

Community-based active surveillance for rabies In Machakos District, Kenya

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Abstract

The rabies problem in Kenya has been greatest in Machakos District where the disease has persisted endemically for over 40 years. This paper presents the results of a one-year community-based active surveillance for rabies in six randomly selected sublocations in the district for the period 1992-1993. Approximately 860 rabid dogs per 100 000 dogs were confirmed in this study, compared to approximately 12 per 100 000 confirmed rabid dogs reported by the existing passive-surveillance system. This active surveillance underestimated the true rabies incidence, because only 41 % (130/317) of the potential specimens could be diagnosed. Dogs accounted for 92% (179/194) of primary animal-rabies suspects, 80% (66/83) of secondary suspects, and 81 % of the confirmed animal-rabies cases. The annual incidence of animal-bites of humans was 234 per 100 000 people and the point estimate of human-rabies incidence per year was 25 per million people. Almost all (97%) animal-bites of humans were due to dogs. The traditional passive-surveillance system grossly underestimated the importance of rabies as a public-health problem in Machakos District. Community-based active surveillance provides a potential cost-effective strategy for greatly improving estimates of rabies incidence and epidemiology to inform veterinary and policy decision-making.