

Instructions for Authors

Published by the National Institute on
Alcohol Abuse and Alcoholism

Table of Contents

- Overview of Review and Editing Process 1
- Types of Reviews 2
 - Narrative Reviews 2
 - Scoping Reviews 2
 - Other Types of Publications 2
- Manuscript Preparation 2
 - Format 2
 - Title Page 2
 - Correspondence 2
 - Acknowledgments. 2
 - Disclosures. 2
 - Abstract 3
 - Keywords. 3
 - Body of Review 3
- Style and Usage 4
 - Voice, Tone, and Use of Tenses in Describing Research Findings 4
 - Clarity and Understandability 4
 - Abbreviations 4
 - Alcohol Terminology 4
 - Numbers. 5
 - Trade Names 5
- References 6
 - Citations in Text. 6
 - Citations in Reference List. 6
 - Reference Examples. 7
- Journal Contact Information 8
- Appendix A: Figures, Tables, and Boxes 9
 - Figures 9
 - Tables 12
 - Boxes 13

Overview of Review and Editing Process

Alcohol Research: Current Reviews (ARCR) is an open-access, interdisciplinary journal with the mission of providing in-depth reviews spanning the field of alcohol research. Areas of interest include the effects of alcohol across the life span on health, function, and well-being in addition to basic science, genetics, epidemiology, prevention, diagnosis, and treatment of alcohol-related conditions. Topics are approached from basic, translational, and clinical perspectives.

Submitted manuscripts undergo review by independent reviewers with expertise in the subject matter covered by the review. Based on their recommendations, the authors may be asked to revise the manuscript. The authors should revise the article in accordance with the editors' and reviewers' comments and return within 2 weeks.

As much as possible, reviews should be written in a style that is accessible and understandable to a broad audience of scientists and clinicians, including trainees, with varying specialties and degrees of expertise in the field of alcohol research. *ARCR* editorial staff copyedit accepted manuscripts for clarity, grammar, punctuation, journal style, and format. The managing editor sends a copyedited Word document with tracked changes to the corresponding author to resolve any queries. The author should answer all queries and return the corrected manuscript to the managing editor within 7 days.

A PDF of the manuscript, including tables and figures, will be sent to the corresponding author. Authors are urged to review this draft for any errors; however, only the most critical changes to the accuracy of the content may be made at this point in the process. Rewriting sections of text, revising tables and figures, adding or subtracting references, and making stylistic changes are not permitted unless approved by the *ARCR* editors. The corresponding author should return any corrections to the PDF within 7 days.

Types of Reviews

Narrative Reviews

These instructions focus on the narrative review, ARCR's standard article type. Narrative reviews provide a synthesis of studies done in a field, identify gaps, and suggest areas of future research.

Scoping Reviews

ARCR welcomes the submission of scoping reviews instead of a narrative review for authors who are interested in mapping evidence to identify main concepts, theories, sources, and knowledge gaps in a field. Scoping

reviews must follow the guidelines outlined by [Preferred Reporting Items for Systematic reviews and Meta-Analyses \(PRISMA\)](#). If you have any questions about preparing a scoping review, please feel free to contact the ARCR managing editor (see contact information at the end of this document).

Other Types of Publications

ARCR does not accept original research articles or other types of reviews, such as systematic reviews or meta-analyses.

Manuscript Preparation

Format

Double-space and number every page, including the title page. Number the lines in the left margin of your manuscript. See [instructions for adding numbers to lines within Word](#). Arrange the manuscript in the following order: title page, abstract, and body of review. References and graphics are discussed later in this document.

More information for each section follows. A Word template is available at <https://arcr.niaaa.nih.gov/sites/default/files/2022-04/ARCR-manuscript-template-narrative-reviews.docx>.

Title Page

The title page includes:

- An article title of no more than 15 words
- A byline listing all author names and their Open Researcher and Contributor ID ([ORCID](#)), if available
- A separate affiliation section that lists department, university or organizational affiliation, and location (city and state/country) for each author

Correspondence

Provide the full name, complete mailing address, and email address for the corresponding author. Use the following format:

Address correspondence concerning this article to [corresponding author's name, complete mailing address]. Email: [author@institution.edu]

Acknowledgments

This section includes funding sources, including relevant grant numbers, and other acknowledgments. Do not include names of principal investigators. If there are no funding sources or other acknowledgments, this section will not be included.

