## Letters to the Editor

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## Research and the Internet: An E-Mail Survey of Sexual Orientation

The Internet is becoming a mainstream means of communication and has the potential to become an important medium for the conduct of public health survey research. In fact, the Internet is beginning to rival the telephone and postal service in desirability for the distribution of surveys.1 With 6.4 million households currently connected to the Internet in the United States, the methods for conducting electronic surveys (e-mail surveys) and the success of these methods are of growing interest to researchers.2,3 This letter therefore discusses the methods and sampling success of what may be the first attempt to sample subjects randomly from Internet newsgroups. The study's purpose was to examine the properties of a new measure of sexual orientation.

Kiesler and Sproull's<sup>4</sup> method for sampling users connected to an "Intranet"

served as the foundation of the sampling plan. All postings to two Internet newsgroups (alt.politics.homosexuality and talk.politics.medicine) were collected over a 2-week period and the e-mail addresses (attached to each posting) enumerated. These newsgroups were chosen to produce a sample with a broad range of sexual orientations. From the enumerated list, 360 subjects were randomly sampled and were sent e-mail informing them of their selection. The e-mail survey was sent to them upon obtaining their consent to participate.

Of the 360 subjects selected, 9 could not be contacted. Of the 351 subjects contacted, 66.1% requested an e-mail survey, and 56.4% completed it. The e-mail survey sampling process was considered successful: it achieved a response rate within the range of response rates often obtained in mail and telephone surveys of similar subjects.<sup>5,6</sup> The Internet survey methods discussed here may therefore prove advantageous to other investigators wanting to collect research data. However, the respondents were predominantly young, male, White, and highly educated and were not representative of the general population of the United States. This was partly due to the type of participants attracted to the newsgroups sampled and the demographic characteristics of Internet users in general.

Despite this demographic bias, this study has demonstrated the ability of an e-mail survey to reach a relatively rare, hidden, and geographically dispersed population (in this case, homosexuals and bisexuals). Until the Internet becomes accessible to the general population, its research use may be limited to the study of populations who are likewise difficult to identify and for whom the sampling biases imposed by the Internet are considered tolerable. However, many groups of

interest to public health researchers may fit such requirements, including people with rare diseases and people with specific health behaviors or interests. Such groups are rapidly forming accessible electronic communities.

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## The Maryland Ban on the Sale of Assault Pistols and High-Capacity Magazines: Estimating the Impact in Baltimore

A Maryland law banning the sale of assault pistols and high-capacity ammunition magazines took effect in June 1994.<sup>1</sup> Other states, including California,<sup>2</sup> New