



**Taylor Regional  
Hospital Cancer  
Program**

**20  
Annual  
09 Report**

## 20 Chairman's 09 Report

**S**ince our last report our great country has seen many changes and has been faced with many challenges, but one thing remains constant – and that is Taylor Regional Hospital's dedication and commitment to providing the highest quality state of the art cancer care for our community.

We have maintained a close alliance with the James Graham Brown Cancer Center, but since the opening of our very own Taylor Regional Hospital Cancer Center, which is adjacent to the hospital, we are now capable of providing the complete gamut of oncologic services.

Dr. Zewdu Lissanu, our Medical Oncologist, provides care not only for the cancer center but also at a satellite clinic in Lebanon, Kentucky.

The James Graham Brown Center Division of Radiation Oncology continues to provide radiation services five (5) days per week eliminating the need for the 90 minute trip to Louisville, Kentucky for many of our patients.

Sherri Angel, R.N, OCN is the Director of Medical Oncology Services. We have six (6) full- time nurses and three (3) part-time nurses. Five (5) of our nurses are an Oncology Certified Nurse (OCN). As our Cancer Center continues to grow to meet the expanding needs of our community, I anticipate our need for staff to continue to increase.

We have added Dr. Carolyn Harris to our staff as a Nuclear Medicine Physician who works with our surgeons to diagnose tumors that require lymph node biopsies to determine possible metastases. The lymphocintigraphy (radiological imaging) is useful for several types of cancer, particularly breast cancer and melanomas. We have also

added CT/PET scanning and MRI scanning to our armamentarium of diagnosis and treatment to assist caregivers in delivering the most state of the art care.

A new van was purchased in September 2010. As of May 2011, we have logged 40,936 miles providing transportation to our patients.

Last year, we once again received the honor of accreditation through the American College of Surgeons (ACoS) validating our commitment to providing you, our community with the highest quality of cancer care.

Dr. Eugene Shively, who has for years worked tirelessly and has been instrumental in developing the Cancer Program we now have, serves as our Cancer Liaison Physician with the American College of Surgeons (ACoS).

In 2009, 295 new analytic cases were added to our Registry with breast, lung, colon and prostate as primary sites being the most prevalent sites which correspond with the national norm. Our annual report this year will focus on renal cancer and is summarized in the Cancer Report by Dr. James Angel, our Urologist.

In 2009, 13,593 chemotherapy treatments were administered at our oncology center and 5,034 radiation therapy treatments were given. We now truly have multi-modality therapy readily available to give to you in your back door.

As chairman of the Cancer Committee I have been very fortunate to participate in the care of our cancer patients and be a part of a dedicated Hospital Administration and multi-disciplinary Medical and Nursing Staff.

May God bless you.

Sincerely,

Robert A. Romines, M.D., F.A.C.S.  
Chairman, Cancer Committee,  
Taylor Regional Hospital



**Robert A. Romines, M.D.,  
F.A.C.S.**

### Cancer Committee Members 2009

**Robert B. Romines, M.D.**  
Chairman

**Eugene H. Shively, M.D.**  
Liaison Physician

**Lora Sztendera, M.D.**  
Family Practice

**Zewdu Lissanu, M.D.**  
Medical Oncologist

**William Spanos, M.D.**  
Radiation Oncologist

**James Dunnington, M.D.**  
Pathologist

**Betty Alexander, NSA (2009)**

**Dana Garrett, NSA (2011)**

**Lisa Haliday, RN**  
Care Management

**Cindy Rose**  
Director Public Relations

**Kristi Lanham, CNMT**  
Radiology

**Sam Underwood, CTR**  
Cancer Registry

**Angie Skaggs, Pharm D**  
Pharmacy

**Eric Spowles, Pharm D.**  
Director Pharmacy

**Lisa Dunnington, RHIT**  
Director HCIS (2009)  
Director Quality/Care  
Management (2011)

**Sherri Angel, RN**  
Director Medical Oncology

**Jennifer Smothers, CTR (2009)**  
Coordinator

**JoAnn Smith, RHIT (2011)**  
Coordinator

## 20 Cancer Registry 09 Report

**T**he Cancer Registry is an integral part of the Taylor Regional Hospital Cancer Program. The registry is an information system that monitors all types of cancer diagnosed and/or treated at Taylor Regional Hospital. The primary function is to provide data management services under the support and leadership of the Cancer Committee. The cancer registry collects and documents demographic information, pathological and diagnostic testing results, treatment information and follow-up data.

