THE CANCER LETTER

PO Box 9905 Washington DC 20016 Telephone 202-362-1809

Vol. 24 No. 11
March 20, 1998

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Price $275 Per Year US
$295 Per Year Elsewhere

Coalition Gives "Incomplete" To NCI, CDC Statistics, But Gets Low Grade From Critics

A coalition of organizations concerned about cancer among racial and ethnic minorities said the latest report of cancer incidence and mortality doesn't fully represent minorities and, consequently, is "hard to take seriously."

"Groups of Americans who suffer the highest incidence and mortality rates from cancer have been left out of newly released research that says cancer is receding among the general population," the

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In Brief:

Bailes Elected President Of ASCO For 1999; Outlines Goals In Remarks To ACCC

JOSEPH BAILES became the first community oncologist to be elected president of the **American Society of Clinical Oncology**. Bailes, national medical director of the Dallas-based Physician Reliance Network, will begin his term in May 1999. **Allen Lichter**, professor and chairman of radiation oncology at University of Michigan, will become the ASCO president at the society's annual meeting this May in Los Angeles. In the recently concluded election, Bailes ran against **George Bosl**, chairman of the department of medicine at Memorial Sloan-Kettering Cancer Center, professor of medicine at Cornell University Medical College, and a member of the ASCO board of directors. Bailes, a member of the ASCO board, has chaired the ASCO Clinical Practice Committee since 1989. . . . **BAILES RECEIVED** the National Achievement Award from the ***Association of Community Cancer Centers*** at its annual meeting last week for "leadership and skill in bringing together community and university oncologists, advocacy groups, and members of Congress to ensure patient access to quality cancer care." In a speech at the meeting, Bailes said ASCO will emphasize resolving practice expense issues to better balance drug reimbursements with chemotherapy administration codes, modifying reimbursement policies for oral therapeutics, ensuring that clinical trials are available to patients who want to participate, and continuing to talk with FDA to ensure patient and physician access to new therapies and the implementation of reforms for dissemination of off-label information. Bailes said ASCO also plans to streamline its handling of public policy issues, coordinate the Clinical Practice Committee with the Public Issues Committee, hire legislative specialists, and solidify ties with the advocacy community.

Critics Give ICC Statement On Report Card A Low Grade

(Continued from page 1)

Intercultural Cancer Council said in a statement dated March 11.

These claims, enumerated in a press release titled "Group Gives Government Incomplete on Report Card" and posted on PRNewswire, coincided with the announcement by NCI, the Centers for Disease Control and Prevention, and the American Cancer Society that cancer incidence and mortality declined between 1990 and 1995 (**The Cancer Letter**, March 13). The announcement was based on a paper titled "Cancer Incidence and Mortality, 1973-1995: A Report Card for the U.S.," published in the March 15 issue of the journal Cancer.

Though apparently intended to illuminate a sad corollary to the good news in the Report Card, the ICC has instead turned the spotlight on itself, inviting examination of its political tactics and scientific veracity of its claims. Pointing to inaccuracies in the press release, key scientists who study the issue of race and cancer said that at best, ICC had made an honest mistake in interpretation of cancer statistics, or—at worst—made a deliberate attempt to politicize cancer statistics along racial lines.

ICC officials said the press release is accurate and they stand by it.

The principal argument in the ICC statement is that the study by NCI, CDC, and ACS does not include "more than half" of the U.S. population.

Not true, said officials at NCI and ACS. The cancer mortality data derive from the entire U.S. population, and therefore, are representative of all minorities.

The incidence data, from the NCI Surveillance, Epidemiology and End Results program, represent 9.5 percent of the U.S. population overall, but rely on oversampling to measure cancer incidence in minorities. For example, SEER includes about 12 percent of the U.S. white population, 12 percent of the black population, and far larger percentages of other racial and ethnic minorities.

Thus, ICC allies and critics alike were surprised to read the following statements by ICC co-chairmen Lovell Jones and Armin Weinberg:

—"For the black community it's hard to take this seriously when more than half of the African Americans in this country are not represented," said Jones, director of experimental gynecology-endocrinology at the University of Texas M.D. Anderson Cancer Center.

—"It's like looking at a puzzle with large missing pieces," said Weinberg, director of the Center for Cancer Control and Research at Baylor College of Medicine.

