



# 2008-2009 ANNUAL REPORT

*Utilizing 2008 Statistics*

**MEMORIAL CANCER INSTITUTE**

The Leading Cancer Institute in Broward County

## **CANCER COMMITTEE ROSTER 2008-2009**

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<b>Terri Calabello, RN, BSN, OCN</b>	<i>Oncology Services</i>
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<b>Cindy Cann, RN, OCN</b>	<i>MRH Clinical Nurse Specialist</i>
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<b>Liliya Gorokhovskaya, RN</b>	<i>MHW Quality Improvement</i>
<b>Lily Grant</b>	<i>Patient &amp; Family Advisory Council</i>
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<b>Allison Iosia, RN, CPON</b>	<i>Nursing, Pediatric Oncology</i>
<b>Maury Jayson, MD</b>	<i>Urology, Cancer Liaison Physician</i>
<b>Lanetta Jordan, MD</b>	<i>Sickle Cell Services</i>
<b>Virginia Kline-Kaye, RN</b>	<i>MRH Nursing Administration</i>
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<b>Marilyn Paradiz</b>	<i>Physician Office Practice</i>
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<b>Srinath Sundararaman, MD</b>	<i>Medical Director, Radiation Oncology</i>
<b>Cynthia Wigutow, RD</b>	<i>Nutrition</i>
<b>Lawrence Wong, MD</b>	<i>Pathology</i>



*Atif M. Hussein, MD, FACP  
Medical Director, Memorial Cancer Institute*

## **CANCER COMMITTEE CHAIRMAN'S REPORT**

It is my distinct privilege to serve as the chairman of the Cancer Committee for the sixth consecutive year. I am extremely grateful for everyone's involvement in our monthly meetings and for working so diligently to make our cancer program a success.

At the Memorial Cancer Institute, our vision continues to become an integrated, multidisciplinary, automated cancer program that will allow patients and their families in our community to receive the highest level of cancer care through excellent, compassionate clinical expertise and leading-edge comprehensive clinical research without having to leave our community. Memorial Cancer Institute encompasses a wide range of services, including medical oncology, surgical oncology, gynecological oncology, radiation oncology, plastic surgery, pathology, radiology, genetic testing, oncology nursing and social services. To further enhance the level of care, we have pursued the strategy of developing comprehensive, multidisciplinary, disease-specific programs in the following areas: breast cancer; gastrointestinal cancer; hematologic malignancies, including lymphoma, leukemia and myeloma; bone marrow transplantation; lung cancer and sickle cell disease.

### **Breast Cancer Program**

Dr. Alejandra Perez is the Associate Medical Director and the leader of our Breast Cancer Program. We are one year post opening the new 6,000-square-foot Breast Cancer Center West in addition to our Breast Cancer Center East. We continue to provide advanced treatment and support for breast cancer patients. The Breast Cancer Centers continue to address the physical and emotional needs of breast cancer patients and their families. The focus is on traditional treatment as well as complementary and alternative therapies, psychological support and genetic counseling. Dr. Perez continues to work with Dr. Carmen Calfa and Dr. Aruna Mani to take care of our breast cancer patients. Maxine Chang is our coordinator for cancer risk assessment who continues to advise and counsel high-risk patients. We continue to work closely with Dr. Phyllis Neimark, a breast surgical oncologist, as well as our colleagues in pathology and radiology and plastic surgery to provide those patients with comprehensive care.

### **Leukemia and Lymphoma Program**

Daren Grosman, Director of the Leukemia Lymphoma Program; Lyle Feinstein, Director of the Bone Marrow Transplantation Program; and Dr. Allen Greenberg continue to provide excellent clinical care and leading-edge clinical research for our patients. To date, we have performed 28 transplants. Among the 13 patients evaluable for response who are more than 90 days following transplant, 92% have met their treatment goal, and no further treatment was necessary. The mortality rate is 0%, and the majority of those patients were transplanted and taken care of in the outpatient setting in the Memorial Hospital West Cancer Institute. We continue to expand our dedicated in-patient cancer units, both east and west, to provide the safest care for those patients who are at the highest risk for infections and other medical complications. We will continue to expand this program by recruiting two additional physicians.

### **Lung Cancer Program**

Dr. Raja Mudad serves as Director of the Thoracic Oncology Program, and he works very closely with Dr. Mark Block, a dedicated thoracic oncologic surgeon. Both Dr. Mudad and Dr. Block conduct multidisciplinary thoracic oncology tumor boards by presenting these patients to formulate the best plan of care for them. We continue to expand the clinical research program in lung cancer, and we are currently involved in various studies, including chemotherapy, targeted therapy and vaccine trials. Dr. Mudad continues to work with others for a more comprehensive smoking cessation program.

### **Gastrointestinal Cancer Program**

Dr. Pablo Ferraro and Dr. Michel Vulfovich continue to expand the scope of clinical research for patients with various gastrointestinal cancers. We continue to have one of only a few endoscopic ultrasound units in the nation to better stage and diagnose some patients with various gastrointestinal tumors.

### **Sickle Cell Day Hospital**

As part of our Memorial Cancer Institute, the Sickle Cell Day Hospital is the only facility of its kind in the nation certified by the Joint Commission on Accreditation of Health Care Organizations (JCAHO) and is Florida's first and only facility dedicated to the treatment and support of sickle cell patients age 16 and older. Since May 2003, the day hospital has been extremely successful in minimizing the frequent hospitalization of patients with sickle cell anemia, with more than 90% of patients being discharged the same day of treatment. Dr. Lanetta Jordan continues to be instrumental in promoting the facility and in procuring funding for operations and working with other specialists to provide the best care for sickle cell patients.

### **Radiation Oncology**

The Radiation Oncology Department continues to expand its services under the directorship of Dr. Srinath Sundararaman. Recently, the Memorial Cancer Institute-Radiation Oncology started offering cancer patients a new, precise and fast form of cancer treatment called RapidARC radiotherapy from Varian Medical Systems. For some patients, our new RapidARC technology enables us to deliver an image-guided, intensity-modulated radiation therapy treatment two to eight times faster than is possible using other treatment techniques. We deliver a RapidARC treatment in a single rotation of the linear accelerator around the patient, which takes less than two minutes. RapidARC treatments are consequently far more comfortable for patients, who spend significantly less time in daily treatment without any compromise in treatment position. This will improve the quality of care as well as the patients' comfort during treatment. In addition, we broke ground for a CyberKnife in our West Cancer Institute. In addition to Dr. Sundararaman, Drs. Sack, Botero, Karimpour and Ciccia provide care for our cancer patients in a comprehensive team approach.

### **Clinical Research Department**

The Clinical Research Department is under the direction of Cynthia Frankel, RN, OCN. The Clinical Research Department is serving a greater function at Memorial Cancer Institute. Ms. Frankel has been instrumental in implementing advanced protocols to address specific groups of cancer patients. As we demonstrate our commitment to high quality care, more pharmaceutical companies are seeking our program's participation.

In addition to the disease-specific programs mentioned above, we continue to provide very specialized care for patients with rare tumors such as melanoma, sarcoma and brain tumors. We are, in fact, the only institution participating in two compassionate studies for sarcoma and melanoma, and those studies have provided treatment options for more than 40 desperate patients who benefited from such treatments here at home without having to travel to other cities or states to receive such leading-edge treatment protocols.

### **Oncology Data Center**

Our Oncology Data Center team is responsible for organizing up to 14 tumor boards a month involving disease-specific physicians, as well as for compiling case abstracts on more than 3,800 cancer cases annually. In 2009, our staff received the Jean Byers Memorial Award for Excellence in cancer registration. On July 27, 2009, we received a three-year accreditation award, with commendation, from the Commission on Cancer, a testament to the dedicated work our employees are doing.

Thanks to countless dedicated healthcare providers and administrators collaborating, sharing their expertise and securing needed resources, Memorial Cancer Institute is strengthening its commitment to provide superior cancer care for patients and their families.



**Lyle Feinstein, MD**  
**Medical Director,**  
**Bone Marrow Transplant Program**

## ***MULTIPLE MYELOMA***

Multiple myeloma (MM) is a malignancy of plasma cells. A progressively debilitating disorder, MM is characterized by bone pain, spontaneous fractures, frequent infections, renal failure and anemia. The median age at diagnosis is 70 years, and MM rarely occurs in people under the age of 45 years. [Graph 1] In the year 2009, there will be an estimated 20,580 new cases of MM in the United States (1,430 of which will occur in Florida), and approximately 10,580 patients will die of the disease (720 in Florida). [Graph 2]

Since 2002 there has been a steady increase in the number of cases diagnosed or referred to Memorial Healthcare System. Forty new cases of MM were diagnosed in 2008. [Graph 3] The median age at Memorial was 65, and data from the National Cancer Data Base indicates the peak age group, both nationally and in Florida, was in the 70-79 age group. [Graph 4] The median survival of patients with plasma cell tumors diagnosed between 1998 and 2001 and treated at MHS was comparable to the National Cancer Data Base at 30 months. [Graph 5]

## ***THE BONE MARROW TRANSPLANT PROGRAM @ MEMORIAL CANCER INSTITUTE***

Autologous hematopoietic cell transplantation (HCT), also known as bone marrow transplantation (BMT), involves the collection and storage of a patient's blood progenitor cells prior to the administration of high-dose chemotherapy. Patients with multiple myeloma and certain lymphomas can achieve durable remissions and even cure with high-dose chemotherapy; however, this occurs at the expense of eradicating the bone marrow and preventing the production of normal blood cells. The result is life-threatening anemia, infection and bleeding. "Rescuing" the bone marrow by re-infusing blood progenitor cells after high-dose chemotherapy permits the production of normal blood cells. Autologous HCT improves response rates and prolongs progression-free survival after initial induction chemotherapy for patients with MM.

Established in November 2007, the MCI BMT Program at Memorial Hospital West is the only program of its kind in Broward County. Transplants are performed on an outpatient basis, and patients are only admitted for complications. To date, 28 transplants have been performed on 21 patients (MM-20, non-Hodgkin lymphoma-1). The median age was 59.5 years (range 42 – 68). The median time to blood count recovery was rapid at 12 days. All patients are alive, and three patients did not require hospitalization. Among the 13 MM patients who are evaluable for response ( $\geq 90$  days following completion of treatment), 10 achieved a complete remission, one achieved a very good partial remission, and two patients achieved a partial remission. All 13 patients have returned to their normal lives and require no further therapy, only observation.

The MCI BMT Program is currently in the process of applying for accreditation with the Foundation for the Accreditation of Cellular Therapy. In November we will hold our 2nd Annual MCI BMT Celebration of Life dinner honoring the patients and their caregivers who have completed the transplant process at the MCI.

Through the ongoing growth of the BMT Program, MCI will continue to provide patients living in South Florida with leading-edge, life-saving treatment without the burden of uprooting themselves and their support systems for a prolonged period of time.

## **NETWORK CANCER PROGRAM 2008-2009 STATISTICAL REVIEW**

- *Accredited, with commendation, as a Network Cancer Program by the American College of Surgeons Commission on Cancer, one of only 3 Network Programs in the State of Florida.*
- *The Oncology Database includes all cancer cases diagnosed and/or treated at Memorial Regional Hospital and Memorial Hospital West.*

### **ONCOLOGY DATA CENTER**

The Oncology Data Center is fortunate to have seven FTEs, four of whom are Certified Tumor Registrars, maintaining a computerized database which collects and documents demographic information, pathologic and diagnostic test results, staging and treatment information on all cancer cases diagnosed and/or treated at Memorial Regional Hospital and Memorial Hospital West. Active follow-up is undertaken annually to monitor diagnostic and treatment outcomes and provide accurate data to calculate survival rates.

