

CONTENTS *continued*

Hospital cost control in Norway: a decade's experience with prospective payment <i>Thomas S. Crane</i>	406
Declines in nonwhite and white neonatal mortality in Mississippi, 1975-80 <i>Donna M. Strobino, Young J. Kim, Barbara E. Crawley, Gary A. Chase, and Joan H. Salim</i>	417
Credentialing and job practice in environmental health: an empirical study <i>Catherine S. Cline</i>	427
Collaborative studies program on maternal and child health in New York State, 1981-83 <i>Rosemary Barber-Madden and Linda Randolph</i>	432
The accuracy of tuberculin skin tests: self-assessment by adult outpatients <i>Nancy L. Risser, Donald W. Belcher, James B. Bushyhead, and Barbara M. Sullivan</i>	439

DEPARTMENTS

LETTERS TO THE EDITOR

Minimizing the risks of swimming, <i>Thomas E. Stenvig</i>	355
Correction, <i>John C. Wright</i>	363
INFORMATION FOR CONTRIBUTORS	356

PREVENTION BRIEFS

Sodium, hypertension, and the American public: second tracking survey, *James T. Heimbach* — Navy launches fitness program for youngsters — New surveillance system helps States target efforts to cut premature deaths — 'Healthfinder' resource guides available, *Grace H. McCarn and Joanne Angle* 371-373

PROGRAMS, PRACTICES, PEOPLE

Public health degrees for the disadvantaged in the Pacific Basin, *Jerrold M. Michael, Kazue K. McLaren, and Jonathan Raymond* — Nurse practitioners can improve school health services, program shows — Growth in physician supply projected, *Adele M. Miller* — Infant death rates drop among Indians and Alaska Natives — Female veterans, aging, and VA hospitalization, *Donald D. Stockford* — NIDR begins survey of adult dental health 446-451

EDUCATION NOTES

Educational Resource Center courses — PHS epidemiology program 450-452

COVER 3

NCHS's health index data base (HINDEX)



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Margaret M. Heckler, Secretary



PUBLIC HEALTH SERVICE
James O. Mason, MD, DrPH
Acting Assistant Secretary for Health

PUBLIC HEALTH REPORTS
(USPHS 324-990)
ISSN 0090-2818

Editorial Board

- Dr. C. Everett Koop, Surgeon General and Chairman
- Dr. George E. Hardy, Jr., CDC
- Dr. Robert S. Gordon, Jr., NIH
- Dr. Everett Rhoades, HRSA
- Dr. Stuart Nightingale, FDA
- Dr. Harold A. Pincus, ADAMHA

- Marian Priest Tebben, Executive Editor
- Ellen Casselberry, Assistant Executive Editor
- William N. LeVee, Associate Editor
- Ronald J. Kostraba, Conceptual Design
- Rick Mowery, Art Director

Public Health Reports is published six times a year. Opinions expressed are the authors' and do not necessarily reflect the views of *Public Health Reports* or the Public Health Service. Trade names are used for identification only and do not represent an endorsement by the Service.

The Secretary of Health and Human Services has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this Department. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through September 30, 1985.

Address correspondence to:

Editor, *Public Health Reports*
Rm. 721-H, Hubert H. Humphrey Bldg.
200 Independence Ave., SW
Washington, D.C. 20201
AC 202:426-5146

Subscription Information

Public Health Reports is for sale by the Superintendent of Documents. U.S. Government Printing Office. Washington, D.C. 20402. All correspondence about paid subscriptions (for example, change of address or failure to receive an issue) should also be addressed to the Superintendent of Documents.

Information for contributors

Address correspondence

on editorial matters

to Editor,

PUBLIC HEALTH REPORTS,

Room 721 H

Hubert H. Humphrey Building

200 Independence Ave. SW

Washington, D.C. 20201

Area code 202: 426-5146

PUBLIC HEALTH REPORTS, published by the Public Health Service, welcomes from any source contributions of value to public health, disease prevention, health promotion, medical care, and community medicine.

Scientific papers concerned with the delivery of health services and with the many facets of health care, as well as technical reports documenting studies and research, are especially suitable. We also seek papers on new programs, new projects, and new ideas, even when they are experimental in nature. We are interested in both full-length papers and less formal, news-oriented papers, under 1,500 words, for the Prevention Briefs and the Programs, Practices, and People sections. *Public Health Reports* wants to record what is currently happening in the health field.

To spur lively debate and examination of public health issues, letters to the editor are encouraged; letters are limited to 500 words and 10 references.

