Differential Risks That Guide Cancer Screening Decisions

Cancer screening refers to checking for precancerous lesions or cancer in people who have no signs or symptoms of the cancer for which they are being tested. The decisions of whether someone should be screened for cancer, at what age the screening should begin, for which cancer type(s) the individual should be screened, and at what age the routine screening should stop, are different for each person. Broadly speaking, individuals fall into two categories for cancer screening:

INDIVIDUALS AT AVERAGE RISK OF DEVELOPING CANCER

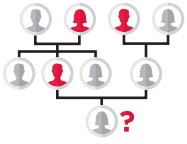
In general, individuals at average risk of developing cancers are those who do not have a strong family history of cancer or personal history of cancer, and do not have an inherited genetic condition or lifestyle factor that places them at high risk of developing cancer.

INDIVIDUALS AT HIGH RISK OF DEVELOPING CANCER

There are also other factors that may help determine whether an individual should consider undergoing cancer screening. Some of these factors, which may put an individual at a higher risk for developing cancer, are described below:

Individuals with increased exposure to one or more cancer risk factors:
For example, individuals who smoke tobacco are at a higher risk for developing cancer. According to CDC, people who smoke cigarettes are 15 to 30 times more likely to develop lung cancer or die from it than people who do not smoke.

Individuals with a unique cellular or tissue makeup:
For example, women who have extremely dense breasts have an increased risk of developing breast cancer compared to women with less dense breasts. As another example, women who have certain patterns of "overactive" breast tissue in an otherwise benign breast biopsy (e.g., atypical cells or lobular carcinoma in situ) are also at increased risk for developing breast cancer.



Individuals with inherited cancer susceptibility syndromes:
Also called hereditary cancer syndromes, inherited cancer susceptibility syndromes are caused by genetic mutations that can be passed on from one generation to the next and can predispose an individual to develop certain types of cancer. For example, individuals who have certain mutations in the BRCA1/2 genes or have a strong family history of breast cancer are at a higher risk of developing cancers of breast, ovarian and pancreas.

Individuals who consider themselves at a high risk for inheriting a cancer-predisposing genetic mutation should consult a health care provider and consider genetic testing and genetic counseling. Genetic testing may aid an individual and his or her health care provider team in deciding whether a preventive surgery would help reduce the risk of developing cancer later on.

Individuals from certain racial and ethnic minorities:
Those who belong to certain racial and ethnic minorities are at a higher risk of developing certain types of cancer and at a younger age compared to White individuals. For example, accruing evidence shows that a breast cancer diagnosis at a younger age is more common in Black women compared to White women. Furthermore, Black women are more likely to be diagnosed with biologically aggressive forms of the disease at all ages.