





INTRODUCTION

In 2001, the American Institute for Cancer Research (AICR) first commissioned a survey to gauge public awareness of various lifestyle-related cancer risk factors.

We wanted to determine how well the American public was able to separate clearly established cancer risks, such as those highlighted in our comprehensive expert reports and Continuous Update Project (CUP), from factors about which no such scientific consensus exists, but which many in the public believe cause cancer.

SUMMARY OF RESULTS

Americans generally remain more prone to blame cancer on factors they do not control than they are to recognize the steps they can take to help protect themselves. This has held true in every AICR Cancer Risk Awareness Survey conducted since 2001.

- In 2015, awareness of four out of the six known lifestyle-related risk factors established by AICR's expert reports and ongoing analysis have experienced modest increases.
- Nevertheless, awareness of these six clearly established lifestyle-related risk factors obesity, inactivity, alcohol, diets high in red meat, diets low in vegetables and fruits, and processed (cured) meats – remains alarmingly low.
- For the first time since 2009 and only the second time in the history of the survey awareness that **obesity** is a cancer risk factor has nudged above 50 percent.
- Americans have heard health messages about cancer's link to many other long-established risk factors. As they have since the survey began, an overwhelming majority of Americans correctly identify **tobacco** (94 percent) and **excessive sun exposure** (84 percent) as cancer risks.







The six well-established cancer risk factors from our expert reports and CUP are:

✓ Obesity

Raises risk for colorectal cancer, post-menopausal breast cancer, ovarian cancer, esophageal cancer, endometrial cancer, kidney cancer, pancreatic cancer, gallbladder cancer and aggressive prostate cancer.

✓ Insufficient Physical Activity

Raises risk for colorectal cancer, post-menopausal breast cancer and endometrial cancer.

Diets Low in Vegetables and Fruits

Raise risk for colorectal cancer, stomach cancer, esophageal cancer, lung cancer and mouth/pharvnx/larvnx cancer.

Alcohol

Raise risk for colorectal cancer, breast cancer (pre- and post-menopausal), esophageal cancer, mouth/pharynx/larynx cancer and liver cancer.

✓ Diets High in Red Meat

Raise risk for colorectal cancer.

✓ Cured Meats (Meat Preserved by Salt, Nitrates, Nitrites or Sugar) Raise risk for colorectal cancer.



RANKED RESULTS OF AICR'S 2015 CANCER RISK AWARENESS SURVEY

The percentage of Americans who answered "YES" when asked if each of the following factors has a significant effect on whether or not the average person develops cancer, ranked from highest percentage to lowest:

(NOTE: The six established cancer risks highlighted in AICR's expert reports and CUP are in bold.)

RANKING	2015	CHANGE FROM 2013	RANKING	2015	CHANGE FROM 2013
1. Tobacco*	94 percent	+2	16. Artificial Sweeteners	51 percent	+11
2. Inherited Predisposition/"Cancer Genes" **	89 percent	+3	17. Diets High in Fat	50 percent	+5
3. Radiation*	88 percent	+5	18. Trans-fats	45 percent	+8
4. Industrial Pollution	86 percent	+3	19. Alcohol	43 percent	+5
5. Excessive Exposure to the Sun*	84 percent	-0-	20. Insufficient Physical Activity (tie)	42 percent	+6
6. Asbestos*	83 percent	+4	21. Diets Low in Vegetables & Fruits (tie)	42 percent	-1
7. Pesticide Residue on Produce***	74 percent	+2	22. Cured Meats (tie)	38 percent	+2
8. Nuclear Power	68 percent	+4	23. Cell phones (tie)	38 percent	+8
9. Food Additives	62 percent	+6	24. Diets High in Red Meat (tie)	35 percent	-0-
10. Radon*	59 percent	+3	25. Breast Implants (tie)	35 percent	+1
11. Genetically Modified Foods	56 percent	+5	26. Power Lines	32 percent	+1
12. Viruses and Bacteria (tie)****	55 percent	+4	27. Sugar	27 percent	+6
13. Stress (tie)	55 percent	+5	28. Grilling Meat	19 percent	-3
14. Hormones in Beef	54 percent	+9	29. Coffee	10 percent	+4
15. Overweight/Obesity	52 percent	+4			

^{*}These factors are known to be legitimate cancer risks, though they are not highlighted in AICR's expert reports or the CUP.

