

(c)  $LD_{50}$  figures by any route vary widely depending on test conditions, particularly on species and sex of animals used. In order to specify a limiting injected  $LD_{50}$ , it would probably be necessary to specify test conditions quite exactly, and these test conditions would be difficult to standardize, particularly as to the specifications of the animals to be used.

Because of the difficulties enumerated above, it would seem more practical to set up three standards of lethality, one for inhaled gases and vapours, a second for percutaneously toxic substances, and a third for supertoxic solids. If these levels were chosen to just include the least toxic of present chemical agents of chemical warfare, the degree of overlap with toxic materials necessary for use in industry, agriculture, and medicine, would be minimized.

The difficulties of standardizing animal test conditions are encountered with any toxic material. However, it may be argued that accurate  $LD_{50}$  figures are unnecessary for treaty purposes, since it is only necessary to decide whether a given material is more or less lethal than a set limit. Considerable savings in test costs could be realized and less uncertainty would exist if certain easily available chemicals were named as agreed standards of lethality.

Based on the foregoing considerations, the following scheme is proposed as a basis for discussion: