

AMERICAN JOURNAL OF Preventive Medicine

A forum for the communication of information, knowledge,
and wisdom in prevention science, education, practice, and policy.

Editors

Editor-in-Chief: Kevin Patrick, MD, MS, *La Jolla*

Editor: F. Douglas Scutchfield, MD, *Lexington*

Associate Editors

Science: Steven H. Woolf, MD, MPH, *Fairfax*

Education: Robert B. Wallace, MD, *Iowa City*

Practice: Beverly B. Green, MD, MPH, *Seattle*

International: Adrian Bauman, MB, BS, MPH, PhD, *Sydney*

Policy: C. Tracy Orleans, PhD, *Princeton*

Consulting Statistics Editor: Gregory J. Norman, PhD, *La Jolla*

Managing Editor: Charlotte S. Seidman, FNP, MHS, MPH, ELS, *La Jolla*

Associate Managing Editor: Beverly A. Lytton, BA, *La Jolla*

Editorial Board

Jasjit S. Ahluwalia, *Minneapolis*

Thomas Baranowski, *Houston*

Ross C. Brownson, *St Louis*

Douglas Campos-Outcalt, *Phoenix*

Frank J. Chaloupka, *Chicago*

Vilma E. Cokkinides, *Atlanta*

Susan J. Curry, *Iowa City*

Larry L. Dickey, *Sacramento/San Francisco*

William H. Dietz, *Atlanta*

John P. Elder, *San Diego*

Jonathan E. Fielding, *Los Angeles*

Eric A. Finkelstein, *Singapore*

Lawrence D. Frank, *Vancouver*

Howard Frumkin, *Seattle*

Russell E. Glasgow, *Denver*

Lawrence W. Green, *San Francisco*

Jeffrey R. Harris, *Seattle*

Ralph W. Hingson, *Bethesda*

Thomas P. Houston, *Columbus*

Robert W. Jeffery, *Minneapolis*

Neal D. Kohatsu, *Sacramento*

Thomas E. Kottke, *St Paul*

Fuzhong Li, *Eugene*

Gina Schellenbaum Lovasi, *New York*

Stephen A. Matthews, *University Park*

J. Michael McGinnis, *Washington DC*

Angela D. Mickalide, *Washington DC*

Walter A. Orenstein, *Atlanta*

Michael D. Parkinson, *Alexandria*

Deborah N. Pearlman, *Providence*

Diana B. Petitti, *Phoenix*

Kathryn A. Phillips, *San Francisco*

Barbara K. Rimer, *Chapel Hill*

Thomas N. Robinson, *Stanford*

Carol W. Runyan, *Chapel Hill*

James F. Sallis, *San Diego*

Rob W. Sanson-Fisher, *Newcastle, NSW*

Leif I. Solberg, *Minneapolis*

Kurt C. Stange, *Cleveland*

Victor J. Strecher, *Ann Arbor*

Stephen Hunt Taplin, *Bethesda*

Steven M. Teutsch, *Los Angeles*

Evelyn P. Whitlock, *Portland*

Walter Willett, *Boston*

Antronette (Toni) Yancey, *Los Angeles*

Richard K. Zimmerman, *Pittsburgh*

A Journal of the

ACPM
American College of
Preventive Medicine

&

APTR
ASSOCIATION FOR PREVENTION
TEACHING AND RESEARCH

Published by Elsevier Inc

www.ajpm-online.net

Advertisements that appear in AJPM must be approved by the Editorial Office prior to publication. However, publication of an advertisement does not imply that the editors of AJPM nor AJPM's sponsoring organizations, ACPM and APTR, endorse the advertised products or services.

Governing Board

Douglas B. Kamerow, MD, MPH, Chair
Washington DC

Ruth Gaare Bernheim, JD, MPH
Charlottesville, Virginia

Michael T. Compton, MD, MPH
Atlanta, Georgia

Halley S. Faust, MD, MPH, MA
Santa Fe, New Mexico

Sharon K. Hull, MD, MPH
Akron, Ohio

Linda Kinsinger, MD, MPH
Durham, North Carolina

Stephen A. McCurdy, MD, MPH
Davis, California

Lloyd Novick, MD, MPH
Greenville, North Carolina

James A. Tacci, MD, JD, MPH
Rochester, New York

Editorial correspondence should be directed to:

American Journal of Preventive Medicine
University of California, San Diego
9500 Gilman Drive, DEPT 0811
La Jolla CA 92093-0811

Tel (858) 534-9340
Fax (858) 534-9344

E-mail for AJPM business:
ajpm@ucsd.edu

E-mail for manuscript queries:
eAJPM@ucsd.edu

E-mail for press queries:
eAJPM@ucsd.edu

AJPM Online:
www.ajpm-online.net

Fed Ex Address:
Calit2/Atkinson Hall, Room 3322
University of California, San Diego
La Jolla CA 92093-0811

Sponsoring Organizations' Offices:

American College of Preventive Medicine
Michael A. Barry, CAE
Executive Director
455 Massachusetts Avenue NW,
Suite 200
Washington DC 20001

Tel (202) 466-2044
Fax (202) 466-662
www.acpm.org

Association for Prevention Teaching and Research
Allison L. Lewis
Executive Director
1001 Connecticut Avenue NW,
Suite 610
Washington DC 20036

Tel (202) 463-0550
Fax (202) 463-0555
www.aptrweb.org

Author's Instructions on AJPM's Website

Complete author's instructions and guidelines for submitting manuscripts to the **American Journal of Preventive Medicine** can be found on the **AJPM Online Website**: www.ajpm-online.net. The Journal welcomes brief reports (max. 1200 words); research articles (3000 words); RCTs/community-based trials (4000 words); and review articles (4000 words) on all aspects of practice, education, policy, and research in preventive medicine and public health.

