

# Chronic Disease in Texas



A Report of the Bureau of Chronic Disease and Tobacco Prevention  
Texas Department of Health

## Screening for Colorectal Cancer in Texas - 2001

### ABSTRACT

Estimated prevalences for the use of colorectal cancer screening are low. Results of this survey show that only 41 percent of Texas adults aged 50 years or older had ever had a fecal occult blood test (FOBT), 37 percent had ever had a sigmoidoscopy, while 33 percent had ever had a colonoscopy. While the proportion of adult Texans 50 years and older who reported having a FOBT within the past year increased significantly (from 17.5 percent [95% confidence interval—CI, 15.4%–19.6%] in 1999<sup>1</sup> to 42.8 percent [95% CI, 37.5%–48.0%] in 2001), the proportion of adult Texans 50 years or older who reported having had a sigmoidoscopy within the past 5 years decreased significantly (from 32.8 percent [95% CI, 30.1%–35.4%] in 1999<sup>1</sup> to 23.6 percent [95% CI, 18.8%–28.3%] in 2001). Overall results show continuing underuse of these screening tests, despite their effectiveness in reducing incidence and mortality from colorectal cancer. Furthermore, efforts to increase colorectal cancer awareness and promote the use of colorectal cancer screening exams at regular intervals need to be improved.

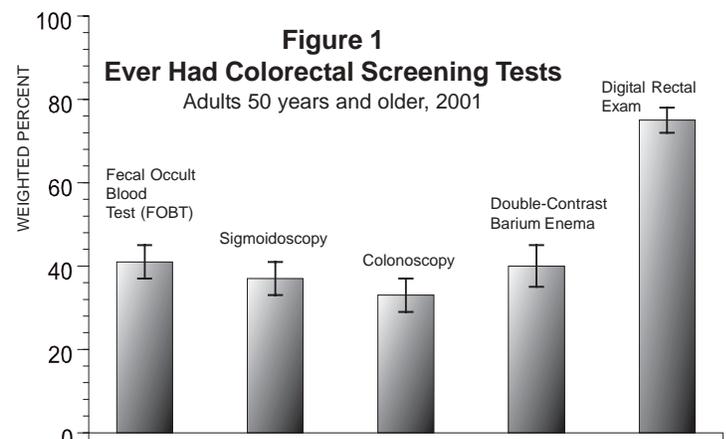
### INTRODUCTION

Colorectal cancer — or cancer of the colon or rectum — is the

second leading cause of cancer-related death in Texas and in the United States after lung cancer.<sup>2</sup> The American Cancer Society estimates that about 56,700

Americans will die of colorectal cancer this year.<sup>2</sup> Colorectal cancer is one of the most commonly diagnosed cancers for both men and women in the United States. Approximately 135,400 new cases will be diagnosed this year. For men, colorectal cancer follows prostate and lung cancers in incidence; for women, it follows breast and lung cancers.<sup>2</sup>

The risk of developing colorectal cancer increases with advancing age. Risk factors include having inflammatory bowel disease, a personal or family history of colorectal cancer or colorectal polyps, and certain hereditary syndromes. Lack of regular physical activity also contributes to a person's risk for colorectal cancer. Other factors that might contribute to the risk of the disease include low fruit and vegetable intake, a low fiber and high-fat diet, obesity, alcohol consumption and tobacco use.<sup>2</sup>



Reducing the number of deaths from colorectal cancer chiefly depends on detecting and removing precancerous colorectal polyps as well as detecting and treating the cancer in the early stages. Removing precancerous polyps, which can be present in the colon for years before invasive cancer develops, can prevent colorectal cancer.

