

# Chloracne

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Chloracne is an acne-like eruption of blackheads, cysts, and pustules associated with over-exposure to certain halogenated aromatic compounds, such as chlorinated dioxins and dibenzofurans. The lesions are most frequently found on the cheeks, behind the ears, in the armpits and groin region. The condition was first described in German industrial workers in 1897 by Von Bettman, and was initially believed to be caused by exposure to toxic chlorine. It was only in the mid-1950s that chloracne was associated with aromatic hydrocarbons. The substances that may cause chloracne are now collectively known as chloracnegens. Chloracne is particularly linked to toxic exposure to dioxins &mdash; so much so that it is considered a clinical sign of dioxin exposure. The severity and onset of chloracne may follow a typical asymptotic dose-response relationship curve. ([From the Wikipedia article Chloracne.](#))

## Recent Publications on Chloracne:



- [The pleiotropy of dioxin toxicity - Xenobiotic misappropriation of the aryl hydrocarbon receptor's alternative physiological roles.](#)  
*The aryl hydrocarbon receptor is a signal regulated transcription factor...*29th September, 2009  
Drug Discovery Biology Laboratory, Monash Institute of Pharmaceutical- Pharmacol Ther. 2009 Sep 23. ([DOI Direct Link](#))
- [Cancer incidence in the population exposed to dioxin after the "Seveso accident": twenty years of follow-up.](#)  
*BACKGROUND: The Seveso, Italy accident in 1976 caused the contamination of...*17th September, 2009  
Unit of Epidemiology, Department of Preventive Medicine, Fondazione IRCCS- Environ Health. 2009 Sep 15;8:39. ([DOI Direct Link](#))
- [Repression of aryl hydrocarbon receptor transcriptional activity by epidermal growth factor.](#)  
*The aryl hydrocarbon receptor (AHR) mediates most, if not all, of the many...*15th September, 2009  
Department of Pathology and Laboratory Medicine, Jonsson Comprehensive- Mol Interv. 2009 Jun;9(3):116-8. ([DOI Direct Link](#))
- [Loss of dioxin-receptor expression accelerates wound healing in vivo by a mechanism involving TGFbeta.](#)  
*Delayed wound healing caused by inefficient re-epithelialization...*15th September, 2009  
Departamento de Bioquímica y Biología Molecular, Facultad de Ciencias,- J Cell Sci. 2009 Jun 1;122(Pt 11):1823-33. Epub 2009 May 12. ([DOI Direct Link](#))
- [Inflammatory and chloracne-like skin lesions in B6C3F1 mice exposed to 3,3',4,4'-tetrachloroazobenzene for 2 years.](#)  
*Exposure to dioxin and dioxin-like compounds (DLCs) has been connected to...*10th September, 2009  
Hadassah - Hebrew University Medical Center, Jerusalem 91200, Israel.- Toxicology. 2009 Nov

