

The endocrine system is responsible for producing and managing the hormones that regulate many parts of the human body. Most of the tumors that affect the endocrine system are benign (non-cancerous) but they can still have a major effect on a person's health. Compared with other types of cancer, endocrine cancers are much less common. However, a greater proportion of endocrine cancers can potentially be hereditary.

#### Risk factors for some endocrine tumors

**Lifestyle factors:** Maintaining a healthy weight and being physically active can reduce the chance that someone develops cancer.

**Smoking:** It has been suggested at smoking cigarettes increases an individual's chance of adrenal cancer and pancreatic neuroendocrine (islet cell) tumors.

Age and gender: Thyroid cancer is more common in women than in men and is more common in middle age (40s and 50s). Men are more likely to develop pheochromocytomas than women.

**Iodine**: Diets low in iodine increase an individual's chance to develop thyroid cancer, however this is less common in countries with iodine added to their foods, such as the United States.

**Diabetes**: Individuals with diabetes are at an increased risk of pancreatic neuroendocrine (islet cell) tumors.

**Radiation exposure**: Children who have been treated with radiation to the head or neck are at an increased risk of thyroid cancer. Imaging tests such as X-rays and CT scans expose individuals to a small dose of radiation. While this amount is generally safe, these tests should only be used when needed to prevent unnecessary radiation exposure. Studies have determined that individuals exposed to nuclear radioactive material from accidents at nearby power plants or nuclear weapons are also at increased risk of thyroid cancer.

# Types of Neuroendocrine tumors and cancers

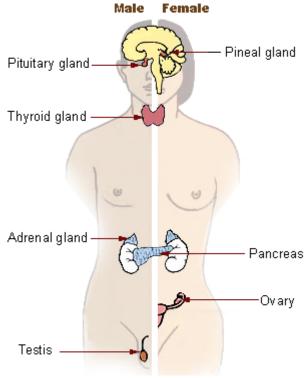
The varieties of endocrine tumors and cancers are very diverse and can occur in any part of the endocrine system:

- Thyroid
- Parathyroid (Multiple Endocrine Neoplasia, type 1)
- Pituitary



- Adrenal (Paraganglioma and Pheochromocytoma)
- Pancreatic (Islet cell)





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Click <u>here</u> to learn more about scheduling a genetic counseling appointment for questions about hereditary cancer predisposition.

#### **Additional Resources**

### \*Positive Results Facebook Group

Genetic Support Foundation hosts a Facebook group for Hereditary Cancer Support and Resources. Get trusted information and join a community of support.

## \*Cascade Screening Connector

Genetic Support Foundation has partnered with the Washington State Department of Health to provide cascade screening to help people identify and contact family members who may



have an increased chance of developing cancer.

\*FORCE (Facing Our Risk of Cancer Empowered)

The FORCE mission is to improve the lives of individuals and families facing hereditary cancer. Resources include peer navigation and expert-reviewed information. \*AliveAndKicknAliveAndKickn is a nonprofit working to improve the lives of individuals and families affected by Lynch Syndrome and associated cancers through research, education, and screening.

\*Health Experiences USAThis national research project brings patient voices into the healthcare experience and features video clips of people facing hereditary cancer. Individuals from a variety of backgrounds share both positive and negative experiences about living with hereditary cancer.