The Oncology Data Center has been the recipient of the Jean Byers Award for Excellence in Cancer Registration every year since our reference date of 2002. In addition, yearly submissions to the National Cancer Data Base continue to be error free.

With a reference date of January 1, 2002, Memorial Healthcare System as a Network facility has accessioned over 25,000 cases diagnosed through December 31, 2008. As shown in **Graph 1**, there has been a 22% growth in analytic cases since 2003 and an overall growth of 17%. Seventy-two percent of cases are newly diagnosed and receiving all or part of the first course of therapy at our facilities. **Graph 2**

As we have seen in past years, over 80% of patients reside in Broward County, while close to 20% of patients reside outside of the South Broward District; of the latter group, three quarters are from Miami-Dade County. **Graph 3** The majority of patients are white, while Hispanic ethnicity accounts for 21% of cases. This is a 4% increase in the percentage of Hispanic patients over the same time period in 2007. **Graph 4**

A review of the distribution by sex indicates the majority (61%) of cases are of the female gender. Breast cancer accounts for 23% of all cases seen at our facilities; however, it represents 41% of all female cancers. **Graph 5**

Peak incidence occurs in the 6<sup>th</sup> decade of life for both males and females. **Graph 6**

The primary site table is a breakdown of cases by site, sex and stage at diagnosis. In 2008, a total of 3,819 unduplicated cases were added to the database.

## 2008 PRIMARY SITE TABLE

TABLE 1 PRIMARY SITE	TOTAL	%			CLASS OF CASE	ALIVE	EXP	STAGE					ONLY			
			Male	Female				Analytic	NA	STAGE 0	STAGE 1	STAGE 2	STAGE 3	STAGE 4	99	88
BASE OF TONGUE	9	.2	8	1	7	2	6	3	0	0	0	2	3	2	0	0
OTH & UNSPEC PARTS OF TO GUM	8	.2	5	3	6	2	7	1	1	1	1	1	1	1	0	0
FLOOR OF MOUTH	3	.1	2	1	3	0	2	1	0	0	0	0	2	1	0	0
PALATE	1	.0	0	1	0	1	1	0	0	0	0	0	0	0	0	0
OTH PARTS OF MOUTH	4	.1	1	3	2	2	3	1	0	0	1	0	1	0	0	0
PAROTID GLAND	2	.1	1	1	1	1	1	1	0	0	1	0	0	0	0	0
OTH PARTS MAJ SALIVARY G	1	.0	0	1	1	0	1	0	0	1	0	0	0	0	0	0
TONSIL	14	.4	10	4	13	1	12	2	0	0	2	2	7	2	0	0
OROPHARYNX	2	.1	1	1	2	0	2	0	0	1	0	0	0	1	0	0
NASOPHARYNX	2	.1	2	0	2	0	2	0	0	0	0	1	1	0	0	0
PYRIFORM SINUS	3	.1	2	1	2	1	1	2	0	0	0	0	1	1	0	0
HYPOPHARYNX	4	.1	3	1	4	0	2	2	0	1	1	1	0	1	0	0
OTH LIP ,ORAL CAV & PHAR	7	.2	5	2	2	5	6	1	0	0	0	0	0	0	0	0
ESOPHAGUS	24	.6	19	5	17	7	17	7	0	0	3	2	8	4	0	0
STOMACH	58	1.5	40	18	40	18	39	19	0	8	5	2	19	5	0	0
SMALL INTESTINE	15	.4	6	9	9	6	11	4	0	1	3	0	0	1	0	0
COLON	268	7.0	131	137	191	77	202	66	16	20	52	40	48	15	0	0
RECTOSIGMOID JCT	24	.6	13	11	19	5	20	4	0	2	7	5	2	2	0	0
RECTUM	70	1.8	38	32	52	18	61	9	2	7	9	20	8	6	0	0
ANUS AND ANAL CANAL	13	.3	5	8	10	3	12	1	0	1	2	3	0	4	0	0
LIVER-INTRAHEP BILE DCTS	44	1.2	28	16	39	5	25	19	0	6	6	15	3	8	0	0
GALLBLADDER	13	.3	3	10	11	2	8	5	0	3	3	0	5	0	0	0
OTH & UNSPEC PTS OF BILI	15	.4	6	9	12	3	12	3	0	0	4	2	4	1	0	0
PANCREAS	76	2.0	49	27	57	19	40	36	0	7	13	4	19	14	0	0
OTH & ILL-DEFINED DIGEST	2	.1	2	0	1	1	1	1	0	0	0	0	0	0	0	0
ACCESSORY SINUSES	10	.3	5	5	7	3	9	1	0	0	1	2	3	0	0	0
LARYNX	32	.8	22	10	20	12	27	5	0	8	5	5	2	0	0	0
BRONCHUS AND LUNG	433	11.3	206	227	335	98	271	162	0	65	18	74	147	27	0	0
THYMUS	4	.1	1	3	4	0	3	1	0	1	0	0	0	0	0	0
HEART, MEDIASTINUM AND P	5	.1	3	2	4	1	2	3	0	0	2	0	2	0	0	0
OTH W/I RESP/INTRATHOR O	1	.0	1	0	1	0	1	0	0	0	0	0	0	0	0	0
BONES, JNTS, ART CART LI	4	.1	3	1	2	2	3	1	0	0	0	0	0	2	0	0
BONES, JNTS, ART CART OT	5	.1	2	3	3	2	3	2	0	0	1	0	1	0	0	0
HEMATOPOIETIC/RETICULOEN	292	7.6	148	144	155	137	233	59	0	0	0	0	1	0	0	1
SKIN	139	3.6	86	53	72	67	120	19	6	26	12	4	7	8	0	0
PERIPHERAL NERVES AND AN	1	.0	1	0	0	1	0	1	0	0	0	0	0	0	0	0
RETROPERITONEUM AND PERI	15	.4	3	12	15	0	15	0	0	3	0	1	3	1	0	0
CONN, SUBQ AND OTH SOFT	28	.7	15	13	15	13	19	9	0	2	1	2	3	5	0	0
BREAST	890	23.3	4	886	709	181	855	35	174	230	178	75	26	26	0	0
VULVA	19	.5	0	19	14	5	18	1	6	3	1	3	1	0	0	0
VAGINA	2	.1	0	2	2	0	2	0	2	0	0	0	0	0	0	0
CERVIX UTERI	63	1.7	0	63	48	15	57	6	1	21	6	12	6	1	0	0
CORPUS UTERI	129	3.4	0	129	104	25	118	11	0	65	6	17	8	1	0	0
UTERUS, NOS	4	.1	0	4	3	1	3	1	0	0	0	0	0	0	0	0
OVARY	43	1.1	0	43	24	19	36	7	0	6	2	11	1	2	0	1
OTH FEMALE GENITAL ORGS	5	.1	0	5	4	1	3	2	0	0	0	2	2	0	0	0
PENIS	2	.1	2	0	1	1	2	0	0	0	1	0	0	0	0	0
PROSTATE GLAND	273	7.2	273	0	154	119	243	30	0	0	128	6	12	7	0	0
TESTIS	13	.3	13	0	6	7	11	2	0	3	1	2	0	0	0	0
OTHER MALE GENITAL ORGS	1	.0	1	0	1	0	1	0	0	0	0	0	0	0	1	0
KIDNEY	87	2.3	44	43	68	19	78	9	0	33	5	12	12	2	4	0
RENAL PELVIS	4	.1	2	2	2	2	3	1	1	0	0	0	1	0	0	0
URETER	3	.1	2	1	0	3	3	0	0	0	0	0	0	0	0	0
BLADDER	125	3.3	91	34	89	36	103	22	44	21	11	6	4	3	0	0
EYE AND ADNEXA	4	.1	1	3	1	3	2	2	0	1	0	0	0	0	0	0
MENINGES	70	1.8	13	57	55	15	63	7	0	0	0	0	0	0	3	67
BRAIN	70	1.8	35	35	54	16	54	16	0	3	0	0	0	0	45	7
OTHER CENTRAL NERVOUS SY	9	.2	2	7	7	2	7	2	0	0	0	0	0	0	2	7
THYROID GLAND	98	2.6	18	80	81	17	93	5	0	46	5	13	11	6	0	0
ADRENAL GLAND	3	.1	1	2	3	0	3	0	0	1	0	0	0	0	2	0
OTH ENDOCRINE GLDS/REL S	49	1.3	25	24	28	21	47	2	0	0	0	0	0	0	3	46
OTHER ILL-DEFINED SITES	2	.1	2	0	1	1	2	0	0	0	0	0	0	0	1	0
LYMPH NODES	139	3.6	74	65	88	51	115	24	0	10	22	21	30	5	0	0
UNKNOWN PRIMARY SITE	58	1.5	28	30	55	3	25	33	0	0	0	0	1	1	53	0
TOTAL	3819		1508		2740		3149		253		520		417		321	
		100.0		2311		079	671			607		368		166		129

**From this point forward, discussion will focus on only those cases diagnosed and treated at the Network facilities (analytic cases).**

**Breast cancer accounts for over 25% of all newly diagnosed cases at Memorial Regional and Memorial West Hospitals, followed by lung cancer at 12% and colon cancer at 7%, respectively. [Graph 7] Over 53% of cases were diagnosed at an early stage of disease, Stage 0, I and II, therefore providing the best opportunity for cure. [Graph 8]**

**A review of the major site incidence for 2008, comparing the experience at Memorial with that seen nationally and in Florida, indicates that Memorial has a much greater incidence of breast cancer than that seen both nationally and in Florida. [Graph 9] This can directly be attributed to the establishment of dedicated Breast Cancer Centers at both Memorial Regional Hospital and Memorial Hospital West. However, prostate cancer incidence is considerably lower than national and state figures, probably due to diagnostic tools utilized in the private physician offices.**

**As identified previously, female incidence of breast cancer is much higher than that seen nationally, accounting for 41% of cancers among females at Memorial. [Graph 10] Review of male incidence is consistent with national figures with the exception of prostate, which is significantly lower than national averages. [Graph 11]**

## **TUMOR BOARDS**

**The Memorial Healthcare System Network Cancer Program provides multidisciplinary, biweekly Adult Tumor Boards, weekly Hematologic Tumor Boards and monthly Pediatric Tumor Boards. The Oncology Data Center staff provided their services in obtaining continuing education credits, coordination and documentation, as well as technical support for one hundred thirty-three Tumor Boards in 2008, preparing case summaries on the five hundred forty-seven cases presented.**

**Under the leadership of Raja Mudad, MD (Adult Tumor Boards), Daren Grosman, MD, and Lyle Feinstein, MD (Hematologic Tumor Boards), and Iftikhar Hanif (Pediatric Tumor Boards), the primary function of these conferences is to provide a forum for case presentations and consultation with colleagues in the area of malignant and hematologic disorders. Some of these conferences focus on specific cancer sites, while others can cover multiple diagnoses in one meeting. The multidisciplinary nature of the conference is emphasized by representation of medical oncology, radiation oncology, surgical oncology, diagnostic radiology and pathology disciplines. Discussion encompasses appropriate diagnostic workup, treatment recommendations and opportunities for participation in clinical trials.**

**Conferences are integral to improving the care of cancer patients by contributing to the patient management process while providing education to physicians and other staff.**

## GLOSSARY:

- ❖ **Analytic case:** Diagnosed and/or received all or part of the first course of treatment at this institution.
- ❖ **Non-analytic case:** Diagnosed and treated prior to the first contact with the reporting institution.
- ❖ **Primary site:** The organ or tissue from which the tumor originated.
- ❖ **SEER:** Surveillance, Epidemiology, and End Results program. A cancer incidence and survival reporting system of the National Cancer Institute (NCI).
- ❖ **AJCC (TNM) Staging:** The TNM staging system is a shorthand notation for describing the anatomic extent of malignant neoplasm.  
T---Tumor growth represents the size or extent of the primary tumor.  
N---The absence or presence and extent of regional lymph node metastases.  
M---The absence or presence of distant metastasis.  
Once T, N and M have been classified, this information can be used to assign the stage of the tumor. Staging is a method of grouping cases with similar characteristics.
- ❖ **SEER General Stages:**

**Stage 0** ----Carcinoma in situ

**Stage I** ----Localized to the organ of origin

**Stage II** ----Limited local extension and/or limited regional lymph node spread.

**Stage III** ----More extensive local or regional lymph node spread

**Stage IV**----Distant spread

- ❖ **Survival:** The cumulative portion alive over a period of time.

