INVENTORY OF ONGOING RESEARCH IN OCCUPATIONAL HEALTH AND ENVIRONMENTAL EPIDEMIOLOGY IN DEVELOPING COUNTRIES

1990-91

WORLD HEALTH ORGANIZATION, GENEVA, 1991

JOINTLY WITH

INTERNATIONAL DEVELOPMENT RESEARCH CENTRE

In support of the INTERNATIONAL PROGRAMME ON CHEMICAL SAFETY
INVENTORY OF ONGOING RESEARCH IN OCCUPATIONAL HEALTH AND ENVIRONMENTAL EPIDEMIOLOGY IN DEVELOPING COUNTRIES 1990-91

Prepared by

The Program on Environment and Health Management Sciences for Health (MSH) Boston, Massachusetts, USA

The aim of this inventory is to provide researchers, research funding agencies, public health agencies and others interested in environmental and occupational health an up-to-date and comprehensive source of information on research carried out in developing countries. This first issue contains 500 descriptions of projects being carried out in over 70 developing countries. It is planned to update the inventory regularly. A form to submit with information about new or amended projects is included in this report.

This inventory is a collaborative activity among the International Development Research Centre (IDRC), Ottawa, Canada, the World Health Organization (WHO), Geneva, Switzerland, and Management Sciences for Health (MSH), Boston, USA. It was established in a "CARDBOX" microcomputer file by MSH, Boston; responsible officer for this project: Barry S. Levy, M.D., M.P.H.

Additional copies available from:

Environmental Epidemiology
Division of Environmental Health
World Health Organization
1211 Geneva, Switzerland
INTRODUCTION

Occupational and environmental health hazards account for much morbidity, disability, and mortality worldwide. A variety of health problems can occur, such as poisoning due to pesticides; respiratory and neurologic disorders due to dust, heavy metals or solvents; acute injuries in the workplace; noise-induced hearing loss, vibration - and radiation-induced disorders; as well as disorders due to biologic agents or psychosocial factors. In general, the frequency and severity of these problems are greater in developing countries, where exposures to the hazards are more severe and resources to deal with the problems are limited.

Research plays a critical role in broadening our understanding of occupational and environmental health problems and in guiding the anticipation, recognition, evaluation, treatment, and prevention and control of these problems.

This directory is intended to enable individuals and organizations concerned about and/or researching occupational and environmental health problems in developing countries to have information on ongoing research in occupational health and environmental epidemiology in these countries. It is based on information obtained from investigators by a mailed questionnaire survey performed by Management Sciences for Health (Boston, Massachusetts, USA) in mid-1990. Questionnaires in English, French, and Spanish were mailed to all members of the WHO Global Environmental Epidemiology Network (GEENET), all organizations in the International Commission on Occupational Health (ICOH) directory of research institutions in occupational health, and others.

It is hoped that this directory stimulates information exchange and collaborative research, and ultimately improved prevention and control of these problems. The amount of information given for each project is variable but all abstracts should cover key points such as "Objectives of the study," "Study type," and "Country of data collection."

Selection of material

The main criterion for inclusion of a project in the directory is that the research project deals with environmental epidemiology or occupational health and safety in a developing country. The term "epidemiology" was interpreted quite broadly. We must stress that editors do not act as referees of the quality of research. Inclusion in the directory implies an adequate description of the research project, not an assessment of its quality.

Acknowledgements:

The inventory was developed with funding from the International Development Research Centre, the World Health Organization and the Government of Sweden. It was prepared by Management Sciences for Health in support of the International Programme on Chemical Safety.

The following people contributed to the work:

Barry S. Levy and Mark Jones, MSH, Gilles Forget, IDRC, Tord Kjellström and Laurence Pollier, WHO.
STRUCTURE OF THE DOCUMENT

Keywords and definitions:

**Project:** Refers to each ongoing research undertaken in a developing country which has been selected for this inventory and stored as a record in the microcomputer file using the CARDBOX software.

**Master List:** It is the inventory of all projects in the present document.

**Serial number:** The projects stored in the microcomputer file have been first sorted by country of principal investigator and then alphabetically by last name of first investigator. The serial number refers to the exclusive sorting number which was then allocated to each project.

**(n):** The numbers in brackets ( ) in the present document refer to the question numbers of the questionnaire from which all the information in this inventory have been collected. A copy of this questionnaire is included as an annex at the end of this document.

PART I

Part I (6) is a “geographic table of contents”, presented as an alphabetical list of countries, and shows where to find in the Master List the different projects in a specific country, based on the Serial Number of each project. Country names used in the Inventory conform as far as possible to the UN list of member states.

**Example:**

Chile: 19, 52 - 62, 150, 479, 483

The country of data collection and study of all these projects (here identified by their serial numbers) is Chile. When data are being collected in more than one country, the study will be indexed under each of the countries where data are being collected.
PART II

Part II is the Master List. In the Master List, the projects are sorted by country of principal investigator and then alphabetically by last name of principal investigator. The following illustration shows what a record looks like on the computer screen:

**Record layout**

<p>| INVESTIGATION OF OCCUPATIONAL HEALTH AND | Management Sciences for Health |</p>
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<td>Date: 01/03/1983</td>
<td>Collaborator: Dr. Gilles Forget, International Development Research Centre, Ottawa, Canada</td>
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<td>First Name: Matthew</td>
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</tr>
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<tr>
<td>Function: Ph.D.</td>
<td>Collaborator: Dr. Gilles Forget, International Development Research Centre, Ottawa, Canada</td>
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<tr>
<td>Institution: Occupational Health Centre</td>
<td>Collaborator: Dr. Gilles Forget, International Development Research Centre, Ottawa, Canada</td>
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<tr>
<td>Name: University</td>
<td>Collaborator: Dr. Gilles Forget, International Development Research Centre, Ottawa, Canada</td>
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<tr>
<td>Type: Occupational</td>
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<td>Collaborator: Dr. Gilles Forget, International Development Research Centre, Ottawa, Canada</td>
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<td>Collaborator: Dr. Gilles Forget, International Development Research Centre, Ottawa, Canada</td>
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<tr>
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<td>Collaborator: Dr. Gilles Forget, International Development Research Centre, Ottawa, Canada</td>
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<td>Type of Study: Descriptive, Cross-Sectional</td>
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<td>Aim of Study: To evaluate environmental conditions in coal mines in relation to respiratory dust and the chemical nature of dust.</td>
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For the purpose of this printed list, only selected fields have been included. Following is an explanation of these fields as well as a layout of a printed record showing the position of the different fields.

**ID:** Project serial number  
**FA:** Family name of principal investigator  
**NA:** First name of principal investigator  
**IN:** Institution of principal investigator  
**ST:** Street address  
**PO:** P.O.Box  
**TO:** Town  
**PC:** Zip Code  
**CO:** Country of residence of principal investigator  
**C1:** Principal collaborator number 1 to the project, and institution's address  
**C2:** Principal collaborator number 2 to the project, and institution's address
PART III

Part III, (7), is an alphabetical index by hazard. It gives a list of the different hazards the projects were reported to focus on. The serial numbers are shown next to each hazard.

PART IV

Part IV, (8), is an alphabetical index by occupation which has been established on the same basis as the index by hazard.

PART V

Part V, (8), is an alphabetical index by industry.
PART VI

Part VI, (9), is an alphabetical index by type of study. Projects which involve more than one study type are classified under each type.

PART VII

Part VII, (1), identifies each project in which an investigator is involved. The list is sorted alphabetically by family name and first name, it also gives the country to which they belong as well as their serial number.

ANNEX

At the end of this document we have included the questionnaire sent by Management Sciences for Health to the different institutions and individuals for this inventory. Please use it to inform us about changes in the projects in this inventory, or about new projects. Please return the questionnaire to:

Environmental Epidemiology
Division of Environmental Health
World Health Organization
1211 Geneva, Switzerland
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1. **Algeria**

Said Guerouli,
Département de Médecine sociale, Division de la Médecine du Travail, Institut National d’Enseignement Supérieur en Sciences Médicales, B.P. 354 Annaba 23000
Collaborateurs: M. Mezheri, Inst. des Sciences Judiciaires, Annaba, Algérie; M. Ludjali, I.N.S.P., Algérie, Algérie

Occupational handicap : preventive approach and social measures
To produce prevalence and incidence data as regards occupational disability in the chemical industry. Evaluate the correlation between hazardous chemical exposure and outbreak of illness. Design prevention schemes and social support measures for victims.

Country: Algeria
Hazard: Chemicals
Industry: Chemical
Type of study: Descriptive, Cross Sectional, Exposure Assessment, Occupational Safety, Ergonomics
Time: 1985 - 1991

2. **Algeria**

Abdelmalek Nezali,
Service Médecine du Travail, Département Médecine, Institut National d’Enseignement Supérieur en Sciences Médicales, B.P. 355 RP Annaba 23000
Collaborateurs: Michel Vezeza, Dept. Medicine Sociale, Université Laval, Quebec, Canada

Medical and environmental surveillance of iron and steel making (establishment of program)
To set up a medico-environmental surveillance system.

Country: Algeria
Hazard: Noise, Dust, Heat
Industry: Metals Ferrous
Type of study: Descriptive, Exposure Assessment

3. **Algeria**

Mohammed Rachid Sahlal,
Département de la Médecine Sociale, Institut National d’Enseignement Supérieur en Sciences Médicales, Université de Tizi-Ouzou,
Tizi-Ouzou
Collaborateurs: Achiou, Institut Santé Animale, Drabenkhead, Algérie

Epidemiologic study of brucellosis in the professional environment
Technical risk prevention.

Country: Algeria
Hazard: Brucella
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Case Control
Time: 1987

4. **Argentina**

Guillermo Miguel Eguzkia,
Instituto de la Calidad Biológica y Ecotoxicología (INCABIE), Universidad Nacional de Rosario UNR y CONICET,
Rosario 1886 Rosario 2000
Collaborators: Alberto Moula, INCABIE, Rosario, Argentina

Biorolgical and ecotoxicological quality
To identify and evaluate the potential risks from exposure to: urban pollutants, agricultural pollutants, residues of natural and artificial pollutants in food, chemical substances in the work environment, etc. To adopt prophylactic measures.

Country: Argentina
Hazard: Carcinogens, Pesticides, Mycotoxins
Industry: Agriculture, Chemical
Occupation: Agricultural Workers, Chemical Workers
Type of study: Exposure Assessment, Occupational Safety
Time: 1983

5. **Argentina**

Ana Maria Digo,
Direccion Nacional de Promocion y Proteccion de la Salud, Ministerio de Salud y Accion Social de la Nacion,
Defensa 120, 4 of 403 Buenos Aires 1345
Collaborators: Alicia Florian, Ministerio de Salud, Pcia de Buenos Aires, La Plata, Argentina; Eduardo Rodriguez, Buenos Aires, Argentina

Association of morbidity due to work accidents with risk factors inherent in the individual.

Country: Argentina
Hazard: Accidents Occupational
Industry: Manufacturing
Type of study: Descriptive, Exposure Assessment
Time: 1990 - 1991

6. **Argentina**

Esteria Raquel Gimenez,
Centro Intoxicaciones, Hospital R Gutierrez, Gallo 1300 Buenos Aires 1425
Collaborators: Neilson Albino / Raúl Piquer / Roberto Tariot, Centro Intoxicaciones, Buenos Aires, Argentina

Epidemiology of toxic areas. Characterization of environmental poisoning, especially lead and carbon monoxide (inside)
To describe tendencies and handle risks. To detect early diagnosis.

Country: Argentina
Hazard: Lead, Carbon Monoxide
Type of study: Descriptive, Exposure Assessment
Time: -

7. **Argentina**

Mario Fernando Juarez,
Laboratorio de Control Ambiental, Dirección General de Saneamiento Ambiental - SIPOASA,
Pdo. Donnigo 1980 San Miguel de Tucumán 4000
Collaborators: E.A Quiles / I.G.B. Meoni / M.A. Barriones / M.S. Mokusa, Dirección General de Saneamiento Ambiental, Tucumán, Argentina

Environmental control studies around a lead smelter: Study of environmental conditions in order to develop control measures.

Country: Argentina
Hazard: Lead, Sulfur Dioxide
Industry: Metals Non Ferrous, Smelter
Type of study: Descriptive
Funds: Departmental/Institutional
9 Argentina
Jorge Daniel Lemus,
Hospital Juan A. Fernandez, Escuela de Salud Publica,
Universidad de Buenos Aires, Area Programatica - Cides,
Monteabill 63 3°12", Capital Federal 1406
Collaborators: M. Laccouri, Ministria de Salud Publica, Univ.
B.A., Capital Federal / A. Viera, Hospital Fernandez,
Buenos Aires, Argentina; Ruben Nieto, Escuela de Salud Publica,
Univ. Buenos Aires, Capital Federal, Argentina

Epidemiology of environmental risks in Buenos Aires
With an earlier division of the City of Buenos Aires in
13 districts health areas, we are studying both the
retroactive and projected environmental risks that will
affect the city’s inhabitants, using a demonstrative zone
and various experimental and control groups, in a
descriptive, analytical, and experimental fashion.

Country: Argentina
Hazard: Many
Type of study: Descriptive, Case Control, Cohort,
Cross Sectional, Exposure Assessment, Occupational Safety
Time: 1983 - 1993

10 Australia
Adie Green,
Department of Epidemiology, Queensland Institute of Medical
Research,
Bramston Terrace Hospital, Brisbane 4006
Collaborators: Elkins, Tropical Health Program, Khon Kaen,
Thailand

Cholangiocarcinoma in Northeast Thailand
Investigate and elucidate the etiology of
cholangiocarcinoma in Northeast Thailand.

Country: Thailand
Hazards: Carcinogens
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Descriptive, Cross Sectional
Time: 1988 - 1992

11 Australia
Ralph Shapiro,
Occupational Epidemiology, Social and Preventive Medicine,
University of Queensland, Medical School,
Version 4.005
Collaborators: Dr M. C. Shapiro, University of Queensland,
Brisbane, Australia; Dr S. Ulibachuck, Prince of Songkla
University, Hat Yai, Thailand

Pesticide exposure

Country: Thailand
Hazard: Pesticides
Industry: Forestry
Type of study: Descriptive, Exposure Assessment
Time: 1989 - 1992

12 Australia
Alistair Woodward,
Dept. of Community Medicine, University of Adelaide,
Box 498, GPO Adelaide 5001
Collaborators: Dr A. Farhan, University of Syiah Kuala,
Banda Aceh, Indonesia; Dr A. Hami, University of Syiah
Kuala, Banda Aceh, Indonesia

Acute respiratory infections (A.R.I.) in childhood - Risk
factors and management
To identify risk factors for severe A.R.I. in children
aged under 5 years. To promote the standard care
management approach to A.R.I.

Country: Indonesia
Hazard: Air Pollution Indoor
Type of study: Descriptive, Cross Sectional
Time: 1987 - 1990
Funds: Ford Foundation

13 Belgium
Robert Lauwerys,
Medecine et Hygiene du Travail et de l'Environnement,
Universite Catholique de Louvain,
30-54, Cite Chapelle-aux-Champs Bruxelles 1200
Collaborators: M. Braijn, University of Oran, Oran,
Algeria

Detection of groups at risk of exposure to genotoxic chemicals
in the steel industry
Detection of groups at risk of exposure to genotoxic
chemicals.

Country: Algeria
Hazard: Chemicals
Industry: Metals Ferrous
Occupation: Steel Workers
Type of study: Cross Sectional, Exposure Assessment
Time: -

14 Bolivia
Guido Condoreco,
Instituto nacional de Salud Occupational, Medicina del
Trabajo,
Casilla No. 1569, La Paz,
Collaborators: Dr J. Chinchilla, INSO, La Paz, Bolivia;
Hugo Medina, INSO, La Paz, Bolivia

Poisoning of agricultural workers by organophosphorus
pesticides in Bolivia
To define the magnitude, characteristics, and
epidemiological tendencies of the use of organophosphorus
pesticides, as well as their health effects on
agricultural workers and on the environment.

Country: Colombia, Brazil, Mexico
Hazard: Pesticides Organophosphorus Compounds
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Descriptive, Cohort
Time: 1987 - 1989
Funds: CIID Canada

15 Bolivia
Juan Jose Martinez,
Instituto Nacional de Salud Occupational, Medicina del
Trabajo,
Casilla No. 1832, La Paz,
Colaborators: Dr F. M. Massis Iza, INSO, La Paz, Bolivia;
Doc. Nancy de Urgull, INSO, La Paz, Bolivia

Audiological study of the workers in the Raymi Mining Company
To prevent noise-induced hearing loss.

Country: Several
Hazard: Noise
Industry: Mining
Type of study: Occupational Safety
Funds: Empresa Minera Inti Raymi

16 Bolivia
Hugo Medina,
Instituto nacional de Salud Occupational, Medicina del
Trabajo,
Casilla No. 1832 La Paz,
Collaborators: Dr Víctor Lopez, INSO, La Paz, Bolivia

Periodic evaluation of cyanide in the environment, and lead
and cyanide in biological samples, toxic gases and studies of dust
in mining
To determine indices of cyanide in the environment, soil
and water, cyanide in blood and silicic dioxide.

Country: Several
Hazard: Cyanides, Lead, Gas, Dust Asbestos
Industry: Mining
Type of study: Sampling Evaluation Study
Funds: Instituto Nacional de Salud, Empresa Minera Inti Raymi
17 Bolivia
Antonio Quijbert,
Instituto Nacional de Salud Occupacional, Química,
Casilla No. 1832 La Paz

Toxicological evaluation of arsenic in blood, National Factory
To determine levels of cyanide.
Country: Several
Hazards: Cyanides
Industry: Metals Non Ferrous
Type of study: Occupational Safety
Time: 1989 - 1989
Funds: Empresa Minera Inti Raymi, Instituto Nacional de Salud Occupational

19 Bolivia
Roberto Vargas Sagarnaga,
Epidemiología, Dirección Nacional de Epidemiología,
Calle 15 No. 2159 La Paz.
Collaborators: Marlene Vargas Nieva, SECAB, Bogota, Columbia; Omar Arana, Univ. Simon Bolivar, Caracas, Venezuela

Trace metal contamination in river-banks populations in countries of the Andres Bello convention
To determine whether currents of water contaminated with mercury, arsenic, and lead affect the health of people living along the river-banks.
Country: Bolivia, Colombia, Chile, Ecuador, Panama, Venezuela
Hazards: Water Pollution, Mercury, Lead, Arsenic
Industry: Metals Non Ferrous
Type of study: Descriptive
Time: 1987 - 1989
Funds: Convenio Andres Bello, CIID Canada

20 Brazil
Waldemar Almeida,
Department of Toxicological Information, Ministry of Health, "Oswaldo Cruz" Foundation,
Avenida Brasil, 4363 - 5th Floor Rio de Janeiro 21044
Collaborators: Flávio Zumbrone, Poison Control Centers, State University, UNICAMP, Campinas, SP, Brazil; Angelo Tropé, Department Preventive Medicine, State University, UNICAMP, Campinas, SP, Brazil

Epidemiological surveillance of people exposed to pesticides in Brazil
Morbidity and mortality rates due to pesticides in Brazil, information on the main products and circumstances.
Country: Brazil
Hazards: Pesticides
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Occupational Safety, Descriptive
Time: 1989 - 1999
Funds: Ministry of Health

21 Brazil
Marcia Aran,
Federal University Rio de Janeiro
Av N. S. Copacabana 1029/195, Rio de Janeiro 22069
Collaborators: Raulo Tereziha, Federal University, Rio de Janeiro, Brazil

Health and work environment
To evaluate the work environment and occupational health related to psychosocial aspects.
Country: Brazil
Hazards: Stress Occupational
Industry: Education
Occupation: University Employees
Type of study: Cohort, Exposome Assessment, Occupational Safety
Time: 1990 - 1993

22 Brazil
Helena R. Correa Filho,
Departamento de Medicina Preventiva e Social, Faculdade de Ciências Medicas, UNICAMP
A.P. 6.111 Campinas - 13081
Collaborators: Lenine Carvalho, Soc. Saúde e Meioambiente, Port Alegre, Brazil; Maria Degrada Hoefel, Hospital de Clínicas, Porto Alegre, Brazil

Silicosis: a mortality follow-up in Sao Paulo City, Brazil
Investigate differential risks for lung cancer mortality among cases of silicotics and controls from an industrial population in Sao Paulo City.
Country: Brazil
Hazards: Dust Silica
Type of study: Cohort
Time: 1991 - 1993

23 Brazil
Alvaro R. Crespo Merlo,
Medicina Preventiva, Saúde publica e Medicina do trabalho,
Faculdade de Medicina, Universidade Federal, av. Ramiro Barcellos, 2500 Porto Alegre 90210
Collaborators: Lenina Carvalho, Soc. Saúde e Meioambiente, Porto Alegre, Brazil; Maria Degrada Hoefel, Hospital de Clínicas, Porto Alegre, Brazil

Computer-related work and health
To collaborate to change the environmental conditions and organization of hazardous work.
Country: Brazil
Hazards: VDT
Occupation: VDT Operators
Type of study: Cross Sectional, Exposure Assessment, Occupational Safety, Ergonomics
Time: 1989 - 1990
Funds: DATAPREV
25 Brazil
Jorge Da Rocha Gomes,
Saudal Ambiental, Faculdade de Saude Publica, Universidad de Sao Paulo,
Avenida Dr. Arnaldo, 715 Sao Paulo 01255
Collaborators: Miguel Angel, Faculdade de Medicina, Universidad Federal Fluminense, Rio de Janeiro, Brazil; Bezi Garcia, Faculdade de Medicina, Universidad Federal Fluminense, Rio de Janeiro, Brazil

Occupational accidents seen at a large hospital
To evaluate whether the occurrence of occupational accidents may be compared to that given in the official statistics.

Country: Brazil
Hazard: Accidents Occupational
Type of study: Cross Sectional, Occupational Safety
Time: 1989 - 1990

26 Brazil
Francisco A. De Castro Lacer,
Area Saude e Trabalho, Instituto de Saude, Secretaria de Estado da Saude de Sao Paulo,
Rua Santo Antonio, 59020 andar A.P. 8037 Sao Paulo 01314
Collaborators: P.R. Nascimento, Secretaria Estado da Saude, Sao Paulo, Brazil; J.B. Amanco, Ministerio do Trabalho, Sao Paulo, Brazil

Work processes in the ceramic industry and silicosis
To relate occurrence of silicosis with historical development of production process.

Country: Brazil
Hazard: Dust Silica
Industry: Ceramics
Occupation: Ceramic Workers
Type of study: Exposure Assessment
Time: 1989 - 1990
Funds: Conselho Nacional de Desenvolvimento Científico e Tecnologico

27 Brazil
Myriam Debern-Ribeiro,
Medicina Preventiva, Escola Paulista de Medicina,
Rua Botucatu 740 Sao Paulo 04022

Hypertension among workers in ten subsectors of the economy
To estimate the prevalence of hypertension in distinct working environments.

Country: Brazil
Industry: Textile, Construction, Chemical, Administration
Type of study: Cohort, Cross Sectional, Exposure Assessment
Time: -

28 Brazil
Fernando Dias de Avila Lopes,
Programa de Educação Continuada, Ciências Biológicas,
Fundação Oswaldo Cruz, Escola Nacional de Saúde Publica, FIOCRUZ-ENSP A.P. 926 Rio de Janeiro 21041

Health ecology, with emphasis on zoonoses
To develop methods of field study, to devise methods for environmental management for control of vectors and/or reservoirs.

Country: Brazil
Hazard: Zoonoses, Vectorborne Disease
Type of study: Environmental, Development of Control Measures
Time: 1988 -
Funds: National Research Council

29 Brazil
Luiz Augusto Facchini,
Medicina Social, Faculdade de Medicina, Universidade Federal de Pelotas, UFPEL,
Caixa Postal 464 Pelotas-RS 96100
Collaborators: Elizabete Wendeross, UFPEL, Pelotas-RS, Brazil

Health risks in the food industry
To study the relationship among type of production activity, occupational risks, and the most prevalent risks in food industry workers.

Country: Brazil
Industry: Food Processing
Occupation: Food Processing Workers
Type of study: Descriptive, Cross Sectional, Exposure Assessment, Occupational Safety
Time: 1990 - 1991
Funds: UFPEL and Union of Food Industry Workers

30 Brazil
Luiz Augusto Facchini,
Medicina Social, Faculdade de Medicina, Universidade Federal de Pelotas, UFPEL,
Caixa Postal 464 Pelotas-RS 96100
Collaborators: Eloise Tomaz, UFPEL, Pelotas-RS, Brazil; Cesar Vicella, UFPEL, Pelotas-RS, Brazil

Working mothers and child health
To study under-five morbidity, nutrition, and use of health services as related to employment.

Country: Brazil
Occupation: Food Processing Workers
Type of study: Cohort
Time: 1988 - 1990
Funds: FINEP/Government of Brazil
Brazil
Lúis Augusto Faccchini, 
Medicina Social, Faculdade de Medicina, Universidade Federal de Pelotas, UFPEL, 
Caixa Postal 464 Pelotas-RS 96.100 
Collaborators: Eliane Tomasi, UFPEL, Pelotas-RS, Brazil; Cesar Vicora, UFPEL, Pelotas-RS, Brazil

Women's work and health
To identify the types of paid and unpaid work held by women in a working neighborhood and the health impact of these jobs, with special emphasis on eventual work in the food industry.

Country: Brazil
Industry: Food Processing
Occupation: Food Processing Workers
Type of study: Cohort, Cross Sectional, Exposure Assessment
Time: 1983 - 1990
Funds: FINEP/Government of Brazil

35 Brazil
Aparecida Mari Igati, 
Faculdade Ciencias Medicas UNICAMP, Departamento Medicina Preventiva e Social, Cidade Universitaria Zeferino Vaz, 
Apar. postal 6111 Campinas 13081 
Collaborators: L.T. Ferreira, Fandaceuro, Sao Paulo, Brazil; M. Milan, Esaq, Piracicaba, Brazil

Work conditions of load-cane engine operators in Brazil

Country: Brazil
Industry: Agriculture
Occupation: Agricultural Workers, Sugar Plant Workers
Type of study: Ergonomics
Time: 1986 - 1989

37 Brazil
Magali Michel, 
Medicina Preventiva, Saude Publica e Medicina do Trabalho, SA 
Av. Sao Paulo, 723 Porto Alegre 90230 
Collaborators: Moises Ferreira, Escola Tecnica de Comercio, Porto Alegre, Brazil

Environmental education and assessment of environmental and occupational risk
Assessment of environmental and occupational risk.

Country: Brazil
Hazards: Air Pollution Outdoor, Water Pollution, Noise, Accidents Prevention
Industry: Chemical, Manufacturing, Administration
Type of study: Descriptive, Cross Sectional, Exposure Assessment, Occupational Safety
Time: 1990 - 1993

39 Brazil
Roque Monteclene Neto, 
Escola Paulusica de Medicina, Department of Genetics, 
Rua Botucatu, 740 Sao Paulo 04032 
Collaborators: L. Schumacher, COSIPA, Sao Paulo, Brazil

Morbidity in the steel industry
Determination of morbidity of group of workers in various units of steel industry.

Country: Brazil
Hazards: Dust
Industry: Metals Ferrous
Occupation: Steel Workers
Type of study: Case Control
Time: 1989 - 1993

Brazil
Lúis Augusto Faccchini, 
Medicina Social, Faculdade de Medicina, Universidade Federal de Pelotas, UFPEL, 
Caixa Postal 464 Pelotas-RS 96.100 
Collaborators: Elisabete Weilerpass, UFPEL, Pelotas-RS, Brazil

Occupational health in the chemical-pharmaceutical industry
To identify the chemical risks, working conditions, and morbidity perceived by chemical-pharmaceutical workers.

Country: Brazil
Hazards: Chemical, Pharmaceuticals
Industry: Chemical, Pharmaceutical
Type of study: Descriptive, Exposure Assessment, Occupational Safety
Time: 1989 - 1990

36 Brazil
Sebastiao Loureiro, 
Medicina Preventiva, Universidade Federal da Bahia, 
Rua Padre Feijio No.29 4-andar Salvador 40.140 
Collaborators: J. Barberino, Dept Health of Bahia, Bahia, Brazil; N. Ribeto, School of Pharmacy, Salvador-Bahia, Brazil

Interaction effects of T. cruzi infection and pesticides on ECG abnormality on a rural population in Brazil
To look for interaction between a chemical agent and a living agent (Trypanosoma cruzi) in increasing the risk of heart disease.

Country: Brazil
Hazards: T. cruzi, Pesticides
Occupation: Pesticide Applicators, Agricultural Workers
Type of study: Cross Sectional
Funds: FINEP (Brazilian Research Financing Agency)

38 Brazil
Luci Ines Menhcon Pesantes Corro, 
Salud Ocupacional, Rede Ferroviaria Federal S.A., 
Rua Pres. Conconico Menegus 156 also 322 aptf, Men Riover Salvador Bahia 41010

Factors harmful to health
To prevent disease, assess causative factors, and register data from earliest symptoms to later course of illness. To uncover relationship to a period of environmental exposure and make a timely diagnosis in order, if possible, to intervene to control the hazard.

Country: Brazil
Hazards: Noise
Industry: Transportation
Occupation: Railroad Workers
Type of study: Descriptive, Case Control, Exposure Assessment, Occupational Safety, Ergonomics
Time: 1985 - 1988

40 Brazil
Luci Carlos Marone, 
Faculdade de Ciencias Medicas do Santa Casa de Sao Paulo, Dept of Medicina Social, 
Rua Matheus da Silva, 65 Sao Paulo 04124 
Collaborators: Clarice Higa, FCM Santa Casa - Sao Paulo, Sao Paulo, Brazil

Seriously injured persons assisted in a general hospital in Sao Paulo City. Study of factors related to persons and accidental occurrences
To describe the factors related to people, accidents, and medical care. Accidents related to work are compared with those not related to work.

Country: Brazil
Hazards: Accidents
Industry: Many
Occupation: Many
Type of study: Descriptive, Exposure Assessment, Occupational Safety
Time: 1990 - 1990
Funds: CNPQ - (Federal Government of Brazil Source)
41 Brazil

Maria C. Pereira Binder,
Saude Publica, Faculdade de Medicina de Botucatu, Universidade Estadual Paulista, UNESP,
Botucatu, 19910
Collaborators: Muntz, I., UNESP, Botucatu, Brazil; Dellevedove R.T.A., UNESP, Botucatu, Brazil

Study of the conditions of chemical and biological risks in the laboratories of hospital "das Clínicas" of the medical school of Botucatu
Identification of chemical and biological occupational risks in medical laboratories.

Country: Brazil
Hazards: Chemicals, Biologicals
Industry: Health Care
Occupation: Health Workers Laboratory
Type of study: Exposure Assessment
Time: 1990 - 1991
Funds: FUNDUNESP

42 Brazil

Câmara Volney de M,
Estudos de Saude Coletiva, Faculdade de Medicina,
Universidade Federal do Rio de Janeiro,
Av. Brigadeiro Trompowsky 5, Rio de Janeiro, Brazil
Collaborators: Reinaldo Campos, PUC/RS, Rio de Janeiro, Brazil

Mercury levels in hair in dentists
To evaluate morbidity and mercury levels on hair in dentists.

Country: Brazil
Hazards: Mercury
Industry: Health Care
Occupation: Health Workers Dentists
Type of study: Cross Sectional, Occupational Safety, Ergonomics
Funds: Universidade Federal do Rio de Janeiro

43 Brazil

Flavio Zambonone,
Saúde Ambiental, Medicina Preventiva e Social, Universidade Estadual de Campinas, UNICAMP,
Cidade Universitária "Zéfiro Vas", Campus 13.081
Collaborators: Angelo Trape, UNICAMP, Campinas, Brazil

Pesticides use and public health
Study of pesticides use and public health.

Country: Brazil
Hazards: Pesticides
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Descriptive

44 Brazil

Angelo Zanaga Trape,
Universidade Estadual de Campinas, Departamento Medicina Preventiva y Social, Environnemental Health Area,
Cidade Universitaria Zefiro Vas A.P. 6.111 Campus 13.081
Collaborators: Flavio A.D. Zambonone, UNICAMP, Campinas, Brazil; Maria Aparecida Igani, UNICAMP, Campinas, Brazil

Epidemiological surveillance on population exposed to pesticides in São Paulo, Brazil
To evaluate the exposure level to pesticides of farm workers, effects on human health, and other consequences.

Country: Brazil
Hazards: Pesticides
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Cohort, Exposure Assessment
Time: 1982 - 1992

45 Cameroon

Julienne Nouthe-Djoungang,
Inspection Médicale du Travail, Ministère du Travail et de la Prévoyance Sociale,
Yaoundé

Occupational Risks in construction and public works
Evaluation of the magnitude of health and safety hazards in the sector of public works and their impact on occupational health.

Country: Cameroon
Hazards: Accidents, Occupational
Industry: Construction
Type of study: Descriptive, Exposure Assessment
Time: 1990 - 1992

46 Canada

Tee L. Guidotti,
Occupational Health Program, University of Alberta, Faculty of Medicine,
13-103 Clinical Sciences Building Edmonton T6G 2G3
Collaborators: Dr Peng Kaya, H. Industrial Health and Occupational Disease Institute, Harbin, China; Dr Murray Young, Amoco Canada, Calgary, Canada

Heilongjiang - centered network for occupational health
Network is an overall framework for facilitating exchange of information, research collaboration, creation of training opportunities, and consultation on practice, centered in Heilongjiang but with participants also from elsewhere.

