

IHS Standards and Guidelines For Internet and Intranet Services

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Goal

The purpose of this document is to provide standards and guidelines in support of Indian Health Service (IHS) web sites so the process of World Wide Web (WWW) information discovery and acquisition is as quick and simple as possible for most users.

Introduction

The World Wide Web is a powerful electronic communication tool that allows Indian Health Service and its employees to quickly and efficiently interact, acquire, and disseminate information with others and the public on a local, regional, and worldwide basis at a relatively low cost.

The Indian Health Service Internet web site, <http://www.ihs.gov>, has been in existence since October 1994 and provides a mechanism to make public information easily accessible. The IHS Intranet, <http://home.ihs.gov>, was established in 1996 and provides a device to keep IHS Components and staff informed of policies, news, and activities of interest to only the internal audience.

The Indian Health Service is an Operating Division (OPDIV) of the Department of Health and Human Services (HHS). Therefore, the IHS Standards and Guidelines **only** supplement those published by HHS: *World Wide Web Applications and the Internet—Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html>. Refer to them for guidance on matters not addressed in this document. *The World Wide Web Consortium (W3C)*, <http://www.w3.org/>, should be referenced for additional information and guidance on topics not included in either the IHS or HHS documents.

Indian Health Service Standards and Guidelines were created to promote consistency in the development and maintenance of Internet and Intranet web sites and pages. The standards and guidelines within this document are dynamic in nature. As the World Wide Web, the Internet, technology, and IHS use of this communication medium grows, these standards and guidelines will expand and evolve. Any suggestions for modification of this document, questions about its contents, requirements for assistance in developing a web page, or concerns about ensuring that existing pages comply with these principles should be addressed to the webmaster, webmaster@ihs.gov, with reference made to “Standards and Guidelines.”

This document has been prepared by the IHS Standards and Guidelines Committee, Joye Howe Chairperson, and approved by Leonard Thurman, IHS Webmaster, and Dr. Richard Church, IHS Chief Information Officer (CIO). To avoid confusion, the web version of this document should be considered the authoritative and most current version. This document is available on the IHS Internet site, <http://www.ihs.gov/GeneralWeb/HelpCenter/webmaster.asp>.

Purpose of These Standards and Guidelines

The World Wide Web (WWW) is built on standards that enable compatibility and interoperability between applications and platforms. Since the potential exists for the creation of numerous Internet and Intranet web sites and servers within IHS, it is important to establish a consistent framework for web development and maintenance throughout IHS to help users find, retrieve, and use the information they need.

If all IHS-sponsored WWW homepages adhere to a reasonable set of standards and guidelines for the organization and presentation of information, users will be able to enter the system at any point and tap not only the specific homepage they first contact, but also the full resources of the entire interlinked system of IHS materials.

This document is intended to provide standards and guidelines to ensure high quality and consistent content, organization, and presentation of information on IHS servers and web pages. At the same time, this document tries to avoid placing unnecessary constraints on the design and operation of individual IHS components; every service faces special circumstances pertaining to its particular mission, goals, content customers, technical capabilities, and organizational structure.

Level of Compliance

All web developers, contractors, government employees, and other authorized users whose web sites or pages reside on any of the Headquarters IHS Internet or Intranet server(s) **at a minimum** must comply with the elements listed in the Standards section of this document. This also applies to IHS web contractors residing on or offsite developing web pages for IHS owned or leased equipment.

Guidelines are good practices that have worked well elsewhere. They are proven and have produced successful results. IHS web developers are encouraged to incorporate these guidelines into their web projects.

Facilities or areas that maintain their own web server(s) and pages are strongly encouraged to follow the Standards and Guidelines presented in this document.

Standards and Guidelines

Accessibility

Standards

1. All web pages should meet the requirements of the Americans with Disabilities Act (ADA) of 1990. Reference <http://www.w3.org/WAI/> for resources on Web Accessibility.
2. Pages should provide graphic and table information in text format for users with disabilities.
3. For the visually impaired: Mandatory "alt" tags for graphics should be provided.
4. For the hearing impaired: Provide text transcriptions or descriptions for audio clips.
5. Vision color deficiency/color blindness: Avoid use of the colors red, green, gray, or purple.
6. Epilepsy and seizures: Avoid the use of blinking lights.

Guidelines

1. Every attempt should be made to accommodate various browser software packages and low-bandwidth access.
2. Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Accuracy/Timeliness/Currency

Standards

None

Guidelines

Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Acronym Use

Standards

1. Acronyms should be defined when first used and be consistent throughout the document or document collection.
2. Organizational acronyms should be in accordance with the acronyms appearing in the United States Government Manual.

Guidelines

Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Audio Clips

Standards

If audio clips are used, provide text transcriptions or descriptions.

Guidelines

None

Browsers

In general, there is variation among browsers in their capabilities and interpretation of HTML tags. Web pages produced by the IHS should be usable by all major browsers to ensure equitable access to the information.

Standards

1. Web sites must be backward compatible one complete version; i.e., if the current released browser version is 4.06, web site pages must be functional with version 3.0 and above.
2. Uses of non-standard or browser-specific features are to be avoided.
3. Pages should be designed to properly display on a monitor set to 640 by 480 or an 800 by 600 pixel screen resolution.

Guidelines

1. Sites should not require or encourage users to choose any specific browser software.
2. Browser plug-ins, Java script, embedded elements, etc. should be used with care and consideration for audience and bandwidth availability, and for increasing the effectiveness of content presentation.
3. Web pages should be designed according to how the end user will most likely to access, view or print the page.
4. Pages that are likely to be printed should be tested to ensure that they print appropriately on standards letter size sheet of paper.
5. Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html>, "Client Feature Variations" section for additional information.

Cookies

Standards

None

Guidelines

1. If cookies are used, site users should be warned that the cookie feature is being employed.
2. **Sample Cookies Notice:** "This site uses a technique known as cookies to provide better services to our users. Cookies allow us to keep a record of your activities while visiting our WWW site. If you object to this monitoring, you may wish to exit our site at this time."

Copyright

A copyright is the “right” of an author or publisher to control the use of an original work that the author or publisher has produced. However, this “right” does *not* extend to works of the Federal government. Therefore, works created by IHS employees as part of their official duties are in the public domain. Although many government materials are in the “public domain” the public domain does *not* extend outside the United States. Therefore, those in foreign countries who wish to reproduce any material offered by government agencies should request specific permission from the originating agency.

Standards

Ensure that disseminated information complies with copyright law for those materials where others are the copyright holders.

Guidelines

1. Of independent illustrations or collections, no more than five images of an artist or photographer should be used.
2. Proper credit should be given to all copyright material.
3. When in doubt, give credit as if the material was copyrighted.
4. If credit is given for one item, credit must be given for all items.
5. Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Design Format

Standards

None

Guidelines

1. Information should be obtainable with a minimum number of mouse “clicks.”
2. Pages should be designed for efficient transfer over low-bandwidth connections, which are still prevalent in schools, homes, and libraries.
3. Use a background color when using a background image in the event the user has graphics turned off.

4. Avoid using dark backgrounds.

Development Server

Standards

1. Workspace on the IHS Web Development server is available to any IHS employee or contractor developing material to go on-line on the IHS web site. There are many tools available for putting added functionality into web pages, i.e. Active Server Page (ASP) scripting, Server side Visual Basic (VB)-Script, and SQL Server database access methods.
2. To establish a workspace and account, e-mail webmaster@ihs.gov. Describe the project and include the name of the person who will be responsible for the web site and a work phone number where that person can be reached.

After the request has been approved, an IHS Web Team member will be assigned as the point of contact. Contact this person for web-related guidance and assistance.

