The Surveillance Research Program (SRP) directs the collection and analysis of data to answer key questions about cancer incidence, morbidity, mortality, and cancer-related health status in diverse regions and populations in the United States.

**Highlights**

**Transitions and New Leadership Roles in NCI’s Surveillance Research Program**

In June 2011, the Surveillance Research Program (SRP) announced the implementation of a long-term succession planning effort. This initiative was launched to help SRP plan and prepare for the future retirement of Dr. Brenda Edwards, who has served as the Associate Director of SRP and its predecessor organizational unit since 1989. “Given the critical and extensive responsibilities that Dr. Edwards has managed for many years, this transition will require more than the usual degree of planning and preparation,” stated Robert Croyle, Ph.D., Director of the Division of Cancer Control and Population Sciences (DCCPS). “NCI has relied very heavily on Brenda’s unique wealth of knowledge, experience, and expertise. In order to prepare the program for new leadership in the future, it is essential that we first enhance leadership capacity from within by transitioning some of Brenda’s day-to-day management responsibilities to staff in the program.”

To ensure a smooth transition for SRP throughout the coming years, a new leadership structure has been put into place. On June 1st, Dr. Croyle assumed the role of acting Associate Director (AD) for SRP, and Dr. Edwards joined the division leadership team within the Office of the Director, as Senior Advisor for Cancer Surveillance. In their respective roles, Dr. Croyle has taken on some of Dr. Edwards’ former internal management responsibilities as AD, while Dr. Edwards has begun to work with the leadership team while maintaining a high level of involvement in DCCPS’ ongoing national and international surveillance efforts, including the Surveillance, Epidemiology, and End Results (SEER) Program.

In addition to Dr. Croyle’s and Dr. Edwards’ new roles, SRP leadership finalized a delegated governance model to increase the number...
of staff who have a comprehensive knowledge of the program’s various projects, issues, and partnerships. SRP’s current Branch Chiefs (Drs. Kathy Cronin of the Data Analysis and Interpretation Branch, Eric “Rocky” Feuer of the Statistical Methodology and Applications Branch, and Angela Mariotto of the Data Modeling Branch), along with staff members Dr. Zaria Tatalovich (Acting Chief, Surveillance Systems Branch [SSB]), Margaret (Peggy) Adamo (team leader for the Quality Improvement group of Certified Tumor Registrars, SSB), and Carol Kosary (program-wide coordinator for SEER) are collaborating with Drs. Croyle and Edwards to implement both short-term and long-term planning activities that will ensure the ongoing success of SRP.

Zaria Tatalovich Appointed Acting SSB Branch Chief

Zaria Tatalovich, Ph.D., has been appointed Acting Chief of the Surveillance Systems Branch (SSB). Since joining SRP 3 years ago as a health statistician and expert in geospatial science in the Cancer Statistics Branch (CSB), Dr. Tatalovich has taken part in and provided extensive leadership for various cancer surveillance projects. In particular, she has led the development of new geospatial/geostatistical tools, models, and data for more comprehensive assessment of geographic variations in cancer risk among different population subgroups; contributed to quality improvement of cancer-related area-level data; served as the Scientific Lead for the State Cancer Profiles and as an NCI representative on several NAACCR committees; and collaborated on various research projects at the National Institutes of Health (NIH) and the Centers for Disease Control and Prevention (CDC) on environmental exposures, tobacco control, and contextual influences on health. She also has contributed to the development of a program announcement on spatial uncertainty, and took a leading role in organizing an NIH-wide geospatial infrastructure development symposium in 2011.

Dr. Tatalovich has master’s degrees in Geography and Psychology. She received a Ph.D. in Geography from the University of Southern California. Before coming to SRP, Dr. Tatalovich started her career as a Research Professor at the University of Southern California. During her tenure, she held appointments in the Departments of Geography and Preventive Medicine.

In her new role as SSB acting branch chief, Dr. Tatalovich will help coordinate surveillance systems development efforts, oversee quality improvement of cancer data and registry operations, and continue working on developing geospatial infrastructure across the NIH. When asked about this transition in her career, Dr. Tatalovich stated, “I welcome the opportunity to work with the SSB team in this new role—we represent a unique blend of experts and good-hearted people. I hope that we will all take equal responsibility to build a stronger SSB and SEER Program, and I am convinced that we have what it takes to be successful.”