^{****}Several viruses, including the human papilloma virus, have been linked to various cancers.



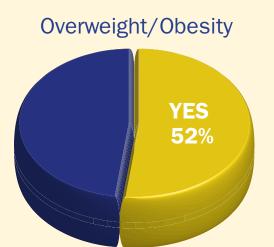




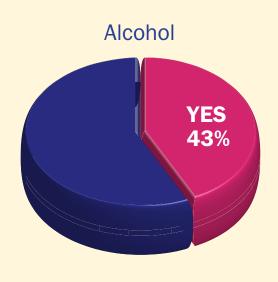
^{**} Only about 5-10 percent of all cancers are caused by "cancer genes" – most cases occur in individuals who do not possess them. Nonetheless, being born with BRCA1, BRCA2 or other cancer genes does increase risk.

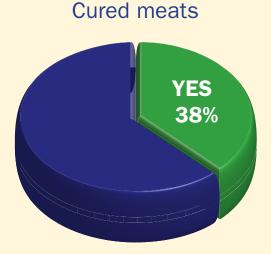
^{***}A great deal of evidence links high daily exposure to pesticides (as occurs among farm workers) to cancer, but the evidence on lower levels of exposure is far

Which of the following do you believe has a significant effect on whether or not the average person develops cancer? (% of YES responses)

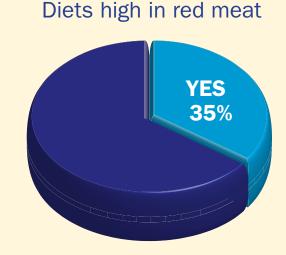














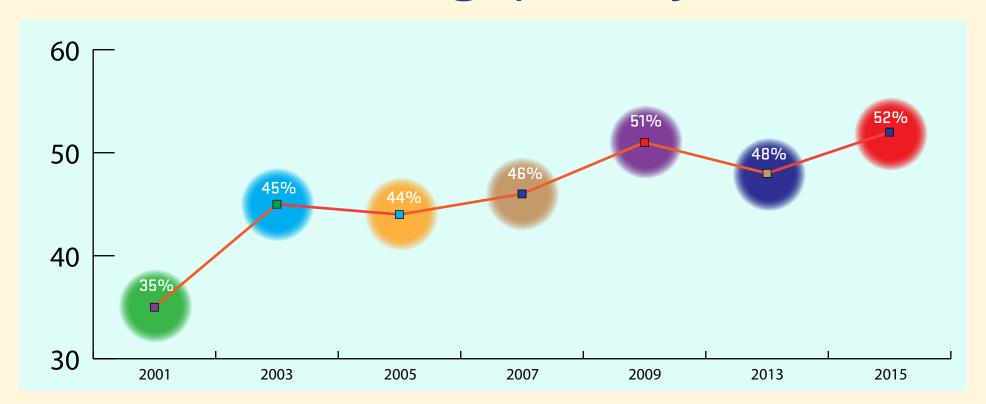
PART ONE:

Selected Trends in Cancer Risk Awareness for Risks Highlighted in AICR's Reports





Overweight/Obesity



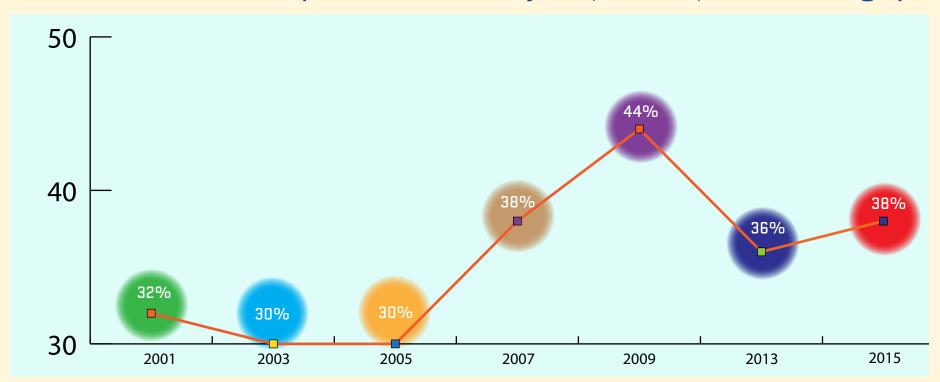
TREND

Awareness that obesity is a risk factor for cancer has increased 4 percentage points – just outside the survey's margin of error – to 52 percent. This is only the second time in the survey's history that awareness of obesity's role in cancer has inched above fifty percent.

