

Annual Report **2007**



The
Medical
Center



**CANCER TREATMENT CENTER FOR SOUTHERN KENTUCKY
AND BARREN RIVER REGIONAL CANCER CENTER**

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Laura Williams

Coding Manager – Health Information Management

Michael Zachek, MD

(Pulmonology)

Message from the Chairperson



Another successful year has passed for the Cancer Committee at The Medical Center at Bowling Green. Throughout the year many people including those involved with quality care and continual improvement, education, data collection and reporting, work hard to improve the care we provide to those diagnosed with cancer. We concentrate our efforts in several areas including working toward earlier detection through screening efforts at The Medical Center as well as at The Medical Center Health & Wellness Center

at Greenwood Mall. We work hard to stay on the cutting edge of treatment in surgical, chemotherapy and radiation therapy fields. We have continued to update and improve the equipment and techniques in our Cancer Center. Everyone involved also advocate prevention through appropriate programs including colon cancer screening and smoking cessation. As always, our nurses and technicians provide the compassionate and skillful care that benefits all of our patients.

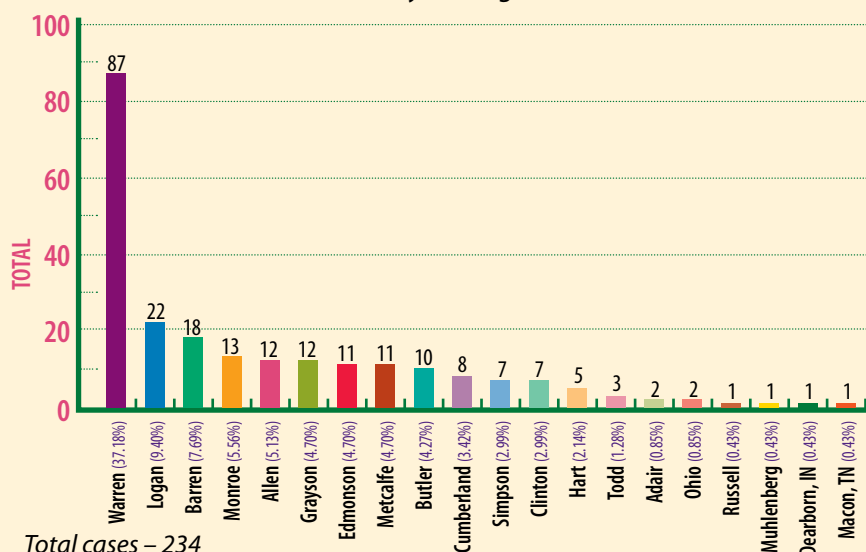
In Kentucky, lung cancer is the most prevalent type of cancer. For that reason, we have chosen to highlight it in this year's annual report. Please pay particular attention to the article written by Michael J. Zachek, MD on this subject. It provides meaningful statistics and enlightening advice to all who are concerned about this subject.

A lot has been accomplished during the year but rest assured that we on the Cancer Committee and all who are involved with fighting cancer at The Medical Center will continue to work toward providing the best care possible for all of our patients.

