

- (a) Pottery and earthenware processes
- (b) Lead mining, smelting, and refining
- (c) Gasoline--(Ethyl gas)
- (d) Printing trades
- (e) Miscellaneous: drinking water; beer made in lead lined vats; paint; face powder and cosmetics.

#### Absorption

Respiratory tract most frequent and serious. Dust or fumes is the carrier of the substance. Enters blood directly in lungs.

Intestinal tract--through liver into the circulation.

Skin--not as frequent--though it occurs from paints, cosmetics and hair dye.

#### Storage in Body

Lead is stored in the bones. Safely stored without ill effects as long as calcium balance of body is positive and a normal hydrogen concentration of the blood.

Excretion--through feces and urine.

#### Symptoms

Acute form--Intense colic, diarrhoea, rapidly developing anemia, convulsions, and mental symptoms.

Chronic form--Anemia, constipation, colic, paralysis (wrist drop), "blue line" on gums, muscular pain, and swelling of joints.

Maternal and Congenital--Lead is a race poison, causing:

- (a) Sterility
- (b) Prematurity and still births
- (c) Dwarfing

Prevention rests here, as in control of communicable diseases, upon a knowledge of the sources and modes of infection: (a) dust, (b) fumes, (c) by hands to gastro-intestinal tract.

- (a) Prevention of dust and removal of fumes
- (b) Cleanliness of body clothing and surroundings
- (c) Milk drinking

Arsenic is a source of a considerable amount of occupational poisoning.

The principal sources of arsenic poisoning are:

- (a) Lead smelting
- (b) Paris green manufacture
- (c) Sheep dip
- (d) Hides, feather, and fur processing
- (e) Criminal use