

## **Heartburn or Heart Attack? Many Can't Tell the Difference**

*-- Survey of U.S. adults ages 18 and over suggests chest pain sufferers may misinterpret the cause of their symptoms --*

**Washington, DC February 21, 2006** — Many adults (64%) know severe chest pain is typically involved as a symptom of acid reflux disease, but even so, a majority of adults say they would most likely call 911 or go to the emergency room immediately if they were experiencing severe chest pain. According to a new survey of more than 2,000 U.S. adults commissioned by AstraZeneca and conducted by Harris Interactive<sup>®</sup>, nearly one in five U.S. adults (18%) have, or know someone who has, ever called an ambulance or gone to a hospital thinking they were having a heart attack, but it turned out to be heartburn or acid reflux disease. Acid reflux disease, in which stomach acid flows back into the esophagus, often causes burning pain or pressure in the chest.

Chest pain can be even more alarming for those who have previously been diagnosed with either angina (chest pain) or a heart attack. According to the AstraZeneca survey, these adults are four times more likely than those without either condition (20% vs. 5%) to have sought emergency assistance for symptoms that turned out to be heartburn or acid reflux disease.

“Many types of chest discomfort can be caused by acid reflux disease. Yet this connection is often overlooked because the symptoms of cardiac angina can be so similar to non-cardiac chest pain from GERD.<sup>i</sup>,” said John P. Liuzzo, M.D., Ph.D., Division of Interventional Cardiology, Columbia University Medical Center, New York. “Physicians could be more aware of acid reflux disease as a possible factor in the diagnosis and treatment of patients with chest pain.”

Studies have shown that half the time, non-cardiac chest pain (i.e., pain not caused by heart disease) in people with coronary artery disease (CAD) may be caused by acid reflux disease.<sup>ii</sup> A recent clinical study presented in November at the 78<sup>th</sup> American Heart Association Scientific Sessions in Dallas reported that CAD patients with previous chest pain who added a proton pump inhibitor (PPI) to their regular heart medication regimen had less non-cardiac chest pain, visited their doctor complaining of non-cardiac chest pain less often, and were admitted to the hospital for non-cardiac chest pain less often than those taking a placebo (dummy pill).<sup>iii</sup>

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“Sometimes, the chest pain may be accompanied by other symptoms, such as heartburn or acid regurgitation<sup>iv</sup>,” said John Bonhomme, MD, MPH, Senior Faculty Advisor, Grace Crum Rollins School of Public Health, Emory University. “But it is important for anyone experiencing these symptoms not to assume they are being

caused by acid reflux disease. Only a physician can diagnose the underlying cause of chest pain, so it's important that people seek prompt medical treatment.”

### **About Coronary Artery Disease**

In people with coronary artery disease, the arteries that supply blood to the heart become hardened and narrowed due to plaque buildup. When this occurs, a person may experience angina due to decreased blood flow to the heart – a feeling of uncomfortable pressure, fullness, squeezing, or pain in the center of the chest. The discomfort also may be felt in the neck, jaw, shoulder, back, or arm.<sup>v</sup> A heart attack occurs when the arterial plaque breaks open and forms a clot that completely blocks blood flow through the artery, resulting in damage to the heart.<sup>vi</sup>

### **About Heartburn and Acid Reflux Disease**

Heartburn is a burning pain in the center of the chest caused by acid from the stomach backing up into the esophagus. Acid reflux disease is persistent heartburn that occurs on two or more days a week for at least three months. This occurs when the valve between the esophagus and stomach stops closing properly, allowing stomach acid to leak back into the esophagus. Acid reflux disease is a chronic condition that, if left untreated, may lead to more serious medical conditions.

For more information about coronary artery disease, acid reflux disease, and the differences between heartburn and a heart attack, visit [www.acg.gi.org/patients/](http://www.acg.gi.org/patients/).

### **About the Survey**

Harris Interactive<sup>®</sup> fielded the online survey on behalf of AstraZeneca between January 11 and 13, 2006 among a nationwide sample of 2,095 U.S. adults 18 years of age or older, of whom 114 have been diagnosed with angina and/or a heart attack by a healthcare professional. The data were weighted to be representative of the total U.S. adult population on the basis of region, age within gender, education, household income, race/ethnicity and propensity to be online. In theory, with a probability sample of this size, one can say with 95% certainty that the results for the overall sample of adults have a sampling error of plus or minus 3 percentage points. The sampling error for the sample of those who have been diagnosed with angina and/or a heart attack by a healthcare professional is plus or minus 15 percentage points. This online sample is not a probability sample.

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## About Harris Interactive®

Harris Interactive Inc. ([www.harrisinteractive.com](http://www.harrisinteractive.com)), based in Rochester, New York, is the 13<sup>th</sup> largest and the fastest-growing market research firm in the world, most widely known for *The Harris Poll*® and for its pioneering leadership in the online market research industry. Long recognized by its clients for delivering insights that enable confident business decisions, the Company blends the science of innovative research with the art of strategic consulting to deliver knowledge that leads to measurable and enduring value. Harris Interactive serves clients worldwide through its United States, Europe ([www.harrisinteractive.com/europe](http://www.harrisinteractive.com/europe)) and Asia offices, its wholly-owned subsidiary Novatris in Paris, France ([www.novatris.com](http://www.novatris.com)), and through an independent global network of affiliate market research companies. EOE M/F/D/V

## About Men's Health Network

The Men's Health Network is a non-profit educational organization committed to improving the health and wellness of men through education campaigns, partnerships with retailers and other private entities, workplace health programs, data collection, and work with health care providers to provide better programs and funding for men's health needs.

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This Press Release can be found on the web at  
<http://www.menshealthnetwork.org/mhnnews/mhn-news.shtml>.

## References

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<sup>i</sup> Is it just a little heartburn – or something more serious? Understanding GERD consumer education brochure. American College of Gastroenterology. Available at ACG Web site:

<http://www.acg.gi.org/patients/pdfs/UnderstandGERD.pdf>.

<sup>ii</sup> Liuzzo JP et al. Chest pain from gastroesophageal reflux disease in patients with coronary artery disease. *Cardiol Rev* 13:167-173, 2005.

<sup>iii</sup> JP Liuzzo, et al. A prospective, randomized, placebo-controlled evaluation of Nexium for CAD patients. The EPAC Study - **E**someprazole **P**revention of **A**typical **C**hest Pains. Proceedings of the 78<sup>th</sup> American Heart Association Scientific Sessions.

<sup>iv</sup> Is it just a little heartburn – or something more serious? Understanding GERD consumer education brochure. American College of Gastroenterology. Available at ACG Web site:

<http://www.acg.gi.org/patients/pdfs/UnderstandGERD.pdf>.

<sup>v</sup> What is angina pectoris? American Heart Association. Available at AHA Web site:

<http://www.americanheart.org/presenter.jhtml?identifier=4472>.

<sup>vi</sup> What is a heart attack? American Heart Association, 2004. Available at AHA Web site:

<http://www.americanheart.org/downloadable/heart/110063558762007%20WhatIsaHeart%20Attack.pdf>.