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GUIDELINES:  
**RETRACTION GUIDELINES**

# GUIDELINES

## RETRACTION GUIDELINES

COPE Retraction guidelines are formal COPE policy and are intended to advise editors and publishers on expected practices when considering whether a retraction is appropriate, and how to issue a retraction. The guidelines include advice on when to consider a retraction, what to include in a notice, how quickly a retraction should be issued, who should issue a retraction, and what to do when the evidence is insufficient or not conclusive enough to support a retraction.

These guidelines do not include expressions of concern or corrections. Expressions of concern and corrections are covered elsewhere.<sup>1</sup> These guidelines apply mainly to journal articles but might be applicable to other published documents.

The guidelines are reviewed regularly and updated when required. Proposals for new guidelines are reviewed by the Education Subcommittee and authored by COPE Trustees and Council Members, sometimes in conjunction with external experts. If you would like to comment on the content of our guidance, please contact Natalie Ridgeway, Executive Officer [cope\\_execofficer@publicationethics.org](mailto:cope_execofficer@publicationethics.org)

### Purpose of retraction

Retraction is a mechanism for correcting the literature and alerting readers to articles that have such seriously flawed or erroneous content or data that their findings and conclusions cannot be relied upon. Unreliable content or data can result from honest error, naive mistakes, or research or publication misconduct. The purpose of retraction is to correct the literature and ensure its integrity, not to punish the authors. Of note, once an article is posted online (eg, so-called online first, not yet assigned to an issue), it is considered published.



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## KEY POINTS

### RETRACTION GUIDELINES

#### RETRACTION MIGHT BE WARRANTED IF:

- there is clear evidence of major errors, irregularities in the data or images, or any form of misrepresentation (eg, fraud, identity theft, or fictitious authorship) that compromise the reliability of the findings;
- unethical research practices, compromised peer review, or undisclosed conflicts of interest are identified that could bias interpretation of the work or recommendations by peer reviewers;
- findings have been published elsewhere without proper attribution, permission, or justification, or material or data have been used without proper authorisation.



#### NOTICES OF RETRACTION

Notices of retraction should link to the retracted article, clearly identify it with title and authors, be published promptly, and be freely accessible to all readers.

#### PURPOSE OF RETRACTION

The purpose of retraction is to correct the literature and ensure its integrity, not to punish the authors.

#### BATCH RETRACTIONS

Batch retractions might be appropriate when there is evidence of systematic manipulation of the publication process in one or more journals (eg, paper mills).

## When to retract an article

Editors can decide to retract a publication if they no longer have confidence in the results and conclusions reported in the paper. Reasons for this loss of confidence can be, but are not limited to:

- ✓ **Indications that the findings are unreliable because of:**
  - irregularities in the data or their analysis, or both;
  - fictitious or unavailable data;
  - image irregularities, such as alterations and duplications; or
  - major error (eg, miscalculation or experimental error).
- ✓ **The authorship of the publication cannot be verified or there are serious concerns about accountability for the research.**
- ✓ **Any form of misrepresentation, for example:**
  - with respect to accountability for the work;
  - deception;
  - fraud (eg, a paper mill);
  - identity theft or fictitious authorship; or
  - undisclosed involvement of artificial intelligence (AI).
- ✓ **The publication includes, as determined by the editor, an unacceptable level of overlap with previously published content.**
- ✓ **The findings have previously been published elsewhere without proper attribution or disclosure to the editor, permission to republish, or justification (ie, cases of redundant publication).**
- ✓ **The publication contains material or data without authorisation for use, removal of which would affect the results and conclusion of the article.**
- ✓ **Copyright has been infringed or there is some other serious legal issue (eg, libel, privacy).**
- ✓ **The publication reports unethical research.**
- ✓ **The peer review or publication process was compromised (eg, fake reviewers, paper mill use, or citation manipulation) and any additional review does not support publication.**
- ✓ **The authors failed to disclose a major competing interest or conflict of interest that, in the editor's view, could have unduly affected interpretations of the work or recommendations by editors and peer reviewers.**
- ✓ **The publication is, or includes, a meta-analysis or systematic review, the conclusions of which rely on content that has subsequently been corrected or retracted.**

