

PATTERNS AND TRENDS IN LEADING CAUSES OF UNINTENTIONAL AND VIOLENCE-RELATED INJURY MORTALITY: UNITED STATES, 2000–2009

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Background Trending upwards, the US unintentional and violence-related injury mortality rate needed disaggregation.

Aims/Objective/Purpose To analyse rate patterns and trends in total injury mortality and its five leading external causes.

Methods An observational study using negative binomial regression to analyse annual cause-of-death data for US residents for the period 2000–2009 from the Web-based Injury Statistics Query and Reporting System (WISQARS).

Results/Outcome The mortality rate declined by 25% for unintentional motor vehicle traffic crashes, and increased by 128%, 71%, and 15% for unintentional poisoning, unintentional falls, and suicide, respectively. Suicide is now the leading cause of injury mortality, followed by motor vehicle traffic crashes, poisoning, falls, and homicide, respectively. Females had a lower total injury mortality rate than males (0.39; 95% CI 0.38 to 0.40). Blacks (0.92; 95% CI 0.89 to 0.95) and Hispanics (0.86; 95% CI 0.84 to 0.89) had lower motor vehicular and suicide mortality rates (Blacks: 0.47; 95% CI 0.45 to 0.49) (Hispanics: 0.43; 95% CI 0.41 to 0.45) than Whites, and higher homicide rates (5.55; 95% CI 5.22 to 5.91) (1.92; 95% CI 1.80 to 2.05). The poisoning mortality rate showed a strong time trend; for example, 2009 vs 2000 (1.96; 95% CI 1.75 to 2.20). The fall mortality rate displayed a positive age gradient.

Significance/Contribution to the Field Suicide, unintentional poisoning, and unintentional fall mortality pose major challenges for prevention in the USA. Suicide has become the leading cause of unintentional and violence-related or intentional injury mortality. Epitomised by successes in motor vehicle traffic safety, injury prevention needs to be evidence-based, proactive, multifaceted, integrated, systematic, flexible, ethically defensible, and sustained.