Disclosures

Each author must separately disclose any financial and nonfinancial interests that might appear to bias results presented in ARCR using the Disclosure of Interest form (February 2021 version) of the International Committee of Medical Journal Editors. The form can be downloaded from the manuscript submission page in Editorial Manager or at <http://www.icmje.org/disclosure-of-interest/>. When in doubt whether any interest might present a potential conflict, authors are encouraged to err on the side of caution and report all interests.

It is the responsibility of the corresponding author to obtain the Disclosure of Interest forms from all coauthors and upload them when submitting the manuscript.

Abstract

(200 to 400 words recommended for narrative reviews; word limits do not apply to scoping reviews, which should follow [PRISMA guidelines](#))

ARCR narrative reviews must include a structured abstract with the following headings: Purpose; Search Methods; Search Results; and Discussion and Conclusions. Headings are bold, all caps, and followed by a colon. Scoping reviews should follow PRISMA guidelines: <http://www.prisma-statement.org/Extensions/ScopingReviews>.

- **PURPOSE:** Clearly articulate the purpose of the review, and provide context or background information for understanding why the review is important. Describe the topics to be covered, and be specific about how the review will benefit science, prevention, treatment, and/or health outcomes.
- **SEARCH METHODS:** Describe the search strategy employed (e.g., search terms used, inclusion/exclusion criteria, databases searched).
- **SEARCH RESULTS:** Report the number of articles captured by the search, the number of articles included, and the number of articles excluded.
- **DISCUSSION AND CONCLUSIONS:** Emphasize the included studies' most salient results—especially new and important aspects that could move the field forward—and the review's principal conclusions. Note any major limitations pertaining to the review and the included studies, and avoid overinterpretation of findings.

Keywords

Provide a maximum of eight keywords—with one being “alcohol”—to be used for indexing. Authors are encouraged to use the Medical Subject Headings (MeSH) search feature to identify keywords that correspond with MeSH terminology when possible: <https://www.ncbi.nlm.nih.gov/mesh>.

Body of Review

(6,000 words or fewer recommended for narrative reviews; word limits do not apply to scoping reviews, which should follow [PRISMA guidelines](#))

Articles begin with an introduction that describes the purpose (i.e., rationale, objectives) of the review. Subsequent sections describe the following:

- *Search methods employed.* Include a list of databases searched (a minimum of three), all search terms used, the dates of the searches, and all inclusion/exclusion criteria. Review articles may not include unpublished results or data.
- *Results of the literature search.* Provide the number of articles captured by the search, the number of articles excluded, and the number of articles included.
- *Results of the reviewed studies, especially new and salient findings.* Note any apparent limitations of the studies reviewed or gaps in the literature.
- *Summary of the conclusions of the review and potential future directions.*

Begin each major section with a first-level heading of up to 50 characters. Second- and third-level headings, also limited to 50 characters, can be used to divide main sections into subtopics.

Style and Usage

ARCR editorial style is based on the *Publication Manual of the American Psychological Association*, seventh edition (APA manual). The reference style for ARCR is based on the American Medical Association's *AMA Manual of Style*, 11th edition (AMA manual).

Voice, Tone, and Use of Tenses in Describing Research Findings

All ARCR articles, including abstracts, are written in third person. Articles educate the scientific community about current knowledge and trends in alcohol research and are written at a reading level appropriate for graduate students. The language used should be understandable to scientists who do not have a background in the specific topic being covered.

As a literature review journal, ARCR has a specific style for discussing research results, generally following APA guidelines.

- Use past tense (e.g., “Smith *showed*”) or present perfect tense (e.g., “researchers *have shown*”) for the literature review.
- Use past tense to discuss the results from a specific study:
This study found that anxiety decreased significantly.
- Use present perfect tense when discussing collective past results:
Binge drinking in adolescents has been associated with negative effects.
- Use present tense when discussing overall results, conclusions, and future research:
Most of the research shows that the treatment effectively reduces symptoms.

Clarity and Understandability

ARCR asks authors to focus on the “bottom line” of research findings, providing perspective on the implications of the research rather than presenting extensive details about the methodology. Readers can be directed to original research articles for more information. Provide citations to support statements in the article.

Avoid using the words “important” and “importantly.” Be specific about the research and how the review will benefit science, prevention, treatment, and/or health outcomes.

ARCR editorial staff will work with authors to identify areas of their manuscripts that need further explanation.