Country: China
Hazards: Dust, Silica
Industry: Petrochemical, Mining
Type of study: Descriptive, Exposure Assessment
Time: 1990 -
Funds: Applications pending

47 Canada

D. Mergler,
Université de Québec, CINHOSE,
C.P. 8888 Montréal, H3C 3P8
Collaborators: Dr Rosemary Bowler, University of California, San Francisco, USA

Health and reproductive outcome study of women factory workers in the Mexican border industry
Explore neurotoxic responses and reproductive outcomes, including brain-damaged children with respect to exposure

Country: Mexico
Hazards: Chemicals, Cumulative Trauma
Industry: Manufacturing, Electronics
Occupation: Assembly Workers, Factory Workers
Type of study: Descriptive
Time: 1990 - 1993
Funds: Gansett Foundation

48 Canada

Robert Steele,
Community Health and Epidemiology, Queen's University,
Abramson Hall Kingston, ON K7L 3N6
Collaborators: S. Anand M. Peat / P. Oosthuizen / L. Krefting, Queen's University, Kingston, Canada

Queen's University Himalayan integrated development project
To establish a data base of information on healthy agricultural methods, water and energy supplies.

Country: India
Hazards: Deforestation
Industry: Agriculture, Power Plant
Type of study: Case Control, Economic Analysis
Time: 1989 - 1995
Funds: CIDA
49  
Canada  
Mentawat Woldeyohannes,  
School of Occupational Health, McGill University,  
1150 Pine Avenue West Montreal H3A 1A3  
Collaborators: Gilles Theriault / Yves Bergevin, McGill  
University, Montreal, Canada; Community Health, A.A.  
University, Addis Ababa, Ethiopia / Environmental Health  
Dept, Ministry of Health, Addis Ababa, Ethiopia  

Respiratory condition among cotton textile workers in  
Ethiopia  
To determine the deleterious effects of cotton dust  
exposure on the respiratory system that occur in textile  
mill workers involved in dusty operations.  

Country: Ethiopia  
Hazards: Dust Cotton  
Industry: Textile  
Occupation: Cotton Workers  
Type of study: Descriptive, Case Control, Exposure Assessment  
Time: 1988 - 1992

50  
Central African Republic  
Claude Conjugue Batoma,  
Médecine du Travail, Direction Médicale du Travail Ministère  
de la Fonction Publique et du Travail,  
Bangui  

Study of toxicity of various tropical oils in the wood  
industry in Central Africa  

Country: Central African Republic  
Hazards: Toxic Substances  
Industry: Wood Working  
Occupation: Wood Workers  
Time: -

51  
Central African Republic  
Claude Conjugue Batoma,  
Médecine du Travail, Direction Médicale du Travail, Ministère  
de la Fonction Publique et du Travail,  
Bangui  

Study of toxicity of various tropical oils in the wood  
industry in Central Africa  

Country: Central African Republic  
Hazards: Toxic Substances  
Industry: Wood Working  
Occupation: Wood Workers  
Time: -

52  
Chile  
Suzanne Aurelius,  
PAESMI, Programa de Apoyo y Extensión en Salud Materno  
Infantil,  
Casilla 121 Santiago  

Quality of life, health and development  
To evaluate the ecological perception of school students,  
teachers and community members in different social  
settings in Chile.  

Country: Chile  
Type of study: Descriptive  
Time: 1990 - 1992

53  
Chile  
Dra. A. Japial & Ing. J. Alcaino,  
Instituto de Salud Publica de Chile, Salud Ocupacional y  
Consumos Ambientales, Av. Maranao No 1.000 Santiago Casilla 48 St. J  
Collaborators: Dr. Luis Martinez, Servicio Salud del  
Ambiente, Region Metropolitana, Santiago, Chile; Dr. Oscar  
Roman, Servicio Salud Central, Santiago, Chile  

Profile for a control program for worker exposure to solvents  
To determine the frequency of exposure and overexposure  
to solvents from an environmental and biological  
perspective  

Country: Chile  
Hazards: Solvents  
Industry: Chemical, Engineering  
Type of study: Descriptive, Case Control, Exposure Assessment  
Time: 1990 - 1991  
Funds: PAHO

54  
Chile  
Fernandez J. Heriberto,  
Instituto de Microbiologia Clinica, Universidad Austral de  
Chile,  
Campus Isla Teja Valdivia  
Collaborators: Dr Cesar Rebolledo, Universidad Austral,  
Inst. of Public Health, Valdivia, Chile; Dr Walter Gesche,  
Universidad Austral, Inst. of Public Health, Valdivia,  
Chile  

Campylobacter in humans and animals  

Country: Chile  
Hazards: Campylobacter  
Industry: Food Processing  
Occupation: Abattoir Workers  
Type of study: Descriptive, Cross Sectional  
Time: 1988 - 1990

55  
Chile  
Juan Carlos Ibáñez J.,  
Hospitale Psychiatric, Sernicio Salud,  
Trancalnel S/N Concepción  

Labor Risk and Psychiatric Pathology in a Psychiatric Service  
Staff  

Country: Chile  
Industry: Health Care  
Occupation: Health Workers Hospital  
Time: -

56  
Chile  
Lucia Malina,  
Service de Salud Talcahuano,  
Thompson, 85 Talcahuano  
Collaborators: Ted Haines, Occupational Health Program,  
MacMaster University, Hamilton Ontario, Canada  

Profile of worker's health in the Bõ-Bõ river-basin region, Chile  
Project integrated with global EULA project for the Bõ-Bõ  
river basin.  

Country: Chile  
Hazards: All  
Industry: Many  
Occupation: Many  
Type of study: Descriptive, Exposure Assessment,  
Occupational Safety  
Time: 1990 - 1993  
Funds: None
57 Chile
Rafael Olmos,
Salud Ocupacional y Contaminacion
Ambiental, Instituto de Salud Pública de Chile,
Avenida Marathon No 1000 Santiago 48
Collaborators: Juan Alemán, Instituto Salud Pública de Chile,
Santiago, Chile; Florin Moreno, Instituto Salud Pública de Chile,
Santiago, Chile
Levels of light in workplaces
To determine lighting levels in manufacturing industries
in order to propose regulations.
Country: Chile
Industry: Manufacturing
Type of study: Exposure Assessment
Time: 1988 - 1990
Funds: Instituto Salud Pública de Chile

58 Chile
Olga Catalina Reyes Montemayor,
Secretaría Regional Ministerial, Ministerio de Salud,
Pedro Aguirre Cerda No. 1731 Concepción, Casilla 105
Collaborators: F. Carlos Bruna, Universidad de Concepción,
Concepción, Chile; Carlos Barrios, Universidad de Concepción,
Concepción, Chile
Overall levels of mercury in pregnant and nursing mothers and
preschool children in Caletas Pesqueras of Region Eight of
Chile
Country: Chile
Hazards: Mercury
Time: 1990 - 1995

59 Chile
Ana María Sancha,
Department of Civil Engineering, University of Chile,
Av Blanco Encalada, 2020, Of 17 Santiago
Collaborators: Dr. A. deVilliers, International Development Research Centre, Ottawa, Ontario, Canada; M. E. Meek / J. C. Moranger, Health and Welfare Canada, Ottawa, Ontario, Canada
Investigation of arsenic-related health effects and possible
control in Northern Chile
To assess extent of exposure to arsenic in water, soil,
and food to undertake preliminary study of possible health
effects; to introduce and evaluate simple water treatment
system for arsenic removal.
Country: Chile
Hazards: Arsenic
Type of study: Cross Sectional, Exposure Assessment
Funds: International Development Research Centre

60 Chile
Jaime Sepulveda Salinas,
Dep. Tecnico Comisión Nacional Campesina,
Dieciocho 350 Casilla 52604 Cor, Central Santiago
Collaborators: Juan Julio / H. Becanilla, AGRAC,
Santiago, Chile; Organizaciones Sindicales, Comisión Nacional Campesina, Aconcagua, Chile
Epidemiological study of pesticide handlers in three areas of
Valle de Aconcagua
To study the working conditions of pesticide handlers and
the health of workers exposed to pesticides. To evaluate
the epidemiological surveillance system and improve
control policies.
Country: Chile
Hazards: Pesticides
Industry: Agriculture
Occupation: Pesticide Applicators
Type of study: Descriptive, Exposure Assessment,
Occupational Safety
Time: 1989 - 1990
Funds: Oxfam Canada

61 Chile
Patricio Torres,
Instituto de Parasitología, Universidad Austral de Chile,
Campus Valdivia, Valdivia
Collaborators: Dr Cesar Rebollo, Universidad Austral,
Inst. of Public Health, Valdivia, Chile; Dr Walter Gesche,
Universidad Austral, Inst. of Public Health, Valdivia, Chile
Helminths in fish and fish-eating fowl, relationship with
human health in southern Chile's lake area
Country: Chile
Hazards: Helminths
Type of study: Descriptive, Cross Sectional
Time: 1989 - 1990

62 Chile
Monica Judith Torres Silvarete,
Servicio Salud Publico, VIII Region - Chile,
Arauco 1099 (Lab. Bacteriologico) Chillan
Collaborators: Dr. G. Villagran, S.S.Pable, Chillan, Chile
Dr. Pilar Rivera, Univ. del Bio Bio, Chillan, Chile; Dr. Juan Trastum, Inst. Salud Publica, Santiago, Chile
Pollution of maternal milk and of fatty tissues in Chilean
women by pesticides with high levels of residue.
To identify the residual levels of pesticides in women in
farming areas and to observe their behavior in the first
two months of lactation.
Country: Chile
Hazards: Pesticides
Type of study: Cross Sectional
Time: 1989 - 1990
Funds: International Program for Chemical Control

63 China
Ke Chen,
Dept. of Respiratory Allergy, Guangxi Medical College,
6 Binhu Road, Nanning 530027
Collaborators: Yuanfen Liu, Guangxi Medical College,
Nanning, Guangxi, China; Jienan Zhang, Beijing Institute
of Botany, Academia Sinica, Beijing, China
The major aeroallergens in Guangxi, China
Prevention and treatment for respiratory allergic
diseases.
Country: China
Hazards: Dust Allergens
Type of study: Descriptive, Exposure Assessment
Time: 1982 - 1988
Funds: Scientific Committee of Guangxi

64 China
Xiao Lin Chen,
School of Public Health, Department of Environmental Health,
Shanghai Medical University,
138, YiXue Yuan Road Shanghai 200032
Study of health effects of indoor air pollution due to cooking
in Shanghai and evaluation of effectiveness of ventilation
Country: China
Hazards: Air Pollution Indoor
Time: -
65. China
Xin-Hua Chen,
Administration Department, Sichuan Institute of Labor Hygiene and Occupational Diseases.
Collaborators: Wang Yong Min, Sichuan Institute of Labor Hygiene, Chengdu, China; Shen Guo An, Sichuan Institute of Labor Hygiene, Chengdu, China

The law of occurrence of pneumoconiosis in Sichuan Province over the years, investigating and studying the status quo Getting a clear understanding of pneumoconiosis occurrence from 1950 to 1986 throughout the province, and its distribution; setting up the data bank for pneumoconiosis.

Country: China
Hazard: Dust
22 Industries
33 Occupations
Type of study: Descriptive, Cross Sectional, Exposure Assessment
Time: 1986 - 1990
Funds: The Public Health Bureau of Sichuan Province

66. China
Yibin Chen,
Nuclear Technology Section, Sichuan Institute of Labor Hygiene and Occupational Diseases.
Collaborators: Dai Fu Chen, Sichuan Institute of Labor Hygiene, Chongqing, China; Bo Zhang, Sichuan Institute of Labor Hygiene, Chongqing, China

Radon content of drinking water in principal China cities and the inhalation dose of the population exposed to radon progeny (1) Radon content of drinking water. (2) Air-to-water concentration ratio, and (3) Dose from inhalation of radon progeny.

Country: China
Hazard: Radon
Type of study: Exposure Assessment
Time: 1986 - 1990
Funds: Sichuan Hygiene Department

67. China
Zi-Quiang Chen,
Occupational Health, The School of Public Health, Shanghai Medical University,
138 N Xu Yuan Road, Shanghai, China

A study on reference values of WHO neurobehavioural core test battery; neurotoxic effects of lead, mercury...on working population To prevent working population from contracting neurotoxic illness and to reduce occupational hazards.

Country: China
Hazard: Lead, Mercury, Manganese, Carbon Disulfide, Toluene, Solvents
Industry: Manufacturing Battery, Manufacturing Thermometer, Metals Ferrous
Type of study: Exposure Assessment
Time: 1986 - 1992
Funds: Ministry of Public Health

68. China
Horn-Chi Chiang,
Industrial Hygiene Research Center, Kaohsiung Medical College,
No. 100 Shih-Chuan 1st Road, Kaohsiung
Collaborators: Shun-Sheng Cheng, Kaohsiung Medical College, Kaohsiung, Taiwan, China; Hsin-Chin Yu / Ying-Chin Ko, Kaohsiung Medical College, Kaohsiung, Taiwan, China

The occurrence of carpal tunnel syndrome in frozen food factory employees The prevalence of carpal tunnel syndrome (CTS) in frozen food factories. The relationship between CTS and repetitiveness, and exposure of hands to cold.

Country: Taiwan Province of China
Hazard: Cumulative Trauma
Industry: Food Processing
Occupation: Food Processing Workers
Type of study: Cross Sectional, Ergonomics
Time: 1989 - 1990

69. China
DePu Dong,
Institute of Industrial Health, Anshan Iron and Steel Corporation,
29, 219 Park, Anshan, 114001
Collaborators: Sun Yongji, Institute of Occupational Diseases, Fuzhou, China; Qiu Gulan, Institute of Labor Health, Dalian, China

An epidemiological study of lung cancer among workers exposed to silica dust in refractory plants To study the relationship of lung cancer mortality among fire-brick making workers to exposure to silica dust.

Country: China
Hazard: Dust Silica, Carcinogens
Industry: Refractory Factory
Type of study; Cohort, Exposure Assessment
Time: 1988 - 1990
Funds: Each Institution in cooperation

70. China
DePu Dong,
Institute of Industrial Health, Anshan Iron and Steel Corporation,
29, 219 Park, Anshan, 114001
Collaborators: Chen Qhun, Industrial Health Institute, Wuhan, China; Ma HuiLin, Institute of Industrial Health, Benxi, China

Further study of mortality of lung cancer among coke oven workers To present mortality experience findings among coke oven workers. To show the relation of lung cancer risk to years since first exposure. To provide some basis for preparing allowance limit of coke oven emissions.

Country: China
Hazard: Dust Coal, Carcinogens
Industry: Manufacturing, Metals Ferrous
Occupation: Coke Oven Workers
Type of study; Cohort, Exposure Assessment
Time: 1986 - 1990
Funds: Each Institution in cooperation
China

Ke-Mei FANG,
Dept. of Clin., Immunology and Biochemistry, Jiang-Su Provincial Institute of Occupational Medicine,
172 He-Ban Cun Nan-Jing, 210008
Collaborators: Wang Xiao-Ning / Liang Min, Jiangsu Institute of Occupational Medicine, Nanjing, China

Treating Leukopenia caused by Benzene with
Traditional Chinese Medicine Assaying CSF-1
(1) Evaluating the effect of Chinese medicine in treating leukopenia caused by benzene. (2) Survey the relationship between CSF-1 and changes in white blood count.

Country: China
Hazards: Benzene
Industry: Chemical
Occupation: Chemical Workers
Type of study: Case Control
Time: 1990 - 1991
Funds: Government of China

China

Wei-Zu Fu,
Shanghai Institute of Industrial, Hygiene and Occupational Diseases, Occupational Epidemiology,
361 Beijing Road (w) Shanghai 200003
Collaborators: Wang Yi-Lan, Shanghai Medical University, Shanghai, China; Sun Gu-Lan, SILOHOD, Shanghai, China

Investigation on reproductive toxicity of heavy metals (lead, mercury, and manganese) among workers and their offspring. To evaluate dose-effect and dose-response relationship between male and female workers exposed to heavy metals, and studying special effects of heavy metals on female workers, providing scientific data for protecting female workers.

Country: China
Hazards: Lead, Mercury, Manganese
Industry: Mining, Metal Non Ferrous, Smelter
Occupation: Miners, Smelter Workers, Battery Workers
Type of study: Descriptive, Case Control, Exposure Assessment, Occupational Safety
Funds: The Ministry of Public Health, China

China

Xue-Qi Gu,
Occupational Health, The School of Public Health, Shanghai Medical University,
38 Yi Xue Yuan Road Shanghai 200032
Collaborators: Fu Hui, Shanghai Medical University, Shanghai, China; Jin Xi-peng, Shanghai Medical University, Shanghai, China

Lung cancer study of workers in a tin mine
To explore risk factors of excess mortality of lung cancer among the tin miners and to assess the effect of cigarette smoke on lung cancer.

Country: China
Hazards: Dust, Air Pollution Tobacco Smoke
Industry: Mining Tin
Type of study: Case Control
Time: 1988 - 1990
Funds: From the enterprise

China

Fengsheng He,
Dept. of Occupational Medicine, Institute of Occupational Medicine, Chinese Academy of Preventive Medicine,
29 Nan Wei Road Beijing 100000
Collaborators: Dr. Arnold De Villiers, IDRC, Ottawa, Canada

Epidemiological studies on acute pyrethroid poisoning in cotton growers
To identify the prevalence of acute pyrethroid poisoning in cotton growers.

Country: China
Hazards: Pesticides
Industry: Agriculture
Occupation: Cotton Workers, Pesticide Applicators
Type of study: Descriptive, Exposure Assessment, Occupational Safety
Time: 1987 - 1992

China

Kaiyu Feng,
Heilongjiang Institute of Labour, Health and Occupational Diseases,
173 Didian Street Harbin 150010
Collaborators: Liu Pinnan, Heilongjiang Institute of Industrial Hygiene and Occupational Diseases, Harbin, China; Ch Ternnan, Heilongjiang Institute of Industrial Hygiene and Occupational Diseases, Harbin, China

A study on reproductive impairment of TNT
To investigate the reproductive impairment in workers exposed to TNT.

Country: China
Hazards: TNT
Industry: Chemical
Occupation: Factory Workers
Type of study: Cross-Sectional, Exposure Assessment, Occupational Safety

China

Xue-Qi Gu,
Occupational Health, The School of Public Health, Shanghai Medical University,
138 Yi Xue Yuan Road Shanghai 200032
Collaborators: Lin Hui-jie, Shanghai Medical University, Shanghai, China; Jin Xi-peng, Shanghai Medical University, Shanghai, China

Risk assessment of N.N-Methylene-bis (MATDA) used as a pesticide
To study the toxic effects of MATDA in qualitatively and quantitatively, especially on human health; to elucidate the underlying mechanism of species difference; to identify a level of exposure associated with an unacceptable degree of concern as to human health effects.

Country: China
Hazards: Pesticides MATDA
Occupation: Pesticide Manipulators
Type of study: Case Control, Exposure Assessment
Time: 1982 - 1987
Funds: Government

China

Xue-Qi Gu,
Occupational Health, The School of Public Health, Shanghai Medical University,
138 Yi Xue Yuan Road Shanghai 200032
Collaborators: Li feng, Shanghai Medical University, Shanghai, China; Lu Pei-ling, Shanghai Medical University, Shanghai, China

Epidemiological research on coal workers
To propose preventive strategy for coal worker's pneumoconiosis; to supply a computer management system for coal worker's pneumoconiosis; to research the effect of coal dust in vivo and vitro.

Country: China
Hazards: Dust Coal, Dust Silica
Industry: Mining Coal
Occupation: Miners Coal
Type of study: Cohort, Cross Sectional, Exposure Assessment
Time: 1987 - 1990
Funds: Shanghai Medical University

China

Fengsheng He,
Dept. of Occupational Medicine, Institute of Occupational Medicine, Chinese Academy of Preventive Medicine,
29 Nan Wei Road Beijing 100000
Collaborators: Dr. Wang Haile, Qi-Lu Petrochemical Company, Xinlun, Shandong, China

Epidemiological studies on acute occupational acrylamide poisoning
To assess the adverse effects of acrylamide on occupationally exposed workers.

Country: China
Hazards: Acrylamide
Industry: Chemical
Occupation: Chemical Workers
Type of study: Cross-Sectional, Exposure Assessment
Time: 1986 - 1990
81 China

Xingzhou He,
Environmental Epidemiology, Institute of Environmental Health, Chinese Academy of Preventive Medicine (CAPM),
29 Nan Wei Road Beijing 100050
Collaborators: Chen Wei / Chen Hong (Tin Yinlong, Inst. of Env. Health & Engineering, Chinese Academy of Preventive Medicine, Beijing, China; Chen Shaohua, Institute of Anti-tuberculosis, Beijing, China)

A case-control study on passive smoking and lung cancer
To evaluate the relation between passive smoking and lung cancer in China.

Country: China
Hazards: Air Pollution Tobacco Smoke
Type of study: Case Control

83 China

Caihong Hu,
Institute of Occupational Diseases of the Anhui Province,
89 Jiuxi Road Hefei 230022
Collaborators: Wang Xinchen, Institute of Occupational Diseases of the Anhui, Hefei, China; Shi Rongshan, Institute of Occupational Diseases of the Anhui, Hefei, China

Occupational health and environmental epidemiology
Hygienic standard in the air of workplace. Diagnostic criteria of occupational poisoning.

Country: China
Hazards: Dust, Metals Heavy, Solvents
Industry: Mining, Metals Non Ferrous, Chemical
Time: 1984 - 1992

85 China

Tian-Xi Hu,
Shanghai Institute of Industrial Hygiene and Occupational Disease, Occupational Respiratory Division, 361 Beijing Road (w) Shanghai 200003
Collaborators: Li Quan-Lu, SILHOD, Shanghai, China; Jiang Hui-Xin, SILHOD, Shanghai, China

Cross-sectional prevalence study on asbestosis in the Shanghai Area
The prevention of asbestosis and the safe use of asbestos.

Country: China
Hazards: Dust Asbestos
Type of study: Cross Sectional
Funds: Scientific fund from Health Bureau of Shanghai

86 China

Zonglian Hu,
Dept. of Labour Hygiene and Occupational Disease, Anhui Medical University,
Meilshan Road 1 Hefei 230032
Collaborators: Bao Deming, Wan Nan Medical College, Wuhu, China; Ma Xueping, Sanitary & anti-epidemic station, Anqing, China / Li Xinchen, Sanitary & anti-epidemic station, Wuhu, China

Investigation on the effects in workers exposed to organic dusts
Comparative effect of organic dusts and mineral dusts on health of the exposed workers.

Country: China
Hazards: Dust
Type of study: Descriptive, cohort, Cross Sectional, Exposure Assessment
Time: 1988 - 1990
87  China  
Hui-Xin Jiang,  
Shanghai Institute of Industrial Hygiene and Occupational  
Diseases, Occupational Respiratory Division,  
361 Beijing Road (w) Shanghai 200003  
Collaborators: Hu Tian-Xi, SILNOO, Shanghai, China  

Thirty-year dynamic observation on morbidity of silicosis in  
Shanghai refractory plant  
The prevalence of silicosis.  
Country: China  
Hazard: Dust Silica  
Industry: Refractory Factory  
Type of study: Cohort  
Funds: Scientific fund from Health Bureau of Shanghai

88  China  
Xue-zhi Jiang,  
Occupational Health, The School of Public Health, Shanghai  
Medical University,  
138 Y Xue Yuan Road Shanghai 200002  
Collaborators: Rui-wen Zhang, Shanghai Medical University,  
Shanghai, China; Wei Wang, Shanghai Medical University,  
Shanghai, China  

Studies on potential risk of exposure to formaldehyde  
To perform risk assessment of occupational exposure.  
Country: China  
Hazard: Formaldehyde  
Industry: Manufacturing Resin  
Type of study: Cohort, Cross Sectional, Occupational Safety  
Funds: Science Funds of the Chinese Academy of Science

89  China  
Xing-Bo Jing,  
Department of Occupational Epidemiology, Jiangsu Provincial  
Institute of Occupational Medicine,  
122 He-Ran Chu Nie-Jing 210028  
Collaborators: Ke-Mei Fang, Jiangsu Institute of  
Occupational Medicine, Nanjing, China  

A study on the relationship between chlorodimeform and bladder  
cancer  
In order to know whether there is a relationship between  
chlorodimeform and bladder cancer and how high the risk is  
of chlorodimeform inducing bladder cancer in farm workers.  
Country: China  
Hazard: Pesticides  
Industry: Agriculture  
Occupation: Agricultural Workers  
Type of study: Case Control  
Time: 1986 - 1990  
Funds: Science Funds of the Chinese Academy of Science

90  China  
Xipeng Jin,  
Occupational Health, The School of Public Health, Shanghai  
Medical University,  
138 Y Xue Yuan Road Shanghai 200002  
Collaborators: Ren Dao-feng, Shanghai Medical University,  
Shanghai, China; Lin Hui-feng, Shanghai Medical University,  
Shanghai, China  

Toxicokinetics of benzene and toluene in the alveolar air of  
workers  
To evaluate feasibility in biomonitoring.  
Country: China  
Hazard: Benzene, Toluene, Solvents  
Type of study: Exposure Assessment, Occupational Safety  
Time: 1989 - 1993  
Funds: National Natural Science Foundation of China

91  China  
Ying-Chin Ko,  
Industrial Hygiene Research Center, Kaohsiung Medical College,  
No. 100 Shih-Chuan 1st Road Kaohsiung  
Collaborators: Ching Sheng Cheng, Kaohsiung Medical  
College, Kaohsiung, Taiwan, China; Horn-Che Chiang,  
Kaohsiung Medical College, Kaohsiung, Taiwan, China  

The occurrence of low back pain among heavy load workers in  
Kaohsiung harbour  
The prevalence of low back pain among manual lifting  
workers. The risk factors of low back for the  
workers.  
Country: Taiwan Province of China  
Hazard: Cumulative Trauma, Accidents Occupational  
Industry: Shipping  
Occupation: Dock Workers  
Type of study: Case Control, Ergonomics  
Time: 1990 - 1991

92  China  
Guang Li,  
Environmental Epidemiology, Liaoning Province Public Health  
and Anti-epidemic Station,  
Nanning Street 10-9-1 Shenyang 110005  
Collaborators: Peng Fuqiang, Liaoning Public Health  
Institute, Shenyang, China  

Air pollution and stroke  
To study the relationship between indoor and outdoor air  
pollution (mainly coal fume) and stroke to evaluate the  
magnitude of stroke incidence caused by air pollution in  
northern cities of China.  
Country: China  
Hazard: Air Pollution Outdoor, Air Pollution Indoor, Dust Coal  
Type of study: Case Control  
Time: 1990 - 1991
95 China
Chaoke Liang,
Dept of Environmental Epidemiology, Institute of Environmental
Health Chinese Academy of Preventive Medicine,
29 Nan Wei Road Beijing 100029
Epidemiological study of fluorosis by indoor coal smoke
Dose - response relationship between fluorosis and
fluoride pollution in indoor air.
Country: China
Hazards: Dust, Coal, Air Pollution Indoor, Fluoride
Type of study: Descriptive, Cross Sectional
Time: 1990 - 1993
Funds: Ministry of Public Health of China

96 China
You-xin Liang,
Occupational Health, The School of Public Health, Shanghai
Medical University,
138 Yi Xue Yuan Road Shanghai 200032
Collaboratory: Peng-sheng Ho, Institute of Occupational
Medicine, Chinese Academy of Preventive Medicine, Beijing,
China; Zhi-qiangu Chen, Shanghai Medical University,
Shanghai, China
Neurobehavioral test battery
To develop and validate neurobehavioral test battery
computerized neurobehavioral evaluation system.
Country: China
Hazards: Solvents, Metals Heavy
Industry: Chemical, Manufacturing Battery
Occupation: Battery Workers
Type of study: Cross Sectional, Ergonomics,
Neurobehavioral Evaluation
Time: 1985 - 1990
Funds: Seventh five-year-plan Project

97 China
Guowei Liu,
Clinical Epidemiology Unit, Hua Shan Hospital, Shanghai
Medical University,
No. 12 Wuhan Zhi Road Shanghai 200040
A case-control study of aplastic anemia and leukemia for
environmental risk factors
Country: China
Hazards: Carcinogens
Time: -

98 China
Ruey Shing Lin,
Institute of Public Health, College of Medicine, National
Taiwan University,
1 Jen At Road, Section 1 Taipei
Childhood leukemia and residential exposure to high power
lines
To explore whether childhood leukemia victims are more
likely to have been exposed to high electromagnetic
fields.
Country: Taiwan Province of China
Hazards: Electromagnetic Fields
Type of study: Case Control

99 China
Ruey Shing Lin,
Institute of Public Health, College of Medicine, National
Taiwan University,
1 Jen At Road, Section 1 Taipei
Cohort study on residents chronically exposed to arsenic
(1) To study dose-response relationship between cancer
and arsenic exposure. (2) To study possible age
susceptibility to arsenic exposure particularly on
urineheal cancer.
Country: Taiwan Province of China
Hazards: Arsenic
Type of study: Exposure Assessment
Time: 1987 - 1990
Funds: Department of Health, Republic of China (Taiwan)

100 China
Xiu Wu Lin,
Environmental Monitoring, Department of Epidemiology,
Environmental Medical Institute,
7 Xin Min Street Chang Chau 130021
Survey and research of the harm of heavy metal contamination
on human body
Try to find preventive measures. Provide scientific
basis.
Country: China
Hazards: Metals Heavy
Type of study: Descriptive, Cohort, Cross Sectional,
Exposure Assessment, Occupational Safety
Time: 1973 - 2000
Funds: Dept. of the Province Hygiene

101 China
Xiu Wu Lin,
Environmental Monitoring, Department of Epidemiology,
Environmental Medical Institute,
7 Xin Min Street Chang Chau 130021
Survey and research of the harm of water system contaminated
by methyl mercury on human health
Try to find preventive measures. Provide scientific
basis.
Country: China
Hazards: Methyl Mercury
Type of study: Descriptive, Cohort, Cross Sectional,
Exposure Assessment, Occupational Safety
Time: 1973 - 2000
Funds: Dept. of the Province Hygiene
A case-control study on non-smoking factors of lung cancer of farmers in Shunyi, China

Country: China
Hazard: Carcinogens
Type of study: Case Control
Time: 1987 - 1989

Study of phytosideros in Shanghai cotton textile mills
To study the environmental condition and occurrence of phytosiderosis in Shanghai cotton mills.

Country: China
Hazard: Dust Cotton
Industry: Textile
Occupation: Textile Workers
Type of study: Descriptive, Exposure Assessment
Time: 1981 - 1986
Funds: The Ministry of Public Health

Stomach and esophagus cancer in relation to air pollution
To analyse the role of flying dusts and refractory dusts in stomach and esophagus cancer.

Country: China
Hazard: Dust, Carcinogens, Air Pollution
Type of study: Case Control
Time: 1990 - 1990

Indoor air pollution and its effects on human health
Assess indoor air pollution and its effects on children's health.

Country: China
Hazard: Air Pollution Indoor
Type of study: Cross Sectional
Time: 1987 - 1990
Funds: Chinese Academy of Preventive Medicine
111

China
Guan Shen,
Pneumoconiosis Research Department, Sichuan Institute of Labor Hygiene and Occupational Diseases,
19, Dian Xin Road, Chengdu 610041
Collaborators: Wang Jinwen, Sichuan Institute of Labor Hygiene, Chengdu, China; Lin Jin, Sichuan Institute of Labor Hygiene, Chengdu, China

Research of Coal Miners' Lung Cancer in Sichuan Province. Relationship between coal dust and development of lung cancer.

Country: China
Hazard: Dust Coal
Industry: Mining Coal
Occupation: Miners Coal
Type of study: Descriptive, Cohort
Time: 1986 - 1990
Funds: The Public Health Bureau of Sichuan Province

112

China
Yi'e Shen,
Occupational Health, The School of Public Health, Shanghai Medical University,
138 Yi Xue Yuan Road Shanghai 200032
Collaborators: Gu Xue-qing, Shanghai Medical University, Shanghai, China; Lu Pei-lian/ Ye Ting-ting, Shanghai Medical University, Shanghai, China

Epidemiological survey of farmer’s lung. To determine the prevalence of farmer’s lung and hazards of hay dust, and to make suggestions to prevent disease and reduce hazards.

Country: China
Hazard: Dust Hay
Industry: Agriculture, Manufacturing Paper
Type of study: Descriptive, Cross Sectional, Exposure Assessment
Time: 1988 - 1992
Funds: The Ministry of Public Health

113

China
Yi-nin Sun
Environmental Epidemiology, Liaoning Province Public Health and Anti-epidemic Station,
Nanying Street 10-9-1 Shenyang 110005

Study on human health affected by organic pollutants in drinking water. To determine organic pollutants in sources of drinking water, and to clarify their relation with human health and through epidemiological investigation.

Country: China
Hazard: Water Pollution
Type of study: Cohort
Time: 1990 - 1992

114

China
Bingde Tang,
Department of Occupational Health, Guangdong Institute of Occupational Medicine,
78 Yile road Guangzhou City GE 510260
Collaborators: Wong Yukwong, Guangdong Institute of Occupational Medicine, Guangzhou, China; Zhang Bilian, Guangdong Institute of Occupational Medicine, Guangzhou, China

The occupational health problems of small-scale industries in rural areas of Guangdong. In order to draw up a measure of prevention for occupational hazards in small-scale industries.

Country: China
Hazard: All
Industry: Small Scale
Occupation: Many
Type of study: Descriptive, Case Control, Exposure Assessment
Time: 1986 - 1988
Funds: Guangdong Institute of Occupational Medicine

115

China
Bing-gen Tao,
Dept of Occupational Epidemiology, Immunology and Biochemistry, Jiang-Su Provincial Institute of Occupational Medicine,
212 He-Ban Cun Nan-Jing 210037
Collaborators: Xu Bao / Xu Ya-Hui / Ling Min Jiangsu Institute of Occupational Medicine, Nanjing, China

Relationship of Acetylator Phenotype with Occupational Cancer
(1) To determine the prevalence of acetylator phenotypes in Chinese people. (2) To study occupational cancer relating to rapid or slow phenotypes. (3) To screen workers with rapid or slow phenotypes to prevent occupational cancer.

