



TOOLKIT for Making Written Material Clear
and Effective

SECTION 2: Detailed guidelines for writing
and design

PART 5

Understanding and using the “Toolkit
Guidelines for Graphic Design”

Chapter 3

Guidelines for fonts (typefaces), size of print,
and contrast

U.S. Department of Health and Human Services
Centers for Medicare & Medicaid Services



Introduction

About the Toolkit and its guidelines

The *Toolkit for Making Written Material Clear and Effective* is an 11-part health literacy resource from the Centers for Medicare & Medicaid Services (CMS). To help you develop or revise your written material, the Toolkit includes detailed guidelines for writing and design. There are 26 guidelines for writing and 46 for graphic design. For the full list, see Toolkit Part 3, *Summary List of the “Toolkit Guidelines for Writing and Design”*.

About this part of the Toolkit

Part 5 of the Toolkit focuses on the guidelines for graphic design. These guidelines apply to designing various types of written material intended for use in printed formats (see Toolkit Part 1). (For discussion about material that is read on a computer screen, see Toolkit Part 8, *Will your written material be on a website?*)

What is this chapter about?

This is the third of the eight chapters on design in Toolkit Part 5. It explains how to apply the Toolkit Guidelines for fonts (typefaces), size of print, and contrast. As with all of the Toolkit chapters on design, this chapter assumes that you have not had formal training in design. For background on things to know about the Toolkit Guidelines for Design, see Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*.

What aspects of design are covered in the other chapters?

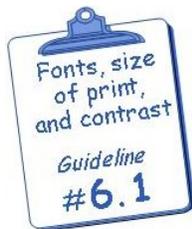
The other chapters in Toolkit Part 5 cover the following topics: tips for learning about design and working with design professionals (Chapter 1); overall design and page layout (Chapter 2); headings, bulleted lists, and text emphasis (Chapter 4); use of color (Chapter 5); use of photographs, illustrations, and clip art (Chapter 6); tables, charts, and diagrams (Chapter 7); and forms and questionnaires (Chapter 8).

List of guidelines covered in this chapter

This chapter discusses the 12 guidelines for fonts, size of print, and contrast that are shown below in Figure 5-3-a. (For the full list of guidelines for design, see Toolkit Part 3, *Summary List of the Toolkit Guidelines for Writing and Design*).

Figure

5-3-a. Toolkit guidelines for fonts, size of print, and contrast.



For the regular text in printed materials, use a “serif” font that is designed for ease of reading. Serif fonts are fonts that use the small lines called “serifs” to finish off the main strokes of letters. For extended amounts of text, serif fonts work better than fonts without serifs (which are called “sans serif” fonts). Since readability of fonts differs greatly, pick a serif font that is highly readable as your basic text font. This text font should show good contrast between its bold and regular versions, and should remain easy to read when italicized.



For the headings in your printed materials, use an easy-to-read “sans serif” font, preferably one that is a “font family” with different weights (some bolder than others). To help readers skim and pick out the main points in your material, be sure that there is good contrast between the serif font you use for text and the sans serif font you use for headings. Choosing a font for headings that offers variations in weight is helpful because it gives you better options for creating good contrast.



In general, use no more than two or three different typefaces in a single piece of material. Limiting the number of fonts will give your material a cleaner look and greater unity. For most information materials, it works well to use just one serif font for the text and one sans serif font for the titles and headings. Experiment a bit to be sure the fonts you have chosen work well together. You may want to add an additional font or two for a particular purpose, such as using a special font to accent the title.



Make the type size large enough for easy reading by your intended audience.

The best way to know whether your type is large enough is to get feedback from your intended readers. Older readers will need somewhat larger type than younger ones. You can use point size (such as “12 point font”) as a rough guide, but keep in mind that fonts in the same point size can vary a lot in actual physical size due to differences in style of the letters. These differences in lettering style can affect ease of reading as much or more than point size.



For all of your text, including titles and headings, use upper and lower case letters in combination – nothing written in “all caps.”

Text in all capital letters is hard to read, so use capital letters only at the beginning of sentences and other places where they are required. For ease of reading, try capitalizing only the first word in titles and headings (rather than capitalizing all of the important words).



To emphasize words and short phrases that are part of your regular text, use italics or boldface type.

Do not use underlining or put the text into all capital letters, because these make text hard to read. Be restrained in using italics, boldface, and other devices such as contrast in size or color accents on text. If you use these devices too often, they lose impact. If you use them on longer blocks of text, they make it hard to read.



For ease of reading, use dark colored text on a very light non-glossy background.

Make sure there is enough contrast between the printed text and the paper to be able to read everything easily. Black text on a white or cream-colored non-glossy background is best. Don’t use light-colored text on a dark background (this is called “reversed out” text), because it is too hard to read.



For ease of reading, do not print text sideways, on patterned or shaded backgrounds, or on top of photos or other images.

Printing a title or heading that runs vertically rather than horizontally puts a burden on readers to tilt their heads or twist the page in order to read it (and most won’t). When you put words on top of an image or pattern, the words and the background compete for attention, and both lose. The words are harder to read because of reduced contrast and distraction in the background, and the impact of the image is undermined by the words on top of it. Even a plain shaded background makes words harder to read, because it reduces the contrast between the text and background.



For ease of reading and a cleaner look, adjust the line spacing in your material. To make blocks of text easier to read, add a little extra space between the lines. To help readers connect a heading with the text that follows it, leave a little less line space after the heading than you leave before it. To make bullet points stand out more clearly, put a little extra space between them. Keep these line spacing adjustments consistent throughout the document.



For ease of reading, use left justification throughout the material, for both the text and the headings. Left-justify the basic text, leaving the right margin uneven (“ragged right”). Don’t use “full justification” because forcing even margins on both sides of a block of text inserts uneven spaces between the words, making them harder to read. Don’t center blocks of text, because centering makes it harder to read. To make headings prominent and easy to skim, left justify them (rather than centering them).



Keep your lines of text to an appropriate length for easy reading – neither too short nor too long. For many materials, a line length of about five inches long works well. If the paper is wide, set the text in columns to maintain a readable line length. Avoid “wrapping” your text in awkward ways that make it hard to read.



For ease of reading, watch where the lines break (avoid hyphenation; split long headings carefully to reflect natural phrasing). Do not hyphenate words at the end of a line, because splitting a word over two lines makes it harder to read, especially for less-skilled readers. When headings are long, split them over two lines in a way that reflects natural phrasing and avoids the awkwardness of leaving a single word by itself on the second line.



Source: Created for this Toolkit. For more about the guidelines and how to use them, see Toolkit Part 3, *Summary List of the “Toolkit Guidelines for Writing and Design”*.



Background on terms we use to describe fonts

The fonts you choose can have great impact on your written materials (fonts are also called “typesyles” or “typefaces.”) To give you background for our discussion about choosing fonts, this section explains some terminology for describing fonts (*serif*; *sans serif*; *highly readable*; and *font family*). Then, in the section that follows, we give detailed guidelines for choosing your fonts.

What are serif and sans serif fonts?

What is a “serif”?

“Serif” is the name for a small line or flare that extends from the main stroke of a letter to finish it off.



◀ This letter “t” has three serifs

Fonts with letterforms that have serifs are called “**serif fonts.**”

What is “sans serif”?

“Sans serif” means that there are no serifs on the letterforms of the font. The word “sans” is French for “without, so “sans serif” means “without serif.”