Abbreviations

- Use the full name for an abbreviation at first mention followed by the abbreviation in parentheses.
- Do not use abbreviations for terms that appear only once or twice. In general, if you abbreviate a term, use the abbreviation at least three times in a paper. Otherwise, spell it out each time. However, a standard abbreviation for a long, familiar term is clearer and more concise even if it is used fewer than three times.
- Only use abbreviations generally understood by the ARCR audience. Do not create abbreviations.

Alcohol Terminology

- Use nonstigmatizing, person-first language whenever possible. Avoid labeling persons as “drug abusers,” “addicts,” “alcoholics,” “depressives,” etc. Instead, use “person with substance use disorder,” “person with alcohol use disorder,” “person with depression,” etc. Please use APA’s [“Bias-Free Language”](#) guidelines and the Centers for Disease Control and Prevention’s [“Preferred Terms for Select Population Groups & Communities”](#) for reference as well.
- Clearly define terms—for example, “heavy,” “moderate,” and “light drinking”; “binge drinking”; and “alcohol misuse.” In addition to defining how these terms are used in the article, whenever possible, indicate how their definitions might differ among studies cited in the article.
- “Alcohol use disorder” is preferred over “alcoholism” and “alcohol dependence.” However, “alcohol dependence” can be used (1) in reference to animal models or (2) in reference to previous studies based on the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* or the *International Classification of Diseases: Ninth Revision (ICD-9)* diagnostic criteria.

- Use “alcohol abuse” and “drug abuse” only in reference to previous studies based on (*DSM-IV*) diagnostic criteria. “Alcohol misuse” and “substance misuse” are the preferred ARCR terms.
- Avoid language that suggests “safe” drinking levels recommended by NIAAA or ARCR.
- Do not use “patient” unless the context is clinical. Instead, use “participant,” “person with an alcohol problem,” or “individual who has alcohol use disorder.”
- When referring to “drinks,” “number of drinks,” or “standard drinks,” specify an alcohol quantity (e.g., “14 grams of alcohol”).
- For data other than percentages, round numbers to one decimal unless there is a reason to be more precise (e.g., *p* values, odds ratios, coefficients, blood alcohol concentration).
- Delete zero before a decimal if the number always will be less than one (e.g., *p* < .05).
- Use “to” to express ranges of numbers in text. En dashes are acceptable in tables, especially if space is a concern.

from 1999 to 2013

from 16% to 18%

for 5 to 8 years

weighs 0.23 kg to 0.35 kg

Numbers

- In general, use numerals to express numbers 10 and above, and use words to express numbers zero through nine.

The 10 site evaluators conducted five site visits.

Students in the study were in the sixth, eighth, 10th, and 12th grades.

- Use numerals for percentages, proportions, ages, money, and other units of measure.

2%; 1 in 4 college students; ages 6 to 9;
\$5, 3 cm; 6 mg

- Round percentages with decimals to nearest whole number (unless doing so would eliminate the difference between two numbers being compared).

68%, not 67.8%

- Express ratios as numerals (e.g., 4:1 ratio).
- Express percentiles and quartiles as numerals.
the 5th percentile, the 95th percentile
the 3rd quartile
- Express scores and points on a scale as numerals.
scored 6 on a 7-point scale

Trade Names

- Generic names should be used. If necessary for clarity, trade names may be included, following the generic name (lowercase). Capitalize trademarked names, but do not use the ®, TM, or SM symbols.

disulfiram (Antabuse), naltrexone (Vivitrol)

References

- ARCR uses a numbered citation system based on the *AMA Manual of Style and Citing Medicine: The NLM Style Guide for Authors, Editors, and Publishers* (<http://www.nlm.nih.gov/citingmedicine>).
- Superscript all citation numbers in text.
- ARCR encourages the use of a reference manager software that includes the AMA style within its repository; examples include Endnote or Zotero. When using reference manager software, authors should:
 - Select the “American Medical Association 11th edition” style.
 - When possible, upload references using the Digital Object Identifier (DOI) or other unique identifier, thereby ensuring fields are correctly formatted.
 - Ensure citations within the body of the text match the reference list by “refreshing” all citations and references prior to manuscript submission.
- Authors are responsible for ensuring that every reference cited in the text also appears in the reference list—and vice versa. Manuscripts that do not meet these criteria will be returned to the author for correction.
- Personal communications and references to websites that do not mention a specific document are not to be included in the reference list; however, they may be mentioned in the text.
- Unpublished results and data are not to be included in the text or references of ARCR review articles.
- Use hyphens, not en dashes, for page number ranges in citations in text and in the references list.
- When more than one reference is cited in one place, use commas without spaces to separate the citation numbers. If more than two numbers are sequential, use a hyphen between the first and last numbers in the sequence.
 - Several mutations of the gene were identified.*^{4,5,7-9,11}
- Avoid placing a citation number immediately after a number or a unit of measure to avoid confusing the citation number with an exponent.
 - Don't:** *The smallest tumor was 6 mm² and was later determined to be benign.*³
 - Better:** *The smallest tumor² was 6 mm and was later determined to be benign.*³
 - Best:** *The smallest tumor was 6 mm and was later determined to be benign.*^{2,3}
- For reference citations in text that include page numbers (e.g., for a direct quote), close up all space and do not use periods.
 - “Everything you're sure is right can be wrong in another place.”*^{3(p505)}
- Please ensure that citations in text match citations in the references list in terms of citation number and source.

