

**YOUR RESULT**

**High Risk  
Screening Recommended**

**HEALTH HISTORY  
RISK FACTORS**

Your Personal History  
**Average Risk**

Your Family History  
**Increased Risk**

**LIFESTYLE  
RISK FACTORS**

**1 Change  
Recommended**

***You're at **high risk** for colorectal cancer.  
Follow the screening plan recommended by your doctor.***

- There are several tests to look for colorectal cancer, including at-home stool tests. Colonoscopy has the benefit of being able to find polyps before they become cancer.
- Your family history increases your CRC risk. Ask your doctor what this means for you.
- You have 1 lifestyle risk factor that can be improved. If you need help making the recommended change, be sure to ask for it.

**Colorectal Cancer Risk Factors**

Many things affect the risk of developing cancer of the colon or rectum (also called colorectal cancer or CRC). Some of these “risk factors” can be changed and others cannot.

Lifestyle risk factors can be changed. Avoid the risk factors listed in the table. If you need help making a recommended change, help is available.

A healthy diet may also affect CRC risk. Diets that include fruits, vegetables, and other foods high in fiber may slightly lower the risk of colorectal cancer.

Lifestyle Risk Factors	You Reported
Obesity weight range	No
Current smoker	No
Low weekly exercise	Yes
Moderate/heavy alcohol use	No

## Results

### What Is Screening?

“Screening” is a general term for tests that look for signs of a disease before there are symptoms.

### Screening Saves Lives

The goal of colorectal cancer (CRC) screening is to prevent cancer. Some tests can find growths in the colon or rectum before they become cancer (pre-cancerous polyps). Other tests cannot.

Finding cancer at an early stage is also very important. When found early, about 90% of people treated for CRC are still alive five years later.

### How Common Is CRC Screening?

The good news is that roughly two out of every three people who should be screened for CRC are up-to-date. The remaining people have either never been screened or aren't up-to-date.

### Options for Colorectal Screening

Colonoscopy is one of several screening tests for colorectal cancer. Other tests include:

- Sigmoidoscopy - A lighted tube is used to look for polyps in the lower third of the colon.
- Stool tests done at home - Fecal immunochemical tests (FIT or FIT-DNA) or fecal occult blood tests (FOBT).
- Virtual colonoscopy - X-rays and computers produce images of the entire colon.

Work with your doctor to choose the right test for you.

## COLORECTAL CANCER SCREENING

**High/Increased Risk  
Existing Condition(s)**

Your Screening History  
**Never Screened**

### Colorectal Cancer Symptoms

Early colorectal cancer often has no symptoms. That's why screening is so important.

If you routinely have any of these symptoms, talk to your doctor soon:

- Blood in or on your stool (bowel movement)
- Diarrhea, constipation, or feeling that the bowel does not empty all the way
- Abdominal pain, aches, or cramps that don't go away
- Unexplained weight loss

These symptoms can be caused by things other than cancer. The only way to find out what's causing them is to ask your doctor.

## COLORECTAL CANCER SYMPTOMS

1 or more reported symptoms  
**Increased Risk**

## Results

### Personal History

Type 2 diabetes increases the risk of developing colorectal cancer (CRC). This appears to be true even if a person with type 2 diabetes is physically active and within the recommended weight range.

People who have an inflammatory bowel disease (ulcerative colitis or Crohn's disease) have almost double the risk.

A history of certain types of polyps or other abnormal test results can increase a person's CRC risk.

Inherited gene changes can greatly increase the risk of developing colorectal cancer. Hereditary CRC syndromes include:

- Familial adenomatous polyposis (FAP)
- Family colon cancer syndrome X
- Lynch syndrome (sometimes referred to as hereditary nonpolyposis colon cancer, or HNPCC).

### PERSONAL HISTORY RISK FACTORS

Your Personal History  
**Average Risk**

Your personal history:

No colorectal cancer,  
hereditary CRC syndrome,  
inflammatory bowel disease,  
or type 2 diabetes

### Family History

Most people with colorectal cancer (CRC) don't have a history of the disease in their family. But when people do have an immediate family member (parent, brother, sister, or child) with CRC or pre-cancerous polyps, their risk for CRC is increased.