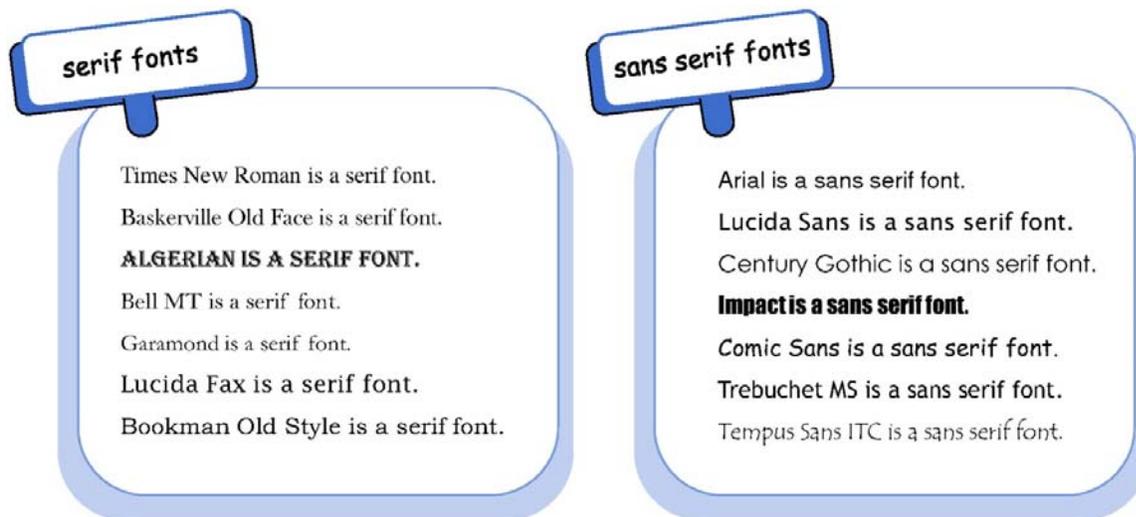


◀ This letter “t” doesn’t have any serifs

Fonts with letterforms that don’t have serifs are called “**sans serif fonts.**”

Although the distinction between serif and sans serif fonts is the important one for this Toolkit, there are other types of fonts as well, including handwriting fonts, picture fonts, and symbols fonts.

There are thousands of different serif and sans serif fonts. Here are just a few examples:



As you can tell from the examples of serif and sans serif fonts above, each font has its own distinctive look or personality. Notice the differences in mood they convey. **All are the same point size, but they differ in physical size because of the differences in style of the letterforms.**

What is a “highly readable” font?

Look again at the examples of fonts shown above, and notice the differences in ease of reading. Some of the fonts are so unusual or ornate that the typographical features of the letterforms are the main thing you notice. Some (like Garamond) are so readable that you barely notice the forms of the letters.

When you are reading more than just a few words, you want a font that is easy to read. And when you are reading an *extended amount of text* that has been printed on paper, you want a font that is “highly readable.”

“Highly readable” fonts are fonts that are easy to read when they are used for an *extended amount of text*.

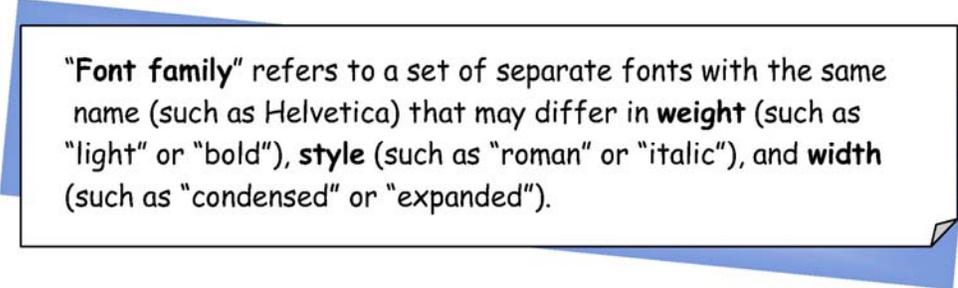
For our purposes in this book, a “highly readable font” is a serif font that has been designed specifically for ease of reading blocks of text. When a font is highly readable, it doesn’t call attention to itself. It has letters and styling that are quite legible and relatively plain. When fonts are highly readable, it is almost as if they were invisible. This is good because it lets you focus entirely on the meaning of what you are reading, rather than noticing the letterforms of the font.

In contrast, fonts that have distinctive design characteristics are less readable. Because they are distinctive, they call attention to themselves, which can distract readers and make them work a little harder. **The basic rule: if it looks hard to read, it is hard to read.**

Using a distinctive font that’s a little less readable can be okay for special purposes, if the font is carefully chosen and the amount of text is limited. For example, you might want to use a distinctive font for the title of your material, to give it a friendly tone (see Guideline 6.3 later in this chapter). But if you use anything other than a highly readable font for your regular text, you are creating a needless barrier that may discourage your readers. (*A note on terminology:* Graphic designers and printers use the term *body copy* instead of *regular text*. *Copy* is the general term for text, so *body copy* means the text that forms the main body of the document.)

For discussion of typefaces and recommendations about which ones are best to use for different purposes, including large amounts of text, see *Before & After Graphics for Business* (McWade, 2005), *The Complete Manual of Typography: A Guide to Setting Perfect Type* (Felici, 2003), and *Stop Stealing Sheep & Find Out How Type Works* (Spiekermann & Ginger, 2003). It can also be helpful to check some of the major websites that sell fonts (see the list of resources at the end of this chapter).

What is a font family?



“Font family” refers to a set of separate fonts with the same name (such as Helvetica) that may differ in **weight** (such as “light” or “bold”), **style** (such as “roman” or “italic”), and **width** (such as “condensed” or “expanded”).

Many fonts are available as a *font family*. As shown in the examples below, a font family has different versions of the same font. The kind and number of variations in style and weight differs by font family. So do the names for the variations. For example, the most delicate version might be called “light” or “thin.” The standard version you would use for regular text might be called “Roman” or “book.” The stretched out version might be called “expanded” or “wide.”



Font families range in size from just two members (such as a font that comes in book weight and italic) to extremely large, with literally dozens of variations. The larger font families include combinations of styles, weights, and widths, such as bold condensed, or expanded italic. If a font has no variations, we call it a “single version” font to distinguish it from a font family. Many decorative or highly distinctive fonts come in only one version. Picture fonts and symbol fonts are often single version fonts.

Font families offer the variations in typeface that are needed for professional printing of written material. When graphic designers prepare documents for printing, they use a separate font for each variation such as boldface or italics (at least they do whenever they can). They do not simply turn on a “bold” or “italics” option for the font, because using a separate font that has been optimized for bold or italics will make the text look better. For example, when you turn on a bolding option for a regular font in your word processing, the letterforms might be printed double or they might be thickened a bit in a uniform way. A boldface font, in contrast, is created letter by letter in a customized way, to make each letter look good in boldface. Using a separate font for each text effect also helps ensure that the final printed text will look the way you expect.

The guidelines for font use that we discuss in the next section urge you to choose a font family for your regular text and a contrasting font family for your headings. As we explain later on, choosing a font family with a good range of variations will help you create the contrast you need in your materials. You may need certain variations for a particular purpose. For example, a condensed version or lighter version of your font may work well for some of the text in an application form or chart.

Here are some things to know about single version fonts and font families:

- **Fonts that come in one weight and style only have limited use.** Generally, a font that comes in only one version is for special applications. It might be useful as an accent font for some purposes, but it does not offer the range of contrast you need for the text and headings in your materials.

- **Graphic design firms typically have a huge array of fonts from which to choose.** If there’s a particular font you’d like to use, ask if they have it, or something similar to it.
- **Often, you can purchase each variation (each member of the font family) individually.** Prices for fonts and font families vary greatly, from as little as \$10 or less on up. There is typically a discount if you buy the entire family as a package. If you use desktop publishing to produce materials and your font choices are limited or unsuitable, you may want to consider adding a few affordable fonts to your collection. Check the font websites listed at the end of this chapter.
- **Since font variations are often sold separately, a single font you have on your computer may be part of a font family.** To find out what other variations might be available, you can check the font websites listed at the end of this chapter.



Guidelines for choosing fonts

When you are choosing fonts for your materials, ease of reading and good contrast are essential. Here’s a simple and highly effective approach:

For printed materials, choose two easy-to-read fonts that contrast well with each other:

- A **serif font** for the regular text
- A **sans serif font** for the headings

As shown below, this approach is reflected in this book’s three guidelines about choosing fonts. (These three guidelines on font use apply to materials that are printed on paper. For text that people read on a computer screen, special considerations apply. For website guidelines, visit <http://www.usability.gov>.)



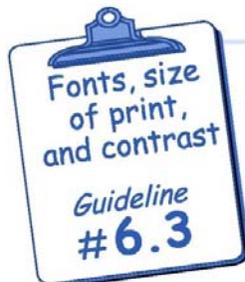
For the regular text in your printed materials, use a "serif" font that is designed for ease of reading.

Serif fonts are fonts that use the small lines called "serifs" to finish off the main strokes of letters. For extended amounts of text, serif fonts work better than fonts without serifs (which are called "sans serif" fonts). Since readability of fonts differs greatly, pick a serif font that is highly readable as your basic text font. This text font should show good contrast between its bold and regular versions, and should remain easy to read when italicized.



