

- The Virginia Department of Health should review the recommendations on preventive services for women in House Document No. 17, 1992 Report on the Task Force on AIDS on Development of Comprehensive HIV/AIDS Plan Pursuant to HJR 436 and report to the Secretary of Health and Human Resources on those recommendations that should be implemented.

## DEPRESSION

### Overview

Depression is important to any discussion of the health status of women because it is not only underdiagnosed and underreported but can be an underlying factor for other conditions which disproportionately affect women. Studies suggest there is a connection between depression and the development of physical illness.<sup>1</sup> Depression is associated with some of the lifestyle disorders such as substance abuse and eating disorders, including obesity. In contrast, depression can be an aftereffect of a major illness or condition and may interfere with a women's ability to seek, comply, or cope with treatments and interventions. For example, breast cancer research suggests that women with positive attitudes and healthy coping skills complete therapies and have better survival rates. Both men and women deal with the stressors of everyday life such as marriage, relationships, divorce, parenting, work, or aging, but women have the added stressors related to reproduction and childbearing.<sup>2</sup> Even though many men have taken on more household responsibilities, women continue to report that they carry the primary role for managing family matters. In fact, many of today's households are headed by women alone. Depression may be the woman's reaction to intolerable social situations. As many as 50 percent of women in therapy for depression have a present or past history of abuse.<sup>2</sup> Women are reared to be responsive to others, to be the pleasers, and to suppress true feelings, particularly anger. Because of some of these social and developmental factors, women are more vulnerable to depression.<sup>3</sup>

Depression is the most common diagnosis of mental illness in the United States affecting eight to 20 million Americans annually. Depression is a pathologic condition which is maladaptive and differs from the normal sadness experienced in everyday life. Depression is exaggerated sadness or grief, and the types differ by degree and duration of clinical symptoms.<sup>4</sup> There is no common event, condition, or factor responsible for depression, but there are a number of influences which produce the depressive state.<sup>4</sup> Various models are used to describe the causes of depression. The psychological approach explains depression as a poor sense of self associated with inadequate/inappropriate parenting. The biological model explains the occurrence of depression originating from genetic and biochemical factors. Familial tendencies have been described but this relationship is unclear.

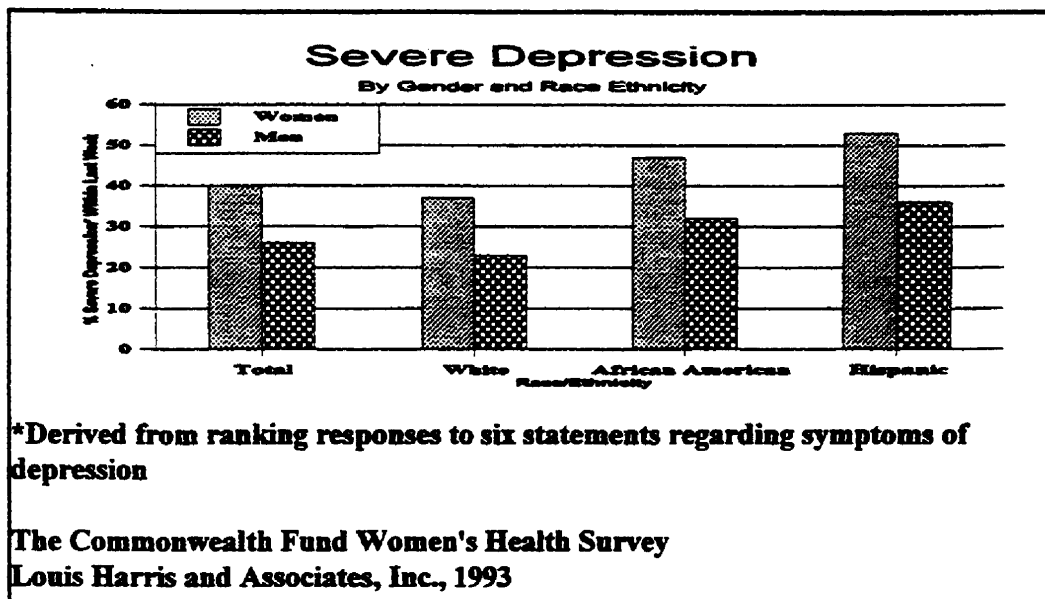
The diagnosis of depression is based upon the DSM-III-R (*Diagnostic and Statistical Manual of Mental Disorders, revised*) which classifies the types of depression using a description of the clinical symptoms or features. Women are most affected by major depression, defined as losing interest or pleasure in all or almost all of usual activities independent of any life events. Four of the clinical features as listed in the DSM-III-R manual must be met to qualify for a diagnosis of depression.

Since there is a long list of symptoms which describe depression, it is difficult to differentiate between depressive symptoms and severe clinical depression. Many persons feel the pressures of today's competitive fast-paced lives by having periods of unhappiness, feelings of despair, or hopelessness. True clinical depression is not the episodic depressed mood but is characterized by biological changes, cognitive disturbances, and social isolation. It is not well understood whether or not these depressive symptoms are precursors to the later development of severe clinical depression.

**Incidence/Prevalence**

Depression is more common in women, persons under 40 years of age, and those of lower socioeconomic status. Eighteen to 23 percent of all women will have a major depressive episode in their lifetime as compared to 8-11 percent of men.<sup>5</sup> In the 1993 The Commonwealth Fund interview, over 2500 women and 1000 men were asked their degree of feeling depressed, ability to sleep, life enjoyment, crying spells, sadness, and feeling disliked. Forty percent of the women reported feelings of severe depression in the past week compared with 26 percent of the men.<sup>6</sup> (See Figure 7.) In that same survey, more minority women were more likely to report symptoms of depression than white women. (See Figure 8.)

**Figure 7**



In Virginia, the number of women suffering from depression is estimated from national prevalence rates. The prevalence of serious mental illness is 0.98 percent to 1.1 percent of the Virginia population or 60,000 persons. In 1993, there were an estimated 126,331 Virginia women with an affective disorder which includes manic-depressive psychosis as well as depression. This represents 5.2 percent of the female population in Virginia. Of these women, 17 percent were black and 83 percent were white. The 1993 Commonwealth Poll indicated that 8 percent of women 18 years of age and older reported that they had ever been diagnosed with depression.

Since the causes of depression are not clear, identifying risks is based upon epidemiological and clinical observations. Those risk factors identified in the literature are:

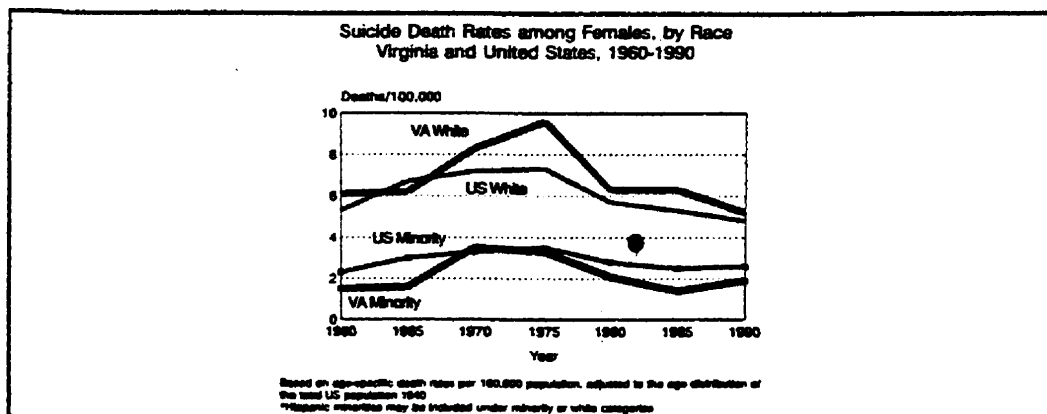
- Family history of depression
- Poor self-concept or self-esteem
- Female gender

- Chronic nonmood disorders
- Substance abuse
- Loss or death of significant other/object
- Stressful life event

Epidemiological studies have not been adequate to accurately describe the incidence and prevalence of depression in the United States, but a new investigation, the Epidemiological Catchment Area (ECA) Program, which is an independent research collaborative effort with the National Institute of Mental Health, is presently conducting interviews with over 3,000 people. Preliminary results indicate that women are twice as likely to experience depression than men. Most researchers today feel this is a true observation, not a reflection of the fact that women seek medical and mental health services more than men.<sup>7, 8</sup> Even though hormones do affect mood, studies have not shown that the genetic and biological factors including hormonal differences in women account for the twice fold prevalence of depression in women as compared to men. Historically, menopause and the subsequent loss of ability to have children was described as the cause of depression in middle-aged women. Numerous studies show no link between menopause and depression. In fact the onset of depressive symptoms is more common in younger women under age 35.<sup>6, 9</sup>

Major depression is associated with increased mortality as a result of suicide or accidents.<sup>9</sup> While men are more successful at suicide, women attempt suicide more frequently with a 2:1 ratio.<sup>7, 8</sup> (See Figure 8.) In 1992, 111 women under age 65 died from suicide compared to 538 Virginia men.<sup>10</sup>

Figure 8



One subgroup of major depression of unique interest to women is depression associated with pregnancy. The association between pregnancy and depression is stronger than originally thought, but the etiology of such is unclear.<sup>11</sup> Postpartum blues or periods of tearfulness and moodiness which occur one to four days post delivery and last only several days are common. About 10-15 percent of women develop a major clinical depression during and/or after pregnancy. The woman with a history of psychological disorders or the woman who experiences an emotionally troubled pregnancy is at risk for a potentially dangerous depression, postpartum psychosis. The incidence of postpartum psychosis is very low at less than 2 per 1000 deliveries.<sup>11</sup>

Reactive depression, or adjustment disorder, has been reported in those women who are victims of domestic and sexual violence. The association between these occurrences is unclear and needs further study.

### **Interventions**

Because the causes of severe clinical depression are poorly understood, identification of those women most at risk is necessary. Early detection and intervention for depressive symptoms may prevent the development of a more serious depression.

Depressive symptoms may be demonstrated by many behaviors, and there are numerous self-help groups which may afford symptomatic relief. For example, women experiencing eating problems related to depression may seek help through weight control programs or aerobic classes. Since one aspect of clinical depression is social isolation, a women's feelings of connection with family, friends, church, or civic groups may give her the support to cope with depressive symptoms.

Treatments for major clinical depression may include education, supportive counseling, psychotherapy, family therapy, and antidepressant drugs. Antidepressant drugs elevate mood but take several weeks to be effective and do have side effects. Treatment may require hospitalization but is usually provided in outpatient settings. Because major depression recurs in 85 percent of all cases, treatment should include a component of maintenance, either counseling and/or medication, to prevent recurrence.

As stated earlier, the differentiation of the types of depression from normal emotional fluctuations is difficult; therefore, the diagnosis may be missed. Even though women are more likely than men to complain and more willing to talk about feelings, women's complaints are not heeded.<sup>3</sup> Women are more likely to report general somatic symptoms such as headaches, constipation, sleeplessness, or other vague physical complaints.<sup>9</sup> These women seen in primary care settings may be in an early, poorly-organized stage of depression.<sup>9</sup>

Sadness is such a normal part of life that women may not confide in the health care professional because they do not perceive their symptoms as needing attention. Only about 25-30 percent of depressed women seek treatment.<sup>4,5,13</sup> Even when patients have been diagnosed correctly, only a small proportion are treated adequately. Hesitancy on the part of general health care professionals to accept the legitimacy of patients' complaints and legitimacy of the need for intervention is a barrier for many women to receive adequate care.<sup>5</sup> Up to now, the literature does not reflect any differences in the etiology or treatment of depression between men and women. Therefore, treatment modalities may not be meeting the specific needs of women.<sup>3</sup>

All ethnic/racial groups underuse mental health services relative to need, and the gap between need and usage is widest for members of ethnic minority groups. Therefore, rates of outpatient usage of mental health facilities is lower among blacks and Hispanics than whites.<sup>14</sup> Access issues such as costs and availability are factors which may be barriers to these groups, but in some studies when socioeconomic variables have been controlled, the same pattern of gaps between ethnic/racial groups still exists.<sup>14</sup> Other issues related to the health care delivery system itself and how service is delivered need to be further addressed.

Treatment services for depression are provided in the private sector by hospitals, physicians, and other psychiatric professionals and may be available to women with insurance, but most policies cover only limited inpatient and outpatient cost for psychiatric care. Several of the private psychiatric hospitals offer free outreach educational and screening services on depression. The services for women with depression vary as to availability, accessibility, quality and cost. There is no mechanism in the private sector to assess the delivery of psychiatric services for women with depression.

The Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services has 40 community services boards (CSBs) which are the public sector agencies responsible for the provision of statewide community-based mental health, mental retardation, and substance abuse services. All community services boards offer a combination of core services based on the unique need of their localities which include emergency services, inpatient services, outpatient/case management services, day support services, residential services, and prevention and early intervention services. Women with symptoms or a diagnosis of depression may receive services through the local community services board. Priority is given to those individuals who have the most serious mental health diagnoses. Virginia has ten psychiatric hospitals which provide inpatient psychiatric, psychological, nursing, social work, recreational, physical and occupational therapies, along with educational, medical/dental ancillary, and other support services.

Because women frequently do not recognize depressive symptoms or readily seek treatment, depression is frequently undertreated. More education and public awareness is needed to help women know how to differentiate depressive symptoms from severe clinical depression and know where help is available. The AIM - Awareness (Alliance for Increased Mental Health Awareness) is a public/private consortium of mental health service and advocacy groups working to remove the stigma that confronts people with mental illness, including depression.

### **Conclusions**

Women need to be aware that depressive symptoms are legitimate and do not represent a character flaw. Early detection and intervention may prevent the development of severe clinical depression. Varied social support programs and medical treatments are available and are effective in providing not just relief of symptoms but return to wellness. Recovery is the rule not the exception. Depression is more common in women than men and is underdiagnosed and/or inadequately treated for many women for varied reasons. Even though minority women underuse mental health services, minority women, as reported in one national poll, were more likely to report symptoms of depression than white women. Issues related to the need for and the usage of mental health services warrants further attention beyond the scope of this report.

### **Private and/or Public Strategic Recommendations**

- The Department of Mental Health, Mental Retardation and Substance Abuse Services in collaboration with the Virginia Department of Health and private organizations concerned about women's health should continue discussions and increase efforts to identify reasons minority and low-income women fail to seek mental health services and should develop a plan to increase public awareness and acceptance that with early detection and intervention may prevent a more serious condition.



- **Department of Mental Health, Mental Retardation and Substance Abuse Services should work with health care professionals to increase their knowledge and skills in identifying symptoms of depression in women and make appropriate referrals to community resources for education, supportive counseling, family therapy, psychotherapy, and/or medical treatment.**
- **Private employers, community-organizations, and churches should develop the awareness needed to identify members with depressive symptoms and provide the appropriate support and encouragement for them to seek intervention when necessary.**

## Reproductive Health

Since it is the primary focus for much of a woman's life, reproductive health is one of the most important areas of special concern in women's health. This concern begins in adolescence with the onset of menarche and continues when a woman becomes sexually active, bears children, through the perimenopausal period into menopause. Single motherhood, unplanned pregnancies, sexually transmitted diseases, abortion, and teen pregnancy are issues of particular concern.

Unwed motherhood and single motherhood can have a devastating effect on the lives of women. There were 27,520 births to single women in Virginia in 1992. In addition, there were 29,357 divorces and annulments—of which 48 percent involved children less than 18 years of age (14,945), with women having primary custody of these children.<sup>1,2</sup> Divorce, which affects almost 50 percent of marriages in the United States, is linked to families living in reduced economic circumstances. Unpaid child support and inadequate divorce settlements account for part of the problem. Moreover, working women, who are more likely to be the custodial parent, earn less than their male counterparts.<sup>1</sup>

Teenagers are most often associated with unwed motherhood, and teenage pregnancy has presented public health with one of its most disturbing problems in recent history. Children who bear children begin a cycle of poverty and economic dependence. Outcomes of too-early childbearing involve low birthweight babies, reliance on an overburdened welfare system, increasing school dropout rates, and as a direct result, greatly reduced earning potential in a sophisticated job market.<sup>3</sup>

### Teen Pregnancy

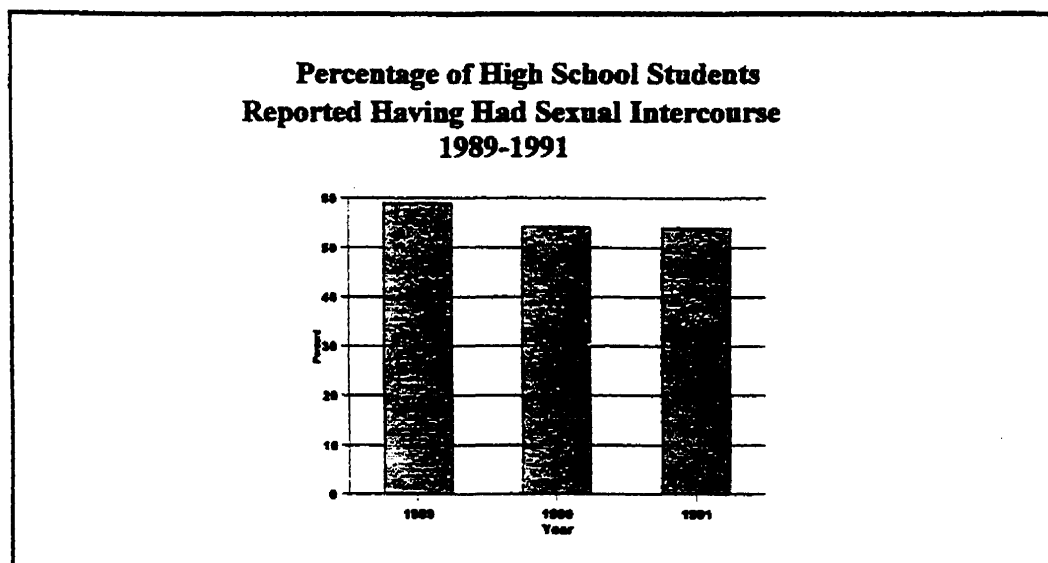
#### Overview

Much has been written about the complex problems of teen pregnancy. This section is not an attempt to restudy the problem, but to demonstrate the problem as it exists in Virginia and to highlight current activities in place to address Virginia's needs. Teenage women who elect to have their babies and raise them begin a lifetime cycle of poverty which has long-range implications for their health.

Each baby born to a teen mother costs the Commonwealth an average of \$15,000 annually in health and welfare costs (average annual cost for 1988, DMHMRSAS, Virginia Council on Teen Pregnancy Report). These figures do not include the costs of lost education and wages, as well as the social and emotional costs associated with teen pregnancy.

A 1992 Centers for Disease Control and Prevention (CDC) study of high school students found that 59 percent in 1989 had engaged in sexual intercourse, but in 1991, that percentage had dropped to 54 percent. These data indicate that the trend for sexual intercourse among high schoolers may be dropping.<sup>4</sup>

Figure 9



**Source: Centers for Disease Control**

Virginia's participation in this study began in 1992. Sexual intercourse (ever) reported among high school students in Virginia in 1992 was 58.2 percent, and in 1993, it was 59.1 percent. Among females, the 1992 percentage of sexual intercourse (ever) was 56.8, and in 1993, it was 55.6. Again, as nationally, it seems that sexual intercourse among teens may be leveling or even beginning to drop among females<sup>5</sup>

Many teens who have engaged in sexual intercourse regret doing so. A 1994 Roper Starch study states 62 percent of sexually experienced girls said they "should have waited." In a recent Emory University survey of sexually experienced teen girls, when asked what they would like to learn to reduce teen pregnancy, nearly 85 percent said "How to say no without hurting the other person's feelings."<sup>6</sup>

Most teens who are sexually active try to protect themselves from the negative consequences of sexually transmitted diseases (STDs) and unplanned pregnancy. The way young women resolve their pregnancies is related to their socioeconomic status. Young women from advantaged families are more likely to have abortions. Those who elect to bear the child are often from low-income families. Young mothers are not only at a disadvantage economically, educationally, and socially, but they are also at risk of falling farther behind their more advantaged peers who postponed childbearing to obtain more education and to establish a career.<sup>7</sup>

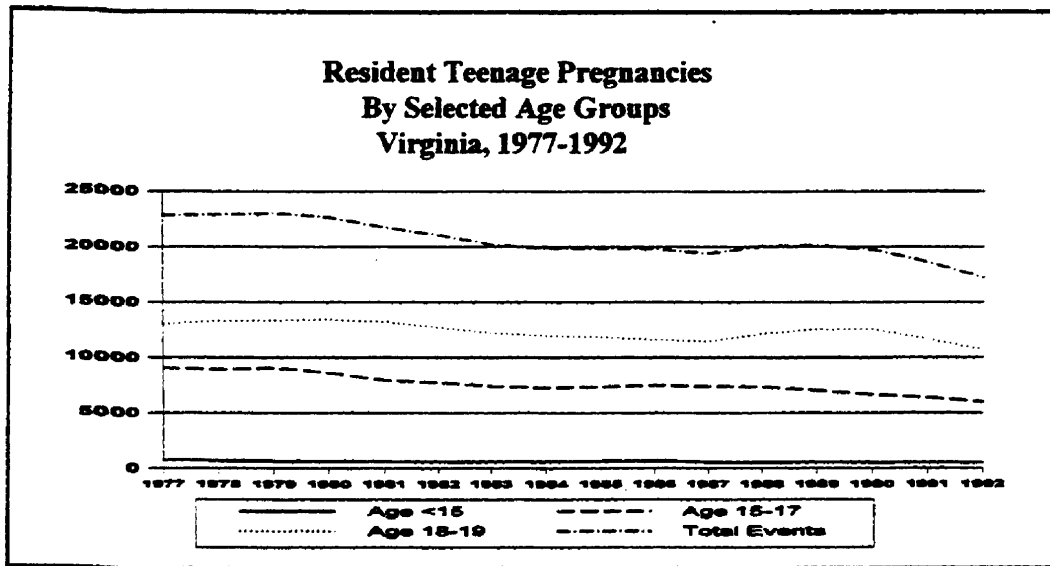
Crumbling American families are contributing to this phenomenon of teenage pregnancy. Single-parent households, whether produced by divorce or unwed motherhood, are environments which for years frequently lack balanced guidance, direction, and development of sexual identity brought about by a positive relationship with a healthy mother and father.

It is crucial in the very early development of children that they learn about the significance of self, self-respect, and respect for others, as well as what are reasonable, proper relations between people. It is these values that, when instilled early, will be utilized later when the child is a teen and decisions will be made to avoid becoming sexually active. Another consequence of teenagers living with an unmarried parent is an awareness on the teenagers' part that the parent is engaging in sexual activity. About two-thirds of women and men aged 20-44 are sexually active, and research indicates that teenagers exposed to this nonmarital sexual activity view unwed parenthood less negatively than others.<sup>7</sup>

Incidence

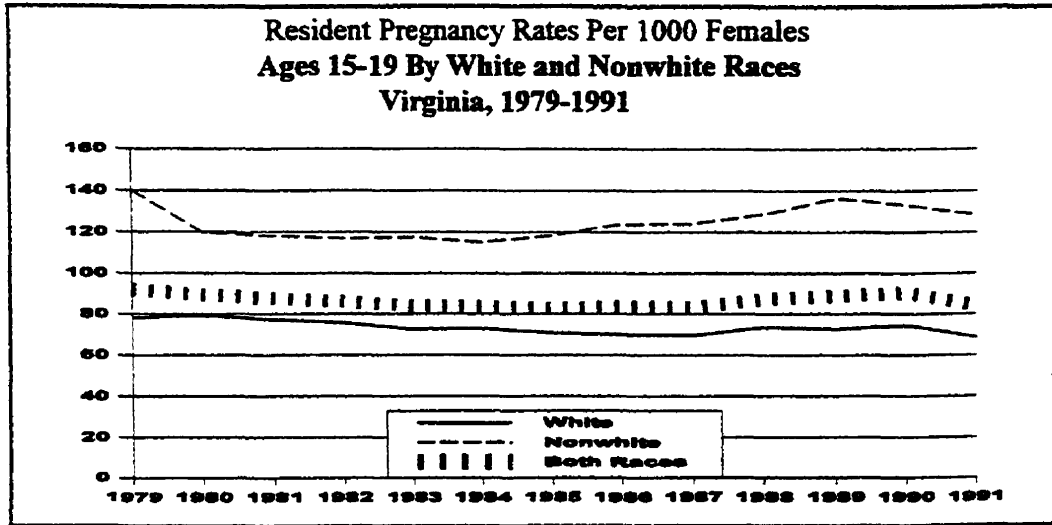
On any given day in Virginia in 1992, 47 teenage women became pregnant and 29 gave birth. A total of 17,245 teens became pregnant and 10,716 babies were born to teen mothers in Virginia in 1992. Births to teens represented 11.3 percent of total births in Virginia. The most devastating finding is that 518 pregnancies occurred in girls ages 10-14. Twenty percent of all abortions in the state occurred to teens ages 10-19. Twenty-five percent of all teen pregnancies were repeat pregnancies.<sup>2</sup>

