国际化学品安全规划处
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环境流行病学研究方法指南

联合国环境规划署
国际劳工组织　　合编
世界卫生组织

人民卫生出版社

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联合国环境规划署、国际劳工组织及
世界卫生组织合编

方企圣　张振宏　蔡祖根
汪启琳　[redacted]　译

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方企圣　等译

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致《标准》文献的读者

虽然已经尽了很大努力，使《标准》文献中的资料尽量准确，按时出版，但是错误是难免的，而且今后还可能再出现。为了阅读环境卫生标准文献的所有人的利益，诚恳地希望读者将发现的任何错误告诉瑞士日内瓦世界卫生组织国际化学品安全规划处，以便将它载入以后出版物的勘误表中。

此外，衷心希望与《标准》文献有关的任何专业领域的专家，将有关的任何被遗漏的已出版的重要文献通知世界卫生组织秘书处。这些文献可能有助于改变接触受检环境因子对健康危害的评价，以便在修改或重新评价《标准》文献的结论时考虑采纳这些资料。

前　言

一个多世纪来，流行病学研究对于查明传染病在社会上的传播途径发挥了重要作用，通常人们还同时进行深入的实验研究，因而弄清了与这些疾病有关的细菌、病毒或其他生物性因子，並采取了适当的治疗和预防措施。生物性因子的流行病学研究和传染病的有效控制，给人们指出了一种研究途径，即将流行病学的方法应用于环境中非生物性因子效应的研究。然而，对物理性和化学性因子的研究，要得出明确的结论，一般比生物性因子研究更困难，这是因为非生物性因子研究涉及各种因素，且因素间的相互作用往往更为复杂。

政府及公共卫生当局负责人、政治家和公众对环境危害与人类健康的关系日益关心。过去二十年间，尽管做了很多用流行病学方法研究环境因子效应的工作，但在建立卫生标准上取得良好结果的研究很少，研究的设计、实施和结果的评价上都缺乏适当的指导。虽然有很多资料和报道分散发表在文献中，但是由于这个学科发展很快，或者由于新的问题一旦被认识后，要求采取行动的压力迅速增加，因而已公布的研究工作，往往在研究设计、资料分析和解释上都有缺陷。所以迫切需要提出一个报告，确定适合这类研究的方法学，以便成员国、有关的科研机构及科研工作者用比较正确的方法进行流行病学研究。

“环境流行病学研究方法指南”一书是1975年10月7～13日在日内瓦召开的世界卫生组织流行病学方法研究组关于环境因子对人类健康效应评价会议上提出来的。研究组认为

环境流行病学的基本原则，特别是有关生物因子部分，已经建立得相当完善，所以主要的问题是将它们正确地应用于环境中物理性和化学性因子健康效应的研究中去。

所以研究组在提出的各种建议中，包括要筹备出版一本世界卫生组织专集，作为用流行病学方法评价环境因子对人类健康效应时的指南。这个建议在1976年世界卫生组织执委会第五十八次会议上得到一致通过。

为了实现这个建议，1978年1月30日～2月1日在伦敦St.Bartholomew医学院医学研究委员会毒理部召开了专集编辑组第一次会议。[a]编辑组通过了专集的纲要，60多名作者和各章汇编人的初步名单和出版准备工作的时间安排。

编辑组第二次会议于1980年2月26～29日在伦敦召开。编辑组评阅了各章汇编人根据作者们提供的资料汇编的第一稿，並部署了下一步的编辑工作。明确规定每章並不是汇编入个人的著作，因为基本资料是由很多作者提供的，而在编辑过程中，还将有些资料从一个章移到另一章。各章汇编人负有双重任务，他们既从各作者处收集资料汇编成章，又是专集全书编辑组的成员。编辑组成员和全体作者名单分别列在第〔18〕～〔21〕页。作者提出的资料有的插入不同章节，所以不完全是原作的形式，但也有些资料几乎是以原作的形式被较详尽地引用。