Peggy Adamo Represents SRP’s Certified Tumor Registrars on the SRP Leadership Team

As part of SRP’s new leadership transition, Certified Tumor Registrar (CTR) Peggy Adamo recently became a member of the SRP Leadership Team, effective June 1, 2011. Appointed by Dr. Bob Croyle, DCCPS Director, Adamo now serves as a liaison between the SRP Leadership Team and SRP’s three other CTRs: Carol Johnson, Jennifer Ruhl, and Lois Dickie.

According to Adamo, her new role reinforces the importance of SRP’s CTRs, who are part of NCI’s SEER (Surveillance, Epidemiology, and End Results) Program and continue their main duties of assessing and improving cancer data quality as well as educating, writing instructions for, and developing tools for people who collect cancer patient data at the hospital and central registry levels.

“The four CTRs now have a voice on the Leadership Team, and I think that’s fabulous,” said Adamo.
Adamo, who became a CTR in 1996 and joined SRP in 2002 with years of prior management experience, sees her new role as being a representative of and advocate for the CTRs and a leader within SRP. In this capacity, she will communicate relevant CTR- and other SRP-related issues to the SRP Leadership Team and to the other CTRs.

Adamo takes her new duties very seriously, evidenced by her enrollment in an NIH supervisory course and an NCI Executive and Leadership Coaching Program to expand upon her leadership skills. She will continue to seek opportunities to further develop her leadership skills.

**Announcements**

**SEER Releases New Cancer Statistics Review**


- SEER Data, 1973–2008, including delay-adjusted incidence data for SEER 9 and SEER 13
- Updated Stat Fact Sheets and Fast Stats

The updated Cancer Statistics Review presents the most recent cancer incidence, survival, prevalence, and lifetime risk statistics. National cancer mortality statistics will be added to the report as soon as they become available. All material in the SEER CSR report is in the public domain and may be reproduced or copied without permission. Citation of this source is, however, appreciated.

In addition, the latest SEER data also were released through SEER*Stat. For more information about SEER*Stat, please visit http://www.seer.cancer.gov/seerstat/.

The April release of the Cancer Statistics Review did not include the most current cancer mortality statistics because the latest mortality file with 2008 deaths from the National Center for Health Statistics, Division of Vital Statistics had not been released at the time. On October 20, 2011, cancer mortality statistics will be posted as an addendum to the Cancer Statistics Review and in our other statistical reports and analysis tools. US Mortality data through 2008 will also be available in SEER*Stat through client-server mode at that time.

**SEER-Medicare Health Outcomes Survey (MHOS) Data Now Available**

Of the 6.5 million older adults with cancer, 43 percent survive more than 10 years and 17 percent survive more than 20 years after the initial diagnosis. With advances in effective therapies and earlier detection, the number of cancer survivors in the Medicare program will continue to grow. As this shift takes place, a better understanding of the health-related quality of life of older adults with cancer diagnoses will be increasingly valuable. Information about the health-related quality of life of older cancer survivors can help health plans develop appropriate policies and make sound decisions about allocating resources to better serve this population.
Data files from the Surveillance, Epidemiology and End Results-Medicare Health Outcomes Survey (SEER-MHOS) Linkage Project became publicly available to external investigators in December 2010. The SEER-MHOS database, which is modeled on the SEER-Medicare Linked Database, is a population-based resource that will give researchers valuable insights into the health-related quality of life of elderly cancer patients and survivors. It contains information from more than 53,000 cancer patients and survivors as well as nearly 854,000 people who have never been diagnosed with cancer. SEER data provide clinical, demographic, and cause-of-death information for people with cancer. MHOS data provide information on health-related quality of life, self-reported comorbidities, and sociodemographics of those enrolled in Medicare Advantage Organizations.

The SEER-MHOS database includes six cohorts of MHOS data (baseline and follow-up) covering the data collection years of 1998–2005. Two additional cohorts of MHOS data covering the data collection years of 2005–2007 are undergoing linkage with SEER data.