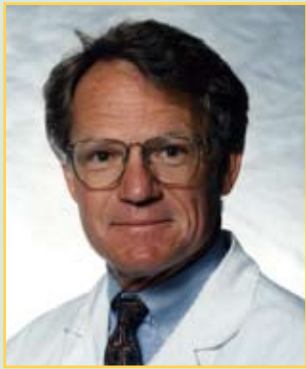
*Tage Haase, MD
Committee Chairperson*

2007 Number of Lung Cancer Cases

County at Diagnosis



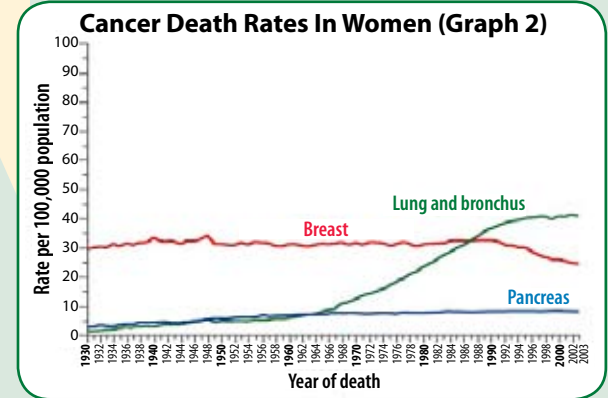
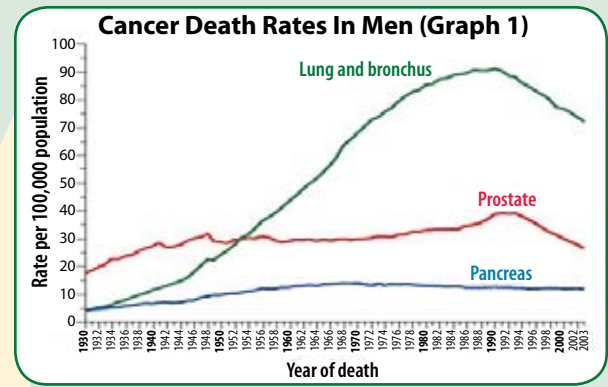
Lung Cancer Update



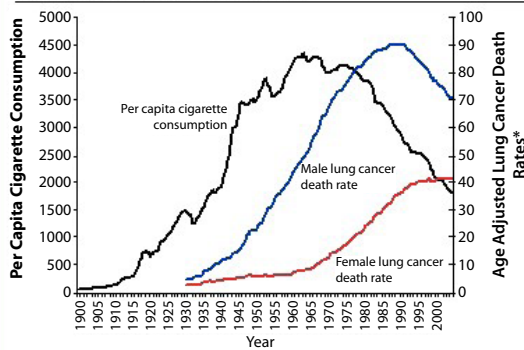
Michael J. Zachek, MD

Lung Cancer is the most common cause of cancer mortality in men and women worldwide. It is estimated that in 2007, lung cancer will have been identified in 213,280 Americans and result in 160,390 deaths. This is far greater than the number of deaths seen in breast, prostate and colorectal cancer combined. Although lung cancer death rates in men have begun to decline (see graph 1), the death rate of lung cancer in women is at a plateau (see graph 2). Almost one half of all lung cancer deaths now occur in women.

Kentucky had the **highest lung cancer death rate** of any state in 2006, estimated at 3,500 deaths. The rates of lung cancer in Warren County in 2001–2005 were below that of the state as a whole, but still well above the national average (see graph 4).



Tobacco Use in the US, 1900-2004 (Graph 3)



*Age-adjusted to 2000 US standard population.
Source: Death rates: US Mortality Data, 1960-2004, US Mortality Volumes, 1930-1959, National Center for Health Statistics, Center for Disease Control and Prevention, 2006. Cigarette consumption: US Department of Agriculture, 1900-2004.

**Invasive Cancer Incidence Rates in Warren County, Kentucky
Lung and Bronchus, 2001–2005
(Graph 4)**

Year	2001	2002	2003	2004	2005	2001–2005
Population at Risk	93340	94179	95470	97075	98929	478993
Total Cases	83	69	79	69	66	366
Crude Rate	88.92	73.26	82.75	71.08	66.71	76.41
Age-Adjusted Rate	102.36	82.84	92.90	80.07	74.18	86.09
Statewide Age-Adjusted Rate	103.43	102.03	100.80	101.83	98.31	101.24

Note: All rates are per 100,000. Rates are age-adjusted to the 2000 U.S. Standard Million Population.

Created Aug 25, 2008

Cigarette smoking remains the leading cause of cancer in the United States. It accounts for approximately 87 percent of the known risk factors for lung cancer, and it is estimated that between 10 and 15 percent of active smokers will develop lung cancer. As graph 3 suggests, the rate of cigarette smoking declines, lung cancer death rates will also drop; but with a lag of 30 plus years!

About 10 percent of lung cancer patients have no prior history of smoking. It appears that environmental smoke exposure (second hand smoke), genetic factors, emphysema, dust exposure and radon gas exposure account for some of these cases.

