

L31 ANSWER 67 OF 160 CA COPYRIGHT 1996 ACS

AN 124:36405 CA

TI General health of workers in the Novaky Chemical Works exposed to vinyl chloride

AU Galikova, E.; Tomikova, K.; Zigova, A.; Mesko, D.; Buchancova, J.; Petriskova, J.; L'uptakova, M.; Jakubis, M.; Karaffova, N.

CS JLF, MFN, Martin, Slovakia

SO Prac. Lek. (1994), 46(6), 251-6

CODEN: PRLFAG; ISSN: 0032-6291

DT Journal

LA Slovak

AB The authors examd. 129 employees in the Novaky Chem. Works (Slovakia) exposed to vinyl chloride (VC) within the framework of the Research Task "Monitoring of the Effects of Chem. Carcinogens in Working Environment and the Health of Workers". The mean age was 36.6 yr (19-58 yr), the mean exposure lasted 13.4 yr (2-37 yr). The authors took case history data in view of the work history and the incidence of oncol. diseases in the family history, objective examn., lab. examn. with emphasis to hepatopathies. The authors evaluated the incidence of diseases with possible connection to work exposure and frequency of non-occupational diseases. The results of the complex clin. examn. and levels of some lab. parameters were evaluated and compared with the data of blood donors from the same area. The mean concns. of vinyl chloride in the air from the measuring spots of "classical anal." under the reactor and in the compressor room in 1990-1993 several-fold surpassed the MAC. It became obvious that the exposed workers were employed in the following occupations: operating machinery (60 workers), repairman-locksmith (46 workers), shift engineer (12 employees), electrician (5 employees) worker in PVC bag filling (5 workers), research workers (one employee). The oncol. diseases in the family history occurred in 9.3%. Cardiovascular diseases predominated (23.3%), followed by diabetes mellitus (11.3%). In the subjective complaints the most frequent symptoms were those related to bone and joint system (16.3%), respiratory (10%) and digestive (8.5%) system. The objective examn. revealed hepatomegaly in 5.4%. Sedimentation of erythrocytes was increased by 31%. There were no substantial changes in evaluating blood count. Lymphocytosis was obsd. in 43.4%. The level of cholesterol, GMT, ALT and AFP were not significantly different when compared with those of blood donors. Hepatopathies occurred in 13.9%. Diseases of respiratory system were obsd. in 10%, diseases of gastrointestinal system (except hepatopathies) and vertebrogenic syndrome were found in the same frequency (9.3%, resp.).

ASI 000013932

L31 ANSWER 66 OF 160 CA COPYRIGHT 1996 ACS

AN 124:36410 CA

75-01-4

TI Anti-p53 antibodies in sera of workers occupationally exposed to vinyl chloride

AU Trivers, Glenwood E.; Cawley, Helen L.; DeBenedetti, Virna M. G.; Hollstein, Monica; Marion, Marie J.; Bennett, William P.; Hoover, Marie L.; Prives, Carol C.; Tamburro, Carlo C.; Harris, Curtis C.

CS Laboratory Human Carcinogenesis, National Institutes Health, Bethesda, MD, 20892, USA

SO J. Natl. Cancer Inst. (1995), 87(18), 1400-7

CODEN: JNCIEQ; ISSN: 0027-8874

DT Journal

LA English

AB The objective of this study was to det. the prevalence and time of appearance of serum anti-p53 antibodies during the pathogenesis of angiosarcoma of the liver (ASL) assocd. with occupational exposure to vinyl chloride. Enzyme-linked immunoassay (EIA) was used to detect anti-p53 antibodies in individuals occupationally exposed to vinyl chloride; 15 of these individuals had ASL. It is concluded that serum anti-p53 antibodies can predate clin. diagnosis of certain tumors, such as ASL, and may be useful in identifying individuals at high cancer risk, such as workers with occupational exposure to vinyl chloride.