The risk is even higher if CRC or pre-cancerous polyps are diagnosed:

- Before age 60
- In 2 or more immediate family members

Having an immediate family member with a hereditary CRC syndrome increases the risk of developing CRC. This is because the gene change that causes the syndrome may be passed on through generations.

### FAMILY HISTORY RISK FACTORS

Your Family History  
**High Risk**

Your immediate family history:

Familial adenomatous polyposis (FAP)

## Lifestyle Risk Factors

Too much body fat increases the risk of colorectal cancer. Compared to people in the healthy weight range:

- Men with obesity have about a 50% higher risk of colon cancer and a 20% higher risk of rectal cancer.
- Women with obesity have about a 20% increased risk of colon cancer and a 10% increased risk of rectal cancer.

### WEIGHT

Current

200 lbs.  
**Increased Risk**

Recommended Goal

175 lbs. or less  
**Average Risk**

For your height, 200 pounds is considered OBESITY.  
Ask a health care professional about weight management options.

Smoking tobacco causes colorectal cancer. The risk seems higher for rectal cancer than for colon cancer.

People who quit smoking have a better chance of surviving colorectal cancer than those who don't.

### SMOKING

Current

Smoked within 30 days  
**Increased Risk**

Recommended Goal

Never smoked  
**Average Risk**

Talk to your doctor about programs or services to help you quit smoking.

Moderate to heavy alcohol use increases the risk of colorectal cancer.

An average of 2 to 3 drinks daily is "moderate use." Four drinks daily is "heavy use."

Moderate drinkers have a 20% higher risk of colorectal cancer than nondrinkers or light drinkers.

### ALCOHOL USE

Current

Fewer than 2 drinks daily  
**Average Risk**

Recommended Goal

Fewer than 2 drinks daily  
**Average Risk**

## Lifestyle Risk Factors

Physical activity lowers the risk of colon cancer, but not rectal cancer.

It's never too late to start exercising. Even people who have been inactive most of their lives can lower their colon cancer risk.

Taking a brisk walk or climbing stairs count towards the weekly recommended goal.

The recommended goal can be met by a mix of moderate and vigorous exercise.

### WEEKLY EXERCISE

Current

Recommended Goal

Equivalent to 180 min. moderate  
**Decreased Risk**

150 min. or more moderate  
**Average Risk**

\*60 moderate + 60 vigorous = 180 min. moderate  
(each minute of vigorous exercise equals two minutes of moderate)

\*\*The goal is 150 minutes of moderate exercise or an equivalent mix of moderate and vigorous minutes.

### About This Assessment

The Colorectal Cancer Assessment focuses primarily on screening recommendations for colorectal cancer (CRC) from the American Cancer Society<sup>1</sup> (ACS), the United States Preventative Task Force Services<sup>2</sup> (USPSTF) and the American College of Gastroenterology<sup>3</sup> (ACG). It also assesses risk factors related to CRC and family history.<sup>1,2</sup>

Lifestyle-related factors, such as alcohol use, smoking, and BMI, are assessed and evaluated.<sup>4</sup> Symptoms<sup>4</sup> of possible colorectal cancer are also assessed.

### References

1. Wolf AMD, Fontham ETH, Church TR, et al. Colorectal Cancer Screening for Average-Risk Adults: 2018 Guideline Update from the American Cancer Society. *CA Cancer J Clin* 2018;68:250-281. <https://doi.org/10.3322/caac.21457>.
2. US Preventive Services Task Force. Screening for Colorectal Cancer US Preventive Services Task Force Recommendation Statement. *JAMA*. 2021;325(19):1965-1977. <https://doi.org/10.1001/jama.2021.6238>.
3. Shaukat A, Kahi CJ, Burke CA, et al. ACG Clinical Guidelines: Colorectal Cancer Screening 2021. *Am J Gastroenterol* 2021;116:458-479. <https://doi.org/10.14309/ajg.0000000000001122>
4. American Cancer Society. Colorectal Cancer Facts & Figures: 2020-2022. Atlanta, GA: American Cancer Society. 2020. <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/colorectal-cancer-facts-and-figures/colorectal-cancer-facts-and-figures-2020-2022.pdf>

**NOTICE: Health assessments are based on averages from studies of large groups of people.**

Your situation may be different. It is important to discuss your personal situation with your health care provider. This assessment is not intended to replace medical advice from your health care provider, but rather help you set health goals and make healthy lifestyle decisions.