Country: China
Hazard: Carcinogens, Mutagens
Industry: Chemical
Occupation: Chemical Workers
Type of study: Case Control, Occupational Safety
Time: 1989 - 1992
Funds: Government of China

116

China
Jiugong Wang,
Dept of Environment Hygiene, School of Public Health, West China University of Medical Sciences,
People’s South Road Chengdu 610041
Collaborators: Qu Zhidong, Chengdu Environmental Protection Institution, Chengdu, China; Pu Shengli, Chengdu Environmental Protection Institution, Chengdu, China

The cardiogenic effects of atmospheric nickel pollution on residents in the vicinity of an electrometallurgy factory. The cardiogenic effects on residents (lung cancer and nasopharyngeal carcinoma).

Country: China
Hazard: Nickel
Industry: Metals Non Ferrous
Type of study: Cohort, Cross Sectional
Time: 1988 - 1990
Funds: Chengdu Constructive Committee. Environmental Protection Agency in Chengdu.

117

China
Yilan Wang,
Occupational Health, The School of Public Health, Shanghai Medical University,
138 Yi Xue Yuan Road Shanghai 200032
Collaborators: Xueqi Jiang, Shanghai Medical University, Shanghai, China; Ziqiang Chen, Shanghai Medical University, Shanghai, China

Occupational health of working women in China. Effects of occupational exposure to low-level lead. To investigate the status of occupational health of working women in China and to make a special protective legislation for them.

Country: China
Hazard: Lead
Industry: Manufacturing Battery
Type of study: Cohort, Cross Sectional
Time: 1987 - 1995
Funds: National Educational Committee for Doctoral Training Funds

118

China
Zhengang Wang,
Dept. of Environmental Health, School of Public Health, Beijing Medical University,
College Road Beijing 100083

Effects of a stable magnetic field on workers in electrolysis workshop. Assessment of neurobehavioral effects among workers exposed to a magnetic field.

Country: China
Hazard: Electromagnetic Fields
Industry: Chemical
Type of study: Descriptive, Cross Sectional, Exposure Assessment
Time: 1989 -
119 China
Zhengang Wang,
Dept. of Environmental Health, School of Public Health, Beijing Medical University,
College Road Beijing 100083

Lead pollution and its effects on children in rural areas

Country: China
Hazards: Lead
Industry: Metals Non Ferrous, Printing
Type of study: Descriptive, Cross Sectional, Exposure Assessment
Time: 1987

120 China
Shijun Xia,
Department of Environmental Health, School of Public Health, Tongji Medical University,
13 Hangkong Road Wuhan 430030
Collaborators: On Tin, Anti-epidemic Sanitation Station, Tianmeng, Hubei, China

The effect of pesticides on human health
Health evaluation for pesticides used by farmers.

Country: China
Hazards: Pesticides, Arsenic, Metals Heavy
Industry: Agriculture
Type of study: Descriptive, Case Control, Exposure Assessment
Time: 1983 - 1992
Funds: EPA of China

121 China
Shijun Xia,
Department of Environmental Health, School of Public Health, Tongji Medical University,
13 Hangkong Road Wuhan 430030
Collaborators: Lin Zongqin, Gugin City EPA, Gugin, Yangnan, China

The effect of environmental arsenic pollution on human health
The health effect of arsenic pollution on residents; standard of arsenic in atmosphere.

Country: China
Hazards: Arsenic, Metals Heavy
Industry: Smelting
Type of study: Descriptive, Case Control, Exposure Assessment
Time: 1988 - 1994
Funds: EPA of China

122 China
Chen Xiaodong,
Environmental Epidemiology, Jiangsu Provincial Sanitary and Anti-epidemic Station,
172 Jiangsu Road Nanjing 210009
Collaborators: Lin Ping / Lu Yanlong, Jiangsu Provincial Station, Nanjing, China; Zhao Yinhui, Gaoyou County Station, Gaoyou, China

Economic analysis and strategy study on population effects caused by environmental pollution on town and township enterprises
This study aims at making clear the economic loss caused by environmental pollution and developing strategies to take effective measures to control pollution.

Country: China
Hazards: All
Industry: Metals Non Ferrous, Chemical
Type of study: Case Control, Cross Sectional, Economic Analysis
Time: 1988 - 1990
Funds: Ministry of Public Health

123 China
Chen Xiaodong,
Environmental Epidemiology, Jiangsu Provincial Sanitary and Anti-epidemic Station,
172 Jiangsu Road Nanjing 210009
Collaborators: Lin Ping / Lu Yanlong, Jiangsu Provincial Station, Nanjing, China; Zhao Yinhui, Gaoyou County Station, Gaoyou, China

Lead environmental pollution and population effects caused by smelter
To study the relationship between environmental pollution of lead and effects on population. To study the high-risk population of all age groups exposed to lead.

Country: China
Hazards: Lead
Industry: Metals Non Ferrous, Smelting
Type of study: Case Control, Cross Sectional
Funds: The Central Commission of Patriotic Public Health Campaign

124 China
Shou-Zhen Xue,
Occupational Health, Shanghai Medical University,
130 Dong-An Road Shanghai 200022
Collaborators: Zhou Zhi-Jun / Xu Jun-Cai, Shanghai Medical University, Shanghai, China; Jin Zhen-Guo / Young Wel, Institute of Occupational Medicine, Jiang-Su Province, Nan-Jin, China

Study on the antinutagenicity and health effect of synthetic detergent (LAS & AEO)
To study antinutagenic potential In vitro. To study its health effects in exposed workers.

Country: China
Hazards: Linear Alkyl Sulphonate (LAS), Aliphatic Ethoxyalcohol (AEO)
Industry: Chemical
Type of study: Cohort, Antinutagenicity Test
Time: 1989 - 1993
Funds: Grant from Chinese Natural Research Foundation

125 China
Taoshun Yang,
Management of Occupational Health, Sichuan Institute of Labor Hygiene and Occupational Diseases,
19, Dian Xin Road Chongqing 610041
Collaborators: Yang Dingbo, West China University of Medical Science, Chengdu, China; Huan Xinpel, Sichuan Institute of Labor Hygiene and Occupational Diseases, Chengdu, China

Research of occupational osteoarthropathy
To establish diagnostic criteria and management of occupational osteoarthropathy.

Country: China
Hazards: Chemicals, Pesticides
Industry: Chemical, Agriculture
Occupation: Agricultural Workers
Time: 1986 - 1990
Funds: The Public Health Bureau of Sichuan Province

126 China
Taoshun Yang,
Management of Occupational Health, Sichuan Institute of Labor Hygiene and Occupational Diseases,
19, Dian Xin Road Chongqing 610041
Collaborators: Yang Dingbo, West China University of Medical Science, Chengdu, China; Huan Xinpel, Sichuan Institute of Labor Hygiene and Occupational Diseases, Chengdu, China

The investigation of lead mine's effects on environment and inhabitants' health in Ninn County
To establish the amount and regularity of lead pollution caused by villagers'mining in the Ninn County, a mountainous region of Sichuan.

Country: China
Hazards: Lead
Time: 1986 - 1990
Funds: Central Ministry of Health
127  
Xu Yang,  
Dept. of Environmental Health, Wuhan Public Health and  
Anti-epidemic Station,  
21 Yue Fei Street, Wuhan 430004  
Collaborators: Yu Li, Wuhan Public Health and  
Anti-epidemic Station, Wuhan, China; Zhang Chi, Wuhan  
Public Health and Anti-epidemic Station, Wuhan, China  
An investigation of the effect of industrial pollutants  
accumulated through the aquatic food-chain in East Lake area  
The level of these pollutants at various aquatic  
food-chain levels.  
Country: China  
Hazards: Metals Heavy  
Industry: Metals Ferrous, Chemical  
Type of study: Descriptive, Cohort, Cross Sectional  
Time: 1990 - 1992  
Funds: Municipal Government

128  
Zhousen Yang,  
Environmental Epidemiology, Liaoning Province Public Health  
and Anti-epidemic Station,  
Nanjing Street 10-9-1 Shenyang 110002  
Economical assessment of human health affected by  
environmental pollution from community-run enterprises  
Find out the extent of environmental pollution caused by  
producing asphalt, cement, and asbestos from the  
community-run enterprises, and assess the harm to the  
residents' health.  
Country: China  
Hazards: Dust Cement, Dust Asbestos  
Industry: Chemical, Cement  
Type of study: Cohort  
Time: 1989 - 1990  
Funds: Medical Academy of China

129  
P: Yao-Pu,  
Dept. of Environmental Health, School of Public Health,  
Nanjing Railway Medical College,  
No: 1138, 210009  
Collaborators: Yin Li-Hong, Nanjing Railway Medical  
College, Nanjing, China  
Mutagenic hazards of mosquito repellent incense fumes  
Evaluation of hazards of mosquito-repellent incense  
fumes.  
Country: China  
Hazards: Pesticides  
Type of study: Case Control, Exposure Assessment  
Time: 1990 - 1992

130  
China  
China  
China  
China

131  
Songqian Yin,  
Dept. of Toxicology & Epidemiology, Institute of Occupational  
Medicine, Chinese Academy of Preventive Medicine,  
29 Nan Wei Road, Beijing 100050  
Collaborators: William Blot, National Cancer Institute,  
NIH, Maryland, USA; Guikin Li, Institute of Occupational  
Medicine, Beijing, China  
The cohort study on benzene and leukemia and other cancers in  
China.  
Study the dose-response of benzene and leukemia,  
assessment of risk in the different exposure levels and  
probing the relationship between benzene and other  
cancers.  
Country: China  
Hazards: Benzene, Carcinogens  
Industry: Painting, Manufacturing Shoe, Petrochemical  
Type of study: Case Control, Cohort, Exposure Assessment,  
Occupational Safety  
Funds: National Institute of Health, USA

132  
Xue-Yun You,  
Shanghai Institute of Industrial Hygiene and Occupational  
Diseases, Occupational Cancer,  
361 Beijing Road (w) Shanghai 200003  
Collaborators: Chen Ji-gang, SILHOD, Shanghai, China; Wei  
Xing, SILHOD, Shanghai, China  
The epidemiological investigation on cancer in Chinese rubber  
industry  
The morbidity and mortality of cancers, especially lung  
cancer, in 18 jobs of the rubber industry. The  
confounding role of smoking on the incidence of lung  
cancer.  
Country: China  
Hazards: Rubber, Carcinogens  
Industry: Rubber  
Type of study: Case Control, Cohort  
Time: -  
Funds: Ministry of Health, China

133  
Hsin-Su Yu,  
Industrial Hygiene Research Center, Kaohsiung Medical College,  
No. 100 Shih Chuan 1st Road, Kaohsiung  
Collaborators: Shun-Sheng Cheng, Kaohsiung Medical  
College, Kaohsiung, Taiwan; Horn-Che Chiang /  
Yong-Chun Ko, Kaohsiung Medical College, Kaohsiung,  
Taiwan, China  
Field survey study on heat stress and physiological responses  
in the winter in Taiwan  
The levels of heat stresses exposure among workers at hot  
workplaces in the winter in Taiwan. The physiological  
responses for workers at each level of heat stresses.  
Country: Taiwan Province of China  
Hazards: Heat  
Type of study: Cross Sectional, Exposure Assessment  
Time: 1989 - 1990  
Funds: Council of Labor Affairs of Taiwan

134  
Yongran Yu,  
Institute of Occupational Diseases, Zhejiang Academy of  
Medicine,  
Tian Muo Shan Street, 60 Hangzhou 310013  
Collaborators: Chen Xiu-feng, Zhejiang Academy of Medical  
Sciences, Hangzhou, China; Yang Tiheng, Zhejiang Academy  
of Medical Sciences, Hangzhou, China  
Studies on the mutagenicity of methyl-parathion  
Country: China, USA, USSR, India  
Hazards: Methyl Parathion  
Industry: Chemical  
Occupation: Pesticide Applicators  
Type of study: Cohort, Exposure Assessment  
Funds: Zhejiang Scientific Committee
135  China
Yiluo Yuan,
Environmental Health, Liaoning Province Public Health and Anti-epidemic Station,
Naning Street 10-9-1, Shenyang 110005
Collaborators: Fan Kangmin, Shenyang Public Health Institute, Shenyang, China

The effect of cadmium pollution on health in residents in
Zhangshi irrigation area, Shenyang
Investigate the level of environmental cadmium pollution and its effect on residents' health in the irrigation area
in order to plan against this hazard.
Country: China
Hazard: Cadmium
Industry: Smelter
Type of study: Cohort
Time: 1986 - 1990
Funds: Department of Public Health, China

136  China
Dianye Zhang,
Institute of Industrial Health, Anshan Iron and Steel Corporation,
29, 219 Park Anshan 114001
Collaborators: Li Jianbin, Industrial Health Institute, Anshan, China; Ma Zhiqin, Industrial Health Institute, Anshan, China

An epidemiological study of physical condition and fitness
between accident and non-accident groups for vehicle drivers
To research physical and psychological fitness of vehicle
drivers and develop national standard for selection of
drivers.
Country: China
Hazard: Accidents Traffic
Industry: Transportation
Occupation: Drivers
Type of study: Case Control, Ergonomics
Time: 1988 - 1990
Funds: Ministry of Public Security, State Standard Commission

137  China
Dianye Zhang,
Institute of Industrial Health, Anshan Iron and Steel Corporation,
29, 219 Park Anshan 114001
Collaborators: Li Jianbin, Industrial Health Institute, Anshan, China; Ma Zhiqin, Industrial Health Institute, Anshan, China

Epidemiologic investigation of occupational hazards for VDT
operators
To observe whether there are occupational hazards and
strain for VDT operators, and to investigate harmful
factors.
Country: China
Hazard: Cumulative Trauma, VDT
Occupation: VDT Operators
Type of study: Case Control, Ergonomics
Time: 1986 - 1988
Funds: Anshan Iron and Steel Complex

138  China
Sheng-Nian Zhang,
Shanghai Institute of Industrial Hygiene and Occupational Diseases, Toxicology,
361 Beijing Road (w) Shanghai 200003
Collaborators: Bai-ge Zhao, Institute of Planned Parenthood Research, Shanghai, China

Reproductive toxicological study on lead
Effects of lead on the hypothalamic - pituitary - ovarian
- (uterine) axis.
Country: China
Hazard: Lead
Industry: Metals Non Ferrous, Printing
Occupation: Foundry Workers, Battery Workers, Printers
Type of study: Case Control, Exposure Assessment, Occupational Safety
Time: 1990 - 1991

139  China
Yoon Zhdng,
Harbin Medical University, Environmental Health Dept., Medical Institute of Heilongjiang,
41 Dong Daoli Street Harbin 150001
Collaborators: Guo Dianmin / Zhu Zhenggang / Tao Kesheng, Harbin Medical University, Harbin, People's Republic of China

The relationship between cancer mortality in Harbin and
environmental factors
To study cancer mortality in Harbin and the effect of
environmental factors (especially drinking water pollution
and air pollution) on cancer mortality for Harbin
residents.
Country: China
Hazard: Carcinogens, Water Pollution, Air Pollution
Type of study: Descriptive, Case Control
Funds: Natural Scientific Foundation Committee of P.R.C.

140  China
Jinduo Zhao,
Shenyang Research Institute of Industrial Hygiene and
Occupational Diseases,
South 17th West Road, Shenyang 110024

Occupational hazards of asbestos
Effects of different types of asbestos on prevalence of
asbestosis, lung cancer, and mesothelioma, with and
without history of smoking.
Country: China
Hazard: Dust Asbestos
Type of study: Descriptive, Cohort, Cross Sectional, Exposure Assessment, Occupational Safety
Time: 1984 - 1990
Funds: Committee for Science and Technology, Shenyang, China

141  China
Jinduo Zhao,
Shenyang Research Institute of Industrial Hygiene and
Occupational Diseases,
South 17th West Road, Shenyang 110024

Etiology of pneumoconiosis caused by aluminium oxide
Elucidating the etiology of pneumoconiosis caused by
aluminium oxide.
Country: China
Hazard: Aluminium
Occupation: Aluminium Workers
Type of study: Descriptive, Cohort, Cross Sectional, Exposure Assessment, Occupational Safety
Funds: Ministry of Public Health and Committee for Science and Technology, China

142  China
Rea Zhou,
Guangxi Institute of Occupational Diseases,
73 He-Ti Road Nanning, Guangxi
Collaborators: Wu Kong Gui, Guangxi Institute of
Occupational Diseases, Nanning, China; Jiang Shi Qiang / Du Yan, Guangxi Institute of Occupational Diseases, Nanning, China

A study of the new methods of treatment in heavy manganese
poisoning
Country: China
Hazard: Manganese
Industry: Mining, Smelter
Type of study: Clinical
Time: 1990 - 1993
Funds: Local Government
143 China
Ren Zhou, Guangxi Institute of Occupational Diseases, 73 He-Ti Road Nanning, Guangxi Collaborators: Wu Rong Gui, Guangxi Institute of Occupational Diseases, Nanning, China; Jiang Shi Qiang / Du Yan, Guangxi Institute of Occupational Diseases, Nanning, China

Effect of manganese and its compounds on reproductive functions in women workers
Find dose-response relationship and explore the mechanism of abnormal reproductive outcome in exposed women workers.
Country: China Hazards: Manganese Industry: Mining, Smelter Type of study: Descriptive, Case Control, Cross Sectional, Exposure Assessment Time: 1990 - 1993 Funds: Local Government

144 China
Hangang Zhu, Dept. of Environmental Health, Shanghai Medical University, 138, Yi Xue Yuan Road Shanghai 200032 Collaborators: Lu-yu Tuo, Department of Environmental Health, Shanghai Medical University, Shanghai, China; Qi-yu Zhao, Department of Environmental Health, Shanghai Medical University, Shanghai, China

Relationship between drinking water and digestive tract cancer in Huangpu River area
To evaluate the risk of drinking water to digestive tract cancer.
Country: China Hazards: Carcinogens Industry: Chemical Type of study: Cohort, Cross Sectional Time: 1990 - 1990 Funds: Environmental Protection Agency, Shanghai

145 Colombia
Luis Alberto, Escuela Colombiana de Medicina, Cundinamarca, Transversal 40, 150-29 (Apartado 121) Bogota Collaborators: Camilo Hernandez, Escuela Colombiana de Medicina, Bogota, Colombia

Prevalence of the hand arm vibration syndrome in the automobile industry in Bogota
To determine, by means of a cross-sectional study, the prevalence of the vibration syndrome in automotive industry workers in Bogota who are exposed to manual tools producing vibration. To establish the statistical correlation between the syndrome and occupational exposure.

146 Colombia
Roberto Jose Dennis Verano, Faculty of Medicine, Clinical Epidemiology Unit, Pontificia Universidad Javeriana, 8 Piso, Cra. 7, No. 40-62 Bogota, D.E. Collaborators: Darío Maldonado, Universidad Javeriana, Bogota, Colombia; Sandra Norman, University of Pennsylvania, Philadelphia, USA

Risk factors for chronic obstructive pulmonary disease among women in Bogota
To show if the frequency of exposure to wood smoke was higher among women with chronic obstructive pulmonary disease (cases) than in women without the disease (controls).
Country: Colombia Hazards: Air Pollution Indoor Industry: Chemical Type of study: Case Control Time: 1990 - 1992

147 Colombia
Luis Javier Franco Espinal, Seguridad Industrial, Ema de Colombia S.A., Carrera 63 No 49x-31 oficina 1009 A.P. 5233 Medellin Collaborators: Dr. Octavio Meso, Laboratorio Clinico, Medellin, Colombia

Epidemiologic surveillance of workers exposed to chemical products (follow-up)
Early detection of changes in health of workers exposed to chemical products.

148 Colombia
Javier-Dario Palafox, Salud Ocupacional, Servicio Seccional de Salud de Antioquia, Calle 28 No 70-24 B9-30 Medellin, Colombia Collaborators: Dr. Oscar Nieto-Zepeda, S.S.A., Medellin, Colombia

Occupational exposure to mercury among gold workers in Caucausia town, province of Antioquia
To determine level of environmental/occupational mercury contamination. To identify the best biological sample for monitoring. To determine frequency of signs and symptoms in exposed people.
Country: Colombia Hazards: Mercury Industry: Mining Gold Type of study: Descriptive, Exposure Assessment Time: 1990 - 1992 Funds: Ministry of Health / Provincial Health Service of Antioquia
149
Colombia
Nelly Palacios,
Universidad del Valle, Secretaria de Salud de Cali, Seguro Social, Ciencias Químicas - Protección Ambiental - Salud Occupational.
Calle 46 No. 66-00 Cali
Collaborators: Giuslao Bergonzoli / Jose A. Gallego L. / Secretaria de Salud de Cali, Cali, Colombia: Jorge Paredes, Seguros de Salud, Cali, Colombia

To determine concentrations of lead, arsenic, mercury, iron, zinc, copper in industrial and urban areas.
To determine concentrations of lead, arsenic, mercury, iron, zinc, copper in industrial and urban areas. To implement electroanalytic techniques in order to identify and quantify heavy metals. To complete the physicochemical and epidemiological study to assist in decision-making.

Country: Colombia
Hazard: Metals Heavy Industry: Smelter
Type of study: Cross-Sectional, Occupational Safety
Time: 1986 - 1990
Funds: Colciencias

150
Colombia
Mauricio Restrepo,
Instituto Nacional de Salud, Cundinamarca, Av. Eldorado, Carrera 50, CAN, Bogota, Colombia
Collaborators: Edgar Podlesky, Instituto Nacional de Salud, Bogota, Colombia

The health of people exposed to polluted rivers: a triple-blind observational study
To provide baseline data on some health status indicators on the human body burden of pollutants, to demonstrate the feasibility of international cooperation in carrying out projects in environmental epidemiology in Latin America. Urban and industrial areas.
Country: Colombia, Bolivia, Chile, Panama, Peru, Venezuela
Hazard: Arsenic, Mercury, Lead, Cadmium
Industry: Agriculture, Metals Non Ferrous
Type of study: Descriptive, Cross-Sectional, Exposure Assessment
Funds: TDRC

151
Colombia
Beatriz Tapaja,
Salud Ambiental, Secretaria de salud de Antioquia, Calle 29 No 70-24 B6-201 Medellin
Collaborators: Dr. Oscar Neto-Depata, S.S.S.A., Medellin, Colombia

A model for occupational health care for workers not covered by Social Security in the clothing-making industry in Medellin.
To establish a model for occupational health care of a working population not covered by Social Security in small industries.

Country: Colombia
Hazard: Cumulative Trauma, Noise, Chemicals
Industry: Textile
Occupation: Textile Workers
Type of study: Exposure Assessment, Occupational Safety, Ergonomics
Time: 1990 - 1992
Funds: Ministry of Health / Provincial Health Service of Antioquia

152
Colombia
Rodrigo S. Vasquez,
Sección de Epidemiología, Medicina Preventiva, Universidad Metropolitana, Apartado Aereo No. 50357 Barranquilla, Colombia
Collaborators: Jairo Ramiro, Secretaria Salud, Barranquilla, Colombia

Control of atmospheric contamination in the city of Barranquilla.
To determine the level of contamination in various parts of the city.

Country: Colombia
Hazard: Air Pollution Outdoor
Type of study: Descriptive
Time: 1990

153
Colombia
Juan Diego Velez,
Instituto de Ciencias de la Salud, Facultad de Medicina CES, Apartado Aereo 05459 Medellin
Collaborators: M.E. Arboleda / J.I. Medina / Fernando Trujillo, Faculty of Medicine CES, Medellin, Colombia

To determine the incidence of chronic intoxication by organophosphates and associated symptoms in the workers of the fumigation workers at the city of Santuario (Antioquia); to establish a prevention and control program.

Country: Colombia
Hazard: Pesticides Organophosphorus Compounds
Industry: Agriculture
Type of study: Descriptive
Time: 1990 - 1991

154
Colombia
Sergio Villa,
Instituto de Ciencias de la Salud, Facultad de Medicina CES, Apartado Aereo 05459 Medellin
Collaborators: M.E. Arboleda / J.I. Medina / Fernando Trujillo, Faculty of Medicine CES, Medellin, Colombia

To make an occupational health diagnosis for the construction industry workers in Medellin during the period of August 1, 1990 to July 31, 1991, in order to determine strategies for the prevention and control.

Country: Colombia
Hazard: All
Industry: Construction
Occupation: Construction Workers
Type of study: Descriptive, Exposure Assessment, Occupational Safety, Ergonomics
Time: 1990 - 1991
Funds: Just began.

155
Costa Rica
M. del Rosario Alfaro,
Escuela de Ciencias Ambientales, Universidad Nacional, A.P. 86-3000 Heredia
Collaborators: Engr. Aquilano Bruno, Universidad Nacional, Heredia, Costa Rica; Ronald Bormond, Universidad Nacional, Heredia, Costa Rica

Determining health effects of acidification.
To determine health effects of acidification on a population.

Country: Costa Rica, Nicaragua, Honduras
Hazard: Acid Rain
Industry: Agriculture
Type of study: Descriptive, Case Control, Exposure Assessment
Time: 1984 - 2010
Funds: Universidad Nacional, International Foundation for Science

156
Costa Rica
Roberto Castro Cordoba,
Medicina del Trabajo y Toxicología, Ministerio de Salud, A.P. 10/23-1000 San Jose
Collaborators: Dr. César Jarquin, Ministerio de Salud, San Jose, Costa Rica

Epidemiological monitoring for workers exposed to pesticides.
To establish a national system of epidemiological monitoring for the exposed workers.

Country: Costa Rica
Hazard: Pesticides
Industry: Agriculture
Occupation: Agricultural Workers, Pesticide Applicators
Type of study: Cohort
Time: 1990 - 1990
157 Costa Rica
Guillermo Llano,
OPS/OMS,
A.P. 3745 San José 1000
Collaborators: Dra Ojeda Villegas, Social Security,
Limon, Costa Rica; Dr Mercedes Barguero, University of
Costa Rica, San Jose, Costa Rica

Occupational health hazards in agriculture workers in Limon,
Costa Rica
To determine impact on health status of using pesticides.
Country: Costa Rica
Hazards: Pesticides
Industry: Agriculture
Type of study: Case Control

159 Cuba
Antonio Grande Barra,
Facultad de Salud Pública, Higiene y Epidemiología,
Calle 146 No 2504 Cubafacan, Plaza La Habana 14063
Collaborators: Jose Uriel, Facultad Salud Publica, La
Habana, Cuba

Work accidents in the textile industry
To study different risks (physical, chemical, and social) in 250 workers injured and 250 workers without injury.
Country: Cuba
Hazards: Accidents
Industry: Textile
Occupation: Textile Workers
Type of study: Case Control, Occupational Safety
Time: 1990 - 1991
Funds: Faculty of Public Health / Ariguanabo Textile Industry

161 Czechoslovakia
Ivan Konecny,
Czechoslovakia

Clinical and laboratory changes in several types of occupational diseases.
Country: Czechoslovakia
Hazards: Dust Silica, Carbon Dioxide, Dust Asbestos, Solvents, Noise
Industry: Mining, Manufacturing, Agriculture, Engineering
Type of study: Descriptive, Case Control, Cohort, Exposure Assessment
Time: 1980 - 1985
Funds: Government

163 Czechoslovakia
A. Nauj,
Univerzita Karlova, Faculté de Médecine et Hygiène,
Srobarova 50 Prague 10 100 34
Collaborators: Dr Legaith, Charles University, Prague,
Czechoslovakia; Dr J. Halk, Charles University, Prague,
Czechoslovakia

The deposition of aerosol particles in lung
To detect the interindividual differences in the deposition and clearance of aerosol particles in human lungs for improving the admission examinations for dust-exposed work.
Country: Czechoslovakia
Hazards: Dust
Industry: Mining
Type of study: Exposure Assessment
Time: 1975
Funds: State
165 Ecuador
Daniel Polo,
Direccion del Medio Ambiente, Instituto Ecuatoriano de Obras Sanitarias (IEOS),
Toledo 666 y Lerida Quito 680

Noise in Quito (preliminary study)
To know the noise level, sources, and population affected in Quito City.
Country: Ecuador
Hazard: Noise
Type of study: Case Control, Exposure Assessment
Time: 1990 - 1991

166 Egypt
Ahmed Refai Abdel Ghafar,
Community, Environmental and Occupational Medicine, Faculty of Medicine, Zagazig University,
Zagazig
Collaborators: Samir M. Wasif, Faculty of Medicine, Zagazig, Egypt; Gamal H. El Samra, Faculty of Medicine, Industrial Med. Dept., Cairo, Egypt

Health profile of agricultural workers in Sharkia Governorate, Egypt
Assessment of health status of agricultural workers.
Evaluation of various hazards encountered in farm work.
Country: Egypt
Hazard: Zoonoses, Pesticides
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Descriptive, Cross Sectional, Exposure Assessment, Occupational Safety, Ergonomics
Time: 1990 - 1992

167 Egypt
Olfat Ali,
Public Health and Occupational Medicine, University of Mansoura, Faculty of Medicine, Mansoura

An environmental profile of a village.
To assess different environmental components in the village. To define different types of pollutants in rural areas. To study impact of these hazards on human health.
Country: Egypt
Hazard: Air Pollution Outdoor, Air Pollution Indoor, Water Pollution, Soil Pollution
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Descriptive, Cross Sectional, Exposure Assessment
Time: 1990 - 1993

168 Egypt
Olfat Ali,
Public Health and Occupational Medicine, University of Mansoura, Faculty of Medicine, Mansoura

Impact of pesticide use on agricultural health
Impact of pesticides on agricultural workers, especially children and juveniles.
Country: Egypt
Hazard: Pesticides
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Case Control, Cohort, Exposure Assessment
Time: 1990 - 1993

169 Egypt
Amin El Gamal,
Egyptian Environmental Affairs Agency, 6, Mahad Sahint St. Heligoland

Health surveillance of workers and workplace in a pesticide factory in Egypt
Country: Egypt
Hazard: Pesticides
Industry: Chemical
Time: 1980 - 1980

170 Egypt
Ahmed El-Kady,
Community Medicine Department, Faculty of Medicine, A*STAR University, Assiut

Study of occupational hazards in the aluminum industry in Nagah Hamomady
Study the various occupational hazards in the aluminium industry in Upper Egypt.
Country: Egypt
Hazard: Aluminum, Fluoride, Electricity
Industry: Metals Non Ferrous
Occupation: Aluminum Workers
Type of study: Case Control
Time: 1986 - 1990

171 Egypt
Esmat Elzayat,
Faculty of Medicine, Dept. of Internal Medicine, Suez Canal University,
Ismaïlia
Collaborators: Enas El Sheikh / Adel Mishriky, Faculty of Medicine, Suez Canal University, Ismailia, Egypt; Mohamed Tawfik, Faculty of Agriculture, Suez Canal University, Ismailia, Egypt

Quantitative assessment of some chlorinated hydrocarbon pesticides in breast milk and their relation to infant growth
To estimate levels of DDT and metabolites in breast milk, and to study their association with infant growth.
Country: Egypt
Hazard: Pesticides, DDT, Metabolites
Type of study: Cross Sectional, Exposure Assessment
Time: 1988 - 1990

172 Egypt
Rifky Fares,
Faculty of Medicine, Dept. of Community Medicine, Suez Canal University,
Ismaïlia
Collaborators: Adel Mishriky, Faculty of Medicine, Suez Canal University, Ismailia, Egypt; Mustafa Abdel-Aziz, Faculty of Medicine, Suez Canal University, Ismailia, Egypt

Assessment of pulmonary function in poultry workers
To study the pattern of acute and cumulative changes in pulmonary function tests (PFTs) and their relation to occupational exposure.
Country: Egypt
Hazard: Dust, Gas, Endotoxins
Industry: Poultry
Occupation: Poultry Workers
Type of study: Cohort, Exposure Assessment, Clinical
173 **Egypt**

Mohamed Hussein,  
Community Medicine Department, Faculty of Medicine, Assiut University, 
Assiut  
Collaborators: Dr. Hosny Ahmed Shaboon, Faculty of Medicine, Dept. of Community Medicine, Assiut University, Assiut, Egypt; Dr. K.A.E. Fadel, Faculty of Medicine, Dept. of Community Medicine, Assiut University, Assiut, Egypt  

Occupational allergy in laboratory animal handlers  
To study the prevalence of allergy to laboratory animals in animal handlers.  

Country: Egypt  
Hazard: Dust Allergens  
Industry: Health Care  
Occupation: Health Workers Laboratory  
Type of study: Case Control  
Time: 1990 - 1991  

174 **Egypt**

Mohamed Hussein,  
Community Medicine Department, Faculty of Medicine, Assiut University, 
Assiut  
Collaborators: Dr. Hosny Ahmed Shaboon, Faculty of Medicine, Dept. of Community Medicine, Assiut University, Assiut, Egypt; Dr. K.A.E. Fadel, Faculty of Medicine, Dept. of Community Medicine, Assiut University, Assiut, Egypt  

Job Satisfaction among Nurses in Assiut  
To study the determinants of satisfaction at jobs such as nursing in Upper Egypt, which is different than the rest of the country.  

Country: Egypt  
Hazard: Stress Occupational  
Industry: Health Care  
Occupation: Health Workers Nurses  
Type of study: Descriptive  
Time: 1990 - 1991  

175 **Egypt**

Mohamed Hussein,  
Community Medicine Department, Faculty of Medicine, Assiut University, 
Assiut  
Collaborators: A.Y. El-Kady, Faculty of Medicine, Dept. of Community Medicine, Assiut University, Assiut, Egypt; N. Rad, Faculty of Medicine, Dept. of Community Medicine, Assiut University, Assiut, Egypt  

Coal workers' pneumoconiosis: A clinical, respiratory and radiological cross-sectional study  
Study of early predictors of getting coal workers' pneumoconiosis.  

Country: Egypt  
Hazard: Dust Coal  
Industry: Mining Coal  
Occupation: Miners Coal  
Type of study: Cross Sectional  
Time: 1990 - 1991  

176 **Egypt**

Mahmoud Amr & Mohamed El Bataanouli,  
Department of Industrial and Occupational Medicine, Kasr El Aini, Faculty of Medicine, Cairo University, 
Cairo  

Pesticide Intoxication - Egypt  
Assessment of environment and evaluation of health.  