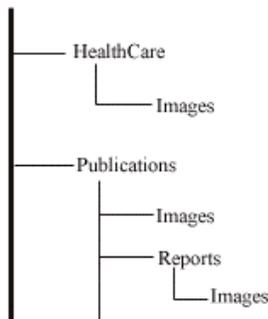
Guidelines

None

Directory Structure

Standards

1. An “images” sub-directory for storing graphics files will be created for each directory to increase the modular approach of the web structure. All the graphics needed for a web site should be placed in the “images” sub-directory relative to the web page directory. It is expected that it will be necessary to duplicate graphics commonly used throughout the site. Example:



2. Each directory will have an owner who is responsible for its contents.

3. Each directory shall have a file named "index.asp" that points to all active files served from that directory.
4. All secondary documents shall have owner identification and a creation date or date of last update and information. Contact information could be in the form of a "mailto" link, an e-mail address or telephone number.

Guidelines

None

Disclaimers

All Federal web sites should include disclaimers addressing privacy, retention of information collected, links to external sites, and disclaimers of endorsement and liability. Aggressive use of disclaimers (notices, warnings) is encouraged.

Standards

None

Guidelines

1. Use of "universal" disclaimers is generally not necessary for IHS home pages. Instead, disclaimers should be included in individual documents when necessary. For example, a document that mentions specific commercial products might include a disclaimer stating that no endorsement is implied.
2. Disclaimer of Endorsement
IHS web pages containing links to external web pages should include a statement that releases IHS from responsibility for the material included. It is important to avoid giving the impression that IHS is endorsing external information or products.
3. Disclaimer of Liability
Disclaimers of Liability address references to commercial products and services as well as merchantability and fitness for purpose.
4. Privacy Notice Disclaimer
Disclaimers should be included to advise the public of intended use of information learned about site visitors.
5. Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Electronic Reading Rooms

Standards

Mandatory Electronic Reading Rooms are required for Freedom of Information Act (FOIA) and Electronic Freedom of Information Act (EFOIA) documents created or modified after November 01, 1996.

Guidelines

Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

E-Mail Addresses

E-Mail addresses can also be personal identifiers. Their collection and potential retrieval may be subject to the Privacy Act.

Standards

None

Guidelines

1. Care should be taken not to include Privacy Act information in e-mail addresses.
2. A Privacy Act Disclaimer should be included on pages where e-mail addresses contain Privacy Act information.
3. Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

File Format

In some instances it is easier to create web files in a format other than HTML. However, there are drawbacks to doing so. For example, when using Adobe's Portable Document Format (PDF), (a) the contents of PDF files may not be included in site-wide full-text search indexes, (b) PDF viewers are not embedded in most Web browsers and (c) PDF viewers require more powerful hardware for on-line viewing than a Web browser alone.

To make information readily available to as wide an audience as possible, the choice of file formats used should be based on the following considerations: (a) the intended use of the material by the target audience; (b) the accessibility of the format to the target audience and (c) the level of effort required to convert the material to the format.

Standards

1. Material intended to be viewed, read, or browsed on-line should be prepared in HTML format (for text and tables) and GIF or JPEG for graphics.
2. Proprietary formats, i.e., WordPerfect, Microsoft Word, PowerPoint, SAS, Adobe Acrobat Portable Document Format (PDF), **may be used only if**:
 - 2.1. Conversion to HTML is not feasible or practical (contact your designated IHS Web Team member for approval)
 - 2.2. The intended audience is known to have ready access to software which can handle the proprietary format; or
 - 2.3. The intended use is data analysis or manipulation.
3. Links to files in proprietary or unusual formats **will be** explicitly noted and instructions provided for using and/or downloading the appropriate helper application, such as the Microsoft Word viewer, Adobe Acrobat Reader.

Guidelines

None

File Size

Standards

None

Guidelines

1. Keep pages, including both HTML and graphics, under 50KB. Many users still have 28.8 modems.
2. Divide large or complex documents, typically those larger than 10 screens, into multiple, smaller files.
3. Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html>, "Documents" and "Page Sizing" sections for additional information.

Files

Standards

1. The default page for any directory should be named "index.asp", "index.cfm", "index.htm", "default.asp", "default.cfm" or "default.htm".
2. References to files, anchors, and images residing on all Headquarters IHS Internet or Intranet servers shall be relative, not absolute Uniform Resource Locators (URLs), to make documents and sites portable.

