

CHAPTER

2

“I find significant resistance to screening due to fear of cancer and discomfort with invasive tests including Paps. It’s difficult and time consuming to educate.”

New Mexico Family Physician

Populations at Risk for Cervical Cancer

Who is at Risk?

The epidemiologic risk factors for developing cervical dysplasia are different than those for invasive cervical cancer. Women who are older and have not received regular screening and follow-up are at higher risk for invasive cervical cancer. Younger women, due to a variety of behaviors, are more likely to have exposure to Human Papilloma Virus (HPV) and to develop precancerous lesions.

Risk Factors

Women at Greatest Risk for Developing Cervical Dysplasia

Although the exact causes of cervical dysplasia are not fully understood, all women with a cervix are at some risk. There are, however, factors that elevate the risk. These include:

- **Women exposed to Human Papilloma Virus (HPV).** Certain HPV subtypes are more commonly associated with dysplasia. (See Chapter 4).
- **Women who initiated intercourse at an early age.** The younger the age at initiation of intercourse, the greater the risk of cervical dysplasia. Early onset of sexual activity is thought to be associated with high risk because, during puberty, cervical tissue undergoes physiologic changes which may make this area more vulnerable to development of dysplasia.
- **Women with multiple sexual partners.** The more sexual partners a woman has, the greater the likelihood that she will develop cervical dysplasia. Also, the more sexual partners a woman's partner has, the greater her risk. Several studies indicate that there may be an important "male component" to this disease, as husbands of patients with cervical cancer report considerably more sexual partners than husbands of unaffected women. (NIH/NCI Cancer Statistics Branch, Div. of Cancer Prevention and Control, 1996).
- **Women with compromised immune systems.** The overall strength of the immune system appears to play a role in susceptibility to cervical dysplasia. Recent studies confirm that the prevalence of cervical dysplasia is increased in Human Immunodeficiency Virus (HIV) infected women and that their disease progresses more rapidly. It is difficult, however, to distinguish the effect of HIV infection from the effect of increased HPV exposure.

- **Women of low socioeconomic status.** It is possible that women of low socioeconomic status are vulnerable to a diet and behavior that place them at risk for cervical dysplasia.
- **Women who smoke.** Several studies looking at the effect of smoking on health confirm that smokers develop cancerous changes of the cervix more often than nonsmokers. These studies have reported a dose-response relationship between smoking and cervical dysplasia and, further, that cigarette smoking at the time of diagnosis is associated with high-grade cervical dysplasia.
- **Women with deficiencies of Vitamins A, C or β -carotene and deficiencies of folacin (one of the B complex vitamins).** The association of vitamin deficiencies with increased risk is under investigation. (See Chapter 4).

Health care providers are more likely to find the listed risk factors for cervical **dysplasia** in women age 50 and younger. The risk factors for cervical **cancer** are typically issues for women age 50 and older. These **age groups should be considered as two distinct populations.**

Women at Greatest Risk for Developing Invasive Cervical Cancer

- Women who get Pap smears infrequently or not at all.
- Women who do not receive adequate and appropriate follow-up of abnormal Pap smears.
- Women who are past childbearing age.
- Women 50 years and older. They have more than three times the risk of women under 50.
- Women of color. They have 2.5 times the risk for developing cervical cancer as white women.

Women at Greatest Risk for Dying from Cervical Cancer

- Women who have not been screened.
- Women who do not get appropriate follow-up care.
- Low-income women and women residing in rural counties. They represent a higher incidence of advanced disease.
- Women who are older. From 1989-1993, the mortality rate for women over age 65 was 4.3 times greater than for younger women.

Who is at Risk for Cervical Cancer?

- Any women 18 or over and women of any age who have been sexually active run a risk of developing cervical cancer.
- The risk of developing cervical cancer increases with age, especially in women past their childbearing years.
- Women with less formal education — regardless of race — have a higher risk of dying from this disease than do women who are college graduates.
- African American women are three times as likely to develop cervical cancer and more than twice as likely to die from it as are Caucasian women.
- Cervical cancer is the third most common cancer among Hispanic women in the United States, compared to sixth among non-Hispanic whites.

