

DIALOG File 153: MEDLINE - 73-79

1850993 79225993

Health effects of vinyl chloride.

Tamburro CH

Tex Rep Biol Med .1978, 37 p126-44, 146-51, ISSN 0040-4675

Journal Code: VNN

Languages: ENGLISH

Journal Announcement: 7911

Subfile: INDEX MEDICUS

Vinyl chloride is a basic chemical for plastics manufacturing and has been used as an anesthetic agent. Vinyl chloride's previously unknown carcinogenic capability appears to be related to the body's ability to convert it from a non-toxic or minimally toxic chemical to a toxic and, with prolonged exposure, cancer-forming agent. Early exposure in animals causes body cells to make adaptive changes which may prepare them for malignant transformation and appear to precede evidence of morphological injury. These findings appear to occur before a low-grade chemical injury occurs. Vinyl chloride chemical injury in man appears to follow the same pattern. Present clinical data in humans now demonstrate evidence of pre-cancer injury and cancer transformation of various types of cells in different organs of the body. Manifestations of pre-cancerous injury to organs other than the liver (such as the lung, heart, spleen, brain and lymphatic system) may also be occurring and require further investigation. Early detection of these pre-cancerous chemical injuries requires a prospective ongoing system of surveillance and the development of diagnostic methods which can identify specific causal agents in the presence of non-specific injury.

Such a systematic approach has been developed and is now in operation. Its initial achievements appear to be the foundation for future success in controlling the health effects of industrial chemicals.

Tags: Animal; Human; Support, U.S. Gov't, P.H.S.

Descriptors: *Angiosarcoma--Chemically Induced (CI); *Carcinogens, Environmental; Environmental Exposure; Health Education; *Liver Neoplasms--Chemically Induced (CI); Lung--Drug Effects (DE); Neoplasms, Experimental--Chemically Induced (CI); *Occupational Diseases--Chemically Induced (CI); Rats; Risk; Spleen--Drug Effects (DE); *Vinyl Chloride--Adverse Effects (AE); Vinyl Chloride--Metabolism (ME); *Vinyl Compounds--Adverse Effects (AE)

1732016 79107016

Environmental pollutants and the epidemiology of cancer.

Heath CW Jr

Environ Health Perspect .Dec 1978, 27 p7-10, ISSN 0091-6765

Journal Code: E10

Languages: ENGLISH

Journal Announcement: 7906

Subfile: INDEX MEDICUS

Cancer etiology involves the interplay of genetic and environmental factors. Striking geographic differences and changes in cancer incidence over time have led epidemiologists to infer that probably the major etiologic component is environmental. Recent experiences with vinyl chloride, kepone,

and polybrominated biphenyl illustrate the problems involved in epidemiologic studies of proven or suspected environmental carcinogens. While epidemiologic studies will continue to be an essential means for monitoring potential human risks, the long latent periods involved in human carcinogenesis severely limit the usefulness of such approaches for disease prevention. While in vitro and animal test systems can never fully supplant human studies, they represent our only means for detecting potential carcinogenicity before human exposure has become widespread or long established.

Tags: Animal; Human

Descriptors: Angiosarcoma--Chemically Induced (CI); *Carcinogens, Environmental; Epidemiologic Methods; Kepone--Poisoning (PO); Liver Neoplasms--Chemically Induced (CI); *Neoplasms--Chemically Induced (CI); Neoplasms--Occurrence (OC); Occupational Diseases--Chemically Induced (CI); Polybromobiphenyl Compounds--Poisoning (PO); POLYBROMOBIPHENYL CPDS--Poisoning (PO); United States; Vinyl Chloride--Poisoning (PO)

1722463 79097463

Survey of mortality among employees engaged in the manufacture of styrene and polystyrene at the BASF Ludwigshafen works.

Frentzel-Bevme R; Thiess AM; Wieland R

Scand J Work Environ Health .1978, 4 Suppl 2 p231-9, Journal Code: UEB

Languages: ENGLISH

Journal Announcement: 7905

Subfile: INDEX MEDICUS

A mortality survey of 1,960 employees currently or previously exposed to styrene at work has shown that the observed number of deaths from cancer or other causes is no higher than the number expected in the German population or in a group of BASF employees. Analyses of deaths occurring after a minimum period of five years in groups exposed for different durations (5 years, 10 years, 15 years, more than 15 years) indicated no increase in mortality with exposure time. This latter observation also applied to malignant tumors; therefore it may be inferred that prolonged exposure to styrene is not a cancer hazard.

Tags: Human; Male

Descriptors: Adolescence; Adult; Age Factors; Aged; Chemical Industry; Environmental Exposure; Germany, West; Middle Age; *Mortality; Neoplasms--Mortality (MO); *Occupational Medicine; *Polystyrenes--Poisoning (PO); Prospective Studies; *Styrenes--Poisoning (PO); Time Factors; Vinyl Chloride--Poisoning (PO)

1693929 79068929

Vinyl chloride and pulmonary cancer [letter]

Wagoner JK

J Environ Pathol Toxicol .Jan-Feb 1978, 1 (3) p361-2, (cont. next page)

DIALOG File 153: MEDLINE - 73-79

Journal Code: ILL

Languages: ENGLISH

Journal Announcement: 7904

Subfile: INDEX MEDICUS

Tags: Animal; Human

Descriptors: *Lung Neoplasms--Chemically Induced (CI);
*Vinyl Chloride--Adverse Effects (AE); *Vinyl
Compounds--Adverse Effects (AE); *VINYL CPDS--Adverse Effects
(AE)

1548347 78183347

Identification and reduction of carcinogens in the
respiratory environment.