A total of 301 cases were entered into the database in 2009; all of these cases being analytic. There have been 5206 cases accessioned in the registry since our beginning reference date in 1987. Active follow-up is maintained on approximately 4580 patients, with a successful follow-up rate of 90%. Each case is followed annually to monitor diagnostic and treatment outcomes and to provide accurate data to calculate survival rates.

The Cancer Registry data is reviewed for accuracy, timeliness

**Little things that didn't  
used to matter much suddenly  
are very important.**

and quality by a physician member of the Cancer Committee. The data available to the Cancer Committee, Hospital Administration and physicians to evaluate outcomes of treatment and to assess the needs of the community. Additionally, physician review of Treatment

Planning, Collaborative Staging, AJCC (American Joint Committee on Cancer)/TNM (Tumor Node Metastasis) Staging, CAP (College of American Pathologists) Protocols for pathology reports and NCCN (National Comprehensive Cancer Network) guidelines is performed.

Tumor Conferences are held once monthly on each fourth Tuesday. These conferences are attended by members of the medical staff, nursing personnel and other clinical and support personnel. Each individual case of cancer diagnosed at Taylor Regional Hospital is presented at Tumor Conference. Pathological slides are presented by the Pathologist, x-rays are presented by the Radiologist and an open discussion is held among physicians regarding staging and management for each case.

On staff are two Certified Tumor Registrars who are both active members of the National Cancer Registrars Association. They attend many state meetings to keep abreast of the latest changes in the registry field.

Physicians help provide quality data by providing cancer registry with treatment information and information on the status of their patients on follow-up exams. Patients can also help provide quality data by sending back information on their current address and physician. Patients can provide this valuable information by completing and returning the follow-up letter from the Cancer Registry, or by calling the Cancer Registry at (270) 789-5853.

For any data requests or additional information, contact Sam Underwood, CTR at (270) 789-5853.

Jennifer L. Smothers, CTR



# 20 Case Frequency 09 Report

Site	Count	Female	Male	Percent
Breast, female & male	50	50	0	16.61%
Trachea, bronchus, lung-NSC	42	12	30	13.95%
Colon	30	14	16	9.97%
Prostate	18	0	18	5.98%
Kidney	13	4	9	4.32%
Non-Hodgkin's Lymphoma	13	4	9	4.32%
Bladder	12	1	11	3.99%
Myeloproliferative & myelodysplastic	12	5	7	3.99%
Rectum/Anus	12	3	9	3.99%
Malignant Melanoma	11	6	5	3.65%
Larynx	10	2	8	3.32%
Trachea, bronchus, lung-small cell	9	3	6	2.99%
Esophagus	6	1	5	1.99%
Acute Myelogenous Leukemia	6	3	3	1.99%
Chronic Lymphocytic Leukemia	5	2	3	1.66%
Pancreas	5	3	2	1.66%
Cervix	4	4	0	1.33%
Oropharynx	4	0	4	1.33%
Ovary	4	4	0	1.33%
Plasma Cell Tumors	3	1	2	1.00%
Thyroid	3	2	1	1.00%
Tongue	3	2	1	1.00%
Benign/borderline brain, CNS	3	2	1	1.00%
Salivary Glands	2	0	2	0.66%
Gallbladder	2	2	0	0.66%
Other Urinary Organs	2	0	2	0.66%
Endometrium (corpus uteri)	2	2	0	0.66%
Stomach	2	1	1	0.66%
Connective & Soft tissue	2	1	1	0.66%
Other Skin	1	0	1	0.33%
Other Digestive Tract	1	0	1	0.33%
Unknown Primary	1	1	0	0.33%
Liver	1	0	1	0.33%
Hodgkin's	1	1	0	0.33%
Floor of mouth	1	0	1	0.33%
Nasal Cavities, Sinuses, ear	1	0	1	0.33%
Lip	1	0	1	0.33%
Brain	1	1	0	0.33%
Hypopharynx	1	0	1	0.33%
Other male genital organs	1	0	1	0.33%
<b>TOTAL</b>	<b>301</b>	<b>137</b>	<b>164</b>	<b>99.96%</b>