Example 1:

To address a file in the document, that is:	<A HREF=
in the same directory or folder:	"*.asp">
down one level:	"(directory name)/*.asp">
up one level:	"../*.asp">
up two levels:	"../../*.asp">
in a sibling directory:	"../(SibDirName)/*.asp">

Note that " * " refers to the filename. The directory or folder names are separated by forward slashes, and two dots are used to refer generically to the directory above the current one.

Example 2:

A link from the file "index.asp" to the file "coding.asp", when both files reside on the server www.ihs.gov in the directory "/general/web", should be expressed as

``
not as
``

3. In linking to remote pages, i.e., pages on the web somewhere on another system, use absolute URL pathnames.

Example: <http://www.hhs.gov/progorg/oirm/bestguid.html> is the absolute URL address for the Department of Health and Human Services *World Wide Web Applications and the Internet Best Practices and Guidelines*.

Guidelines

Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Footer

Standards

1. Standard footer information will be included at the bottom of every web page that resides on IHS Headquarters servers. Users are encouraged to use a similar format for web sites that reside on other IHS servers.

The footer information for IHS Headquarters servers is processed on the server prior to the web browser receiving the page. This works with all browsers. However, the footer information does require the web server to do the processing. When designing web pages, the footer information is not visible until the pages are moved to the IHS Headquarters Development server.

2. Information to be included:
 - 2.1. The standard footer file that is listed below. The footer should be centered horizontally on the page.
 - 2.2. The e-mail address, mailto link, postal mailing address, or phone number of the person(s) responsible for the contents of the page should be provided for the user's convenience.
 - 2.2.1. Each program or office should designate a person(s) responsible for reviewing and responding to inquiries.
 - 2.2.2. Communications received should be handled in the same manner as a phone call or regular mail and in a timely fashion.
 - 2.2.3. If the inquiry is inappropriate for the person to whom it is addressed, forward it to the appropriate office or individual for response or processing.
 - 2.3. The date the page was created.
3. The standard footer file for IHS Headquarters *Internet* web pages is used by including this code in the file immediately before the closing `</BODY>` tag. This file will automatically include the date the file was last modified.

Example for the .ASP, .HTM, or .HTML filename extensions:

```
<!--#include virtual="/GeneralWeb/WebComponents/Navigation/NavBars/Footer_Navigation.asp"-->
```

Example for the .CFM (ColdFusion) filename extension:

```
<CFINCLUDE TEMPLATE="/GeneralWeb/WebComponents/Navigation/NavBars/footer_navigation.cfm">
```

4. A standard footer file for IHS Headquarters *Intranet* web pages is used by including this code in the file immediately before the closing `</BODY>` tag. This file will automatically include the date the file was last modified.

Example for the .ASP, .HTM, or .HTML filename extensions:

```
<!--#include virtual="/GeneralWeb/WebComponents/NavBars/nav_footer.asp"-->
```

Example for the .CFM (ColdFusion) filename extension:

```
<CFINCLUDE TEMPLATE="/IntraGeneralWeb/WebComponents/NavBars/nav_footer.cfm">
```

Guidelines

Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> “Footers” and “Mailboxes for Organizations” sections for additional information.

Forms

Standards

None

Guidelines

1. Not all browsers support forms.
2. Include a printable form that a user can print and mail in or provide a number that can be called.

Frames

Frames are compliant with any HTML 4.0 browser and are a part of the HTML 4.0 specifications.

Standards

1. Frames should be avoided when at all possible and used only when no other method of displaying multiple files or data meets the functional needs of the site.
2. If frames are used, each frame must have a unique, function identifying name, example: `<FRAME src="nav.html" name="frame name">`
3. If frames are used, ensure that pages are readable and usable without frames. Use the “NORFRAMES” tag, which is the default for browsers that cannot view frames, alternative at the end of each “FRAMESET” tag.