Hoffman D; Wynder EL

Zentralbl Bakteriол [Orig B] .Mar 1978. (2-3) p113-35.

ISSN 0300-9661 Journal Code: Y53

Languages: ENGLISH

Doc Type: Review Journal Announcement: 7809

Subfile: INDEX MEDICUS

Epidemiological studies have implicated three factors in the
overall increase of lung cancer--tobacco, especially cigarette
smoking, urban pollution and, to a lesser extent, certain
industrial respiratory environments. Some data were discussed
on carcinogenic industrial inhalants, and on the possible
effect of urban pollution. The reduction of pollution and that
of specific environmental agents is stressed. Laboratory
studies on the identification of carcinogens in cigarette
smoke and their reduction toward the "less harmful cigarette"
represent a part of this aspect. (58 Refs.)

Tags: Human; Support, U.S. Gov't, P.H.S.

Descriptors: *Air Pollution--Prevention and Control (PC);
Asbestos--Adverse Effects (AE); Automobile Driving;
Benzene--Adverse Effects (AE); *Carcinogens, Environmental--I-
solation and Purification (IP); Coal tar--Adverse Effects (AE)
; Bis(Chloromethyl) Ether--Adverse Effects (AE); Germany, West
; Hydrocarbons--Adverse Effects (AE); Occupational Medicine;
*Industrial Waste--Prevention and Control (PC); Lung
Neoplasms--Chemically Induced (CI); Nitrosamines--Adverse
Effects (AE); Smoking; Socioeconomic Factors; United States;
Vinyl Chloride--Adverse Effects (AE)

1533828 78168828

Mutagenic and carcinogenic risks associated with halogenated
olefins.

Infante PF

Environ Health Perspect .Dec 1977. 21 p251-4. ISSN 0091-6765

Journal Code: EIO

Languages: ENGLISH

Journal Announcement: 7809

Subfile: INDEX MEDICUS

Recent experimental evidence indicates that structural
analogs of vinyl chloride namely, vinylidene chloride and
trichloroethylene, are mutagenic. Carcinogenic response also
has been observed in experimental animals following exposure
to vinylidene chloride, trichloroethylene, and

perchloroethylene. More recent observations demonstrate
low-level vinyl chloride-induced mammary carcinoma. An
additional chlorinated olefin, chloroprene, has demonstrated a
mutagenic response in several test systems. Likewise, several
studies have indicated significant excesses of chromosomal
aberrations as well as adverse effects on reproductive
function following male exposure to chloroprene. Although
reports have indicated an increased incidence of lung and skin
cancer among workers occupationally exposed to chloroprene,
adequately designed studies have not been carried out which
would allow the development of valid inferences regarding its
carcinogenicity. The question facing the scientific community
and society is whether observations in subhuman species are
adequate to institute prudent public health practice by
controlling these agents as carcinogens or mutagens or
whether, once again, epidemiologic enumeration of the toll
will be required.

Tags: Animal; Female; Human; Male

Descriptors: Angiosarcoma--Chemically Induced (CI);
Chromosome Aberrations; Environmental Exposure; *Hydrocarbons,
Chlorinated--Poisoning (PO); Hydrocarbons, Chlorinated--Toxic-
ity (TO); Liver Neoplasms--Chemically Induced (CI); Lung
Neoplasms--Chemically Induced (CI); Mammary Neoplasms,
Experimental--Chemically Induced (CI); Mice; *Mutation--Drug
Effects (DE); *Neoplasms--Chemically Induced (CI);
*Occupational Diseases--Chemically Induced (CI); Rats;
Reproduction--Drug Effects (DE); Risk; Skin
Neoplasms--Chemically Induced (CI); Vinyl Chloride--Toxicity
(TO)

1453887 78088887

Mortality among employees of PVC fabricators.

Chiazze L Jr; Nichols WC; Wong O

J Occup Med .1977 Sep. 19 (9) p623-8. ISSN 0096-1736

Journal Code: JFR

Languages: ENGLISH

Journal Announcement: 7805

Subfile: INDEX MEDICUS

A cross-sectional mortality study of 4,341 deaths occurring
among current and former employees of 17 PVC fabricators
during 1964-1973 is presented. The objectives are: (1) to
identify any angiosarcoma deaths among the employees of these
fabricators, and (2) to examine the distribution of deaths by
cause. No angiosarcoma deaths were found among the study
group. Sex-race-cause-specific Proportionate mortality Ratios
(PMR's) were computed, using the corresponding U.S. mortality
as the standard. Among white employees, there appears to be an
excess in total cancer mortality, particularly that of the
digestive system. Observed deaths were found to exceed the
expected in cancers of the breast and urinary organs among
white females. Deficit mortality was observed in cirrhosis of
liver among both male and female white employees.

Tags: Female; Human; Male

Descriptors: Adult; Aged; Angiosarcoma--Mortality (MO);
(cont. next page)

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Breast Neoplasms--Chemically Induced (CI); Breast Neoplasms--Mortality (MO); Gastrointestinal Neoplasms--Chemically Induced (CI); Gastrointestinal Neoplasms--Mortality (MO) Middle Age; *Neoplasms--Mortality (MO); Occupational Diseases--Chemically Induced (CI); *Occupational Diseases--Mortality (MO); *Polyvinyl Chloride--Adverse Effects (AE); *Polyvinyls--Adverse Effects (AE); Urogenital Neoplasms--Chemically Induced (CI); Urogenital Neoplasms--Mortality (MO)

1386234 78021234

Confidence intervals and test of hypotheses concerning dose response relations inferred from animal carcinogenicity data.

