

Risk of cancer, risk factors in cancer, cancer patient survival, cancer screening

Epidemiological and statistical cancer research is conducted based on countrywide population-based Finnish Cancer Registry material available from the year 1953 onwards. The Finnish Cancer Registry collaborates with a number of research institutes in Finland and abroad.

Descriptive epidemiology (incidence trends and maps, cancer risks by social class) aim at creating and testing hypotheses on risk factors in cancer.

Future predictions in cancer incidence and mortality are made particularly for decision-makers and authorities.

Analytical studies into risk factors in cancer use cohort and case-control approaches; examples of study objects: environmental exposures (due to magnetic fields around high-power electrical lines, radon, Chernobyl fall-out, emissions from an oil refinery etc.), occupational exposures based on occupational codes or direct exposure data, biochemical and chemical constituents of serum (vitamins, micronutrients, tumour markers, antibodies), dietary factors, certain diseases and drugs. Risks of cancer patients to contract a new primary cancer are also studied. Research focuses are increasingly more found within genetic cancer epidemiology.

Evaluation of population-based cancer control measures, particularly screening, is often based on materials collected by the Mass-screening Registry.

Evaluation of cancer patient survival and prognostic factors is conducted using representative countrywide materials.

Biostatistical methodology in cancer incidence predictions and cancer patient survival analyses greatly facilitates the applications in these areas.