INCIDENCE OF TOXOPLASMOSIS, a disease of the blood, was surveyed in 36 cities in the Central American country El Salvador. The measured incidence in each city can be regarded as an estimator of the true incidence, which is unobservable. The measured incidence has a normal distribution whose standard deviation is determined by the number of people surveyed in that city. The measured rates are expressed in terms of deviation from the national incidence (the average of the rates observed in all the cities). Thus zero denotes exactly the national rate, and a city with a measured incidence of −.040 would have an observed rate 4 percent lower than the country as a whole.