Lung cancer is the second most common cancer, accounting for about one out of five malignancies in men and one out of nine in women. Unfortunately, over the past several years, while the incidence of lung cancer has gradually declined in men, it has been rising alarmingly in women. In 1940 only seven women in 100,000 developed the disease; today the rate is 42 in 100,000.

All the evidence points to smoking as the cause. As one specialist in the field reports, “How long it takes to get cancer depends on how many cigarettes you smoke a day.” However, studies prove that quitting smoking does lower the risk.

There are two major types of lung cancer: small cell lung cancer (SCLC) - which is also called oat cell cancer, because the cells resemble oat grains - and non-small cell lung cancer (NSCLC). The aggressiveness of the disease and treatment options depend on the type of tumor diagnosed. Because many types of lung cancer grow quickly and

(Continued on page 3)
Q & A #1

Q: In ICD-O-3, is the diagnosis of myeloproliferative syndrome synonymous with myeloproliferative disease, NOS and therefore not reportable or, is it synonymous with myelodysplastic syndrome and therefore reportable?

A: There is a pathologic difference between myeloproliferative disease/disorder/syndrome and myelodysplastic disease/disorder/syndrome. The first is an overproduction of a certain type of cell, the second is a failure to produce healthy cells of a certain type. Calling both diseases syndromes does not necessarily make them synonymous. Do not accession myeloproliferative disease/myeloproliferative disorder, NOS/myeloproliferative syndrome. Myeloproliferative disorder/disease is coded to M-9975/1 and is more of a general category of bone marrow overproduction problems than a specific diagnosis. Both diagnoses would end up in 238.7 but only some of the cases would be considered reportable; those called chronic myeloproliferative disease/disorder and perhaps the myeloproliferative disorder/disease cases which, based on the complete medical record, would end up being coded as M-9975/3. Each case should be evaluated on its own merits for reportability. Myelodysplasia (NOS) is a term with two meanings: bone marrow malfunction and malignancy and also disorders of spinal cord development (such as spina bifida). The term is sometimes used as a synonym for myelodysplastic syndrome, NOS (M-9989/3). Make sure that the diagnosis refers to the hematopoietic disease. Then determine whether the physician is using the term generically to describe bone marrow malfunction (such as thrombocytopenia or pancytopenia) or referring to myelodysplasia as part of a neoplastic disease (with reference to refractory anemia or some other reportable term). Myelodysplasia as a spinal cord disorder or describing a category of bone marrow failure (with reference to the -penias) is not reportable.

April Fritz, SEER curator

Q & A #2

Q: I abstracted a patient with a breast primary. She did not have any surgery of her primary site, but she did have a scope of regional lymph node surgery. Why did I get edit number 252, “If Surgery of Primary Site equals 00 or 98, then Reason No Surgery must equal 1-8. If Surgery of Primary Site equals 99, then Reason No Surgery must equal 9”? She did have surgery so I shouldn’t have to code a reason for no surgery.

A: For cases diagnosed 1/1/2003 and after, the reason for no surgery field now only applies to the surgery of the primary site. If the patient did not have surgery of the primary site, you must code the reason for no surgery a code 1-8, regardless of whether the patient had any other type of surgery. You may only use a ‘9’ in the reason for no surgery field if your surgery of primary site is ‘99’. If surgery of primary site is ‘99’, then the date field must be ‘99-99-9999’.

REMINDER:
For all cases diagnosed January 1, 2003 and after, the Surgery of Primary Site must be coded to a ‘98’ for all Unknown and Ill-Defined primary sites and Hematopoietic / Reticuloendothelial / Immunoproliferating / Myeloproliferative Diseases. The Date of Surgery remains 00-00-0000 if there was no surgery of other regional or distant sites performed.
spread rapidly and because the lungs are vital organs, early detection and prompt treatment – usually surgery to remove the tumor – is critical.

ICD-O Codes for Lung Cancer

RELATED ADJECTIVES

Lung = pneumo-, pulmono-, broncho-, bronchiolo-, alveolar, hilar,
Breathing = -pnea

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<tr>
<td>C34.2</td>
<td>Middle lobe, lung</td>
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<td>C34.3</td>
<td>Lower Lobe, lung</td>
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<tr>
<td>C34.8</td>
<td>Overlapping lesion of lung</td>
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<tr>
<td>C34.9</td>
<td>Lung, NOS</td>
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<tr>
<td>C33.9</td>
<td>Trachea, NOS</td>
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</tbody>
</table>

Prior to the Second Edition of ICD-O, trachea and lung had the same ICD-O code. With the advent of ICD-O-2, trachea has a separate code (C33.9) from lung (C34...).