Crump KS; Guess HA; Deal KL

Biometrics .Sep 1977. 33 (3) p437-51. ISSN 0006-341X

Journal Code: A50

Languages: ENGLISH

Journal Announcement: 7802

Subfile: INDEX MEDICUS

Confidence intervals and hypothesis tests are developed for dose-response relations based on dichotomous data from animal carcinogenicity experiments. The functional form of the dose-response curve comes from the Armitage-Doll multistage carcinogenesis model and involves a polynomial in the dose-rate, with non-negative coefficients. Asymptotic distributions of the maximum likelihood estimators of these coefficients are used to construct confidence bounds on risk at a given dose and on the dose corresponding to a given risk.

Likelihood ratio tests are developed for the presence of a positive dose-related effect and for the existence of a positive slope to the dose-response curve at zero dose. The latter test is of practical importance since a positive slope of the dose-response curve at zero dose rules out any "threshold-like" behavior and would often mean that any concentration low enough to insure a negligibly low cancer risk (e.g., 10^{-6}) would be too low to be economically useful for applications such as food additives. Simulation experiments are performed to provide guidelines for applying the theory.

Tags: Animal; Human

Descriptors: *Carcinogens; Dieldrin; Dimethylnitrosamine; Dose-Response Relationship, Drug; DOSE RESPONSE RELAT DRUG; ODT; Mathematics; Models, Biological; Risk; Statistics; Vinyl Chloride

1318455 77223455

Clinical studies of cancer etiology.

Li FP

Cancer .Jul 1977. 40 (1 Suppl) p445-7. ISSN 0008-543X

Journal Code: CL2

Languages: ENGLISH

Journal Announcement: 7711

Subfile: AIM; INDEX MEDICUS

Clues to causes of cancer in man can be identified through clinical observation of patients. Alert practitioners have,

for example, recently discovered carcinogenic effects of occupational exposure to vinyl chloride and of diethylstilbestrol therapy during gestation. Clinical case studies have also clarified the role of host susceptibility in development of cancer. In most instances, validity of initial clinical observations was established by more detailed epidemiologic and laboratory studies. Clinicians can contribute to carcinogenesis studies by being alert to causes of cancer in their patients, and by referring exceptional observations to clinical epidemiologists and basic scientists for further study. Knowledge of risk factors can be applied to cancer prevention and early detection.

Tags: Female; Human; Male

Descriptors: Adenocarcinoma--Chemically Induced (CI); Angiosarcoma--Chemically Induced (CI); Ataxia Telangiectasia--Complications (CO); Ataxia Telangiectasia--Familial and Genetic (FG); Ataxia Telangiectasia--Radiotherapy (RI); Chromosome Aberrations; Diethylstilbestrol--Adverse Effects (AE); DNA Repair--Radiation Effects (RE); Liver Neoplasms--Chemically Induced (CI); Lymphoma--Etiology (ET); Lymphoma--Familial and Genetic (FG); Maternal-Fetal Exchange; *Neoplasms--Etiology (ET); Pregnancy; Radiation Tolerance; Vaginal Neoplasms--Chemically Induced (CI); Vinyl Chloride--Poisoning (PO)

1301073 77206073

Validity and limitations of long-term experimentation in cancer research.

Tomatis L

IARC Sci Publ .1977. (16) p299-307. ISSN 0300-5038 Journal Code: GFU

Languages: ENGLISH

Journal Announcement: 7710

Subfile: INDEX MEDICUS

Tags: Animal; Human

Descriptors: 2-Acetylaminofluorene--Toxicity (TO); Amines--Toxicity (TO); Bladder Neoplasms--Chemically Induced (CI); *Carcinogens, Environmental--Toxicity (TO); Dichloroethylenes--Toxicity (TO); Bis(Chloromethyl) Ether--Toxicity (TO); Dose-Response Relationship, Drug; DOSE RESPONSE RELAT DRUG; Lung Neoplasms--Chemically Induced (CI); *Neoplasms--Chemically Induced (CI); Neoplasms--Familial and Genetic (FG); Neoplasms--Immunology (IM); Neoprene--Toxicity (TO); Research Design; Vinyl Chloride--Toxicity (TO)

1279921 77184921

Mortality and cancer morbidity in a group of Swedish VCM and PCV production workers.

Byren D; Engholm G; Englund A; Westerholm P

Environ Health Perspect .Oct 76. 17 p167-70. ISSN 0091-6765

Journal Code: E10

Languages: ENGLISH

Journal Announcement: 7709

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Subfile: INDEX MEDICUS

The cohort of workers employed in a Swedish vinyl chloride/poly(vinyl chloride) plant since its start in the early 1940's has been followed for mortality and cancer morbidity patterns. Only 21 of the 771 persons could not be traced. Difficulties in establishing exposure levels at different work areas in the past makes an evaluation of dose-effect relationships impossible. A four- to fivefold excess of pancreas/liver tumors was found, including two cases later classified as angiosarcomas of the liver. The number of brain tumors and suicide do not deviate significantly from expected. Cardiovascular and cerebrovascular diseases, on the other hand, differ significantly from the expected. The discrepancies between previous reports on VCM/PVC workers and this report are discussed. The possible etiology of the cardiovascular deaths is also discussed.

