

## Evaluating Health Information on the Internet

### Key Points

- Any Web site should make it easy for people to learn who is responsible for the site and its information (see Question 1).
- If the person or organization in charge of the Web site did not write the material, the original source should be clearly identified (see Question 4).
- Health-related Web sites should give information about the medical credentials of the people who prepare or review the material on the site (see Question 6).
- Any Web site that asks users for personal information should explain exactly what the site will and will not do with that information (see Question 9).
- Any e-mail messages should be carefully evaluated. The origin of the message and its purpose should be considered (see Question 11).
- The Federal Trade Commission and the Food and Drug Administration are Government agencies that help protect consumers from false or misleading health claims on the Internet (see Question 13).

The popularity of the Internet has made it easier and faster to find health information. Much of this information is valuable; however, the Internet also allows rapid and widespread distribution of false and misleading information. It is important for people to carefully consider the source of information and to discuss the information they find with their health care provider. This fact sheet can help people decide whether the health information they find on the Internet or receive via e-mail is likely to be reliable.

### 1. Who runs the Web site?

Reputable Web sites generally make it easy for people to see who is responsible for the site and its information. On the National Cancer Institute's (NCI) Web site, for example, NCI is clearly noted on every major page, along with a link to the site's home page.

### 2. Who pays for the Web site?

It costs money to run a Web site. The source of a Web site's funding should be clearly stated or readily apparent. For example, Web addresses ending in ".gov" are Federal Government-sponsored sites, ".edu" indicates educational institutions, ".org" is often used by noncommercial organizations, and ".com" denotes commercial organizations. The source of funding can affect what content is presented, how the content is presented, and what the owners want to accomplish on the site.

### 3. What is the purpose of the Web site?

The purpose of the Web site is related to who runs and pays for it. Many Web sites have a link to information about the site. The link, which is often called "About This Site," should clearly state the purpose of the site and help users evaluate the trustworthiness of the information on the site.

### 4. What is the original source of the information on the Web site?

Many health and medical Web sites post information collected from other Web sites or sources. If the person or organization in charge of the site did not write the material, the original source should be clearly identified.



**5. How is the information on the Web site documented?**

In addition to identifying the original source of the material, the site should identify the evidence on which the material is based. Medical facts and figures should have references (such as citations of articles in medical journals). Also, opinions or advice should be clearly set apart from information that is “evidence-based” (that is, based on research results).

**6. How is information reviewed before it is posted on the Web site?**

Health-related Web sites should give information about the medical credentials of the people who prepare or review the material on the Web site. For example, NCI’s Web site contains cancer information summaries from the Institute’s PDQ® database. All PDQ summaries are peer-reviewed and updated by six editorial boards of cancer specialists in adult treatment, pediatric (childhood) treatment, supportive and palliative care, screening and prevention, genetics, and complementary and alternative medicine. Each editorial board meets regularly to review and update the cancer information summaries on the basis of newly published research results. Additional information can be found at <http://www.cancer.gov/cancertopics/pdq/about-editorial-boards>.

More information about PDQ is available in the NCI fact sheet *PDQ®: Questions and Answers*. This fact sheet can be accessed at <http://www.cancer.gov/cancertopics/factsheet/Information/PDQ> and can be requested by calling NCI’s Cancer Information Service at 1–800–4–CANCER (1–800–422–6237).

**7. How current is the information on the Web site?**

Web sites should be reviewed and updated on a regular basis. It is particularly important that medical information be current, and that the most recent update or review date be clearly posted. Even if the information has not changed, it is helpful to know that the site owners have reviewed it recently to ensure that the information is still valid.

**8. How does the Web site choose links to other sites?**

Reliable Web sites usually have a policy about how they establish links to other sites. Some medical Web sites take a conservative approach and do not link to any other sites; some link to any site that asks or pays for a link; others link only to sites that have met certain criteria.

**9. What information about users does the Web site collect, and why?**

Web sites routinely track the path users take through their sites to determine what pages are being used. However, many health-related Web sites ask the user to “subscribe” or “become a member.” In some cases, this may be done so they can collect a user fee or select relevant information for the user. In all cases, the subscription or membership will allow personal information about the user to be collected by the Web site owners.

Any Web site asking users for personal information should explain exactly what the site will and will not do with the information. Many commercial sites sell “aggregate” data about their users to other companies—information such as what percent of their users are women with breast cancer. In some cases, they may collect and reuse information that is “personally identifiable,” such as the user’s ZIP Code, gender, and birth date. Users should be certain they read and understand any privacy policy or similar language on the site, and not sign up for anything they do not fully understand.