The ICD-O four-digit subsites of the lung are considered part of a single primary site.

LUNG ANATOMY
(Showing ICD-O-2/3 Codes)
Abstracting, Coding, & Staging Lung Cancer (Cont’d)

MORPHOLOGY & GRADE

ICD-O MORPHOLOGY CODES

If the diagnostic term in the pathology report is not in the list below, be sure to consult your ICD-O manual.

Small cell lung cancers include ICD-O morphology codes M-80413, M-80423, M-80433, M-80443, and M-80453. Small cell carcinoma is also called oat cell, round cell, reserve cell, or small cell intermediate cell carcinoma. Small cell cancers are usually central lesions (in the bronchus or toward the center or hilum of the lung). Occasionally, mixed tumors containing small cells and non-small cells are diagnosed. These should be treated as small cell cancers.

COMMON NON-SMALL CELL LUNG CANCER HISTOLOGIES

Squamous or epidermoid (807_3)--least likely to recur after resection; frequently a central or bronchial lesion.

Adenocarcinoma (814_3)--usually slow-growing, but can metastasize widely; usually a peripheral lesion.

Bronchioloalveolar (82503)--a very specific subtype of adenocarcinoma with a distinct characteristic presentation and behavior.

Bronchioloalveolar adenocarcinomas arise in the alveolar sacs in the lungs.

Large cell carcinoma (80123)--also called giant cell or clear cell. Other subtypes of adenocarcinoma are acinar, papillary, and mucinous.

Adenosquamous carcinoma (85603)--a specific histologic variant containing both epithelial (squamous) and glandular (adeno-) cells.

Carcinoids (824_3)--arise from neuroectoderm (which generates supporting structures of lung). Melanomas, sarcomas and lymphomas may also arise in the lung.

Mesothelioma (905_3)--linked to asbestos exposure; usually involves the pleura, not the lung.

Non-small cell carcinoma (80463)--a general term used sloppily to separate small cell from the "non-small cell" types (such as adenocarcinoma, squamous cell carcinoma, large cell, etc.) of carcinomas. Only use 8046/3 when there is no other type of non-small cell carcinoma contained in the source documents.

Synonyms for in situ carcinoma: polypoid with no invasion of stalk, confined to epithelium, intraepithelial, involvement up to but not through the basement membrane, noninfiltrating, no stromal involvement, papillary noninfiltrating, Stage 0.

Key words:

Pancoast tumor--a tumor of the apex of lung which invades brachial plexus nerves causing pain in the arm. Superior sulcus tumor--a less invasive tumor of the apex of the lung.

Bronchogenic carcinoma--not a specific cell type--it is a description of where the tumor arose: broncho-(bronchus) and -genic (arising in). More information should be obtained before the morphology is coded.

EXTENT OF DISEASE FOR LUNG CANCER

COMMON METASTATIC SITES

Unless otherwise indicated, all statements apply to both small cell and non-small cell lung cancer.
Abstracting, Coding, & Staging Lung Cancer (Cont’d)

(Continued from page 4)

Lymphatic Spread: Cervical lymph nodes, contra lateral lung and contra lateral mediastinum.

Hematogenous Spread: Brain, bone, liver, adrenal glands, kidney, contra lateral lung.

EXTENT OF DISEASE EVALUATION

DEFINITIONS

Key words/involvement: terms which indicate possible involvement by tumor. Common terms are provided, but the list is not all-inclusive.

Other words/no involvement: other terms seen in reports which indicate an abnormality but do not indicate a neoplastic process. Common terms are provided, but the list is not all-inclusive.

Key information: information to look for in the report of the study. Key information helps define the extent of disease.

DIAGNOSTIC STUDIES--PHYSICAL EXAM

Key information: location of any masses or enlarged organs (organomegaly; hepatomegaly; splenomegaly); palpable lymph nodes, especially supraclavicular; jaundice (yellowing of skin and eyes due to blockage of bile ducts by metastases).

DIAGNOSTIC STUDIES--IMAGING

Key information: size and location of primary tumor; relationship of mass to other tissues, such as impingement or extension to another tissue (ribs, chest wall, pleura); elevation of diaphragm on one side (phrenic nerve paralysis); hilar or mediastinal involvement; enlargement or decrease in size of lung(s); opacity, such as atelectasis, pleural effusion or pneumonitis; masses in mediastinum and/or hilum of lung; involvement of distant sites.

Chest X-ray

Imaging, Lung

Esophagogram

Imaging, Bone

Imaging, Brain

Imaging, Liver/spleen

DIAGNOSTIC STUDIES--TUMOR MARKERS

Key information: baseline and observation—to assess tumor burden and monitor for recurrence.