For the headings in your printed materials, use an easy-to-read "sans serif" font, preferably one that is a "font family" with different weights (some bolder than others).

To help readers skim and pick out the main points in your material, be sure that there is good contrast between the serif font you use for text and the sans serif font you use for headings. Choosing a font for headings that offers variations in weight is helpful because it gives you better options for creating good contrast.



In general, use no more than two or three different typefaces in a single piece of material.

Limiting the number of fonts will give your material a cleaner look and greater unity. For most information materials, it works well to use just one serif font for the text and one sans serif font for the titles and headings. Experiment a bit to be sure the fonts you have chosen work well together. You may want to add an additional font or two for a particular purpose, such as using a special font to accent the title.

Two main fonts - one for text and one for headings

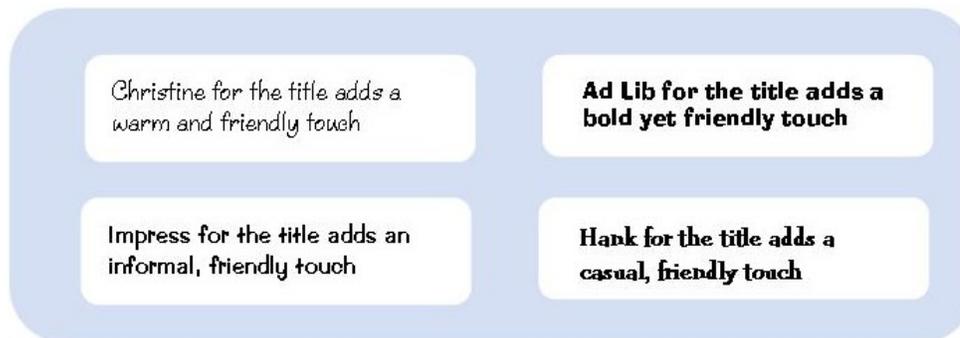
Mixing too many different fonts can distract or confuse your readers and make the material look cluttered and disorganized. As discussed above, it works best to use just two main fonts for your materials -- a serif font for basic text and a sans serif font for headings and subheadings:

- **Serif fonts work better than sans serif fonts for ease of reading extended amounts of text.** For the basic text, Guideline 6.1 above recommends that you use a *serif* font rather than a *sans serif* font. Studies of readers’ reactions to different typestyles suggest that serif fonts work better than sans serif fonts for basic reading. Readers tend to find blocks of text easier to read and understand when they are printed in a serif font (Wheildon, 2005). Guideline 6.1 also urges you to choose one of the highly readable serif fonts that is designed for ease of reading extended amounts of text (for more about this, see the previous section with background on font terminology).
- **A sans serif font for headings offers good contrast with the text.** If you use the same font for the headings as for the text, the headings will not stand out and the material will be harder to skim. Guideline 6.2 above recommends using a different font for the headings. Specifically, it recommends using a sans serif font that offers good contrast with your text font. Good contrast between headings and the basic text makes it easier for readers to skim the material and pick out the main points.

There are many highly readable serif and sans serif fonts to consider. To learn more about what makes type readable and investigate your choices, see the resource section at the end of this chapter and talk with your graphic designer. If fonts intrigue you, you’ll enjoy visiting the websites listed at the end of the chapter. You can also get inspiration by studying real-life examples. Collect samples of printed materials in an “idea file” and study the fonts that are used.

Adding a third font for a special purpose

As suggested in Guideline 6.3 above, for some materials, you may want to add another font or two to use in a limited way for a special purpose. For example, using a distinctive font for the title of your material can lend warmth to your material, increasing its appeal and making it seem more approachable to less-skilled readers. Here are some examples of special purpose fonts:



If you use a special font as an accent, it's wise to get feedback from readers to verify that it adds appeal and is reasonably easy to read.

Choosing particular fonts that work well together

When you are ready to choose specific fonts for materials to be printed, you will have many choices of suitable fonts. There are many other possible fonts, including a large selection that is readily available through your graphic designer. To help pick an effective combination of serif and sans serif fonts for your material, here are things to consider:

- **Is each font easy to read?** Check to be sure that it remains easy to read when you change to the boldface or italics variation of the font.
- **Is each font a font family that has the variations you need for your material?** To provide good contrast in your text and headings, you need a font family with some variations in style and weight, and possibly variations in width as well. A font that comes in only one version may work as an accent font for a very limited amount of text, but it won't work well for the regular text or headings.
- **Does each font family offer good contrast among its variations?** Check on the degree of contrast between the regular and bold versions of your serif text font. Choose one with higher contrast, so that any word you print in boldface type will really stand out. When you are choosing a sans serif font, look for font families that include a demi-bold or semi-bold variation (or a regular boldface that is not as heavy as most). These variations are often more readable than regular boldface, and more versatile for adding contrast to your documents.
- **Does your sans serif font for headings contrast well with your serif font for the text?** Experiment a bit with different combinations. You may be surprised at the differences in contrast. For a discussion with examples, see “Typeface combinations (What typefaces go together? Here's how to mix and match)” in *Before & After Graphics for Business* (McWade, 2005:34-35)

typeface. There are other good resources with examples, too, including Felici (2003) and Williams (2006).

Getting reactions from readers

When you have a final group of fonts you are considering, it’s helpful to create test pages printed in different combinations of fonts. Show these samples to your intended readers and others to get their reactions. If you get others’ reactions to sample pages, ask for first impressions, but also ask them to do a little reading to see if their opinions change. Sometimes what looks great at first glance can prove less appealing after you start reading it.

Using your fonts effectively

Once you have chosen your fonts, be sure to use them in a consistent way throughout the document. For example, don’t switch the font style or size for your headings from one page to the next. Graphic designers use “style sheets” to establish and maintain consistency in font use.

Make the print large enough for easy reading by your intended readers



Make the type size large enough for easy reading by your intended audience.

The best way to know whether your type is large enough is to get feedback from your intended readers. Older readers will need somewhat larger type than younger ones. You can use point size (such as “12 point font”) as a rough guide, but keep in mind that fonts in the same point size can vary a lot in actual physical size due to differences in style of the letters. These differences in lettering style can affect ease of reading as much or more than point size.

How large should you make the type in your materials? Obviously, the type in a document needs to be big enough for easy reading, or people may get annoyed or discouraged and give up. Keeping the type large

enough is especially crucial for older readers who are experiencing the normal age-related declines in vision (see Toolkit Part 9, *Things to know if your written material is for older readers*).

Problems with relying on point size as a standard

How big is big enough for type size? Sometimes, organizations set a minimum standard for point size of type to make sure that the type in materials is not too small. If you use specific point size as a guide for size of type (such as 12 point font), here are two important things to keep in mind:

- **Point size is only a rough guide to the actual physical size of the type, because fonts in the same point size can vary a lot in actual size due to differences in their style.** The example below shows the same text in the *same point size* (12 point) for three different fonts. All of these text samples would meet a standard for 12 point type. But notice how they differ in actual physical size.

This example shows three highly readable serif fonts, all in 12 point type. Notice how the **actual size differs, even though point size is the same:**

This sentence is shown in 12 point type.	Bookman Old Style
This sentence is shown in 12 point type.	Charter
This sentence is shown in 12 point type.	Times New Roman

- **Point size is important, but it captures only one part of what makes type easy for people to read.** As shown in the preceding section, since typographical features differ greatly from one font to the next, the particular fonts you choose have great impact on ease of reading. And, as shown in the rest of the guidelines in this chapter, so does the way you use them. For example, factors such as line length and line spacing can have a big impact on ease of reading.

