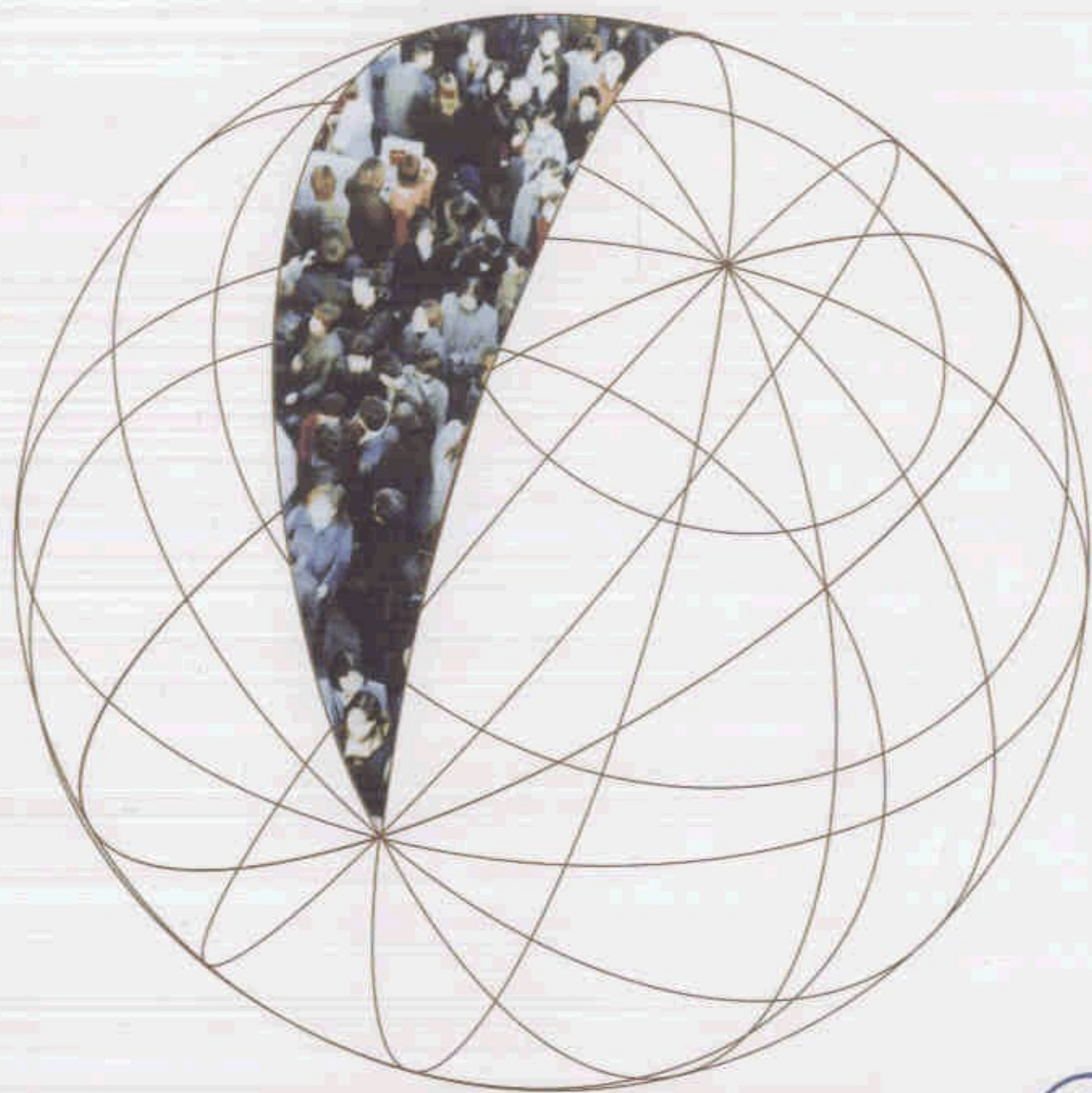


INTERNATIONAL ENCYCLOPEDIA OF

PUBLIC HEALTH

EDITOR IN CHIEF HARALD KRISTIAN HEGGENHOUGEN

ASSOCIATE EDITOR IN CHIEF STELLA R. QUAH



VOLUME 1 A-Com



CONTENTS

Editorial Advisory Board	v
Editorial Board	vii–xviii
Subject Classification	xix–xxxiv
Contents	xxxv–I
Preface	ii–liii
Foreword 1	lv–lvi
Foreword 2	lvii–lviii
Contributors	lix–lxiii
Guide to Use of the Encyclopedia	lxv–lxvi

VOLUME 1

A

Abortion	<i>A Faúndes and F Alvarez</i>	1
Active Life Expectancy	<i>K G Manton</i>	12
Acute Care Hospitals	<i>M Hensher</i>	24
Adenoviruses	<i>C P Gerba and R A Rodriguez</i>	28
Adolescent Health	<i>N S Musacchio and M Forcier</i>	33
Adolescents	<i>A J Flisher and N Gerein</i>	48
Agenda Setting in Public Health Policy	<i>J Shiffman</i>	55
Aging, Physical Activity and Health	<i>R J Shephard</i>	61
Agricultural Health and Safety	<i>M J Perry</i>	69
AIDS, Epidemiology and Surveillance	<i>R Choi and C Farquhar</i>	76
AIDS: Overview	<i>M Essex</i>	90
Alcohol Consumption: Overview of International Trends	<i>M G Monteiro, J Rehm, B Taylor, and T Stockwell</i>	98
Alcohol, Integrated Control of	<i>S Casswell</i>	108
Alcohol—Socioeconomic Impacts (Including Externalities)	<i>B Easton</i>	112
Alcohol—Treatment	<i>T F Babor</i>	116
The Alcohol Industry	<i>L Hill</i>	124
Alcohol, The Burden of Disease of	<i>J Rehm, J Patra, D Baliunas, S Popova, M Roerecke, and B Taylor</i>	135
Alma-Ata and Primary Health Care: An Evolving Story	<i>J H Bryant and J B Richmond</i>	152