Figure 10



Source: Virginia Center for Health Statistics

Figure 11



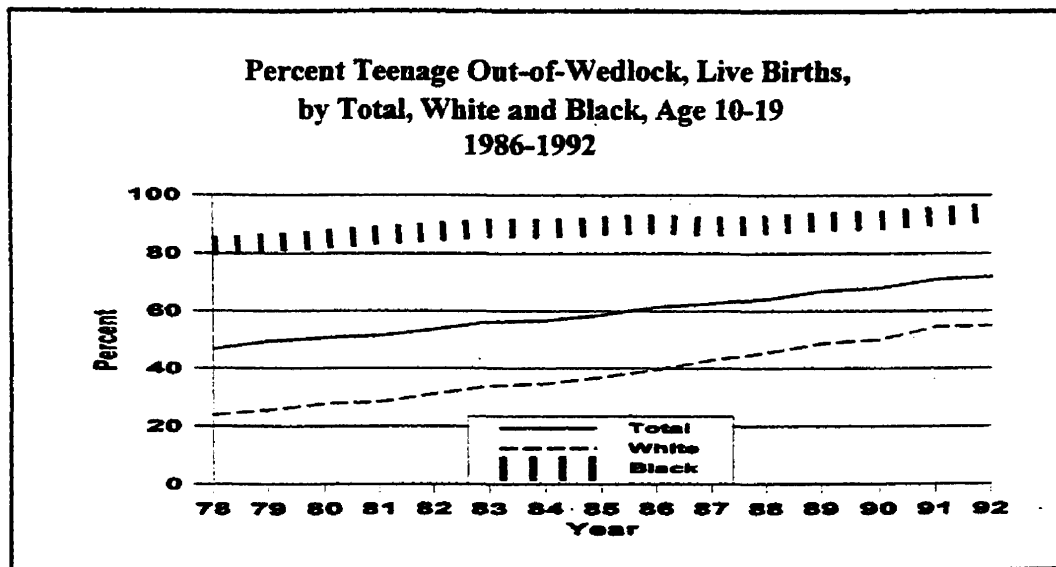
Source: Virginia Center for Health Statistics (1992 rates not available at the time of this report)

Teen pregnancies in Virginia have been slowly declining since 1977 (25 percent) in both white and nonwhite girls and across all age groups. (See Figure 10.) In girls 15-17 years of age, the pregnancy rate has dropped from 55.7 in 1986 to 51.6 in 1992 ( preliminary estimates not final).<sup>2</sup>

In Virginia, there is concern that the percentage of out-of-wedlock live births to teens has been increasing. Since 1978, the percentage of out-of-wedlock live births to the total number of live births to teens has increased from 46.6 percent to 71.9 percent in 1992. For white teens, the increase in out-of-wedlock births went from 23.8 percent in 1986 to 54.8 in 1992. The percentage of out-of-wedlock births to black teens varied from 82.5 percent in 1987 to 93.9 percent in 1992.<sup>2</sup> (See Figure 12.)

In 1991, the national birth rate per 1,000 females 15-19 was 62. In Virginia in 1991, the birth rate per 1,000 females 15-19 was 53.

Figure 12



Source: Virginia Department of Health, Center for Health Statistics

**Interventions**

Parents are the best resource for teaching their children values that include sexual responsibility. Unfortunately, many do not provide sound guidance and direction or do not feel adequately prepared for the task. There are programs in Virginia that provide help for parents who are struggling with this problem; although to date, these efforts have been fragmented. In order to give a more comprehensive and effective approach, state-level teen pregnancy prevention programs, in cooperation with the private sector, need to be consolidated. This consolidation will bring together those most knowledgeable about prevention so that strategies known to be effective and new efforts can be properly coordinated and evaluated.

Brief descriptions of some intervention strategies are listed below.

Abstinence from sexual intercourse must be the major intervention for all efforts to prevent teen pregnancies. Abstinence used to be the norm for teenagers, and attention to delaying the beginning of sexual intercourse must be emphasized by making this expectation explicit by all who come in contact with teens including parents, teachers, service agency personnel, ministers and church school teachers, etc. People who relate to teens need to teach teens abstinence skills and why it is important to wait.

The Campaign for Our Children, funded by the Hospital Association of Virginia through the Virginia Health Care Foundation and administered by the March of Dimes, is a media campaign designed to prevent and postpone teen pregnancy. Twelve video messages are available for local television public service announcements. The Broadcasters Association of Virginia agreed to provide as much time as possible for airing of the PSAs. Included as part of the Campaign for Our Children are posters which have been sent to all high schools along with discussion guides for teachers or counselors to use in classroom settings. The messages of these posters are male responsibility and the benefits of abstinence.

The 1993 and 1994 General Assemblies appropriated money to establish seven teen pregnancy prevention programs in the areas of the state with the highest teen pregnancy rates. (Portsmouth, Roanoke City, Norfolk, Richmond, Petersburg Area, Eastern Shore and Alexandria ) Each of these programs is community-based with comprehensive teen pregnancy prevention strategies developed by a community coalition with solutions unique to the needs of each particular community. These strategies include, but are not limited to, abstinence, postponing sexual intercourse, personal responsibility, parental involvement, and mentoring programs.

Since 1982, the General Assembly appropriated state funds to establish Better Beginnings coalitions in 18 localities. The purpose of these coalitions is to support communities in the development of a community-wide, comprehensive five-year plan to prevent adolescent pregnancy. Small grants of \$5,000 are awarded to enable the formation and maintenance of broad-based community coalitions that assist localities to mobilize their efforts to prevent teen pregnancies in their communities.

A program funded by state appropriations and federal Medicaid and Maternal and Child Health Block Grant funds is the Resource Mothers program. This program utilizes women from the community to provide support and education to pregnant teens. It has been successful in reducing repeat pregnancies and infant mortality. Currently there are 24 Resource Mothers programs in Virginia.

A program that has shown positive results in preventing both teen pregnancies and school dropouts is the Teen Outreach Program (TOP). The school-based program helps students develop self-esteem and life skills through community volunteer service opportunities and classroom-based learning with family involvement.

Best Friends is a program that shows promise in preventing teen pregnancy. It is a school-based mentoring program for young women that helps them gain self-respect and acquire sound decision-making skills. Its implementation, with an evaluation component to demonstrate its effectiveness, is being considered in several localities in Virginia.

A program that research indicates delays sexual intercourse and prevents pregnancy is Postponing Sexual Involvement Education. Older teens are trained to present information, guided discussions, and skill-building activities to younger teens in existing school family life education programs.

The Virginia Department of Health operates family planning clinics in every city and county in Virginia through local health departments. Services are available to teens who request them. Most teens receive all services without charge. Others may have Medicaid which covers all provided services such as physical examination, pap smear, STD screening and treatment, laboratory tests, and provision of their birth control method.

## **Adult Pregnancy**

### **Overview**

All the phases of a woman's reproductive life have their own special problems, but childbearing or the prevention of it, is a concern for about half of most sexually active adult women's lives. Unplanned pregnancies are a problem in the United States, resulting in high rates of abortion and unwed motherhood, which impact women's health, infant mortality, and morbidity. Many complex factors influence the cause

of high numbers of unplanned pregnancies in this country. One major factor is personal responsibility, which is affected by the multiple conflicting messages about sexual behaviors that exist in society. Deciding whose responsibility it is to prevent a pregnancy, the man's or the woman's, is another factor that is involved. Society has never clearly established whether it believes this is a joint responsibility.

### Incidence

Eighty percent of Virginia women 18 years of age and older report that they have been pregnant. Of these women, 86 percent were married and 44 percent report that their last pregnancy was unplanned.<sup>1</sup> It is a significant finding that almost half of pregnancies in married women are unplanned. Most women want to have children when they are most able to care for them and to limit the number they have. The United States has one of the highest unplanned pregnancy rates among developed countries and as a result, the highest rates of abortion and unplanned births. Unplanned births are not necessarily unwanted, just ill-timed; pregnancies which are terminated by abortions are considered unwanted.<sup>3</sup>

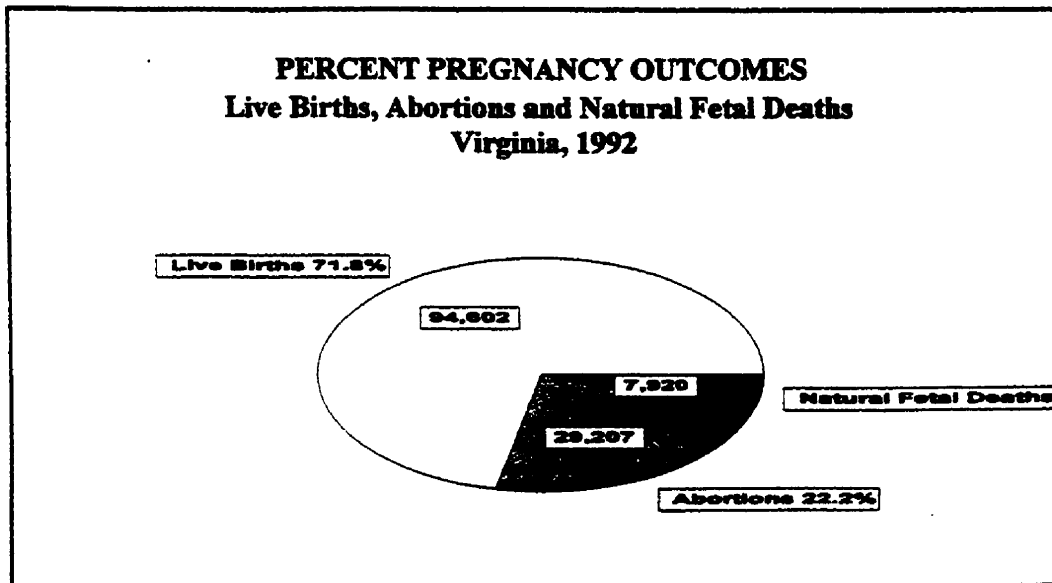
Women of reproductive age are defined as being at risk of unplanned pregnancy if they had ever had sexual intercourse, if neither they nor their partners had been surgically sterilized or were otherwise not sterile, and at least part of the year they were neither pregnant nor trying to become pregnant.<sup>8</sup>

There were an estimated 641,030 women ages 20-44 in Virginia at risk for an unplanned pregnancy in 1990—or 40 percent of all women in Virginia.<sup>8</sup>

There were 131,729 reported pregnancies in Virginia in 1992: 94,602 (72 percent) resulted in live births, 29,207 (22 percent) resulted in induced terminations, and 7,920 (6 percent) resulted in natural fetal deaths. Of the live births, 7,224 (7.5 percent) were low birthweight and 1,453 (1.5 percent) had congenital anomalies.<sup>2</sup>



Figure 13



Source: Virginia Center for Health Statistics, VDH

Of the total number of births in Virginia in 1992, it can be assumed that 63,230 (48 percent) were unplanned, with 46 percent (29,207) of these ending in abortion. Surveys have found that:

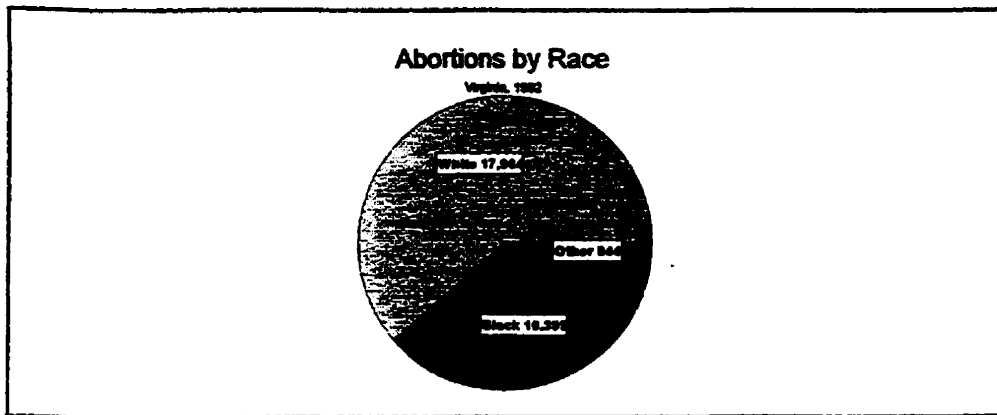
- 77 percent of the pregnancies to women age 40-44 are unplanned.<sup>9</sup>
- 75 percent of pregnancies to poor women, or during times of poverty, are unplanned, and over 50 percent of these end in abortion.<sup>9</sup>
- 53 percent of all unplanned pregnancies occur to the 10 percent of women who are not using contraception.<sup>9</sup>
- 86 percent of adult women in Virginia who have ever been pregnant were married.
- Of these, 56 percent said their pregnancies were planned.<sup>9</sup>

### Abortion

Each year more than six million American women or 11 percent of all women of reproductive age become pregnant, and about 1.6 million of these pregnancies end in abortion.<sup>10</sup> In Virginia in 1992, 29,207 women had an abortion; of this number, 17,964 were in white women, 10,399 were in black women, and 844 in other races. (Figure 14) Women aged 20-24 were the largest group obtaining abortions in Virginia, 9,977 followed by those aged 25-29, 6,724.<sup>2</sup> (Figure 15) There were a total of 5,594 abortions in teens aged 15-19, with 230 in females below age 15 and 2,117 in teens 15-17 years of age.

