

Introduction

The Research-Based Web Design & Usability Guidelines (*Guidelines*) were developed by the U.S. Department of Health and Human Services (HHS), in partnership with the U.S. General Services Administration. This new edition of the *Guidelines* updates the original set of 187 guidelines, and adds 22 new ones. Many of the guidelines were edited, and numerous new references have been added. There are now 209 guidelines.

The *Guidelines* were developed to assist those involved in the creation of Web sites to base their decisions on the most current and best available evidence. The *Guidelines* are particularly relevant to the design of information-oriented sites, but can be applied across the wide spectrum of Web sites.

Who Are the *Guidelines* for?

The primary audiences for the *Guidelines* are Web site managers, designers, and others involved in the creation or maintenance of Web sites. A secondary audience is researchers who investigate Web design issues. This resource will help researchers determine what research has been conducted, and where little or no research exists.

Why Were the *Guidelines* Created?

HHS created this set of guidelines for several reasons:

- 1) To create better and more usable health and human service Web sites. HHS is mandated to provide clear information in an efficient and effective manner to patients, health professionals, researchers, and the public. Translating the latest Web design research into a practical, easy-to-use format is essential to the effective design of HHS' numerous Web sites. The approach taken to produce the *Guidelines* is consistent with HHS' overall health information dissemination model that involves rapidly collecting, organizing, and distributing information in a usable format to those who need it.
- 2) To provide quantified, peer-reviewed Web site design guidelines. This resource does not exist anywhere else. Most Web design guidelines are lacking key information needed to be effective. For example, many guideline sets:
 - Are based on the personal opinions of a few experts;
 - Do not provide references to support them;
 - Do not provide any indication as to whether a particular guideline represents a consensus of researchers, or if it has been derived from a one-time, non-replicated study; and
 - Do not give any information about the relative importance of individual guidelines.

By addressing these issues, the *Guidelines* will help enable organizations to make more effective design decisions. Each guideline in this book shows a rating of its 'Relative Importance' to the success of a Web site, and a rating of the 'Strength of Evidence' supporting the guideline. Professional Web designers, usability specialists, and academic researchers contributed to these ratings. The ratings allow the user to quickly ascertain which guidelines have the greatest impact on the success of a Web site, and to determine the nature and quality of the supporting evidence. The 'Relative Importance' and 'Strength of Evidence' ratings are unique to this set of guidelines.

- 3) To stimulate research into areas that will have the greatest influence on the creation of usable Web sites. There are numerous Web design questions for which a research-based answer cannot be given. While there are typically more than 1,000 papers published each year related to Web design and usability, much of this research is not based on the most important (or most common) questions being asked by Web designers. By providing an extensive list of sources and 'Strength of Evidence' ratings in the *Guidelines*, HHS hopes to highlight issues for which the research is conclusive and attract researchers' attention to the issues most in need of answers.

How to Contribute Additional References?

The authors of the *Guidelines* attempted to locate as many references and source documents as possible. However, some important *Guidelines* may not have been created, and some applicable references may have been missed. Readers who are aware of an original reference pertaining to an existing guideline, or who have a suggestion for a new research-based guideline, should submit an email to: info@usability.gov.

Please include the following information in your email:

- Reference information—author, title, publication date, source, etc. (Remember, books are usually not original references.);
- The guideline to which the reference applies;
- If suggesting a new guideline, a draft of the guideline; and
- A copy of the source (or a link to it), if available.

This information will help the authors maintain the *Guidelines* as a current and accurate resource.

Is There an Online Version of these *Guidelines*?

HHS has created an online version that can be found at www.usability.gov. The online version provides users with the opportunity to search for specific topics.