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Contact: Deborah Kimbell
603-653-3602
deborah.kimbell@dartmouth.edu

What Are the Chances?

New Charts Document Relative Risk of Death From Smoking, Heart Disease, Cancer and Other Causes

Lebanon, NH & White River Jct, VT – If you’re a 55 year-old male who has never smoked, how likely is it you will die from heart disease over the next 10 years? From prostate cancer? Pneumonia? Researchers at the Dartmouth Institute for Health Policy and Clinical Practice (TDI) have created charts to provide patients with information – based on actual records -- of their risk of death.

The charts are about more than satisfying morbid curiosity. The authors, Steven Woloshin, Lisa M. Schwartz, and H. Gilbert Welch, note that exaggerated or incomplete risk information can lead people to make unwise choices about health behaviors or to become overwhelmed and cynical about health risks in general.

“To make sense of the disease risks they face, people need basic facts about the magnitude of a particular risk and how one risk compares with other risks. Unfortunately, this fundamental information is not readily available to patients or physicians,” they write in the current issue of the Journal of the National Cancer Institute.

The researchers used Census data and records from the National Center for Health Statistics to calculate age- and sex-specific death rates. In addition, they broke out the rates for smokers vs. non-smokers. Among their findings:

- The 10-year risk of death from all causes is higher for men than for women.
- The effect of smoking on the chance of dying is equivalent to adding 5-10 years of age, meaning that a 55-year-old man who smokes has about the same 10-year risk of death from all causes as a 65-year-old male who has never smoked.
- For men who have never smoked, heart disease represents the single largest cause of death from 50 on.
- For women who currently smoke, the chance of dying from heart disease or lung cancer exceeds the chance of dying from breast cancer from 40 on.

“The risk charts provide answers to two basic questions people need to ask to make good decisions about health: how big is my risk and how does this risk compare with other risks? Reading a statement like “in 2007, more than 27,000 men will die from prostate cancer” may grab the reader’s attention, but it doesn’t put the risk into the context of other important health risks, Nor does it address the probability of dying from this specific cancer over a defined time period,” the authors write.

Physicians are urged to post the charts in their offices to encourage patient-doctor communication and to aid patients in making good decisions about screening or preventative behaviors. Physicians are also posting the charts because of the compelling demonstration they provide of the harms of cigarette smoking.

Steven Woloshin, MD, MS is an Associate Professor of Community and Family Medicine at Dartmouth Medical School (DMS), Co-Director of the Center for Medicine and the Media at TDI, and a member of the White River Junction Outcomes Group. Lisa M. Schwartz, MD, MS is also an associate professor of Community and Family Medicine at DMS, a member of the Center for Medicine and the Media, and Co-director of the White River Outcomes Group. H. Gilbert Welch, MD, MPH is a Professor of Community and Family Medicine and Co-director of both the Center for Medicine and the Media and the White River Outcomes Group.

The risk charts referenced in the article, *The Risk of Death by Age, Sex, and Smoking Status in the United States: putting Health Risks in Context* may be downloaded at:

<http://www.vaoutcomes.org/riskcharts.php>

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