NSE (Neuron Specific Enolase)—elevated level indicates presence of small cell carcinoma of lung and neuroblastoma.

Squamous Cell Carcinoma (SCC) Antigen—monitors tumor burden after treatment for squamous cell carcinoma; usually used for advanced disease; primary application is head and neck cancer, secondarily for lung cancer.

DNA Studies—differentiates between tumors at high and low risk for recurrence. DNA studies are a prognostic tool for non-small cell lung and other solid tumors.

Ploidy Analysis—Aneuploid tumors correlate with more aggressive behavior and a greater risk of recurrence.

S-Phase Analysis—Patients with high S-phase fraction have less favorable prognosis.

(Continued on page 6)
OTHER TUMOR MARKERS

ACTH (Adrenocorticotropic Hormone)--elevated level found in paraneoplastic syndrome caused by small cell carcinoma. Non-diagnostic of lung cancer, but an indicator of metastases.

CEA (Carcinoembryonic Antigen)--persistent elevated levels indicate residual or recurrent metastatic carcinoma; smoking may affect accuracy of CEA results.

Calcitonin--elevated levels of this thyroid hormone occasionally occur with small cell lung cancer; increasing levels may indicate progression of disease.

TPA (Tissue Polypeptide Antigen)--elevated level indicates presence of malignancy; not specific to lung cancer, also monitors bladder, prostate, and gynecologic tumors.

DIAGNOSTIC STUDIES--ENDOSCOPIES

Bronchoscopy
Mediastinoscopy
Thoracoscopy
Laryngoscopy
Esophagoscopy

DIAGNOSTIC STUDIES--PATHOLOGY

Key information: cell type and grade, location within specimen, exact size of lesion, distance from carina, presence of other tumors in specimen, location, size and number of lymph nodes involved (ipsilateral or contra lateral), invasion of blood vessels and/or lymphatic channels within specimen, extension to adjacent tissues (mainstem bronchus, pleura, pericardium, muscle, ribs), results of biopsies of possible metastatic sites.

Bone Marrow Biopsy
Cytology
Closed Chest Needle Biopsy
Sputum Cytology
Bronchial Washings
Thoracentesis

LUNG CANCER STAGING

Criteria for TNM Clinical Staging: Physical examination and history; pathologic examination of primary tumor or other tissue to establish a diagnosis of cancer, imaging, endoscopy, and studies to determine presence or absence of positive nodes and distant metastases.

Criteria for TNM Pathologic Staging: All information from clinical staging and thoracotomy, plus pathologic examination of the resected specimen and lymph nodes.

Clinical staging tends to underestimate the extent of disease and therefore may distort survival rates.

The Veterans Administration Lung Cancer Study Group used a two-stage system for describing small cell lung cancers:

Limited stage--confined to the hemithorax of origin, the mediastinum and the supraclavicular nodes, the region which can be encompassed by a radiotherapy port.

Extensive stage--tumor too widespread to be in-
Abstracting, Coding, & Staging Lung Cancer (Cont’d)

Excluded in the definition for limited stage disease.

Note: patients with pleural effusion, contra lateral supraclavicular nodes, or multiple ipsilateral lung tumors may be included in either stage, because the size of the radiotherapy port has not been defined.

**KEYS TO ABSTRACTING**

For AJCC staging, a pleural effusion is considered malignant unless cytologic examination has been proven negative on two or more occasions. These pleural effusions are non-bloody and non-exudative. Clinical judgment and negative cytologies will determine that the effusion is non-malignant. Otherwise, a malignant effusion is staged to T4.

If a lung cancer is detected by positive sputum cytology but cannot be seen on imaging or endoscopy, the tumor should be staged TX. If there are no positive lymph nodes or distant metastases, the case is stage-grouped to the category "Occult carcinoma."

The size of tumor must be recorded in order to stage the case in the AJCC staging system. Use TX if the primary tumor was excised at another facility and no information about tumor size is available.

The dividing line between T2 and T3 lesions is the pleural cavity. If the tumor extends only to the visceral pleura, it is T2. If the tumor invades the parietal pleura or pericardial, diaphragmatic, or mediastinal surfaces, it is at least T3.

Tumors or lesions in the lung that are not a direct extension of the primary tumor are considered M1. Simultaneous multiple tumors of different histologies should be staged as individual primary cancers. Simultaneous is defined as being diagnosed within two months. Different histologies refers to the first three digits of the ICD-O morphology code. Patients with evidence of superior vena cava syndrome, compression of the esophagus or trachea, or vocal cord paralysis most likely have involvement of mediastinal lymph nodes. These should be staged as N2 or N3 depending on the location of the involved nodes.

