**WHO WE ARE**

*Environmental Health Perspectives (EHP)* is a monthly open-access journal that publishes peer-reviewed research and news concerning human health and the environment. One of the overarching principles of the journal is to provide a forum for the objective and balanced presentation of scientifically credible information. Although *EHP* is sponsored by the National Institute of Environmental Health Sciences (NIEHS), its editorial policies are independent of the institute.

In 2004 *EHP* became an open-access journal. All content published since the beginning of the journal in 1972 is available free online at http://www.ehponline.org/ and http://www.ncbi.nlm.nih.gov/pmc/journals/253/. *EHP* is committed to promoting the discussion and exchange of information internationally, as described in detail at http://www.ehponline.org/international/

**WHAT WE PUBLISH**

The environmental health sciences include many fields of study and increasingly comprise multidisciplinary research areas. *EHP* publishes articles from a wide range of scientific disciplines encompassing mechanistic research, experimental and observational human studies, and *in vitro* and *in vivo* animal research with a clear relationship to human health effects. Studies involving exposure science, climate change, ecologic issues, or effects on wildlife populations are welcome, but the relevance of the findings to human health should be made clear. *EHP* also addresses ethical, legal, social, and policy issues related to environmental public health. Because children are uniquely sensitive to their environments, *EHP* devotes a research section specifically to issues surrounding children’s environmental health.

*EHP* provides additional information on environmental health issues through its News and Editorials. Although *EHP* welcomes ideas for News and Editorials, the journal does not accept unsolicited manuscripts of these types. Please contact the Editor-in-Chief for further information.

**ABOUT YOUR MANUSCRIPT**

All papers submitted to *EHP* are evaluated by a group of consulting editors to determine whether the topic is within the scope of the journal and to evaluate adherence to word limits and journal format. Papers also are assessed for originality, scientific quality, environmental health significance, clarity of presentation, and conciseness. Before papers are sent for peer review, they are screened for possible plagiarism (see “Scientific Integrity” below), and authors must submit a Competing Financial Interests Declaration form on behalf of all authors (see “Competing Financial Interests” below). Papers selected for review are assigned to Associate Editors, who identify reviewers and make recommendations to the Editor-in-Chief. Members of the Editorial Review Board serve as a pool of potential reviewers of papers. Both the Board of Associate Editors and the Editorial Review Board are composed of leading scientists from all segments of the environmental health sciences. The overall acceptance rate of papers submitted to the journal is approximately 15%.

**TYPES OF MANUSCRIPTS**

Manuscripts in the categories below are considered for publication. All manuscripts are peer reviewed except Correspondence. See “Article Length” below for details concerning word limits.

**Correspondence** (≤ 750 words) should address specific scientific issues or questions raised by Research or News Articles published in the journal within the previous 6 months. Authors of papers cited in Correspondence will be given the opportunity to respond. Letters addressing issues raised in previously published letters are discouraged. Correspondence may include a brief table or small figure if it is critical to the discussion. New data must not be included. Authors may include data from or redrawing of previously published materials as long as the work is cited and written permission from the original authors and/or publishers has been granted for republication in both printed and electronic form. Each figure is considered equivalent to 250 words toward the total word count. Correspondence that cites abstracts or unpublished observations is not acceptable and will not be published. Letters that are highly polemic or personal in nature will not be published. Correspondence is not peer reviewed and is published at the discretion of the *EHP* editors. Conclusions and opinions expressed by the authors do not necessarily reflect the policies of *EHP*.

**Commentaries** (≤ 5,000 words) present information and personal insight on a particular topic. Commentaries should not be extended critiques of single articles appearing in *EHP* or elsewhere. Factual data should be included to substantiate arguments. *EHP* reserves the right to reject Commentaries without review if they are perceived as being too polemic or personal in nature. *EHP* also reserves the right to propose that Commentaries be reviewed as one side of a point/counterpoint debate. Assuming the original author agrees, *EHP* will ask another author to address the opposite side of an argument. If both papers are accepted, *EHP* will publish them side by side. Manuscripts on ethical, legal, social, or policy issues may also be accepted in this category.

**Research Articles** (≤ 7,000 words) report original scientific research and discovery. Research Articles may come from any field of scientific research relevant to the study of human health and the environment. Manuscripts in the categories below are considered for publication. All manuscripts are peer reviewed except Correspondence. See “Article Length” below for details concerning word limits.

**Substantive Reviews** (≤ 10,000 words) provide an overview, integration of information, and critical analysis of a particular field of research or theme related to environmental health sciences. Previous research should be comprehensively reviewed regardless of whether the findings are consistent with expectations or the review authors’ hypotheses. It is appropriate for authors to discuss the strengths and weaknesses of individual studies, focus on high-quality studies that add to the weight of the evidence on the topic under review, identify information gaps, and make recommendations for future research. Lengthy historical perspectives generally are not appropriate.

**Quantitative Reviews and Meta-Analyses** (≤ 10,000 words) present, contrast, and (when appropriate) combine data across studies to address specific study questions related to environmental health. Inclusion criteria and strategies used to search the literature should be explicitly described, along with analytic methods used to evaluate or combine data. The potential for publication bias and heterogeneity among studies should be investigated, and graphical displays of data contributed by individual studies are encouraged. The strengths and weaknesses of individual studies and potential causes of discordant findings among studies also should be discussed. As with Substantive Reviews, authors should integrate and critically analyze information from previous research, identify information gaps, and make recommendations for future research.

**Reviews Based on Meetings or Conferences** (≤ 10,000 words) should review the state of the science for a particular area, identify research gaps and needs, and explain how the outcome of the meeting or conference addresses those gaps and needs. These reviews should focus on the science or theme but not on the conference or meeting itself. *De novo* data, participant lists, dialogue of workgroups or committees, and discussion of the internal organization of the meeting are not allowed. These papers should be submitted to *EHP* no more than 1 year after the meeting or conference takes place. Prospective authors should consult with the Editor-in-Chief before submitting a review based on a meeting or conference.

**ORIGINALITY OF SUBMISSION**

Contributions submitted to *EHP* must be original works of the author(s) and must not have been previously published in print or online or simultaneously submitted to another publication. Previously published material (e.g., figures, tables) may be included in Commentaries and Reviews, assuming the original authors have given permission to reproduce the material and all copyright issues have been resolved. For original Research Articles, previously published schemata or illustrative figures are acceptable with the proper attribution and permission. Text or narrative from guidance documents, technical reports, and position papers by various government and nongovernmental organizations may be considered if they include new information. *EHP* will consider papers from dissertations that have been published in their entirety by a university in partial fulfillment of a degree. Manuscripts presented at a scientific meeting but not published in full or under review for publication elsewhere also will be considered. As indicated in *Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication* (International Committee of Medical Journal Editors [http://www.icmje.org/urm_full.pdf]), it is the responsibility of the author to make a full statement to the editor concerning materials in a manuscript that might be considered redundant or duplicative. For additional clarification, please contact the Editor-in-Chief.

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*EHP* requires assurances that animals used in a study have been treated humanely and with regard for the alleviation of suffering. Research
involve human subjects must be noted, and information regarding informed consent procedures must be described in the “Methods” section of manuscripts concerning human subjects research.

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EHP anticipates receiving submissions on research that, based on current understanding, can be reasonably anticipated to provide knowledge, products, or technologies that could be directly misapplied by others to pose a threat to public health and safety, agriculture, plants, animals, or the environment (also known as dual-use research). Papers flagged for dual-use issues by EHP editors will undergo an additional level of review concerning the implications to society of publishing such a paper, and EHP reserves the right to seek expert advice in such cases. Authors should be aware that EHP could determine that the risks to public health and safety of publishing the paper outweigh the benefits of publishing, even if the paper has otherwise been deemed acceptable for publication.

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Editors and reviewers also must disclose to the Editor-in-Chief any actual or potential competing interests, both financial and nonfinancial, that have occurred within the last 3 years and could reasonably be perceived as relevant. Competing nonfinancial interests include former or current mentor–student relationships, faculty appointments in the same department or organization, familial relationships, service on advisory boards that oversee the research under review, collaborations, or membership in organizations that hold ideological views that are contradictory to the theme or topic under review.

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EHP will impose a 3-year ban on publication in EHP by any authors found to have willfully failed to disclose a competing financial interest. A paper may also be retracted or an Expression of Concern published and appended to the article.

MANUSCRIPT PREPARATION

ARTICLE LENGTH

All words in the main text, title pages, abstract, tables, and references count toward EHP word limits. In addition, each figure is counted as 250 additional words. Manuscripts that do not conform to the word limits may be returned to the author(s) for revision before the review process is initiated. Depending on the topic and potential impact of a paper, the Editor-in-Chief reserves the right to waive word limits. Authors may place some types of information, such as lengthy descriptions of previously published methods, in Supplemental Material; however, these methods must be described briefly in the text of the paper. Information included in Supplemental Material does not count toward the word limit. The judicial use of references also may help meet the following word limits:

- Correspondence: ≤ 750 words
- Commentaries: ≤ 5,000 words
- Research Articles: ≤ 7,000 words
- Substantive Reviews: ≤ 10,000 words
- Quantitative Reviews and Meta-Analyses: ≤ 10,000 words
- Reviews Based on Meetings or Conferences: ≤ 10,000 words.

PARTS OF A MANUSCRIPT

Title Pages

The title pages should include the following items in the order shown, beginning on the first page of the manuscript:

- Manuscript title, not to exceed 20 words
- [Titles should describe the research or topic of the paper but not summarize results or conclusions; titles generally should not contain abbreviations or numerical values, with the exception of abbreviated study names (e.g., NHANES)]
- Names of the authors spelled out in full
- Affiliations of all authors (department, institution, city, state/province, and country)
- Name of and contact information for corresponding author to whom page proofs should be sent, including complete address for express mail service, telephone number, and e-mail address
- A short running title, not to exceed 50 characters and spaces
- Acknowledgments, including grant information
- A competing financial interests declaration.
Abstract
All papers must include a structured abstract of ≤ 250 words, which should not contain references. No information should be reported in the abstract that does not appear in the text of the manuscript. In general we recommend that authors indicate study names or sources of data that are integral to the study in the title or abstract. Conclusions should mention the relevance of the work to environmental health science. Headings to be used in the structured abstracts vary by article type as described below:
• Commentaries: Background, Objectives, Discussion, Conclusions
• Research Articles: Introduction, Materials and Methods, Results, Discussion
• Meta-Analyses: Background, Objectives, Methods, Results, Conclusions
• Substantive Reviews and Reviews Based on Meetings or Conferences: Background, Objectives, Methods, Discussion, Conclusions.

Main Text
The organization of the text varies by article type and roughly reflects the structure of the abstract:
• Commentaries: Introduction (comprising the Background and Objectives stated in the abstract), Discussion, Conclusions
• Research Articles: Introduction (comprising the Background and Objectives stated in the abstract), Methods, Results, Discussion, Conclusions
• Reviews: Introduction (comprising the Background and Objectives stated in the abstract), Methods (including data sources), Results (as appropriate), Discussion, Conclusions.

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Manuscript Formatting
Manuscript pages must be numbered consecutively, beginning with the title page, and lines should be numbered in the original submission and all subsequent revisions. The manuscript must be prepared using Times New Roman font at 12-point size. The manuscript must be double-spaced, with all margins set at 1 inch.


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EHP Style

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EHP covers all disciplines engaged in the broad field of environmental health sciences. Therefore, authors should write in a clear and simple manner, in the active voice, and avoid unnecessary jargon, so the article is understandable to readers in other disciplines and to those whose first language is not English. In deference to the breadth of the journal’s readership, please define terms that may not be universally recognized among all environmental health scientists.

Clearly define all outcomes, exposures, predictors, confounders, and covariates, and describe the methods or assays used to characterize study data. Results should be presented in a clear and unambiguous manner. Comparison groups or reference conditions should be clearly indicated when reporting measures of association or effect and when reporting p-values for statistical tests comparing outcomes or effects between groups.

We recommend against the use of “fold” terminology because it can be difficult to determine whether it is being used to describe relative versus absolute differences or changes between groups or conditions.

Whenever possible, provide an estimate of variability or precision when reporting measures of association or effect and when reporting p-values for statistical tests comparing outcomes or effects between groups.