NCI staff managing the SEER-MHOS linkage are Dr. Steven Clauser, Branch Chief of ARP’s Outcomes Research Branch, and Ms. Anita Ambs, Office of the Associate Director, Applied Research Program (ARP).

Recent Surveillance Research Program (SRP) Publications


SRP News

Progress in Cancer Control: Overall Incidence and Death Rates Decrease

This year’s “Annual Report to the Nation on the Status of Cancer” reported encouraging news: incidence and death rates for all cancers combined decreased from 2003 to 2007. The report was published in the Journal of the National Cancer Institute on March 31, 2011, and co-authored by individuals from the National Cancer Institute (NCI), American Cancer Society, Center for Disease Control and Prevention (CDC), and North American Association of Central Cancer Registries (NAACCR).

Among cancers whose incidence rates decreased from 2003 to 2007 were cancers of the lung and bronchus, colon and rectum, and oral cavity and pharynx in both men and women. Meanwhile, cancer-specific death
rates decreased during that time period for myeloma, leukemia, non-Hodgkin lymphoma, and cancers of the kidney and renal pelvis, stomach, brain, colon and rectum, and lung and bronchus in both men and women. (For more comprehensive data on incidence and death rates, see Tables 1 and 2 below.)

One of the most anticipated findings presented in the report was the decrease in the lung cancer-specific death rate in women, according to Dr. Brenda Edwards, an author of the report and the DCCPS Senior Advisor for Cancer Surveillance. This decrease “really reflects underlying long-term patterns in smoking among men and women,” said Edwards. Women took up cigarette smoking later than men and consequently started experiencing a decrease in lung cancer-specific death rate later than men (2003 versus 1991).

In addition to describing incidence and death rates for lung cancer and other major cancers, the annual report featured a special section on brain and other nervous system (ONS) tumors. From 1987 to 2007, the overall incidence rate of neuroepithelial malignant brain and ONS tumors decreased by 0.4 percent per year to 24.55 per 100,000 adults for men and women combined. Children aged 0–19 years had a much lower incidence rate (48.47 per 1,000,000 children); however, their tumors were much more likely to be malignant (65.2% versus 33.7% for adults). Malignant brain tumor-related death rates in children did not change from 1999 to 2007; those in adults decreased at a rate of 1.2 percent per year.

For the first time, the annual report revealed incidence rates for benign brain tumors, which have been collected on a national level only since 2004. With more than 4 years of data available, “we had adequate numbers to take a very careful look at the benign brain tumors in addition to the malignant tumors that we had always reported,” said Edwards. The most common benign tumors, meningiomas, occurred 2.3 times more often in women. Death rates for benign brain tumors decreased in both children and adults.

Overall, the annual report indicates progress in controlling cancers. However, although incidence and death rates have decreased for many cancers, survival has remained relatively low for some, such as brain and ONS tumors (see Table 3). Researchers are working to characterize these tumors at the molecular level, which hopefully will lead to the development of novel targeted therapies.

To view the full report, visit http://seer.cancer.gov/report_to_nation/.

Table 1. Statistically significant changes in incidence rates (2003–2007). These data were based on recent 5-year average annual percent change (AAPC) from joinpoint analysis of Surveillance, Epidemiology, and End Results (SEER) 13 data for 1992–2007.
Table 2. Statistically significant changes in death rates (2003–2007). These data were based on recent 5-year AAPC from joinpoint analysis of US data for 1975–2007 (NCI SEER and CDC National Program of Cancer Registries [NPCR] data provided by NAACCR).

