



YOUR HEALTH IS OUR MISSION

**CANCER PROGRAM ANNUAL REPORT 2015**

The success of the Cancer Program at Naval Medical Center San Diego (NMCS D) depends on the leadership of the Oncology Advisory Group (OAG), a multidisciplinary standing committee of the medical staff. The OAG includes medical representatives from all medical specialties involved in the care of the cancer patient, as well as representatives from patient administration, oncology nursing, pharmacy, tumor registry, clinical research, nutrition, social services, pastoral care, and the American Cancer Society. The OAG meets bi-monthly and is responsible for planning, initiating, stimulating and assessing all cancer related activities in the hospital, and the clinical supervision of the Tumor Registry.

NMCS D participates in the American College of Surgeons Commission on Cancer Accreditations Program. The OAG is responsible for following the standards set forth by the college. Participation as a CoC-accredited cancer program ensures that our patients receive quality care, cancer education, access to prevention and early detection programs, comprehensive care including state-of-the-art services, a multidisciplinary team coordinating the most appropriate treatment options, information on clinical trials and developing treatments, support services, a cancer registry which is vital to providing lifelong patient follow-up to monitor disease recurrence, ongoing monitoring and improvements in cancer care.

NMCS D successfully completed the triennial Commission on Cancer, Cancer Program Survey on Aug. 7, 2013 and is once again fully accredited, receiving all eight possible commendations. The cancer program received a 4th consecutive Outstanding Achievement Award. NMCS D was the first Military Treatment Facility to earn the Commission on Cancer Outstanding Achievement Award, and is the only MTF to earn multiple OAAs.

**A message from Dr Preston Gable, Cancer Liaison Physician;**

The Oncology Advisory Group would like to thank the hospital leadership—our current Commander, CAPT Acosta, and our XO, CAPT Kuehner as well as the entire Executive Steering Council for providing the support and leadership necessary for us to provide truly outstanding cancer care to our military beneficiaries. Cancer care is truly a team effort—the patient is at the center, and is supported on all sides by nursing, physicians from surgery, radiology, pathology, medical oncology, radiation oncology and gynecologic oncology as well as social workers, nutritionists, physical therapy, the tumor registry, our clinical trials office, and even our local American Cancer Society. Our leadership has fostered this team approach and it has paid off—NMCS D is currently a four-time winner of the Commission on Cancer’s Outstanding Achievement Award! As a cancer patient in our system, you will be treated like family. After all, we are one big military family. While we can’t cure everyone, we will do our best to provide professional, compassionate health care, where the patient comes first.

|                                     |           |
|-------------------------------------|-----------|
| <b>TUMOR REGISTRY</b>               | <b>2</b>  |
| <b>2014-2015 OAG MEMBERSHIP</b>     | <b>2</b>  |
| <b>CANCER SCREENING /PREVENTION</b> | <b>3</b>  |
| <b>CANCER CARE QUALITY</b>          | <b>3</b>  |
| <b>CLINICAL TRIALS DATA</b>         | <b>5</b>  |
| <b>CANCER INCIDENCE REPORT 2014</b> | <b>6</b>  |
| <b>PRIMARY SITE TABLE</b>           | <b>10</b> |
| <b>2014 STATISTICS</b>              | <b>12</b> |

### The Tumor Registry



The Tumor Registry, under the administrative supervision of the Patient Administration Department and the clinical supervision of the Oncology Advisory Group, manages a complete database on all patients that have been diagnosed and/or treated for a malignant disease at NMCS D. The data collected by the registry is used for the evaluation of the care of our patients. The reports created enable the command to assess the cancer treatment given and also compare our data with that of other healthcare facilities.

The Tumor Registry documents and stores all the significant elements of the patient's history and treatment, which includes demographics, anatomic site, and extent or stage of disease at the time of diagnosis. The Tumor Registry also performs follow-up annually on all cancer patients to gather survival/treatment statistics. Lifetime follow-up is essential in providing the medical staff and researchers with outcome and end results data.

The Tumor Registry assists the Oncology Advisory Group with bi-monthly meetings, attendance at Tumor Boards, Quality Improvement of the Cancer Program at NMCS D, and the survey for the American College of Surgeons Accredited Cancer Programs.

### Tumor Registry Services

- Up-to date and accurate cancer data for researchers and medical administrators for prevention and control of cancer.
- Cancer statistics for supporting evidence for medical staff, clinical trials studies, and patient care improvement.
- Custom reports of cancer data and analysis available on request for staff, residents and interns.

### Oncology Advisory Group 2014 – 2015



|                      |   |
|----------------------|---|
| CDR (Dr.) H. Tracy   | Chair/Hematology Oncology                                   |
| Dr. P. Gable         | CLP/ Hematology Oncology                                    |
| CDR (Dr.) L. Rivera  | Surgical Oncology   |
| CDR (Dr.) T. Oseni   | Surgical Oncology   |
| LCDR (Dr.) A. Kremp  | Pathology   |
| LCDR (Dr.) D. Greene | Radiation Oncology  |
| Dr. C. Goepfert      | Diagnostic Radiology/Breast Health                          |
| CDR (Dr.) C. Norris  | Palliative Care/Tumor Board Coordinator/Hematology Oncology |
| J. Tszchanz, RN, ONP | Outpatient Oncology Nursing                                 |
| S. Gharabaghli, RN   | Quality Control   |
| H. Ciaralli, CTR     | Cancer Registry/Cancer Program Administrator                |
| B. Taylor            | Clinical Research Data Manager                              |
| M. Dispenzieri, LCSW | Outreach Coordinator  |
| B. Manschot, LCSW    | Psychosocial Services Coordinator                           |

## Cancer Screening Programs—HEDIS Initiatives

We have worked to improve breast, cervical, and colorectal cancer screening at NMCS D and to exceed national benchmarks for clinical preventive services and care. There are three areas where women can receive mammograms to be able to detect breast cancer early and treat if it is found. Naval Branch Health Clinic Chula Vista, Naval Branch Health Clinic Kearny Mesa and the Breast Health Center at NMCS D all offer mammography. Mammograms are scheduled by appointments, but each of the areas will walk -in patients if the schedule allows. In the Pharmacy, Radiology, and Lab Waiting areas, patients can pick up the "Mammo While You Wait" cards and take to the Breast Health Center , where they will try to provide walk-in mammograms if the schedule permits. NMCS D uses the Mammography Reporting System to remind patients who have had mammo-grams here in the past thirty days prior to their due date.



Well-woman exams and PAP tests for cervical cancer are provided through patient's Primary Care Providers and the OB/GYN Department. More than 14,000 women enrolled to NMCS D have completed their cervical cancer screening exams.

A number of screening methods are available to prevent or detect colorectal cancer, such as colonoscopy, flex-sigmoidoscopy, and for those patients who have specific health conditions who should not undergo colonoscopy, NMCS D offers Colonography. Currently, clinical research and medical evidence indicates that colonoscopy is the best method to prevent colorectal cancer, however if patients elect not to have colonoscopy, test kits for stool specimens are available in each of the Primary Care Clinics. These test kits require only one specimen and may either be dropped off at any NMCS D lab or may be mailed in. More than 8,800 patients have completed their colorectal cancer screening. Staff at NMCS D continue to mail reminder letters to patients who are overdue or coming due for colorectal cancer screening.

Health Fairs were held at the hospital October 28, 2015 in recognition of National Breast Cancer Awareness and in several of the Branch clinics, resulting in an additional 17 mammograms being completed.

The MRS computerized system was reprogrammed and we piloted sending 100 patients a letter concerning their being overdue for mammography. This resulted in a 25% response rate and completion of overdue mammograms. We plan to send out additional letters using this system as the pilot was successful.

NMCS D provides high quality care and has received accreditation from the Joint Commission and the American College of Surgeons. Furthermore, NMCS D's Cancer Programs was the first Naval Medical Center to Receive an Accommodation award for excellence in cancer care. If breast cancer is detected, the Breast Health Center offers world-class coordination of care and treatments. Patients with cancer may also be referred to the Hematology/Oncology Department for multidisciplinary care and chemotherapy, General Surgery, and to Radiation Oncology. Patients are referred for enrollment in Clinical Trials that they may qualify for and Genetic Counselors are also available.

