

Overview of Colorectal Cancer

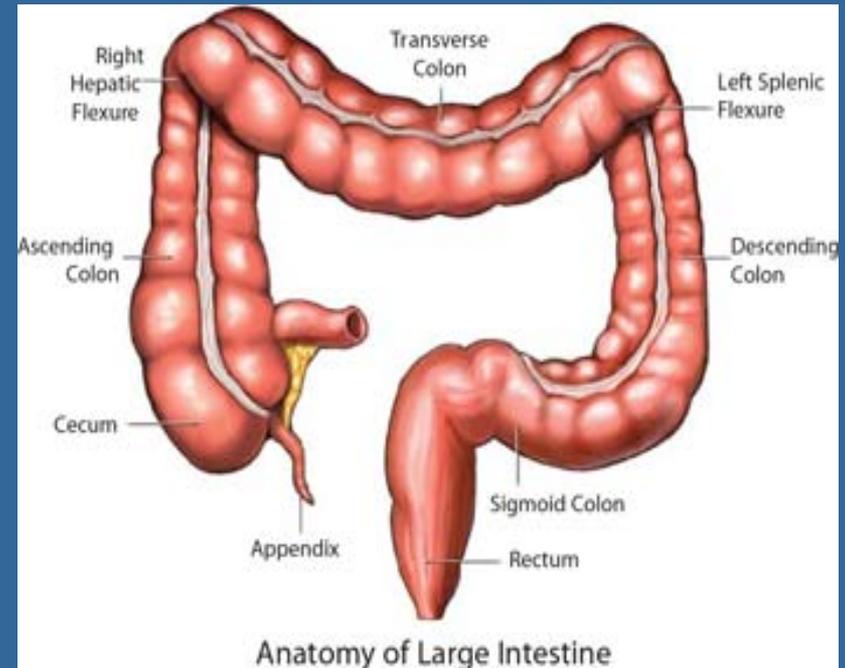


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Did you know that
colorectal cancer
is the second leading cause of
cancer deaths in Maryland?

What is colorectal cancer?

- Cancer that begins in the colon (bowel or large intestine) or rectum is known as colorectal cancer
 - The colon is about 5 feet long.
 - Colorectal cancer can occur any section of the colon or the rectum.



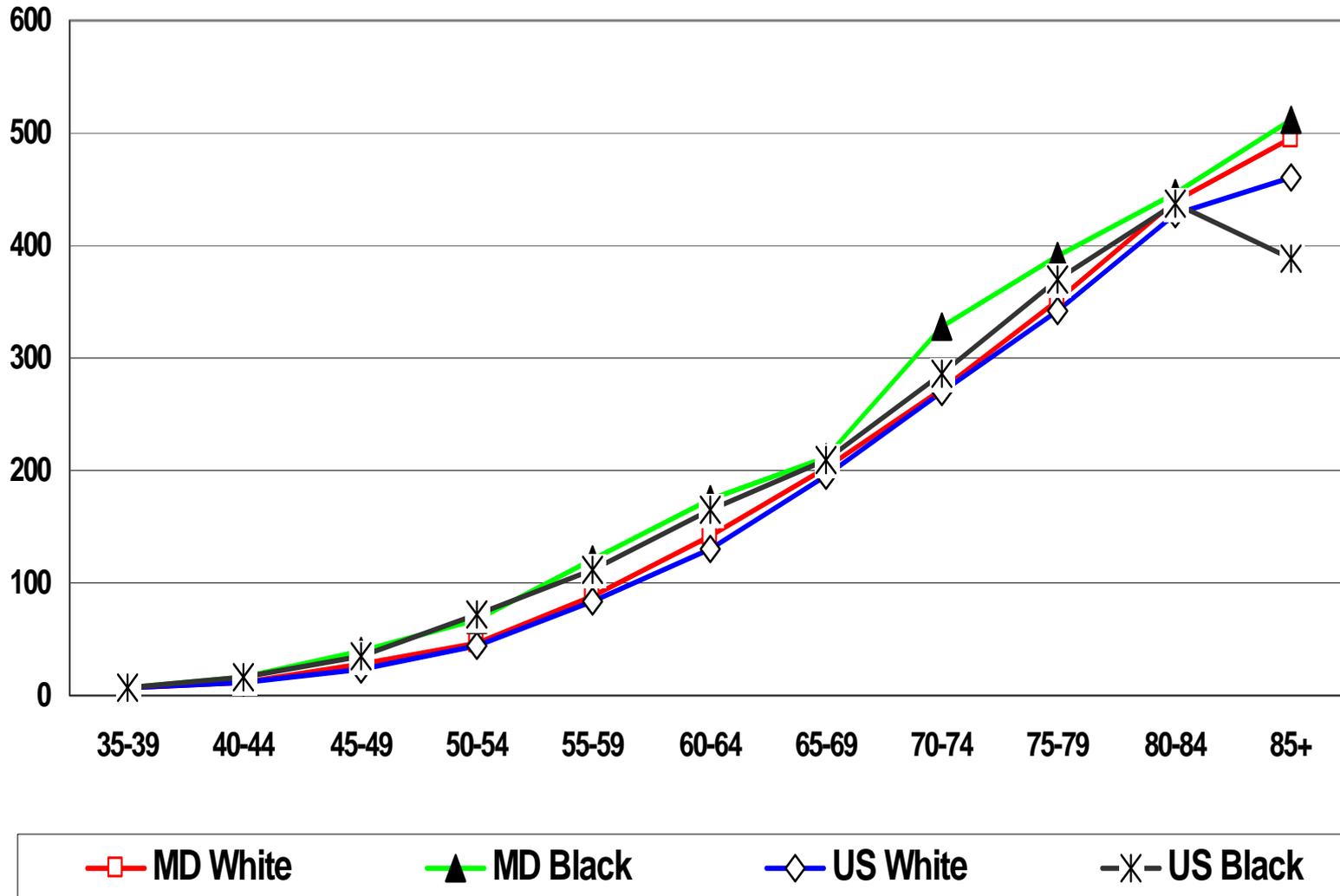
How many people get colorectal cancer and die from it?