As with so many other topics covered in this book, feedback from your readers is the ultimate test. So instead of a standard based on point size, Guideline 6.4 shown above offers this advice for determining an appropriate size of type:

Instead of specifying a point size, use this pragmatic rule:

Make the type large enough for easy reading by your intended audience

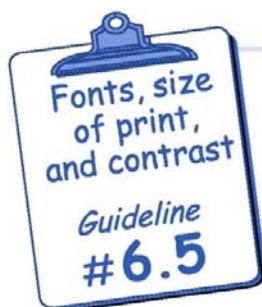
Here are some tips:

- **Use point size as a rough guide, but stay flexible.** As you develop your materials, be attentive to size of print and its impact on ease of reading, making adjustments if needed. You don’t want to make the type too small, but you also need to be careful not to make it too large, since oversize type is actually harder to read if you don’t have vision limitations that require large print.
- **To find an appropriate size of type, it helps to use a mockup as a tool.** For a discussion about the merits of using mockups, see Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*. Rely on feedback from testing draft materials with members of your audience as the measure of success.
- **If you are producing print materials for an older audience, you will need to make the type just a bit larger.** This need for slightly larger print applies to all materials for people with Medicare. More generally, any audience with people 40 and older will appreciate materials with type that is slightly larger than it needs to be for a younger audience. By “slightly larger,” we mean type that is from ½ to 1 ½ points larger, depending on the font and your audience. For example, if a point size of 12 works well for a younger audience, you may want to make it 13 for an older audience. The goal is to compensate for the normal age-related decline in vision, not to create a “large print” document. Other guidelines later in this chapter cover additional ways to make whatever size font you choose easier for older eyes to read, such as by adding a little extra space between the lines.
- **If you are producing written materials for people with vision loss that is more extensive than the normal age-related decline in vision, you will need to use a significantly larger type size.** Just above, we recommended enlarging type size *slightly* for any audience of older readers. But a slight enlargement of type size will not meet the needs of readers with significant vision loss. Depending on the font, they may need a point size as large as 16 or 18 points. If the material is intended for an audience of people with vision loss, then producing one version in oversize type will work well. But if your audience includes people with normal vision as well people with significant vision loss, it may work better to produce two versions of the material.

- **When you need to develop alternate formats, consult with your intended readers to learn about their circumstances and preferences.** There are many options to consider. For example:
 - **Enlarge (or reduce) it on a photocopier.** If your main version of the material is in regular size print, consider producing a large print version by enlarging the document on a photocopier that can make oversize copies. Alternatively, if your main version is in very large print, you could reduce it on the photocopier, making a regular-size version that’s easier for people to read if they don’t have vision loss. Using the photocopier to create the alternate version is quick and easy, and it preserves all formatting and visual elements. It can also be cost effective, especially if you need only a limited number of copies.
 - **Print the text in extra-large type.** Another option is to put the text portion of the document into a word processing file, increase the size of the font (16 to 18 points), and print it out. This method sacrifices the formatting but works well for some documents.
 - **Other options.** There are other ways to accommodate people with vision loss, including braille and computer-assisted devices (when this specialized equipment is readily available).



Avoid using “all caps”



For all of your text, including titles and headings, use upper and lower case letters in combination -- nothing written in “all caps.”

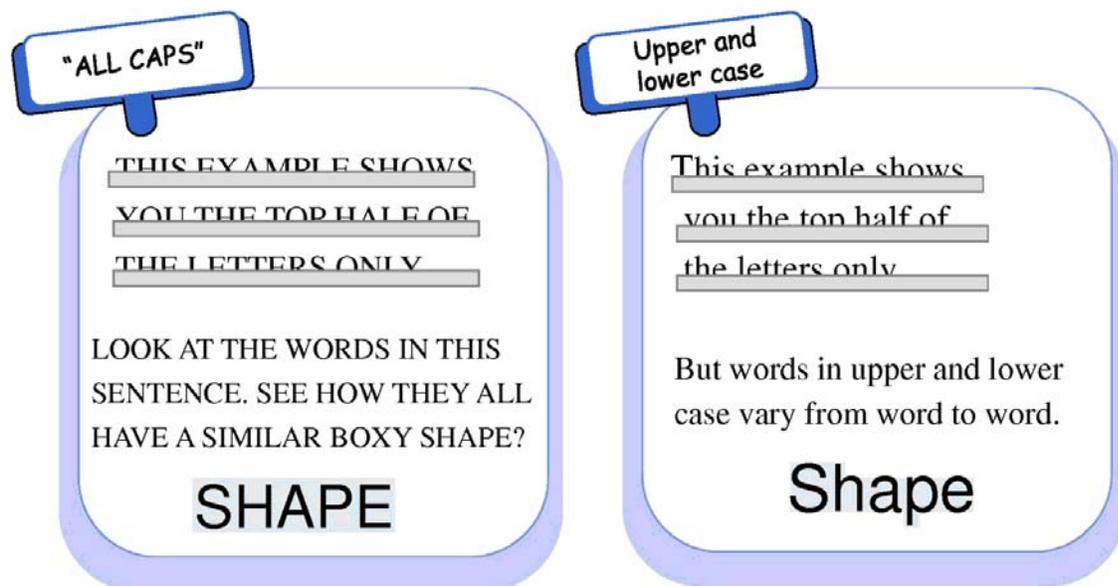
Text in all capital letters is hard to read, so use capital letters only at the beginning of sentences and other places where they are required. For ease of reading, try capitalizing only the first word in titles and headings (rather than capitalizing all of the important words).

Sometimes materials use all capital letters (“all caps”) on a title or on a whole block of text, usually as a way to give it special emphasis. Using capital letters for emphasis is a habit that carries over from the typewriter days. Typewriters have only two options for emphasizing particular words or sentences: you can type them in all caps or you can underline them. Neither of these is an attractive option, because both make text harder to read. Moreover, the meaning of all caps has acquired some new connotations in the computer age: if you use all caps in an online discussion, it’s considered the equivalent of shouting.

Readers have to slow down to read text in all caps

For ease of reading, Guideline 6.5 urges you to avoid all caps text altogether:

- **We read in phrases, not letter by letter, so variation in the shape of the words leads to faster recognition.** Lower-case letters are easier to read than upper case letters because they have much more variation in shape (Wheildon, 2005).
- **When you put text into all caps, you force your readers to pay more attention than usual to the forms of the individual letters,** because it’s harder to distinguish among the letter shapes of capitals. As shown below, capital letters are all relatively boxy, and words in all caps have a similar shape. As a result, when you are reading text in all caps, you have to slow down a bit to tell one capital letter from another. This is true even for short blocks of text.



And just to emphasize this point further, here’s an all-caps version of the same paragraph you just read. Which is easier and more appealing to read?

- **WHEN YOU PUT TEXT INTO ALL CAPS, YOU FORCE YOUR READERS TO PAY MORE ATTENTION THAN USUAL TO THE FORMS OF THE INDIVIDUAL LETTERS, BECAUSE IT’S HARDER TO DISTINGUISH AMONG THE LETTER SHAPES OF CAPITALS. AS SHOWN BELOW, CAPITAL LETTERS ARE ALL RELATIVELY BOXY, AND WORDS IN ALL CAPS HAVE A SIMILAR SHAPE. AS A RESULT, WHEN YOU ARE READING TEXT IN ALL CAPS, YOU HAVE TO SLOW DOWN A BIT TO TELL ONE CAPITAL LETTER FROM ANOTHER. THIS IS TRUE EVEN FOR SHORT BLOCKS OF TEXT.**

So why make your readers work harder? There’s no need to use all caps text in your materials, so just avoid it altogether. As shown in the next Guideline (6.6), the switch from typewriters to word processing has given all of us much better ways to emphasize text, such as using boldface or italics.

Try using “sentence case” for your titles and headings

You can make your titles and headings easier to read by capitalizing *the first word only* (plus any words that require capitalization for proper grammar). Compare the two versions below. Notice how jumping from lowercase to uppercase so often makes text on the left harder to read:

“Title case”

(capitalize all the important words)

Use Capital Letters Only When
They Are Needed Grammatically
(No Text in “All Caps”)

“Sentence case”

(capitalize only the first word)

Use capital letters only when
they are needed grammatically
(no text in “all caps”)

For text emphasis, use boldface or italics (with restraint)



To emphasize words and short phrases that are part of your regular text, use italics or boldface type.

Do not use underlining or put the text into all capital letters, because these make text hard to read. Be restrained in using italics, boldface, and other devices such as contrast in size or color accents on text. If you use these devices too often, they lose impact. If you use them on longer blocks of text, they make it hard to read.

Using boldface or italics to highlight certain text draws attention and makes it easier for people to understand and use your materials. By making the key words and main points pop out from the rest of the text, you show your readers what’s most important and help them skim to find information of personal interest.

