



health hazard
evaluation report
style guide

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The CDC Style Guide is the first reference HHE report authors should use when they have questions about grammar, style, and usage. While this Health Hazard Evaluation Report Style Guide does include some commonly used items from CDC style, its chief purpose is to provide answers for questions specific to HHE reports that the CDC Style Guide doesn't address. Because the grammar points in the CDC Style Guide are drawn from the *AMA Manual of Style* (10th Edition), the *Chicago Manual of Style* (16th Edition), and *Elements of Style*, this HHE style guide does the same.

resources for report authors

[CDC Style Guide](#)

[Merriam-Webster Dictionary](#)

[NIOSH Reference Guide](#)

[HHE Final Report Template \(Word 2007\)](#)

abbreviation list

- The abbreviations list is on p. ii in the HHE report.
- The list is in alphabetical order by abbreviation.
- The left hand column in the abbreviations list contains the abbreviation; the right hand column contains the spelled out word or term.
- Use abbreviations from the list in the report and its appendices; do not spell out the abbreviation on first use in the report or appendices.
- Abbreviations are usually capitalized, unless they never appear in caps, such as cfm or ppm.
- Capitalize the first word of the spelled-out abbreviation, then use lower case unless the term is a proper noun.
- Words/terms that start with a number or a non-English character (e.g., μm) go at the top of the list (before the A's).

abbreviations

- Do not spell out the abbreviation on first use in the report or appendices (except as noted below).
- If you use a term three or fewer times, spell it out each time you use it; do not use an abbreviation.
- Spell out the abbreviation on first use on the highlights and acknowledgments pages and include the abbreviation in parentheses; then just use the abbreviation. If you use the term three or fewer times on this page, spell it out each time.
- The articles “a” and “an” should agree with the sound of the abbreviation, not the word for which it stands.

Examples: an HHE report, an LTBI, an MRI, a VOC

- Use United States as a noun. Use U.S. as an adjective.

Examples:

The latest U.S. figures show that one out of every four deaths results from cancer.

In the United States, one out of every four deaths results from cancer.

acknowledgments section

- Spell out abbreviations when first used on this page.

active voice

- A verb is in the active voice when the performer of the act is the subject of the sentence. A verb is in the passive voice when the performer of the act is the object of the sentence.

Examples:

Active voice: The physician examines the patient.

Passive voice: The patient is examined by the physician.

- Use the active voice wherever possible; it is more accurate, direct, precise, and interesting. Sentences written in the active voice are usually shorter and easier to read, and paragraphs also flow better. The passive voice traditionally was the norm in science writing because it was considered to be more scientific or objective. Most journals now encourage the use of the active voice. However, you may use the passive voice in the following circumstances, when:

The subject is unknown. *Example:* A memo was circulated in the office.

The subject is irrelevant to the matter or obvious. *Example:* The samples are being analyzed.

The emphasis needs to be on the object, not the subject. *Example:* Smallpox was eradicated in 1980.

appendices

- References are handled the same way as in the report, i.e., following the Author/Date style.
- References used in an appendix should be included in the appendix so the appendix can stand alone.

assessment section

- The assessment section should provide relevant information for understanding the HHE approach.
- Technical details of methods are included in appendices at the end of the report rather than in the assessment section.
- Where possible, commingle the industrial hygiene and medical assessment descriptions rather than using separate sections.

based on

- Use *based on* only after some form of the verb *to be* or implied verb *to be*.
Incorrect: Based on these data, we can assume that smoking causes cancer.
Correct: On the basis of these data, we can assume that smoking causes cancer.
Correct: The assumption that smoking causes cancer is based on these data.

conduct (or perform)

- Avoid using *conduct* (or *perform*) to describe our activities or when making recommendations.
Examples:
Avoid: We conducted (or performed) air monitoring ...
Use: We monitored the air for ...
Avoid: Conduct (or perform) training on health effects of the chemicals
Use: Train employees about health effects of the chemicals

contents

- The contents page lists the report's main headings and up to two subheadings.
- The contents page also lists the appendices.

