

### **dose-response and dose-effect relationships**

The graph of the relation between dose and the proportion of individuals responding with an all-or-none effect; it is essentially the graph of the probability of an occurrence (or the proportion of a population exhibiting an effect) against *dose*. Typical examples of such all-or-none effects are mortality or the incidence of cancer.

The dose-effect curve is the graph of the relation between dose and the magnitude of the biological change produced measured in appropriate units. It applies to measurable changes giving a graded response to increasing doses of a drug or *xenobiotic*. It represents the effect on an individual animal or person, when biological variation is taken into account. An example is the increased effect of lead on the haem synthesis, *e.g.*, on activity of the enzyme 6-amino laevulinic acid dehydratase in blood serum or coproporphyrin levels in urine.

2001, 73, 1022