

GLOSSARY

Age-adjusted Rate

In general, the number of “events”—deaths, illness, hospitalizations – in a population is affected by the size and age makeup of the population. As the size and age of populations vary, comparing crude rates between populations and across time can be misleading. For instance, a population with a large elderly population may have a higher crude death rate than a population with a smaller elderly population simply due to the fact that illness and death increase with age.¹

In order to eliminate the effect of age and make fairer comparisons between populations, rates are age-adjusted. An age-adjusted rate is obtained by calculating age-specific rates for each population of interest and multiplying these rates by proportions of the same age categories in a “standard population”, then summing the apportioned specific rates to a total. The “standard population” used for age-adjusting in this report is the 2000 U.S. Standard Population. It is important to note that because age-adjusted rates are based on an external standard population, they do not reflect the absolute or “real” frequency of the event in the population. In addition, the standard population used for age-adjustment must be the same for all rates to be compared.^{1, 2}

Age-specific rate

An age-specific rate is a crude rate for a specific age group – both the numerator and denominator are restricted to the selected age group.³ Examples of age-specific rates include the birth rate for teens 15-19 years or death rate for adults 45-54 years. Age-specific rates are used when the risk of disease or injury is different at different ages. For example, the risk of injury and death due to motor vehicle accidents is higher among younger age groups versus the elderly.²

Confidence interval

A confidence interval is a measure that indicates the precision of a rate or percent. It consists of lower and upper limits that mark the range within which we expect the true rate to fall. Confidence intervals are calculated with a stated probability, usually 95%.^{2, 4} The precise definition of the 95 percent confidence interval is that if a measurement was to be conducted 100 times, the true estimate would fall within the confidence interval 95 times, and the true rate would be either higher or lower than the range of the confidence interval 5 times.⁵

A narrow confidence interval for a rate indicates with greater certainty that the calculated rate is a reliable estimate of the true rate, while wider intervals signal greater variability and less certainty.¹

Crude rate

Crude rates are not adjusted for age or other factors that may affect a health outcome. The crude death rate is a measure of the overall burden of disease and mortality in a population.³ It is calculated by dividing the total number of “events” for a population, such as deaths or hospitalizations, by the total number of individuals in the population at risk and multiplying by a constant such as 100,000.^{2, 6}

Federal Poverty Level

Federal Poverty Level is a term commonly used to refer to the official U.S. *Department of Health and Human Services Poverty Guidelines*. Issued yearly, these guidelines serve as one of the indicators for determining eligibility in a wide variety of Federal and State programs. The guidelines vary by family size.⁷ The 2007 poverty guideline for a family of two is \$13,690, for a family of three is \$17,710 and for a family of four is \$20,650. For more information see the U.S. Department of Health and Human Services website at <http://aspe.hhs.gov/poverty/07poverty.shtml>

In Situ

In situ is a term used for a non-invasive cancer, which is a cancer that has not spread from the area of the body where

it originated. In breast cancer, “in situ” means that the cancer remains confined to the ducts or lobules and has not spread to the surrounding breast tissue or other organs of the body.⁸

Incidence

Incidence refers to new cases of illness, death or injury that arise during a specific time period. The incident rate is calculated by dividing the number of new cases occurring during a given period of time by the population at risk.⁹ Incidence is also often expressed as a percentage of the population.

Pacific Islander

Pacific Islander is a racial term used to describe an individual of Polynesian, Micronesian or Melanesian descent. For purposes of the U.S. 2000 Census, this includes, but is not limited to, people having origins in any of the original peoples of Hawaii, Guam, Samoa, Tonga, Fiji or other Pacific Islands. In the 2000 U.S. Census, Pacific Islanders were included in the category of “Native Hawaiian and Other Pacific Islander.” For statistical purposes these populations are grouped in efforts to get numbers large enough to calculate stable rates. In this report, Pacific Islanders are often left out of tables due to the group’s small numbers.¹¹

Prevalence

Prevalence is the number or proportion of both new and pre-existing cases of illness, death or injury in a given population regardless of the date of occurrence. The prevalence rate is the number of all current cases over a specified period of time divided by the population at risk.⁹ Incidence conveys information about the risk of contracting the disease.

Rate

A rate is a measure of the frequency of an “event”, such as a death, case of disease or hospitalization, in a population. A rate is calculated using a numerator and a denominator. The numerator is the number of “events” that occur in a population. The denominator is the number of people in the population, all of whom must be eligible to be counted in the numerator. The denominator is often referred to as the “population at risk.”²



Editor’s note: The Washington State Department of Health provides an excellent online resource for understanding statistical words and terms, as well as guidelines to calculating rates. It can

be found at <http://www.doh.wa.gov/Data/guidelines/Rateguide.htm>

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