# 20 Primary 09 Site Table

Site	Total	Sex		Best Stage Group					
		Female	Male	Stage 0	Stage I	Stage II	Stage III	Stage IV	Stage Unk.
Lip	1	0	1	0	1	0	0	0	0
Tongue	3	2	1	0	3	0	0	0	0
Salivary glands	2	0	2	0	0	0	2	0	0
Floor of mouth	1	0	1	0	1	0	0	0	0
Oropharynx	4	0	4	0	0	1	0	3	0
Hypopharynx	1	0	1	0	0	0	1	0	0
Esophagus	6	1	5	0	0	2	0	3	1
Stomach	2	1	1	0	0	0	0	1	1
Colon	30	14	16	7	2	6	9	6	0
Rectum/Anus	12	3	9	1	2	3	2	4	0
Liver	1	0	1	0	0	0	1	0	0
Gallbladder	2	2	0	0	1	0	0	0	1
Pancreas	5	3	2	0	0	1	1	3	0
Other digestive tract	1	0	1	0	0	0	0	0	1
Nasal cavities,sinuses,ear	1	0	1	0	1	0	0	0	0
Larynx	10	2	8	0	2	2	3	3	0
Trachea,bronchus,lung-small	9	3	6	0	0	0	3	6	0
Trachea,bronchus,lung-NSC	42	12	30	0	8	4	11	19	0
Connective & soft tissue	2	1	1	0	0	0	1	1	0
Malignant melanoma	11	6	5	2	4	5	0	0	0
Other skin	1	0	1	0	0	0	0	0	1
Breast, female & male	50	50	0	7	22	11	3	6	1
Cervix	4	4	0	0	2	0	1	1	0
Endometrium (corpus uteri)	2	2	0	0	1	0	0	0	1
Ovary	4	4	0	0	1	0	1	2	0
Prostate	18	0	18	0	1	15	1	1	0
Other male genital organs	1	0	1	0	1	0	0	0	0
Bladder	12	1	11	5	3	1	2	0	1
Kidney	13	4	9	0	10	0	3	0	0
Other urinary organs	2	0	2	0	0	0	2	0	0
Brain	1	1	0	0	0	0	0	0	1
Thyroid	3	2	1	0	2	0	0	1	0
Hodgkin's	1	1	0	0	0	0	0	1	0
Non-Hodgkin's Lymphomas	13	4	9	0	4	4	3	2	0
Plasma cell tumors	3	1	2	0	0	0	0	0	3
Lymphocytic leukemias	5	2	3	0	0	0	0	0	5
Myeloid leukemias	6	3	3	0	0	0	0	0	6
Myeloprolif. & myelodysplas.	12	5	7	0	0	0	0	0	12
Unknown primary	1	1	0	0	0	0	0	0	1
Benign/borderline brain,CNS	3	2	1	0	0	0	0	0	3
<b>TOTAL</b>	<b>301</b>	<b>137</b>	<b>164</b>	<b>22</b>	<b>72</b>	<b>55</b>	<b>50</b>	<b>63</b>	<b>39</b>



**When we found out my dad  
was cancer free it felt like  
we bought back time.**

## 20 Focus on Renal Cell 09 Carcinoma

**R**enal cell carcinoma accounts for 2-3% of all adult malignant neoplasms. It is the third most common urologic cancer behind prostate cancer and transitional cell carcinoma of the bladder and upper urinary tracts.

