



CHAPTER 6. Colorectal Cancer

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COLORECTAL CANCER

IMPORTANCE OF COLORECTAL CANCER FOR CANCER PREVENTION AND CONTROL

Colorectal cancer is the third most common cancer among both men and women in the United States. The American Cancer Society estimates that in 2007 in the United States there will be 153,760 new cases of colorectal cancer diagnosed, accounting for approximately 10% of all cancers among men and 11% among women. Colorectal cancers account for about 9% of cancer deaths in men and women, with an estimated 52,180 deaths in 2007. Nationwide, the lifetime risk for developing colorectal cancer is approximately 1 in 18 persons. Between 1998 and 2003 colorectal cancer incidence rates declined 2.1% per year. Mortality rates from colorectal cancer have declined at a similar rate over the last two decades as a result of decreasing incidence, early detection, and improvements in treatment.^{1,2,3,4}

The risk of colorectal cancer increases with age, with the majority diagnosed in individuals over the age of 50. Blacks are more likely than other racial and ethnic groups to develop colorectal cancer. Other non-modifiable risk factors include inherited genetic syndromes, personal or family history of colorectal cancer or polyps, or a personal history of inflammatory bowel disease. However, some risk factors—such as obesity, lack of physical activity, smoking, heavy alcohol consumption, or a diet high in fat and low in fiber—can be modified to reduce an individual's risk of developing colorectal cancer.¹

While the incidence of colorectal cancer is decreasing in the U.S. and New Jersey, less than 40% of all colorectal cancers are diagnosed in the early stages when treatment is most effective. Patients diagnosed in the early stages have a survival rate of approximately 90%. Survival declines rapidly with more advanced diagnoses.^{1,5} For this reason, screening and early detection are important factors in decreasing incidence and mortality from colorectal cancer.

Colorectal cancers develop slowly, beginning with a polyp, a benign growth that rarely causes symptoms. Detecting and removing polyps before they become cancerous is the optimal method of reducing the incidence and mortality of colorectal cancer. Several methods are currently available to screen for colorectal cancer: digital rectal exam (DRE), fecal occult blood test (FOBT), flexible sigmoidoscopy (FSIG) or sigmoidoscopy, double contrast barium enema (DCBE), and colonoscopy. The DRE examines only a limited portion of the rectum and is not recommended as a screening method when used alone. The FOBT is not specific to colorectal cancer or polyps, but may be used to determine whether a more specific test is needed. A sigmoidoscopy provides a view of the rectum and part of the distal colon and has been shown to reduce colorectal cancers of that site by up to 60%.⁵ Only the colonoscopy and double contrast barium enema can provide a view of the entire colon and rectum, and these are therefore the only screening tests able to detect cancers of the proximal, as well as the distal colon and the rectum.^{6,7} The DCBE, however, is no longer recommended due to its lower sensitivity. The colonoscopy is the only screening method that can not only detect cancerous and pre-cancerous polyps, but can also remove them in the same procedure. Since almost every colorectal cancer begins with a polyp, the unique ability of the colonoscopy to remove polyps provides a significant measure of prevention against the development of cancer. An emerging technology in the field of colorectal cancer screening is the virtual colonoscopy. The virtual colonoscopy is a noninvasive test that examines the colon using computerized imaging. One disadvantage of the virtual colonoscopy compared to the colonoscopy is the fact that the procedure shows less detail, such that smaller lesions may go undetected. A second disadvantage is that the physician cannot take tissue samples or remove polyps during a virtual colonoscopy. Thus, if abnormalities are found, a conventional colonoscopy must be performed. See Table 1 below for a summary of current colorectal cancer screening options.



Table 1. Centers for Disease Control and Prevention current colorectal cancer screening guidelines for average-risk individuals over age 50*^{1,6,8}

Test Type	General Frequency**	Benefits	Limitations***
Fecal Occult Blood Test (FOBT) or Fecal Immunochemical Test (FIT)	Every year	<ul style="list-style-type: none"> • 33% mortality reduction (FOBT only) • Low cost • No bowel preparation 	<ul style="list-style-type: none"> • Performed at home and subject to patient error • Not specific for colorectal cancers • Pre-test dietary restrictions (for FOBT) • Will miss some polyps • Additional procedures needed if positive
Flexible Sigmoidoscopy (FSIG)	5 years	<ul style="list-style-type: none"> • 60% mortality reduction from distal colon/rectal cancers • Minimal preparation/moderate discomfort 	<ul style="list-style-type: none"> • No reduction in deaths from proximal colon cancers • Views approximately one-third of colon • Small risk of infection or bowel tear • Additional procedures needed if positive
Colonoscopy	10 years	<ul style="list-style-type: none"> • Provides view of entire colon • 66% reduction of new cancers; most accurate test for detecting polyps • Can biopsy and remove polyps • Can diagnose other disease • Minimal discomfort 	<ul style="list-style-type: none"> • Can miss small polyps • Sedation needed • Subject to provider capability • Potential risk of infection or bowel tears • Full bowel preparation needed
Double Contrast Barium Enema (DCBE)	5–10 years	<ul style="list-style-type: none"> • Provides view of the entire colon • Few complications • No sedation needed 	<ul style="list-style-type: none"> • Can miss small polyps • Lower sensitivity to detecting polyps than colonoscopy • Full bowel preparation needed • Additional procedures needed if positive

* For average-risk individuals. Individuals with increased or high risk should begin screening before age 50. See Appendix C for additional information.