Tags: Human

Descriptors: Accidents. Occupational; *Chemical Industry: Mortality; Neoplasms--Mortality (MO); *Neoplasms--Occurrence (OC); Occupational Diseases--Mortality (MO); *Occupational Diseases--Occurrence (OC); *Polyvinyl Chloride; *Polyvinyls; Registries; Suicide--Occurrence (OC); Sweden; Time Factors; Vascular Diseases--Mortality (MO); Vascular Diseases--Occurrence (OC); *Vinyl Chloride; *Vinyl Compounds; *VINYL CPDS

1279914 77184914

PVC: health implications and production trends.

Karstadt M

Environ Health Perspect .Oct 76. 17 p107-15. ISSN 0091-6765

Journal Code: E10

Languages: ENGLISH

Doc Type: Review Journal Announcement: 7709

Subfile: INDEX MEDICUS

Poly(vinyl chloride) (PVC) is a complex plastic system. Individual components of the PVC system, including residual vinyl chloride monomer (RVCM) and certain additives, may pose risks of harm to human health. There have been significant reductions in the RVCM content of PVC resin since 1974, reducing the cancer risk of workers in PVC fabrication plants and consumers of PVC products. A "no-effect" level for vinyl chloride monomer (VCM)-induced carcinogenesis has not been found to date; therefore, the significance of human exposure to low levels of RVCM remains to be determined. Exposure to PVC dust may cause pulmonary dysfunctions. Pulmonary and other possible health effects of PVC dust require further study. The PVC plastics system should be characterized as to interactions among its various components and as to interactions of the components and the PVC system as a whole with biological systems. (31 Refs.)

Tags: Human

Descriptors: Air Pollutants. Occupational--Analysis (AN); Angiosarcoma--Chemically Induced (CI); Automobiles; *Chemical Industry; Dust; Food Contamination; Government Agencies; Industry; Liver Neoplasms--Chemically Induced (CI); Occupational Diseases--Chemically Induced (CI); Particle Size Pneumocology--Etiology (ET); *Polyvinyl Chloride--Adverse

Effects (AE); *Polyvinyls--Adverse Effects (AE); United States Food and Drug Administration: FDA: United States; Vinyl Chloride--Adverse Effects (AE)

1254782 77159782

Cancer following occupational exposure to asbestos and vinyl chloride.

Nicholson WJ

Cancer .Apr 1977. 39 (4 Suppl) p1792-801. ISSN 0008-543X

Journal Code: CLZ

Languages: ENGLISH

Doc Type: Review Journal Announcement: 7708

Subfile: AIM: INDEX MEDICUS

A review is presented of the various factors important in the identification of carcinogenic disease from occupational and environmental exposure to asbestos and vinyl chloride. The long lapsed period, usually of 20 or more years from first exposure to these materials, is discussed, as well as the requirement for sufficiently long observation periods in prospective epidemiological studies. The multiple-factor etiology of lung cancer involving cigarette smoking and asbestos exposure is illustrated. The risks of asbestos-related cancers to other than those directly working with the material are discussed in a variety of circumstances, and finally the effectiveness of control procedures for vinyl chloride and asbestos are compared. (39 Refs.)

Tags: Human; Male

Descriptors: *Asbestos--Adverse Effects (AE); Asbestosis--Occurrence (OC); Carcinogens. Environmental--Poisoning (PO); Environmental Exposure; Longitudinal Studies; Lung Neoplasms--Chemically Induced (CI); Lung Neoplasms--Etiology (ET); Lung Neoplasms--Occurrence (OC); Maximum Permissible Exposure Level; MPEL; *Neoplasms--Chemically Induced (CI); Neoplasms--Occurrence (OC); *Occupational Diseases--Chemically Induced (CI); Prospective Studies; Risk; Smoking--Complications (CO); Time Factors; United States; *Vinyl Chloride--Adverse Effects (AE); *Vinyl Compounds--Adverse Effects (AE); *VINYL CPDS--Adverse Effects (AE)

1229572 77134572

Mortality experience of workers exposed to vinyl chloride monomer in the manufacture of polyvinyl chloride in Great Britain.

Fox AJ; Collier PF

Br J Ind Med .Feb 1977. 34 (1) p1-10. ISSN 0007-1072

Journal Code: AXS

Languages: ENGLISH

Journal Announcement: 7707

Subfile: INDEX MEDICUS

Identification particulars were obtained for over 7000 men who were at some time between 1940 and 1974 exposed to vinyl chloride monomer in the manufacture of polyvinyl chloride. Approximately 99% of these men have been traced and their

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mortality experience studied. The overall standardised mortality ratio, 75-4, shows a significant reduction compared with the national rates. Four cases of liver cancer were found. Two of these have been confirmed by a panel of liver pathologists as angiosarcoma and two as not angiosarcoma. There is no evidence to support the hypothesis that cancers other than those of the liver are associated with exposure to vinyl chloride monomer. The two cases of angiosarcoma were found in men who had been exposed to high concentrations of the monomer although the second man died only eight years after first exposure. The industry in Great Britain has expanded considerably since the second world war with over 50% of men having entered with the last decade. Conclusions drawn about the effect of vinyl chloride monomer on the mortality experience of men in this industry must consequently be tempered by the reservation that the full impact may not yet be in evidence.