Citations in Text

- Citation numbers are typically placed at the end of a sentence. If all information in a paragraph pertains to a single source, place the citation number at the end of the first sentence in the paragraph that contains the cited material.
- In the body of a document, **always** place citation numbers after punctuation.
 - After review, they removed the term “addicts.”*¹
 - The findings are questionable;*³

Citations in Reference List

- References are listed in numerical order at the end of the document.
- Provide a DOI for each reference, if possible. (This primarily applies to journal articles.) Do not include a PubMed ID (PMID).
- Present both DOIs and other URLs as hyperlinks (i.e., beginning with “http://” or “https://”). Because hyperlinks lead readers directly to the content, do not include “Retrieved from,” “Accessed from,” or an accessed date with DOIs and other URLs.
- Each reference is a separate entry. Do not combine multiple references under one number. Do not repeat a reference using a different number.
- Indicate that a reference is “in press” only if the item has been accepted for publication.

Reference Examples

Journal article with up to six authors (include all authors):

Weitzman ER, Magane KM, Wisk LE, Allario J, Harstad E, Levy S. Alcohol use and alcohol-interactive medications among medically vulnerable youth. *Pediatrics*. 2018;142(4):e217426. <https://doi.org/10.1542/peds.2017-4026>.

Journal article with seven or more authors (use “et al.,” with preceding comma, **after the third author**):

Muggli E, Matthews H, Penington A, et al. Association between prenatal alcohol exposure and craniofacial shape of children at 12 months of age. *JAMA Pediatr*. 2017;171(8):771-780. <http://doi.org/10.1001/jamapediatrics.2017.0778>.

Journal article with organization as author (spell out name of organization; if organization is author of more than one reference, include abbreviation in parentheses at first mention, and use abbreviation for any references that follow):

National Institute on Alcohol Abuse and Alcoholism (NIAAA). *Alcohol Use Disorder: A Comparison Between DSM-IV and DSM-5*. 2016. <https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/alcohol-use-disorder-comparison-between-dsm>.

Journal article in press:

Dashwood E, Steele L. Self-deception and rationalization: A review of cognitive processes to avoid responsibility. *Psychol Bull*. In press.

Book:

Collins WL, Lucas CT, deBourgh LC. *Subjective Well-Being and Life Satisfaction*. New York, NY: Routledge; 2018.

Chapter in a book:

Collins WL, Lucas CT, deBourgh LC. Leave well enough alone? The costs and benefits of solitude. In: Smart UR, Tooley IM, eds. *Subjective Well-Being and Life Satisfaction*. 2nd ed. London, UK: Taylor and Francis; 2018:25-61.

Book with a volume number or an edition number:

Ferrars E, Ferrars R, Brandon C, eds. *The Power of Likability in a Status-Obsessed World*. Vol 2. 2nd ed. Oxford, UK: Oxford University Press; 2017.
American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed. Arlington, VA: American Psychiatric Association; 2013.

Government or organization report:

Report or survey with URL: Include <http://www> or <https://www>, remove any end slashes, and end with period.

Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Behavioral Health Statistics and Quality. *Behavioral Health Trends in the United States: Results From the 2014 National Survey on Drug Use and Health*. 2015. <https://www.samhsa.gov/data/sites/default/files/NSDUH-FRR1-2014/NSDUH-FRR1-2014.pdf>.

Report or survey with organization as author, no URL:

Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Behavioral Health Statistics and Quality. *Results From the 2017 National Survey on Drug Use and Health: Summary of National Findings*. Rockville, MD: U.S. Department of Health and Human Services; September 2018.

