

The Use and Abuse of Antibiotics Surprise! Most people are reasonably well informed

They've heard about overuse and know antibiotics are not effective for treating viruses-and that colds and flus are caused by viruses. Still half the public believes antibiotics are at least "somewhat effective" in treating colds and flus.

There is widespread consensus among medical authorities that antibiotics are prescribed too often and that this is a major cause of the evolution of new strains of bacteria which are increasingly drug resistant. As a result, bacterial diseases, such as tuberculosis, which used to be easy to cure, are now much harder (and more expensive) to treat. Subsequently, we need to develop new and stronger antibiotics to treat these new strains of resistant bacterial diseases.

It is believed that many inappropriate prescriptions for antibiotics, written by doctors responding to the demands of their patients who think antibiotics help to cure colds and flus, may be one cause of the problem.

Harris Interactive decided to measure the public's knowledge and/or ignorance on this topic.

As with many surveys, this one finds a fair amount of public confusion. While a large majority of the public (79%) knows that colds and flus are caused by viruses, not bacteria, and most people (61%) know that antibiotics are not effective in treating viruses, still half of all adults (49%) believe that antibiotics are at least somewhat effective in treating colds and flus.

The good news therefore is that many people are reasonably well informed; the bad news is that too many are not.

This research is based on a nationwide survey of 2,053 adults surveyed online between November 9 and 14, 2001 and weighted to be representative of all U.S. adults. The sampling and weighting methods were the same as those used by Harris Interactive to predict the 2000 elections with great accuracy.

What Causes Colds and Flus?

The great majority of the public (79%) knows that colds and flus are caused by viruses. Only 18% thinks they are caused by bacteria. There is a modest, but only a modest, difference in knowledge based on education. Those who believe, wrongly, that bacteria cause colds and flus include 19% of those with only a high school education or less, and 10% of those with post-graduate degrees.

TABLE 1

Are colds and flus caused by bacteria or viruses?

Are colds and flus caused by...?

Base: All Adults	Total %	EDUCATION			
		High School or Less %	Some College %	College Grad %	Postgrad %
Bacteria	18	19	17	17	10
Viruses	79	78	77	82	88
Something else	3	2	6	1	2

♦ EDITORS ♦

Humphrey Taylor

Chairman of *The Harris Poll*®

Robert Leitman

Group President, Health Care, Education & Public Policy



What Kinds of Diseases Are Effectively Treated by Antibiotics?

Most people (89%) know that antibiotics treat bacterial diseases effectively, and a smaller majority (61%) knows that they do not treat viruses effectively. However, two out of five adults (39%) believe that antibiotics can be used to treat viruses effectively.

TABLE 2

Perceived Effectiveness of Antibiotics for Treating Bacteria and Viruses

Are antibiotics effective for treating...?

Base: All Adults

		Yes	No
Bacterial disease	%	89	11
Viruses	%	39	61

Effectiveness of Antibiotics in Treating Flu and Viruses

Notwithstanding their replies to the previous question (Table 2), half of the public (49%) believes that antibiotics are at least somewhat effective in treating colds and flus.

On this question there is quite a strong correlation with education. Only 30% of postgraduates believe antibiotics treat viruses effectively. Even if this number is alarmingly high, it compares with 57% of those with only a high school education or less.

TABLE 3

Perceived Effectiveness of Antibiotics for Treating Colds and Flu

How effective do you think antibiotics are for treating colds and flus?

Base: All Adults	All Adults %	EDUCATION			
		High School or Less %	Some College %	College Grad %	Postgrad %
Very effective	8	9	6	8	6
Somewhat effective	41	48	37	38	24
Not very effective	25	25	25	25	23
Not at all effective	26	19	32	28	47

People are Aware That There is a Problem

The overwhelming majority of the public (93%) reports that they have seen, heard or read of the problem of diseases becoming resistant to antibiotics because of their overuse.

TABLE 4

Seen/Heard/Read About Diseases Becoming Resistant to Antibiotics

Have you seen, heard or read of the problem of diseases becoming resistant to antibiotics because of the overuse of antibiotics?

Base: All Adults

	Total %
Yes	93
No	7

So What?

The issues of bacterial resistance and the overuse of antibiotics has been the focus of much debate and discussion. Addressing these issues successfully is dependent on public knowledge and public behavior. When patients ask their doctors for antibiotics, even when their use is not appropriate, many doctors, it is believed, prescribe them. It is good news, therefore, that so many people are reasonably well informed. It is bad news that so many people are misinformed to the extent that half the public believes that antibiotics are at least somewhat effective in treating colds and viruses.

These data are reassuring for another reason. The fact that most people are reasonably well informed suggests that a strong public education campaign, using the media and physicians who treat patients with colds and flus, could further reduce the level of public ignorance and misinformation.

Overprescribing is Not the Only Cause of Antibiotic Resistance

We should note that the inappropriate use of antibiotics to treat colds and flus is only one of several factors which are believed to have caused the evolution of new strains of bacterial resistance to antibiotics. Other possible causes include non-compliance by patients who fail to complete their antibiotic treatments and the widespread use of antibiotics to increase the growth of cattle, pigs and chickens.

It is also worth noting that American doctors prescribe antibiotics more often than doctors in many other countries (German doctors are reportedly very reluctant to prescribe them for anything other than serious conditions). The European Union does not allow the prophylactic use of antibiotics in livestock that is the norm in this country.

About Harris InteractiveSM

Harris Interactive (Nasdaq: HPOL) 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. Strengthened by its recent merger with Total Research Corporation, the Company now combines the power of technology with international expertise in predictive, custom, strategic research. Headquartered in the United States, with offices 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. For more information about Harris Interactive, visit www.harrisinteractive.com. EOE M/F/D/V

For more information, please contact us at:

877.919.4765

or visit our website at

www.harrisinteractive.com

Media inquiries, contact:

Nancy Wong 585.214.7316