Malaria in the highlands of Kenya is traditionally regarded as unstable and limited by low temperature. Brief warm periods may facilitate malaria transmission and are therefore able to generate epidemic conditions in immunologically naive human populations living at high altitudes. The adult:child ratio (ACR) of malaria admissions is a simple tool we have used to assess the degree of functional immunity in the catchment population of a health facility. Examples of ACR are collected from inpatient admission data at facilities with a range of malaria endemicities in Kenya. Two decades of inpatient malaria admission data from three health facilities in a high-altitude area of western Kenya do not support the canonical view of unstable transmission. The malaria of the region is best described as seasonal and meso-endemic. We discuss the implications for malaria control options in the Kenyan highlands.