AICR'S TAKE

Apart from not smoking, being at healthy weight it is the single most important thing Americans can do to protect themselves from cancer. Obesity increases risk for nine of the most common cancers in the US, and AICR estimates it to be a cause of over 122,000 cases every year. Awareness of this link needs to be much higher, on par with that of tobacco and excessive sun exposure.

Cured Meats (Meats Preserved By Salt, Nitrates, Nitrites or Sugar)



TREND

Following a precipitous drop in awareness in 2013, awareness that processed meat is a cause of cause of cancer remains low, but has begun to rise.

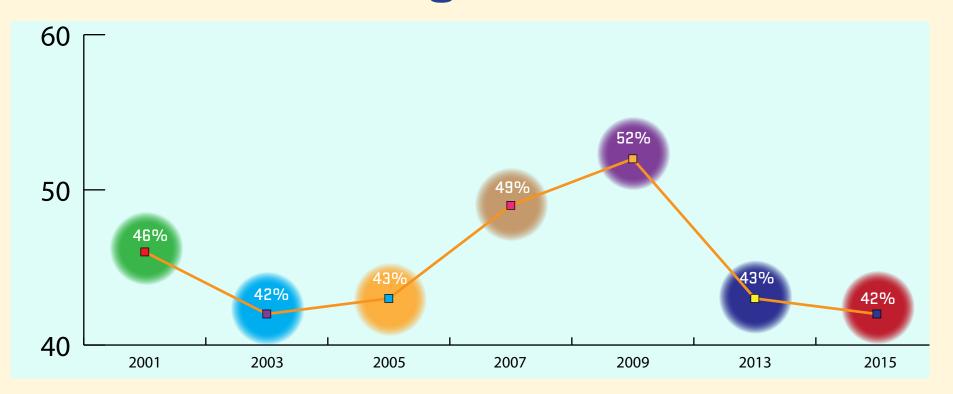
AICR's TAKE

When it comes to cancer risk, AICR recommends limiting red meat, if eaten at all (see **Diets High in Red Meat** on page 11). This is because modest consumption (18 ounces [cooked] or less per week) is not associated with an increase in colorectal cancer risk.

The same does not hold true for processed meat (a category that includes cured meats like bacon, ham, hot dogs and cold cuts). Even small amounts of processed meat, consumed regularly, make colorectal cancer more likely. This is why AICR recommends avoiding these foods in general, and saving them for special occasions.

Yet many busy American families turn to processed meats – especially hot dogs – as a convenient everyday snack for kids. Today only about 1 in 3 Americans knows of the clear link between these foods and increased cancer risk. This number needs to be much higher.

Diets Low in Vegetables and Fruits



TREND

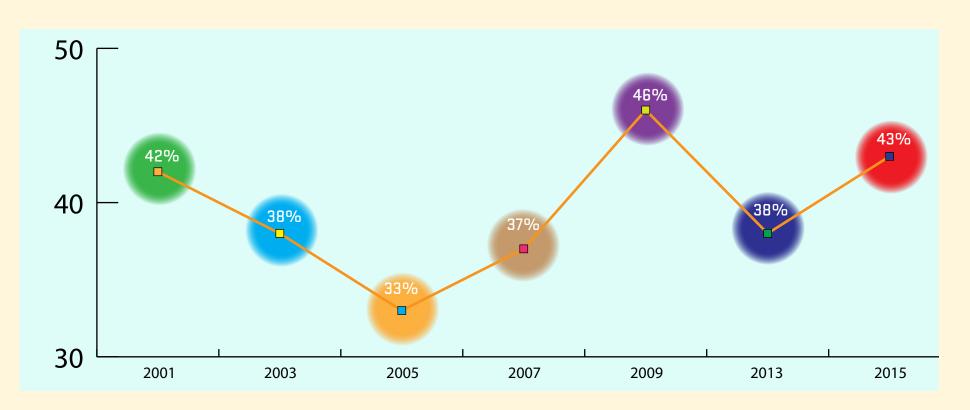
Awareness that diets lacking in plant food increase cancer risk continues to dwindle from its 2009 high of 52 percent