In-Text Citations
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• Single author: (Wing 2002)
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• Multiple sources cited at one time: List publications alphabetically by author in the citation. Separate publications by the same author(s) with commas and those by different authors with semicolons: (Aldridge et al. 2005; Jameson et al. 2006; Levin et al. 2007; Slotkin 2004a, 2004b; Slotkin et al. 2008)
• Multiple sources cited at one time with different first authors but same last name and date: Use first author’s last name plus initial(s) (Smith A 2000; Smith J 2000).

Provide references for any quotations used in the text. For example:
According to Rubin et al. (2001), “it is only with a multidisciplinary and collaborative approach that the environmental and public health significance of Pfiesteria will be fully understood.”

Any items that must be cited but are not accessible to the public must appear in the text in parentheses but should not be listed in the references: (Ramsdell JS, Moeller PDR, personal communication); (Reeves MK, unpublished data).

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Authors are fully responsible for the accuracy of their references. The list of references should begin on a new page after the Conclusions of the manuscript. All references must include
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• Year of publication
• Full title of article or chapter (lower case)
• Journal [abbreviated according to BIOSIS, Index Medicus, or PubMed (http://www.ncbi.nlm.nih.gov/nlmcatalog/journals)] or book/proceedings in title case
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Journal article—conventional reference
Journal article—advance publication
Journal article—published online only
Journal article, “in press”
Chapter in edited book
Agency as author
Proceedings
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Website
Footnotes
Do not use footnotes. Place all textual information within the manuscript and all references in the proper form both in text and in the reference list.
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Tables
Each table must begin on a new page after the References. Tables must be numbered with Arabic numerals, followed by a brief title (not to exceed 25 words). Tables should contain no more than two layers of column headings. A column heading must be provided for each column. Additional column heads should not be placed in the middle of a table. Tables must be created using the Table feature in Microsoft Word. List abbreviations and definitions under each table. Type footnotes directly after the abbreviations, beginning on the next line. General footnotes to tables must be indicated by lowercase superscript letters beginning with “a” for each table. Footnotes indicating statistical significance must be identified in the following order: asterisks (*, **), number signs (#, ##), and daggers (†, ††). The comparison to which the p-value applies must be clearly indicated (e.g., “compared with untreated controls”). For presentation of data in tables, please use the “±” symbol for arithmetic mean and standard deviation or “compared with untreated controls”). For presentation of data in tables, please use the “±” symbol for

Figure Legends
Figure legends should be provided on a new page after tables. Each figure legend should include a title for the entire figure and descriptors for each panel (e.g., “Figure 1. Incidence of hepatocellular adenomas (A) and carcinomas (B) in mice exposed to DEHP”). Define error bars and any abbreviations beginning on the next line.
be peer reviewed along with the manuscript and thus must meet the same rigorous standards.

Supplemental Material must not exceed 2,000 words, including text, tables, references, and figure legends plus an additional 250 words per figure. If the Supplemental Material exceeds this limit, the author must request a waiver from the Editor-in-Chief before the paper is submitted to the journal. Authors may provide a separate (ideally permanent) web repository for information that is not included in the Supplemental Material file if they believe it would be of interest to readers. This material should be clearly identified as not peer reviewed. This information should be cited in the text and included in the reference list (formatted as a website).

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MANUSCRIPT SUBMISSION
MANUSCRIPT CENTRAL

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INITIAL SUBMISSION OF A MANUSCRIPT

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REQUIRED COVER LETTER

A cover letter must accompany the manuscript and include the following points:

- Assurances that the manuscript a) is an original work, b) has not been previously published whole or in part, and c) is not under consideration for publication elsewhere
- A statement that animals used in research have been treated humanely according to institutional guidelines, with due consideration to the alleviation of distress and discomfort. The source of those guidelines must be provided
- A statement that participation of human subjects did not occur until after informed consent was obtained
- Confirmation that all authors have disclosed any actual or potential competing interests regarding the submitted article and the nature of those interests (the required CFID form is available at http://ehp.niehs.nih.gov/cfid.pdf)
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PEER REVIEW

Manuscripts are assessed for originality, scientific quality, environmental health significance, clarity of presentation, and conciseness. Scientific quality and environmental significance have a higher weight than the other criteria.