** Suggested frequencies vary and may change as new information becomes available. See Appendix C for a list of screening guideline resources. Patients should consult a physician to determine the best screening program to meet their needs. A colonoscopy should always follow a positive result from any other test.

*** Information on the limitations of screening tests is from both the Centers for Disease Control and Prevention⁸ and the American Cancer Society.¹

Although screening and early detection are important in the successful prevention and treatment of colorectal cancer, colorectal cancer screening is less widely used than screening for other cancers. (See Table 2 below for the percent of New Jersey residents who have had an FOBT, a sigmoidoscopy, or a colonoscopy.) These numbers reflect the need for efforts to increase education and awareness of colorectal cancer screening and prevention.⁶



Table 2. Percent of New Jersey residents Aged 50 and over who have had colorectal cancer screening New Jersey versus U.S. by gender, 2002 and 2004

TYPE OF SCREENING	PERCENT OF MALES				PERCENT OF FEMALES			
	2002		2004		2002		2004	
	NJ	US	NJ	US	NJ	US	NJ	US
Had a home blood stool test in the past two years?*	31.1	30.4	26.9	27.5	29.7	25.7	25.0	26.0
Ever had a sigmoidoscopy/colonoscopy?*	48.7	47.8	59.3	52.5	47.7	47.9	54.5	53.2
Had sigmoidoscopy/colonoscopy in the past 10 years?***	46.3	–	56.4	–	44.0	–	50.6	–
Had home blood stool test in the past year or sigmoidoscopy/colonoscopy in the past 5 years?***	52.8	–	58.1	–	50.0	–	52.7	–

* Source: Centers for Disease Control and Prevention. [Behavioral Risk Factor Surveillance System Survey Data](#). Atlanta, GA: Centers for Disease Control and Prevention, 2007.

** Source: Center for Health Statistics. [New Jersey Behavioral Risk Factor Survey](#) [unpublished data]. Trenton, NJ: New Jersey Department of Health and Senior Services, 2007.

Note: U.S. data not available for sigmoidoscopy/colonoscopy in past 10 years or home blood test in past year/ sigmoidoscopy/colonoscopy in past 5 years.

COLORECTAL CANCER IN NEW JERSEY

In this section we discuss the status of colorectal cancer in New Jersey, including incidence, mortality, prevalence, and survival.