Country: Egypt  
Hazard: Pesticides  
Industry: Chemical  
Occupation: Pesticide Manipulators, Chemical Workers  
Type of study: Case Control, Exposure Assessment  
Time: 1990 - 1992  
Funds: IDRC-(Canada) and Cairo University  

177 **El Salvador**

Roberto Lopez Salazar,  
Departamento de Higiene y Seguridad Ocupacional, Ministerio de Trabajo y Prevision Social, Zona Franca, San Bartolo 11000, El Salvador  
Collaborators: Kenedy Hernandez, Ministerio de Trabajo y P.S., Ilopango, El Salvador  

Noise study in textile industry  
To evaluate noise intensity and frequency and make technical recommendation to prevent occupational hearing loss.  

Country: El Salvador  
Hazard: Noise  
Industry: Textile  
Type of study: Exposure Assessment, Occupational Safety  
Funds: Ministerio de Trabajo y Prevision Social  

178 **Ethiopia**

Gabre-Emmanuel Teka,  
Department of Community Health, Faculty of Medicine, Addis Ababa University, 
P.O. Box 40489 Addis Ababa  

The status of environmental health programs, their multisectorality and coordination mechanisms in Ethiopia  
To determine the existing status and coordination mechanisms of the programs.  

Country: Ethiopia  
Type of study: Descriptive  
Time: 1988 - 1990  
Funds: Addis Ababa University, in part  

179 **Fiji**

Taito Waqa,  
Factories Inspectorate, Ministry for Employment and Industrial Relations, Victoria Arcade P.O.Box 2216 Suva  

Fiji industrial accidents and diseases: causes and distribution  
To identify high-risk areas for national counteractions.  

Country: Fiji  
Hazard: Accidents Prevention  
Industry: Many  
Type of study: Descriptive, Occupational Safety  
Time: 1976 - 1996  
Funds: Fiji Government  

180 **France**

Ch. Agbokiu,  
Interprofessional Center, of Occupational Health, 14, quai Lefebre Pointe à Pitre 97110  
Collaborators: Activités scientifiques en Médecine du Travail, Paris, France  

Analytic approach of the thermal stress in Guadeloupe  
To study thermal stress in a tropical environment.  

Country: Guadeloupe  
Hazard: Heat  
Type of study: Descriptive, Exposure Assessment, Ergonomics  
Time: 1988 - 1990
181 France
Dominique Choudat,
Département de Médecine du Travail, UER Cochin Port-Royal,
24, rue du Faubourg Saint-Jacques Paris Cedex 14 F-75674
Collaborators: Bali Mohamed, Moka, Mauritius Island

Respiratory manifestations of sugar-cane workers
Determine the prevalence of respiratory symptoms and lung
function in sugar-cane industry workers.

Country: Mauritius
Hazards: Dust
Industry: Agriculture
Occupation: Sugar Plant Workers, Agricultural Workers
Type of study: Cohort, Cross Sectional, Exposure Assessment
Time: 1987 -

182 France
Sylviane Cordeyier,
INSERM, Unité 170,
16 Avenue Paul Vaillant Couvier Villejuif 94807 Cedex
Collaborators: L. Abensam, McGill University, Montréal,
Canada; B. Lahouze, INSERM U13, Port, France

Role of environmental exposures in the etiology of liver
cancer, lymphomas, and molar pregnancies in Vietnam
To study the role of viral infections, aflatoxins, and
herbicide exposure in the etiology of some cancers and
some reproductive disorders.

Country: Vietnam
Hazards: Viral Infections, Aflatoxins, Pesticides, Carcinogens
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Case Control
Time: 1989 - 1992

183 France
Jacques A. Druker,
Université de Tours, Faculté de Médecine, Département de Santé
Publique,
2, bis, Bvd. Tonnelle Tours 37022

Consequences of small dusts in the epidemiology of
communicable diseases in Ceara State, Brazil

Country: Brazil
Hazards: Infectious Agents
Time: -

184 France
Patrice Fardeliane,
Service de Rhumatologie, Centre Hospitalier Universitaire,
U.E.R. de Médecine Université de Picardie,
Place Victor Pauchet Amiens Nord 80000
Collaborators: Z. Bachiri, Centre Hospitalier, Sfax,
Tunisia; J.L. Sebert, C.H.R.U, Amiens, France

Bone fluorosis in the city of Sfax, Tunisia
Evaluation of bone fluorosis among dialysed patients,
population at high risk.

Country: Tunisia
Hazards: Fluoride
Type of study: Descriptive, Cross Sectional, Environmental,
Clinical

185 France
Marcel Goldberg,
INSERM Unité 88,
91 Boulevard de l'Hôpital Paris 75634 Cedex 13
Collaborators: Fky Sante-Maron, Institut Pasteur, Noumea,
New Caledonia

Respiratory cancers in nickel workers and general population
in New Caledonia
Comparison of cancer incidence between nickel workers and
general population. Analysis of nickel species possibly
associated with an excess risk. Comparison of respiratory
cancer incidence between New Caledonia and other
countries.

Country: New Caledonia
Hazards: Nickel, Dust Asbestos
Industry: Mining Nickel
Type of study: Descriptive, Case Control, Cohort
Time: 1981 - 1990
Funds: Société de Nickel

186 France
Philippe Hartemann,
Épidémiologie et Hygiène, Département de la Santé publique,
Faculté de Médecine de Nancy,
9 Avenue de la Forêt de Haye B.P. 184 Vandoeuvre les Nancy
54505
Collaborators: D. Lesca, Food Research Institute, Annaba,
Algeria

Epidemiological study of endemic fluorosis in Algeria
Determination of the ingested dose: role of water and
liquid and solid foods.

Country: Algeria
Hazards: Fluoride
Type of study: Descriptive, Cohort
Time: 1985 - 1992

187 France
Serge Kochman,
Lab. de Physiopath. Respiratoire, Centre Hospitalier
Universitaire, Faculté de Médecine, Université de Reims,
Rue Cognacq Jay Reims Cedex 51090
Collaborators: Bernard, Institut Jean Godinat, Reims,
France

Isocyanate toxicity
Are Ig-G mediated hypersensitivities implicated in lung
diseases observed in exposed workers

Country: Morocco
Hazards: Isocyanates
Occupation: Factory Workers
Type of study: Immunological Study
Time: 1989 - 1994

188 France
Quang Thieu Pham,
INSERM Unité 115, Santé au Travail et Santé Publique, Méthodes
et Applications, Faculté de Médecine,
BP 184 Vandoeuvre Cedex F-54505
Collaborators: Bui Tuyet Minh, Institut National de
Médecine du Travail, Hanoi, Vietnam; Mohan Kumari, Kovai
Medical Center, Coimbatore, India

Bysnessis in cotton plants: Longitudinal study
Prevalence and incidence of byssinosis in relation to
cotton dusts and other hazards in the textile industry;
recommendations for prevention.

Country: Vietnam, India
Hazards: Dust Cotton
Industry: Textile
Type of study: Descriptive, Cohort, Exposure Assessment
Funds: WHO, INSERM
189  France  
Quang Thien Pham, 
INSERM Unité 115, Santé au Travail et Santé Publique, Méthodes et Applications, Faculté de Médecine, 
BP 134 Vandoeuvre Cedex F-54505  
Collaborators: Dr Lai-Van Hoat, Institute of Occupational Diseases, Quang-Ninh, Vietnam; Dr Le Trang, Medical Research Center of Occupational Diseases, Hanoi, Vietnam; Dr N.D. Huong, National Institute of Lung Diseases  
Silicosis and respiratory problems among coal miners of the Quang Ninh Basin (Vietnam)  
Evaluation of respiratory problems (silicosis, bronchitis, tuberculosis) among coal miners according to work hazards and conditions.  
Country: Vietnam  
Hazard: Dust Silica, Dust Coal, Heat  
Industry: Mining Coal  
Occupation: Miners Coal  
Type of study: Descriptive, Cohort, Exposure Assessment, Occupational Safety  
Funds: Scientific and Technical Cooperation Vietnam - France

190  Gabon  
Bernard Obiang Osseumita,  
Dépt. de Santé publique et de Médecine du Travail, Centre Universitaire de la Santé, B.P. 4009 Libreville 11e  
Collaborators: Prof. Kouembgo, Laboratoire de Toxicologie, Faculté de Médecine, Libreville, Gabon  
Risks tied to the use of pesticides in developing countries, especially Gabon  
To propose preventive measures in the workplace and the environment.  
Country: Gabon  
Hazard: Pesticides  
Industry: Agriculture  
Occupation: Agricultural Workers  
Type of study: Descriptive, Exposure Assessment, Occupational Safety  
Time: 1990 - 1994

191  Germany  
Herman M. Bolt,  
Arbeitsphysiologie und Arbeitmedizin, Institut für Arbeitshygiene an der Universität Dortmund,  
Adenauerstrasse 67 Dortmund D-44221  
Collaborators: Dr Zhang Guang, Tongji Medical University, Wuhan/Hubei, China; Dr Zhang Wei, Tongji Medical University, Wuhan/Hubei, China  
Exposure to lead alloys in petroleum industries in Hubei, China  
Exposure to lead alloys, biomonitoring strategies.  
Country: China  
Hazard: Lead  
Industry: Petrochemical  
Type of study: Descriptive, Exposure Assessment  
Time: 1987 - 1992  
Funds: Stiftung Volkswagenwerk (VW)

192  Germany  
Christoph Brückner,  
Institut und Poliklinik für Arbeitsmedizin, Friedrich Schiller Universität Jena,  
Jahnstraße 3 Jena 69120  
Collaborators: H.C. Härte, Institut für Arbeitsmedizin, Jena, Germany  
Wood workers and cancer (Part I)  
Country: Germany  
Hazard: Dust Wood, Carcinogens  
Industry: Agriculture, Forestry, Mining  
Occupation: Agricultural Workers, Wood Workers, Miners  
Type of study: Descriptive, Exposure Assessment  
Time: 1987 - 1989

193  Germany  
Christoph Brückner,  
Institut und Poliklinik für Arbeitsmedizin, Friedrich Schiller Universität Jena,  
Jahnstraße 3 Jena 69120  
Collaborators: H.C. Härte, Institut für Arbeitsmedizin, Jena, Germany  
Wood workers and vibration vasospastic syndrome  
To improve occupational safety.  
Country: Germany  
Hazard: Vibration  
Industry: Agriculture, Forestry  
Occupation: Wood Workers  
Type of study: Case Control, Occupational Safety, Ergonomics  
Time: 1986 - 1990

194  Germany  
Christoph Brückner,  
Institut und Poliklinik für Arbeitsmedizin, Friedrich Schiller Universität Jena,  
Jahnstraße 3 Jena 69120  
Collaborators: D. P. Kliessner, Institut für Arbeitsmedizin, Jena, Germany  
Psychologic investigations among officials exposed to noise and physical factors  
To develop better workplaces. To improve occupational safety.  
Country: Hungary, USSR  
Hazard: Vibration, Physical Industry: Administration, Education  
Occupation: Office Workers, University Students  
Type of study: Case Control, Ergonomics  
Time: 1986 - 1990

195  Germany  
Theodor M. Flieden,  
Institute for Occupational and Social Medicine, University of Ulm,  
Albert Einstein Allee 11, Ulm D-7900  
Collaborators: Prof. Dr. Sandor Iszoregrziszl, Mahidol University, Siriraj Hospital, Bangkok, Thailand  
Agranulocytosis in Thailand: an environmentally-induced disease?  
To try to correlate the agranulocytosis with chemical exposure.  
Country: Thailand  
Hazard: Chemicals, Substance Abuse  
Industry: Chemical  
Type of study: Descriptive, Case Control, Exposure Assessment  
Time: 1990 - 1995  
Funds: University of Ulm, Mahidol University

196  Germany  
Wolfgang Laurig,  
Arbeitsphysiologie III (Ergonomics), Institut für Arbeitsphysiologie an der Universität Dortmund,  
Andréstraße 67 Dortmund D-44221  
Collaborators: Prof. Cai Ronggui, School of Public Health, Tongji Medical University, Wuhan, China  
Ergonomic assessment of load as a method to determine reasons for spinal impairment  
Prevention of impairment.  
Country: China  
Hazard: Cumulative Trauma  
Industry: Manufacturing  
Type of study: Descriptive, Ergonomics  
Time: 1989 - 1992  
Funds: Stiftung Volkswagenwerk
197 Werner Möller, 
Arbeitshygieneinspektion des Rates des Bezirks Gera, Institut für Arbeitshygiene 
Clara-Zetkin-Straße 19 Gera 6500 
Collaborators: Dr Peiper, Industrial Hygiene Inspectorate, Gera, Germany; Dr Wainrich, Dr Zwelling, Industrial Hygiene Inspectorate, Gera, Germany 

Combined influence of noise and climate 
To examine effects of noise in connection with climate on human beings. 

Country: Germany 
Hazards: Noise, Climate 
Occupation: VDT Operators 
Type of study: Ergonomics 
Time: 1987 - 1990 
Funds: Ministry of Health 

198 Werner Möller, 
Arbeitshygieneinspektion des Rates des Bezirks Gera, Institut für Arbeitshygiene 
Clara-Zetkin-Straße 19 Gera 6500 
Collaborators: Dr Wendig, Industrial Hygiene Inspectorate, Gera, Germany; Dr Richter, Industrial Hygiene Inspectorate, Gera, Germany 

Risk of hearing loss due to combined influences of noise and whole-body vibration 
To investigate the influence of additional exposure by whole-body vibration on noise-induced hearing loss. 

Country: Germany 
Hazards: Noise, Vibration 
Type of study: Exposure Assessment 
Time: 1987 - 1990 
Funds: Ministry of Health 

199 Klaus Schuch, 
Institut für Politikwissenschaft, Medizinische Akademie Dresden, 
Fetschersstraße 74 Dresden 0919 

Physiological reactivity in laboratory and under work conditions: cause and importance 
To study the connection between experimental and epidemiological investigations - risk persons and risk situations. 

Country: Germany 
Hazards: Stress Occupational 
Industry: Education, Transportation 
Occupation: University Employees 
Type of study: Social Study 
Time: 1991 - 1993 
Funds: Ministry 

200 Klaus Schuch, 
Institut für Politikwissenschaft, Medizinische Akademie Dresden, 
Fetschersstraße 74 Dresden 0919 

Psychosocial factors and health of surgeons 
Factors and influence on health status. 

Country: Germany 
Hazards: Stress Occupational 
Industry: Health Care 
Occupation: Health Workers Physicians 
Type of study: Social Study 
Time: 1989 - 1992 
Funds: Ministry 

201 Gert W. Schreinacker, 
Institut für Arbeitsmedizin der Karl-Marx-Universität Leipzig 
Liebigstraße 27 Leipzig 2010 
Collaborators: Prof. Bacht, Institute of Occupational Medicine, Hamburg, Germany 

Health status and psychosocial factors of teachers before and after the political changes in GDR 
To study the political changes in a developed country and psychosocial factors and development of health and psychosocial factors in teachers. 

Country: Germany 
Hazards: Stress Occupational 
Industry: Education 
Occupation: University Employees 
Type of study: Social Study, Economic Analysis 
Time: 1990 - 1993 
Funds: Ministry 

202 Gert W. Schreinacker, 
Institut für Arbeitsmedizin der Karl-Marx-Universität Leipzig 
Liebigstraße 27 Leipzig 2010 
Collaborators: Prof. Bacht, Institute of Occupational Medicine, Hamburg, Germany 

Psychophysiological functions in toluene-exposed workers 
To assess chronic intoxication due to low concentrations. 

Country: Germany 
Hazards: Toluene, Solvents 
Industry: Health Care 
Occupation: Printers, Health Workers Laboratory 
Type of study: Case Control, Exposure Assessment 
Time: 1990 - 1992 
Funds: Different sources 

203 Werner Schunk, 
Institute of Occupational Medicine, Academy of Science, 
Institut für Arbeitsmedizin der Medizinischen Akademie Erfurt, 
Gustav-Freytag-Straße 1 Erfurt 5082 
Collaborators: Prof. Lennert, Institute of Occupational Medicine of University, Erlangen-Nürnberg, Germany 

Examinations for reactions in the human body due to heavy metals (manganese, lead, and mercury) 
(1) Determination of allowable level of lead oxide and lead dust. (2) Determination of mercury in the human body and lead in animals. (3) Development of test of exposure. 

Country: Germany, Sweden, Hungary 
Hazards: Metals Heavy, Manganese, Lead, Mercury 
Industry: Metal Non Ferrous, Glass, Thermometer 
Type of study: Case Control, Cohort, Exposure Assessment, Occupational Safety 
Time: 1986 - 1994 
Funds: Medicine and Industry, Ministry of Health 

204 Annelore Sohl, 
Institute of Occupational Medicine 
Karl-Borwel-Stasse 39 Chemnitz 90766 
Collaborators: Naumann Chr. / Friedrichsen G., Institute of Occupational Medicine, Chemnitz, Germany; Koeber 1. / Thiern U., Institute of Occupational Medicine, Chemnitz, Germany 

Epidemiological investigations of the influence of factors of shift work on health and capability - a longitudinal study 
Shift - and nightwork - is a stress factor which may lead to impairments of health and well-being, numerous cross-sectional studies are available, but longitudinal studies are few. 

Country: Germany 
Hazards: Shift Work 
Industry: Textile 
Type of study: Cohort, Longitudinal Study 
Time: 1978 -
205 Germany
Annelore Seibt,
Institute of Occupational Medicine
Kurt-Berthold-Strasse 39 Chemnitz 9006
Collaborators: Dr. J. Roither, Institute of Occupational Medicine, Chemnitz, Germany; Dr. G. Enderlein, Central Institute of Occupational Medicine, Berlin, Germany

Cardiac infarction and occupational characteristics under special consideration of psychological stress
To study psychic working demands and their relation to acute myocardial infarction.
Country: Germany
Hazards: Stress
Industry: Many
Occupation: Many
Type of study: Case Control
Time: 1987 - 1990

207 Germany
Uwe Thielenke,
Algemeine und Kommunale Hygiene, (Institute of Hygiene),
Universität Rostock,
Leninallee 70 Rostock D-1800

Health conditions of children from areas with heavy air pollution, and possibilities for prevention
Country: Germany
Hazards: Air Pollution Outdoor
Time: -

208 Ghana
Thomas Francis Bruce,
Department of Factories Inspectorate Ministry of Labour and Social Welfare
P.O. Box M38 Accra
Collaborators: Dr. A.B. Quainoo, Consultant to Factory Inspectorate (Occupational Physician), Hara, Ghana

Industrial Hygiene - Hazards Evaluation - Noise, Heat Stress in Industry
To identify areas of stress, evaluate and institute appropriate control measures.
Country: Ghana
Hazards: Heat, Noise, Respiratory
Industry: Textile, Wood Working, Cement
Type of study: Exposure Assessment, Occupational Safety
Time: 1987 - Funds: Ghana Government

209 Ghana
Albert Quainoo,
Ministry of Mobilisation and Social Welfare
P.O. Box M84 Accra
Collaborators: Ministry of Health, Accra, Ghana

Occupational respiratory and audiometric profile in Ghana's textile and woodworking industry
To determine the prevalence and severity of respiratory disorders and hearing impairment in the textile and woodworking industries.
Country: Ghana
Hazards: Noise, Respiratory industry: Textile, Wood Working
Type of study: Descriptive

210 Greece
Klealos Katsounianni,
Department of Epidemiology, University of Athens Medical School,
Mikras Aias Street, Goudi Athens 115 27
Collaborators: Anagnosta Pansioe, Dept. of Epidemiology, Univ. Athens Medical School, Athens, Greece; Giota Tsouloumi, Dept. of Epidemiology, Univ. of Athens Medical School, Athens, Greece

Short-term effects of air pollution on morbidity in Athens, Greece
To investigate whether air pollution levels are correlated with emergency admission for respiratory and cardiac crises in all hospitals of the Athens area.
Country: Greece
Hazards: Air Pollution Outdoor, Sulfur Dioxide, Nitrogen Dioxide, Carbon Monoxide, Ozone
Type of study: Descriptive, Time Series
Time: 1989 - 1990

211 Greece
Klealos Katsounianni,
Department of Epidemiology, University of Athens Medical School,
Mikras Aias Street, Goudi Athens 115 27
Collaborators: A. Harzaki, Dept. of Epidemiology, Univ. Athens Medical School, Athens, Greece; A. Rinaldi, Dept. of Epidemiology, Univ. of Athens Medical School, Athens, Greece

Short-term effects of air pollution on cause-specific mortality 1983-1989
To investigate whether air pollution levels are associated with cause-specific mortality in Athens.
Country: Greece
Hazards: Air Pollution Outdoor, Sulfur Dioxide, Nitrogen Dioxide, Carbon Monoxide, Ozone
Type of study: Descriptive, Time Series
Time: 1990 - 1992

212 Greece
Athena Linos,
Dept. of Hygiene and Epidemiology, University of Athens Medical School,
110 Vasileos Sofias Avenue Athens 115 27
Collaborators: A. Linos, Athens Univ. Medical School, Athens, Greece; C. Hatsis, Athens, Greece

Effect of nickel occupational exposure on health
To study the effect of nickel mining and processing on cancer and other chronic disease development.
Country: Greece
Hazards: Nickel, Metals Heavy Industry: Mining Nickel, Metals Non Ferrous
Type of study: Cohort, Cross Sectional
Time: 1989 - 1993
Funds: Industry
213 Greece
Emmanuel Tsililas,
Central Laboratory of Public Health, Ministry of Health & Social Welfare,
Toussia Street, 14 Athens 106 83
Collaborators: Dominick Lizzana, Center of Safety in Work, Ministry of Labour, Athens, Greece; F. Frangiadakis, Chemist, Athens, Greece

Scientific committee for unhealthy work conditions
Laws Nb. 1505/84 (Interministerial body).
To determine health hazards and accidents risks in the working environment of all services belonging to the state and state organizations and municipalities. To propose control measures.

Country: Greece
Hazard: Chemicals
Industry: Administration
Occupation: Government Workers
Type of study: Case Control, Cohort, Occupational Safety, Ergonomics
Funds: State budget

215 Hong Kong
Sik-yuen Chan,
Labour Department, Occupational Health Division, 15/F Harbour Building, 38 Pier Road, Central Hong Kong

Health effects of VDT operation
To study the long-term effects of VDT operation on eye and musculoskeletal functions and pregnancy outcome.

Country: Hong Kong
Hazard: Cumulative Trauma, VDT
Occupation: VDT Operators
Type of study: Cohort, Cross Sectional, Exposure Assessment
Time: 1989
Funds: The Royal Hong Kong Jockey Club

217 Hungary
Illes Doshi,
Hygiene and Epidemiology, Albert Szent-Györgyi University, Medical School, Dorottya 16-18 P.O. Box 186 Szeged 6720
Collaborators: Dr Nagyalmiényi / Dr G. Vetro, Dep. of Hygiene, Szeged, Hungary; Dr M. Nemes / Dr L. Istvanis, Dep. of Hygiene, Szeged, Hungary

Investigations of pesticide effects on humans and the environment
To detect early, occult intoxication by application of sensitive methods.

Country: Hungary
Hazard: Pesticides
Industry: Agriculture
Occupation: Agricultural Workers, Pesticide Applicators
Type of study: Descriptive, Case Control, Exposure Assessment
Time: 1986 - 1993
Funds: Hungarian Ministry of Health

218 Hungary
Ilidiko Farkas,
Department of Experimental Hygiene, National Institute of Hygiene, Györi ut 2-6 Budapest 1097
Collaborators: K. Sajgó, National Institute of Hygiene, Budapest, Hungary; A. Berczki, Hig. Epidemiology, Station, Békészcsaba, Hungary; M. Borváth / M. Török, Heart Sanatory, Balatonfold, Hungary

The role of arsenic uptake and iodine balance in ischemic heart disease
The high level of arsenic accompanied with high and low levels of iodine in one county, and the frequency distribution of heart attack patients will be evaluated.

Country: Hungary
Hazard: Iodine, Arsenic
Type of study: Case Control, Cohort
Time: 1988 - 1993
Funds: Institutional

219 Hungary
Robert L. Haddock,
Planning and Evaluation Section, Dep. of Public Health and Social Services, P.O. Box 2816 Agana Guam 96910
Collaborators: F. Neon, Department of Public Health and Social Services, Agana, Guam

Infant salmonellosis
Determine origin of salmonella infections in infants.

Country: Guam
Hazard: Salmonella
Type of study: Case Control
Time: 1987 - 1990
Funds: Local Government

220 Hungary
Péter Kertai,
Medical University, Hygiene and Epidemiology, Nagyendelken 98 Debrecen H-4012

Chemoprevention of chemically induced experimental tumours

Country: Hungary
Hazard: Carcinogens
Time: -
Occupational exposure to heavy metals and organic solvents

Country: Hungary
Hazard: Metals Heavy, Solvents
Time: -

223 Hungary
Peter Rudnai,
National Institute of Hygiene,
Gyula u 2-6 Budapest 1097
Collaborators: Dr. Aranka Bereczky, Public Health Station of County Bekes, Bekecszaba, Hungary; Dr Gabor Bocsi,
National Institute of Hygiene, Budapest, Hungary

Epidemiological study on the health effects of drinking water with high arsenic content.
To find health consequences of chronic exposure to drinking water containing arsenic above the hygienic limit value.

Country: Hungary
Hazard: Arsenic, Water Pollution
Type of study: Descriptive, Case Control, Exposure Assessment
Time: 1986 - 1990
Funds: Ministry of Health

225 Hungary
Peter Rudnai,
National Institute of Hygiene,
Gyula u 2-6 Budapest 1097
Collaborators: Prof Uwe Thielebeule, National Institute of Hygiene, Budapest, Hungary; Dr Ilidko Farkas, National Institute of Hygiene, Budapest, Hungary

Epidemiological study on the health significance of indoor-air pollutants.
To provide the epidemiological basis for setting hygienic limit values for some indoor-air pollutants.

Country: Hungary
Hazard: Air Pollution Indoor
Type of study: Cross Sectional, Exposure Assessment
Time: 1986 - 1990
Funds: Ministry of Environmental Protection

227 Hungary
Sandor Takacs,
Board of Directors, Public Health and Epidemiology,
Baco-B. u. 12 P.O. Box 186Miskolc 3501
Collaborators: Ferenc Bozas, Public Health, Miskolc, Hungary; Dr Albert Tatar, Public Health, Miskolc, Hungary

Environmental exposures in patients with digestive and bladder cancer
Determination of concentration of trace elements in the above mentioned patients, searching after correlations between concentration and human health and/or diseases.

Country: Hungary
Hazard: Toxic Substances, Nitroso Compounds, Water Pollution, Air Pollution Outdoor
Type of study: Case Control, Environmental
Time: 1979 - 1992

228 Hungary
Sandor Takacs,
Board of Directors, Public Health and Epidemiology,
Baco-B. u. 13 P.O. Box 186Miskolc 3501
Collaborators: Zsolt Deni, Public Health, Miskolc, Hungary; Dr Marianna Radocy, Public Health, Miskolc, Hungary

Indoor radon concentrations and lung cancer
Determination of concentration of radon and thoron in indoor-air and soil. Searching after correlation with incidence of lung cancer.

Country: Hungary
Hazard: Radon, Air Pollution Indoor, Soil Pollution
Type of study: Case Control, Environmental
229 India
Saraswati Arumugam,
Institute of Pathology and Electron Microscopy, Madras Medical College,
Park Town Madras 600 003
Collaborators: All Neuro Surgeons at the Institute of Neurology, Madras / Jaminuto, India

Brain tumors in India
To determine epidemiology of brain tumors.
Country: India
Hazards: Petrochemicals
Type of study: Case Control, Exposure Assessment

230 India
Saraswati Arumugam,
Institute of Pathology and Electron Microscopy, Madras Medical College,
Park Town Madras 600 003
Collaborators: Dr. Shanila, Cancer Institute, Madras, India

Vascular neoplasms in India
To determine any occupational hazards or exposure to be correlated with vascular tumors.
Country: India
Hazards: Petrochemicals
Type of study: Case Control, Exposure Assessment
Time: 1988 - 1995

231 India
Madhukar Rhee,
Dept. of Pharmacology and Toxicology, Indian Institute of Toxicology & Toxicology Research, 172, Hornby Bldg, D.N. Road, Delhi 110 006

Exposure of farm workers to pesticides
Study of health hazards of pesticides to sprayers.
Country: India
Hazard: Pesticides
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Exposure Assessment
Time: 1985 - 1995
Funds: Industry

232 India
M.K. Chakraborty,
Regional Occupational Health Centre, ICMR, 3 Kdy. Street Calcutta 700016

Air pollution due to fugitive and stock emission from thermal power plants
To monitor the contribution of particulates and gases by the plant to the ambient atmosphere by the thermal power plants and recommend control measures where needed. To study effects on exposed workers inside the plant due to leakage of dust and gases.
Country: India
Hazard: Dust, Gas, Air Pollution, Outdoor, Air Pollution Indoor Industry: Power Plant Thermal
Type of study: Exposure Assessment
Funds: Ministry of Environment and Forests, Gvt. of India

233 India
Debendra Nath Gha Mazumder,
Gastroenterology Unit, Department of Medicine, Institute of Postgraduate Medical Education and Research, 244 A.J.C. Bose Road Calcutta 700 030
Collaborators: Dr. Girishchand Chatterjee, Dpt. of Biochemistry, University College of Science, Calcutta, India; Dr. Sambasiva Nath Gha, Nuclear and Experimental Medical Science, Inst. of P.G. Medical Edu. and Research, Calcutta, India

Studies on the mechanism of environmental arsenic toxicity causing collagenesis in liver and non-cirrhotic portal fibrosis in man
Role of chronic drinking of arsenic-contaminated water in producing liver damage in man with prospect of experimental study to understand the pathogenesis of collagenesis in the liver.
Country: India
Hazard: Water Pollution, Arsenic
Type of study: Descriptive, Clinical
Time: 1989 - 1992
Funds: Government of India

234 India
Brahma Nand Gupta,
Epidemiology Division, Industrial Toxicology Research Centre, Mahamaham Ghati Marg Box 80 Lucknow 226 001

Effect of silica dust on metal-ware workers in Moradabad, U.P., India
To study morbidity due to metals, dust particles and other factors.
Country: India
Hazard: Metals Heavy, Dust Silica
Industry: Metals Non Ferrous
Occupation: Metal Workers
Type of study: Descriptive, Cross Sectional, Exposure Assessment
Time: 1988 - 1989

235 India
Brahma Nand Gupta,
Epidemiology Division, Industrial Toxicology Research Centre, Mahamaham Ghati Marg Box 80 Lucknow 226 001

Epidemiological survey of pesticides sprayers and pesticide residue analysis in air, water, and soil
To study morbidity due to pesticides spraying.
Country: India
Hazard: Pesticides
Industry: Agriculture
Occupation: Agricultural Workers, Pesticide Applicators
Type of study: Descriptive, Cross Sectional, Exposure Assessment

236 India
Brahma Nand Gupta,
Epidemiology Division, Industrial Toxicology Research Centre, Mahamaham Ghati Marg Box 80 Lucknow 226 001

A study of morbidity and socio economic condition of workers in cotton industry, Lucknow, India
To study morbidity due to dust particles.
Country: India
Hazard: Dust Cotton
Industry: Textile
Occupation: Cotton Workers
Type of study: Descriptive, Cross Sectional, Exposure Assessment
Time: 1984 - 1984
237 India
Brahma Nand Gupta,
Epidemiology Division, Industrial Toxicology Research Centre,
Mahama Gandhi Marg Box 80 Lucknow 226 001

Epidemiologic survey of workers and industrial hygiene studies
in five electronic industries in India
To study morbidity due to metals, acids, organic solvents, and other factors.
Country: India
Hazards: Metals Heavy, Acid Rain, Solvents
Industry: Electronics
Type of study: Descriptive, Cross Sectional, Exposure Assessment
Time: 1986 - 1987

238 India
Brahma Nand Gupta,
Epidemiology Division, Industrial Toxicology Research Centre,
Mahama Gandhi Marg Box 80 Lucknow 226 001

A study of morbidity and socioeconomic conditions of workers
in Glass Bangle Industry at Firozabad Aga, India
To study morbidity due to metals.
Country: India
Hazards: Metals Heavy, Dust
Industry: Glass
Occupation: Glass Workers
Type of study: Descriptive, Cohort, Cross Sectional, Exposure Assessment
Time: -

239 India
Brahma Nand Gupta,
Epidemiology Division, Industrial Toxicology Research Centre,
Mahama Gandhi Marg Box 80 Lucknow 226 001

Respiratory morbidity in agate workers, Khambat Gujarat, India
To study morbidity due to agate dust.
Country: India
Hazards: Dust
Occupation: Agate Workers
Type of study: Descriptive, Cross Sectional, Exposure Assessment
Time: -

240 India
Brahma Nand Gupta,
Epidemiology Division, Industrial Toxicology Research Centre,
Mahama Gandhi Marg Box 80 Lucknow 226 001

Bhopal disaster: A follow-up study (Phases I and II) M.P., India.
To study morbidity due to methyl isocyanate gas.
Country: India
Hazards: Methyl Isocyanate Gas, Pesticides
Industry: Chemical
Type of study: Descriptive, Cross Sectional, Exposure Assessment
Time: 1986 - 1986

241 India
Brahma Nand Gupta,
Epidemiology Division, Industrial Toxicology Research Centre,
Mahama Gandhi Marg Box 80 Lucknow 226 001

Bhopal disaster: A follow-up study (Phase III.1) M.P., India.
To study morbidity due to methyl isocyanate gas.
Country: India
Hazards: Methyl Isocyanate Gas, Pesticides
Industry: Forestry
Type of study: Descriptive, Cross Sectional, Exposure Assessment

242 India
Brahma Nand Gupta,
Epidemiology Division, Industrial Toxicology Research Centre,
Mahama Gandhi Marg Box 80 Lucknow 226 001

Epidemiological health survey of saw-mill workers in and around
Lucknow U.P., India
To study morbidity due to saw dust.
Country: India
Hazards: Dust Wood
Industry: Forestry
Occupation: Saw Mill Workers
Type of study: Descriptive, Cross Sectional, Exposure Assessment
Time: 1988 - 1989

243 India
Brahma Nand Gupta,
Epidemiology Division, Industrial Toxicology Research Centre,
Mahama Gandhi Marg Box 80 Lucknow 226 001

Health survey of hemp workers at Kanpur
To study morbidity due to hemp dust.
Country: India
Hazards: Dust, Hemp
Industry: Agriculture
Occupation: Hemp Workers
Type of study: Descriptive, Cross Sectional, Exposure Assessment
Time: 1977 - 1978

244 India
Abraham Joseph,
Epidemiology Resource Centre, Dept. of Community Health,
Christian Medical College,
Thorapadi Post Office Vellore 632 002

Child labor
To study the extent of child labor. Factors responsible for child labor. To study the type of work, income and attitudes, educational status, and social problems associated with child labor. To evaluate the health status of children involved in child labor.
Country: India
Type of study: Descriptive, Occupational Safety
Time: -
245  India  
Abraham Joseph,  
Epidemiology Resource Centre, Dept. of Community Health,  
Christian Medical College,  
Thorapdi Post Office  
Vellore 632 002  

Industrial pollution (Tannery)  
To conduct a descriptive cross-sectional study on the  
effects of tannery effluents on health, agricuture, and  
environment at Gangaapuram and Govindapuram. To report on  
the findings to the general public, industrialists and  
governmental agencies, and voluntary organizations to  
create an awareness of these hazards among the community,  
industrialists, and governmental agencies.  