Manuscript form. To facilitate review, authors should submit four copies of their manuscripts. All copy, including references, should be typed double spaced. Each chart and table should be placed on a separate sheet of paper. References should follow the style used by the journal; "et al." should be used only if there are more than four authors. Footnotes should be worked into the text. Authors' affiliation should appear on a separate sheet. Authors are expected to recognize scientific contributions by those who have assisted them only if such contributions warrant mention in the author identification space or in the text. Journal policy does not allow publication of separate "acknowledgements." Black and white photos and charts that illustrate papers are welcome.

More detailed instructions, including examples of our reference style and information on the preparation of a synopsis, will be supplied on request.

Manuscript review. Most manuscripts submitted for publication are reviewed by technical experts in the Public Health Service as well as experts not associated with the Service. Authors are given the opportunity to consider reviewers' comments or suggestions. They also receive edited typescripts for approval. Authors are responsible for the accuracy and validity of all material, including tables, charts, and references.

Manuscripts are reviewed with the understanding that they have not been submitted for publication elsewhere. Appropriate information should be supplied if a paper has been presented at or prepared for a meeting.

Tearsheets. In lieu of reprints, senior authors are provided with 100 to 150 sets of tearsheets after publication. Associate authors receive 10 to 50 sets each.

Secondary publication and indexing. Secondary publication of articles is provided in various abstracting journals (Abstracts for Social Workers, Current Literature in Family Planning). Articles are indexed in the annual Cumulated Index Medicus and monthly Index Medicus (National Library of Medicine), Engineering Index, Hospital Literature Index (American Hospital Association), Cumulative Index to Nursing and Allied Health Literature, American Statistics Index, and Medical Socioeconomic Research Sources (MEDSOC), as well as in the Institute for Scientific Information's Current Contents (Social and Behavioral Sciences, Life Sciences, and Physical & Chemical Sciences), Social Sciences Citation Index, Bibliographic Index of Health Education Periodicals, and Science Citation Index. Full text is available on the MEDIS data base, and synopses are available on the GTE Telenet Medical Information Network.

described here combined faculty with both public health and clinical perspectives, emphasized relevance to future practice, and required students to actively work through epidemiologic problems. This Vermont experience has shown that combining health department and clinical faculty resources can result in a useful format for teaching epidemiology to medical students.

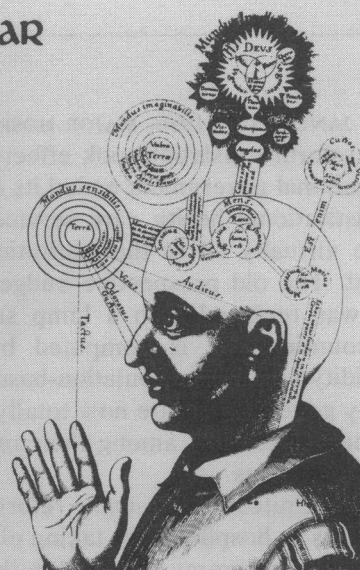
References

1. Cullinan, T. R.: Teaching concepts in epidemiology. *J Epidemiol Community Health* 34: 201-203 (1980).
2. Ernster, V. L.: On the teaching of epidemiology to medical students. *Am J Epidemiol* 109: 617-618 (1979).
3. Garraway, M., Hurt, W., and Petrie, H.: Preparation of data boards for teaching epidemiology in a clinical setting. *Med Biol Illus* 27: 151-154 (1977).
4. Mulvihill, M. N., Wallman, G., and Blum, S.: A seven-year retrospective view of a course in epidemiology biostatistics. *J Med Educ* 55: 457-459 (1980).
5. Rosenberg, S. N.: Student acceptance of a public health clerkship: advantages of a 'clinical' format. *J Med Educ* 53: 364 (1978).
6. Rosenberg, S. N., Schorow, M., and Haynes, M. L.: Bridging the gap between clinical medicine and public health: an experimental course for medical students. *Public Health Rep* 93: 673-677, November-December 1978.
7. Terris, M.: Epidemiology as a basic science in the education of health professionals. *Int J Epidemiol* 7: 294-296 (1978).
8. Waters, W. E.: Teaching epidemiology to medical students. *Int J Epidemiol* 6: 329-330 (1977).
9. Stewart, M. M., Richstone, N., Greene, M. G., and Longe, P.: Community medicine clerkships in an applied research setting. *J Med Educ* 52: 145-146 (1977).
10. Vuturo, A. F.: Teaching clinical epidemiology in the family practice office. *J Family Practice* 6: 653-654 (1978).
11. Epstein, L. M., Tamir, A., Spenser, T., and Perlman, S.: The community project: the teaching implications of applied epidemiology. *Med Educ* 77: 39-44 (1983).