Renal cell carcinoma is the most lethal of all urologic cancers. Traditionally more than 40% of patients with renal cell carcinoma have died of their cancer in contrast to approximately 20% mortality rates associated with prostate and bladder cancers. Approximately 31,000 new cases of renal cell carcinoma are diagnosed each year in the United States and 11,900 patients die of the disease. Overall incidence is 8.9 new cases diagnosed per 100,000 population per year.

The male to female predominance is 3 to 2. Renal cell carcinoma is primarily a disease of elderly patients with a typical presentation in the sixth to seventh decades of life. There is a 10-20% higher incidence in African/American patients over the general population.

The majority of cases of renal cell carcinoma are sporadic and the National Cancer Institute estimates that only 4% of renal cell carcinomas are familial.

The incidence of renal cell carcinoma has increased since the 1970s by an average of about 3-4% per year, most likely because of better diagnostic evaluation of patients over the years including ultrasonography and CT scanning. This has also translated into a better five year survival of patients with the disease because of detection in earlier stages.

Renal cell carcinoma in childhood is uncommon, representing only 2.3 to 6.6% of all renal tumors in children. Mean age of presentation is eight to nine years and

the incidence is similar in boys and girls. Although Wilms Tumor is much more common in children seven years of age or less, renal cell carcinoma is as common as Wilms Tumor during the second decade of life. Renal cell carcinoma in children and young adults is more likely to exhibit a papillary histology and a predilection for locally advanced high grade disease and unfavorable histologic subtypes. TFE3 protein overexpression which correlates with the presence of ASPL-TFE3 and PRCC-TFE3 gene translocation events involving the X and first chromosomes is relatively common in children and young adults with renal cell carcinoma.

Most studies suggest that stage per stage children and young adults with renal cell carcinoma may respond better to surgical therapy and a number of long-term survivors have been reported after radical nephrectomy and lymphadenectomy for lymph node positive disease. Therefore, an aggressive surgical approach which includes not only nephrectomy (surgical removal of the kidney) but also regional lymphadenectomy (surgical removal of lymph nodes) is recommended for the treatment of renal cell carcinoma in children and young adults.

The only generally accepted environmental risk factor for renal cell carcinoma is tobacco exposure although relatively associated risks have been modest ranging from 1.4 to 2.5 compared with controls.

Since the early 1990s, significant advances have been made and are understanding of the molecular genetics of renal cell carcinoma and this has come about by the correlation of several different familial congenital syndromes and their association with increased incidences of different types of renal cell carcinoma. We now more than ever recognize the distinct nature of various histologic subtypes of renal cell carcinoma and advances in molecular genetics have contributed to a major revision of the histologic classification of this malignant neoplasm.



**James R. Angel, M.D.,  
Taylor Regional Urology**



**I had to keep  
reminding myself each  
day to never give up.**

The familial form of common clear cell variant of renal cell carcinoma is the von Hippel-Lindau disease. Major manifestations include the development of renal cell carcinoma, pheochromocytoma, retinal angiomas, and hemangioblastomas of the brain stem, cerebellum, and spinal cord.

Renal cell carcinoma develops in about 50% of patients with von Hippel-Lindau disease and is distinctive for its early age at onset, often in the third, fourth and fifth decade of life and for its bilateral multifocal involvement.