The implications of these statements reach beyond an academic disagreement over data. Since its formation three years ago, ICC has become an increasingly visible player in the arena of oncopolitics. ICC's membership includes key minority organizations as well as ACS. The intercultural group is providing the outreach to minorities in the upcoming march against cancer. Together with ACS and NCI, ICC sponsors a biennial symposium on cancer in minorities. *And,* ***The Cancer Letter*** has learned, ICC and ACS are lobbying the office of the Vice President to develop a comprehensive plan on coordination of the National Cancer Program.

"It's not clear what the basis is for the ICC charge that the study is misleading," said Louis Sullivan, president of Morehouse School of Medicine in Atlanta, principal investigator of the NCI-funded National Black Leadership Initiative on Cancer, former HHS secretary, and former member of the National Cancer Advisory Board.

"It's very easy to throw a charge like that around, but I think they should give an example of how it is misleading," Sullivan said. "What is the

THE CANCER LETTER

Member, Newsletter Publishers Association

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Founded Dec. 21, 1973 by Jerry D. Boyd

basis for that charge?"

Sullivan and others who study race and disparity in health outcomes, said public statements of this sort threaten to trivialize the public health questions that emerge from the careful examination of cancer incidence and mortality trends. These include research questions about the collection of cancer incidence and mortality data based on racial and ethnic categories, and correlating these data with income, education, health insurance status, quality of care, treatment modalities, and outcomes.

"I don't understand [the ICC] statement," said Harold Freeman, chairman of the President's Cancer Panel, director of surgery at Harlem Hospital, and chairman of the Eastern region of the National Black Leadership Initiative on Cancer. Freeman also is an ex officio member of the ICC Steering Committee.

"There are people who are dealing with race as the issue in itself. I have no fight against those people. However, my experience of 30 years in Harlem has led me to look at the universal causes of these disparities that probably operate across all populations," Freeman said. One of the most important of these is poverty, he said.

"I take a Martin Luther King Jr. approach to health care issues," Freeman said. "There is no separate way to solve the problems of poor black people. If poverty is the issue, then you have to approach poverty."

Harmon Eyre, ACS executive vice president for research and cancer control, said the ICC statement could confuse the public. "My concern about the real negative spin of the ICC statement is that it takes away from the fact that there is real progress going on, and detracts from the message that we can make progress," Eyre said. "Clearly, reducing tobacco use in minorities or any population is important, and access to screening and treatment is important. These messages are universal."

"A Rather Non-Combative Position"

The ICC statement appears to have influenced some news coverage of Report Card. The Houston Chronicle quoted the ICC press release prominently in a March 12 story, and included additional comments from Jones. According to the story, Jones "contends the data upon which the report card is based are flawed."

The confusion over the different sources of incidence and mortality data surfaced in a story on MSNBC, an Internet news site containing text articles from NBC's television news programs.

The March 12 story reported that, "groups representing minorities criticized the report," and that "the population database from which the statistics are drawn has major 'blind spots' that leave nearly half the American population—especially minorities and the poor—undercounted."

ICC co-chairman Weinberg said the group had no intention of getting into a fight with NCI and ACS.

"I thought we took a rather non-combative position, where we could have been very combative," Weinberg said to **The Cancer Letter**.

"There is something seriously wrong with SEER when it is expressed as a totally representative report," Weinberg said. "It doesn't mean, however, that what [the Report Card] does represent is wrong. It's just that you cannot use it to extrapolate to all Americans without stating the limits, and, in fact, often the limits are stated, but to the average person, they are considered more like a footnote rather than the punchline."

The ICC statement was intended to point out the limitations of the Report Card, Weinberg said.

"People tend to skim articles, skim headlines, look at bullets, and they don't go beneath it," he said. "That's really unfair to a lot of people who are not properly represented in this report. If you read the report, they do make some very legitimate statements about the differences that we are seeing in these populations, even within the limits of the SEER data. But they are very hard to find unless you are really intent on reading the full article."

Weinberg said Hispanics and Native Americans were not sufficiently represented in the Report Card.

"I recognize that SEER has attempted to compensate by adding some sites that would be a broader representation of minority populations, but, unfortunately, it is not sufficient," Weinberg said.

Asked to explain Jones's comment in the press release that the study is "hard to take seriously" for African Americans, Weinberg said, "That may be the language that reflects the people [Jones] is talking about. You and I may consider a different way of stating it, but that may be very appropriate from the population that he represents most."

Jones, who was traveling in Guam, did not return repeated calls to his hotel.

