

This year in Alaska:

- 3,090 people will be diagnosed with cancer, including
- 260 new colorectal cancer cases
- 460 new breast cancer cases, and
- 380 new lung cancer cases
- Cancer will kill 910 Alaska residents

This year in the United States:

- More than 1.5 million new cancer cases will be diagnosed
- Cancer will kill 571,950 Americans

Cancer Research and Prevention Funding in Alaska:

- Alaska received \$11.3 million in funding from the National Institutes of Health in Fiscal Year 2010
- Alaska received \$2.4 million in FY 2010 for the National Breast and Cervical Cancer Early Detection Program

Selected Research Accomplishments:

According to a study by The Cancer Genome Atlas (TCGA) Research Network, the most common form of malignant brain cancer in adults, glioblastoma multiforme (GBM), is not a single disease but appears to be four distinct molecular subtypes. Researchers also found that response to aggressive chemotherapy and radiation differed by subtype. Patients with one subtype treated with this strategy appeared to succumb to their disease at a rate approximately 50 percent slower than patients treated with less aggressive therapy. This effect was seen to a lesser degree or not at all the remaining subtypes. Researchers said the results may lead to more personalized approaches to treating groups of GBM patients based on their genomic alterations which may improve the near uniformly fatal prognosis of this cancer.

In a study supported by the National Cancer Institute scientists have found that cancer patients produce antibodies, as of part an immune system response that target abnormal glycoproteins, made by their tumors. The result of this work suggests that antitumor antibodies in the blood may provide a fruitful source of sensitive biomarkers for cancer detection. Scientists hope that such antibodies may ultimately have the potential to help doctors detect cancer by a simple blood test.

Scientists at the National Cancer Institute have established the presence of certain proteins in ovarian cancer tissues and have linked these proteins to poor survival rates in women with advanced stages of the disease. Abnormalities in a specific family of proteins have been found in several types of cancer, including ovarian cancer, but the mechanism and importance of such alterations in ovarian cancer was not defined. A researcher involved in the study, Christina M. Annunziata, M.D., Ph.D., has stated that "this study sheds light on the distinctive genetic features of the...pathway and may provide targets for the development of novel therapies for ovarian cancer."