Tags: Comparative Study; Human; Male

Descriptors: +Angiosarcoma--Chemically Induced (CI); +Chemical Industry; Environmental Exposure; Epidemiologic Methods; Follow-Up Studies; Liver Neoplasms--Occurrence (OC); Occupational Diseases--Chemically Induced (CI); +Occupational Diseases--Mortality (MO); +Vinyl Chloride--Adverse Effects (AE); +Vinyl Compounds--Adverse Effects (AE); +VINYL CPDS--Adverse Effects (AE)

1195083 77100083

Carcinogenic, mutagenic and teratogenic risks associated with vinyl chloride.

Infante PF; Wagoner JK; Waxweiler RJ

Mutat Res 1976 Nov 1; 41 (1 spel. no) p131-41. ISSN 0027-5107 Journal Code: NNA

Languages: ENGLISH

Journal Announcement: 7705

Subfile: INDEX MEDICUS

The data presented demonstrate clearly that vinyl chloride (VC) is related to a significant excess of mortality from cancer of the liver, lung and brain among workers occupationally exposed to VC. The risk of dying from cancer of the lymphatic and hematopoietic system also appears to increase with an increase in latency. These cancer sites could have been predicted by the animal bioassay conducted by Maltoni. With regard to the liver, even the histopathologic type of cancer (angiosarcoma) was observed first in experimental animals. A study of cancer mortality among populations residing proximate to VC polymerization facilities also demonstrated an increased risk of dying from CNS and lymphatic cancer. These latter findings raise cause for concern about out-plant emissions of VC, but without further study these cancers obviously cannot be interpreted as being related to out-plant exposure to VC. Various test systems now have elicited a positive mutagenic response to VC. Thus, our observations of a significant excess of fetal mortality among the wives of males, who were occupationally exposed to VC, raise public health concern that VC may be mutagenic in humans. With regard to the teratogenicity of VC, observations

of a significant excess of children born with birth defects were reported among populations residing proximate to VC polymerization facilities. Additional epidemiologic study is needed to determine whether a repeated pattern of excessive numbers of children born with birth defects can be observed in other communities with VC polymerization facilities.

Tags: Female; Human; Male

Descriptors: Abnormalities. Multiple--Occurrence (OC); +Carcinogens; Environmental Exposure; Fetal Death; +Mutagens; +Occupational Diseases--Chemically Induced (CI); Ohio; Paternal Age; Pregnancy; Risk; +Teratogens; +Vinyl Chloride--Toxicity (TO); +Vinyl Compounds--Toxicity (TO)

1183333 77088333

Low mortality rates in industrial cohort studies due to selection for work and survival in the industry.

Fox AJ; Collier PF

Br J Prev Soc Med Dec 76; 30 (4) p225-30. ISSN 0007-1242 Journal Code: BIC

Languages: ENGLISH

Journal Announcement: 7705

Subfile: INDEX MEDICUS

Occupational groups are often described as being relatively healthy because their mortality rates are lower than those of the national average. Although correct this confuses the issue for those who are interested in assessing the effects of exposure to a particular chemical. In a further analysis of data collected in a study of all men ever exposed to vinyl chloride monomer in the manufacture of polyvinyl chloride in Great Britain, three factors have been shown to contribute to the low mortality rates that were observed. The three factors: the selection of a healthy population for employment, the survival in the industry of the healthier men, and the length of time that this population has been pursued, have been quantified. The mortality experience within five years of entering this industry was shown to be as low as 37% of that expected; for circulatory disease and respiratory disease it was as low as 21%. There was a progressive increase in standardized mortality ratio with the length of time since entry so that the effect had almost disappeared 15 years after entry. To avoid confounding the selection effect with the survival effect the latter was measured by separating men who survived 15 years after entering the industry according to whether or not they were still in the industry after this period. Those who had left experienced an overall standardized mortality ratio some 50% higher than those still in the industry. This effect, although consistent in the age groups between 25 and 74 years and for all cause groups studied, was greatest in those aged between 25 and 44 years and for lung cancer and respiratory disease.

Tags: Human; Male

Descriptors: Adult; Age Factors; Aged; Cardiovascular Diseases--Mortality (MO); Great Britain; Middle Age; +Mortality; Neoplasms--Mortality (MO); +Occupational Diseases (cont. next page)

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*Occupational Diseases--Mortality (MO); *Occupations;
*Polyvinyl Chloride--Poisoning (PO); *Polyvinyls--Poisoning
(PO); Respiration Disorders--Mortality (MO); Time Factors;
*Vinyl Chloride--Poisoning (PO); *Vinyl Compounds--Poisoning
(PO); *VINYL CPDS--Poisoning (PO)

1165362 77070362

The trade unionist's view of occupational cancer.
Blyghthon AC

Legal Department Transport and General Workers' Union
Transport House, London, England.

