

GENERAL GUIDELINES

Artwork should be of good quality and clean, with clear lettering, sharp black lines, and sides trimmed straight. Photocopies are not acceptable. The scanner faithfully reproduces all smudges, crooked or broken lines, and stray marks. Tape, creases, and other surface irregularities may produce shadows that the scanner will render as black.

Although we encourage authors to submit artwork electronically (see “Guidelines for Submission of Digital Art”), we also require, in all cases, a hard copy.

Artwork Created with Microsoft PowerPoint, MS Word, or WordPerfect

The graphics created in these programs are low-resolution images that are not suitable for professional reproduction. Graphics created using PowerPoint, Word, or WordPerfect are acceptable only if they are line images, with no gray, color, or shading, and only if they are printed from a high-quality laser printer (see “Line Art”). Only hard copies of line art created with these programs will be accepted; do not submit electronic PowerPoint, Word, or WordPerfect files.

Internet Graphics

Graphics downloaded from Web pages are not acceptable for print reproduction. These graphics are low-resolution images (usually 72 dpi) that are suitable for screen display but far below acceptable standards for print reproduction.

The only exception to this rule is a screen capture of a Web page that is being discussed or reviewed (see “Screen Captures” in Guidelines for Submission of Digital Art).

Cropping and Sizing

Your artwork will be cropped and sized for publication. If you want to be certain that a particular area of your image is excluded or included, please indicate where the image should be cropped.

Figures will be printed either in a single column (20 picas or 85 mm) or across two columns (25–41.5 picas or 106–176 mm). Exceptionally wide figures (54 picas or 229 mm in width) will be placed broadside. Artwork is generally not enlarged, as the quality of the image may be compromised. If possible, figures should be submitted in the size at which they will be published.

Labeling

Please be consistent with type (both font and size) within a figure. Since most figures are reduced, figures employing more than one font size may, after reduction, contain both text that is too small to read and text that is so large as to be awkward (see [fig. 1](#)). After

reduction, all text should be readable but not excessively large. Of course, some variation in the size of letters may be necessary to emphasize elements in a figure or to fit lettering in a limited space; however, please try to use no more than a 2-point variation in your type sizes.

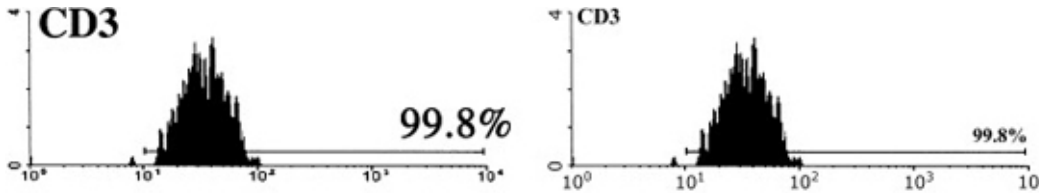


Figure 1. A, Note the large variation in font sizes used for labels. This makes sizing the image particularly difficult and results in awkward-looking graphics. In contrast, B uses fairly consistent type sizes, resulting in a more balanced figure.

Please use the same font type for all figures in your article; use standard fonts such as Times, Courier, Arial, Helvetica, or Symbol. Sans serif fonts such as Arial and Helvetica are ideal and should be used whenever possible.

If the figures in your article contain units of measurement, please label these units consistently. Make sure abbreviations are consistent with those used in the text and the legend. Omit initial zeros from P values.

Avoid placing labels over shaded areas of a figure. Best results are obtained from black lettering on a white background. If the area requiring a label contains shading, it is best to create a white box and place the black label within.

Figures consisting of more than one panel should include uppercase panel designations ("A," "B," "C," etc.). Whenever possible, include all panels of a figure on the same page.

Each chart or graph should incorporate a key to any symbols used. Please set the key inside the figure when possible.

