Analisis risiko kesehatan pada fumigasi kapal di Kantor Kesehatan Pelabuhan Batam dan Tanjung Pinang tahun 2013 = Health risk analysis on ship fumigation in Batam Port Health Office and Tanjung Pinang 2013

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Abstrak

Fumigasi adalah suatu kegiatan memasukkan/melepaskan pestisida (fumigan) kedalam ruangan tertutup/kedap udara selama waktu tertentu dengan tujuan untuk membasmi tikus dan serangga sebagai vektor penyebab penyakit menular. Pekerjaan fumigasi merupakan upaya yang dilakukan oleh pemerintah dalam program pemberantasan vektor dikapal dan pesawat dengan menggunakan fumigant methyl bromide. Dari revew 542 literatur (Budnik et al., Environmental Health 2012), termasuk in vitro dan studi epidemiologi pajanan untuk studi epidemiologi pestisida methyl hidrokarbon, terutama efek beracun (kronik) atau karsinogenik dari penggunaan methyl bromide antara tahun 1990-2011, ditemukan 91 kasus toksisitas methyl bromide dan 29 menggunakan istilah ?karsinogenik, neoplastik atau mutagenik".
Tiga studi epidemiologi dievaluasi, menilai suatu kemungkinan hubungan antara kanker dan methyl bromide. Methyl bromide dianggap sebagai bahan karsinogen potensial di dasarkan pada penelitian terhadap hewan yang telah menunjukkan potensi karsinogenik dari senyawa ini (J. Donald Millar, M.D., D.T.P.H., NIOSH, 2003). Penelitian Saragih (2009), aktivasi kolinesterase darah pada petugas fumigasi kapal pada 66 responden, sebanyak 25,8% yang mempunyai tingkat aktivasi kolinesterase darah yang termasuk dalam kategori keracunan dan 74,2% mempunyai tingkat aktivasi kolinesterse darah. Data Kantor Kesehatan Pelabuhan Tanjung Pinang, 2012, didapat dua orang kasus terpajan methyl bromide dengan kerusakan kulit berat.
Penelitian ini bertujuan menganalisis tingkat resiko terpajan methyl bromide pada pekerja fumigasi kapal di wilayah Kantor Kesehatan Pelabuhan Batam dan Tanjung Pinang, tahun 2013. Analisis resiko dilakukan secara semi-kuantitatif berdasarkan Australian Standar/New Zealand Standar 4360 Risk Management yang terdiri dari nilai kemungkinan (Likehood), nilai dampak (consequence) sehingga diperoleh tingkat resiko (Level Of Risk) dengan cara analisa matrik W.T Fine. Dari hasil analisa matrik terhadap dua metode fumigasi tersebut ditentukanlah suatu prosedur atau kontrol dalam mencegah atau menanggulangi resiko bahaya fumigasi kapal.
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Fumigation is an activity insert/release pesticide (fumigant) into a closed room/airtight during a certain time in order to eradicate rodents and insects as vectors of disease-causing infectious. Fumigation on ships and aircrafts has been programmed by government to eradicate vectors such as rodents and insects used the fumigants i.e. methyl bromide. Based on 542 of review literatures (Budnik et al, Environmental Health, 2012), including in vitro and epidemiological studies of pesticide exposure for epidemiological studies methyl hydrocarbon, especially toxic effects (chronic) at or carcinogenic methyl bromide of use between the years 1990 - 2011, found 91 cases of toxicity methyl bromide and 29 used in term ?carcinogenic, neoplastic or mutagenic?.
Then, three epidemiological studies evaluated, assessing a possible link between cancer and methyl

bromide. Methyl bromide considered as a potential carcinogen based on animal studies that have demonstrated the carcinogenic potential of this compound. (J. Donald Millar, MD, DTPH, NIOSH, 2003). Saragih (2009) studied activation of blood cholinesterase ship fumigation officer on 66 respondents, 25.8% have blood cholinesterase levels of activation were included in the category of poisoning and the remaining 74.2% have an activation of blood cholinesterase. According the data in Tanjung Pinang Port Health Office, 2012, acquired two cases of methyl bromide exposed to severe skin damage.

In this dissertation aims to analyze the level of risk in workers exposed to methyl bromide fumigation of ships in the Port Health Office of Batam and Tanjung Pinang, in 2013. Risk analysis performed semi-quantitatively based on Australian Standard/New Zealand Standard 4360 Risk Management consisting of the value of probability (likelihood), the value of impact (consequence) in order to obtain the level of risk analysis by matrix WT Fine. Based on the analysis of the matrix for two methods of fumigation were revealed a procedure or control in preventing or overcoming hazards ship fumigation.