Current Recommendations for Colorectal Cancer Screening

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Trust Methodist

WHY DO WE SCREEN?

Colorectal Cancer

In the United States

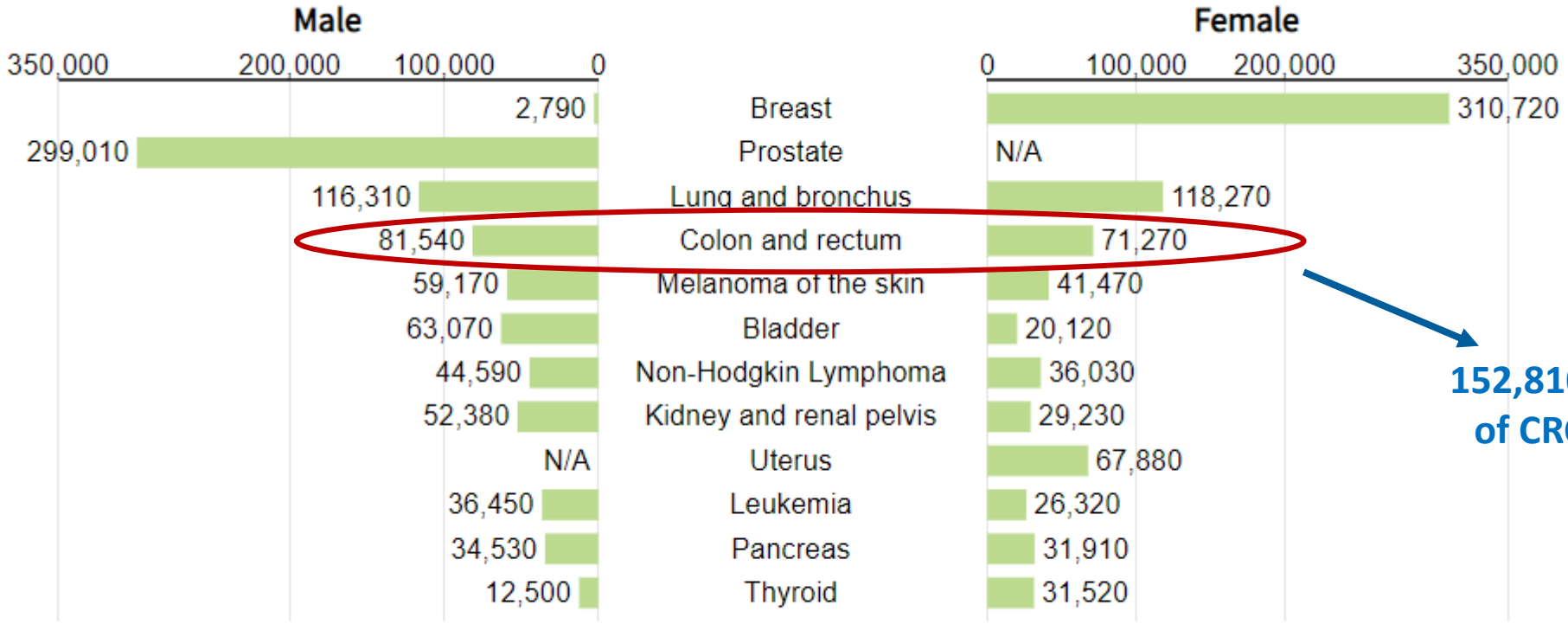
- Fourth most common cause of cancer affecting men
- Third most common cancer affecting women

- Second leading cause of cancer death overall

- ~4% lifetime risk of developing colon cancer

Colorectal Cancer in 2024

Annual Incidence of Common Cancers



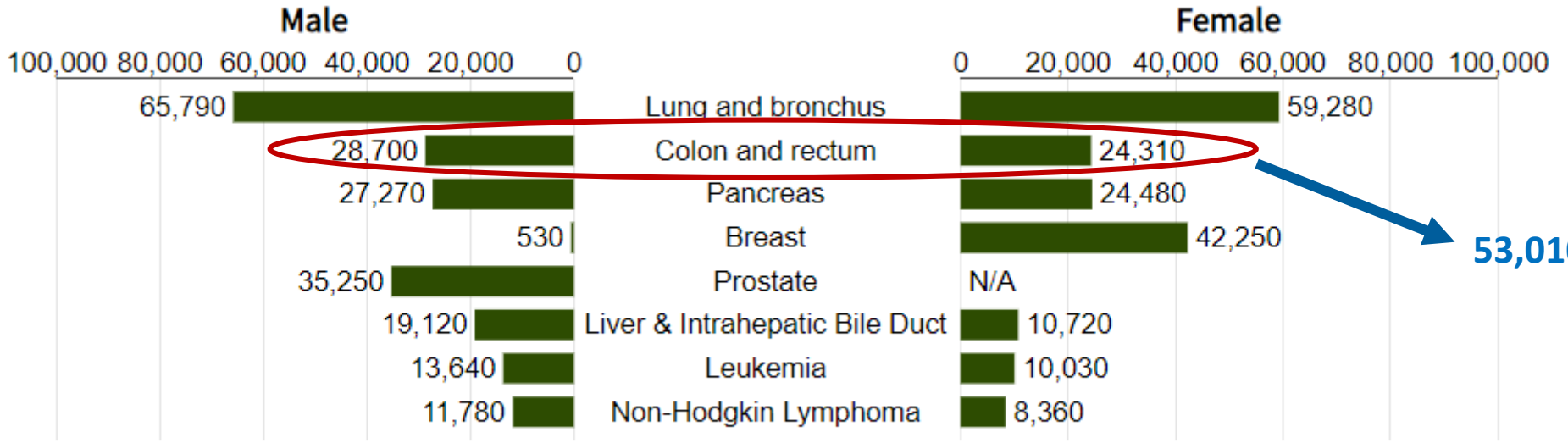
152,810 new cases of CRCA in 2024

Source: Cancer Facts & Figures 2024, American Cancer Society (ACS), Atlanta, Georgia, 2024.

NCI SEER Data (seer.cancer.gov)