Today no health professional Gets far
Without a Well-furnished Mind.

Let **Public Health Reports** keep you
posted on new policies and important
findings in your field.

If you now see **PHR** only irregularly,
why not subscribe? Use the order
blank on page 452.



may mean that VA hospitals are less well-equipped to treat female veterans. In fact, most hospitalizations of young women are for deliveries and obstetrical care, and, since VA hospitals do not routinely provide such services, other than on a contract basis through non-VA facilities, their lack is clearly a major reason for underuse of VA hospitals by young female veterans. Moreover, female veterans—particularly older female veterans—may have established patterns for use of health care that exclude VA services as options. Finally, there is the additional possibility that female veterans as a group may be healthier than male veterans or nonveterans.

At any rate, two VA reports (3,5) have identified the increasing numbers of young female veterans as a future issue for the VA health care system. With these reports as well as data on the increasing numbers of older female veterans and on underuse of VA hospitals by both younger and older female veterans, the VA is now in a better position to begin to assess and plan for female veterans' future health care needs.

—DONALD D. STOCKFORD, MA, *Biometrics Division, Veterans Administration*

References

1. Russell, M.: The female veteran population. Monograph No. 70-84-1. Office of Reports and Statistics, Veterans Administration, Washington, DC, 1983.
2. Feitz, R., et al.: Data on female veterans, fiscal year 1983. Office of Information Management and Statistics, Veterans Administration, Washington, DC, 1984.
3. Page, W. F., and Stockford, D.: Women veterans: usage of VA hospitalization. Biometrics Monograph No. 19. Office of Information Management and Statistics, Veterans Administration, Washington, DC, 1984.
4. National Center for Health Statistics: Utilization of short-stay hospitals. Vital and Health Statistics, Series 13, No. 78. Hyattsville, MD, 1984.
5. Stockford, D., and Page, W. F.: Women veterans' usage of VA hospitalization. Biometrics Monograph No. 15. Office of Reports and Statistics, Veterans Administration, Washington, DC, 1982.

NIDR Begins Survey of Adult Dental Health

The first large-scale survey of the oral health of American adults has been launched by the National Institute of Dental Research (NIDR). During the coming year, a team of dentists will examine nearly 20,000 people aged 16 to 75 for evidence of tooth decay and periodontal disorders.

"This study will serve as a benchmark," said NIDR Director Dr. Harold Loe. "It will tell us how prevalent periodontal diseases, dental caries, and tooth loss are among adults of different ages."

Currently, very little is known about the prevalence of tooth decay among adults, he noted. There is some evidence that root caries—decay of exposed tooth root surfaces—is becoming more of a problem in older people now that fewer teeth are being lost earlier in life. The new survey will provide detailed information about the incidence of root caries and coronal caries, decay of tooth surfaces that normally project above the gum line.

The study is the first to assess the extent of periodontal disorders in the population. These diseases, which damage the structures supporting the teeth, are the primary cause of tooth loss in adults.

During the course of the survey, nine dentists will conduct oral examinations at 600 business establish-

ments and 200 senior citizen centers around the country. Both the sites and the participants were selected to represent the majority of adults in the United States. Exams will take place either in the health units of the participating facilities or in NIDR's mobile examination units.

Each oral examination will last about 15 minutes. While the volunteer sits in a portable dental chair, the dentist will use basic instruments and a mirror to check for decay and gum disease. No x-rays will be taken, and no treatment will be given. Specially trained personnel accompanying the dentists will record the results.

The oral exams are being scheduled and conducted by Westat, Inc., a private research organization, under a \$3.2 million contract with NIDR. When the survey is completed, in about a year, NIDR epidemiologists will analyze the results and report the findings.

Five years ago, NIDR conducted a similar survey of the prevalence of dental caries among American school children. The survey showed that tooth decay had declined significantly over the previous decade.

The new study will reveal the extent to which tooth decay, periodontal destruction, and tooth loss afflict people as they get older. "Armed with this information, we can target our research and education efforts where they are needed most," said Dr. Loe.

EDUCATION NOTES

Training courses in occupational safety and health are given by the National Institute for Occupational Safety and Health (NIOSH) directly or in cooperation with professional organizations or agencies. NIOSH also sponsors Educational Resource Centers in universities throughout the country. Following is a list of courses being offered by those centers in the next few months. For further information such as application deadlines, contact the persons specified in the listing.