## When retraction is not appropriate

If an editor is uncertain about the reliability of a publication because of insufficient information, delays, or inability to obtain information, for example, retraction might not be appropriate. In this situation, and if warranted, an editor could consider publishing an expression of concern.<sup>1</sup> Other situations where a retraction might not be appropriate are:

- ✓ the authorship is disputed but there is no reason to doubt the validity of the article's findings, data, or content (but see section on "Further considerations about disputed authorship");
- ✓ correction would sufficiently deal with the errors or concerns raised, provided that the main results and conclusions are not unduly affected by the correction;
- ✓ if an editor requires more information to be confident that a paper should be retracted, an expression of concern should be issued<sup>1</sup>; or
- ✓ conflicts of interest have been reported to the journal after publication, but in the editor's view, these are not likely to have influenced the interpretations, recommendations, or the conclusions of the article.

### Further considerations about disputed authorship

Authors sometimes request that articles are retracted when authorship is disputed after publication. If there is no reason to doubt the validity of the findings, the reliability of the data, or the authenticity of the authors as those who were responsible for the work, it is not appropriate to retract a publication solely on the grounds of an authorship dispute. In such cases, the editor should inform those involved in the dispute that they cannot adjudicate in such cases but will publish a correction to the author or contributor list if such a change is justified, as determined by the editor when presented with documentation in support of the request.

Also, all of the authors must agree to any changes in the authorship.

For guidance about how to handle authorship disputes that occur before publication, consult the relevant COPE Flowcharts.<sup>2</sup>

### Is retraction appropriate for unpaid publication fees?

Although non-payment of publication fees might be a reason not to publish an article, it is unrelated to the content of the article. Therefore, an article should not be retracted as a consequence of failing to pay owed publication fees.<sup>3</sup>

**It is not appropriate to retract a publication solely on the grounds of an authorship dispute**

## Other forms of retraction

### Retraction with replacement

This category of retractions is associated with articles that have serious errors that, when corrected, change the findings significantly but do not invalidate the underlying scholarship or methods of the study.

Typically, copies of the original article, with errors and corrections highlighted, are published as supplements to the retracted and replaced article.

### Retraction with removal

In rare cases it might be necessary to remove part or all of the content of an article from online publication, such as when the article violates personal privacy, is the subject of a court order, or could have a serious health risk to the general public or the environment.

In these circumstances, the metadata (title, authors, date of publication, issue or volume, journal name, and affiliations) should be retained, and the retraction notice should clearly state why the content of the article has been removed.

### Republishing retracted content

An author might republish some of the work in a retracted article if the content was found to be reliable. To do so transparently, authors should notify the

editor of the previous retraction when they submit the article to the journal. It is usually appropriate to cite the retraction, indicating why the work was flawed and what has been omitted or corrected in the new article. Permission to republish also needs to be agreed with the copyright holder of the retracted work.

In some instances, journal editors might want to work with authors to concurrently retract an article that was found to be fundamentally flawed while simultaneously publishing a linked and corrected version of the work. This strategy of retract and republish is not commonly used, but could provide an opportunity for editors and authors to transparently correct the literature when a simple correction cannot sufficiently deal with the flaws of the original article (eg, see Retraction and republication—a new tool for correcting the scientific record?<sup>4</sup>). In this instance, the original article should not be removed or replaced, but should be retained and linked to. The two versions of the articles should be clearly distinguishable (eg, by having different digital object identifiers (DOIs)).



## Which publications should be retracted?

Editors can decide to retract a publication if they no longer have confidence in the results and conclusions reported in the paper. Some of the reasons why an editor would lose confidence in an article have been discussed.