Omit any extraneous information, such as page numbers, figure numbers, author names, or manuscript number, from the figure. Such information should be marked on the back of the figure—not included as part of the actual image. Figures themselves should not contain a title or text that is duplicated in the figure legend. Figure legends should be included on a separate page, with the manuscript.

Copyright

If the artwork you are submitting has been published elsewhere or is otherwise copyrighted, we must have a letter of permission from the copyright holder in order to use the image. In addition, if the artwork is not your own, we will need information about its source.

GUIDELINES FOR SPECIFIC TYPES OF ARTWORK

Bar Graphs

Avoid the use of gray or color in bar graphs. Instead, please use solid black, solid white, and patterned (e.g., horizontally or diagonally striped) bars (see [fig. 2](#)). If a bar graph must contain gray shading or color, please submit a high-resolution, glossy print. Laser printouts will be accepted only if the bar graph contains no gray shading or color.

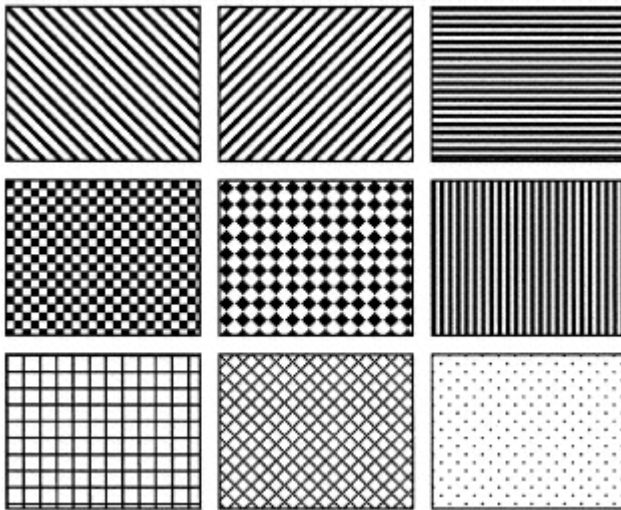


Figure 2. Possible fill patterns for bar graphs.

Please refrain from submitting "three-dimensional" bar graphs unless there is a compelling reason for the information to be rendered in three dimensions. The information in most bar graphs can be adequately rendered in two dimensions, and making a bar graph three-dimensional only obfuscates the data (see [fig. 3](#)).

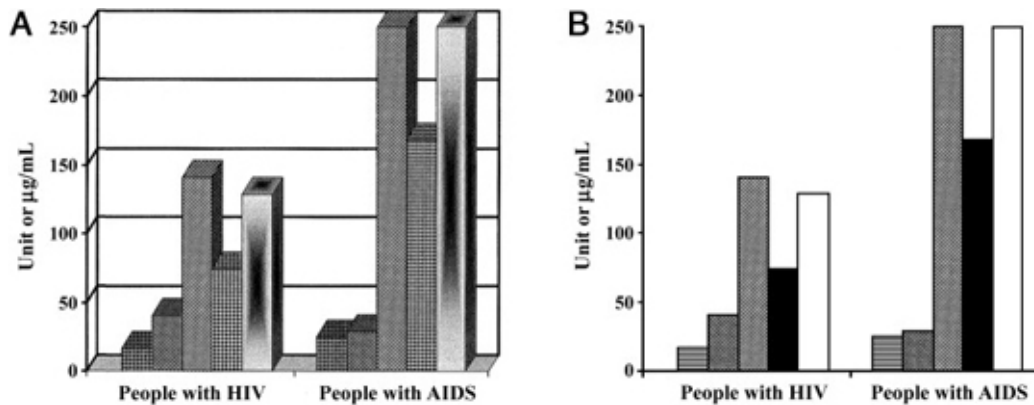


Figure 3. Avoid using "3-D" bar graphs. Both A and B display the same information; however, B is much clearer and easier to read.

Line Art

Always submit sharp, laser printouts for line art. Dot matrix printouts are unacceptable.