IARC Sci Publ (FRANCE), 1976, (13) p425-9, ISSN 0300-5038

Journal Code: GFU

Languages: ENGLISH

Journal Announcement: 7704

Subfile: INDEX MEDICUS

The Transport and General Workers' Union (UK) has an active programme devoted to monitoring the health of its 1.8 million members. Files on members who died of bladder cancer after exposure to beta-naphthylamine go back to the late 1920's. From the same period came data on members suffering from asbestosis which included some cases of lung cancer before the industrial cause of the disease was recognized. These and other more recent examples including Nonox S and vinyl chloride amply justify the need for setting up registers of all workers who are at risk from industrial exposure. The scientific community has a responsibility for communicating data regarding hazards both to employers and employees who can then ensure that all who have been exposed can be notified and screened. The trade unions have a part to play in ensuring that industry accepts conditions of greater control under the new regulations in the United Kingdom. There must be a continuing tripartite discussion between industrial management, trade unions and the responsible government official.

Descriptors: Bladder Neoplasms--Chemically Induced (CI);
*Neoplasms--Chemically Induced (CI); England; Labor Unions;
Legislation, Medical; Liver Neoplasms--Chemically Induced (CI);
Occupational Diseases--Diagnosis (DI); *Occupational
Diseases--Prevention and Control (PC); Registries; Vinyl
Chloride--Adverse Effects (AE); 2-Naphthylamine--Adverse
Effects (AE)

1165338 77070338

Occupational chemical carcinogenesis: new facts, priorities
and perspectives.

Maltoni C

Institute of Oncology and Tumour Centre, Bologna, Italy.

IARC Sci Publ (FRANCE), 1976, (13) p127-49, ISSN 0300-5038

Journal Code: GFU

Languages: ENGLISH

Journal Announcement: 7704

Subfile: INDEX MEDICUS

There is need for a new active approach to the problem of
occupational carcinogenesis. It is no longer acceptable to

adopt a "wait and see" attitude since: 1. evidence suggests that cancer is an "ecological" disease; 2. The carcinogenic risk has been increasing as industrialisation increased; 3. Factory workers are the most exposed population and hazards spread from the work-place to the general population as consumer goods and pollution. It is necessary and possible, to identify potential carcinogens before workers and the general population are exposed. That predictive experiments could be done, is exemplified by the history of stilboestrol, bis (chloromethyl) ether, vinyl chloride and chromium pigments, all of which were reported carcinogenic in animal tests before any epidemiological results were available. Unfortunately, these results were received with scepticism because the test methods were thought to be inadequate. It is necessary to develop the future policy of prevention by: 1. establishing a priority for testing compounds already produced and widespread in occurrence and those about to be produced on a large scale; 2. establishing experimental models for determining carcinogenic risk, especially rapid screening tests; 3. study of the more important compounds by long-term bioassays. Full details are given of the testing of vinyl chloride monomer and preliminary results are tabulated for tests on styrene, acrylonitrile and vinylidene chloride.

Tags: Animal; Human

Descriptors: *Neoplasms--Chemically Induced (CI);
Neoplasms--Prevention and Control (PC); *Carcinogens,
Environmental; Hamsters; Mice; *Occupational Diseases--Preven-
tion and Control (PC); Rats; Time Factors; Vinyl
Chloride--Adverse Effects (AE)

1144990 77049990

[Liver tumors. Laparoscopic aspects]

Lebertumoren Laparoskopische Aspekte

Mori M

Fortschr Med, Nov 76 1911, 94 (32) p1876-8, ISSN 0015-8178

Journal Code: F62

Languages: GERMAN Summary Languages: ENGLISH

Doc Type: English Abstract Journal Announcement: 7703

Subfile: INDEX MEDICUS

A review is given on laparoscopic possibilities in the differentiation of tumours of the liver. Benign lesions are rare and usually discovered by chance. Primary cancer of the liver can be verified ante finem in a maximum of 40% of the cases. Characteristic is the endoscopic picture in the case of haemangiosarcoma after arsenic, Thorotrast, vinyl chloride (marked capsular fibrosis, net-like marking, "restless" surface of the liver). All the tumours need to be confirmed histologically. A tumour-like appearance is presented by echinococcus alveolaris and coarse-nodular granulomatous changes (sarcoidosis, lymphogranulomatosis, etc.).

Tags: Human

Descriptors: Diagnosis, Differential; Echinococcosis,
Hepatic--Diagnosis (DI); *Peritoneoscopy; Liver Neoplasms--Ch-
emically Induced (CI); Liver Neoplasms--Classification (CL);
(cont. next page)

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*Liver Neoplasms--Diagnosis (DI); Neoplasm Metastasis; Thorium Dioxide--Adverse Effects (AE); Tuberculosis, Hepatic--Diagnosis (DI)

1130286 77035286

Chemical carcinogens in the human environment; problems and quantitative aspects.

Preussmann R

Institute of Toxicology and Chemotherapy, German Cancer Research Center, Heidelberg.

Oncology (Switzerland) 1976, 33 (2) p51-7, ISSN 0030-2414

Journal Code: OHW

Languages: ENGLISH

Journal Announcement: 7702

Subfile: INDEX MEDICUS

A short review on environmental carcinogenesis by chemicals is given. Problems related with the determination of carcinogenicity of chemicals are mentioned. Some critical factors in the monitoring of environmental carcinogens are discussed in relation to a quantification of human exposure to such compounds. An attempt at risk evaluation is made for polycyclic aromatic hydrocarbons, vinyl chloride, N-nitroso compounds and aflatoxins. It is concluded that there is a "threshold dose" for individual carcinogens that does not lead to tumor induction within the normal life span. The probability of multifactorial cause of human cancer by environmental carcinogens, however, does not allow the definition of "safe" levels of such compounds in view of syncarcinogenic and other enhancing and/or modifying effects.