Retractions can be requested by the author or authors of an article, by an institution, by readers, or by editors. Regardless of who makes a request, decisions on retractions are made by editors. Publications should be retracted (or an expression of concern published) even if all or some of the authors do not agree. Partial retractions should be avoided because the status of the article and which parts can be relied upon are difficult to determine.

If redundant publication occurs, the journal that published the article first does not need to take action unless there are other concerns. Any journals that subsequently publish a redundant article should retract the article and state the reason for the retraction. If an article is published in more than one journal (either online or in print) at the same time, precedence may be determined by the publication dates or the dates when a licence to publish or the copyright transfer agreement was signed by the authors. Guidelines on dealing with redundant publications can be found in the COPE flowchart on redundant (duplicate) publication in a published article.<sup>5</sup>

If partial overlap (ie, when authors present new findings in an article that has a substantial amount of previously published information) is identified after publication, editors should consider whether to retract the whole article or issue a correction, clarifying which parts of the article had been published previously and providing appropriate attribution to the earlier work. This approach will depend on the amount and nature of the overlap. In some cases (eg, description of a standard method), a limited degree of text recycling may be permissible.<sup>6</sup>

Posting an 'in press' or final version of an article online, by the journal where it will eventually be published, or on a preprint platform or institutional archive, usually constitutes publication, even if the article has not appeared (or will not appear) in its final form or in an issue. If an article is retracted before it appears in its final form or in an issue, the online version of the article should be retained, with a clear notice of retraction, and should be included in bibliographic databases (eg, with a DOI or other permanent citation). Retaining the original work ensures transparency of the published record because online versions may have been accessed and cited by researchers before retraction.

**CONTENT OF RETRACTION NOTICES**

**OBJECTIVE AND FACTUAL**  
A retraction notice should be objective and factual, and should avoid inflammatory or accusatory language.

**LINKED TO THE ARTICLE**  
The notice should be linked to the retracted article (see NISO CREC, the National Information Standards Organization (NISO)'s Communication of Retractions, Removals, and Expressions of Concern (CREC)<sup>7</sup>) and should clearly identify the retracted article (eg, by adding 'retracted' at the beginning of the title, including the title and authors in the retraction heading, or citing the retracted article and its DOI).

**UNMISTAKABLY IDENTIFIED**  
Retracted articles should be unmistakably identified in all online sources (eg, on the journal website, including in the table of contents, on the original article, and on any bibliographic databases). Best practice includes changing the title to 'Retracted: Title', watermarking all versions (including HTML and PDF) as RETRACTED, and including the retraction notice at the beginning of the PDF of the retracted article.

**INCLUDE AUTHORS AND TITLE**  
The authors and title of the retracted article should be included in the retraction heading. The European Association of Science Editors (EASE) has a form for checking the details of a retraction.<sup>8</sup>

**WHO IS RETRACTING THE ARTICLE**  
Who is retracting the article should be stated (eg, the editor or publisher), along with the reasons and basis for retraction so that readers understand why the article is unreliable. A link to relevant content (eg, online community peer reviews or critique articles) could be published if the material was used to inform the retraction decision.

**EDITORIAL DECISION**  
Editors might consider including in the retraction notice whether (and which) authors agreed or disagreed with retraction of the article. The content of the retraction notice is an editorial decision that is based on the outcome of the journal's investigation. Editors should proceed with retraction and publication of the retraction notice even if the authors do not agree or cannot be contacted.



✕ +



## CONTENT OF RETRACTION NOTICES

## RELATE TO ONE ARTICLE

A retraction notice should relate to one retracted article (but see section on 'Batch retractions') and be clearly identified as a retraction (ie, distinct from other types of corrections or comments).

