In the wild, some lizard species are known to be venomous and other species maintain high levels of deadly oral bacteria strains that aides the animal in killing prey. This experiment investigates whether a similar difference exists among pet lizards. It was hypothesized that some pet lizards exhibit high levels of bacteria as well as have a greater number of different strains than others species. Six different species and eight specimens of pet lizards were used for this experiment. The oral cavities of two Bearded Dragons, two Leopard Geckos, a Blue Tongue skink, a Crested Gecko, a White-Line Gecko and a Veiled Chameleon were swabbed and the bacteria colonies were grown and then examined. The results showed that the Chameleon and the White-line Gecko had the highest amount of oral Bacteria. Further Gram staining showed that all of the strains were Gram positive Rods and Cocci and Gram negative Rods. No other shapes or Gram negative Cocci were found. This suggests that some variation in amounts exists but the bacteria seem to be part of a normal oral flora. It was therefore concluded that some pet lizards have higher amounts of bacteria than others but are part of the normal oral flora.