编辑组最后一次会议是1981年8月20～21日在爱丁堡职业医学研究所召开的。编辑组成员推敲和评阅了各章和全书的结构，同时也讨论了有关国际流行病学学会/世界卫生组

a 当时的国际流行病学学会（IEA）主席J.Kostrzewski教授参加了这次会议，並当选为编辑组主席。他强调指出，国际流行病学学会准备对这个计划在技术上给予全力支持。

织（IEA/WHO）关于专集联合工作组的问题（该联合工作组是在第九次国际流行病学学术会议后一周成立的），並对专集的最后编辑工作计划取得了一致意见。

来自16个国家和欧洲共同体委员会的38名环境卫生学家包括6名编辑组成员参加了IEA/WHO 联合工作组。该组于1981年8月24日在爱丁堡召开会议。各成员评阅了各章和全书的稿件，进行了有价值的评议，提出了改进的建议。会议参加者名单见第〔22〕～〔23〕页。

专集稿件的最后一次讨论会于1981年11月30日～12月3日在莫斯科召开，会议参加者是来自世界卫生组织各地区的国际专家组，5名编辑组成员和2名世界卫生组织官员。参加者名单见第〔24〕～〔25〕页。这次会议的召开得到联合国环境规划署的财政支持，由苏联国家科学技术委员会国际计划中心和莫斯科全苏A.N.Sysin一般卫生和环境卫生研究所（该所也是世界卫生组织环境卫生效应协作中心）作为东道主。专家组的评论和建议有很大价值，它使专集更为完善。

这样，共有26个成员国102名专家参加了专集的编辑工作。

1980年世界卫生组织、联合国环境规划署和国际劳工组织一起创建了国际化学品安全规划处（IPCS），本书出版工作是这个新的国际规划处的主要计划之一。

虽然做了很多努力来避免名词术语的不统一，但没有可能做到完全统一，实际上，这个问题已超出本专集的范畴。IPCS已提出计划，要对毒理学和流行病学研究中常用的名词，制订出国际上一致同意的定义。所以应当了解，某些名词在不同的国家，不同的科学领域中有不同的含义，如果超出使用国家的习惯，超出特定的范围，而不下精确的定义就

使用这些名词，可能会造成很大的误会。所以提醒读者要注意到某些技术名词从一个场合转到另一个场合时含义上的变化。

本专集应该成为进行非生物因子对人群健康效应的流行病学研究的指南。一个流行病学调查不仅涉及流行病学家，也涉及其他专家(例如临床医师、统计学家、工程师、化学家和护士)，所以本专集是针对范围这样广泛的读者而写的。编辑组相信本专集的公布将为进一步的研究铺平道路。*

本专集的最后编辑工作是在1982年由M. Lebowitz和R. Waller完成，由J. Kostrzewski，M. Jacobsen和Y. Hasegawa协助。

应该特别感谢已故的F. Sawicki博士，因为他对本专集作出了很有价值的贡献，也因为他在环境因子与呼吸道疾病的关系方面做了大量的研究工作。

编 辑 组

* * *

为编辑本标准，通过与美国北卡罗来纳州研究三角公园的国立环境卫生科学研究所（IPCS的领导机构）订立合同，由健康和人类服务部提供了部分财政资助。

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* 例如世界卫生组织欧洲地区办事处协调下进行的几种化学物质健康效应的协作流行病学研究将应用本书提出的一些原则。编辑组知道日内瓦的世界卫生组织及其欧洲地区办事处正准备联合出版职业卫生流行病学手册。本书虽然也引用了一些职业卫生的研究成果，但它主要是面向广大居民的问题，而不是针对某个职业人群的。

环境流行病学研究方法指南

编辑组[a]

Dr K.P. Duncan, Health and Safety Executive, London, England (Coordinator for Chapter 7)

Dr M. Greenberg, Health and Safety Executive, London, England (Coordinator for Chapter 4)

Dr Y. Hasegawa, Environmental Hazards and Food Protection, Division of Environmental Health, World Health Organization, Geneva, Switzerland (Secretary)