Addressing the Needs of Special Populations

Women of Color

Women of color comprise about half of New Mexico's female population. Hispanic women represent the largest percentage of the population, followed by American Indian women, with African American and Asian American women comprising the smallest groups in New Mexico's diverse population.

Poverty and low literacy—two factors which pose barriers to early detection of cervical cancer and recognition of risk behaviors—are more common among women of color.

Hispanics

Hispanic women in New Mexico represent 37% of the total female population. Approximately 30% of the Hispanic population resides in Bernalillo County with access to the University of New Mexico Hospital (UNMH). UNMH has made it a priority to provide cervical screening regardless of ability to pay. The majority of the population resides in rural areas within the state, and rural residence places it at higher risk for infrequent screening due to decreased access to care. The Breast and Cervical Cancer Program of the New Mexico Department of Health has been active in providing increased screening in rural areas statewide.

While rates of invasive cervical cancer have declined in the Hispanic population, the incidence of high-grade cervical dysplasia remains higher in this group than in non-Hispanic white women. A larger proportion of cervical cancer cases was diagnosed at a more advanced stage among minority women in New Mexico (Chao, 1996).

American Indians

In New Mexico, 9.3% of the female population are American Indian. Cancer incidence in New Mexico is reported with a designation of “American Indians,” with tribal-specific data to allow for comparisons with other tribes nationally. Historically, attention has been focused on American Indians because their rates of cervical cancer have been high, particularly in women over the age of 50. Risk factors for cervical cancer in this population have not been well characterized in analytic epidemiologic studies. Although age-adjusted incidence rates for invasive cervical cancers have declined 66% over the past 25 years, data from the NM Breast and Cervical Cancer Control Program still identify American Indian women as the highest risk group for cervical dysplasia.

Culture influences use of the health care system and adherence to recommended screening and treatment programs. Limited knowledge of cancer prevalence and prevention, poverty, minimal and unpleasant experiences with the health care system, and communication problems present challenges to American Indians and to their health care providers.

African Americans

African Americans comprise about 2% of the total population in New Mexico. Nationally, they continue to experience incidence rates of invasive cervical cancer which are nearly two times higher than those in Caucasians, in spite of the decline in cases nationwide. Racial differences are also evident in lower survival rates for African American women.

Access to health care, age at onset of sexual activity, and educational attainment—all risk factors identified for this population—place them at increased risk for cervical dysplasia and invasive cancers of the cervix.

Lesbians

Research suggests that lesbians are less likely than heterosexual women to receive regular screening for cervical cancer. This is true even among lesbians with a past or current history of heterosexual intercourse, multiple sexual partners, or sexually transmitted diseases. Therefore, lesbians may be at higher risk for cervical cancer than assumed.

Reasons for this low screening rate include misinformation among lesbians and health care providers about lesbian health care needs and the false assumption that lesbians do not engage in behaviors that put them at risk for cervical cancer. Also, because Pap screening and other preventive care services are most often linked to reproductive health care, lesbians may less frequently receive these routine services. Lesbians should receive regular cervical cancer screening and bimanual pelvic examinations. The frequency of screening should be based on an evaluation of each patient's risk and specific medical history (Rankow, 1995).

Women Incarcerated in Jails and Prisons

Many women incarcerated in New Mexico's jails and prisons are women of color. Their medical histories may include multi-substance abuse, inadequate health care, multiple sexual partners, a history of sexually transmitted disease and heavy cigarette smoking. Many of these factors, taken with irregular use of Pap smears, place them in a higher risk category for cervical dysplasia.

