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of our planet's northernmost inhabitants*

1,3-Butadiene and leukemia among synthetic rubber industry workers: exposure-response relationships.

<https://arctichealth.org/en/permalink/ahliterature166384>

Author: Hong Cheng
Nalini Sathiakumar
John Graff
Robert Matthews
Elizabeth Delzell

Author Affiliation: University of Alabama at Birmingham, Ryals School of Public Health, Department of Epidemiology, Birmingham, AL, USA. hcheng@ms.soph.uab.edu

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Date: Mar-20-2007

Language: English

Publication Type: Article

Keywords: Butadienes - adverse effects
Canada - epidemiology
Carcinogens - chemical synthesis - chemistry - toxicity
Chemical Industry - manpower - statistics & numerical data
Confidence Intervals
Dimethyldithiocarbamate - adverse effects
Humans
Leukemia, Lymphoid - chemically induced - epidemiology
Leukemia, Myeloid - chemically induced - epidemiology
Likelihood Functions
Male
Middle Aged
Occupational Exposure - statistics & numerical data
Proportional Hazards Models
Rubber - adverse effects - chemical synthesis - chemistry
United States - epidemiology

Abstract: Previous research updated the mortality experience of North American synthetic rubber industry workers during the period 1944-1998, determined if leukemia and other cancers were associated with several employment factors and carried out Poisson regression analysis to examine exposure-response associations between estimated exposure to 1,3-butadiene (BD) or other chemicals and cancer. The present study used Cox regression procedures to examine further the exposure-response relationship between several unlagged and lagged, continuous, time-dependent BD exposure indices (BD parts per million (ppm)-years, the total number of exposures to BD concentrations >100 ppm ("peaks") and average intensity of BD) and leukemia, lymphoid neoplasms and myeloid neoplasms. All three BD exposure indices were associated positively with leukemia. Using continuous, untransformed BD ppm-years the regression coefficient (beta) from an analysis that controlled only for age was 2.9×10^{-4} (p

PubMed ID: 17123495 [View in PubMed](#) 

1,3-Butadiene: exposure estimation, hazard characterization, and exposure-response analysis.

<https://arctichealth.org/en/permalink/ahliterature186649>

Author: K. Hughes
M E Meek
M. Walker
R. Beauchamp

Author Affiliation: Existing Substances Division, Environmental Health Directorate, Health Canada, Environmental Health Centre, Tunney's Pasture PL0802B1, Ottawa, Ontario, Canada K1A 0L2.

Source: J Toxicol Environ Health B Crit Rev. 2003 Jan-Feb;6(1):55-83

Language: English

Publication Type: Article

Keywords: Animals

Butadienes - metabolism - toxicity

Canada - epidemiology

Carcinogens, Environmental - toxicity

Environmental Exposure

Hazardous Substances - toxicity

Humans

Mutagens - toxicity

Neoplasms - chemically induced - epidemiology

Occupational Diseases - chemically induced - epidemiology

Risk assessment

Abstract: 1,3-Butadiene has been assessed as a Priority Substance under the Canadian Environmental Protection Act. The general population in Canada is exposed to 1,3-butadiene primarily through ambient air. Inhaled 1,3-butadiene is carcinogenic in both mice and rats, inducing tumors at multiple sites at all concentrations tested in all identified studies. In addition, 1,3-butadiene is genotoxic in both somatic and germ cells of rodents. It also induces adverse effects in the reproductive organs of female mice at relatively low concentrations. The greater sensitivity in mice than in rats to induction of these effects by 1,3-butadiene is likely related to species differences in metabolism to active epoxide metabolites. Exposure to 1,3-butadiene in the occupational environment has been associated with the induction of leukemia; there is also some limited evidence that 1,3-butadiene is genotoxic in exposed workers. Therefore, in view of the weight of evidence of available epidemiological and toxicological data, 1,3-butadiene is considered highly likely to be carcinogenic, and likely to be genotoxic, in humans. Estimates of the potency of butadiene to induce cancer have been derived on the basis of both epidemiological investigation and bioassays in mice and rats. Potencies to induce ovarian effects have been estimated on the basis of studies in mice. Uncertainties have been delineated, and, while there are clear species differences in metabolism, estimates of potency to induce effects are considered justifiably conservative in view of the likely variability in metabolism across the population related to genetic polymorphism for enzymes for the critical metabolic pathway.

