

Kingdom of Saudi Arabia
Ministry of Health
Saudi Cancer Registry

**Cancer Incidence Report
Saudi Arabia
2008**

Report prepared by:
Haya S. Al-Eid, BDS, DFE, CTR
Marielen S. Manalo, Secretary

Reviewed by:
Shouki Bazarbashi, MD
Ali Al-Zahrani, MD, PhD

Foreword

The 2008 cancer incidence report represents the twelfth publication for the cancer registry since its establishment in 1992. Our Mission is to provide comprehensive cancer data about incidence of cancer in Saudi Arabia. Cancer data undergo an extensive quality control performed continuously which includes IARC edit checks and through visual review of abstracted cases.

It is clear from this report that the number and the incidence of cancer are a little bit lower than in 2007. Despite of our continuous efforts to ascertain comprehensive case finding, we faced many obstacles manifested in resignation, unavoidable maternity issues, and for sadness death of two of our dedicated registrars. Nevertheless, we believe there is considerable room for improvement manifested in the newly recruited tumor registrars that have joined us in 2012.

Also, one of our main obstacles is medical record unavailability in many hospitals. This leads to under-reporting of clinically diagnosed cases in our population. We continue to struggle and face many challenges, of most importance is the finding of well qualified tumor registrars.

On November, 2011, we conducted a high quality education and training workshop for our registrar, registrars from the research unit at KFSH&RC and the Gulf Cooperation Council States.

In this report, we have maintained the same standard format as in the previous reports especially the section of the collective data variables since the start of the Saudi Cancer Registry in January 1994 beside the Arabic summary of cancer statistics.

Cancer data from 1994-2008 is available in our website www.scr.org.sa. Moreover, the cancer registry provides aggregate data upon request through electronic data request and we encourage everyone to make use of it.

Shouki Bazarbashi, MD
Chairman

Acknowledgment

The Saudi Cancer Registry is a program funded by The Ministry of Health and its main office located at King Faisal Specialist Hospital and Research Center. This publication is a part of our efforts to make cancer data available to oncologists, researchers, strategic health planners, community care providers, and administrators.

The production of this report reflects the efforts of our valuable cancer registrars, main office staff and members of the board of directors. Special warm thanks to our registrar who maintain patients' confidentiality and travel to every part of the kingdom to collect the cancer cases from different and numerous health facilities.

Special thanks to the support provided by the Ministry of Health represented by his Excellency the Minister of Health Dr. Abdullah Al Rabeeah and the deputy Minister of Health Dr. Mansour Al Hawasi. In addition we continue to be in debt for the continuous support of King Faisal Specialist Hospital and Research Center leadership represented by His Excellency Dr. Qasem Al Qasabi, the chief operating officers.

Introduction

This is the twelfth incidence report published by the Saudi Cancer Registry. Previous publications include the 1994 Summary Report, 1994-1996 Incidence Report, 1997-1998 Incidence Report, 1999-2000 Incidence Report, 2001, 2002, 2003, 2004, 2005, 2006 & 2007 Incidence Reports.

The structure of this report can be outlined as follows:

Part I Materials and Methods

This part of the report contains information about the background of the Saudi Cancer Registry and methods used in collecting and analyzing the data. We present the basics of coding and classification of tumor topography, morphology and extent of disease at the time of diagnosis. Also we describe the software programs we have used to analyze the data.

Part II Overview of Cancer Incidence

Part II contains figures and tables that show overall cancer incidence in Saudi Arabia for the year 2008. We present these figures and tables mainly by sex and in certain areas we have it analyzed by different age groups. There are bar charts representing the age distribution of cancer incidence for the year 2008 among Saudis by sex and age groups. We present incidence and morphology tables for the most common types of cancers among adults and children. In addition, tables list the total number of cases, the Age-Standardized Incidence Rate (ASR) per 100,000 population, Crude Incidence Rate (CIR) and Cumulative rates by primary site and sex. Separate bar charts depict the most common types of cancer, by sex.

Part III Incidence of Selected-Sites

In this part the incidence of the most common cancers among Saudi males and females are outlined. A standardized layout presents data for all patients and for both sexes where applicable. For each selected site the number and the percentage of all newly diagnosed cases for the year 2008, the ASR, morphological differentiation and staging for each sex and the specific cancer rank for both sexes is presented. In addition, ASR for the specified cancer among Saudis is compared with ASR among other populations from selected countries.

Part IV Cancer Incidence among Non-Saudis

This part presents the incidence of cancer cases among Non-Saudis including the most common types of cancer. The analysis of the Non-Saudis is performed separately due to the nature of the expatriate population in Saudi Arabia in which a large part of the population, particularly among males, falls in the labor work force age group (25-44) and some of patients come for treatment purposes only.

Part V Incidence Tables

Part V contains the following detailed tables for all newly diagnosed cancer types among Saudis and Non-Saudis for 2008:

- Distribution of cancer cases among Saudis by age group and sex
- Distribution of cancer cases among Non-Saudis by age group and sex
- Cancer Incidence (per 100,000 population) among Saudis by age group and sex
- Cancer Incidence (per 100,000 population) among Non-Saudis by age group and sex
- Age-standardized incidence rate and relative frequencies among Saudis by cancer site, sex
- Distribution of cancer and cancer incidence (per 100,000 population) among Saudis by year and sex.

Part VI Appendices

Appendix A: Regional listing of all health care facilities from which cancer cases have been reported. The objective is to receive feedback from facilities that have not been included in order to improve our case-finding and reporting processes.

Appendix B: Names of the members of the Board of Directors.

Appendix C: Cancer Registration Abstract Form.

Appendix D: Summary of Cancer Statistics in Saudi Arabia for the year 2008.