cover page

- Provide a brief descriptive title for the report. The title should begin with "Evaluation of..."
- List the name(s) of primary report authors in the middle of the page.
- Give author(s) credentials without periods.
Examples: MD (*not* M.D.); PhD (*not* Ph.D.)

dash/hyphen

- Use a hyphen for hyphenated words/phrases (state-of-the-art), compound adjectives (low-fat diet), and line breaks.
- Use an en dash between words that indicate duration or in ranges of numbers.
Examples:
January–March
9:00 a.m.–5:00 p.m.
50%–75%
1990–1995
- To make an en dash:
Insert–Symbol–Special Characters–En Dash
–or–
Hold down the alt key with your left hand then type 0150 on the numeric keypad.

–or–

Hold down the ctrl key with your left hand then press the num lock and hyphen keys on the numeric keypad simultaneously.

expletive

- See there is

e.g., etc., i.e.

- Use e.g., (exempli gratis: for example), etc., (et cetera: and others), and i.e., (id est: that is) with care; they have different meanings.

Examples:

Certain behaviors are harmful (e.g., smoking drinking, overeating).

Certain behaviors are harmful (smoking, drinking, overeating, etc.).

We studied three harmful behaviors (i.e., smoking, drinking, and overeating).

figures

- Insert figures in the body of the report near the text they illustrate. A figure is any illustration that isn't a table (photographs, line drawings, bar charts, pie charts, noise profile graphs, etc.).
- Refer to each figure in the body of the report.
- Number the figures consecutively throughout the report in the order they appear (Figure 1, Figure 2, Figure 3, etc.). If the report has appendices that include figures, number them consecutively throughout that particular appendix.

Example:

Number the figures in Appendix B as follows: Figure B1, Figure B2, Figure B3, etc.

- Write a short descriptive caption for each figure starting on the same line as the figure number, below the figure. End the caption with a period whether the caption is a full sentence or not. Write the caption in sentence style (first word is capitalized and the rest are in lower case unless they are proper nouns).

Example: Figure 4. Bags/month passed through EDS machines at three airports in 2003.

- Use 10-point Arial type for the figure caption.

footnote symbols in tables

- For 10 or fewer footnotes, use the following superscript symbols in this order:
 - * asterisk
 - † dagger
 - ‡ double dagger
 - § section mark
 - ¶ paragraph mark
- For footnotes 6 through 10, double the symbols.
- Do not superscript these symbols in tables or table footnotes.

headings

- *See also* subheadings
- Spell out abbreviations in headings and subheadings.

Example:

Avoid: CO Monitoring

Use: Carbon Monoxide Monitoring

highlights page

- Keep the message consistent with the Summary and Conclusions sections.
- Keep the recommendations consistent with the Recommendations section.
- Use active voice.
- Spell out abbreviations when first used on this page.
- The balloon box in the left margin contains a brief description of why the HHE was performed.
- When talking about the site visit:
 - Use this wording: NIOSH investigators evaluated the facility on ...
 - Make this sentence the first bullet under What NIOSH Did and remove it from other places on this page.
- An 8.5” by 14” highlights page will be included in the hard copy distribution.
- For additional information, see Appendix A. How to write a highlights page and <http://www.plainlanguage.gov/>

hyphen

- *See* dash/hyphen

introduction

- Provide brief background/introductory information for the HHE. Give basic information about the HHE’s location, the facility being evaluated, the exposures and health effects involved, and what NIOSH did.
- Where possible, commingle the industrial hygiene and medical parts of the introduction rather than using separate sections.

mathematical operators

- In mathematical operations or equations, insert a space before and after most symbols.
Examples: +, =, ×, ≥

Use the mathematical operators in Word’s Insert Symbol function rather than alphabetic letters for equations. For example, use the multiplication symbol (×) rather than the letter “X” for multiplication. Use the minus sign symbol (−) rather than a hyphen (-).