Sophisticated molecular genetic linkage studies in patients with von Hippel-Lindau disease eventually led to the identification of the VHL tumor suppressor gene. This gene, which is located at chromosome 3q 25-26 has now been completely sequenced and its role as a tumor suppressor gene for both sporadic and familial forms of renal cell carcinoma has been confirmed. As with most tumor suppressor genes, both the alleles of the VHL gene must be mutated or inactivated for the development of the disease. The observed inheritance patterns have conformed to Knudson's hypothesis. As expected, almost all patients have von Hippel-Lindau disease were found to have germline mutation of one allele of VHL tumor suppressor gene. An autosomal dominant inheritance from the affected patient was confirmed. The second allele is most commonly lost by gene or chromosome deletion. As expected, most erratic clear cell renal cell carcinomas are found to harbor mutations or other genetic mechanisms that inactivate both the alleles of the VHL gene. However, they differ in that both mutations must be acquired after birth accounting for the late onset and unifocal nature of the sporadic form of the disease. Knudson's hypothesis about tumor suppressor genes and their role in familial and sporadic tumors thus holds true for renal cell carcinoma.

A critically important function of VHL protein complex is to target the hypoxia inducible factor. HIF-1 is an intracellular protein that plays an important role in

regulating cellular responses to hypoxia, starvation and other stresses. Inactivation or mutation of the VHL gene leads to dysregulation expression of HIF - 1. This in turn leads to a several fold upregulation of expression of vascular endothelial growth factor or VEGF, the primary pro angiogenic growth factor in renal cell carcinoma contributing to the pronounced neovascularity associated with renal cell carcinoma.

There are several other familiarly-related renal cell carcinoma subtypes. The next most common is hereditary papillary renal cell carcinoma. This particular type of papillary renal cell carcinoma is referred to as type 1 papillary renal cell carcinoma. Studies of families with HPRCC (Hereditary Papillary Renal Cell Carcinoma) demonstrate an autosomal dominant mode of transmission. Missense mutation of the MET proto-oncogene at 7q31 was found to segregate with the disease, implicating it as the relevant genetic locus. Most of the mutations in HPRCC have been found in a tyrosine kinase domain of MET and apparently lead to constitutive activation. Trisomy for chromosome 7, which is commonly found in HPRCC and sporadic papillary renal cell carcinoma develops primarily through duplication of the chromosome harboring the mutant allele of the MET protooncogene and effectively increase the dosage of activated receptor.

Early onset of multifocality in HPRCC are due to inheritance of mutated MET gene which places all the cells in the kidney at risk from birth and accounts for the hereditary form of papillary renal cell carcinoma versus the sporadic form of the disease.

Another form of papillary renal cell carcinoma has been discovered in hereditary leiomyomatosis and renal cell carcinoma. Lunan and colleagues described a new familial renal cell carcinoma syndrome of which patients commonly developed cutaneous and uterine leiomyomas and type 2 papillary renal cell carcinoma. Renal tumors in this syndrome are unusual for familial renal cell carcinoma in that they are often solitary and unilateral and they

# 20 Focus on Renal Cell 09 Carcinoma (Continued)

are more likely to be aggressive than other forms of familiar renal cell carcinoma.

Collecting duct renal cell carcinoma, another highly malignant variant of renal cell carcinoma, has also been observed in this syndrome which was named hereditary leiomyomatosis and renal cell carcinoma or HLRCC Syndrome. HLRCC locus was mapped to a region on 1q42-22 and this was later shown to be the site of fumarase hydratase gene. Fumarase hydratase is an essential enzyme in the Krebs Cycle of oxidative metabolism. Again, autosomal dominant inheritance was observed and this appears to be a tumor suppressor gene rather than an oncogene.

The mechanistic link between metabolic enzyme location in the mitochondria and tumor genesis is still an enigma and is now an active area of investigation.

The last of the clinical syndromes associated with renal cell carcinoma is the Birt-Higg-Dube Syndrome in which patients develop cutaneous fibrofolliculomas, lung cysts, spontaneous pneumothoraces, and a variety of renal tumors particularly derived from the distal nephron. It is named after three Canadian physicians who first described the cutaneous lesions in 1977.

Renal tumors typically include chromophobe renal cell carcinoma, oncocytomas, and hybrid or transitional tumors with features of both of these entities. As with all familial renal cell carcinoma syndromes, and autosomal dominant pattern of inheritance is observed.