For greatest impact, be selective about which words and phrases you emphasize, and choose the most effective ways to do it. Below are some tips for ways to emphasize words or phrases that are part of your regular text. (For ways to emphasize larger blocks of text, see Guideline 7.4 in Toolkit Part 5, Chapter 4, *Guidelines for headings, bulleted lists, and emphasizing blocks of text.*)

- **In general, use boldface or italics to emphasize key words or short phrases.** Either of these works well for emphasizing a brief portion of the regular text, as long as you have chosen a font that remains highly readable when you use the bold or italic version (see the discussion of Guidelines 6.1, 6.2, and 6.3 earlier in this chapter).
- **Italics can work well as a substitute for setting text in quotation marks.** Some fonts have an italic version that is readable enough to use for passages that are a little longer, such as a quote with several sentences.
- **Be sparing in your use of bolding and italics, or you will diminish the effect.** When you use boldface and italics in a selective and limited way, you send a strong signal to your reader about what is most important. Overdoing the emphasis weakens this signal. For example, if you put a

full paragraph in boldface, rather than just a key phrase or sentence, you weaken the signal about what is most important. You also make the whole paragraph harder to read. For example, here’s this same paragraph again in boldface:

Be sparing in your use of bolding and italics, or you will diminish the effect. When you use boldface and italics in a selective and limited way, you send a strong signal to your reader about what is most important. Overdoing the emphasis weakens this signal. For example, if you put a full paragraph in boldface, rather than just a key phrase or sentence, you weaken the signal about what is most important. You also make the whole paragraph harder to read.

- **Avoid using bolding and italics in combination (except for a word or two).** Using both methods of emphasis at the same time can make text significantly harder to read. If you need to emphasize one word in a sentence that is bolded, then italicizing that word will work. Similarly, you could use boldface to emphasize a word or two in a phrase that is in italics. But don’t set entire sentences or longer blocks of text in bold italics. This example shows why:

Avoid using bolding and italics in combination (except for a word or two). Using both methods of emphasis at the same time can make text significantly harder to read. If you need to emphasize one word in a sentence that is bolded, then italicizing that word will work. Similarly, you could use boldface to emphasize a word or two in a phrase that is in italics. But don’t set entire sentences or longer blocks of text in bold italics.

- **Avoid using underlining and all-caps text.** The previous section showed how putting text in all capital letters makes it harder for people to read. The underscore option that you can use to underline a word makes words harder to read. As you can see from the example below, underlining adds clutter and cuts through parts of letters that descend below, such as the letters *p*, *j*, and *y*. Graphic designers are taught that underlining words for emphasis is unprofessional.

Avoid using underlining and all-caps text. The previous section showed how putting text in all capital letters makes it harder for people to read. The underscore option that you can use to underline a word makes words harder to read. As you can see from the example below, underlining adds clutter and cuts through parts of letters that descend below, such as the letters p, j, and y. Graphic designers are taught that underlining words for emphasis is unprofessional.

Use very dark colored text on a very light non-glossy background



For ease of reading, use dark colored text on a very light non-glossy background.

Make sure there is enough contrast between the printed text and the paper to be able to read everything easily. Black text on a white or cream-colored non-glossy background is best. Don't use light-colored text on a dark background (this is called “reversed out” text), because it is too hard to read.

The ink and type of paper you choose for printed materials can have great impact on ease of reading. Research shows that highly contrasting colors for paper and ink, together with non-gloss paper, improve reader's attention and comprehension (Wheildon, 2005).

Use non-glossy paper to avoid glare

Designers and printers refer to paper as *stock*, so they would call non-gloss paper *uncoated stock*. They use the term *matte* for *low gloss* paper, and *coated* for *higher gloss*. To learn more about choosing appropriate paper for your materials, and the cost implications of paper choices, see *Getting it Printed*:

How to Work with Printers & Graphic Imaging Services to Assure Quality, Stay on Schedule & Control Costs, 4th Edition (Kenly & Beach, 2004).

- **For ease of reading, coated stock is a poor choice.** When text is printed on coated stock, the glare from the slightly shiny surface of the paper makes it harder to read. Many magazines are printed on thin sheets of coated stock. You may have noticed how they can be hard to read; sometimes you have to keep tilting the page slightly to reduce the glare. Why add such an extra burden to materials that you want readers to use?
- **In special situations, there may be reason to use coated stock.** For example, suppose you are producing a booklet that will be used for repeated reference. For longer wear, you could print the cover (only) on coated stock, or have the printer add varnish to the cover. The glossy finish is protective in this case, and doesn't interfere much with reading ease because the amount of text on a cover is usually fairly limited. Although coated stock would work well in this situation, it's not really necessary: choosing a heavy weight uncoated stock would probably work just as well.

Contrast between text and paper

Maintaining a high degree of contrast between printed text and the paper is crucial for ease of reading, especially for older readers. Figure 5-3-b below gives an example.

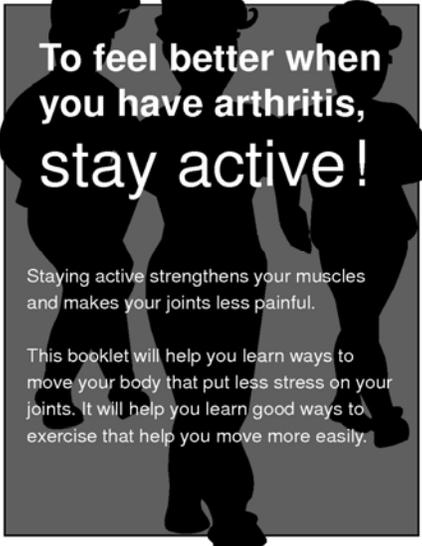
Figure

5-3-b. How contrast between text and background affects ease of reading.

Consider the different versions of a booklet cover shown below. In each version, the words are the same. There are more words than you would generally put on a cover; we added extra text to help make points about contrast between text and background.

Which of the six versions is easiest to read?

A



To feel better when you have arthritis, stay active!

Staying active strengthens your muscles and makes your joints less painful.

This booklet will help you learn ways to move your body that put less stress on your joints. It will help you learn good ways to exercise that help you move more easily.

B



To feel better when you have arthritis, stay active!

Staying active strengthens your muscles and makes your joints less painful.

This booklet will help you learn ways to move your body that put less stress on your joints. It will help you learn good ways to exercise that help you move more easily.

C



To feel better when you have arthritis, stay active!

Staying active strengthens your muscles and makes your joints less painful.

This booklet will help you learn ways to move your body that put less stress on your joints. It will help you learn good ways to exercise that help you move more easily.

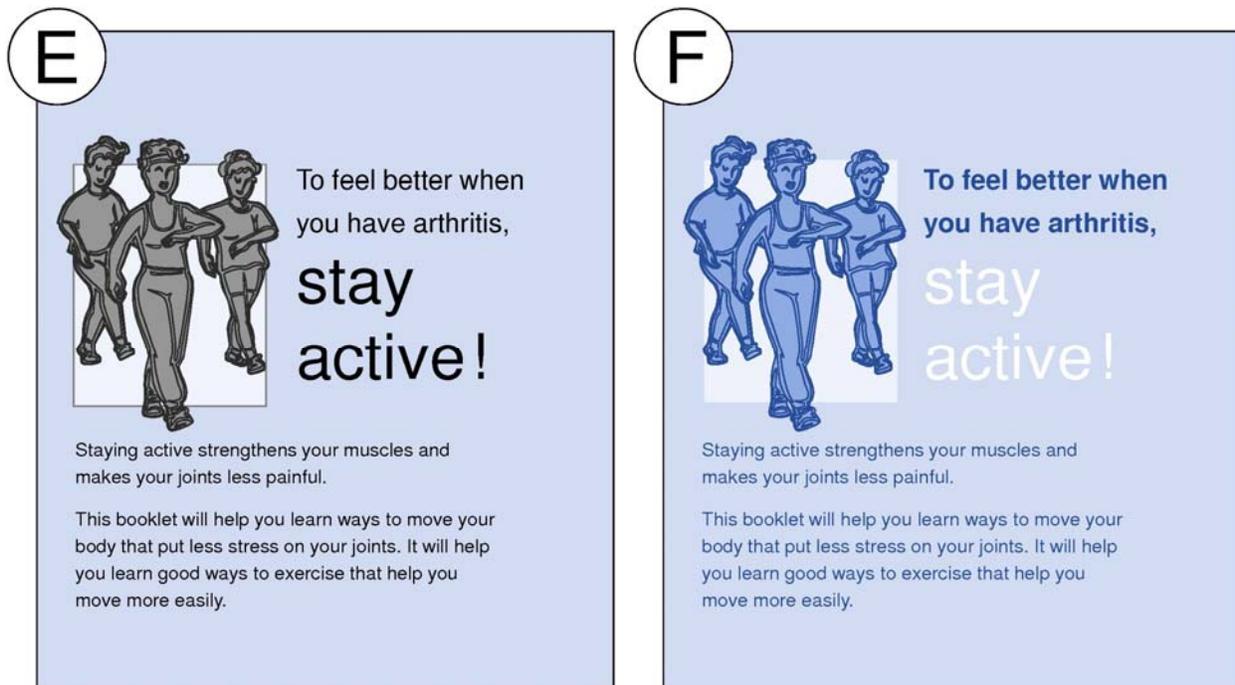
D



To feel better when you have arthritis, stay active!