NMAM or NIOSH Manual of Analytical Methods

- When referring to methods in the NIOSH Manual of Analytical Methods, use NIOSH Method 7082 (*not* NIOSH method 7082 or NIOSH 7082).

numbers

- See [Appendix B. Number quick guide](#) and CDC Style Guide, pp. 33–36
- Use an en dash for range of numbers (see also dash/hyphen).
- Use percent sign (%) with both numbers in a percentage range.
Example: 85%–90% (*not* 85–90%)
- Use numerals with units of measure (5 mm, 10.1 mL, 6 days).
- When units of measure are not involved, spell out numbers below 10, and use numerals when the number is 10 or greater.
Examples: three shifts, four reports, 12 employees, 39 interviews.
- Where possible, avoid starting a sentence with a number. Reword the sentence instead.

odds ratio, formatting of

- See prevalence ratio

OSHA log

- When referring to an OSHA Log, use the form’s full, official name the first time: OSHA’s Form 300 Log of Work-Related Injuries and Illnesses. After that, refer to the form as an OSHA Log (or OSHA Logs if plural).

passive voice

- See active voice

photographs

- Use photos only when they enhance and clarify the text.
- Use photos with identifiable people in them only with written consent.
- Insert photographs in the body of the report near the text they illustrate.
- The caption for photographs is Figure 1, Figure 2, etc.
- Use a period after the figure number, then write the caption in sentence style (first word is capitalized and the rest are in lower case unless they’re proper nouns).
- End the caption with a period whether or not it’s a full sentence.
Example: Figure 2. Separators located on floor behind worker.
- Large photographs may be placed in an appendix at the end of the report. Figures in an appendix are numbered consecutively along with the letter name of the appendix.
Example: Figure A2 (this would be the second figure in Appendix A)

prepositional phrases

- Avoid using too many prepositions in one sentence. Common prepositions are with, among, in, of, for, into, by, from, at, during, next to, and in front of.
Avoid: In order to better understand ...
Use: To better understand...
Avoid: In an attempt to describe the exposures, we sampled five employees.
Use: To describe the exposures, we sampled five employees.
Avoid: Biotransformation may result *in* the destruction *of*...
Use: Biotransformation may destroy...
Avoid: ...can cause damage to the brain...
Use: ...can damage the brain...

prevalence ratio, formatting of

- Use equal sign with space on either side for PR and CI. Comma after the PR value.
Example: PR = 1.99, 95% CI = (1.05, 3.78)

punctuation

- *See also [dash/hyphen](#)*
- Use double curly quotes in text. (Times New Roman does this automatically when you enter a quotation mark.)
- Use inch mark for inches (") and foot marks for feet ('). (Insert→Symbol→basic Latin→click on quotation mark for inch mark or apostrophe for foot mark→ Insert→Close). Even though the basic Latin symbols are called quotation mark and apostrophe, they're flat (rather than curly) quotes, appropriate for use as inch and foot marks.

range

- Express a range as follows.
Example: These employees had worked for the company an average of 7 years (range: 6 months to 20 years)

recommendations section

- Follow the hierarchy of controls using the boilerplate language, with modifications as needed for specific situations.

reference list

- *See also [NIOSH Reference Guide](#)*
- References follow the Author/Date format according to the NIOSH Reference Guide.
- References are listed alphabetically. References cited in an appendix should be placed at the end of the appendix so the appendix can stand alone.

- References have both a *volume* and an issue number; the volume number (that is the first number) is italicized. Check PubMed for both numbers.
- References to HHE reports do not need the NTIS number.
- Check that spelling and publication date in reference citations in the text match the reference list.
- Make sure references in the reference list are actually used in the text.
- Make sure references in the text are included in the reference list.
- For references to the NIOSH Manual of Analytical Methods, use the current year. Because the NMAM is online it is always up to date. Always use the full reference without the method number(s).

NIOSH [current year]. NIOSH manual of analytical methods (NMAM®). 4th ed. Schlecht PC, O'Connor PF, eds. Cincinnati, OH: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational safety and Health, DHHS (NIOSH) Publication 94–113 (August 1994); 1st Supplement Publication 96–135, 2nd Supplement Publication 98–119; 3rd Supplement 2003–154. [<http://www.cdc.gov/niosh/docs/2003-154/>].