At **Taylor Regional Hospital**, kidney cancer comprised 4.41% of all cancers diagnosed which was slightly greater than the national average. This is probably secondary to provider mixes at **Taylor Regional Hospital**. Our occurrence rate for renal cell carcinoma is 16.49 cases per 10,000 is slightly higher than the national average. It may in some way be related

to the increased rate of cigarette abuse in Kentucky and our area versus the nation. There was approximately a two to one greater incidence of males affected by renal cell carcinoma that is seen nationally.

There were two cases of very unusual renal cell carcinoma that was identified at **Taylor Regional Hospital** and are very uncommonly seen. One was in a 14-year old child who had a 9 cm left clear cell carcinoma and papillary renal cell carcinoma with metastatic disease to the regional lymph nodes. This patient was handled with radical nephrectomy in addition to regional lymphadenectomy and she is a long-term survivor from her disease. She did undergo genetic testing and she did have a translocation of chromosome 3 which is seen in children and young adults with renal cell cancer. She also demonstrated the papillary form of renal cell carcinoma which is also commonly seen in this group and although she did have an aggressive form of renal cell carcinoma she is a long-term survivor which would go along with the national findings that surgical extirpation even in cases of regional metastasis is often beneficial to long term survival.

A second unusual case in our series involved a young woman who had hereditary leiomyomatosis and renal cell carcinoma syndrome. She was found to have the typical type 2 papillary renal cell carcinoma and genetic studies indicated that she had the characteristic mutation of 1q42-44 which was the site of fumarase hydratase gene. She also was found to have a steroid tumor of the right ovary which produced testosterone and masculinization. This clinical syndrome has often been found to be a very aggressive form of renal cell carcinoma and very few of these patients survive and unfortunately this patient was found to have metastatic disease.

A somewhat greater than expected number of cases of renal cell carcinoma have been detected and treated at **Taylor Regional Hospital**. This has included a preponderance of the most common variety of renal cell carcinoma, which is clear cell

carcinoma in the kidney, but it is has also included some of the most unusual types of renal cell carcinoma including one case of clear cell carcinoma and papillary carcinoma in a child and also one case of hereditary leiomyomatosis and renal cell carcinoma syndrome. Cooperation between the surgical service and pathology at **Taylor Regional Hospital** has allowed for the exact genetic classification of the disease and subsequently translated into the appropriate treatment of these very unusual cases. The expertise that is available at **Taylor Regional Hospital** with the cooperation between the surgical and medical services along with pathology and medical oncology and radiation oncology has allowed for continued excellent management of oncology patients at **Taylor Regional Hospital**.

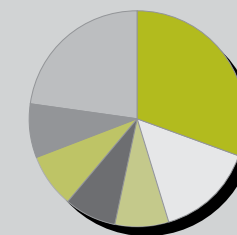


James R. Angel, MD  
Taylor Regional Urology

Reference: Campbell-Walsh Urology, 9th edition 2007

## 2009 Kidney Cancer Cases by County of Residence

Adair County	31%
Green County	15%
Larue County	8%
Lincoln County	8%
Nelson County	8%
Russell County	8%
Taylor County	23%



## 2009 County of Residence at Diagnosis

Adair County	16.94%
Barren County	0.33%
Bullitt County	0.33%
Casey County	0.99%
Clinton County	0.33%
Cumberland County	0.66%
Green County	11.29%
Hardin County	0.33%
Hart County	0.33%
Larue County	1.66%
Lincoln County	0.33%
Marion County	11.96%
Metcalfe County	0.99%
Nelson County	0.99%
Russell County	3.98%
Taylor County	44.18%
Todd County	0.99%
Washington County	3.65%

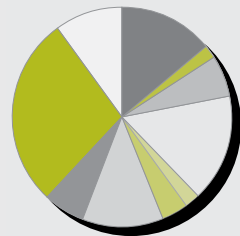


**There is a pivotal moment where you have to say, I can wallow in the disparity of this situation or I can do the best I can and give myself a fighting chance.**

