A literature survey revealed lack of adequate information on poisoning in Kenya, thus providing the impetus for the present work. In this study, a 3 year retrospective survey of human poisoning in 19 Kenyan District, Provincial hospitals and Kenyatta National Hospital (KNH), representing approximately 40% of such public hospitals in the country, was carried out. Cases of poisoning were identified by diagnosis codes entered on hospital records at the time of discharge. A total of 1904 cases of poisoning were recorded and the information analyzed with particular focus on childhood poisoning. Distribution pattern with respect to poisoning agents, age and sex is presented. Children aged 0-5 years account for 29.78% while those aged 6-14 years account for 10.24% of cases of poisoning recorded. In the age group 0-5 years, Kerosine, drugs and organophosphates account for 41.09, 23.81 and 15.17% of poisoning cases respectively. It is concluded that any preventive measures targeted at children must focus on the 3 classes of poisons which together account for approximately 80% of all classes of poisoning in children.