Document on a website (*Note*: Callouts to a website rather than a specific document can be included in the text of the article and should not be listed as a reference):

National Institute on Alcohol Abuse and Alcoholism (NIAAA). What are symptoms of alcohol use disorder? Rethinking Drinking website. No date. <https://www.rethinkingdrinking.niaaa.nih.gov/How-much-is-too-much/Whats-the-harm/What-Are-Symptoms-Of-Alcohol-Use-Disorder.aspx>.

Paper presented at a meeting or conference:

Buendía JA, Remedios TB, Ternera P. The effects of misperception and family relationships on alcohol consumption. Paper presented at: American Public Health Association 2019 Annual Meeting and Expo; November 4-8, 2019; Atlanta, GA.

Journal Contact Information

Sheri Grabus, Ph.D.
Managing Editor
Email: sgrabus@iqsolutions.com
Phone: (240) 221-4087

Appendix A: Figures, Tables, and Boxes

ARCR prefers original figures, artwork, and tables that synthesize or organize material in a way that enhances understanding of the text. Reprinting figures and tables from other articles and depictions of unpublished data are not permitted. Authors are responsible for obtaining permission to reproduce copyrighted material from each relevant publisher.

Display items should add significantly to ARCR readers' understanding of the information in the article. Please ensure that each table, figure, or box contains only the most salient information to be conveyed to readers. If it does not, do not include it.

Figures

A figure is any image, illustration, graphic, or chart that is not presented in a tabular format (i.e., columns of information or data that can be read from left to right).

- Provide graphics and images as separate files. Do not insert or embed graphics or images into the text file. If the electronic artwork was created in a Microsoft Office application (Word, PowerPoint, or Excel), provide it as a separate file in that same application. If a chart/graphic is created with an Adobe application, provide the files in vector format (Adobe Illustrator).
- Include source or permission credit at the bottom of a figure if it has been published previously, even if it represents the author's original work. Please indicate if the copyright holder requires specific wording for the source line.
- Ensure that every figure has a number and a title. Figures and tables are numbered separately. Every figure is referenced in the text. Figure callouts occur in the text in order (e.g., Figure 1, Figure 2, Figure 3).
- Figure titles do not appear within the graphic area of the figure. All explanatory information for the figure goes in the title and/or caption beneath the figure.
- Label X and Y axes.
- Indicate units of measure that apply to the figure in axis labels, in a caption, or somewhere within the graphic.
- Use 10 pt. Arial font.

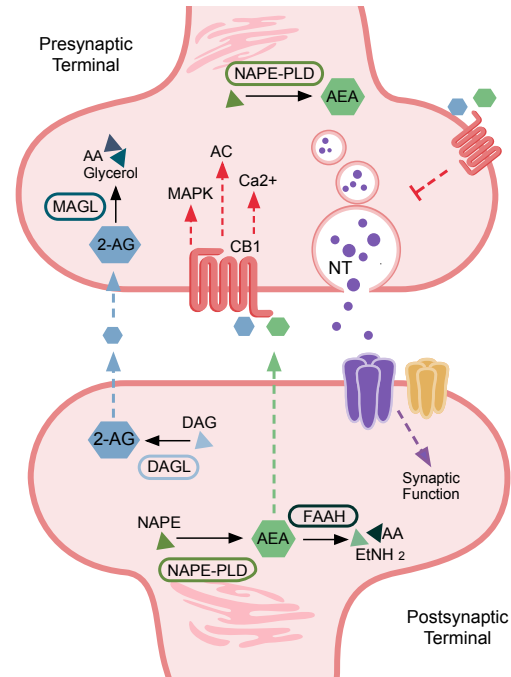


Figure 1. Summary schematic of endocannabinoid signaling in the synapse. A simplified description of the subcellular distribution of components of the endocannabinoid pathway is shown. Components include the major enzymes involved in regulating endocannabinoid levels (fatty acid amide hydrolase [FAAH], ...