**PUBLISHED AS SOON AS POSSIBLE**

Notices should be published as soon as possible to minimise harmful effects. If there is a delay in the investigation, editors should consider publishing an editor's note or an expression of concern.<sup>1</sup>

**FREELY AVAILABLE**

Retraction notices should be freely available to all readers (ie, not behind access barriers or available only to subscribers).

## CATEGORY AND TYPE

The category or type of retraction should be stated: specifically, retraction, retraction with replacement, or retraction with removal.

## WHO RAISED THE CONCERNS

If the concerns about the article were raised by a third party, their name could be included in the retraction notice, if relevant, and with permission. If the concerns were raised by an institutional investigation, this information should be included in the retraction notice.

## EXPRESSION OF CONCERN

If an expression of concern has previously been published for the same concern as the retraction, and a decision to retract the paper is made, the retraction notice should make clear that the retraction supersedes the expression of concern.

## ALL VERSIONS

Retraction notices should be published in all versions of the journal (ie, print and online) and, as far as possible, should be linked to all other online versions relating to the reasons for retraction, such as those on preprint platforms or institutional archives, and also to the data underlying the paper (eg, published datasets, see FORCE11 and COPE Research Data Publishing Ethics Working Group flowchart: Scientific rigor-Published data<sup>9</sup>).

## BIBLIOGRAPHIC DATABASES

Journals are responsible for ensuring that retractions are labelled so that they are identified by bibliographic databases, with a link to the retracted article (NISO<sup>7</sup> provides recommended best practice for metadata creation, transfer, and display for both the original article and the statement of retraction, removal, or expression of concern). The retraction should appear on all online searches for the retracted publication.

## Who should issue the retraction?

Publishers can support editors in investigations, make recommendations about how to handle cases, and jointly issue retraction notices. However, because the editor is responsible for the journal's content, they should always make the final decision about retracting material, except in instances where the editor is compromised or has a conflict of interest. This approach is consistent with the principle of editorial independence and limits the possible influence of business or economic interests on editorial decision making.

## Batch retractions

Batch retractions might be needed when there is evidence of large scale systematic manipulation of the publication process in one or more journals (eg, paper mills, see definitions). Because they are related, the group of articles is treated as one entity for the purposes of investigation and retraction.

These cases will typically be coordinated by publishers; editors should collaborate closely with publishers and should still be involved in and responsible for decisions for any given article.

As for all retraction notices, those issued for batch retractions should inform readers of the ethics and integrity concerns that led to retraction, even if the reasons are identical for many articles. In general, a retraction should relate to a single published article (see NISO CREC guidelines<sup>7</sup>) but there may be rare cases, as in large scale systematic manipulation, where one notice is linked to several articles (see section 7.8 of NISO CREC guidelines, Using a single notice for multiple events,<sup>7</sup> and this example of a retraction notice for several articles<sup>10</sup>).

Batch retraction notices should clearly state that systematic, coordinated, and widespread manipulation of the publication process has been identified and that the article is one of a group of articles affected by

the same process of manipulation. The wording of batch retraction notices can be the same or similar when, for example, the peer review process for all articles was compromised in the same way.

Batch retraction notices should be published at the same time or in batches close together in time. The structure and mechanism of the retraction is the same as for an individual article.

As with all retractions, the authors of the articles involved in a batch retraction should be notified of the decision before their article is retracted (see 'Communicating with authors').

Some authors could be blameless and inadvertently involved in some forms of systematic manipulation of the publication process. Where appropriate, journal editors should consider offering a process of recourse for these authors. For example, if the editor is confident that only the peer review process is compromised, and there is no evidence to support loss of confidence in the content of the article, the article could be re-reviewed. However, editors should decide whether recourse is offered to authors before or after retraction based on the evidence of systematic manipulation of the publication process. If offered before retraction, this should not cause undue delay to the timely resolution of the broader systematic manipulation case.

