

air concentration of $50 \mu\text{g.U/M}^3$ of soluble uranium dusts is recommended as a tentative maximum allowable concentration. Studies of the chemical toxicity of UF_6 , UO_2F_2 , $\text{UO}_2(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$, and UCl_4 have been summarized and tabulated. Three 30-day studies are available on UF_6 , four on UO_2F_2 , four on uranyl nitrate hexahydrate, and five on UCl_4 . Two one year studies are available on UF_6 , four on uranyl nitrate hexahydrate and two on UCl_4 . One two year study is summarized in which the exposures during the first year were to several soluble and insoluble uranium dusts, and the exposure during the second year was to uranyl nitrate hexahydrate dust. From the standpoint of the toxic effects observed in all these studies, the maximum allowable concentration recommended, viz., $50 \mu\text{g.U/M}^3$, appears to be a reasonable tentative figure.

ADAPTATION OF NUCLEAR SCIENCE ABSTRACT.

THE TOXICITY OF BERYLLIUM. CLAIRE R. TAYLOR, Australia Department Supply and Development, Defense Research Laboratories, Information Circular no. 15, 1949.

This circular is a review with 63 abstracts.

TOXICOLOGICAL RESEARCHES ON CARBON DISULFIDE POISONING. R. FABRE, P. KORMANN, A. FABRE and P. VAQUIER, Rec. d. trav. Inst. Nat. Hyg. 2:657, 1948.

A method is described for estimating the amount of carbon disulfide in the blood of persons exposed to inhalation of the vapor. Examples are given of results obtained in a factory where workers were exposed to concentrations of carbon disulfide varying from 0.08 to 0.45 mg. per liter of air, the average concentrations being about 0.20 to 0.25 mg. per liter. Results of 11 analyses are given; the amounts of carbon disulfide in the samples of blood show a range of 0 to 28 mg. per liter of blood. Symptoms included headache, fatigue, cramps and somnolence, which were related to the amount of carbon disulfide and the period of exposure. The action of carbon disulfide is irreversible, with very slow diminution at prolonged periods after removal from exposure. Experiments with rabbits show the highest concentrations in the adrenals, brain, kidneys, bile and blood. The high figures indicate a strong affinity for the tissue lipids.

CONDENSED FROM BULL. HYG.

SURVEY ON SATURNISM IN LEAD MINERS IN THE MARRAKECH REGION. J. FAURE, Bull. Inst. d'hyg. Maroc. 9:99, 1949.

Faure made a survey of lead poisoning in four lead mines in the Marrakech region. One hundred and forty-three workmen were examined. Definite but mild lead poisoning was observed in 12 miners, who presented basophilic aggregation in a ratio equal or superior to 1 for 10 microscopic fields. Thirteen additional miners were to be considered as likely affected, since the ratio of the basophilic aggregation was between 1 for 10 fields and 1 for 20 fields. There was not a single instance of colic; many of the patients complained of abdominal pain, but it was never of the dramatic intensity observed in classic lead colic. Burton's line (blue line) was an inconstant sign, since 25 per cent of the patients with definite lead poisoning did not present it. The blue line may be present as an isolated symptom in persons whose blood does not present any changes. Workers who had been employed for five to 10 years in the process of grinding the metal in water presented Burton's line frequently, while miners exposed to lead dust presented hematological changes in absence of this line. Faure suggests that poisoning due to slow absorption of small doses may reveal itself by this slowly appearing symptom and that massive poisoning, on the contrary, may affect various parts of the body before the lead in the saliva may have had time to produce the characteristic line on the gums. The author emphasizes the fact that this symptom was always present