T.J. Dunlap, a spokesman for ICC, said the press release was not intended to question the validity of the SEER data. "Our press release is pointing out the limitations of the database, SEER in particular," Dunlap said. "It is by no means calling into question the entire report."

Gilbert Friedell, a member of the ICC Steering Committee, said he, too, stands by the claims in the press release.

"We are not critical of the information in the report," said Friedell, director for cancer control at the University of Kentucky Markey Cancer Center, director of the Kentucky Cancer Registry, and head of the NCI-funded Appalachia Leadership Initiative on Cancer. "We are suggesting that we need a better database."

Friedell said the incidence figures in the Report Card do not coincide with the data in the Kentucky Cancer Registry, a registry funded by the state and CDC. The Kentucky registry is among 37 such registries where data collection began too recently to be included in the report, NCI officials said.

Friedell said the Kentucky data show that lung cancer incidence continues to increase in men and women in the state, contrary to the national trend that shows a decrease in lung cancer incidence in men.

"SEER doesn't cover Appalachia or much of the South," Friedell said.

Friedell is a member of the Institute of Medicine Panel on the Study of Cancer in Minorities. The panel is examining NIH programs on special populations.

The Science Of Data Collection

Brenda Edwards, director of the NCI Surveillance Research Program and one of the authors of the Report Card, said the cancer mortality data came from death certificates filed in every state and sent to the CDC National Center for Health Statistics.

"The mortality data is for 100 percent of the population, with the exception that Hispanic data were not available for four states," she said.

Cancer incidence data used in the Report Card were drawn from nine SEER registries that cover 9.5 percent of the U.S. population, the paper said.

NCI and CDC have in the past few years developed new registries to expand the populations included in SEER and non-SEER areas, Edwards said. However, data from these registries were not available for inclusion in the report.

The recently published paper examined cancer incidence and mortality from 1973 through 1995, and emphasis was placed on data comparability over time, Edwards said.

SEER's coverage is expanding. Currently, 10 SEER registries cover 14 percent of the population.

Blacks and whites are represented equally. The database includes 12 percent of the white population and 12 percent of the black population, Edwards said.

To collect data on several ethnic groups, the program "oversamples," or represents a greater percentage, of those populations. For example, SEER collects data on 24 percent of the American Indian, Eskimo, and Aleut populations. Similarly, SEER includes data on 43 percent of Chinese, 49 percent of Filipinos, 60 percent of Japanese, 34 percent of Koreans, 31 percent of Vietnamese, 25 percent of Hispanics, and 78 percent of Hawaiians.

Responding to ICC's claim that Hispanics and Native Americans are inadequately represented in the report, Edwards said these populations were included in estimates of the overall cancer incidence rate. The NCI's annual cancer statistics review, to be available next month, is expected to include additional data on Hispanics from new SEER registries in Los Angeles and San Jose/Monterey counties, she said.

Last year, NCI increased funding to enhance reporting of Native American cancer incidence, Edwards said.

The Institute is providing funds to the Cherokee Nation to develop a Native American cancer registry, Edwards said. The SEER registries in Seattle and New Mexico are working with the Indian Health Service to cross-check cancer cases listed in the database with membership lists of Native American tribes. NCI also funds the Alaska Native Registry.

NCI's efforts to assure adequate representation of special populations are not new, Edwards said.

A review of the SEER program in 1989 by external advisors to NCI recommended that the program be expanded to cover more Hispanics, residents of rural areas, and the "economically deprived." NCI has added the Hispanic data, but has not been able to determine how to include more rural Americans, or selectively cover geographic areas with a high percentage of persons with low economic status, Edwards said.

"According to U.S. census data, Vermont has the largest percentage of its residents who live in rural areas," Edwards said. It is not clear how one defines a "rural area" for the purpose of collecting cancer incidence data, nor is it clear how one defines an "economically deprived" person, she said.

While NCI would like to include data on income or economic status, these data typically are not available in medical records, Edwards said. Also, there are public concerns about including personal information in medical reporting systems, she said.

Efforts to resolve these issues are being coordinated, Edwards said. Data standards are set through the North American Association of Central Cancer Registries, which includes NCI, CDC, ACS, the American College of Surgeons and other organizations. NCI also is working with these organizations through the National Coordinating Council for Cancer Surveillance, a public-private group that meets to discuss surveillance issues.

"We need to have more constructive dialogue on how to respond to these data needs and incorporate them into our surveillance systems," Edwards said. "It's time to move beyond simply reporting racial-ethnic groups."