All new submissions undergo an initial review by a group of consulting editors. Authors will be notified within 1–3 weeks if their paper is not selected for peer review based on the evaluation. Papers selected for peer review (~20% of new submissions) are assigned to an Associate Editor, who identifies at least two peer reviewers and makes recommendations to the Editor-in-Chief based on their reviews. Reviewer names are not provided to authors, but author names are available to reviewers. Reviewers are asked to complete their review within 2 weeks.

After editorial consideration, a decision letter and reviewers’ comments will be e-mailed to authors. If a revision of the manuscript is required, authors must submit the revised manuscript to EHP within 6 weeks of the request. If authors fail to meet this deadline, the submission will be canceled unless the authors have obtained prior permission for an extension from the Editor-in-Chief. Authors must submit both the revised manuscript and a letter responding to reviewers’ comments.

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- Each revised figure must be submitted as a separate file in one of the following formats: EPS, PDF, TIFF, or JPEG. Each figure must be labeled with the correct figure number for the revised manuscript. Additional information on formatting and content requirements is provided in “Preparing Tables and Figures” above.
- Authors must submit a cover letter with point-by-point responses to the reviewers’ comments, a copy of the revised manuscript with changes tracked in Microsoft Word, and a clean version of the revised manuscript with all changes accepted. To expedite the processing of revised manuscripts, it is important to be as specific as possible in responding to reviewers’ comments. Authors should copy the editors’ and/or reviewers’ comments into the response letter and respond to each comment individually, including the specific changes made in response to each comment (if any) and where the changes are located in the revised draft. As in the original submission, the revised manuscripts must have numbered lines to facilitate locating specific text or changes.
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FINAL INTERNAL REVIEW

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**Publication Sequence**

**Advance Publication**

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Abbreviations

All nonstandard abbreviations [e.g., organochlorine (OC) pesticides, limit of detection (LOD), polymerase chain reaction (PCR)] and abbreviations for elements (e.g., Fe, Cu, Ag) and chemical compounds [e.g., polychlorinated biphenyls (PCBs), carbon dioxide (CO₂)] should be defined in the text on first use and abbreviated thereafter.

Standard abbreviations, which do not need to be defined, are shown below. Units of measure should be abbreviated only when a specific amount is given (e.g., "concentration of 10 ng/mL" versus "units of nanograms per milliliter").

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
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<tbody>
<tr>
<td>Å</td>
<td>angstrom</td>
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<tr>
<td>amu</td>
<td>atomic mass unit</td>
</tr>
<tr>
<td>ATP</td>
<td>adenosine 5'-triphosphate</td>
</tr>
<tr>
<td>BW</td>
<td>body weight</td>
</tr>
<tr>
<td>°C</td>
<td>degrees Celsius</td>
</tr>
<tr>
<td>cm</td>
<td>centimeter</td>
</tr>
<tr>
<td>cm²</td>
<td>square centimeter</td>
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<tr>
<td>cm³</td>
<td>cubic centimeter</td>
</tr>
<tr>
<td>Da</td>
<td>dalton</td>
</tr>
<tr>
<td>df</td>
<td>degrees of freedom</td>
</tr>
<tr>
<td>DNA</td>
<td>deoxyribonucleic acid</td>
</tr>
<tr>
<td>EDTA</td>
<td>ethylenediamine-tetraacetic acid</td>
</tr>
<tr>
<td>ft</td>
<td>foot</td>
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<tr>
<td>g</td>
<td>gram</td>
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<tr>
<td>g</td>
<td>gravity (10,000 × g)</td>
</tr>
<tr>
<td>gal</td>
<td>gallon</td>
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<tr>
<td>Gy</td>
<td>gray (unit of absorbed dose of ionizing radiation)</td>
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<tr>
<td>ha</td>
<td>hectare</td>
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<tr>
<td>HEPES</td>
<td>N-2-hydroxyethylpiperazine-N'-2-ethane sulfonic acid</td>
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<td>HPLC</td>
<td>high-performance liquid chromatography</td>
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<td>i.d.</td>
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<td>Kₘ</td>
<td>Michaelis constant</td>
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<td>parts per trillion</td>
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<td>SE</td>
<td>standard error, standard error of the mean</td>
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<td>standard deviation</td>
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<td>sodium dodecyl sulfate-polyacrylamide gel electrophoresis</td>
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