

Appendix C: Glossary

Age-Specific Rate: The rate of occurrence of a cancer for a specific age group (the number of cancers occurring during a specified period of time in a particular age group divided by the total number of individuals in the age group and time period).

Age-Standardized Rate (age-adjusted rate): Refers to a rate that has been adjusted to control for differences in age distribution between populations. It is a weighted average of age-specific rates, with the proportion of individuals in the corresponding age groups of the standard population functioning as the weights. The 1970 U.S. population is used as the standard in this report.

ALL: Acute lymphocytic leukemia.

Artifact: Any artificial product. In epidemiology, any observation that has been introduced by the methods used for data collection or data analysis.

Ascertainment: The collection of information; the process of finding desired information.

ATSDR: Agency for Toxic Substances and Disease Registries, an agency within the U.S. Centers for Disease Control and Prevention.

Basement membrane: A usually single-layered membrane of flat cells of connective tissue underlying the epithelial cells of many organs.

Benign: Not malignant, not likely to metastasize.

Biopsy: The removal and examination, usually microscopic, of tissue from the living body, performed to establish precise diagnosis.

Cancer: Diseases characterized by rapid, uncontrolled cell growth, with a tendency to spread throughout the body.

Cancer-Directed Treatment: As defined by SEER, this is therapy specifically undertaken to affect, control, change, remove, or destroy cancer tissue, or to induce remission in leukemias.

Cancer Registry: An ongoing system for the registration and follow-up of patients who develop cancer.

- **Hospital-Based Cancer Registry:** A cancer registry that uses hospital records as the primary data source for identification of cases.
- **Pathology-Based Cancer Registry:** A cancer registry that uses pathology laboratory records as the primary data source for identification of cases.
- **Population-Based Cancer Registry:** A cancer registry that attempts to collect information on at least 95 percent of the incident cancers occurring in the individuals residing within a defined geopolitical region.

Cancer Surveillance (from French, "surveiller" meaning "to watch"): The continuing scrutiny of cancer occurrence; its main purpose is to detect changes in trend or distribution in order to initiate investigative or control measures.

Carcinoma: A malignant tumor of epithelial origin.

Case-Control Study: A study in which individuals with a particular condition such as cancer (referred to as cases) are selected for comparison with individuals in whom the condition is absent (controls). Cases and controls are compared with respect to past exposures, risk factors, or attributes thought to be relevant to the development of the condition under study.

Cell Type: See Histologic Type.

Central Nervous System (CNS): Brain, meninges, spinal cord and cranial nerves.

Clinically Diagnosed: Refers to cancers which are not histologically confirmed, but are instead diagnosed through other means—for example, through imaging procedures such as CT scans. Cancers which are only clinically diagnosed and have no microscopic confirmation are not collected by MCSS.

Cohort: In this report, cohort refers to a group of people with one or more common characteristics. Researchers follow cohorts over time, often to see if certain members are at higher risk than others of developing a disease like cancer.

Completeness: In the context of cancer surveillance, it is the ascertainment of all newly diagnosed cases of cancer occurring in Minnesota residents.

Death Clearance: A quality control activity that links MCSS' database of incident cancers with Minnesota cancer-related death certificates. Any death certificates that do not have a corresponding match in the MCSS database indicate a cancer that may have been missed. MCSS staff members follow up each of these cases to see if the cancer should have been included in the database.

Demographic Data: Descriptive information such as name, social security number, address, age, and sex, that is useful in identifying individuals or their geographical location of residence.

Distant: A General Summary Stage term used to describe cancer that has spread from the primary site to distant organs or lymph nodes.

EAPC: Estimated Annual Percentage Change.

Epidemiology: The study of health conditions (e.g., cancers, injuries, etc.) by looking for patterns of occurrence by time, place, or person in the hopes of finding causes or identifying control measures for the condition.

Etiology: The study or theory of the causation of any disease; the sum of knowledge regarding causes.

Expected Number of Cases: The number of cases (of a cancer) expected in a given population in a given time period if the incident rates for that cancer were the same as the rates in a comparison population, adjusting for age differences of the two populations.

Histologic Type: "Histo" refers to tissue, and histologic type refers to the type of tissue in which a tumor originated, e.g., glandular tissue, connective tissue, etc.

Histologically Confirmed: Refers to a tumor of which at least a piece has been examined microscopically and diagnosed by a pathologist or other specialist.

Hospital-Based: See Cancer Registry.

In Situ: Preinvasive cancer; a cancer that is diagnosed before it penetrates too deeply.

Incidence Rate: The rate at which new events (in this case, cancers) occur in a population. It is usually expressed as a number per 100,000 persons per year.

Incident: A newly-diagnosed cancer from a defined population, within a specified period of time.

Invasive: The tendency to spread to adjacent healthy tissues. Technically, "invasive" means the carcinoma has penetrated the basement membranes and is close to blood vessels.

Ionizing Radiation: Particles or photons that have sufficient energy to produce ionization (the removal of an electron from an atom or molecule) directly in their passage through a substance. This causes cell damage in humans. X-rays and gamma rays are examples.