- 9;265(1-2):1-9. Epub 2009 Sep 6. ([DOI Direct Link](#))
- [\[Toxic effects of PCB/PCDF to human observed in Yusho and other poisonings\]](#)  
*Yusho PCB poisoning occurred in 1968, when the human environment had been...*21st August, 2009  
 Daiichi College of Pharmaceutical Sciences, 22-1 Tamagawa-cho, Minami-ku,- Fukuoka Igaku Zasshi. 2009 May;100(5):141-55.
  - [\[Chloracne in seven organic chemists exposed to novel polycyclic halogenated chemical compounds \(triazoloquinoxalines\).\]](#)  
*Chloracne is an acneiform eruption caused though poisoning by aromatic...*30th June, 2009  
 Department of Dermatology, Royal Hallamshire Hospital, Sheffield, UK.- Br J Dermatol. 2009 Oct;161(4):939-43. Epub 2009 May 8. ([DOI Direct Link](#))
  - [\[TCDD exposure estimation for workers at a New Zealand 2,4,5-T manufacturing facility based on serum sampling data.\]](#)  
*Employment in the manufacture of the herbicide...*6th June, 2009  
 aSummit Toxicology, LLP, Falls Church, VA, USA.- J Expo Sci Environ Epidemiol. 2009 Jun 3. ([DOI Direct Link](#))
  - [\[EGF receptor signaling blocks aryl hydrocarbon receptor-mediated transcription and cell differentiation in human epidermal keratinocytes.\]](#)  
*Dioxin is an extremely potent carcinogen. In highly exposed people, the...*9th April, 2009  
 Department of Biology and W. Harry Feinstone Center for Genomic Research,- Proc Natl Acad Sci U S A. 2009 Mar 17;106(11):4266-71. Epub 2009 Mar 2. ([DOI Direct Link](#))
  - [\[Reduced expression of von Hippel-Lindau gene in subjects exposed to polychlorinated biphenyls and dibenzofurans.\]](#)  
*Polychlorinated biphenyls (PCBs) and polychlorinated dibenzofurans (PCDFs)...*13th November, 2008  
 Environmental and Occupational Health, College of Medicine, National- Environ Res. 2008 Oct;108(2):247-51. Epub 2008 Aug 22. ([DOI Direct Link](#))
  - [\[Role of mitogen-activated protein kinase pathway in chloracne\]](#)  
*OBJECTIVE: To investigate the role of mitogen-activated protein kinase...*3rd September, 2008  
 Department of Occupational Health, School of PublicHealth, Tianjin Medical- Zhonghua Lao Dong Wei Sheng Zhi Ye Bing Za Zhi. 2008 Mar;26(3):154-6.
  - [\[Increased risk of diabetes and polychlorinated biphenyls and dioxins: a 24-year follow-up study of the Yucheng cohort.\]](#)  
*OBJECTIVE: Polychlorinated biphenyls (PCBs) and polychlorinated...*21st August, 2008  
 Division of Environmental Health and Occupational Medicine, National- Diabetes Care. 2008 Aug;31(8):1574-9. Epub 2008 May 16. ([DOI Direct Link](#))
  - [\[Epidemiologic evidence of relationships between reproductive and child health outcomes and environmental chemical contaminants.\]](#)  
*This review summarizes the level of epidemiologic evidence for...*17th June, 2008  
 McLaughlin Centre for Population Health Risk Assessment, University of- J Toxicol Environ Health B Crit Rev. 2008 May;11(5-6):373-517. ([DOI Direct Link](#))
  - [\[Expression of AhR, CYP1A1, GSTA1, c-fos and TGF-alpha in skin lesions from dioxin-exposed humans with chloracne.\]](#)  
*Occupational exposure to certain polychlorinated aromatic hydrocarbons...*6th June, 2008  
 The College of Environmental Science and Engineering, Nankai University,- Toxicol Lett. 2008 Apr 1;177(3):182-7. Epub 2008 Feb 5. ([DOI Direct Link](#))
  - [\[Environmental toxicants and effects on female reproductive function.\]](#)  
*One of the most toxic substances known to humans,...*3rd June, 2008  
 Department of Biological Sciences and NIEHS Marine and Freshwater- Tren Reprod Bio. 2006;2:1-11.

## Chloracne Clinical Trials:



- [Molecular Epidemiology of Dioxin-Related Illness in Seveso](#)