## REFERENCES:

American Cancer Society, Cancer Facts & Figures, 2008.

American Joint Committee on Cancer Manual for Staging of Cancer, Sixth Edition 2002, Springer-Verlag, New York Berlin Heidelberg.

International Classification of Disease for Oncology (ICD-O), Third Edition. Geneva: World Health Organization 2000.

SEER Cancer Statistics Review 1975-2002; 5 YR Relative Survival Rate, year of diagnosis: 1995-2001.

NCDB, Commission on Cancer, ACoS. Benchmark Reports, v9.0

## • Accreditations and Affiliations

Memorial Regional Hospital and Memorial Hospital West are accredited by and affiliated with the following:

- American College of Surgeons Commission on Cancer (AcoS/CoC)
- Florida Association of Pediatric Tumor Programs
- Florida Pediatric Community Clinical Oncology Program
- NCCTG/Mayo Clinic

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***Simply the Best!***

# *Myeloma- Facts & Figures*

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- ❑ There are 66,529 people living with, or in remission from, myeloma in the United States.
- ❑ This year, 20,580 people will be diagnosed with myeloma.
- ❑ The median age at diagnosis is 70 years; myeloma rarely occurs in people under age 45.
- ❑ This year, 10,580 people will die from myeloma.
- ❑ From 1975 to 2006, the incidence of myeloma increased by 9 percent.
- ❑ The incidence of myeloma in black men and women was 127 percent greater than myeloma incidence in white men and women in 2006.
- ❑ Mortality from myeloma has been decreasing from 1994 to 2005 (the most recent data available).

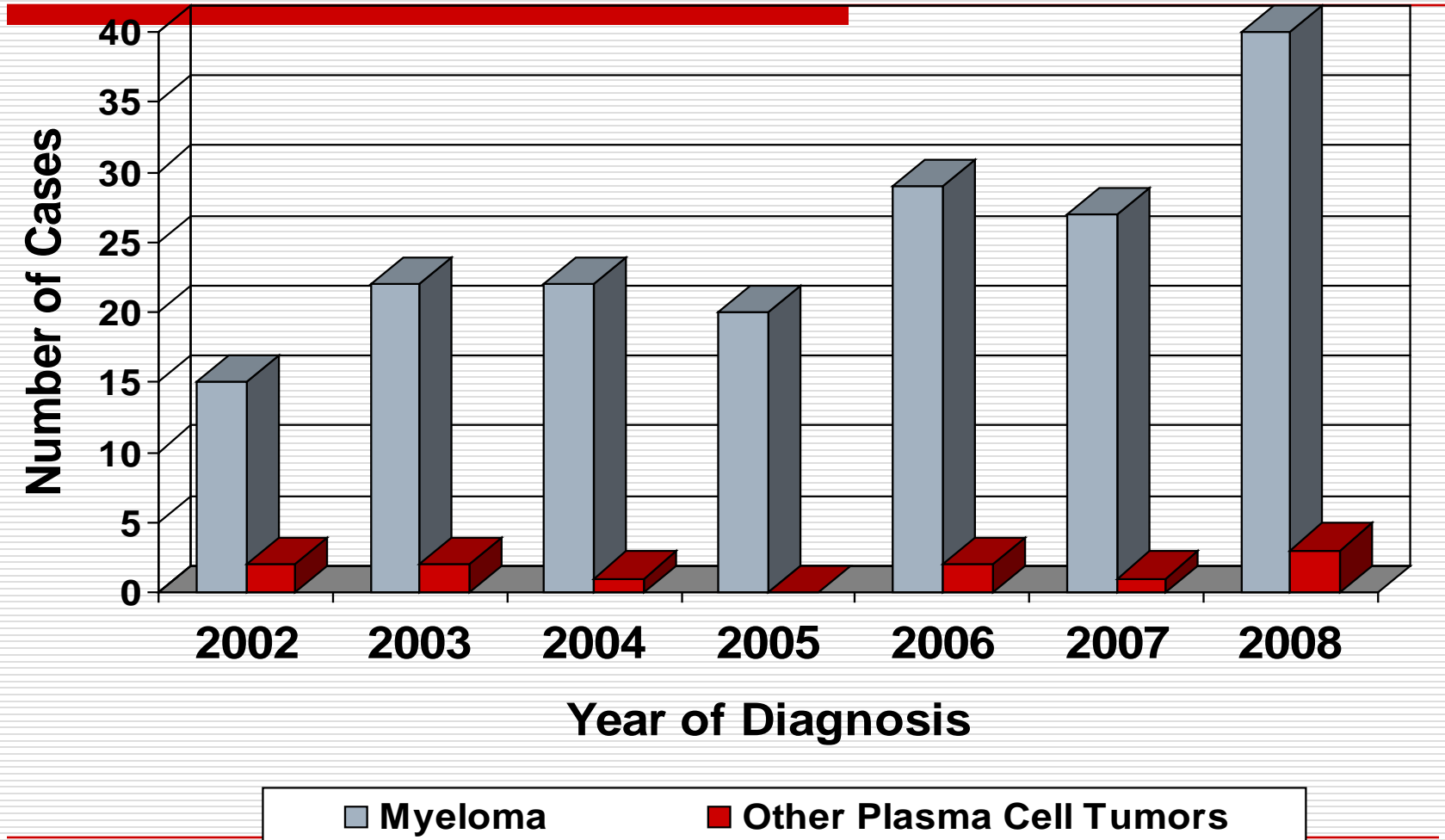
# Myeloma

## Estimated New Cases & Estimated Deaths, 2009

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	New Cases	Deaths
United States	20,580	10,580
Florida	1,430	720

# Plasma Cell Tumors 2002-2008



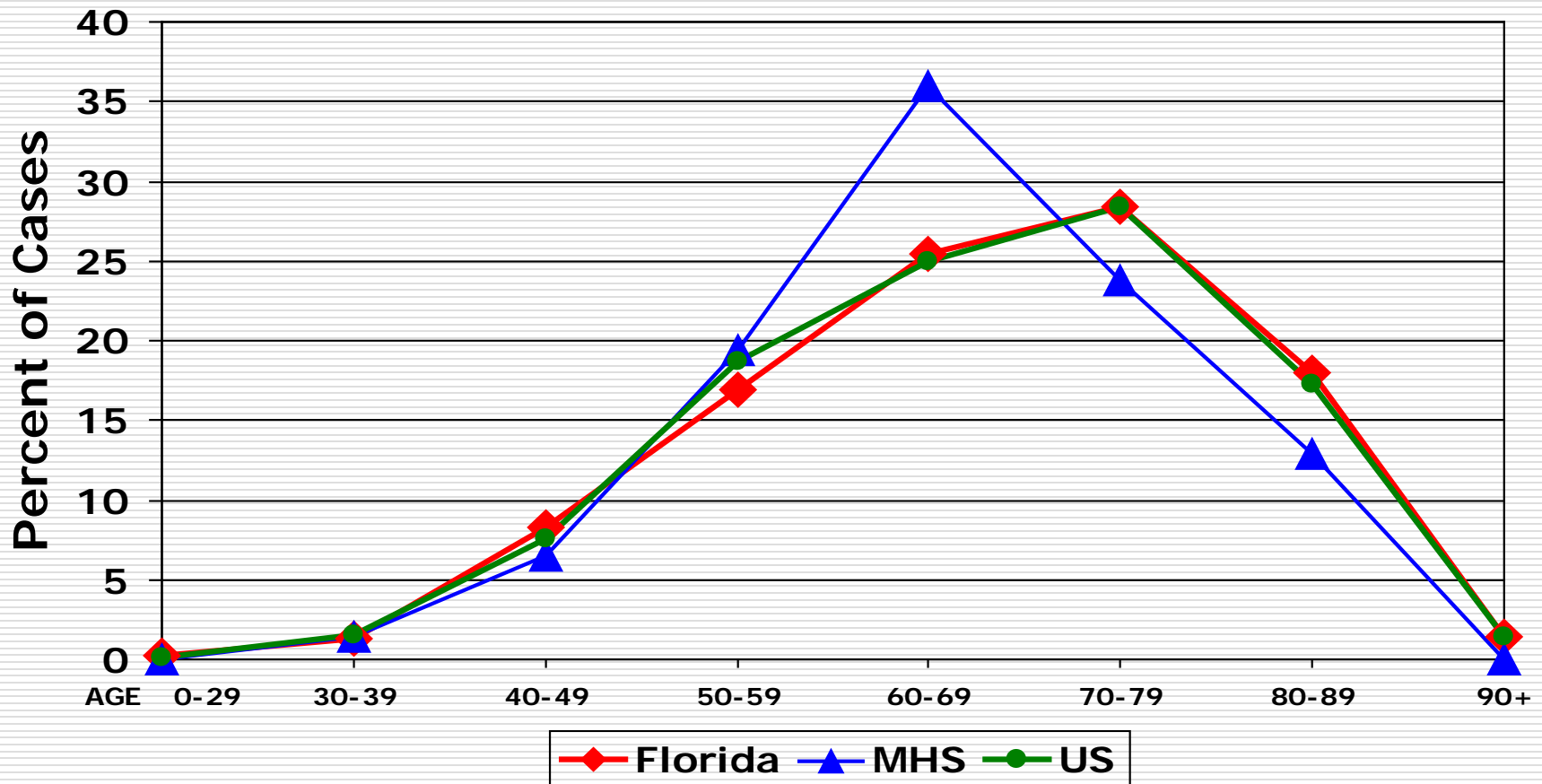
Source: Memorial Healthcare System Network Cancer Program