Staying active strengthens your muscles and makes your joints less painful.

This booklet will help you learn ways to move your body that put less stress on your joints. It will help you learn good ways to exercise that help you move more easily.



Source: Created as an example for this Toolkit.

Black text on white paper is easiest to read

Did you choose version C as the easiest to read? Of all the versions, C has the strongest contrast between text and background. Contrast is crucial to ease of reading:

- **You can't go wrong with black text on white non-gloss paper; it's the best overall choice.** Black text on very light colored paper, such as pale cream or ivory colored paper, is okay, too.
- **For best contrast, keep the black ink at “full strength” (100% black) for regular text.** Sometimes, materials “screen back” the black ink used for text so that it prints in shades of dark gray instead (such as 80% black). This might be done for an aesthetic effect, or for variety, but it reduces ease of reading. It's best to keep text at 100% black. You can add visual interest by using shades of gray in your design elements instead.

Avoid using light text on a dark background

Guideline 6.7 shown above warns against using light-colored text on a dark colored background. Graphics designers and printers refer to light text on a dark background as “reversed out” text. As you can see in version A of Figure 5-3-b above, **reversed out text is generally quite hard to read.** It can work if you

use it for just a couple of words that are large and bold: the huge ultra- bold words “stay active” are the only readable parts of version A. Usually, it’s best to avoid reversed out text altogether.

Compare version F, where these same words are shown in white text against a blue background. Comparing the reversed out text for “stay active” on A and F shows the impact of different contrast between text and paper. The words show up better on A because it has white against black, the maximum in contrast. The words are harder to read when the background is changed to blue, which offers much less contrast with the white letters.

Any color of ink other than black reduces readability of the text

Compare versions C and D in Figure 5-3-b above. Notice how the blue text in D is harder to read, especially in the blocks of smaller text at the bottom of the page.

In general, be cautious about using colored ink for text:

- **Light colors such as yellow and orange and light shades of any color are unsuitable for text.**
- **Use darker colors for occasional text accents in titles or headings.** It can work well to use a dark-colored ink other than black for limited amounts of larger text, such as titles or headings.
- **Use black as the ink color for regular text.** Figure 5-3-b above gives an example: notice how it is easier to read the smaller text that is printed in black (version C) than the same text printed in blue (version D). Similarly, even when contrast is reduced by adding a blue background, it is easier to read the black text in version E than the blue text in version F.

Avoid colored backgrounds

Sometimes, people choose colored paper as the background for their written material. They may pick a bright color on purpose, to draw attention: “I’m making this flyer neon orange so they can’t miss it!” Unless the paper is extremely light (such as cream or ivory), using colored paper for your materials is not a good idea:

- **If you print your material on a brightly colored paper, people may notice it, but they are far less likely to read it.** The bright color that catches their eye becomes problematic as soon as they start reading, because the colored background greatly reduces the contrast between type and paper. It’s self-defeating to use neon colored paper, in particular; readers tend to find it harsh and may just give up.
- **Bright paper may signal “junk mail” to some readers.**

- **The reduced contrast may tempt you to use too much bolded text.** A large amount of bolded text makes the material less appealing and even harder to read.

As we note in discussing the next guideline, these same concerns about using colored paper apply if you print text on colored backgrounds. Whenever you print text on a colored background, you reduce the contrast and make it harder to read. As an example, compare versions C and D (both on white background) to versions E and F (both on blue background). Notice how much easier it is to read the text against the white background.

If you shouldn't use colored paper or colored backgrounds for text, what can you use instead to attract reader's attention?

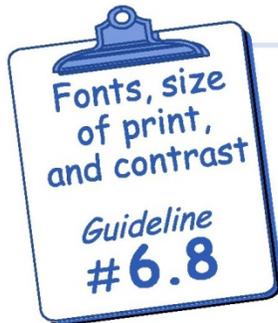
- If the materials are in black and white, add visual interest by using photos, illustrations, and other design elements in black and shades of gray. Silhouettes and ethnic patterns are other possibilities. If the materials have an accent color, or full color, see the suggestions in Toolkit Part 5, Chapter 5, *Guidelines for use of color*.

Consider the impact of font choice as well

Earlier in this chapter we discussed variations in the weight of fonts and showed examples of “font families.” When you use font variations, take into account their impact on ease of reading:

- **Be cautious about using light face fonts.** Light face fonts print significantly lighter than regular book weight, thereby reducing the contrast between printed text and paper. You may want to use light face fonts for special purposes, such as labels for areas to be filled in on a form, but don't use them for blocks of text.
- **Be cautious about using a “heavy” or “ultra” version of bold.** Often, these are much too dark for readability in written materials. They are typically used in applications that require very large print, such as in large display ads or on a billboard. Occasionally, you can use it to your advantage for certain purposes, such as using them in color to emphasize the numbers in a numbered list.
- **In general, you may find that a semi-bold font is more readable than regular bold,** especially for subheadings. When you are looking for a font with bolded versions that are easy to read, keep in mind that font families use different names for the degrees of bolding in their versions. You can't go by name alone: the “bold” or “medium” version in one font may be just as readable as the “demi-bold” version in another.

Do not print text sideways or on top of shaded backgrounds, photos, or patterns



For ease of reading, do not print text sideways, on patterned or shaded backgrounds, or on top of photos or other images.

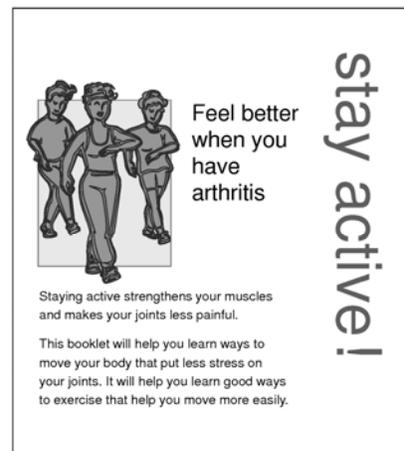
Printing a title or heading that runs vertically rather than horizontally puts a burden on readers to tilt their heads or twist the page in order to read it (and most won't). When you put words on top of an image or pattern, the words and the background compete for attention, and both lose. The words are harder to read because of reduced contrast and distraction in the background, and the impact of the image is undermined by the words on top of it. Even a plain shaded background makes words harder to read, because it reduces the contrast between the text and background.

Readers usually ignore text that's printed sideways

Occasionally, you may see text that is printed sideways in written materials. For example, this formatting is sometimes used to mark a new section or for the labels of a table or graph.

In the example to the right, we have taken version C from Figure 5-3-b above and made just one change: we printed the main part of the title sideways.

Whatever the purpose of this unconventional formatting, printing text sideways puts a burden on readers. To read sideways text comfortably, you either have to tilt your head or tilt the paper. Why do this to your readers? It's a barrier that's easy to avoid.



Shaded (“screened”) backgrounds make text harder to read

To be effective, your written materials need to attract and *hold* the attention of your intended readers. It’s not enough for people to notice the text -- you want them to linger long enough to *read* it. Putting anything other than a plain background behind the text reduces contrast and makes the text harder to read. This includes plain shaded backgrounds as well as photos or other images.

A note on terminology: what we call a *shaded background* is also called a *screen*. **Screen is the term that graphic designers and printers use to refer to an even-toned tint of a given color.** The degree of shading is identified as a percentage of the full strength (100%) color. For example, a 20% screen of black would be a light shade of gray. Graphic designers and printers have reference books that show the full range of screens for various colors of ink.