Editors should refer to COPE guidance for advice on what investigative steps or actions, apart from retraction, might be applicable to cases of suspected coordinated systematic manipulation of the publication process.<sup>11</sup> For more insights, COPE has guidance on 'Addressing concerns about systematic manipulation of the publication process'<sup>12</sup> and 'Systematic manipulation of the publication process'.<sup>11</sup>

## Definitions

### PAPER MILL

Systematic manipulation of the publication process where an individual or group of individuals have repeatedly used dishonest or fraudulent practices to:

- prevent or inappropriately influence the independent assessment of a piece of scholarly work by independent peers; and/or
- inappropriately attribute authorship of a piece of scholarly work; and/or
- publish fabricated or plagiarised research.

This definition also includes instances where peer review or content has been compromised in a systematic manner (eg, compromised guest edited special issues).

### BATCH RETRACTION

A set of articles in one or more journals, identified as having features in common that are indicative of large scale systematic manipulation of the publication process (eg, paper mills).



## Communicating with authors

For both individual and batch retractions, authors should be notified of the decision before their article is retracted. Authors should be told why the editor decided to investigate their article, what caused the editor to lose confidence in the article, and why that concern cannot be resolved by a correction. Authors should also be reminded that the purpose of retractions is to maintain the integrity of the published record, and not to apportion blame or to punish authors.

### Importance of timely handling of retractions

To minimise harmful effects and uptake (eg, citation of erroneous work, acting on their findings, or drawing

incorrect conclusions), retraction notices should be published as soon as the editor is confident that the publication is seriously flawed, misleading, or falls into any of the categories described above. If there is a delay in making that determination, editors should publish an expression of concern (for information about when to issue an expression of concern, see COPE's guidelines on expressions of concern<sup>1</sup>).

When an editor has lost confidence in the results or conclusions of an article, they should not delay retraction solely because the authors or their institutions are not cooperative or responding promptly. If the editor has a reasonable expectation that more relevant information about

the retraction is forthcoming (eg, from an institutional investigation), it might be appropriate to wait. An expression of concern could be issued in the interim.

If a letter or commentary that has been submitted for publication raises serious concerns about an article, an editor should not wait for a decision on publication of the letter or commentary to consider whether the article might also need to be retracted (or whether an expression of concern is needed). Likewise, the editorial decision to publish a letter or commentary should be taken independently of the retraction decision.<sup>13</sup>

When editors have credible grounds to suspect misconduct, this should be brought to the attention of the authors' institutions as early as possible, but the decision to correct or retract an article should be made by the editor and does not necessarily depend on the outcome of an institutional investigation. The editor should not wait for the outcome of an institutional investigation to retract the article if they are confident that the article is unreliable.

In principle, editors should raise concerns with all of the authors, not just the corresponding author, before contacting institutions. In rare cases, such as when allegations of serious misconduct are well founded, they might contact institutions and authors jointly (editors should consult the COPE guidelines, Cooperation between research institutions and journals on research integrity cases,<sup>14</sup> the CLUE guidelines, Cooperation and liaison between universities and editors (CLUE): Recommendations on best practice,<sup>15</sup> and the Working Group of Institutional Research Integrity Officers and Journal Editors and Publishers<sup>16</sup>).

If necessary, a previously corrected article could be further corrected or a previously corrected article could be retracted after the outcome of an institutional investigation. Where possible, the outcome of institutional investigations should be quoted from

and cited in the retraction notice, and any findings of misconduct should be appropriately attributed to the institution who made the finding.

## Authorship and retracted articles

Authorship requires joint responsibility for the integrity of the reported research. Therefore, unless the author was originally listed on the article without consent, and this has been confirmed by an authorship investigation, it is not appropriate for author names to be removed from a publication, even if they were not directly culpable for the errors or actions that led to retraction.

If retraction is due to the actions of some but not all of the authors of a publication, the notice of retraction should state this if possible. This approach would only be appropriate if an institutional investigation concluded that a specific author or authors were responsible for the errors or actions. The retraction notice should reference the institutional investigation.