# National Cancer Data Base

Age at Diagnosis Plasma Cell Tumors 2000-2006

**for Memorial, Florida & United States**

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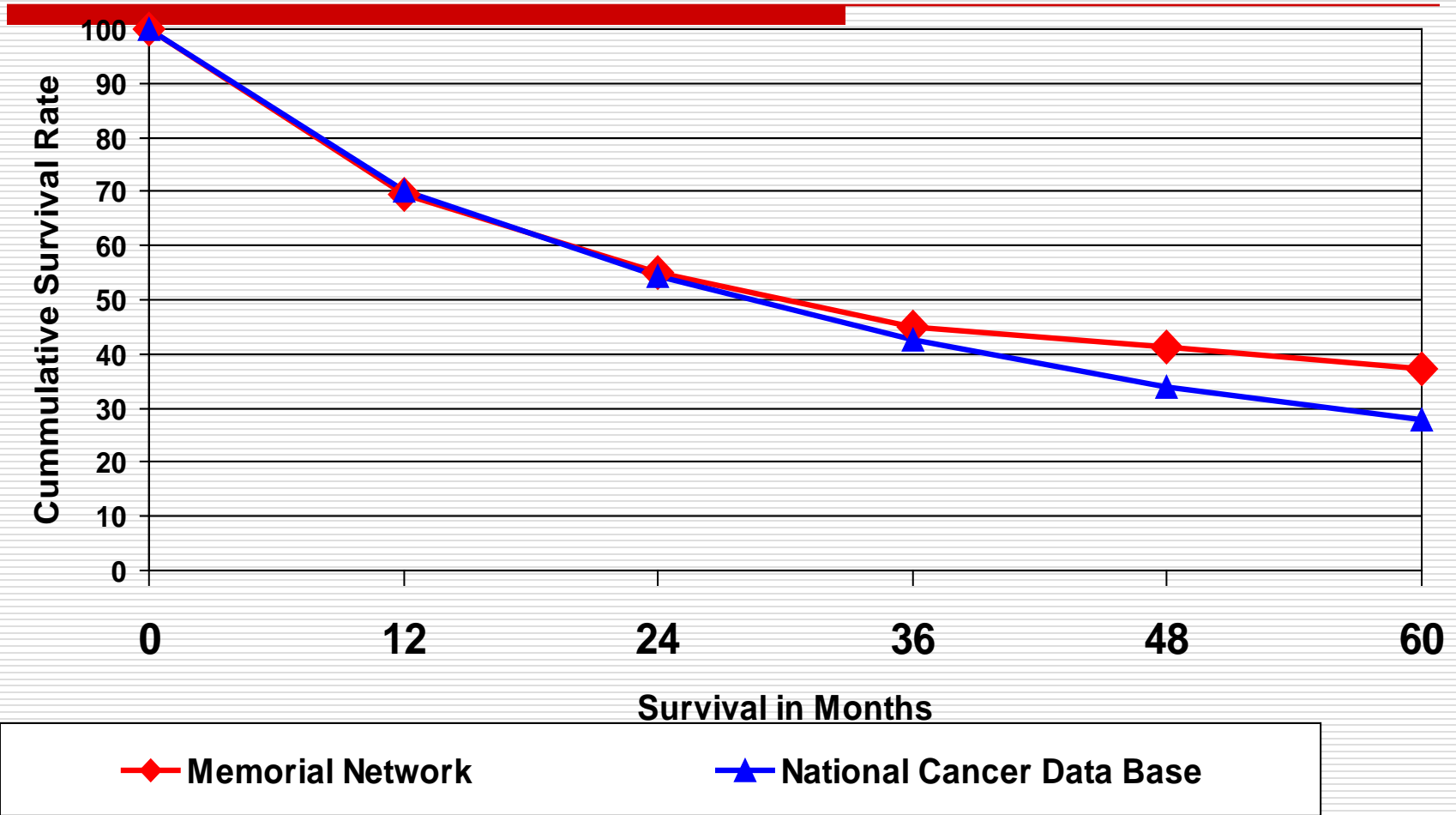
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N = Florida (65 Hospitals) 4,252; MHS (2 Hospitals) 139; United States (1338 Hospitals) 68,927.  
Source: NCDB, Commission on Cancer, ACoS. Benchmark Reports, v9.0

# PLASMA CELL TUMORS

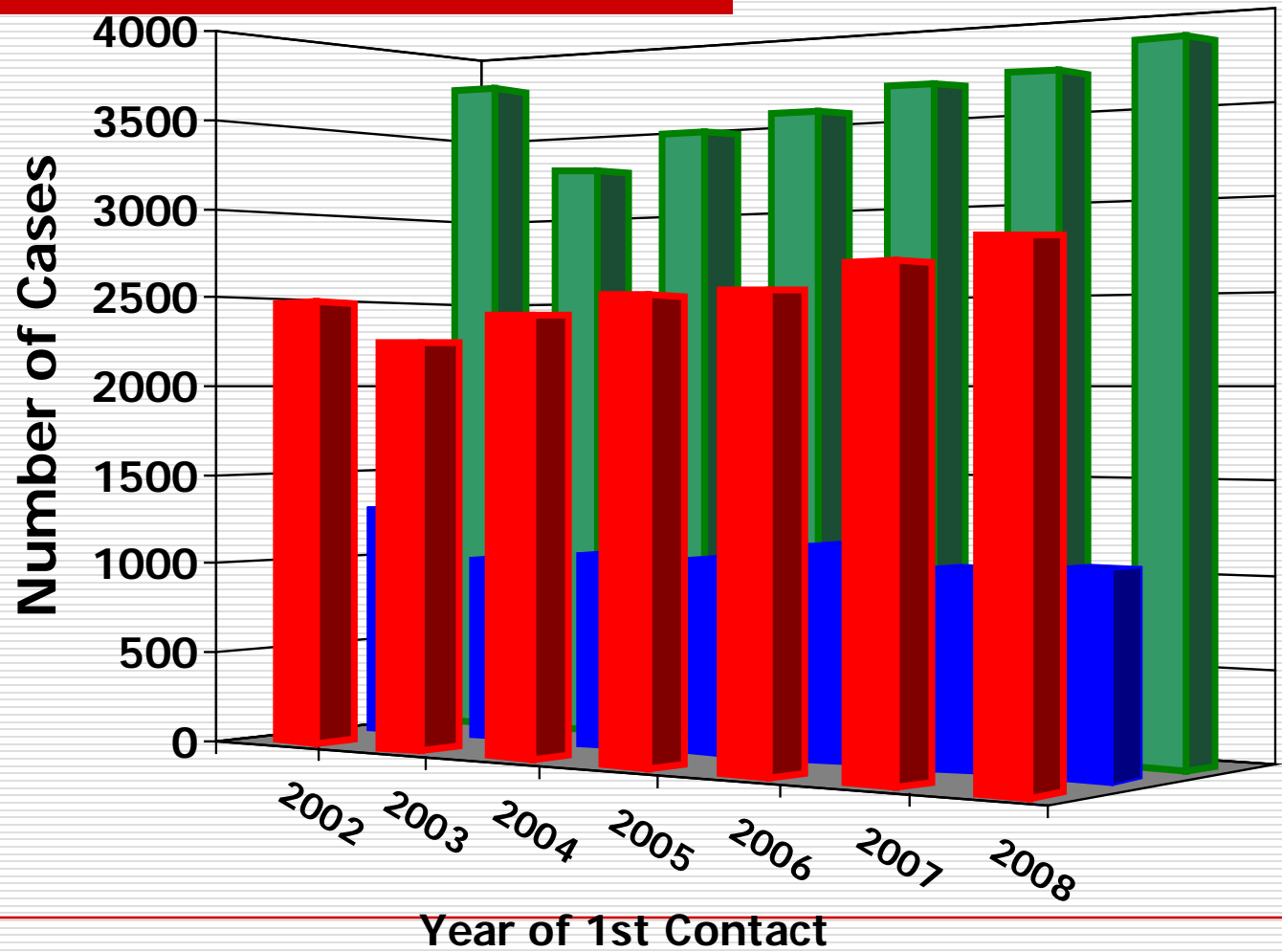
Diagnosed in 1998-2001

NCDB DATA Observed Survival



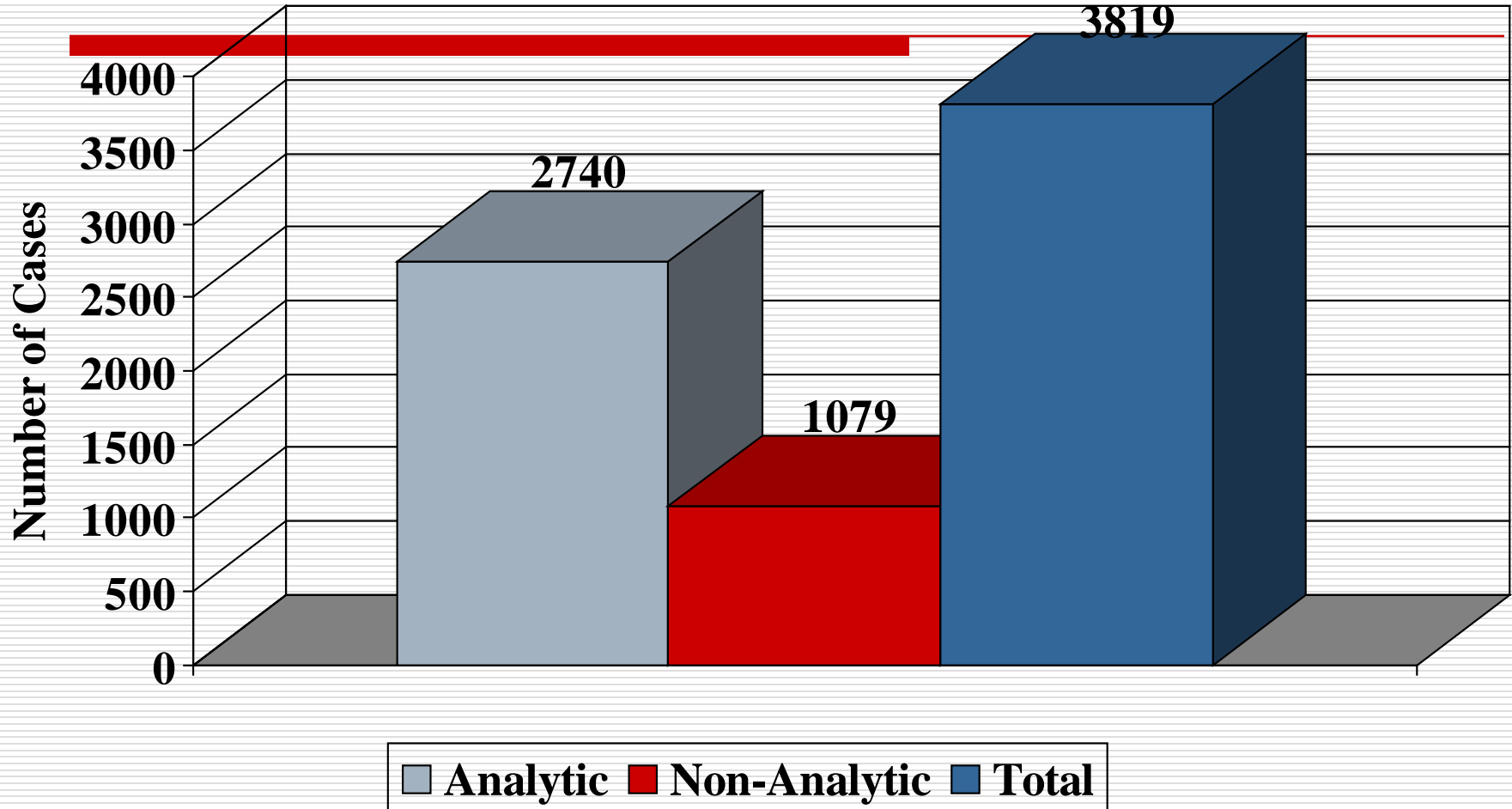
Source: Commission on Cancer, Survival Reports, 2009 National Cancer Database, Cases Diagnosed in 1998-2001, Data from 1333 Programs[National]