<table>
<thead>
<tr>
<th>Increase</th>
<th>Women</th>
<th>Decrease</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>Men</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liver and intrahepatic bile duct</td>
<td>Liver and intrahepatic bile duct</td>
<td>Lung and bronchus</td>
<td>Lung and bronchus</td>
</tr>
<tr>
<td>Pancreas</td>
<td>Pancreas</td>
<td>Colon and rectum</td>
<td>Colon and rectum</td>
</tr>
<tr>
<td>Melanoma of the skin</td>
<td>Corpus uteri (uterus)</td>
<td>Malignant brain and other nervous system</td>
<td>Malignant brain and other nervous system</td>
</tr>
<tr>
<td>Stomach</td>
<td>Stomach</td>
<td>Kidney and renal pelvis</td>
<td>Kidney and renal pelvis</td>
</tr>
<tr>
<td>Non-Hodgkin lymphoma</td>
<td>Non-Hodgkin lymphoma</td>
<td>Leukemia</td>
<td>Leukemia</td>
</tr>
<tr>
<td>Myeloma</td>
<td>Myeloma</td>
<td>Oral cavity and pharynx</td>
<td>Bladder</td>
</tr>
<tr>
<td>Prostate</td>
<td>Breast</td>
<td>Ovary</td>
<td></td>
</tr>
</tbody>
</table>

Table 3. 5-year relative survival for malignant neuroepithelial brain tumors. These data were from SEER 9 registries.

<table>
<thead>
<tr>
<th>Age group (years)</th>
<th>Survival (%) for people diagnosed in....</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–19</td>
<td>62.9</td>
</tr>
<tr>
<td>20–39</td>
<td>54.1</td>
</tr>
<tr>
<td>40–64</td>
<td>16.1</td>
</tr>
<tr>
<td>&gt; 65</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Events and Training

NCRA 37th Annual Educational Conference

Surveillance Systems Branch (SSB) staff members attended and contributed to the Annual Educational Meeting and Conference of the National Cancer Registrars Association (NCRA), May 15–18 in Orlando, Florida. This year’s conference, entitled “Enchantment, Enrichment & Education,” hosted more than 1,200 attendees who participated in educational programming activities, networking opportunities, and informative meetings. The conference included various workshops and seminars that were sponsored and presented by staff members from SSB, with topics ranging from an NCI SEER update to a 1.5-day workshop that focused on Collaborative Staging Version 2, including:

Brenda K. Edwards, Ph.D., provided the NCI SEER update during the NCRA opening plenary session. During this update, Dr. Edwards discussed the introduction and objectives for the 2010 Quality Improvement Studies that focused on Collaborative Staging Version 2 (CSv2) data and formed the basis of the materials presented during a SEER Advanced Workshop.

Lynn Ries, CTR, gave a presentation entitled “CS by the Numbers.” The purpose of this talk was to provide a quantitative conceptual overview of the new CSv2 data requirements summarized into major components. Carol Johnson, CTR, and Lois Dickie, CTR, gave a presentation entitled “Revised MPH Rules.” The objec-
The objectives of this presentation were to: (1) inform the registrar community that the current Multiple Primary and Histology (MPH) rules are being revised; (2) educate registrars about major concerns that were identified and are being addressed in the revised rules; and (3) show registrars some of the improvements and coding aides that will be available with the new rules.

Lois Dickie, CTR, oversaw the NCI/SEER Booth and basket for NCRA’s “Basket Raffle” (see photos). This year’s theme for the booth and basket was “SEER Toy Story,” and the purpose of the basket was to collect donations of toys, games, and family-friendly films. Contents of the basket were later raffled at the NCRA Awards Luncheon.

Peggy Adamo, RHIT, CTR, and Carol Johnson, CTR, gave a presentation entitled “Where to Find Answers to Hematopoietic, MP/H, SEER*Rx, and ICD-0-3 QUESTIONS—the SEER Inquiry System (SINQ).” The objectives of this presentation were to: (1) teach participants how and where SINQ can be accessed; (2) educate participants about the search capabilities of SINQ; and (3) show participants how to use the reporting mechanism in SINQ.

NCRA’s upcoming Annual Educational Conference will be held in National Harbor, Maryland, April 18-21, 2011, at the Gaylord National Hotel. Registration and hotel information will be available in December 2011. For more information about the upcoming conference, visit http://www.ncra-usa.org/i4a/pages/index.cfm?pageid=3282.

**NAACCR Annual Conference**


Many SRP members attended, including Dr. Hyunsoon Cho, who gave a talk on the non-cancer health status of U.S. cancer patients. As a mathematical statistician, Cho typically attends statistical conferences; this was her first cancer registry conference.