Strategies for Reaching Women Who Underutilize Screening Services

- Increase public education about early detection and treatment success.
- Include high quality training for health care providers on eliciting a thorough health history, improving communication with patients, and obtaining an adequate cervical smear sample.
- Increase the use of culturally sensitive messages targeted to populations not receiving adequate screening.
- Increase access of patients to female healthcare providers.
- Increase primary prevention efforts including women's modification of sexual behavior and smoking cessation.
- Increase secondary prevention efforts by increasing screening through regular Pap smears.

Barriers to Screening: The Patient's Perspective

Barriers to cervical cancer screening operate in different combinations for women. Certain factors, however, have been identified consistently. Underutilization of Pap smear screening is associated with poverty or near poverty, little formal education, and inadequate health care and health insurance. Furthermore, not all women know about cervical cancer, its detection, or its treatment. Women most commonly report that they:

- Find it difficult to talk about their reproductive system, and therefore, will not consult health care providers about cervical cancer screening.
- Have to wait too long before the health care provider sees them.
- Are embarrassed to have a gynecological examination.
- Find the test unpleasant and uncomfortable.
- Do not like to be examined by male health care providers.
- Believe they are not susceptible to cancer.
- Fear the test results will be positive.
- Believe cancer cannot be cured.
- Have no personal health care provider or regular health care.
- Can only afford to go to a health care provider when sick.

Availability, Accessibility, and Affordability of Screening

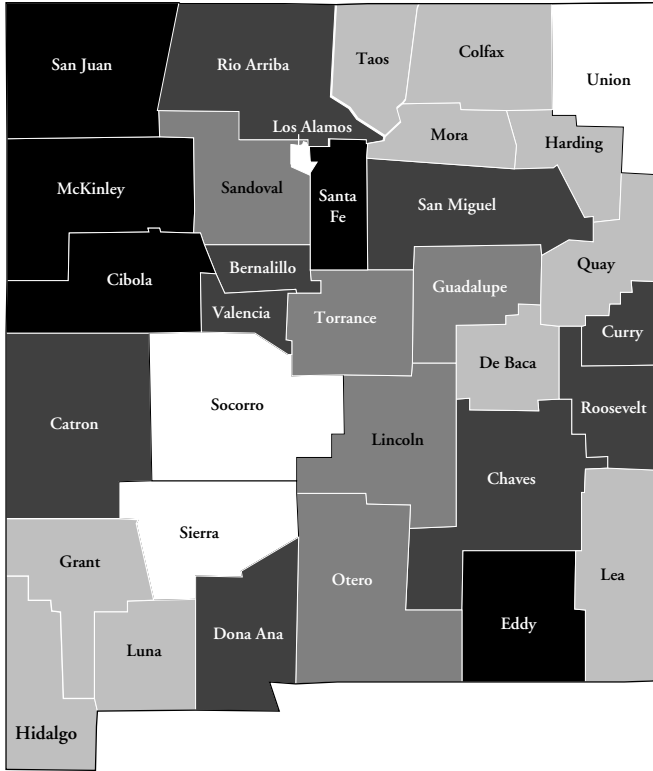
Many women at highest risk of cervical cancer do not have a source of private health care. Some of these women use the public health sector, while others do not access any services—private or public.

Since 1992, the Centers for Disease Control and Prevention (CDC) have provided federal funding for New Mexico's Breast and Cervical Cancer Detection and Control Program (B&CCP). All 33 counties in New Mexico and the Indian Health Service provide free or reduced cost screening for cervical cancer for eligible women. The B&CCP provided cervical screening services to over 60,500 women during a 6 year period. Unfortunately, available funding serves only a small portion of the eligible New Mexico women. The introduction of managed care to the Medicaid eligible women of New Mexico may result in some initial decreased access due to enrollment schedules. Providers should attempt to track those Medicaid eligible patients who do not return for screening or follow-up.