- It is estimated that about 154,000 people developed colorectal cancer and 52,180 died from the cancer in US in 2007*
- In Maryland in 2007:
 - 2,870 individuals were projected to develop colorectal cancer and
 - 970 estimated to die from the cancer *

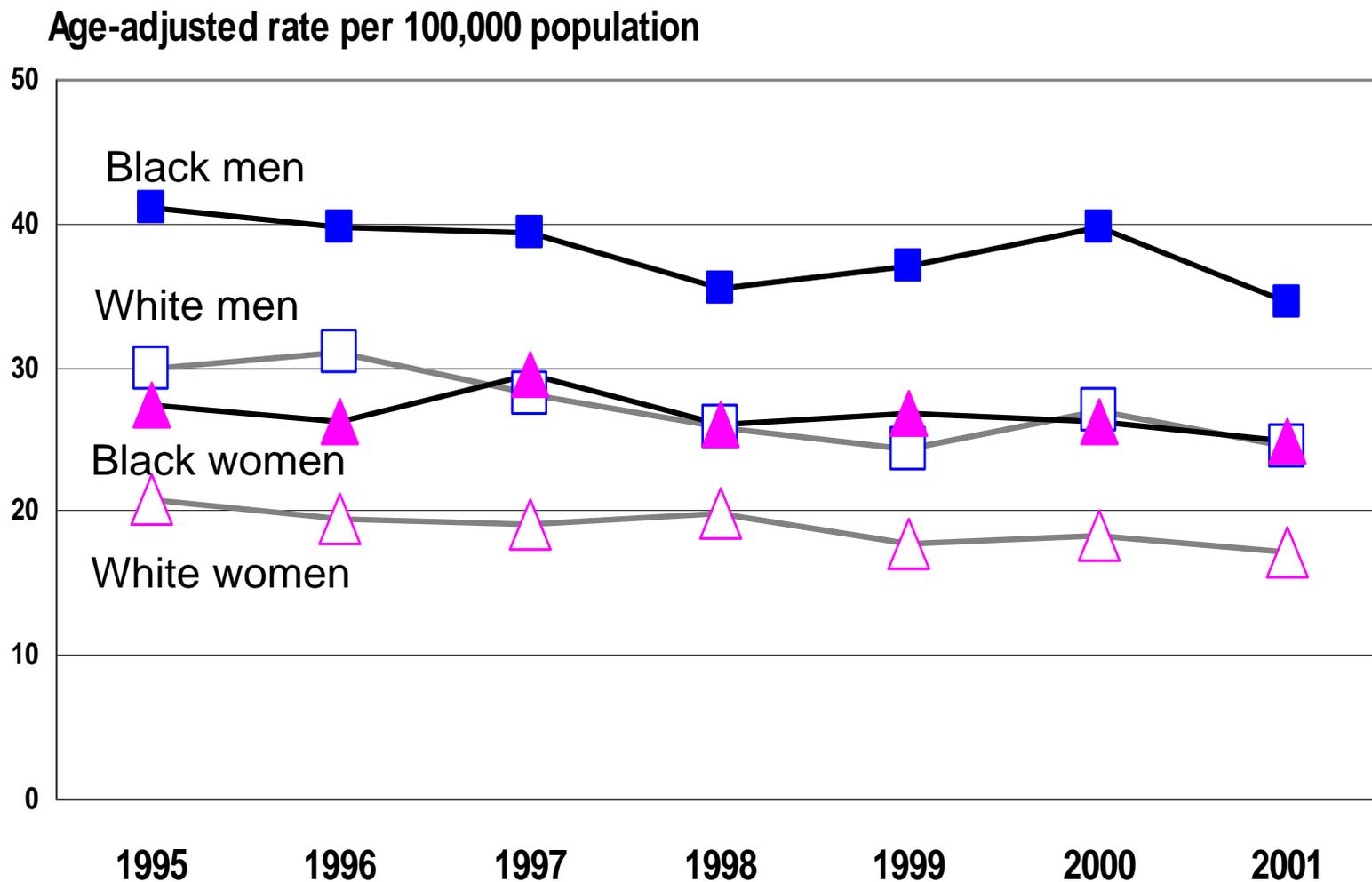
* American Cancer Society's Cancer Facts and Figures 2007

