

COPD Statistical Information

COPD (Chronic Obstructive Pulmonary Disease) is an umbrella term used to describe lung disease associated with airflow obstruction. Most generally, emphysema, and chronic bronchitis, either alone or combined, fall into this category. There is continuing debate as to whether this term also includes asthma. However, as a general rule, it is not included. Although it does have obstructive components, it is in part reversible and is more generally considered a restrictive lung disease. Many with emphysema and chronic bronchitis also have asthma or an asthmatic component to their illness as well.

For the purpose of the statistical facts presented here, only emphysema and chronic bronchitis are included in the figures and estimates. When you think about the number of people also affected by asthma, as well as the over 200 or more restrictive lung diseases on record, these figures are, indeed, very frightening and overwhelming.

Surprising little has actually been learned about COPD. Studies are very limited, but things do seem to be improving with some very encouraging studies and clinical trials under way for medications and treatments. There is a very long way to go, however.

The good news is that COPD, though considered a chronic, debilitating and generally fatal disease, can be managed, controlled and slowed down. We can all lead good and long lives with a great deal of quality and joy even after diagnosis. If you or a loved one has been diagnosed with COPD, general well-being and prognosis can improve greatly with proper treatment and care.

The most important factors contributing to a longer and healthier lifestyle include, but are not limited to:

- Early detection
- A knowledgeable physician who is proactive in disease management, preferable a pulmonary specialist
- Following your medication regimen faithfully
- Healthy eating habits
- Stopping smoking
- A personal exercise program, approved by your physician
- Education about any and all aspects of your disease and related problems
- Infection prevention to limit exacerbations leading to further lung damage

Some Alarming Statistics

World Wide Information

- The World Health Organization (WHO) estimates that COPD as a single cause of death shares

4th and 5th places with HIV/AIDS (after coronary heart disease, cerebrovascular disease and acute respiratory infection).

- The WHO estimates that in 2000, 2.74 million people died of COPD worldwide.
- In 1990, a study by the World Bank and WHO ranked COPD 12th as a burden of disease; by 2020, it is estimated that COPD will be ranked 5th.
- According to the WHO, passive smoking carries serious risks, especially for children and those chronically exposed. The WHO estimates that passive smoking is associated with a 10 to 43 percent increase in risk of COPD in adults.
- Although cigarette smoking is the primary cause of COPD, the WHO estimates that there are 400,000 deaths per year from exposure to biomass fuels.
- In Algeria, the prevalence of tuberculosis and acute respiratory infection has decreased since 1965, but an increase in chronic respiratory diseases (asthma and COPD) has been observed in the last decade.
- COPD is estimated to be 6.2 percent in 11 Asian countries surveyed by the Asian Pacific Society of Respiratory Diseases.
- The use of biomass fuels, especially in the rural areas, contributes towards a higher prevalence of COPD in some of these countries and suggests that COPD may be significantly greater in this region of the world than previously estimated.
- In China, where it is estimated that over 50 percent of the men smoke, chronic respiratory diseases are the 4th leading cause of death in large urban areas, but the first leading cause of death in rural areas.
- In China, smoking rates among women remain low (estimated at 6 percent), although the prevalence of COPD in men and women is about the same. This points to the importance of risk factors other than smoking as a cause for COPD in Chinese women.
- In Malaysia, respiratory illness is the primary cause of visits to health clinics and outpatient hospital clinics. It is estimated that 50 percent of the male population smokes, with higher rates in the rural areas than the urban areas.

