OBJECTIVES: To describe disparities in the incidence of diagnosed cases of congenital syphilis by Departments in Colombia between the years 2006-2009. METHODS: Ecological study. National incidence and incidence by Departments of congenital syphilis in Colombia were estimated. A descriptive comparison of these ratios showing the lowest and highest incidence by Departments each year is showed. RESULTS: National incidence of congenital syphilis in Colombia increased from 1.98 per 1000 live births in 2006 to 2.56 per 1000 live births in 2009. The lowest regional incidence in Colombia was found in Calditas with 0.35 cases per 1000 live births in 2009. Departments with the highest incidence of congenital syphilis in the same year were Chocó and Meta, with incidences of 7.43 and 5.92 per 1000 live births, respectively. CONCLUSIONS: Incidence of congenital syphilis has been increasing in Colombia in the last years, and it is far from the goals of the World Health Organization (0.5 cases per 1000 live births). There are notorious differences among Departments in Colombia suggesting avoidable disparities in the strategies for preventing and controlling this disease during pregnancy among them. A critical review of current programs of public health should be done.