Authors who become aware of potential errors, ethical issues, or misconduct affecting the content of their published article must raise this to the attention of the journal's editor and publisher as soon as a concern is confirmed (contacting a publication ethics or research integrity team, if this is in place); ethical issues or misconduct should also be raised with the institution. Authors might first consult any coauthors, although this may not be appropriate if they are potentially implicated.

Authors and their institutions might request retraction, but they must always provide sufficient explanation and documentation of the concerns so that the editor can independently assess how to proceed. The decision to correct or retract an article is made by the editor.

## Possible legal implications of retractions

Authors who disagree with a retraction (or whose request to retract a publication is refused) sometimes threaten journals and their editors with legal action. Concern over litigation can make editors reluctant to retract articles, especially if the authors are opposed to this action.

Publishers should support editors to make prompt decisions based on the trustworthiness of the content, and ensure that there are systems in place to support editors in responding to legal threats.

Journals' instructions for authors should explain the journal's policies on publication ethics and describe the circumstances that might require retraction.

This information should be incorporated into author agreements and brought to the authors' attention. It is common for author agreements to have commitments from authors confirming compliance with the journal's policies. However, even if the publishing agreement or journal instructions do not set out specific conditions for retraction, a journal can best defend itself against a legal challenge to a retraction (or expression of concern) if a suitable investigation and proper procedures are followed (see for example Mario Saad vs American Diabetes Association<sup>17</sup>).

Legal advice could be helpful to determine the appropriate wording for a retraction notice to ensure that the text is not considered defamatory. As much as possible, wording of retractions should be limited to proven facts. Retraction notices should not engage in speculation (eg, about motives or factors that are unproven) and should avoid personal attacks.

Nevertheless, retraction notices should always mention the reason for retraction, and a statement about misconduct findings can be included if they are properly attributed to the finding body (eg, following an institutional or funder investigation). If authors consent to the wording of a retraction statement, this might provide a defence against a libel claim.

## Citing retracted articles

Retracted articles continue to be cited (eg, when researchers are unaware that the article has been retracted<sup>18,19</sup>). This can be for several reasons: the article was downloaded before it was retracted and the authors who cited it did not verify its status, or the authors did not notice that it was retracted (retracted articles remain online and searchable). Retracted articles can, however, justifiably be cited, depending on the reason for the retraction, or for meta-research purposes. Hence it is essential that publishers promptly provide adequate data to indexing databases so that the information associated with retracted articles is accurate, up to date, and consistent across databases.<sup>7</sup>

To ensure that retracted articles are not cited inappropriately, references should be checked by the authors and the journal before publication. Authors should not cite retracted papers without acknowledging the retraction.

