

American Journal of Preventive Medicine

The premier source of timely and evidence-based information on prevention science, education, practice, and policy for a global audience.

Matthew L. Boulton, MD, MPH
University of Michigan, Ann Arbor, MI
EDITOR-IN-CHIEF

SENIOR ASSOCIATE EDITORS

William C. Wadland, MD, MS, *East Lansing, MI*
Robert B. Wallace, MD, *Iowa City, IA*

ASSOCIATE EDITORS

Caroline R. Richardson, MD, *Ann Arbor, MI*
Patrick Remington, MD, MPH, *Madison, WI*
Laura Power, MD, MPH, *Ann Arbor, MI*

STATISTICS EDITORS

Ananda Sen, PhD, *Ann Arbor, MI*
Niko Kaciroti, PhD, *Ann Arbor, MI*

EDITORIAL STAFF

Jillian B. Morgan, MPH, *Ann Arbor, MI*
Managing Editor

Julie Fielding, MLIS, *Ann Arbor, MI*
Associate Managing Editor

Matthew S. Redding, BS, *Ann Arbor, MI*
Editorial Assistant

Stacy Wennstrom, MA, *Ann Arbor, MI*
Editorial Assistant

Sara McAdory-Kim, MA, *Minneapolis, MN*
Editorial Specialist

EDITORIAL BOARD

Ross C. Brownson, *St Louis, MO*
Frank J. Chaloupka, *Chicago, IL*
Ana V. Diez Roux, *Philadelphia, PA*
Eric A. Finkelstein, *Singapore*
Howard Frumkin, *Atlanta, GA*
Sandro Galea, *Boston, MA*
Karen Glanz, *Philadelphia, PA*

Beverly B. Green, *Seattle, WA*
Jeffrey R. Harris, *Seattle, WA*
Thomas P. Houston, *Columbus, OH*
Neal D. Kohatsu, *Sacramento, CA*
Thomas E. Kottke, *St Paul, MN*
Gina S. Lovasi, *Philadelphia, PA*
Sara Luckhaupt, *Cincinnati, OH*

Michael D. Parkinson, *Pittsburgh, PA*
Deborah N. Pearlman, *Providence, RI*
K. Srinath Reddy, *New Delhi, India*
Carol W. Runyan, *Chapel Hill, NC*
James F. Sallis, *San Diego, CA*
Steven M. Teutsch, *Los Angeles, CA*
Richard K. Zimmerman, *Pittsburgh, PA*

PAST EDITORS- AND CO-EDITORS-IN-CHIEF

Kevin Patrick, MD, MS (*Jan 1995 – Dec 2013*) and F. Douglas Scutchfield, MD (*Jan 1995 – Dec 1996*)
Charles H. Hennekens, MD, DrPH (*Jul 1992 – Dec 1994*)
Robert S. Lawrence, MD (*Jan 1990 – Jun 1992*)
Robert L. Berg, MD (*Jan 1989 – Dec 1990*) and John M. Last, MD, DrPH (*Sep 1989 – Dec 1990*)
Joseph Stokes, III, MD (*Jul 1986 – Aug 1989*)
Nemat O. Borhani, MD, MPH (*Jan 1985 – Jun 1986*)

ACPM
American College of
Preventive Medicine

&

APTR
ASSOCIATION FOR PREVENTION TEACHING AND RESEARCH

www.ajpmonline.org

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.

AJPM GOVERNING BOARD

APTR Representatives

James Ebert, MD, MBA, MPH
Chair
Kettering, OH

Timothy P. Hickman, MD, MEd, MPH
Kansas City, MO

Scott Frank, MD, MS
Cleveland, OH

Robin Molella, MD, MPH
Rochester, MN

ACPM Representatives

Ayanna V. Buckner, MD, MPH
Atlanta, GA

Robert Gilchick, MD, MPH
Los Angeles, CA

Ross M. Miller, MD, MPH
Los Angeles, CA

Lynne Wilcox, MD, MPH
Atlanta, GA

Joint APTR ACPM Representative

Yuri T. Jadotte, MD, PhD, MPH
Stony Brook, NY

CONTACT INFORMATION

American Journal of Preventive Medicine

University of Michigan School of Public Health
1415 Washington Heights
Ann Arbor MI 48109-2029
Tel (734) 936-1591
Fax (734) 936-1615
ajpm@umich.edu
www.ajpmonline.org

American College of Preventive Medicine

Donna Grande, MGA
Executive Director
455 Massachusetts Avenue NW, Suite 200
Washington DC 20001
Tel (202) 466-2044
Fax (202) 466-2662
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.ajpmonline.org. The Journal welcomes research briefs (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. A list of common abbreviations, initialisms, and acronyms can be found in the Author Instructions on the website.

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., 230 Park Avenue, Suite 800, New York NY 10169-0901, USA. Periodical postage paid at New York NY and additional mailing offices.

POSTMASTER: Send address changes to Elsevier, Journal Returns, 1799 Highway 50 East, Linn, MO 65051, USA.

(For Post Office use only: Volume 56 issue 2 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. 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. Please visit our Support Hub page <https://service.elsevier.com> for assistance.

For Advertising Orders & Inquires: North & South America: Lorrie Young, Elsevier Inc., 230 Park Avenue, Suite 800, New York, NY 10169-0901, USA; Tel (212) 633-3855; Email: lorrie.young@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.

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.

Permission may be sought directly from Elsevier's Global Rights Department in Oxford, UK: phone 215-239-3804 or +44 (0)1865 843830; fax +44 (0)1865 853333. Requests may also be completed online via the Elsevier site (<http://www.elsevier.com/authors/obtaining-permission-to-re-use-elsevier-material>).

Notice: Practitioners and researchers must always rely on their own experience and knowledge in evaluating and using any information, methods, compounds or experiments described herein. Because of rapid advances in the medical sciences, in particular, independent verification of diagnoses and drug dosages should be made. To the fullest extent of the law, no responsibility is assumed by the publisher for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in the material herein.

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.

© 2019 American Journal of Preventive Medicine