INTISARI

Ike Indriyani. NIM 3212031. *Korelasi Paparan Benzena Pada Pekerja Dengan Kebiasaan Merokok Di Terminal Bahan Bakar Melalui Pengukuran S-Phenyl Merkapturic Acid (sPMA).*

Benzena adalah cairan tidak berwarna dengan bau yang khas. Benzena menguap sangat cepat di udara dan mudah larut dalam air serta sangat mudah terbakar. Benzena terdapat di udara, air dan tanah. Proses industri minyak bumi adalah salah satu sumber utama benzena di lingkungan. Tingkat benzena di udara semakin meningkat oleh emisi dari pembakaran batu bara dan minyak, knalpot kendaraan, dan penguapan dari pompa bensin. Asap rokok adalah sumber benzena lain di udara, terutama di dalam ruangan. Tujuan penelitian ini adalah menggunakan kadar sPMA urin untuk mengetahui hubungan antara paparan benzena dengan kebiasaan merokok pekerja di Terminal Bahan Bakar Surabaya. Penelitian ini menggunakan desain studi potong lintang dengan jumlah sampel 50 pekerja Terminal Bahan Bakar Surabaya. Sampel menggunakan urin sewaktu yang di tampung pada saat akhir giliran kerja diperiksakan kadar sPMA urin di Laboratorium Prodia IndTox Cikarang. Hasil uji statistik dengan SPSS, uji korelasi dengan menggunakan uji non parametrik yaitu dengan uji korelasi *Spearman* dimana di dapatkan nilai signifikansi untuk kadar sPMA terhadap status rokok pekerja Terminal Bahan Bakar Surabaya sebesar 0,079 ($p > 0,05$) yang berarti bahwa tidak terdapat hubungan antara paparan benzena dengan kebiasaan merokok pekerja Terminal Bahan Bakar Surabaya.

Kata kunci : asap rokok, Benzena, kadar sPMA urin

ABSTRACT

Ike Indriyani. NIM 3212031. *The Correlation Of Benzene Exposure In Workers With Smoking Habits In Fuel Terminals Through Measurement Of S-Phenyl Merkapturic Acid (sPMA)*

Benzene is a colorless liquid with a characteristic odor. Benzene evaporates very quickly in air and is easily soluble in water and is highly flammable. Benzene is present in the air, water and soil. Petroleum industry processes are one of the main sources of benzene in the environment. The process of the petroleum industry is one of the major sources of benzene in the environment. Benzene levels in the air are further increased by emissions from burning coal and oil, vehicle exhaust, and evaporation from gas stations. Cigarette smoke is another source of benzene in the air, especially indoors. One way to detect benzene in the body is to test for sphenylmercapturic acid (sPMA) in the urine. The purpose of this study was to use urine sPMA levels to determine the relationship between benzene exposure and the smoking habits of workers at the Surabaya fuel terminal. This study used a cross-section study design with a sample of 50 Surabaya fuel terminal workers. The sample uses urine when it is accommodated at the end of the shift, the urine sPMA level is checked at Prodia IndTox Cikarang Laboratory. Results of statistical tests using SPSS, correlation tests using nonparametric tests, that is, Spearman correlation tests. The results of statistical tests with SPSS, correlation tests using a non-parametric test, namely with the Spearman correlation test where the significance value for sPMA levels on the cigarette status of fuel terminal workers in Surabaya was 0.079 ($p > 0.05$) which means that there is no relationship between benzene exposure and the smoking habits of fuel terminal workers in Surabaya.

Keywords: Benzene, cigarette smoke, urine sPMA levels.