Tags: Animal; Human

Descriptors: Aflatoxins--Analysis (AN); Aflatoxins--Toxicity (TO); *Neoplasms--Chemically Induced (CI); *Carcinogens, Environmental; Carcinogens, Environmental--Analysis (AN); Carcinogens, Environmental--Toxicity (TO); Environmental Pollution--Analysis (AN); Nitroso Compounds--Analysis (AN); NITROSO CPDS--Analysis (AN); Nitroso Compounds--Toxicity (TO); NITROSO CPDS--Toxicity (TO); Polycyclic Hydrocarbons--Analysis (AN); Polycyclic Hydrocarbons--Toxicity (TO); Risk; Smoking; Vinyl Chloride--Analysis (AN); Vinyl Chloride--Toxicity (TO)

1122464 77027464

[Clinical picture and pathology of the so-called vinyl chloride disease]

Klinik und Pathologie der sog. Vinylchlorid-Krankheit

Szadkowski D

Fortschr Med Sep 76 1916, 94 (26) p1412-5, ISSN 0015-8178

Journal Code: F62

Languages: GERMAN Summary Languages: ENGLISH

Doc Type: English Abstract Journal Announcement: 7702

Subfile: INDEX MEDICUS

About 26 years ago symptoms of liver and spleen were described for the first time by Tribukh et al. in laborers exposed to vinyl chloride. Besides these symptoms scleroderma, acroosteolysis and Raynaud's phenomenon are known to be typical for the VC disease. Rather high

concentrations of VC seem to be necessary to cause this disease. After cessation of exposure the symptoms may improve partly. Haemangiosarcoma of the liver may occur as the most serious effect of prolonged exposure to vinyl chloride. Presently 48 cases induced by VC exposure are observed all over the world. Diagnosis is difficult, the prognosis of this cancer is practically always fatal. The improvement of working places by the chemical industries should further reduce the risk of acquiring VC disease as well as haemangioma of the liver due to VC exposure. I

Tags: Animal; Human

Descriptors: Angiosarcoma--Chemically Induced (CI); Environmental Exposure; Fingers--Drug Effects (DE); Hepatitis, Toxic--Diagnosis (DI); Hepatitis, Toxic--Etiology (ET); Liver Neoplasms--Chemically Induced (CI); Liver--Drug Effects (DE); Methods: Occupational Diseases--Chemically Induced (CI); Osteolysis--Chemically Induced (CI); Osteolysis--Radiography (RA); Rabbits; Raynaud's Disease--Chemically Induced (CI); Scleroderma, Systemic--Chemically Induced (CI); Vinyl Chloride--Poisoning (PO); Vinyl Chloride--Toxicity (TO); *Vinyl Compounds--Poisoning (PO); *VINYL CPDS--Poisoning (PO)

0992197 76182197

A hazardous society? Individual versus community responsibility in cancer prevention. Third annual Matthew B. Rosenhaus Lecture.

Higginson J

Am J Public Health Apr 1976, 66 (4) p359-66, ISSN 0090-0036

Journal Code: 3XW

Languages: ENGLISH

Journal Announcement: 7608

Subfile: AJM; INDEX MEDICUS

Tags: Female; Human; Male

Descriptors: Angiosarcoma--Chemically Induced (CI); Asbestos--Poisoning (PO); Environmental Exposure; Life Style; Lung Neoplasms--Chemically Induced (CI); Mesothelioma--Chemically Induced (CI); Neoplasms--Chemically Induced (CI); *Neoplasms--Etiology (ET); Neoplasms--Prevention and Control (PC); Occupational Diseases--Chemically Induced (CI); Risk; Scrotum; Smoking--Complications (CO); Social Control, Formal; Urogenital Neoplasms--Chemically Induced (CI); Vinyl Chloride--Poisoning (PO)

0878992 76068992

The Food and Drug Administration and the vinyl chloride problem--an overview.

Schaffner RM; Lombardo P

J Assoc Off Anal Chem Nov 1975, 58 (6) p1211-3, ISSN 0004-5756 Journal Code: HFJ

Languages: ENGLISH

Subfile: INDEX MEDICUS

Recent evidence has shown that chronic exposure to vinyl chloride by inhalation may cause cancer in laboratory animals (cont. next page)

DIALOG File 153: MEDLINE - 73-79

and in man. Its possible oral effects are currently being investigated. The history of the significant events leading to the investigation of this chemical is presented. The current and future activities of the Food and Drug Administration in this area are also described.

Descriptors: Carcinogens; Environmental Pollutants; Food Contamination; Occupational Diseases--Chemically Induced (CI); *United States Food and Drug Administration; *FDA; *Vinyl Chloride; Vinyl Chloride--Adverse Effects (AE); *Vinyl Compounds

0832270 76022270

Cancer mortality in U.S. counties with plastics and related industries.

Mason TJ

Environ Health Perspect .Jun 1975. 11 p79-84. ISSN 0091-6765

Journal Code: E10

Languages: ENGLISH

Subfile: INDEX MEDICUS

Counties in the United States have been identified with chemical establishments whose primary manufacturing processes use vinyl chloride. Site-specific cancer mortality comparisons have revealed an excess of multiple myeloma in males associated with two of the manufacturing categories, synthetic rubber and synthetic fibers. A causal relationship between these manufacturing categories and multiple myeloma could not be established. An industry-based assessment of the occupational contribution to this excess is needed to evaluate the etiologic importance of this relationship.