The US Preventive Services Task Force, the American Cancer Society, and the Interdisciplinary Task Force (convened by the Agency for Healthcare Research and Quality and supported by five major gastroenterology societies) developed detailed guidelines for colorectal cancer screening.<sup>3,4,5</sup>

Since the mid-1990s, these guidelines have recommended that persons aged 50 years or older should have screening tests regularly. The U.S. Preventive Services Task Force recommends annual fecal

occult blood testing and sigmoidoscopy (periodicity unspecified).<sup>3</sup> The American Cancer Society<sup>4</sup> and major gastroenterology societies<sup>5</sup> provide additional options for screening in their guidelines summarized below:

***Recommended screening procedures include the following tests:***

- FOBT every year
- Flexible sigmoidoscopy every 5 years
- Total colon examination by colonoscopy every 10 years or by double-contrast barium enema every 5-10 years.<sup>3,4,5</sup>

Previous estimates on the rates for the use of colorectal cancer screening tests indicate that the proportion of Texans 50 years and older who have been screened remains low.<sup>1</sup> Specifically, data collected in 1997 show that only about 20 percent of adult Texans 50 years or older reported they had received a fecal occult blood test (FOBT) within the past year, while 27.5 percent reported that they had received a sigmoidoscopy within the past 5 years.<sup>6</sup> Follow-up data in 1999 show that the proportion of adult Texans aged 50+ who had a FOBT in the preceding year decreased, while those having a sigmoidoscopy within the preceding 5 years increased slightly compared to data collected in 1997 (17.5 percent for FOBT and 32.8 percent for sigmoidoscopy for 1999).<sup>1</sup>

To estimate recent rates for the use of colorectal cancer screening

tests, the Texas Department of Health analyzed data from the 2001 Behavioral Risk Factor Surveillance System (BRFSS) survey on colorectal screening. This report summarizes the results of this analysis.

## METHODS

We used data from the colorectal cancer survey collected by the BRFSS from February through April 2001. The BRFSS is a population-based, random-digit-dialed telephone survey of the noninstitutionalized, Texas population aged 18 years and older. This survey used a truncated, list-assisted type of cluster sampling. For the colorectal cancer survey, a total of 998 persons aged 50 years and older were asked the following questions regarding screening tests (including multiple choice answers regarding periodicity):

**Question:** *A blood stool test is a test that may use a special kit at home to determine whether the stool contains blood. Have you ever had this test using a home kit? When did you have your last blood stool test using a home kit?*

**Question:** *A sigmoidoscopy is when a tube is inserted into the rectum to view the last foot or so of the bowel for signs of cancer and other health problems. Have you ever had this exam? How long has it been since your last sigmoidoscopy?*

**Question:** *A colonoscopy is when a tube is inserted into the rectum to view the entire bowel for signs of cancer and other health problems. Have you ever had this exam? How long has it been since your last colonoscopy?*

**Question:** *Have you ever had a digital rectal examination (when a doctor inserts a finger in the rectum to check for problems)? When did you have your last digital rectal exam?*

**Question:** *A double-contrast barium enema, sometimes called a barium enema with air contrast, is an enema of a chemical given through the rectum to partially fill and open the colon, after which X-rays are taken. Have you ever heard of this test? Have you ever had a double-contrast barium enema? When was the last time you had a double-contrast barium enema?*

In addition, health status questions were asked regarding such indicators as awareness of colorectal cancer and polyps, and knowledge and attitudes regarding colorectal cancer. Respondents also were asked if their doctors counsel them about the risks and benefits of early cancer detection, and whether they have seen articles or advertising that inform the public about the risks of colorectal cancer.

Responses coded as “don’t know/not sure” or “refused” were excluded from the analyses. Data were weighted to the distribution of the Texas adult population using 2001 intercensal estimates. Weights were also adjusted for the number of telephone numbers per household, the number of adults in the household, and the demographic distribution of the survey sample. Proportions, standard errors, and 95 percent confidence intervals were calculated using SPSS and SUDAAN statistical software.

## RESULTS

In this colorectal cancer survey of persons aged 50 years and older, whites comprised more than 70 percent of the respondent group. Hispanics represented 18 percent of the respondents, Blacks represented 6 percent and those categorized as others accounted for 3 percent. Women comprised 55 percent of the respondents, while men accounted for 45 percent.

More than 77 percent of the respondents graduated from high school. About 37 percent have retired, while about 32 percent are still employed. About 35 percent of the respondents have household income of at least \$50,000.

## HEALTH STATUS INDICATORS

### Fair or Poor Health Status

The percentage of adults aged 50+ who reported fair or poor health status was 27.1 percent (95% CI, 24.0%–30.1%).