- For references to OSHA sampling and analytical methods, use the current year because their online methods are always up to date. Always use the full reference without the method number(s).

OSHA [current year]. OSHA sampling and analytical methods. Hendricks W, ed. Salt Lake City, UT: U.S. Department of Labor, Occupational Safety and Health Administration. [<http://www.osha.gov/dts/sltc/methods/index.html>].

- For references to websites, check that the URL is still valid. Because it must be valid at the time of publication, check the link just before approving the final version of the report and update the “Accessed on” date.

run-in list

- A run-in list in a document means that the list is part of the paragraph (i.e., vertical rather than horizontal). When using a run-in list, use numbers in closed parentheses to label items. Note absence of a colon before the first number.
Example: Some of the factors include (1) personal characteristics such as age, sex, and race; (2) family history of cancer; (3) diet; (4) personal habits such as cigarette smoking and alcohol consumption; (5) the presence of certain medical conditions; (6) exposure to cancer-causing agents in the environment; and (7) exposure to cancer-causing agents in the workplace.

registration symbol

- *See also* trademark symbol
- Use the registration symbol (®) on the first occurrence of a registered product, and drop it in subsequent occurrences.

results and discussion section

- Small, simple summary figures and tables are encouraged within the text. Place longer or more complex tables and figures at the end of the main text before the Appendices.
- Use photos when they help the reader understand the point you want to make.
- Keep subheadings to a minimum (The table of contents will list only two).
- Where possible, commingle the industrial hygiene and medical parts rather than using separate sections.

serial comma

- See CDC style guide, p. 41
- The serial comma is the comma before the last conjunction in a series. Always use the serial comma. In scientific writing, you will rarely be misunderstood if you use the serial comma; you may often be misunderstood if you do not use it. The examples below are often used in technical writing texts to demonstrate the difference in meaning that can occur when a sentence does or does not contain the serial comma.
 - I'd like to thank my parents, Ayn Rand and God. (The writer's parents are Ayn Rand and God.)
 - I'd like to thank my parents, Ayn Rand, and God. (The writer is thanking her parents *and* Ayn Rand *and* God.)

significant figures

- Use two significant figures unless you're dealing with means, then use three significant figures.
- For ranges, use two significant figures.
- Sample results and the MQC are typically shown with two significant figures. The MDC has one significant figure.

spacing, between sentences

- Insert a single space between sentences (i.e., after a period) and after a colon.

spacing, line

- Use 1.5 or double spacing for review copies.
- Use single spacing for final copy.

spelling and terminology

- byproduct (one word, no hyphen)
- crossdraft (one word)
- dBA (*not* dB[A])
- downdraft (one word)
- e-mail (hyphen)

- facepiece (*not* face piece or face-piece)
- filtering facepiece
- fit testing (two words, no hyphen)
- followback (*not* follow back or follow-back)
- follow-up (*not* follow up or followup)
- full facepiece
- full-shift (when used as an adjective: full-shift monitoring)
- Gram-negative (or -positive) (capitalize Gram, hyphen between Gram and negative/positive)
- half-mask (not half-face)
- hand washing (two words)
- health hazard evaluation (no caps)
- healthcare (one word)
- Internet (capital I)
- job site (two words)
- lockout/tagout (*not* lock-out tag-out or lockout-tagout)
- Lpm (*not* LPM or lpm)
- mL (*not* ml)
- N95 (*not* N 95 or N-95)
- outdoor air (*not* outside air)
- PEL = permissible exposure limit (no caps)
- *P* value (upper case, italic P without hyphen)
- posttraumatic stress disorder (*not* post traumatic or post-traumatic)
- REL = recommended exposure limit (no caps)
- requestor (*not* requester)
- short (or shortness) of breath (write it out; don't abbreviate as SOB)
- TLV = threshold limit value (no caps)
- *t*-test (lower case, italic t with hyphen)
- walk-through (hyphen, *not* walkthrough)
- website (one word)
- workers' compensation (*not* workmans' compensation)
- work shift (two words)
- work site (two words)
- workforce (one word)
- workplace (one word)
- workstation (one word)
- worktable (one word)
- workweek (one word)