The NCI Bypass Budget request for fiscal 1999 seeks $25 million in new funding to expand SEER.

Edwards said ICC leadership has been made aware of NCI's efforts to expand SEER. Last year, Edwards described the NCI initiatives to the council, she said.

"We have taken steps to enhance the capacity for improving cancer reporting well beyond the SEER area," Edwards said. "I am disappointed that the ICC, which is familiar with these efforts, and those of other agencies such as CDC and ACS, and many states throughout the U.S., did not use this as an opportunity to support those efforts."

ACS vice president Eyre agrees with Edwards.

SEER provides the most accurate cancer incidence data available, and its coverage is improving, he said. "As the CDC-funded state cancer registries come online with cancer incidence data, we can greatly expand the SEER evidence," Eyre said.

The coverage of mortality statistics leaves little room for improvement. "Deaths are accounted for in 100 percent of the population," Eyre said. "The ICC press release does not make the distinction between the incidence and mortality data."

Further, Eyre challenged the accuracy of a claim in the ICC press release that NCI uses SEER data to determine research funding priorities. "In much the same way that census figures influence how federal money gets spent, SEER data are a driving force in the allocation of cancer funding in this country," the press release states.

"That is incorrect," Eyre said. "The driving force far and away has been in relation to the opportunity for scientific development. As an example, over the last five years, the most common cancer in Americans has been prostate cancer, and prostate cancer research has received far less funding than other areas."

Lobbying For Coordination of Cancer Program

The ICC statement comes at a time when the council is lobbying the Administration to establish a new plan for coordination of the National Cancer Program. ICC's lobbying efforts appear to coincide with similar efforts by ACS.

Both groups are lobbying the Office of the Vice President and pursuing the same goal: assuring better "coordination" of the nation's efforts to control cancer.

Though the term "coordination" is open to interpretation, some observers say that it could represent an effort to control the cancer agenda.

John Seffrin, ACS chief executive officer, mentioned the need for "planning," "evaluation," "collaboration," and "coordination" of the nation's efforts against cancer several times in a statement at the March 12 press conference on the Report Card.

ICC has met with Vice President Albert Gore's staff to seek the Administration's leadership in the creation of a "national plan" for coordinating the National Cancer Program, involving the cancer activities of federal agencies, public, and private organizations, Dunlap said. "It's an important priority that came out of the ICC meeting [earlier this year]," she said.

Dunlap said ICC has not developed a formal proposal for how the cancer program should be coordinated or who should coordinate it. "How do we go about doing it, I don't know," she said. "What role the President's Cancer Panel could play, or a different type of cancer panel, I don't know. We just want it coordinated.

"It's a matter of how it is going to be done and who is going to step to the plate to do it," Dunlap said. "Hopefully, the White House would take some initiative.

"Everyone is energized by the possibility that cancer is moving to the forefront, and we just want to make sure the battle is waged on all fronts," Dunlap said.

ICC steering committee member Friedell agrees greater coordination is necessary.

"We need to take a hard look at creating a national cancer plan," Friedell said to **The Cancer**

Letter. "The question of the leadership of the National Cancer Program should be looked at. The National Cancer Act established the director of NCI as the head of the National Cancer Program. There have been questions raised about that."

These plans appear to be consistent with those of ACS.

"ACS has set lofty goals to reduce cancer mortality by 50 percent by 2015 and produce a 25 percent downturn in cancer incidence," Seffrin said to **The Cancer Letter**. "A careful analysis of current trends leads one inescapably to the realization that those goals won't be met unless we increase our efforts.

"We need to get serious about the development of a National Cancer Program plan that would include all sectors–the public, private, and independent sector–with a view toward trying to delineate the strategies to move us in the right direction, and then, determine who is best postured to play what role in that overall plan," Seffrin said.

"There's a lot of work being done by every organization dedicated to doing something about cancer," he said. "But we all have sense a frustration that the whole could be more than the sum of its parts if somehow we were more well-tuned, synergistic, coordinated.

"That would never mean that an organization had to be controlled by some oversight body. We would voluntarily look at what's happening and what needs to happen, and then see to what extent people could step up to the plate and agree to take on certain tasks," Seffrin said.

ACS has had informal discussions with other organizations and its Board of Directors, but as yet has made no formal proposal, Seffrin said. "Our board is interested in us providing leadership to stimulate the effort to look at the value of the development of a National Cancer Program plan," he said.

ICC's Dunlap said she is aware of these discussions within ACS.