The age-specific percentage of adults who reported fair or poor health status ranged from 20.4 percent to 41.2 percent. The percentage was 20.4 percent for those between 50 and 59 years of age (95% CI, 16.4%–24.3%), 27.6 percent for those between 60 and 75 years of age (95% CI, 23.7%–31.6%), and 41.2 percent for those who were older than 75 years of age (95% CI, 32.1%–50.2%).

The sex-specific percentage of adults aged 50+ who reported fair or poor health status was 23.3 percent for males (95% CI, 18.8%–27.9%) and 30.2 percent for females (95% CI, 26.1%–34.2%).

### Awareness of Colorectal Cancer

The percentage of adults aged 50+ who reported having ever been told by a doctor that they had colorectal cancer was 2.5 percent (95% CI, 1.2%–3.7%).

The age-specific percentage of adults who reported being told by a doctor that they had colorectal cancer ranged from 0.3 percent to 8.1 percent. The percentage was 0.3 percent for those between 50 and 59 years of age (95% CI, 0.2%–0.3%), 2.1 percent for those between 60 and 75 years of age (95% CI, 0.6%–3.6%), and 8.1 percent for those older than 75 years of age (95% CI, 2.69%–13.5%).

The sex-specific percentage of adults aged 50+ who reported having ever been told by a doctor that they had colorectal cancer was 2.8 percent for males (95% CI, 0.5%–5.0%) and 2.2 percent for females (95% CI, 0.9%–3.5%).

### Awareness of polyps removed from the colon

The percentage of adults aged 50+ who reported that they had growths, sometimes called polyps, removed from the colon was 11.9 percent (95% CI, 9.5%–14.2%).

The age-specific percentage of adults who reported that they had growths, sometimes called polyps, removed from the colon ranged from 6.2 percent to 24.9 percent. The percentage was 6.2 percent for those between 50 and 59 years of age (95% CI, 3.6%–8.8%), 11.8 percent for those who were between 60 and 75 years of age (95% CI, 8.5%–15.1%), and 24.9 percent for those who were older than 75 years of age (95% CI, 16.9%–32.9%).

The sex-specific percentage of adults aged 50+ who reported that they had growths, sometimes called polyps, removed from the colon was 13.6 percent for males (95% CI, 9.6%–17.5%) and 10.5 percent for females (95% CI, 7.8%–13.1%).

## CLINICAL PREVENTIVE SERVICES - COLORECTAL SCREENING

### Fecal Occult Blood Test (FOBT)

**Ever used**—Results of the study show that the percentage of adults aged 50+ who reported ever using a home kit blood stool test (also known as a fecal occult blood test) was 41.4 percent (95% CI, 38.0%–44.8%) (Figure 1, Table 1).

The age-specific percentage of adults who reported ever using a home kit blood stool test ranged from 36.1 percent to 43.0 percent. The percentage was 36.1 percent for those between 50 and 59 years of age (95% CI, 31.2%–41.0%), 46.7 percent for those between 60 and 75 years of age (95% CI, 41.5%–51.9%), and 43.0 percent for those older than 75 years of age (95% CI, 34.0%–52.0%).

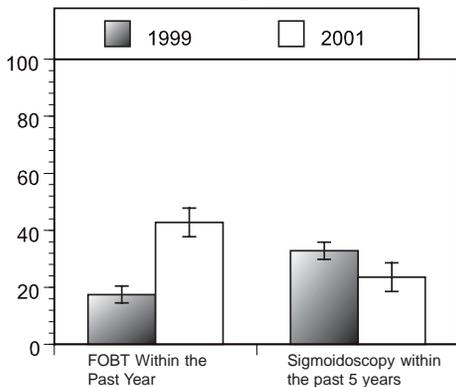
The sex-specific percentage of adults aged 50+ who reported ever using a home kit blood stool test was 38.0 percent for males (95% CI, 32.7%–43.2%) and 44.2 percent for females (95% CI, 39.9%–48.6%).

**Received test within the past year**—Results of the study show that the percentage of adults aged 50+ who reported receiving a home kit blood stool test within the past year was 42.8 percent (95% CI, 37.5%–48.0%) (Figure 2, Table 2).