Professor I.T.T. Higgins, School of Public Health, University of Michigan, Ann Arbor, Michigan, USA (Coordinator for Chapter 2)

Dr M. Jacobsen, Institute of Occupational Medicine, Edinburgh, Scotland (Coordinator for Chapter 6)

Professor J. Kostrzewski, Department of Epidemiology, National Institute of Hygiene, Warsaw, Poland (Chairman)

Professor P.J. Lawther, MRC Toxicology Unit, Clinical Section, St. Bartholomew's Hospital Medical College, London, England

Professor M.D. Lebowitz, Division of Respiratory Sciences, Health Sciences Center, University of Arizona, Tucson, Arizona, USA (Coordinator for Chapter 5)

Dr I. Shigematsu, Radiation Effects Research Foundation, Hiroshima, Japan

Mr R. E. Waller, Toxicology and Environmental Protection, Department of Health and Social Security, London, England (Coordinator for Chapter 1)

Professor R.L. Zielhuis, University of Amsterdam, Coronel Laboratorium, Netherlands (Coordinator for Chapter 3)

[a] Professor W.W. Holland and Dr C. du V. Florey, St. Thomas's Hospital Medical School, London, were initially the Coordinators for Chapter 4. As they were unable to continue the work it has been taken over by Dr Greenberg. The Secretariat wishes to thank Professor Holland and Dr Florey for their efforts.

作者

Professor M. Alderson, Institute of Cancer Research, Surrey, England (contributor to section 4.2)
Professor K. Biersteker, Agricultural University, Wageningen, Netherlands (contributor to Chapter 2)
Professor N.P. Bochkov, Institute of Medical Genetics, Moscow, USSR (contributor to section 4.10)
Professor D.S. Borgaonkar, North Texas State University, Denton, Texas, USA (contributor to section 4.10)
Dr N. Breslow, International Agency for Research on Cancer, Lyon, France (contributor to Chapter 6)
Dr D.G. Clegg, Food Directorate, Department of National Health and Welfare, Ottawa, Canada (contributor to section 3.5)
Dr J.H. Cummings, Dunn Clinical Nutrition Centre, Addenbrookes Hospital, Cambridge, England (contributor to section 4.11)
Professor W.J. Eylenbosch, University of Antwerp, Wilrijk, Belgium (contributor to sections 4.10 and 4.11)
Dr C. Favaretti, Institute of Hygiene, University of Padua, Italy (contributor to Chapter 7)
Dr A.J. Fox, The City University, London, England (contributor to Chapter 6)
Mrs M. Fugas, Institute of Medical Research and Occupational Health, Zagreb, Yugoslavia (contributor to Chapter 3)
Professor J.R. Goldsmith, Ben Gurion University, Beer Sheva, Israel (contributor to Chapter 3)
Professor B.D. Goldstein, New York University Medical Center, New York, USA (contributor to section 4.7)
Professor I.F. Goldstein, Columbia University, School of Public Health, New York, USA (contributor to Chapter 6)
Professor M. Hashimoto, Graduate School of Environmental Sciences, Tsukuba University, Ibaraki-ken, Japan (contributor to Chapter 7)
Professor M.W. Higgins, School of Public Health, University of Michigan, Ann Arbor, Michigan, USA (contributor to section 5.6)
Dr A.W. Hubbard, Ministry of Agriculture, Fisheries and Food, London, England (contributor to section 3.5)
Dr A. Jablensky, Division of Mental Health, World Health Organization, Geneva, Switzerland (contributor to section 4.6)
Dr A. Jakubowski, Institute of Occupational Medicine and Rural Hygiene, Lublin, Poland (contributor to section 3.5)
Dr H. P. Jammet, Centre for Nuclear Studies, Fontenay-aux-Roses, France (contributor to section 3.5)