Tags: Female; Human; Male

Descriptors: Cellulose--Toxicity (TO); *Chemical Industry; Environmental Exposure; Rubber--Toxicity (TO); Liver Neoplasms--Chemically Induced (CI); Lung Neoplasms--Chemically Induced (CI); Multiple Myeloma--Chemically Induced (CI); *Neoplasms--Chemically Induced (CI); Neoplasms--Mortality (MO); *Plastics--Toxicity (TO); Rectal Neoplasms--Chemically Induced (CI); Rubber--Toxicity (TO); Time Factors; United States; *Vinyl Chloride--Toxicity (TO); *Vinyl Compounds--Toxicity (TO)

0745560 75165560

A simple after-loading technique for the treatment of cancer of the cervix.

Haybittle JL; Mitchell JS

Br J Radiol .Apr 1975. 48 (568) p295-8. ISSN 0007-1285

Journal Code: B28

Languages: ENGLISH

Subfile: AIM; INDEX MEDICUS

A simple manual after-loading system for the treatment of carcinoma of the cervix has been developed. Radiochemical Centre J-type caesium sources are used made up in PVC tubes which can be inserted into PVC uterine tubes or rubber ovoids after these have been packed in position in the patient. Radiation exposure to theatre staff has been reduced by a factor of about four.

Tags: Animal; Female

Descriptors: *Cervix Neoplasms--Radiotherapy (RT); Cesium Isotopes; Disposable Equipment; Polyvinyls; Radiation Dosage; Radiotherapy Dosage; *Radiotherapy--Instrumentation (IS); Rubber

0653991 75073991

Editorial: Vinyl chloride and cancer.

Can Med Assoc J .8 Feb 1975. 112 (3) p269-70. ISSN 0008-4409

Journal Code: CKW

Languages: ENGLISH

Subfile: AIM; INDEX MEDICUS

Tags: Animal; Human; Male

Descriptors: Aged; Alkaline Phosphatase--Blood (BL); *Angiosarcoma--Chemically Induced (CI); Angiosarcoma--Occurrence (OC); Angiosarcoma--Diagnosis (DI); Bile Duct Neoplasms--Chemically Induced (CI); Brain Neoplasms--Chemically Induced (CI); Environmental Exposure; Gallbladder Neoplasms--Chemically Induced (CI); *Liver Neoplasms--Chemically Induced (CI); Liver Neoplasms--Occurrence (OC); Liver Neoplasms--Diagnosis (DI); Lung Neoplasms--Chemically Induced (CI); Nasopharyngeal Neoplasms--Chemically Induced (CI); *Occupational Diseases--Chemically Induced (CI); Rats; Raynaud's Disease--Chemically Induced (CI); Thyroid Neoplasms--Chemically Induced (CI); *Vinyl Compounds--Adverse Effects (AE)

0635937 75055937

Editorial: More facts on vinyl chloride and cancer.

Br Med J .30 Nov 1974. 4 (5943) p486-7. ISSN 0007-1447

Journal Code: R4W

Languages: ENGLISH

Subfile: AIM; INDEX MEDICUS

Tags: Animal; Human; Male

Descriptors: Adult; Air Pollution; *Angiosarcoma--Chemically Induced (CI); Chemical Industry; Environmental Exposure; *Liver Neoplasms--Chemically Induced (CI); Mice; Middle Age; Occupational Diseases--Chemically Induced (CI); Rats; *Vinyl Compounds--Poisoning (PO)

0517964 74252964

Editorial: Vinyl chloride, P.V.C., and cancer.

Lancet (England) .29 Jun 1974. 1 (870) p1323-4. ISSN 0023-7507

Journal Code: LOS

Languages: ENGLISH

Subfile: AIM; INDEX MEDICUS

Tags: Human; Male

Descriptors: AGED; *Polyvinyls--Adverse Effects (AE); Chlorides--Adverse Effects (AE); *Occupational Diseases--Chemically Induced (CI); *Liver Neoplasms--Chemically Induced (CI); *Angiosarcoma--Chemically Induced (CI); Environmental Exposure; Time Factors

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0417275 74152275

Letter: Vinyl chloride and cancer.

Roe FJ

Br Med J (England) .20 Apr 1974. 2 (911) p176. ISSN

0007-1447 Journal Code: B4W

Languages: ENGLISH

Subfile: AIM; INDEX MEDICUS

Tags: Animal; HUMAN

Descriptors: CARCINOGENS; CHLORIDES; +NEOPLASMS--Chemically
Induced (CI); OCCUPATIONAL DISEASES--Chemically Induced (CI);
+Polyvinyl Alcohol--Adverse Effects (AE); SARCOMA--Chemically
Induced (CI)

0403000 74138000

Editorial: Vinyl chloride and cancer.

Br Med J (England) .30 Mar 1974. 1 (908) p590-1. ISSN

0007-1447 Journal Code: B4W

Languages: ENGLISH

Subfile: AIM; INDEX MEDICUS

Tags: HUMAN; MALE

Descriptors: +ANGIOSARCOMA--Chemically Induced (CI);
CHLORIDES--Adverse Effects (AE); GREAT BRITAIN; +LIVER
NEOPLASMS--Chemically Induced (CI); +OCCUPATIONAL
DISEASES--Chemically Induced (CI); UNITED STATES; +VINYL
COMPOUNDS--Adverse Effects (AE)