PubMed ID: 12587254 [View in PubMed](#) 

[1,4 billions crowns to 1 881 projects renew rehabilitation and habilitation].

<https://arctichealth.org/en/permalink/ahliterature202185>

Author: G. Wallgrund
G. Grimby

Author Affiliation: Sahlgrenska Universitetssjukhuset, Göteborg.

Source: Lakartidningen. 1999 Apr 14;96(15):1823

Date: Apr-14-1999

Language: Swedish

Publication Type: Article

Keywords: Community Health Services - economics - trends
Humans
Rehabilitation - economics - methods - trends
Sweden

PubMed ID: 10319646 [View in PubMed](#)

[1,4 millions Swedes are on the donation registry. Still several thousands newly registered persons per month].

<https://arctichealth.org/en/permalink/ahliterature208386>

Author: H. Gäbel
N. Rehnqvist
B. Eriksson

Author Affiliation: Transplantationskirurgiska kliniken, Huddinge sjukhus, Stockholm.

Source: Lakartidningen. 1997 May 28;94(22):2105-8

Date: May-28-1997

Language: Swedish

Publication Type: Article

Keywords: Humans
Public Opinion
Registries
Sweden
Tissue Donors
Tissue and Organ Procurement - statistics & numerical data

PubMed ID: 9213668 [View in PubMed](#)

\$1.5 billion at stake as tobacco smuggling lawsuit relaunched.

<https://arctichealth.org/en/permalink/ahliterature183644>

Author: Louise Gagnon

Source: CMAJ. 2003 Sep 16;169(6):593

Date: Sep-16-2003

Language: English

Publication Type: Article

Keywords: Canada

Crime - economics - legislation & jurisprudence

Health Promotion - economics - legislation & jurisprudence

Humans

Marketing of Health Services - economics - legislation & jurisprudence

Smoking - economics - legislation & jurisprudence

State Health Plans - economics - legislation & jurisprudence

Taxes - economics - legislation & jurisprudence

Tobacco Industry - economics - legislation & jurisprudence

United States

PubMed ID: 12975235 [View in PubMed](#) 

1,005 delayed days: a study of adult psychiatric discharge.

<https://arctichealth.org/en/permalink/ahliterature244608>

Author: P A Barrette
Source: Hosp Community Psychiatry. 1981 Apr;32(4):266-8
Date: Apr-1981
Language: English
Publication Type: Article
Keywords: Adult
Canada
Hospitals, Community
Hospitals, Psychiatric - organization & administration
Humans
Length of Stay
Patient Acceptance of Health Care
Patient Discharge

Abstract: Delay in discharge of psychiatric patients frequently is attributed to the lack of available community resources, or to the unwillingness of the patient or his family to accept discharge or transfer to another facility. The role of the psychiatric system itself rarely is mentioned as a factor. A study of 138 psychiatric patients in a Canadian community hospital in 1978 showed that 35 per cent were judged to be delayed in their discharge. By far the greatest source of delay was the administration of the various psychiatric services within the system. Delayed patients were found to be statistically similar to nondelayed patients, except for the delayed patients tendency to be poorer and to be overrepresented on two of the six wards studied. The cost implications of the delays in discharge are discussed, as are suggestions for solving the problems within the administrative framework.

