

# CEA Blood Test

## What is CEA?

The tumor marker CEA stands for **carcinoembryonic antigen**. A tumor marker is a substance found in the body or blood that may be a sign of cancer or other health conditions. CEA is a protein that is found in embryonic tissue (fetal tissue) and in some tumors. A high level of this protein in the blood **could** mean that cancer is present. CEA may be used as a tumor marker for a number of cancers, usually cancers of the digestive tract – colorectal, pancreatic, stomach – but is also used for lung, breast, ovarian, thyroid, bladder, head and neck, cervical, kidney, prostate cancers and lymphoma and melanoma. How often the test is done depends on many factors, but it is usually the change in CEA over time (called serial CEA levels) that is most helpful.

There are other substances and benign conditions, however, that can raise your CEA level. Some of these are cigarette smoking, liver disease, pancreatitis, gastrointestinal inflammatory conditions (Crohn's, ulcerative colitis), hepatitis, cirrhosis, peptic ulcers, cholecystitis (inflammation of the gallbladder), hypothyroidism, colon polyps, benign breast disease, lung infections, , and chronic obstructive pulmonary disease (COPD).

## What is a CEA Blood Test?

A CEA blood test is used most often to help doctors to:

- stage a cancer
- predict which cancers may be likely to progress
- monitor cancer treatment (determine if treatment has been effective)
- assess whether or not cancer has returned after treatment

## What Does an Elevated CEA Level Mean?

- One significant limitation of this test is that CEA is not increased in all cancers, and is not as likely to be found if the cancer is in the early stages.
- If the CEA level is elevated before a patient undergoes treatment, it should go back down after treatment.
- If the CEA level does not return to lower levels or begins to rise after treatment and continues to rise, more tests will be done to see if the cancer has returned or if it is hiding in another area of the body.