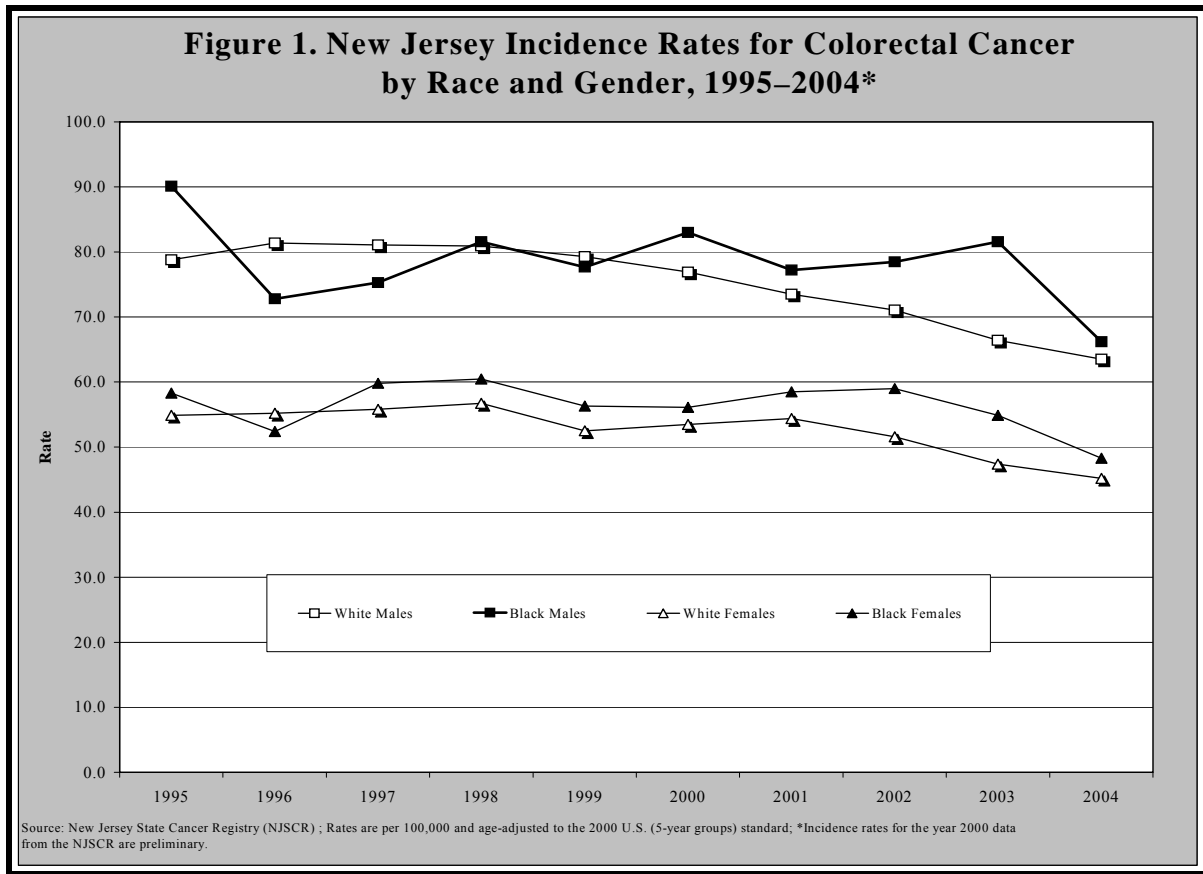
Incidence. Consistent with U.S. colorectal cancer incidence rates, rates in New Jersey have declined since 1979 among all race and gender groups, with the exception of black males. Although the number of colorectal cancer cases is approximately equal for men and women (principally because women live longer than men), men have consistently had higher incidence rates than women, regardless of race (Figure 1). According to 2004 data from the New Jersey State Cancer Registry, the incidence rate of colorectal cancer among New Jersey men (all races combined) was 63.2 per 100,000**; the incidence rate for white males was 63.5 compared to 66.2 per 100,000 for black males. Incidence rates among New Jersey females (all races combined) was 45.5 per 100,000**; the incidence rate for white females was 45.2 compared to 48.3 per 100,000** for black females in 2004*. The incidence rate for Hispanic females in New Jersey was 41.0, and the incidence rate for Hispanic males was 66.3 per 100,000** in 2004.² The American Cancer Society estimates that, in 2007, 5,160 new colorectal cancer cases will be diagnosed in New Jersey.¹

* Incidence rates for the year 2004 data from the New Jersey State Cancer Registry are preliminary

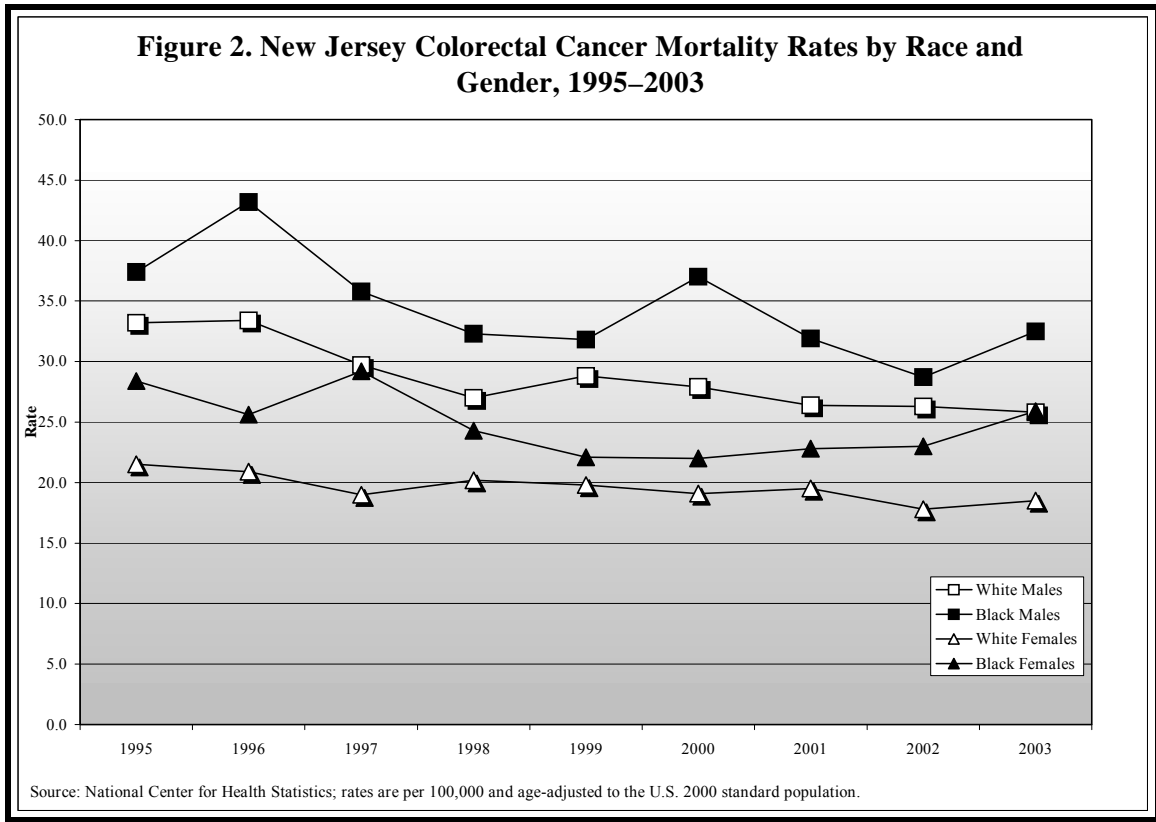
** Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.