PubMed ID: 7227988 [View in PubMed](#) 

[1,5 ppm fluoride in natural drinking water. Impressions of a journey to Vordingborg, Denmark]

<https://arctichealth.org/en/permalink/ahliterature43787>

Author: Bremer
Source: Zahnarzte Mitt. 1971 Nov 2;61(21):1070
Date: Nov-2-1971
Language: German
Publication Type: Article
Keywords: Adolescent
Child
Child, Preschool
Denmark
Dental Caries - epidemiology
Fluorides
Humans
Water supply
PubMed ID: 5286845 [View in PubMed](#) 

The 1.9 Å crystal structure of heat-labile shrimp alkaline phosphatase.

<https://arctichealth.org/en/permalink/ahliterature189601>

Author: Maaïke de Backer
Sean McSweeney
Hanne B Rasmussen
Bjørn W Riise
Peter Lindley
Edward Hough

Author Affiliation: European Synchrotron Radiation Facility, Grenoble, France.

Source: J Mol Biol. 2002 May 17;318(5):1265-74

Date: May-17-2002

Language: English

Publication Type: Article

Keywords: Alkaline Phosphatase - chemistry

Animals
Crystallography, X-Ray
Decapoda (Crustacea) - chemistry - enzymology
Humans
Models, Molecular
Protein Conformation
Temperature

Abstract: Alkaline phosphatases are non-specific phosphomonoesterases that are distributed widely in species ranging from bacteria to man. This study has concentrated on the tissue-nonspecific alkaline phosphatase from arctic shrimps (shrimp alkaline phosphatase, SAP). Originating from a cold-active species, SAP is thermolabile and is used widely in vitro, e.g. to dephosphorylate DNA or dNTPs, since it can be inactivated by a short rise in temperature. Since alkaline phosphatases are zinc-containing enzymes, a multiwavelength anomalous dispersion (MAD) experiment was performed on the zinc K edge, which led to the determination of the structure to a resolution of 1.9 Å. Anomalous data clearly showed the presence of a zinc triad in the active site, whereas alkaline phosphatases usually contain two zinc and one magnesium ion per monomer. SAP shares the core, an extended beta-sheet flanked by alpha-helices, and a metal triad with the currently known alkaline phosphatase structures (Escherichia coli structures and a human placental structure). Although SAP lacks some features specific for the mammalian enzyme, their backbones are very similar and may therefore be typical for other higher organisms. Furthermore, SAP possesses a striking feature that the other structures lack: surface potential representations show that the enzyme's net charge of -80 is distributed such that the surface is predominantly negatively charged, except for the positively charged active site. The negatively charged substrate must therefore be directed strongly towards the active site. It is generally accepted that optimization of the electrostatics is one of the characteristics related to cold-adaptation. SAP demonstrates this principle very clearly.

PubMed ID: 12083516 [View in PubMed](#) 

The 1 alpha-hydroxylase locus is not linked to calcium stone formation or calciuric phenotypes in French-Canadian families.

<https://arctichealth.org/en/permalink/ahliterature206213>

Author: P. Scott
D. Ouimet
Y. Proulx
M L Trouvé
G. Guay
B. Gagnon
L. Valiquette
A. Bonnardeaux

Author Affiliation: Service de Néphrologie, Hôpital Maisonneuve-Rosemont, Montreal, Quebec, Canada.

Source: J Am Soc Nephrol. 1998 Mar;9(3):425-32

Date: Mar-1998

Language: English

Publication Type: Article

Keywords: 25-Hydroxyvitamin D3 1-alpha-Hydroxylase - genetics - metabolism

Adult
Calcium - urine
Canada
European Continental Ancestry Group - genetics
Family Health
Female
France - ethnology
Genetic Linkage
Genetic Markers - genetics
Humans
Kidney Calculi - enzymology - genetics
Male
Middle Aged
Nuclear Family
Pedigree
Phenotype
Vitamin D - blood

