

COPD ALERT FACT SHEET

DECEMBER 2010

1. **COPD - A DEFINITION.** An umbrella term used to describe major chronic lung diseases such as **emphysema and chronic bronchitis**. While COPD is often the result of smoking, it may be caused by genetic defects, childhood bouts with pneumonia, exposure to environmental pollution, and by health hazards present in some jobs. Almost 90% of COPD patients have both emphysema and chronic bronchitis, and most patients have other pulmonary diseases, like asthma, and additional serious ailments precipitated by COPD.

2. **THE MORBIDITY AND MORTALITY FACTOR.** According to the Center for Disease Control (CDC), COPD is the **THIRD** leading cause of death in this country with **141,075 deaths** in 2008. That is **386 DEATHS PER DAY!** The American Academy of Allergy, Asthma and Immunology warns that COPD is **the only major disease with an EVER-INCREASING death rate**. At the same time, death rates for other major diseases have been steadily declining. According to the CDC's National Center for Health Statistics, the death rate for heart diseases FELL by nearly 35% between 1979 and 1997. During the same period the **death rates for lung diseases ROSE more than 16%**. National projections through the year 2006 predict continued escalation in COPD morbidity and mortality rates. At the present time, it is estimated that there could be as many as **35 million people with COPD in the US** (American Lung Association - ALA). Particularly worrisome is the fact that the age of COPD patients has been steadily declining. The COPD support groups and programs throughout the country and worldwide witness increasing influx of patients in their 30's and 40's.

3. **THE ECONOMIC FACTOR.** COPD is a unique public health challenge to society now and for the foreseeable future. It is a fatal and highly disabling disease that imparts substantial economic burden on individuals and society. The World Bank study suggests that some **25% of COPD patients will die during their productive middle age**, losing 20 to 25 years of life. At the same time, millions of COPD patients live for many years but are disabled and unable to work. The ALA has described **COPD as the second most disabling disease** for American workers. Not surprisingly, the economic costs are enormous. According to the National Heart, Lung, and Blood Institute (NHLBI), nearly \$50 billion per year (a conservative estimate) is spent on medical expenditures. The primary source of medical expenses for COPD patients are extended hospital stays and expensive medications. A study published in *Chest* (2001, 117: 25S-9S) points out that **10% of COPD patients account for more than 70% of all medical care costs**. In recent years, these costs have escalated considerably.

4. **COPD - A NEGLECTED DISEASE.** Insufficient attention is being paid to the fact that there is an extreme shortage of viable treatment options for COPD. In actuality, physicians have only a few choices: to experiment with medicines developed almost exclusively for asthma; prescribe pulmonary rehabilitation and oxygen; or to consider surgery. Asthma medications relieve symptoms, but are not curative in any way or combination. Their effectiveness also diminishes over time. Furthermore, most of them received a black box warning from the Food and Drug Administration because of safety concerns. Pulmonary rehabilitation is not commonly available, while oxygen therapy is undergoing a major overhaul with substantial reimbursement cuts and competitive bidding, which have a negative effect on the patient population. The issue of surgery is a complex one and it does not apply to most patients. Many of them do not qualify for medical or insurance-related reasons. Medicare and many other insurance carriers offer limited or no coverage for the lung volume reduction surgery (LVRS). Lung transplants are an option to much fewer patients due to very strict medical requirements and a critical shortage of donor lungs.

5. **SCANDALOUS RESEARCH GAPS.** There is no known cure for COPD or any of its components. Even though smoking and environmental factors play a role in acquiring and developing COPD, removing them does not eradicate or prevent progress of the disease. In fact, still not enough is known about the process. There is

also clear evidence that physicians are often ill prepared to deal with COPD. One of the major reasons is the fact that there are hardly any medicines developed specifically for this disease. It is imperative that a special national research program be established to learn more about the disease process and to develop specific medicines to treat and possibly cure COPD. Clearly, the amount of money that the National Institutes of Health (NIH) **allocates** for research on COPD is **woefully small and declining**. The figures below demonstrate how low COPD ranked in 1996 in terms of the total amount of research dollars (in thousands) per death in comparison with other diseases.*

HIV/AIDS	KIDNEY	LIVER	DIABETES	ALL CANCERS	HEART	PNEUMONIA/FLU	COPD
\$43,206	\$13,414	\$6,756	\$4,856	\$4,723	\$1,160	\$750	\$588

Compare with the figures for 2005 (upper row – number of death, lower row – amount per death):**

16,371	35,525	60,000	71,372	570,000	725,192	40,000	124,816
179,158	11,147	6,166	14,221	9,896	2,982	7,375	448

See also the chart for 2010 at www.copd-alert.com/FUND2010B.jpg

Note that the **10 major causes of death** in the U.S. are: 1. **heart disease**; 2. **cancer**; 3. **stroke**; 4. **chronic lower respiratory diseases (COPD)**; 5. **accidents**; 6. **diabetes**; 7. **influenza/pneumonia**; 8. **Alzheimer's disease**; 9. **Nephritis, nephrotic syndrome, and nephrosis**; and 10. **Septicemia**.***

6. AGENDA FOR ACTION. The National Lung Health Education Project (NLHEP) has pointed to the major reduction in premature morbidity and mortality from heart attack and stroke as one of the greatest public health success stories in this country. This was accomplished due to massive research and public education funding by several government organizations, including the NIH. In 2000 it was estimated that by 2020, COPD would rank as the third leading cause of death, surpassing stroke. That happened in 2008, 12 years ahead of these predictions. Therefore, the government and the Congress **MUST** take major steps to slow the upward spiraling of the incidences of death and disability due to COPD and related lung diseases in this country or we will have a major public health emergency on our hands within the next few years. The deadly march of COPD can be stopped if the government and the Congress commit to a massive research and public education programs similar to those used for heart disease, stroke, and AIDS. Current levels of funding are very disturbing. **Compare these examples for 2010: COPD - \$98 million (141,075 deaths per year); AIDS - \$3 billion (11,061 deaths); breast cancer - \$769 million (41,000 deaths); Parkinson's - \$158 million (17,588 deaths per year).**

REFERENCES

*<http://www.ncpa.org/pd/gif/spenddeath.gif> and National Center for Policy Analysis, "Prioritizing Health Research Spending" at <http://www.ncpa.org/health/pdh39.html>
 Also, "Estimates of Costs and NIH Support of Related Research for the 10 Leading Diseases or Conditions Causing Death in the United States" at <http://www.nap.edu/readingroom/books/nih/tab7.html>
 ***"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>.
 ***CDC, National Center for Health Statistics: Deaths/Mortality at <http://www.cdc.gov/nchs/fastats/deaths.htm>. Also, www.cdc.gov/nchs/data/hestat/preliminarydeaths04_tables.pdf#2;
www.nhlbi.nih.gov/health/public/lung/copd/campaign-materials/pub/speakers-guidewith-pp-inserted.pdf
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