

Smoking

Summary of Methods and Data for Estimate of Costs of Illness

- | | |
|---|---------------------|
| 1. Estimated Total Economic Cost | \$ 138.0 billion |
| Estimated Direct Cost | \$ 80 billion |
| Estimated Indirect Cost | \$ 58 billion |
| Reference Year | 1995 |
| IC Providing the Estimate | NIDA |
| | |
| Direct Costs Include: Other related nonhealth costs | Not Available |
| Indirect Costs Include: | |
| Mortality costs | Yes, \$49.5 billion |
| Morbidity costs: Lost workdays of the patient | Yes |
| Morbidity costs: Reduced productivity of the patient | No |
| Lost earnings of unpaid care givers | No |
| Other related nonhealth costs | Not Available |
| Interest Rate Used to Discount Out-Year Costs | 4 % |
| 2. Category code(s) from the International Classification of Diseases, 9th Revision, Clinical Modification, (ICD-9-CM) for all diseases whose costs are included in this estimate: <u>No relevant code.</u> | |
| 3. Estimate Includes Costs: | |
| Of related conditions beyond primary, strictly coded ICD-9-CM category | No |
| Attributable to the subject disease as a secondary diagnosis | No |
| Of conditions for which the subject disease is an underlying cause | Yes |
| 4. Population Base for Cost Estimate (Total U.S. pop or other) | Total U.S. pop. |
| 5. Annual (prevalence model) or Lifetime (incidence model) Cost: | Annual |
| 6. Perspective of Cost Estimate (Total society, Federal budget, or Other) | Total Society |
| 7. Approach to Estimation of Indirect Costs | Human Capital |
| 8. <u>Source of Cost Estimate:</u> (Reference published or unpublished report, or address and telephone of person/office responsible for estimate). | |

Rice, D.P. Economic Costs of Substance Abuse, 1995. Proceedings of the Association of American Physicians, 111: 119-125, 1999.

9. Other Indicators of burden of disease:

Smoking-related deaths for 1996 estimated at 422,081. Estimate is extrapolated from the 1990 estimate from the Office of Smoking and Health, CDC, and the 1990 and 1996 estimates for alcohol related deaths estimated by NIAAA. In 1990, smoking-related deaths were estimated at 418,690 and alcohol related deaths at 109,751. Calculating the ratio of smoking related deaths to alcohol related deaths, yielded a factor of 3.8149 (i.e. there were approximately 4 times as many smoking related deaths as alcohol related deaths). Multiplying the 1996 alcohol related death estimate by this factor yields the 1996 estimate for smoking related deaths.

10. Commentary:

Smoking is a major contributor in deaths from lung cancer (90 percent), coronary heart disease, chronic bronchitis, and emphysema, and cancers of the pancreas, trachea, bronchus, and larynx. Therefore, smoking-related cost estimates are derived from actuarial data under diagnoses such as respiratory, pulmonary or heart disease, or cancer.

The estimates of smoking costs omit the cost of complications associated with health problems of newborns, such as low birth weight caused by mother's smoking. Also omitted are the costs of illnesses caused by environmental tobacco smoke exposure of children and adults, such as asthma and otitis media.