Colorectal Cancer Age-Specific Incidence Rates by Race, Maryland and the United States, 1995-1999

Age-specific rate per 100,000 population



Colorectal Cancer Mortality Rates by Race and Sex in Maryland, 1995-2001



What causes colorectal cancer?

- It is not known exactly what causes colorectal cancer
 - But there are risk factors that increase chances for colorectal cancer:
 - Some risk factors cannot be changed--- age, personal and family history
 - Some risk factors can be changed or eliminated---tobacco use, obesity, inactivity

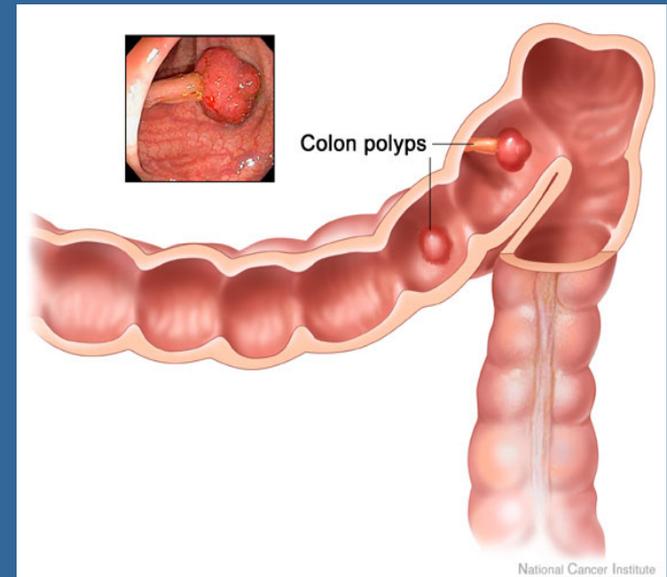
What are the personal and family risk factors?

- Age
 - More than 90% of colorectal cancer is found people ages 50 and over.
- Family history (in a mother, father, brother, sister, or child):
 - Colorectal cancer
 - Adenomatous polyps or “adenomas”

What are the personal and family risk factors (cont.)?

