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**VULNERABLE USERS' DEATHS IN BRAZILIAN ROAD SAFETY 10 CITIES (RS-10)**

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**Background** In Brazil since 2006, deaths among Vulnerable Road Users (VRU) have made up more than half of all traffic-related deaths, with 51.1% of all deaths in 2010 occurring among motorcyclists, pedestrians, and bicyclists. We investigated mortality rates among motorcyclists and pedestrians in five state capitals targeted by a global road safety initiative.

**Objective** To evaluate road traffic fatalities among VRU in five Brazilian cities from 2000 to 2010, describing demographic trends among victims.

**Methods** Mortality data were obtained from the Ministry of Health, compiled using ICD-10 codes (V01–V89), subcategorised by VRU type and disaggregated by gender, age, and city.

**Results** The five cities represent 18.4% of total deaths occurred in capitals from 2000 to 2010. Mortality rates varied from 25.0 per 100 000 (Belo Horizonte) to 42 (Palmas), all above the national rate (21.5). Motorcyclist deaths increased by 288.4%, while pedestrian deaths fell by 5.6% over the decade. The highest pedestrian death rate was observed in Belo Horizonte (9.7/100 000, 39.8% cars/fleet, Gross National Product-GDP US\$9679). The highest rate of deaths among motorcyclists occurred in Palmas (13.9 deaths/100 000, 13% motorcycles/fleet, GDP US\$8364). Disaggregated by age, VRUs between 61 and 80 died at the highest rates.

**Contribution to the Field** Given high proportion of road traffic fatalities that occur among VRU, policy implications can be gleaned from the results. Brazil's transit authorities vary from between states, so analysis of the burden of VRU deaths between capitals can be helpful in targeting interventions towards appropriate risk groups.