AICR's TAKE

This significant and worrisome recent slide in awareness means that Americans are either not hearing or are ignoring health messages about the protective power of plant-based diets. Given the clear evidence that diets high in fruits and vegetables – as well as whole grains and beans – decrease risk for several cancers, this finding suggests that science-based public health advice may be losing ground to the "noise" that exists on the Internet and in social media.

In addition to their direct effect on cancer risk, fruits and vegetables are low in calorie-density, which means they can help prevent the buildup of body fat that research shows increases risk for many cancers (see **Overweight/Obesity** on page 6.)

Alcohol



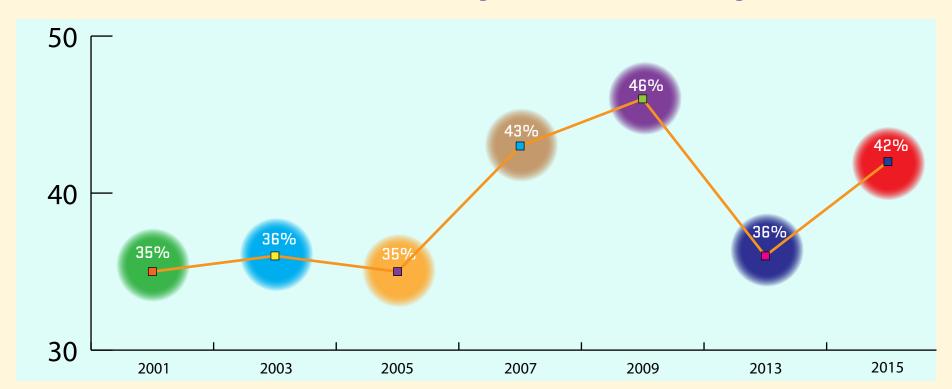
TREND

After a precipitous drop in 2009, awareness that alcohol raises cancer risk has begun to climb to 43 percent – incredibly, less than half of Americans realize that alcohol is potent carcinogen.

AICR's TAKE

Messages about the potential heart-health benefits of modest alcohol intake may be clouding the alcohol-cancer link in the minds of Americans. Nonetheless, alcohol remains a clear and convincing cause of several cancers, and the best advice, when it comes to cancer risk, is not to drink at all.

Insufficient Physical Activity



TREND

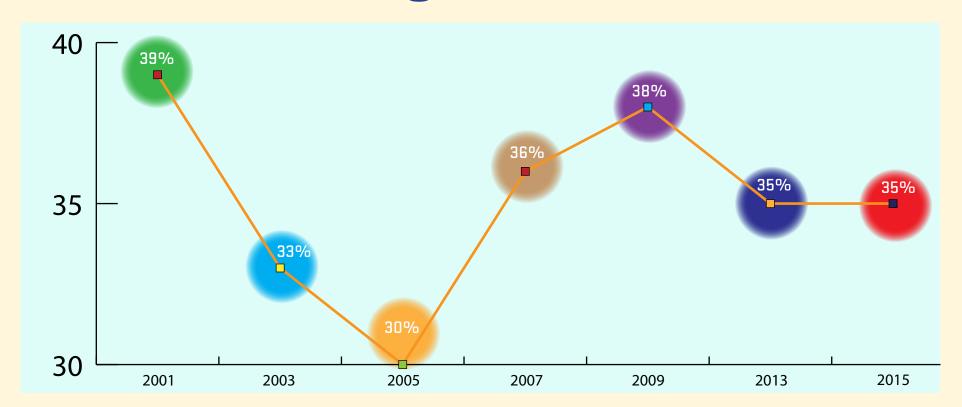
After the largest (10-point) drop in survey history in 2013, awareness that physical activity plays a role in risk is bouncing back – but has yet to crack the 50 percent barrier.