**10. How does the Web site manage interactions with users?**

There should always be a way for users to contact the Web site owners with problems, feedback, and questions. If the site hosts a chat room or other online discussion areas, it should tell users about the terms of using the service. Is the service moderated? If so, by whom, and why? It is always a good idea to spend time reading the discussion without joining in, to feel comfortable with the environment before becoming a participant.

**11. How can people verify the accuracy of information they receive via e-mail?**

Any e-mail messages should be carefully evaluated. The origin of the message and its purpose should be considered. Some companies or organizations use e-mail to advertise products or attract people to their Web sites. The accuracy of health information may be influenced by the desire to promote a product or service.

**12. Where can people find information about health claims they find on the Internet or receive via e-mail?**

One way to minimize the damage and fear caused by misinformation is to identify respected sources of sound health information and use them as primary resources. Additionally, some reputable Web sites include information about cancer myths and rumors that have been posted on the Internet or circulated via e-mail. Two such Web sites that focus on cancer are described below.

- The American Society of Clinical Oncology (ASCO) is a professional organization that represents physicians who treat people with cancer. ASCO's patient information Web site, Cancer.Net, provides information to help patients and their families make health care decisions. The Cancer.Net *Cancer Myths* Web page describes common misconceptions about cancer. This resource is available at <http://www.cancer.net/patient/All+About+Cancer/Cancer.Net+Feature+Articles/Cancer+Basics/Cancer+Myths>.
- The American Cancer Society (ACS) is a nationwide, community-based voluntary health organization. The ACS offers a variety of services and programs for patients and their families. The ACS also supports research, provides printed materials, and conducts educational programs. The ACS *Rumors, Myths, and Truths* Web page provides links to information about possible hoaxes. This page can be found at <http://www.cancer.org/AboutUs/HowWeHelpYou/rumors-myths-and-truths>.

**13. How does the Federal Government protect consumers from false or misleading health claims posted on the Internet?**

The **Federal Trade Commission** (FTC) enforces consumer protection laws. As part of its mission, the FTC investigates complaints about false or misleading health claims posted on the Internet. The FTC's *Cure-ious? Ask Web* page includes questions people can ask their health care provider, tips for spotting cancer treatment scams, information about how to file a complaint, and resources for patients and their families. This Web page is located at <http://www.ftc.gov/bcp/edu/microsites/curious/index.shtml>.

**Agency:** Federal Trade Commission  
**Address:** 600 Pennsylvania Avenue, NW  
Washington, DC 20580  
**Telephone:** 1-877-382-4357 (1-877-FTC-HELP) (toll-free)  
**TTY:** 1-866-653-4261 (toll-free)  
**Web site:** <http://www.ftc.gov/>

The **Food and Drug Administration** (FDA) regulates drugs and medical devices to ensure that they are safe and effective. The FDA's *For Consumers: Protecting Yourself* Web page (<http://www.fda.gov/ForConsumers/ProtectYourself/default.htm>) includes links to several resources that have tips about buying medicines and other products online. Two of these resources are *Beware of Online Cancer Fraud* (<http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm048383.htm>) and *Buying Medicines Over the Internet* (<http://www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/BuyingMedicinesOvertheInternet/default.htm>).

**Agency:** Food and Drug Administration  
**Address:** 10903 New Hampshire Avenue  
Silver Spring, MD 20993  
**Telephone:** 1-888-463-6332 (1-888-INFO-FDA) (toll-free)  
**Web site:** <http://www.fda.gov/>

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### Related NCI materials and Web pages:

- National Cancer Institute Fact Sheet 2.1, *Cancer Information Sources* (<http://www.cancer.gov/cancertopics/factsheet/Information/sources>)
- National Cancer Institute Fact Sheet 2.2, *PDQ®: Questions and Answers* (<http://www.cancer.gov/cancertopics/factsheet/Information/PDQ>)
- National Cancer Institute Fact Sheet 2.8, *Cancer Fund-Raising Organizations* (<http://www.cancer.gov/cancertopics/factsheet/Information/organizations>)

### How can we help?

We offer comprehensive research-based information for patients and their families, health professionals, cancer researchers, advocates, and the public.

- **Call** NCI's Cancer Information Service at 1-800-4-CANCER (1-800-422-6237)
- **Visit** us at <http://www.cancer.gov> or <http://www.cancer.gov/espanol>
- **Chat** using LiveHelp, NCI's instant messaging service, at <http://www.cancer.gov/livehelp>
- **E-mail** us at [cancergovstaff@mail.nih.gov](mailto:cancergovstaff@mail.nih.gov)
- **Order** publications at <http://www.cancer.gov/publications> or by calling 1-800-4-CANCER
- **Get help** with quitting smoking at 1-877-44U-QUIT (1-877-448-7848)

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