The examples in Figure 5-3-c below show how printing text on a shaded background makes the text harder to read. As shown in these examples, the degree of shading makes a difference, but so does the style and color of the font.

Figure

5-3-c. Printing text on a shaded background reduces contrast and makes it harder to read.

Black text, non-bolded serif font

How to sign up for Medicare

Black text, non-bolded sans serif font

How to sign up for Medicare

Black text, **boldface** serif font

How to sign up for Medicare

Black text, **boldface** sans serif font

How to sign up for Medicare

Blue text, non-bolded serif font

How to sign up for Medicare

Blue text, non-bolded sans serif font

How to sign up for Medicare



Source: Created as an example for this Toolkit.

As you can see from the examples in Figure 5-3-c above:

- The darker the background, the harder it is to read the text.
- Against a shaded background, the serif font is harder to read than the sans serif font, the non-bolded fonts are harder to read than the boldface fonts, and the blue text is harder to read than the black text.

To make your materials easy for people to understand and use, avoid printing text on a shaded background. If you do use a shaded background, keep the background itself as light as possible. A very pale yellow background seems to offer the best contrast. Use the shaded background for very limited amounts of text. But before you use a shaded background to highlight important text, consider other options that may be more effective. In the next chapter, Figure 5-4-d gives some suggestions (*Replacing the shaded background and boxed-in text: Ideas for better ways of emphasizing important blocks of text*).

Printing text on photos or patterned backgrounds makes it hard to read

As it says in guideline 6.8 shown earlier in this chapter, when you put words on top of an image or pattern, the words and the background compete for attention, and both lose. The photo to the right is an example.



The words are hard to read because of reduced contrast and distraction in the background, and the impact of the image (quite attractive in color) is undermined by the words on top of it.

Sometimes graphic designers add a semi-opaque screen between the text and the photo, to increase the contrast and make the words easier to read. As shown to the right, this helps a lot with contrast, though the screen itself is a new distraction. Although you can read the text more easily, the text and image are still fighting for attention.



Another way to increase the contrast is to lighten the entire image, so that the text stands out more clearly. As shown to the right, the contrast is improved, but the image has lost impact (this loss is even more apparent for the image shown in color).



The photo to the right shows the simplest and most effective solution: print the text on a plain light colored background. In the example shown here, we curved the text slightly to echo the curve of the lettuce and add visual interest.



Separating the text and image provides the greatest contrast for both. This separation makes the material easier for less-skilled readers: there are no longer two things fighting for attention in the same spot, so they can concentrate more readily on the meaning of the words.

For other examples of how printing text on patterned backgrounds interferes with ease of reading, see versions A and B of the booklet in Figure 5-3-b earlier in this chapter.



Adjust the spacing between lines



For ease of reading and a cleaner look, adjust the line spacing in your material.

To make blocks of text easier to read, add a little extra space between the lines. To help readers connect a heading with the text that follows it, leave a little less line space after the heading than you leave before it. To make bullet points stand out more clearly, put a little extra space between them. Keep these line spacing adjustments consistent throughout the document.

Together with choice of font and size of print, line spacing has a big impact on ease of reading. To help your readers understand and use the material, here are two types of line spacing adjustments to make:

- **Add a little extra space between the lines of the regular text.**

- **Throughout the material, use spacing adjustments to emphasize connections** and help readers understand what parts of the material belong together.

The rest of this section gives you tips and examples on how to make both types of line space adjustments.

Adding extra line space to the regular text

If you use the default setting on word processing, the lines of text you type will be single spaced. To see the impact of line spacing, try this experiment with your own test page of text. First, print it out single spaced. Then, add just a little extra space between the lines. You can do this by changing line spacing to a multiple of 1.1 on the line spacing or paragraph menu. Now print the page again and compare. Don't you agree that adding a little more space between the lines makes the page easier to read?

Graphic designers routinely add extra line space to the regular text to make it more readable. They call the space between lines of text “leading” (pronounced as “ledd-ing”), and refer to degrees of leading as being “looser” and “tighter.” (If you want details on this topic, including how line space is measured by designers, see the books by Felici (2003) and Williams (2006) listed at the end of this chapter.)

You want the line space (leading) in your regular text to be loose enough but not too loose. You want to add just enough extra line space to open up the text a bit, but not so much that it draws attention to the line spacing. How much extra space to add depends on the font and size of print. Here are some examples:

This line space is too tight. It is set to be a little less than single spacing. This text is crowded and hard to read. Notice how it is hard to find which line to read next when you return to the left margin.



You want the line space (leading) in your regular text to be loose enough but not too loose. You want to add just enough extra line space to open up the text a bit, but not so much that it draws attention to the line spacing. How much extra space to add depends on the font and size of print.

This line space is single spaced. It's a little tight for easy reading.



You want the line space (leading) in your regular text to be loose enough but not too loose. You want to add just enough extra line space to open up the text a bit, but not so much that it draws attention to the line spacing. How much extra space to add depends on the font and size of print.

This line spacing is about right.
It’s just a little more than single spacing.



You want the line space (leading) in your regular text to be loose enough but not too loose. You want to add just enough extra line space to open up the text a bit, but not so much that it draws attention to the line spacing. How much extra space to add depends on the font and size of print.

This line spacing is too loose.
Putting too much extra space between the lines makes the material harder to read and weakens the connection of text within a paragraph.



You want the line space (leading) in your regular text to be loose enough but not too loose. You want to add just enough extra line space to open up the text a bit, but not so much that it draws attention to the line spacing. How much extra space to add depends on the font and size of print.

Using line space adjustments to emphasize connections in the material

Below, the same text has been formatted in two different ways:

Differences in line spacing.

- In example A, there is equal space (and quite a lot of space) between each line.
- **In B, the line space has been adjusted to group together the information about each doctor who is listed.** There is a small amount of extra space after the doctor’s name, to help set it off, but the main spaces you see are those between the entries.

These other differences also help make B easier to read and use:

Differences in justification.

- The centered text in A is hard to skim.
- Switching from centered text to left-justified text in B makes the material much easier to skim (for more on left-justification, see the discussion of guideline 6.10 below).

Differences in contrast.

- In version A, you need to read the list carefully to pick out a doctor’s name.
- Notice how easy it is to skim version B. The bold text for the doctor’s name makes all the difference.



ELIZABETH BAKER, D.O.
Southside Medical Clinic
15042 Greenway Road
Springfield, MO 54906

RAFAEL ESPINOZA, M.D.
MedicFirst Care Clinic
1998 Fairview Way
Springfield, MO 54908

CHANG LEE, M.D.
Preferred Care Providers
2322 Hwy 9 North
Springfield, MO 54909

PAUL STEINBERG, M.D.
Specialty Care Center
52334 Hickory Wood Drive
Springfield, MO 54909

MARY STUART, M.D.
Preferred Care Providers
2322 Hwy 9 North
Springfield, MO 54909

SABAT TAHIR, M.D.
CareOne Health Clinic
4067 Center Blvd.
Springfield, MO 54907



Elizabeth Baker, D.O.
Southside Medical Clinic
15042 Greenway Road
Springfield, MO 54906

Rafael Espinoza, M.D.
MedicFirst Care Clinic
1998 Fairview Way
Springfield, MO 54908

Chang Lee, M.D.
Preferred Care Providers
2322 Hwy 9 North
Springfield, MO 54909

Paul Steinberg, M.D.
Specialty Care Center
52334 Hickory Wood Drive
Springfield, MO 54909

Mary Stuart, M.D.
Preferred Care Providers
2322 Hwy 9 North
Springfield, MO 54909

Sabat Tahir, M.D.
CareOne Health Clinic
4067 Center Blvd.
Springfield, MO 54907

Source: Created as an example for this Toolkit; all names and addresses are fictional.

- The next chapter has an example of guidelines for formatting bulleted points. It shows how putting a little extra space between the bulleted points makes each one stand out more clearly (Figure 5-4-c).

Left justify the text and headings



For ease of reading, use left justification throughout the material, for both the text and the headings.

Left-justify the regular text, leaving the right margin uneven (“ragged right”). Don’t use “full justification” because forcing even margins on both sides of a block of text inserts uneven spaces between the words, making them harder to read. Don’t center blocks of text, because centering makes it harder to read. To make headings prominent and easy to skim, left justify them (rather than centering them).