"ACS has been talking about coordination of the cancer program for a long, long time," Dunlap said. "They have been out there talking about it, and I don't know anyone who doesn't agree, including [NCI Director] Rick Klausner."

Does Klausner agree that the cancer program needs a new national plan?

"Dr. Klausner has used his position to enhance the central issue of open and complete communication in the National Cancer Program by suggesting the creation of the National Cancer Policy Board and the creation of the Director's Consumer Liaison Group," NCI spokesman Paul Van Nevel said to **The Cancer Letter**.

"He does not interpret coordination of the National Cancer Program as a control issue, but as a communication issue, and he strongly believes in the freedom of all the organizations involved in the National Cancer Program to speak with their own voices," Van Nevel said.

"To do otherwise would be unwise, unrealistic and counterproductive."

No Genetic Basis For Race, President's Cancer Panel Says

The concept of race as it is used in the U.S. is a product of the nation's social and political history and has no basis in biological science, the President's Cancer Panel said in a recent report.

Over the past 20 years, advances in the study of population genetics have enabled scientists to determine that there is no genetic basis for racial categories based on visual features such as skin color or facial characteristics, according to the report, "The Meaning of Race in Science—Considerations for Cancer Research."

"Biologically distinct races do not exist," Panel Chairman Harold Freeman wrote in a letter transmitting the report to President Clinton. "Indeed, there is no evidence that they have ever existed in the recorded history of the human community."

About 85 percent of all variation in gene frequency occurs within populations and only 15 percent occurs between populations, the report said.

This scientific knowledge could change the way Americans think about race, Freeman wrote. "Now, more than ever before, we have the opportunity to promote a more meaningful dialogue among people of America and throughout the world," he wrote. "We can begin by teaching every first grader the simple truths that science has now shown us—that we are more alike than we are different."

For scientists, the lack of a genetic basis for race presents a dilemma, the report said. "Scientists have used social and politically determined racial categories to make scientific comparisons between races with little or no discussion about the meaning of race."

For example, the report said, the NIH

Revitalization Act of 1993 mandates that clinical trials provide valid subset analysis among traditionally defined racial and ethnic minority groups. "This requirement was instituted in an effort to be just—to correct previous exclusions of certain populations from scientific study," the report said. "Yet this may not be the best approach to obtaining scientific answers to questions pertaining to differences in disease among populations."

The report was submitted to the White House on Jan. 30.

Among the Panel's findings:

—Scientists estimate that externally visible traits such as skin color represent only 0.01 percent expression of each individual's 100,000 genes. These traits are inherited individually, not transmitted in genetic clusters.

—Racial and ethnic categories used in the U.S. census and in other scientific studies are a product of the nation's history and have changed over time.

—It is estimated that three-quarters to nine-tenths of African-Americans have some white ancestry, and approximately one-quarter have Native American ancestry.

—As the U.S. becomes increasingly multiracial, it is difficult to classify persons by race. "The limitations of existing racial and ethnic categories and the reliability of both assignment to and individual self-report of race raise serious questions about the accuracy and usefulness of existing cancer statistics on racial subsets."

—Research needs to distinguish between race and socioeconomic status. "Racial differences in cancer outcome are greatly reduced and in some instances eliminated when socioeconomic status is taken into account. To date, the link between race and socioeconomic status has been very poorly accounted for in scientific research."

—There has been little public health research on the health consequences of racial discrimination. "Appropriate racial/ethnic and socioeconomic data are needed in public health databases, and the health effects of racial/ethnic position across the life span should be further explored."

The panel identified six "critical questions" that scientists must ask:

—To what extent is race being used as a biological classification in science?

—What assumptions do scientists make when they compare races and how do these assumptions affect scientific conclusions?

—To what extent do societal and institutional values related to race shape the approach to scientific investigation in terms of the selection of problems considered worthy of research and the development of hypotheses to be tested?

—Should race be used as a scientific variable in biological studies?

—In an increasingly mixed-race society, how should multiracial identity be accounted for in the design, interpretation, and application of scientific research?

—How can race be applied validly to research studies that, in many cases, are designed to improve health conditions for specific populations?

Among the Panel's recommendations:

—"To retain race as a variable with bearing on scientific research, it must be recognized that race is a social construct determined by how one group sees and behaves toward another. Race is a proxy for discriminatory experiences, culture, class, diet, or other factors. To be used validly in scientific research, what is being measured, and for what purpose, must be clearly defined.