Country: India  
Industry: Tannery  
Type of study: Descriptive, Occupational Safety,  
Cross Sectional  
Time:  

247  India  
Gopa Kothari,  
Dep. of Prev. and Social Medicine, Lokmanya Tilak Municipal  
Medical College & Sion Hospital,  
Sion Bombay 400 022  
Collaborators: Dr G. Kothari, L.T.M.M. College, Bombay,  
India; Dr S. Shanta, L.T.M.M. College, Bombay, India  

Occupational hazards in children in urban slums  
To study the effect of occupational hazards in children.  

Country: India  
Hazards: All  
Type of study: Occupational Safety  
Time: 1990 - 1993  

249  India  
Raghunandan Murunudar,  
Preventive and Social Medicine, Government Medical College,  
Mangalal, Aurangabad 431 001  
Collaborators: Mr. Das, Marathwada Institute of  
Technology, Aurangabad, India; Mr. Dharmadkar, Marathwada  
Institute of Technology, Aurangabad, India  

Effect of some of the air pollutants on human health, an  
epidemiological study  
To study, in general, the effects of air pollutants on  
human health.  

Country: India  
Hazards: Air Pollution Outdoor, Air Pollution Indoor  
Type of study: Cohort, Cross Sectional  
Time: 1990 - 1991  
Funds: Gvt of Maharashtra, and, Marathwada Institute of  
Technology  

251  India  
Jagdish Parikh,  
Occupational Medicine, National Institute of Occupational  
Health, IPCL,  
Meghani Nagar Ahmedabad 380016  

Health impact of pollution of the River Bhadra  
To study health effects due to use of polluted river  
water.  

Country: India  
Hazards: Water Pollution  
Type of study: Cross Sectional  
Time: 1989 - 1989  

246  India  
Bal Krishna Khanna,  
Dept. of Tuberculosis & Respiratory Diseases, King George Med.  
College,  
7, Shahmina Road  
Lucknow 226001  
Collaborators: Dr R. Chandra, R.G. Medical College,  
Lucknow, India; Dr V. K. Shrivastava, K.G. Medical  
College, Lucknow, India  

A study of iodine deficiency disorders (IDD) in the state of  
Uttar Pradesh  
To assess the prevalence of IDD. To study the associated  
environmental factors. To assess the impact of national  
IDD control programme.  

Country: India  
Type of study: Descriptive, Cross Sectional,  
Exposure Assessment, Economic Analysis  
Funds: Government of India  

248  India  
Jyotendra Mair,  
Indian Petrochemicals Corporation Limited.,  
P.O. Petrochemicals  
Baroda 380 346  

Study of liver function tests of employees in a vinyl chloride  
plant  
To establish the effect of vinyl chloride on liver  
function of exposed workers.  

Country: India  
Hazards: Vinyl Compounds  
Industry: Petrochemical  
Type of study: Case Control, Exposure Assessment  
Time: 1984 - 1994  

250  India  
Jagdish Parikh,  
Occupational Medicine, National Institute of Occupational  
Health, IPCL,  
Meghani Nagar Ahmedabad 380016  

Cotton dust exposure in the ginning industry of Gujarat,  
India  
To find out cotton dust levels in the ginning factories  
and health status of ginning workers.  

Country: India  
Hazards: Dust Cotton  
Industry: Textile  
Occupation: Cotton Workers  
Type of study: Cross Sectional, Exposure Assessment  
Time: 1989 - 1993  

252  India  
Jagdish Parikh,  
Occupational Medicine, National Institute of Occupational  
Health, IPCL,  
Meghani Nagar Ahmedabad 380016  

Prevalence of berylliosis in textile mills of Ahmedabad, India  
To find out the prevalence of berylliosis and determine  
cotton dust levels in the textile mills of Ahmedabad,  
India.  

Country: India  
Hazards: Dust Cotton  
Industry: Textile  
Type of study: Cross Sectional, Exposure Assessment  
Time: 1982 - 1984
252
Subodh Kumar Rastogi,
Dept. of Epidemiology, Industrial Toxicology Research Centre,
Mahatma Gandhi Marg P.O. Box 80 Lucknow
Collaborators: Prof. P.K. Ray, Industrial Toxicology
Research Centre, Lucknow, India

Environmental effects of silica dust in metalware industries
in U.P., India (with special reference to Moradabad)
To study the occupational morbidity in the exposed
workers and to record physiological responses on exposure
to heat stress.
Country: India
Hazard: Dust Silica, Metals Heavy, Heat
Industry: Metals Non Ferrous
Type of study: Exposure Assessment
Funds: Dept. of Environment, Uttar Pradesh, India

254
Habibullah Saliyed,
Occupational Health Centre, Department of Occupational
Medicine,
3, Dr M. Iqubal Rd (Kut Street) Calcutta 700016
Collaborators: Dr Gilles Forget, International Development
Research Centre, Ottawa, Canada

Study of pneumoconiosis in underground miners in India
To assess environmental conditions in coal mines in
relation to respirable dust and the chemical nature of
dust.
Country: India
Hazard: Dust Coal
Industry: Mining Coal
Occupation: Miners Coal
Type of study: Descriptive, Cross Sectional
Funds: ICMR/IDRC

255
Habibullah Saliyed,
Occupational Health Centre, Department of Occupational
Medicine,
3, Dr M. Iqubal Rd (Kut Street) Calcutta 700016
Collaborators: Dr Gilles Forget, International Development
Research Centre, Ottawa, Canada

Study of pneumoconiosis at high altitude in central Ladakh
Country: India
Hazard: Dust Inorganic
Type of study: Descriptive, Cross Sectional
Funds: ICMR/IDRC

256
Amup Kumar Srivastava,
Occupational Health Centre, Industrial Toxicology Research
Ctr,
Mahatma Gandhi Marg Nr 80 Lucknow 226 004
Collaborators: Dr Khanna, Industrial Toxicology Research
Centre, Lucknow, India; Dr Mital Das, Industrial
Toxicology Research Centre, Lucknow, India

A study of tri ortho cresyl phosphate (TOCP) poisoning
outbreak in Calcutta, India
To study recovery following TOCP ingestion and factors
affecting it.
Country: India
Hazard: Tri Ortho Cresyl Phosphate (TOCP)
Type of study: Cohort
Time: 1988 - 1990
Funds: Institutional Funds

258
Molly Thomas,
Department of Clinical Pharmacology, Christian Medical College
Hospital,
Ida Scudder Road Box 3 Vellore 632 004
Collaborators: Dept. of Neurology and Otolary, Christian
Medical College Hospital, Vellore-4, India

Delayed neurotoxic and ototoxic effects of chronic exposure to
organophosphorus compounds
To determine the effects of exposure to organophosphorus
compounds particularly in relation to age, duration of
exposure, and nutrition, on neurologic and otologic
indices and cholinesterase levels.
Country: India
Hazard: Organophosphorus Compounds
Industry: Manufacturing, Agriculture
Occupation: Factory Workers, Agricultural Workers
Type of study: Cohort, Exposure Assessment, Occupational Safety

259
Kamen Baratawijaya,
Faculty of Medicine, University of Indonesia, Department of Education,
Jalan Salemba 6 - Jakarta Jakarta
Collaborators: Dr Herta Sundary, Med. Fac. Univ. Indonesia,
Jakarta, Indonesia; Dr Samudrajat & Dr Nunang Sulistono,
Med. Fac. Univ. Indonesia, Jakarta, Indonesia

Prevalence study of allergy among urban and suburban areas in
Jakarta
To study the effect of environmental factors on the
prevalence of respiratory allergy.
Country: Indonesia
Hazard: Dust Allergens, Air Pollution Outdoor
Type of study: Cohort
Time: 1989 - 1992
Funds: University of Indonesia

260
Hersuanto Reksosoodarmo,
Faculty of Medicine, Department of Public Health, Cadjah Mado
University,
Sekip Yogakarta 55281
Collaborators: Djoko Sarwono, Faculty of Medicine, GMU,
Yogyakarta, Indonesia

Epidemiology of metals intoxication in the small industries
fabricating utensils made of aluminium
To plan preventive and protective measures of the workers
and people surrounding the industries from metals
exposure.
Country: Indonesia
Hazard: Aluminium, Metals Heavy
Industry: Manufacturing
Type of study: Cross Sectional, Exposure Assessment
Funds: WHO
261 Indonesia
Tomiy Sadjinim, Clinical Epidemiology & Biostatistics Unit, Gadjah Mada University, Administration Building, Jl. Kesehatan, 1 Bypassaria 55281 Collaborators: Gato Sumono, Pertamina, Jakarta, Indonesia

The occupational health epidemiology study in Pertamina Cilacap
To investigate the utility of health care system.
Country: Indonesia
Industry: Petrochemical
Type of study: Descriptive
Time: 1990 - 1992

262 Islamic Republic of Iran
Masih Mirlohi, Department of Public Health and Industrial Medicine, School of Public Health, Isfahan University of Medical Sciences, Isfahan
Collaborators: M. Reza Shahmansouri, School of Public Health, Isfahan University of Medical Sciences, Isfahan, Iran

The incidence of occupational disease in Isfahan enamel workers plants
To study the incidence of occupational disease in enamel workers.
Country: Iran
Hazards: Dust Silica, Lead
Occupation: Enamel Workers
Type of study: Exposure Assessment, Occupational Safety
Time: 1990 - 1991
Funds: Isfahan University of Medical Sciences

263 Islamic Republic of Iran
Mohammed Reza Shahmansouri, Environmental Health, Faculty of Health, University of Isfahan, Marvdasht, Farabi Ave. 8 Ave No 6 Isfahan
Collaborators: Dr. H. Mirlohi, School of Public Health, Isfahan, Islamic Republic of Iran

Ecologic aspects of water pollution by lead in the Isfahan area
Ecologic aspects of lead water pollution in Isfahan area.
Country: Iran
Hazards: Lead
Type of study: Exposure Assessment
Time: 1990
Funds: Isfahan University of Medical Sciences

264 Israel
Joseph H. Abramson, School of Public Health and Community Medicine, Faculty of Medicine, Hebrew University & Hadassah School of Medicine, POB 1172 Jerusalem 91120 Collaborators: Dr. J. Harrington, J.C. Brookdale Institute, Jerusalem, Israel; Dr. J. Geffen & Prof. J. Kark, Hadassah Medical Organization, Jerusalem, Israel

Occupational factors as predictors of future health status
Work-health relationships in a community sample.
Country: Israel
Hazards: Stress Occupational, Retirement
Industry: Many
Occupation: Many
Type of study: Cohort
Funds: Department of Labour and Social Welfare of Israel

265 Israel
Estela Derazane, Institute for Occupational Health, Sackler School of Medicine, University of Tel-Aviv, Tel-Aviv 69978
Collaborators: Dr E. Kozan / Mrs C. Peretz, Institute for Occupational Health, Tel-Aviv, Israel

The attitude towards the finding of concentrations of lead in the blood above the upper limit allowed by law
To investigate the attitude of those responsible for the workers' health to the finding of concentrations of lead in the blood above the upper limit allowed by law.
Country: Israel
Hazards: Lead
Industry: Metals Non Ferrous
Type of study: Cohort
Time: 1990
Funds: The Committee for Research and Prevention in Occupational Safety and Health in Israel

266 Israel
John Goldsmith, Faculty of Health Sciences, Epidemiology of Health Services Evaluation, Ben Gurion University of the Negev, POB 653 Beer Sheva 84120 Collaborators: I. Shoham / H. Vardi, Epidemiology Unit, Beer Sheva, Israel; R. Cohen, Epidemiology Unit, Beer Sheva, Israel / M. Mandel, Israel Meteorological Service, Bet Dagan, Israel

The relation of hot weather to motor vehicle accidents
To determine if there is an increase in the number of traffic accidents on hot days, compared to days without elevated temperature.
Country: Israel
Hazards: Heat, Accidents Traffic
Industry: Transportation
Type of study: Descriptive
Time: 1989 - 1990
Funds: Karen Sapir (Lottery)

267 Israel
John Goldsmith, Faculty of Health Sciences, Epidemiology of Health Services Evaluation, Ben Gurion University of the Negev, POB 653 Beer Sheva 84120 Collaborators: I. Shoham / H. Vardi, Epidemiology Unit, Beer Sheva, Israel; R. Cohen, Epidemiology Unit, Beer Sheva, Israel / M. Mandel, Israel Meteorological Service, Bet Dagan, Israel

Demographic variables associated with childhood cancer
To determine if there are temporal or geographical trends in childhood cancer or differences among Jews, Beduins, or differences by type of community.
Country: Israel
Hazards: Radiation
Type of study: Descriptive
269 Israel
John Goldsmith,
Faculty of Health Sciences, Epidemiology of Health Services
Evaluation, Ben Gurion University of Negev,
POB 653 Beer Sheva 84120
Collaborators: Prof R Carel, Occupational Health Unit,
Faculty of Health, Beer Sheva, Israel

Occupational hazards among Negev workers
To make a systematic description of the hazards to which workers in the region are exposed.

Country: Israel
Hazards: Chemicals, Accidents Occupational, Biologicals
Industry: Many
Occupation: Many
Type of study: Descriptive, Exposure Assessment
Funds: Ministry of Labor

271 Israel
Ayana-Irene Goren,
Research Inst. for Environmental Health, Sackler School of Medicine, University of Tel-Aviv,
Tel-Aviv 69978
Collaborators: Dr Sherf, District Health Officer, Ministry of Health, Ashkelon, Israel

Epidemiological health monitoring in the vicinity of a coal-fired power plant in Ashkelon
Follow-up of schoolchildren, adults with chronic obstructive pulmonary diseases, mortality patterns in the exposed population, and use of sick fund clinics, in order to be able to detect changes in health in time and space.

Country: Israel
Hazards: Air Pollution Outdoor
Type of study: Cohort
Funds: Ministry of Health

273 Israel
Manfred S. Green,
Cardiovascular Research Unit, Occupational Health and Rehabilitation Institute,
P.O. Box 3 Ramaana 43100
Collaborators: Dr S. Melamed, Occupational Health and Rehabilitation Institute, Ramaana, Israel

The Israeli CORDIS project
To evaluate the cardiovascular effects of environmental and occupational stress on industrial workers (early detection of risk factors for cardiovascular disease, with special emphasis on coronary heart disease and cerebrovascular disorders in working population)

Country: Israel
Hazards: Metals Heavy, Noise, Heat, Stress
Industry: Textile, Electronics, Food Processing, Rubber
Type of study: Cohort, Cross Sectional, Exposure Assessment, Ergonomics
Time: 1985 - 1991
Funds: Public Committee

275 Israel
Kurt Leenah,
Institute for Occupational Health, Sackler School of Medicine,
University of Tel-Aviv,
Tel-Aviv 69978
Collaborators: Dr A. Pines, Health Insurance system of General Federation of workers, Tel-Aviv, Israel; Prof E. Kahan, Institute for Occupational Health, Tel-Aviv University, Ramat-Aviv, Israel

Work risk assessment and evaluation of workers right-to-know in Jerusalem Factories
To determine the level of exposure of workers to occupational risks. To evaluate the knowledge of workers about risks at work.

Country: Israel
Hazards: Many
Industry: Small Scale
Type of study: Exposure Assessment
Time: 1990 - 1992
Funds: The Committee for Research and Prevention in Occupational Safety and Health in Israel

277 Israel
John Goldsmith,
Faculty of Health Sciences, Epidemiology of Health Services
Evaluation, Ben Gurion University of Negev,
POB 653 Beer Sheva 84120
Collaborators: Y. Hershman, Soroka Hospital Center, Beer Sheva, Israel

Environmental factors in Parkinson's disease suggested by clustering
Given that in three adjacent kibbutzim there is five-fold excess of Parkinson's disease, how can we identify the most probable environmental exposure factor?

Country: Israel
Hazards: Water Pollution, Manganese
Type of study: Case Control, Cohort
Time: 1988 - 1993

272 Israel
Ayana-Irene Goren,
Research Inst. for Environmental Health, Sackler School of Medicine, University of Tel-Aviv,
Tel-Aviv 69978
Collaborators: Dr Silverberg, Ministry of Health, Tel-Aviv, Israel; Dr Nudel, Ministry of Health, Tel-Aviv, Israel

Epidemiologic health monitoring in Tel-Aviv
Cross-sectional community study, aimed at detecting health hazards associated with community exposure to different levels of air pollution.

Country: Israel
Hazards: Air Pollution Outdoor
Type of study: Cross Sectional
Time: 1990 - 1991
Funds: Israel Electric Corporation, Municipality of Tel-Aviv

274 Israel
Ernesto Kahan,
Institute for Occupational Health, Sackler School of Medicine,
University of Tel-Aviv,
Tel-Aviv 69978
Collaborators: Dr J. Rubok, Health Insurance system of General Federation of workers, Tel-Aviv, Israel; Ms E. Derazze, Institute for Occupational Health, Tel-Aviv University, Ramat-Aviv, Israel

Adverse health effects in workers exposed to different levels of cadmium
To correlate signs and symptoms with levels of exposure to cadmium, time of exposure, and internal dose index.

Country: Israel
Hazards: Cadmium
Industry: Metals Non Ferrous
Type of study: Cross Sectional
Time: 1989 - 1990
Funds: The Committee for Research and Prevention in Occupational Safety and Health in Israel

276 Israel
Shai A. Shivan,
Clinical Epidemiology Unit, The Rambam Medical Center,
6, Alia St. Haifa

An assessment of occurrence of lung disease
To assess occurrence of lung disease.

Country: Israel
Hazards: Air Pollution Outdoor, Petrochemicals, Chemicals
Industry: Petrochemical, Chemical
Type of study: Descriptive, Cross Sectional
Time: 1989 - 1992
An assessment of the implementation of the recommendations made by the Unit of Occupational Hygiene of the Institute for Occup. Health

To examine the extent to which the recommendations of the Occupational Hygiene Unit are implemented and to analyze the reasons for partial or non-implementation.

Country: Israel
Hazard: Chemicals, Physical
Industry: Many
Type of study: Occupational Safety
Time: 1989 - 1990
Funds: The Committee for Research and Prevention in Occupational Safety and Health in Israel

Israel

Health effects of low level exposures to organophosphates

Determine levels of exposure.

Country: Israel
Hazard: Pesticides Organophosphorus Compounds
Industry: Agriculture
Type of study: Descriptive, Exposure Assessment, Occupational Safety,
Time: 1982 - 1992
Funds: WHO

Israel

Road accident epidemiology and prevention

Intervention on speeding and tailgating to reduce death and injury.

Country: Israel
Hazard: Accidents Traffic, Accidents Prevention
Industry: Transportation
Occupation: Drivers
Type of study: Descriptive, Cross Sectional,
Exposure Assessment, Occupational Safety, Intervention
Time: 1987 - 1993
Funds: Foundations

Israel

Ruth Pogrow,
Occupational Nursing, Nursing School, Faculty of Medicine, The Hebrew University - Hadassah,
Ein-Karem Jerusalem 91000

Collaborators: Fourth-year students

Exposure to industrial noise and solvents among workers in a furniture factory

Country: Israel
Hazard: Noise, Solvents
Industry: Manufacturing Furniture
Occupation: Factory Workers
Type of study: Descriptive, Occupational Safety
Time: 1987 -

Israel

Elitha D. Richter,
Unit of Occupational and Environmental Medicine, Hebrew University School of Public Health and Community Medicine,
P.O. Box 1172 Jerusalem 91010

Collaborators: Dr. Joseph M. Shouk, Israel Ministry of Health, Jerusalem, Israel

Sources of radon exposure and lung cancer

Determine sources of exposure, exposure levels in houses of non-smokers, and occurrence of lung cancer.

Country: Israel
Hazard: Radon
Type of study: Case Control, Exposure Assessment, Occupational Safety
Time: 1989 - 1992
Funds: Israel Government

Israel

Samuel Ron,
Occupational Health and Rehabilitation Institute at Loewenstein Hospital,
P.O.B. 432 Rannie, 43 100

Collaborators: Dr. Shlomo Gur, Occupational Health and Rehabilitation Institute, Rannie, Israel

Short- and long-term effects on vision, oculomotor system and psychophysiological variables of workers with visual display terminals

To assess whether there is a decrease in the functional activity of the oculomotor system, visual system, and vigilance in workers who work with visual display terminals.

Country: Israel
Hazard: VDT
Industry: Administration
Occupation: VDT Operators
Type of study: Case Control, Cross Sectional, Ergonomics
Time: 1988 - 1993
Funds: Committee for Prevention and Research in Occupational Health, Ministry of Labour and Social Welfare, Jerusalem, Israel
283 Israel
Ramzi Sanear,
Center for Environmental and Occupational Health Sciences, Birzeit University,
PO Box 14 Bieber, West Bank
Collaborators: Dr. Simon Kastab, Birzeit University, Bir Zeit, West Bank - Via Israel; Sanir Abu al-Haj, Birzeit University, Bir Zeit, West Bank - Via Israel

Exposure to organophosphate pesticides among farm workers in the Jordan Valley - West Bank
Reduction of occupational hazard from the use of pesticides via understanding level of whole blood cholinesterase levels in farmers exposed to organophosphate pesticides, assessing dermal exposure, and performing a KAP (knowledge, attitudes, and practices) survey.

Country: West Bank Palestine
Hazard: Pesticides
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Cohort, Exposure Assessment, Occupational Safety, Ergonomics
Time: 1988 - 1990
Funds: IDRC, University, AMIDEAST

285 Israel
Jerome B. Westin,
Dept. of Medical Ecology, The Hebrew University, Hadassah School of Medicine,
P.O. Box 1172 Jerusalem 91.010
Collaborators: E. Richter, Hebrew University Hadassah, Jerusalem, Israel

Radon concentrations in houses of non-smoking victims of lung cancer in Israel
Study possible link between domestic exposure to radon and lung cancer.

Country: Israel
Hazard: Radon
Type of study: Case Control
Time: 1989 - 1990

287 Italy
Arnto Rotondi,
Environmental Biology, University of Siena,
Via delle Cerchie, 3 Siena 53100
Collaborators: Bacci Eros / Focardi S., Division of Environmental Biology, Siena, Italy; Leontzo C. / Fossi C., Division of Environmental Biology, Siena, Italy

Mercury contamination and human risk and fate of xenobiotics
Evaluate the risk for fishermen and fate of xenobiotics detoxication systems in vertebrates.

Country: Italy
Hazard: Mercury
Industry: Fishing
Occupation: Fishermen
Type of study: Descriptive, Case Control, Occupational Safety
Time: 1972 - 2000
Funds: WHO, UNEP, EEC, Ministry of Education

289 Japan
Minoru Kasuya,
Dept. of Public Health, Toyama Medical and Pharmaceutical University,
Sugimoto 2630, Toyama 930-01
Collaborators: Kazuo Nomiyama, Ichichi Medical School of Medicine, Minami Kofu, Japan; Shijie Liu, School of Public Health, Beijing Medical University, Beijing, China

Health effects of cadmium and its prevention
Health effect of cadmium exposure of cadmium smelting workers.

Country: China
Hazard: Cadmium
Industry: Metals Non Ferrous, Smelter
Occupation: Smelter Workers
Type of study: Descriptive, Exposure Assessment
Time: 1988 - 1990
Funds: Ministry of Education of Japan

290 Japan
Tatsunori Kashiwabara,
National Institute of Industrial Health, Dept. of Experimental Toxicology,
6-21-1, Nagao, Tama-ku, Kawasaki, Kanagawa 214
Collaborators: Prof. Kanamori, Watanabe, Japan, Dean of Occupational health, Mahidol university, Bangkok, Thailand; Prof. Malinee Wongkumanich, Dept. of Occupational health, Mahidol university, Bangkok, Thailand

Occupational health promotion in a textile factory in Thailand
To identify occupational health problems in Thailand. To improve working conditions through workers' participatory approach.

Country: Thailand
Hazard: Noise, Dust
Industry: Textile
Type of study: Cross Sectional, Exposure Assessment, Ergonomics
Time: 1987 - 1992
Funds: Private research fundations
291. Japan
Masatomo Tani,
Occupational Health Service Center, Japan Industrial Safety and Health Association,
35-1 Shiba S-chome, Minato-ku Tokyo 108
Collaborators: H. Cusadlo, Occupational Safety and Health Center, Manila, Philippines

Heavy metal poisoning
To investigate the incidence rate of heavy metal poisoning.

Country: Philippines
Hazard: Metal Heavy
Industry: Mining, Metals Non Ferrous
Type of study: Descriptive, Exposure Assessment
Funds: Japanese Official Development Aids

293. Jordan
Madi T. A. Jaghbir,
Environmental & Occupational Health, Dept. of Community Medicine, Faculty of Medicine, University of Jordan,
Amman
Collaborators: Dr. I. Nazer, Jordan University, Amman, Jordan; Dr. A. Salheb, Jordan University, Amman, Jordan

Evaluation of dimethoate toxicity
To evaluate the exposure of farm workers to pesticides.

Country: Jordan
Hazard: Pesticides
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Exposure Assessment
Time: 1987 - 1990

294. Kenya
Nelson Kiama,
Factories Inspectorate Ministry of Labour
PO Box 40526 Nairobi
Collaborators: Dr. Sakari, Factories Inspectorate, Nairobi, Kenya; Dr. Wambugu, Factories Inspectorate, Nairobi, Kenya

Pesticides: Effects on health of workers in formulating plants
To study effects of pesticides on health of workers exposed.

Country: Kenya
Hazard: Pesticides
Industry: Chemical
Type of study: Descriptive
Time: 1990 -
Funds: Factories Inspectorate, Ministry of Labour

295. Kenya
Mutuku A Mwanthi,
Dept. of Community Health, College of Health Sciences,
University of Nairobi,
Box 19676 Nairobi

Assessment of knowledge, attitudes, and practices of pesticide handling at community level
To assess community awareness, behavior, and practices regarding handling of pesticides by small scale farmers at community level.

Country: Kenya
Hazard: Pesticides
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Descriptive
Time: 1987 - 1990
Funds: IDRC

296. Kenya
Grace Obye,
Medical Research Centre, Kenya Medical Research Institute,
P.O. Box 20752 Nairobi

East Africa Pesticides Network
To assess the nature and magnitude of pesticide poisoning among farm workers.

Country: Kenya
Hazard: Pesticides
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Descriptive, Cross Sectional, Exposure Assessment
Time: 1989 - 1993
Funds: IDRC

297. Kenya
William D.O. Sakari,
Factories Inspectorate Ministry of Labour
PO Box 40526 Nairobi

Assessment of health hazards in small scale industries dealing with lead
To assess occupational health hazard due to lead. To recommend assessment of workers.

Country: Kenya
Hazard: Lead
Industry: Metals Non Ferrous
Type of study: Descriptive
Time: 1989 - 1990
Funds: FINIDA, Factories Inspectorate

298. Kenya
Alexander Wambugu,
Factories Inspectorate Ministry of Labour
PO Box 40526 Nairobi
Collaborators: Dr. Sakari, Factories Inspectorate, Nairobi, Kenya; Dr. Kiama, Factories Inspectorate, Nairobi, Kenya

Noise and its effects on hearing capability
To study effects of noise on hearing capability.

Country: Kenya
Hazard: Noise
Industry: Textile
Type of study: Descriptive
Time: 1990 -
Funds: Factories Inspectorate, Ministry of Labour
299  Kuwait
Mawahbeh Ahou Elazim,
Environment Protection Council, Occupational Health Section,
P.O. Box 24395 Safat, 13104
Collaborators: Lyda Al-Abani, Environmental Protection Department, Kuwait; Mahal Al Delami, Environmental Protection Department, Kuwait

The relationship between indoor biological pollution and allergy
Investigation of the relationship among indoor biological pollution, air-conditioning, and allergy.

Country: Kuwait
Hazard: Dust Allergens, Fungi, Bacteria
Type of study: Cross Sectional
Time: 1989 - 1992

301  Kuwait
Mostafa El Desoky,
Environment Protection Council, Occupational Health Section,
P.O. Box 24395 Safat, 13104
Collaborators: Raja Z. Hassan, Environmental Protection Department, Kuwait; Mahawah Al Elazim / Mohamed Ellahkami, Environmental Protection Department, Kuwait

Follow-up study of pesticide applicators
Follow-up of the health status of pesticide applicators.

Country: Kuwait
Hazard: Pesticides
Industry: Agriculture
Occupation: Pesticide applicators
Type of study: Cohort
Time: 1990 - 1991

302  Malaysia
Mohammad Ismail Yádžz,
Department of Environmental Sciences, Universiti Pertanian Malaysia (UPM), Serdang 43400
Collaborators: Mohammad Faizul Zakaria, Dept. of Environmental Sciences, Universiti Pertanian Malaysia, Malaysia

(1) Indoor air quality monitoring. (2) Personal exposure to environmental pollutants in the work environment
To develop risk assessment associated with particular work environments.

Country: Malaysia
Hazard: Carbon Monoxide, Lead, Dust, Microbiological Agents, Air Pollution Indoor, Air pollution Outdoor
Industry: Transportation, Health Care
Type of study: Exposure Assessment
Time: 1985 -
Funds: Limited local support

303  Mexico
Ivobi Bistien Bustani,
Secretaria Academica, Escuela Mexicana de Medicina,
Fuentes No.31, Col. Tlalpan A.P. 22-271 Mexico 14000

Effects of air pollution over productivity of men

Country: Mexico
Hazard: Air Pollution
Time: -

304  Mexico
Mario Davila,
Departamento de Prevencion de Accidentes y Enfermedades de Trabajo, Instituto Mexicano del Seguro Social (IMSS), Avenida Cuauhtémoc No.330, Mexico, D.F. 06723
Collaborators: Carlos Pérez Luido, Instituto Mexicano del Seguro Social (IMSS), Mexico City D.F., Mexico; Juan Omarenza Samisteban, Instituto Mexicano del Seguro Social (IMSS), Mexico City D.F., Mexico

Impact of preventive measures on toxic effects of organic solvents
To evaluate changes in neurototoxic effects in exposed workers resulting from the adoption of preventive measures.

Country: Mexico
Hazard: Solvents
Industry: Chemical, Manufacturing Paint
Occupation: Paint Production Workers
Type of study: Exposure Assessment
Time: 1990 - 1991

306  Mexico
Humberto Ferraz-Torres,
Atevi Dine, de la Salud en el Trabajo e Inv., Instituto Mexicano del Seguro Social (IMSS), Avenida Cuauhtémoc No.330, Mexico, D.F. 06723
Collaborators: Dr. Bernardo Salazar, Instituto Mexicano del Seguro Social (IMSS), Mexico City D.F., Mexico; Gerardo Espinola, Instituto Mexicano del Seguro Social (IMSS), Mexico City D.F., Mexico

Audiometric study comparing two groups of workers diagnosed with chronic acoustic trauma exposed to different types of loud noises
To establish criteria for the interpretation and assessment of hearing loss due to exposure to loud noises, in order to determine the variations between exposure to stable loud noises and unstable loud noises.

Country: Mexico
Hazard: Noise
Industry: Energy
Type of study: Descriptive, Cross Sectional
Time: 1990 - 1990
Identification of risk factors in disabling arthritis of the spine in male workers in Mexico in 1987

To describe the frequency of the main diagnosed diseases causing disability and to identify and quantify the relative weight of the risk factors associated with paralyzing arthritis of the spine.

Country: Mexico
Time: 1988 - 1990

Blood lead levels in a sample of infants and their mothers in Mexico City

To evaluate blood lead levels in the umbilical cord in a sample of newborns in Mexico City, and to evaluate determinants of blood lead levels.

Country: Mexico
Hazards: Lead
Type of study: Descriptive, Cross Sectional
Time: 1990 - 1991
Funds: Epidemiological Assessment Council/MOH

Distribution of lead levels in fertile women and their under-15 children in the metro-Mexico City area

To evaluate the blood lead levels of fertile women and their under-15 children. To identify the determinants of blood lead.

Country: Mexico
Hazards: Lead
Type of study: Cross Sectional
Time: 1990 - 1991
Funds: MOH and PAHO

Attention problems of first- through third-grade students in a case-control study

To evaluate the relation between attention problems and blood lead levels in first- to third-grade students in the Federal District of Mexico City.