Guidelines

Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Government Information Locator Service (GILS) Compliance

Standards

1. GILS is mandated by law, OMB Bulletin 95-01.
2. Search engine must be compliant to Z.3950 (library card regulations).

Guidelines

1. Agencies should ensure that a GILS record is created for each agency's WWW site that identifies WWW retrievable information.
2. Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Graphics

Standards

1. Graphics should have an associated alternative text tag (ALT="picture description") to comply with the Americans with Disabilities Act, for text-only browsers, or for clients that have image loading turned off to read the page in a coherent manner.
2. Web pages should only link to graphics located on the web site server where their pages reside.
3. Images should be no wider than 535 pixels or higher than 295 pixels in order to display on the typical web browser's viewing window on a 640 by 480 monitor.

Guidelines

1. Use the browser-safe 216-color palette.
2. Graphics, icons, and images should be included for clarity, not for decoration.
3. Keep graphics small, either by reducing the physical size of the graphic or by reducing the number of colors in the graphic, to reduce file size and accommodate dial-up users.
4. Include height and width attributes in the "img src"; this will decrease download time. since the text can be printed on the screen leaving space for the image to follow.
5. Reuse graphics.

- 5.1. Multiple use of the same graphic provides a consistent look throughout a web site.
- 5.2. The browser only has to download a reused image once. Once the graphic is in memory, the browser can access it without going back to the server.
6. To use images found elsewhere on the web, ask permission to use them.
7. Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html>, Icons and Images section for additional information.

Header

To standardize the process of finding information on web sites that reside on IHS Headquarters servers, the following header navigation "include" statement listed below is to be included on all web pages. To determine if a page may be an exception, please e-mail webmaster@ihs.gov. Web sites that reside on other IHS servers are encouraged to use a similar format.

The navigation bar is processed on the server prior to the web browser receiving the page. This works with all browsers. However, the navigation bar does require the web server to do the processing. When designing a web site, the navigation bar is not visible until the pages are moved to the IHS Development server.

Standards

1. The "include" statement for the header navigation bar for pages on the IHS *Internet* server should be placed immediately following the <BODY> tag.

Example for .ASP, .HTM, or .HTML filename extensions:

```
<BODY>
<!--#include virtual="/GeneralWeb/WebComponents/Navigation/NavBars/navigation.asp"-->
```

Example for the .CFM (ColdFusion) filename extension:

```
<BODY>
<CFINCLUDE TEMPLATE="/GeneralWeb/WebComponents/Navigation/NavBars/navigation.cfm">
```

2. The "include" statement for the header navigation bar for pages on the IHS *Intranet* server should be placed immediately following the <BODY> tag.

Example for .ASP, .HTM, or .HTML filename extensions:

```
<BODY>
<!--#include virtual="/GeneralWeb/WebComponents/NavBars/nav_header.asp"-->
```

Example for the .CFM (ColdFusion) file extension web pages:

```
<BODY>
```

Guidelines

None

Home Page

Standards

1. Each IHS directory home page should be identified by an IHS logo.
2. Since each page on Headquarters IHS servers should contain the standardized header which contains the IHS logo, each individual page need not display it. Under special circumstances where the header might not be used, the IHS logo should be placed on the page in an appropriate manner.
3. Each document collection or program home page file should be named "index. asp", "index.cfm", "index.htm", "default.asp" "default.cfm" or "default.htm" if it resides on the IHS Headquarters server.

Guidelines

1. Provide text-only versions whenever possible.
2. Reference "Files" section of this document for naming the default for each folder or directory.

Home Page Links

Congress and the President have issued requirements/initiatives that affect Home Page links. The Department of Health and Human Services also requires a link to their Internet home page. These requirements pertain only to the web server's primary home page not to individual home pages that reside on the web server.

Standards

Mandatory links

- 1) Disclaimers
- 2) Electronic Reading Room
- 3) Freedom of Information Act (FOIA)

- 4) Link to parent organization, HHS, by either logo or text link
- 5) Kids Page link (required only for Internet sites)

Guidelines

1. Recommended links

- 1.1. Frequently Asked Questions (FAQ)
- 1.2. Individual Home Pages
- 1.3. Search
- 1.4. Site Information
- 1.5. What's New

2. Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

HTML (HyperText Markup Language)

Standards

All web pages created in HTML shall conform to the IHS Standards and Guidelines for Internet and Intranet Services.