Mortality. Mortality from colorectal cancer comprises approximately 10% of all cancer deaths in New Jersey.^{1,2} According to the New Jersey State Cancer Registry, colorectal cancer mortality rates for New Jersey males (all races combined) decreased from 33.4 per 100,000** in 1995 to 25.7 per 100,000** in 2003 (Figure 2). This decrease was evident in mortality rates for both white males and black males. Similarly, mortality rates for New Jersey females (all races combined) decreased from 22.0 per 100,000** in 1995 to 19.0 per 100,000** in 2003 (Figure 2). This decrease was evident in both white females and black females in New Jersey. The mortality rate for Hispanic males in New Jersey increased from 10.9 per 100,000** in 1995 to 20.0 per 100,000** in 2003. The mortality rate for Hispanic females, however, remained relatively stable from 1995 to 2003 (10.6 versus 9.1 per 100,000**, respectively).¹⁰ The American Cancer Society estimates that, in 2007, there will be 1,680 deaths in New Jersey due to colorectal cancer.¹



**Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard.



Prevalence. Estimates indicate that on January 1, 2003, there were 38,510 or 0.4% of New Jersey men and women alive who had ever been diagnosed with colorectal cancer. As with other cancers, the prevalence of colorectal cancer increases with age and is highest in the 65+ age group (2.7%). The prevalence of colorectal cancer is slightly higher in whites than in blacks (0.5% versus 0.3%, respectively).¹¹

Survival. The five-year relative survival rate for colorectal cancer diagnosed in New Jersey from 1994–1997 is 60.6%. This rate is slightly lower than the U.S. rate of 62.5%. Disparities in survival exist between blacks and whites. In New Jersey, as in the U.S., black women have a lower survival rate than white women (52.1% versus 60.3%, respectively) and black men have a lower survival rate than white men (48.2% versus 63.2%, respectively).

Colon cancer survival rates are much higher for cancers diagnosed at the local stage than at the regional or distant stage. For example, in New Jersey from 1994–1997, the five-year survival rate for local-stage colorectal cancers was 90.7% for men and 86.3% for women, whereas that for regional-stage was 65.0% for men and 62.5% for women, and that for distant-stage was 6.0% and 9.1% for men and women, respectively.¹² In New Jersey, white males have a higher percentage of local-stage colorectal cancers diagnosed than black males (46.01 versus 38.76%, respectively), whereas the percentage of local-stage colorectal cancers is similar for white females and black females (42.82 versus 43.26%, respectively).⁹



HEALTHY NEW JERSEY 2010 GOALS

Healthy New Jersey Goal 1

Reduce the age-adjusted death rate from colorectal cancer per 100,000 standard population* to: 19.0 for the total population (age-adjusted), 19.0 for whites (age-adjusted), 22.0 for blacks (age-adjusted) and 124.0 for persons 65+, by 2010.

Table 3. Age-adjusted death rate from colorectal cancer per 100,000 standard population, New Jersey, 1999–2002, and [Healthy New Jersey 2010](#) projected target rates.

Population	1999	2000	2001	2002	Target	Preferred 2010 Endpoint
Total	23.3	23.0	22.4	21.5	19.0	13.0
White	23.4	22.8	22.4	21.4	19.0	13.0
Black	25.8	27.7	26.3	25.1	22.0	13.0
Hispanic	13.5	14.7	15.6	12.8	***	***
Asian/Pacific Islander*	**	4.7	**	8.8	***	***
Persons 65+	145.0	144.0	142.7	134.9	124.0	81.0

Source: New Jersey Department of Health and Senior Services, Center for Health Statistics, [Healthy New Jersey 2010: Update 2005](#).

* The number of Asian/Pacific Islander cases is known to be understated.

** Figure does not meet standard of reliability or precision.

*** A target was not set because the baseline data for this subpopulation were statistically unreliable.

Note: Data for white, black, and Asian/Pacific Islander include Hispanics and non-Hispanics.



