There are striking geographic differences in the incidence and mortality of different cancer types in different world regions. This global diversity reflects both the presence of local risk factors for specific cancers, and the extent to which effective cancer control measures have been implemented. Much of the observed variation in recorded incidence rates of different cancer types in different registry populations can be attributed to lifestyle and environmental factors. Such marked international variability supports the critical role of cancer prevention as a means to reduce the future cancer burden. Although specific causes remain unknown for many cancers, where measured, about two-thirds of cancers diagnosed today are potentially avoidable. Prevention measures include eliminating exposure to known lifestyle and environmental risk factors, including tobacco and alcohol, dietary factors, excess body weight, and UV radiation, and increasing resistance to infection by vaccination. However, the proportion of cancer cases avoidable—overall and for specific risk factors—substantially varies by region. For example, infection accounts for 30–50% of all cases in sub-Saharan Africa, whereas this proportion is only 5% in Europe and North America.

The most frequently diagnosed cancers and leading cause of cancer death at the national level reflect the major risk factors in the population and the average prognosis of the major cancers observed. **Stomach** and **lung** cancers dominate the global landscape, particularly in women. Female breast cancer is the most frequent cancer in four-fifths of the world’s nations, with cervical cancer ranking most frequent in the majority of remaining countries, particularly in sub-Saharan Africa. The mortality profile among women is slightly more heterogeneous, with lung cancer also a leading cause of death.

Among men, there is considerable international diversity in the leading cancer types, with around 10 different cancers as the most commonly diagnosed cancer or leading cause of cancer death. Prostate, lung, and liver cancer are major cancers in men, although other cancers dominate in some regions (lip and oral cavity in South Asia and Kaposi sarcoma in Eastern Africa). Nevertheless, lung cancer is the leading cause of cancer death among men in over half of the world’s countries.

**Cancer varies between different populations, and every type is rare in some part of the world.** Many specific causes are now known. To explore these differences, but a large proportion of global variation for common cancers remains unexplained.

—Prof. Julian Pays, France, 2001

Cancer incidence rates vary up to 50-fold between geographic areas.

**Breast** and **cervical** cancer are the most frequently diagnosed cancers and leading causes of cancer death in many countries in women. Lung cancer is also a leading cause of cancer death in many countries.

**SUM 1.1**

The most common cancer cases and deaths in women in 45 countries in 2018

**SUM 1.2**

The most common cancer cases and deaths in men in 45 countries in 2018

**MAP 16.1**

Relative and absolute global variations in age-standardised rates (world) of registry populations included in CI5 Volume XI (circa 2008–12); rates shown are those within the 10th and 90th percentiles in males.

**MAP 16.2**

Relative and absolute global variations in age-standardised rates (world) of registry populations included in CI5 Volume XI (circa 2008–12); rates shown are those within the 10th and 90th percentiles in females.

**MAP 16.3**

Relative and absolute global variations in age-standardised rates (world) of registry populations included in CI5 Volume XI (circa 2008–12); rates shown are those within the 10th and 90th percentiles in males and females.

**MAP 16.4**

Relative and absolute global variations in age-standardised rates (world) of registry populations included in CI5 Volume XI (circa 2008–12); rates shown are those within the 10th and 90th percentiles in males.

Considering both sexes together, either female **breast**, **prostate**, or **cervical** cancer is the most commonly diagnosed cancer in over 70% of countries.