

P192. TOXIC EFFECT OF LEAD EXPOSURE TO NEWBORN AND CHILDREN

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Recently, studies about effects of metals and heavy metal compounds -which are pollutants- on all biological systems have become more important. Lead is a hidden and permanent toxic metal. Because of its free machining characteristic, lead has an extensive usage area. The major part of its usage area is batteries. Besides paints, ammunitions, radioprotective shields, jewellery, fish poles and cable coating are other usage areas. Increasing population, rapid industrialization and urbanization has increased lead exposure and remarked its toxic effects on environment and human health. The most sensitive groups about lead exposure are infants, pregnant and workers who work for jobs that have extreme lead contact. While 40 mg/dl of Pb level in blood for adults requires treatment; this level is lower for children and pregnant. However toxic effects of lead depend on individual's age, dosage of exposure and frequency; personal genetic differences are also important. In societies due to lead's cognitive and behavioral effects, mostly children's exposure is overstressed. 75% of lead is accumulated in bones, the rest of it is dangerously spread to soft tissues. Half life of lead in bones is approximately 20-30 years. It has been proved that lead accumulated in body causes several neurological insults, lower academic success, behavioral disorders, hearing disorders and mental deficiency. And also Lead exposure has caused birth weight, reduction of the gestation period, the short stature in children furthermore delayed sexual maturation in girls.

In this compilation exposure of lead which is an important toxic substance in pollution and effects on infants and children health will be mentioned.

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