GOALS, OBJECTIVES, AND STRATEGIES

In support of the Healthy New Jersey 2010 goal for colorectal cancer, the recommendations of the Colorectal Cancer Workgroup are summarized below for the following focal areas:

- Awareness and education
- Screening
- Research and surveillance

AWARENESS AND EDUCATION

The impact of colorectal cancer on the morbidity and mortality of American citizens in general, and on New Jersey residents in particular, is alarming. New Jersey has the highest incidence rate of colorectal cancer in the country for males and the third highest rate for females. The mortality rates are more optimistic, with New Jersey seventh in the nation for males and fourth for females.¹ Yet despite these statistics, colorectal cancer has not received the same level of attention paid to breast and prostate cancers.

It is well established that early detection of cancer through screening tests offers significantly improved chances for survival. Research suggests that the recent steady decline in colorectal cancer incidence and mortality rates may be due to increased screening and polyp removal preventing the progression of polyps to invasive cancers.^{3,13,14} Nationally, the Behavior Risk Factor Surveillance System (BRFSS) shows an increase in colorectal cancer screening rates nationwide of 3% between 2002 and 2004. Although this seems to be a small increase, recent data from the BRFSS, Medicare, and the National Committee on Quality Assurance (NCQA) indicate that concerted efforts to improve colorectal cancer screening rates have begun to demonstrate success. While only 7 states had colorectal cancer screening rates of 60% or greater in 2002, by 2004 there were 15 states at that level, and 7 were over 65%.¹⁵ During that period, 11 states had an increase in endoscopy rates of 7% or greater. Two had increases of 12%.¹⁶⁻¹⁷ While improvement varied from state to state, nationwide overall screening rates increased by 3%.¹⁵ Medicare screening rates demonstrated significant increases from 2000 and 2003.¹⁸ In Medicare managed care plans, rates rose from 49.5% in 2003 to 53.9% in 2005, and in commercial managed care plans from 47.4% in 2003 to 52.3% in 2005.¹⁹

Yet despite established screening and treatment guidelines, widespread availability of testing, and widespread agreement among professional societies and the scientific community that screening can prevent colorectal cancer and reduce mortality, screening rates remain relatively low for the population as a whole. The concentration of particularly low screening rates in certain subgroups (e.g., the uninsured and the medically underserved) contributes to higher colorectal cancer mortality in these populations.^{13,14,19-22} Barriers to colorectal cancer screening have been identified, including inadequate health insurance coverage, lack of awareness of screening, and lack of physician referral.

Colorectal cancer screening rates are low for a number of reasons. Some reasons are associated with the individual patient. Colorectal cancer and colorectal cancer screening tests are unpopular subjects. The public views the tests as distasteful and as likely to be painful. Most people know little about the tests and are confused about what test to have and when and are often unaware of how to schedule screening.²³ Most also report that their doctors do not talk to them about colorectal cancer or their



screening options. Awareness of colorectal cancer screening options is an important determinant of whether or not an individual is appropriately screened. Individuals with health insurance are significantly more likely than the uninsured to be aware of colorectal cancer screening.²⁴ As a result, the Colorectal Cancer Workgroup aims to increase awareness of colorectal cancer screening options among all New Jersey residents, particularly the uninsured, as a means of increasing colorectal cancer screening rates and decreasing the incidence and mortality of the disease.

Other reasons for low colorectal cancer screening rates are associated with healthcare providers. Providers cite a lack of training and/or experience in testing, lack of time to discuss the subject with their patients, a desire to avoid inconveniencing their patients, and concern that the tests are not effective. Further reasons these tests are not performed include inadequate reimbursement, high costs, and limited access to centers or providers who can perform the tests.²⁵

Evidence suggests that when a screening recommendation comes directly from the clinician, compliance with colorectal cancer screening can be quite high.^{3,4,13,21,24,26} As indicated earlier, colorectal cancer is a highly curable disease when detected early. When diagnosed at an early stage, the five-year relative survival is 90%; yet less than 40% of incident cases are diagnosed while still localized,² and disparities among racial and ethnic minorities continue to be of concern. To alleviate this public health burden, a commitment among healthcare professionals to preventive screening is necessary. Of primary importance is the fact that clinicians recommend at least one of the appropriate screening options for all eligible patients; the role of the healthcare provider in recommending and conducting preventive screening is a strong predictor of preventive service use.^{3,4,13,14,20,21,24,27} At this time, economic and healthcare system disincentives to screening are limiting the choices available to physicians and patients, and studies indicate that many physicians are unaware of the appropriate timing and frequency for screening.²⁷ However, as familiarity and screening skills grow in the broader medical community, and as insurance and cost obstacles are removed, a greater range of options will be made available.³ The Colorectal Cancer Workgroup recommends that educational efforts be targeted at physicians to increase awareness and implementation of published screening guidelines. To achieve this requires commitment and collaboration among healthcare providers, insurance companies, and regulatory agencies.

