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October 1, 2016

**THE COST OF A NEW SMOKER**

We have used attributable risk calculations to estimate the number of new smokers recruited by motion pictures and several people have asked what the costs associated with these new smokers are. This issue is particularly relevant when considering the cost/benefit ratio associated with state film subsidy programs.

The most widely accepted estimate of the cost of the lifetime costs for a new smoker is from *The Price of Smoking,* by Frank Sloan, et al. (Cambridge, MA, MIT Press, 2004).

Sloan and colleagues produced a comprehensive analysis (as of 2000) of the effects of smoking on a number of effects, including health costs, mortality and morbidity costs, effects on Social Security and private retirement systems, and other costs. They also accounted for the effect on cost of people quitting smoking and the fact that people who die early because of smoking do not incur health or retirement costs after they die. These cash flows were discounted at 3% per year to estimate the present values of lifetime costs (and cost savings due to things like early death) for a 24-year-old smoker. (They selected 24 as a starting point to avoid the complications of youthful experimentation that does not lead to established smoking and the fact that few of the health and other costs of smoking are incurred by people under that age.) The cost data are based on the 1990s.

Despite the limitations of their methods, their findings are still useful for estimating the impacts of creating a new smoker.

We use Sloan et al.’s estimates to develop two values for the cost to society of a new smoker:

* The total lifetime costs of direct medical services, including those due to the secondhand smoke that the smoker generates.
* Costs of medical services consumed through age 50, under the logic that shorter term costs are more important to policy makers than complete lifetime costs.

Sloan et al. provide costs in year 2000 dollars. We adjusted total medical costs to August 2016 dollars (the most recent data available) using the Bureau of Labor Statistics hourly compensation index for total lifetime costs except for medical costs and the medical consumer price index for health care costs.

The table below shows the results of these calculations, with references to the specific sources for the estimates in Sloan et al.’s book.

|  |  |  |  |
| --- | --- | --- | --- |
| **Discounted Present Cost of Smoking for a 24-Year-Old Smoker**  **(from Sloan et al, *The Price of Smoking*)** | | | |
|  | Source | Year 2000 dollars | Year 2016 dollarsa |
| ***Lifetime medical costs*** |  |  |  |
| Due to smoking | Table 5.6b | $ 3,187 |  |
| Due to secondhand smoke | Table 11.2 | $ 604 |  |
| Total |  | $ 3,791 | $6,810 |
|  |  |  |  |
| ***Medical costs through age 50*** |  |  |  |
| Due to smoking | Table 5.6b | $ 5,206 |  |
| Due to secondhand smoke | Table 11.2 | $ 604 |  |
| Total |  | $ 5,810 | $10,437 |
|  |  |  |  |
| a Medical costs adjusted using medical CPI in August 2000 and 2016 = 260.8 and 468.5.  (Sources: <http://www.bls.gov/cpi/cpid00av.pdf> and http://www.bls.gov/cpi/cpid1608.pdf)  b Average of male and female costs. | | | |

The reason that the lifetime medical costs for the smoker are lower than the costs through age 50 is mostly that smokers do not live as long and so incur medical costs earlier than nonsmokers (and future costs are discounted).

*Suggested brief description:* Discounted present value of future medical costs of a 24-year-old smoker based on values in Tables 5.6 and 11.2 of *The Price of Smoking,* by Frank Sloan, et al. (Cambridge, MA, MIT Press, 2004) adjusted to August 2016 prices using the Medical CPI.