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Background: There have been few studies evaluating snakebite mortality in Venezuela and South America. In this study we evaluate trends in fatal snakebites occurring in Venezuela, 2003-2007.

Methods: Epidemiological data for this study were retrieved from the records of the Ministry of Health of Venezuela (ICD-10 codes to search for deaths due to snakebites). We analyzed the impact of these envenomations in Venezuela during the study period.

Results: During the study period, there were 176 reports of death due to snakebite (0.63 deaths/100,000pop., ranging from 0.08 to 0.17), showing a slight decrease in the mortality rates from 0.13 deaths/100,000pop. in 2003 to 0.08 in 2007 (r² = 0.3942, b = -0.014000, P = 0.2634); 72.7% were males, 27.3% were females (P < 0.05). Annual mean deaths numbered 35 per year. Of total deaths, 30.1% occurred in victims 55–70 y-old (age adjusted rate of 1.4 deaths/100,000pop.). Deaths in young children (<5 y-old) accounted for 4.5% of the total (age adjusted rate of 0.28 deaths/100,000pop.). Mortality by age showed an age dependent pattern, with higher rates in older ages (r² = 0.259, b = 0.392998, P = 0.0156). Regard the place of envenomations occurrence in 15.3% were at home, 12.5% at roads and 5.1% at farms (P < 0.05).

Conclusion: These figures are similar to a previous report (Wilderness and Environmental Medicine 2007;18:209-213), however previously was reported a slight increase in the mortality in the last eight years, herein we showed a decrease. Additionally also an increase in the female deaths has been observed. Unfortunately morbidity data at the national level is not optimal (underreporting) to perform further analyses beyond the primary analysis of the trends in snakebite mortality. Conversely, all cases of deaths are specifically and obligatorily reportable, and mortality information is more available and accurate. Snake envenomations are an important cause of injury and deaths in Venezuela as in many American countries. Surveillance of envenomations is essential for establishing guidelines, planning therapeutic supplies, and training medical staff on snakebite treatment, as well as assessing risk zones for travelers.

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Epidemiology of drowning deaths in Venezuela, 1996-2007
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Background: Over the past four decades, medical community has learned considerably more about the pathophysiology and treatment of drowning. This, coupled with increased emphasis in improvement in water safety and resuscitation, has produced a threefold decrease in the number of deaths, indexed to population, from drowning in countries such as United States and Australia yearly. However in many countries these trends are not the same.

Methods: Epidemiological data for this study were retrieved from the records of the Ministry of Health of Venezuela, using ICD-10 codes to search for all deaths due to drownings during the study period (1996-2007). Using these data, we analyzed the impact of these accidents in Venezuela, a significant beaches tourist destination for travelers.

Results: During the study period, there were 7,071 reports of death due to drownings (rates ranging from 1.88 deaths/100,000pop. to 2.87), showing a significant decrease in the mortality rates from 2.87 deaths/100,000pop. in 1996 to 1.88 in 2007 (r² = 0.8971, b = -0.947, P < 0.001); 81.97% were males (rates 3.11-4.55 deaths/100,000pop), and 18.03% were females (rates 0.70-1.16 deaths/100,000pop) (P < 0.01). Annual mean deaths numbered 589 per year (±32). Highest rates occurred in victims aged less than 5 y-old (3.71 deaths/100,000pop.), however when adjusted by sex highest rate was observed in males 15-24 y-old (4.86 deaths/100,000pop.). Female rates were highest at less than 4 y-old (3.03 deaths/100,000pop.). Regard the place of drowning occurrence in 52% was at natural waters (beaches, rivers, lakes) (1.04 deaths/100,000pop.), 4% at swimming pools (0.08 deaths/100,000pop.) and 1% at bathtub (0.02 deaths/100,000pop.).

Conclusion: Drownings in male adolescents and young adults (and female children less than 5 years) continue to be a great challenge for water safety organizations, legislators and parents. Drownings in the indigenous community and among tourists requires more detailed study and action. Prevention especially during holydays or vacations requires a multidisciplinary approach, including travel medicine practitioners, in order to keep the decrease of these fatalities.

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