

# Dramatic Variation in the Global Burden of Esophageal Cancer: A Disability-Adjusted Life Years Approach

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## Objectives

- Esophageal cancer is the eighth most common cancer worldwide and the sixth leading cause of cancer-related deaths. As a significant cause of worldwide morbidity and mortality, it places a considerable humanitarian and economic burden on society.
- This burden has not been fully characterized on either a national or global scale.
- The aim of this study is to describe the global burden of esophageal cancer through estimation of the disability-adjusted life years (DALYs) attributable to this disease throughout the world.
- DALYs represent the time lost from both morbidity and mortality.

## Methods

- Estimates of the incidence and mortality of esophageal cancer in 184 countries and territories were obtained from the International Agency for Research on Cancer GLOBOCAN 2008 database.
- DALYs attributable to esophageal cancer in 2008 were calculated for each country and territory using the methodology established by the World Health Organization.

## Results

- In 2008, there were a total of 4,669,780 DALYs attributable to esophageal cancer.
- Global rate of 0.68 DALYs per 1,000 people per year.
- 83.6% of global DALYs were in less developed countries.
- 51.4% of global DALYs were in Eastern Asia, 48.9% in China alone.
- Men contributed 68% of global DALYs; however, several countries had DALY rates substantially higher among women.
- Rates of DALY accrual showed dramatic variation among regions, with the highest rate (1.68 DALYs per 1,000 people per year) in Southern Africa.

Figure 1: DALYs by region in 2008

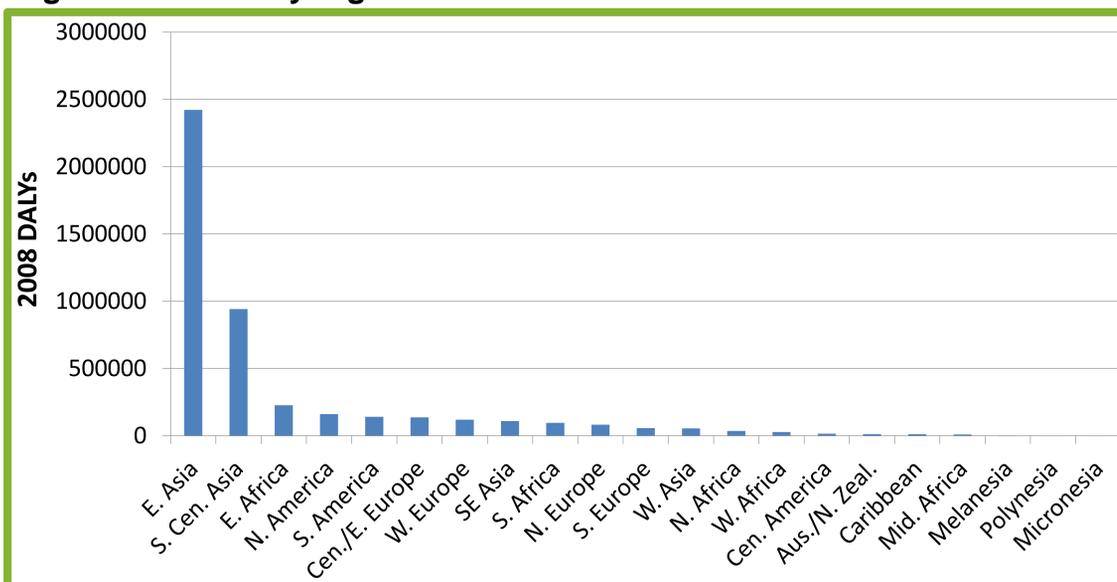
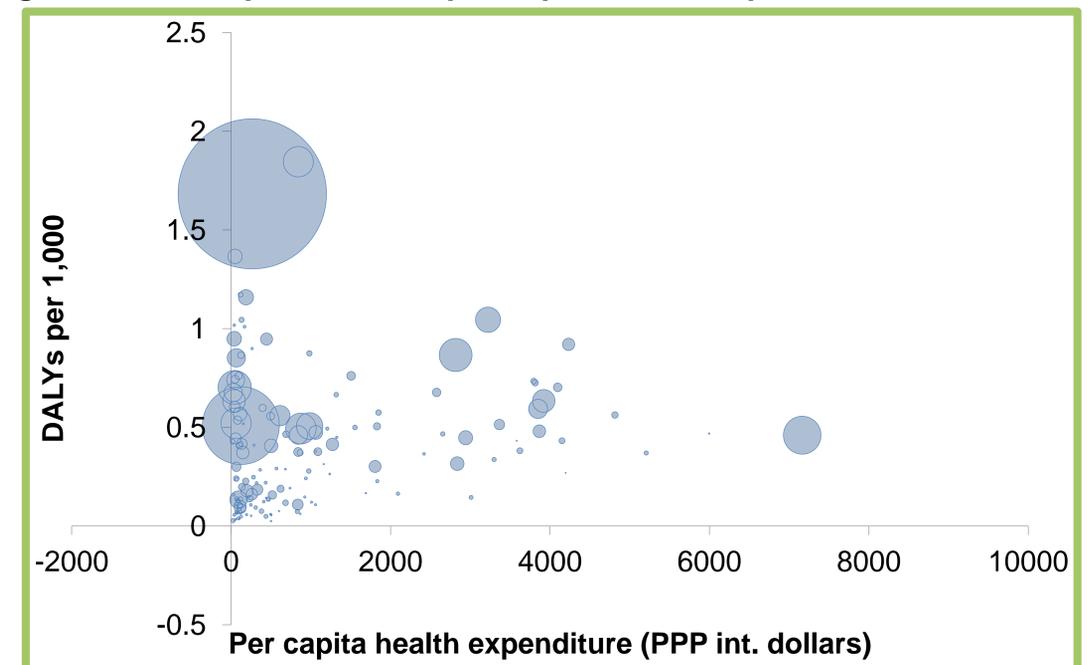


Figure 2: DALYs per 1,000 in 2008



Figure 3: DALYs per 1,000 vs. per capita health expenditure



## Conclusions

A tremendous number of years of life were lost or affected by esophageal cancer in 2008.

The vast burden of this disease is in Eastern Asia, where cancer rates are also increasing dramatically.

This work serves to help solidify global priorities for interventions to effect DALY reduction through the prevention and treatment of esophageal cancer.