Ten-year incidence and time trends of railway suicides in Germany from 1991 to 2000.

BACKGROUND: Railway suicides strongly impact psychological and socioeconomic aspects of the railway company, its employees and possible eye witnesses. We aimed to assess the incidence of railway suicides compared with the total burden of suicides in Germany and its time trend over a 10-year observation period.

METHODS: From 1991 to 2000, a total of 8,653 fatal railway suicides were recorded by the national central registry of all passenger accidents on the German railway net. To assess time trends, the average annual percentage change (AAPC) of the number of suicides was estimated using Poisson regression. Adjustments were made for two age groups and measures of availability.

RESULTS: Railway suicides accounted for 7.0% (annual range 5.0-7.9%) of all suicides in Germany. The time trend of the number of suicides by all means declined, with a significant stronger decline for older subjects [AAPC -2.2; 95% confidence interval (CI) -3.0 to -1.5; and -4.2; 95% CI -5.2 to -3.0]. An AAPC of 1.8% (95% CI 0.1-3.4) indicated an increasing time trend of the number of railway suicides for subjects aged 65 years exhibited a strong decrease (AAPC -6.2%; 95% CI -10.9 to -1.3).

CONCLUSIONS: The present study demonstrates different time trends for railway suicides compared with all suicides. It underlines the urgent need for amplified research efforts in the particular field of railway suicides. Further examinations are recommended, in particular
concerning possible reasons for this suicidal method.