# 2002-2008 Accessions

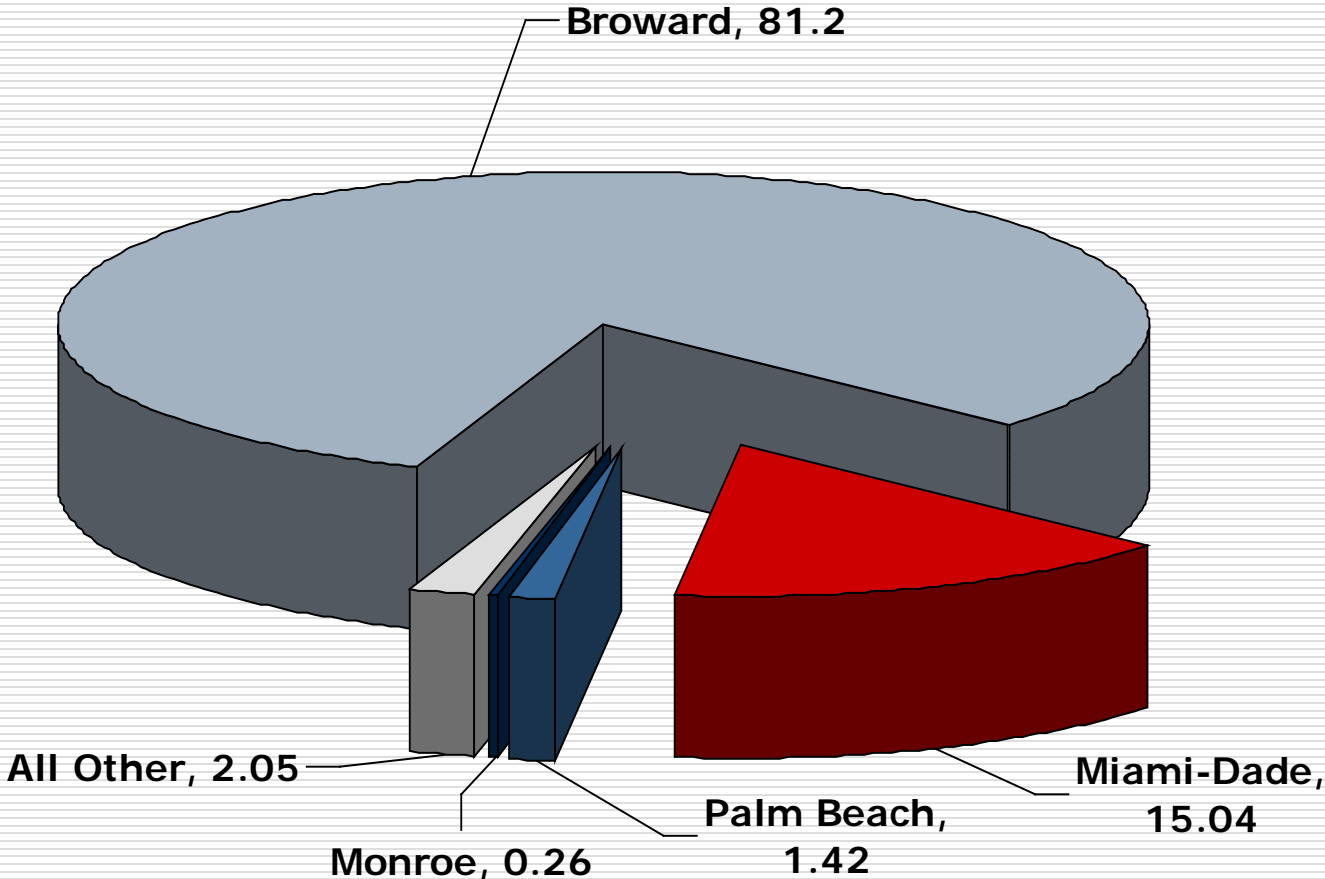


■ Analytic ■ Non-Analytic ■ TOTAL

# Class of Case

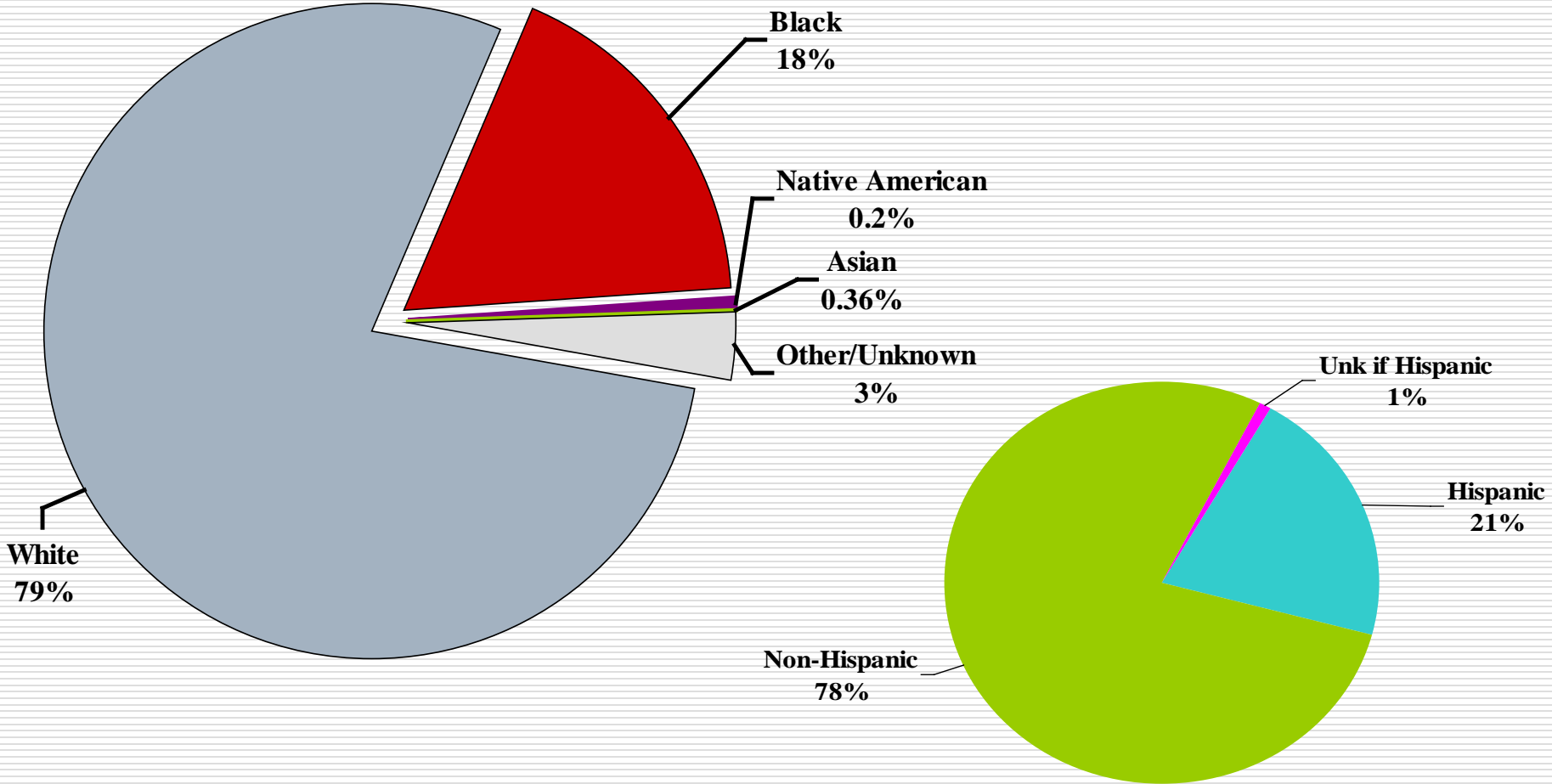


# Distribution by County of Residence 2008



# RACE

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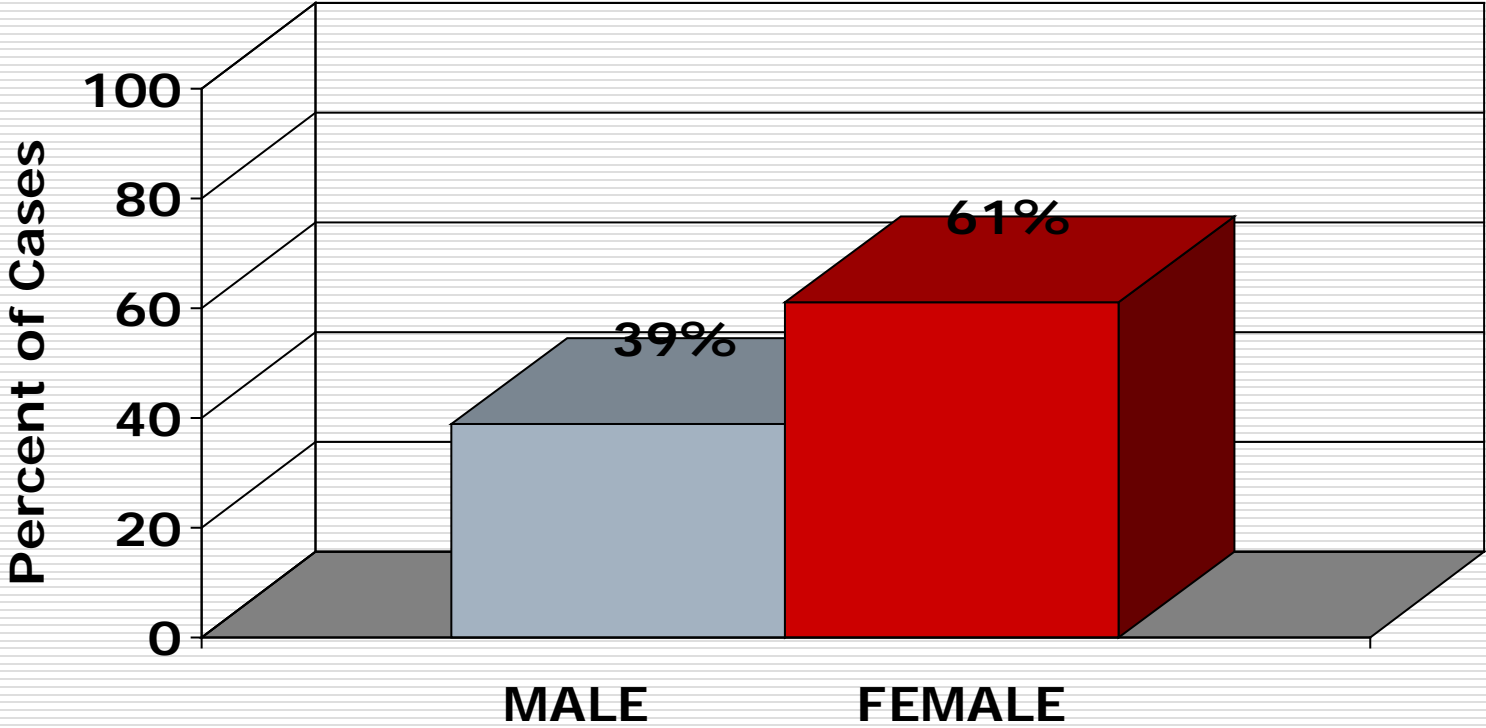