HARVARD EDUCATIONAL RESOURCE CENTER

Clean Room Technology, August 6-8, \$500.

Occupational and Environmental Radiation Protection, August 19-23, \$800.

In-Place Filter Testing Workshop, August 19-23, \$1,000 (includes laboratory fee).

Risk Analysis and Environmental Health, with Emphasis on Carcinogenesis, September 9-11, \$500.

Write or call the Office of Continuing Education, Harvard School of Public Health, 677 Huntington Ave., Boston, MA 02115 (617: 732-1171).

NEW YORK-NEW JERSEY EDUCATIONAL RESOURCE CENTER

Industrial Ventilation, August 5-9, \$500.

Occupational Toxicology, October 1-3, \$125 for 1 day or \$315 for 3 days.

UOSHERC (University Occupational Safety and Health Educational Resource Center) Seventh Annual Scientific Meeting, October 24, \$60.

Contact Lee Laustsen, Project Manager, Continuing Education and Outreach, Office of Consumer Health Education, University of Medicine and Dentistry of New Jersey, Rutgers Medical School, Piscataway, NJ 08854 (201: 463-4500).

Training-Certification in Hearing Conservation, September 18-19, \$330.

Contact Renee Lyons, RN, MPH, Occupational Health Specialist, Office of Consumer Health Education, University of Medicine and Dentistry of New Jersey, Rutgers Medical School, Piscataway, NJ 08854 (201: 463-4500).

JOHNS HOPKINS EDUCATIONAL RESOURCE CENTER

The Health Care Provider: Infectious and Reproductive Hazards, October 3-4, \$250.

Write or call Dr. Jacqueline Corn, Department of Environmental Health Sciences, Johns Hopkins University, 615 North Wolfe St., Baltimore, MD 21205 (301: 955-2609).

NORTH CAROLINA EDUCATIONAL RESOURCE CENTER

Summer Institute in Occupational Safety and Health, 10 courses offered during the week of July 29-31 and 11 during the week of July 31-August 2. Tuition is \$390 per course except for Sampling and Evaluating Airborne Asbestos Dust, which will be \$550.

Contact Ted M. Williams, Occupational Safety and Health Educational Resource Center, 109 Conner Dr., Suite 1101, Chapel Hill, NC 27514 (919: 962-2101).

ALABAMA EDUCATIONAL RESOURCE CENTER

Southeastern Occupational Health Conference, September 5-7, \$75.

Contact Toni Watson, University of Alabama School of Public Health, University Station, Box 99, Birmingham, AL 35294 (205: 934-3263).

CINCINNATI EDUCATIONAL RESOURCE CENTER

Comprehensive Review for Industrial Hygiene Professionals, August 5-9, \$525.
Safe Handling of Chemicals in the Laboratory, August 14, \$45.

Hazardous Materials Management for Site Personnel, August 14-16, \$15 charge for refreshments.

Occupational Hazard Communication, August 19-20, \$250.

Risk Assessment, September 11-12, \$275.

Nonionizing Radiation, September 18-19, \$350.

Pulmonary Function Testing, September 25-27, \$340.

For further information, contact Dr. Grace K. Lemasters, Director, Continuing Education, ML 182, University of Cincinnati, 231 Bethesda Ave., Cincinnati, OH 45267 (513: 872-5733).

MICHIGAN EDUCATIONAL RESOURCE CENTER

Management Briefing Seminar in Occupational Health, August 5-6, \$200 for 1 day, \$375 for 2 days.

Contact Leslie Gally, Director, Continuing Education, Center for Occupational Health and Safety Engineering, 1205 Beal, University of Michigan, Ann Arbor, MI 48109 (313: 763-0567).

MINNESOTA EDUCATIONAL RESOURCE CENTER

Comprehensive Industrial Hygiene Review Course, August 12-16, \$600.

Third Annual Graduate Occupational Health and Safety Institute, September 9-20. Ten individual graduate level courses to be held over the 2-week period; \$450 for first course and \$150 for each subsequent course.

Contact Ruth K. McIntyre, Director, Continuing Education, Midwest Center for Occupational Health and Safety, 640 Jackson St., St. Paul, MN 55101 (612: 221-3992).

Grand Rounds, held quarterly throughout 1985, no charge.

Contact Dr. Roger Luckmann, Occupational Medicine Section, St. Paul-Ramsey Medical Center, 640 Jackson St., St. Paul, MN 55101 (612: 221-3771).

