

MERCURY POISONING & POLLUTION

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Mercury is a heavy metal poison. Pure metallic mercury is not practically poisonous. In fact, small amount is used as medicine in abortion, healing the wound, etc. Hence a very small amount of mercury produces no noticeable ill -effects. Excess of Hg instantly kills human attacking brain, mucus membrane and nerves. Contact with Hg produces heaviness, headache, fatigue, sleepiness, diarrhea, etc. It may also bring genetic change. Mercury vapour on the other hand is very dangerous. It causes destruction of lung tissues. The risk also increases with the period of exposure to mercury vapour. Mercury vapour is released in the atmosphere by various activities. One of the chief cause of release of mercury in the atmosphere is during eruption of volcanoes. Mercury vapour is also released while burning of coal.

SELECTIVE POISONING

The toxicity of inorganic mercury compounds depends on their solubilities. For example, the insoluble mercurous chloride is not considered very toxic and , in fact, it has been used in medicine as purgative and a drug to kill intestinal worms. Such treatment may be termed as selective poisoning. Because the mercuric salts are generally more soluble, they are considerably more toxic. They affect the liver and kidneys. It also leads to sore gums and loose teeth.

BIOLOGICAL CYCLE IN MAN

Mercuric salts such as HgCl_2 have been used for a number of years as disinfectant of seeds and to control diseases of tubers and bulbs. The most toxic of all mercury compounds are methylated mercury compounds (e.g. $(\text{CH}_3)_2\text{Hg}$), which are used as fungicides and pesticides. They cause nervous disorder in animals (esp. marine). Another organo-mercuric compound, phenyl mercury acetate

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