Unlike other cancers, where screening tools (mammography, colonoscopy, PSA levels) are readily available, there has not been a widely agreed upon screening methodology for lung cancer. Simple chest Xrays and sputum cytology sampling are not helpful. Recently, the use of spiral CT scans of the chest has been suggested as a detection tool, but studies have yielded contradictory results; some suggesting that early detection

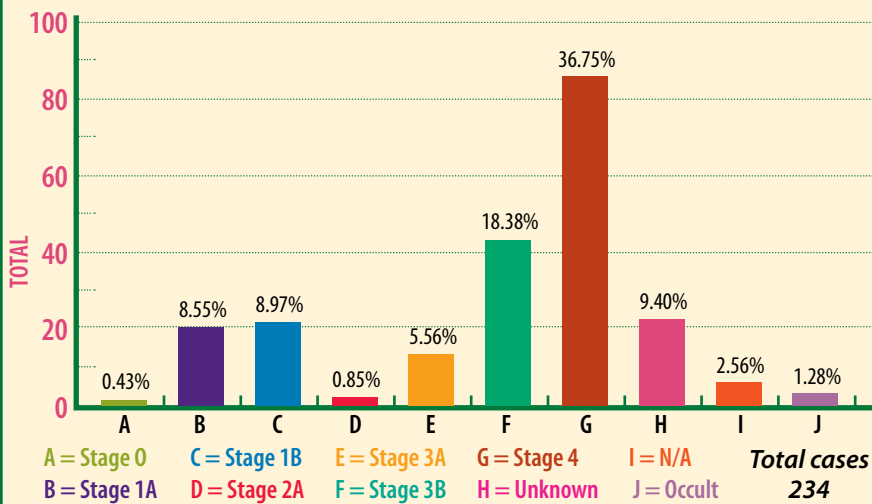
leads to better long term survival while others suggest the possibility of over diagnosis. In Kentucky, where lung scarring due to Histoplasmosis is common, this approach must be viewed with caution due to the high rate of false positive studies. A National Lung Screening Trial is being conducted to answer some of these questions.

The statistics confirm the lethality of lung cancer, especially in the Commonwealth. While the future holds some promise of improved screening techniques, presently, the key to reducing lung cancer death rates is through prevention. This means keeping teenagers smoke free and helping current smokers to quit.

References:

1. Sarita Dubey and Charles A. Powell, Update in Lung Cancer 2007, American Journal of Respiratory and Critical Care Medicine Vol 177. pp. 941–946, (2008)
2. www.cdc.gov/cancer/lung/statistics/risk_state.htm
3. www.cancer-rates.info

2007 Lung Cancer – AJCC Stage



American Cancer Society Report

Through August 20, 2008, the American Cancer Society in Bowling Green served 630 constituents, 99 of whom were uninsured. The Relay For Life campaign was successful with nine CHC teams raising over \$27,400. We also saw an increase in the number of patient referrals to the American Cancer Society by The Medical Center using the Patient Direct Referral Form.

There have been many national and state-related anti-cancer initiatives during the past year including the following in Kentucky. Hopkins County is the latest county in Kentucky to implement a smoke-free ordinance. In addition, Kentucky Senate Bill 96 mandates that colorectal cancer screenings, including colonoscopies, be covered by health benefit plans, effective Jan. 1, 2009. The unanimously-passed House Bill 415 established a program to provide colon cancer screenings for uninsured people between the ages of 50 and 64 and other people at high risk. These actions promise to have a positive impact on the health of thousands of Kentucky's uninsured.

ACS CAN Fight Back Express was launched in Ohio on May 4 and has traveled through more than 30 states, reaching an audience of more than 35 million people. The ACS CAN Bus highlights the role elected officials play in the fight against cancer and champions legislation that will help us achieve our mission. The Fight Back Express made a stop in Bowling Green on July 10 and left Bowling Green with signatures and messages of hope that will be shared in Washington, D.C.

We are also pleased to announce that Road to Recovery transports patients from their home to the Cancer Center for their treatments. This is a free service offered to any cancer patient in Warren County and is staffed by trained volunteers who donate their time and automobile. In addition, Candlewood Suites in Bowling Green offers a lodging discount to cancer patients who are receiving treatments and who are in need of housing assistance.