Unites States Information

- **COPD is the fourth leading cause of death in the U.S. and is projected to be the third leading cause of death for both males and females by the year 2020.**
- The NHBLI reports 12.1 million adults 25 and older were diagnosed in 2001.
- It is estimated that there may currently be 16 million people in the United States currently diagnosed with COPD.
- It is estimated that there may be as many as an additional 14 million or more in the United States still undiagnosed, as they are in the beginning stages and have little to minimal symptoms and have not sought health care yet.
- Men are 7 times more likely to be diagnosed with emphysema than women, though the prevalence in women is on a steady increase and this number is lowering with each year
- People over the age of 50 are more likely to be considered disabled, however, the damage started years before
- About 1.5 million emergency department visits by adults 25 and older were made for COPD in 2000.
- More emergency department visits for COPD were made by adult females than adult males (898,000 vs. 651,000).
- About 726,000 hospitalizations for COPD occurred in 2000. More females than males were hospitalized for COPD (404,000 vs. 322,000).
- The total estimated cost of COPD in 2002 was \$32.1 billion.
 - \$18 billion were direct costs
 - \$14.1 billion were indirect costs

NOTE: Prior estimates place the that the total cost of managing COPD in 2000 had increased to approximately 30 billion dollars. Smokers are 10 to 15 times more likely to be disabled by

emphysema then non-smokers.

- According to the Center for Disease Control (CDC), there were **124,816 deaths** in the US in 2002
- It is the only major disease with an increasing death rate, rising 16%

	HIV/Aids	Kidney	Liver	Diabetes	All Cancers	Heart	Pneumonia/Flu	COPD
Number of Deaths	16,371	35,525	60,000	71,372	570,000	725,192	40,000	124,816
NIH Allocation for research per death	\$179,158	\$11,147	\$6,166	\$14,221	\$9,896	\$2,982	\$7,375	\$448

Ref: Conditions by Death” at http://www.wrongdiagnosis.com/lists/deaths_printer.htm and National Institutes of Health, “Estimates of Funding for Various Diseases, Conditions, Research Areas,” March 8, 2005, at <http://www.nih.gov/news/fundingresearchareas.htm>. Also, Cary P. Gross, M.D., Gerard F. Anderson, Ph.D., and Neil R. Powe, M.D., M.P.H., M.B.A., “The Relation Between Funding by the National Institutes of Health and the Burden of Disease,” *N Engl J Med* 1999;340:1881-1887 at <http://tinyurl.com/ddb2y>.

Older Data included for evaluation

- Between 1979 and 1995, the number of individuals with COPD in the United States increased relatively steadily from 7.5 million to 14.5 million persons. -- almost doubling in 25 years
- Between 1985 and 1995, the number of physician visits for COPD in the United States increased from 9.3 million to 16 million.
- The number of hospitalizations for COPD in 1995 was estimated to be 500,000. In the United States in 1993, 28 percent of men and 23 percent of women smoked.
- The rates of cigarette smoking were higher among black (33 percent) than white men (27 percent), but similar in black and white women (21 percent and 23 percent, respectively).
- In the United States, it is estimated that 5 to 7 percent of adults current or former smokers have moderate reductions in lung function and 3 to 5 percent have severe reductions. These percentages increase with increasing age of the population.
- COPD is currently the 4th leading cause of death in the United States for those between the ages of 65-84.
- COPD is currently the 5th leading cause of death in the United States for ages 45-64 and 85 and older.
- Mortality has increased 22% in the last decade
- More than 100,000 American's died in 1997 from COPD.
- It is estimated that the total cost of managing COPD in 1998, physicians, medications, hospital and nursing care, etc., exceeded 15 billion dollars in the United States.

A very detailed map of the United States showing the prevalence of COPD in the United States and incidence and mortality rates by states can be found at:

<http://www.copdinamerica.org/map.html>

Research resources

The information presented here was gathered from a variety of sources deemed fairly accurate. To research this information further, please visit the following web sites:

<http://www.nhlbi.nih.gov>

http://www.nhlbi.nih.gov/health/public/lung/other/copd_fact.pdf

<http://www.copdinamerica.org/background.html>

http://gsk.ibreathe.com/ibreathe_pages/3_0_copd/3_1_2_statistics.htm

<http://www.hosprract.com/issues/1998/04/dmmferg.htm>

http://www.lungusa.org/data/lae_02/lae_index02.html