“Since this is a different audience than I’m used to speaking to, I was a little nervous at the beginning. But the audience was good. I felt like they became more aware of and interested in the non-cancer health status of cancer patients, especially survival probability, during my talk, and they gave me good feedback.”

Cho’s talk was one of several oral presentations that fell into the category of “Using Data to Advance Science.” Other categories included “Data Quality,” “Innovative Approaches to Data Collection,” and “Capturing Information from Electronic Reporting Sources.” Of the 99 talks and 54 posters presented, SRP members presented 6 talks and 2 posters.

In addition to giving a talk at the conference, Cho enjoyed meeting new people, making new friends, and seeing new products at the exhibit booths.

Among the exhibit booths was a SEER exhibit booth staffed by several SRP members. The booth featured publications providing information on various NCI, DCCPS, and SRP programs—for example, a brochure entitled “SEER...as a Research Resource” and a tear sheet entitled “Statistical Methods in the Cancer Surveillance Research Program (SRP).”
In addition to the business side of the conference, program committee members organized tours of the area, including one of historic Louisville and one of a bourbon distillery, where conference attendees could sample Kentucky bourbon.

Next year’s NAACCR conference will be held June 2–8 in Portland, Oregon.

**SRP Attendees**

Peggy Adamo (gave an oral presentation, judged posters, moderated part of a session, and helped staff the SEER booth), Sean Altekruse (gave a poster presentation), Hyunsoon Cho (gave an oral presentation), Kathleen Cronin (gave two oral presentations), Brenda Edwards (moderated and presented slides for Plenary Session #2: Keeping Pace with Science, and provided an update on the American Joint Committee on Cancer [AJCC] Surveillance Summit during the NAACCR Showcase session), Terri Harshman (managed the SEER exhibit booth), Nadia Howlader (gave an oral presentation and a poster presentation), Missy Jamison (staffed the SEER exhibit booth), Carol Kosary (served as an expert resource for and proctored the preconference Basic and Advanced SEER*Stat Courses), Anne-Michelle Noone (presented a poster and staffed the SEER exhibit booth), Lynn Ries (gave an oral presentation), and Jennifer Ruhl and Leon Sun (staffed the SEER exhibit booth and attended the NAACCR Clinical Data Work Group and NAACCR Pathological Data Work Group meetings).

**Oral presentations**

- “Galloping into the future: what’s next for the SEER hematopoietic and lymphoid neoplasm project.” MB Adamo1.
- “Multidisciplinary approach to timely reporting of surveillance statistics: utility of SEER February submission files.” D Stinchcomb2, J Stevens3, L Sun1, M Adamo1, A-M Noone1, N Howlader1, K Cronin1, AM Stroup4, BK Edwards3.
- “Imputed population-based cancer registry data as a method to account for missing information: application to estrogen-receptor (ER) status for breast cancer.” N Howlader1, M Yu1, A-M Noone1, K Cronin1.
- “The use of cause-specific survival in SEER population-based registries when relative survival fails.” LAG Ries1, J Ruhl1, K Cronin1, N Howlader1.

**Poster presentations**

- “Histological classification of liver and intrahepatic bile duct cancers.” S Altekruse1, S Devesa1, L Dickie1, K McGlynn1, D Kleiner1.
- “Multiple primaries (MPS) in survival estimates: should SEER include or exclude MPS?” N Howlader1, A-M Noone1, L Ries1, A Mariotto1, K Cronin1.

1National Cancer Institute, Bethesda, MD; 2Westat, Rockville, MD; 3Information Management Services, Silver Spring, MD; 4Utah Cancer Registry, University of Utah, Salt Lake City, UT

**CISNET Mid-Year Meeting**

The 2011 Cancer Intervention and Surveillance Modeling Network (CISNET) Mid-Year Meeting was held from May 9–13, 2011, at the Massachusetts General Hospital’s Yawkey Outpatient Care Center in Boston, MA. Individuals from NCI’s DCCPS and CISNET programs were invited to discuss issues in cancer interven-
tion and surveillance modeling and provide updates relevant to each cancer consortium. The meeting included sessions on each of the five cancer consortiums (lung, prostate, colorectal, breast, esophageal) and featured guest speakers who discussed topics of interest to their group.