Professor F. Kaloyanova, Institute of Hygiene and Occupational Health, Sofia, Bulgaria (contributor to Chapter 3)
Professor S.R. Kamat, Department of Chest Medicine, K.E.M. Hospital, Bombay, India (contributor to sections 4.8 and 5.6)
Dr H. Kato, Radiation Effects Research Foundation, Hiroshima, Japan (contributor to section 5.6)
Professor L.T. Kurland, Mayo Clinic, Rochester, Minnesota, USA (contributor to section 4.5)
Dr J.F. Kurtzke, Veterans Administration Hospital, Washington, DC, USA (contributor to section 4.5)
Dr P.J. Landrigan, National Institute for Occupational Safety and Health Cincinnati, Ohio, USA (contributor to Chapter 5)
Professor M.F. Lechat, Catholic University of Louvain, Brussels, Belgium (contributor to section 4.10)
Professor S.R. Leeder, University of Newcastle, New South Wales, Australia (contributor to section 4.4)
Dr D.T. Mage, Health Effects Research Laboratory, Environmental Protection Agency, Research Triangle Park, North Carolina, USA (contributor to Chapter 3)
Dr P.B. Meijer, TNO Research Institute for Environmental Hygiene, Delft, Netherlands (contributor to Chapter 3)
Dr W.E. Miall, MRC Epidemiology and Medical Care Unit, Harrow, England (contributor to Chapter 5)
Dr C.S. Muir, International Agency for Research on Cancer, Lyons, France (contributor to Chapter 2 and section 4.3)
Profesor M. Nikonorow, National Institute of Hygiene, Warsaw, Poland (contributor to section 3.5)
Dr B.R. Ordoñez, Autonomous Metropolitan University, Mexico City, Mexico (contributor to Chapter 7)
Professor B. Paccagnella, Institute of Hygiene, University of Padua, Italy (contributor to Chapter 7)
Dr R. . Packham, Water Research Centre, Medmenham, England (contributor to section 3.5)
Professor B.S. Pasternack, New York University Medical Center, New York, USA (contributor to Chapter 6)
Professor W.O. Phoon, University of Singapore, Singapore (contributor to Chapter 5)
Dr I. Purcell, University of Newcastle, New South Wales, Australia (contributor to section 4.4)
Professor A.V. Roscin, Central Institute for Advanced Medical Training, Moscow, USSR (contributor to section 4.7)
Dr M. Šarić, Institute for Medical Research and Occupational Health, Zagreb, Yugoslavia (contributor to section 4.4)
Dr F. Sawicki, National Institute of Hygiene, Warsaw, Poland (contributor to Chapter 5)

作者（续）

Dr M.A. Schneiderman, National Cancer Institute, Bethesda, Maryland, USA (contributor to Chapter 2)

Dr I. Shigematsu, Radiation Effects Research Foundation, Hiroshima, Japan (contributor to section 5.5 and Chapter 7)

Dr C. Silverman, Bureau of Radiological Health, US Food and Drug Administration, Rockville, Maryland, USA (contributor to section 3.5)

Professor F.H. Sobels, University of Leiden, Leiden, Netherlands (contributor to section 4.10)

Dr E. Somers, Environmental Health Directorate, Department of National Health and Welfare, Ottawa, Canada (contributor to Chapter 7)

Dr J. H. Stebbings, Jr., Los Alamos Scientific Laboratory, Los Alamos, New Mexico, USA (contributor to Chapter 6)

Dr A. H. Suter, Occupational Safety and Health Administration, Department of Labor, Washington, DC, USA (contributor to section 3.5)

Dr H. Tamashiro, Institute of Public Health, Tokyo, Japan (contributor to section 5.5 and Chapter 7)

Dr M.P. van Sprundel, University of Antwerp, Wilrijk, Belgium (contributor to sections 4.10 and 4.11)

Dr M. Violaki-Paraskeva, Ministry of Social Services, Athens, Greece (contributor to Chapter 7)

Professor D. Wassermann, The Hebrew University Hadassah Medical School, Jerusalem, Israel (contributor to Chapter 4)

Professor M. Wassermann, The Hebrew University Hadassah Medical School, Jerusalem, Israel (contributor to Chapter 4)

Professor W.E. Waters, Community Medicine, Southampton General Hospital, Southampton, England (contributor to section 5.3)