Table of Contents

Foreword.....	3
Acknowledgement.....	3
Introduction.....	5
PART I.....	9
Background on Saudi Arabia.....	10
Saudi Cancer Registry.....	10
Definitions of Statistical Terms.....	13
PART II.....	15
Cancer in Saudi Arabia 2008.....	16
Adult Cancers in Saudi Arabia, 2008 (above 14 years).....	21
Childhood Cancers in Saudi Arabia 2008 (14 years and below).....	24
International Comparison of Age-Standardized Incidence Rates.....	27
PART III.....	28
Cancer Incidence for Most Common Sites, 2008.....	30
Female Breast (C 50).....	31
Colo-rectal (C18-C20).....	33
Non-Hodgkin Lymphoma (C82-C85; C96).....	35
Thyroid (C73).....	37
Leukemia (C91-C95).....	39
Liver (C22).....	41
Lung (C33-C34).....	43
Hodgkin disease (C81).....	45
Skin (C44).....	47
Prostate (C61).....	49
Corpus Uteri (C55).....	51
Bladder (C67).....	53
Stomach (C16).....	55
Ovary (C56).....	57
Sources.....	59
PART IV.....	60
Cancer Among Non-Saudi Population 2008.....	62

PART V 64

Table 5.1.1	Age Distribution of Cancer Cases among Saudi Males, 2008.....	65
Table 5.1.2	Age Distribution of Cancer Cases among Saudi Females, 2008.....	66
Table 5.1.3	Cancer Incidence Cases among Saudi Males by Age Group (per 100,000), 2008.....	67
Table 5.1.4	Cancer Incidence Cases among Saudi Females by Age Group (per 100,000), 2008.....	68
Table 5.4.1	Age Distribution of Cancer among non-Saudi Males, 2008.....	69
Table 5.4.2	Age Distribution of Cancer among non-Saudi Females, 2008.....	70
Table 5.4.3	Incidence Rates for Cancer Cases among non-Saudi Males by Age Group (per 100,000), 2008.....	71
Table 5.4.4	Incidence Rates for Cancer Cases among non-Saudi Females by Age Group (per 100,000), 2008.....	72
Table 5.5.1	Number of Cases by Primary Site and Years among Saudi Males, 1994-2008.....	73
Table 5.5.2	Number of Cases by Primary Site and Years among Saudi Females, 1994-2008.....	74
Table 5.5.3	Age Adjusted Incidence Rate by Primary Site and Years among Saudi Males, 1994-2008.....	75
Table 5.5.4	Age Adjusted Incidence Rate by Primary Site and Years among Saudi Females, 1994-2008.....	76

PART VI 78

APPENDIX A:	Reporting Health Care Facilities.....	79-82
APPENDIX B:	Members of SCR Board of Directors.....	83-84
APPENDIX C:	Cancer Registration Abstract Form.....	85-86
APPENDIX D:	Summary of Cancer Statistics in Saudi Arabia for the Year 2008.....	87-88

PART I
MATERIALS AND METHODS

Background on Saudi Arabia

Saudi Arabia is a vast country extending over four-fifths of the Arabian Peninsula. It stretches from the Arabian Gulf in the east to the Red Sea in the west. It is approximately 2,149,700* square kilometers in area and is divided into 13 administrative regions (Figure 1.1).



Figure 1.1 Administrative Regions of Saudi Arabia

The estimated Saudi national population for year 2008 was 18,045,027**. Of these 9,100,119 (50.4%) were males and 8,944,908 (49.6%) were females. The Non-Saudi population in 2008 was 6,649,657**; of these 4,591,885 (69.1%) were males and 2,057,772 (30.9%) females.

Figures 1.2 and 1.3 show the Saudi and Non-Saudi population pyramids by sex and age group respectively.

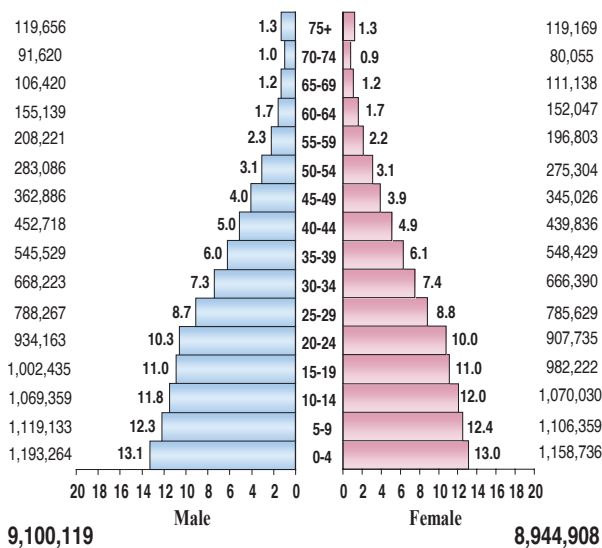


Figure 1.2 Population Pyramid of Saudis (%) by Sex and Age Group, 2008

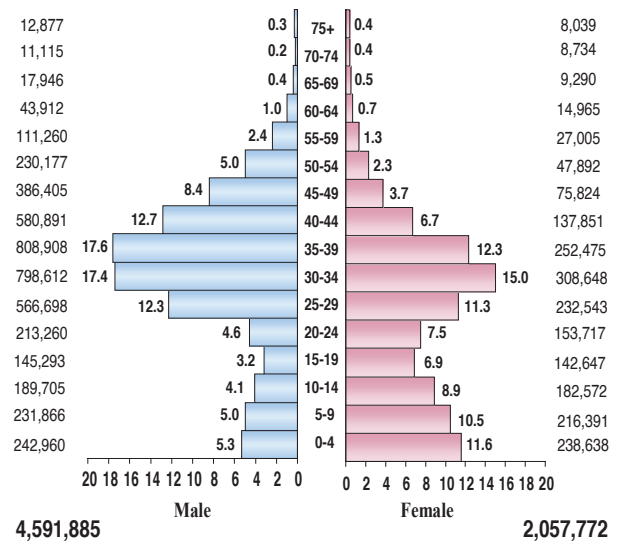


Figure 1.3 Population Pyramid of non-Saudis (%) by Sex and Age Group, 2008

Saudi Cancer Registry

The Saudi Cancer Registry (SCR) of Saudi Arabia is a population-based registry established in 1992 under the jurisdiction of the Ministry of Health (MOH) by the order of His Excellency the Minister of Health. The SCR commenced reporting cancer cases from 01 January 1994.

Objectives:

The primary goal of the SCR is to define the population-based incidence of cancer in Saudi Arabia. Additional objectives include programs for early detection and cancer screening, as well as cancer research projects.