Country: Mexico
Hazards: Lead
Type of study: Descriptive, Case Control, Cross Sectional
Funds: Ministry of Health and Pan American Health Organization (PAHO)

The effect of short-term exposure to high levels of pollutants and the corresponding changes in lung function (PEFR) in adults.

To correlate changes in lung function (PEFR) after changes in concentrations of several environmental pollutants (ozone, sulfur dioxide, nitrogen dioxide, and carbon monoxide).

Country: Mexico
Hazards: Air Pollution Outdoor, Ozone, Sulfur Dioxide, Nitrogen Dioxide, Carbon Monoxide
Type of study: Descriptive
Time: 1991 - 1993

Relationship between length of residence in Mexico City and the flow-volume curve

To relate the length of residence (1 month to several years) in the contaminated atmosphere of D.F. (Federal District) to the possible obstruction of respiratory airways.

Country: Mexico
Hazards: Air Pollution Outdoor
Type of study: Cohort, Cross Sectional
Time: 1989 - 1990
Funds: UAM

Audioimetric profile study of 100 workers of normal hearing

To establish an audiometric profile of individuals with normal hearing.

Country: Mexico
Hazards: Noise
Industry: Many
Occupation: Many
Type of study: Descriptive, Cross Sectional
Time: 1989 - 1990
Funds: Instituto Mexicano del Seguro Social
315 Mexico
Constanza Sánchez,
Dirección de Vlg. Epidemiología de Enfermedades Crónicas Y
Accidentes, Direcc. General de Epidemiología, Secretaría de
Salud,
Anceo Ortega 1221, 1er. piso MEXICO, D.F. 03100
Collaborators: M. Hernandez, Direcc. Grad. Epidemiología,
Mexico City / J. Romieu, ECO OPS, Mexico City, Mexico; A.
Gómez, Secretaría De Educación, Mexico City / C. Riot,
Instituto de Neurología, Mexico City, Mexico
Evaluation of pulmonary health and lead levels in students in
metropolitan Mexico City
To evaluate blood lead levels in students in the Federal
District of Mexico City.
Country: Mexico
Hazards: Lead
Type of study: Cohort
Funds: Epidemiologic Assessment Council/MOH (Consejo Asesor en
Epidemiologia, Secretaría de Salud)

317 Mexico
Amparo Tapia-Curiel,
Laboratorio de Salud Publica, Medicina Preventiva y Social,
Facultad de Medicina, Universidad de Guadalajara,
A.P. 1-4358 Guadalajara 44340
Collaborators: Aracely Rodríguez, Facultad de Medicina,
Universidad de Guadalajara, Guadalajara, Mexico
Working children and health
To study the pathologic status and working conditions of
children who work in Guadalajara, Mexico.
Country: Mexico
Hazards: All
Industry: Manufacturing Shoe, Street Work
Occupation: Shoe Workers, Street Workers
Type of study: Descriptive, Cross Sectional,
Exposure Assessment
Funds: Organización Panamericana de la Salud - PAHO,
Universidad de Guadalajara

319 Mexico
Griselda Uribe-Vazques, MPH,
Laboratorio de Salud Publica, Medicina Preventiva y Social,
Facultad de Medicina, Universidad de Guadalajara,
A.P. 1-4358 Guadalajara 44340
Collaborators: Juan Carlos Ramírez-Rodriguez, Facultad de
Medicina, Universidad de Guadalajara, Guadalajara, Mexico;
Norma Elena Gutierrez de la Torre, Facultad de Medicina,
Universidad de Guadalajara, Guadalajara, Mexico
Women’s Health Problems by Occupation
To identify working conditions which correlate with
workplace injuries, and perceived illnesses among women in
selected occupations with a high percentage of female
workers.
Country: Mexico
Hazards: Stress
Industry: Many
Occupation: Many
Type of study: Descriptive, Cross Sectional
Time: 1988 - 1993
Funds: Organización Panamericana de la Salud (PAHO)

321 Netherlands
Wilm C.M. Zwennis,
UW Medical Biological Laboratory, Occupational Toxicology,
Langeleerdweg 139 Postbus 45 Biljnaik 2280 AA
Collaborators: Mrs F. Barron M.D., UW-MBL, Biljnaik, The
Netherlands
Exposure to lead of children living in different areas of
Nicaragua
To establish the exposure to lead of children (less than
12 years of age) and to propose measures to reduce health
risks.
Country: Nicaragua
Hazards: Lead
Industry: Metals Non Ferrous
Type of study: Cohort, Exposure Assessment
Time: 1986 - 1988

316 Mexico
Miguel A. Santos Díaz,
Pediatría, Iah. Genética, Facultad de Medicina, Universidad
Autonoma de San Luis Potosí,
Av Venustiano Carranza apt. 2405 San Luis Potosí 78 210
Collaborators: Fernando Díaz-Barriga, Fac. de Medicina
UASLP, SLP, Mexico; Mariano Cajis, CINVESTAV-IPN,
Mexico, Mexico / Juan A. Garza, UA Nuevo León, Monterrey
NL, Mexico
Arsenic exposure in children living near smelters
Evaluate the toxicity of exposure to arsenic and cadmium.
Country: Mexico
Hazards: Lead, Arsenic, Cadmium, Zinc
Industry: Metals Non Ferrous, Smelter
Type of study: Descriptive, Case Control, Exposure Assessment
Time: 
Funds: CIID Canada, CONACYT Mexico, SEP Mexico

318 Mexico
George Toledo,
Medicine Human School, Departamento Psicosocial,
10 a, av. sur Calle Central Tuxila Gutierrez 25000
Epidemiology of work-related illnesses in Tuxila Gutierrez
Country: Mexico
Time: -

320 Netherlands
Johannes J. Kolik,
Instituut voor Sociale Geneeskunde, Arbeids-en
Bijzonderenbehandelingen, University of Nijmegen,
Verlengde Groenestraat 75 B-6525 E
Use of pesticides in Peru
Country: Peru
Hazards: Pesticides
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Exposure Assessment, Occupational Safety
Time: - 1989

322 Nicaragua
Rafael Amador,
Universidad Nacional Autónoma Nicaragua, Medicina Preventiva y
Salud Publica, Hospital Escuela "Dr. Oscar D. Rivas",
León
Collaborators: Ingvar Lundberg, Karolinska Institute,
Stockholm, Sweden; Matt Reff, Ministry of Health, Leon,
Nicaragua / Andersson Kjell, Orebro Hospital, Orebro, Sweden
Development of a questionnaire for symptoms of neurotoxicity
in Spanish
To develop a neurobehavioral symptom questionnaire in
Spanish for epidemiological studies and surveillance of
early neurological disturbance in workers.
Country: Nicaragua
Hazards: Pesticides, Lead, Solvents, Mercury
Type of study: Cross Sectional
Time: 1989 - 1990
Funds: SAREC
323 Nicaragua
Rafael Amador,
Universidad Nacional Autonoma Nicaragua, Medicina Preventiva y
Salud Publica, Hospital Escuela “Dr. Esteban Rosales”,
Managua
Collaborators: Ingvar Lundberg, Karolinska Institute,
Stockholm, Sweden; Matt Keiffer, Ministry of Health, Leon,
Nicaragua
Acute neurobehavioral effects on workers exposed long-term to
organophosphates
To identify level of neurological affections in workers
exposed (long term) to organophosphates during spraying
season.
Country: Nicaragua
Hazard: Pesticides Organophosphorus Compounds
Industry: Agriculture, Manufacturing
Occupation: Agricultural Workers, Factory Workers
Type of study: Cross Sectional
Time: 1990 - 1991
Funds: SAREC

324 Nicaragua
Rafael Amador,
Universidad Nacional Autonoma Nicaragua, Medicina Preventiva y
Salud Publica, Hospital Escuela “Dr. Esteban Rosales”,
Managua
Collaborators: Ingvar Lundberg, Karolinska Institute,
Stockholm, Sweden; Matt Keiffer, Ministry of Health, Leon,
Nicaragua
Chronic neurobehavioral effects on workers exposed long-term to
organophosphates
To identify level of chronic neurological affections in
workers exposed (long term) to organophosphates during
spraying season.
Country: Nicaragua
Hazard: Pesticides Organophosphorus Compounds
Industry: Agriculture, Manufacturing
Occupation: Agricultural Workers, Factory Workers
Type of study: Cohort
Funds: SAREC

325 Nicaragua
Aurora Aragon,
Universidad Nacional Autonoma Nicaragua, Medicina Preventiva y
Salud Publica, Hospital Escuela “Dr. Esteban Rosales”,
Managua
Collaborators: Ake Thoern, Karolinska Institute,
Stockholm, Sweden; Rodolfo Pena, Dpto Medicina Preventiva
y Salud Publica, Leon, Nicaragua
Lung disorders in a nationalized multinational gold mine,
Mina de Limon, Nicaragua
Creation of baseline knowledge of pulmonary problems and
conduct of an adequate health program, giving priority to
workers in higher exposure to the risk factors.
Country: Nicaragua
Hazard: Air Pollution Outdoor, Dust
Industry: Mining Gold
Type of study: Descriptive, Cross Sectional
Time: 1985 - 1989
Funds: SAREC

326 Nicaragua
Nestor Castro,
Ministry of Health, National Autonomous University, Preventive
Medicine,
Viejo Hospital San Vicente Leon
Collaborators: Rob McConnell, Mount Sinai Medical Center,
NY, USA; Kjell Andersson, Orebro Medical Center, Orebro,
Sweden; Christer Hogshted, Karolinska Institute,
Stockholm, Sweden
Parasit exposure and pulmonary disease
To evaluate symptoms and spirometric function among
parasit-exposed backpack sprayers.
Country: Nicaragua
Hazard: Pesticides Parasit
Industry: Agriculture
Occupation: Pesticide Applicators
Type of study: Cross Sectional
Time: 1987 - 1990
Funds: SAREC

327 Nicaragua
Nestor Castro,
Ministry of Health, Department of Hygiene and Epidemiology,
MINSA II Region Leon
Collaborators: Rob McConnell, Mount Sinai Medical Center,
NY, USA; Kjell Andersson, Orebro Medical Center, Orebro,
Sweden; Christer Hogshted, Karolinska Institute,
Stockholm, Sweden
Chronic exposure to parasiat and respiratory impairment
To study the effect on lung function from chronic
parasit exposure.
Country: Nicaragua
Hazard: Pesticides Parasit
Industry: Agriculture
Occupation: Agricultural workers
Type of study: Case Control, Cross Sectional
Time: 1988 - 1990
Funds: SAREC

328 Nicaragua
Juan Centeno Chavarria,
Universidad Nacional Autonoma de Nicaragua, Preventive
Medicine, Hospital Escuela Oscar D. Rosales Leon
Collaborators: Kjell Andersson, Orebro Medical Center,
Orebro, Sweden
Validation of a general questionnaire on occupational hazards
for Nicaraguan workers
To design and test a general occupational health
questionnaire for workers.
Country: Nicaragua
Industry: Many
Type of study: Descriptive, Exposure Assessment,
Validation Study
Time: 1989 - 1990
Funds: SAREC

329 Nicaragua
Jose Jenkins Moller,
Organizacion Panamericana de la Salud, OPS/OMS,
Carretera la Sabana A.P. 1309 Managua
Environmental health hazards in Central America
To determine environmental health hazards in Central
America.
Country: Belize, Honduras, El Salvador, Nicaragua, Costa Rica,
Panama
Hazard: All
Type of study: Exposure Assessment, Occupational Safety
Time: 1990 - 1994
Funds: Sweden, Norway
331  Nicaragua
Carlos Quintero G.,
Universidad Nacional Autonoma de Nicaragua, Department of Physiology,
Leon
Collaborators: A. Aragon, UNAN, Leon, Nicaragua; Kiell Anderson, Orebro Medical Center, Orebro, Sweden

Reference values for lung function in healthy Nicaraguan workers, 1989
To obtain reference values.

Country: Nicaragua
Type of study: Descriptive, Cross Sectional
Time: 1987 - 1990
Funds: SAREC

333  Nigeria
Ude A. Adeoluwa,
Dept. of Environmental Health and Epidemiology, Faculty of Health Science, Il-e-Ife, Obafemi Awolowo University, Ile-Ife

Environmental factors in the endemicity of waterborne diseases in Il-e-Ife, Nigeria
To identify socio-cultural habits that contribute to poor sanitary practice that perpetuate the transmission of some waterborne diseases.

Country: Nigeria
Hazards: Bacteria, Water Pollution
Industry: Breweries
Type of study: Descriptive
Time: 1989 - 1990
Funds: Utilization of university departmental materials.

335  Nigeria
Michael C. Asuzu,
Dept. of Preventive and Social Medicine, University College Hospital, University of Ibadan,
P.M.B. 5116 Ibadan
Collaborators: Dr. A. Ogundiran, Institute of Occupational Health, Oyo State Ministry of Health, Ibadan, Nigeria

Low back ache among government-employed workers in Ibadan, Nigeria
To find out the prevalence and distribution of low back ache among government-employed workers with various job descriptions, its determinants and effects on job efficiency of workers.

Country: Nigeria
Hazards: Cumulative Trauma
Industry: Administration
Occupation: Government Workers
Type of study: Cross Sectional, Ergonomics
Time: 1990 - 1990

337  Nigeria
George O.U. Oleru,
Occupational & Environmental Health, Dept. of Community Health, College of Medicine, University of Lagos,
P.M.B. 12003 Lagos

Assessment of dose-effect associations from exposures in Nigerian industries
To establish dose-effect associations of diverse exposures to the Nigerian worker. Establish baseline data to further evaluate occupational risks.

Country: Nigeria
Hazards: Chemicals, Dust Cement, Dust Asbestos, Metals Heavy, Noise
Industry: Manufacturing, Metals Non Perous
Occupation: Factory Workers
Type of study: Cross Sectional, Exposure Assessment, Occupational Safety
Time: 1978 -

332  Nicaragua
Carlos Quintero G.,
Universidad Nacional Autonoma de Nicaragua, Department of Physiology,
Leon
Collaborators: Kiell Anderson, Orebro Medical Center, Orebro, Sweden

Validation of a respiratory questionnaire for Nicaraguan population
To design and test a standardized respiratory questionnaire.

Country: Nicaragua
Type of study: Validation Study
Time: 1989 - 1990
Funds: SAREC

334  Nigeria
Simon Asogwa,
Occupational Health, Anambra State University of Technology, College of Health Sciences, P.M.B. 01660 Enugu

A survey on the role of alcohol in road traffic accidents in Nigeria

Country: Nigeria
Hazards: Accidents Traffic, Accidents Prevention, Alcohol Drinking
Industry: Transportation
Occupation: Drivers
Time: -

336  Nigeria
Tunde Awofeso,
Occupational Health and Safety, Environmental Protection and Safety, Nigerian National Petroleum Corporation, S.Ways Road Apapa Lagos

Safety and environmental auditing (noise level mapping, hazardous chemicals)
Database acquisition for surveillance scheme.

Country: Nigeria
Hazards: Noise, Chemicals
Industry: Petrochemical
Type of study: Case Control, Cross Sectional, Exposure Assessment, Occupational Safety
Time: 1988 - 2000
Funds: NNPC

338  Nigeria
George O.U. Oleru,
Occupational & Environmental Health, Dept. of Community Health, College of Medicine, University of Lagos,
P.M.B. 12003 Lagos

Community respiratory morbidity and lung function as function of distance from cement factories
To determine how the siting of industries (cement production) affects respiratory morbidity and lung function. To change policy of location of industries close to population centers.

Country: Nigeria
Hazards: Dust Cement
Industry: Cement
Type of study: Descriptive, Cross Sectional, Exposure Assessment
Time: 1989 - 1992
339 Nigeria
Mynepalii K.C. Sridhar,*
Dept. of Preventive and Social Medicine, College of Medicine,
University of Ibadan,
Ibadan
Collaborators: W.R. Brieger

Types of cooking fuel and possible sources of environmental air pollution in a rural set-up in Nigeria
To relate fuel use pattern and respiratory infections.

Country: Nigeria
Hazards: Air Pollution Indoor, Respiratory
Type of study: Descriptive
Time: 1988 - 1989

340 Nigeria
Mynepalii K.C. Sridhar,*
Dept. of Preventive and Social Medicine, College of Medicine,
University of Ibadan,
Ibadan
Collaborators: R.O. Bolarinwa

Occupational hazards in steel rolling mills in Nigeria
To give safety education to workers based on their knowledge, attitudes and practices in the industry.

Country: Nigeria
Hazards: Chemicals, Heat, Stress
Industry: Metals Ferrous
Occupation: Steel Workers
Type of study: Descriptive, Exposure Assessment,
Occupational Safety
Time: 1985 - 1986

341 Nigeria
Mynepalii K.C. Sridhar,*
Dept. of Preventive and Social Medicine, College of Medicine,
University of Ibadan,
Ibadan
Collaborators: M.C. Asucu

Effect of "Harmattans" dust on the disease pattern in a rural community in southern Nigeria
To explain certain types of diseases which are predominant during dry period.

Country: Nigeria
Hazards: Dust
Type of study: Descriptive, Cross Sectional
Time: 1989 - 1990

342 Nigeria
Mynepalii K.C. Sridhar,*
Dept. of Preventive and Social Medicine, College of Medicine,
University of Ibadan,
Ibadan
Collaborators: J.I. Mbanugo

Prevalence of methemoglobin in infants in Eastern Nigeria
To study the relation between dietary nitrate levels and methemoglobin levels in infants.

Country: Nigeria
Hazards: Nitrates
Type of study: Cross Sectional
Time: 1985 - 1986

343 Oman
Margaret Northway,
Department of Physiology and Pharmacology, College of Medicine, Sultan Qaboos University,
P.O. Box 32485 Muscat, Sultanate of Oman
Collaborators: Goger Green / Naida Buena, Royal Hospital, Muscat, Oman; Said Al Yahyae, SQU, Muscat, Oman

Gastric Cancer in Oman
Determine distribution of cases and investigate predisposing risk factors.

Country: Oman
Industry: Fishing
Occupation: Fishermen
Type of study: Descriptive, Case Control, Cross Sectional
Time: 1989 -

344 Pakistan
Mahmuda Mubasher,
Environmental & Occupational Health, Department of Community Medicine, Aliaba Iqbal Medical College,
Canal Park Lahore 54500

Environmental correlates of disease causation in an urban slum and rural area, Lahore, Pakistan
Fill in the gap in the knowledge and suggest measures for the control of some of the health problems with environmental sanitation in specific localities.

Country: Pakistan
Hazards: All
Occupation: Agricultural Workers, Factory Workers
Type of study: Descriptive, Cross Sectional
Time: 1989 - 1990

345 Pakistan
Najeeba Saleem,
Public Health Division, National Institute of Health, Islamabad

To monitor environmental health hazards in water and air
To monitor chemical pollution in air and water.

Country: Pakistan
Hazards: Air Pollution Outdoor, Water Pollution, Chemicals
Type of study: Exposure Assessment
Time: 1990 -
Funds: WHO

346 Pakistan
Mohammad Zahir Shah,
Dept. of Community Medicine, Khyber Medical College,
Peshawar
Collaborators: Dr G. Sarwar, Khyber Medical College, Peshawar, Pakistan; Dr A. Rahman, Khyber Medical College, Peshawar, Pakistan

Air pollution in Peshawar
To study air pollution due to motor vehicle exhausts and consumption of fuel, and its effects on the health of population.

Country: Pakistan
Hazards: Air Pollution Outdoor
Type of study: Descriptive
Time: 1990 - 1990
347 Paraguay
Victor Ricardo Duarte Piatelli,
Hygiene and Security of Occupation, Ministry of Justice and Work.

Assistance:
Collaborators: Roberto Krickovich, OPS/OMS, Asuncion, Paraguay; Plinio Duarte, OPS/OMS, Asuncion, Paraguay

Study on primary health care models for the health protection and promotion of underprivileged working populations in Paraguay.

Know work characteristics and analyze situations of risk in peripheral areas of the capital city and establish appropriate strategies of prevention and educational methodologies in health and occupation.

Country: Paraguay
Hazard: All
Industry: Many
Type of study: Descriptive, Cross Sectional, Exposure Assessment, Occupational Safety
Time: 1989 - 1990
Funds: WHO. Technical Cooperation Accords

348 Peru
Wellington Chumbe Albarnoz,
Normas y Investigaciones, Instituto Nacional de Salud. Occupational (INSO), Lima

Las Amapolas 350 Lima 14
Collaborators: R.M. Chavez, Instituto Nacional Salud Occupational, Lima, Peru; Renato Espinosa L. / Gustavo Medina, Instituto Nacional Salud Occupational, Lima, Peru

Epidemiological situation of saturnism (lead intoxication) of fringe workers, Lima, Peru.

To determine the workers health status in the informal industry. Heavy metals, lead recuperation to produce bauxite. To determine the prevalence of saturnism. To propose intervention and control strategies.

Country: Peru
Hazard: Metals Heavy, Lead, Solvents
Industry: Metals Non Ferrous, Smelter
Occupation: Battery Workers, Smelter Workers
Type of study: Descriptive, Cross Sectional, Exposure Assessment
Time: 1990 - 1991
Funds: OSHA

349 Philippines
Ms. Cristina Cobantog,
Dept. of Preventive and Community Medicine, Ramon Magsaysay Memorial Medical Centre, University of the East Aurora Boulevard Quezon City 1108

Collaborators: Medical Staff of the Occupational Safety and Health Center, Dilliman, Quezon City, Philippines

Biological lead levels among exposed workers.

To determine the biological lead concentrations and identify factors contributing to differences in concentrations.

Country: Philippines
Hazard: Lead
Industry: Metals Non Ferrous, Manufacturing Battery, Manufacturing Paint
Type of study: Descriptive
Time: 1990 - 1991

350 Philippines
Natnadai Chipongian,
Occupational Safety and Health Center, Health Control Division, North Avenue, Science Road Quezon City 1100

Collaborators: Dr. Casado / Dr. Yu-Shin / Dr. Somera-Cucuco, Occupational Safety and Health Center, Quezon City, Philippines; Dr. Paz Reyes / Dr. Villanueva / Dr. Ortiga, Occupational Safety and Health Center, Quezon City, Philippines

A prevalence study of pneumoconiosis in four industrial establishments.

To determine the prevalence of pneumoconiosis and silicobrochitis.

Country: Philippines
Hazard: Dust Silica
Industry: Mining, Bottling, Cement, Ceramics
Type of study: Cross Sectional, Exposure Assessment
Time: 1988 - 1989
Funds: OSHC

351 Philippines
Agnes Ramos,
Occupational Safety and Health Center, Environmental Control Division, North Avenue, Science Road Quezon City 1100

Survey of work environment of paint and printing industry.

To identify and assess the degree of potential environmental hazards encountered by painting and printing workers and to establish control measures for the improvement of the workplace in these industries.

Country: Philippines
Hazard: Solvents, Noise, Lead
Industry: Printing, Painting
Type of study: Exposure Assessment
Time: 1989 - 1989

352 Philippines
Agnes Ramos,
Occupational Safety and Health Center, Environmental Control Division, North Avenue, Science Road Quezon City 1100

Survey of work environment of ceramics industry in metro Manila.

To identify and assess the degree of potential environmental hazards encountered by ceramics workers and to establish control measures for the improvement of the workplace in the industry.

Country: Philippines
Hazard: Dust, Noise, Heat
Industry: Ceramics
Occupation: Ceramics Workers
Type of study: Exposure Assessment

353 Philippines
Lisa C. Seoera,
Dept. of Environmental and Occupational Health, College of Public Health, Univ. of the Philippines Manila. 625 Pedro Gil Street B-1A 460 Manila 1001

Collaborators: Dr. Ancheta, Non Communicable Disease Services, Department of Health, Manila, Philippines

National occupational health survey, phase I - National Capital Region (NCR)

Country: Philippines
Hazard: Accidents Occupational, Stress Occupational, Chemicals, Biologicals
Industry: Many
Occupation: Many
Type of study: Descriptive, Cross Sectional, Exposure Assessment, Occupational Safety, Ergonomics
Time: 1989 - 1990
Funds: Department of Health, Philippines

354 Philippines
Ronald Subida,
Department of Environmental and Occupational Health, College of Public Health, University of the Philippines, 625 Pedro Gil at. Ermita, Manila 1000

Collaborators: Dr. Lovina / Dr. Subida / Prof. Tumay, University of the Philippines - College of Public Health, Manila, Philippines

A case-control study, review of records, & health facility surveillance to examine effects of triphenyl-tin & other pesticides used on rice.

Explore the relationship between pesticide exposure and spontaneous abortion and teratogens.

Country: Philippines
Hazard: Pesticides, Triphenyl Tin
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Case Control
Time: 1990 - 1991
Funds: UN-FAO
Environmental health surveillance in an industrial estate in Leyte, Philippines, and its immediate vicinity.

Country: Philippines
Hazards: All
Time: -

Professional and maritime medicine-neuropsychophysiology

To estimate chosen psychic and physical parameters of a fisherman. To describe saturated diving system. To modify energetic load, influence on occupational work.

Country: Poland
Industry: Fishing
Type of study: Occupational Safety, Ergonomics, Clinical
Time: 1985 - 1990
Funds: Ministry of Health

Thurstonian scales for measurement of mental workload

To develop methods for measurement of mental workload in six dimensions: intellectual problems, monitoring, risk, responsibility, interindividual conflicts, time pressure.

Country: Poland
Hazards: Stress Occupational
Occupation: Managerial Staff
Type of study: Methodological
Time: 1987 - 1990

Labor protection against electric and magnetic fields (1-100 KHz)

To propose criteria and standards for limiting occupational exposure; to solve problems related to design, calibration, and use of field intensity measuring devices.

Country: Poland
Hazards: Electricity, Electromagnetic Fields, VDT
Industry: Energy
Occupation: Energy Workers, VDT Operators
Type of study: Descriptive, Exposure Assessment, Occupational Safety, Ergonomics
363 Poland
Zefia Makowska,
Dept. of Work Psychology, Nofer’s Institute of Occupational Medicine,
Teresy 8 Post Box 199 Lodz, 90-950
Collaborators: Sprzaniecka E, Kluge G., Nofer’s Institute of Occupational Medicine, Lodz, Poland; Srodekiewska J., Hanke W., Nofer’s Institute of Occupational Medicine, Lodz, Poland
Mental workload of managerial staff in industry: determining factors and effects
To assess negative effects of mental workload; to develop psychological criteria of personal selection.
Country: Poland
Hazards: Stress Occupational Industry: Textile
Occupation: Managerial Staff
Type of study: Exposure Assessment

365 Poland
Zygmunt Starzyński,
Dept. Epidemiology and Statistics, Institute of Occupational Medicine,
Teresy 8 199 Lodz, 90-950
Occupational exposure to some chemicals and skin cancer
To test the hypothesis that exposure to polycyclic hydrocarbons in the workplace has an important influence on the incidence of skin cancer in an industrialized city in Poland.
Country: Poland
Hazards: Chemicals, Polycyclic Hydrocarbons
Type of study: Case Control
Time: 1986 - 1990

367 Poland
Neonila Szeszenia-Dabrowska,
Dept. Epidemiology and Statistics, Institute of Occupational Medicine,
8 Teresy Street P.O. Box 199 Lodz, 90-950
Collaborators: U. Wilczenkiewicz / W. Szymczak / T. Kaczmerek, Institute of Occupational Medicine, Lodz, Poland; W. Smirnovitch, All-Union Cancer Research Center, Moscow, USSR
Cancer mortality among rubber workers
Evaluation of mortality, especially due to malignant neoplasms, in rubber worker cohorts, according to profession, exposure, age at first exposure, and length of service.
Country: Poland
Hazards: Chemicals, Styrenes, Antioxidants, Nitroso Compounds, Vulcanizing Agents, Blowing Agents
Industry: Rubber
Occupation: Rubber Workers
Type of study: Cohort, Cross Sectional
Time: 1986 - 1995
Funds: Government Project

369 Portugal
Ramiro Avila,
Servico Universitario Pneumologia, Universidade Nova de Lisboa,
Hospital de Palido Valente, Faculdade de Medicina, Alameda das Linhas de Torres 117 Lisboa 1700
Collaborators: Nelson Diogo, Hospital de Palido Valente, Lisboa, Portugal; Luisa Vieira, Hospital de Palido Valente, Lisboa, Portugal
Study of human allergic reactions to grain and its derivatives
To study and evaluate the influence of grain dust and its derivatives in humans.
Country: Portugal
Hazards: Dust Allergens, Dust Grain
Industry: Agriculture, Food Processing
Occupation: Grain Workers, Bakery Workers, Flour Mill Workers
Type of study: Descriptive, Exposure Assessment,
Occupational Safety
Time: 1987 - 1990

364 Poland
Damiana Roman,
Central Institute for Labour Protection, Ergonomic Department, Centralny Instytut Ochrony Pracy,
Tambka 1 Warsaw, 00-021
Operator stand analysis
To find out the most convenient arrangement of control elements.
Country: Poland
Type of study: Ergonomics
Time: 1987 - 1990

366 Poland
Zygmunt Starzyński,
Dept. Epidemiology and Statistics, Institute of Occupational Medicine,
Teresy 8 199 Lodz, 90-950
Analysis of the incidence of occupational diseases in Poland
Epidemiological evaluation of occupational diseases in Poland.
Country: Poland
Type of study: Descriptive
Time: 1970-

368 Poland
Neonila Szeszenia-Dabrowska,
Dept. Epidemiology and Statistics, Institute of Occupational Medicine,
8 Teresy Street P.O. Box 199 Lodz, 90-950
Collaborators: U. Wilczenkiewicz / W. Szymczak, Institute of Occupational Medicine, Lodz, Poland; W. Szymczak, Institute of Occupational Medicine, Lodz, Poland
Evaluation of Cancer Risk in Asbestos Workers in Poland
Evaluation of cancer risk among asbestos workers employed in period 1945-1973; identification of groups of high cancer risk, according to industrial process, concentration of dust, and length of service.
Country: Poland
Hazards: Dust Asbestos
Occupation: Asbestos Processing Workers
Type of study: Cohort, Exposure Assessment
Time: 1980 - 1993
Funds: Government Project

370 Portugal
Salvador Massano Cardoso,
Instituto de Higiene e Medicina Social, Faculdade de Medicina, Universidade de Coimbra,
Caimbra 3049
Collaborators: S. Cardoso, Instituto Higiene e Medicina Social, Coimbra, Portugal;  F. Arenda, C.T.T.
Telecomunicacoes de Portugal, Lisboa, Portugal
Clinical pathologic description of a telecommunication enterprise
General description of population, by age, sex, professional qualifications. Pathologic description: number of ill persons, morbidity, absenteeism, causes of diseases.
Country: Portugal
Hazards: All
Industry: Communication
Type of study: Descriptive, Cross Sectional
Time: 1989 - 1990
371  Portugal
A. Sérgio S.R. Miguel,
Produção e Sistema (Systems and Production), Universidade do
Minho,
Largo de Papa Braga 4719

Study on the efficacy of personal hearing protection in
industrial environments.
Hearing loss evaluation as a function either of exposure
time or noise level. Influence of personal hearing
protection.

Country: Portugal
Hazards: Noise
Industry: Textile, Chemical, Food Processing, Manufacturing
Type of study: Case Control, Exposure Assessment
Time: 1989 - 1992

372  Republic of Korea
Chul-Whan Cha,
Institute for Environmental Health and Dept. of Preventive
Medicine, Medical College, Korea University,
2-4 Mungyo-gu-dong Seoul 110-522
Collaborators: Yong-Tae Yum, Inst. for Env. Health & Dept.
of Preventive Medicine, Medical College, Korea Univ.,
Korea; Kwang Jong Kim, Inst. for Env. Health & Dept. of
Preventive Medicine, Medical College, Korea Univ., Korea

Study of working processes and health risk assessment on
mercury handling facilities in Korea
(1) Detect the sources of contamination, investigate the
distribution of mercury contamination according to the
working processes, and evaluation of biological monitoring
index for workers. (2) Intervention study on improvement of
the working environment.

Country: Korea
Hazards: Mercury
Industry: Manufacturing
Occupation: Fluorescent Lamp Manufacturing Workers
Type of study: Cohort
Funds: Government (Korea Research Foundation)

373  Republic of Korea
Chul-Whan Cha,
Institute for Environmental Health and Dept. of Preventive
Medicine, Medical College, Korea University,
2-4 Mungyo-gu-dong Seoul 110-522

Collaborators: Yong-Tae Yum, Inst. for Env. Health & Dept.
of Preventive Medicine, Medical College, Korea Univ.,
Korea; Kwang Jong Kim, Inst. for Env. Health & Dept. of
Preventive Medicine, Medical College, Korea Univ., Korea

Study of association between noise from manufacturing machines
and noise-induced deafness
(1) Investigate noise characteristics of manufacturing
machines (2) Suggest basic principles for the improvement
of noisy environments (3) Suggest preventive management
of noise deafness.

Country: Korea
Hazards: Noise, Accidents Prevention
Industry: Manufacturing Automobile, Forestry, Textile, Chemical
Occupation: Many
Type of study: Cohort
Time: 1990 - 1990
Funds: Government (Korea Research Foundation)

374  Republic of Korea
Byung-Mann Cho,
Preventive Medicine, College of Medicine, Pusan National
University, 10, I-ga, Ami-dong, Seo-gu Pusan 602-739

Subjective symptoms and urinary excretion of hippuric acid in
toluene exposed female workers
To investigate correlation between subjective symptoms and
urinary excretion of hippuric acid that is commonly
used for biological monitoring of exposure to toluene.

Country: Korea
Hazards: Toluene, Solvents
Industry: Manufacturing Shoe
Type of study: Cross Sectional
Time: 1990 - 1990

375  Republic of Korea
Kyu Sang Cho,
Catholic Industrial Medical Center, Catholic Medical College,
505 Bangpo-Dong, Socho-Ku Seoul 137-701
Collaborators: Seun-Hun Lee, Catholic University Medical
College, Seoul, Korea; Hyoungs Park, Catholic University
Medical College, Seoul, Korea

Evaluation of occupational health service system
To evaluate efficiency, effectiveness, and impact of
occupational health care service delivery systems on
various aspects of concerns.

