

Guidelines for Preparing Manuscripts and Abstracts

Part I: Guidelines for Manuscript Preparation

1. Start with your tables or figures.

- A. Determine which tables or figures display the most important information that you want to convey.
- B. Aim for 3-5 tables/figures.
 - i. One table may describe the study population.
 - ii. If the study population is a subset of the total population, you may want a table contrasting the total population and the subset you used.
 - iii. Subsequent tables/figures show your results, beginning with the simplest analysis and moving to more complex analyses.
 - iv. If the manuscript is intended for a certain journal, there may be specific guidelines for the number of tables/figures possible.

2. Develop an annotated list of references.

- A. Identify the references that you plan to use so that you can add them in as you write the manuscript.

3. Begin with writing the introduction.

- A. Brief introductions are preferable (1-2 paragraphs).
- B. Elements of an introduction.
 - i. State the health problem or condition.
 - ii. Describe gaps in knowledge of the problem/condition.
 - iii. Describe how your study can fill the gaps.
 - iv. State why filling the gaps is important.
 - v. Briefly summarize your findings (optional).

4. Write the methods section.

- A. Describe data source/data collection methods.
 - i. State restrictions (e.g., subjects with unknown values were excluded).
- B. Describe the variables used. You may want to give additional background about variables that are not commonly used.
- C. Describe the statistical approach.
 - i. Mention approach to account for sampling and stratification scheme.
 - ii. If appropriate, state statistical rationale for sample size.
 - iii. State statistical methods used starting with simpler procedures then progressing to more complex procedures.
 - iv. Mention statistical software used.

5. Write the results section.

- A. Use your tables/figures as a guide.
- B. Describe study population (response rate, contrast respondents and nonrespondents, general attributes of study population).
- C. Describe exclusions.
- D. Describe results, providing narratives for each table.

6. Write the discussion section.

- A. Consider including the following elements.
 - i. One-paragraph summary of the findings.
 - ii. Methodologic considerations that may influence interpretation (strengths and weaknesses of the study.)
 - iii. Comparison of results with results from other investigations.
 - iv. Implications of results for public health practice and/or future research.

7. Write the abstract.

- A. Often you can adapt the abstract from sentences that are already in the manuscript.

Part II: Guidelines for Abstract Preparation

1. **Make the introductory sentence a “teaser” that attracts the reader’s interest.** For an abstract about a health problem, you might want to state the number of people affected by the problem, the cost of treating it, the frequency of complications related to it, or some other attention-grabbing fact.

Examples:

In the US every day, 100,000 computer programmers have to leave work early because of blisters on their fingers.

Although doctors can save smaller and smaller babies, their ability to prevent babies from being born too small or too early is limited.

2. **The next sentence should summarize the goal of your study.** In light of the problem you stated in the first sentence, what new information did you want to know? Often, you can word this sentence so that it also describes your study design.

Examples:

To learn more about the causes of finger injuries among computer programmers, we compared 400 injured workers with 400 noninjured workers.

We studied the effectiveness of nurse home visits during the mothers’ first and second trimesters for prevention of preterm delivery.

3. **The next 2-3 sentences should summarize the methods of your study.** For PRAMS in particular, you may want to mention the data collection methods (mailed questionnaire with telephone follow-up for nonresponders) and something about the sampling design and weighting in the analysis.

Examples:

From the state master list of injured and noninjured programmers for 1988 and 1989, we selected a stratified systematic sample of programmers. Workers in mail-order businesses were oversampled. Subjects were

contacted by mail with telephone follow-up; the response rate was 75%. Analysis weights adjusted for selection probability and nonresponse. Analysis using specialized sample survey software showed... (continue with the results).

From Researchville birth certificates, we selected a stratified systematic sample of mothers who delivered a live born infant during 1988 or 1989 (n=1200). Mothers of low birthweight infants were oversampled. Mothers were contacted by mail with telephone follow-up; the response rate was 75%. Analysis weights adjusted for selection probability and nonresponse. Analysis using specialized sample survey software showed... (continue with the results).

