

ABSTRAK

Timbal (Pb) adalah logam berat yang dapat menyebabkan keracunan dan terakumulasi dalam tubuh manusia. Mekanisme masuknya timbal kedalam tubuh manusia dapat melalui sistem pernafasan, oral ataupun langsung melalui permukaan kulit. Timbal yang diabsorpsi dalam tubuh sebanyak 95% diikat oleh eritrosit kemudian diangkut oleh darah ke organ organ tubuh dan kemudian akan disimpan dalam jaringan lunak (sum-sum tulang, sistim saraf, ginjal, hati) serta jaringan keras (tulang, kuku, rambut, gigi). Karyawan SPBU adalah profesi yang berkaitan pencemaran udara asap kendaraan bermotor. Penelitian ini bertujuan untuk mengetahui kadar timbal (Pb) yang terdapat pada rambut karyawan SPBU di Gunungtua. Penelitian ini bersifat ini bersifat deskriptif. Untuk mengetahui gambaran kadar timbal (Pb) pada rambut karyawan SPBU di Gunungtua Pemeriksaan dilakukan dengan menggunakan SSA dengan hasil sampel 10 rendah, 10-20 sedang, 20 tinggi. Dari tabel Data Hasil Uji Kualitatif dan Kuantitatif diperoleh hasil yang menunjukkan kadar Pb pada 5 (lima) sampel rambut karyawan SPBU di Gunungtua seluruhnya dinyatakan negatif di hasil Uji Kualitatif mengandung Pb dan memenuhi nilai ambang batas WHO tahun 1995 tentang tingkat pencemaran kadar timbal di tubuh manusia (10 mg/kg). Disarankan khususnya para karyawan SPBU ataupun pekerja yang beraktivitas di SPBU agar tetap melindungi diri dari bahaya asap-asap kendaraan, dan membiasakan diri untuk pola hidup bersih dan sehat.

Kata kunci: Timbal (Pb), SSA (Spektrofotometer Serapan Atom), Karyawan SPBU

ABSTRACT

Lead (Pb) is a heavy metal that can cause poisoning and accumulates in the human body. The mechanism of lead entry into the human body can be through the respiratory system, orally or directly through the skin surface. 95% of the absorbed lead in the body is bound by erythrocytes and then transported by the blood to the organs of the body and then stored in soft tissues (bone marrow, nervous system, kidneys, liver) and hard tissues (bones, nails, hair, teeth). Gas station employees are professions related to air pollution from motor vehicle fumes. This study aims to determine the levels of lead (Pb) in the hair of gas station employees in Gunungtua. This research is descriptive in nature. To find out the description of lead (Pb) levels in the hair of gas station employees in Gunungtua, the examination was carried out using AAS with sample results of 10 low, 10-20 medium, 20 high. From the table of Qualitative and Quantitative Test Results Data, the results showed that the Pb levels in 5 (five) hair samples of SPBU employees in Gunungtua were all declared negative in the Qualitative Test results containing Pb and meeting the 1995 WHO threshold value regarding the level of lead contamination in the human body (10 mg/kg). It is especially recommended for gas station employees or workers who are active at gas stations to continue to protect themselves from the dangers of vehicle fumes, and get used to a clean and healthy lifestyle.

Keywords: lead (Pb), SSA (Atomic Absorption spectrophotometer), gas station employees