Organizational Structure:

A Board of Directors was appointed to include representatives from the MOH, King Faisal Specialist Hospital and Research Center (KFSH&RC), and the Medical Services Departments of the Ministry of Defense and Aviation, Ministry of Interior, the National Guard, King Saud University, King Faisal University, King Abdul-Aziz University and King Khalid University. The Board is charged with the responsibility of overseeing the SCR's establishment, defining demographic and cancer-related data to be collected, approving research requests, and reporting findings, as well as disseminating information collected while ensuring the confidentiality of all data reported to the SCR.

* Source: Demographic and Health Indicators for Countries of the East Mediterranean, WHO, Regional Office for the EM, 1999

** Source: 2008 SCR Estimation with 3.2% Growth Rate among Saudis and 2.5% among non-Saudis based on 2010 Census, Central Department for Statistics (CDS) data, Ministry of Planning (web site <http://www.planning.gov.sa>).

The SCR Main Office, including administrative and technical staff, is located in the premises of the KFSH&RC in Riyadh. Additionally, five regional branches and four hospital-based offices were set up to ensure comprehensive data collection from all over the Kingdom (Figure 1.4).

Regional Offices:

- 1 Central Region: King Fahad Medical City in Riyadh, covering Riyadh, Qassim, and Hail Health Regions.
- 2 Eastern Region: King Fahad Hospital of the University, Al Khobar, covering Dammam, Al Ahsa, and Hafr Al-Batin Health Regions.
- 3 Western Region: King Abdulaziz Hospital and Cancer Center, Jeddah, covering Jeddah, Makkah, Taif and Qunfudah Health Regions.
- 4 Southern Region: Asir Central Hospital, Abha, covering Asir, Baha, Najran, Jazan and Bisha Health Regions.
- 5 Madinah/Northern Region: Maternity and Children Hospital, Madinah, covering Madinah, Tabuk, Jouf and Northern Health Regions.

Offices at the Medical Service Division or Oncology Department of the following establishments:

- 6 King Faisal Specialist Hospital & Research Centre, Riyadh
- 7 Ministry of Defense and Aviation, Armed Forces Hospitals, Riyadh
- 8 National Guard Hospitals, King Abdulaziz Medical City, Princess Norah Oncology Center, Jeddah
- 9 King Abdul Aziz University Hospital, Jeddah
- 10 Ministry of Interior, Security Forces Hospital, Riyadh
- 11 King Khalid University Hospital, Riyadh

Each of the SCR offices operates under the supervision of a member of the Board of Directors who is responsible for the daily management of that office. Staffing consists of tumor registrars and secretarial staff.

The SCR Main Office indirectly supervises the regional offices and is responsible for ensuring the accuracy and quality of data collected in all of the regions. Quality control processes include verification of site, morphology, and staging information as well as case linkage (tumor and patient), and consolidation of data. The Main Office also prepares periodic reports for dissemination of information to the medical community, government establishments, international organizations and the media.



Figure 1.4 Organizational Chart of the Saudi Cancer Registry of Saudi Arabia

Format

The format of the current report is similar to the previous reports.

Data management

A ministerial decree has categorized cancer as a mandatory notifiable disease. This ensures the opportunity for comprehensive data collection. The SCR strives for full access to cancer data from all Ministry of Health, governmental and private hospitals, as well as clinics and laboratories throughout the Kingdom. Cancer data are abstracted from patients' medical records, based on clinical and/or histopathological diagnosis, by SCR-trained cancer registrars.

The data abstract (see appendix D) includes personal identification (name, ID Number, sex, age), demographic information (address, telephone number, nationality), and tumor details (diagnosis date, primary site, histology, behavior, grade, stage, basis of diagnosis). The primary site (topography) and histology (morphology) of the malignancies are identified and coded according to the *International Classification of Diseases for Oncology 3rd Edition (ICD-O-3)*, published by the World Health Organization (WHO), 2000.

Effective from year 2001, changes were made in coding of cancer types and behaviors as well as staging according to International guidelines. The new SEER Summary Stage 2000 guidelines should result in increased accuracy and consistency in the coding of stage. There are some differences in the timing rules for determining stage and some sites are coded differently using the new guidelines. However, the new criteria and guidelines should improve the usefulness of staging as a predictor of prognosis and survival as the changes reflect a new understanding of the natural history of cancer. The new guidelines, SEER Summary Stage Manual 2000, is available on the web at: <http://seer.cancer.gov/tools/ssm/>. Cases diagnosed on or after 01 January 2008 are classified according to the updated ICD-O-3. Improvements in the understanding of cancer pathology over the last decade are reflected in the changes to ICD-O-3. While there have not been any changes in the primary site codes, there are significant changes regarding histology (cell types). Leukemias and lymphomas, particularly are affected. Some cases that were previously considered benign are now

counted as malignant. Also small number of cancers that were previously coded as borderline tumors are now considered benign. Counts of ovarian cancers, lymphomas and leukemias as well as some hematopoietic diseases will change due to changes in either reportability or definition. However, as with the new staging guidelines, the ICD-O changes reflect advances in the understanding of the pathology and behavior of cancers.

It should be noted that ICD-O-3 codes are converted to ICD-10 for analysis purposes. Since the WHO has not yet converted the ICD-10 hematopoietic disease behavior changes, our software, CanReg 4.33, cannot include these cases for analysis and they have been excluded. Every effort is made to accurately code patient and tumor information, to ensure that all data can be reviewed, linked, and consolidated, as appropriate, so that each malignancy is counted only once for statistical analysis.

The computer software programs used for data entry and incidence tables output are *CanReg 4.33*, developed by the International Agency for Research on Cancer, (IARC) Lyon, France.

The second part of the report includes the overall cancer incidence in Saudi Arabia and the relevant epidemiological and clinicopathological details for the 14 most common cancers among Saudi nationals for the year 2008. For each cancer site, the number and percentage of all newly diagnosed cases for the year 2008, age-standardized incidence rate (ASR) per 100,000 population for each sex, and specific cancer rank in comparison to all cancers for both sexes are presented.

Useful international statistics for specified cancer include the ranking of cancer worldwide. The references for this information is summarized on page 64.

The relevant data incorporate details for all patients presented over the year 2008. For each cancer there are five figures:

1. An Arithmetic line graph represents the age-specific incidence rate (AIR) for all age groups at five-year intervals. The graph is plotted by sex, where applicable.
2. A Table lists the percentages of the most common histology sub-types for each specific cancer.
3. A Pie chart shows the distribution of the clinical stages of each cancer such as localized, regional, distant metastasis and unknown.
4. A Bar chart shows regional distribution of ASR for particular cancer across the administrative regions by males and females.
5. A Bar chart shows comparison of age-standardized incidence rate (ASR) for each cancer type in Saudi Arabia with ASR in selected countries.