Anemia	<i>T Shamah, S Villalpando, and L Moreno</i>	174
Anthropological Perspectives in Bio-Ethics	<i>K A Stewart</i>	184
Anthropological Perspectives on the Health Transition	<i>L Manderson</i>	193
Antibiotic Development and Resistance	<i>J Straand, C Gradmann, M Lindbæk, and G S Simonsen</i>	200
Antimicrobial Resistance	<i>F C Tenover and J E McGowan Jr.</i>	211
Arboviruses	<i>H Artsob and R Lindsay</i>	219
Arms Control Measures	<i>R Pilch</i>	227
Arsenic	<i>J R Meliker and J O Nriagu</i>	233
Asbestos	<i>G Wagner and R Lemen</i>	238
Asthma	<i>P M O'Byrne</i>	245
Australia and New Zealand, Health Systems of	<i>J D Glover, D M S Hetzel, and S K Tennant</i>	255
Autoimmune Diseases	<i>N R Rose</i>	267

B

Bacterial Infections: Overview	<i>S Doron and S L Gorbach</i>	273
Bacteriology, Historical	<i>O Amsterdamska</i>	282
Bioaerosols	<i>J Douwes, W Eduard, and P S Thorne</i>	287
Biodiversity, Health Implications of	<i>A Bernstein</i>	297
Biostatistics	<i>P E Leaveron and F V Wilder</i>	301
Bladder Cancer	<i>C Pelucchi and E Negri</i>	311
Blindness	<i>S Resnikoff and R Pararajasegaram</i>	318
Blood Transfusion Services	<i>C Jersild and V Hafner</i>	325
Botulism	<i>A Aureli, G Franciosa, and L Fenicia</i>	329
Brain Tumours	<i>R McKean-Cowdin, P Razavi, and S Preston-Martin</i>	338
Breast Cancer	<i>U Veronesi and P Boyle</i>	348
Brucellosis	<i>J S Solera and M J Castaño</i>	357
Burns and Scalds	<i>R Poulos and M Stevenson</i>	370

C

Cadmium	<i>A Fristachi and H Choudhury</i>	377
Canada, Health System of	<i>G P Marchildon</i>	381
Cancer and Senescence	<i>K Itahana and G P Dimri</i>	391
Cancer Care, The Future Organization of	<i>K Sikora</i>	395
Cancer Economics	<i>T N Chirikos</i>	408
Cancer Epidemiology	<i>P A Wark and J Peto</i>	416
Cancer: Global Burden/Trends and Projections	<i>F I Bray</i>	424
Cancer Mortality	<i>A Hjartåker, E Weiderpass, and F I Bray</i>	452
Cancer Screening	<i>M Hakama and A Auvinen</i>	464

Cancer Survival	<i>T Hakulinen and T Dyba</i>	480
Carcinogens, Environmental	<i>R W Clapp, M M Jacobs, and G K Howe</i>	493
Cardiac Rehabilitation	<i>H M Arthur and J A Stone</i>	507
Cardiovascular Disease: Overview and Trends	<i>M J S Zaman, E J Brunner, and H Hemingway</i>	511
Cardiovascular Disease Prevention	<i>L Wilhelmsen</i>	538
Centers for Disease Control	<i>S B Thacker and D J Sencer</i>	549
Cerebrovascular Disease	<i>V Feigin and G Donnan</i>	556
Child Abuse/Treatment	<i>A P Giardino</i>	571
Child Labor	<i>J Kasper and D Parker</i>	583
Child Obesity and Health	<i>Y Wang</i>	590
Child Rights	<i>J Goldhagen and G Lansdown</i>	605
Child Soldiers	<i>J Pearn</i>	612
Child Witness to Violence	<i>M Augustyn and B Zuckerman</i>	616
Childhood Infectious Diseases: Overview	<i>Z A Bhutta and M A Saeed</i>	620
Children and Adolescents, Measuring the Quality of Life of	<i>E Davis, E Waters, A Shelly, and L Gold</i>	641
Children, Media and Health	<i>S Goldstein and S Usdin</i>	648
China, Hong Kong and Taiwan, Health System of	<i>G M Leung, A Wagstaff, M Lindelow, and J R Lu</i>	656
Chlamydia (Trachoma and Sexually Transmitted Infections)	<i>A W Solomon and D C W Mabey</i>	672
Cholera and Other Vibrioses	<i>J G Morris Jr.</i>	683
Cholesterol and Lipids	<i>C Baigent and R Clarke</i>	693
Chronic Disease Modeling	<i>J D F Habbema, R Boer, and J J Barendregt</i>	704
Chronic Obstructive Pulmonary Disease	<i>R K Morgan and R Summer</i>	709
Circulatory Diseases and Aging	<i>I Akushevich and A I Yashin</i>	717
Classic Concepts of Disease	<i>T Schramme</i>	726
Classification of Mental Disorders: Principles and Concepts	<i>T Üstün</i>	733
Clinical Epidemiology	<i>D L Sackett</i>	740
Clinical Trials	<i>W R Harlan</i>	744
Codes of Ethics for Public Health	<i>J C Thomas and R Gaare Bernheim</i>	754
Cognitive Disorders	<i>L D Ravdin</i>	759
Colorectal Cancer	<i>E Mitry</i>	765
Community Health Workers	<i>S B Rifkin</i>	773
Community Health Insurance in Developing Countries	<i>B Criel, M-P Waelkens, W Soors, N Devadasan, and C Atim</i>	782
Community-Based Nutrition Programs	<i>K Tontisirin and L Bhattacharjee</i>	791
Comparative Health Systems	<i>H Wang</i>	799
Comparative Risk Assessment	<i>M Ezzati</i>	806
Competition in Health Care	<i>P H Song, J D Barlow, E E Seiber, and A S McAlearney</i>	818
Compression of Morbidity	<i>J McCallum and C Mathers</i>	823

