

Mental incapacitants

There are many chemical substances which act upon the central nervous system to produce incapacitation. Few of these are sufficiently potent and "safe", or possess the necessary chemical and physical properties to make them potential chemical agents. An example of this type of agent is the BZ-compound whose application produces severe mental disturbances. In minute doses it will merely give changes in mood, varying from an apparent drunken happiness to deepest despair. In larger doses, it produces severe hallucinations and one no longer knows who they are or what they are doing. The military effect, therefore, varies from disturbance of morale to a complete breakdown of military discipline, resulting in the inability to appreciate and carry out orders. The onset of symptoms may be delayed from one to several hours while the duration of effects from a few hours to several days. During this phase, the subject may inflict injury on himself or on others. Memory during the period of intoxication may be lost or fragmentary.

* * *

On the basis of all that has been mentioned, the problem of quantitative evaluation of incapacitants, especially psychochemicals, regarding experimental animals in relation to lethal chemical warfare agents seems to be more complicated. As we have pointed out, different incapacitating agents produce different effects and each type requires a separate method for the determination of the effective (incapacitating) dose and the possible extrapolation with regard to humans.

If the toxicity criterion is to be one of the foundations for the prohibition of highly toxic or lethal chemical warfare agents, then incapacitating agents and among them riot control agents only, should be the subject of further consideration and agreement. The other incapacitating agents should be encompassed by the Convention in order to be banned. In our opinion, a quantitative limitation of production and a limitation of the types of incapacitating agents and types of devices for their use should be set in order to distinguish them as much as possible from those agents which can be used as chemical weapons. If new short-term incapacitating compounds are discovered in the future, the criterion for their possible use should be based on the safety threshold for humans and should in any case be of a similar or lesser toxicity than the existing ones.