The American Journal of Preventive Medicine (ISSN:0749-3797), the official journal of the American College of Preventive Medicine and the Association for Prevention Teaching and Research, is published monthly by Elsevier Inc., 360 Park Avenue South, New York, NY 10010-1710. Periodical postage paid at New York, NY and additional mailing offices.

POSTMASTER: Send all address changes to *The American Journal of Preventive Medicine*, Elsevier Health Sciences Division, Subscription Customer Service, 3251 Riverport Lane, Maryland Heights, MO 63043.

(For Post Office use only: Volume 39 issue 5 of 6)

Subscriptions are available on a calendar-year basis. Single issues are available on request from your nearest Regional Sales Office. All prices include postage.

For Advertising Orders & Inquires: North & South America: Jim Maloney, Elsevier Inc., 1600 John F. Kennedy Blvd., Suite 1800, Philadelphia, PA 19103; Tel (215) 239-3130; E-mail: j.maloney@elsevier.com
International: Advertising Department, Elsevier Inc., The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, United Kingdom; Tel (+44) (0) 1865 843565; Fax (44) (0) 1865 843976; E-mail: media@elsevier.co.uk
Japan: Advertising Department, Elsevier Science Japan; Tel (81) (3) 5561 5033; Fax (81) (3) 5561 5047.


Personal rates apply only when issues of the journal are sent to a private address and payment is made by personal check or credit card. Any enquiry relating to subscriptions should be sent to:
The Americas: Elsevier Health Sciences Division, Subscription Customer Service, 3251 Riverport Lane, Maryland Heights, MO 63043, USA; phone: (+1) (800) 6542452 [toll free number for US customers], or (+1) (314) 4478871 [customers outside US]; fax: (+1) (314) 4478029; e-mail: JournalsCustomerService-usa@elsevier.com
Japan: Elsevier, Customer Service Department, 4F Higashi-Azabu, 1-Chome Bldg, 1-9-15 Higashi-Azabu, Minato-ku, Tokyo 106-0044, Japan; phone: (+81) (3) 5561 5037; fax: (+81) (3) 5561 5047; e-mail: jp.info@elsevier.com
Asia Pacific (excluding Japan): Elsevier, Customer Service Department, 3 Killiney Road, #08-01 Winsland House I, Singapore 239519; phone: (+65) 63490222; fax: (+65) 67331510; e-mail: asiainfo@elsevier.com
Brazil: Elsevier Inc., Rua Sete de Setembro 111/16 Andar, 20050-002 Centro, Rio de Janeiro-RJ, Brazil (Tel: (+55) (21) 509 5340. Fax: (+55) (21) 507 1991. E-mail: elsevier@campus.com.br).
Rest of the World: Amsterdam: Elsevier, Customer Service Department, PO Box 211, 1001 AE Amsterdam, The Netherlands; phone: (+31) (20) 4853757; fax: (+31) (20) 4853432; e-mail: nlinfo-f@elsevier.com

Requests for Permissions, Reprints, and Photocopies. All rights are reserved, no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or

otherwise without either the prior written permission of the publisher (Elsevier Inc., 360 Park Avenue South, New York NY 10010-1710) or a license permitting restricted copying issued in the UK by the Copyright Licensing Agency Ltd., 90 Tottenham Court Road, London, W1P 9HE, or in the USA by the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. Fax: 508-750-4744. Reprints of individual articles are available only from the authors.

All inquiries regarding copyright material from this publication, other than reproduction through the Copyright Clearance Center, should be directed to Elsevier Science Ltd., P.O. Box 800, Oxford OX5 1DX, U.K. Phone: 44-1865 843830; Fax: 44-1865 853333; E-mail: permissions@elsevier.co.uk

The American Journal of Preventive Medicine is indexed and abstracted in Index Medicus/MEDLINE, EMBASE/Excerpta Medica, MEDLARS, Psychological Abstracts, PsycINFO, Sociological Abstracts, the Health Promotion and Education and the Cancer Prevention and Control Databases of CHID on BRS, the Smoking and Health Database on DIALOG, and Science Citation Index, Research Alert, and Current Contents.

 The journal is printed on acid-free paper that meets the minimum requirements of ANSI Standard Z39.48-1984 (Permanence of Paper), beginning with volume 1, number 1.

© 2010 American Journal of Preventive Medicine