Country: Korea
Industry: Manufacturing
Type of study: Evaluation
Time: 1990 - 1992
Funds: The International Development Research Center and the
Catholic Industrial Medical Center

376  Republic of Korea
Soo-Hun Cho,
Environmental Medicine & Toxicology, Dept. of Preventive
Medicine, College of Medicine, Seoul National University,
28 Yunkun-Dong, Songpa-gu Seoul 110-744
Collaborators: Seol-Heui Hon, Chungbuk National
University, College of Medicine, Cheongju, Korea

Possibility of cadmium poisoning in a zinc galvanizing factory
To evaluate the possibility of cadmium poisoning due to a
zinc galvanizing process.

Country: Korea
Hazards: Cadmium, Zinc
Industry: Metals Non Ferrous
Occupation: Zinc Galvanizing Workers
Type of study: Cohort, Exposure Assessment
Time: 1988 - 1990
Funds: Korea Occupational Health Association

377  Republic of Korea
Soo-Hun Cho,
Environmental Medicine & Toxicology, Dept. of Preventive
Medicine, College of Medicine, Seoul National University,
28 Yunkun-Dong, Songpa-gu Seoul 110-744
Collaborators: Soel-Heui Hon, Chungbuk National
University, College of Medicine, Cheongju, Korea

Serious decompression sickness among Korean divers (diving
fishermen): outbreak and follow-up
To provide basic data for the establishment of adequate
measures for prevention and management (including
treatment) of decompression sickness.

Country: Korea
Hazards: Barometric Pressure Change
Industry: Fishing
Occupation: Shellfish Divers
Type of study: Descriptive, Cohort
Time: 1987 - 1992
Funds: Korea Occupational Health Association

378  Republic of Korea
Choe Kyung Chung,
Department of Preventive Medicine, Catholic University Medical
College,
62 Young-Dong, Yongdungpo-Gu Seoul 150-010
Collaborators: Jong Wan Koo, Catholic University Medical
College, Seoul, Korea

Lung volumes in coal workers' pneumoconioses
To evaluate respiratory impairment of miners by the lung
volumes according to the radiographic category of
pneumoconioses.

Country: Korea
Hazards: Dust Coal
Industry: Mining Coal
Occupation: Miners Coal
Type of study: Exposure Assessment
Time: 1990 - 1991
Funds: Catholic Medical Center
379 Republic of Korea
Jong-Hai Chung,
Dept. of Preventive Medicine and Public Health, College of Medicine, Yeungnam University, 
317-1 Daemyung-Dong Taegu 705-600
Collaborators: Pock Soo Kang, College of Medicine, Yeungnam University, Taegu, Korea; Jun Sukong, College of Medicine, Yeungnam University, Taegu, Korea
Blood lead concentration of taxi drivers in Taegu, Korea
To investigate the blood lead concentration, its correlation factors and influence on taxi drivers.
Country: Korea
Hazard: Lead
Industry: Transportation
Occupation: Drivers
Type of study: Cross Sectional, Exposure Assessment
Time: 1988 - 1990

380 Republic of Korea
Dai Yong Hong,
Dept. of Preventive Medicine, College of Medicine, Gyeongsang National University
92 Chilam-dong Kyungsangnam-do Jinju 660-280
Collaborators: Hyun Rim Choi, Kyunghee Medical College, Seoul, Korea
A study on the improvement of lead screening test in lead-exposed workers
To improve lead screening test in lead-exposed workers.
Country: Korea
Hazard: Lead
Industry: Metal Non Ferrous, Electronics, Printing, Manufacturing Battery
Occupation: Battery Workers, Electronics Workers, Printers
Type of study: Descriptive, Exposure Assessment
Time: 1989 - 1990
Funds: Ministry of Education attached to the National Academy of Science & Promotion

381 Republic of Korea
Do Kyeon Kim,
Department of Preventive Medicine and Public Health, College of Medicine, Pusan National University, 
10, I-ga. Ami-dong, Seo-gu Pusan 602-739
Frequency of sister chromatid exchange in chromium-exposed workers
To determine the frequency of sister chromatid exchange in workers exposed to chromium and compare with the frequency in other workers exposed to lead, and organic solvents.
Country: Korea
Hazard: Chromium
Industry: Manufacturing
Type of study: Cross Sectional
Time: 1990 - 1990

382 Republic of Korea
Hyung-Suk Kim,
Dept. of Preventive Medicine, School of Medicine, Kyung Hee University, 
Seoul 130-701
Environmental Stress
To study the stress situation.
Country: Korea
Hazard: Stress Environmental
Type of study: Exposure Assessment
Time: 1990 - 1993

383 Republic of Korea
Jooyoun Kim,
Industrial Medicine Department, Institute of Industrial Medicine, Dong-A University, 
13-ga. Tongdarya-dong, So-gu Pusan 602-103
Collaborators: Do Kyeon Kim, Dept. of Preventive Medicine, College of Medicine, Daegu, Korea; Dae Yong Hong, Institute of Industrial Medicine, Jinju, Korea
A study on the levels of personal exposure associated with occupation to nitrogen dioxide using palme's tube among Koreans
To update the assessments of four urban indoor and vehicle road nitrogen dioxide concentrations and personal nitrogen dioxide levels by job groups.
Country: Korea
Hazard: Air Pollution Indoor, Air Pollution Outdoor, Nitrogen Dioxide
Type of study: Descriptive, Exposure Assessment
Time: 1988 - 1990
Funds: Non Directed Research Fund of the Korea Research Foundation, 1989.

385 Republic of Korea
Yang Ok Kim,
Department of Preventive Medicine, Chonnam National University Medical School, 
5 Hohak-dong, Dong-Ku Kwangju 501-190
Collaborators: Jae Shin Park, Chonnam University Grad. School, Kwangju, Korea; In Hyun Song, Chonnam Univ. Med. School, Kwangju, Korea / Sung Nam Park, Kwangju Industrial Health Center, Kwangju, Korea
Epidemiological survey on anemia in women workers
To determine blood hemoglobin status of women workers by occupation, age, work time, family status, eating habits, and menstrual condition.
Country: Korea
Type of study: Cross Sectional
Time: 1990 - 1991

386 Republic of Korea
Yang Ok Kim,
Department of Preventive Medicine, Chonnam National University Medical School, 
5 Hohak-dong, Dong-Ku Kwangju 501-190
Collaborators: Sung Nam Park, Kwangju Industrial Health Center, Kwangju, Korea
Epidemiological study on liver function of male workers
Objective signs of liver dysfunction (ALT, AST activity) among workers, by occupation, exposure to chemicals, and alcohol drinking habit.
Country: Korea
Hazard: Chemicals, Alcohol Drinking
Type of study: Cross Sectional
Time: 1990 - 1991
387 Republic of Korea
Jong Sub Lee,
Dept. of Preventive Medicine and Public Health, School of Medicine, Wonkwang University,
344-2 Sinpyung-dong, Chonlupuk-do I r i City 570-079
Collaborators: Young Kyum Ahn, School of Medicine, Yonsei University, Wonju City, Korea

Effects of water pollution on crops, aquatic organisms, and inhabitants' health along Man-Gyung area
To contribute to water pollution preventive measures.

Country: Korea
Hazard: Water Pollution
Industry: Agriculture, Fishing
Type of study: Case Control
Funds: Korea Science Foundation

389 Republic of Korea
Seung Han Lee,
Catholic Industrial Medical College,
62 Yeleo-dong, Yeongdung-po-ku Seoul 150-010

Combined effect of simultaneous exposure to benzene and its derivatives on metabolism
To examine effects of exposure to toluene and xylene with benzene in urinary metabolic excretion and organ pathology. To compare them with the effect of single exposure to each solvent, and to evaluate changes in adverse effects.

Country: Korea
Hazard: Solvents, Benzene
Type of study: Exposure Assessment
Time: 1987 - 1990

391 Republic of Korea
Seung Han Lee,
Catholic Industrial Medical College,
62 Yeleo-dong, Yeongdungpo-ku Seoul 150-010
Collaborators: J.W. Koo, Catholic University Med. College, Seoul, Korea

Effects of VDT work on the eye and vision
To study the effect of VDT work on accommodation of the eye, with special reference to VDT display in Korean alphabets.

Country: Korea
Hazard: Cumulative Trauma, VDT
Occupation: VDT Operators
Type of study: Case Control
Time: 1990 - 1991
Funds: University funds

392 Republic of Korea
Chung Park,
Catholic Industrial Medical College,
62 Yeleo-dong, Yeongdungpo-ku Seoul 150-010

An investigation on the manganese exposure in manganese-containing-ore-crushing workers
To evaluate the manganese exposure and its health effects in manganese-containing-ore-crushing workers.

Country: Korea
Hazard: Manganese
Industry: Manufacturing
Type of study: Exposure Assessment
Time: 1989 - 1990

393 Republic of Korea
Seung Han Lee,
Catholic Industrial Medical College,
505 Banpo-dong, Socho-ku Seoul 137-701

Neurobehavioral study on workers occupationally exposed to organic solvents in Korea
To investigate the health hazards among solvent-exposed workers.

Country: Korea
Hazard: Solvents
Industry: Manufacturing
Occupation: Car Painters
Type of study: Exposure Assessment
Time: 1990 - 1991

395 Republic of Korea
Chung Park,
Catholic Industrial Medical College,
62 Yeleo-dong, Yeongdungpo-ku Seoul 150-010

Low back pain of manual workers
To investigate the possible causes of low back pain in manufacturing industries of Korea.

Country: Korea
Hazard: Cumulative Trauma
Industry: Manufacturing
Type of study: Cross Sectional
Time: 1989 - 1990
Funds: University funds

394 Republic of Korea
Chung Park,
Catholic Industrial Medical College,
62 Yeleo-dong, Yeongdungpo-ku Seoul 150-010

An investigation on lead exposure in tollgate workers of an express highway
To evaluate lead exposure and its health effects in tollgate workers of an express highway.

Country: Korea
Hazard: Lead
Industry: Transportation
Occupation: Tollgate Workers
Type of study: Exposure Assessment
Time: 1989 - 1990

394 Republic of Korea
Chung Park,
Catholic Industrial Medical College,
62 Yeleo-dong, Yeongdungpo-ku Seoul 150-010

Occupational cervicobrachial disorder among international telephone operators
To disclose the magnitude of occupational cervicobrachial disorder problems among international telephone operators and to develop diagnostic procedures which are more specific and helpful in field examinations.

Country: Korea
Hazard: Cumulative Trauma
Industry: Communication
Occupation: Telephone Operators
Type of study: Descriptive
Time: 1989 - 1990
Republic of Korea

Im Goung Yun,
Department of Preventive Medicine, Catholic University Medical College,
62 Yoido-Dong, Yongdungpo-Gu Seoul 150-010
Collaborators: Young Lim, Catholic University Medical College, Seoul, Korea; Kyung Ah Kim, Catholic University Medical College, Seoul, Korea

The early diagnosis and treatment of pneumococcosis

Country: Korea
Hazards: Dust Mineral
Industry: Mining
Type of study: Clinical
Funds: WHO

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Saudi Arabia

397
Basil Al-Sheikh Ali,
Dept. of Physiology, College of Medicine, King Faisal University,
P.O. Box 2114 Dammam 31451
Collaborators: S.O. Balil, King Faisal University, Dammam, Saudi Arabia; A. Albar / G. Abood, King Faisal University, Dammam, Saudi Arabia

Pulmonary effects of industrial dusts and fumes: survey of four industrial groups in the Eastern Province, Saudi Arabia
Assess pulmonary effects of these occupations (ventilation defects and pulmonary diseases). Safety measures in these industries.

Country: Saudi Arabia
Hazards: Dust Cement, Ammonia, Dust Asbestos
Type of study: Case Control, Cross Sectional
Exposure Assessment, Occupational Safety
Funds: King Abdul Aziz for Science and Technology, Riyadh, Saudi Arabia

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Saudi Arabia

399
Fahid Ghazali,
Dept of Environmental Health, Primary Health Care,
Al-Ghary P.O. Box 360 Jeddah 21411
Collaborators: Ministry of Health / Industry of Minerals / Farouk / Rural / Education / Defense - , Road, Saudi Arabia

The role of environmental health in the process of development in Saudi Arabia: National symposium on development and environment
Comparative studies concerning all the subjects and problems relating to the environment and its hazards, How to control pollution.

Country: Saudi Arabia
Hazards: Air Pollution, Water Pollution
Industry: Many
Occupation: Many
Type of study: Case Control, Cross Sectional, Ergonomics
Exposure Assessment, Occupational Safety
Time: 1990 - 1991
Funds: Kingdom of Saudi Arabia

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Senegal

401
Cheikh Fall,
Ministère de la Santé Publique,
BP 4006 Dakar

Ground water pollution by nitrate: Health hazards
To find solutions to stop the hazards.

Country: Senegal
Hazards: Nitrates, Water Pollution
Type of study: Descriptive, Case Control
Time: 1988 - 1992
Funds: State

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Rwanda

396
Jules M. Martin,
Dépt. d’Epidémiologie, Centre Universitaire de Santé Publique, Faculté de Médecine, Université Nationale du Rwanda, B.P. 68 Butare
Collaborators: Dr Janvier Gasana, University Center for Public Health, Butare, Rwanda; Dr Andre Nibikiza, University Center for Public Health, Butare, Rwanda

Impact of water supply on diarrhoeal diseases among children in Huye
Causes of diarrhea in the sociocultural context of Rwanda.

Country: Rwanda
Type of study: Cohort, Economic Analysis
Time: 1988 - 1990
Funds: UNICEF and organization of volunteers (Dutch)

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Saudi Arabia

398
Talal Beyari,
Brusselsos Centre, General Directorate for Health Affairs, Gastme Region,
P.O. Box 2290 Buraidah
Collaborators: Dr Alaidaa Almeri, Deputy Director, Primary Health Care, King Faisal Specialist Hospital, Buraidah, Saudi Arabia; Dr K.R. Lavakumar, King Faisal Specialist Hospital, Buraidah, Saudi Arabia

Intersectoral approach for the control of brucellosis
To find out the total number of affected patients in population, follow up of each patient with treatment (incidence and prevalence). To find out the areas of high incidence and to initiate proper control measures.

Country: Saudi Arabia
Hazards: Brucella
Industry: Agriculture, Food Processing
Occupation: Abattoir Workers, Agricultural Workers
Type of study: Descriptive, Case Control
Time: 1990 - 1993
Funds: Directorate of Health Affairs

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Saudi Arabia

400
Naderi H. Noweir,
College of Engineering, King Abdul Aziz University, Dept. of Industrial Engineering,
P.O. Box 9027 Jeddah 21413
Collaborators: M. A. Allardis / M.S. Afifry, Industrial Engineering, King Abdul Aziz University, Jeddah, Saudi Arabia

Appraisal of work hazards and Safety in the industrial Estate of Jeddah
To establish profiles for occupational exposures and hazards in Jeddah as a model of the prevailing conditions in Saudi Arabia.

Country: Saudi Arabia
Hazards: All
Industry: Manufacturing
Type of study: Exposure Assessment, Occupational Safety
Time: 1990 - 1991
Funds: King Abdul Aziz University Research Funds

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Singapore

402
Jerry Jeyaratnam,
Department of Community, Occupational and Family Medicine, National University Hospital,
Ken Ridge Singapore 5111
Collaborators: James Lee, National University of Singapore, Singapore

Stomach cancer among Singaporean fishermen
To attempt to identify causes of the increased risk of stomach cancer among Singaporean fishermen.

Country: Singapore
Industry: Fishing
Occupation: Fishermen
Type of study: Cohort
Time: 1987 - 1992
Funds: National University Singapore
403

Singapore

Goh, Kee Tai,
Quarantine and Epidemiology Department, Ministry of Environment, Environment Building, 40 Scott Road, Singapore 0922
Collaborators: Dr Kwok San Fong, Industrial Health, Dpt. Scientific Services, Singapore; Dr Kong Kin Hong / Dr Yew Fan Seng / Dr Heng Bee Hoon, Quarantine & Epidemiologyu Dpt., Singapore

Blood lead levels of the general population in Singapore
To determine whether reduction in lead concentration in petrol has any effect on the blood lead levels of the general population.

Country: Singapore
Hazard: Lead
Type of study: Cross Sectional, Population Based Survey
Time: 1990 - 1991

404

South Africa

Daniel J. Kocks,
Dept. of Community Health, Medical University of Southern Africa.
P.O.B. 219 Medunsa 0204

The management of an occupational health service in a developing country
To develop managerial norms for an occupational health service.

Country: South Africa
Type of study: Descriptive
Time: 1989 - 1992

405

South Africa

Jonathan Myers,
Occupational Health Division, Community Health, University of Cape Town,
Observatory Cape Town 7925
Collaborators: Prof. T. Nell, University of South Africa, Johannesburg, South Africa; Dr. D. Rees, National Centre of Occupational Health, Johannesburg, South Africa

Neurotoxicity in solvent-exposed workers
Measure effect of chronic solvent toxicity in factory workers manufacturing paint.

Country: South Africa
Hazard: Solvents, Chemicals
Industry: Chemical, Manufacturing Paint
Occupation: Paint Production Workers
Type of study: Cross Sectional, Exposure Assessment
Time: 1990 - 1992
Funds: University, South Africa Research Council, Other

406

South Africa

Jonathan Myers,
Occupational Health Division, Community Health, University of Cape Town,
Observatory Cape Town 7925
Collaborators: Dr. M. Bachmann, University of Cape Town, Cape Town, South Africa; Dr. I. Levy, University of Cape Town, Cape Town, South Africa

Peripheral neurotoxicity in chemical workers exposed to acrylamide and n-hexane
(1) To measure peripheral vibration sense quantitatively,
(2) To compare with clinical findings, (3) To assess levels of toxicity near recommended exposure limits, (4) To assess appropriateness of vibration test regime.

Country: South Africa
Hazard: Acrylamide, Hexanes
Industry: Chemical
Occupation: Chemical Workers
Type of study: Cross Sectional, Exposure Assessment
Funds: University, South Africa Medical Research Council, Other

407

South Africa

Jonathan Myers,
Occupational Health Division, Community Health, University of Cape Town,
Observatory Cape Town 7925
Collaborators: Dr. M. Talley, University of Cape Town, Cape Town, South Africa

Evaluation of building-related complaints (BSS)
To relate symptoms and complaints to perception of environmental problems, stress level, and job satisfaction.

Country: South Africa
Hazard: Air Pollution Indoor
Occupation: Office Workers
Type of study: Cross Sectional,
Time: 1990 - 1991
Funds: Contract Research with Industry

408

South Africa

Jonathan Myers,
Occupational Health Division, Community Health, University of Cape Town,
Observatory Cape Town 7925
Collaborators: Dr. I. Yurch, University of Cape Town, Cape Town, South Africa; Dr. M. Gaimmann, University of Cape Town, Cape Town, South Africa

Evaluation of building-related complaints (BSS)
To investigate the difference after one year in change from naturally ventilated non-air-conditioned building to a "tight" building.

Country: South Africa
Hazard: Air Pollution Indoor
Occupation: Office Workers
Type of study: Cohort
Funds: Contract Research with Industry

410

Suriname

Alphonso Karg,
Labour Inspection, Department of Labour, Wagenwegstraat 47 Paramaribo

Survey on occurrence of occupational accidents as basis for preventive action
To promote conditions at work that guarantee the highest degree of quality of working life by protecting workers' health enhancing their physical, mental and social well-being, and preventing ill health and accidents.

Country: Suriname
Hazard: Accidents Prevention
Industry: Many
Type of study: Occupational Safety
Time: -
411 Sweden
Carl-Johan Gothe,
Department of Occupational Medicine, Huddinge Hospital, Huddinge S-141 85
Collaborators: Sven Langworth, Dept. of Occupational Medicine, Sweden; Trena Cankler, Dept. of Occupational Medicine, Sweden

Medical consequences of mercury exposure
To study toxicological consequences of environmental and occupational exposure to mercury.

Country: Yugoslavia, Poland
Hazard: Mercury
Industry: Mining, Chemical, Health Care
Occupation: Miners, Chemical Workers, Health Workers Dentists
Type of study: Descriptive, Cross Sectional, Exposure Assessment, Occupational Safety, Clinical
Time: 1985 - 1993

413 Syrian Arab Republic
Assamedin Haffar,
Social Insurance, Occupational Health and Safety, 33 Port Said Street P.O.B 2684 Damascus

Noise and hypertension. Thermal stress and hypertension
Describe the relationship between noise exposure and hypertension, describe the relationship between heat stress and hypertension.

Country: Syria
Hazard: Noise, Heat
Industry: Textile, Glass
Occupation: Textile Workers, Glass Workers
Type of study: Descriptive, Case Control, Cross Sectional, Exposure Assessment
Funds: Government

415 Tanzania
Titus K. Kabahum,
Department of Community Health, Mulimbili Medical Center, Faculty of Medicine,
PO Box 65015 Dar es Salaam
Collaborators: Prof. Mandara, Department of Community Health, Mulimbili, Dar es Salaam, Tanzania

Effects of occupational exposure to residual fenitrothion among workers in the malaria control project in Dar es Salaam
To determine the activity (spraying, mixing, weighing, supervision, driving) associated with greatest toxic effects of fenitrothion among workers in mosquito control activities in project in Dar es Salaam.

Country: Tanzania
Hazard: Pesticides Organophosphorus Compounds
Industry: Agriculture
Occupation: Agricultural Workers, Pesticide Manipulators
Type of study: Cohort, Exposure Assessment, Occupational Safety
Time: 1988 - 1993

417 Thailand
Vitoon Attanatho,
Dept. of Preventive & Social Medicine, Faculty of Medicine, Mahidol University Siriraj Hospital, 2 Pranak Road Bangkok 10700

Health risk of borax to various groups of population in Thailand
To determine health risk of borax to various groups of population in Thailand. After legislation has been announced, borax was strictly prohibited to be used as a food additive.

Country: Thailand
Hazard: Borax
Type of study: Descriptive, Cross Sectional
Time: 1989 - 1990

418 Thailand
Kanit Buranakorn,
Dept. of Biochemistry, Faculty of Medicine, Chulalongkorn University,
Bangkok 10330
Collaborators: Prayat Tosikhoung, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand; Chonnchan Chaiachawong, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand

Biochemical and hematological effects of manganese

Country: Thailand
Hazard: Manganese
Time: -
419 Thailand
Chuangchee Chaitachawong,
Dept of Physiology, Faculty of Medicine, Chulalongkorn University
Bangkok 10330
Collaborators: Srisakul Chaurporn, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand; Buapa Marukul, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand

General health problems of people living around cement plant in Saraburi Province
Assessment of health status and lung capacity of people exposed to cement dust in comparison to non-exposed group.

Country: Thailand
Hazard: Dust Cement
Industry: Cement
Type of study: Descriptive, Case Control, Cohort, Cross Sectional, Exposure Assessment
Time: 1990 - 1992
Funds: Thai Government Funding

420 Thailand
Piyasorn Chaithipun,
Labour Standard Division, Department of Labour,
Ploen Bumrun Bangkok 1070
Collaborators: Amnaya Poornaphong, Labour Standard Division, DOL, Bangkok, Thailand; L. Parada, Labour Standard Division, DOL, Bangkok, Thailand

The study of the problems of working injuries and work environment of dock workers
To know the causes of accidents and diseases in dock work. To draft the safety law relating to dock work. To decrease and control accidents and diseases in dock work.

Country: Thailand
Hazard: Cumulative Trauma, Accidents Occupational
Industry: Shipping
Occupation: Dock Workers
Type of study: Exposure Assessment, Occupational Safety, Ergonomics
Time: 1990 - 1991

421 Thailand
Chalerm Chavalitnimitkul,
National Institute for the Improvement of Working Conditions and Environment,
Phra Phatthan Nakhon Chai Wat Road Bangkok 10170
Collaborators: Dr Karl Kurppa, Institute of Occupational Health, Helsinki, Finland

An investigation on selected musculoskeletal symptoms of removing shell and peeling coconut jacket of coconut factory in Thailand
To determine whether the workers removing the coconut shell and peeling the jacket present an excessive prevalence of pain symptoms in the upper limb region in comparison to workers in other operations.

Country: Thailand
Hazard: Cumulative Trauma
Industry: Food Processing
Occupation: Coconut Workers
Type of study: Cross Sectional, Ergonomics
Time: 1990 - 1992
Funds: Royal Thai Government

422 Thailand
Pirun Kamolratamakul,
Institute of Health Research, Chulalongkorn University,
Preventive and Social Medicine, Faculty of Medicine, Rama IV Road, Pratunam Bangkok 10330

Long-term effects of toluene on health among workers in paint manufactures
To study long-term effects of toluene on health among workers in paint manufacture.

Country: Thailand
Hazard: Toluene, Solvents
Industry: Manufacturing Paint
Type of study: Descriptive, Exposure Assessment
Time: 1989 - 1992
Funds: Thai Government

423 Thailand
Pimphun Kirdunoon,
Forensic Medicine, Faculty of Medicine, Chulalongkorn University
Bangkok 10330
Collaborators: Pornsakol, U., Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand

Study on blood cholinesterase activity, signs, and symptoms of farmers in Bang Bua Tong
To compare cholinesterase activity of farm workers in Bang Bua Tong with a control group in same area and an area in Bangkok.

Country: Thailand
Hazard: Pesticides
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Occupational Safety
Time: 1988 - 1990
Funds: Chulalongkorn University

424 Thailand
Wichai Kosuwon,
Orthopaedic and Rehabilitation Medicine, Faculty of Medicine, Khon Kaen University,
123 Friendship Highway Khon Kaen 40002
Collaborators: Arnon C., Faculty of Public Health, Khon Kaen, Thailand

Motorcycle accidents in Khon Kaen province
Risk factors for motorcycle accidents.

Country: Thailand
Hazard: Accidents Traffic
Type of study: Descriptive
Time: 1988 - 1989

425 Thailand
Wichai Kosuwon,
Orthopaedic and Rehabilitation Medicine, Faculty of Medicine, Khon Kaen University,
123 Friendship Highway Khon Kaen 40002
Collaborators: Arnon C., Faculty of Public Health, Khon Kaen, Thailand

Prevalence of low back pain in personnel of Srinagarind Hospital
Risk factors for acute low back pain among personnel.

Country: Thailand
Industry: Health Care
Occupation: Health Workers Hospital
Type of study: Descriptive, Case Control, Exposure Assessment, Occupational Safety
Time: 1990 - 1991

426 Thailand
Phak Aeumsganong,
Obstetrics and Gynecology, Faculty of Medicine, Khon Kaen University,
123 Friendship Highway Khon Kaen 40002

Occupation and pregnancy outcome

Country: Thailand
Time: -
427 Thailand
Oraphun Matadiologkul,
Department of Medical Services, National Office of
Occupational and Environmental Medicine, Ministry of Public
Health, 2 Rajavithi Road Bangkok 10400
Collaborators: O. Matadiologkul, National Office of
Occupational and Environmental Medicine, Ministry of
Health, Bangkok, Thailand; V. Buaprasert, National Office
of Occupational and Environmental Medicine, Ministry of
Health, Thailand

Risk factors for chromosomal abnormalities among workers in
shoe industries, Thailand

To identify risk factors for chromosomal abnormalities
among workers exposed to working processes and the
environment in shoe factories in the shoe industry.

Country: Thailand
Hazard: Toluene, Benzene, Solvents
Industry: Manufacturing Shoe
Occupation: Shoe Workers
Type of study: Case Control
Time: 1989 - 1990
Funds: Thai Government

428 Thailand
Oraphun Matadiologkul,
Department of Medical Services, National Office of
Occupational and Environmental Medicine, Ministry of Public
Health, 2 Rajavithi Road Bangkok 10400
Collaborators: T. Vansamit, National Office of
Occupational and Environmental Medicine, Ministry of
Health, Bangkok, Thailand; S. Jirakatib, National Office of
Occupational and Environmental Medicine, Ministry of
Health, Bangkok, Thailand

Prevalence of occupational stress, overwork & inappropriate
exposure habits to toxic substances among Thai
construction workers in Singapore

To find prevalence in emigrated Thai workers in Singapore
of overwork, stress, and other health problems related to
occupational.

Country: Singapore
Hazard: Toxic Substances, Stress Occupational
Industry: Construction
Occupation: Construction Workers
Type of study: Descriptive
Time: 1990 - 1990
Funds: Thai Government

429 Thailand
Oraphun Matadiologkul,
Department of Medical Services, National Office of
Occupational and Environmental Medicine, Ministry of Public
Health, al Area
2 Rajavithi Road Bangkok 10400
Collaborators: F. Kapoorni, National Office of
Occupational and Environmental Medicine, Ministry of
Health, Bangkok, Thailand; T. Pongsawormvit, National
Office of Occupational and Environmental Medicine,
Ministry of Health, Bangkok, Thailand

Risk factors of sudden unexplained death syndrome among Thai
workers migrated to Singapore

To identify risk factors of sudden unexplained death
syndrome.

Country: Singapore, Thailand
Hazard: Toxic Substances, Stress Occupational
Industry: Construction
Occupation: Construction Workers
Type of study: Case Control
Time: 1990 - 1990
Funds: Thai Government

430 Thailand
Oraphun Matadiologkul,
Department of Medical Services, National Office of
Occupational and Environmental Medicine, Ministry of Public
Health, al Area
2 Rajavithi Road Bangkok 10400
Collaborators: Dr. Wilai Phanvilai, Cardiology Unit,
Rajamangla Hospital, Bangkok, Thailand; Dr. Chart
Pichayangkul, Cardiology Unit, Rajamangla Hospital,
Bangkok, Thailand

Cohort study of Thai workers in Singapore with abnormal
electrocardiogram compared with normal EKG group to determine
risk factors of SUDS
(1) To study incidence of sudden unexplained death
syndrome (SUDS) among Thai construction workers with EKG
abnormalities.
(2) To identify risk factors of SUDS prospectively.

Country: Singapore, Thailand
Industry: Construction
Occupation: Construction Workers
Type of study: Cohort
Time: 1990 - 1992
Funds: Thai Government

431 Thailand
Oraphun Matadiologkul,
Department of Medical Services, National Office of
Occupational and Environmental Medicine, Ministry of Public
Health, al Area
2 Rajavithi Road Bangkok 10400
Collaborators: T. Pongsawormvit, National Office of
Occupational and Environmental Medicine, Ministry of
Health, Bangkok, Thailand; K. Rattapun, Division of
Toxicology, Ministry of Health, Bangkok, Thailand

Blood and urine lead levels among Thai people in Thailand,
1990
(1) To find the mean blood and urine lead levels among
Thai people. (2) To find the prevalence of high blood and
urine lead absorbers and lead poisoning cases among Thai
people.

Country: Thailand
Hazard: Lead
Type of study: Descriptive
Time: 1990 - 1991
Funds: Thai Government

432 Thailand
Satri Sowakonthai,
Research Affairs, Clinical Epidemiology Unit, Faculty of
Medicine, Khon Kaen University
123 Friendship Highway Khon Kaen 40002

Risk factors and morbidity of villagers working in a small
industry in rural area in Northeast Thailand

Country: Thailand
Time: -
The study of blood and urine lead of metropolitan people
To study the normal value of lead in Thai people living in Bangkok.

Country: Thailand
Hazard: Lead
Type of study: Descriptive
Time: 1986 - 1987

The biosocial risk factors of childhood diarrhoea in Khon Kaen
To identify the biosocial risk factors of diarrhoea in children under 5 in rural areas of Northeast Thailand.

Country: Thailand
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Cohort
Time: 1988 - 1989
Funds: ADDOR-HIID

The risk factors of workers’ disability from accidents working in the industrial field
To analyze the causes of accidents and the risk factors of workers’ disability from accidents working in the industrial field.

Country: Thailand
Hazard: Accidents Prevention
Occupation: Press Workers
Type of study: Descriptive, Occupational Safety
Time: 1987 - 1989
Funds: WHO

Pathology linked to trichlorethylene with regard to a regional survey
To determine risks associated with chronic exposure to trichlorethylene.

Country: Tunisia
Hazard: Trichloroethylene
Industry: Engineering
Type of study: Descriptive, Cross Sectional
Time: 1989 - 1990
441  Tunisia
Nejib Mrizaek,
Unité de Médecine de Travail, Faculté de Médecine de Sousse, Sousse, Tunisia

Industrial pollution in the Sousse Region
Inventory of the various risks and cartography of industrial pollution in Sousse

Country: Tunisia
Hazards: Chemicals, Metals Heavy, Air Pollution, Water Pollution
Industry: Engineering, Chemical
Type of study: Descriptive, Exposure Assessment,
Time: 1989 - 1990
Funds: None

442  Tunisia
Nejib Mrizaek,
Unité de Médecine de Travail, Faculté de Médecine de Sousse, Sousse, Tunisia

Study of the pathology of jute in Tunisia
To determine the pathology of jute in Tunisia.

Country: Tunisia
Hazards: Hemp
Industry: Spinning, Weaving
Type of study: Descriptive, Cross Sectional
Time: 1985 - 1990
Funds: None

443  Turkey
Y. Izzetin Barış,
Hacettepe Üniversitesi, Tıp Fakültesi, Göğüs Hastalıkları Kliniği, Hacettepe University Ankara

Ten-year mortality study in an anatolian village (Türkey) with environmental erionite exposure: High rates of mesothelioma
Investigation of the frequency of deaths due to malignant pleural mesothelioma and other cancers in a village population environmentally exposed to erionite.

Country: Turkey
Hazards: Erionite
Industry: Agriculture
Occupation: Agricultural Workers, Miners
Type of study: Descriptive, Exposure Assessment
Time: 1980 - 1990

444  Turkey
Y. Izzetin Baris,
Hacettepe Universitesi, Tıp Fakültesi, Göğus Hastalıkları Kliniği, Hacettepe University Ankara

Prospective cohort study of occupational diseases in workers exposed to asbestos
Investigation of occupational diseases in workers of asbestos cement industry.