In reviewing the data, its collection and analysis, two qualifying statements can be made:

- a. The number of patients presenting with malignant disease from Riyadh region exceeds the expected number per population. The reason for this is that Riyadh has many referral centers providing patients from outside the region with cancer-related care. Some of these patients don't provide their permanent address, but instead, provide a temporary Riyadh address. This situation is partially resolved through tumor and patient linkage of cases from all regions based on identifiers such as national ID.
- b. As previously noted, the software used in analyzing this report, CanReg 4.33, does not include in situ cases in the incidence tables. These cases were added to the total cancer cases in the overview.

Notification

The data included in this report were abstracted up to June 2010. 2008 incident cases which are identified after this date (late reporting) will be noted in subsequent incidence reports. It is anticipated that the number of late-reported cases will decrease as case ascertainment processes are improved.

Definitions of Statistical Terms

Age-Specific Incidence Rate (AIR)

The number of cancer cases occurring during a specific period in a population of a specific age and sex group, divided by the number of midyear population of that age and sex group.

Age-Standardized Rate (ASR)

The Age-standardized rate is a summary measure of a rate that a population would have if it had a standard age structure. Standardization is necessary when comparing several populations that differ with respect to age structure. The most frequently used standard population is the World Standard Population (see below). The calculated incidence is known as the World Standardized Incidence Rate. The rate is expressed per 100,000 populations.

Age Class	Population
0-4	12,000
5-9	10,000
10-14	9,000
15-19	9,000
20-24	8,000
25-29	8,000
30-34	6,000
35-39	6,000
40-44	6,000
45-49	6,000
50-54	5,000
55-59	4,000
60-64	4,000
65-69	3,000
70-74	2,000
75+	2,000
Total	100,000

* Doll R. Payne P. Waterhouse J. Cancer incidence in Five Continents Vol. I. International Union Against Cancer. 1966

Crude Incidence Rate

The crude incidence rate for a cancer site is the total number of cases registered as a proportion of the total population. It denotes the approximate number of cases occurring in each 100,000 individuals. All rates are thus, expressed as per 100,000 population.

Cancer rates vary greatly with age and the crude rate is strongly influenced by the demographic structure of the population. Hence, if the population structure changes over time the crude rate over that period may be artificially altered. It is not appropriate to compare crude rates across geographical areas of cancer registries with different population age structures. Therefore, in order to assess time trends in registration data or compare incidence across geographical areas or between registries it is necessary to first standardize the rates with respect to age.

Cumulative Incidence rate

Cumulative incidence is the probability or risk of individuals developing the disease during a specified period. For cancer, it is expressed as the number of new born children (out of 100, or 1000) who would be expected to develop a particular cancer before the age of 65 (or 70, or 75) if they had the rates of cancers currently observed. Like the age standardized rate, it permits comparison between populations of different age structures. In this report the age ranges 0-64 and 0-74 years are used. The cumulative rate is the summation of the cancer age-specific rates; which are computed for five-year age intervals. The cumulative rate is five times the sum of the age-specific rates calculated over the five-year age groups.

ICD-10

The World Health Organization's International Classification of Diseases, tenth edition.

ICD-O-3

The World Health Organization's International Classification of Diseases for Oncology, 3rd Edition has been the standard coding system for neoplasms for over 25 years. The coding system includes a four character code for primary site, a four-digit numeric code for cell type, one-digit code for behavior and a one-digit code for tumor aggressiveness (grade).

Incidence Rate

An incidence rate is defined as the rate at which a new event occurs in a population. It is calculated as the number of new cases of disease arising in a population over a defined time period, divided by the population at risk of developing that disease.

Mean

The simple mathematical average of two or more numbers.

Median

The midpoint of the range numbers that are arranged in order of value.

Metastasis

Metastasis is the distant spread of cancer from its original site to other organs of the body, including lymph nodes, skeletal and or visceral organs.

Range

Is the difference between the maximum and minimum values in a set of observations.

Rank

This measure reflects the importance of a specific cancer site relative to other sites, in terms of the number of registrations. Ranking illustrates the most and least frequent cancer sites in a population according to their frequency.

Ratio

The relation between two quantities. The first quantity as numerator and the second as denominator

Relative Frequency

This statistic is defined as the number of specific cancer cases registered relative to the total number of all cancer. It is expressed as a percentage.

Summary Stage

Staging is the grouping of cancer cases into broad categories based on the extent of disease.

PART II
OVERVIEW OF CANCER INCIDENCE
2008

Reported Cancer Incidence Cases in Saudi Arabia, 2008

Between January 01 and December 31, 2008, the total number of cancer incident cases reported to the SCR was 11,946. Overall cancer was slightly more among women than men. Cancers affected 5,908 (49.5%) males and 6,038 (50.5%) females, with a male to female ratio of 98:100. 9,054 cases were reported among Saudis, 2,701 among Non-Saudis.

The total number of cases excluded from analysis include 191 cases of unknown nationalities. Other exclusions were 249 in situ cases, the current software program CanReg-4 version 4.33, does not include in situ cases in the statistical analysis. Also, 52 were ICD-O-3 coded cases that failed to convert to ICD-10 codes as described in the Data Management (see page 12). This puts the total number of exclusions from the analysis as 490 cases. Table 2.1 illustrates the distribution of the cases by sex and nationality.

Diagnosis of malignancy was confirmed histologically in 85.6% of the cases, and haematological and cytologically in 8.4% of cases, clinically confirmed cases were 0.3%, radiologically confirmed cases were 2.2%, cases confirmed by Death Certificate Only were 2.8% and the method of diagnosis was unknown for 0.7% of the cases.

As shown on Table 2.1, 11,456 cases were analyzed, of which 8,848 (77.2%) were Saudis and 2,608 (22.8%) were Non-Saudis. Among the Saudis 4,231 (47.8%) were male and 4,617 (52.2%) were female. The male to female ratio was 92:100. The crude incidence rate (CIR) of all cancers among Saudi Population was 49% 100,000 (46.4/100,000 among males and 51.5% 100,000 among females). The overall age-standardized incidence rate (ASR) for all Saudis with a world standard population reference was 76.8/100,000 (74.1/100,000 in males and 79.4/100,000 in females).