state names

- Spell out the full names of states in the text of a report. (Madison, Wisconsin)
- Use the two-letter state abbreviation in references. (Madison, WI)

subheadings

- *See also* headings

- Keep subheadings to a minimum (only two will be listed in “Contents”).
- Write subheadings in title case (use initial capitals for all words except articles [a, an, the], conjunctions [and, but], and prepositions of three or fewer letters.
- Spell out abbreviations in subheadings.

Example:

Carbon Monoxide Sampling (*not* CO Sampling)

summary page

- Where needed, use abbreviations from the abbreviation list this section (i.e., don’t spell out abbreviated terms).
- Be brief and include only the most important information. The Summary “balloon” should not include the exact language used in the Summary.
- Include a brief summary of your findings and recommendations in the balloon box in the left margin (i.e., what the bottom line is for the evaluation).
- Do not use references.

tables

general

- Use 10-point Arial type.
- Select Table Simple 1 in the Table Designs in Office 2007. You must access this table template from the HHE Final Report template.

title

- Give a descriptive title for the table. It should be specific enough to enable the reader to understand the table without referring to the text. It should, however, avoid stating the information carried by the column and row headings.
- Put the table number and name above the table.
- The title follows the number (Table #.) on the same line; use a period after the title number.
- Left justify title.
- Use sentence case with no period at the end (i.e., first word is capitalized and the rest of the words are in lower case unless they’re proper nouns).
- Number the tables consecutively throughout the report in the order they appear (Table 1, Table 2, Table 3, etc.). If the report has appendices that include tables, number them consecutively throughout that particular appendix.

Example:

Number the tables in Appendix B as follows: Table B1, Table B2, Table B3, etc.

cells

- Center the data in the fields under the column heading; *align numerical data on the decimal*.
- Leave no blank fields. If a field has no data, indicate this by using NA for not available, ND for nondetected, or an em dash (—) to indicate lack of data.
- Sample results that are “trace” (i.e., between the Minimum Detectable and Minimum Quantifiable Concentrations) should be shown in square brackets, i.e., [], *not* parentheses ().

- Sample results below the Minimum Detectable Concentration should be shown as ND.
- Tell the reader what the MDC and MQC are when they appear in a table. *See* significant figures.

column headings

- Each column heading for numerical data should include the unit of measure for the data in parentheses after the text. The unit should apply to all data under the heading.
- Center the column heading.

row headings

- Use sentence case (i.e., first word is capitalized and the rest of the words are in lower case unless they're proper nouns).
- Left justify the row heading.

footnotes

- *See* footnote symbols in tables section
- Use sentence case (i.e., first word is capitalized and the rest of the words are in lower case unless they're proper nouns).
- Use a period at the end of a footnote if it's a full sentence, and no period if it's not a full sentence.
- Indent the second line of a long footnote.
- If you use an abbreviation in a table that is listed on the abbreviation page, do not spell out the abbreviation again in the table. Spell out abbreviations not listed on the abbreviations page as a table footnote, and use the appropriate footnote symbol.

table body

- Select Table Simple 1 from the Table Design choices in Microsoft Office Word 2007
- Left justify the table on the page.
- In the Word Final Report template, size the tables either for the width of the text margin (4 inches) or for the width the full margin (7 inches).
- When OSHA and/or ACGIH limits are needed in the table, separate them from the table's data with a thin (1 point) line rather than placing this information in a footnote. Do not use a line between OSHA and ACGIH limits.

there is

- The words *there* or *it* followed by a form of *to be* are called expletives. Starting a sentence with an expletive often results in unnecessary verbiage. To be clear and concise, avoid expletives.

Avoid: There is evidence to suggest that smoking causes stomach cancer.

Use: Evidence suggests that smoking causes stomach cancer.

Avoid: It is often difficult to find links between diseases and the environment.

