

## New Research Suggests Flu Vaccine Was Not Effective in Preventing Flu Over Winter 2002/2003

Two recent surveys conducted by Harris Interactive suggest that the flu vaccine used to vaccinate people before and during last winter (2002-2003) was not effective in preventing flu.

The first survey was designed to measure how many people had tried and failed to be vaccinated, as well as to measure public perceptions of the effectiveness of flu shots and of attitudes about the distribution and availability of vaccine for this current flu season. The results of this survey were published in The Wall Street Journal Online Health Industry Edition on December 30, 2003.

However, one finding in that survey appeared to warrant further study. The finding was that there was no correlation between having a flu vaccine shot and not getting the flu.

In light of the seriousness of this finding, Harris Interactive decided to repeat the survey and to add two additional questions. These questions were whether people who claimed to have had the flu had spent one day or more in bed, and whether a doctor had diagnosed the flu. We wanted to test a possible explanation for this remarkable finding – that many people who did not get the flu, but had colds or coughs for example, *thought* they had flu.

The results of the second survey confirmed the results of the first survey and strengthened the evidence that the flu vaccine used in 2002-2003 was not effective in preventing flu. Virtually identical proportions of those who said they had and those who said they had not received a flu shot claimed to have had the flu. Furthermore, virtually identical proportions of those who claimed to have had the flu said they had spent at least one day in bed regardless of whether they had received (79%) or had not received (75%) a flu shot.

In addition, among those who had had the flu, those who had received a flu shot (54%) were more likely than those who had not (33%) to say that a doctor had diagnosed their flu. This surprising difference may be explained, we believe, by a tendency of people who get flu shots to see their doctors more when they suffer from many symptoms, not just the flu. In other words, the people who use their doctors more for all kinds of events and conditions may be more likely *both* to get flu shots and to visit their doctors when they feel ill.

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### *What's Ahead in Health Care News?*

During this year, Harris Interactive and IMS Health will launch a global physician poll that provides insights on the perspectives and experiences of physicians in the U.S., U.K., France, Germany, Italy and Spain. Look for results in upcoming issues of the Harris Interactive *Health Care News*.

## Reasons For Caution

This research raises some very important questions and provides prima facie evidence that the vaccine used before and during last winter (2002-2003) was ineffective. However, there have been clinical trials of much greater scientific rigor than this research in the past, which have found flu vaccines were effective.

All of the following are possible factors that should be taken into account:

- It is possible that those who are most likely to get the flu are also the most likely to receive flu shots and that this reduces the prevalence of flu in this group to the prevalence of flu in the rest of the population.
- It is possible that many of those who claimed to have had the flu did not have it, and this over-claiming was much more common among those who received their flu shots—however, the replies to the new questions added to our survey make this hypothesis implausible.
- People’s memories, 12 months later, of whether or not they had flu shots before or during last winter may be so faulty that they are completely unreliable.
- The flu vaccine used last winter may have been uniquely ineffective whereas the vaccines used in other winters may have been much more effective.

## What Might Be Done

What this research does suggest, however, is that we should not assume that flu shots are effective unless they are tested. Our understanding, as nonscientists, is that flu viruses mutate and that each year judgments are made by those manufacturing the vaccine as to the type or types of viruses which are likely to be prevalent in the coming winter. Perhaps those involved in making these judgments fare better in some winters than in others?

At the very least, we believe that there is enough evidence here to question the effectiveness of flu vaccines and perhaps to seek to measure their effectiveness with the best scientific methods each year. It would be relatively easy to conduct double blind, randomized trials of volunteers each winter using the currently available vaccines to determine their effectiveness.

**TABLE 1**

### Those Who Said They Had The Flu Over Winter 2002-2003 Analyzed By Whether Or Not They Had Received A Flu Vaccine

“Thinking of last winter (2002-2003)...did you have a flu vaccine shot in the fall or winter of 2002-2003?”

“Thinking of last winter (2002-2003)...did you get the flu last winter?”

	All Adults	Had flu shot in fall or winter 2002-2003	
		Yes	No
Base: All Adults	4,170	1,448	2,704
	%	%	%
Had flu	18	17	18
Did not have flu	78	79	78
Not sure	4	3	4

Source: Based on two nationwide surveys combined. One with 1,792 adults surveyed online between December 18 and 22, 2003. One with 2,378 adults surveyed online between January 6 and 8, 2004.

**TABLE 2**

**Some Measures Of Seriousness Of “Flu” Experienced By Those Who Did And Did Not Have Flu Vaccine Shots**

“Did you spend one or more days in bed with the flu?”

“Did you visit a doctor who diagnosed the flu?”

	All who say they had flu	Had flu shot in fall or winter 2002-2003	
		Yes	No
Base: “Had the flu”	391	133	258
	%	%	%
Spent one or more days in bed	76	79	75
Visited a doctor who diagnosed flu	40	54	33

Source: Based on a nationwide survey of 2,378 adults surveyed online between January 6 and 8, 2004.

Downloadable PDFs of the Harris Interactive Health Care News are available at [http://www.harrisinteractive.com/news/newsletters\\_healthcare.asp](http://www.harrisinteractive.com/news/newsletters_healthcare.asp)

### Methodology

This research is based on two nationwide surveys conducted online by Harris Interactive. One with 1,792 adults (aged 18 and over) surveyed online between December 18 and 22, 2003. One with 2,378 adults (aged 18 and over) surveyed online between January 6 and 8, 2004. Figures for age, sex, race, education and income were weighted where necessary to bring them into line with their actual proportions in the population. Propensity score weighting was also used to adjust for respondents’ propensity to be online.

In theory, with probability samples of this size, one could say with 95 percent certainty that the results of each survey have a statistical precision of plus or minus three percentage points of what they would be if the entire adult population had been polled with complete accuracy. Unfortunately, there are several other possible sources of error in all polls or surveys that are probably more serious than theoretical calculations of sampling error. They include refusals to be interviewed (nonresponse), question wording and question order, and weighting. It is impossible to quantify the errors that may result from these factors. This online sample was not a probability sample.

*These statements conform to the principles of disclosure of the National Council on Public Polls.*

### About Harris Interactive®

Harris Interactive ([www.harrisinteractive.com](http://www.harrisinteractive.com)) is a worldwide market research and consulting firm best known for *The Harris Poll*® and its pioneering use of the Internet to conduct scientifically accurate market research. We combine the power of unique methodologies and technology with international expertise in predictive, custom and strategic research. Headquartered in Rochester, NY, with offices across the United States, in the United Kingdom, Japan and a global network of local market and opinion research firms, the Company conducts international research with fluency in multiple languages. EOE M/F/D/V

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