do not have a precancerous condition, do not need a colposcopy, and can return to a regular screening schedule.”

The model incorporates a wide range of information about the likelihood of women with abnormal cytology results or positive HPV tests eventually dying of cervical cancer, the costs of cytology, HPV testing, other diagnostic tests like colposcopy, and the cost of treating women with cervical cancer.

Of course, a large randomized clinical trial that compares each of the combinations of tests would be the ideal source of information for guideline development. However, such a study would be extremely difficult to conduct. Because cervical cancer is relatively rare in countries where screening is already an established practice, it would probably require participation of hundreds of thousands (or even millions) of women. And because cervical cancer takes many years to develop, the results of such a clinical trial would take years to obtain.

“Millions of women every year are told that they have an abnormal Pap test result and require further testing,” said Debbie Saslow, PhD, Director of Breast and Cervical Cancer at the American Cancer Society. “Often this means more frequent Pap tests, and for many women it means a colposcopic exam,” Saslow said. “With the new HPV DNA test, a negative result can save many of these women from further evaluation, an important advance to cervical care.”

“However, many women will be told that they have HPV, the sexually-transmitted virus associated with cervical cancer,” Saslow said. “It is important that providers explain some basic facts about HPV and the natural history of cervical cancer to women who receive a positive test result.”

“The virus is very common, particularly in younger women, and the virus usually goes away on its own without causing any problems.” Saslow said. Doctors and other health care providers “need to be prepared to address questions related to the transmission of HPV and any implications a positive test result may have regarding patients’ sexual relationships.”

“Having these guidelines available will result in more educated patients and providers,” Runowicz said. “By highlighting the advances in screening, hopefully more women will avail themselves of annual gynecologic exams and periodic cytologic screening.”

REPORT TO THE NATION: CANCER DEATH RATES DROP, BUT TOTAL NUMBER OF CASES RISE

Cancer mortality rates continued to fall in the United States during the years between 1993 and 1999, according to a consensus report by five government and private health organizations.

The *Annual Report to the Nation on the Status of Cancer, 1973-1999, Featuring Implications of Age and Aging on the US Cancer Burden* was published in the May 15 issue of *Cancer* (2002;94:2766-2792). The report was the journal’s fifth yearly “report card” to the nation.

This year it was compiled by the American Cancer Society (ACS), the National Cancer Institute (NCI), the North American Association of Central Cancer Registries, the Centers for Disease Control and Prevention, and the National Institute on Aging. The initial *Report to the Nation* was issued four years ago and documented the first sustained decline in cancer mortality rates.

“The good news in this report is the continuing fall in cancer death rates by slightly more than one percent per year between 1993 and 1999,” said John R. Seffrin, PhD, Chief Executive Officer of the ACS.

But this year’s report stated that the actual numbers of cancer cases and deaths were up because the age-standardized incidence rate (expressed in new cases per 100,000 people per
year) is holding steady; yet the US population is growing larger and many more people are living into age ranges where cancer is more common.

If these population trends continue and incidence rates remain the same, by the year 2050 there could be twice as many people diagnosed with colorectal cancer each year. Much of this will be because of an almost three-fold increase in the number of people older than 75 who will be diagnosed with cancer for the first time.

“The total impact of cancer on the US population is a combination of how all these trends affect us,” said the report’s lead author, Brenda K. Edwards, PhD, Associate Director for Surveillance Research Programs at NCI.

**“Big Four” Cancer Death Rates Down**

Most of the decline in death rates involved lung, colorectal, breast, and prostate cancers, which together account for more than half of all US cancer deaths. Lung cancer death rates were down among all age and sex groups except among older women.

“The group of women who had the longest exposure to tobacco use is aging so their lung cancer rates are going up; and younger women have smoked less and their rates are lower, so it is quite related to use of tobacco,” Edwards said.

Edwards added that some experts believe wider use of colorectal cancer screening tests could be a reason colorectal cancer death rates fell. Improvements in treatment, and improvements in diet and lifestyle among some may have helped lower these rates as well, she said.

Breast cancer death rates had been declining among white women for some time, and are now dropping among African-American women for the first time. This drop may have occurred because more African-American women are now taking advantage of ways to find breast cancer early. As a result, these women are often being treated in early stages of the disease.