## Studies of Quality and Quality Improvement initiatives

### Studies of Quality:

**As an Academic Comprehensive Cancer Program, NMCS D is required to undertake at least two studies on the quality of cancer care and outcomes at the facility.**

Annually the QI Coordinator under direction of the Cancer Committee develops, analyzes, and documents the required studies that measure the quality of care and outcomes for patients with cancer. Quality improvement is multidisciplinary. The study focuses on areas with *problematic quality* related issues relevant to our cancer population.

In 2015 The Oncology Advisory Group oversaw the following studies;

- #1. We completed a 10 year review of the patients with pancreatic cancer and evaluated time to adjuvant chemotherapy in the post-operative period.
- #2. We evaluated the incidence of optional contralateral prophylactic mastectomy in non-invasive breast cancer (DCIS) patients who are treated in an equal access to care facility.
- #3. We assessed all of our patients with Stage IIIB and IV lung adenocarcinoma to confirm if 100% of the cases were tested for EGFR and ALK mutations in accordance with the NCCN guidelines.

### Quality Improvements:

**As an Academic Comprehensive Cancer Program, NMCS D is required to initiate at least two quality improvements related to cancer care and outcomes at the facility.**

Annually, two patient care improvements are required. One improvement should be based on the results of a completed study that measures cancer patient quality care and outcomes and one improvement can be identified from another source or from a completed study.

In 2015 the Oncology Advisory Group developed:

- A Rapid On-Site Evaluation (ROSE) program by having Pathology present at interventional biopsies to increase the diagnostic yield of satisfactory biopsy sampling
- The evaluation of MSI testing in all patients diagnosed with endometrial cancer under the age of 55

**Clinical Trials**

| Type of Trial            | Location | Number |
|--------------------------|----------|--------|
| <b>2014</b>              |          |        |
| Treatment Trials         | Referred | 0      |
| Quality of Life Trials   | Onsite   | 114    |
| Total                    |          | 0      |
| Annual Analytic Caseload |          | 656    |
| Percent                  |          | 17%    |
| <b>2015</b>              |          |        |
| Treatment Trials         | Referred | 14     |
| Quality of Life Trials   | Onsite   | 67     |
| Total                    |          | 81     |
| Annual Analytic Caseload |          | 630    |
| Percent                  |          | 13%    |

Clinical research advances science and ensures that cancer patients receive the highest possible level of care. NMCS D patients who participate in clinical trials have the opportunity to advance evidence-based medicine.

NMCS D enrolls cancer in patients in several ongoing trials, that include, but are not limited to the following;

**BREAST: CALGB/Alliance E1Z11** A Cohort Study to evaluate Genetic Predictors of Aromatase Inhibitor Musculoskeletal symptoms (AIMSS). NMCS D 2014.0053

**BREAST: NSABP B-51** A Randomized Phase III clinical trial evaluating Post-Mastectomy Chest wall and Regional Nodal XRT and Post-Lumpectomy Regional Nodal XRT in patients with Positive Axillary Nodes before Neoadjuvant Chemotherapy who convert to Pathologically Negative Axillary Nodes after Neoadjuvant Chemotherapy. (Pending IRB approval)

**BREAST: Alliance/ACOSOG Z11102** Impact of Breast Conservation Surgery on Surgical Outcomes and Cosmesis in Patients with Multiple Ipsilateral Breast Cancer (MIBC). (No patients enrolled)

**COLORECTAL: 80702: (D)** A Phase III Trial of 6 VS 12 Treatments of Adjuvant FOLFOX Plus CELECOXIB or PLACEBO Patients with Resected Stage III Colon Cancer.

**PROSTATE/GENITOURINARY: 90203(D)** Phase III Neo-Adjuvant Docetaxel Androgen Deprivation Prior To Radical Prostatectomy Vs Radical Prostatectomy in High Risk Prostate Ca Patients (No patients enrolled)

**PROSTATE: 70807** The Men’s Eating and Living (MEAL) Study: A Randomized Trial Of Diet to Alter Disease Progression In Prostate Cancer Patients on Active Surveillance.

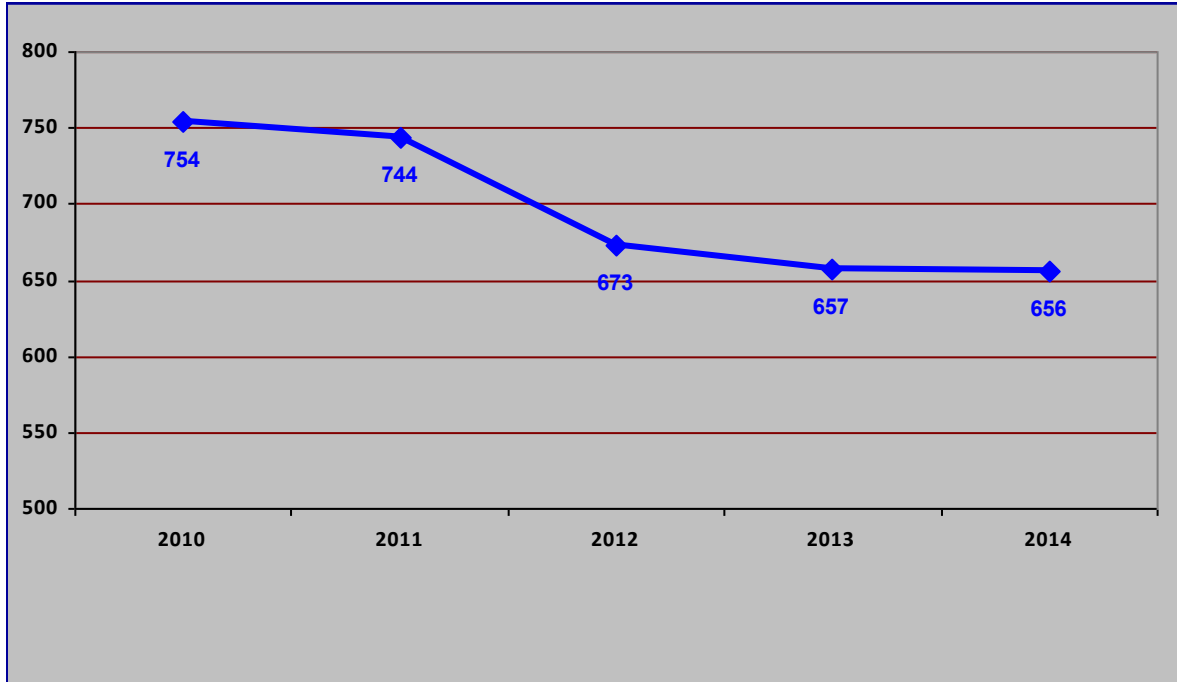
**PROSTATE: CPDR** A comprehensive research program to study prostate cancer and prostate disease in the tri-service military healthcare system.

**HODGKIN’S LYMPHOMA: CALGB 50801** A phase II trial of response-adapted therapy base on PET for bulky Stage I and Stage II Classical Hodgkin Lymphoma (HL) (Pending IRB approval).

**CHRONIC LYMPHOCYtic LEUKEMIA: CALGB/ALLICANCE A041202** - A Randomized Phase III study of Bendamustine Plus Rituximab vs. Ibrutinib Plus Rituximab vs. Ibrutinib alone in untreated older patients >=65 years of age with Chronic Lymphocytic Leukemia (CLL) (Pending IRB approval).

### NMCS D Cancer Incidence 2014

In 2014\* there were 656 cases of newly diagnosed and or treated incidences of cancer at Naval Medical Center, San Diego accessioned into the Automated Central Tumor Registry (ACTUR) database. Compared to 2013, this is a statistically insignificant change. The five year incidence rate is illustrated below.