The age-specific percentage of adults who reported using a home kit blood stool test within the past year ranged from 35.3 percent to 46.1 percent. The percentage was 46.1 percent for those between 50 and 59 years of age (95% CI, 37.7%–54.6%), 43.1 percent for those between 60 and 75 years of age (95% CI, 35.5%–50.7%), and 35.3 percent for those older than 75 years of age (95% CI, 21.6%–49.0%).

The sex-specific percentage of adults aged 50+ who reported using a home kit blood stool test within the past year was 43.8 percent for males (95% CI, 35.1%–52.5%) and 41.9 percent for females (95% CI, 35.4%–48.5%).

**Figure 2**  
% of Adults Aged 50+ Who Had Colorectal Screening Tests Within Recommended Time 2001



## Sigmoidoscopy

**Ever Had**—Results of the study show that the percentage of adults aged 50+ who reported ever having a sigmoidoscopy was 37.2 percent (95% CI, 33.8%–40.6%) (Figure 1, Table 1).

The age-specific percentage of adults who reported ever having a sigmoidoscopy ranged from 25.6 percent to 46.3 percent. The

percentage was 25.6 percent for those between 50 and 59 years of age (95% CI, 21.2%–30.0%), 46.2 percent for those between 60 and 75 years of age (95% CI, 41.0%–51.4%), and 46.3 percent for those older than 75 years of age (95% CI, 36.9%–55.6%).

The sex-specific percentage of adults aged 50+ who reported ever having a sigmoidoscopy was 40.3 percent for males (95% CI, 35.0%–45.6%) and 34.6 percent for females (95% CI, 30.4%–38.8%).

**Had exam within the past 5 years**—Table 2 and Figure 2 show that the percentage of adults aged 50+ who reported having a sigmoidoscopy within the past 5 years was 23.6 percent (95% CI, 18.8%–28.3%).

The age-specific percentage of adults who reported having a sigmoidoscopy within the past 5 years ranged from 22.8 percent to 24.3 percent. The percentage was 23.1 percent for those between 50 and 59 years of age (95% CI, 14.7%–31.4%), 24.3 percent for those between 60 and 75 years of age (95% CI, 17.7%–30.8%), and 22.8 percent for those who were older than 75 years of age (95% CI, 11.4%–34.1%).

The sex-specific percentage of adults aged 50+ who reported having a sigmoidoscopy within the past 5 years was 23.2 percent for males (95% CI, 16.1%–30.2%) and 24.0 percent for females (95% CI, 17.5%–30.4%).

## Colonoscopy

**Ever had**—Table 1 and Figure 1 show that the percentage of adults aged 50+ who reported ever having

a colonoscopy was 32.7 percent (95% CI, 29.5%–36.0%).

The age-specific percentage of adults who reported ever having a colonoscopy ranged from 22.5 percent to 43.6 percent. The percentage was 22.5 percent for those who were between 50 and 59 years of age (95% CI, 18.2%–26.8%), 39.3 percent for those who were between 60 and 75 years of age (95% CI, 34.1%–44.4%), and 43.6 percent for those who were older than 75 years of age (95% CI, 34.3%–52.8%).

The sex-specific percentage of adults aged 50+ who reported ever having a colonoscopy was 33.9 percent for males (95% CI, 28.7%–39.1%) and 31.8 percent for females (95% CI, 27.7%–35.9%).

**Received exam within the past 5 years**—The percentage of adults aged 50+ who reported receiving the exam within the past 5 years was 20.5 percent (95% CI, 15.6%–25.4%) (Table 2).

The age-specific percentage of adults who reported having a colonoscopy within the past 5 years ranged from 14.4 percent to 26.2 percent. The percentage was 14.4 percent for those between 50 and 59 years of age (95% CI, 6.6%–22.1%), 26.2 percent for those between 60 and 75 years of age (95% CI, 18.8%–33.5%), and 17.6 percent for those older than 75 years of age (95% CI, 7.2%–28.1%).

The sex-specific percentage of adults aged 50+ who reported having a colonoscopy within the past 5 years was 24.1 percent for males (95% CI, 16.1%–32.2%) and 17.2 percent for females (95% CI, 11.5%–22.8%).