Cancer screening rates continue to be low among groups that lack health insurance or a usual source of care, and large disparities in cancer incidence and mortality across racial and ethnic groups persist.^{3,4,13,14,20,23} Blacks and other minority groups are more likely to be diagnosed with more advanced colorectal cancer than their white counterparts.¹⁴ Similarly, persons with limited education and lower socioeconomic status infrequently participate in screening programs in general and have very low rates of colorectal cancer screening in particular.^{3,4,20,23,28} To be effective, preventive initiatives focusing on colorectal cancer must be inclusive of the general population as well as those at increased risk for developing colorectal cancer and must include the screening options currently available for the detection of colorectal cancer.

As cost is often cited as a barrier to screening, accurate and cost-efficient options must be available to the healthcare practitioner as well as to the community. Several screening options exist for cost containment while maximizing the benefits of screening.³ Insurance coverage for age- and risk-appropriate screening must be available in order to reduce the incidence of colorectal cancer and increase the efficacy of screening interventions by identifying early disease for optimal health benefits. Therefore, screening efforts combined with broader, more aggressive educational initiatives must be part of a complete and comprehensive prevention program that integrates age-related screening with the promotion of healthy lifestyles.¹⁹



In addition, barriers to screening (e.g., lack of knowledge or awareness, accessibility, language, and cultural sensitivity) need to be addressed in order to make awareness of colorectal cancer and screening opportunities as common as awareness of mammography for breast cancer and prostate-specific antigen (PSA) tests for prostate cancer. The most effective modalities appear to be simple, straightforward patient education materials that include brief, hopeful messages about the purpose of screening and its benefits.^{21,29} Access to screening, clinician recommendations, and education can be effectively combined for favorable impact on screening rates to reduce the debilitating effects of colorectal cancer on our communities.

The public must also be made aware of the inherent and modifiable risk factors associated with colorectal cancer. Efforts to encourage a healthy diet and increased physical activity, as well as to discourage the use of alcohol and tobacco products could lead to a reduction in incidence of colorectal and other cancers. Individuals with a personal or family history of colorectal polyps, cancer, or inflammatory bowel disease, in particular, should be made aware of their increased risk of developing colorectal cancer and should be encouraged to speak with a physician about early screening.¹

In recent years, colorectal cancer has received increased attention due in part to the efforts of advocates and organizations such as the Task Force to increase public and professional awareness. Colorectal screening must become a focused health initiative, as is already the case with breast and prostate cancer screening. Only through recognition of colorectal cancer as a major health problem will we be able to effectively influence incidence and mortality rates.

Clearly, one of the most important priorities for action is to improve public awareness about colorectal cancer as a preventable and curable cancer, about the benefits of colorectal cancer screening, and about the specifics of screening options. Efforts must focus on providers' systematic referral and reminder practices targeting and reaching multiple audiences—including those at increased risk, the uninsured, and other underserved audiences—with messages that encourage specific behavior change. However, education and awareness should not focus solely on those eligible for screening. Evidence suggests that beginning such education among younger populations may increase its effectiveness and lead to better screening outcomes.³⁰ Identifying these audiences and designing effective messages will require a strong research foundation. Collecting data about the public's knowledge, attitudes, and behaviors concerning colorectal cancer will be critical for developing effective communications with the public in general as well as with specific target audiences. In addition to proactive public awareness efforts, professional awareness strategies will be critical in encouraging providers to discuss colorectal cancer and the benefits of screening with their patients, as well as increasing the number of providers who are themselves screened.

Education and awareness activities—for the public, for payers, as well as for healthcare professionals—must continue in order to open and facilitate dialogue between patients and their healthcare providers as a means to increase usage of colorectal cancer screening tests and reduce the burden of disease among New Jersey residents. Outreach programs must be developed to eliminate the personal, social, and economic barriers to colorectal cancer screening.



GOAL CO-1

To raise awareness about colorectal cancer for all residents of New Jersey of *at least* high school age by 2006, with regard to effective measures available for prevention, detection, and treatment to improve the quality of life and survival rates for those diagnosed.

Objective CO-1.1

To target specific educational efforts for subpopulations, including but not limited to, lower socioeconomic status (SES) and high-risk groups, in order to increase awareness of colorectal cancer.

Strategies

- CO-1.1.1** Review the content of the curriculum the New Jersey Department of Education is developing—as supported by Title 18A:40–32 Cancer Awareness Week and Title 18A:40–33 Cancer Awareness Program for School-aged Children—as it relates to colorectal cancer.
- CO-1.1.2** Provide recommendations to the Department of Education for curriculum development for high-school-aged students, specific to colorectal cancer, which would be included with the general cancer education program.

Objective CO-1.2

To increase the knowledge and change the behaviors of women and men with regard to the importance of colorectal cancer screening and the need to request it.