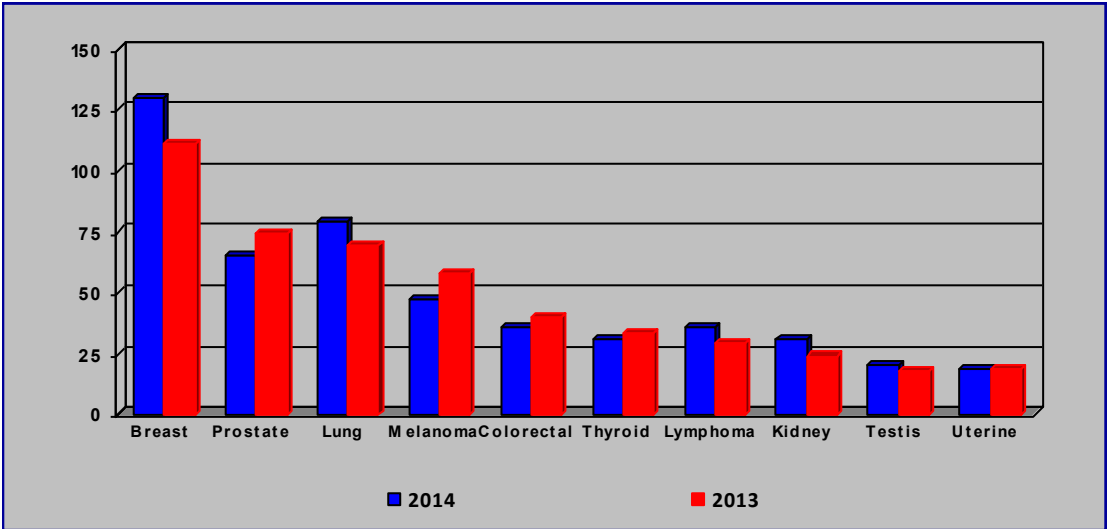
2014 saw an increase in the number of testicular cancer cases (25%) as well as lymphomas (24%) and kidney cancer cases (22%). Of significance, this is the 2<sup>nd</sup> consecutive year that NMCS D has had an increase in kidney cases, we've seen a 72% increase since CY 2012. There was however a decrease in the number of melanoma cases as well as another decrease in the number of reportable prostate cancer cases, a 34% decrease since 2012. The following table illustrates the top 10 sites of 2014 in comparison to the totals from 2013.

| Site            | 2014 | 2013 | Change | +   | -   |
|-----------------|------|------|--------|-----|-----|
| Breast          | 130  | 111  | +19    | 15% |     |
| Bronchus & Lung | 79   | 69   | +10    | 13% |     |
| Prostate        | 65   | 74   | -9     |     | 14% |
| Melanoma        | 47   | 58   | -11    |     | 19% |
| Colorectal      | 36   | 40   | -4     |     | 10% |
| Lymphoma        | 36   | 29   | 7      | 24% |     |
| Thyroid         | 31   | 33   | 2      |     | 3%  |
| Kidney          | 31   | 24   | 7      | 22% |     |
| Testis          | 20   | 18   | 2      | 25% |     |
| Corpus Uteri    | 19   | 19   |        |     |     |

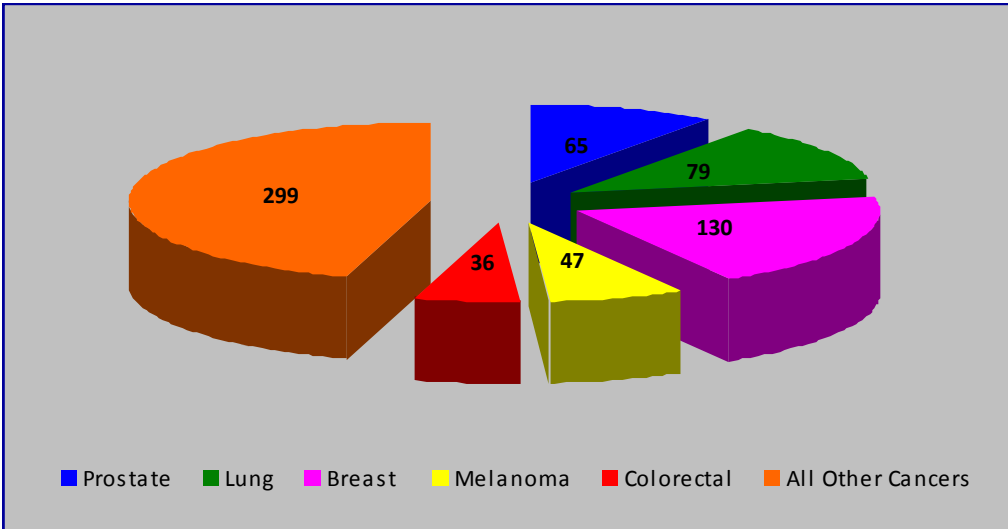
**NOTE:** \*2014 is the last complete year of cancer data available at time of publication of this report.

**Top Ten Site Comparison 2013 — 2014**

The chart to the right further illustrates the cancer incidence for 2013 vs. 2014.

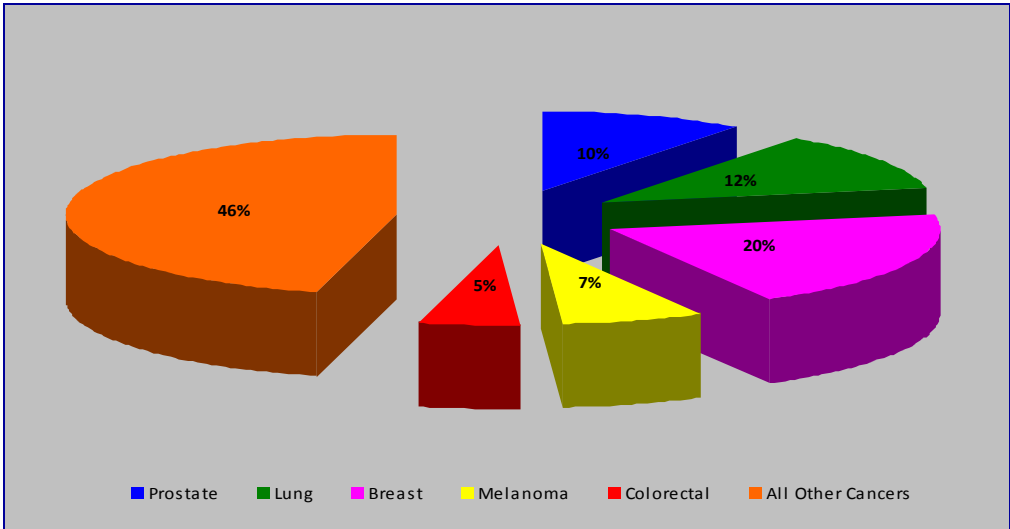


**2014 Cancer Incidence Top 5 Sites**

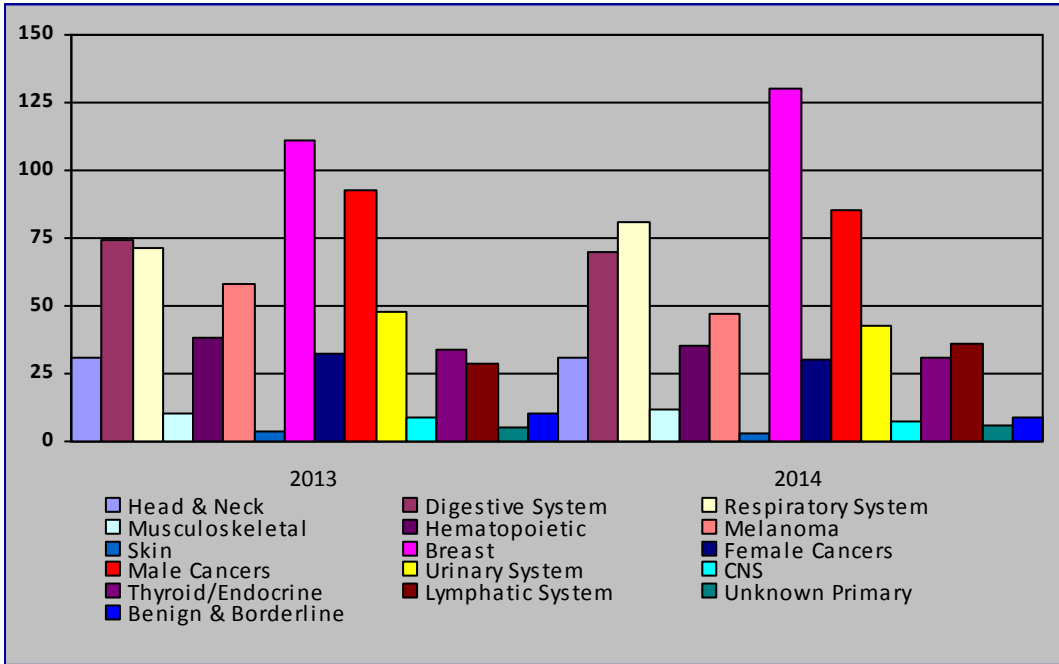


The most prevalent incidences of cancer were Breast Cancer, Lung Cancer, Prostate Cancer, Melanoma, and Colorectal Cancer. Together these 5 cancers accounted for 54% of all reported cancers in 2014 as demonstrated in the pie charts at left.

