

Recommendations for Writing Scientific Abstracts

Millicent Eidson, MA, DVM, DACVPM (Epid.), Office of Public Health Practice, NYSDOH
Associate Professor and Associate Chair for Epidemiology, Department of Epidemiology & Biostatistics,
UAlbany School of Public Health
Past-President, Alpha Gamma Chapter, Delta Omega Honorary Society in Public Health

Review carefully specific abstract instructions for the conference, meeting, poster session or competition for which the abstract is being submitted. Specific groups will likely have some detailed guidelines or requirements on submission and contents.

If provided the option for submitting the abstract for a presentation or a poster, the submitter may wish to indicate both to improve the chance of the abstract being selected. A scientific oral presentation at a conference is usually considered more prestigious for the C.V. than a poster, because the limited time assigned to oral presentations by the Organization Committee requires selection of the best abstracts for scheduled sessions. For the same reason, careful selection of the subject area (if requested) for the abstract may increase chances of having the abstract chosen for the conference.

Recommendations for writing the abstract:

- Follow any word or character count limitations exactly. Use the word count feature of Microsoft Word to assist.
- Abstracts are usually improved by using headings to separate parts of the abstract, similar to those for a scientific journal article. Typical headings will be: Introduction, Methods, Results, Discussion (sometimes Conclusion is a separate heading after Discussion).
- For some abstracts, all the work on a project may not be complete when the abstract is submitted. However, for many meetings, the abstracts are published as submitted. Thus, it is important to have the abstract as complete and polished as possible, because it may represent the only official and retrievable record of the poster or presentation.
- Depending on the meeting, usually abstracts will have more than one author, similar to a scientific paper. The first author listed does not need to be the author presenting the oral presentation or poster at the meeting. Usually the abstract submission form will have instructions about how to indicate the presenting author.
- Author order: Sometimes authors are ordered in terms of who did the most work (the person doing the most work is listed first, and the person doing the least work is listed last). Sometimes the head of the department where the study was done is listed last as the 'senior author' for oversight of the project, although that person may have not had detailed direct involvement with the project itself. In case of doubts ask about the policy related to author order with your mentor/supervisor and consult the author order with co-authors.
- Make sure to prepare the abstract at least a week before the submission deadline to enable all coauthors to review and approve the abstract. Make sure all of them get the abstract and agree to be added as co-authors. Do not assume that lack of response means approval of the abstract!

- Allow additional time for abstract review if required by the institution. For work conducted with NYSDODH data or staff, abstracts must be submitted for NYSDOH approval using the Manuscript Clearance Form. Abstracts should not be submitted to the conference organizers until NYSDOH approval has been obtained. The Manuscript Clearance approval is not needed within NYSDOH for abstracts submitted to the School of Public Health Poster Day; however, student mentor and academic advisor approval is required before submission.

Recommendations for Abstract Content:

It can be challenging to get all the information below into an abstract. In the first draft, try to be complete. In each subsequent draft, edit out every unnecessary word to reduce the number of words and meet the word or character count requirement. If there is a maximum number of characters, consider whether to use simpler words or to adjust punctuation.

Here are general suggestions for abstract sections that may be utilized:

- **Title:** The title should explicitly address the main message of the study which is later followed in all consecutive sections. The title should be concise if possible, and attract attention of all participants interested in the topic.
- **Introduction:** The Introduction is used to provide (1) the justification for the study and (2) the objective of the study. Briefly mention **why** the study is being done based on previous literature and what question the study is intended to answer. Previous studies should not be specifically mentioned in the abstract or cited, but words referring to the previous state of knowledge on the subject should be considered.
- **Methods:** The Methods section describes **how** the study was done. This section must include the time period for the study, the geographical location for the study, any specific types of populations that were selected (gender, age, etc.), the design of the study (case control, cohort, cross-sectional, etc.), how information was collected (medical records, phone interviews, mailed surveys, etc.), factors studied (disease, exposure, demographic variables, etc.), and types of statistical analyses. In an abstract, only the most important features of the methods can be included.
- **Results:** The Results section describes **what was found** in the study. In most cases, numbers (data) must be included. Data can be descriptive (numbers and percentages) or analytic (Chi Square, significance testing, etc.). Comparison data from other studies is not included in the Results section (it is included in the Discussion section). Only the most important results can be included in the abstract. No tables or figures are included in an abstract. Make sure that sufficient information is included so that the results statements are clear.
- **Discussion:** The Discussion section **compares** the study results with other studies, describes the potential **limitations** associated with interpreting the study results, and offers **recommendations** for future studies or programs. Results should not be repeated, but can be summarized in comparison to other studies. No references are specifically cited in an abstract.
- **Conclusion:** The Conclusion section is infrequently used. If required, it should be used to **summarize** the lessons learned from the study.

Specific conferences or competitions may require a different organizational structure for abstracts. For the **Alpha Gamma Chapter of the Delta Omega Honorary Society in Public Health annual abstract competition** for the subsequent American Public Health Association (APHA) convention, the following headings are required: Objectives/Research Questions; Methods; Results; Conclusions; Implications for Public Health; Student Role in the Project. Here are a few differences:

- An Objectives/Research Questions section must be more explicit about objectives and research questions than an Introduction section.
- The Conclusions section and the Implications for Public Health section would replace the Discussion section.

Updated 2/9/12