UTAH EDUCATIONAL RESOURCE CENTER

Rocky Mountain Comprehensive Review of Industrial Health, August 5-9, \$600.

Ergonomics and Safety, September 6, \$50-125.

Fourth Annual Joint Utah Conference on Industrial Health and Safety, September 17-19, \$65.

Seventh Annual RMCOEH Occupational and Environmental Health Conference: "Health and Hazardous Waste: Weighing the Risks," October 9-11, \$300.

Contact Katharine E. Blosch, Director, Continuing Education, Rocky Mountain Center for Occupational and Environmental Health, Bldg. 512, University of Utah, Salt Lake City, UT 84112 (801: 581-5710).

SOUTHERN CALIFORNIA EDUCATIONAL RESOURCE CENTER

Ergonomics, August 1-2, \$375.

Legal Aspects of Occupational Safety and Health, August 8-9, \$375.

Management and Administrative Skills for the Occupational Health Professional, August 12-16, \$675.

Recognition of Accident Potential in the Workplace Due to Human Factors, August 5-7, \$425.

Recognition of Occupational Health Hazards, August 19-23, \$675.

Behavioral Science: a New Approach to Accident Prevention, September 4-5, \$375.

Hazardous Materials: Handling and Disposal, September 9-13, \$675.

Write or call Joan Brown, University of California, Southern Occupational Health Center, 19722 MacArthur Boulevard, Irvine, CA 92717 (714: 856-1064).

WASHINGTON EDUCATIONAL RESOURCE CENTER

Worker Health and Safety at Hazardous Waste Sites, September 18-20, \$10.

Implementing the Hazard Communication Standard, October 3, \$75.

Asbestos Removal, October 23-25, \$350.

Contact Sharon L. Morris, Continuing Education Coordinator, Northwest Center for Occupational Health and Safety, Department of Environmental Health, SC-34, University of Washington, Seattle, WA 98195 (206: 543-1069).

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH)

Ionizing Radiation, NIOSH 584, to be held August 5-9, in Cincinnati, \$420.

Industrial Hygiene Measurements, NIOSH 550, to be held September 9-19 in Cincinnati, \$760.

For further information, contact Donna Welage, Training Registrar, Di-

vision of Training, National Institute for Occupational Safety and Health, 4676 Columbia Parkway, Cincinnati, OH 45226 (513: 684-8225).

Industrial Hygiene Laboratory Quality Control, NIOSH 587, to be held August 26-30 in Cincinnati, \$360.

Contact Thomas Ratliff, R & R Associates, P.O. Box 46181, Cincinnati, OH 45246 (513: 771-2490).

Industrial Hygiene Sampling, Decision-making, Monitoring, and Recordkeeping: Sampling Strategies, NIOSH 553, to be held August 19-23 in Cincinnati, \$420.

Industrial Ventilation, NIOSH 588, to be held August 19-23 in Cincinnati. \$420.

Contact Charles M. Nenadic, CES, P.O. Box 75120, Cincinnati, OH 45275 (606: 341-8874).

PHS Epidemiology Program. Applications for a planned extension of a training program in medical epidemiology are being accepted by the Public Health Service (PHS). Up to 11 persons a year may

be accepted by the PHS as service fellows, a nontenured, junior professional classification under the Civil Service, for up to a 3-year period of duty. For applicants to be considered for service beginning between July 1 and September 1, 1986, applications must be received by September 10, 1985.

In their first year, successful applicants will attend universities at Government expense to study epidemiology, biostatistics, and related subjects. This course work should be used as credit toward a degree in public health, although it will not necessarily complete degree requirements. During the next 2 years, fellows will work with senior epidemiologists primarily in research studies in participating PHS agencies. A matching procedure akin to the national internship matching will be used to ensure that each person is assigned to a preceptor whose area of expertise is of interest to the trainee and is consistent with his or her career plans.

Salaries will be according to the scale in effect for staff fellows in intramural research at the Alcohol, Drug Abuse, and Mental Health Administration and the National Institutes of Health. Currently, the remuneration schedule for a

physician to be recruited in 1986 is \$30,000 per annum for the first year (\$21,000 for a nonphysician). Educational costs and allowable relocation expenses for the first year are also provided.

Applicants must already have an MD, a doctorate in an allied health profession, or a PhD in a biomedical or behavioral science (such as biochemistry or psychology) or the equivalent. By July 1, 1986, applicants must also have 1 year of postdoctoral training or experience. In addition, applicants must be U.S. citizens at the time of application and be acceptable to an accredited university offering an MPH or the equivalent or a more advanced public health degree.