**2014 Cancer Incidence Percentages by Site**



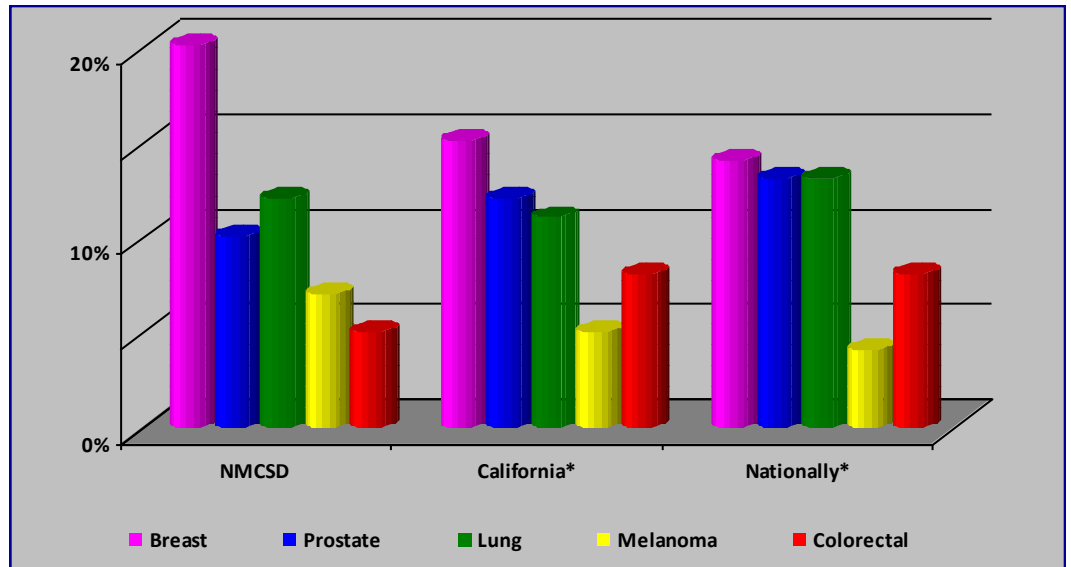
2013 – 2014 System Comparison



The chart to the left compares the system incidence of 2013 to 2014. The five most prevalent cancers show little variance in number year to year. In 2014 NMCS D saw an increase in breast cancer 15%, and an increase of 13% in head & neck cancers. On the flip side, respiratory system cancers decreased by 17.8% compared to 2011, and urinary system cancers

2014 Incidence Comparison of Select Cancers

A site comparison between NMCS D and projected cancers in California and Nation-wide shows very little variation. NMCS D does have a higher incidence of breast cancer in comparison to state and national figures as illustrated by the following chart to the right. NMCS D also had a significantly lower percentage of colorectal cancer.





## 2014 Primary Site Table

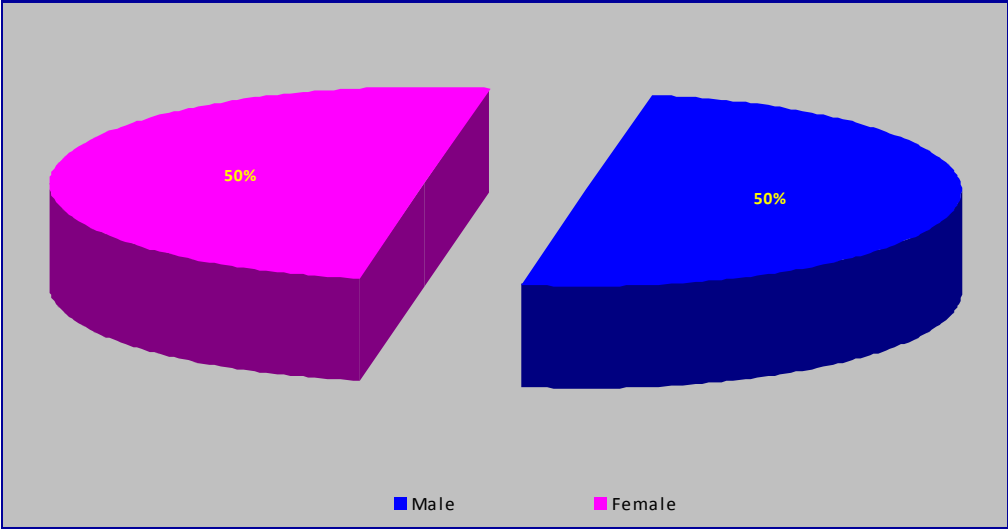
|                               | All | Male | Female | 0  | I   | II  | III | IV | UNK | N/A |
|-------------------------------|-----|------|--------|----|-----|-----|-----|----|-----|-----|
|                               | 656 | 328  | 328    | 51 | 231 | 114 | 99  | 86 | 4   | 71  |
| <b>HEAD &amp; NECK</b>        |     |      |        |    |     |     |     |    |     |     |
| Lip/Oral Cavity               | 2   | 2    | 0      | 0  | 0   | 0   | 0   | 2  | 0   | 0   |
| Tongue                        | 5   | 4    | 1      | 0  | 1   | 0   | 0   | 4  | 0   | 0   |
| Tonsil                        | 4   | 4    | 0      | 0  | 0   | 0   | 2   | 2  | 0   | 0   |
| Pharynx                       | 1   | 1    | 0      | 0  | 0   | 0   | 0   | 1  | 0   | 0   |
| Oropharynx                    | 5   | 4    | 1      | 0  | 0   | 0   | 0   | 4  | 1   | 0   |
| Nasopharynx                   | 2   | 2    | 0      | 0  | 0   | 0   | 1   | 1  | 0   | 0   |
| Hypopharynx                   | 1   | 1    | 0      | 0  | 0   | 0   | 0   | 1  | 0   | 0   |
| Larynx                        | 7   | 7    | 0      | 0  | 5   | 1   | 0   | 1  | 0   | 0   |
| Sinuses                       | 1   | 0    | 1      | 0  | 0   | 0   | 0   | 1  | 0   | 0   |
| Salivary Glands               | 2   | 1    | 1      | 0  | 1   | 0   | 1   | 0  | 0   | 0   |
| Other Head & Neck             | 1   | 0    | 1      | 0  | 1   | 0   | 0   | 0  | 0   | 0   |
| <b>DIGESTIVE SYSTEM</b>       |     |      |        |    |     |     |     |    |     |     |
| Esophagus                     | 5   | 5    | 0      | 0  | 0   | 0   | 4   | 1  | 0   | 0   |
| Stomach                       | 7   | 5    | 2      | 0  | 1   | 1   | 0   | 5  | 0   | 0   |
| Small Intestine               | 1   | 1    | 0      | 0  | 0   | 1   | 0   | 0  | 0   | 0   |
| Colon                         | 19  | 11   | 8      | 1  | 6   | 4   | 6   | 2  | 0   | 0   |
| Appendix                      | 1   | 0    | 1      | 0  | 0   | 0   | 1   | 0  | 0   | 0   |
| Rectum                        | 17  | 10   | 7      | 2  | 2   | 8   | 2   | 3  | 0   | 0   |
| Anus & Anal Canal             | 2   | 2    | 0      | 0  | 0   | 2   | 0   | 0  | 0   | 0   |
| Liver                         | 3   | 2    | 1      | 0  | 0   | 0   | 0   | 2  | 0   | 1   |
| Gallbladder                   | 1   | 0    | 1      | 0  | 0   | 1   | 0   | 0  | 0   | 0   |
| Ampulla of Vater              | 3   | 1    | 2      | 0  | 0   | 3   | 0   | 0  | 0   | 0   |
| Pancreas                      | 10  | 8    | 2      | 0  | 1   | 0   | 3   | 6  | 0   | 0   |
| Other Digestive               | 1   | 0    | 1      | 0  | 0   | 0   | 0   | 0  | 0   | 1   |
| <b>RESPIRATORY SYSTEM</b>     |     |      |        |    |     |     |     |    |     |     |
| Bronchus & Lung               | 79  | 43   | 36     | 0  | 32  | 9   | 20  | 18 | 0   | 0   |
| Pleura                        | 1   | 0    | 1      | 0  | 0   | 0   | 1   | 0  | 0   | 0   |
| Thymus                        | 1   | 0    | 1      | 0  | 0   | 0   | 0   | 0  | 0   | 1   |
| <b>MUSCULOSKELETAL SYSTEM</b> |     |      |        |    |     |     |     |    |     |     |
| Bone                          | 2   | 1    | 1      | 0  | 1   | 0   | 0   | 0  | 0   | 1   |
| Connective & Soft Tissue      | 10  | 7    | 3      | 0  | 7   | 1   | 1   | 1  | 0   | 0   |