Use: Finding links between diseases and the environment often is difficult.

trademark symbol

- See also registration symbol
- Use the trademark symbol (™) on the first occurrence of a trademarked product, but drop it in subsequent occurrences.

URLs

- Usually when you enter a URL into your text, Word underlines it and changes the font color to blue; this is a hyperlink. Be sure to keep hyperlinks in your documents (including references), so readers who access the document online can click on the hyperlink.
- Make sure that URLs include <http://> at the beginning if that's part of the link. This is required for Section 508 compliance.

Example:

Avoid: www.smahsa.gov

Use: <http://www.smahsa.gov>

- Surround URLs with square brackets in reference lists.
- Do not surround URLs with brackets in text. If a URL is part of a sentence, do not precede it with a colon; just include it as part of the sentence.

Example: You can find further information on smoking cessation at

www.cancer.org/docroot/PED/content/PED_10_13X_Guide_for_Quitting_Smoking.asp?from=fast.

- URLs must work when the final report is released; therefore, the date accessed (month and year) should be as close as possible to the date on the cover of the report.

United States

- Use United States as a noun, U.S. as an adjective.

usage notes

- Refer to job titles and work locations (such as departments, areas, production lines) the same way throughout the report.
- Use *concentration* to describe the relative content of any substance that is dissolved or dispersed within a solution or mixture and *level* to convey a sense of the relation a particular range of concentrations has to a standard or normal concentration.

Example: We detected arsenic in the sludge in concentrations ranging from 2.1 to 17 ppm.

Example: Blood lead levels of 10 µg/dL or more in children are considered elevated.

- Avoid using the possessive for NIOSH. It is unnecessary and sounds awkward.
Avoid: Investigators from NIOSH's HHE Program collected bulk samples.
Use: Investigators from the NIOSH HHE Program collected bulk samples.
- The word *located* is often extraneous; avoid using it wherever possible.
Avoid: We measured carbon monoxide exposure in the garages located behind the main building.

Use: We measured carbon monoxide exposure in the garages behind the main building.

Avoid: We visited the facility located in Cincinnati, Ohio.

Use: We visited the facility in Cincinnati, Ohio.

- Include manufacturer, city, and state (not abbreviated) for equipment cited in the report.
- Use active voice (“We collected...” instead of “Samples were collected by the NIOSH investigator”).
- After initially using “NIOSH investigator” you may use more conversational language such as “We sampled...”, “We reviewed...”.
- Use over for spatial relationships only (the cow jumped over the moon).
Avoid: The company spent over \$1 million on renovations.
Use: The company spent more than \$1 million on renovations.
- Express a union name like this: International Brotherhood of Teamsters, Local 769.
- Avoid using *respectively* to connect components in a sentence; this construction forces readers to pause and puzzle over which components go together.
Avoid: The smoking rates for boys, girls, men, and women were 18, 15, 27, and 26%, respectively.
Use: The smoking rates were 18% for boys, 15% for girls, 27% for men, and 26% for women.
- Do not use “significant” in a non-statistical context. Try important, substantial, notable, major, or great.
- Use “NIOSH investigators conducted an evaluation,” rather than an investigation.
- Use *employee* rather than *worker*.
- Use *employer* rather than *management*.
- Where appropriate, say *use* rather than *utilize*.

verb tense

- Be careful with verb tense. Our site visits happened sometime in the past, and we had a “snapshot” of conditions at the time of our visit. Therefore, you should usually use past tense when describing events that took place during a site visit. Our recommended exposure limits are currently applicable, so you should usually use present tense when discussing exposure limits.

walk-through

- Rather than saying that you conducted a walk-through, describe what you did while touring the facility.
Example: Following the opening conference, we walked through the facility to become familiar with facility layout, equipment, and typical work activities.

Appendix A. How to write a highlights page

(May 2005; revised July 2010)

The highlights page, a one-page HHE report supplement, informs workers of the HHE's findings in non-technical, easy-to-read language. This page is designed for posting at the work site. Although the full report is available to workers, many of them may not read it. Therefore, the highlights page should be meaningful on its own, independent of the full report.

