

POTENTIAL FOR LIVES SAVED BY THE ROAD SAFETY IN 10 COUNTRIES (RS-10) PROJECT INTERVENTIONS IN FIVE BRAZILIAN CITIES

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Background The Road Safety in 10 Countries (RS10) project aims to improve road safety in Brazil by reducing drinking and driving (DWI) and excessive speeding. In 2010, 1086 road traffic deaths occurred in five intervention cities; estimated effectiveness on reducing deaths are 29% for speed reduction and 42% for DWI reduction. Implementing effective interventions has tremendous potential to save lives.

Aims/Objectives/Purpose To estimate the potential number of lives saved by the RS10 project in Brazil from 2012 through 2014.

Methods Mortality data from 2010 were extracted from Brazil's Mortality Information System (SIM). Prevalence of risk factor behaviours was collected in 2011 and 2012 in Palmas and Teresina and then projected to Belo Horizonte, Campo Grande, and Curitiba. The post-intervention mortality was projected using varied reductions in risk factor prevalences.

Results/Outcome Decreases in the prevalence of DWI from a baseline prevalence of 10% to potential future prevalence rates of 8%, 5% or 2% could eliminate 44, 110, or 176 deaths respectively over a 3 year period. If the baseline rate of speeding are reduced from 30% to 25%, 20%, or 15% then 59, 118, or 178 deaths could be averted during the same period.

Significance/Contribution to the Field Interventions undertaken by RS10 have the potential to save as many as 354 lives (or 10.9% of annual deaths) in the five intervention cities given moderate success. The effect of interventions on risk factors behaviour should be monitored and the interventions adapted frequently to maximise their effectiveness in order to save as many lives as possible.