

# THE DESCRIPTION OF LEAD (Pb) IN HAIR OF BUS DRIVER WHOSE ROUTE FROM UJUNG GADING TO PADANG IN 2016

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## ABSTRACT

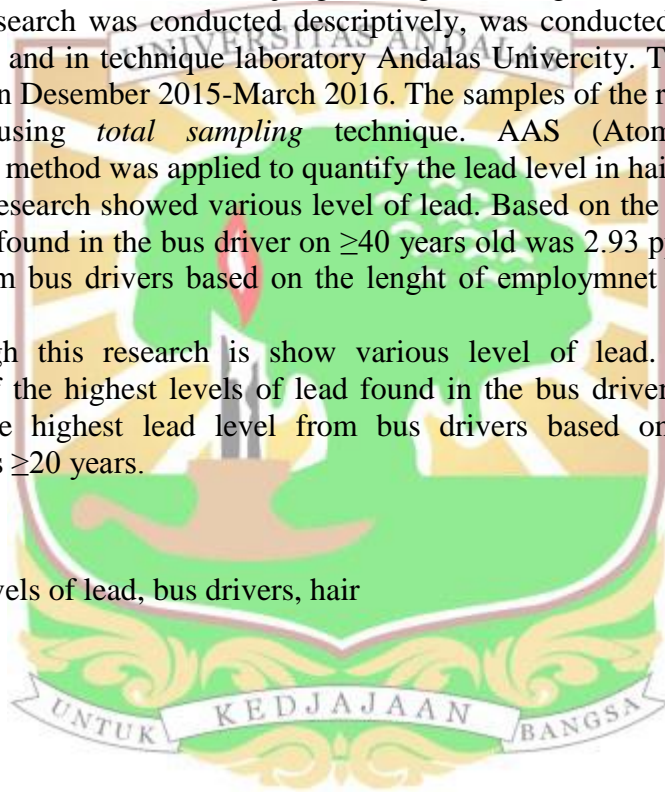
Lead poisoning is a serious and sometimes fatal condition. Normal amount of lead in hair of Autopsi Administration Hospital is  $<12$  ppm . Bus drivers work every day on highway, so it get easily exposed to lead (Pb) from polluted air. The objective of this study was to measure the levels of lead in the hair of bus driver who drive from Ujung Gading to Padang.

The research was conducted descriptively, was conducted in bus counter Ujung Gading and in technique laboratory Andalas University. The research was done among on Desember 2015-March 2016. The samples of the research were 19 drivers by using *total sampling* technique. AAS (Atomic Absorption Spectrometry) method was applied to quantify the lead level in hair of samples.

This research showed various level of lead. Based on the age, the highest levels of lead found in the bus driver on  $\geq 40$  years old was 2.93 ppm. The highest lead level from bus drivers based on the length of employment  $\geq 20$  years was 3.43 ppm.

Through this research is show various level of lead. The frequency distribution of the highest levels of lead found in the bus driver with aged  $\geq 40$  years, and the highest lead level from bus drivers based on the length of employment is  $\geq 20$  years.

Key word : levels of lead, bus drivers, hair



# GAMBARAN KADAR TIMBAL (Pb) DALAM RAMBUT SOPIR BUS YANG MELEWATI JALUR TRANSPORTASI UJUNG GADING- PADANG PADA TAHUN 2016

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## ABSTRAK

Keracunan logam Pb merupakan keadaan yang sangat serius dan kadang bisa berakibat fatal. Data dari Autopsi Administration Hospital menyatakan bahwa, kadar batas normal Pb dalam rambut adalah  $<12$ . Sopir bus bekerja setiap harinya di jalan raya, sehingga akan lebih mudah terpapar logam Pb dari polusi udara. Penelitian ini bertujuan untuk melihat gambaran kadar Pb dalam rambut sopir bus yang melewati jalur transportasi Ujung Gading-Padang.

Penelitian ini bersifat deskriptif dilakukan di loket bus Ujung Gading dan di Laboratorium Teknik Universitas Andalas. Penelitian dilakukan dari bulan Desember 2015-Maret 2016. Besar sampel yang diteliti berjumlah 19 orang dengan menggunakan teknik *total sampling*. Pemeriksaan sampel dilakukan menggunakan metoda SSA (Spektrofotometri Serapan Atom).

Hasil penelitian didapatkan seluruh rambut sopir bus positif mengandung logam Pb. Berdasarkan umur kadar Pb tertinggi ditemukan dalam rambut sopir bus yang berumur  $\geq 40$  tahun yaitu 2,93 ppm. Berdasarkan lama masa kerja kadar Pb tertinggi ditemukan dalam rambut sopir bus dengan lama masa kerja  $\geq 20$  tahun yaitu 3,43 ppm.

Kesimpulan dari penelitian adalah, seluruh rambut sopir bus mengandung logam Pb. Distribusi frekuensi kadar Pb tertinggi ditemukan pada sopir bus yang berumur  $\geq 40$  tahun, dan berdasarkan lama masa kerja ditemukan pada sopir bus dengan lama masa kerja  $\geq 20$  tahun.

Kata Kunci : Kadar Pb, sopir bus, rambut