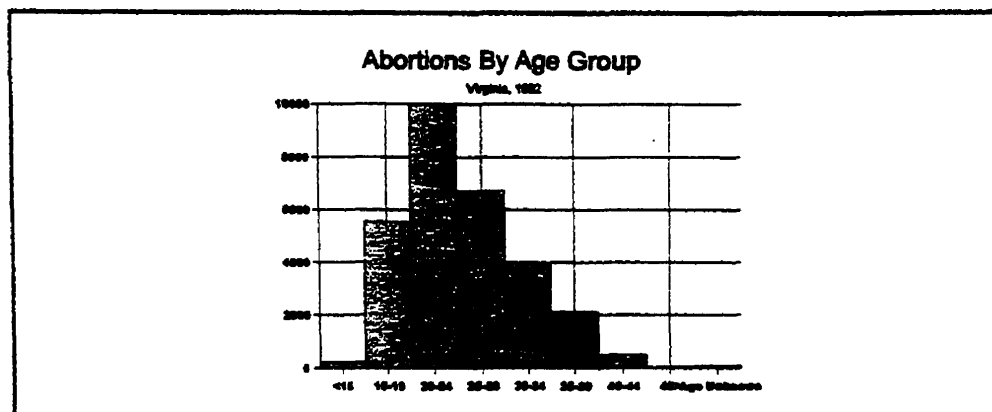
Abortion represents a failure of personal responsibility by both men and women to make wise decisions about their sexual behavior. The ability to make fully informed decisions is affected by the stage of growth and development, conditions of their family life, peer influences, etc. Some of these decisions have life-long consequences. Therefore, parents are integral in providing support and guidance in helping teens make important decisions about abortions. Currently in Virginia, a teenager can obtain an abortion without parental knowledge or consent. There is support statewide for parents to be involved in this decision, as evidenced by passage of two parental notification bills by the Virginia General Assembly in 1992 and 1994. To date there is very little epidemiological research that shows the impact of parental notification laws on the rate of teen abortions. It is reasonable to state that this law may facilitate pregnancy avoidance.

Figure 14



Source: Center for Health Statistics

Figure 15



Source: Center for Health Statistics

As with any invasive procedure, there is concern about the adverse impact of abortion on a woman's health. By law, women must be informed by their physician about the risks of abortion and childbearing. National statistics show that one percent of all abortion patients experience a major complication (such as a serious pelvic infection, hemorrhage requiring a blood transfusion, or unintended major surgery) associated with the procedure.<sup>10</sup>

The latest research study highlighting the ill effects of induced abortion concerns the link with breast cancer. The study, published in the November 2, 1994, issue of the Journal of the National Cancer Institute, reports an increase in the risk of contracting breast cancer in young women after a first trimester abortion.<sup>14</sup> Other studies are in process examining this and other risk factors for breast cancer.

The risk of death associated with abortion increases with the length of pregnancy, from one death for every 500,000 abortions at eight weeks or less, to 1 per 30,000 at 16-20 weeks, and 1 per 8,000 at 21 or more weeks.<sup>10</sup> The risk of death associated with abortion decreased more than five fold from 1973 to 1985 nationally, with 3.4 deaths per 100,000 legal abortions in 1973 to 0.4 in 1985.<sup>11</sup>

In 1992, the Virginia Department of Health, Center for Health Statistics documented 125 abortions for a genetic defect in the fetus, or 0.43 percent of the total abortions performed. The Center also reports 7,920 natural fetal deaths. The three highest complications related to the medical history of the pregnancy that resulted in a natural fetal death were uterine bleeding, infection, and anemia. No data are available to link the natural fetal death to a previous abortion. More research is needed to determine if there is a relationship.

## **Interventions**

Many complex behavioral, cultural, social, and medical factors contribute to why Americans control the number and timing of pregnancies so poorly. Most women complete their families in a period of four years but are sexually active and at risk for pregnancy for most of their reproductive life. It is during this long period of time that women are most at risk of having an unplanned pregnancy.<sup>5</sup>

There is much concern about the prevention of unplanned pregnancy. There are some specific strategies that must be considered if this problem is to be addressed adequately. One problem is inaccurate or incomplete knowledge of all methods of contraception including their effectiveness and limitations. All women need adequate and complete information about contraceptives. Women need easy access to inexpensive available methods. For teens and poor women who have the highest rates of unplanned pregnancy, contraceptives are a problem of access and cost. Another issue is one of personal responsibility for one's actions and accepting the consequences of those actions. Women need good reason and motivation to prevent unplanned pregnancies, not only the capacity to regulate fertility. Women and their partners need the knowledge and skills to plan the number and the spacing of children they desire in order to promote healthy women and subsequently healthy families.

Poor and low-income women in Virginia who are most at risk of having an unplanned pregnancy do have access to pregnancy planning services through local health departments, free or subsidized non-profit clinics, state teaching hospitals, and private providers. Women living at 38 percent of poverty are eligible for pregnancy planning services, and once a woman is pregnant, Medicaid pays for prenatal care for those up to 133 percent of poverty, regardless of marital status. This coverage extends to 60 days after delivery and will provide only for a postpartum visit; it does not provide for continuing care to assist low income women to plan for a future healthy pregnancy. Some states have obtained federal Medicaid waivers to extend postpartum coverage for up to 24 months. (See Appendix G for Costs of Virginia Expansion of Medicaid.)

## **Sexually Transmitted Disease**

### **Overview**

The most preventable cause of infertility is sexually transmitted disease, accounting for approximately 20 percent of cases of infertility. Nationally in 1988, approximately one in 12 women of childbearing age reported difficulty in becoming pregnant. Data on infertility are not available in Virginia.<sup>8</sup>

The rate of sexually transmitted diseases (STD) is steadily growing among women, as is the severity of infections. Persistent viral infections, including the human immunodeficiency virus (HIV), hepatitis B virus (HBV), herpes simplex virus (HSV), and human papillomavirus (HPV), are affecting hundreds of Virginia women with incurable illness. Syphilis and resistant strains of once easily cured gonorrhea are at high levels.<sup>12</sup> Medical complications associated with these and other STDs are more serious for women than for men. Complications from STDs may result in pelvic inflammatory disease (PID), chronic pain, infertility, ectopic pregnancy, fetal and infant death, and pneumonia, birth defects, blindness, and mental retardation of the newborn. Certain cancers, such as cervical and liver, have been closely linked to STDs.<sup>10, 12</sup>

### Incidence

Women and men under 25 years of age account for the majority of the STD cases. Two-thirds of reported cases of gonorrhea and chlamydia occur in women and men age 24 or younger. Rates of chlamydia, gonorrhea, vaginitis, and pelvic inflammatory disease are all highest in adolescents and decline with increasing age. Women are less likely than men to seek health care if infected because a greater percentage of their STDs are asymptomatic. STDs are more difficult to diagnose in women than in men, and women are more likely than men to acquire a sexually transmitted disease from any single sexual encounter.<sup>12</sup>

In 1993, 5,015 cases of gonorrhea were reported among females in Virginia. Seventy-eight percent of these cases were in women aged 15-29, and 35 percent were in teens aged 15-19 (rates not available). It is a significant finding that slightly more than a third of the females infected with gonorrhea are teens. Of the gonorrhea cases among women in Virginia in 1993, 76 percent were reported in minority females, 11 percent were reported in white females, and 12 percent were reported without specified race.<sup>13</sup>

The Centers for Disease Control and Prevention estimates that Chlamydia trachomatis infection is twice as frequent as gonorrhea. The Virginia data are expected to underestimate the incidence of chlamydia infections because (1) screening has been limited for part of the year to high-risk females attending certain public health clinics, (2) as many as 75 percent of women with uncomplicated chlamydia infections are asymptomatic, and (3) persons with gonorrhea presumptively treated for chlamydia infection are not included in the case counts.<sup>1</sup>

During 1993, 10,637 cases of chlamydia infection were reported in females. Eighty-one percent of the reported cases were under 30 years of age. Forty percent of all reported cases were aged 15-19. Of the chlamydia cases among females, 50 percent were in minority females, 28 percent were in white females, and 22 percent were reported with race unspecified.<sup>13</sup>

There are no Virginia incidence figures available for herpes or human papillomavirus since they are not reportable diseases.

Early syphilis includes the primary, secondary, and early latent stages of syphilis. 1993 was the second year of decline for early syphilis among women since 1985. In 1993, the numbers of cases in men and women were about equal. During 1993, 973 cases of early syphilis were reported among females. The majority (49 percent) of these cases were in women aged 15-29, 36 percent were in women aged 30-44, and 13 percent were in women aged 45-64. Eighty-nine percent of the syphilis cases in females were reported in minority females.<sup>13</sup>

### Intervention

Preventive measures for avoiding transmission of all STDs are generally consistent with guidelines for reducing the risk of HIV infection.

- Abstinence from sexual intercourse is the most effective risk-free option.
- The next best option is having a mutually faithful relationship with an uninfected partner, which eliminates any STD risk.

- Health care providers can educate women about their bodies, prevention of STDs, and the signs and symptoms so that treatment can occur early.
- Health care providers can also offer routine STD testing to include risk assessment and voluntary HIV screening. They can ensure that women diagnosed with an STD and their partners receive appropriate treatment and counseling.
- Local health departments provide screening and treatment of all reportable STDs at no cost in addition to partner notification, testing, counseling, and follow-up.
- The Centers for Disease Control recommends condoms as a good method to prevent STDs.

### **Conclusions**

The Virginia teen pregnancy rate is dropping and will probably drop below the goal rate projected for the nation in Healthy People 2000 (United States goal rate of 50 pregnancies per 1,000 adolescents 15-17 years). Comprehensive educational programs with emphasis on abstinence and intervention efforts on the part of localities appear to be having an effect on lowering teen pregnancy rates, as evidenced by decreasing teen sexual activity, but these efforts must intensify and employ strategies known to work. Even though rates of teen pregnancies are decreasing, the live birth rate is increasing.

Pregnancy impacts women's health, and women must have knowledge and information regarding all aspects of their reproductive health. Women in Virginia report that about half of their pregnancies were unplanned. Twenty-two percent of these pregnancies that are unwanted ended in abortion. Those women raising children alone are likely to be low income, which has long-range implications for their health. Women need to be provided with information about effective methods of preventing pregnancy, and they need to take the responsibility for sexual behaviors that could lead to an unplanned pregnancy. Sexually transmitted diseases are increasing in women and medical complications are more serious.

Also, men must be willing to accept responsibility for sexual behavior that could lead to either exposing a woman to STDs or an unplanned pregnancy. Men need to act responsibly and show respect for women; therefore, many problem areas for women would be lessened.

One teen pregnancy that is unplanned and occurs outside of marriage is too many. More needs to be done to ensure that teen pregnancies continue to decline and to reach teens who are most at risk. Virginia needs to intensify statewide efforts to assure that the numbers of teen pregnancies continue to drop and target at-risk teens by employing strategies that work.

### **Legislative Recommendations**

- The General Assembly consider supporting parental notification for teens requesting abortion.

- The Governor and the General Assembly support those policies and proposals that strengthen Virginia's families, (i.e. Resource Mother's, abstinence programs and fatherhood initiatives programs) and eliminate or revise those that contribute to the numerous personal and societal problems stemming from family dissolution.

**Private and/or Public Strategic Recommendations**

- Upon release of the evaluation of the seven teen pregnancy programs, programs showing positive outcomes should be replicated in other high risk communities.
- The Secretary of Health and Human Resources should develop a consolidation plan for all state-level teen pregnancy prevention support and coordination activities.
- The Department of Medical Assistance should obtain a federal waiver to extend Medicaid coverage to two years past delivery for those women currently covered at 133 percent of poverty and for only 60 days postpartum.
- The Departments of Education, Health, Mental Health and Mental Retardation and Substance Abuse Services, and Social Services should increase staff training on abstinence skills development for teens and require all family life programs in these agencies to use abstinence skills education as a major part of their sex education program. Staff training should include themes consistent with Campaign for Our Children to coordinate efforts with this program.
- All participating partners should continue to work together to expand the Campaign for Our Children strategy to other media markets; enhance with teaching materials for communities.
- The Virginia Department of Health should provide consultation to localities on how to organize teen pregnancy prevention coalitions and develop local community-based programs that are known to work to prevent teen pregnancy.
- Health care providers in both private and public health settings should screen for high-risk sexual practices and provide counseling to prevent unintended pregnancies and to help ensure that all women are prepared for pregnancy before it occurs.
- Providers of services and programs to parenting teens should target their efforts to prevent repeat pregnancies in this high risk group.