**DISCLAIMER**

THE INFORMATION CONTAINED IN THE RISK ASSESSMENT IS FOR YOUR PERSONAL USE ONLY. THIS RISK ASSESSMENT WILL NOT PROVIDE YOU WITH A MEDICAL SERVICE; IT WILL NOT DIAGNOSE, CURE, MITIGATE, TREAT, OR PREVENT DISEASE OR OTHER CONDITIONS; AND IT IS NOT INTENDED TO PROVIDE A DETERMINATION OR ASSESSMENT OF YOUR STATE OF HEALTH. ALWAYS CONSULT A LICENSED HEALTH CARE PROFESSIONAL SUCH AS YOUR FAMILY PHYSICIAN OR A SPECIALIST TO MAKE HEALTH CARE DECISIONS OR BEFORE STARTING ANY DIET OR EXERCISE PROGRAM. WE MAKE NO WARRANTIES, EXPRESSED OR IMPLIED, IN CONNECTION WITH THE RISK ASSESSMENT OR THE PERFORMANCE OF THE RISK ASSESSMENT, AND NEITHER THE ASSESSMENT PROVIDER, NOR MEDICOM HEALTH INTERACTIVE, WILL BE HELD RESPONSIBLE OR LIABLE FOR ANY COSTS OR DAMAGES RELATED TO USE OF THE RISK ASSESSMENT OR ANY INFORMATION PROVIDED THEREFROM.

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Mt. General Memorial Regional Medical Center  
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(555) 555-2100

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(555) 555-4100

Mt. General Memorial Lakeport Hospital  
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(555) 555-5100

**YOUR RESULT**  
summaryResult

**COLORECTAL CANCER SCREENING**



## ECC-119 - NEW

colorectalSymptomsRisk

### COLORECTAL CANCER SYMPTOMS

No reported symptoms

**Average Risk**

1 or more reported symptoms

**Increased Risk**



## HEALTH HISTORY RISK FACTORS

Top Badge

personalHistoryRisk

Your Personal History  
**Diagnosed CRC**

'diagnosed\_crc'

Your Personal History  
**High Risk**

'high'

Your Personal History  
**Increased Risk**

'increased'

Your Personal History  
**Average Risk**

'average'

Bottom Badge

familyHistoryRisk

Your Family History  
**High Risk**

'high'

Your Family History  
**Increased Risk**

'increased'

Your Family History  
**Average Risk**

'average'



## LIFESTYLE RISK FACTORS

`lifestyleRiskFactorsCount`

**1 Change  
Recommended**

`lifestyleRiskFactorsCount = 1`

**# Changes  
Recommended**

`lifestyleRiskFactorsCount = 2 OR 3 OR 4`

**No Recommended  
Changes !**

`lifestyleRiskFactorsCount = 0`

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## Report - page 1 MESSAGING

reportMainMessage

LC documents --> Colorectal Cancer Messaging --> reportMainMessage  
<https://www.lucidchart.com/documents/edit/53df9278-c089-4378-8b15-7f178ce3f1e5/1>

### Bullets

**(NOTE: ORIGINAL BULLET1 REMOVED IN 2021)**

#### *Bullet 1 Personalized Screening Notes*

LC documents --> Colorectal Cancer Messaging --> bullet2  
<https://www.lucidchart.com/documents/edit/53df9278-c089-4378-8b15-7f178ce3f1e5/3>

#### *Bullet 2 Health History Risk*

LC documents --> Colorectal Cancer Messaging --> bullet3  
<https://www.lucidchart.com/documents/edit/53df9278-c089-4378-8b15-7f178ce3f1e5/4>

#### *Bullet 3 Lifestyle Risk Factors*

LC documents --> Colorectal Cancer Messaging --> bullet4  
<https://www.lucidchart.com/documents/edit/53df9278-c089-4378-8b15-7f178ce3f1e5/5>

## Report - page 1 PARTS

Lifestyle Risk Factors	You Reported	
Obesity weight range	No	If bmiRisk = 'increased', show Yes; else, show No
Current smoker	No	If smoker = 'current', show Yes; else, show No
Low weekly exercise	Yes	If exerciseRisk = 'average', show Yes; else, show No <b>(QA &amp; DEVS: Please note this one is different)</b>
Moderate/heavy alcohol use	No	If alcoholRisk = 'increased', show Yes; else, show No

### DEV & QA NOTE: "Current smoker" and "Low weekly exercise" are a little different here.

The logic for the Lifestyle Risk Factors badge is identical to the table logic.

i.e. The number of YES answers in the table on page 1 should match the number of RECOMMENDED CHANGES in the Lifestyle Risk Factors Badge.