ASI 000013933

L31 ANSWER 148 OF 185 CA COPYRIGHT 1996 ACS

AN 124:168010 CA 75-01-4

TI The effect of vinyl chloride on the morphology of mouse ***sperm***

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SO Beijing Yike Daxue Xuebao (1995), 27(4), 273-4, 277

CODEN: BYDXEV; ISSN: 1000-1530

DT Journal

LA Chinese

AB The effect of vinyl chloride on the morphol. of ***sperm*** was obsd., and the ***mutagenicity*** of vinyl chloride in germ cells was assessed. Vinyl chloride increased the abnormal incidence of mouse ***sperm***, and the main types of abnormal ***sperm*** induced by vinyl chloride were banana-like and nonhooked. Dose-effect curves were obtained.

L31 ANSWER 149 OF 185 CA COPYRIGHT 1996 ACS

AN 124:168003 CA

TI ***Toxic*** elements in tobacco and tobacco smoke

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SO Trace Toxic Elem. Nutr. Health, Proc. Int. Conf. Health Dis.: Eff. Essent. Toxic Trace Elem., 4th (1995), Meeting Date 1993, 32-7. Editor(s): Abdulla, Mohammed; Vohora, Shashi B.; Athar, Mohammad. Publisher: Wiley Eastern, New Delhi, India.

CODEN: 62EMAA

DT Conference

LA English

AB The World ***Health*** Organization states that about 3 million deaths are caused yearly worldwide by the use of tobacco. Much is known about the adverse ***health*** effects of CO, nicotine, tar, irritants, nitrosamines and other noxious substances emitted in tobacco smoke but not enough attention has been paid to the harmful effects of heavy metals and other ***toxic*** elements present in tobacco leaves and in tobacco smoke. Smoking may be a substantial source of intake of ***hazardous*** elements not only to the smoker but also, through passive smoking, to nearby non-smokers. The adverse ***health*** effects of such ***toxic*** elements on the ***fetus*** through maternal smoking, and on infants through parental smoking, is of special concern. The literature contains data on Al, As, Cd, Cr, Cu, Pb, Mn, Hg, Ni, Po²¹⁰, Se and Zn in tobacco leaves and in smoke, but only for As, Cd, Pb, Ni, and Po²¹⁰ there is enough evidence that they may play a neg. role on human ***health***. Maternal smoking may entail a potentially harmful decrease in Zn levels in the ***fetus*** and the newborn.

ASI 000013934

L31 ANSWER 136 OF 167 CA COPYRIGHT 1995 ACS

AN 123:135606 CA

75-01-4

TI Considering pharmacokinetic and mechanistic information in cancer risk assessments for environmental contaminants: examples with vinyl chloride and trichloroethylene

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SO Chemosphere (1995), 31(1), 2561-78

CODEN: CMSHAF; ISSN: 0045-6535

DT Journal; General Review

LA English

AB Risk assessments of vinyl chloride (VC) and trichloroethylene (TCE) are presented as examples of approaches for incorporating chem.-specific pharmacokinetic and mechanistic information into a more scientifically plausible cancer risk assessment. For VC, the evidence regarding mode of action includes direct reaction of a metabolite with DNA, resulting in DNA adducts and mistranscription, and cross-species target-tissue correspondence of a rare tumor type. Risk ests. for human exposure to VC predicted with a physiol.-used in environmental decision-making by a factor of 30 to 50, and were more consistent with human epidemiol. data. For TCE, there is evidence of increased cell proliferation due to receptor interaction or cytotoxicity in every instance in which tumors are obsd., and the tumors typically represent an increase in the incidence of a commonly obsd., species-specific lesion. Virtually safe exposure ests. for human exposure to TCE predicted with a PBPK model and a margin of exposure (MOE) approach were higher than those obtained by the conventional LMS approach by roughly a factor of 100. The MOE approach is recommended as an alternative to the LMS approach for chems. with a carcinogenic mode of action which entails increased cell proliferation, leading to the expectation of a highly nonlinear cancer dose-response.

ASI 000013935