Left-justify the regular text, leaving the right margin uneven

There are two usual choices for justification of regular text: left justification and full justification:

- **Left-justification makes text easier to read.** This book advises you to use left justification because it maintains even spacing between words, making the text easier to read. Left justification leaves the right margin uneven (“ragged right”), adding a little visual interest to the page. This book uses left justification for its regular text.
- **Full justification makes text harder to read.** Full justification forces the text into straight margins on both the left and right by inserting uneven amounts of space between the words. If the lines of text are long and the print is small, this uneven spacing is not noticeable. But in materials with lines of text that are five inches or so, with print large enough for easy reading, full justification can make text harder to read. If the text is in narrower columns, such as in a tri-fold brochure, using full justification can produce large gaps between words. As you can see in the example below, large gaps between words make the material harder to read.

Full justification:

But in materials with lines of text that are five inches or so, with print large enough for easy reading, full justification can make text harder to read. If the text is in narrower columns, such as in a tri-fold brochure, using full justification can produce large gaps between words.

Left justification:

But in materials with lines of text that are five inches or so, with print large enough for easy reading, full justification can make text harder to read. If the text is in narrower columns, such as in a tri-fold brochure, using full justification can produce large gaps between words.

Left-justify headings

There are three choices for justification of titles and headings: left, right, and centered. This Toolkit advises using left justification for headings (and for titles, too). There are three reasons:

- **Left-justified headings are easier to read, especially when they continue to more than one line.** When text is left justified, it’s easy to pick out the beginning of the next line of text, because your eyes return to the left margin by force of habit. In contrast, when text is centered or right justified, the next line of text can start in a different place, so your eyes have to hunt for it. It can get tedious to start at a different place for each new line of text. If you center or right justify the headings, you create a barrier for readers because you make them work harder.
- **Left-justified headings are more prominent, so readers are less likely to miss them.** Left justified headings are consistent with “reading gravity”, which means that they fit with the reader’s natural and habitual progression through a printed page. Testing materials with readers show that they can sometimes overlook a heading that is centered, because their eyes are oriented toward the left margin. (For more on reading gravity, see Guideline 5.3 in Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*.)
- **Left-justified headings reinforce strong alignments, making the page layout look clean and orderly.** When headings, blocks of text, lists, illustrations, and other elements are lined up in a clear, strong, consistent way, the material looks “clean” and orderly and is easy to skim. (See the discussion of page grids under Guideline 5.4 in Toolkit Part 5, Chapter 2, *Guidelines for overall design and page layout*.)

Make lines an appropriate length for easy reading



Keep your lines of text to an appropriate length for easy reading - neither too short nor too long.

For many materials, a line length of about five inches long works well. If the paper is wide, set the text in columns to maintain a readable line length. Avoid “wrapping” your text in awkward ways that make it hard to read.

Line length affects the ease of reading

Sometimes, the problem is that lines of text are much *too long*. This happens, for example, when a document uses landscape orientation and the paper is wide. Other times, the problem is that lines of text are *too short*:

- **Some written materials have very narrow columns of text.** For example, pull-out quotes and short blocks of text in the outer margin of a page sometimes have very short line lengths. There may be as few as two or three words on a line in these blocks of text. Sometimes, columns of text are squished into a small place to accommodate a photo or other image.
- **Printing text with a short line length is a big barrier to readers.** When lines of text are too short in a document, it’s harder to read. Your eyes take in smaller bundles of words, and you have to keep going back and forth, back and forth, back and forth, just to read a sentence or two.

Here are some tips for length of lines:

- **Avoid narrow columns and lines that are longer than five inches or so.** The line length you should use depends in part on the size and shape of the material and the size of the print.
 - For regular text in materials written for less-skilled readers, it often works well to create lines of text that are, on average, about five or five and a half inches long.

- It generally works well if lines are no less than about 25 characters wide, and no more than about 50 to 60 characters wide. Use wide margins to take up the rest of the space on the page; it gives the reader a place to pause and rest.
- If you are formatting a *short* passage of text, such as a caption for a photo, try for a minimum length of at least two inches.
- **Use columns if the paper is wide.** Earlier in this chapter, we noted that it’s generally better to use a portrait orientation to your paper (taller than it is wide) rather than a landscape orientation. Unless your paper size is small, if you do use a landscape orientation, you will likely need two columns of text to keep the line length easy to read.
- **Avoid wrapping text in awkward ways.** A slight contouring of the right margin of a block of text that makes it follow the shape of a photo or other graphic element can add a nice effect. Just do it carefully, to preserve ease of reading.



Watch where lines of text break



For ease of reading, watch where the lines break (avoid hyphenation; split long headings carefully to reflect natural phrasing).

Do not hyphenate words at the end of a line, because splitting a word over two lines makes it harder to read, especially for less-skilled readers. When headings are long, split them over two lines in a way that reflects natural phrasing and avoids the awkwardness of leaving a single word by itself on the second line.

Split long titles and headings carefully

When titles and headings need to be split over two lines, pay attention to where you break the lines:

- **Break the lines at a place that keeps words together that belong together as a unit.** Maintaining natural phrasing for each line of the title or heading makes it easier to understand. Think of it as breaking the title or heading into separate “sound bites” for the reader.
- **Break the lines at a place that creates good visual balance.** Don’t leave one word all by itself on the second line. It looks awkward and it’s harder to read.
- **If a title or heading fills up nearly all of a line, break it into two lines.** Breaking a long title or heading makes it easier to read and easier to skim. When a title or heading stretches across a whole line, it makes the material harder to skim.

Heading
A

How to get the health care your family needs from a managed care organization

Looks awkward: only one word on the second line (this can happen with default formatting)

Breaks up natural phrasing: It splits up words that belong together (*managed care* and *organization.*)

Heading
B

How to get the health care your family needs from a managed care organization

Looks awkward: the long line in the middle looks strange

Breaks up natural phrasing: It splits up words that belong together (*health* and *care*, *managed* and *care organization.*)

Heading
C

How to get the health care your family needs
from a managed care organization

Looks fine: the two lines have good balance

Reflects natural phrasing: The first line breaks at an appropriate place – each line of the heading has natural phrasing

Avoid hyphenating words at the end of a line

In written materials for less-skilled readers, it’s best to avoid hyphenating words at the end of a line because hyphenation makes reading and comprehension more difficult. Splitting words over two lines with a hyphen forces the reader to make a visual and mental link between the two parts of the word that have been split. This puts an unnecessary burden on your readers. Don’t use hyphens to carry over the words in headings or titles, either.



End notes



You can use font websites to take a closer look at font choices. These websites have great features that let you try out samples of your own text using different fonts and let you do key-word searches for fonts with particular attributes (such as “friendly” or “readable”). These sites also have newsletters that are interesting and informative. Often they include examples of how the fonts have been used in different applications.

Try these: <http://www.myfonts.com> and <http://www.fonts.com>.

References cited in this chapter

All of the references listed below are also excellent resources for learning more about the topics covered in this chapter. Some are described in Figure 5-1-a in Toolkit Part 5, Chapter 1, *Tips for learning about design and working with design professionals*.

Felici, James

- 2003 *The complete manual of typography: A guide to setting perfect type*. Berkeley, CA: Peachpit Press.

Kenly, Eric and Mark Beach

- 2004 *Getting it printed: How to work with printers & graphic imaging services to assure quality, stay on schedule & control costs*. Fourth edition. Revised by Eric Kenly. Cincinnati, OH: How Design Books.

McWade, John

- 2005 *Before & after graphics for business*. Berkeley, CA: Peachpit Press.

Spiekermann, Erik and E.M. Ginger

- 2003 *Stop stealing sheep & find out how type works*. Second edition. Berkeley, Ca: Adobe Press.

Wheildon, Colin

- 2005 *Type & layout: Are you communicating or just making pretty shapes*. With additional material by Geoffrey Heard. Victoria, Victoria, Australia: The Worsley Press. (Note: This is the second edition of this book. The first edition was published in 1996 and titled *Type & layout: How typography and design can get your message across—or get in the way*.)

Williams, Robin

- 2006 *The non-designer's type book: Insights and techniques for creating professional-level type*. Second Edition. Berkeley, CA: Peachpit Press.

To view, save, or print all or parts of this Toolkit from your personal computer, visit <http://www.cms.gov> and select Outreach & Education.

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