## IV. VIOLENCE AGAINST WOMEN

While violence has long been part of the American culture, it has only recently been seen as an important public health problem. "Identifying violence as a public health issue is a relatively new idea," wrote Surgeon General C. Everett Koop in 1985. "Over the years we've tacitly and, I believe, mistakenly agreed that violence was the exclusive province of the police, the courts, and the penal system. To be sure, those agents of public safety and justice have served us well. But when we ask them to concentrate more on the prevention of violence and to provide additional services for victims, we may begin to burden the criminal justice system beyond reason."<sup>1</sup> The criminal justice system addresses violence by focusing on the offender. The public health approach complements the criminal justice system by emphasizing the victim and victim-offender relationship. Public health surveillance forms the foundation for prevention.

Violence is a significant women's health concern because of its prevalence and consequences for the health of women. Some experts in the field of violence estimate that as many as 30 percent of all women in the United States have been physically abused by their partner at least once, and that approximately 20 percent of all women visiting emergency departments for all complaints have been physically abused.<sup>2</sup> Although males are at much higher overall risk than females from injury and death due to interpersonal violence, females are more likely than males to become victims of spousal homicide and abuse, rape, and other sexual assault, including child sexual abuse. Nationwide, women experience ten times more incidents of violence by intimate partners than do men.<sup>3</sup> When women do resort to violence it is often in self-defense.<sup>4</sup> Rather than addressing the full scope of violence against women in Virginia, this study focuses on domestic violence and sexual assault, those forms of violence which disproportionately affect women.

Several recent legislative studies address these women's health issues. Senate Document No. 17 (1992) reports on sexual assault on Virginia's college campuses. Senate Document No. 17 (1993) and Senate Document No. 36 (1994) address issues related to the training and certification of therapists who provide mental health treatment to sexual assault victims and offenders. Senate Document No. 44 (1994) reports recommendations of the Commission on the Reduction of Sexual Assault to break the cycle of sexual assault victimization, and Senate Joint Resolution No. 56 (1994) continues this commission to follow up on the recommendations. Based on recommendations of the Virginia Domestic Violence Coordinating Council, House Joint Resolution No. 279 (1994) creates the Commission on Family Violence Prevention. This women's health study complements these other studies by looking at the incidence and effects of domestic violence and sexual assault from a public health perspective.

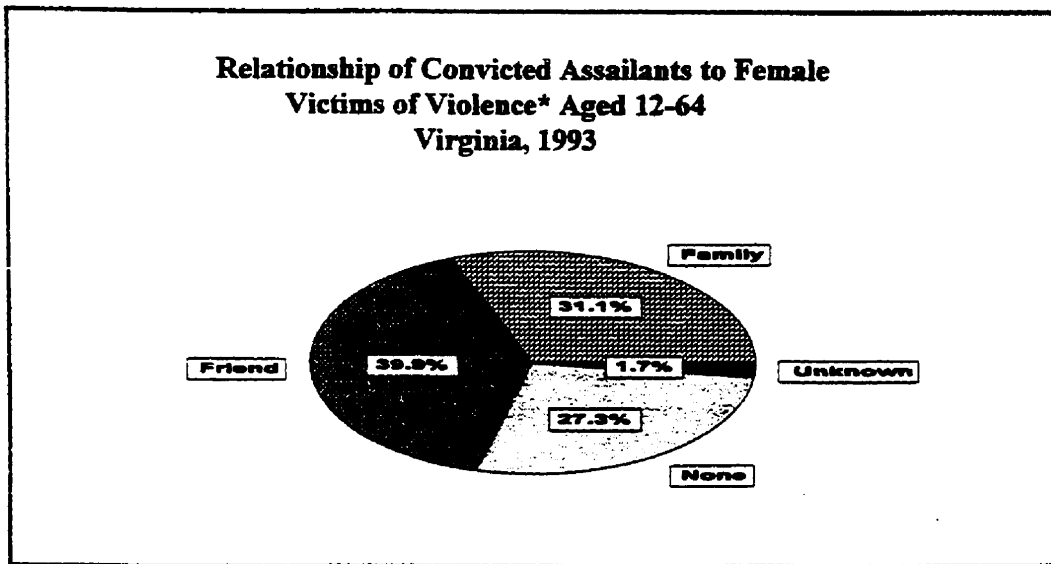
### Domestic Violence

#### Overview

Women are more often assaulted by family members and friends than by strangers. Of those assaults to women aged 12 to 64 for which there was a criminal conviction in Virginia in 1993, over 30 percent were perpetrated by a family member.<sup>5</sup> (See Figure 16.)



Figure 16



**\*homicide, physical assault, rape/sodomy, and sexual assault**

**Source: PSI Data Base, Virginia Department of Criminal Justice Services**

Although male partners are also abused, women appear to be at greater risk of injury from abuse. Once physical violence has occurred in a relationship, it tends to continue and become more severe over time. Domestic homicides, regardless of whether the victim is male or female, are generally preceded by a history of physical and emotional abuse directed at the woman. When a wife kills a husband, it is usually in self-defense. Therefore, the prevention of homicides among spouses and other intimate partners is directly linked to the prevention of abuse of women.<sup>4</sup>

Virginia public health workers find that domestic violence is often linked with other problems. It has been associated with suicide attempts, substance abuse, and mental illness among women. Many mothers of abused children are themselves battered women. These women are often battered by their partners during pregnancy. Adults who were physically abused as children by family members are at increased risk of physically abusing their spouses or being a victim of spouse abuse.<sup>6</sup>

Virginia public health nurses, social workers, and resource mothers find that many women who are assaulted by their partners do not define their relationship as abusive. They excuse the violent behavior based on the man's background or alcohol use. Some women assume responsibility for the abuse themselves, feeling that it is justified punishment. Public health workers have found that, while battered women do not like the abusive behavior, some perceive it as normal, and many feel powerless to prevent it. Batterers often isolate their victims, tracking them and timing their movements, blocking their contact with family, friends, and other support networks, including health care providers, and restricting their access to transportation.

Social norms that accept physical force as a legitimate method of exercising power and control within the family may be a contributing factor to high rates of domestic violence.

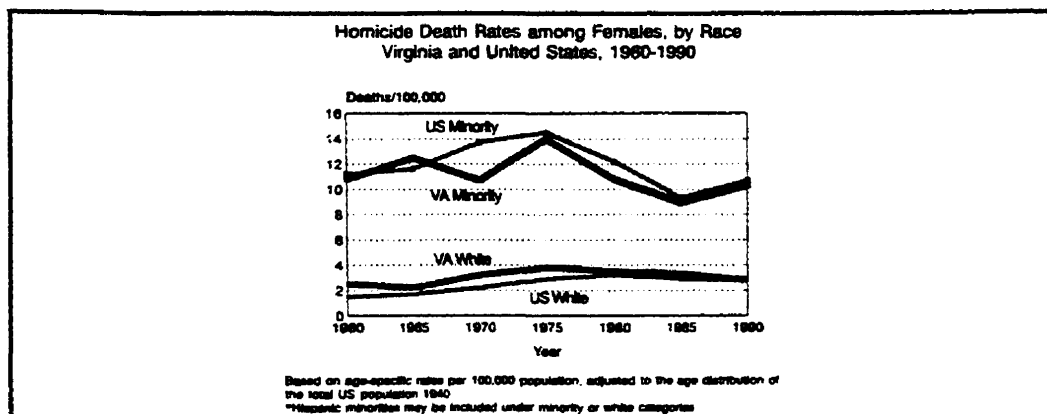
**Incidence**

National surveys reveal that each year 3.4 to 7 percent of women in the United States are physically abused by their partners. National Crime Victimization Survey data from 1987 to 1991 found violence against women by partners to be associated with lower family income and with less than a college education. Women living in central cities, suburban areas, and rural areas reported similar rates of domestic violence. Black, Hispanic, and white women reported similar rates of domestic violence.<sup>3</sup> The prevalence of domestic violence against women in Virginia is not known.

Studies of women receiving health care in private and public settings estimate that 4 to 17 percent of pregnant women experience domestic violence. In recent four-state population-based studies of women giving birth, 3.8 to 6.1 percent reported that their husband or partner had physically hurt them during the 12 months preceding childbirth. In general, rates of physical abuse were higher for those women who were teenagers, were unmarried, had indicators suggesting low income, had delayed or no prenatal care, and whose pregnancy was unintended.<sup>7</sup> The prevalence of domestic violence against pregnant women in Virginia is not known.

In 1992, 97 Virginia women aged 12 to 64 were victims of homicide.<sup>8</sup> Nationally, approximately one out of six homicides occurs within the family, primarily among young adults and blacks.<sup>4</sup> In 1992 in Virginia, 42 percent of all female homicide victims were aged 15 to 34, and half of all female homicide victims were black.<sup>8</sup> Of those homicides of women for which there was a conviction in Virginia in 1993, 37 percent were perpetrated by a family member.<sup>5</sup>

**Figure 17**



**Effects**

Based on data from the Virginia Statewide Trauma Registry, 250 to 350 women aged 12 to 64 years died in or were admitted to the hospital from Virginia hospital emergency departments in 1992 with injuries purposefully inflicted by others. The place of occurrence was reported for half of these injuries. Table 5 shows the nature of those assaults known to have occurred in the home. The women stayed in the hospital an average of four days. These data do not include those women who were treated in the emergency

department and released, who were treated in a clinic or physician's office, or who received no medical evaluation. Information on the assailant and his/her relationship to the injured woman is not available.<sup>9</sup>

**Table 5**

**Reports Of Women Age 12-64 Treated in Hospital Emergency Departments for Serious Violent Assaults Resulting in Death or Hospitalization Which Occurred in the Home, by Type of Assault, Virginia, 1992.**

NATURE OF ASSAULT	NUMBER OF WOMEN
Beating or fight	26
Knife or other sharp object	18
Firearm	8
Pushing from a high place	2
Striking by a blunt or thrown object	2
Hot liquid	1
Rape	1
Other or unspecified	15
<b>TOTAL</b>	<b>73</b>

Source: Virginia Statewide Trauma Registry

More comprehensive information on women hospitalized for injuries due to violence will be available from the Patient Level Data Base.

Hospitalizations, however, account for only a portion of violent injuries to women. Of those female victims of violence aged 12 to 64 years for which the assailant was a family member convicted in Virginia in 1993, 16 percent received injuries resulting in death or hospitalization. An additional 18 percent required medical attention, and another 38 percent required some type of psychosocial counseling.<sup>5</sup> (See Table 6.) Likewise, crimes for which there was a conviction represent only a portion of violence against women. Not all violence is reported to police, and not all reports result in an arrest and conviction. Of those abused women leaving Virginia's domestic violence shelters in Fiscal Year 1994, only 40 percent had reported the abuse to law enforcement. Approximately 20 percent of the abuse had resulted in an arrest, and 7 percent had resulted in a prosecution.<sup>10</sup>

Table 6

<b>Injuries To Women Aged 12 to 64 for Which the Women Was Related to the Perpetrator and for Which There Was a Criminal Conviction in Virginia in 1993</b>	
<u>Type of Injury</u>	<u>Number of Women</u>
Death	24 (9%)
Serious physical injury*	17 (7%)
Other physical injury**	45 (18%)
Emotional injury***	97 (38%)
Threat of injury****	57 (22%)
None	16 (6%)
<b>Total</b>	<b>256 (100%)</b>
<p>* injuries requiring overnight hospitalization or resulting in permanent disfigurement                      ** injuries requiring first aid or emergency room treatment but no overnight hospitalization                      *** injuries requiring psychiatric or psychological care or any other type of counseling                      **** threats with a weapon or strong-arm tactics not resulting in physical injury</p>	
<p><b>Source: PSI Data Base, Virginia Department of Criminal Justice Services</b></p>	

In addition to physical injury, victims of domestic violence suffer from the loss of self-esteem, independence, and peace of mind. Physical abuse undermines the foundations of a healthy relationship. Many children who are not themselves abused suffer from stress, sadness, and guilt, and may display violent behavior as a result of their exposure to violence in the home.

**Interventions**

Interventions for domestic violence have historically targeted the abused woman with the goal of eliminating future abuse. However, there are some efforts to prevent the initial violence. Educational programs for adolescents on dating violence is one approach. Promising strategies to reduce violence by male youths, such as adult mentoring programs, non-violent conflict resolution skills training, and parenting education, may potentially decrease other forms of violent behavior such as spouse abuse. Adults who are physically abused as children by family members are at increased risk of physically abusing their spouses or being a victim of spouse abuse.<sup>6</sup> Therefore, strategies for the prevention and treatment of child abuse may also reduce spouse abuse. Home visiting programs are a promising child abuse prevention strategy.

