

Scott, H.M. (Lusaka, Northern Rhodesia): LEAD POISONING IN SMALL ANIMALS. Veterinary Record 75:830-3 (Aug. 17), 1963.

An outbreak of 28 cases of lead (Pb) poisoning in dogs and cats at Broken Hill Mine Township, Northern Rhodesia, is described. Abdominal signs included restlessness, pains, vomiting, diarrhea; nervous signs consisted of symptoms of anxiety, hyperexcitability, fear, hysteria, continuous barking and convulsions. The onset of symptoms was usually very sudden; in cats only nervous signs were observed. Blood slides showed no basophilic stippling. The minerals mined at Broken Hill are Pb and zinc; it was suspected that the animals were ingesting Pb. Treatment with calcium disodium ethylenediaminetetraacetate (1 g. daily for 7 days for a dog weighing 30 pounds) was very successful. Pb determinations in tissues from dogs and cats that had died of suspected Pb poisoning gave the following results, Pb in ppm: blood, 1.3 to 1.5; kidney, 2.5 to 3.7; bone, 5.5 to 42; liver, 2.5 to 9.2; stomach contents, 1.5 to 2.1. Since there was a possibility that the Pb hazard may involve also human beings, Pb assays were made of the soil and the vegetation in the area. The Pb content of soil from the yard of a house at the surface, and 3, 6 and 12 inches deep, respectively, was, g. per kg. soil, 2.8, 3.0, 1.6, 2.8. Four samples of smelter ash from drives in the housing area contained, in g. per kg., 0.20, 42.6, 0.10, 0.20, respectively. Other assays taken at different locations gave the following data, in g. per kg.: soil, traces to 5.9; unwashed grass, 0.09 to 0.672; grass ash, 0.04 to 6.65; water, mg. per liter, 0.1 to 25.4.