For all sites, the age-specific incidence rate (AIR) increased with age for both males and females. After the age of 64 years, the increase was nearly one and one half fold for males compared to females. The median age at diagnosis is was 58 Range (0-120) years for men and 50 Range (0-104) years for women.

	Saudis			Non-Saudis			Unknown Nationality			All
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Total
Analyzed *	4231	4617	8848	1422	1186	2608	81	108	189	11456
Invasive	4255	4633	8888	1429	1191	2620	81	108	189	11697
In Situ	89	77	166	53	28	81	1	1	2	249
ICD 10 **	24	16	40	7	5	12	0	0	0	52
Total	4344	4710	9054	1482	1219	2701	82	109	191	11946

Table 2.1 Distribution of Cancer Cases in Saudi Arabia by Nationality and Sex, 2008

* Unknown nationalities, in situ cases and ICD-10 conversion failures are excluded from analysis
 ** ICD-10 conversion failure

Cancer among Saudis 2008

As explained earlier the total number of cancer cases analyzed among Saudis during the year 2008 were 8,848. Following are figures presenting the percentage distributions of cancer incidence and most frequent types of cancers among Saudis by sex and age-group.

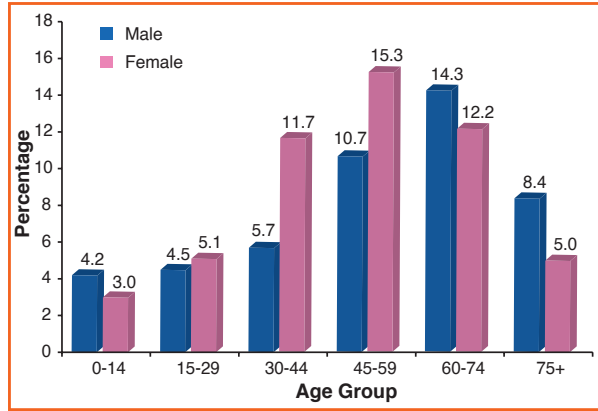


Figure 2.1 Percentage Distribution of Cancer Incidence among Saudis by Sex according to Age Group, 2008

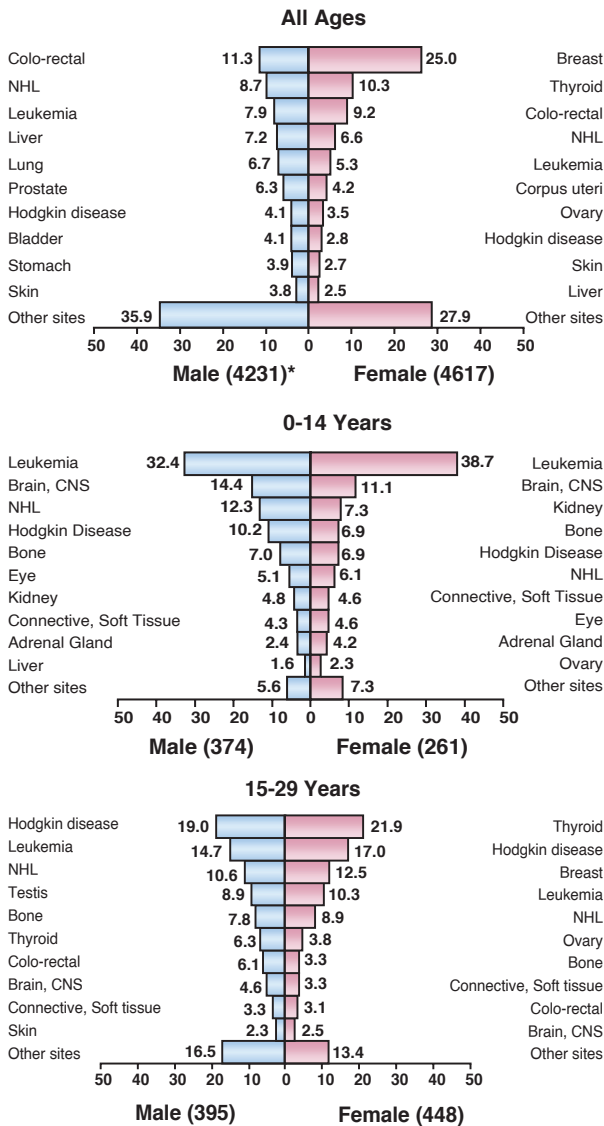


Figure 2.2 Percentage Distribution of Most Frequent Types of Cancer by Sex among Saudis, 2008

* 1 male case is included only in the total as he may not be added to any age group

Cancer	No.	%
Breast	1169	13.2
Colo-rectal	904	10.2
NHL	674	7.6
Thyroid	606	6.8
Leukemia	582	6.6
Liver	418	4.7
Lung	367	4.1
Hodgkin disease	306	3.5
Skin	284	3.2
Prostate	267	3.0

Table 2.2 Ten Most Common Cancers among Saudis, 2008 (All Ages)

