This study was done between 2005 and 2010 in seven health districts in Guerrero, México. Samples for clenbuterol analysis were collected (n= 1,221). The health districts Costa Grande and Norte had a higher number of contaminated samples (Clenbuterol >2000 parts per trillion –ppt-), with 38 and 37, respectively, Costa Chica had only 6 cases. Urine and liver samples were the most appropriated for clenbuterol detection. The results showed a progressive decrease in percentage of contaminated samples from 2006 (20.0 %) up to 7.1 % in 2009, however, there was a slight increase next year (9.3 %). There was a strong correlation between the percentage of contaminated samples obtained in Guerrero and nationally in the 2007-2010 period (r= 0.962) with higher levels in Guerrero (Mean= 11.3 %, National mean= 8.5 %) (P<0.05). During the study period 29 samples of intoxicated people were analyzed, which were confirmed in the urine of seven patients (24.0 %), whose concentrations were between 4,859 and 15,996 ppt (mean= 10,100), in the other samples of serum, clenbuterol was not detected. For health surveillance of clenbuterol was possible to reduce contaminated samples and the occurrence of poisoning; however, must be a permanent monitoring to prevent risks for the population of Guerrero.

Keywords
Clenbuterol, Food poisoning, Beta-adrenergic agonists.