## REFERENCES

1. COPE Council. COPE Guidelines: Expressions of concern.  
<https://doi.org/10.24318/mw2J3661>
2. COPE Flowcharts.  
<https://cope.onl/cope-flowcharts>
3. COPE Council. COPE Guidelines: Author fees and waivers – English.  
<https://doi.org/10.24318/CkhGNJ8Q>
4. Cagney H, Horton R, James A, et al. Retraction and republication – a new tool for correcting the scientific record? *Eur Sci Editing* 2016;42(1):3-7. <https://b.link/retraction-republication>
5. COPE Council. COPE Flowcharts and infographics – Redundant (duplicate) publication in a published article – English.  
<https://doi.org/10.24318/cope.2019.2.13>
6. BioMed Central. Text recycling guidelines for editors.  
<https://cope.onl/text-recycling>
7. National Information Standards Organization (NISO). NISO RP-45-2024, Communication of Retractions, Removals, and Expressions of Concern (CREC) 27 June 27 2024.  
<https://doi.org/10.3789/niso-rp-45-2024>
8. European Association of Science Editors (EASE). EASE Standardised Retraction Form.  
<https://b.link/ease-retraction-form>
9. FORCE11 & COPE Research Data Publishing Ethics Working Group flowchart: Scientific rigor - Published data.  
<https://doi.org/10.5281/zenodo.7896759>
10. Retraction notice regarding several articles published in the *Journal of Intelligent & Fuzzy Systems*. *J Intell Fuzzy Syst* 2021;41(5):5769-72. <https://doi.org/10.3233/JIFS-219218>
11. COPE Council. COPE Flowcharts and infographics – Systematic manipulation of the publication process – English.  
<https://doi.org/10.24318/cope.2019.2.23>
12. COPE Council. COPE Supplemental guidance – Addressing concerns about systematic manipulation of the publication process – English.  
<https://doi.org/10.24318/x0mN3xfg>
13. COPE Council. COPE Flowcharts and infographics - Handling of post-publication critiques - English.  
<https://doi.org/10.24318/o1VgCAih>
14. COPE Council. COPE Guidelines: Cooperation between research institutions and journals on research integrity and publication misconduct cases – English.  
<https://doi.org/10.24318/cope.2018.1.3>
15. Wager E, Kleinert S, and on behalf of the CLUE Working Group. Cooperation & Liaison between Universities & Editors (CLUE): recommendations on best practice. *Res Integr Peer Rev* 2021;6:6.  
<https://doi.org/10.1186/s41073-021-00109-3>
16. Garfinkel S, Alam S, Baskin P, et al. Enhancing Partnerships of Institutions and Journals to Address Concerns About Research Misconduct: Recommendations From a Working Group of Institutional Research Integrity Officers and Journal Editors and Publishers. *JAMA Netw Open* 2023;6(6):e2320796.  
<https://doi.org/10.1001/jamanetworkopen.2023.20796>
17. SAAD v. AMERICAN DIABETES ASSOCIATION. Civil Action No. 15-10267-TSH. March 5, 2015. <https://b.link/saad-ada>
18. Kühberger A, Streit D, Scherndl T. Self-correction in science: The effect of retraction on the frequency of citations. *PLoS ONE* 2022;17(12):e0277814.  
<https://doi.org/10.1371/journal.pone.0277814>
19. Schneider J, Woods ND, Proescholdt R, et al. Reducing the inadvertent spread of retracted science: recommendations from the RISRS report. *Res Integr Peer Rev* 2022;7:6.  
<https://doi.org/10.1186/s41073-022-00125-x>

Links to other sites are provided for your convenience but COPE accepts no responsibility or liability for the content of those sites.

Cite this as: COPE Council. COPE Retraction guidelines – English.

DOI: <https://doi.org/10.24318/cope.2019.1.4>

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## RESOURCES AND FURTHER READING

Barbour V, Bloom T, Lin J, et al. Amending published articles: time to rethink retractions and corrections? (version 1; peer review: 2 approved with reservations). *F1000Research* 2017;6:1960. <https://doi.org/10.12688/f1000research.13060.1>

Besançon L, Bik E, Heathers J, et al. Correction of scientific literature: Too little, too late! *PLoS Biol* 2022;20(3):e3001572. <https://doi.org/10.1371/journal.pbio.3001572>

Budd JM, Sievert M, Schultz TR. Phenomena of retraction: reasons for retraction and citations to the publications. *JAMA* 1998;280:296–7. <https://doi.org/10.1001/jama.280.3.296>

Council of Science Editors (CSE). Recommendations for Promoting Integrity in Scientific Journal Publications. 3.5 Correcting the literature. <https://b.link/cse-integrity-recommendations>

Decullier E, Maisonneuve H. Correcting the literature: Improvement trends seen in contents of retraction notices. *BMC Res Notes* 2018;11:490 <https://doi.org/10.1186/s13104-018-3576-2>

Fanelli D, Ioannidis JPA, Goodman S. Improving the integrity of published science: An expanded taxonomy of retractions and corrections. *Eur J Clin Invest* 2018;48:e12898. <https://doi.org/10.1111/eci.12898>