2014 Primary Site Table

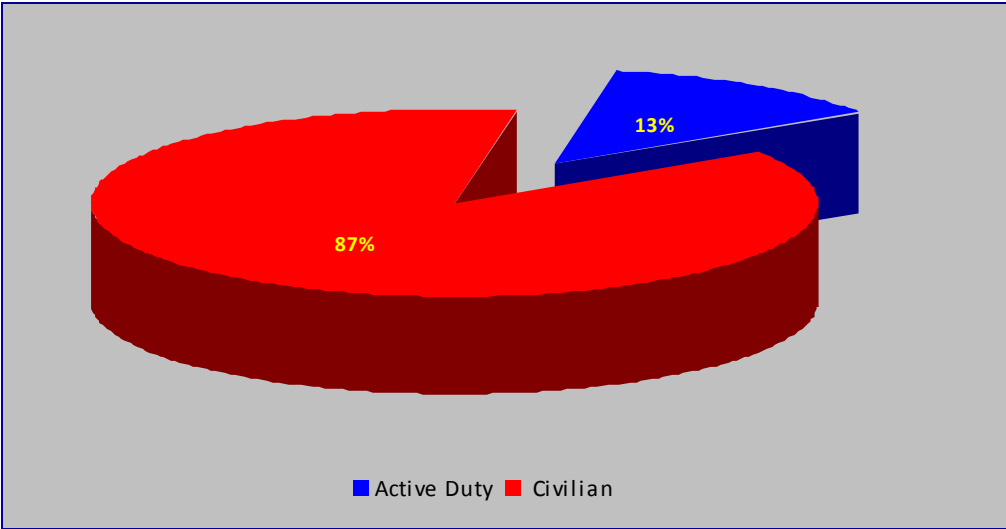
|                                       | All | Male | Female | 0  | I  | II | III | IV | UNK | N/A |
|---------------------------------------|-----|------|--------|----|----|----|-----|----|-----|-----|
| <b>HEMATOPOIETIC SYSTEM</b>           |     |      |        |    |    |    |     |    |     |     |
| Leukemia                              | 24  | 15   | 9      | 0  | 0  | 0  | 0   | 0  | 0   | 24  |
| Multiple Myeloma                      | 4   | 4    | 0      | 0  | 0  | 0  | 0   | 0  | 0   | 4   |
| Other Blood & Bone Marrow             | 7   | 3    | 4      | 0  | 0  | 0  | 0   | 0  | 0   | 7   |
| <b>MELANOMA</b>                       |     |      |        |    |    |    |     |    |     |     |
| Melanoma                              | 47  | 30   | 17     | 10 | 31 | 2  | 1   | 3  | 0   | 0   |
| <b>CARCINOMA OF THE SKIN</b>          |     |      |        |    |    |    |     |    |     |     |
| Other Skin Carcinoma                  | 3   | 2    | 1      | 0  | 1  | 0  | 0   | 0  | 0   | 2   |
| <b>BREAST</b>                         |     |      |        |    |    |    |     |    |     |     |
| Breast                                | 130 | 0    | 130    | 32 | 43 | 31 | 21  | 2  | 0   | 1   |
| <b>FEMALE GENITAL SYSTEM</b>          |     |      |        |    |    |    |     |    |     |     |
| Vulva                                 | 1   | 0    | 1      | 0  | 1  | 0  | 0   | 0  | 0   | 0   |
| Cervix Uteri                          | 3   | 0    | 3      | 0  | 2  | 0  | 1   | 0  | 0   | 0   |
| Corpus Uteri                          | 19  | 0    | 19     | 0  | 12 | 1  | 4   | 2  | 0   | 0   |
| Ovary                                 | 7   | 0    | 7      | 0  | 0  | 0  | 3   | 3  | 1   | 0   |
| <b>MALE GENITAL SYSTEM</b>            |     |      |        |    |    |    |     |    |     |     |
| Prostate                              | 65  | 65   | 0      | 0  | 12 | 38 | 10  | 5  | 0   | 0   |
| Testis                                | 20  | 20   | 0      | 0  | 14 | 1  | 3   | 0  | 0   | 2   |
| <b>URINARY SYSTEM</b>                 |     |      |        |    |    |    |     |    |     |     |
| Kidney                                | 31  | 21   | 10     | 0  | 20 | 1  | 5   | 1  | 0   | 4   |
| Renal Pelvis & Ureter                 | 2   | 1    | 1      | 2  | 0  | 0  | 0   | 0  | 0   | 0   |
| Bladder                               | 10  | 7    | 3      | 4  | 4  | 0  | 1   | 1  | 0   | 0   |
| <b>CENTRAL NERVOUS SYSTEM</b>         |     |      |        |    |    |    |     |    |     |     |
| Brain                                 | 5   | 5    | 0      | 0  | 0  | 0  | 0   | 0  | 0   | 5   |
| Other CNS                             | 2   | 1    | 1      | 0  | 0  | 0  | 0   | 0  | 0   | 2   |
| <b>THYROID &amp; ENDOCRINE GLANDS</b> |     |      |        |    |    |    |     |    |     |     |
| Thyroid                               | 31  | 7    | 24     | 0  | 23 | 2  | 5   | 1  | 0   | 0   |
| <b>LYMPHATIC SYSTEM</b>               |     |      |        |    |    |    |     |    |     |     |
| Hodgkin Disease                       | 10  | 6    | 4      | 0  | 1  | 4  | 2   | 3  | 0   | 0   |
| Non-Hodgkin Lymphoma                  | 26  | 14   | 12     | 0  | 9  | 3  | 1   | 10 | 2   | 1   |
| <b>UNKNOWN PRIMARY</b>                |     |      |        |    |    |    |     |    |     |     |
| Unknown Primary                       | 6   | 2    | 4      | 0  | 0  | 0  | 0   | 0  | 0   | 6   |
| <b>BENIGN/BORDERLINE</b>              |     |      |        |    |    |    |     |    |     |     |
| Benign/Borderline                     | 9   | 3    | 6      | 0  | 0  | 0  | 0   | 0  | 0   | 9   |

2014 Cancer Incidence Male to Female Ratio

In 2014 there were an equal number of men and women diagnosed and/or for cancer at NMCSO.



Active Duty Service Member Breakdown

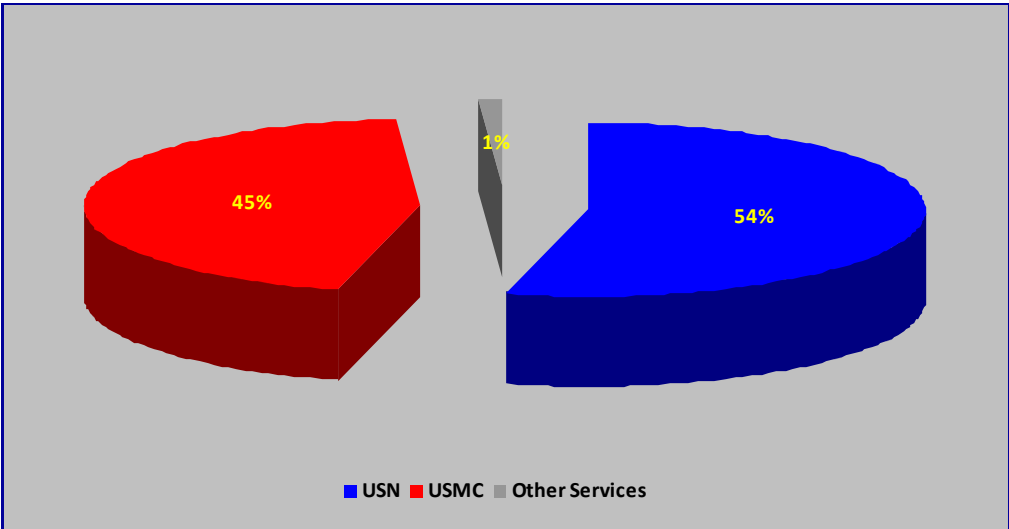


Active duty service members accounted for 13% of our cancer patients in 2014.