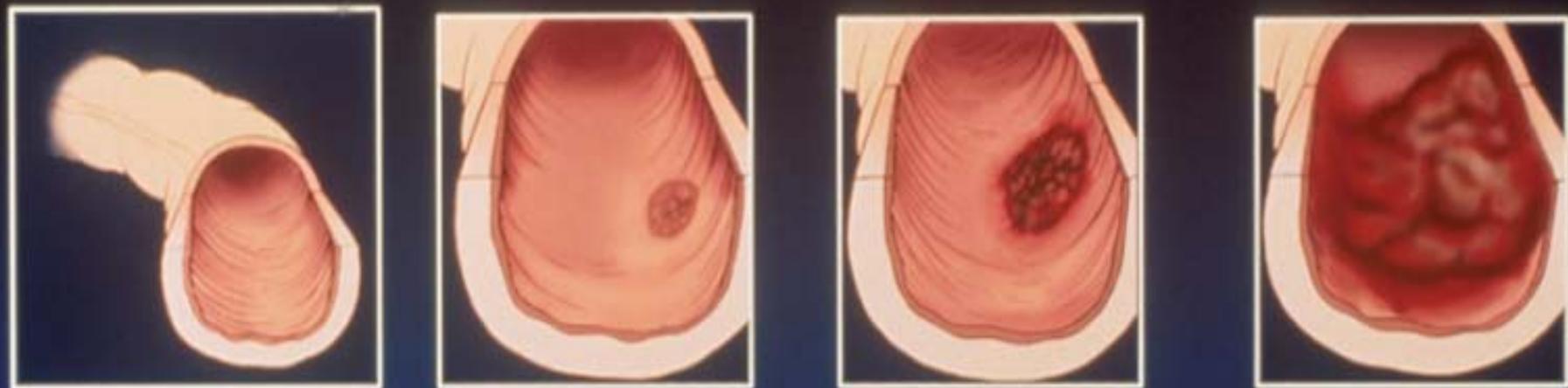
Personal history of:

- Colorectal cancer
- Adenomatous polyps or “adenomas”
 - An adenoma is a growth that can turn into cancer
- Ovarian or endometrial cancer before age 50
- Inflammatory bowel disease
 - Ulcerative colitis and Crohn colitis



Source: NCI

Adenoma - Carcinoma Sequence



**Normal
mucosa**



Adenoma



**Severe
dysplasia**



Cancer

- Hyperproliferation
- DNA hypomethylation

- Oncogene mutations

- Allelic deletions
- Aneuploidy

Other risk factors

- Other risk factors for colorectal cancer include:
 - Smoking
 - Diets high in fat
 - Obesity in premenopausal women

Race and colorectal cancer

- Compared to Caucasians, African-Americans...
 - Develop colon cancer at a younger age
 - Have decreased access to screening
 - Have more 'aggressive' colon cancer
 - Have a reduced response to chemotherapy for advanced disease
 - Have reduced survival (30% mortality increase)

What are the signs and symptoms for colorectal cancer?

- Early stages of colorectal cancer may have NO signs or symptoms.
- If signs and symptoms are present, they may include:
 - Bleeding from the rectum or blood in the stool
 - Marked change in bowel habits
 - Abdominal mass
 - Abdominal cramps or pain
 - Iron deficiency anemia that is not due to other conditions

Who should be screened for colorectal cancer?

- People ages 50 and over
- People under 50 with:
 - Personal or family **risk factors**

**Colorectal Cancer Screening
Saves Lives!**

How do we test for colorectal cancer?