Colorectal Cancer in 2024

Estimated Annual Deaths from Common Cancers



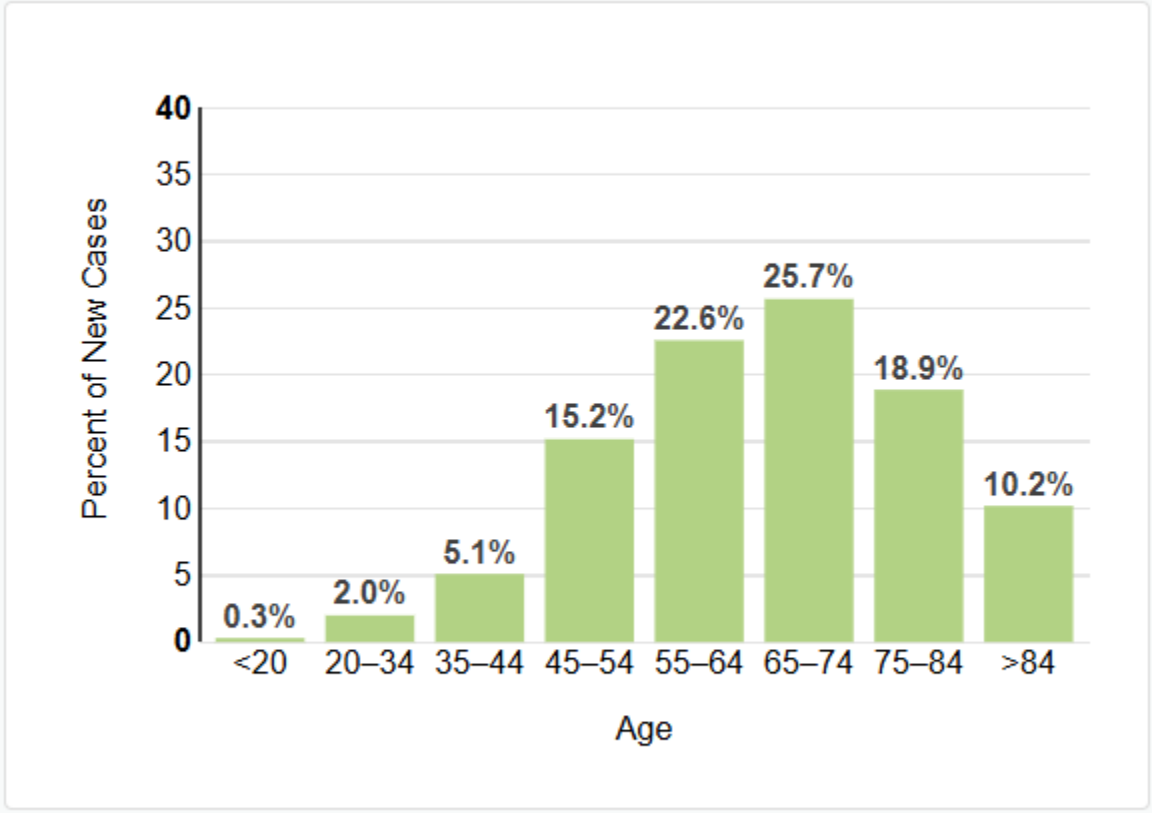
53,010 CRCA Deaths in 2024

Source: Cancer Facts & Figures 2024, American Cancer Society (ACS), Atlanta, Georgia, 2024.

NCI SEER Data (seer.cancer.gov)

Age at Diagnosis

Percent of New Cases by Age Group: Colorectal Cancer



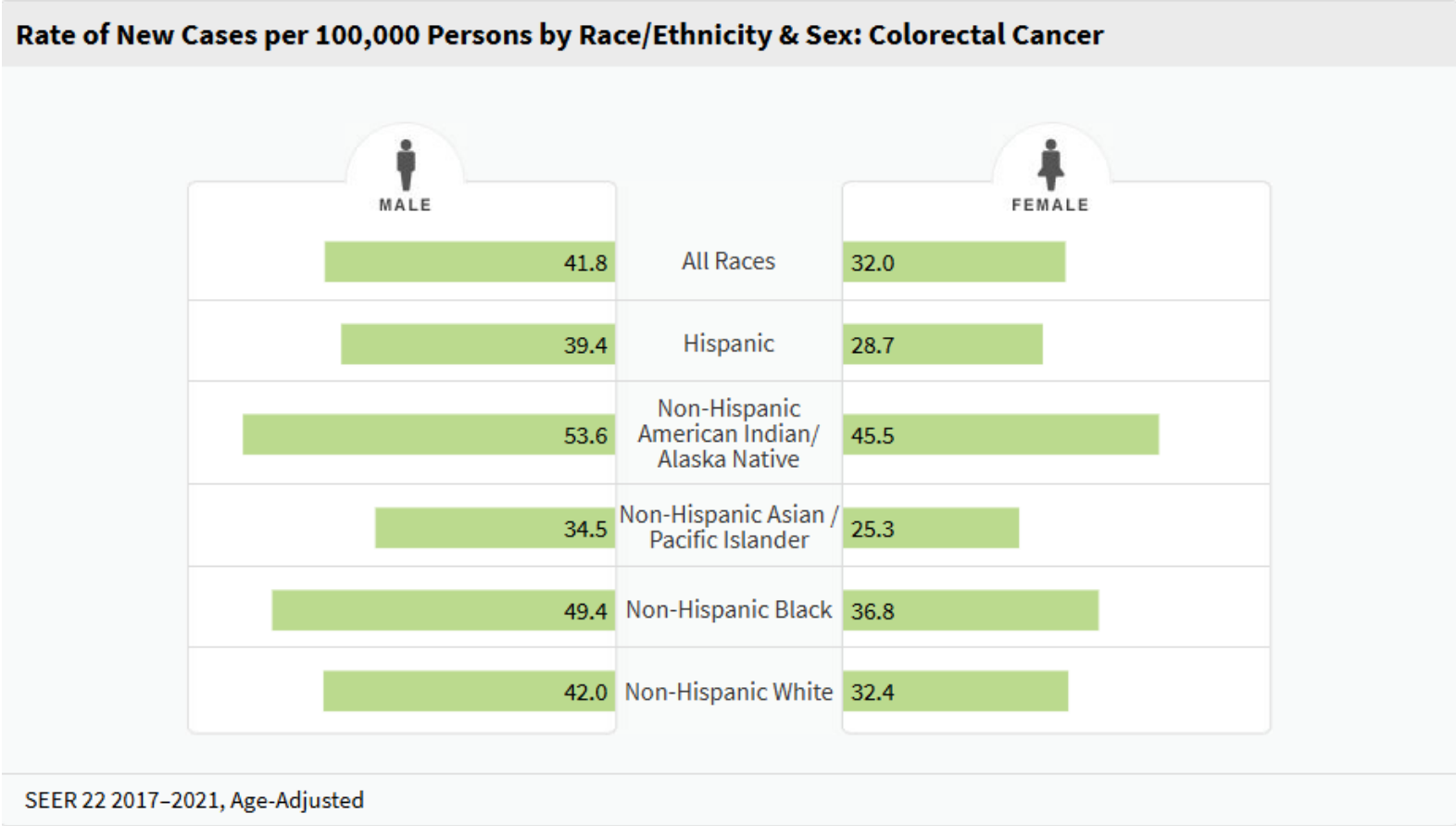
Colorectal cancer is most frequently diagnosed among people aged 65–74.

Median Age At Diagnosis
66

SEER 22 2017–2021, All Races, Both Sexes

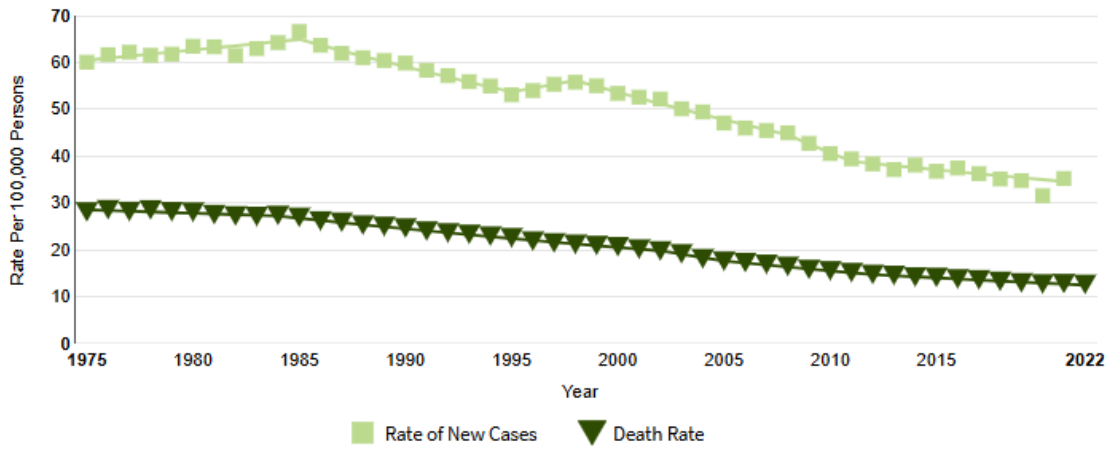
Race/Ethnicity & Sex

- More prevalent in Men than Women
- African Americans, American Indians/Alaska Natives at higher risk