AICR's TAKE

When it comes to lowering cancer risk, there are no "magic bullets" – but regular physical activity comes pretty close. Being active protects against cancer both directly (by helping to regulate the body's hormone levels) and indirectly (by helping to prevent the buildup of excess body fat, itself a cause of nine cancers).

But we are becoming an increasingly sedentary country, as screen time increases and commutes get longer. We hope in 2017 to see a majority of Americans realizing the protective power of regular physical activity.

Diets High in Red Meat



TREND

Awareness of this important cancer risk factor has vacillated over the course of the survey, but saw no change over the past two years.

AICR's TAKE

The traditional American meal, which consists of a large chunk of red meat (beef, pork, lamb) with some starchy vegetables on the side, has to change. At high levels of red meat consumption, risk for colorectal cancer increases markedly. It is dismaying that 2 out of 3 Americans have not heard this message.

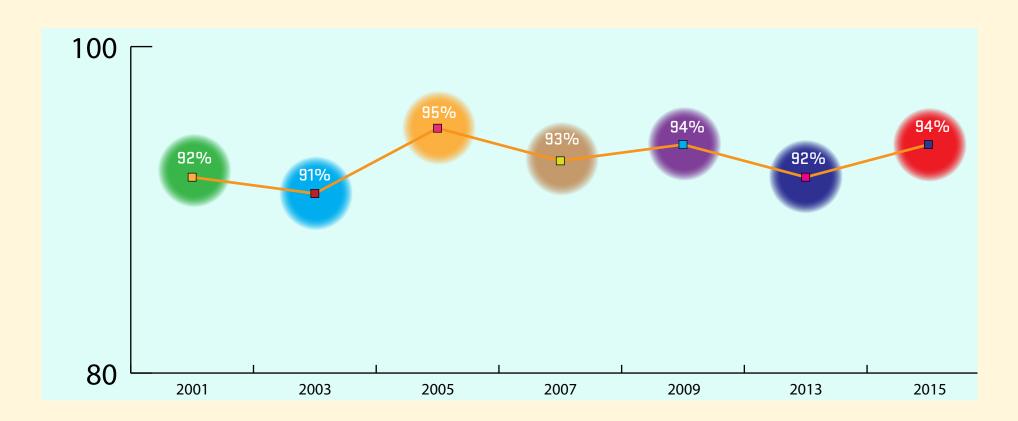
For cancer protection, AICR recommends that those who choose to eat red meat at all limit themselves to no more than 18 ounces (cooked) per week.



PART TWO: Selected Trends for Other Notable Cancer Risks



Tobacco



TREND

Holding steady.

AICR's TAKE

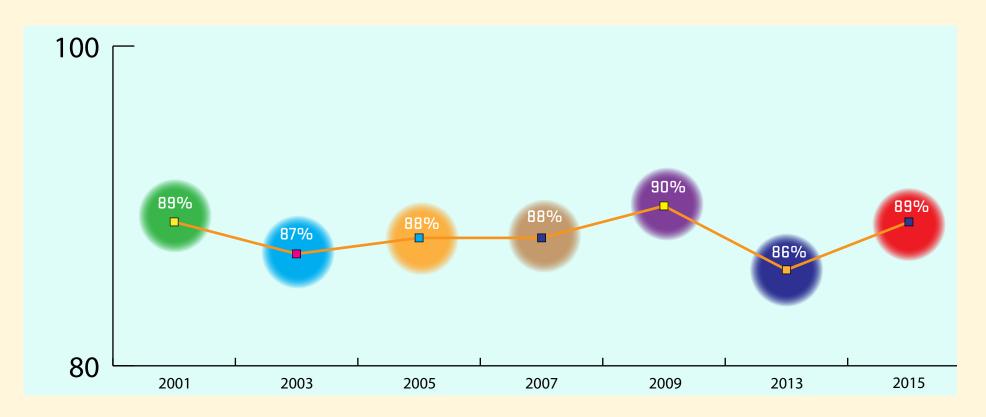
We're encouraged that health messages about such a clear and convincing risk for many cancers are being heard.







