

P02-119

SMOKER SUICIDE RATES AND RISKS IN THE UNITED STATES AND FRANKFURT, GERMANY

B. Leistikow¹, K. Petronis², M. Kettner³, N. Willits⁴, B. Schneider⁵

¹Dept. of Public Health Sciences, University of California, Davis, ²Epidemiology, Pfizer, Inc., New York, USA, ³Centre of Legal Medicine, Goethe University, Frankfurt/Main, Germany, ⁴Dept. of Statistics, University of California, Davis, USA, ⁵Dept. of Psychiatry, Psychosomatics and Psychotherapy, Goethe University, Frankfurt/Main, Germany

Background: Suicide and smoking are immense, growing, associated global problems. Recent general population suicide rates and ratios by smoking status are unknown though in past reports, smokers had near three-fold hazard ratios of suicide among health professionals. So we assessed recent suicide rates and rate ratios in the general population of the United States (US) and Frankfurt, Germany.

Methods: US National Health Interview Survey interviewees from 1987, 1988, and 1990-94 with near complete follow up through 2002 (representing the US adult non-institutionalized population) and all suicides in 1999-2000 among adult residents of Frankfurt, their proxy respondents, control subjects, and census data were studied using survival time methods. Age was categorized in both samples as 18-30, 31-60 and 61+ years.

Results: The respective US versus Frankfurt crude suicide rates per 100,000 were 13.8 (95% confidence interval (CI) 12.4-15.5) versus 17.7 (CI 15.0-20.5) overall, 7.9 (CI 6.4-9.9) versus 12.0 (CI 9.2-14.7) in never smokers, and 22.9 (CI 19.5-27.0) versus 32.0 (CI 24.5-39.6) in current smokers. Smoker suicide rate ratios relative to never smokers ranged from 2.1 (males) to 4.2 (females) in US groups and 1.5 (ages 61+ years) to 3.7 (ages 31-60 years) in Frankfurt groups (each $p < 0.05$).

Discussion: In both the US and Frankfurt, Germany, large absolute and relative excesses of suicide are seen in smokers. Reducing the prevalence of smoking might greatly reduce suicide rates, especially in young and middle-aged adults and US females.

Acknowledgements: This study was funded by Pfizer, Inc.