

## A B S T R A C T

Environmental and biological evaluation for exposure to lead were carried out in selected work related situations. The level of lead in blood of selected populations working and living in these work situations are higher than those of the controls. Lead in blood values of normal Sri Lankans <sup>(16 µg/100 ml)</sup> studied, are lower than for other countries, <sup>(15-30 µg/100 ml)</sup>. Hence, a corresponding difference in the numerical values of lead in blood for Sri Lankan lead workers and those of other countries for comparable occupational exposure to lead is observed. The highest exposure to lead was observed in the lead re-melting rooms where workers manifest the highest mean blood lead level of 51 µg/100 ml in the printing press, but the adult male workers engaged in the process of recovering gold from jewellers' wastes exhibited the alarmingly high mean blood lead level of 87 µg/100 ml. Further, adult female residents of the area registered a dangerous level of the order of 97 µg/100ml of mean blood lead indicating a serious threat to public health status in the area. The soil, water and plants in the vicinity exhibited contamination by lead to varying degrees. This is reiterated by the fact that all the children in the area were exhibiting unsatisfactory and unhealthy lead absorption levels above the recommended level of 11µg/100 ml blood, due to release of lead from the bones into the circulatory system from time to time. While many of them seriously suffered the toxic effects of lead poisoning and lead encephalopathy, a few succumbed to their illnesses.