Prostate cancer death rates fell as well. Most experts think the PSA test has helped find more prostate cancers early, but it’s not yet clear whether early detection or better treatments (or both) have driven prostate cancer death rates lower, said Edwards.

Among men, chances of developing any kind of cancer fell, but chances rose among women, with the largest increase in breast cancer. Most of the increase in new breast cancer cases was early-stage breast cancer, most often found through early detection by mammography, clinical breast exam, or breast self-exam, said Edwards. Finding the disease in early stages might be partly responsible, along with better treatments, for the lowered breast cancer death rates, she said.

**Age-adjustment Standard Changed**

Cancer incidence and mortality rates are often age adjusted to compare rates among populations with different age distributions. For example, comparing Florida and Alaska rates might make it look as though moving from Alaska to Florida would almost triple a person’s cancer risk. But in reality, Florida simply has more people in older age groups that are more likely to develop cancer. Although the crude or unadjusted rate is higher for Florida, the age-adjusted rates are similar for the two states.

Likewise, age adjustment is very helpful when comparing trends in incidence or mortality over time in the same geographic region when the population’s age distribution is changing. Earlier reports used age-adjusted incidence and mortality rates that were standardized based on the makeup of the US population in 1970.

But this year for the first time, the model for age adjustment was based on the results of the 2000 US census. This update allows for more accurate age-adjusted rates based on the US population as it is now, compared with what it was 30 years ago.

But because of this change in statistical
methodology, the latest incidence and mortality rates can’t be compared directly with those of previous years. The incidence rates for many cancers would look much higher than in previous years, even though they really haven’t changed much.

For example, the overall risk of developing cancer, and rates of breast, prostate, and other cancers that mainly occur later in life will appear to go up if compared with earlier reports. That’s because the new “year-2000 adjustment” recognizes that larger percentages of the US population are in the older age groups in which those diseases occur more often.

“But changing the yardstick hasn’t turned back progress against cancer—overall death rates from all cancers combined continued to fall during the years 1993 to 1999, continuing the trend first observed five years ago,” said Michael Thun, MD, Vice President of Epidemiology and Surveillance Research for the ACS.

Looking to the Future

“The projection of future cancer cases was new in this year’s report and underscores how large the impact of the future aging and growth of the population will be on the future cancer burden,” said Thun.

The authors noted that a peek into the future clearly shows the need to quicken the pace of research, increase cancer prevention and screening, and improve therapies, including treatments for an aging population, many of whom may have age-related comorbidities in addition to their cancer.

Commenting on the new report, NCI Director, Andrew C. von Eschenbach, MD, said, “The continuing decline in the rate of cancer deaths once again affirms the progress we have made against cancer, but the report also highlights the need for an acceleration of research as the population of the United States ages.”

PC-SPES FOUND TO CONTAIN PRESCRIPTION DRUGS

The well-known herbal dietary supplement, PC-SPES, has been found to contain prescription drugs and has been recalled from the market. Researchers from California and the Czech Republic found that PC-SPES contained three prescription drugs not named in the supplement’s list of ingredients—diethylstilbestrol (DES), indomethacin, and warfarin. The findings were reported at the April 2002 meeting of the American Association for Cancer Research in San Francisco, CA.

PC-SPES is a combination of material from eight plants, and is manufactured in China and distributed in the United States by Botanic Lab of Brea, CA. Because the product is marketed as a dietary supplement, the 1994 Dietary Supplement Health and Education Act requires its label to contain the following statement: “This product is not intended to diagnose, treat, cure, or prevent any disease.”

Nonetheless, PC-SPES is frequently used as a treatment by men with advanced prostate cancer. Several clinical studies (recently reviewed in CA Cancer J Clin 2001;51:199-204) have found the product to be an efficacious treatment for advanced prostate cancer.

Pattern of PC-SPES Side Effects Raises Suspicions

One of the researchers, Robert Nagourney, MD, from Rational Therapeutics of Long Beach, CA, had been treating his advanced prostate cancer patients with PC-SPES for several years. Although he was impressed with the success of the treatment, he was puzzled by the side effects.

Among men taking PC-SPES reported in case series and clinical trials, the prevalence of