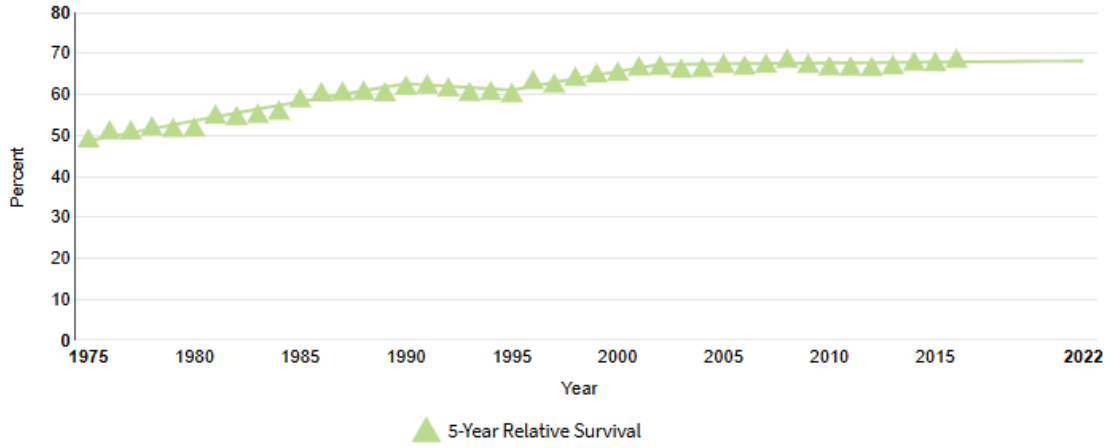


Trends

New Cases, Deaths and 5-Year Relative Survival



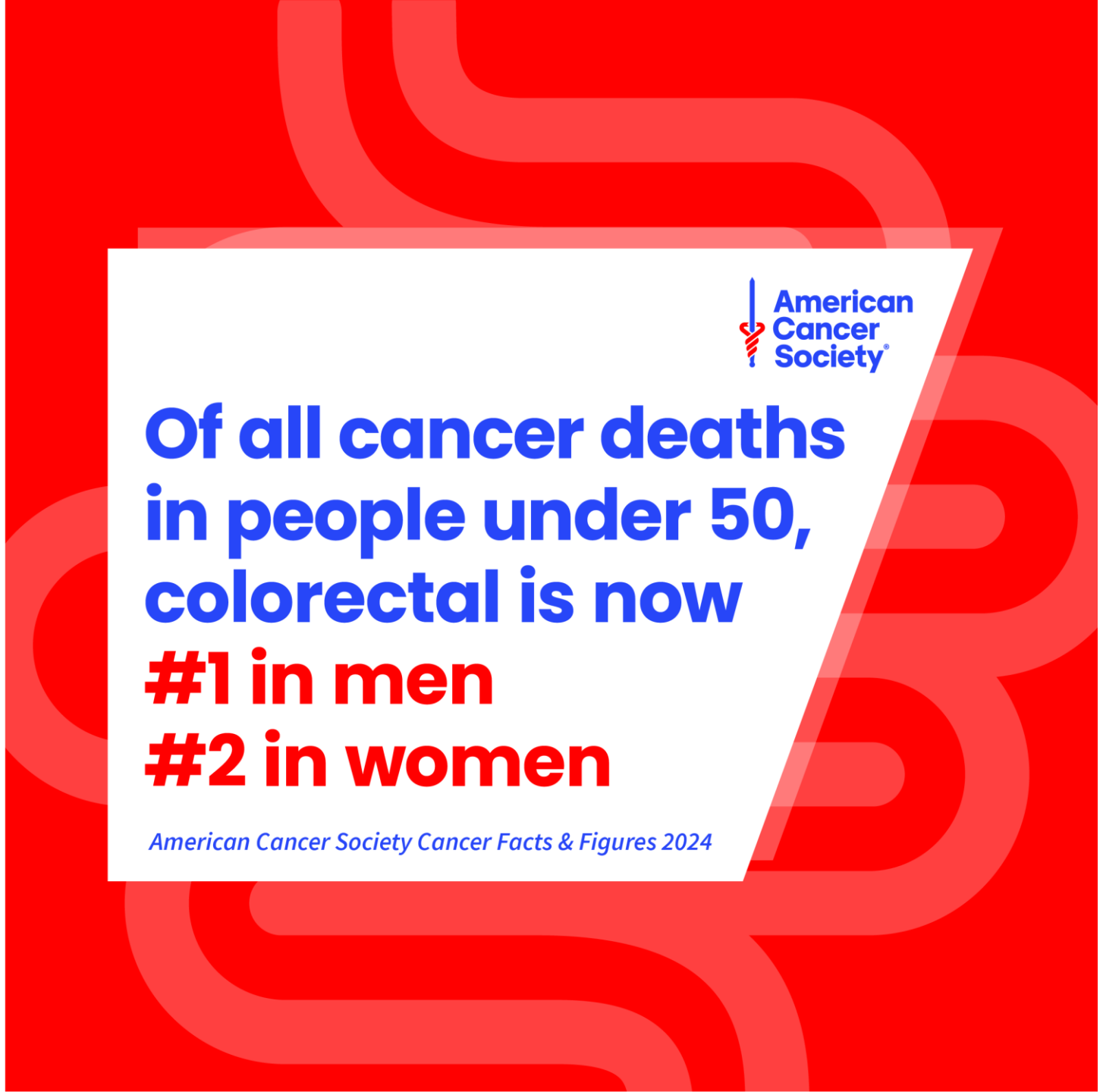
New cases come from SEER 8. Deaths come from U.S. Mortality.
All Races, Both Sexes. Rates are Age-Adjusted.
Modeled trend lines were calculated from the underlying rates using the Joinpoint Trend Analysis Software.
The 2020 incidence rate is displayed but not used in the fit of the trend line(s). Impact of COVID on SEER Cancer Incidence 2020 data