# 2009 Top Five Most Diagnosed Cancers

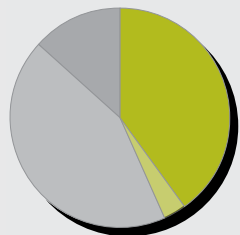
## Breast

Number of cases:	50	Treatment	
Age range:	27-90	Surgery Only	7
Mean age:	58	Surgery/Chemo	1
		Surgery/Radiation	3
AJCC Stage of Disease		Surgery/Hormone	8
Stage 0:	7	Radiation/Hormone	1
Stage I:	22	Chemo/Radiation	2
Stage II:	11	Surgery/Chemo/Radiation	6
Stage III:	3	Surgery/Chemo/Hormone	3
Stage IV:	6	Surgery/Radiation/Hormone	14
Unknown:	1	Surgery/Chemo/Radiation/Hormone	5



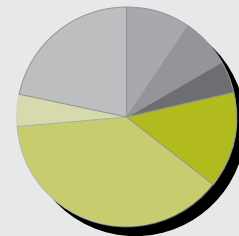
## Colon

Number of cases:	30	Treatment	
Age range:	50-89	Surgery Only	12
Mean age:	70	Chemotherapy Only	1
		Surgery/Chemo	13
AJCC Stage of Disease		No Treatment	4
Stage 0:	7		
Stage I:	2		
Stage II:	6		
Stage III:	9		
Stage IV:	6		



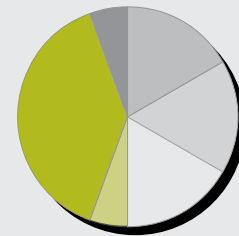
## Lung

Number of cases:	42	Treatment	
Age range:	43-87	Surgery Only	4
Mean age:	65	Chemotherapy Only	3
		Radiation Only	2
AJCC Stage of Disease		Surgery/Chemo	6
Stage I:	8	Chemo/Radiation	16
Stage II:	4	Surgery/Chemo/Radiation	2
Stage III:	11	No Treatment	9
Stage IV:	19		



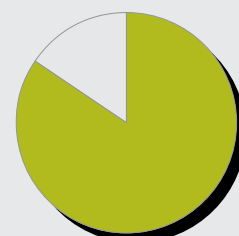
## Prostate

Number of cases:	18	Treatment	
Age Range:	51-85	Surgery Only	3
Mean Age:	68	Radiation Only	3
		Hormone Only	3
AJCC Stage of Disease		Surgery/Hormone	1
Stage I:	1	Radiation/Hormone	7
Stage II:	15	No Therapy	1
Stage III:	1		
Stage IV:	1		



## Kidney

Number of cases:	13	Treatment	
Age range:	14-73	Surgery Only	11
Mean age:	44	No Treatment	2
AJCC Stage of Disease			
Stage I:	10		
Stage III:	3		



# 2009 Kidney Cancer Annual Report

**K**idney cancer comprised 4.41% of all cancers diagnosed at TRH in 2009, making it the fifth most common behind breast with 16.95% occurrence, non-small cell lung second with 14.24%, colon third with 10.17%, Non-Hodgkin's lymphoma fourth with 4.41% occurrence rate.

Our occurrence rate for kidney cancer is 16.49 per 100,000 which compares similarly with that of Kentucky at 17.68 and the nation at 14.1.

Over the previous 5 years (2004 – 2009) our numbers and percent of total cases for kidney cancer have varied – as low as 7 cases in 2004 to as high as 17 cases in 2007.

Demographically, 69% of those diagnosed with kidney cancer at TRH in 2009 were men and 31% women. The average age at diagnosis was 44 years with ages ranging from 14 (Dameron/2009) to 73 years. 100% of those patients diagnosed in 2009 were Caucasian.