## Double-Contrast Barium Enema

**Ever had**—Table 1 and Figure 1 show that the percentage of adults aged 50+ who reported ever having a double-contrast barium enema was 39.8 percent (95% CI, 35.4%–44.2%).

The age-specific percentage of adults who reported ever having a double-contrast barium enema ranged from 31.1 percent to 51.0 percent. The percentage was 31.1 percent for those between 50 and 59 years of age (95% CI, 25.1%–37.0%), 45.7 percent for those between 60 and 75 years of age (95% CI, 38.8%–52.5%), and 51.0 percent for those older than 75 years of age (95% CI, 38.4%–63.6%).

The sex-specific percentage of adults aged 50+ who reported ever having a double-contrast barium enema was 41.1 percent for males (95% CI, 33.8%–48.5%) and 38.8 percent for females (95% CI, 33.5%–44.2%).

**Received exam within the past 5 years**—The percentage of adults aged 50+ who reported receiving a double-contrast barium enema within the past 5 years was 16.5 percent (95% CI, 11.3%–21.7%).

The age-specific percentage of adults who reported receiving the exam within the past 5 years ranged from 13 percent to 18.5 percent. The percentage was 16.0 percent for those between 50 and 59 years of age (95% CI, 7.6%–24.4%), 18.5 percent for those between 60 and 75 years of age (95% CI, 10.8%–26.2%), and 12.7 percent for those older than 75 years of age (95% CI, 0%–25.5%).

The sex-specific percentage of adults aged 50+ who reported receiving the exam within the past 5 years was 15.5 percent for males (95% CI, 7.1%–24.0%) and 17.3 percent for females (95% CI, 10.8%–23.7%).

## Digital Rectal Exam (DRE)

Digital rectal examination (DRE) is another test to detect colorectal cancer, however, it can inspect only a limited area and is not recommended as a screening method.

**Ever had**—Table 1 and Figure 1 show that the percentage of adults aged 50+ who reported ever having a digital rectal examination was 75.2 percent (95% CI, 72.2%–78.1%).

The age-specific percentage of adults who reported ever having a digital rectal examination ranged from 69.8 percent to 76.9 percent. The percentage was 76.1 percent for those between 50 and 59 years of age (95% CI, 71.8%–80.3%), 76.9 percent for those between 60 and 75 years of age (95% CI, 72.5%–81.3%), and 69.8 percent for those older than 75 years of age (95% CI, 61.4%–78.3%).

The sex-specific percentage of adults aged 50+ who reported ever having a digital rectal examination was 80.2 percent for males (95% CI, 75.9%–84.4%) and 71.0 percent for females (95% CI, 66.9%–75.1%).

## KNOWLEDGE AND ATTITUDES

### Thinks that if colorectal cancer is found early, chances of survival are greater

The percentage of adults aged 50+ who think that finding colorectal cancer early increases chances of survival is 93.5 percent (95% CI, 91.7%–96.3%).

The age-specific percentage of adults who think that if colorectal cancer is found early the chances of survival are greater ranged from 90.9 percent to 95.0 percent. The percentage was 93.4 percent for those between 50 and 59 years of age (95% CI, 90.62%–96.1%), 95.0 percent for those between 60 and 75 years of age (95% CI, 92.7%–97.3%), and 90.9 percent for those older than 75 years of age (95% CI, 85.1%–96.7%).

The sex-specific percentage of adults aged 50+ who think that if colorectal cancer is found early the chances of survival are greater was 92.9 percent for males (95% CI, 89.9%–95.8%) and 94.1 percent for females (95% CI, 91.8%–96.4%).

### “In terms of personal risk, what are your chances of developing colorectal cancer?”

The percentage of adults aged 50+ who think that their own chance of developing colorectal cancer is high was 8.9 percent (95% CI, 6.8%–10.9%).

The age-specific percentage of adults who think that their own chance of developing colorectal cancer is high ranged from 7.7 percent to 12.9 percent. The percentage was 7.7 percent for those between 50 and 59 years of age

(95% CI, 4.9%–10.5%), 8.3 percent for those between 60 and 75 years of age (95% CI, 5.4%–11.2%), and 12.9 percent for those older than 75 years of age (95% CI, 6.0%–19.8%).