A Highlights page consists of six parts: Title, Introduction, What NIOSH Did, What NIOSH Found, What Managers Can Do, and What Employees Can Do. This document describes what each part should contain.

Title

- Tell what you evaluated during the HHE.
- Use sentence case, i.e., capitalize the first word only, no period at the end.
- Don't include the HHE's location. (This goes in the Highlights Introduction section.)
- Use generic terms when describing the employer rather than the company name.

EXAMPLES

- Evaluation of monobutyltin trichloride exposure among glass workers
- Evaluation of noise exposure at a swine confinement facility
- Identification of boat-related carbon monoxide (CO) poisonings and related risk factors

Introduction

Include who, where, why, and when in the introduction.

EXAMPLE

The National Institute for Occupational Safety and Health (NIOSH) received a (*type of request e.g., management, union, employee, confidential employee*) request for a health hazard evaluation (HHE) at (*employer name*) in (*city, state*). (*Requester category such as the company, a union, a group of employees*) submitted the HHE request because (*give reason*).

What NIOSH Did

- NIOSH investigators evaluated the facility on (*month, day, year*).
- Include a brief description of each method you used in the evaluation.
- List the items in order of priority.
- Use the first person (I, we) in full sentences.

EXAMPLES

- We led investigations that measured CO on houseboats and other types of recreational boats.
- We interviewed employees about their work-related exposures.
- We logged employee activities to determine how the activities relate to exposures.

What NIOSH Found

- Include a brief description of what you found with each method you used.
- Include relevant observations you made that the requester may not have listed in the HHE request such as poor housekeeping practices, safety concerns unrelated to the HHE, etc.
- Use full sentences.

EXAMPLES

- Some produce, such as cilantro, might have caused allergy-related skin problems.
- The alfalfa pellet mill operator and front loader are exposed to organic dust that may contain mold.
- On-board CO detectors sounded in only 1 of 15 poisoning incidents occurring inside houseboat cabins.

What Managers Can Do

- List recommendations that managers can implement, in order of priority. Anything that you list here should also be included in the report's Recommendations section. However, you do not have to include every recommendation that managers implement if you run out of space or if the recommendation isn't high priority.
- List the items in order of priority.
- Use the second person (you) in full sentences.

EXAMPLES

- Revise and enforce the respiratory protection program.
- Install portable hand washing stations.
- Educate employees about the causes of work-related skin problems.

What Employees Can Do

- List recommendations that employees can implement, in order of priority. Anything that you list here should also be included in the report's Recommendations section. However, you do not have to include every recommendation that employees implement if you run out of space or if the recommendation is not high priority.
- List the items in order of priority.
- Use the second person (you) in full sentences.

EXAMPLES

- Report symptoms of CO poisoning to designated health and safety personnel.
- Use respirators according to the respiratory protection program.
- Wear nitrile and butyl rubber gloves, which provide better protection than latex gloves.

Appendix B. Number quick guide

Spelling Out Numbers

General Rule

In text, spell out numbers one through nine. Use numerals for 10 and above. Zero is usually spelled out, so as not to be confused with the letter O.

When recording numbers in tables and figures—not in text—always use numerals. In addition, use numerals for units of measure (e.g., age, time, money) and forms of numbers (e.g., decimals, percents), even if they are below 10.

Examples: He came to the agency 2 years ago.
Toxic shock syndrome is fatal in 5% of cases.

Combination of Numbers Less Than and Greater Than 10

If you have a combination of numbers less than and greater than 10, treat related numbers alike.

Example: In 1997, two outbreaks of Ebola virus hemorrhagic fever resulted in 12 cases and 8 deaths. (Numerals are used for all related items because one them is greater than nine. The first number is spelled out because it is unrelated and less than 10.)

Numbers Beginning a Sentence, Title, or Heading

Spell out the number if it starts a sentence, title, heading, or subheading. When a unit of measure or a symbol follows the number, it too must be spelled out. It is usually better to rephrase the sentence.