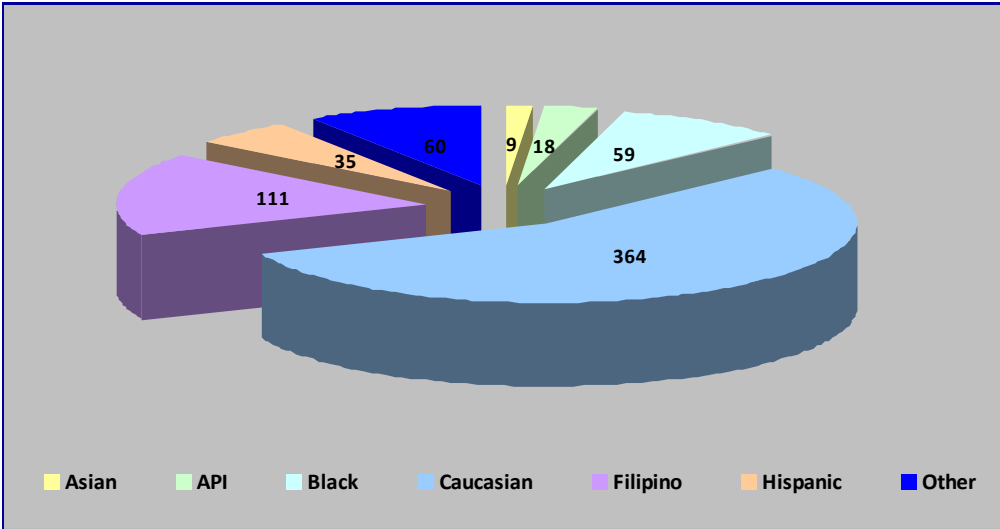
2014 Active Duty Patients by Branch of Service

The chart at right illustrates the breakdown of our active duty patients by branch of service in 2014.

As to be expected, 54% of the active duty patient population is active duty Navy. Active duty marines made up 45% The other uniformed services accounted for just 1% of the active duty patient load.



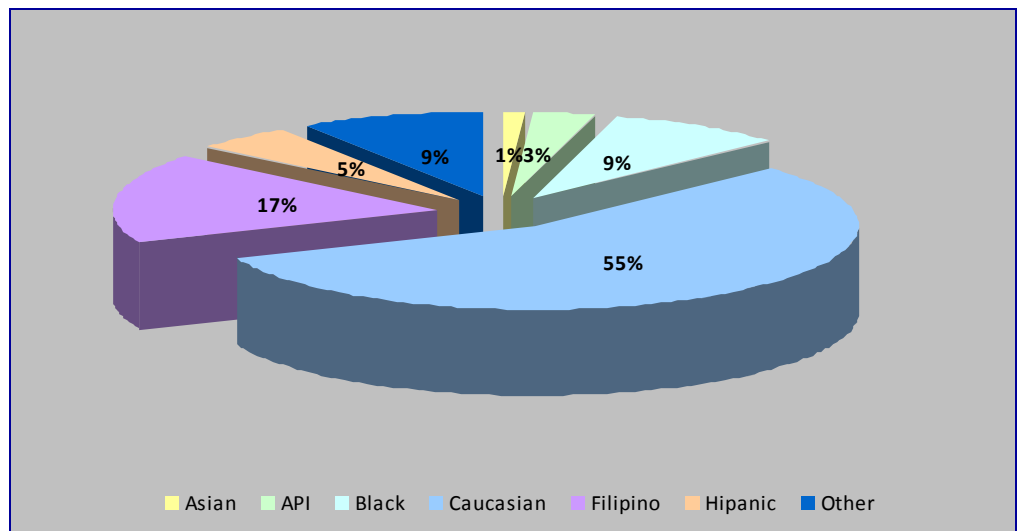
2014 Cancer Patient Breakdown by Race



The breakdown of cancer patients is illustrated in this pie chart. Caucasians make up the major of our cancers, followed by Filipinos. This breakdown is the historic trend at NMCS D.

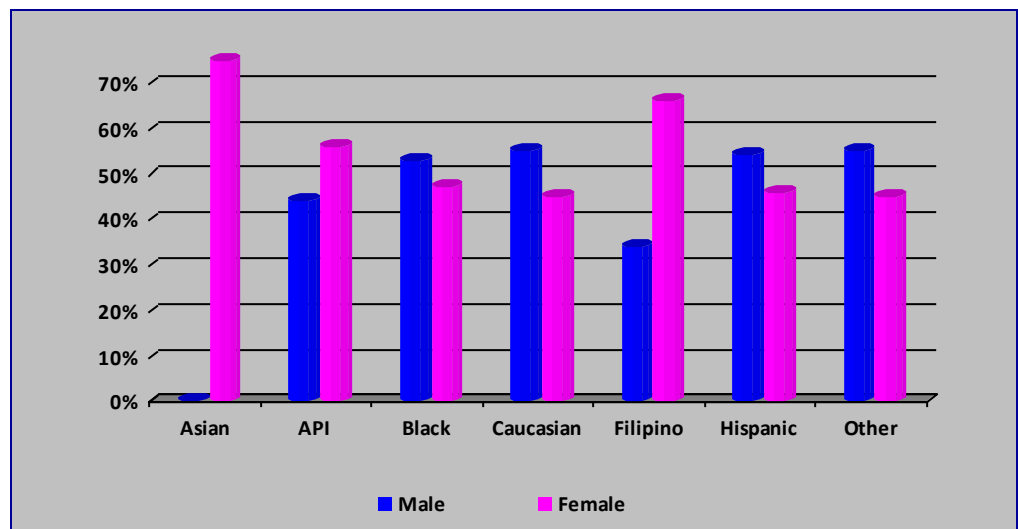
Totals are shown in the chart at left, while percentages are shown below.

2014 Race Distribution by Percentage



2014 Cancer Patient Breakdown by Race and Gender

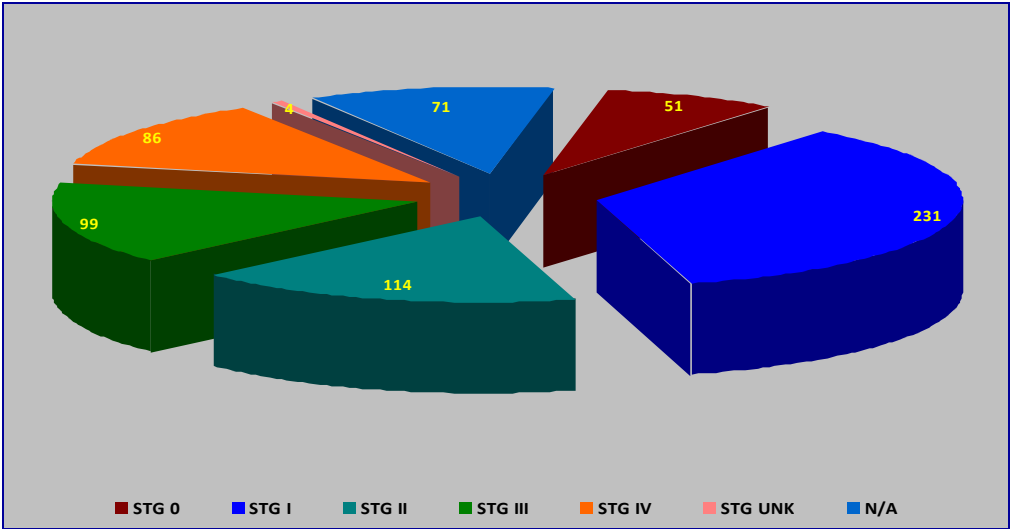
At right is a breakdown of 2014 cancer patients by race and gender. Note that the percentages of Asian and Filipino women are higher than males, whereas males cancer patients rates are higher for all other races .