For information and an application, send a postcard with the applicant's printed name and home mailing address to Robert S. Gordon, Jr., MD, MHS, Chairman, Steering Committee, NIH, Bldg, 1, Rm. 238, Bethesda, MD 20205.

PUBLIC HEALTH REPORTS

ORDER FORM

PLEASE PRINT OR TYPE

Please enter my subscription to PUBLIC HEALTH REPORTS at \$21.00 a year Domestic; \$26.75 a year Foreign; \$5.00 for a single copy Domestic; and \$6.25 for a single copy Foreign. (HSMHA)

Name—First, Last _____

Street address _____

Company name or additional address line _____

City _____ State _____ ZIP Code _____

(or Country) _____

FOR OFFICE USE ONLY	
Quantity	Charges
_____	Enclosed
_____	To be mailed
_____	Subscriptions
_____	Postage
_____	Foreign handling
_____	MMOB
_____	OPNR
_____	UPNS
_____	Discount
_____	Refund

Enclosed is \$ _____

check, money order, or charge to my Deposit Account No. _____



Credit Card Orders Only VISA master charge
Total charges \$ _____ Fill in the boxes below.



Credit Card No. _____

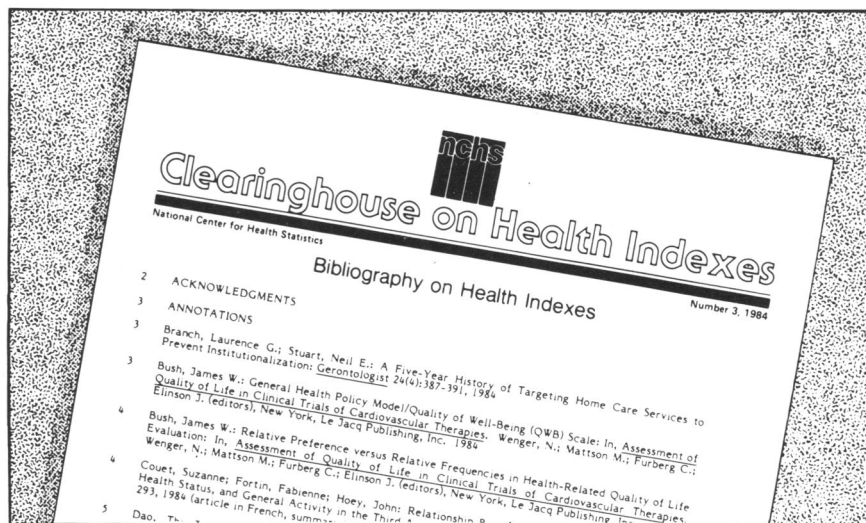
Expiration Date _____
Month/Year _____

Order No. _____

Mail to: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

Keep up to date.....

with the
latest
citations
from the



Become part of an interactive network of persons actively engaged in measuring

- Positive health
- Well-being
- Quality of life
- Health status

The Annotated Bibliography on Health Indexes is

- Informative
- Detailed
- Timely
- Accurate



Order your copy today!!!!

Order Form

Mail To: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

GPO Stock Number-017-022-00860-2

Price \$2.00

Enclosed is \$ _____ check.

money order, or charge to my

Deposit Account No.

_____ - _____

Order No. _____

**MasterCard and
VISA accepted.**



Credit Card Orders Only

Total charges \$ _____

Fill in the boxes below.

Credit Card No. _____

Expiration Date
Month/Year _____

Customer's Telephone No.'s			
Area Code*	Home	Area Code	Office
_____	_____	_____	_____

Charge orders may be telephoned to the GPO order desk at (202)783-3238 from 8:00 a.m. to 4:00 p.m. eastern time, Monday-Friday (except holidays).

Company or Personal Name

Additional address/attention line

Street address

City

State ZIP Code

(or Country)

PLEASE PRINT OR TYPE

For Office Use Only

Quantity	Charges
_____	Publications _____
_____	Subscriptions _____
_____	Special Shipping Charges _____
_____	International Handling _____
_____	Special Charges _____
_____	OPNR _____
_____	UPNS _____
_____	Balance Due _____
_____	Discount _____
_____	Refund _____

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Room 721-H, Hubert H. Humphrey Bldg.
Washington, D.C. 20201

Second-Class Mail
Postage and Fees Paid
PHS-OASH
ISSN 0090-2818

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300