Lifetime Risk of Cancer: An approximate measure of the chance of developing cancer in an individual's lifetime.

Linear Interpolation: A statistical procedure by which one can estimate unknown values that fall between two known values. MCSS has used linear interpolation to derive population estimates for years that fall between census years (e.g., Minnesota census data from 1980 and 1990 was used to estimate the population for the years 1988 and 1989).

Localized: A General Summary Stage term used to describe invasive cancer that has not spread beyond its primary site.

Malignant: Tending to become progressively worse, to spread, and invade other tissues.

MCCHS: Minnesota Center for Health Statistics.

MCSS: Minnesota Cancer Surveillance System.

MDH: Minnesota Department of Health.

Metro(Metropolitan): In this report the metro area refers to Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington counties.

Minnesota Resident: Defines the population of individuals on whom cancer occurrence information is being collected by the MCSS.

Mortality Rate: A measure of the rate at which deaths occur in a population (the number of deaths occurring in a defined period of time divided by the total number of people in the population during that period of time).

NCI: National Cancer Institute.

Natural History: In this report, the term refers to the natural course or progression of a cancer over a period of time.

Non-Metro (Non-metropolitan): In this report, non-Metro refers to all Minnesota counties except Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington.

Non-Identified File: A set of electronic records from which the identity of any one individual cannot be deduced.

Nulliparity: The condition of never having given birth.

Observed Number of Cases: The actual (also called crude) number of cases of a cancer recorded for a given population for a given time period.

Pathology: The branch of medicine that studies the essential nature of disease, especially the structural changes in tissues or organs associated with disease.

Pathology-Based: See Cancer Registry.

Population: All the inhabitants of a given area considered together; the number of inhabitants of a given area.

Population-Based: Pertaining to a population defined by geopolitical boundaries; this population is used as the denominator in calculating rates. For the MCSS, this is the State of Minnesota. (Also see Cancer Registry.)

Prevalent: Refers to a disease that was first diagnosed prior to a specified period of time.

Primary Site (Site): The place in the body where the cancer first arose.

Prostate Specific Antigen (PSA): A blood test used to screen men for prostate cancer used with increased frequency since 1987.

Quality Control: The steps taken to avoid making errors and to find and correct errors before the data are added to the master database.

Rapid Ascertainment: The process by which cases are reported within a shorter time than through the routine process.

Record Linkage: The process of comparing two records from different sources, deciding if the records correspond to the same individual or entity, and then taking some action based on that decision.

Regional: A General Summary Stage term used to describe cancer that has spread from the primary site into immediately adjacent organs or tissues via direct extension, and/or to regional lymph nodes.

Regression: A statistical tool for evaluating the relationship of variables; used in this report for estimating the best trend line that would describe a series of yearly rates for a specific cancer.

Risk Factor: An attribute or exposure that is associated with an increased probability of developing a condition or disease, but does not necessarily imply cause and effect.

Screening: Procedures performed on or tests administered to asymptomatic people (i.e., people who show no signs of the disease in question) to determine if the disease could be present in an early, subclinical phase. Those whose screening results come back positive generally undergo further diagnostic testing to see if the disease is truly present.

SEER (Surveillance, Epidemiology and End Results): An ongoing, population-based cancer surveillance system sponsored by the National Cancer Institute that monitors cancer incidence, treatment, and follow-up in nine or eleven U.S. regions comprising approximately 10 or 14 percent of the U.S. population depending on which years of data are examined.

SES: Socioeconomic status.

SIR: Standardized Incidence Ratio. The actual (observed) number of cases of a disease in a given population divided by the number of cases expected in that population, adjusting for age differences.

Stage (of a tumor): Stage at diagnosis classifies how far a cancer has progressed, in order to determine the best course of treatment and to predict a patient's prognosis. Although there are various staging systems in use, two of the most well-known are:

- General Summary Stage (GSS), developed for the National Cancer Institute's SEER Program, which categorizes tumors as in situ, localized, regional, distant (see specific terms for further definitions); and
- The American Joint Committee on Cancer's TNM system, which incorporates information on the size of the tumor; which (if any) lymph nodes are affected; and whether the tumor has spread to distant organs, and then assigns a cancer-specific stage (e.g., Stage IIA breast cancer).

Certain cancers, such as leukemias, may be staged differently. Clinicians use prognostic factors specific to these cancers to determine the appropriate course of action.

Subclinical: Refers to a disease process that is not causing any obvious signs or symptoms.

Surveillance: The systematic collection, analysis, and interpretation of data pertaining to the occurrence of specific diseases (in this report, cancer).

- **Active Surveillance:** The reporters of disease are contacted at regular intervals and specifically asked about the occurrence of the disease under surveillance. This is considered the most ideal and complete form of surveillance.
- **Passive Surveillance:** Reporting of the disease in question is initiated by the reporting source.

Tumor: A mass resulting from the abnormal growth of cells. Tumors may either be benign (with little tendency to spread throughout the body) or malignant (with a tendency to spread throughout the body). Malignant tumors are synonymous with cancer.

Underlying Cause of Death: The disease or injury that initiated events resulting in death.