VOLUME 2

C		
Consumerism: Overview	<i>L Wong and J F P Bridges</i>	1
Controlling Illegal Stimulants: A Regulated Market Model	<i>J A Buxton, R G Mathias, and M Haden</i>	7
Coronary Heart Disease	<i>J Müller-Nordhorn and S N Willich</i>	16
Corruption and the Consequences for Public Health	<i>T Vian</i>	26
Cost-Influenced Treatment Decisions and Cost Effectiveness Analysis	<i>D B Evans</i>	34
Cultural Competence in Public Health	<i>E Waters, L Gibbs, E Riggs, N Priest, A Renzaho, and M Kulkens</i>	38
Cultural Context of Reproductive Health	<i>R Root and C H Browner</i>	44
Cultural Epidemiology	<i>J A Trostle</i>	48
Cultural Factors Influencing Therapeutic Practice	<i>N L Etkin, J D Baker, and J N Busch</i>	56
Cultural Issues in Health Communication	<i>T S Harvey</i>	60
Cystic Fibrosis	<i>E F McKone</i>	65
D		
Decision Analytic Modeling	<i>P Muennig</i>	71
Demand and Supply of Human Resources for Health	<i>G Dussault and M Vujicic</i>	77
The Demand for Health Care	<i>G Mwabu</i>	84
Demography of Aging	<i>K C Land and V L Lamb</i>	89
Demography, Epidemiology and Public Health	<i>O S Miettinen</i>	95
Dengue, Dengue Hemorrhagic Fever	<i>M G Guzman, A B Perez, O Fuentes, and G Kouri</i>	98
Dental Epidemiology	<i>P G Robinson and Z Marshman</i>	119
Dentists	<i>J E Gallagher</i>	126
Determinants of National Health Expenditure	<i>A K Nandakumar and M E Farag</i>	136
Diabetes Mellitus Prevention	<i>S R Dasari, R Oza-Frank, and K M Venkat Narayan</i>	146
Diabetes Mellitus Treatment	<i>C Chao and S Liu</i>	153
Diabetes Mellitus, Epidemiology	<i>J K Bardsley and H E Resnick</i>	161
Diet and Cancer	<i>J S Kravchenko</i>	169
Diet and Heart Disease	<i>F B Hu</i>	181
Dietary Guidelines, International	<i>A Seow</i>	190
Diphtheria	<i>T S P Tiwari</i>	195
Disability and Rehabilitation	<i>N E Groce</i>	199
Disasters and Emergency Planning	<i>J Leaning</i>	204
Disease Classification	<i>R Jakob</i>	215
Disease Prevention	<i>E Nolte</i>	222
Drinking Water and Sanitation	<i>M Checkley and W Checkley</i>	234

Drowning	<i>E F van Beeck</i>	245
Drugs, Illicit – Primary Prevention Strategies	<i>F Faggiano and F Vigna-Taglianti</i>	249
E		
East Asia and Pacific States, Health Systems of	<i>D Caussy and U Than Sein</i>	267
Economic Models of Hospital Behavior	<i>X Liu and A Mills</i>	276
Ectoparasites and Arthropod Vectors: Ectoparasite Infestations	<i>H Feldmeier</i>	282
Educational Attainment and Health/Survival	<i>J G Cleland and J K van Ginneken</i>	295
Effective Alcohol Policy	<i>H D Holder</i>	303
Elder Abuse	<i>L S Daichman, S Aguas, and C Spencer</i>	310
Emergency Medical Technicians	<i>E Romero-Hicks</i>	315
Emerging Diseases: Overview	<i>J D Mayer</i>	321
Endocrine Diseases: Overview	<i>P C Hindmarsh</i>	332
Energy Use, Health Implications of	<i>M Joffe</i>	341
Enteroviruses	<i>J G Newland and J R Romero</i>	347
Environmental and Occupational Epidemiology	<i>N Pearce and J Douwes</i>	352
Environmental Health: Overview	<i>D Krewski, M C Turner, N Boom, and F Momoli</i>	361
Environmental Justice and Health	<i>C Stephens, R Willis, and C Church</i>	373
Environmental Opportunistic Mycobacteria	<i>T P Primm and J O Falkinham</i>	382
Environmental Protection Laws	<i>N A Ashford and C C Caldart</i>	390
Epidemic Investigation	<i>E Mathieu and Y Sodahlon</i>	401
The Epidemiology of Vitamin C	<i>J Enstrom</i>	413
Epidemiology, Historical	<i>L M Irgens</i>	424
Ergonomics/Musculoskeletal Issues	<i>J T Dennerlein</i>	443
<i>Escherichia coli</i>	<i>C Wanke and C L Sears</i>	452
Esophageal Cancer	<i>L M Brown and S S Devesa</i>	459
Essential Drugs Policy	<i>H Haak</i>	468
Ethics of Health Promotion	<i>N Guttman</i>	477
Ethics of Immunization	<i>M Verweij</i>	482
Ethics of Infectious Disease Control	<i>M J Selgelid</i>	486
Ethics of Organ Transplants	<i>L S Parker and K D Williams</i>	493
The Ethics of Public Health Research: Moral Obligations to Communities	<i>H A Taylor, R R Faden, N E Kass, and S Johnson</i>	498
Ethics of Screening	<i>S S Coughlin</i>	503
Ethnic Conflict and Public Health	<i>D Pedersen and H Kienzler</i>	508
Euthanasia and Public Health	<i>B D Onwuteaka-Philipsen and L Deliens</i>	519
Evidence-Based Public Health Policy	<i>V Lin</i>	527
Extreme Weather Events and Human Health	<i>S L Molloy, E A Dreelin, and J B Rose</i>	536