The sex-specific percentage of adults aged 50+ who think that their own chance of developing colorectal cancer is high was 7.4 percent for males (95% CI, 4.3%–10.5%) and 10.0 percent for females (95% CI, 7.3%–12.8%).

### “Did your doctor counsel you about the risks and benefits of early detection?”

The percentage of adults aged 50+ who reported that their doctor counseled them about the risks and benefits of early detection was 50.2 percent (95% CI, 46.8%–53.7 %).

The age-specific percentage of adults who reported that their doctor counseled them about the risks and benefits of early detection ranged from 45.3 percent to 54.3 percent. The percentage was 48.8 percent for those between 50 and 59 years of age (95% CI, 43.7%–54.0%), 54.3 percent for those between 60 and 75 years of age (95% CI, 49.1%–59.5%), and 45.3 percent for those older than 75 years of age (95% CI, 36.1%–54.5%).

The sex-specific percentage of adults aged 50+ who reported that their doctor counseled them about the risk and benefits of early detection was 53.0 percent for males (95% CI, 47.5%–58.4%) and 48.0 percent for females (95% CI, 43.6%–52.3%).

### Articles or advertising about the risks of colorectal cancer

The percentage of adults aged 50+ who reported that they saw articles or advertising about the risks of colorectal cancer during the past 6 months was 51.9 percent (95% CI, 48.4%–55.4 %).

The age-specific percentage of adults who reported that they saw articles or advertising about the risks of colorectal cancer during the past 6 months ranged from 47.5 percent to 53.9 percent. The percentage was 52.1 percent for those between 50 and 59 years of age (95% CI, 47.0%–57.3%), 53.9 percent for those who were between 60 and 75 years of age (95% CI, 48.6%–59.2%), and 47.5 percent for those older than 75 years of age (95% CI, 38.3%–56.7%).

The sex-specific percentage of adults aged 50+ who reported that they saw articles or advertising about the risks of colorectal cancer during the past 6 months was 46.6 percent for males (95% CI, 41.1%–52.0%) and 56.4 percent for females (95% CI, 51.9%–60.8%).

### Places where these articles or advertisements were seen

Percentages of adults aged 50+ who reported that they saw articles or advertisements regarding information about risks of colorectal cancer in the following places or media are as follows:

- **Magazine:** 30.9%  
(95% CI, 24.2%–37.6%)
- **Doctors Office:** 12.3%  
(95% CI, 7.4%–17.1%)
- **TV:** 36.7%  
(95% CI, 29.7%–43.7%)

- **Radio:** 0.2%  
(95% CI, -0.2%–0.5%)
- **Health Newsletter:** 8.5%  
(95% CI, 4.6%–12.5%)
- **Other:** 11.5%  
(95% CI, 6.8%–16.2%)

### Articles or advertising about the potential benefits of early detection of colorectal cancer

The percentage of adults aged 50+ who reported seeing articles or advertising regarding information about the potential benefits of early detection of colorectal cancer during the past 6 months was 52.2 percent (95% CI, 48.7%–55.7 %).

The age-specific percentage of adults who reported seeing articles or advertising regarding information about the potential benefits of early detection of colorectal cancer during the past 6 months ranged from 47.3 percent to 55.6 percent. The percentage was 51.5 percent for those between 50 and 59 years of age (95% CI, 46.4%–56.7%), 55.6 percent for those between 60 and 75 years of age (95% CI, 50.3%–61.0%), and 47.3 percent for those older than 75 years of age (95% CI, 38.1%–56.4%).

The sex-specific percentage of adults aged 50+ who reported that they saw articles or advertising regarding information about the potential benefits of early detection of colorectal cancer during the past 6 months was 49.5 percent for males (95% CI, 44.0%–55.1%) and 54.4 percent for females (95% CI, 49.9%–58.8%).