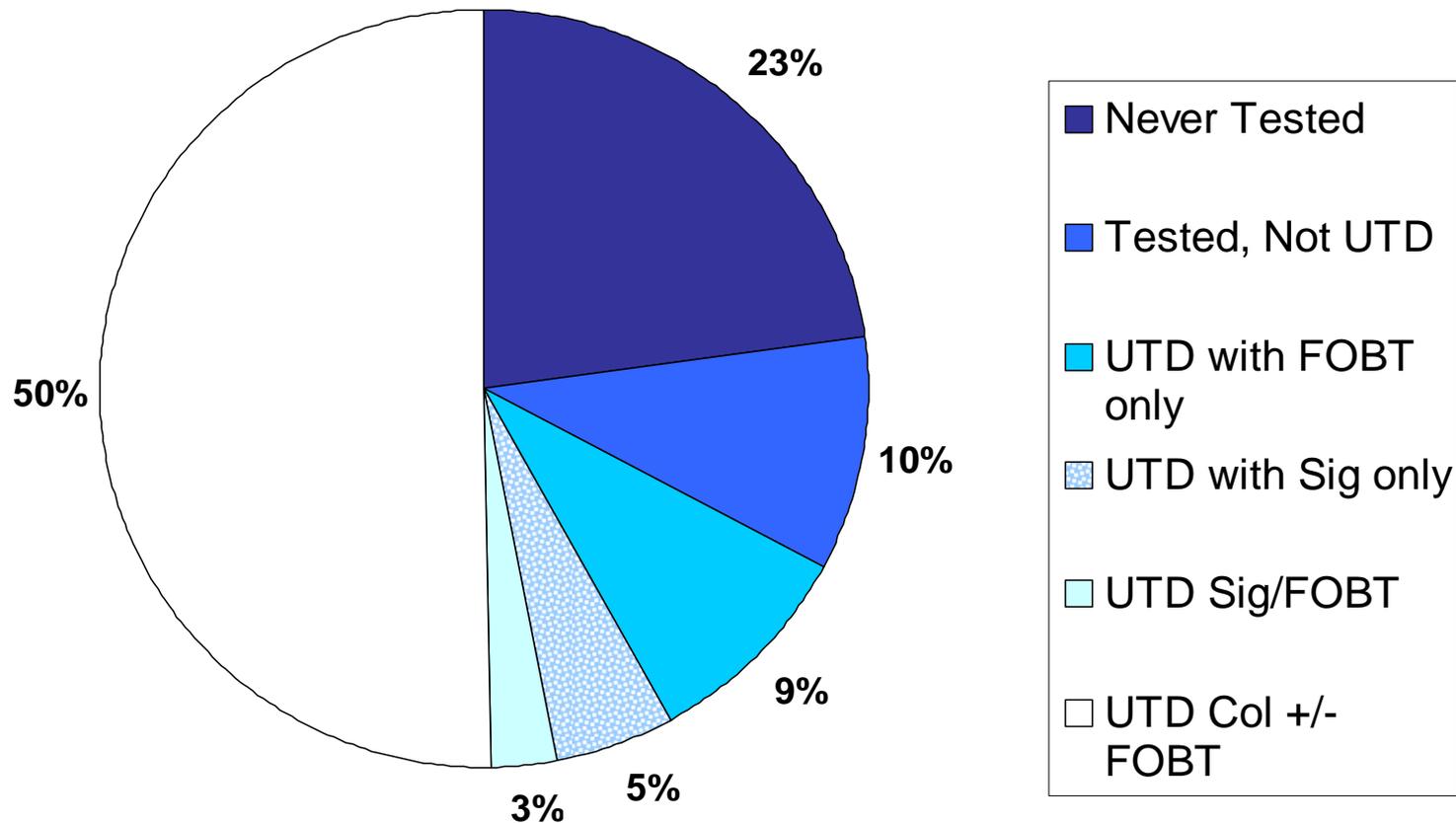
Tests used to look for colorectal cancer:

- Colonoscopy
- Flexible Sigmoidoscopy
- Fecal Occult Blood Test (FOBT)
- Double contrast barium enema
- Other