Dr J.A.C. Weatherall, Office of Population Censuses and Surveys, London, England (contributor to section 4.10)

Professor P.H.N. Wood, The Arthritis and Rheumatism Council Epidemiology Research Unit, University of Manchester, Manchester, England (contributor to section 4.8)

Dr M. Zaphiropoulos, Ministry of Social Services, Athens, Greece (contributor to Chapter 7)

国际流行病学学会/世界卫生组织联合工作组：环境流行病学研究方法指南专集

成员

Dr E. Bennet, Health and Safety Directorate, Commission of the European Communities, Luxembourg

Dr S. Beresford, Royal Free Hospital School of Medicine, London, England

Dr G. W. Brebe, Clinical Epidemiology, National Cancer Institute, National Institutes of Health, Bethesda, Maryland, USA

Professor L. Breslow, School of Public Health, University of California Los Angeles, California, USA

Dr D. Brille, Studies and Research Mission, Ministry of the Environment, Paris, France

Dr P.G.J. Burney, Department of Community Medicine, St Thomas' Hospital Medical School, London, England

Miss M. Deane, Epidemiological Studies Section, California State Department of Health Services, Berkeley, California, USA

Dr A.R. Eltom, Faculty of Medicine, Khartoum, Sudan

Professor W.S. Eylenbosch, Department of Epidemiology and Social Medicine, University of Antwerp, Wilrijk, Belgium

Professor G.M. Fara, Institute of Hygiene, Milan, Italy

Dr J.J. Feldman, Analysis and Epidemiology, National Center for Health Statistics, Hyattsville, Maryland, USA

Dr I.F. Goldstein, Environmental Epidemiology Research Unit, Columbia University, School of Public Health, New York, USA

Dr Y. Hasegawa, Environmental Hazards and Food Protection, Division of Environmental Health, World Health Organization, Geneva, Switzerland

Dr N. M. Hanis, Epidemiology Unit, Research and Environmental Division, Medical Department, Exxon Corporation, E. Millstone, New Jersey, USA and Cornell University Medical School, New York, USA

Professor I.T.T. Higgins, School of Public Health, University of Michigan, Ann Arbor, Michigan, USA

Professor M.W. Higgins, Department of Epidemiology, School of Public Health, University of Michigan, Ann Arbor, Michigan, USA

Dr M. Hitosugi, Department of Public Health, School of Medicine, Kitasato University, Sagami-hara City, Kanagawa-Ken, Japan

Professor A.C. Irwin, Department of Preventive Medicine, Dalhousie University, Halifax, Nova Scotia, Canada

Dr M. Jacobsen, Institute of Occupational Medicine, Edinburgh, Scotland

Professor H. Kasuga, Department of Public Health, School of Medicine, Tokai University, Isehara-Shi, Kanagawa-Ken, Japan

Dr M. Khogali, Faculty of Medicine, Kuwait University, Safat, Kuwait

Professor M.A. Klinberg, Department of Preventive and Social Medicine, Tel-Aviv University School of Medicine, Ramat Aviv, Israel

Professor J. Kostrzewski, Department of Epidemiology, National Institute of Hygiene, Warsaw, Poland

Professor L.T. Kurland, Department of Medical Statistics and Epidemiology, Mayo Clinic, Rochester, Minnesota, USA

Professor R.A. Kurtz, Faculty of Medicine, Kuwait University, Safat, Kuwait

Professor M. Lebowitz, Division of Respiratory Sciences, Health Sciences Center, University of Arizona, Tucson, Arizona, USA

Dr S. Mazumdar, Department of Biostatistics, University of Pittsburgh, Pittsburgh, Pennsylvania, USA

Dr U. G. Oleru, College of Medicine, University of Lagos, Lagos, Nigeria

Professor B.S. Pasternack, Department of Environmental Medicine, New York University, Medical Center, New York, USA

Professor M.R. Pandey, Thapathali, Katmandu, Nepal

Professor W.O. Phoon, Department of Social Medicine and Public Health, National University of Singapore, Singapore

Dr M.P. Sprundel, Department of Epidemiology and Social Medicine, University of Antwerp, Wilrijk, Belgium

Professor R. Steele, Department of Community Health and Epidemiology, Queen s University, Kingston, Ontario, Canada

Dr H. Tamashiro, National Institute for Minamata Disease, Minamata City, Kumamoto-Ken, Japan.