Guidelines

None

Image Maps

Standards

None

Guidelines

If image maps are used, a text-based alternative should also be supplied for selecting options.

Images

Reference “Graphics” section of this document.

Information Approval and Clearances

Standards

1. Each IHS Program or Division should identify individual(s) to be responsible for the content of that organization’s web pages.
2. If the material to be placed on-line has already been approved for public dissemination and published in an IHS publication, no additional approval should be required.
3. If the material has not been previously approved and printed, the material should be reviewed by the sponsoring program for quality, accuracy, and adherence to existing standards and guidelines.
4. Previously unpublished material should undergo review by the IHS Communication Products Manager or the IHS Office of Communications.
5. Information release must comply with any embargoes.

Guidelines

1. Special care should be exercised where there is a potential to disclose privacy or other information protected or otherwise inappropriate for release.
2. Quality reviewers can regularly spot-check disseminated information.
3. Whenever possible, electronic release should be coordinated with release of printed publications so that press releases and other publicity can mention electronic availability and include the Uniform Resource Locator (URL).

Information Collection/Surveys

Be careful in the use of on-line informal surveys asking the public for information. The Paperwork Reduction Act (PRA) of 1995 (44USC35) and 61CFR 6428 dated February 20, 1996, requires that the Office of Management and Budget (OMB) must clear all information collection requests, with minor exceptions, and display an OMB control number prior to

issue. Contact the appropriate agency Reports Clearance Officer (RCO) for more information on the PRA or to validate the releasability of such a request.

Standards

Surveys of ten or more people require OMB certification and control number.

Guidelines

1. Users should be notified of any user information collection activities and/or usage monitoring and the purpose for its use.
2. Information, which contains individual identifiers, such as E-Mail addresses, should not be retained for long periods of time.
3. Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Information/System Protection

Standards

None

Guidelines

1. Follow existing security policies and procedures in the use of Internet services and content, and refrain from any practices that might jeopardize IHS computer systems and data files, including but not limited to virus attacks, when downloading files from the Internet.
2. Do not import via the Internet and distribute any data or graphics to IHS employees or customers that would create a hostile work environment (prohibited in accordance with the Equal Employment Opportunity Act). Where the situation warrants, coordinate security and privacy matters with the component's network administrator or server webmaster where content is stored.
3. Protect information entrusted to the agency. The continued protection of sensitive or confidential information, as well as the effective use of safeguards to assure the integrity of IHS information and systems will determine the extent to which the Internet and Intranet will be accessed and used to support IHS missions. On-line computer security training sessions can be found on the IHS Intranet at "http://home.ihs.gov/Internal/security/sectoc.asp".

4. Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html>, Information/System Protection and Security sections for additional information.

Information Published

Standards

1. Indian Health Service offices or programs should establish a periodic review cycle of documents disseminated through the IHS Internet or Intranet to support IHS credibility and provide current, accurate information to the user. (See “Meta Tags” section of this document for additional information.)
2. Special care should be exercised where there is a potential to disclose privacy or other information protected or otherwise inappropriate for release.

Guidelines

1. Web document owners are responsible for obtaining authorization prior to releasing or publishing information in paper or electronic format.
2. Clearance must be obtained if an electronic product is not a derivative of a publication that has already been cleared.
3. When publishing an electronic version of a previously published document, it is recommended that the document be encompassed within a table.
 - 3.1. A table width=80% is recommended to simulate margins, to make the printed version of the document more closely reflect its original counterpart and create a sufficient margin for any monitor’s size or resolution setting.
 - 3.2. It is important to assign both the table and the table cell(s) width based on percentages rather than pixels. Not all browsers have the ability to understand table structure in one format (i.e. percentages), and the table cells in another (i.e. pixels).
4. Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html>, “Content Management”, “Information Collection”, “Information System Protection”, and “Information Release” sections for additional information.

Java

Java is an object-oriented programming language developed by Sun Microsystems, Inc. and is a subset of the C++ language. A Java program, called a Java applet, can be included inside an HTML page will run on current version of both Netscape and Internet Explorer (IE) browsers.