Source: Oncolink

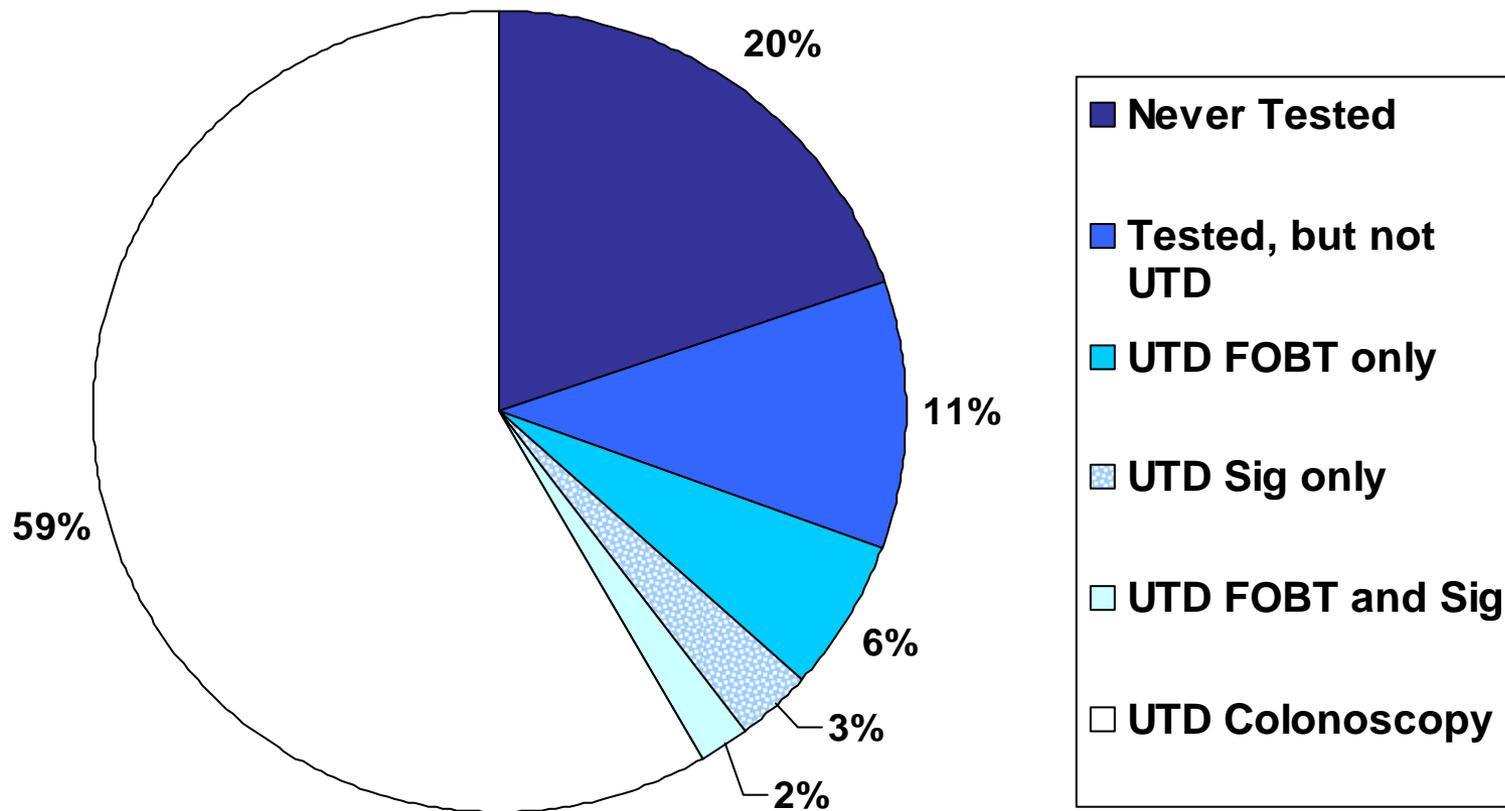
Current CRC Screening Status of Marylander's ≥ 50 years old Maryland Cancer Survey, 2004