Once physical violence has occurred in a relationship, it tends to continue and to become more severe over time.<sup>4</sup> While primary prevention of domestic violence is the first goal, early identification of and intervention with victims can be expected to lower the death and injury rate due to violent and abusive behavior, including the emotional consequences that are frequently associated with repeated exposure to violent and abusive behavior. In the course of home visiting, Virginia public health nurses and resource mothers identify domestic violence which has not been identified or addressed by other health care providers. Hospital emergency departments and primary care clinics and offices, including obstetrical, are in a key position to intervene early with victims of violent and abusive behavior. However, battered women are easily turned away by emergency department personnel, physicians, and law enforcement officers who lack skills in recognizing and addressing abusive situations. Protocols for identifying, treating, and referring victims of violent and abusive behavior are used in many hospital emergency departments across the country. Information is unavailable on the use of protocols by Virginia emergency departments.

Hospital protocols must be coordinated with criminal justice intervention and community services to be effective. Those abused women who want to make a change face many obstacles. Many are entrenched in the relationship and lack self-esteem. Many have no income or resources of their own and lack a supportive family. They have no place to go and little hope of finding affordable housing. Therefore, leaving the abuser is not a realistic or acceptable option for all women. Many lack transportation to go to counseling, support groups, or to take out a warrant. Many victims experience lack of support from law enforcement. Women need to be presented with various options for consideration.

There are 44 domestic violence programs in Virginia, 37 of which receive some financial support from the Virginia Family Violence Prevention Program of the Virginia Department of Social Services. (See Appendix H.) Most of the programs are independent, private non-profit organizations. Others are affiliated with YWCAs, churches, community action agencies, and local government. Most of the funded programs provide the following core services:

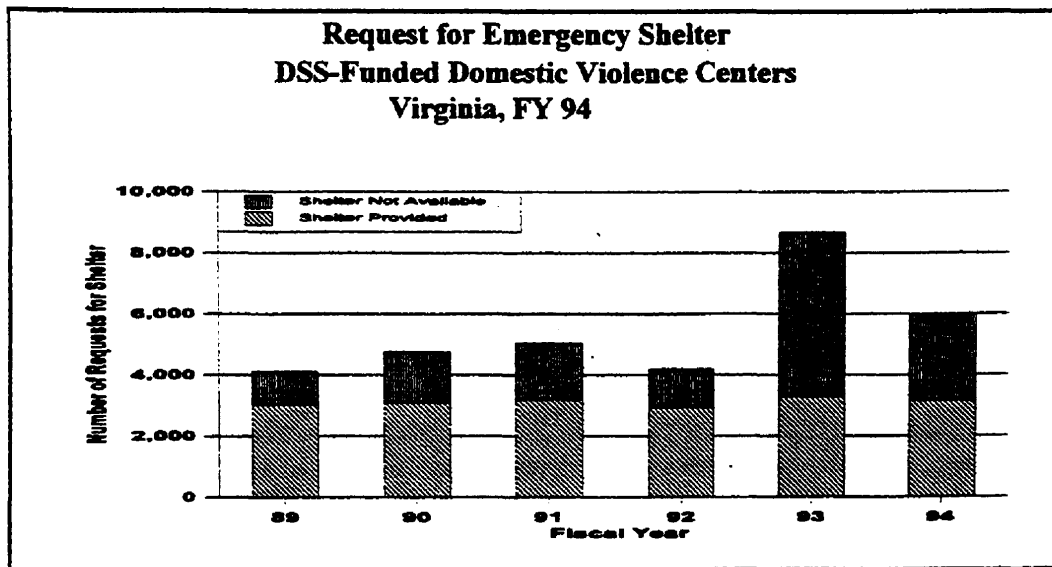
- Temporary emergency housing
- 24-hour crisis intervention
- Individual peer counseling
- Support groups
- Personal advocacy
- Court advocacy
- Public awareness.

Virginians Against Domestic Violence (VADV), a statewide coalition of domestic violence programs, interested individuals, and other organizations, operates a toll-free hotline and provides technical assistance and other support for the community-based programs and training for a variety of professionals.

Service statistics are available only for the domestic violence prevention programs which receive funds from the Department of Social Services. In Fiscal Year 1994, 29,805 battered women requested and received services from the 36 programs funded in that year. Shelter was provided for 3,148 women, at least 90 percent of whom were abused by their current or former male partner. The shelters had to turn away 2,839 families for lack of space. Fifty-nine percent of the sheltered women were white, 34 percent were black, 1 percent Hispanic, 1 percent Asian, less than 1 percent American Indian, and 2 percent unknown. Ninety percent of the sheltered women were 13 to 44 years of age. Of the women sheltered, 268 were

pregnant. Requests for emergency shelter have consistently exceeded available shelter space.<sup>10</sup> (See Figure 18.)

Figure 18



Source: Virginia Department of Social Services

The lack of space for battered women and their children could be partially alleviated if more shelters were available. However, not all battered women want or need emergency shelter. Nonresidential counseling and support services can help some women to avoid severe battering and the need for emergency shelter by providing them with options early in the battering cycle. Increasing nonresidential programs may also be a practical option in rural areas where support for shelters may be unavailable but where battered women are still in need of services.

**Legislation**

House Joint Resolution No. 279 of the 1994 General Assembly established the Family Violence Prevention Commission to study domestic violence in the Commonwealth; to identify existing services and resources available to address family violence; to investigate ways to coordinate delivery of those services and resources and increase public awareness of their existence; and to determine services, resources, and legislation which may be needed to further address, prevent, and treat family violence. The Commission will submit its findings and recommendations to the Governor at the 1996 session of the General Assembly. The legislation does not call for a representative from the health field to serve on the commission. Those organizations which most directly address family violence issues are not represented on the Commission.

## Sexual Assault

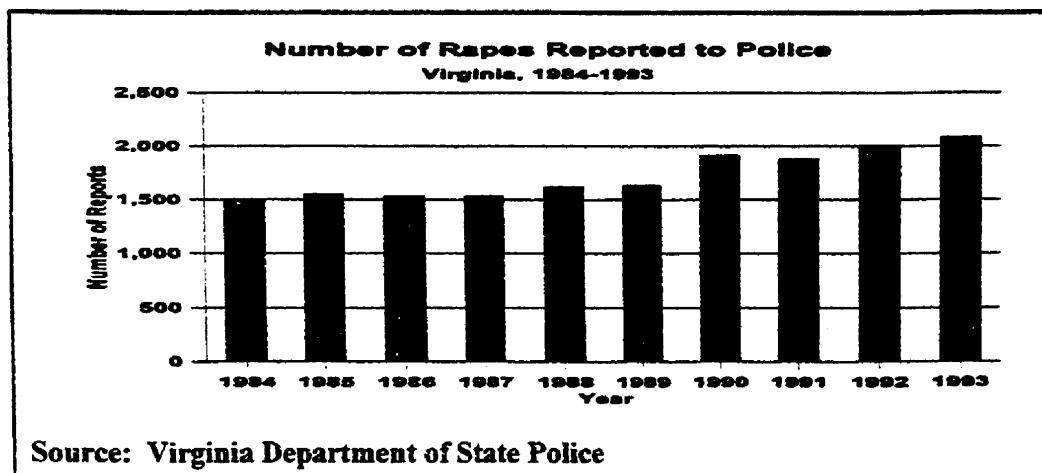
### Overview

Rape and other sexual assault can be understood as an act of power and control. An assailant asserts his power by using physical force or threats of bodily harm or by forcing a woman to submit to sexual acts against her will. Sexual assault is the result of the power differences between men and women which are reinforced by cultural beliefs and attitudes which support a subservient role for women. The belief that forced kissing, fondling, or sexual intercourse are acceptable behaviors in the context of dating relationships is an important factor underlying sexual assault in our society. Marital rape is one form of domestic violence.

### Incidence

In 1993, 2,084 rapes were reported to police in Virginia.<sup>11</sup> The actual number of rapes and other sexual assaults is unknown, however. Nationally only about one-half of rapes are reported to police.<sup>3</sup> Victims of acquaintance and date rape and other rapes that do not meet common stereotypes are particularly reluctant to report and often fail to define their experience as rape.<sup>4</sup> The number of rapes reported to police is increasing. (See Figure 19.)

**Figure 19**



Young, unmarried, and low-income women are the most frequent victims of rape and rape attempts. Women between the ages of 12 and 34 are particularly vulnerable.<sup>4</sup> In Virginia, approximately half of the female victims of rape and attempted rape in 1993 for which there was a conviction were in this age group.<sup>5</sup>

In a survey of students in Virginia colleges, 15 percent of the women reported that they had given in to unwanted sexual activity because of emotional pressure, 7 percent had experienced sexual assault, 5 percent had been the victims of attempted rape, and 2 percent had been raped. In most cases the assailant

was a friend or acquaintance. Only 13 percent of women who had experienced attempted rape and 10 percent of those who were raped had reported the incidents to someone in authority. Alcohol or other substance use was a factor in two-thirds of the incidents.<sup>12</sup>

In Fiscal Year 1993, 811 females aged 12 through 17 were found to have been sexually abused by a parent or caretaker. Eighty percent of child sexual abuse victims reported to the Virginia Department of Social Services are females.<sup>13</sup>

**Effects**

Sexual assault is a traumatic crisis that disrupts the physical, psychological, social, and sexual aspects of the victim's life. The most common injuries, besides the sexual assault itself, are bruises, black eyes, and cuts. Injuries to women from sexual assault for which there was a criminal conviction are shown in Table 7. The data represent a select portion of sexual assaults to women.

**Table 7**

<b>Injuries to Women Aged 12 to 64 as a Result of Rape, Sodomy, or Other Sexual Assault for Which There Was a Criminal Conviction in Virginia in 1993</b>	
<b>Type of Injury</b>	<b>Number of Women</b>
Serious physical injury *	12 ( 3%)
Other physical injury **	61 (15%)
Emotional injury ***	217 (55%)
Threat of injury ****	13 ( 3%)
None	72 (18%)
Unknown	20 ( 5%)
<b>Total</b>	<b>395 (100%)</b>
* injuries requiring overnight hospitalization or resulting in permanent disfigurement ** injuries requiring first aid or emergency room treatment but no overnight hospitalization *** injuries requiring psychiatric or psychological care or any other type of counseling **** threats with a weapon or strong-arm tactics not resulting in physical injury	
<b>Source: PSI Data Base, Virginia Department of Criminal Justice Services.</b>	

The psychological effects of rape, child sexual abuse, and other sexual assault are long-lasting. In 1993, close to one-half of victims seeking assistance from sexual assault crisis centers in Virginia first sought



help six months or more after the assault.<sup>14</sup> Virginia public health nurses, social workers, and resource mothers find that many pregnant teens have a history of sexual abuse.

### **Interventions**

Sexual assault prevention strategies include community education, rape avoidance skills training, and criminal justice interventions. Sexual assault awareness programs for adolescents may change or modify beliefs that condone sexual assault, subsequently reducing sexually assaultive behavior in dating relationships. To reduce the psychological effects, standards of care in hospital and health facilities can be designed to be comprehensive, interdisciplinary, and compatible with a victim's needs for the evaluation and treatment of rape and other sexual assault during the immediate crisis period. The effectiveness of all these programs should be evaluated.

There are 22 Sexual Assault Crisis Centers and one Satellite Center serving 84 percent of the localities in Virginia. Approximately half of all localities are primary service areas and receive the full range of prevention and support services the centers offer. Approximately 35 percent are secondary service areas and receive limited services. (See Appendix I.) While many centers are independent, private non-profit organizations, others are affiliated with a hospital, YWCA, community action agency, church, local government, and community services boards. Some Sexual Assault Crisis Centers operate in conjunction with domestic violence centers and general crisis telephone hot-lines. In 1993, 4,396 additional victims of sexual assault were served by the centers, 90 percent of whom were female.<sup>14</sup> The Sexual Assault Crisis Centers provide:

- 24-hour crisis intervention hotlines.
- Advocacy for victims of sexual assault.
- Assistance with victim compensation claims.
- Support services to families and others significant to the victim.
- Recovery/support groups for sexual assault survivors.
- Educational programs for general audiences of all ages and for allied professionals.

Twenty-two localities are not served by Sexual Assault Crisis Centers. Virginians Aligned Against Sexual Assault (VAASA), a coalition of sexual assault crisis centers, interested individuals, and other organizations, proposes that an additional eight centers and five satellites be established. (See Appendix J.)

### **Legislation**

Senate Joint Resolution No. 56 of the 1994 General Assembly continues the Commission on the Reduction of Sexual Assault Victimization in Virginia to: (a) review the implementation of the pilot sites for Child Protective Services assistance in cases of noncaretaker child sexual abuse; (b) review the development by the Department of Health Professions of the certification program for sex offender treatment providers; (c) review the criteria developed by the Supreme Court of Virginia, the Division of Crime Victims Compensation, and the Virginia Association of Commonwealth's Attorneys for payment of physical evidence recovery costs for sexual assault victims; (d) review the development by the Department of Health Professions of professional regulations regarding the appropriate counselor-client relationship when the client is a sexual assault victim; (e) review the provisions in the sexual assault statutes that bar criminal prosecutions in marital relationships; (f) review the links between criminal prosecutions for sex crimes and provisions for criminal fines, victim impact statements, and the victim compensation fund; and (g)

cooperation with the Supreme Court of Virginia's efforts to revise statutes relative to domestic violence issues.