Standards

Java programs, applications or applets, being incorporated into a web page should be thoroughly tested on multiple platforms and browsers and endorsed by your designated IHS Web Team point of contact prior to publication.

Guidelines

To prevent a blank line from appearing in a browser where Java is not enabled or supported, add an image or some HTML code to replace the applet.

JavaScript

JavaScript is a pure scripting, un-compiled, object-based computer interpreted, language and requires Netscape 2.0, IE 3.0, or new browsers to work.

Standards

None

Guidelines

If JavaScript is used, provide alternatives where and if necessary for users without JavaScript-enabled browsers and test web pages in both Internet Explorer and Netscape as each browser handles the code slightly different.

Links (Dead)

Dead links inevitably occur as pages are modified, moved, or deleted and quickly damage a web site's credibility.

Standards

1. Each IHS web developer is responsible for monitoring and maintaining links residing on all their web pages.
2. Dead links should be corrected or removed as soon as possible.

3. External links should be monitored and maintained.
4. Relative rather than absolute linking should be used wherever possible. Reference the "Files" section of this document.

Guidelines

Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Links (Live)

Standards

1. There should be explicit links on each page within a document or collection back to the home page for that document or collection.
2. All office or program home pages should link back to their "parent" directory.

Guidelines

1. Links to large files should explicitly note the file size.
2. Links to files in proprietary or unusual formats (e.g., Adobe Acrobat Portable Document Format, etc.) should be explicitly noted, along with instructions for using and/or downloading the appropriate helper application such as the Adobe Acrobat Reader.
3. Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Meta Tags

META Tags are tags that appear in the <HEAD> . . . </HEAD> part of your HTML document. The META element can be used to give information about the document in general (i.e., author, expiration date, a list of key words, etc.) and assign values to those properties. Each META element specifies a property/value pair. The "NAME" attribute identifies the property and the "CONTENT" attribute specifies the property's value. For example --

```
<META NAME="author" CONTENT="John Q. Public">  
<META NAME="generator" CONTENT="PageMill 2.0">  
<META NAME="expiration" CONTENT="05151999">  
<META NAME="notification" CONTENT="05011999">
```

<META NAME="description" CONTENT="The Indian Health Service web site is a source of information on health care provided to American Indians and Alaska Natives.">

<META NAME="keywords" CONTENT="Indian Health Service, IHS, health care, American Indians, Alaska Natives">

Standards

1. An "Expiration" and a "Notification" META tag will be included with each web page that is developed. These two tags will be used as a mechanism to remind the responsible person or department to review that page and determine whether the document's life needs to be updated, extended, or archived.
 - 1.1. All META tags are dated either the 1st or the 15th of the month.
 - 1.2. The first of these two META tags provides the expiration date.
 - 1.3. The expiration date will be no longer than one year from the date that the web page was developed or last reviewed.
 - 1.4. The second of these two META tags provides the notification date. The notification date will be 15 days prior to the expiration date.
 - 1.5. When the "Notification" date arrives, the person(s) responsible for the web page will be responsible for reviewing the designated page(s) and updating the META tags.
 - 1.6. All documents must be reviewed at least annually.
2. Twice a month the Web Support staff will search the web site for expired documents and notify the owner of the page.

Guidelines

None

Navigation

Standards

Web pages residing on a Headquarters IHS web server should use the Header format listed in the section above.

Guidelines

1. Web pages should be designed to minimize user reliance on the navigational aids in WWW browser software, i.e., back and forward buttons, history lists.
2. Web pages should include a back button to provide a logical means of backing out of a collection of web pages.

Netiquette

Standards

None

Guidelines

Webmasters and Webauthors are responsible to learn the informal rules know as “Netiquette.”

Robots.txt

Robots files informs spiders/crawlers of the time of day to crawl the site, which directories are restricted, the number of simultaneous fingers, frequency of the hits, and so on.