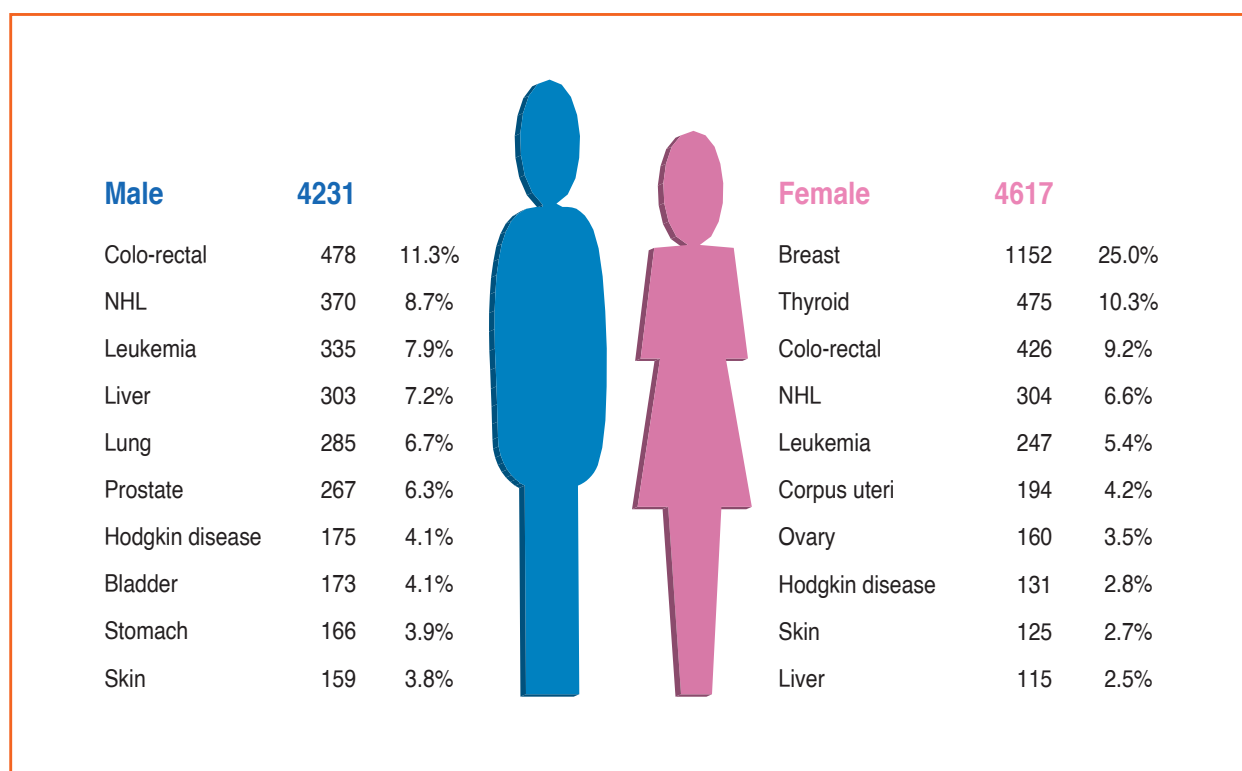


Figure 2.3 Ten Most Common Cancers among Saudis by Sex, 2008

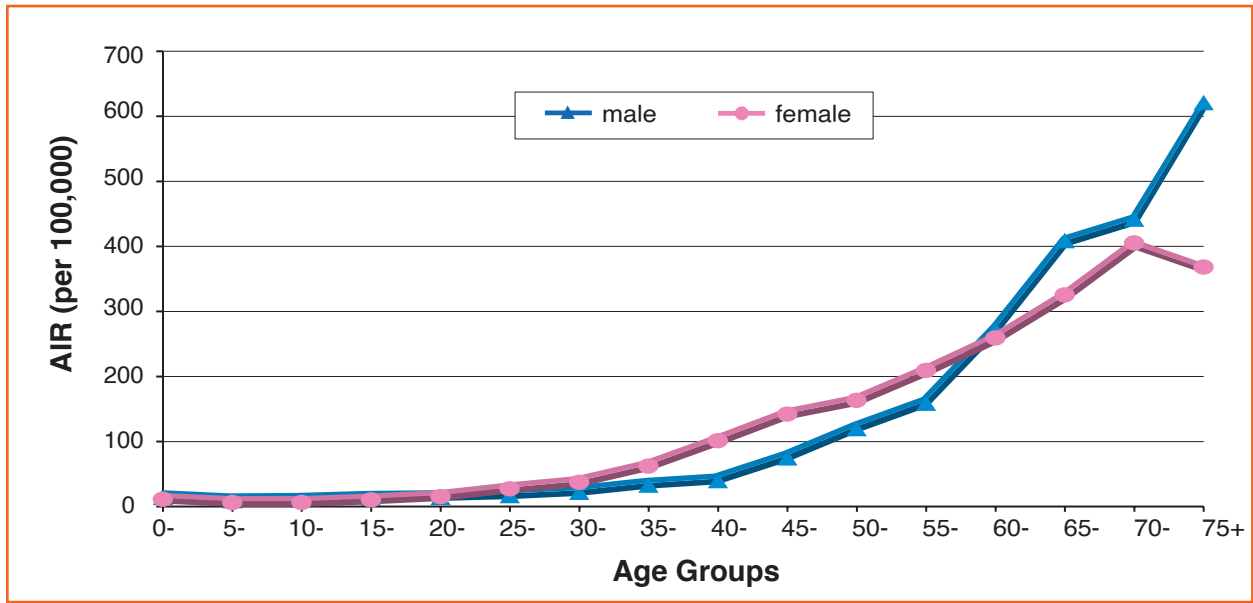


Figure 2.4 Age-Specific Incidence Rates (AIR) for All Cancers among Saudis, 2008

ICD-10	Site	Male						Female					
		No.	%	Crude	ASR	Cumulative Rate		No.	%	Crude	ASR	Cumulative Rate	
				Rate	World	0-64	0-74			Rate	World	0-64	0-74
All	All sites Total	4231	100.0%	46.4	74.1	39.9	82.5	4617	100.0%	51.5	79.4	52.4	68.7
Not C44	All sites but C44	4072	96.2%	44.7	71.1	39.9	79.3	4492	97.3%	50.1	77	51.1	66.8
C00	Lip	9	0.2%	0.1	0.2	0.0	0.1	5	0.1%	0.1	0.1	0.1	0.1
C01-C02	Tongue	30	0.7%	0.3	0.6	0.3	0.7	29	0.6%	0.3	0.6	0.5	0.5
C03-C06	Mouth	39	0.9%	0.4	0.7	0.3	0.9	46	1.0%	0.5	0.9	0.5	0.8
C07-C08	Salivary glands	17	0.4%	0.2	0.3	0.1	0.4	18	0.4%	0.2	0.2	0.2	0.2
C09	Tonsil	2	0.0%	0	0	0.0	0.0	3	0.1%	0	0.1	0.1	0.1
C10	Other Oropharynx	2	0.0%	0	0	0.0	0.0	0	0.0%	0	0	0.0	0.0
C11	Nasopharynx	122	2.9%	1.3	2	1.5	2.3	45	1.0%	0.5	0.7	0.5	0.6
C12-C13	Hypopharynx	5	0.1%	0.1	0.1	0.1	0.1	16	0.3%	0.2	0.3	0.1	0.2
C14	Pharynx unspecified	3	0.1%	0	0.1	0.0	0.1	1	0.0%	0	0	0.0	0.0
C15	Oesophagus	51	1.2%	0.6	1	0.4	1.0	54	1.2%	0.6	1.1	0.7	0.9
C16	Stomach	166	3.9%	1.8	3.2	1.8	3.4	100	2.2%	1.1	1.9	1.0	1.5
C17	Small intestine	31	0.7%	0.3	0.6	0.3	0.8	14	0.3%	0.2	0.3	0.2	0.2
C18	Colon	286	6.8%	3.1	5.3	3.3	5.9	274	5.9%	3.1	5.2	3.4	4.4
C19-C20	Rectum	192	4.5%	2.1	3.7	2.1	4.7	152	3.3%	1.7	3	2.1	2.8
C21	Anus	10	0.2%	0.1	0.2	0.1	0.2	7	0.2%	0.1	0.1	0.1	0.1
C22	Liver	303	7.2%	3.3	6.2	2.6	7.3	115	2.5%	1.3	2.3	1.2	1.9
C23-C24	Gallbladder etc.	54	1.3%	0.6	1	0.6	1.0	77	1.7%	0.9	1.6	0.8	1.3
C25	Pancreas	100	2.4%	1.1	2	1.1	2.3	67	1.5%	0.7	1.4	0.9	1.6
C30-C31	Nose, sinuses etc.	14	0.3%	0.2	0.2	0.2	0.3	6	0.1%	0.1	0.1	0.1	0.1
C32	Larynx	57	1.3%	0.6	1.2	0.7	1.4	5	0.1%	0.1	0.1	0.1	0.1
C33-C34	Trachea, Bronchus, Lung	285	6.7%	3.1	5.8	3.0	7.1	82	1.8%	0.9	1.7	1.0	1.5
C37-C38	Other Thoracic organs	11	0.3%	0.1	0.2	0.1	0.2	11	0.2%	0.1	0.1	0.1	0.1
C40-C41	Bone	73	1.7%	0.8	0.8	0.4	0.6	47	1.0%	0.5	0.5	0.4	0.4
C43	Melanoma of Skin	12	0.3%	0.1	0.2	0.1	0.3	10	0.2%	0.1	0.2	0.1	0.1