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# SPANISH ORIGIN

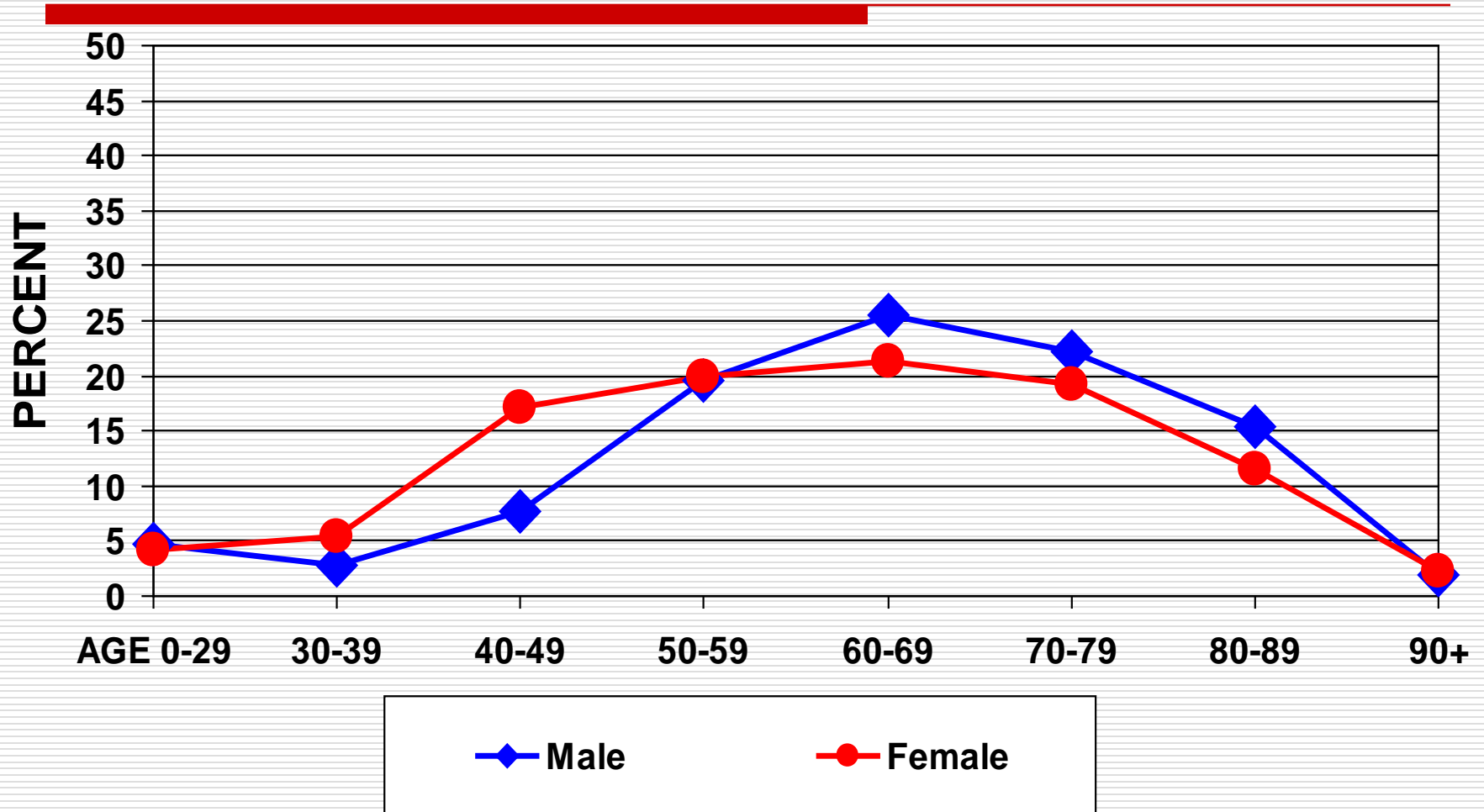
# Distribution by Sex

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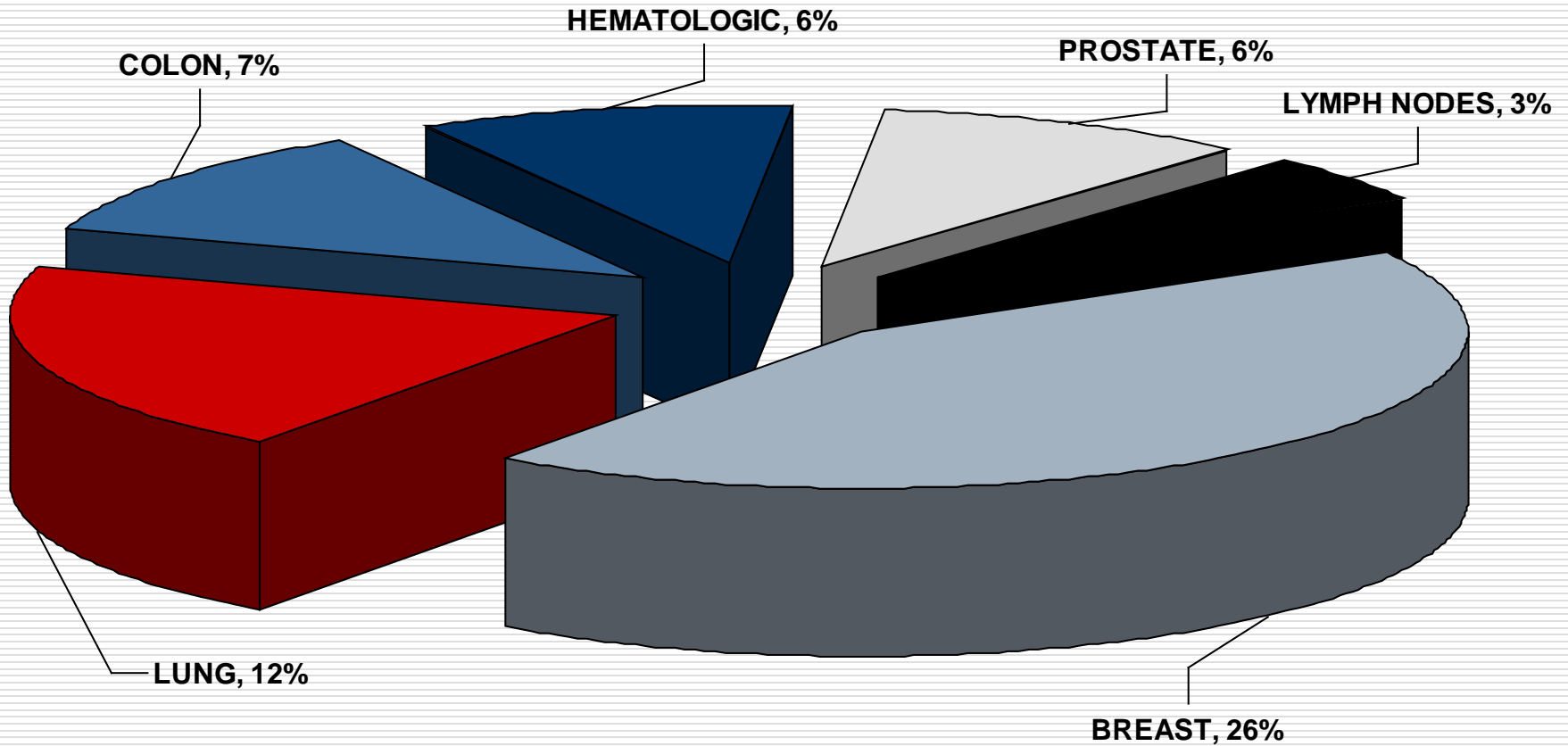
# Age at Diagnosis 2008

