

A STUDY OF WORKERS EXPOSED TO THE INSECTICIDES CHLORDAN, ALDRIN, DIELDRIN

FRANK PRINCI, M.D.

CINCINNATI
AND

GEORGE H. SPURBECK, M.D.*

PIERRE, S. D.

SINCE 1946 a number of new insecticides have been developed and introduced in the United States. Three of these substances, chlordan, aldrin and dieldrin, are chlorinated hydrocarbons, which may be expected to have similar physiological actions on warm-blooded animals. Since the insecticidal powers of these compounds have made their general use desirable, it is necessary that any effects which these materials may have on workers be carefully evaluated. It is particularly important to know whether these substances if absorbed over long periods of time might produce deleterious effects. Because of these considerations, a clinical and laboratory study was undertaken, of a number of workers who had been engaged from one to three years in the manufacture and formulation of these products. To our knowledge, no previous clinical studies of humans exposed to these compounds have been made, and all existing information has been of necessity based on animal experimentation.

The chemical structures and empirical formulas of the three insecticides with which this study was concerned are as follows:

Chlordan ($C_{10}H_6Cl_8$)

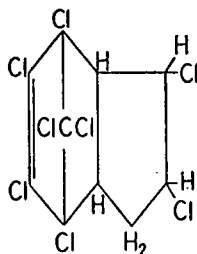


Fig. 1.—Formula of chlordan.

Empirical formula: 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-4,7-methanoindene.

* Fellow in Industrial Medicine.

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From the Division of Industrial Medicine of the University of Colorado Medical Center.