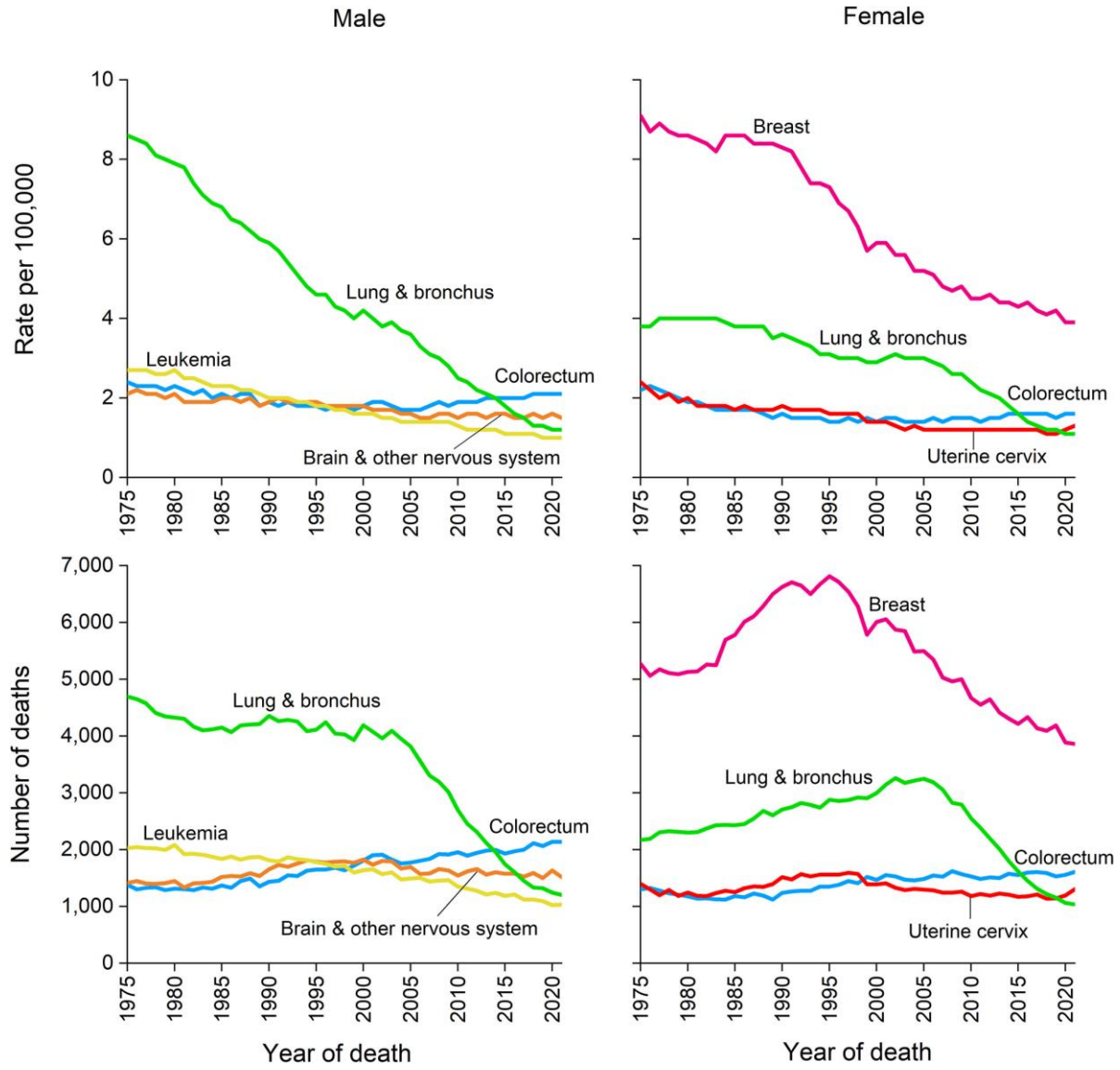
SEER 8 5-Year Relative Survival Percent from 1975–2016, All Races, Both Sexes.
Modeled trend lines were calculated from the underlying rates using the Joinpoint Survival Model Software.

Improved Survival

- Screening finds polyps more often
- Polyps are removed before they can develop into cancers
- Cancers are being found at earlier stage
- Treatment for colorectal cancer has improved


American Cancer Society
Of all cancer deaths in people under 50, colorectal is now
#1 in men
#2 in women
American Cancer Society Cancer Facts & Figures 2024

Cancer Incidence and Mortality in <50 yo



WHO DO WE SCREEN?

Average Risk for Colorectal Cancer

- No Family hx of CRCA
- No personal hx of IBD (UC, Crohn disease)
- No personal hx of adenomatous polyps
- Age $\geq$ 45
- No signs or symptoms of CRCA

Increased Risk for Colorectal Cancer

- Increased Risk:
  - Family hx of CRCA or adenomas in first-degree relative
  - CRCA in 2 second degree relatives
- High Risk:
  - Inflammatory Bowel Disease (IBD)
- Highest Risk:
  - Confirmed or suspected genetic syndromes (FAP, HNPCC)

Screening vs. Surveillance

- “Surveillance” is used for testing patients with a personal hx of adenomatous or serrated polyps or colorectal cancer

- “Screening” is not performed on patients with signs or symptoms, these procedures are “Diagnostic”

HOW ARE WE DOING?

Get your patients screened!

- About ***one-third*** of eligible adults in the United States have never been screened for colorectal cancer

Healthy People 2030

HEALTHY PEOPLE 2030

LHI

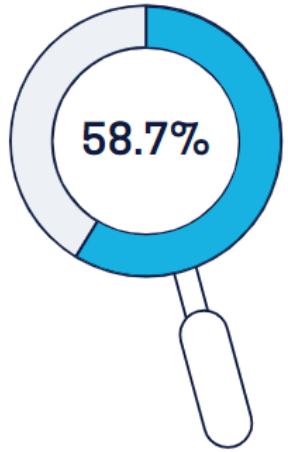
Increase the proportion of adults who get screened for colorectal cancer — C-07

Baseline only

Most recent data: 2021

In 2021, **58.7 percent** of adults aged 45 to 75 years received a colorectal cancer screening based on the most recent guidelines. [3] *