C44	Other Skin	159	3.8%	1.7	3	1.5	3.2	125	2.7%	1.4	2.4	1.3	1.8
C45	Mesothelioma	17	0.4%	0.2	0.3	0.1	0.4	2	0.0%	0	0	0.0	0.0
C46	Kaposi sarcoma	16	0.4%	0.2	0.3	0.2	0.3	5	0.1%	0.1	0.1	0.0	0.0
C47,C49	Connective, Soft tissue	66	1.6%	0.7	0.9	0.6	1.0	54	1.2%	0.6	0.8	0.5	0.7
C50	Breast	17	0.4%	0.2	0.3	0.2	0.3	1152	25.0%	12.9	19.2	14.9	17.7
C51	Vulva	-	-	-	-	-	-	5	0.1%	0.1	0.1	0.1	0.1
C52	Vagina	-	-	-	-	-	-	0	0.0%	0	0	0.0	0.0
C53	Cervix Uteri	-	-	-	-	-	-	93	2.0%	1	1.7	1.2	1.5
C54	Corpus Uteri	-	-	-	-	-	-	194	4.2%	2.2	4	2.7	3.9
C55	Uterus unspecified	-	-	-	-	-	-	22	0.5%	0.2	0.4	0.3	0.4
C56	Ovary	-	-	-	-	-	-	160	3.5%	1.8	3	2.0	2.6
C57	Other Female Genital	-	-	-	-	-	-	5	0.1%	0.1	0.1	0.1	0.1
C58	Placenta	-	-	-	-	-	-	12	0.3%	0.1	0.1	0.1	0.1
C60	Penis	3	0.1%	0	0.1	0.0	0.2	-	-	-	-	-	-
C61	Prostate	267	6.3%	2.9	5.7	1.9	6.9	-	-	-	-	-	-
C62	Testis	74	1.7%	0.8	0.8	0.6	0.6	-	-	-	-	-	-
C63	Other male genital	0	0.0%	0	0	0.0	0.0	-	-	-	-	-	-
C64	Kidney	144	3.4%	1.6	2.5	1.7	2.6	93	2.0%	1	1.5	1.1	1.2
C65	Renal Pelvis	5	0.1%	0.1	0.1	0.0	0.0	1	0.0%	0	0	0.0	0.0
C66	Ureter	3	0.1%	0	0.1	0.0	0.2	0	0.0%	0	0	0.0	0.0
C67	Bladder	173	4.1%	1.9	3.6	1.7	4.4	38	0.8%	0.4	0.8	0.3	0.6
C68	Other Urinary organs	1	0.0%	0	0	0.0	0.1	1	0.0%	0	0	0.0	0.0
C69	Eye	27	0.6%	0.3	0.3	0.1	0.2	17	0.4%	0.2	0.2	0.1	0.1
C70-C72	Brain, Nervous system	158	3.7%	1.7	2.1	1.3	2.0	92	2.0%	1	1.3	0.9	1.1
C73	Thyroid	131	3.1%	1.4	2	1.4	2.1	475	10.3%	5.3	6.8	5.0	5.7
C74	Adrenal gland	14	0.3%	0.2	0.1	0.1	0.1	13	0.3%	0.1	0.1	0.1	0.1
C75	Other Endocrine	9	0.2%	0.1	0.1	0.1	0.1	2	0.0%	0	0	0.1	0.1
C81	Hodgkin disease	175	4.1%	1.9	1.9	1.4	1.6	131	2.8%	1.5	1.5	0.9	1.2
C82-C85;C96	Non-Hodgkin lymphoma	370	8.7%	4.1	6	3.4	6.7	304	6.6%	3.4	5.4	3.4	4.6
C88	Immunoproliferative dis.	0	0.0%	0	0	0.0	0.0	0	0.0%	0	0	0.0	0.0
C90	Multiple Myeloma	37	0.9%	0.4	0.7	0.4	0.8	25	0.5%	0.3	0.5	0.2	0.5
C91	Lymphoid Leukemia	157	3.7%	1.7	2	0.9	1.7	112	2.4%	1.2	1.4	0.7	0.9
C92-C94	Myeloid Leukemia	139	3.3%	1.5	1.9	1.2	2.0	104	2.3%	1.2	1.4	0.9	1.0
C95	Leukemia unspecified	39	0.9%	0.4	0.6	0.3	0.6	31	0.7%	0.3	0.4	0.3	0.3
Other	Other & unspecified	156	3.7%	1.7	3.1	1.7	3.5	165	3.6%	1.8	3.3	1.4	2.7