### Places where these articles or advertisements were seen

Percentages of adults aged 50+ who reported that they saw articles or advertisements regarding information on potential benefits of early detection of colorectal cancer in the following places or media are as follows:

- **Magazine:** 31.0%  
(95% CI, 26.5%–35.5%)
- **Doctors Office:** 7.7%  
(95% CI, 5.3%–10.2%)
- **TV:** 42.2%  
(95% CI, 37.3%–47.0%)
- **Radio:** 1.3%  
(95% CI, 0.2%–2.4%)
- **Health Newsletter:** 7.7%  
(95% CI, 5.1%–10.2%)
- **Other:** 10.2%  
(95% CI, 7.2%–13.2%)

### RECOMMENDATIONS:

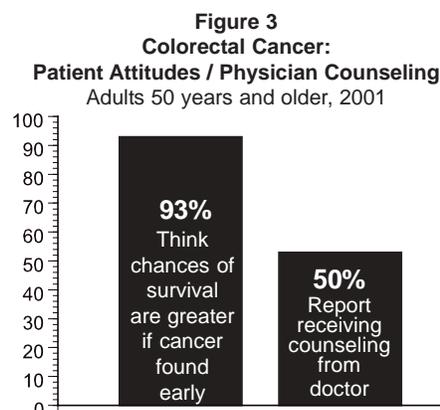
Results of the survey show that while over 93 percent of Texas adults 50 years and older think that the chances of survival are greater if colorectal cancer is found early, only 50 percent reported that their doctor counseled them about the risks and benefits of early detection (Figure 3).

Furthermore, only about 52 percent reported that they saw articles or advertising regarding information about the potential benefits of early detection of colorectal cancer screening during the past 6 months.

Estimated rates for the use of colorectal cancer screening are also low. Results of this survey show that only 41 percent of Texas adults aged 50 years or older have ever had

a FOBT, 37 percent have ever had a sigmoidoscopy, and 33 percent have ever had a colonoscopy. While the proportion of adult Texans 50 years and older who reported having had FOBT within the past year increased significantly (from 17.5 percent [95% CI, 15.4%–19.6%] in 1999 to 42.8 percent [95% CI, 37.5%–48.9%] in 2001), the proportion of adult Texans 50 years or older who reported having had a sigmoidoscopy within the past 5 years decreased significantly (from 32.8 percent [95% CI, 30.1%–35.4%] in 1999 to 23.6 percent [95% CI, 18.8%–28.3%] in 2001).

While study results indicate an increase in the utilization of FOBT (using home kits), overall results show continuing underuse of these screening tests, despite their effectiveness in reducing incidence and mortality from colorectal cancer. Furthermore, efforts to increase colorectal cancer awareness and promote the use of colorectal cancer screening exams at regular interval need to be improved.



### REFERENCES

1. Centers for Disease Control and Prevention. Trends in screening for colorectal cancer – United States, 1997 and 1999. *MMWR* 2001;50(09):162-166.
2. American Cancer Society. Cancer facts and figures, 2001. Atlanta, Georgia: American Cancer Society, 2001 (publication no. 5008.01).
3. U.S. Preventive Services Task Force. Guide to Clinical Preventive Services. 2nd Edition. Washington, DC, U.S. Department of Health and Human Services, 1996.
4. American Cancer Society. Guidelines for the Early Detection of Cancer. *CA Cancer J Clin* 2001;51:38-75.
5. American Gastroenterological Association. Colorectal Cancer Screening: Clinical Guidelines and Rationale. *Gastroenterology* 1997 Feb;112(2):594-642.
6. Centers for Disease Control and Prevention. Screening for colorectal cancer—United States, 1997. *MMWR* 1999;48(06):116-121.

**Chronic Disease in Texas** is published by the Bureau of Chronic Disease and Tobacco Prevention at Texas Department of Health, 1100 West 49th Street, Austin, Texas 78756-3199  
**Phone: (512) 458-7200**

An electronic version of this publication can be found at <http://www.tdh.state.tx.us/bdip>

#### Prepared by:

**Celan J. Alo, M.D., M.P.H.**  
Epidemiologist

**Philip Huang, M.D., M.P.H.**  
Chief, Bureau of Chronic Disease and Tobacco Prevention

**Kenneth W. Condon**  
Director, Behavioral Risk Factor Surveillance System

**Richard Kropp**  
Editor

**Table 1. Proportion of respondents aged 50 years or older who reported ever having a colorectal cancer screening test by selected characteristics—Texas Behavioral Risk Factor Surveillance System (BRFSS), 2001**