### **Conclusions**

While sufficient data are available to document that violence against women in Virginia is a significant public health concern, the incidence of violence against women is unknown. Generally, data are available only for those violent events which result in death, hospitalization, or criminal conviction. A comprehensive public health surveillance system is needed to: (a) assess the magnitude and impact on death and injury due to violence; (b) determine the type and quantity of resources needed to respond to the problem; and (c) develop baseline information for evaluating the effectiveness of violence prevention programs and policies.

The Virginia General Assembly has established commissions to address domestic violence and sexual assault, the types of violence of special concern to women.

### **Legislative Recommendation**

- Because violence is a significant public health problem, the General Assembly designates the State Health Commissioner as a member of the Family Violence Prevention Commission established by the 1994 Senate Joint Resolution No. 56.

### **Private and/or Public Strategic Recommendations**

- The Virginia Department of Health, in conjunction with other state agencies and universities, should develop a comprehensive public health surveillance system to: (a) assess the magnitude and impact of death and injury due to violence, (b) determine the type and quantity of resources needed to respond to the problem, and (c) develop baseline information for evaluating the effectiveness of violence prevention programs and policies.
- The Department of Health should work with the Virginians Against Domestic Violence and health professional organizations to increase the knowledge and skills of hospital emergency departments, primary care clinics, private physicians, including obstetricians/gynecologists, and other health care providers, for identifying, addressing, and preventing domestic violence.

## **V. CONCLUSIONS**

Women's health issues cannot be addressed in a vacuum with only an emphasis on the diagnosis and treatment of disease. Multiple social, economic, environmental, educational, and cultural factors are risk factors for women's diseases and impact women's response to disease/illness.

The majority of women continue their primary role as caretakers of their families when working full-time outside the home. Women often place the health and welfare of their families before their own and may neglect preventive measures as well as medical care when ill. For poor women, their lack of health care is compounded by cost, while for women with health insurance, time may be a factor. Single, widowed, or divorced women are far more apt to be poor than married women. Additional factors for women are: lack of transportation, child care, lack of health knowledge, or cultural attitudes. Therefore, a holistic perspective is necessary in assessing why some women are not well and why certain diseases disproportionately cause their death.

An analysis of death trend data for women in Virginia indicates that the rates for breast and lung cancer are increasing, but the death rate for coronary heart disease is decreasing. White women have higher rates for these three diseases than minority women in Virginia, and white women in Virginia also have higher rates than white women nationally. Minority women in Virginia have rates lower than minority women nationally.

Although death rates for minority women are lower than for white women, minority women fare less well on other health indicators. The five-year survival rate for breast cancer is lower for minority women which may indicate lack of access to early care and less aggressive treatment. The greatest disparities for minority women, especially black women, are in the incidence of STDs, specifically HIV/AIDS, and teen pregnancy.

The health problems or issues which disproportionately affect women have been addressed independently or separately in the study, but they are related in the lives of many women. Domestic violence may increase during pregnancy and be associated with depression. Sexual assault may result in STDs, unwanted pregnancy, or teenage pregnancy. Therefore, consideration should be given to comprehensive models of care which include social support, mental health, and services for domestic violence. Additionally, effective programs for women should include those that have both public and private involvement and are comprehensive, community-based, and sensitive to the individual woman within her environment. Comprehensive programs should empower women to improve their health through health education, prevention, and early intervention. There are recent preventive interventions and legislation by the General Assembly which target women, and these efforts should be continued and supported. Examples include: Virginia Cardiovascular Risk Reduction Program, National Breast and Cervical Cancer Early Detection Program, HJR No. 179 Family Violence Prevention Commission, and SJR No. 156 Commission on the Reduction of Sexual Assault Victimization.

Resources are limited, and priority setting is necessary to impact the status of women's health in Virginia. Those persons and organizations involved with the status of women's health must have timely and reliable data in order to continually monitor populations at risk and reestablish priorities.

Critical evaluation of existing programs is necessary to determine continuation or redirection of funds. Since disparities exist between men and women and between racial and ethnic groups of women, research from Virginia's universities will be necessary to further investigate the numerous findings on this report.

Recommendations have been made following each section and are listed in the executive summary.

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GENERAL ASSEMBLY OF VIRGINIA -- 1994 SESSION

HOUSE JOINT RESOLUTION NO. 173

*Requesting the Virginia Department of Health to continue the Women's Health Study.*

Agreed to by the House of Delegates, February 10, 1994

Agreed to by the Senate, March 8, 1994

WHEREAS, the importance of women's health has been recognized by the Commonwealth and by the nation; and

WHEREAS, pursuant to House Joint Resolution No. 621 (1993), the Virginia Department of Health was requested to provide a profile of the status of women's health in the Commonwealth; and

WHEREAS, in the report on the status of women's health in Virginia, the Department acknowledged that relevant data are under-reported and that such data are not sufficiently quantified and analyzed; and

WHEREAS, such statistics are deemed to be vital to the quality and accessibility of health care provided to the women of this Commonwealth; and

WHEREAS, Virginia is committed to ensuring high quality, fiscally responsible health care to all its people, increasing the effectiveness of and accessibility to health care while containing costs; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Virginia Department of Health be requested to continue its review of women's health status in the Commonwealth, concentrating on women between the ages of 12 and 64. The Department shall include an assessment of (i) the current data systems measuring the health of women, including gaps in existing systems and recommendations for revisions to such systems to improve the data; (ii) the health-related problems which disproportionately affect women; and (iii) the incidence and effects of violence against women. The Department shall also develop a concise brochure on women's health status for use by employers, health care providers, educators, and state and local governments.

The Department of Health shall complete its work in time to submit its findings and recommendations to the Governor and the 1995 Session of the General Assembly as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

## **APPENDIX B**

### **Representatives from Statewide Health Data Systems**

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**Katherine Lawson**  
Violence Prevention Project  
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## APPENDIX C

### Ongoing Statewide Health Data Systems

#### Behavioral Risk Factor Surveillance System

The Virginia Department of Health, Centers for Disease Control, and the Survey Research Laboratory of Virginia Commonwealth University participate collaboratively in a surveillance system to collect data on behavioral risk factors for specific health problems in Virginia. Data come from telephone surveys of Virginians 18 years of age and older.

#### Department of Mental Health, Mental Retardation and Substance Abuse Services

The Department of Mental Health, Mental Retardation and Substance Abuse Services has a system for collecting episode-specific data from all clients admitted to the state mental health facilities.

#### Virginia Health Information

Virginia Health Information (VHI) is a non-profit organization which collects patient level data submitted by hospitals. Data available include patient demographics such as race, sex, age, and patient residence; clinical information such as diagnoses, procedures, birthweight, and outcomes of treatment. Financial data including total charges, fees associated with selected services, employer, and payor information are also included. Strict confidentiality policies are present to safeguard the identities of individual patients when data are released.

#### Reportable Disease Surveillance, Virginia. Office of Epidemiology, Virginia Department of Health.

The Virginia Department of Health has a system for collecting data on reportable disease occurrences to Virginia residents. The data are collected by place of occurrence, age, race, sex, and onset. The data system is limited to diseases reported according to the provisions Regulations for Disease Reporting and Control (primarily communicable diseases) and cancer cases reported to the Virginia Cancer registry. Statistical summaries of numbers, rates and trends are reported annually in the Office of Epidemiology annual report.

#### Virginia Vital Statistics, Annual Report. Center for Health Statistics, Virginia Department of Health.

The Virginia Department of Health has a system for collecting data on deaths to Virginia residents. This data are collected by sex, race, age, residence, and cause of death. Data are also available on live births and fetal deaths by age, race, education, marital status, and residence of mother. Data are from birth and death certificates and reports of induced termination of pregnancy. The data are reported annually in the Center for Health Statistics annual report.

APPENDIX D

ONGOING STATEWIDE DATA SYSTEMS

ASSESSMENT OF DATA SYSTEMS OF WOMEN'S HEALTH STATUS IN VIRGINIA

Data Systems in Virginia	Year Began	Year Last Report	Population Based	Available By Age	Available By Race	Hispanic Ethnicity	Measure Socio Economic Status	Available Local Level	Multiple Years	Trend Data Reported	If no Trend Data, Future Plan	Compare Males/Females	Compare Race/Ethnicity	Rate By Race/Ethnicity	Raw Data Available	Special Reports Available
Behavioral Risk Factor Surveillance System	1989	1992	+	+	+	+	+		+		+	+	+		+	+
Department of Mental Health, Mental Retardation and Substance Abuse Services	1979	1993		+	+	+	+	+	+	+		+	+	+	+	+
Virginia Health Information	1993	1993		+	+	+	+	+			+	+	+	+	+	+
Reportable Disease Surveillance, Virginia	1941 <sup>1</sup>	1992	? <sup>3</sup>	+	+	+		+	+	+		+	+	+	+	+
Virginia Cancer Registry	1970 <sup>5</sup>	1991	+	+	+	+	+	+	+		+	+	+	+	+	+
Virginia Center for Health Statistics	1979 <sup>7</sup>	1991	+	+	+	+		+	+	+		+	+	+	+	+

Can be done as needed. Not routinely reported.

First reportable diseases were syphilis and gonorrhea. Other diseases have been added and identified.

Includes all cases as reported. Under reporting known, laws to report not enforced.

Some reports are more detailed than others.

Statistics have been population based since 1990.

Rates calculated by race: black and white only.

Files available as early as 1960, changes in codes. Limit availability/access of data until 1979.

Rates calculated by race; Limited ethnicity rates available.

Most victims reporting are female.

APPENDIX E

Types of Breast Cancer	Definition
invasive ductal carcinoma	Most common diagnosed breast cancer. Survival rate is good if nodes are negative.
medullary carcinoma	Seven percent of diagnosed cases, most often in younger women (<50 years). Grows in capsule and least likely to metastasize, survival rate is good (80%)
comedocarcinoma	Five percent of diagnosed cases, starts in lining of the mammary duct, unlikely to spread, survival is good
mucinous carcinoma	Three percent of diagnosed cases, grows slowly, is associated with metastasis, survival is good
tubular ductal carcinoma	Rare, 2% invasive cancer arranged in well-organized tubules, prognosis is better than invasive lobular
invasive lobular carcinoma	Approximately 3% originates in lobules of the breast, invasive, prognosis is poor
inflammatory breast cancer	Represents 1% of diagnosed cases, usually widespread when found, metastasizes rapidly, prognosis is poor
Paget's Disease	Cancer of the nipple, 1-4%, associated with an underlying intraductal carcinoma



## **APPENDIX F**

### **Surgical Treatments for Breast Cancer**

**Radical mastectomy** - done less frequently today because of better early detection methods. Indicated for large bulky tumors involving the muscle or fat, axillary lymph or interpectoral nodes. Surgery is removal of the breast, pectoralis major and pectoralis minor muscles, skin overlying the tumor, and all axillary nodes.

**Modified radical mastectomy** - modified when tumor not large, interpectoral nodes are not grossly involved. Surgery is the removal of the breast, axillary nodes, and often the pectoralis minor.

**Total/Simple Mastectomy** - indicated in women with in situ carcinoma (ductal or lobular) with no suspicious axillary involvement, or for those women whose tumor recurred after partial mastectomy and axillary dissection. The surgery involves removal of the breast and pectoralis major muscle fascia. The goal is to remove diseased cells and improve the chances for survival.

**Partial or Segmental Mastectomy** - for small tumors with negative lymph nodes, may not be satisfactory for a woman with small breasts.

**Lumpectomy** - indicated for the removal of small tumors from a client who has clinically negative nodes. Only the tumor is removed but radiation therapy may be added. The breast tissue is preserved.

## Appendix G

### **Cost/Benefit Analysis of Extending Family Planning Benefits to Medicaid Recipients Who Lose Benefits 60 Days Postpartum**

The following is an analysis of extending family planning benefits to Medicaid recipients who would otherwise lose Medicaid eligibility 60 days postpartum. The approach is similar, but not identical, to that used in the South Carolina waiver. The Department of Medical Assistance Services estimated the cost of extending benefits (\$9,560,000) and the cost savings achieved from extending benefits (\$8,556,200) to arrive at a total cost of \$1,003,800. The cost to the Commonwealth would be \$100,380 (GF) in FY 1995 because of the enhanced match rate of 90% for family planning services.