Flanagin A, Heckner H, Poff D, et al. A cross-industry discussion on retracted research: Connecting the dots for shared responsibility. Society for Scholarly Publishing 43rd annual meeting, May 2021. <https://b.link/retracted-research>

Flintoft L, MacCallum CJ, Streeter M, et al. 2023. Tackling publication manipulation at scale: Hindawi's journey and lessons for academic publishing, 2023. <https://b.link/lessons-from-hindawi>

Grieneisen ML, Zhang M. A comprehensive survey of retracted articles from the scholarly literature. *PLoS ONE* 2012;7(10): e44118 <https://doi.org/10.1371/journal.pone.0044118>

International Committee of Medical Journal Editors (ICJME). Recommendations for the conduct, reporting, editing, and publication of scholarly work in medical journals. Corrections, retractions, republications and version control. Updated December 2019. <https://b.link/icmje-corrections>

International Committee of Medical Journal Editors (ICJME). Recommendations for the conduct, reporting, editing, and publication of scholarly work in medical journals. Scientific Misconduct, Expressions of Concern, and Retraction. Updated December 2019. <https://b.link/icmje-misconduct>

Kersjes T. No shame, no blame – How to make retractions work. 3 July 2024. <https://b.link/make-retractions-work>

Malički M, Utrobičić A, Marušić A. Correcting duplicate publications: follow up study of MEDLINE tagged duplications. *Biochem Med (Zagreb)* 2019;29(1):010201. <https://doi.org/10.11613/BM.2019.010201>

Marcus A, Oransky I. What studies of retractions tell us. *J Microbiol Biol Educ* 2014;15:151–4. <https://doi.org/10.1128/jmbe.v15i2.855>

Marasović T, Utrobičić A, Marušić A. Transparency of retracting and replacing articles. *Lancet* 2018;391(10127):1244–5 [https://doi.org/10.1016/S0140-6736\(18\)30487-2](https://doi.org/10.1016/S0140-6736(18)30487-2)

Moskovitz C. Standardizing terminology for text recycling in research writing. *Learned Publishing* 2021;34:370–8. <https://doi.org/10.1002/leap.1372>

Nath SB, Marcus SC, Druss BG. Retractions in the research literature: misconduct or mistakes? *Med J Aust* 2006;185:152–4 <https://doi.org/10.5694/j.1326-5377.2006.tb00504.x>

Oransky I. Criminology researcher to lose sixth paper. Retraction Watch 9 June 2020. <https://b.link/criminologist>

Piotrowski M. Correcting the literature: Committee on Publication Ethics seminar highlights. *Science Editor* 2013;36:29–30 <https://b.link/correcting-literature>

Resnik DB, Dinse GE. Scientific retractions and corrections related to misconduct findings. *J Med Ethics* 2013;39:46–50 <https://doi.org/10.1136/medethics-2012-100766>

Retraction Watch database <https://b.link/r-watch-6>

Shi A, Bier B, Price C, et al. Taking it back: A pilot study of a rubric measuring retraction notice quality. *Account Res* 2024;1–12. <https://doi.org/10.1080/08989621.2024.2366281>

Sox HC, Rennie D. Research misconduct, retraction, and cleansing the medical literature: lessons from the Poehlman case. *Ann Intern Med* 2006;144:609–13 <https://doi.org/10.7326/0003-4819-144-8-200604180-00123>

Steen RG, Casadevall A, Fang FC. Why has the number of scientific retractions increased? *PLoS ONE* 2013;8:e68397. <https://doi.org/10.1371/journal.pone.0068397>

Van Noorden R. Science publishing: The trouble with retractions. *Nature* 2011;478:26–8. <https://doi.org/10.1038/478026a>

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Cite this as: COPE Council. COPE Retraction guidelines – English. DOI: <https://doi.org/10.24318/cope.2019.1.4>

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None declared.



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