

The following excerpt illustrates Exposure/Reach evaluation (from a WHO Monograph entitled **Issues in Evaluating Mass Media-Based Health Communication Campaigns** (Freimuth, Cole, & Kirby, 2000). Freimuth, V., Cole, G., and Kirby, S. (1999). Issues in evaluating mass mediated health communication campaigns in **WHO Monograph** entitled "Evaluation in Health Promotion: Principles and Perspectives." Copenhagen: WHO Regional Office for Europe, in press. See Resources for entire document):

In order for a message to have a desired influence, receivers must first attend to it (5). Hence, an early effect of communication that must be observed in a summative evaluation is whether the intended audience paid attention to the desired message. As stated previously, even if a program is implemented as planned, and desired effects result, these effects can not be attributed to the intervention unless there is evidence that the campaign actually reached the intended audience.

A necessary first step in determining whether the intended audience was reached by mass communication messages is to determine whether a message airs and the number of times it airs. If one can afford paid advertising, this process is greatly simplified because the time, place, and frequency of airing can be controlled. However, for a number of reasons--with cost being a leading factor--paid advertising is seldom used by public sector health communicators in the United States.

When paid advertising is not an option in a mass media campaign, health communicators often rely on PSAs which are aired at no cost to the producer. Unfortunately, airing of PSAs in the U.S. is at the discretion of Public Service Directors at the various television and radio stations, making the tracking of airings difficult. Attempts to overcome these difficulties have included relying on services that monitor commercials and PSAs. For example, Nielson Media Sigma Service (NMSS) operates an electronic tracking service that detects the airing of PSAs in over 1,100 broadcast stations (including 40 Spanish language stations) in all 211 designated market areas plus 28 national cable networks. This service ascertains the number of times a PSA plays, the market(s) where it played, the station call letters, air date, and air time. This monitoring goes on 24 hours a day, seven days a week.

To get some idea concerning the extended reach of broadcast and print media that may have been triggered by our mass media campaigns, we consistently track both broadcast and print media. The services used to track broadcast media is called *Video Monitoring Services, Inc. (VMS)*. The print news tracking service we use is *Lexis-Nexis*.

VMS monitors news and public affairs programming in 46 of the top media markets. This includes 300 local television stations and 50 network and cable channels such as CNN, CNBC and MS-NBC. VMS also monitors selected news radio programming generated by 60 radio stations in 15 of the top media markets.

Lexis-Nexis continually updates and maintains a Regional News library which consists of a combination of news sources grouped together by geographical area. It contains more than 125 full-text U.S. regional news sources together with selected documents from Business Dateline, ABI/INFORM, and abstracts from Miami Herald and Philadelphia Inquirer. The UPI State & Regional wire service is also included.

Together, NMSS, VMS and Lexis-Nexis services allow us to estimate the overall reach of both broadcast and print media. Although these data satisfy the need to determine whether, when, and where a PSA is aired, along with the extended reach of collateral media that may have been triggered by the campaign, these services and the data they generate do not account for who attended to, comprehended, and yielded to the key messages of a campaign. Further audience research must be carried out to make this determination.

In the U.S., to determine who was watching or whether those who were watching were attending to the central messages broadcast on television as a part of a national health communication campaign one can rely on services like the Nielson Station Index (NSI) which generates information regarding the TV viewing behavior of individuals (>100,000) living in randomly selected households in each of the U.S. TV markets. NSI characterizes viewers demographically by their age and gender. Data are collected using diaries for each TV in a participating home. Participants record the programs they watch and for how long, the station the program was aired on, and the date and time the program was aired. Data collected with diaries are further verified and adjusted based on TV Aset meters that electronically capture household viewing events in a sample of TV markets.

To further characterize the audiences who may have viewed a particular message, NSI data can be merged with geo-psychographic data aggregated into neighborhood clusters that represent demographic and/or psychographic profiles of individuals living in different neighborhoods in various locations across the U.S. Merging these data with NSI data allows for the indirect approximation of the psychographic characteristics of those who view a message in question. For example, through their PRIZM cluster analysis system the Claritas Corporation--perhaps the most prominent vendor of geo-psychographic data clusters--provides information on households categorized to one of 62 neighborhood audience segments based on six criterion factors: social rank, household composition, residential mobility, ethnicity, urbanization, and types of housing. Also available in the database is information on media habits, small and large purchase patterns, political beliefs, geographic location, and demographics. The point here is that the process of merging a variety of data sets allows for an indirect approximation of who is watching what and when they are watching.

What is still missing, however, is whether these audiences attended to the messages. Some approaches to determining whether a particular audience attended to and comprehended messages are to: 1) conduct a general population survey to determine audience awareness of a campaign; 2) add specific relevant questions to an Omnibus survey; 3) rely on data collected in

national probability sample surveys; and/or 4) add tags to a televised message which are designed to motivate viewers to call a particular number for more information with the assumption that a burst of calls just after the airing of a the message with such a tag almost certainly indicates the audience attended to the messages. Questions directed at those who call in can help further determine whether those who attended to the message actually understood it. All of these summative evaluation approaches have been used at the CDC in attempts to monitor the reach of our HIV/AIDS health communication efforts carried out by what was the National AIDS Information and Education Program.

As with tracking electronic media, one must be highly creative in determining who is exposed to messages in newspapers or magazines and even more so with collateral materials such as brochures, flyers, posters, and billboards. This often becomes labor intensive and expensive.