

Tobacco

N. Yamaguchi et al. International Journal of Epidemiology (Dec 2000) Vol. 29, p 963.

Exposure to tobacco smoke among Japanese smokers was extrapolated from data held by a tobacco-marketing organisation. Lung cancer mortality information was obtained from death certificates.

A model that assumed risk of lung cancer is dependent on cumulative exposure, was validated and tested. The model also predicts the same outcomes as those found by Doll and Peto, namely that lung cancer death risk increases as the 4.4th power of smoking duration/cumulative exposure. The model appears most accurate at the higher rate of smoking.

Comment

The link between tobacco smoking and risk of lung cancer has been consistently found in high quality studies over several decades.

If causation is accepted, quantitative models such as the one presented here could be used to estimate a threshold exposure for the doubling of risk and therefore a probable date for injury-in-fact.

