Captions

For Deaf and Hard-of-Hearing Viewers

On August 5, 1972, Julia Child, “The French Chef,” in a program televised from WGBH studios in Boston, taught viewers to make a special chicken recipe. The significance of that day stretched far beyond the details of the entrée to have a profound and lasting impact on human communication. It was the first time Americans who are deaf and hard of hearing could enjoy the audio portion of a national television program through the use of captions.

Since then, captions have opened the world of television to people who are deaf and hard of hearing. At first, special broadcasts of some of the more popular programs were made accessible through the Public Broadcasting Service. Now, more than 1,000 hours of entertainment, news, public affairs, and sports programming are captioned each week on network, public, and cable television. Captions are no longer a novelty: they have become a necessity.

What Are Captions?

Captions are words displayed on a television screen that describe the audio or sound portion of a program. Captions allow viewers who are deaf or hard of hearing to follow the dialogue and the action of a program simultaneously. They can also provide information about who is speaking or about sound effects that may be important to understanding a news story, a political event, or the plot of a program.

Captions are created from the transcript of a program. A captioner separates the dialogue into captions and makes sure the words appear in sync with the audio they describe. A specially designed computer software program encodes the captioning information and combines it with the audio and video to create a new master tape. (Captioning on digital television may involve a different process.)

Open and Closed Captions

Captions may be “open” or “closed.” To view closed captions, viewers need a set-top decoder or a television with built-in decoder circuitry. Open captions appear on all television sets and can be viewed without a decoder. In the past, some news bulletins, presidential addresses, or programming created by or for deaf and hard-of-hearing audiences were open captioned. With the widespread availability of closed-caption technology, open captions are rarely used.
Real-Time Captions
Real-time captions are created as an event takes place. A captioner (often trained as a court reporter or stenographer) uses a stenotype machine with a phonetic keyboard and special software. A computer translates the phonetic symbols into English captions almost instantaneously. The slight delay is based on the captioner’s need to hear the word and on the computer processing time. Real-time captioning can be used for programs that have no script; live events, including congressional proceedings; news programs; and nonbroadcast meetings, such as the national meetings of professional associations.

Although most real-time captioning is 98 percent accurate, the audience will see occasional errors. The captioner may mishear a word, hear an unfamiliar word, or have an error in the software dictionary. Often, real-time captions are produced at a different location from the programming and are transmitted by phone lines. In addition to live, real-time captioning, captions are being put on prerecorded video, rental movies, and educational and training tapes using a similar process but enabling error correction.

Electronic Newsroom Captions
Electronic newsroom captions (ENR) are created from a news script computer or teleprompter and are commonly used for live newscasts. Only material that is scripted can be captioned using this technique. Therefore, spontaneous commentary, live field reports, breaking news, and sports and weather updates may not be captioned using ENR, and real-time captioning is needed.

Edited and Verbatim Captions
Captions can be produced as either edited or verbatim captions. Edited captions summarize ideas and shorten phrases. Verbatim captions include all of what is said. Although there are situations in which edited captions have been preferred for ease in reading, most people who are deaf or hard of hearing prefer the full access provided by verbatim texts.

Rear Window Captioning
Nearly a dozen movie theaters across the country are offering this type of captioning. A cupholder holds a lucite panel that reflects the captions off the back wall of the theatre.¹

Current Research
Researchers are studying caption features, speeds, and the effects of visual impairments on reading captions. This research will help the broadcast television industry understand which caption features should be retained and what new features should be adopted to better serve consumers. Other research is examining the potential for captions as a learning tool for acquiring English-language and reading skills. These studies are looking at how captions can reinforce vocabulary, improve literacy, and help people learn the expressions and speech patterns of spoken English.

The Law
The Americans with Disabilities Act (ADA) of 1990 requires that businesses and public accommodations ensure that disabled individuals are not excluded from or denied services because of the absence of auxiliary aids. Captions are considered one type of auxiliary aid. Since the passage of the ADA, the use of captioning has expanded. Entertainment, educational, informational, and training materials are captioned for deaf and hard-of-hearing audiences at the time they are produced and distributed.
The Television Decoder Circuitry Act of 1990 requires that all televisions larger than 13 inches sold in the United States after July 1993 have a special built-in decoder that enables viewers to watch closed-captioned programming. The Telecommunications Act of 1996 directs the Federal Communications Commission (FCC) to adopt rules requiring closed captioning of most television programming.