F

Facility-Based Treatment of Severe Malnutrition	<i>A Ashworth</i>	545
Factors Influencing the Emergence of New (and "Old") Diseases	<i>A M Kimball</i>	552
Falls	<i>D Sturnieks and A Tiedemann</i>	563
Family Planning/Contraception	<i>A Glasier and A Gebbie</i>	570
Famine	<i>M-A Prost and A de Waal</i>	580
Fatty Acids	<i>F Shahidi and S P J N Senanayake</i>	594
Female Reproductive Physiology/Function	<i>H B Croxatto</i>	603
Fetal Growth Retardation: Causes and Outcomes	<i>S Sayers and P A L Lancaster</i>	613
Food Fortification	<i>M G Venkatesh Mannar and A S Wesley</i>	622
Food Safety	<i>J Schlundt</i>	630
Foodborne Illnesses: Overview	<i>G Hall, H Vally, and M Kirk</i>	638
Forced Migration and Health	<i>P Allotey and M Markovic</i>	653
Foundations in Public Health Ethics	<i>B Jennings</i>	660
Foundations in Public Health Law	<i>L O Gostin, B E Berkman, and J Kraemer</i>	670
Functions and Deficiencies of B-Vitamins (and Their Prevention)	<i>W Herrmann and R Obeid</i>	677

VOLUME 3**G**

Gastric Cancer	<i>S Kono</i>	1
Gastrointestinal Disorders: Overview	<i>A J MacFarlane and P J Stover</i>	9
Gender Aspects of Sexual and Reproductive Health	<i>J C Cottingham and T K S Ravindran</i>	19
Gender in Health and Illness	<i>C Vlassoff</i>	26
Genetic Engineering	<i>J S Robert and F Baylis</i>	35
Genetic Epidemiology	<i>H Campbell and N Anderson</i>	39
Genetic Factors of Cardiovascular Diseases	<i>F Civeira, D Recalde, A-L García-Otín, and A Cénarro</i>	44
Geographic Information Systems	<i>L Montana</i>	56
Global Burden of Disease	<i>C Mathers</i>	59
Global Health Initiatives and Public Health Policy	<i>R Brugha</i>	72
Governance Issues in Health Financing	<i>M Lewis and P Musgrove</i>	81
Gynecological Morbidity	<i>M Garefalakis, M Hickey, and N Johnson</i>	88

H

Happiness, Health and Altruism	<i>S G Post</i>	103
Hazardous Wastes	<i>C T De Rosa, M Fay, L S Keith, M M Mumtaz, H R Pohl, M T Hatcher, H E Hicks, J Holler, P Ruiz, and B L Johnson</i>	107
Head Trauma	<i>J Knopman and R Härtl</i>	122

Health and Disease, Concepts of	<i>D Czeresnia and T C Soares</i>	133
Health and Human Rights: Overview	<i>S Gruskin and D Tarantola</i>	137
Health Behavior and Risk Factors	<i>K Glanz and J E Stryker</i>	146
Health Care Costs, Structures and Trends	<i>T Tan-Torres Edejer, C Garg, P Hernandez, N Van de Maele, and C Indikadahena</i>	153
Health Care Financing and the Health System	<i>C Normand and S Thomas</i>	160
The Health Care of Indigenous Peoples/Nations	<i>G Bodeker</i>	175
Health Finance, Equity in	<i>D De Graeve and K Xu</i>	180
Health Inequalities	<i>P Braveman</i>	189
Health Issues of the UN Millennium Development Goals	<i>M Claeson and P Folger</i>	197
Health Literacy	<i>I Kickbusch and D Maag</i>	204
Health Policy: Overview	<i>C Paton</i>	211
Health Promotion	<i>M B Mittelmark, I Kickbusch, I Rootman, A Scriven, and K Tones</i>	225
Health Surveys	<i>J H Madans</i>	240
Health System Organization Models (Including Targets and Goals for Health Systems)	<i>F C J Stevens and J van der Zee</i>	247
Health Systems of Mexico, Central America and the Caribbean	<i>M Á Gonzalez Block and S González McQuire</i>	256
Health Technology Assessment: Ethical, Legal and Social Issues	<i>A Braunack-Mayer and N Palmer</i>	265
Health-Related Stigma and Discrimination	<i>R L Barrett</i>	269
Hearing Disorders	<i>R Burkard</i>	273
Heart Failure	<i>V L Roger</i>	281
<i>Helicobacter Pylori</i>	<i>H Enroth and L Engstrand</i>	290
Helminthic Diseases: Dracunculiasis	<i>E Ruiz-Tiben and D R Hopkins</i>	294
Helminthic Diseases: Echinococcosis	<i>D P McManus and Y R Yang</i>	311
Helminthic Diseases: Filariasis	<i>P K Das and R K Shenoy</i>	317
Helminthic Diseases: Foodborne Trematode Infections	<i>B Fried and J E Huffman</i>	327
Helminthic Diseases: Intestinal Nematode Infection	<i>L Savioli and A F Gabrielli</i>	332
Helminthic Diseases: Onchocerciasis and Loiasis	<i>J H F Remme, B Boatin, and M Boussinesq</i>	339
Helminthic Diseases: Schistosomiasis	<i>A Fenwick and J Utzinger</i>	351
Helminthic Diseases: Taeniasis and Cysticercosis	<i>F Chow and H H Garcia</i>	361
Helminthic Diseases: Trichinellosis and Zoonotic Helminthic Infections	<i>K D Murrell</i>	368
Hepatitis, Viral	<i>K M Gallagher and R T Novak</i>	374
Herpes Viruses	<i>L R Stanberry</i>	382
The History of Malaria and its Control	<i>W J Moss, S N Shah, and R H Morrow</i>	389
The History of Public Health During Colonialism	<i>A Bashford</i>	398
The History of Public Health in the Ancient World	<i>Ø Larsen</i>	404
HIV/AIDS	<i>J S Mukherjee</i>	409
HIV/AIDS and TB	<i>J Myers and K Sepkowitz</i>	421