Inherited Predisposition/Cancer Genes



TREND

Holding steady.

AICR'S TAKE

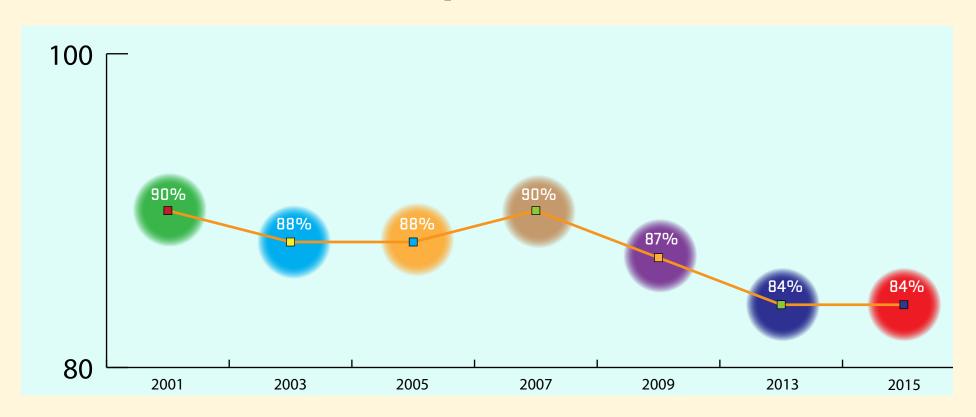
It's true that individuals born with BRCA1, APC or other "cancer genes" are at increased risk for cancer.

Note, however, that respondents were asked if they thought various factors have a significant effect on whether or not the **average person** develops cancer. And the vast majority of cancers that occur – as many as 95 percent, by some estimates – occur in individuals who do not possess these genes.





Excessive Exposure to the Sun



TREND

Gradually dropping.

AICR's TAKE

There's no question that sun exposure increases risk for skin cancer, the most common form of the disease. Given the sheer number of skin cancers that occur in the US every year, the fact that awareness of this risk factor remains at the lowest point it's been in the history of the survey is troubling.



METHODOLOGY

The AICR Cancer Risk Awareness Survey has been conducted periodically since 2001. A random sample of Americans aged 18 and older is telephoned on behalf of AICR by SSRS (www.ssrs.com) using the SSRS Omnibus survey.*

2001: 750 respondents. Margin of error: +/- 4 percent. **2011:** No survey was conducted. **2003:** 1,025 respondents. Margin of error: +/- 3 percent. **2013:** 1,026 respondents. Margin of error: +/- 3 percent. (30 percent of respondents were reached by cell phone.) **2005:** 1,010 respondents. Margin of error: +/- 3 percent. **2015:** 1,108 respondents. Margin of error: +/- 3 percent. **2007:** 1,022 respondents. Margin of error: +/- 3 percent. (50 percent of respondents were reached by cell phone.) **2009:** 1,021 respondents. Margin of error: +/- 3 percent.

The data for the 2015 survey were collected from December 10–14, 2014. The SSRS Omnibus sample is designed to represent the adult U.S. population (including Hawaii and Alaska). The SSRS Omnibus uses a fully-replicated, stratified, single-stage, random-digit-dialing (RDD) sample of landline telephone households, and randomly generated cell phone numbers. The survey was conducted in English and Spanish.

Respondents are read the following question: "Which of the following do you believe has a significant effect on whether or not the average person develops cancer?"

The 29 risk factors are randomly ordered, and read to respondents one at a time; to each, respondents answer "Yes," "No" or "Don't Know."

Raw data tables of the 2015 survey, including breakdowns by sex, age, household income, region, education, race, political affiliation, and metro status, and a full methodology report are available upon request: communications@aicr.org

^{*}For more information on the methodology of the SSRS Omnibus survey, see http://ssrs.com/wp-content/uploads/2014/02/SSRS_Omnibus_Methodology_115. pdf. SSRS is a Charter Member of the Transparency Initiative of the American Association of Public Opinion Research (AAPOR) and committed to complete disclosure of research methods.