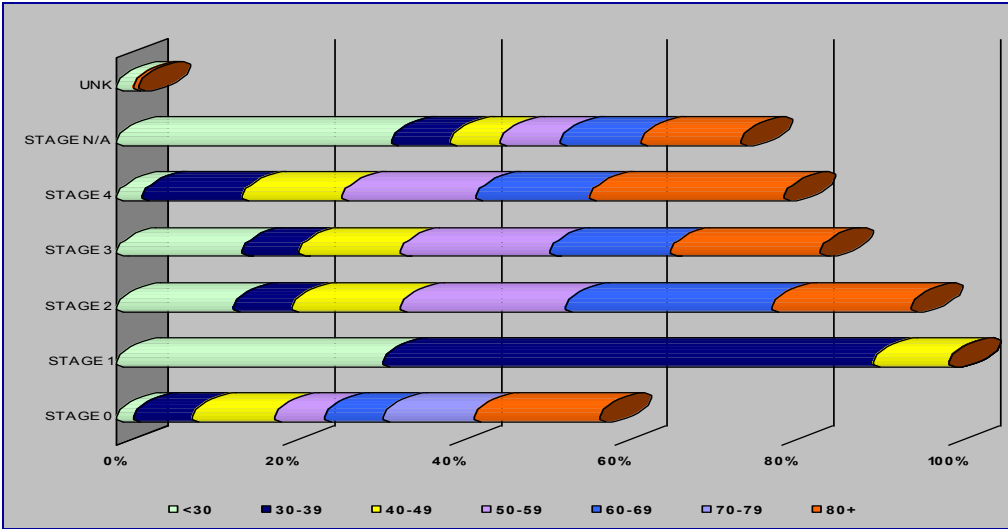
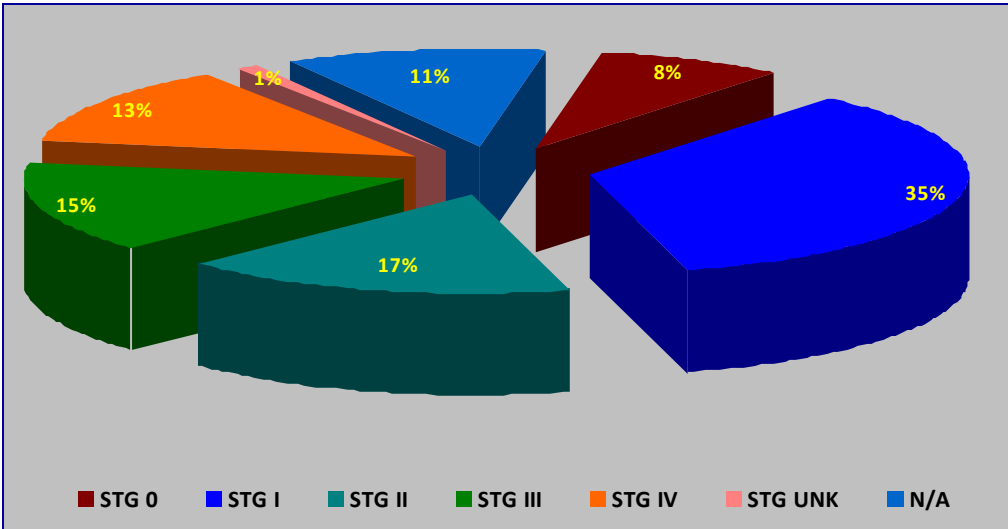
2014 Stage of Disease at Diagnosis

Stage of disease at diagnosis is an important prognostic indicator. The majority of cancer patients were diagnosed with Stage I disease in 2014 and about 60% of all cancer patients were diagnosed with early stage disease. The pie chart at left and the one below illustrate stage of disease by number and percentage respectively.

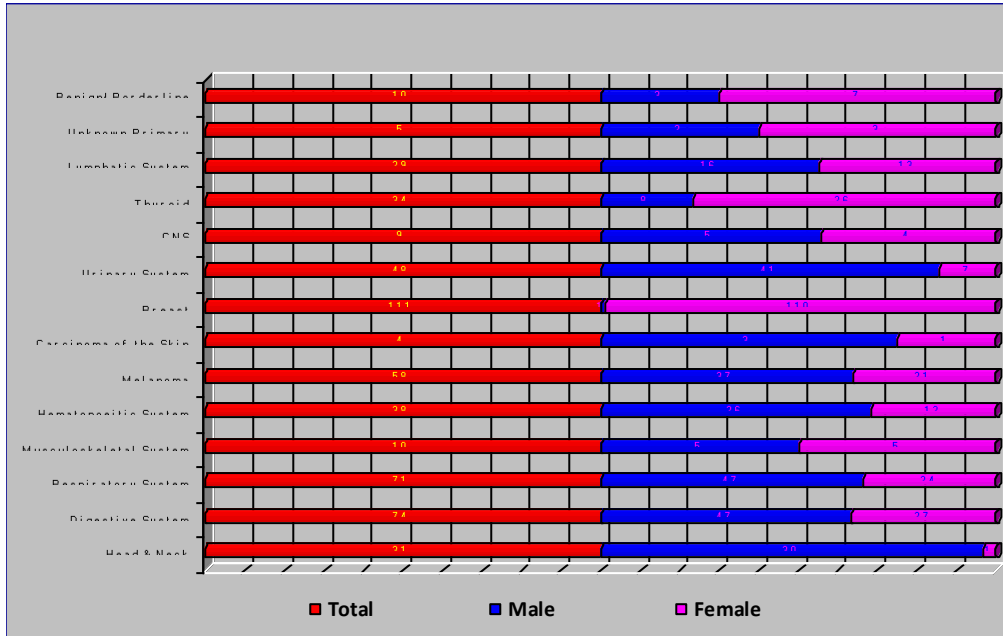
The bottom chart illustrates stage of disease at diagnosis by age group.



2014 Stage of Disease by Percentage



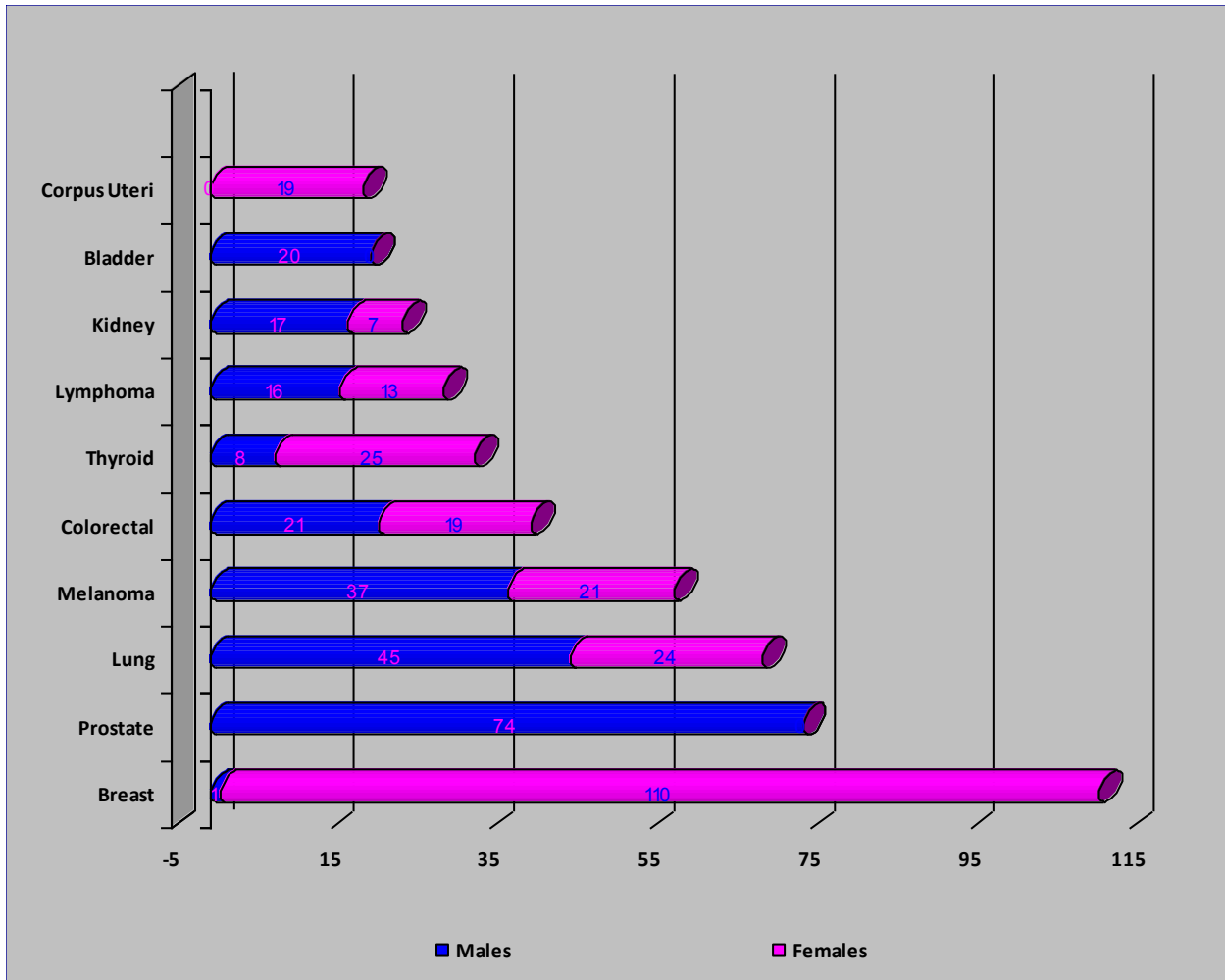
2014 Primary Site Group Distribution by Gender