## Chloracne Patents:



- 5753308- [Methods for manufacturing food and beverage containers from inorganic aggregates and polysaccharide, protein, or synthetic organic binders](#)
- 6025394- [Method for treating patients with acne by administering substituted sulfonyl indenyl acetic acids, amides and alcohols](#)
- 6030673- [Molded starch-bound containers and other articles having natural and/or synthetic polymer coatings](#)
- 6090195- [Compositions used in manufacturing articles having an inorganically filled organic polymer matrix](#)
- 6096563- [Dual particle immunoassay method and kit](#)
- 6177471- [Method for treating patients with acne by administering a CGMP-specific PDE inhibitor](#)
- 6180037- [Methods for the manufacture of sheets having a highly inorganically filled organic polymer matrix](#)
- 6204005- [Immunoassay for toxic congeners of polychlorinated biphenyls](#)
- 6221911- [Uses for thyroid hormone compounds or thyroid hormone-like compounds](#)
- 6395784- [Benzamide ligands for the thyroid receptor](#)
- 6399651- [Method of treating dermatoses using avermectin compound](#)
- 5994330- [Topical application of muscarinic agents such as neostigmine for treatment of acne and other inflammatory conditions](#)
- 5968360- [Composition and method for degradation of polychlorinated biphenyl compounds](#)
- 5928741- [Laminated articles of manufacture fashioned from sheets having a highly inorganically filled organic polymer matrix](#)
- 5766525- [Methods for manufacturing articles from sheets of unhardened hydraulically settable compositions](#)
- 5783126- [Method for manufacturing articles having inorganically filled, starch-bound cellular matrix](#)
- 5800647- [Methods for manufacturing articles from sheets having a highly inorganically filled organic polymer matrix](#)
- 5800756- [Methods for manufacturing containers and other articles from hydraulically settable mixtures](#)
- 5830305- [Methods of molding articles having an inorganically filled organic polymer matrix](#)
- 5834480- [Topical application of opioids for treatment of acne and sebaceous gland disorders](#)
- 5837270- [Topical anti-acne composition](#)
- 5868824- [Inorganically filled, starch-based compositions for manufacturing containers and other articles having a thermodynamically controlled cellular matrix](#)
- 5874464- [Conformationally constrained diacylglycerol analogues](#)

- 5879722- [System for manufacturing sheets from hydraulically settable compositions](#)
- 6495158- [Acne patch](#)
- 6503463- [Process and apparatus for treating dioxins](#)
- 7199265- [Thyroid receptor ligands, pharmaceutical compositions comprising them and their use in the treatment of disorders influenced by thyroid hormones](#)
- 7279593- [Prime ring substituted thyroid receptor antagonists for the treatment of cardiac and metabolic disorders](#)
- 7288571- [Thyroid receptor ligands and method II](#)
- 7319096- [Thyroid hormone receptor antagonists for cardiac and metabolic disorders II](#)
- 7319163- [Thyroid receptor antagonists for the treatment of cardiac and metabolic disorders](#)
- 7342127- [Substituted anilide ligands for the thyroid receptor](#)
- 7359748- [Apparatus for total immersion photography](#)
- 7462480- [Stimulation of microbial dechlorination of polychlorinated biphenyls with halogenated ethenes](#)
- 7531089- [Biogeochemical reactor](#)
- 7557143- [Thyroid receptor ligands](#)
- 7153997- [Benzamide derivatives as thyroid receptor ligands](#)
- 7144909- [Phenoxy substituted benzocondensed heteroaryl derivatives as thyroid receptor ligands](#)
- 7109164- [Aniline-derived ligands for the thyroid receptor](#)
- 6514711- [Immortalized human keratinocyte cell line](#)
- 6730703- [Dual inhibitors of cholesteryl ester and wax ester synthesis for sebaceous gland disorders](#)
- 6747048- [Pyridine-based thyroid receptor ligands](#)
- 6800605- [Aniline-derived ligands for the thyroid receptor](#)
- 6806381- [Process for the preparation of aniline-derived thyroid receptor ligands](#)
- 6831102- [Phenyl naphthol ligands for thyroid hormone receptor](#)
- 6946248- [Compositions and methods for microbial dechlorination of polychlorinated biphenyl compounds](#)
- 6951844- [Phenyl naphthol ligands for thyroid hormone receptor](#)
- 6989402- [Thyroid receptor ligands and method II](#)
- 7005538- [Thyroid receptor antagonists for the treatment of cardiac and metabolic disorders](#)
- 7575764- [Compositions comprising hysizygus ulmarius extract](#)

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