Line art is best reproduced when it is submitted as a crisp black-and-white image and contains no unnecessary gray shading (see fig. 4). Gray areas scan unevenly, which often results in unwanted "moiré" patterns (see fig. 5). If gray must be used in the figure, the figure must adhere to all requirements for halftone images (see "Halftones").

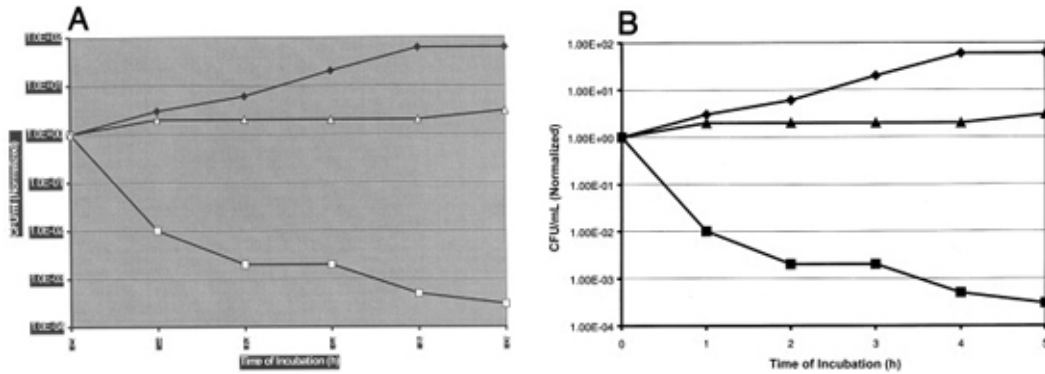


Figure 4. A, Unnecessary backgrounds and shading obfuscate data. B, A cleaner version of the same graph.

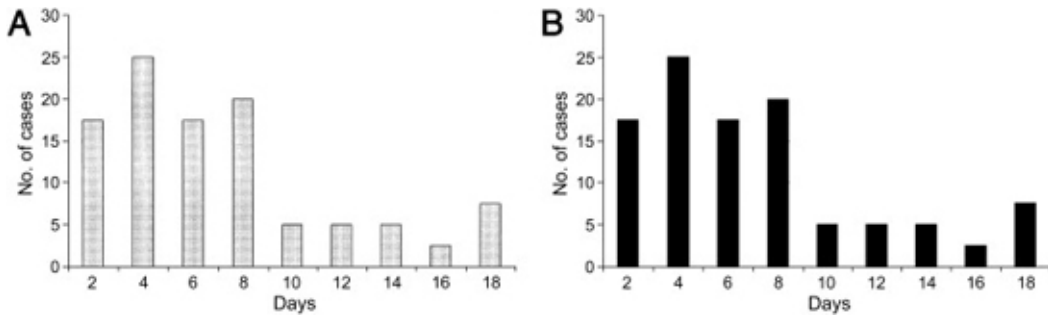


Figure 5. Moiré patterns. Image A was made from a scan of a bar graph that contains gray bars and was printed from a standard laser printer. The fine "screen" created by the laser printer cannot be lined up precisely with the screen used by the scanner—which results in uneven patterns, called "moirés." Solid black (as in B), solid white, and black-and-white patterns eliminate this problem (see also fig. 2 and fig. 7).

Avoid thin lines, particularly in figures requiring considerable reduction. Do not use lines that are thinner than 2 points, and do not use the "hairline" width option that many computer programs offer.

If your image requires the use of many lines (as line graphs often do), please choose patterns that are easily distinguished from each other (see fig. 6). Patterns with similar characteristics are hard to differentiate after reduction.

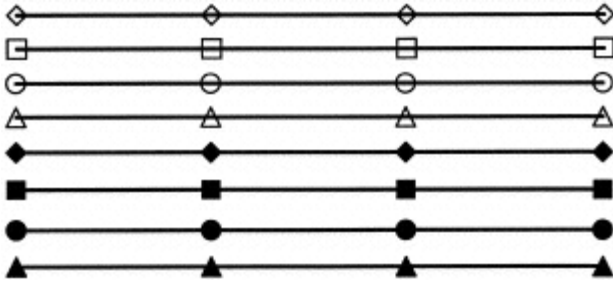


Figure 6. Possible patterns for line graphs.