HIV/AIDS of the Central Nervous System	<i>S S Spudich</i>	430
HIV Safety Guidelines	<i>N G Parry</i>	445
Holistic, Alternative and Complementary Medicine	<i>G Bodeker, F Kronenberg, and G Burford</i>	449
Home Care	<i>M Duke</i>	455
Hospice and Palliative Care	<i>B Gomes, I J Higginson, and E Davies</i>	460
Human Exposure Science	<i>P J Lioy and E Pellizzari</i>	469
Human Rights Approach to Public Health Policy	<i>D Tarantola and S Gruskin</i>	477
Humanitarian Responses to Complex Emergencies	<i>M A Onyango</i>	487
Huntington's Disease	<i>A Kent</i>	495
Hypertension	<i>L A Bazzano, U Pogribna, and P K Whelton</i>	501
I		
Illicit Drug Trends Globally	<i>P Griffiths, M Meacham, and R McKetin</i>	515
Illicit Drug Use and the Burden of Disease	<i>W Hall, L Degenhardt, and N Sindich</i>	523
Immunization	<i>R Lewis, M Zaffran, and B Melgaard</i>	530
Indoor Air Pollution/Developing Countries	<i>M Ezzati</i>	547
Infant Malnutrition/Breastfeeding	<i>A Gupta and J P Dadhich</i>	554
Infant Mortality/Neonatal Disease	<i>P H Wise</i>	562
Infectious Disease Modeling	<i>M Kretzschmar</i>	569
Infertility	<i>F Zegers-Hochschild, J-E Schwarze, and V Alam</i>	576
Influenza	<i>P V Targonski and G A Poland</i>	587
Influenza, Historical	<i>S-E Mamelund</i>	596
Injuries, Epidemiology of	<i>E T Petridou, C N Antonopoulos, and D-M Alexe</i>	608
Innovative Financing of Health Promotion	<i>V Tangcharoensathien, P Prakongsai, W Patcharanarumol, S Limwattananon, and S Buasai</i>	624
Insurance Plans and Programs: An Overview	<i>S Greß and J Wasem</i>	638
Interest Groups and Civil Society, in Public Health Policy	<i>N Mays</i>	650
International Classification Systems for Health	<i>T B Üstün</i>	659
International Law, and Public Health Policy	<i>A L Taylor</i>	667
Internet, Health Information on the	<i>H Bastian</i>	678
Intestinal Infections: Overview	<i>D H Hamer and S L Gorbach</i>	682
Introduction to Parasitic Diseases	<i>D G Colley</i>	694
Iodine Deficiency and its Prevention	<i>B S Hetzel</i>	701
Iron Deficiency and its Prevention	<i>P Whittaker</i>	707

VOLUME 4**J**

Japan, Health System of	<i>N Ikegami</i>	1
-------------------------	------------------	---

K

Kidney Diseases	<i>G Eknoyan</i>	9
-----------------	------------------	---

L

Land Use/Land Change and Health	<i>J A Patz and S H Olson</i>	15
Latin American Social Medicine	<i>H Waitzkin</i>	21
Law, and Public Health Policy	<i>R Martin</i>	30
Lead Hazards and Poisoning	<i>H L Needleman</i>	39
Legal Issues in Public Health	<i>C Reynolds</i>	45
Leprosy	<i>W H van Brakel, P Feenstra, and P R Saunderson</i>	56
Leprosy, Historical	<i>J Robertson</i>	65
Leukemia	<i>T Lightfoot, A Smith, and E Roman</i>	74
Life Expectancy Measurements	<i>D M J Naimark</i>	83
Literacy and Public Health	<i>M S Wolf, R M Parker, and S C Ratzan</i>	98
Liver Cancer	<i>M C Kew</i>	104
Long Term Care for Aging Populations	<i>E Stallard</i>	114
Long Term Care in Health Services	<i>J Brodsky and A M Clarfield</i>	127
Long Term Care, Organization and Financing	<i>M Knapp and A Somani</i>	133
Longevity in Specific Populations	<i>T T Samaras</i>	142
Lung Cancer	<i>D S O'Callaghan and F O'Connell</i>	147
Lung Diseases, Occupational	<i>M Gulati and M R Cullen</i>	156
Lupus Erythematosus: Pathogenesis of Cutaneous Manifestations	<i>A Kuhn and P H Krammer</i>	163
Lyme Disease	<i>M Rosenthal and J Coburn</i>	167
Lymphomas	<i>S G Fisher</i>	175

M

Male Reproductive Function	<i>H M Behre</i>	187
Managed Care	<i>S Glied and K Janus</i>	195
Mass Media Interventions	<i>F Taroni and R Grilli</i>	202
Maternal Health Services	<i>S Bhattacharya and J Tucker</i>	210
Maternal Mortality and Morbidity	<i>L Say and R C Pattinson</i>	222
Measles	<i>G H Dayan</i>	236
Measurement and Modeling of Health-Related Quality of Life	<i>R D Hays and B B Reeve</i>	241
The Measurement and Valuation of Health for Economic Evaluation	<i>J Brazier and J Ratcliffe</i>	252
Measurement of Psychiatric and Psychological Disorders and Outcomes in Populations	<i>T S Brugha and H Meltzer</i>	261
Meat Consumption and Cancer	<i>A J Cross and R Sinha</i>	272
Meat Consumption and Cardiovascular Disease	<i>M L Daviglus, A Pirzada, and K He</i>	281
Media Coverage and Public Health	<i>M Sweet and J Doyle</i>	308