The CISNET lung cancer group session featured a discussion of an ongoing collaboration with the National Lung Screening Trial (NLST) group. In November 2010, the NLST group released initial results from a large-scale test of various screening methods designed to reduce lung cancer deaths by detecting cancer at relatively early stages. Group members compared the effects of two screening procedures (low-dose helical computed tomography [CT] and standard chest X-rays) on lung cancer mortality and found that patients who had been screened using low-dose helical CT experienced 20 percent fewer lung cancer deaths than patients who had been screened using X-rays. Currently, the CISNET lung cancer group is exploring ways to translate these recent findings into public health policy and recommendations that will impact how lung cancer screening is practiced in the near future.

The prostate cancer group meeting featured a session on modeling to inform strategies for active surveillance for prostate cancer. When asked about the importance of modeling in active surveillance for prostate cancer, Angela Mariotto, Ph.D., stated, “With the shift toward earlier stages of prostate cancer diagnosis and growing concerns about overdiagnosis and overtreatment, active surveillance is becoming an acceptable option for managing low-risk prostate cancer. In the absence of observed data on disease-specific mortality under active surveillance, modeling is likely to be a valuable approach for comparing disease-specific outcomes of patients undergoing active surveillance with those who receive immediate treatment. The CISNET Prostate Cancer Group is combining multiple observational data sources to inform their models and answer important questions related to active surveillance for prostate cancer.” Examples of how models may be used include: (1) comparing active surveillance to immediate treatment, and (2) comparing different policies (e.g., more frequent versus less frequent biopsy schedules).

The breast cancer group featured a lecture by Sue Moss, Ph.D., who presented the latest findings and data from a trial that focused on breast cancer screening for women between 40–49 years of age in the UK. This presentation was followed by a discussion regarding ways to incorporate the study results into various mathematical models. Pending further research, the results of this trial may alter public health policy and screening recommendations for women between 40–49 years of age.

The esophageal cancer group featured a lecture by Nick Shaheen, M.D., M.P.H., an Associate Professor of Medicine and Epidemiology at the University of North Carolina at Chapel Hill. Dr. Shaheen discussed endoscopic ablations as a treatment for Barrett’s esophagus and the role that this procedure could play in controlling esophageal cancers.

The colorectal cancer (CRC) group session featured a wide variety of topics. Guest speakers discussed colorectal cancer pathways, including presentations on adenoma biology by Monica Bertagnolli, M.D., a colorectal cancer surgeon at Brigham and Women’s Hospital and head of the Cancer and Leukemia Group B (CALGB), and the emerging serrated polyp pathway by Michael O’Brien, M.D., M.P.H., a pathologist at Boston University. Also, Shannon Swan, M.D. (Massachusetts General Hospital) discussed screening utilities, and Ernst Kuipers, M.D. (Erasmus Medical Center, Rotterdam) presented results from randomized controlled trials of colorectal cancer screening in the Netherlands. The CRC session also provided group members with opportunities to discuss ongoing work regarding model validation using data from the UK Flexiscope Trial of sigmoidoscopy, and the estimated impact of health policy recommendations (such as age of initial screening) on CRC outcomes.


The next season of the North American Association of Central Cancer Registries’ (NAACCR) Certified Tumor Registrar (CTR) Exam Preparation and Review Webinar Series will begin in September 2011. Offering online interactive instruction with live instructors, the course will include eight 2-hour sessions carefully prepared to reflect the changes in the 2011 CTR exam, as well as a short follow-up post-exam session. A module on Collaborative Staging also will be included in the NAACCR CTR Exam Preparation and Review Webinar Series.
A subscription includes “live” lectures presented by experienced instructors, Q&A sessions, study materials, take-home tests, and a timed practice test.

For more information or questions regarding the NAACCR webinars, contact Jim Hofferkamp at jhofferkamp@naaccr.org or Shannon Vann at svann@naaccr.org.