## Analytic cases

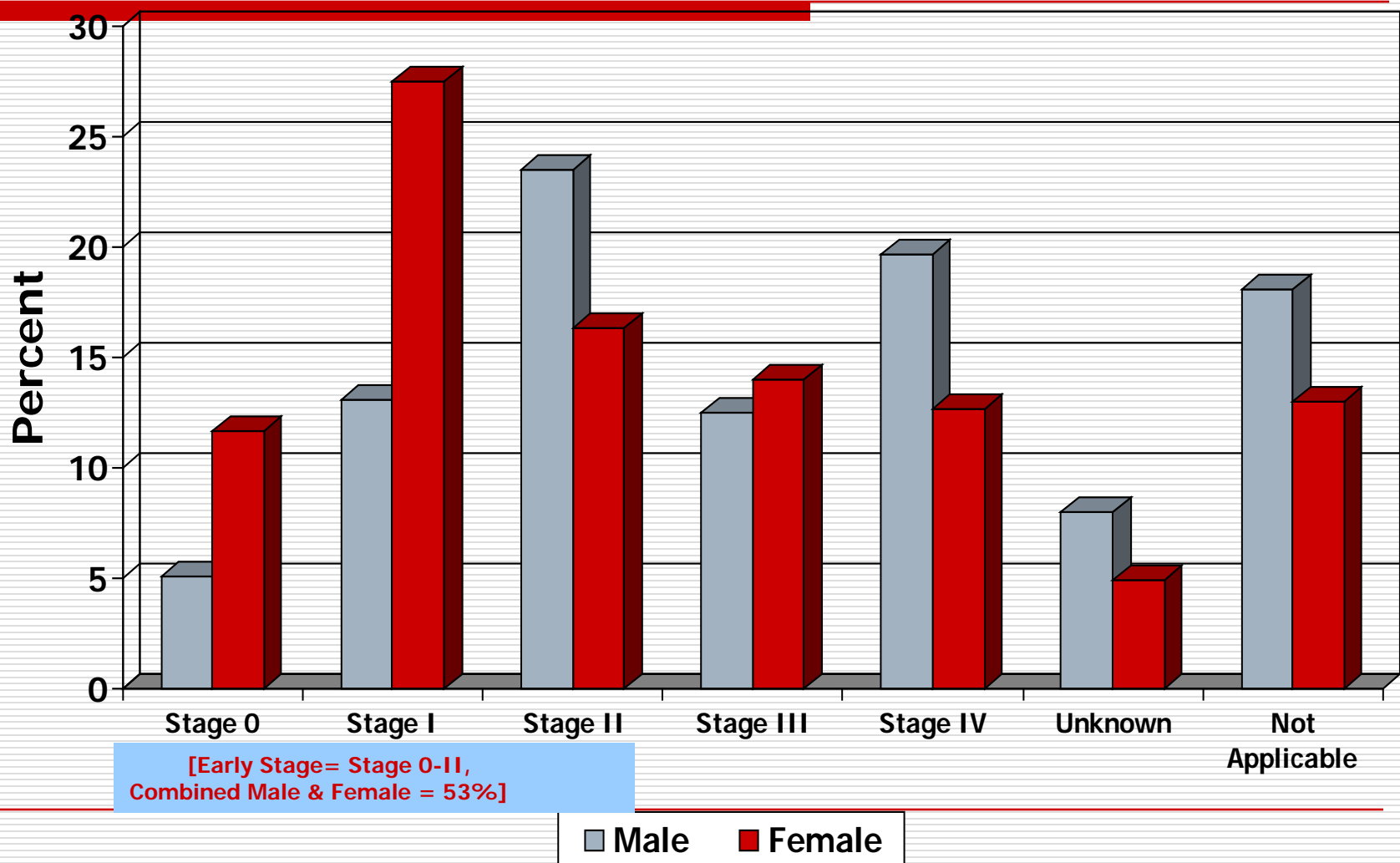


# MAJOR SITE DISTRIBUTION 2008 Analytic Cases

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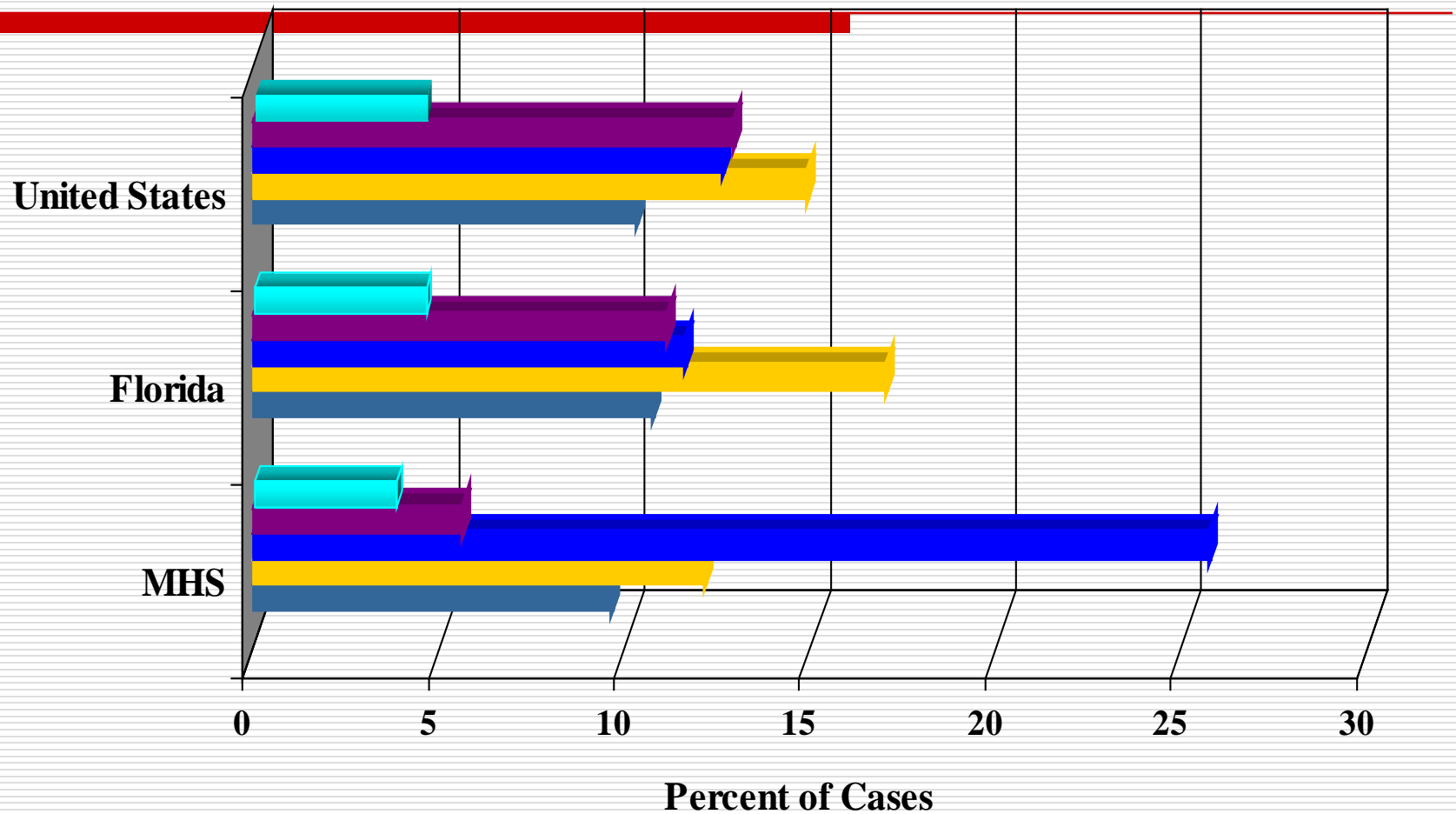


# Stage at Diagnosis



# 2008 Major Site Incidence

## MHS – Florida – United States



■ Colo-Rectal

■ Lung

■ Breast

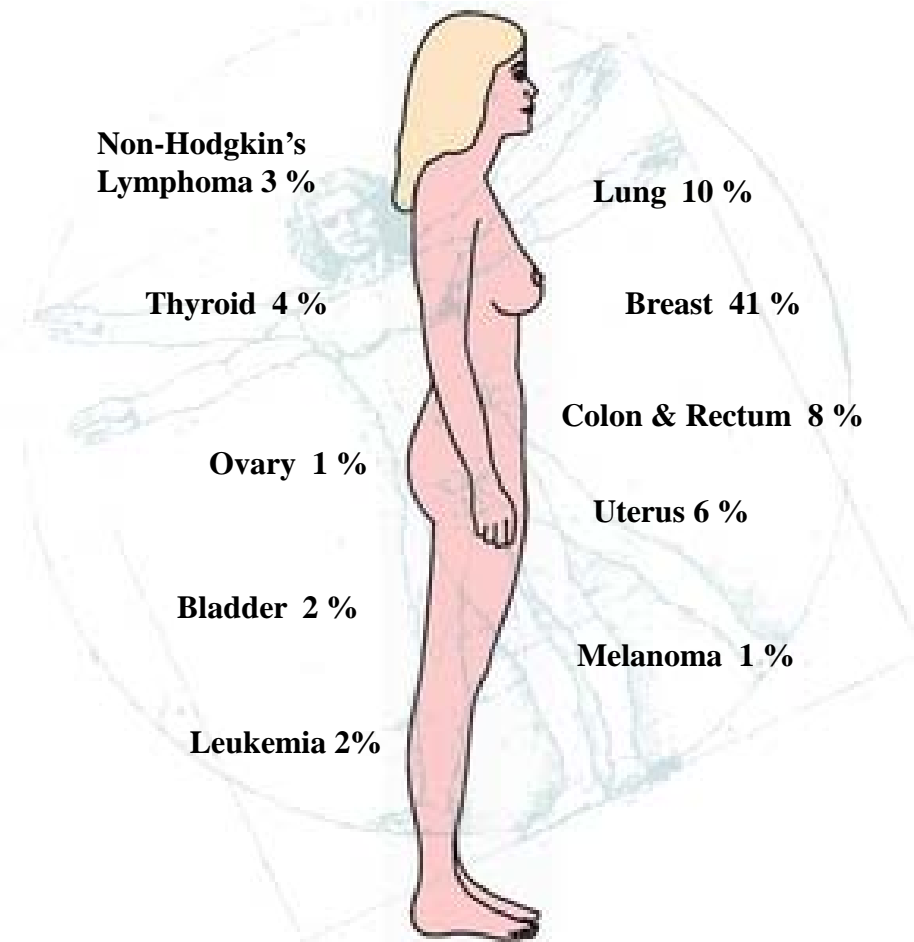
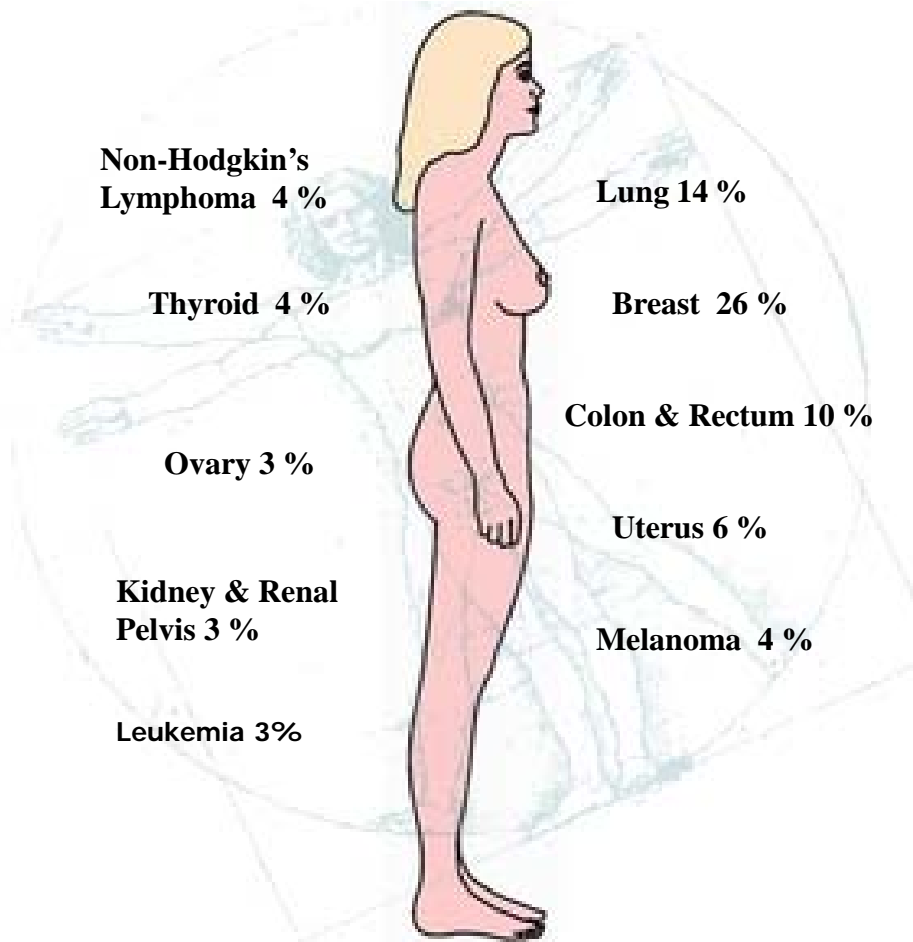
■ Prostate

■ Non-Hodgkin Lymphoma

# FEMALE INCIDENCE

American Cancer Society, US  
692,000

Memorial Healthcare System  
1,724



Memorial Healthcare System Network Cancer Program Analytic Accessions 2008.  
Estimated new cancer cases State & US, 2008.  
American Cancer Society Cancer Facts & Figures 2008