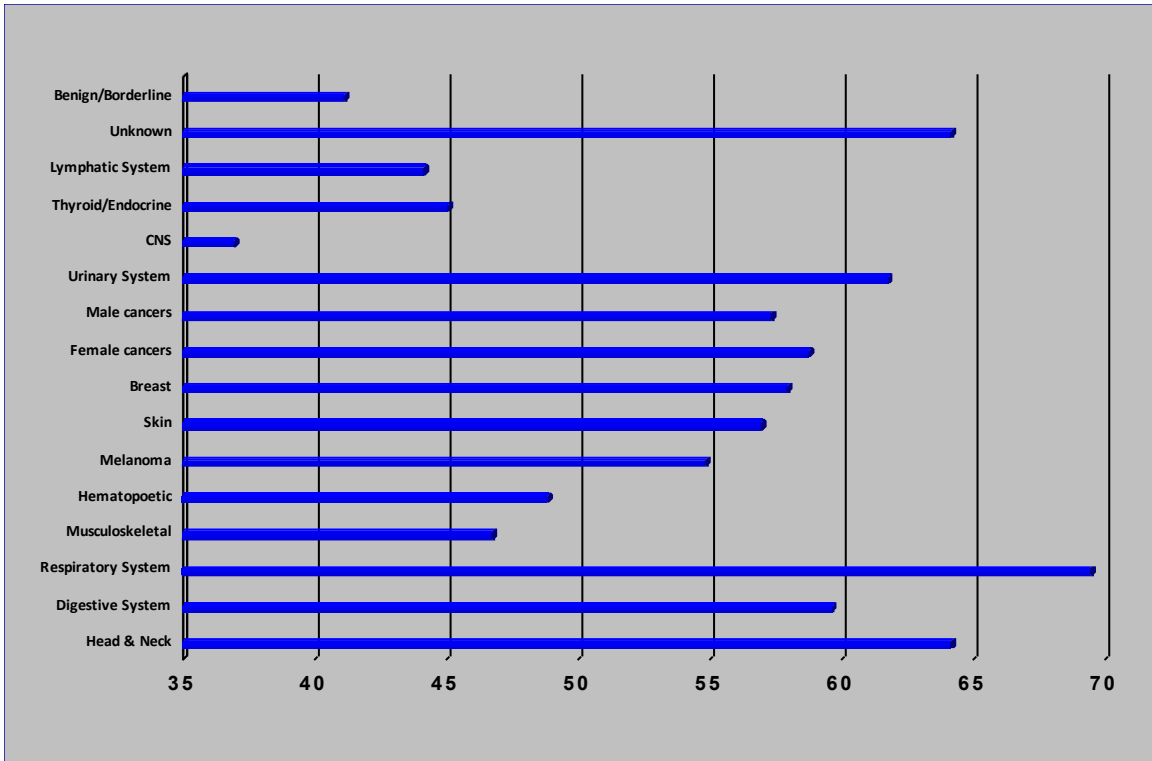
The chart at left breaks down site groups by gender. It should be noted that gender specific cancers i.e. Genital cancers are excluded.

The chart below breaks down the top sites by gender

2014 Site Total Comparison by Gender



Median Age at Diagnosis by Site



Median age at diagnosis is illustrated here. Respiratory system cancers had the highest median age at diagnosis of 69.5, while CNS tumors median age at diagnosis of 37. The median age of all cancer patients in 2014 was 57.2.

2014 Age Distribution at Diagnosis by Site

|                          | TOTALS |       |       |       |       |       |     | PERCENTAGES |       |       |       |       |       |     |
|--------------------------|--------|-------|-------|-------|-------|-------|-----|-------------|-------|-------|-------|-------|-------|-----|
|                          | <30    | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80+ | <30         | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80+ |
| HEAD & NECK              | 1      | 1     | 2     | 5     | 7     | 13    | 2   | 3%          | 3%    | 6%    | 16%   | 23%   | 42%   | 6%  |
| DIGESTIVE SYSTEM         | 2      | 6     | 7     | 21    | 20    | 8     | 10  | 3%          | 8%    | 9%    | 28%   | 27%   | 11%   | 14% |
| RESPIRATORY SYSTEM       | 0      | 2     | 1     | 4     | 27    | 27    | 10  | 0%          | 3%    | 1%    | 6%    | 38%   | 38%   | 14% |
| MUSCULOSKELETAL SYSTEM   | 3      | 1     | 2     | 2     | 1     | 0     | 1   | 30%         | 10%   | 20%   | 20%   | 10%   | 0%    | 10% |
| HEMATOPOIETIC SYSTEM     | 12     | 1     | 2     | 7     | 5     | 10    | 1   | 32%         | 3%    | 5%    | 18%   | 13%   | 26%   | 3%  |
| MELANOMA                 | 8      | 8     | 7     | 6     | 15    | 8     | 6   | 14%         | 14%   | 12%   | 10%   | 26%   | 14%   | 10% |
| SKIN                     | 0      | 0     | 2     | 0     | 1     | 0     | 1   | 0%          | 0%    | 50%   | 0%    | 25%   | 0%    | 25% |
| BREAST                   | 0      | 8     | 23    | 29    | 33    | 11    | 7   | 0%          | 7%    | 21%   | 26%   | 30%   | 10%   | 6%  |
| FEMALE CANCER            | 1      | 2     | 1     | 11    | 10    | 7     | 0   | 3%          | 6%    | 3%    | 34%   | 31%   | 22%   | 0%  |
| MALE CANCER              | 12     | 5     | 7     | 12    | 38    | 14    | 5   | 13%         | 5%    | 8%    | 13%   | 41%   | 15%   | 5%  |
| URINARY SYSTEM           | 2      | 3     | 6     | 4     | 14    | 15    | 4   | 4%          | 6%    | 13%   | 8%    | 29%   | 31%   | 8%  |
| CENTRAL NERVOUS SYSTEM   | 5      | 1     | 0     | 1     | 1     | 0     | 1   | 56%         | 11%   | 0%    | 11%   | 11%   | 0%    | 11% |
| THYROID/ENDOCRINE GLANDS | 5      | 8     | 7     | 7     | 7     | 0     | 0   | 15%         | 24%   | 21%   | 21%   | 21%   | 0%    | 0%  |
| LYMPHATIC SYSTEM         | 9      | 6     | 2     | 4     | 3     | 3     | 2   | 31%         | 21%   | 7%    | 14%   | 10%   | 10%   | 7%  |
| UNKNOWN PRIMARY          | 0      | 0     | 2     | 0     | 1     | 0     | 2   | 0%          | 0%    | 40%   | 0%    | 20%   | 0%    | 40% |
| BENIGN/BORDERLINE        | 3      | 2     | 1     | 3     | 1     | 0     | 0   | 30%         | 20%   | 10%   | 30%   | 10%   | 0%    | 0%  |
| ALL SITES                | 63     | 54    | 72    | 116   | 184   | 116   | 52  | 10%         | 8%    | 11%   | 18%   | 28%   | 18%   | 8%  |