A high mortality from cerebrovascular diseases has been reported among immigrants in Europe; however, data on stroke incidence in immigrants are sparse. Aim of the study is to assess hospitalization rates for stroke across different immigrant groups in the Veneto Region (Italy). The study population was represented by all residents aged 20-64 years. Admissions for stroke in 2008-2013 were extracted from hospital discharge records based on diagnosis codes. We computed age and gender specific rates separately for Italian and foreign residents. For each area of origin (Eastern Europe, North Africa, Sub-Saharan Africa, South Asia, other Asian countries, Central-South America, and industrialized countries) we calculated standardized hospitalization ratios (SHR) by means of indirect standardization, with rates observed in Italian residents as a reference. We identified 9740 hospitalization for stroke, 8.0 % of which occurred in immigrants. Overall stroke rates were higher in immigrants males (SHR 1.45, 95 % confidence interval 1.32-1.59) and females (SHR 1.21, 1.08-1.36) with respect to the Italian population. The highest risk was observed in Sub-Saharan Africans, in both genders (males SHR 3.15, 2.62-3.76; females SHR 3.15, 2.22-4.34), followed by immigrants from South Asia and other Asian countries. Our findings confirm the increased risk of stroke in immigrants, with wide variations by country of origin. Further studies are warranted to investigate associated risk factors in order to shape effective preventive strategies.