Data Source: National Health Interview Survey (NHIS), CDC/NCHS



Target: 68.3% of eligible adults screened

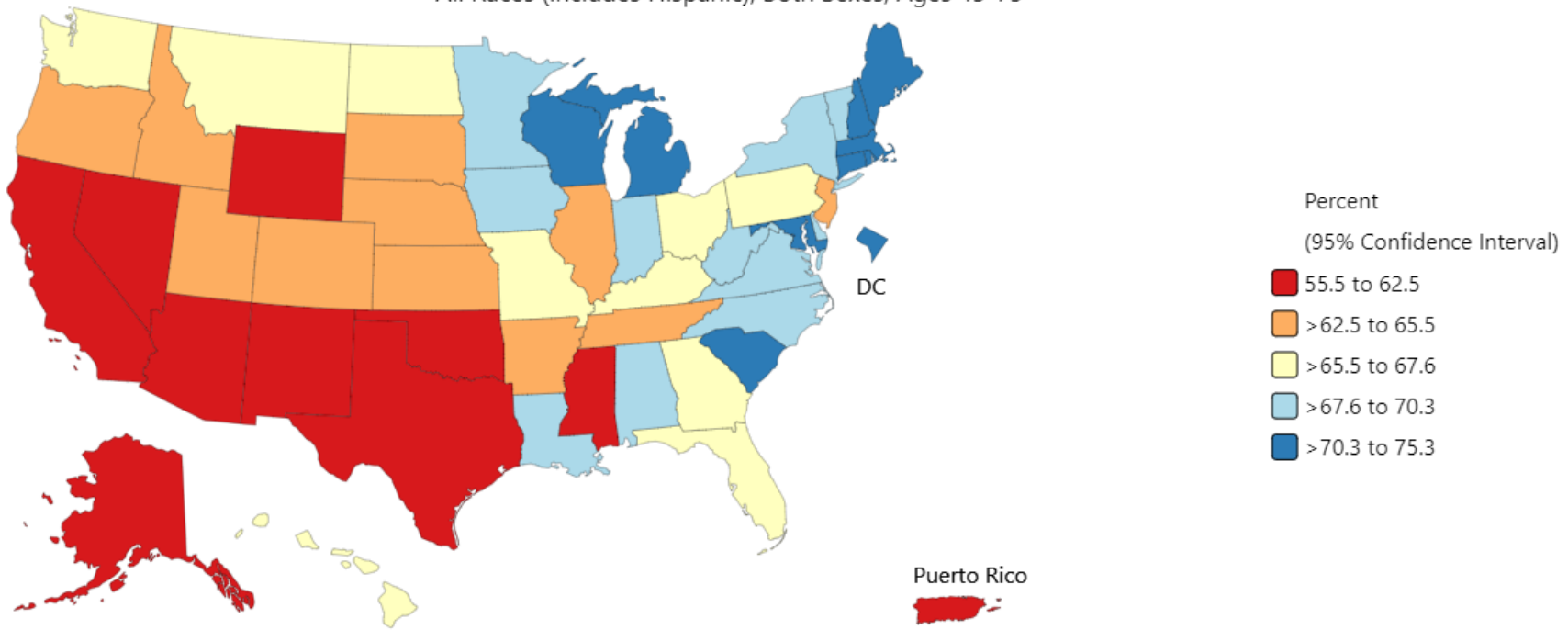
Screening Trends

Screening and Risk Factors by State

(Directly Estimated 2022 BRFSS Data)

Received at Least One Recommended CRC Test

All Races (includes Hispanic), Both Sexes, Ages 45-75

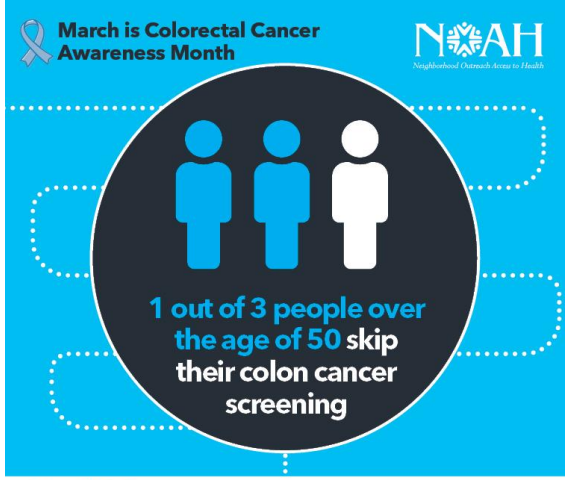


Created by statecancerprofiles.cancer.gov on 11/11/2024 12:20 pm.
2 2022 BRFSS Survey Data is the source for this data collected by the Behavioral Risk Factor Surveillance System (BRFSS) sponsored by the Centers for Disease Control and Prevention. Data for the US is a median and not a percent.

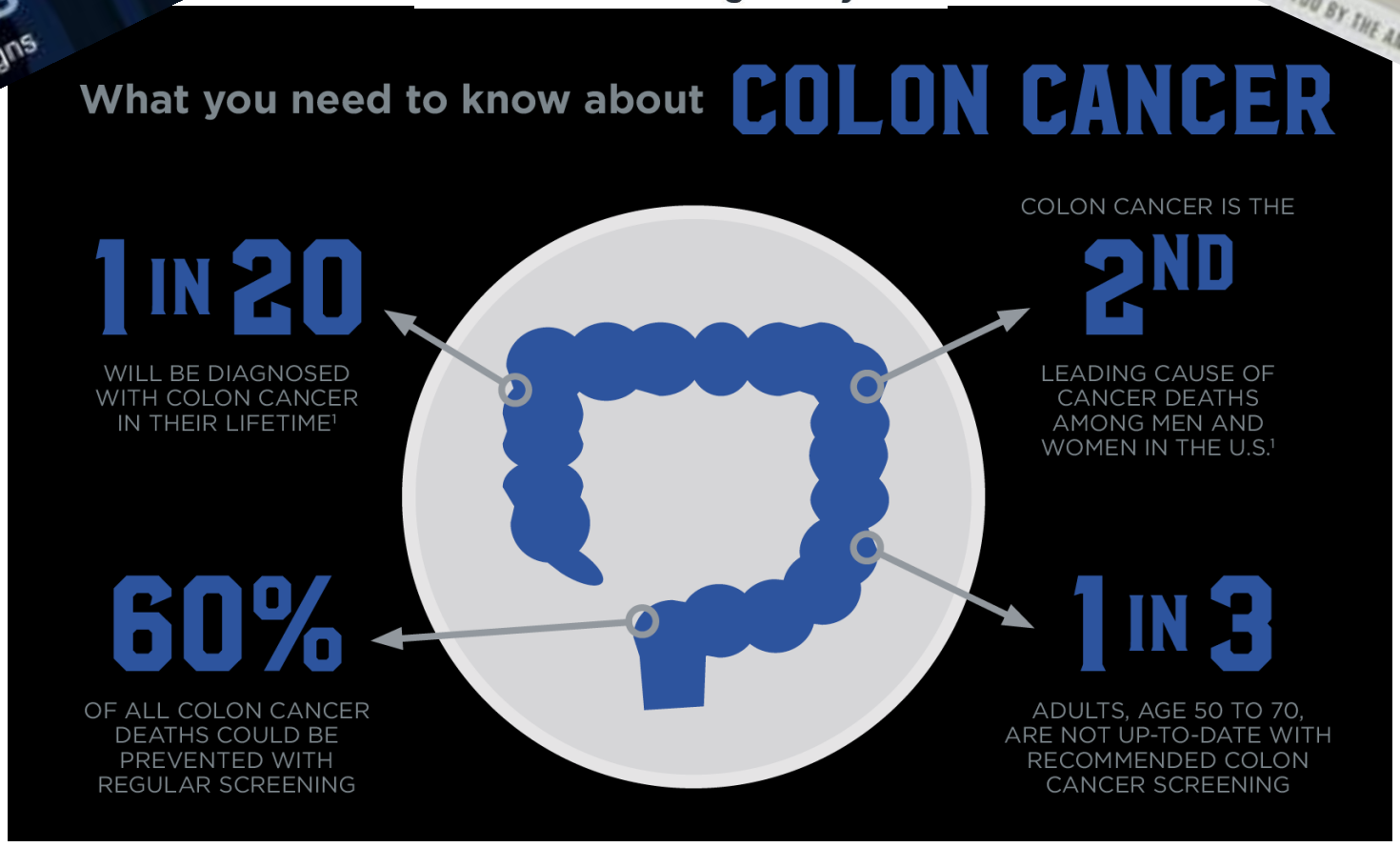
BRFSS Prevalence estimates presented here may vary from other published estimates due to differences in the methodology used to generate estimates.

Data for United States does not include Puerto Rico.


1 in 3
adults has not been screened for colorectal cancer as recommended.
Vitalsigns
www.cdc.gov/vitalsigns


March is Colorectal Cancer Awareness Month
NOAH
1 out of 3 people over the age of 50 skip their colon cancer screening
9 of 10 times colorectal cancer is beatable if caught early


MARCH IS
Colorectal Cancer Awareness Month
1 IN 3 ADULTS ARE NOT
GETTING THE RECOMMENDED
SCREENINGS
Age 50+?
Talk to a gastroenterologist about screening.
BROUGHT TO YOU BY THE AMERICAN GASTROENTEROLOGICAL ASSOCIATION


What you need to know about COLON CANCER
1 IN 20
WILL BE DIAGNOSED WITH COLON CANCER IN THEIR LIFETIME[1]
COLON CANCER IS THE
2ND
LEADING CAUSE OF CANCER DEATHS AMONG MEN AND WOMEN IN THE U.S.[1]
60%
OF ALL COLON CANCER DEATHS COULD BE PREVENTED WITH REGULAR SCREENING
1 IN 3
ADULTS, AGE 50 TO 70, ARE NOT UP-TO-DATE WITH RECOMMENDED COLON CANCER SCREENING


45 IS THE
NEW 50!

Is Screening Appropriate for Your Patient?

Need to know patient's

- Risk level
- Screening/Surveillance history
- Age
- Comorbidities
- Preferences

HOW DO WE SCREEN?

2024 Screening Guidelines

Goal is to maximize the number of eligible patients who get screened

- Multiple screening strategies are available
- Different strategies have varying levels of evidence to support effectiveness
- Each strategy has different advantages and limitations
- No empirical data to demonstrate a greater net benefit of one over another

Average Risk Screening

- Patients aged 45-75
- Patients between 76-85 should be screened on a case-by-case basis
  - Consider life expectancy and co-morbidities
  - Do not routinely screen adults who have had a history of adequate screening
  - Consider screening if not up-to-date with screening and life expectancy at least 5-10 years
- Do not screen patients >85

Do Not Screen Patients with Severe Comorbidities

Estimated life expectancy <5 years
such as metastatic cancer, Alzheimer's, or class III or IV congestive heart failure

High-risk conditions
such as neutropenia, unstable angina, or a high risk for operative complications

Do Not Screen!

Increased Risk Screening

- Patient FHx:
  - CRCA or advanced adenoma in first degree relative dx ≥60 *or*
  - 2 second degree relatives with CRCA

→ Begin screening at 40yo with any test recommended for average risk; repeat at usual intervals based on test and findings

- Patient FHx:
  - CRCA or advanced adenoma in first degree relative dx <60 *or*
  - 2 or more first degree relatives with CRCA at any age (without genetic syndrome)

→ Colonoscopy every 5 years starting at age 40, or 10 years before youngest case in the family was diagnosed

Screening

- FIT
- Fecal DNA-FIT
- Flexible Sigmoidoscopy
- CT Colonography
- Colonoscopy

Colon Cancer SCREENINGS

Society Recommendations

Age: 45 years	US Multi-Society Task Force	US Preventative Services Task Force (USPSTF)	American College of Gastroenterology
FIT	Annual (Tier 1)	Annual	Annual
Stool DNA-FIT	Every 3 years (Tier 2)	Every 1-3 years	Every 3 years
CT colonography	Every 5 years (Tier 2)	Every 5 years	Every 5 years
Flex Sig*	Every 5 years (Tier 2)	Every 5 years	Every 5 years
Colonoscopy	Every 10 years (Tier 1)	Every 10 years	Every 10 years

* USPTF also endorses Flex Sig every 10 years with Annual FIT

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Other Tests

- Barium Enema (DCBE) – may be used but harder to find radiologists willing to perform, largely replaced by CT Colonography
- Capsule Colonoscopy (“pill cam”) – Tier 3 screening method, limited in use to patients unwilling to undergo any other screening, requires diet modification and bowel prep for the test
- Septin 9 test – blood test; currently not recommended for screening purposes due to sensitivity/specificity

Offer Screening

- Colonoscopy remains the *Gold Standard* screening tool

- Many patients who refuse colonoscopy are open to other screening options

Many Patients Prefer Home Stool Testing

- Some patients forgo ANY screening if not offered a home stool testing alternative to colonoscopy
- Clinical evidence indicates that Annual stool blood testing is a reasonable choice for AVERAGE risk patients
- Patients who select this must be prepared to accept follow-up colonoscopy if the test result is abnormal
  - Colonoscopy following a positive stool test should still be considered preventative by insurance (including Medicare!)

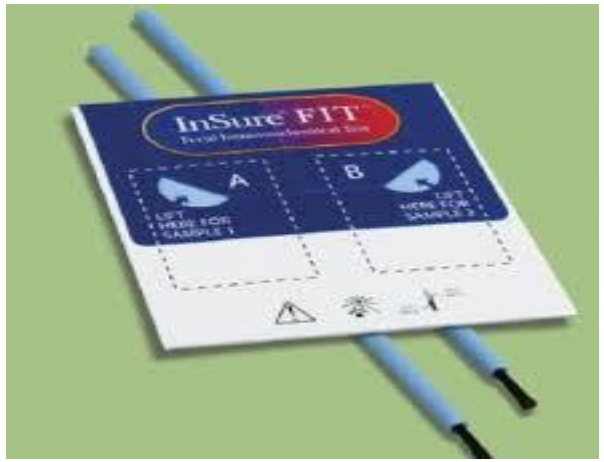
STOOL TESTS

Advantages of Stool Testing

- Less expensive
- Can be offered by any member of healthcare team
- No bowel preparation
- Can be done at home
- Does not require time off work
- Noninvasive, no risk of adverse outcomes

Fecal Occult Blood Tests (FOBT)

- There are two main types of FOBT: guaiac-based FOBT (gFOBT) and immunochemical-based FOBT (iFOBT),



High Sensitivity Guaiac Tests

- Stool samples collected on 3 different days after up to 7 days of dietary and medication restrictions
- Specimen is collected using a stick to take samples from 2 different areas of stool from each BM before it comes into contact with toilet water

Foods associated with false positive FOBT

- Red Meat
- Cantaloupe/other melons
- Grapefruit
- Figs
- Broccoli
- Turnips
- Potato
- Pumpkin
- Radishes
- Horseradish
- Cauliflower
- Cucumber
- Carrot
- Cabbage
- Zucchini
- Parsley

Fecal Immunochemical Tests

- Improved detection of hemoglobin as compared to guaiac based FOBT tests
- Immunochemical FOBT testing uses antibodies to human globin expressed in colorectal bleeding.
- One time use, no dietary restrictions

- FIT increased sensitivity/specificity for CRCA
  - Sensitivity for CRCA – 73-88 %
  - Specificity – 91-95 %

Fecal Immunochemical Tests

- FITs cost more than guaiac tests
- Generally easier for patients to complete
- May need to look at arrangements to defray patient's upfront costs
- Some FITs are processed in office setting (point-of-care)
- Different tests have different Hgb cutoffs defining abnormal value

Stool Testing

- Stool testing should be done at HOME!

- No evidence that testing is sufficiently sensitive when performed as part of a DRE in the office.

Cologuard® (FIT-DNA)

- Cologuard® only test FDA approved
- Detects blood using immunochemical test and eleven DNA biomarkers to identify CRCA and precancerous polyps
- Higher cost than FIT
- Higher sensitivity than FIT
- Lower specificity than FIT

Cologuard® (FIT-DNA)

- Medicare will cover the multi-target stool DNA test if the patient meets certain criteria:
  - Is age 45 to 85 years
  - Has no signs or symptoms of colon cancer
  - Is at average risk for colon cancer
- Medicare reimburses every **3 years**

Cologuard®

Advantages

- No bowel prep
- No dietary restrictions
- Samples are collected at home
- No risk of damage to the lining of the colon.
- No sedation is needed.
- Higher sensitivity for cancers and adenomas than gFOBT or FIT

Disadvantages

- Higher cost than gFOBT or FIT.
- Sensitivity for adenomas is low
- Higher False-positive results (the test suggests an abnormality when none is present).
- Colonoscopy is needed if the test result is positive

Ensure Test Completion

- Need to have a plan for following up with patients to assure the test has been completed.