Medical Pluralism	<i>E Hsu</i>	316
Medical Sciences and Technology in Socio-Cultural Context	<i>S Leigh Pigg</i>	321
Meningitis, Bacterial	<i>D van de Beek and J de Gans</i>	330
Menopause	<i>D W Sturdee</i>	335
Mental Health Etiology: Biological and Genetic Determinants	<i>S J Glatt, S V Faraone, and M T Tsuang</i>	343
Mental Health Etiology: Social Determinants	<i>A Cohen and H Minas</i>	350
Mental Health and Physical Health (Including HIV/AIDS)	<i>A Kagee and M Freeman</i>	354
Mental Health and Substance Abuse	<i>B Saraceno, M Funk, and V Poznyak</i>	365
Mental Health Epidemiology (Psychiatric Epidemiology)	<i>G S Norquist and K Magruder</i>	374
Mental Health, Morbidity and Impact	<i>O Gureje and B Oladeji</i>	384
Mental Health Policy	<i>R Jenkins</i>	393
Mental Health Promotion	<i>H Herrman, R Moodie, and S Saxena</i>	406
Mental Health Resources and Services	<i>S Saxena and P Sharan</i>	418
Mental Illness, Historical Views of	<i>D Pilgrim</i>	431
Mercury	<i>P Grandjean</i>	434
Meta-Analysis	<i>A Tatsioni and J P A Ioannidis</i>	442
Metabolic Myopathies	<i>M Tarnopolsky</i>	450
Migraine	<i>A May</i>	458
Military Health Issues	<i>S P Proctor</i>	462
Multiple Sclerosis	<i>C M Poser</i>	469
Mumps	<i>M Wharton</i>	482
Muscular Dystrophies	<i>M Astejada, M C Malicdan, and I Nishino</i>	486
N		
National Health Systems: Overview	<i>N Goodwin</i>	497
Neurodevelopmental Disorders	<i>E Klimkeit, N Rinehart, and J Bradshaw</i>	512
The New Public Health	<i>J R Ashton</i>	521
New Technologies: Ethics of Genomics	<i>J M Street</i>	528
New Technologies: Ethics of Stem Cell Research	<i>R A Ankeny</i>	533
NGOs (Nongovernmental Organizations)	<i>H Yanacopulos</i>	536
North Africa and Middle East, Health Systems of	<i>F A Akala</i>	542
Nuclear Energy Use	<i>R W Clapp and W Kakos</i>	553
Nurses	<i>J A Oulton and P Caldwell</i>	564
Nutrition and HIV	<i>H Friis, S Gillespie, and S Filteau</i>	572
Nutrition and the Elderly	<i>J S Kravchenko</i>	578
O		
Obesity/Overweight: Health Consequences of	<i>S S Bassuk and J E Manson</i>	589
Obesity/Overweight: Prevention and Weight Management	<i>J G Eby and G A Colditz</i>	602

Observational Epidemiology	<i>J L Kelsey</i>	609
Obstructive Sleep Apnea	<i>S Ryan and W T McNicholas</i>	621
Occupational Death/Injury Rates	<i>T Driscoll and M Fingerhut</i>	627
Occupational Health: Overview	<i>R K Sokas and N L Sprince</i>	639
Occupational Injuries and Work Place Violence	<i>N A Stout, D N Castillo, H E Amandus, and T J Pizatella</i>	649
Occupational Safety and Health Protections	<i>F E Mirer and J M Stellman</i>	658
Oral Cancer	<i>C Scully and D R Moles</i>	668
Oral Health	<i>P E Petersen</i>	677
Organohalogen Pollutants and Human Health	<i>P R S Kodavanti, K Senthil Kumar, and B G Loganathan</i>	686
Orphans due to AIDS	<i>J Kasper</i>	693
Outdoor Air Pollution: Sources, Atmospheric Transport, and Human Health Effects	<i>G D Thurston</i>	700
Ovarian Cancer	<i>R J Edmondson and A R Todd</i>	712

VOLUME 5

P		
Pancreatic Cancer	<i>D S Michaud</i>	1
Parkinson's Disease	<i>A D Korczyn</i>	10
Patient Empowerment in Health Care	<i>J F P Bridges, S Loukanova, and P Carrera</i>	17
Pediatric Cancers	<i>C A Stiller</i>	28
People's Health Movement	<i>R Narayan and C Schuftan</i>	41
Perinatal Epidemiology	<i>L S Bakketeig and P Bergsjø</i>	45
Peripheral Arterial Disease	<i>I Tzoulaki and F G R Fowkes</i>	53
Pesticides	<i>C Colosio and A Moretto</i>	59
Pharmaceuticals as Environmental Pollutants: The Ramifications for Human Exposure	<i>C G Daughton</i>	66
Physical Activity and Health	<i>G A Colditz, H Dart, and C T Ryan</i>	102
Plague, Historical	<i>O J Benedictow</i>	110
Planning, for Public Health Policy	<i>A T Green and T N Mirzoev</i>	121
Pneumonia	<i>M Esperatti and A Torres Marti</i>	133
Poliomyelitis	<i>T J John</i>	144
Poliomyelitis, Historical	<i>H van Vliet, H van der Avoort, and M Conyn-van Spaendonck</i>	155
Politics, and Public Health Policy Reform	<i>A Glassman and K Buse</i>	163
Population and Labor Force Aging, Effect on Socio-Economic Development in Brazil, Russia, India and China	<i>K G Manton</i>	170
Population Growth	<i>S Haddock, E Leahy, and R Engelman</i>	181
Populations at Special Health Risk: Children: Childrens Mental Health Services	<i>B Doll</i>	190
Populations at Special Health Risk: Displaced Populations	<i>S L Thomas, S D M Thomas, and P Komesaroff</i>	198
Populations at Special Health Risk: Incarcerated	<i>A Coyle, A Shelupanov, and G Walcher</i>	206
Populations at Special Health Risk: Indigenous Populations	<i>I P S Anderson and J D Whyte</i>	215