Correct: Eighty milligrams of aspirin per day can help prevent the recurrence of a heart attack.

Better: Taking 80 mg of aspirin per day can help prevent the recurrence of a heart attack.

Consecutive Numbers

To avoid confusion or ambiguity in the case of two consecutive numbers that cannot easily be separated, spell out the one that is more easily understood in word form, or try to rephrase the sentence.

Example 1: The package contains twenty 50-mg pills.

Example 2: Out of five hundred, 200 were affected.

Better: Out of 500, a total of 200 were affected.

Common Fractions

Spell out common fractions. Insert a hyphen only if the fraction modifies a noun.

Examples: Patients have adverse reactions to the medication in one third of the cases.
A two-thirds majority is needed. (*not* two-third)

Appendix C. Quick guide to references

The basic reference format for journal articles is as follows:

- last name [space]
- initial(s) of author [space if one author, comma if more than one author]
- publication year in brackets [period, space]
- title of article (capitalize only first word and proper nouns) [period, space]
- journal abbreviation (from the Index Medicus Abbreviation Listing) [space]
- volume number (italicized or underscored) [colon]
- issue number [in parentheses, colon]
- page number(s) of article [period]

One personal author:

Johnson WS [1959]. An investigation into the true exposure of arc welders by means of simultaneous sampling procedures. *Ind Hyg J* 20:194–196.

Text citation: [Johnson 1959]

Two personal authors:

Kaplan I, Zeligman I [1963]. Urticaria and asthma from acetylene welding. *Arch Dermatol* 88:188–189.

Text citation: [Kaplan and Zeligman 1963]

Multiple personal authors:

Mussi I, Calzaferrri G, Buratti M, Alessio L [1984]. Behavior of plasma and urinary aluminum levels in occupationally exposed subjects. *Int Arch Occup Environ Health* 54(2):155–161.

Text citation: [Mussi et al. 1982]

Note: Include names of all authors in the reference list.

The basic reference format for books and monographs is as follows:

- last name(s) [space]
- initials of author(s) or accepted initials for corporate author [space]
- publication date in brackets [period, space]
- title (only first word and proper nouns are capitalized) [period, space]
- city [comma, space]
- state (postal abbreviation) of publisher [colon, space]
- publisher's name [comma, space]
- page numbers (p. for one page, pp. for multiple pages) [period]

If a volume number or specific edition is included, it appears after the title [period, space] followed by a period. Volume is abbreviated as Vol., edition is abbreviated as ed., and revised as rev. Ordinal numbers such as first, second, and third are abbreviated as 1st, 2nd, and 3rd.

Personal author(s):

Hamilton A, Hardy HL [1974]. *Industrial toxicology*. 3rd ed. Acton, MA: Publishing Sciences Group, pp. 375–405.

Text citation: [Hamilton and Hardy 1974]

Editor, compiler, or chairman as author:

Hawley GG, ed. [1977]. *The condensed chemical dictionary*. 9th ed. New York: Van Nostrand Reinhold Company, p. 3.

Text citation: [Hawley 1977]

Brammer AJ, Taylor W, eds. [1982]. *Vibration effects on the hand and arm in industry*. New York: John Wiley and Sons.

Text citation: [Brammer and Taylor 1982]

The basic reference format for citations from the Internet are as follows:

- author or source (such as agency, corporation, or institute)
- [date of publication]
- title of work or title line of message
- In: Title of complete work or title of list/site
- [Internet address]
- Date accessed:

Internet information:

Limb P [1992]. African nationalist liberation movements.

[http://neal.ctstateu.edu/history/world_history/archives/limb-1.html]. Date accessed: May 1992.

DOL [1998]. Facts on working women: WB world wide conference report.

[<http://www.dol.gov/dol/wb/public/wwc.htm>]. Date accessed: August 2007.

National Safety Council [1999]. General statistics. [<http://www.national-safety-council.ie/gstat.htm>]. Date accessed: June 2010.

(adapted from NIOSH Communication Products from Soup to Nuts, Appendix M, 2006)