Case Frequency Report

SITE	PERCENT	COMPARED TO STATE %
Trachea, bronchus, lung-NSC	21.14%	14.50%
Breast, female & male	16.72%	14.20%
Prostate	11.65%	11.70%
Colon	5.83%	7.30%
Rectum/Anus	5.61%	3.30%
Trachea, bronchus, lung-small cell	5.07%	3.00%
Unknown Primary	2.80%	1.80%
Non-Hodgkin's Lymphoma	2.80%	3.50%
Bladder	2.59%	4.00%
Thyroid	1.83%	1.90%
Brain	1.73%	1.10%
Malignant melanoma	1.73%	5.90%
Endometrium (corpus uteri)	1.51%	2.40%
Larynx	1.40%	1.10%
Kidney	1.40%	3.00%
Plasma cell tumors	1.29%	0.90%
Esophagus	1.19%	1.00%
Pancreas	1.19%	2.10%
Lymphocytic leukemias	1.08%	0.90%
Stomach	0.86%	1.00%
Oropharynx	0.86%	0.50%
Benign / Borderline brain, CNS	0.86%	2.80%
Myeloid leukemias	0.86%	0.80%
Cervix	0.86%	0.80%
Other female genital organs	0.76%	1.20%
Testis	0.65%	0.40%
Nasopharynx	0.65%	0.10%
Myeloprolif. & Myelodysplas.	0.43%	1.30%
Liver	0.43%	0.90%
Connective & soft tissue	0.32%	0.50%
Ovary	0.32%	1.20%
Bone	0.32%	0.10%
Other leukemias	0.32%	0.20%
Small Intestine	0.32%	0.40%
Hodgkin's	0.22%	0.50%
Other Oral Cavity	0.22%	0.00%
Nasal Cavities, sinuses, ear	0.22%	0.10%
Floor of mouth	0.22%	0.20%
Other urinary organs	0.22%	0.50%
Other male genital organs	0.22%	0.10%
Tongue	0.22%	0.50%
Other skin	0.22%	0.20%
Hypopharynx	0.11%	0.20%
Other hematopoietic diseases	0.11%	0.10%
Salivary glands	0.11%	0.20%
Other digestive tract	0.11%	0.30%
Gum & hard palate	0.11%	0.10%
Other respiratory	0.11%	0.10%
Buccal Mucosa	0.11%	0.10%

2007 Cancer Registry Report

The Cancer Registry is a vital component of The Medical Center's Cancer Program and is a requirement for the approval of a program by the American College of Surgeons' (ACoS) Commission on Cancer. It is the responsibility of the Cancer Registry to maintain a database of cancer patients who are diagnosed and/or treated at The Medical Center. Currently, there are over 12,000 patients in the registry. Two Certified Tumor Registrars maintain this computerized database. The registrar is responsible for case-finding and collecting data on each patient. These data include demographics, primary site, histology, diagnostic information, extent of disease, all treatments, and life-time follow-up. All information is required by law to be reported to the Kentucky Cancer Registry. Statistics are also required to be submitted to the National Cancer Database on an annual basis.

Cancer Registry is also responsible for organizing Tumor Conferences. Meetings are held weekly and are attended by the medical staff and other ancillary personnel. Physicians

from Medical Oncology, Radiation Oncology, Radiology, Surgery, and Pathology are represented at the conference. Open discussions focusing on recently-diagnosed cancer cases are presented for education as well as offering advice to the attending physician on treatment options or additional diagnostic studies for the patient. In 2007, 182 prospective cases were discussed, and 192 total cases were discussed, which included follow-up discussion.

The Cancer Registrar also serves on the Cancer Committee, which meets quarterly. The Cancer Committee is a multidisciplinary team that is responsible for assuring quality care to all cancer patients and maintaining ACoS standards for an accredited Cancer Program. For more information regarding the Cancer Registry or related data, call (270) 745-1288 or (270) 796-5104.

Jana Thornton, RHIT, CTR
Paula Alford, RHIT, CTR

2007 Quality Improvement Studies

Communication of Critical Lab Values

Following a performance measure in 2007, the Standards and Practice Committee felt the policy and procedure for communication of critical lab values needed to be revised. A new policy and procedure was developed entitled "Immediate Action Results." A follow-up review will be conducted during February of 2008.