Populations at special Health Risk: Men	<i>A White</i>	224
Populations at Special Health Risk: Migrants	<i>O Razum and F Samkange-Zeeb</i>	233
Populations at Special Health Risk: Rural Populations	<i>J S Humphreys and G Solarsh</i>	242
Populations at Special Health Risk: The Elderly	<i>A S Watts and E M Crimmins</i>	254
Populations at Special Health Risk: The Homeless	<i>D B Herman and J Manuel</i>	261
Populations at Special Health Risk: Unemployed: Unemployment and Job Insecurity	<i>P Martikainen and J Ferrie</i>	268
Populations at Special Health Risk: Women	<i>J Allsworth and M Goldman</i>	276
Populations at Special Health Risk: Workers	<i>C Muntaner, H Chung, I Kim, and J Benach</i>	285
Preventing Uptake of Smoking	<i>K Jamrozik</i>	301
Primary Health Care	<i>D Sanders, N Schaay, and S Mohamed</i>	305
The Private Sector in Health Care Provision, The Role of	<i>A Harding and D Montagu</i>	317
Prostate Cancer	<i>G G Giles</i>	323
Protozoan Diseases: African Trypanosomiasis	<i>J Jannin and P Simarro</i>	331
Protozoan Diseases: Amebiasis	<i>S Hamano and W A Petri Jr.</i>	335
Protozoan Diseases: Chagas Disease	<i>E L Segura and S Sosa-Estani</i>	341
Protozoan Diseases: Cryptosporidiosis, Giardiasis and Other Intestinal Protozoan Diseases	<i>Y R Ortega and M L Eberhard</i>	354
Protozoan Diseases: Leishmaniasis	<i>J-P Dedet</i>	367
Protozoan Diseases: Malaria Clinical Features, Management, and Prevention	<i>A K Boggild and K C Kain</i>	371
Protozoan Diseases: Toxoplasmosis	<i>E Petersen, R Salmi, G Chêne, and R Thiébaud, and R Gilbert</i>	382
Provider Payment Methods and Incentives	<i>R P Ellis and M M Miller</i>	395
Puberty	<i>S R Grover and A Bajpai</i>	402
Public and Consumer Participation in Policy and Research	<i>S Oliver</i>	408
Public Health Approaches to Dying, Death and Loss	<i>A Kellehear</i>	416
The Public Health Dimensions of Disability	<i>J E Crews and D J Lollar</i>	422
Public Health Professionals	<i>P Dhavan and K S Reddy</i>	432
Public/Private Mix in Health Systems	<i>C R Keane and M C Weerasinghe</i>	440

Q

Quality Adjusted Life Years	<i>J A Salomon</i>	449
Quarantine Through History	<i>A A Conti</i>	454

R

Rabies	<i>H Wilde, S Wacharapluesadee, T Hemachudha, and V Tepsumethanon</i>	463
Race, Human Variation, and Health, the Interaction of	<i>A H Goodman</i>	471
Racism and Health	<i>Y C Paradies and D R Williams</i>	474
Radiation Therapy	<i>F Casas, N Bese, D van der Merwe, J Hendry, and B Jeremic</i>	483

Re-emerging Diseases: Overview	<i>M E Wilson</i>	491
The Regulation of Drugs and Drug Use: Public Health and Law Enforcement	<i>C L Fry and S Cvetkovski</i>	501
Relief Operations	<i>P O'Keefe and J Rose</i>	506
Religion and Healing	<i>L D Laird and L L Barnes</i>	514
Reproductive Ethics: Ethical Issues and Menopause	<i>W Rogers</i>	519
Reproductive Ethics: New Reproductive Technologies	<i>R A Ankeny</i>	524
Reproductive Ethics: Perspectives on Contraception and Abortion	<i>E Mulligan and M Ripper</i>	528
Reproductive Rights	<i>J N Erdman and R J Cook</i>	532
Resource Allocation: International Perspectives on Resource Allocation	<i>D K Martin and S R Benatar</i>	538
Resource Allocation: Justice and Resource Allocation in Public Health	<i>R Rhodes</i>	544
Respiratory Diseases: Overview	<i>N J Brennan</i>	551
Respiratory Infections, Acute	<i>M Rogan</i>	556
Respiratory Syncytial Virus	<i>S Junge, D J Nokes, E A F Simões, and M W Weber</i>	561
Rheumatic Fever and Rheumatic Heart Disease	<i>R Vijayvergiya</i>	571
Rhinoviruses	<i>B Winther</i>	577
<i>Rickettsia</i>	<i>E C Crossley, J M Jordan, and D H Walker</i>	582
Risk Assessment, Environmental/Occupational	<i>D M Hassenzahl and A M Finkel</i>	590
Risk Communication	<i>J B Weaver III, S Sargent Weaver, and R J DiClemente</i>	601
Risk Factors	<i>K Jamrozik, R Taylor, and A Dobson</i>	606
Road Traffic Injuries	<i>R Ivers, M Stevenson, R Norton, and J Yu</i>	615
Rubella	<i>H C Meissner</i>	624
Russia and Former USSR, Health Systems of	<i>D Balabanova and R Coker</i>	627
 S		
Salmonella	<i>E J Threlfall</i>	639
Scandinavia, Health Systems of	<i>K Vrangbæk</i>	648
School Health Promotion	<i>O Samdal</i>	653
Schools of Public Health	<i>D Evans</i>	661
Second Hand Smoke	<i>S M McGhee and A J Hedley</i>	669
Seizure Disorders	<i>S C Schachter</i>	674
Serial and Mass Murderers	<i>D L Peck and R B Jenkot</i>	680
Severe Acute Respiratory Syndrome (SARS)	<i>K W Tsang</i>	691
Sexual and Reproductive Health: Overview	<i>M F Fathalla and M M F Fathalla</i>	695
Sexual Health	<i>K Wellings</i>	705
Sexually Transmitted Infections: Overview	<i>B P Stoner</i>	713
Sexual Violence	<i>R Jewkes and L Dartnall</i>	723