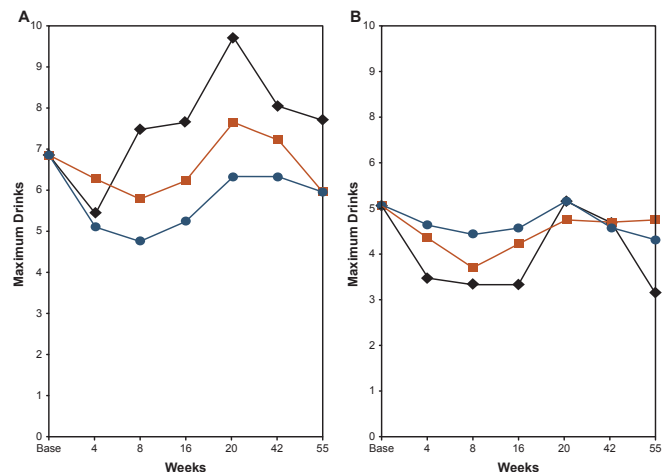


Figure 2. Maximum number of drinks consumed per occasion by students with low (panel A) or high (panel B) level of response (LR) to alcohol over 55 weeks in the San Diego Prevention Study. Blue lines and circle symbols represent students who had watched four videos with LR-based information, orange lines and square symbols represent students who had watched four videos with general alcohol education, and black lines and diamond symbols represent control students who had watched no videos. Source: Adapted with permission from Schuckit et al. (2016).⁴³

- Use the color palette provided below for graphics. Whenever possible, stick to ARCR’s primary colors as identified in the color guidelines. ARCR’s color scheme has been created to have a sound visual foundation for the brand, help maintain consistency, and make the interface aesthetically pleasing.
- If graphics require additional colors, the secondary colors can be used to populate these graphics. (These colors will be used in graphics only.)
- Grays and neutral colors can be used if a monotone palette is needed.

ARCR Primary Colors

<p>ARCR Blue</p> <p>CMYK 88.64.35.17 RGB 55.84.113 HEX #375471</p>	<p>ARCR Orange</p> <p>CMYK 20.78.100.8 RGB 175.89.51 HEX #AF5933</p>	<p>Black</p> <p>CMYK 66.64.67.67 RGB 46.41.37 HEX #2E2925</p>	<p>Dark Gray</p> <p>CMYK 61.53.52.24 RGB 96.96.96 HEX #606060</p>
---	---	--	--

ARCR Secondary Colors (Graphics, Illustrations, etc.)

<p>CMYK 8.88.73.1 RGB 204.81.78 HEX #CC514E</p>	<p>CMYK 25.99.92.23 RGB 141.42.42 HEX #8D2A2A</p>	<p>CMYK 12.64.100.1 RGB 203.121.49 HEX #CB7931</p>	<p>CMYK 70.96.29.16 RGB 91.47.101 HEX #5B2F65</p>	<p>CMYK 82.50.12.1 RGB 69.116.167 HEX #4574A7</p>
<p>CMYK 99.81.44.45 RGB 21.42.69 HEX #152A45</p>	<p>CMYK 65.27.97.9 RGB 109.139.74 HEX #6D8B4A</p>	<p>CMYK 81.45.55.24 RGB 62.97.97 HEX #3E6161</p>	<p>CMYK 2.7.99.0 RGB 255.224.0 HEX #FFE000</p>	<p>CMYK 99.20.87.6 RGB 0.134.89 HEX #008659</p>

