

# Lung Cancer Initiatives

# Facts

FROM THE DIVISION OF CANCER PREVENTION AND CONTROL

2008 / 2009

The Centers for Disease Control and Prevention (CDC) is working to prevent and control lung cancer through a variety of activities.

## The Burden of Lung Cancer

More people die from lung cancer than from any other type of cancer. This is true for both males and females. In 2004 (the most recent year for which statistics are available), lung cancer accounted for more deaths than did breast, prostate, and colorectal cancers combined. In 2004, 89,575 men and 68,431 women in the United States died of lung cancer.<sup>1</sup> That same year, 108,355 men and 87,897 women were diagnosed with lung cancer.\*<sup>1</sup>

Aside from nonmelanoma skin cancer, lung cancer is:

- The second most common cancer among white, black, Asian, Pacific Islander, and American Indian/Alaska Native men in the United States.
- The third most common cancer among Hispanic men.

- The second most common cancer among white and American Indian/Alaska Native women.
- The third most common cancer among black, Asian/Pacific Islander, and Hispanic women.<sup>1</sup>

\* Incidence counts cover approximately 98% of the U.S. population. Death counts cover 100% of the U.S. population. Use caution in comparing incidence and death counts.

In the United States, incidence of lung cancer has decreased significantly by 1.8% per year from 1991 to 2004 among men and remained level from 1998 to 2004 among women. Lung cancer death rates for U.S. women are among the highest in the world. Death rates for U.S. men are lower than rates among men in several other countries, although rates among males are still higher than rates among females in the United States.<sup>13</sup>

## Risk Reduction

Tobacco use is the major cause of lung cancer in the United States. About 90% of lung cancer deaths in men and almost 80% of lung cancer deaths in women in this country have been attributed to smoking.<sup>2</sup> Experts agree on the importance of preventing adolescents from starting to smoke, helping smokers to quit, and reducing exposures to environmental tobacco smoke and other substances known to cause lung cancer.<sup>14</sup>

Quitting smoking will lower one's risk of lung cancer. This is true no matter how old one is or how much he or she smokes. The longer a person goes without smoking, the more his or her risk will diminish compared with those who continue to smoke. However, the risk in people who have quit is still higher than the risk in people who have never smoked.<sup>3,15</sup>

Other things people can do to reduce the risk of lung cancer include:

- Avoiding secondhand smoke.<sup>16,17</sup>
- Making one's home safer by testing for radon and reducing exposure.<sup>18</sup>

## Risk Factors

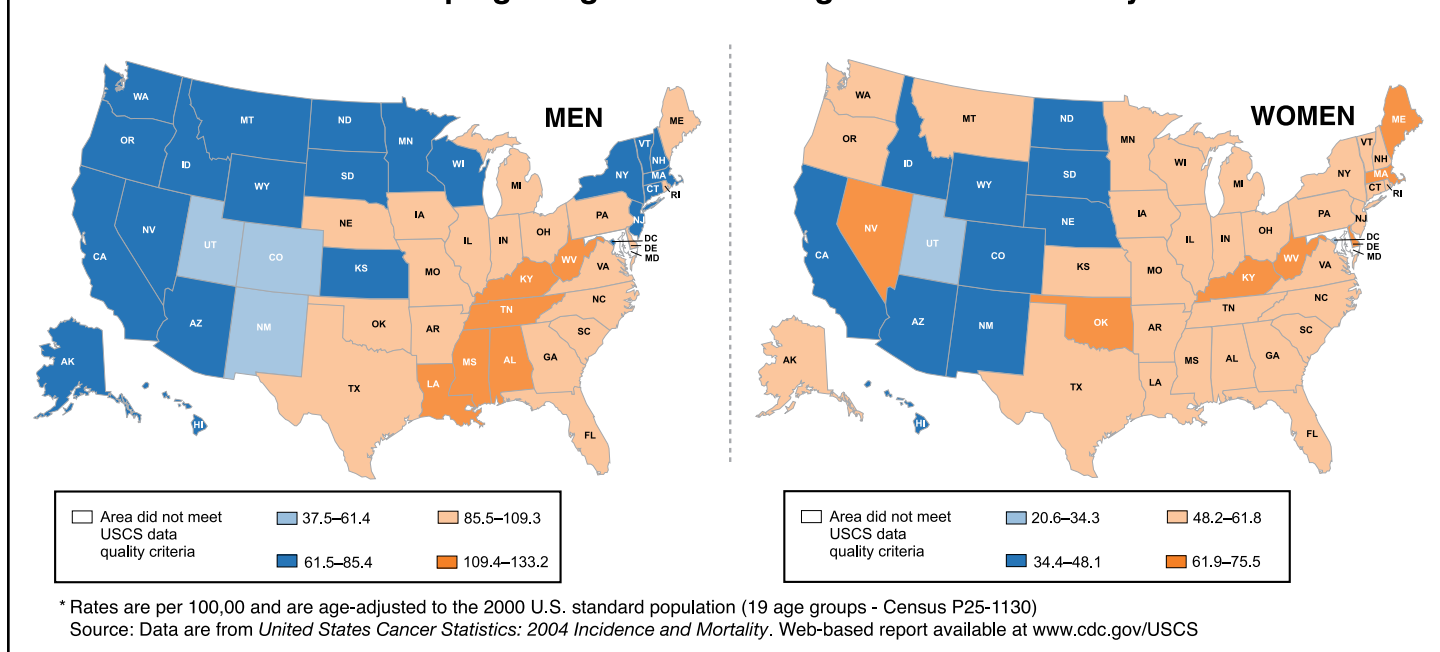
Risk factors for lung cancer include:

- Smoking and being around others' smoke.<sup>2,3,4</sup>
- Things around us at home or work, such as radon gas, asbestos, ionizing radiation, and other cancer-causing substances.<sup>5,6</sup>
- Personal traits, such as having a family history of lung cancer.<sup>7,8,9,10</sup>
- Aging. The risk of death from lung cancer increases with age and is greater in men than in women.<sup>11</sup>

## Screening

Scientists have studied several types of screening tests for lung cancer. Experts at the U.S. Preventive Services Task Force reviewed these studies in 2004 and concluded that more information is needed to determine whether the benefits of screening outweigh the potential harms.<sup>12</sup>

## Rates of Developing Lung Cancer Among Men and Women by State\*



- Discussing the need for any chest X-ray with your doctor and avoid the use of unnecessary diagnostic X-rays.<sup>19</sup>
- Taking action to reduce air pollution from motor vehicles.<sup>20</sup>
- Becoming informed about the safety of chemicals used at work and at home, and following recommended guidelines regarding their use.<sup>19,21</sup>

These and other public health efforts that address lung cancer support CDC's overarching goal of healthy people in every stage of life. They also address the U.S. Department of Health and Human Services' Healthy People 2010 goal of reducing the lung cancer death rate.

### Ongoing Work

CDC's ongoing work to encourage the prevention and control of lung cancer includes:

**Lung Cancer Website.** CDC maintains a website ([www.cdc.gov/cancer/lung/](http://www.cdc.gov/cancer/lung/)) to increase awareness of and knowledge about lung cancer, and to provide resources for preventing and controlling lung cancer. The site presents information about disease burden, risk factors, and risk modification, as well as screening recommendations, a review of CDC's activities in lung cancer control, and links to additional resources. The site offers definitions and links to information about diagnosis, staging, treatment, supportive care, management of side effects, clinical trials, and support groups.

**National Program of Cancer Registries.** CDC's Division of Cancer Prevention and Control (DCPC) collects critical

data about people who are diagnosed with lung cancer in the United States. These data inform public health actions and are the results of a partnership between DCPC's National Program of Cancer Registries and the National Cancer Institute's Surveillance, Epidemiology, and End Results Program. Along with the North American Association of Central Cancer Registries, these programs coordinate the collection of high-quality incidence data for approximately 98% of the U.S. population. CDC's National Center for Health Statistics/National Vital Statistics System provides nationwide cancer death statistics for 100% of the U.S. population. These data are available at <http://apps.nccd.cdc.gov/uscs/> and [www.cdc.gov/nchs](http://www.cdc.gov/nchs).

**Office on Smoking and Health.** CDC's Office on Smoking and Health (OSH) created the National Tobacco Control Program in 1999 to reduce tobacco-related diseases through community interventions, counter-marketing, program policy and regulation, surveillance, and evaluation. The program provides funding and technical support to state and territorial health departments in all 50 states, the District of Columbia, 7 U.S. territories, 9 national organizations, 6 national networks, and 7 tribal support centers, and municipal health officials. More information is available at [www.cdc.gov/tobacco/](http://www.cdc.gov/tobacco/).

**Division of Nutrition, Physical Activity and Obesity.** CDC's Division of Nutrition, Physical Activity and Obesity supports states by offering programs that promote a healthy diet. These programs include Fruits and Veggies—More Matters, which encourages people to eat more fruits and vegetables. More information is available at [www.cdc.gov/nccdphp/dnpa](http://www.cdc.gov/nccdphp/dnpa).

**National Institute for Occupational Safety and Health (NIOSH).** CDC's NIOSH is the federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness, including lung cancer caused by workplace exposures. Information about occupational cancer is available at [www.cdc.gov/niosh/topics/cancer/](http://www.cdc.gov/niosh/topics/cancer/).

**National Center for Environmental Health (NCEH) and the Agency for Toxic Substances and Disease Registries (ATSDR).** ATSDR and CDC's NCEH support environmental health tracking programs and conduct activities to prevent or control exposures and diseases related to the environment. For lung cancer, examples include exposures to asbestos, radon, ionizing radiation, and other cancer-causing substances at home, in the general environment, or from toxic waste sites.

**Guide to Community Preventive Services.** CDC supports the *Guide to Community Preventive Services*, a website that recommends ways to improve tobacco control at the community level. The *Guide* also offers evidence-based recommendations about other disease prevention and health promotion programs, and is available at [www.thecommunityguide.org/tobacco/](http://www.thecommunityguide.org/tobacco/).

**Cancer Control P.L.A.N.E.T.** CDC contributes to Cancer Control P.L.A.N.E.T. (<http://cancercontrolplanet.cancer.gov>), a website that offers research-tested tools and programs for tobacco control, as well as many other resources for the prevention and control of cancer.

**1-800-QUITNOW.** CDC and its partner, the National Cancer Institute (NCI), support a national network of "quitlines" that smokers in the United States can access for help with quitting smoking. 1-800-QUITNOW (1-800-784-8669) is a single-access point to the National Network of Tobacco Cessation Quitlines. Callers are routed automatically to a state-run quitline if one exists in their area. If there is no state-run quitline, the call goes to the NCI quitline.

## Future Directions

During fiscal year 2008–2009, CDC will continue to support and contribute to the activities listed above, and will maintain its lung cancer website, [www.cdc.gov/cancer/lung/](http://www.cdc.gov/cancer/lung/).

With additional funding, CDC's DCPC would enhance lung cancer surveillance activities, and evaluate potential research efforts related to lung cancer screening and early detection, community-based programs related to lung cancer prevention and control, and the public health needs of cancer survivors and their families.



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