If a mediastinal mass or mediastinal adenopathy is reported on x-ray or mediastinoscopy, assume that mediastinal lymph nodes are involved.

If the report states "remaining examination negative" or indicates no evidence of spread and there is no other statement regarding lymph nodes, assume that regional lymph nodes are negative.

"Obstructive pneumonitis" is a radiologic diagnosis that affects TNM staging; it should not be confused with "bronchopneumonia."

Record "Size of Tumor" as 998 if involvement of lung is described as diffuse or entire lobe of lung. Do not add together the sizes of pieces of tumor removed at biopsy and at resection. Use the largest size of tumor, even if this is from the biopsy specimen. If no size is stated, record as 999 in the field "Size of Tumor."

If a lobectomy was performed, assume that the tumor was more than 2 cm distal to the carina.

If a chest x-ray is done and the radiologist makes no comment about the opposite lung, assume that it is not involved.

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**2003 Jean Byers’ Award Recipients**

The 2003 Jean Byers Award for Excellence in Cancer Registration (2001 cases) plaques and/or plates were mailed in November. If you were a recipient and have not received your award please notify Betty Fernandez at 305 243-2629 or e-mail: betty_fernandez@miami.edu
EDUCATION AND TRAINING

December 2003

EMORY UNIVERSITY TRAINING PROGRAMS

ADVANCED CANCER REGISTRY TRAINING PROGRAM

This advanced training program will specifically address: abstracting, staging, and coding really difficult cancer cases; bizarre, rare, and unusual cancer cases; calculating incidence, prevalence, age-adjusted, survival, and other rates; using registry data (preparation, analysis, annual reports, etc.); and using the Internet to locate comparable data and useful cancer information and resources. The course will be held at the Holiday Inn Express Hotel & Suites, 2183 North Decatur Road, Decatur, Georgia 30033, located in the Atlanta-Emory University Area on December 8-10, 2003.

Registration Fee: $500 for the full 3 day training

Approved by NCRA for 20.5 CE hours

Complete details on the listed Emory courses are available on the training web-site at http://cancer.sph.emory.edu or contact Stephen Roffers, PA., CTR at (404)-727-4535.

PRINCIPLES OF ONCOLOGY FOR CANCER REGISTRY PROFESSIONALS

Principles of Oncology is an intensive five-day training program in cancer registry operations and procedures emphasizing accurate data collection. The training program includes extensive site-specific, hands-on case abstracting and coding sessions using both full medical records and abstracts that are representative of the many situations registrars may face. This program is endorsed by the National Cancer Registrars Association (NCRA) and the North American Association of Central Cancer Registries (NAACCR). NAACCR also serves as the fiscal agent for this program. The course will be held at the Bolger Center for Leadership Development in Potomac, Maryland, December 8-12, 2003.

Registration Fee: $695.00*

*NOTE: The registration fee is reduced for participants staying at the Bolger Center because direct costs for meals, breaks, equipment use, etc., are included in the daily sleeping room rate. Students staying at the Bolger Center pay a registration fee of $475 in addition to the cost of the sleeping room.

Additional information for the Principles of Oncology course is available online at: http://seer.cancer.gov/training/oncology/.
DATA COLLECTION OF PRIMARY CENTRAL NERVOUS SYSTEM TUMORS


Topic: Data Collection of Primary Central Nervous System Tumors.

Five CEUs are anticipated to be granted by the NCRA. Registration forms will be mailed with the date and time of the workshop. Gayle Clutter and Joyce Allan will be speakers for this presentation.

For further information, contact Patricia Bentley, CTR, Program Chair, at patbentley@cfl.rr.com.

2004 CTR EXAM, REVIEW & BASIC SKILLS WORKSHOPS

Plans are underway to provide concurrent CTR Examination Review & Basic Skills Workshops at the Moffitt Cancer Center, February 12-13, 2004. Moffitt is located on the campus of the University of South Florida, Tampa, Florida. Details on registration, curriculum and lodging will be distributed shortly. Meanwhile, information is available by contacting Helen Lewis, BS, CTR, Moffitt Cancer Registry. Phone: 813-632-1305 or toll-free 1-800-456-3434 x1305. E-mail address: lewishl@moffitt.usf.edu.

The Certification Examination will be offered at LaserGrade Computer Testing Inc.’s computer-based testing facilities. For a list of tentative testing sites, see the LaserGrade Web site or call LaserGrade at (800) 211-2754.

