

Toxicity by Cutaneous Application.

Nature of Experiment Secretion

Date Started August 20, 1924

Animal # Rabbit 31 Gray Belgian Doe.

Date Finished December 21, 1924

Description of Treatment

0.10 c.c. of pure lead tetraethyl applied to previously clipped skin of belly. Given 16 such treatment from August 20 to November 25. November 28, put into metabolism cage to determine Pb. excretion. Urine and faeces to be collected in 1 week periods. Dec. 5 sample 1 taken. Dec. 16 returned to cage given 4 daily treatments of 5 gms. of NaHCO_3 , sample 2 was to have been taken Dec. 23, exp. discontinued and sample 2 taken for analysis Dec. 19. Died Dec. 21.

Clinical Results

Sept. 30	Animal pregnant.	Weight 6 lbs.
Oct. 6	Delivered 7 normal young	no treatment for 1 week following delivery.
Oct. 9	5 young died because of cold.	Not cared for by mother, taken from her and put in with No. 32. Exposed to vapor of lead tetraethyl.
Dec. 19	Animal developed complete inability to raise head.	
Dec. 21	Animal dead.	

Pathology

Gross No necropsy.

Microscopic

Analyses

Distribution

Weight

Lead

Lead mgs / 100 gms

Skin	312 gms.	4.49 mgs.
Tissue	1590 gms.	2.02 mgs.
Bones	397 gms.	8.04 mgs.
Liver and Kidneys	142 gms.	1.15 mgs.
Central Nervous System	13.5 gms.	Lost
Urine (Small sample)		0.14 mgs.
Faeces and Urine Sample 1 st -7 days		5.89 mgs.
Faeces and Urine Sample 2 nd -4 days		Nil

Conclusions

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