VOLUME 6

S

Shigellosis	<i>S K Bhattacharya and D Sur</i>	1
Sick Building Syndrome	<i>R J Laumbach</i>	4
Sickle-Cell Disease	<i>C S Johnson</i>	8
Skin Diseases (Non-Cancerous)	<i>L E Fried, S Bhandarkar, and J L Arbiser</i>	15
Sleep Disorders	<i>A Culebras</i>	21
Smallpox	<i>M G Reynolds and I K Damon</i>	26
Smoking Cessation	<i>M Glover and H McRobbie</i>	37
Smoking, The Burden of Mortality of	<i>M Ezzati and A D Lopez</i>	51
Social and Cultural Perspectives on Eco-Health	<i>G Albrecht, N Higginbotham, L Connor, and S Freeman</i>	57
Social Determinants of Health, the United Nations Commission of	<i>A Irwin, O Solar, and J Vega</i>	64
Social Dimensions of Infectious Diseases	<i>J Sommerfeld</i>	69
Social Epidemiology	<i>L Myer, E Susser, B Link, and C Morroni</i>	74
Social Gradients and Child Health	<i>B Starfield</i>	87
Social Science Contributions to Public Health: Overview	<i>J Coreil</i>	101
Socio-Cultural Construction of Medical Knowledge	<i>A D Gaines</i>	114
Socio-Cultural Context of Substance Use/Abuse (Alcohol/Drugs/Tobacco)	<i>D B Heath</i>	119
South Asia, Health Systems of	<i>S Bonu and M Rani</i>	128
Southeastern Europe, Health Systems of	<i>N Tavanxhi, G Burazeri, and U Laaser</i>	137
Specific Mental Health Disorders: Child and Adolescent Mental Disorders	<i>A J Flisher, S Hatherill, and Y Dhansay</i>	147
Specific Mental Health Disorders: Depressive and Anxiety Disorders	<i>I B Hickie</i>	154
Specific Mental Health Disorders: Eating Disorders	<i>S S Delinsky, J Derenne, and A E Becker</i>	169
Specific Mental Health Disorders: Mental Disorders Associated with Aging	<i>I Skoog</i>	174
Specific Mental Health Disorders: Personality Disorders	<i>M J Crawford</i>	182
Specific Mental Health Disorders: Psychotic Disorders	<i>R Thara, M Taj, and S Tirupati</i>	187
Specific Mental Health Disorders: Trauma and Mental Disorders	<i>D Silove, A Nickerson, and R A Bryant</i>	196
Spinal Injury	<i>B W Martin and O Amin</i>	201
Sports Injuries	<i>R Dennis and C Finch</i>	206
The State in Public Health, Role of	<i>A Alvarez-Rosete</i>	211
Stigma of Mental Illness	<i>L H Yang, S H Cho, and A Kleinman</i>	219
Streptococcal Diseases	<i>G S Chhatwal and R Graham</i>	231
Stress and (Public) Health	<i>U Lundberg</i>	241
Sub-Saharan Africa, Health Systems of	<i>N Prata</i>	250
Sudden Cardiac Arrest	<i>G Fletcher and T Rea</i>	257
Suicide and Self-Directed Violence	<i>D De Leo and K Krysinika</i>	267

Surveillance of Disease: Overview	<i>I Arita, M Nakane, and T Nakano</i>	275
Syphilis	<i>I Simms</i>	289
Systematic Reviews in Public Health	<i>R Armstrong, E Waters, H Roberts, L M Anderson, S Oliver, and M Petticrew</i>	297

T

Terrorism	<i>B S Levy and V W Sidel</i>	303
Testicular Cancer	<i>E Huyghe</i>	309
Tetanus	<i>C L Thwaites</i>	318
Tobacco - Harm Minimisation	<i>K M Cummings and R J O'Connor</i>	322
The Tobacco Industry	<i>G Thomson and N Wilson</i>	331
Tobacco, Integrated Control of	<i>R Borland</i>	337
Torture and Public Health	<i>L Piwowarczyk, S Crosby, D Kerr, and M Grodin</i>	341
Traditional Asian Medical Systems	<i>E Hsu and R L Barrett</i>	349
Transmissible Spongiform Encephalopathies	<i>E D Belay</i>	358
Trends in Human Fertility	<i>J G Cleland</i>	364
Tuberculosis Diagnosis	<i>P D O Davis</i>	371
Tuberculosis Epidemiology	<i>T H Holtz</i>	382
Tuberculosis Prevention	<i>J S Landry and D Menzies</i>	391
Tuberculosis Treatment	<i>P Nahid and P C Hopewell</i>	397
Tuberculosis: Overview	<i>T M O'Connor</i>	408
Typhoid Fever	<i>C Colomba, L Saporito, and L Titone</i>	414

U

Undernutrition and Its Social Determinants	<i>M Chopra and D Sanders</i>	421
United Kingdom, Health System of	<i>R Surender and K Matsuoka</i>	427
United States, Health System of	<i>W C Cockerham and B P Hinote</i>	434
Universal Coverage in Developing Countries, Transition to	<i>T Ensor</i>	441
Urban Health in Developing Countries	<i>C Stephens and D Satterthwaite</i>	452
Urban Health Systems: Overview	<i>D C Ompad, S Galea, and D Vlahov</i>	463

V

Vaccines, Historical	<i>H Mooloo and A W Artenstein</i>	471
Venous Thromboembolism (VTE)	<i>N S Key and C J Amin</i>	483
Violence Against Women	<i>C García-Moreno</i>	491
Violence/Intentional Injuries – Epidemiology and Overview	<i>A Rutherford</i>	500
Violence/Intentional Injuries – Prevention and Control	<i>D Sethi and A Butchart</i>	508
Viral Diarrhea	<i>G Kang</i>	518

I Contents

Vitamin A Deficiency and Its Prevention	<i>S H Wedner and D A Ross</i>	526
Vitamin D	<i>R Vieth</i>	532

W

Water Pollution: Emerging Contaminants Associated with Drinking Water	<i>I Xagorarakis and D Kuo</i>	539
Waterborne Diseases	<i>J K Griffiths</i>	551
Weapons of Mass Destruction	<i>V W Sidel and B S Levy</i>	564
West Nile Disease	<i>S R Telford III and G D Ebel</i>	571
Western Europe, Health Systems of	<i>R Freeman and A Schmid</i>	579
WHO Definition of Health, Rethinking the	<i>S Bok</i>	590
Wilson's Disease	<i>M El-Youssef</i>	597
Women's Mental Health	<i>P S Chandra, V N G P Raghunandan, and V A S Krishna</i>	608
Worker Health and Safety, International Issues	<i>L London</i>	617
World Bank	<i>J P Ruger</i>	625
World Health Organization	<i>U C Ogbu and O A Arah</i>	634
The World's Medical Schools: Past, Present and Future	<i>M H Boyer</i>	641

Y

Yaws, Pinta, and Endemic Syphilis	<i>S Lal and A C Dhariwal</i>	651
Yellow Fever	<i>E Barnett</i>	657
Yellow Fever, Historical	<i>C Chastel</i>	665
Young People and Violence	<i>I Wagman Borowsky, R Widome, and M D Resnick</i>	675
Subject Index		685