- Need a plan to assure that the testing is completed annually (or every 3 years for FIT-DNA)

- Follow-up on all abnormal results!
  - Do NOT repeat an abnormal stool test
  - All abnormal results on stool testing lead to colonoscopy
  - Do NOT follow-up an abnormal test result with a less definitive test (BE, Flex sig, CT Colonography)

VISUALIZATION TESTS

Visualization Tests

- Colonoscopy
- Flexible Sigmoidoscopy
- CT Colonography

CT Colonography ("Virtual Colonoscopy")

- Requires bowel prep
- Patients given rectal contrast and air
- Exam performed in varied positions
- Sensitive for lesions $\geq$ 6 mm
- Incidental extracolonic findings may lead to additional testing
- Not widely covered for screening by insurers

Flex Sig vs. Colonoscopy

Flexible Sigmoidoscopy

- No sedation required
- Can be done with low volume enema preparation
- Low risk of perforation
- If lesions are identified, the patient will need a complete colonoscopy

Colonoscopy

- Requires complete bowel preparation
- Requires sedation
- May require holding medications
- Risk of perforation < 0.5%
- Endoscopist dependent

- Focus on quality

Colonoscopy Quality Indicators

- Cecal intubation: 95% with documentation of landmarks (photos)
- Adenoma Detection Rate (ADR)
  - 30% men; 20% women
- Withdrawal time: at least 6 minutes (optimal 10+ minutes)
- Description of bowel prep

Withdrawal time and ADR

	< 6 min	> 6 min	P value
Adenoma Detection Rate	12%	28%	<0.001
Advanced ADR	2.6%	6.4%	0.005
Hyperplastic Polyp	10%	27%	0.03

Barclay et al, N Engl J Med 2006: 355; 2533

Withdrawal time and ADR

	6 min	9 min	P value
Adenoma Detection Rate (ADR)	27.1%	36.6%	0.001
Polyp Detection Rate (PDR)	47.8%	58.0%	0.001
Advanced ADR	5.8%	7.6%	0.27
Sessile Serrated Lesion DR	2.2%	4.2%	0.15
Rate of CRC	0.97%	1.4%	0.56

Zhao et al, Clinical Gastroenterology and Hepatology, Vol 20, Issue 2, e168-181

Bowel Prep Scoring

BBPS		3	2	1	0
3=Excellent 2=Good 1=Poor 0=Inadequate					
LC	☐	☐	☐	☐	☐
TC	☐	☐	☐	☐	☐
RC	☐	☐	☐	☐	☐
BBPS= ☐					

Fig. 3. Boston bowel preparation scale (BBPS). LC: Left colon. TC: Transverse colon. RC: Right colon.

How to Predict a Bad Prep

Patient Characteristics

- Inpatient
- Elderly
- Obese
- Lower education
- History of constipation
- Use of antidepressants
- Chronic narcotic use
- Noncompliance with medications

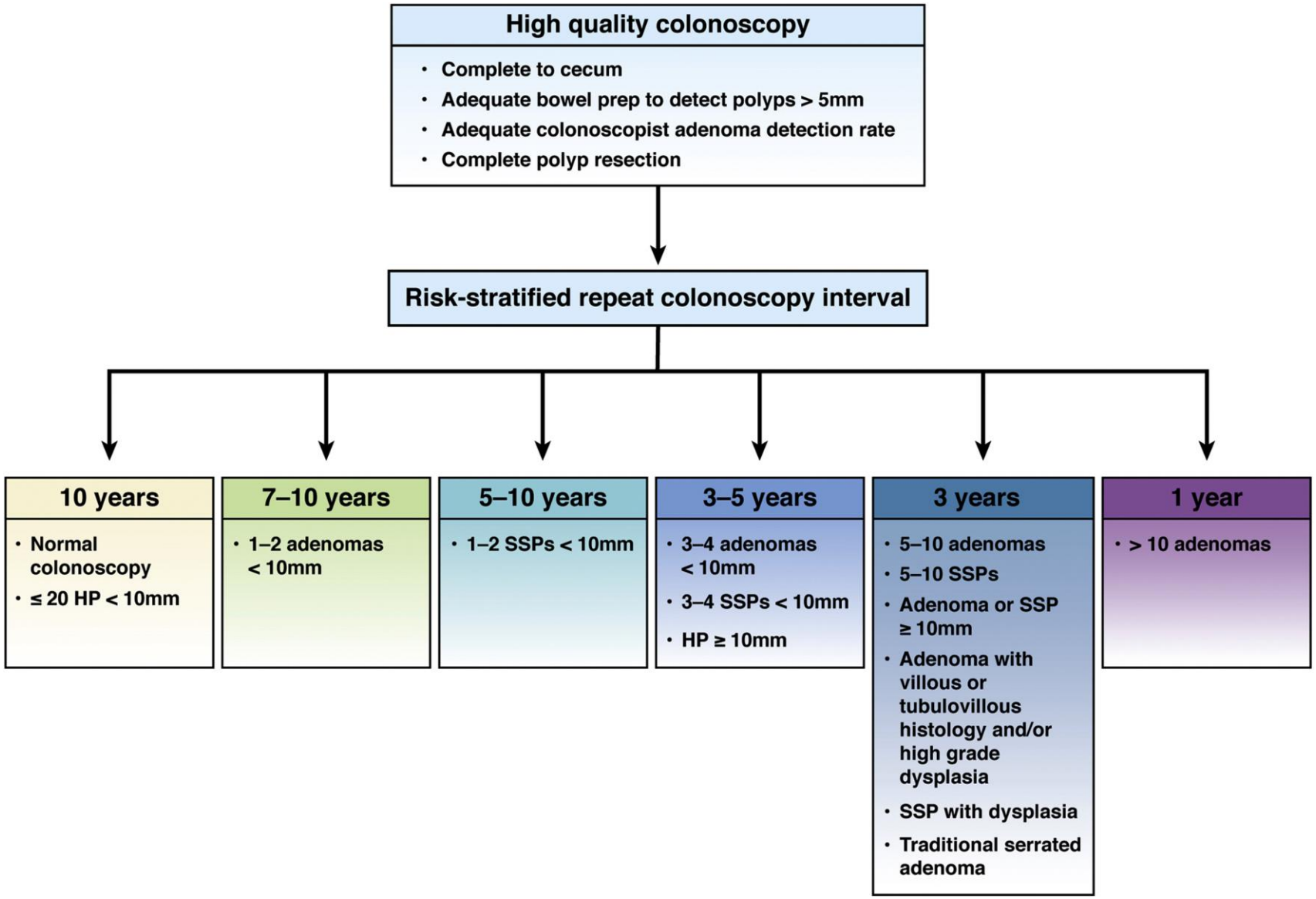
Colonoscopy Report

- Should contain information about:
  - Indications for procedure/Patient co-morbidity
  - Quality of prep
  - Cecal intubation/extent of the colon examined
  - Technical description
  - Photo documentation of landmarks and any abnormal findings
  - Plan for follow-up

Incomplete Colonoscopy

- May be due to:
  - Patient factors
  - Technical Factors
  - Operator Factors
- Will need a follow-up test
  - Colonoscopy in 2-6 months (original or advanced endoscopist) ***OR***
  - CT Colonography ***OR***
  - Double Contrast BE ***OR***
  - Colon Capsule Endoscopy

Follow-up after colonoscopy (average risk)



SCREENING AND INSURANCE

Colonoscopy as Follow-up Test

Screening Continuum

- Cancer screening may be best understood as a stepwise continuum that typically begins with a clinician's recommendation that an individual without symptoms get tested and concludes with the outcome of the test.
- "Screening is not a single test, but rather a cascade of events."
- The USPSTF recommendations are consistent with this notion, writing that "colonoscopy is a *necessary step* in any screening program that reduces mortality from colorectal cancer".