#### **Cost Estimate of Extending Benefits:**

The approximate number of Medicaid recipients in Virginia who would lose Medicaid eligibility 60 days postpartum in FY 1995 is 23,900. The total cost of extending Medicaid eligibility for family planning services only for 22 months at a cost of \$18 per month is \$9,560,000.

#### **Estimate of Cost Savings of Extending Benefits:**

Following the assumption used by South Carolina, one unintended pregnancy would be averted for every 15 recipients who receive extended family planning benefits. Therefore, 1,593 unintended pregnancies would be averted ( $23,900 \div 15$ ). The cost savings associated with averting 1,593 pregnancies is composed of the cost of prenatal care and delivery and the cost for neonatal intensive care. The average Medicaid expenditure for prenatal care and delivery is \$2,850. So, the total cost of prenatal care and delivery for these 1,593 unintended pregnancies would have been \$4,541,000.

Approximately 18% of Medicaid deliveries result in the newborn going to the neonatal intensive care unit (NICU). The average cost of a NICU stay is approximately \$14,000. Therefore, 18% of the 1,593 deliveries or 287 would have stayed in the NICU for a total cost of \$4,015,200.

The total cost savings achieved by extending family planning benefits is the sum of these two components or \$8,556,200.

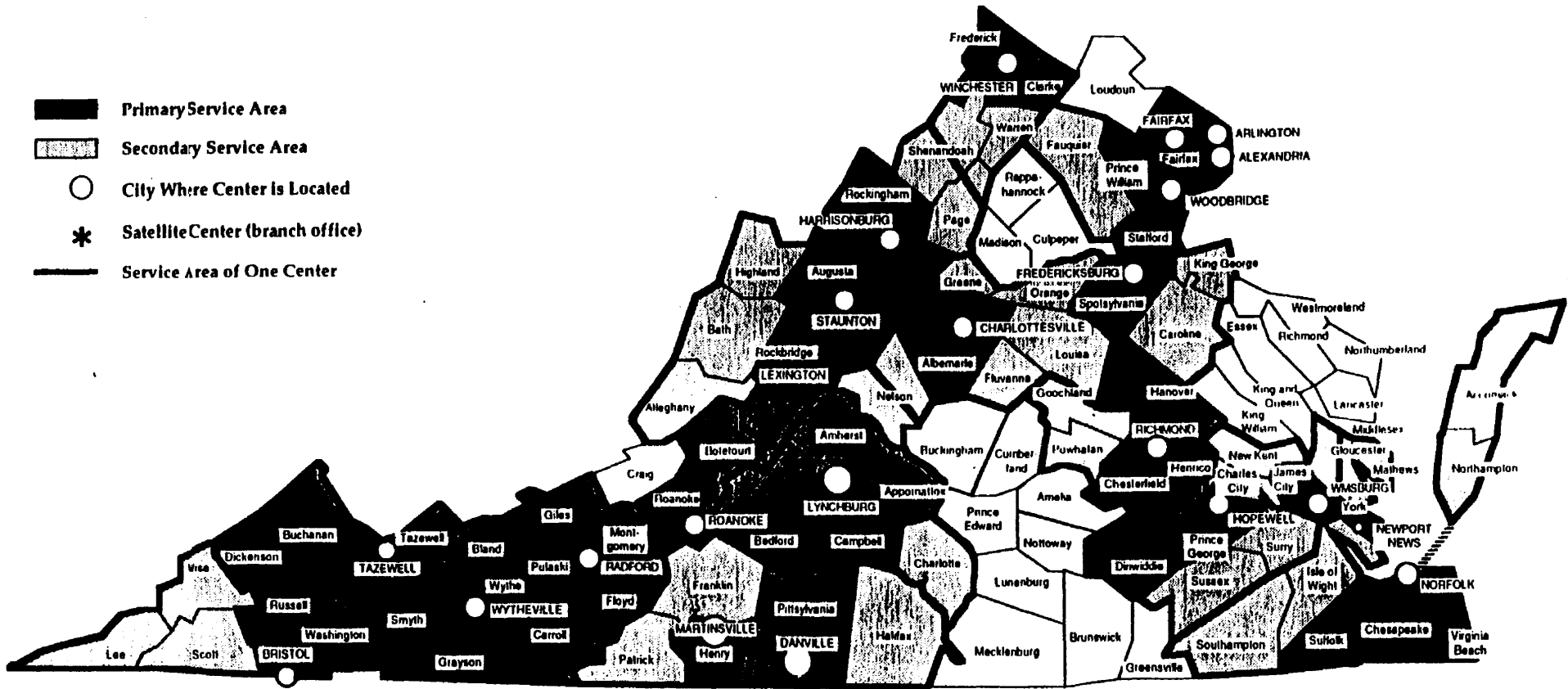
#### **Conclusion:**

Family planning services under Medicaid are matched at an enhanced rate of 90%. Therefore, the cost in FY 1995 would be:

\$ 100,380 (GF)  
\$ 903,420 (NGF)  
\$1,003,800 (Total)



# Sexual Assault Crisis Centers in Virginia 1993



- Primary Service Area
- Secondary Service Area
- City Where Center is Located
- \* Satellite Center (branch office)
- Service Area of One Center

- Alexandria..... Sexual Assault Response and Awareness
- Arlington..... Arlington County Victims of Violence
- Bristol..... Bristol Crisis Center
- Charlottesville..... Sexual Assault Resource Agency
- Charlottesville..... Virginians Aligned Against Sexual Assault
- Danville..... D.O.V.E.S. (Domestic Violence Emergency Services)
- Fairfax..... Fairfax Victim Assistance Network
- Fredericksburg..... Rappahannock Council Against Sexual Assault
- Harrisonburg..... Citizens Against Sexual Assault
- Hopewell..... Sexual Assault Outreach Program-John Randolph Hospital
- Lexington..... Rockbridge Area Coalition Against Sexual Assault
- Lynchburg..... Rape Companion Program Services-Crisis Line of Central Va.

- Martinsville..... Citizens Against Family Violence
- Newport News..... Contact Peninsula, Sexual Assault Support Services
- Norfolk..... Response: Sexual Assault Support Services
- Radford..... Women's Resource Center of the New River Valley
- Richmond..... Rape Crisis Outreach Program, YWCA
- Roanoke..... Sexual Assault Response & Awareness
- Staunton..... Blue Ridge Sexual Assault Center
- Tazewell..... Victims of Sexual Assault Program
- Williamsburg..... Avalon: A Center for Women and Children
- Winchester..... Sexual Assault Support & Prevention Program
- Woodbridge..... S.A.V.A.S. (Sexual Assault Victim's Advocacy Services)
- Wytheville..... Sexual Assault Program, Family Resource Center

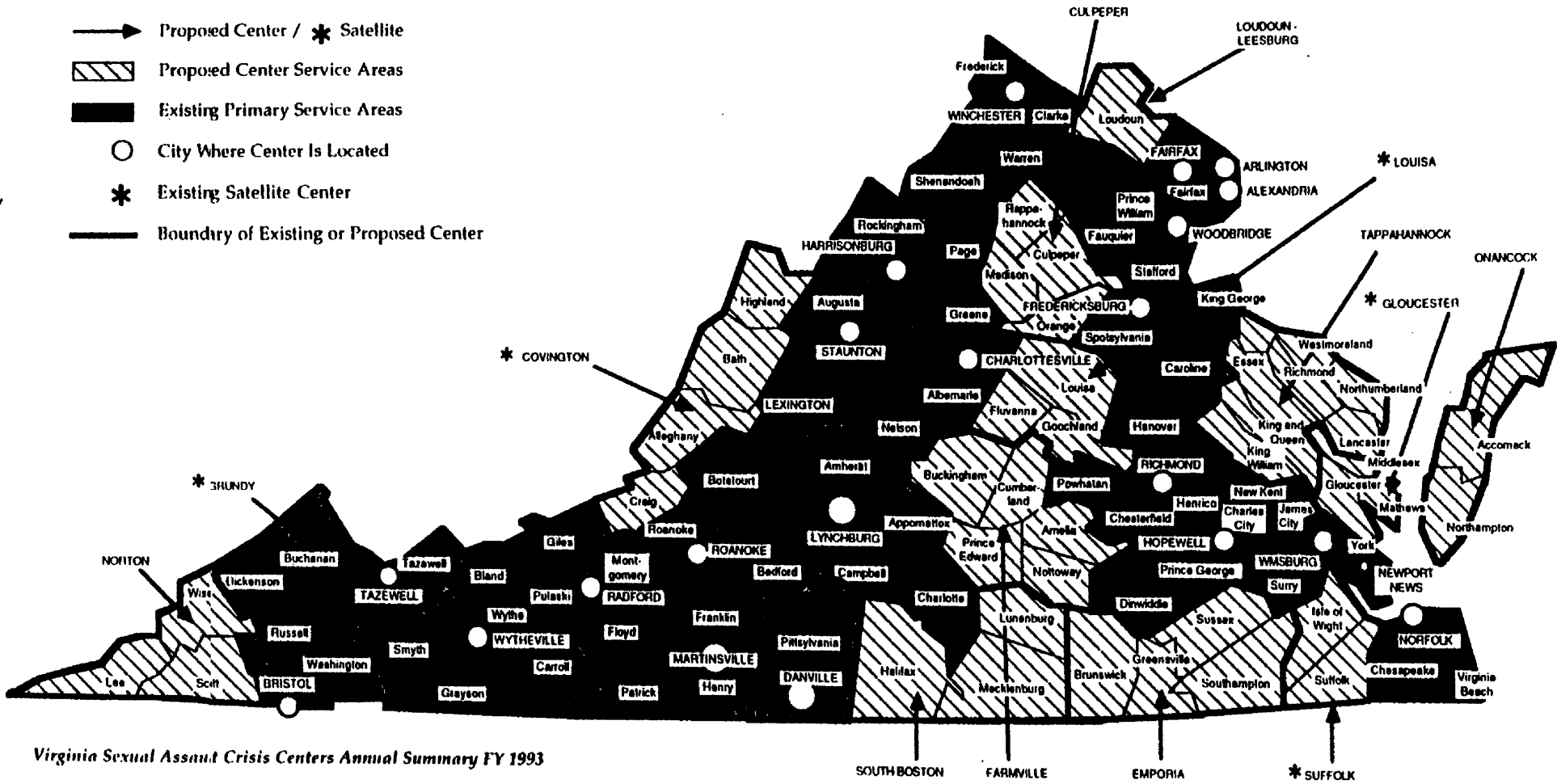
# Individual Center Services

## CENTER

	24 Hour Hotline	24 Hour Crisis Counseling	24 Hour Shelter	Crisis Counseling	Follow-up Counseling	Support Group-Adults	Support Group-Teens	Support Group-Children	Support Group-Parents	Community Education	Allied Professional Training	Education Programs for Schools	Worksite Prevention and Awareness	Volunteer Training and Management	Criminal Justice Support	Emergency Legal Assistance	Emergency Financial Assistance	Assistance Filing Compensation Claims	Personal Advocacy	Access to Handicapped	Emergency Clothing	TDD Telecommunications	Sign Language Interpreters	Foreign Language Interpreters
Alexandria	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Arlington	•	•	•	•	•	•				•	•	•		•	•			•	•	•	•	•	•	•
Bristol	•	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Charlottesville	•	•		•	•	•	•			•	•	•	•	•	•		•	•	•	•	•	•	•	•
Danville	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Fairfax	•	•		•	•	•	•		•	•	•	•	•	•	•		•	•	•	•	•	•	•	•
Fredericksburg	•	•		•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Harrisonburg	•	•		•	•	•				•	•	•	•	•	•		•	•	•	•	•	•	•	•
Hopewell	•	•		•	•	•	•			•	•	•	•	•	•		•	•	•	•	•	•	•	•
Lynchburg	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Martinsville	•	•		•	•	•				•	•	•	•	•	•		•	•	•	•	•	•	•	•
Newport News	•	•		•	•	•			•	•	•	•	•	•	•		•	•	•	•	•	•	•	•
Norfolk	•	•		•	•	•	•			•	•	•	•	•	•		•	•	•	•	•	•	•	•
Radford	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Richmond	•	•	•	•	•	•	•		•	•	•	•	•	•	•		•	•	•	•	•	•	•	•
Roanoke	•	•		•	•	•	•			•	•	•	•	•	•		•	•	•	•	•	•	•	•
Staunton	•	•		•	•	•	•			•	•	•	•	•	•		•	•	•	•	•	•	•	•
Tazewell	•	•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Williamsburg	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Winchester	•	•	•	•	•	•	•			•	•	•	•	•	•		•	•	•	•	•	•	•	•
Woodbridge	•	•		•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•
Wytheville	•	•	•	•	•					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

# Proposed Sexual Assault Crisis Centers

- Proposed Center / \* Satellite
- ▨ Proposed Center Service Areas
- Existing Primary Service Areas
- City Where Center Is Located
- \* Existing Satellite Center
- Boundary of Existing or Proposed Center



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