Strategies

- CO-1.2.1** Assess knowledge of colorectal cancer among target populations by conducting qualitative research about New Jersey residents.
- CO-1.2.2** Identify targeted educational interventions to reduce gaps in awareness and behaviors around colorectal cancer screening among men and women 50 years of age and older residing in New Jersey.
- CO-1.2.3** Develop educational interventions for widespread dissemination of messages about colorectal cancer through multi-faceted delivery mechanisms.



Objective CO-1.3

To increase the knowledge and change the behaviors of healthcare providers with regard to the importance of colorectal cancer screening and the need for patient education.

Strategies

- CO-1.3.1** Recommend that healthcare professional organizations educate their members based on identified knowledge gaps regarding screening for colorectal cancer.
- CO-1.3.2** Collaborate with insurers to provide appropriate patient and provider educational materials regarding colorectal cancer screening.

SCREENING

Early detection of colon and rectal cancers is paramount because almost all of these cancers can be cured when discovered in their earliest growth phases. Currently, fewer than 40% of these cancers are diagnosed in the early stages when treatment is most effective.² Screening for colorectal cancer must be promoted and performed for all adults aged 50 years and older and for higher risk younger individuals in New Jersey.

While several screening methods have been tested and used, only colonoscopy can not only detect cancer and pre-cancerous polyps throughout the entire length of the colon, but also remove them, thus preventing development of invasive cancers. As cancers of the proximal colon are more likely to be diagnosed in later stages than those in the distal colon, use of the colonoscopy is increasingly important.³¹

While the colonoscopy may one day be hailed as the “gold standard” in colorectal cancer screening, other screening modalities are currently available. The digital rectal exam (DRE) examines the anus and a very small portion of the rectum. While DRE is always performed at the time of colonoscopy, it is not recommended as a screening method when used alone. Fecal occult blood test (FOBT) or fecal immunochemical test (FIT) have some value when multiple stool samples are tested by an outpatient. However, FOBT is sensitive, highly non-specific for colon cancer, and “false positives” are common, leading to the need for additional testing. FIT is more patient-friendly and has an equal or lower likelihood of false positives than FOBT. Flexible or, especially, rigid sigmoidoscopy examines only a limited part of the entire colon, potentially missing a majority of colon cancers possibly present. Double contrast barium enema (DCBE) is better than sigmoidoscopy but markedly inferior to colonoscopy, while requiring a similar preparation of the colon. Refer to Table 1 for the benefits and limitations of all available colorectal cancer screening mechanisms.



The American Cancer Society recommends that average-risk individuals begin screening at age 50 with one of the following options:

- A fecal occult blood test or fecal immunochemical test every year, OR
- Flexible sigmoidoscopy every 5 years, OR
- An FOBT or FIT every year plus FSIG every 5 years, OR
- Double-contrast barium enema every 5 years, OR
- Colonoscopy every 10 years

The combined use of FOBT or FIT with FSIG every 5 years is preferable to the use of either FOBT or FIT or FSIG alone. A colonoscopy should be performed following a positive result from any other screening option.³²

Despite sufficient evidence that screening and early detection reduces the incidence and mortality of colorectal cancer, screening rates remain low compared to screening for other cancers. Lack of adequate health insurance is a major barrier to colorectal cancer screening.²⁴ Colorectal cancer screening rates among those without any form of health insurance have been estimated to be as low as 32.7%.[†] According to the 2004 New Jersey Behavioral Risk Factor Survey, only 25.9% of New Jersey respondents reported having had a recent FOBT (within the past two years) and 53.2% reported having had a recent sigmoidoscopy or colonoscopy (within the preceding ten years).³³ These percentages are in stark contrast to the 77.8% of women who reported a mammogram in the last two years.³⁴ Contrary to the national trend, New Jersey colorectal cancer screening rates do not differ significantly by race.³⁴

The New Jersey Cancer Education and Early Detection (NJCEED) program provides free and low-cost colorectal cancer screening to uninsured and underinsured individuals at or below 250% of the federal poverty level. Much of the eligible population may be unaware of the services offered by NJCEED. Further, the NJCEED program is funded to provide screening to only a portion of the eligible population, and no funding mechanism exists to provide treatment for those diagnosed under the program. Thus, the Colorectal Cancer Workgroup recommends not only working to increase public awareness of the NJCEED program, but also advocating for expanded funding for NJCEED to cover screening the eligible population, as well as treating those diagnosed.

While lack of adequate health insurance has been identified as a significant barrier to colorectal cancer screening, evidence suggests that even those with health insurance are not taking advantage of the proven benefits of screening. In 2005, only 52.3% of eligible adults with commercial health insurance and 53.9% of eligible Medicare recipients received any kind of colorectal cancer screening.^{‡35} Among the insured population, physician recommendation is a significant factor in colorectal cancer screening. Physicians should be provided with the tools to facilitate discussing colorectal cancer screening with their patients, including physician reminders, health maintenance flow sheets, prevention stickers and stamps, chart reminders, and shared responsibility among office staff.³⁶

[†] Includes FOBT during the past 1 year; flexible sigmoidoscopy during the past 5 years; or colonoscopy or DCBE during the past 10 years.