Abstract: Calcium urolithiasis is often associated with increased intestinal absorption and urine excretion of calcium, and has been suggested to result from increased vitamin D production. The role of the enzyme 1 alpha-hydroxylase, the rate-limiting step in active vitamin D production, was evaluated in 36 families, including 28 sibships with at least a pair of affected sibs, using qualitative and quantitative trait linkage analyses. Sibs with a verified calcium urolithiasis passage (n = 117) had higher 24-h calciuria (P = 0.03), oxaluria (P = 0.02), fasting and postcalcium loading urine calcium/creatinine (Ca/cr) ratios (P = 0.008 and P = 0.002, respectively), and serum 1,25(OH)₂ vitamin D levels (P = 0.02) compared with nonstone-forming sibs (n = 120). Markers from a 9-centiMorgan interval encompassing the VDD1 locus on chromosome 12q13-14 (putative 1 alpha-hydroxylase) were analyzed in 28 sibships (146 sib pairs) of single and recurrent stone formers and in 14 sibships (65 sib pairs) with recurrent-only (> or = 3 episodes) stone-forming sibs. Two-point and multipoint analyses did not reveal excess in alleles shared among affected sibs at the VDD1 locus. Linkage of stone formation to the VDD1 locus could be excluded, respectively, with a lambda d of 2.0 (single and recurrent stone formers) and 3.25 (recurrent stone formers). Quantitative trait analyses revealed no evidence for linkage to 24-h calciuria and oxaluria, serum 1,25(OH)₂ vitamin D levels, and Ca/cr ratios. This study shows absence of linkage of the putative 1 alpha-hydroxylase locus to calcium stone formation or to quantitative traits associated with idiopathic hypercalciuria. In addition, there is coaggregation of calciuric and oxaluric phenotypes with stone formation.

PubMed ID: 9513904 [View in PubMed](#) 

1 Canadian Field Hospital in Haiti: surgical experience in earthquake relief.

<https://arctichealth.org/en/permalink/ahliterature122035>

Author: Max Talbot
Bethann Meunier
Vincent Trottier
Michael Christian
Tracey Hillier
Chris Berger
Vivian McAlister
Scott Taylor

Author Affiliation: 1 Canadian Field Hospital, Canadian Forces, Montreal, QC. max_talbot@hotmail.com

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Keywords: Canada
Disaster Planning - organization & administration
Earthquakes
Female
Haiti
Hospitals, Packaged - organization & administration
Humans
International Cooperation
Male
Multiple Trauma - etiology - surgery
Operating Rooms
Relief Work - organization & administration
Surgical Procedures, Operative - statistics & numerical data

Abstract: The Canadian Forces' (CF) deployable hospital, 1 Canadian Field Hospital, was deployed to Haiti after an earthquake that caused massive devastation. Two surgical teams performed 167 operations over a 39-day period starting 17 days after the index event. Most operations were unrelated to the earthquake. Replacing or supplementing the destroyed local surgical capacity for a brief period after a disaster can be a valuable contribution to relief efforts. For future humanitarian operations/disaster response missions, the CF will study the feasibility of accelerating the deployment of surgical capabilities.

Notes: Cites: Disasters. 2000 Sep;24(3):262-7011026159
Cites: Prehosp Disaster Med. 2003 Oct-Dec;18(4):278-9015310039
Cites: Disaster Manag Response. 2005 Jan-Mar;3(1):11-615627125
Cites: Mil Med. 2007 May;172(5):471-717521092
Cites: Prehosp Disaster Med. 2008 Mar-Apr;23(2):144-51; discussion 152-318557294
Cites: Ann Intern Med. 2010 Jun 1;152(11):733-720197507
Cites: Prehosp Disaster Med. 2009 Jan-Feb;24(1):9-1019557952
Cites: Science. 2010 Feb 5;327(5966):638-920133550
Cites: Nature. 2010 Feb 18;463(7283):878-920164905
Cites: N Engl J Med. 2010 Mar 18;362(11):e3820200362
Cites: Prehosp Disaster Med. 2009 Jan-Feb;24(1):3-819557951
PubMed ID: 22854149 [View in PubMed](#) 