*UTD—Up to date per Am. Cancer Society options for screening

Current CRC Screening Status of Marylander's ≥ 50 years old

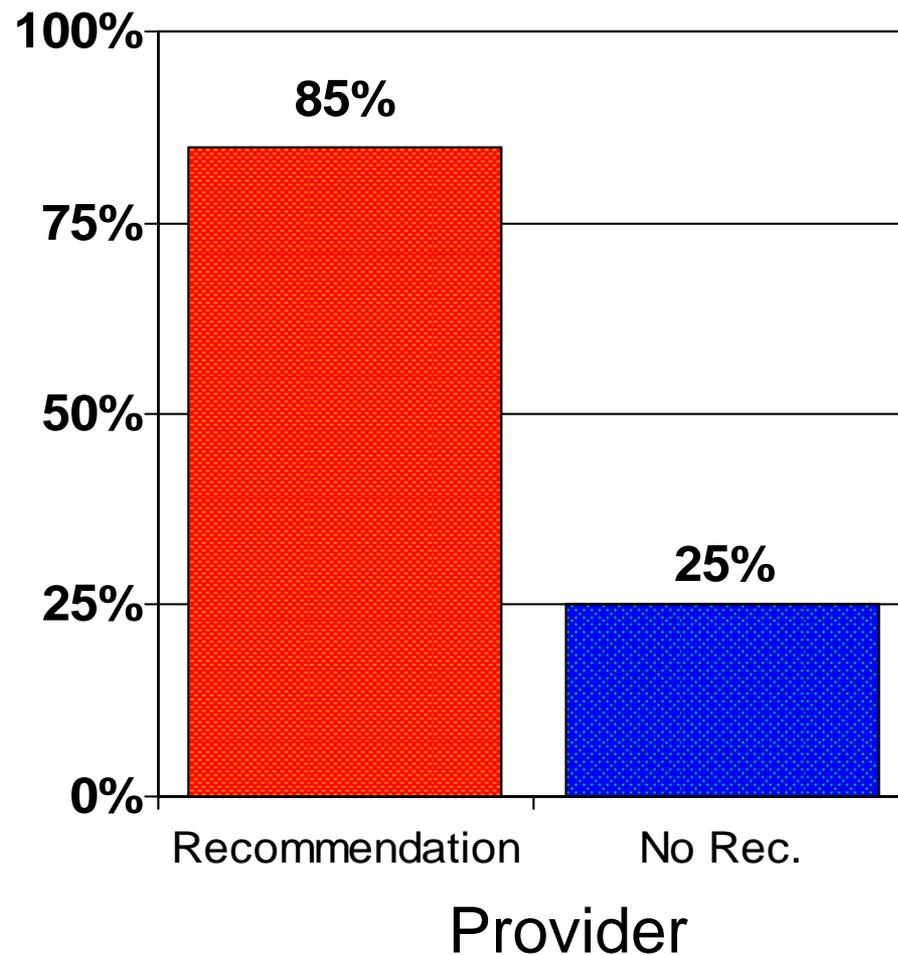
Maryland Cancer Survey, 2006



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**People reporting a
provider's
recommendation
for endoscopy...
got
screened**

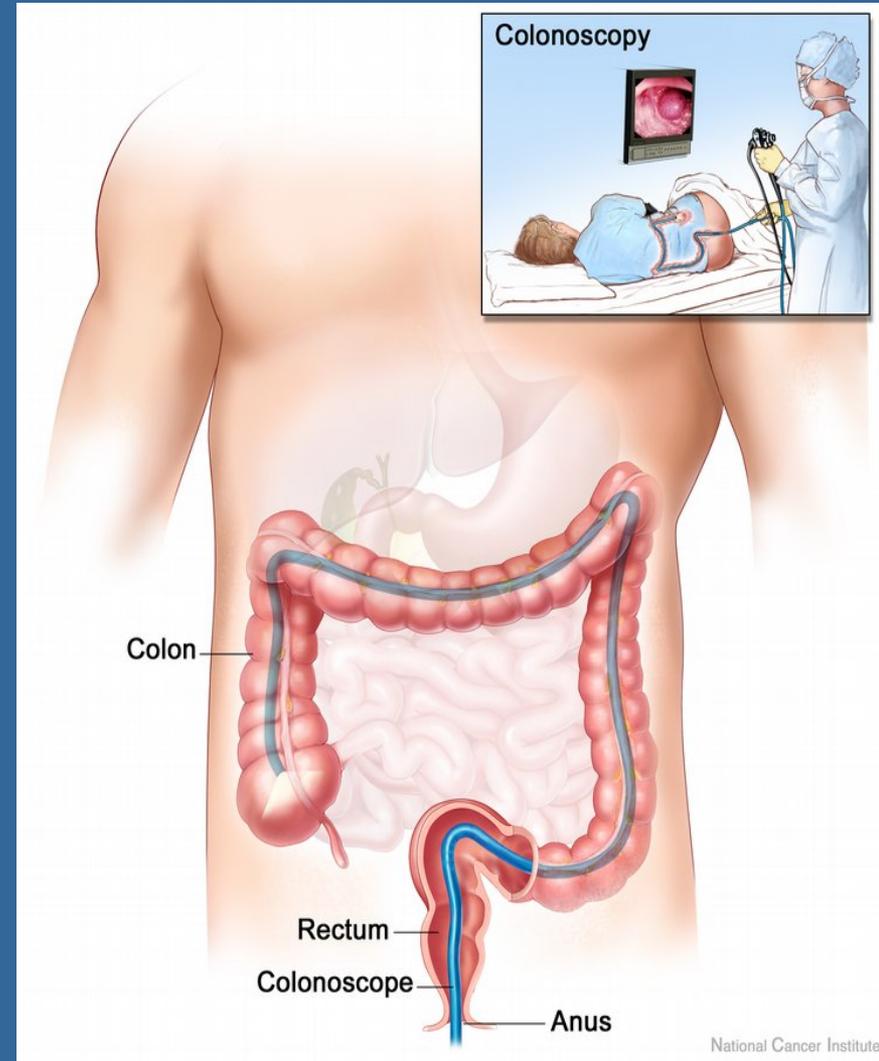
Percent Screened
with Endoscopy



Source: Maryland Cancer Survey, 2006

Colonoscopy

- **Colonoscopy:** doctor uses a flexible tube with a light to look inside your large intestine (colon or guts).