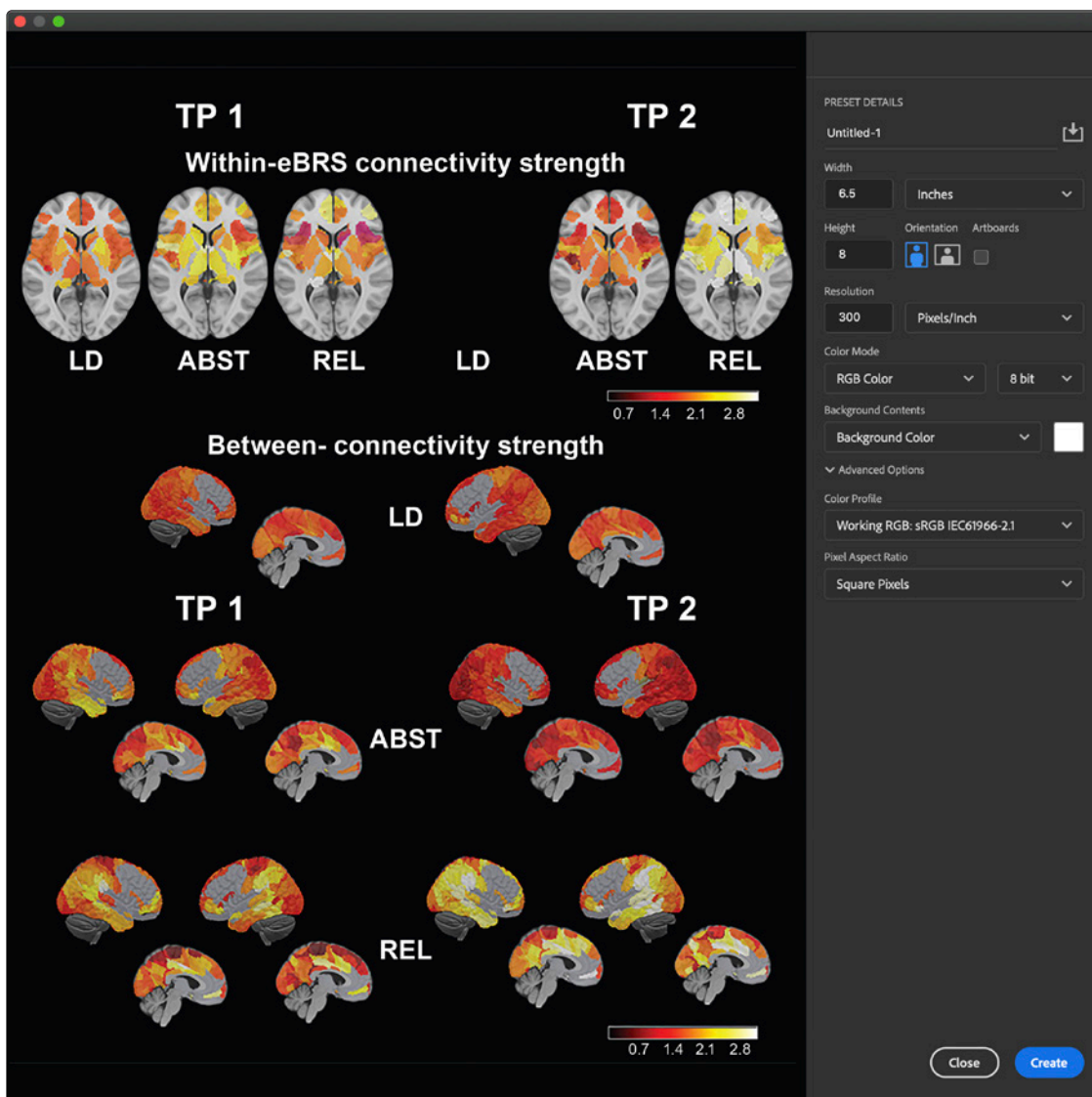
Grays (Graphics, Illustrations, etc.)

<p>CMYK 71.65.64.69 RGB 38.38.38 HEX #262626</p>	<p>CMYK 60.51.51.20 RGB 102.102.102 HEX #666666</p>	<p>CMYK 30.24.24.0 RGB 181.181.181 HEX #B5B5B5</p>	<p>CMYK 9.6.7.0 RGB 229.229.229 HEX #E5E5E5</p>	<p>CMYK 3.3.3.0 RGB 243.242.241 HEX #F3F2F1</p>
--	---	--	---	---

Neutrals (Graphics, Illustrations, etc.)

<p>CMYK 42.42.51.7 RGB 147.135.121 HEX #938779</p>	<p>CMYK 14.14.19.0 RGB 215.209.200 HEX #D7D1C8</p>	<p>CMYK 2.3.4.0 RGB 246.242.238 HEX #F6F2EE</p>
--	--	---

- Guidelines for photographs
 - Resolution: 300 dpi
 - Colors: RGB or CMYK
 - Format: .PSD, .TIFF, or .JPG (submit original native files with layers, fonts, and links, if any)
 - Do **not** supply files that are too low in resolution.
 - Do **not** submit graphics that are disproportionately large for the content. All artwork (including words and numbers) must be clearly legible in a 6" × 10" format.



Tables

A table contains tabular information, i.e., columns of information or data that are read from left to right. Blocks of text separated from the main article are styled as boxes, not tables.

- Ensure that every table has a number and a title. Tables and figures are numbered separately.
- Tables should be self-explanatory and should not duplicate textual material.
- Tables need to be created using word processing software. Do **not** use Excel or comparable spreadsheet programs.