### Stage at Diagnosis – 2004-2009

	TRH Data	KY Data	National Data
Stage 0:	0%	3%	2%
Stage I:	72%	49	49
Stage II:	5%	9%	9%
Stage III:	12%	12%	13%
Stage IV:	7%	15%	16%
Unknown Stage:	4%	12%	11%

### Treatment – 2004-2009 Data

Treatment practices follow national trends with surgery being a mainstay in kidney cancer therapy.

Surgery only: 65 cases – 86%  
 Chemotherapy only: 2 cases – 3%  
 Chemotherapy/Radiation: 1 case – 1%  
 Surgery/Chemotherapy/Radiation: 1 case – 1%  
 No therapy: 7 cases or 9%

No therapy was rendered in 7 cases. Of these, 1 patient had cryotherapy planned, however, never returned; 1 patient was 92 years old; 1 patient was 85; 1 patient declined therapy and chose to be actively followed (had bilateral kidney lesions); and 3 patients were lost to follow-up.

### Kidney and Renal Pelvis Cancer Diagnosed at TRH

2004	7 cases
2005	10 cases
2006	14 cases
2007	17 cases
2008	15 cases
2009	13 cases

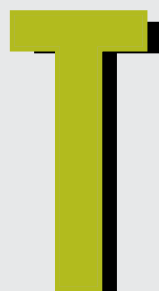
### Top 5 Sites 2009 Data

1. Breast (50 cases)
2. Lung (42 cases)
3. Colon (30 cases)
4. Non-Hodgkin's Lymphoma (13 cases)
5. Kidney (13 cases)

### Five Year History of Renal Carcinoma at TRH

Years: 2004-2009	
Total Cases:	76
Types of Cancer:	
Clear Cell Adenocarcinoma	41 cases or 54%
Renal Cell Carcinoma	20 cases or 26%
Adenocarcinoma with Mixed Subtypes	2 cases or 3%
Clear Cell Adenocarcinoma, NOS	7 cases or 9%
Granular Cell Carcinoma	2 cases or 3%
Papillary Adenocarcinoma	1 case or 1%
Renal Cell Carcinoma NOS	3 cases or 4%

## **Cancer Program receives three-year accreditation**



The Commission on Cancer (CoC) of the American College of Surgeons has granted three-year accreditation with commendation to Taylor Regional Hospital's Cancer Program. The CoC is dedicated to improving survival rates and quality of life for cancer patients.

The accreditation ensures programs conform to 36 CoC standards. During an on-site evaluation by a physician surveyor, the Cancer Program at Taylor Regional Hospital demonstrated a commendation level of compliance with one or more standards and a compliance rating for all others.

Taylor Regional Hospital's CoC-approved program provides patients with comprehensive care through a multispecialty, team approach. Plus, they receive education, support, lifelong follow-up and most importantly, quality care close to home.

## **Taylor Regional Hospital Cancer Committee**



Left to right: Cathy Settle, Clinical Services Administrator; Dana Garrett, Nursing Services Administrator; Dr. Lora Sztendera, Family Medicine; Tammy Tinsley, American Cancer Society; Dr. Robert Romines, Cancer Committee Chairman; Dr. Carolyn Harris, Nuclear Medicine; Lea Ann Moore, TRSA Office Manager; Eric Sprowles, Pharmacy Director; Jane Wheatley, CEO; Sherri Angel, Chemotherapy Services Director; JoAnn Smith, Cancer Conference Coordinator; Dr. James Angel, Urologist; Lisa Dunnington, Care Management/Quality Director; Kristi Lanham, PACS Coordinator; Dr. James Dunnington, Pathologist; Dr. William Spanos, Radiation Oncologist; Gayle Bright, Education Coordinator; Sam Underwood, Tumor Registrar; Tim Herber, Cancer Center Administrator and Dr. Zewdu Lissanu, Medical Oncologist.

### **Not Pictured:**

Jennifer Smothers, CTR  
Tumor Registrar

Eugene Shively, M.D., F.A.C.S.  
ACoS Cancer Program Liaison