Standards

None

Guidelines

1. A “robots.txt” file should be established on each web server’s site root directory.
2. Subdirectories within the web can also have their own “robots.txt” file.
3. Procedures should be established for how to deal with spiders that don’t follow the rules.
4. Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Search Engines

Standards

None

Guidelines

Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Security

Standards

The designated web server systems administrator has primary responsibility for the site server(s) security.

Guidelines

1. Webauthors should be aware of applicable security considerations, particularly in areas such as CGI script development and .exe files.
2. Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Tables

Standards

When tables are used, the same information must be made available in a way that complies with the Americans with Disabilities Act.

Guidelines

1. For additional information on Web Accessibility reference <http://www.w3.org/WAI/> .
2. Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Testing

Standards

1. Before any document or web site is made publicly available, the following elements should be tested:
 - 1.1. Grammar
 - 1.2. Hyperlinks
 - 1.3. Spelling

1.4. Syntax

2. All pages should be tested using multiple browsers, including a character-only browser such as Lynx, to ensure compliance with the Americans with Disabilities Act (ADA).

Guidelines

For additional information on Web Accessibility reference <http://www.w3.org/WAI/> .

Text-Only Alternative For Pages Containing Graphics

Standards

A web's "index.asp", "index.htm", "default.asp" or "default.htm". page must also have a corresponding text-only page to be compliant with the Americans with Disabilities Act (ADA).

Guidelines

1. For additional information on Web Accessibility reference <http://www.w3.org/WAI/> .
2. Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Titles

Standards

1. Every document must have a title.
2. The title should be as short as possible but fully informative and specific i.e., "FY 1999 IHS Budget" is preferable to "Budget".

Guidelines

Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Under Construction Pages

Standards

A user should not connect to a page containing only an "Under Construction" statement.

Guidelines

1. Web page development should be performed on a development server then transferred to the “live” web server therefore eliminating the need for “Under Construction” notices.
2. Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Uniform Resource Locators (URLs)

Standards

1. URL names should be understandable, simple words without becoming cryptic.
2. Provide a redirect link for each web page whose URLs has been changed.

Guidelines

1. URL names should be in lower case because of possible case-sensitive operating systems such as UNIX.
2. Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Usage Monitoring

Standards

None

Guidelines

Reference the HHS *World Wide Web Applications and the Internet Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html> for additional information.

Web Site Establishment

Standards

1. Each web site should have a clearly defined purpose that supports the mission of the IHS component.

2. Each IHS Component carries the following responsibilities:
 - 2.1. Consistent with other leadership responsibilities for public and internal communication, making the decision whether or not to establish an organizational web site and to publish appropriate instructions and regulations for a web site within the limitations established by this document.
 - 2.2. The Head of the IHS Component, or his/her designee, approves the purpose and general content of the web site.
 - 2.3. Designating a web developer for their site.
 - 2.4. Establishing a process for the identification of information appropriate for posting to web sites and ensuring its consistent implementation.
 - 2.5. Identifying the sponsoring IHS office or program prominently on all web pages with a link back to that office or program's home page.
 - 2.6. Linking all office or program home pages back to their "parent" directory.
 - 2.7. Obtaining appropriate clearances prior to releasing information, in either paper or electronic format.
 - 2.8. Creating, updating, and maintaining their own web pages.
 - 2.9. Keeping abreast of and abiding by IHS Standards and Guidelines.
 - 2.10. Ensuring that a process for communications from their web pages is in place.
 - 2.11. Acting as the liaison between any contractor developing pages for IHS web space and their designated web team point of contact.
 - 2.12. Consulting with their designated IHS web team point of contact for advice on web design, implementation, and maintenance, as well as web-related tools and techniques.
 - 2.13. Prior to the release of a new web site or a major revision to an existing web site, final endorsement must be obtained from the designated IHS Web Team point of contact.

Guidelines

1. For preventing duplication on the IHS web site, a web site shall normally be limited only to information for which the establishing organization is responsible. Hyperlinks should be used to reference information already located on the server(s).

2. For additional information, reference the “Information Collection/Surveys”, “Information Release” and “Information/Web Page Sponsor” sections in the HHS *Best Practices and Guidelines*, <http://www.hhs.gov/progorg/oirm/bestguid.html>.