Colonoscopy (cont.)

- Colonoscopy looks at the whole colon to find and remove polyps or to find cancer.
- The procedure takes about 30 minutes unless polyps need to be removed.

Different types of polyps



Sessile polyp



Sessile polyp
Tubulovillous
adenoma



Biopsy forceps

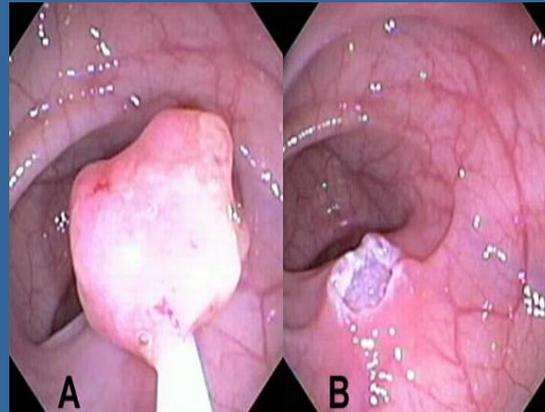
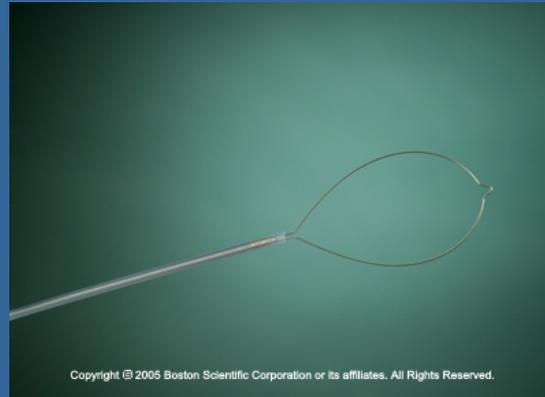
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Different types of adenomas



Sessile polyp

Tubular
adenoma



Polyp removal



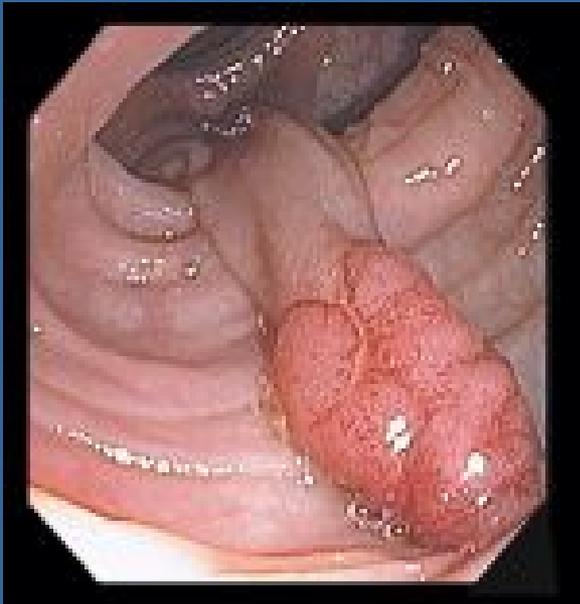
Sessile polyp

Tubulovillous
adenoma

What should I do to get ready for colonoscopy?

- Bowel Preparation: Before colonoscopy, the colon must be clean so the doctor can see inside the entire colon.
 - Clear liquid diet one to two days before the test
 - Laxatives to eliminate stool from the colon

Clean colon showing adenomas



Pedunculated polyp
Tubular adenoma



Pedunculated polyp
Tubular adenoma

What about during and after colonoscopy?

- Just before the test, you will be given medications to relax you.
- After the test, you will need someone to take you home.
- Although the procedure is safe, colonoscopy involves slight risk (bleeding, perforation).

Can I reduce my risk for colorectal cancer?

- You can reduce your risk for colorectal cancer:
 - Get screened for colorectal cancer
 - Achieve and maintain a healthy weight
 - Exercise at least 30 minutes on five or more days each week
 - Eat at least five servings of vegetables and fruits each day
 - Avoid tobacco and alcohol

Colorectal Cancer Screening Saves Lives!

THE
END