Halftones

Halftones are any images that contain gray. Halftones must be submitted as high-resolution glossy prints, slides, or transparencies. When using gray, make sure to use shading with at least a 25% variation in gradation or it may become difficult to distinguish between different elements in your figure (see [fig. 7](#)).

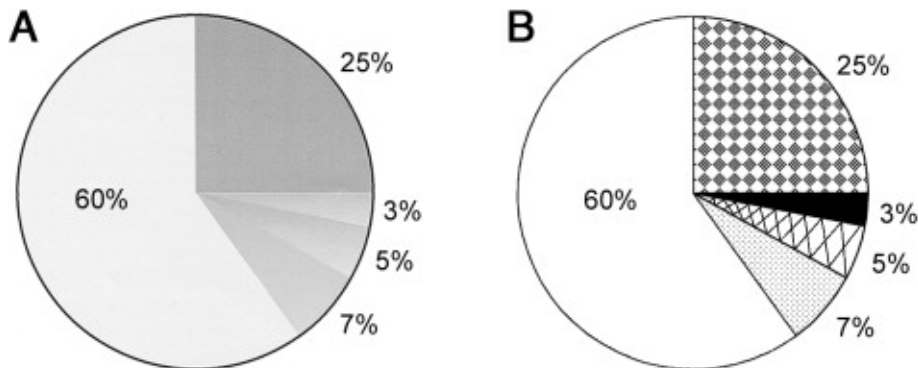


Figure 7. A, Variation between different shades of gray is often altered by scanning and reprinting. Two shades of gray that are separated by less than a 25% gradation may become very difficult to distinguish. B, Black-and-white fill patterns result in graphics that are sharper and easier for the reader to understand (see [fig. 2](#) for fill pattern examples).

Photomicrographs should show only the most pertinent area of the material being studied. A micron bar or appropriate scale marking must appear on the figure.

Color Art

Color images must be submitted as high-resolution glossy prints, slides, or transparencies. Please note that reproduction of color images carries an extra charge. Contact the journal office for current rates. Unless explicit arrangements have been made with the journal's editorial office, you will be charged for color reproduction if your figure contains any color at all.

GUIDELINES FOR THE SUBMISSION OF DIGITAL ART

We use author-supplied electronic art whenever possible. However, we require authors to submit a hard copy as well, in case the electronic file is unusable. We can accept electronic graphic files only in TIFF or bit-mapped EPS format. Files created with Adobe Photoshop produce the best results.

Method of Transfer

We accept image files submitted on standard diskettes, Jaz or Zip disks, or CDs. Disks formatted for either Windows or Macintosh platforms are acceptable. Please do not compress files.

Internet Graphics

Graphics downloaded or saved from Web pages are not acceptable for print. These graphics are low-resolution images (usually 72 dpi) and, although they may look fine on the screen, are far below an acceptable quality needed for print (see [fig. 8](#)). The one exception applies to browser windows captured for articles that discuss or review a Web site (see “Screen Captures”).

