## GEOGRAPHIC DISTRIBUTION OF RISK OF DEATH DUE TO HOMICIDE IN PUERTO RICO, 2000–2007

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All homicide incidents of Puerto Ricos residents reported by the Institute of Forensic Sciences (IFS) for the period 2000–2007 were included for analysis (6409 deaths). Information for each case include age, sex, municipality, date of death and mechanism. Ballistic forensic data was not available for analysis.

Detailed tabulations of crude, sex and age-specific mortalities for Puerto Rico overall and for each municipality per year and for the 8-year period were calculated. Cumulative rate and cumulative risks were estimated up to 74 years of age (lifetime risk). This statistic procedure assumes a Poisson distribution model of homicide incidents. The relative distribution of cumulative rates for each municipality was categorised into quartiles with the top quartile reported as highest risk of homicide death.

Overall, the risk of homicide death in males is 13 times greater than among females. The high homicide rates seen among the young adult population is consistent throughout the 8-year period. The highest rates are observed among males 20-24 years of age (134.5 homicides  $\times$  100 000).

The use of firearms is the most common method for committing homicides in Puerto Rico. At any given year, the proportion of homicides using firearms is at least 80%. Light weapons are used in most, if not all homicides related to illicit drug trafficking (eg, AK-47 assault rifles) which is the principal context in which homicides occur in Puerto Rico. There was no suggestion of seasonality of homicide rates by month.