#### SMOKER: 'Current smoker' in the table is driven by 'smoker' and NOT 'smokerRisk.'

If 'smoker='current', show YES in the table and +1 in the lifestyleRiskFactorsCount

If 'smoker'=[former\_more' OR 'former\_less' OR 'never'], show NO in the table and +0 in the lifestyleRiskFactorsCount .

In contrast, the independent risk factor badge on page 4 of the report is driven by 'smokerRisk' and not 'smoker.'

In cases where smoker='former\_\*' the user will see an orange badge on page 4 but a NO in the table on page 1 (& no change recommended).

#### WEEKLY EXERCISE: 'Low weekly exercise' in the table is driven by 'exerciseRisk.'

If 'exerciseRisk='average', show YES in the table and +1 in the lifestyleRiskFactorsCount

If 'exerciseRisk='decreased,' show NO in the table and +0 in the lifestyleRiskFactorsCount.

In cases where exerciseRisk='average' the user will see a blue badge on page 5 but a YES in the table on page 1 (& change recommended).

### BOTTOM LINE:

There MAY be instances where the number of orange/blue risk factor badges in the report (pages 4 & 5) don't match the number of "recommended changes" in the Lifestyle Risk Factors badge OR the number of YES answers in the table on page 1.

This won't necessarily mean there's a calculation error.

## bmiRisk

### WEIGHT

weight  
Current

### lbs.  
?? Risk

recommendedWeight  
Recommended Goal

### lbs. or less  
Average Risk

### lbs.  
Average Risk

bmiCategory != 'obese'

### lbs.  
Increased Risk

bmiCategory = 'obese'

### CONDITIONAL SUB MESSAGE Driven by 'bmiCategories' -- NOT badge color!

obese:

'weight'

For your height, ### pounds is considered **OBESITY**.  
Ask a health care professional about weight management options.

normal:

'weight'

For your height, ### pounds is considered a **HEALTHY WEIGHT**.

overweight OR underweight

'weight'

'bmiCategory'

For your height, ### pounds is considered {**OVERWEIGHT/UNDERWEIGHT**}.  
Ask your doctor to determine a healthy weight for you.

smokerRisk

## SMOKING

Current

Recommended Goal

text  
**?? Risk**

Never smoked  
**Average Risk**

Never smoked  
**Average Risk**

{text}  
**Increased Risk**

Average Risk:  
smoker = 'never'

Increased Risk:  
If smoker = 'former\_more', show {text} = Quit smoking (more than 1 yr.)  
If smoker = 'former\_less', show {text} = Quit smoking (less than 1 yr.)  
If smoker = 'current', show {text} = Smoked within 30 days

### CONDITIONAL SUB MESSAGE

smoker='current': Talk to your doctor about programs or services to help you quit smoking.

exerciseRisk

WEEKLY EXERCISE

*exerciseModerateEquivalent*

Current

Equivalent to ### min.  
**?? Risk**

Recommended Goal

150 min. or more moderate\*  
**Decreased Risk**

Equivalent to ### min.  
**Decreased Risk**

Equivalent to ### min.  
**Average Risk**

DYNAMIC SUB MESSAGE

Your moderate exercise equivalent is *exerciseModerateEquivalent* minutes.  
(### min. moderate & ### min. vigorous)  
*weeklyExercise\_moderate* *weeklyExercise\_vigorous*

alcoholRisk

## ALCOHOL USE

Current

text  
**?? Risk**

Recommended Goal

Fewer than 2 drinks daily  
**Average Risk**

Fewer than 2 drinks daily  
**Average Risk**

2 or more drinks daily  
**Increased Risk**

