

VA

Radiation Oncology

Patient Education



How Does Radiation Treat Cancer ?

Radiation uses high-energy particles or waves, such as x-rays, gamma rays, electron beams, or protons, to destroy or damage cancer cells. It is one of the most common treatments for cancer.

Human cells normally grow and divide to form new cells, but cancer cells grow and divide much more quickly. Radiation works by making small breaks inside the DNA of the cancer cells, which prevents them from growing and dividing, and causes them to die.

Radiation therapy is often local. This means radiation is

only aimed at and affects the part of the body that needs treatment. While nearby normal cells can sometimes be affected by radiation, most recover and go back to working the way they should.

Some radiation treatments, such as systemic radiation therapy, use radioactive substances that are given in a vein or by mouth. Even though this type of radiation travels throughout the body, the radioactive substance nonetheless collects around the tumor, so the rest of the body remains generally unaffected.

Key Facts About Radiation Oncology Treatment at VA

1

Patients do not feel anything when they are receiving radiation treatments.

3

VA has 41 dedicated radiation oncology services, all accredited by ACR or APEX.

2

There are two types of radiation therapy:

External beam radiation: when a machine aims radiation at your cancer.

Internal treatment radiation: when a source of radiation is put inside your body. The radiation source can be solid or liquid.

4

Cancer is one of the leading causes of death in the United States, and more than half of those with cancer get radiation therapy. Sometimes, radiation therapy is the only cancer treatment needed. Other times, it's used in conjunction with other types of treatment.

About NROP

The radiation oncology practiced across VA is guided by best-in-class leaders in oncology, who are committed to providing high-quality care to Veterans. Through the management of complimentary programs and the strength of our talented staff, NROP walks with Veterans on every step of their cancer journey.



SHOULDER to SHOULDER
Every Step of the Way

VA



U.S. Department
of Veterans Affairs