Professor K.W. Tietze, Federal Health Office, Berlin (West)

Dr M. Wahdan, Regional Adviser on Epidemiology, WHO Regional Office for Eastern Mediterranean, Alexandria, Egypt

Mr R.E. Waller, Toxicology and Environmental Protection, Department of Health and Social Security, London, England

Professor W. Winkelstein, School of Public Health, University of California, Berkeley, California, USA

环境流行病学研究方法指南最后评审会议

成员

Dr L.K.A. Derban, Medical Officer, Volta River Authority, Accra, Ghana

Dr C. Favaretti, Institute of Hygiene, University of Padua, Italy

Dr M. Jacobsen, Institute of Occupational Medicine, Edinburgh, Scotland

Professor S.R. Kamat, Department of Chest Medicine, K.E.M. Hospital, Bombay, India

Professor J. Kostrzewski, Department of Epidemiology, National Intitute of Hygiene, Warsaw, Poland (Chairman)

Professor M.D. Lebowitz, Division of Respiratory Sciences, Health Sciences Center, University of Arizona, Tucson, Arizona, USA (Co-rapporteur)

Professor A. Massoud, Department of Community, Industrial and Environmental Medicine, Ain Shams University, Cairo, Egypt

Dr B.R. Ordoñez, Environmental Health Programme, Autonomous Metropolitan University, Mexico City, Mexico

Professor A.V. Roscin, Central Institute for Advanced Medical Training, Moscow, USSR

Dr I. Shigematsu, Radiation Effects Research Foundation, Hiroshima, Japan

Academician G.J. Sidorenko, A.N. Sysin Institute of General and Communal Hygiene, Academy of Medical Sciences of the USSR, Moscow, USSR (Vice Chairman)

Mr R.E. Waller, Toxicology and Environmental Protection, Department of Health and Social Security, London, England (Co-rapporteur)

世界卫生组织秘书处

Dr I. Farkas, Promotion of Environmental Health, WHO Regional Office for Europe, Copenhagen, Denmark

Dr Y. Hasegawa, Medical Officer, Environmental Hazards and Food Protection, Division of Environmental Health, WHO, Geneva, Switzerland (Secretary)

其他参加者

Dr I.R. Golubev, Department of Public Health, USSR State Committee for Science and Technology, Moscow, USSR

Dr Z.P. Grigorievskaya, A.N. Sysin Institute of General and Communal Hygiene, Moscow, USSR

Dr Y.E. Korneyev, Laboratory of Epidemiological Methods of Study, A.N. Sysin Institute of General and Communal Hygiene, Moscow, USSR (Co-rapporteur)

Dr N.N. Litvinov, A.N. Sysin Institute of General and Communal Hygiene, Moscow, USSR

Dr Y.I. Prokopenko, Department of the Influence of Environmental Factors of Public Health, A.N. Sysin Institute of General and Communal Hygiene, Moscow, USSR

Dr Ya.I. Zvinjackovskij, Laboratory of the Influence of Environmental Factors of Public Health, Marseev Institute of General and Communical Hygiene, Kiev, USSR

• • •

其他评审者

Dr A. David, Office of Occupational Health, Division of Noncommunicable Diseases, WHO, Geneva, Switzerland

Mr J. Duppenthaler, Division of Epidemiological Surveillance and Health Situation and Trend Assessment, WHO, Geneva, Switzerland

Dr K. Hemminki, Institute of Occupational Health, Helsinki, Finland

Dr J. Stjernswärd, Cancer, Division of Noncommunicable Diseases, WHO, Geneva, Switzerland

Dr C. Xintaras, Office of Occupational Health, Division of Noncommunicable Diseases, WHO, Geneva, Switzerland

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