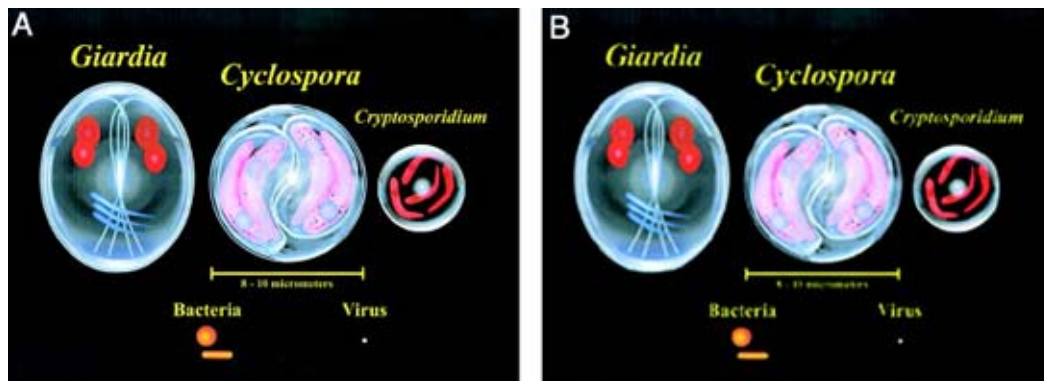


Figure 8. 300 dpi (A) versus 72 dpi (B) resolution.

Line Art

Line art must be prepared as a bit-map image and submitted as a TIFF file. Optimum resolution for black and white bit-map files is 800 dpi. The file should be sized for publication, as described in Cropping and Sizing, above. Avoid using gray in line art. If the use of gray is unavoidable, the graphic must be prepared as a gray-scale image. Optimum resolution for this type of file is 600 dpi.

Halftones

Halftone figures must be prepared as a gray-scale images and submitted as TIFF files. Optimum resolution for halftones is 300 dpi.

Color Art

Color figures must be prepared as CMYK (four-color) files, not as RGB files, and must be formatted as EPS files with binary encoding but without a TIFF preview (see [fig. 9](#)). Optimum resolution for CMYK files is 300 dpi.

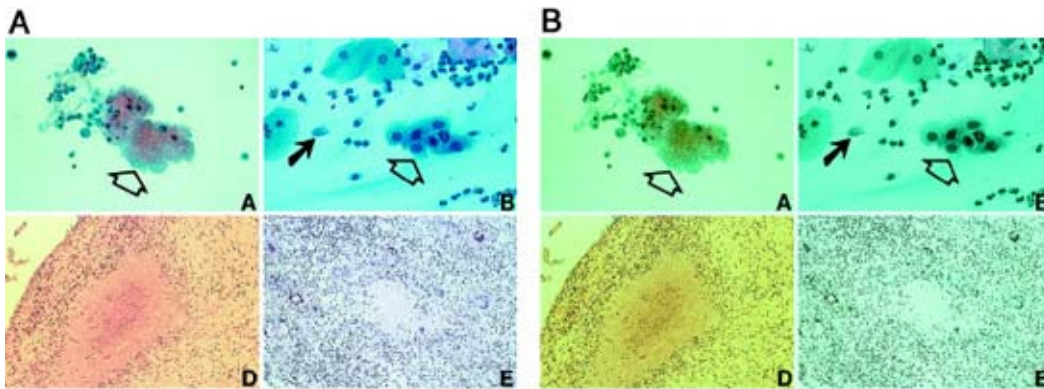


Figure 9. CMYK (A) versus RGB (B) color.

Screen Captures

The one exception to the rule about Internet graphics is browser windows captured for Web review articles (e.g., articles for the Surfing the Web section of *Clinical Infectious Diseases*). Such captures should be prepared as follows:

1. In your browser, open the Web page you want to capture.
2. Maximize the browser window so it fills your screen. This will make the resulting image as large as possible and will make the aspect ratio of the images for this section consistent.
3. Capture the image of the window: If you are running Macintosh OS, press `command+shift+4+caps lock` and click on the window you want to capture. A PICT file containing the image of the window will be saved to your desktop. If you are running Windows, press `alt+PrintScr`. A bit-map of the current window will be copied to the Windows clipboard.
4. Open a graphics application such as Photoshop. If you are running Mac OS, open the PICT file and save the image as a TIFF file. If you are running Windows, open a new document, paste the contents of the clipboard into it, and save the image in TIFF format. If you do not have access to a graphics application that allows you to save graphics as TIFF files, we will accept PICT or BMP files for this section only.

Please include the exact URL for all Web pages for which you are providing screen captures.