The 2004 CTR Exam Handbook for Candidates and Application will be available late November 2003.

2004 EXAM DATES AND DEADLINES

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<th>Application Deadline</th>
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<td>January 31, 2004</td>
<td>March 13, 2004</td>
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<td>July 31, 2004</td>
<td>September 11, 2004</td>
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The Certification Examination will be administered during two 2-week testing periods on a daily basis, Monday through Saturday, excluding holidays, at LaserGrade Computer Testing Inc.’s computer-based testing facilities managed by Professional Testing Corporation.

EXAM APPLICATION FEES

NCRA Members = $200      All other candidates = $275

For further information visit the NCRA website at: http://www.ncra-usa.org/certification/exam.htm#sub1

(Continued on page 10)
PRINCIPLES AND PRACTICE OF CANCER REGISTRATION, SURVEILLANCE, AND CONTROL

Program Information
This intensive and comprehensive training program is taught by a staff of recognized experts in cancer registration, surveillance, and control. The instructors are accomplished adult trainers and are internationally recognized as leaders in their fields. This intensive and comprehensive training program course will be held at the Holiday Inn Express Hotel & Suites, 2183 North Decatur Road, Decatur, Georgia 30033, located in the Atlanta-Emory University Area on March 29-April 2, 2004.

Who Should Attend
This program is suitable for oncology program (hospital-based and central registry-based) employees with minimal knowledge of cancer, anatomy, physiology, and medical terminology. Cancer registrars with less than one year of experience or statistical and epidemiological staff who utilize cancer registry data would benefit most from this program. Class size will be limited and is available on a first come, first served basis.

Registration Fee: $500 for the full 3 day training

Complete details on the listed Emory courses are available on the training web-site at http://cancer.sph.emory.edu or contact Stephen Roffers, PA., CTR at (404)-727-4535.

CANCER CASE ABSTRACTING, STAGING, AND CODING

Program Information
This intensive and comprehensive training program is taught by a staff of recognized experts in cancer registration, surveillance, and control. The instructors are accomplished adult trainers and are internationally recognized as leaders in their fields. The training will be held at the Holiday Inn Express Hotel and Suites, 2183 North Decatur Road, Decatur, Georgia 30033, located in the Atlanta-Emory University area on April 5-9, 2004.

Who Should Attend
This program is suitable for oncology program (hospital-based and central registry-based) employees with minimal knowledge of cancer, anatomy, physiology, and medical terminology. Cancer registrars with less than one year of experience or statistical and epidemiological staff who utilize cancer registry data would benefit most from this program. Class size will be limited and is available on a first come, first served basis.

Registration Fee: $1000 for the weeklong training

Approved by NCRA for 35CE hours

Complete details on the listed Emory courses are available on the training web-site at http://cancer.sph.emory.edu or contact Stephen Roffers, PA., CTR at (404)-727-4535.
DEADLINES AND REMINDERS

DEATH CERTIFICATE NOTIFICATION

The Death Certificate Request Forms were mailed out on November 6, 2003. All forms must be completed and returned to FCDS no later than December 19, 2003. The information on the forms was obtained from the official Florida Vital Statistics Death Certificate.

Each form identifies a Florida resident who expired with a cancer-related cause of death and does not match with any record already in the FCDS database. If you have any questions, please contact your Field Coordinator at (305) 243-4600 or 1-800-906-3034.

RADIATION THERAPY CENTERS CANCER CASE IDENTIFICATION PROGRAM

Beginning with the 2003 patient encounters, Radiation Therapy Centers are responsible for identifying and reporting all of their cancer cases to the Florida Cancer Data System using the FCDS-IDEA Single Entry or the File Upload modules. The deadline to submit cases is June 30, 2004. Please log on to the FCDS website fcds.med.miami.edu or call Betty Hallo at (305) 243-2627 for additional information.

PATH LABS

Every anatomic pathology laboratory that reads biopsy and surgical resection specimens collected from patient encounters within the state of Florida MUST electronically submit the specified data for every malignant cancer case. Specimens read between January 1, 2003 and June 30, 2003 must be submitted to FCDS on or before December 31, 2003.

(July 1, 2003 through December 31, 2003 data are due June 30, 2004.)

NATIONAL CANCER REGISTRARS ASSOCIATION (NCRA)

As of December 1st, 2003 NCRA's NEW mailing address is:

1340 Braddock Place
Suite 203
Alexandria, VA 22314
FLORIDA CANCER DATA SYSTEM

Path Reporting

Cumulative Path Data Received

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P. O. BOX 016960 (D4-11)
MIAMI, FL 33101