- 4. The next few sentences should give the most important points about your findings.** Try to provide as much data as possible. If your study had the aim of examining a particular relationship, you might want to begin by giving the proportion/rate/mean in Groups A and B and including the results of a statistical test.

Examples:

Analysis using specialized sample software showed that, among the 100 variables examined, only the requirement of frequently having to meet strict deadlines increased the risk of finger injuries. The percentage reporting frequent deadlines was 59% among the injured workers and 23% among the uninjured workers ($X^2=1.6$, $p<.001$). The results were essentially the same after adjustment for potentially confounding factors.

Analysis using specialized sample software showed that the percentage having a preterm birth was 33% among mothers reporting ≥ 1 home nurse visit during the first or second trimester and 30% among mothers having no visits ($X^2=.5$, $p=.51$). This analysis was adjusted for maternal race, education, marital status, age, and parity.

- 5. The concluding sentences can cover one or more of the following topics:**
- a. The implications of your findings (for policy, etc.).
 - b. Cautions about the interpretation of your findings.
 - c. Directions for future research (sometimes presented as questions that remain unanswered).
 - d. How the findings compare with those of other investigators (or how unique your findings are).

Examples:

The data concerning deadlines may have been influenced by workers' recall. To evaluate the potential for reducing finger injuries among computer operators, we recommend a prospective study.

The absence of an impact of early home visits on the risk of preterm delivery is consistent with other epidemiologic studies suggesting that factors more proximal to delivery play a greater role in prevention of preterm delivery.

Abstract Examples

Deadlines and finger injuries among computer operators.

(Institute of Hand Nail Research, Cuticle, OH)

In the US every day, 100,000 computer programmers have to leave work early because of blisters on their fingers. To learn more about the causes of finger injuries among computer programmers, we compared 400 injured workers to 400 noninjured workers. From the state master list of injured and noninjured programmers for 1988 and 1989, we selected a stratified systematic sample of programmers. Workers in mail-order businesses were oversampled. Subjects were contacted by mail with telephone follow-up; the response rate was 75%. Analysis weights adjusted for selection probability and nonresponse. Analysis using specialized sample software showed that, among the 100 variables examined, only the requirement of frequently having to meet strict deadlines increased the risk of finger injuries. The percentage reporting frequent deadlines was 59% among the injured workers and 23% among the uninjured workers ($X^2=1.6$, $p<.001$). The results were essentially the same after adjustment for potentially confounding factors. However, the data concerning deadlines may have been influenced by workers' recall. To evaluate the potential for reducing finger injuries among computer operators, we recommend a prospective study.

Home visits during early pregnancy and prevention of preterm delivery.

(Divisions of Public Health Nursing, Maternal and Child Health, and Vital Records, Researchville Department of Health)

Although doctors can save smaller and smaller babies, their ability to prevent babies from being born too small or too early is limited. We studied the effectiveness of nurse home visits during the mothers' first and second trimesters for prevention of preterm delivery. From Researchville birth certificates, we selected a stratified systematic sample of mothers who delivered a live born infant during 1988 or 1989 ($n=1200$). Mothers of low birthweight infants were oversampled. Mothers were contacted by mail with telephone follow-up; the response rate was 75%. Analysis weights adjusted for selection probability and

nonresponse. Analysis using specialized sample survey software showed that the percentage having a preterm birth was 33% among mothers reporting ≥ 1 home nurse visit during the first or second trimester and 30% among mothers having no visits ($X^2=.5$, $p=.51$). This analysis was adjusted for maternal race, education, marital status, age, and parity. The absence of an impact of early home visits on the risk of preterm delivery is consistent with other epidemiologic studies suggesting that factors more proximal to delivery play a greater role in prevention of preterm delivery.