In a survey of the 33 county health departments, most health departments and public clinics offer Pap smear screening. However, the number of clinics that offer cervical screening, the number and ages of clients they are able to serve, and the frequency with which these screenings are offered vary considerably. Many private providers also participate in the B&CCP. Despite public and private efforts, Pap smear screening is less available in certain geographic areas, particularly in rural areas.

The results of national surveys show that between 20-60% of women felt they could only afford to seek health care when sick, not for a screening test. Women who live in poverty or near poverty cannot afford and/or do not avail themselves of cervical cancer screening or follow-up treatment.

Percent of Eligible Women in New Mexico Receiving Pap Smears, 7/94-6/95, by County

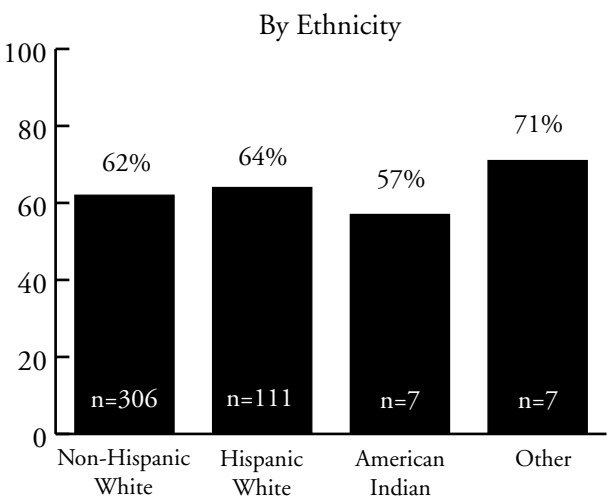
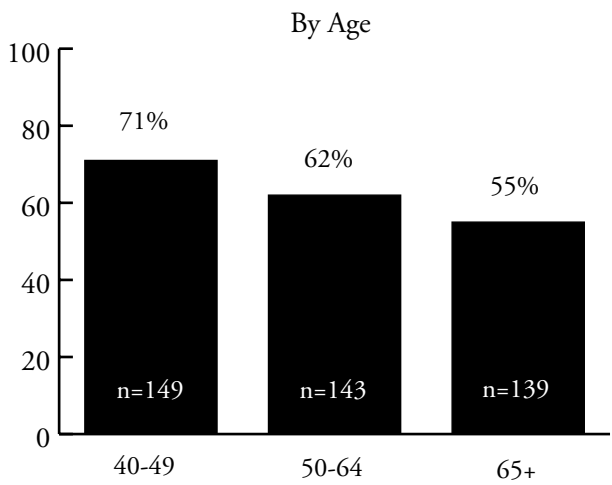


Percent Screened through the B&CCP



Source: New Mexico Department of Health, Public Health Division,
Bureau of Vital Records and Health Statistics, 1996.

Percent of New Mexico Women in Selected Ethnic and Age Groups Who Reported Having a Pap Smear in the Past Year



Source: New Mexico Behavioral Risk Factors Survey, 1995.

Summary of Barriers to Cervical Cancer Screening

Information about barriers to cervical screening suggests that no single factor will explain why some women are not appropriately screened. However, certain factors have been consistently identified regardless of the data source or the data collection.

- **Income** Underutilization of Pap smear screening is associated with low income, low formal education, and lack of health insurance (i.e., poverty or near poverty).
- **Age** Older women are not adequately screened—an observation which appears to be somewhat independent of formal education, income, and other markers of low socioeconomic status.
- **Perceptions and Beliefs** Embarrassment, pain, and discomfort associated with the pelvic examination and the Pap smear are consistently identified as important barriers to cervical screening. Other significant barriers include fear of finding cancer, the long waiting period before being seen by a health care provider, dislike being examined by a male health care provider, lack of understanding of the Pap smear, belief that being asymptomatic means no test is necessary, and belief that cancer cannot be cured regardless of how early it is detected.
- **Resources** Lack of money for preventive care is the most important barrier. Lack of time and transportation are also important. Lack of time is particularly important for women with paid employment.