Time from Registration to Administration of Chemotherapy

A total of 64 outpatient chemotherapy patients' records extending from January 2007 through November 2007 were examined to measure the time from registration until the patient arrived on 4C to receive his chemo treatment. Of the 64 records, 44 indicated less than 30 minutes to the floor; 13 of the 64 were received between 31 minutes and 1 hour; and 7 patients experienced greater than 1 hour to the floor. It was discovered that the major factor influencing the time was bed availability. ACTION: 4C will contact ordering physicians and ask them to order chemotherapy at least 24 hours prior to admission in order to plan bed availability. 4C has also updated the family visiting room to accommodate an outpatient chemo patient.

Pain Intervention (PI) Effectiveness

Documentation of pain by using a pain scale and a description of the pain was met between 93 and 100 percent of the time from January through December 2007. The follow-up documentation ranged from 77 to 97 percent. ACTION: 4C will provide training to nursing staff for follow-up assessment of pain. This PI tool will continue through 2008.

Central Line Dressing Change

4C developed a PI tool that documented dressing changes of central lines. These changes included (1) the central line dressing site will have documentation of assessment every shift. This goal was met 100 percent of the time January through December 2007; (2) the central line will be changed every seven days or as needed. This goal was met 100 percent of the time for 11 months, and 80 percent for the remaining month. ACTION: Inservice training was provided to staff. This PI tool will continue through 2008.

Staging Accuracy

A total of 78 randomly-selected charts were reviewed for staging accuracy consistent with the Registry's top five sites. Results were a 96 percent staging accuracy rate. Compared to the study in 2005, this review indicates a 13 percent improvement in staging accuracy.

Top Five Cancer Sites – 2007

(Comparing The Medical Center top five sites with Kentucky and National Data)

Site	The Medical Center	Kentucky	National Data
Lung	21.14%	14.50%	12.50%
Breast	16.72%	14.20%	15.30%
Prostate	11.65%	11.70%	16.70%
Colon	5.83%	7.30%	7.60%
Rectum/Anus	5.61%	3.30%	3.30%

2007 Cancer Prevention & Early Detection Community Outreach

January

- Health & Wellness Expo (colon cancer screening kits, sun damage screening, body fat analysis, cancer education materials)
- Cooper Clayton Smoking Cessation Classes (Health & Wellness Center and The Medical Center at Scottsville)
- Cancer Support Group
- BG Metalforming Health Fair (HRA-cancer risk factor identification)
- Richardsville Elementary Health Fair
- *WellNews* – Article on Screening Tests for Men
- *Weigh to Wellness*
- Steps to Healthy Lifestyle Management Women’s Luncheon

February

- Better Life Challenge (Bowling Green Municipal Utilities & Warren Rural Electric Cooperative Corporation)
- Wellness Pay\$ Kickoff (Commonwealth Health Corporation employees)
- Look Good Feel Better Classes
- Cancer Support Group

March

- MyPyramid Food Guide Educational Materials
- Cancer Support Group

- Colorectal Cancer Screening Kits (Health & Wellness Center)
- Know Your Numbers Health Fair (Commonwealth Health Corporation)

April

- Cancer Support Group
- Testicular Cancer Awareness
- Breast Health Awareness

May

- Lung Health Screening (Health & Wellness Center)
- City of Bowling Green Health Fair
- Cancer Support Group

June

- PSA Screenings (Health & Wellness Center)
- Sun Damage Screening (Health & Wellness Center)
- Look Good Feel Better Class
- Cancer Support Group
- Cooper Clayton Smoking Cessation Classes
- Men’s Health Update Luncheon

July

- Cancer Support Group

August

- Family Meal Planning (Health & Wellness Center)
- Look Good Feel Better (Health & Wellness Center)
- Cancer Support Group (Health & Wellness Center)

September

- Become a Non-Smoker – Cooper Clayton Class
- Cancer Support Group
- Women’s Health Conference
- Healthy Aging Series

October

- Cancer Support Group
- Look Good Feel Better Class
- Breast Health Awareness
- Cervical Cancer Vaccine: Questions, Answers & Recommendations
- Lung Health Screening

November

- Cancer Support Group
- Look Good Feel Better
- Dining Out Healthy
- Great American Smoke Out

December

- Cancer Support Group