—"In attempting to understand why the burden of cancer is unevenly distributed across our population, we should design studies that seek to identify what variables determine these varying burdens of cancer rather than presume that culturally or politically defined groupings define relevant variables for the burden of cancer.

—"Genetic techniques now available to study human variation should be used to identify subgroups of the general population whose profiles will elucidate the process of cancer as a disease.

—"Data collection on race should be considered incomplete because it does not incorporate socioeconomic position, including the impact of education, income, wealth, and related social and cultural factors. We should move rapidly toward the incorporation of such information into our scientific systems.

—"We must distinguish fairness in access to research participation from issues of valid research design. Moreover, the quest for truth in science must be conducted in the framework of social justice.

—"Science has the capacity to produce systematic ignorance as well as systematic knowledge. The cultural framework in which science is conducted and the role science has played in constructing and legitimizing race and racism must be recognized and addressed."

The Panel listed the following interim steps:

—Educational programs, particularly for youth, should be developed to address the meaning of race in science and society.

—The HHS Secretary and the NIH director should evaluate policies about race and research in light of the issues raised in the report.

Copies of the report are available from Maureen Wilson, NCI assistant director, tel: 301-496-1148, fax: 301-402-1508; email: PRESCAN@nih.gov.

Klausner: Survivorship Growth Means New Research Needed

Following is the edited text of NCI Director Richard Klausner's statement at the March 12 press conference in Washington on the cancer incidence and mortality statistics:

These numbers are one of the most explicit ways to measure progress against cancer. They are a snapshot of where we are and where we've been.

Beneath the numbers are both complexity and many questions. What we haven't had time to explore are the rich details of cancer statistics that reveal changing patterns of cancer at different ages, different population groups, and some marked differences in the distribution of newly diagnosed cancers according to their stage and grade over time.

Furthermore, these numbers do not reveal some real improvements in the quality of life of cancer survivors due to rapidly evolving approaches to therapy. We have not traded prolonged survival in exchange for worsened quality of life. The number of cancer survivors is rising, now estimated to be about 8.5 million Americans. Although a product of our success, we face in this population a variety of new questions and new challenges. These individuals are at significantly increased risk of second cancers. The growth in cancer survivorship challenges us to develop new research emphasis on the many questions that face this population. This is one example of how these changing statistics drive changes in the National Cancer Program.

Our task is not only to describe cancer statistics, but to explain them and to respond to them. Why are incidence and mortality rates changing? The answers are as varied as the multiple diseases we lump together as cancer.

For some cancer sites like lung, the changes are primarily due to prevention; that is, lung cancer incidence and mortality rates almost perfectly track patterns of smoking, and especially, previous patterns of smoking. For others, changes reflect early detection and altered treatment. For each site, it is a different mix, and we are still analyzing it.

Future progress will involve at least two issues:

First, we need to establish to what extent we are applying all that we already know about prevention, early detection, and treatment, and in particular, to make sure that the best practices in all of those areas are being applied and offered to everyone, including older Americans, who bear the major burden of cancer, and for whom the drop in mortality rates is much less than for younger Americans, and in African-Americans, who bear both a disproportionate burden of cancer incidence and a disproportionate burden of cancer mortality.

Second, in addition to applying what we have already established to work, these numbers point to where we need to direct new research, to better detect cancers for which we have no reliable early detection, such as ovarian and pancreatic cancer, and to better treat cancer after it has spread.

What do these numbers mean? First of all, we must remember, behind these numbers are people's lives. If there is, and there has been, a 1 percent drop in mortality rates as compared to the projected rise if nothing had changed just eight to 10 years ago, then after five years, there are 25,000 to 30,000 fewer deaths in 1995 than we would have expected. And, over 70,000 fewer cases of cancer.

Some changes are dramatic, including the drop in breast cancer mortality rates in young, white women, the end of the meteoric rise in lung cancer in men, and the rapidly changing pattern of breast and prostate cancers, that is, pattern of grade and stage being currently diagnosed.

Cancer remains a daunting problem. That we are beginning to observe positive trends in incidence and mortality is hopeful. The varied explanation for the changes reported today support the multifaceted approach that we have taken to prevention, early detection, better diagnosis, more effective and less toxic therapy, and, more recently, to survivorship.

It is only through successfully applying what we now know, gaining the knowledge that we need, and making sure that we have a public health and medical system that allows us to fully apply what we learn—it is only through that that this nation will see the level of reduction in the burden of cancer that we all hope for.