FIT (+) → Colonoscopy → Polyp detection and removal

Colonoscopy as Follow-up Test

Screening Continuum

- More and more insurers subscribe to this concept
- Some regard colonoscopy as a diagnostic service if it follows a positive FIT or FIT-DNA.
- In their view, the patient seeking the colonoscopy is no longer asymptomatic once FIT or FIT-DNA is positive

Screening Colonoscopy in High-Risk Patients

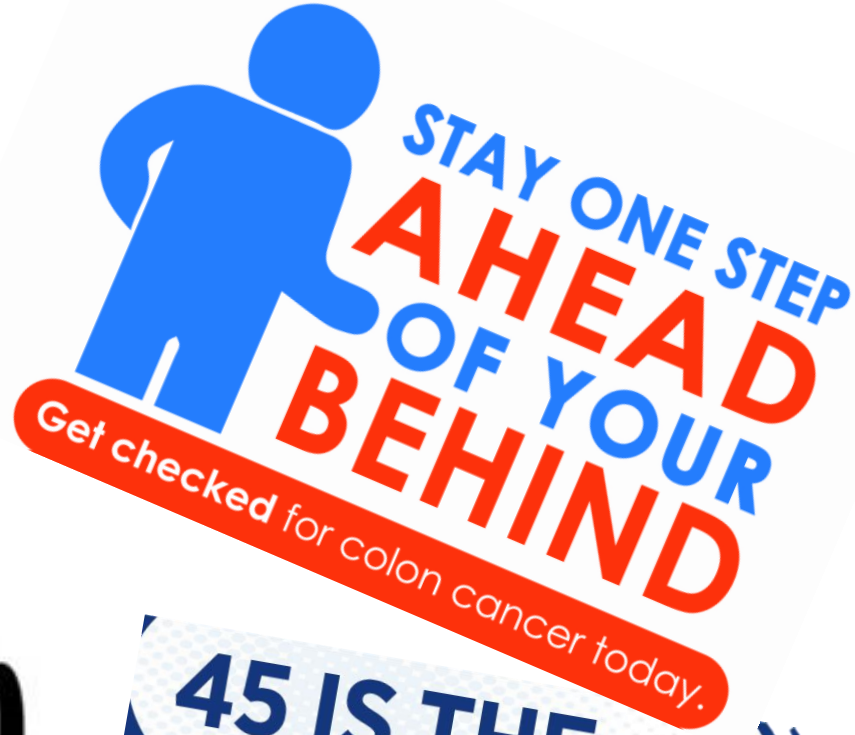
- Screening before the age of 50 and/or at higher frequency (5 years vs 10 years) may be recommended

- Screening initiation and frequency remains the same, but the individual is advised to have a screening colonoscopy rather than other testing options.

- Utilize appropriate ICD-10 codes for high risk patients


MAKE YOUR BOTTOM YOUR TOP PRIORITY.
Get checked for colon cancer today.

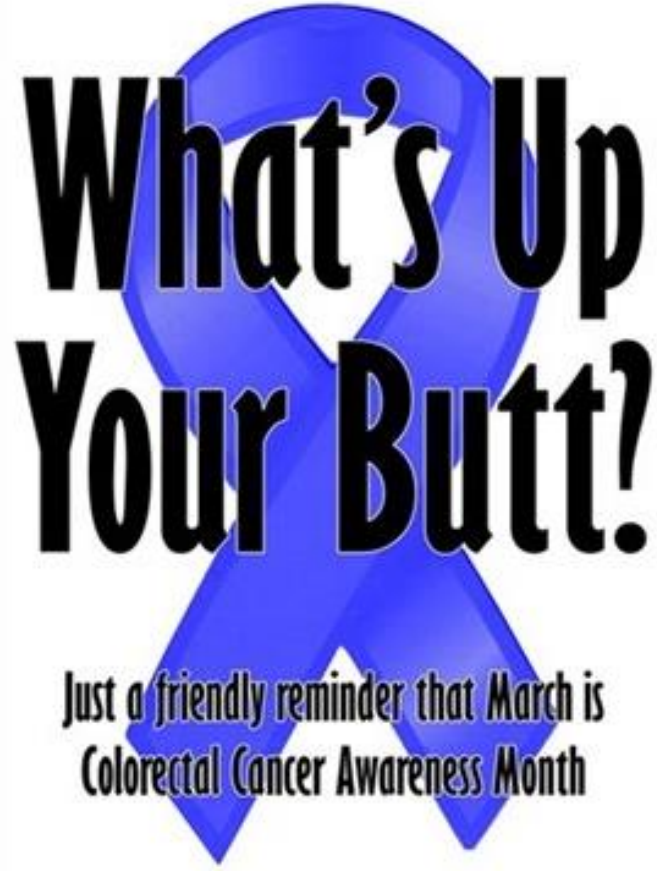

Make That
Call
FOR COLON CANCER SCREENING


STAY ONE STEP AHEAD OF YOUR BEHIND
Get checked for colon cancer today.

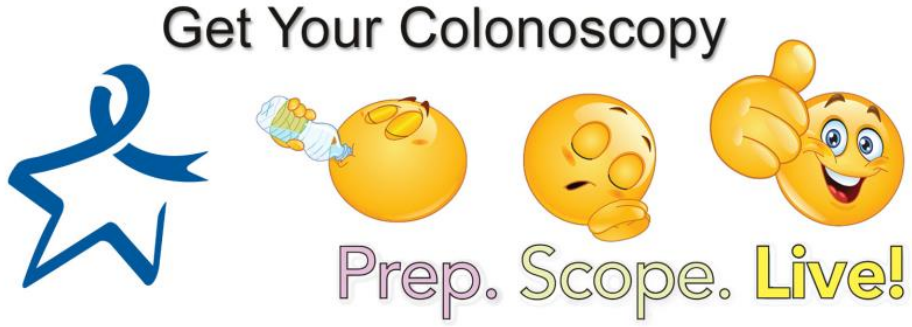

Butt seriously,
get screened.
Know your risks. Talk to your doctor.
It's never too early to start the conversation.


LOVE YOUR COLON


Colon Cancer Prevention Project


What's Up Your Butt?
Just a friendly reminder that March is Colorectal Cancer Awareness Month


45 IS THE New 50


Get Your Colonoscopy
Prep. Scope. Live!


You should be screened if...
You are age
45-75
years old. The risk for colon cancer increases with age.
NCCP

Thank You!