- Every table has a callout in the text, and callouts and tables appear in order (e.g., Table 1, Table 2, Table 3).
- Label all table columns and rows.
- Indicate all units of measure.
- For footnoted explanatory information within a table, use the superscript symbols *, †, and ‡, in that order. Do not use numbered notes for explanatory information.
- Source or permission credit appears at the bottom of a table if it has been published previously, even if it represents the author’s original work. Please indicate if the copyright holder requires specific wording for the source line.

Table 1. Diagnostic Criteria for Four Conditions Within the FASD Spectrum According to CoFASP.⁵

Diagnostic Criterion	FAS		Partial FAS		ARND	ARBD
	Yes	No	Yes	No	Yes	Yes
Confirmed Prenatal Alcohol Exposure ^a	Yes	No	Yes	No	Yes	Yes
Facial Dysmorphology ^b	Required	Required	Required	Required	Not required	N/A
Growth Deficiency ^c	Required	Required	Not required	Required if brain abnormality is not present	Not required	N/A
Brain Abnormality ^d	Required	Required	Not required	Required if growth deficiency is not present	Not required	N/A
Cognitive or Behavioral Impairment ^e	Required	Required	Required	Required	Required*	N/A
Other Systemic Malformation	Not required	Not required	Not required	Not required	Not required	Required

^a Defined as ≥ 6 drinks/week for 2 weeks or ≥ 3 drinks on ≥ 2 occasions; documentation of maternal intoxication in records; positive biomarker for alcohol; or evidence of risky maternal drinking on a validated screening tool.

^b Defined as ≥ 2 of the following: short palpebral fissures, thin vermilion border, and smooth philtrum.

^c Defined as height and/or weight ≤ 10th centile based on racially/ethnically normed charts.

^d Defined as head circumference ≤ 10th centile, structural brain anomaly, or recurrent nonfebrile seizures.

^e Cognitive impairment is defined as global cognitive impairment, verbal or spatial IQ, or individual neurocognitive domain ≥ 1.5 SD below mean. Behavioral impairment is defined as impairment of self-regulation ≥ 1.5 SD below mean. For children under age 3, developmental delay is required.

* ARND requires two behavioral or cognitive deficits if IQ is not ≥ 1.5 SD below the mean.

Note: ARBD, alcohol-related birth defects; ARND, alcohol-related neurodevelopmental disorder; FAS, fetal alcohol syndrome; N/A, not applicable.

Source: Adapted with permission from Wozniak et al.⁵

Boxes

- Boxes are for nontabular content that authors wish to separate from the main text.
- Boxes are **not** numbered.
- Each box has a title. The title is centered and has title case capitalization.
- Each box has a text callout in which the title of the box appears in bold.
- All the text for the box, including the box title, appears at the end of the file (after the references). Do not insert a box at the in-text callout.

Effects of Alcohol Consumption on Women and Factors That Influence Research Outcomes	
What We Know	Factors That Influence Research Outcomes
Acute alcohol consumption	
Deficits reported in women <ul style="list-style-type: none"> • Divided attention • Psychomotor speed • Working memory 	<ul style="list-style-type: none"> • Differences in task demands • Heterogeneity of response to alcohol • Small sample sizes • Differences in study inclusion and exclusion criteria • Cross-sectional vs. longitudinal study • Important to control for variables such as <ul style="list-style-type: none"> ◦ Age ◦ Education ◦ Socioeconomic status (SES) ◦ Depression/anxiety symptoms ◦ Smoking status ◦ Drinking patterns ◦ Alcohol-related pharmacokinetics ◦ Hormonal differences ◦ Nutritional status ◦ Comorbid medical conditions <ul style="list-style-type: none"> — HIV — Hepatitis C — Non-alcohol substance misuse — Psychiatric conditions — Chronic pain
<ul style="list-style-type: none"> • Short-term memory • Set-shifting • Decision-making 	
Moderate drinking	
Modest beneficial effects <ul style="list-style-type: none"> • Better overall cognitive ability • Slower rate of cognitive decline in aging 	
Increased risk of <ul style="list-style-type: none"> • Breast cancer • Gastrointestinal disorders • Infectious diseases 	
Chronic excessive alcohol consumption	
Telescoping Compared with men: <ul style="list-style-type: none"> • Women have shorter intervals between landmark events from the inception of drinking to entering treatment. • Women experience medical and health-related problems earlier, even when duration and amount of alcohol consumed are comparable between the sexes. • Women exhibit different patterns and severity of cognitive compromise, some modulated by sex-related emotional and social factors. 	