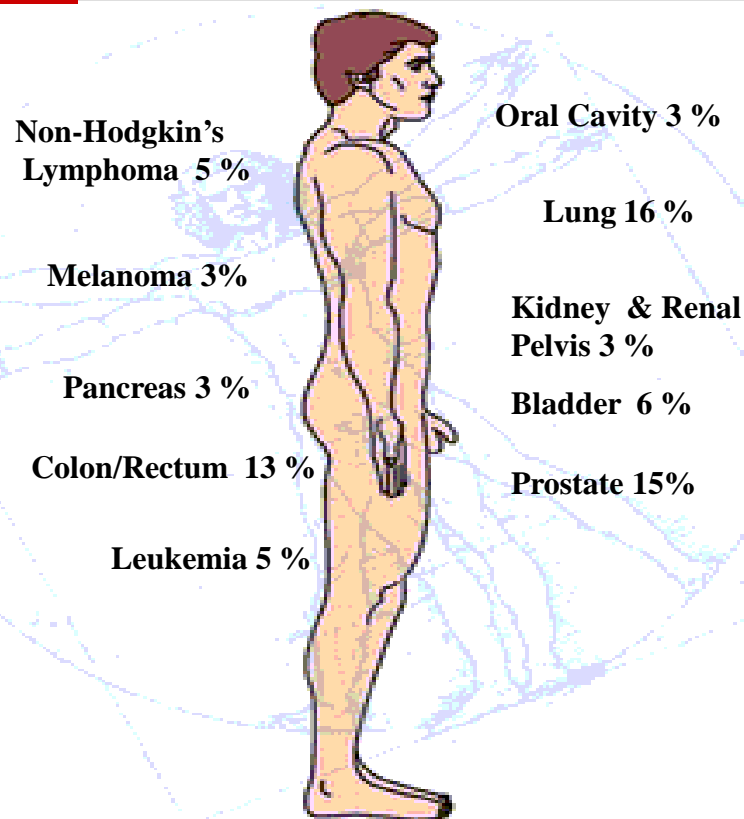
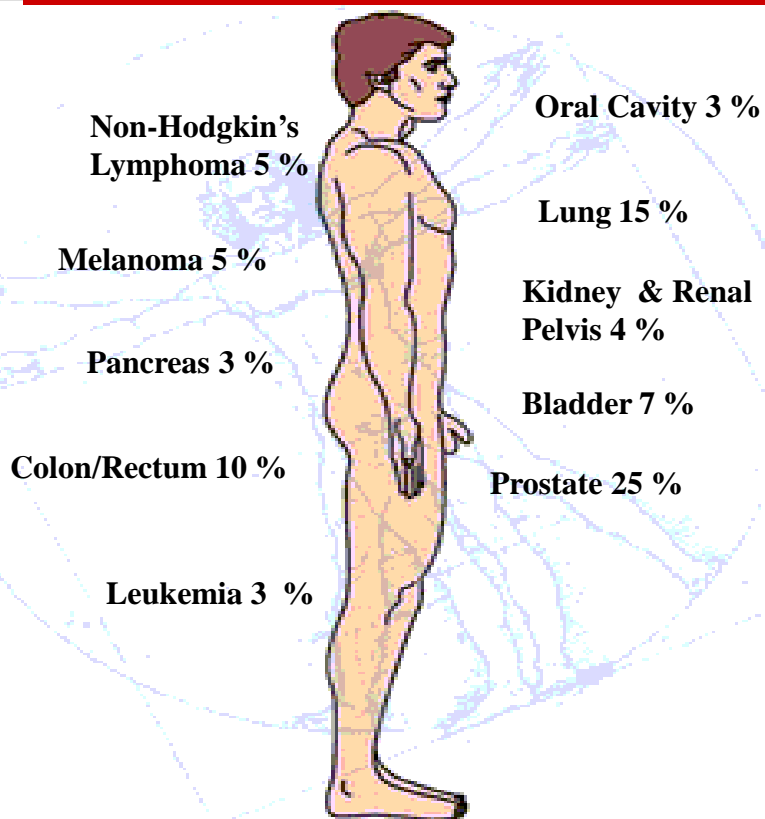
# MALE INCIDENCE

American Cancer Society, US

745,180

Memorial Healthcare System

1016



# 2008 PRIMARY SITE TABLE

# TABLE 1

TABLE 1	TOTAL	%			CLASS OF	CASE	ALIVE	EXP	STAGE				ONLY				
			Male	Female					ANALYTIC	NA	STAGE 0	STAGE 1	STAGE 2	STAGE 3	STAGE 4	99	88
<b>PRIMARY SITE</b>																	
BASE OF TONGUE	9	.2	8	1	7	2	6	3	0	0	0	2	3	2	0	0	0
OTH & UNSPEC PARTS OF TO	8	.2	5	3	6	2	7	1	1	1	1	1	1	1	0	0	0
GUM	3	.1	2	1	3	0	2	1	0	0	0	0	2	1	0	0	0
FLOOR OF MOUTH	3	.1	1	2	2	1	2	0	0	0	1	0	1	0	0	0	0
PALATE	1	.0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0
OTH PARTS OF MOUTH	4	.1	1	3	2	2	3	1	0	0	1	0	1	0	0	0	0
PAROTID GLAND	2	.1	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0
OTH PARTS MAJ SALIVARY G	1	.0	0	1	1	0	1	0	0	1	0	0	0	0	0	0	0
TONSIL	14	.4	10	4	13	1	12	2	0	0	2	2	7	2	0	0	0
OROPHARYNX	2	.1	1	1	2	0	2	0	0	1	0	0	0	1	0	0	0
NASOPHARYNX	2	.1	2	0	2	0	2	0	0	0	0	1	1	0	0	0	0
PYRIFORM SINUS	3	.1	2	1	2	1	1	2	0	0	0	0	1	1	0	0	0
HYPOPHARYNX	4	.1	3	1	4	0	2	2	0	1	1	1	0	1	0	0	0
OTH LIP ,ORAL CAV & PHAR	7	.2	5	2	2	5	6	1	0	0	0	0	0	0	0	0	0
ESOPHAGUS	24	.6	19	5	17	7	17	7	0	0	3	2	8	4	0	0	0
STOMACH	58	1.5	40	18	40	18	39	19	0	8	5	2	19	5	0	0	0
SMALL INTESTINE	15	.4	6	9	9	6	11	4	0	1	3	0	0	1	0	0	0
COLON	268	7.0	131	137	191	77	202	66	16	20	52	40	48	15	0	0	0
RECTOSIGMOID JCT	24	.6	13	11	19	5	20	4	0	2	7	5	2	2	0	0	0
RECTUM	70	1.8	38	32	52	18	61	9	2	7	9	20	8	6	0	0	0
ANUS AND ANAL CANAL	13	.3	5	8	10	3	12	1	0	1	2	3	0	4	0	0	0
LIVER-INTRAHEP BILE DCTS	44	1.2	28	16	39	5	25	19	0	6	6	15	3	8	0	0	0
GALLBLADDER	13	.3	3	10	11	2	8	5	0	3	3	0	5	0	0	0	0
OTH & UNSPEC PTS OF BILI	15	.4	6	9	12	3	12	3	0	0	4	2	4	1	0	0	0
PANCREAS	76	2.0	49	27	57	19	40	36	0	7	13	4	19	14	0	0	0
OTH & ILL-DEFINED DIGEST	2	.1	2	0	1	1	1	1	0	0	0	0	0	0	0	0	0
ACCESSORY SINUSES	10	.3	5	5	7	3	9	1	0	0	1	2	3	0	0	0	0
LARYNX	32	.8	22	10	20	12	27	5	0	8	5	5	2	0	0	0	0
BRONCHUS AND LUNG	433	11.3	206	227	335	98	271	162	0	65	18	74	147	27	0	0	0
THYMUS	4	.1	1	3	4	0	3	1	0	1	0	0	0	0	0	0	0
HEART, MEDIASTINUM AND P	5	.1	3	2	4	1	2	3	0	0	2	0	2	0	0	0	0
OTH W/I RESP/INTRATHOR O	1	.0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0
BONES, JNTS, ART CART LI	4	.1	3	1	2	2	3	1	0	0	0	0	0	2	0	0	0
BONES, JNTS, ART CART OT	5	.1	2	3	3	2	3	2	0	0	1	0	1	0	0	0	0
HEMATOPOIETIC/RETICULOEN	292	7.6	148	144	155	137	233	59	0	0	0	0	1	0	0	1	0
SKIN	139	3.6	86	53	72	67	120	19	6	26	12	4	7	8	0	0	0
PERIPHERAL NERVES AND AN	1	.0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0
RETROPERITONEUM AND PERI	15	.4	3	12	15	0	15	0	0	3	0	1	3	1	0	0	0
CONN, SUBQ AND OTH SOFT	28	.7	15	13	15	13	19	9	0	2	1	2	3	5	0	0	0
BREAST	890	23.3	4	886	709	181	855	35	174	230	178	75	26	26	0	0	0
VULVA	19	.5	0	19	14	5	18	1	6	3	1	3	1	0	0	0	0
VAGINA	2	.1	0	2	2	0	2	0	2	0	0	0	0	0	0	0	0
CERVIX UTERI	63	1.7	0	63	48	15	57	6	1	21	6	12	6	1	0	0	0
CORPUS UTERI	129	3.4	0	129	104	25	118	11	0	65	6	17	8	1	0	0	0
UTERUS, NOS	4	.1	0	4	3	1	3	1	0	0	0	0	0	0	0	0	0
OVARY	43	1.1	0	43	24	19	36	7	0	6	2	11	1	2	0	1	0
OTH FEMALE GENITAL ORGS	5	.1	0	5	4	1	3	2	0	0	0	2	2	0	0	0	0
PENIS	2	.1	2	0	1	1	2	0	0	0	1	0	0	0	0	0	0
PROSTATE GLAND	273	7.2	273	0	154	119	243	30	0	0	128	6	12	7	0	0	0
TESTIS	13	.3	13	0	6	7	11	2	0	3	1	2	0	0	0	0	0
OTHER MALE GENITAL ORGS	1	.0	1	0	1	0	1	0	0	0	0	0	0	0	1	0	0
KIDNEY	87	2.3	44	43	68	19	78	9	0	33	5	12	12	2	4	0	0
RENAL PELVIS	4	.1	2	2	2	2	3	1	1	0	0	0	1	0	0	0	0
URETER	3	.1	2	1	0	3	3	0	0	0	0	0	0	0	0	0	0
BLADDER	125	3.3	91	34	89	36	103	22	44	21	11	6	4	3	0	0	0
EYE AND ADNEXA	4	.1	1	3	1	3	2	2	0	1	0	0	0	0	0	0	0
MENINGES	70	1.8	13	57	55	15	63	7	0	0	0	0	0	0	3	67	0
BRAIN	70	1.8	35	35	54	16	54	16	0	3	0	0	0	0	0	45	7
OTHER CENTRAL NERVOUS SY	9	.2	2	7	7	2	7	2	0	0	0	0	0	0	2	7	0
THYROID GLAND	98	2.6	18	80	81	17	93	5	0	46	5	13	11	6	0	0	0
ADRENAL GLAND	3	.1	1	2	3	0	3	0	0	1	0	0	0	0	2	0	0
OTH ENDOCRINE GLDS/REL S	49	1.3	25	24	28	21	47	2	0	0	0	0	0	0	3	46	0
OTHER ILL-DEFINED SITES	2	.1	2	0	1	1	2	0	0	0	0	0	0	0	1	0	0
LYMPH NODES	139	3.6	74	65	88	51	115	24	0	10	22	21	30	5	0	0	0
UNKNOWN PRIMARY SITE	58	1.5	28	30	55	3	25	33	0	0	0	0	1	1	53	0	0
<b>TOTAL</b>	<b>3819</b>	<b>100.0</b>	<b>1508</b>	<b>2311</b>	<b>2740</b>	<b>079</b>	<b>3149</b>	<b>671</b>	<b>253</b>	<b>607</b>	<b>520</b>	<b>368</b>	<b>417</b>	<b>166</b>	<b>321</b>	<b>129</b>	<b>0</b>