[‡] Includes FOBT during the past 1 year; flexible sigmoidoscopy or DCBE during the past 5 years; or colonoscopy during the past 10 years.



GOAL CO-2 To increase colorectal cancer screening rates among New Jersey residents.

Objective CO-2.1

To increase colorectal cancer screening rates, particularly among the uninsured and underinsured population in New Jersey.

Strategies

- CO-2.1.1** Partner with NJCEED to educate and change behaviors of target populations regarding measures available for prevention, detection, and treatment of colorectal cancer.
- CO-2.1.2** Promote awareness of the NJCEED program and its services among New Jersey residents.
- CO-2.1.3** Advocate for increased funding for screening and treatment under the NJCEED program.

Objective CO-2.2

To increase colorectal cancer screening rates among the insured population in New Jersey.

Strategies

- CO-2.2.1** Assess the knowledge, attitudes, and practices of healthcare providers regarding colorectal cancer screening through a statewide survey.
- CO-2.2.2** Promote the use of screening reminders and other interventions designed to increase colorectal cancer screening recommendations by physicians.

RESEARCH AND SURVEILLANCE

Effective treatment for colorectal cancer at any stage is available and leads to improved survival and/or quality of life. Disparities in treatment and their causes need to be identified so remedies can be devised.³⁷ Outcomes of New Jersey residents with colorectal cancer can be improved by ensuring that high-quality care is available to all New Jersey residents with colorectal cancer. The Colorectal Cancer Workgroup proposes that high-quality colorectal cancer treatment in New Jersey be improved by increasing the number of patients enrolled in clinical trials.



Clinical trials are the major avenue for discovering, developing, and evaluating new therapies. However, only about 3% of all adult cancer patients participate in clinical trials. It is important to increase physician and patient awareness of, and participation in, clinical trials if we are to test new treatments more rapidly, find more effective treatments, and broaden the options available to patients.³⁸ New Jersey residents with colorectal cancer should have information about and access to clinical trials.

In 1999, members of the New Jersey Association of Health Plans, which represents the state's nine largest health insurers, agreed to voluntarily cover the routine healthcare costs of any of their members enrolled in a Phase I, II, and III approved cancer clinical trial. In addition, the year 2000 Medicaid contract includes this service, and payment has been authorized for routine costs of clinical trials under Medicare. However, this mandate is not carried over to all insurers, although all companies offering coverage in New Jersey have been invited to participate in the agreement. Patients should contact their insurer prior to entering a clinical trial to obtain specific information about covered benefits.³⁹

The Colorectal Cancer Workgroup proposes that participation in clinical trials can be increased in New Jersey if awareness is heightened in the public and among professionals. Additionally, insurance coverage of treatment through clinical trials could be improved by increasing the number of insurance companies offering to cover clinical trial participation.

Ongoing surveillance of new and emerging prevention, early detection, and treatment modalities is important to ensure that physicians remain up to date on the most current methods to reduce the incidence and mortality of colorectal cancer. Virtual colonoscopy and capsule endoscopy, for example, are emerging technologies that are currently being studied for the early detection of colorectal cancer. Close monitoring of emerging data is integral to assessing the efficacy of the strategies set forth in this chapter.

GOAL CO-3	To increase the participation of persons with colorectal cancer in clinical trials.
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Objective CO-3.1

To increase awareness of the availability and importance of clinical trials among New Jersey residents with colorectal cancer and their healthcare providers.

Strategies

CO-3.1.1 Promote participation in and enhance public visibility and understanding of important clinical trials for colorectal cancer.

CO-3.1.2 Promote medical professional training and education on clinical trials to ensure that physicians are able to convey information accurately on the need for and procedures for enrolling in clinical trials.



GOAL CO-4

To ensure that New Jersey residents and physicians remain up to date on the most currently available colorectal cancer technologies and resources.

Objective CO-4.1

To continue to monitor and disseminate current advances in colorectal cancer prevention, screening, diagnosis, and treatment.

Strategies

- CO-4.1.1** Conduct periodic literature reviews to determine the state of the science in colorectal cancer research and to identify potentially promising new technologies.
- CO-4.1.2** Work with stakeholders to disseminate, as they become available, evidence-based advances to healthcare providers through CME offerings.

Objective CO-4.2

To continue to monitor and disseminate current advances in colorectal cancer prevention, screening, diagnosis, and treatment.

Strategy

- CO-4.2.1** Request appropriate data, as needed, from the New Jersey State Cancer Registry and other applicable sources.



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