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## VA research on **CANCER**

*VA researchers are working hard to understand the mechanisms that cause cancer, evaluate existing treatments, and find new drugs and therapies for Veterans and others with cancer.*

### **ABOUT CANCER**

- Cancer is a disease in which the normal process of cell growth and death is disrupted. Cancerous cells grow abnormally and spread to other parts of the body, eventually destroying healthy tissue. There are more than 100 different types of cancer.
- There are two main types of cancer. Hematologic cancers are diseases that affect blood cells. Leukemia and lymphoma fall in this group. Solid tumor cancers involve tissues in the body or organs.
- Nearly 50,000 cases of cancer are reported annually in the VA Central Cancer Registry.
- The three most frequently diagnosed cancers in VA patients are prostate, lung, and colon cancer. This list is similar to cancers observed in the general population.
- In 2021, bladder cancer was added to the list of presumptive conditions related to Agent Orange exposure, joining chronic B-cell leukemia, Hodgkin's disease, multiple myeloma, non-Hodgkin's lymphoma, prostate cancer, respiratory cancers, and some soft tissue sarcomas.

### **VA RESEARCH ON CANCER: OVERVIEW**

- The NCI and VA Interagency Group to Accelerate Trial Enrollment ([NAVIGATE](#)) is a collaboration with the National Cancer Institute to address barriers to cancer clinical trial recruitment across VA. The group is working to increase the number and variety of clinical trials available to VA patients.
- VA's National Precision Oncology Program ([NPOP](#)) was established in 2016 to implement and standardize precision oncology throughout VA. The program aims to increase collaboration among VA researchers and clinicians to find optimal cancer treatments for Veterans. The initiative includes precision oncology programs focusing on multiple types of cancer, including lung cancer and prostate cancer.
- VA and the Prostate Cancer Foundation have [partnered](#) to promote prevention, screening, and research to find new treatments for prostate cancer in Veterans.
- VA launched a strategic [partnership](#) with Duke University and Baylor College of Medicine to build VA's National Women Veterans Oncology System of Excellence.

The partnership includes new collaborative research programs.

### **SELECTED MILESTONES AND MAJOR EVENTS**

- 1932** – [Established](#) a tumor research laboratory in Hines, Illinois
- 1950** – [Found](#) there was “strong circumstantial evidence” linking cigarette smoking with respiratory tract cancers
- 1962** – [Developed](#) the “Gleason score” to predict the aggressiveness of prostate cancer
- 1984** – [Developed](#) a transdermal nicotine patch to reduce the cravings for cigarettes
- 2000** – [Showed](#) the superiority of colonoscopy to sigmoidoscopy
- 2016** – [Established](#) the VA National Precision Oncology Program (NPOP)
- 2017** – [Determined](#) prostate cancer surgery does not significantly reduce all-cause deaths for men who are in early-stage disease
- 2018** – [Partnered](#) with the National Cancer Institute to help Veterans with cancer enroll in NCI-funded clinical trials
- 2020** – [Partnered](#) with the [GO<sub>2</sub> Foundation](#) to increase awareness about lung cancer

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screenings and improve outcomes for Veterans with lung cancer

**2020** – [Created](#) the National Women Veterans Oncology System of Excellence to provide cutting edge cancer care and access to clinical trials for women

## RECENT STUDIES: SELECTED HIGHLIGHTS

• **Racial disparities in colorectal cancer were identified** in a study of more than 90,000 Veterans. The study showed that Black people may have a higher risk of colorectal cancer than white people, but that the risk was likely not due to genetics. Rather, non-biological factors such as access to health care may explain the difference. ([Journal of Clinical Gastroenterology](#), Dec. 1, 2021)

• **Rural Veterans may have less access to lung cancer screenings**, according to an Edith Nourse Rogers Memorial Veterans Hospital study. Researchers looked at data for nearly 72,000 Veterans who received a lung cancer screening at VA. Lung cancer screenings were particularly low in rural locations. Nine of the 12 states with the highest proportions of rural Veterans had three or fewer lung cancer screening facilities. ([Chest](#), July 2021)

• **Delaying surgery for lung cancer is linked with a higher risk of death**, found a VA St. Louis study. Patients with early-stage non-small cell lung cancer who delayed surgery for more than 12 weeks after radiological diagnosis had a higher risk of recurrence and death, compared with those who did not delay surgery. Every week of delay after 12 weeks increased the hazard of cancer recurrence by 0.4%. ([JAMA Network Open](#), May 3, 2021)

• **Colorectal cancer screening delay increases cancer risk**, according to a VA Greater Los Angeles study. Patients who received a colonoscopy 13 to 15 months after an abnormal stool test were 1.3 times more likely to be diagnosed with colorectal cancer compared with patients who were screened one to three months after an abnormal test. The risk of advanced colorectal cancer and death increased the longer screening was delayed. ([Gastroenterology](#), May 2021)

• **Surgery risks may outweigh benefits for patients with prostate cancer**, found a review by Minneapolis VA researchers. They found that “watchful waiting” may slightly increase the risk of death for men clinically diagnosed with prostate cancer. However, it reduced overall

harm compared to surgery. The results suggest that prostate cancer surgery may be necessary only for patients under age 65 and for those with more aggressive forms of the cancer. ([Journal of Urology](#), April 2021)

• **PTSD raises suicide risk in prostate cancer patients**, found a study led by White River Junction VA researchers. Veterans with prostate cancer and PTSD were at greater risk of suicide than prostate cancer patients without PTSD. The team found that almost twice as many study patients with PTSD died by suicide, while half as many died from circumstances not related to suicide. ([Psychooncology](#), April 2021)

• **Intermittent fasting may reduce the risk of breast cancer**, suggests a study by VA San Diego researchers. In a mouse model, restricting eating to an eight-hour window decreased the risk of development and growth of breast cancer. Intermittent fasting that aligned with circadian rhythms also improved metabolic health in mice with obesity-driven, postmenopausal breast cancer. ([Nature Communication](#), Jan. 25, 2021)

**For more information on VA studies on cancer and other key topics relating to Veterans’ health, please visit [www.research.va.gov/topics](http://www.research.va.gov/topics)**

*VA’s National Precision Oncology Program (NPOP) was established in 2016 to implement and standardize precision oncology throughout VA.*

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