**Captions and the FCC**

The FCC rules on closed captioning became effective January 1, 1998. They require people or companies that distribute television programs directly to home viewers to make sure those programs are captioned. Under the rules, 100 percent of non-exempt programs shown on or after January 1, 1998, must be closed captioned by January 1, 2006. Also, 75 percent of nonexempt programs shown before January 1, 1998, must be closed captioned by January 1, 2008. The rules do not apply to videotapes, laser disks, digital video disks, or video game cartridges.

**Who Is Required To Provide Closed Captions?**

The rules apply to people or companies that distribute television programs directly to home viewers (video program distributors). Some examples are local broadcast television stations, satellite television services, and local cable television operators. In some situations, video program providers are responsible for captioning programs. A video program provider can be a television program network (for example, ABC, NBC, UPN, Lifetime, A&E) or other company that makes a particular television program. However, since networks do not distribute television programs directly to home viewers, they are not responsible for complying with the captioning rules and are not required to respond to complaints from viewers.

**When Will I See More Closed-Captioned Programming?**

The FCC rules can create transition periods during which the amount of closed-captioned programming will gradually increase. During 2000 and 2001, video program distributors must provide captioning for 450 hours per channel per calendar quarter of new programs (programs shown on or after January 1, 1998). In 2002 and 2003, distributors must increase the hours per channel of captioned programming to 900 per calendar quarter for new programs. In 2004 and 2005, 1,350 hours per channel per calendar quarter of new programs must be captioned.

If a video program distributor is already providing more than the required hours per channel during a specific calendar quarter, that distributor must continue to provide captioned programming at substantially the same level as the average level it provided during the first 6 months of 1997. For programming shown before January 1, 1998, at least 30 percent of a channel’s programming during each calendar quarter must be captioned starting January 1, 2003.

**What Programs Are Exempt?**

Some advertisements, public service announcements, non-English-language programs (with the exception of Spanish programs), locally produced and distributed non-news programming, textual programs, early-morning programs, and nonvocal musical programs are exempt from captioning. The FCC plans to review the program exemptions later to determine whether any changes are necessary.
Where Can I Get Additional Information?

To find out more about the FCC rules and captions, including information on the complaint process, call

Voice: 1–888–CALL–FCC (1–888–225–5322);
Locally at (202) 418–7096;
TTY: (202) 418–7172
Internet: www.fcc.gov/dtf/caption.html

Other Resources:

**NIDCD Information Clearinghouse**
1 Communication Avenue
Bethesda, MD 20892–3456
Voice: (800) 241–1044
TTY: (800) 241–1055
E-mail: ncidcinfo@nidcd.nih.gov
Internet: www.nih.gov/nidcd

**The Caption Center**
125 Western Avenue
Boston, MA 02134
Voice/TTY: (617) 300–3600
E-mail: caption@wgbh.org
Internet: www.wgbh.org/caption

**Department of Television, Film, and Photography**
Gallaudet University
800 Florida Avenue, N.E.
Washington, DC 20002
Voice/TTY: (202) 651–5115

**League for the Hard of Hearing**
71 West 23rd Street
New York, NY 10010
Voice: (917) 305–7700
TTY: (917) 305–7999
E-mail: Postmaster@lhh.org
Internet: www.lhh.org

**National Association of the Deaf**
814 Thayer Avenue
Silver Spring, MD 20910–4500
Voice: (301) 587–1788
TTY: (301) 587–1789
E-mail: nadinfo@nad.org
Internet: www.nad.org

**National Captioning Institute**
1900 Gallows Road, Suite 3000
Vienna, VA 22182
Voice/TTY: (703) 917–7600
E-mail: nci@ncicap.org
Internet: www.us.net/nci

**National Shorthand Reporters Association**
118 Park Street S.E.
Vienna, VA 22180
Voice: (703) 281–4677

Note: Many commercial vendors and some specialized software will allow individuals, groups, and schools to create captions.

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1 Advocates for Better Communication, a volunteer program allied with the League for the Hard of Hearing

2 The Caption Center