Country: Turkey
Hazards: Dust Asbestos
Industry: Cement
Type of study: Cohort, Exposure Assessment, Occupational Safety
Time: 1986 -

445  Turkey
Nazmi Bilir,
Department of Public Health, Faculty of Medicine, Hacettepe University, Ankara 06100

Occupational health and safety problems in asbestos industry
Identification of occupational health and safety risks in two asbestos material production factories.

Country: Turkey
Hazards: Dust Asbestos, Noise, Accidents Prevention
Occupation: Asbestos Processing Workers
Type of study: Descriptive, Exposure Assessment
Time: 1990 - 1991

446  Turkey
Necati Dedeglu,
Dept. of Public Health, Tip Fakültesi, Akdeniz University, Medical Faculty, Topcador Anıtıya 07058

Health of ferrocrohnium workers, Antalya
Determine the health risks (especially cancer) of workers. Determine the most polluted areas of the factory for proper action.

Country: Turkey
Hazards: Chromium, Dust
Industry: Metals Ferrous
Occupation: Factory Workers
Type of study: Cohort, Exposure Assessment
Time: 1990 - 1995
Funds: Research Funds of the University

447  Turkey
Mustafa Ozesmi,
Erciyes Universitesi, Tip Fakültesi Göğüs Hastalıkları Bölümü, University of Erciyes, Medical Faculty, Kayseri 38039

Calcified pleural plaques among the inhabitants of Enezig Village
What is the etiological reason of pleural plaques? What is the frequency of pleural plaques?

Country: Turkey
Hazards: Dust Asbestos
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Descriptive
Time: 1988 - 1990

448  Turkey
Mustafa Ozesmi,
Erciyes Universitesi, Tip Fakültesi Göğüs Hastalıkları Bölümü, University of Erciyes, Medical Faculty, Kayseri 38039

A study of the respiratory system of women weaving carpets on hand looms: To determine whether the people weaving carpets on hand looms have pulmonary or other abnormality.

Country: Turkey
Hazards: Dust
Industry: Weaving
Occupation: Carpet Weavers
Type of study: Exposure Assessment, Occupational Safety
Time: 1988 - 1990
449  Turkey
Mustafa Oezseni,
Erciyes Universitesi, Tip Fakultesi Gogus Hastalikleri Bolumu,
University of Erciyes, Medical Faculty,
Kayseri 38039

Collaborators: R. Demir, Internal Medicine, Kayseri,
Turkey; O.F. Topcu, Dispanser of TBC, Kayseri, Turkey /
A.R. Ergogan, Dispanser of TBC, Sivas, Turkey

Plural calcification frequency and their cause in Doganci Village

Country: Turkey
Hazard(s): Dust Asbestos
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Descriptive
Time: 1990 - 1990

451  Turkey
Handan Sabir,
Department of Occupational Health and Hygiene, Occupational Health and Safety Institution (ISOTM),
P.K. 393 Yenikapı Ankara

Collaborators: Occupational Health and Safety Institution (ISOTM)

Pneumoconiosis in lignite mines
To improve working conditions (health and safety) of the workers in various branches of industry.

Country: Turkey
Hazard(s): Dust Lignite, Dust Coal
Industry: Mining Coal, Mining Lignite
Occupation: Miners Coal, Miners Lignite
Type of study: Cross Sectional, Exposure Assessment, Occupational Safety, Ergonomics
Time: 1990 - 1991
Funds: State Budget

452  Turkey
Peksen Yildiz,
Dept. of Public Health, Faculty of Medicine, Ondokuzmayis University,
Halk Sagligi Anabilim Dalı Samsun 5500

Collaborators: Gulsen Ozen, Medical Faculty, Genetic Department, Samsun, Turkey; Cihat Dundar, Medical Faculty, Public Health Department, Samsun, Turkey

The effects of vinyl chloride on Ig levels and genetic structure
To study the effects of vinyl chloride on Ig levels and genetic structure.

Country: Turkey
Hazard(s): Vinyl Compounds
Occupation: Car Painters
Type of study: Descriptive, Exposure Assessment
Time: 1989 - 1989
Funds: University Medical Faculty

454  Uganda
N.D. Miltumukiza,
Ministry of Labour, Occupational Health and Hygiene,
PO Box 4672 Kampala

Collaborators: Dr. R.K. Mbabad, Ministry of Labour, Kampala, Uganda; Miss A. Hakara, Ministry of Agriculture, Kampala, Uganda

East African Pesticide Research Network
To assess health hazards caused by pesticides handling, storage, and use in agriculture, where coffee, cotton, and other crops are grown, with a view to developing strategies for prevention and control of pesticide poisoning.

Country: Uganda, Kenya, Tanzania
Hazard(s): Pesticides
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Descriptive, Cohort, Exposure Assessment
Time: 1989 - 1993
Funds: IDRC

455  Uganda
Deogratias Kaberu Sekimpi,
Dept. of Occupational Health and Hygiene, Ministry of Labour,
P.O. Box 5779 Nakasero Place P.O. Box 4637 Kampala

Collaborators: Dr D.A. Ogaram, Occupational Health and Hygiene Department, Kampala, Uganda; Dr E.F. Agaba, Coffee Marketing Board, Kampala, Uganda / Dr M. Okon-Awung, Mulago Hospital, Kampala, Uganda

Occupational airways disease among coffee-dust-exposed workers in Uganda
To find out the occurrence of occupational obstructive airways disease among workers exposed to different types of coffee dust, to find out the determinants for development of disease so that preventive measures can be worked out.

Country: Uganda
Hazard(s): Dust Coffee
Industry: Food Processing
Occupation: Coffee Workers
Type of study: Cross Sectional, Exposure Assessment
Time: 1987 - 1990
Funds: IDRC

456  United Kingdom
David Kemp,
Institute of Occupational Health, University of Birmingham,
Birmingham B15 2TT

Collaborators: Dr I. Ponicia, 101H, Birmingham, UK; Dr C.L. Gom, National Skin Center, Singapore

Dermatological hazards in the microelectronics industry in Singapore
To determine the prevalence of dermatitis (occupational) in the microelectronics industry and identify hazards and risk factors.

Country: Singapore
Hazard(s): Chemicals
Industry: Electronics
Type of study: Cross Sectional
457  United Kingdom
Robin Philipp,
Dept. of Epidemiology & Public Health Medicine, University of
Bristol,
Coney Hall, Whelilds Road, Bristol BS8 2PR
Collaborators: Dr. G. Goldstein, RUPH, WHO, Geneva,
Switzerland
Housing and human settlement training needs
To identify the principal environmental factors in urban
environments that public health professionals believe are
particularly hazardous to health and to identify the need
for new training materials on health and these factors.
Country: Worldwide
Hazard: Housing
Type of study: Descriptive
Funds: WHO

459  Uruguay
Raul Baranano,
M.T.S.S./M.S.P./P.A.H.O., Division on Work Conditions,
Junca 1511 - 1er. floor Montevideo 1120
Collaborators: Dr. E. Araujo, Ministerio Salud Publica,
Montevideo, Uruguay / Dra. I. Suarez, M.T.S.S., Montevideo,
Uruguay; G. F. L. Pereira / Tec. M. Narducci, M.T.S.S.,
Montevideo, Uruguay / Tec. S. Bazzi, B.S.E., Montevideo,
Uruguay
Identification and mapping of the worker population, health
services, and diagnosis of the industrial hygiene situation in
Uruguay
Planning and establishing of a national occupational health
program.
Country: Uruguay
Industry: Many
Type of study: Descriptive, Exposure Assessment,
Occupational Safety, Ergonomics
Time: 1989 - 1990
Funds: PAHO, MTSS, MOH

461  U.S.A.
Rebecca Calderon,
Office of Health Research, United States Environmental
Protection Agency,
401 M St., S.W. Washington, D.C. 20460
Collaborators: T. Finchman, PAHO, Mexico
Environmental epidemiology opportunities in Central and South
America
To develop a menu of research opportunities in South America.
Country: Central America/South America
Hazard: Metals Heavy, Pesticides, Solvents, Hazardous Waste,
Air Pollution Outdoor
Type of study: Descriptive
Time: 1990 - 1992

463  U.S.A.
Arthur O.S. Chu,
CAGORD, U.S. Environmental Protection Agency,
401 M. Street, S.W. R.D. 639 Washington, D.C. 20460
Collaborators: David Boyass, EPA/OORD/OCHEA, Washington
D.C., USA
PCB effects on human beings
To demonstrate the association between exposure,
metabolism, and subsequent development of cardiovascular
problems and cancer deaths.
Country: Taiwan Province of China
Hazard: PCB
Type of study: Cohort
Time: 1989 - 1992
Funds: EPA

458  United Kingdom
Anthony Seaton,
Environmental and Occupational Medicine, University of
Aberdeen,
Ashgrove Road West Aberdeen AB9 2DZ
Collaborators: Medical Service, Coal India, Calcutta,
India, Institute of Occupational Medicine, Edinburgh,
Scotland, UK
Pneumoconiosis in Indian coal miners
Description of prevalence, prevention.
Country: India
Hazard: Dust Coal
Industry: Mining Coal
Occupation: Miners Coal
Type of study: Descriptive, Exposure Assessment
Time: 1988 - 1992
Funds: British Council/Overseas Development Agency

460  U.S.A.
Robert Bornschein,
Dept. of Environmental Health, University of Cincinnati,
College of Medicine,
3233 Eden Av. Cincinnati OH 45267
Collaborators: Dr. Boyan Wan, China Medical University,
Shenyang, China
Reproductive and developmental effects of occupational lead
exposure among women in Shenyang, China
Determine effects of high lead exposure during pregnancy
on pregnancy outcome.
Country: China
Hazard: Lead
Industry: Metals Non Ferrous
Occupation: Battery Workers
Type of study: Cross Sectional, Exposure Assessment

462  U.S.A.
Don B. Chaffin,
Michigan Educational Resource Center, Center for Ergonomics,
College of Engineering, University of Michigan,
1305 Beal st. Ann Arbor Mi 48109
Collaborators: Hudson de Araujo Couto, Faculdade de
Ciencias Medicas, Beio Horizonto, Minas Gerais, Brazil
Correlation of aerobic capacity of Brazilian workers and their
physiologic work requirements
To determine if metabolic energy requirements of work is
correlated with aerobic capacities of young male workers.
Country: Brazil
Hazard: Accidents Occupational
Occupation: Machine Operators, Warehouse Workers
Type of study: Cross Sectional, Ergonomics
Time: 1984 - 1986
Funds: University of Minas Gerais, Brazil / University of
Michigan, USA

464  U.S.A.
David Christiansen,
Harvard School of Public Health, Department of Environmental
Science and Physiology,
665 Huntington Ave. Boston MA 02115
Collaborators: A. Velazquez, University of Nicaragua,
Leon, Nicaragua
Respiratory disease in Nicaraguan cotton textile workers
Describe the respiratory disease in workers exposed to cotton
dust for short duration (less than 2 years).
Country: Nicaragua
Hazard: Dust Cotton, Endotoxins
Industry: Textile
Occupation: Cotton Workers
Type of study: Descriptive, Cross Sectional, Exposure Assessment
Time: 1982 - 1990
Funds: Ministry of Health, Nicaragua
465  U.S.A.
David Christiani, Harvard School of Public Health, Department of Environmental Science and Physiology, 685 Huntington Ave, Boston MA 02115
Collaborators: Ye Ting-Ting, Shanghai Medical University, Shanghai, China; A. Velasques, University of Nicaragua, Leon, Nicaragua

Respiratory disease in Chinese textile workers
Examine cotton dust endotoxin exposure response relationships in a longitudinal study.

Country: China
Hazard: Dust, Cotton, Endotoxins
Industry: Textile
Occupation: Cotton Workers
Type of study: Descriptive, Cohort, Cross Sectional, Exposure Assessment
Funds: CDC/NIOSH

467  U.S.A.
Mark R. Cullen, Occupational Medicine Program, Department of Internal Medicine, Yale University, School of Medicine, 333 Cedar Street, New Haven CT 06510
Collaborators: Baloyi Rabelan, Ministry of Labor, Harare, Zimbabwe

Risk of asbestos-related health effects in communities surrounding asbestos mines and mills
Risk of asbestos effects from living near mills and washing clothes of workers.

Country: Zimbabwe
Hazard: Dust, Asbestos
Industry: Mining
Type of study: Cross Sectional, Exposure Assessment
Time: 1990 - 1991
Funds: Government of Zimbabwe, ILO

469  U.S.A.
Richard B. Everson, Epidemiology Branch, Health Effects Research Laboratory, ERC MD 55 A Research Triangle Park NC 27711
Collaborators: G. Metaxides, University of Paras, Greece

Mortality mapping in Greece
Descriptive epidemiology.

Country: Greece
Type of study: Descriptive, Case Control
Time: 1984 - 1990

471  U.S.A.
Frank Hearl, Division of Respiratory Disease Studies, National Institute for Occupational Safety and Health, 944 Chestnut Ridge Road Morgantown WV 26505-2888
Collaborators: Dr Joseph Laughton / Dr Martin Gossmell, NCI, Bethesda, MD, USA; Dr Chen Jianglong / Dr Wu Zhen, Tongji Medical University, Wuhan, China

Study of silica-exposed workers in China
The NIOSH portion of the study seeks to examine the relation between Chinese-collected dust samples and those collected with US instrumentation.

Country: China
Hazard: Dust, Silica, Radon, Cadmium
Industry: Mining
Occupation: Miners, Pottery Workers
Type of study: Descriptive, Case Control, Cohort, Exposure Assessment
Time: 1987 - 1990
Funds: NCT

472  U.S.A.
Daniel Hryhorczuk, Illinois Educational Resource Center, College of Medicine, University of Illinois at Chicago, Room 429, 2121 W. Taylor Chicago IL 60612
Collaborators: Dr Sandalkl, University of Chernivtsi, Chernivtsi, USSR; Dr Kornar, University of Toronto, Toronto, Canada

Investigation of outbreak of chemical illness in children
Identify etiologic agent of chemical illness outbreak in children (with total alopecia at presenting complaint) which occurred in the fall of 1988.

Country: USSR
Hazard: Air Pollution Outdoor, Thallium
Type of study: Descriptive, Case Control
Time: 1990 - 1991
Circadian Dysrhythmias in employees required to travel
To resolve question of shift work, jet lag and other ciradian dysrhythmias and study methods of
treatment/management.

Country: China, Indonesia, Thailand
Hazard: Stress
Industry: Many
Type of study: Descriptive, Exposure Assessment

Matthew Keifer,
Care Nicaragua, Safe and Rational Pesticide Use Program, c/o Care International
600 1st avenue, New York NY 10016
Collaborators: Dr. Feliciano Pacheco, Minsa Region II, Leon, Nicaragua

Safe and rational pesticide use program
To assess impact of integrated pest management on
pesticide poisonings.

Country: Nicaragua
Hazard: Pesticides
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Cohort
Funds: Care Nicaragua, NORAD

Michael D. Lebowitz,
Internal Medicine & Respiratory Sciences, College of Medicine,
University of Arizona, 1501 Campbell Ave, Tucson AZ 85724
Collaborators: Jacobo Pinksman, PAHO, Mexico City, Mexico; Isabelle Romeu, PAHO, Mexico City, Mexico

Surveillance of morbidity and air pollution in Mexico City
Determination of morbidity due to air pollution.

Country: Mexico
Hazard: Air Pollution Outdoor
Type of study: Descriptive
Funds: PAHO, USEPA

Craig Karpilow,
International Professional Associates, Intl. Occupation Medicine Dept.,
509 Olive Way Suite 803, Seattle WA 98101
Collaborators: Bud Brainard, Thomas Jefferson University,
School of Medicine, Philadelphia, USA; J.R. Patel,
I.D.R.C.I., Bombay, India

Hearing deficits in bus drivers/ increased accident rates
To study the accident rates associated with auditory
deficits.

Country: India
Hazard: Noise
Industry: Transportation
Type of study: Descriptive, Exposure Assessment, Occupational Safety
Time: 1988 - 1992

Gerard Lauver,
Dept. of Environmental Medicine, New York University Medical Center,
550 First Avenue, New York NY 10016
Collaborators: Morton Lippmann, New York University Medical Center, NY, USA; Dr. Li Jun Yao, Chinese Cancer Institute, Beijing, China

Radon daughters, smoking, and arsenic as risk factors for lung
cancer in Chinese miners and smelter workers in Gejiu City
To quantify the relative risk of radon daughters, arsenic
and smoking to produce lung cancer in chinese tin miners and to determine cumulative exposure to radon daughters by
in-vivo measurements of Pb-210

Country: China
Hazard: Radon, Arsenic, Lead, Cadmium, Dust Silica
Industry: Mining, Smelting, Metals Non Ferrous
Type of study: Case Control, Exposure Assessment
Time: 1987 - 1992
Funds: U.S. National Cancer Institute

Morton Lippmann,
Dept. of Environmental Medicine, New York University Medical Center,
550 First Avenue, New York NY 10016
Collaborators: Oliva M. Sporer, NYU Medical Center, New
York, USA; Vera Hofmeister / Paulo Aramso, U. Sao Paulo,
Brazil

Effects of industrial air pollution on respiratory function of
children in Caboatat, S.P., Brazil
To quantify extent of depression of lung function
baseline among schoolchildren exposed to various amounts of
industrial air pollution in different neighborhoods in
Caboatat.

Country: Brazil
Hazard: Air Pollution Outdoor
Industry: Metals Ferrous, Petrochemical, Cement
Type of study: Cohort, Cross Sectional, Exposure Assessment
Funds: U.S. EPA
Joint research and public health projects of Asociación Chilena de Seguridad (ACHS) and Mount Sinai Medical Center

As part of a developing collaboration in research and training, researchers from Mount Sinai and the Asociación Chilena de Seguridad are developing joint research and public health projects for the 900,000 workers served by ACHS.

Country: Chile
Hazard: Pesticides, Dust, Lead, Accidents Prevention
Industry: Many
Occupation: Many
Type of study: Descriptive
Time: 1989
Funds: Asociación Chilena de Higiene y Seguridad, Mount Sinai Medical Center

Elevated vibration threshold among workers previously poisoned with organophosphates

To evaluate peripheral neurologic effects.

Country: Nicaragua
Hazard: Pesticides Organophosphorus Compounds
Industry: Agriculture
Occupation: Agricultural Workers, Pesticide Applicators
Type of study, Cohort
Time: 1988 - 1990
Funds: Milbank Foundation via University of Washington

Health effects of atmospheric contamination

Measure health effects of air pollution.

Country: Chile
Hazard: Air Pollution Outdoor, Lead
Type of study: Descriptive, Cohort, Cross Sectional, Exposure Assessment
Funds: Inter-American Development Bank

National policy for occupational health services in Zimbabwe

To determine worker awareness of hazards, identify risks and determine preventive measures.

Country: Zimbabwe
Hazard: Accidents Prevention, Dust, Pesticides
Industry: Mining, Agriculture
Type of study: Occupational Safety
Time: 1990 - 1991
Funds: Self financed
487  U.S.A.
Stephen Von Allmen,
of Health and Human Services, Centers for Disease Control
4600 Clifton Road NE, MS E-28, Atlanta, Ga. 30333
Collaborators: Jacobo Finkelstein, PAHO, Mexico

Applied research in health assessment practice and
methodology
To determine if human populations have been exposed to
environmental contamination through ingestion of, or
contact with, contaminated ground water, surface water,
and/or soil.

Country: Mexico
Hazard: Chemicals, Biologicals
Industry: Manufacturing
Type of study: Exposure Assessment
Time: 1990 - 1991

488  USSR
Gennady Ivanovich Sidorienko,
A.N. Sytin Institute of General and Commmunal Hygiene, AMSe
USSR,
Str. Yegodinskaya, 10 Moscow 11932

Environmental Epidemiology
Time: -

489  Venezuela
Oscar Feo,
Unidad de Salud Ocupacional, Facultad de Ciencias de la Salud
Araya, Universidad de Carabobo,
Ap. de correos 4810/Maracay 2101 A
Collaborators: Gallámez Luis, Carabobo University,
Maracay, Venezuela; Bollivar Manuel, Carabobo University,
Maracay, Venezuela

Comparative study of air and blood lead levels
To establish the relationship between Pb-A and Pb-S in 7
Venezuelan cities. To establish the average figures for
lead poisoning in the Venezuelan population.

Country: Venezuela
Hazard: Lead
Type of study: Cross Sectional
Funds: Venezuela Oil Industry

490  Venezuela
Oscar Feo,
Unidad de Salud Ocupacional, Facultad de Ciencias de la Salud
Araya, Universidad de Carabobo,
Ap. de correos 4810/Maracay 2101 A
Collaborators: Escalon éxito, Carabobo University,
Maracay, Venezuela; Maleto Luis, Carabobo University,
Maracay, Venezuela

Preliminary diagnosis of neuropsychosocial alterations
produced by organic solvents
To test the NCBT-WHO test for preliminary diagnosis of
neuropsychosocial changes and to evaluate the effects
of solvents in the industries studied.

Country: Venezuela
Hazard: Solvents
Industry: Many
Type of study: Cross Sectional
Funds: Carabobo University

491  Venezuela
Eric Omaña,
Universidad Central de Venezuela, (UCV),
Apdo PO 5243 Caracas 1010
Collaborators: Luisa Sanchez / Piedad Suarez, Universidad
Central de Venezuela, Caracas, Venezuela; Maria Leon,
C.U.T.V., Caracas, Venezuela

Carbon monoxide effects on car-parking workers
Change actual work conditions in parking cars under
building

Country: Venezuela
Hazard: Carbon Monoxide
Occupation: Car Parking Workers
Type of study: Descriptive, Exposure Assessment
Time: 1990 - 1992
Funds: Universidad Central Venezuela

492  Yugoslavia
Alica Bauman,
Department for Radiation Protection, Institute for Medical Research
and Occupational Health,
Mose Pijade 158 P.O.Box 291 Zagreb 41000
Collaborators: Jadranka Korvac, Institute for Medical Research and
Occupational Health, Zagreb, Yugoslavia; Dardan Harvat, Institute for Medical Research and
Occupational Health, Zagreb, Yugoslavia

Risk from exposure to radiation and chemical mutagenic agents
at a coal-fired power plant
To define the risk from technologically enhanced natural
radiation. Synergistic interaction between chemical and
radioactive pollutants.

Country: Yugoslavia
Hazard: Radiation Ionizing, Dust Coal, Fly Ash, Air Pollution Outdoor, Sulfur Dioxide, Radon, Uranium
Industry: Energy, Mining Coal
Occupation: Power Plant Workers, Miners Coal
Type of study: Descriptive, Case Control, Exposure Assessment, Occupational Safety
Time: 1980 - 1992
Funds: Until 1984 by IAEA, Coal Fired Plant, Research Council of the Republic of Croatia

493  Yugoslavia
Dardan Harvat,
Institute for Medical Research and Occupational Health,
Mose Pijade 158 POB 291 Zagreb 41000
Collaborators: Jadranka Korvac, Institute for Medical Research and Occupational Health, Zagreb, Yugoslavia; Dardan Harvat, Institute for Medical Research and Occupational Health, Zagreb, Yugoslavia

Cancer risk in the fertilizer industry
To define the chemical risk and the radiological risk.

Country: Yugoslavia
Hazard: Radiation Ionizing, Fluoride, Nitrates, Phosphates, Thorium, Uranium
Industry: Agriculture
Occupation: Agricultural Workers
Type of study: Descriptive, Case Control, Exposure Assessment, Occupational Safety
Time: 1981
Funds: Fertilizer Plant, Research Council of the Republic of Croatia

494  Yugoslavia
Dardan Harvat,
Institute for Medical Research and Occupational Health,
Mose Pijade 158 PO Box 291 Zagreb 41000
Collaborators: D.C. Lloyd, NRPB, Harwell-Dicest, UK; A. Bauman, Institute for Medical Research and Occupational Health, Zagreb, Yugoslavia

Chromosone aberrations in persons occupationally exposed to
ionizing radiation
Evaluation of mutagenic exchanges in somatic cell genome in occupationally-exposed persons and evaluation of risk
from technologically enhanced natural radiation.

Country: Yugoslavia
Hazard: Radiation Ionizing
Industry: Power Plant Nuclear, Health Care
Type of study: Case Control, Exposure Assessment, Occupational Safety
Time: 1982 - 1990
Funds: Self-managing Community of Interest for Science of SR
Croatia / International Atomic Energy Agency
495 Yugoslavia
Blanka Kruthacker,
Institute for Medical Research and Occupational Health,
University of Zagreb, Clinical Toxicological Laboratory,
Mose Pijade 155 PO Box 291 Zagreb 41000
Collaborators: Prof Samo Modic, Institute for Occupational
Health, Ljubljana, Yugoslavia; Dr Aleksandar Vlaskovic,
Institute for Occupational Health, Belgrade, Yugoslavia

Human exposure to PCB, PCDD, and PCDF
Evaluation of the absorption of PCBs, PCDDs, and PCDFs in
selected populations in Croatia, Yugoslavia.
Country: Yugoslavia
Hazard: PCB, PCDD, PCDF
Type of study: Cross Sectional, Exposure Assessment

496 Yugoslavia
Danica Ppapic-Majic,
Institute for Medical Research and Occupational Health,
University of Zagreb, Clinical Toxicological Laboratory,
Mose Pijade 155 PO Box 291 Zagreb 41000
Collaborators: J. Hrask / V. Kacic, Institute for
Medical Research and Occupational Health, Zagreb,
Yugoslavia; J. Pongracic / S. Telisman, Institute for
Medical Research and Occupational Health, Zagreb,
Yugoslavia

Biochemical follow-up of an environmental lead problem after
introduction of an emission control system
To assess the health risk for inhabitants living in the
vicinity of a lead smelter and to establish the length of
time necessary to elapse after the introduction of
effective emission control of lead before a contaminated
area can be proclaimed safe for normal living conditions.
Country: Yugoslavia
Hazard: Lead
Industry: Smelter, Metals Non Ferrous
Type of study: Cohort
Time: 1976 - 1992
Funds: U.S. EPA / Self-managing Community of Interest for
Science of SR Croatia

497 Yugoslavia
Marko Saric,
Institute for Medical Research and Occupational Health,
University of Zagreb,
Mose Pijade 155 PO Box 291 Zagreb 41000
Collaborators: Dr Jasmina Goldoni, Institute for Medical
Research and Occupational Health, Zagreb, Yugoslavia; Prof
Zlatko Koren, Faculty of Electrical Engineering, Zagreb,
Yugoslavia

Biomedical effects of nonionizing radiation
Evaluation of health effects of nonionizing radiation:
the standardization of methodology of research in this
field: to work out a standard for protection from
electromagnetic radiation.
Country: Yugoslavia
Hazard: Radiation Non Ionizing
Industry: Electronics
Occupation: Electronics Workers
Type of study: Occupational Safety
Time: 1988 - 1993
Funds: Republican Scientific Fund

498 Yugoslavia
Skojenka Telisman,
Institute for Medical Research and Occupational Health,
University of Zagreb, Clinical Toxicological Laboratory,
Mose Pijade 155 PO Box 291 Zagreb 41000
Collaborators: D. Ppapic-Majic / J. Turic, Institute
for Medical Research and Occupational Health, Zagreb,
Yugoslavia; P. Crtovik / R. Rocic, Institute "Vuk
Vrhovac", Zagreb, Yugoslavia

The effect of lead on the reproductive system in men
To study dose-effect and dose-response relationships
between the parameters of lead exposure and effects on the
reproductive capacity of men, and a possible contribution
of exposure to cadmium (through smoking).
Country: Yugoslavia
Hazard: Lead, Cadmium
Industry: Manufacturing Battery, Ceramics, Metals Non Ferrous
Occupation: Machine Operators, Ceramics Workers,
Battery Workers
Type of study: Cross Sectional
Time: 1987 - 1990
Funds: Protection Agency and International lead zinc Research
Organization

499 Zaire
Tie Mudiya,
Biologie-Toxicologie-Pharmacologie, Universite de Kinshasa,
Faculte de Pharmacie, Laboratoire de Toxicologie,
Bureau Postal 754 Kinshasa KIN IX
Collaborators: Prof. L. Moel, Universite Libre de
Bruxelles, Bruxelles, Belgique; Prof. R. Lauwerys,
Universite Catholique de Louvain, Bruxelles, Belgique

Biological effect on children of mothers' use of soaps
containing mercury
To make regional health authorities aware in order that
they take preventive and educational measures.
Country: Zaire
Hazard: Mercury
Type of study: Case Control, Cohort

500 Zaire
Tie Mushiya,
Biologie-Toxicologie-Pharmacologie, Universite de Kinshasa,
Faculte de Pharmacie, Laboratoire de Toxicologie,
Bureau Postal 754 Kinshasa KIN IX
Collaborators: Prof. L. Moel, Universite Libre de
Bruxelles, Bruxelles, Belgique; Prof. R. Lauwerys,
Universite Catholique de Louvain, Bruxelles, Belgique

Urban lead poisoning in Kinshasa
To make regional health authorities aware in order that
they take preventive and educational measures.
Country: Zaire
Hazard: Lead
Industry: Manufacturing Battery
Type of study: Case Control, Cohort
INVENTORY OF ONGOING RESEARCH IN OCCUPATIONAL HEALTH AND ENVIRONMENTAL EPIDEMIOLOGY IN DEVELOPING COUNTRIES.

If possible, please reply in English./Veuillez répondre en anglais, si possible./Favor de contestar en inglés, si posible.

1. Principal Investigator/Directeur de recherche/Investigador principal:
   Title/Titre/Título (Dr., Prof., Mr./M./Sr., Ms./Mme./Sra.): ______________________
   First Name/Prénom/Nombre: _________________________________________________
   Family Name/Nom/Apellido: _________________________________________________

2. Institution/Institution/Institución: _______________________________________

3. Address/Adresse/Dirección:
   City/Ville/Ciudad: _________________________________________________________
   Postal Code/Code postal/Código postal: ______________________________________
   Country/Pays/Pais: ________________________________________________________

4. Title of Research Project/Titre du projet de recherche/Título del proyecto de investigación:
   ____________________________________________________________

5. Principal Collaborators/Principaux Collaborateurs/Colaboradores principales
   Name/nom/nombre: Institution/institution/institución: City/ville/ciudad: Country/pays/pais:
   a. ________________________________________________________________
   b. ________________________________________________________________

6. Countries of Data Collection/Pays de collecte de données/Países de colección de datos:
   ________________________________________________________________

7. Hazard(s) or Exposure(s) Studied/Risques étudiés/Riesgos investigados:
   ________________________________________________________________

8. Types of Industry ("mining") and/or Occupations ("farm worker") Studied/Types d'industries ("exploitation minière") et/ou occupations ("ouvrier agricole") étudiés/Tipos de industrias ("minería") y/o ocupaciones ("trabajador agrícola") investigados:
   ________________________________________________________________

9. Year Project Began/Année de début du projet/Año del inicio del proyecto:

10. Expected Year of its Completion/Année prevue pour son achèvement/Año previsto para su conclusión:
    ________________________________________________________________
11. Type of Study/Type de recherches/Tipo de estudio
   (Check one or more/Cochez une ou plusieurs réponses/Seleccione uno o más):
   Epidemiology/Epidémiologie/Epidemiología:
      Descriptive/Descriptive/Descriptiva:
      Case-Control/Étude de cas contrôles/Casos y controles:
      Cohort/Cohorte/Cohorte:
      Cross-Sectional/Transversale/Transversal:

   Industrial Hygiene or Exposure Assessment/Hygiène industrielle ou
evaluation des risques/Higiene industrial o evaluación de riesgos:

   Occupational Safety/Sécurité de l'emploi/Seguridad en el trabajo:

   Occupational Ergonomics/Ergonomie/Ergonómica:

   Other/Autre/Otro: ____________________________

12. Total Number of Subjects in Study/Nombre total de sujets dans l'étude/Número total de sujetos en el estudio:
   Number of Subjects Exposed/Nombre de sujets exposés au danger/Número de sujetos expuestos al peligro: ______________________
   Number of Subjects Affected/Nombre de sujetos affectés/Número de sujetos afectados: ______________________
   Number of Controls/Nombre de controles/Número de controles: ______________________

13. Aim or Objective of Study/But ou objective de l'étude/Propósito o objetivo del estudio:

14. Summary of Methods/Résumé des méthodes/Resumen de los métodos:

15. Preliminary Results/Résultats préliminaires/Resultados preliminares:

16. Source(s) of Financial Support/Source(s) d'appui financier/Fuente(s) de apoyo financiero:

17. List references for similar studies you or your group completed in the past 3 years./Faites une liste de
references pour les études semblables faites par vous ou par votre groupe durant les 3 dernières années./Haga
una lista de referencias de estudios semejantes hechos por Ud. o por su grupo en los últimos 3 años.

Questions 15-17 are optional./Les questions 15-17 sont facultatives./Las preguntas 15-17 son opcionales.

Please return this form in the enclosed envelope to the address below:
Veillez renvoyer ce formulaire dans l'enveloppe ci-jointe à l'adresse ci-dessous:
Favor de devolver este formulario en el sobre adjunto a la siguiente dirección:

Environmental Epidemiology, EHE/PEP
World Health Organization
1211 Geneva, Switzerland

Thank you very much./Merci de votre attention./Muchas gracias por su ayuda.
This document was prepared for the WHO Global Environmental Epidemiology Network, GEENET.

The Network was established in 1987 as a means for the World Health Organization to strengthen education, training and research in institutions involved in epidemiological teaching and research on the health effects of environmental hazards, and other epidemiological applications in environmental and occupational health.

The Network aims at improved communication and collaboration between institutions in this field in developed and developing countries. A series of documents with information of value for training and research development is prepared for the Network and lists of Network members are distributed on a regular basis. Training and research promotion workshops are organised in collaboration with national and international agencies.

For further information write to:

Environmental Epidemiology, EHE/PEP
World Health Organization
1211 Geneva, Switzerland