Characteristic	Ever had fecal occult blood test			Ever had sigmoidoscopy			Ever had colonoscopy			Ever had double contrast barium enema			Ever had digital rectal exam		
	Sample Size	%	95% CI	Sample Size	%	95% CI	Sample Size	%	95% CI	Sample Size	%	95% CI	Sample Size	%	95% CI
<b>SEX</b>															
Males	388	<b>38.0</b>	32.7-43.2	380	<b>40.3</b>	35.0-45.6	380	<b>33.9</b>	28.7-39.1	202	<b>41.1</b>	33.8-48.5	386	<b>80.2</b>	75.9-84.4
Females	602	<b>44.2</b>	39.9-48.6	589	<b>34.6</b>	30.4-38.8	590	<b>31.8</b>	27.7-35.9	365	<b>38.8</b>	33.5-44.2	590	<b>71.0</b>	66.9-75.1
<b>Age Group</b>															
50-59	441	<b>36.1</b>	31.2-41.0	433	<b>25.6</b>	21.2-30.0	435	<b>22.5</b>	18.2-26.8	266	<b>31.1</b>	25.1-37.0	435	<b>76.1</b>	71.8-80.3
60-75	405	<b>46.7</b>	41.5-51.9	400	<b>46.2</b>	41.0-51.4	398	<b>39.3</b>	34.1-44.4	228	<b>45.7</b>	38.8-52.5	401	<b>76.9</b>	72.5-81.3
76+	144	<b>43.0</b>	34.0-52.0	136	<b>46.3</b>	36.9-55.6	137	<b>43.6</b>	34.3-52.8	73	<b>51.0</b>	38.4-63.6	140	<b>69.8</b>	61.4-78.3
<b>Race Groups</b>															
Whites	703	<b>47.0</b>	42.9-50.9	689	<b>40.4</b>	36.4-44.4	691	<b>35.3</b>	18.2-26.8	473	<b>40.7</b>	35.9-45.5	694	<b>79.7</b>	76.4-83.0
Hispanics	176	<b>23.6</b>	16.6-30.6	171	<b>24.5</b>	17.3-31.7	169	<b>22.5</b>	15.4-29.6	51	<b>36.4</b>	22.8-50.0	172	<b>59.2</b>	51.4-67.0
African Americans	69	<b>27.8</b>	16.6-39.0	69	<b>39</b>	25.9-52.1	70	<b>36.7</b>	23-49.7	26	<b>43.1</b>	22.3-63.9	69	<b>76.3</b>	66.0-86.6
<b>TOTAL</b>	990	<b>41.4</b>	38.0-44.8	969	<b>37.2</b>	33.8-40.6	970	<b>32.7</b>	29.5-36.0	567	<b>39.8</b>	35.4-44.2	976	<b>75.2</b>	72.2-78.1

**Table 2. Proportion of respondents aged 50 years or older who reported having had colorectal cancer screening tests within recommended time intervals—Texas BRFSS, 2001**

Characteristic	Fecal occult blood test within the past year			Sigmoidoscopy within the past 5 years			Colonoscopy within the past 5 years		
	Sample Size	%	95% CI	Sample Size	%	95% CI	Sample Size	%	95% CI
<b>SEX</b>									
Males	143	<b>43.8</b>	35.1-52.5	153	<b>23.2</b>	16.1-30.2	125	<b>24.1</b>	16.1-32.2
Females	261	<b>41.9</b>	35.4-48.5	204	<b>24.0</b>	17.5-30.4	184	<b>17.2</b>	11.5-22.8
<b>Age Group</b>									
50-59	160	<b>46.1</b>	37.7-54.6	119	<b>23.1</b>	14.7-31.4	96	<b>14.4</b>	6.6-22.1
60-75	184	<b>43.1</b>	35.5-50.7	180	<b>24.3</b>	17.7-30.8	155	<b>26.2</b>	18.8-33.5
76+	60	<b>35.3</b>	21.6-49.0	58	<b>22.8</b>	11.4-34.1	58	<b>17.6</b>	7.2-28.1
<b>TOTAL</b>	404	<b>42.8</b>	37.5-48.0	357	<b>23.6</b>	18.8-28.3	309	<b>20.5</b>	15.6-25.4