Table 2.3 Number, Percentage,ASR,CIR, and Cumulative Rates (per 1000) of New Cases by Primary Site and Sex among Saudis, 2008

Adult Cancers in Saudi Arabia, 2008 (>14 years)

Between January and December 2008, the total number of adult cancer incidence cases reported was 11,164. Overall cancer was slightly more in females than in males. Cancer affected 5,449 (48.8%) males and 5,715 (51.2%) females with a

95:100. Of all cases, there were 8,412 Saudis, 2,577 of Non-Saudis and 175 of unknown nationalities. As shown on table 2.4, the total number of analyzed cases are 10,697.

	Saudis			Non-Saudis			Unknown Nationality			All
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Total
Analyzed *	3856	4356	8212	1352	1133	2485	72	101	173	10697
Invasive	3876	4371	8247	1359	1138	2497	72	101	173	10917
In Situ	89	76	165	52	28	80	1	1	2	247
ICD 10 **	20	15	35	7	5	12	0	0	0	47
Total	3965	4447	8412	1411	1166	2577	73	102	175	11164

Table 2.4.1 Distribution of Reported Adult Cancer Cases in Saudi Arabia by Nationality and Sex, 2008

Cancer	No.	%
Breast	1169	14.2
Colo-rectal	904	11.0
NHL	612	7.5
Thyroid	601	7.3
Liver	410	5.0
Lung	367	4.5
Leukemia	360	4.4
Skin	280	3.4
Prostate	267	3.3
Stomach	266	3.2

Table 2.4.2 Ten Most Common Cancers among Saudi Adults, 2008

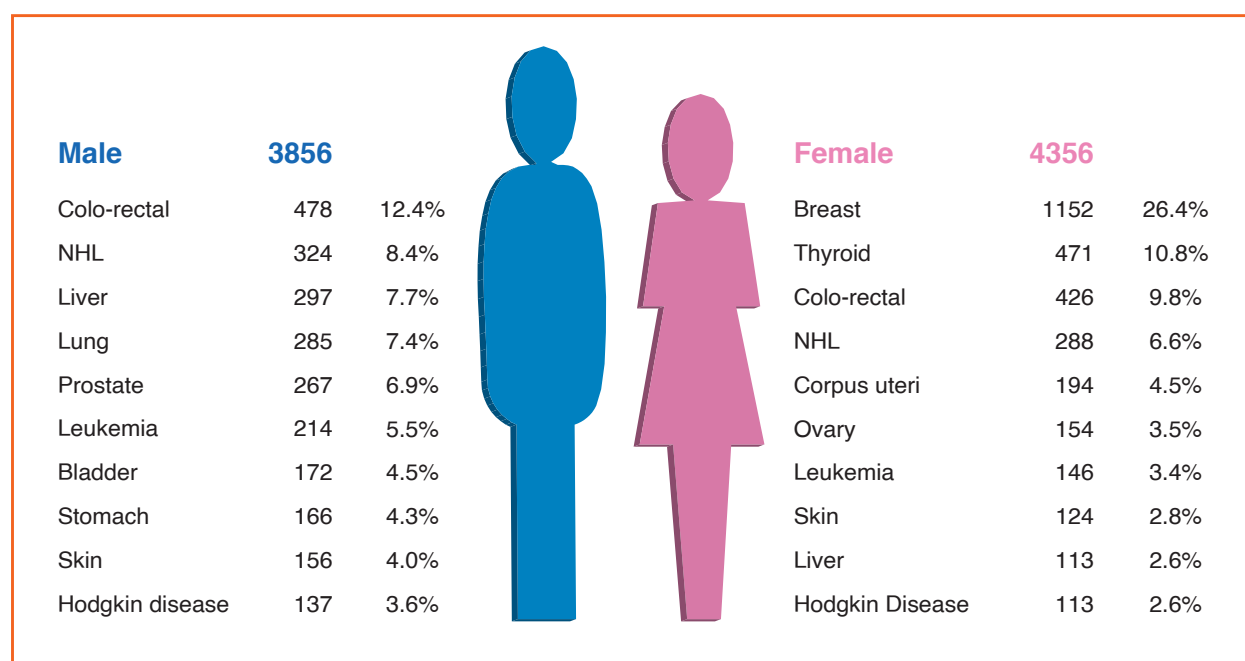


Figure 2.6 Ten Most Common Cancers among Saudi Adults by sex, 2008

* Unknown nationalities, in situ cases and ICD-10 conversion failures are excluded from analysis
 ** ICD-10 conversion failure

Primary Site	Code	Morphology	Male	%	Female	%	
Breast	8500	Infiltrating duct carcinoma, NOS	12	70.6	897	77.9	
	8520	Lobular carcinoma, NOS	0	0.0	57	4.9	
	8010	Carcinoma, NOS	0	0.0	35	3.0	
	8523	Infiltrating duct mixed with other types of carcinoma	1	5.9	28	2.4	
	8000	Neoplasm, malignant	1	5.9	27	2.3	
	8510	Medullary carcinoma, NOS	1	5.9	22	1.9	
	8522	Infiltrating duct and lobular carcinoma	0	0.0	13	1.1	
	8140	Adenocarcinoma, NOS Other	0 2	0.0 11.8	12 61	1.0 5.3	
Colo-rectal	8140	Adenocarcinoma, NOS	350	73.2	312	73.2	
	8480	Mucinous adenocarcinoma	31	6.5	42	9.9	
	8490	Signet ring cell carcinoma	17	3.6	9	2.1	
	8263	Adenocarcinoma in tubulovillous adenoma	10	2.1	11	2.6	
	8000	Neoplasm, malignant	14	2.9	6	1.4	
	8481	Mucin-producing adenocarcinoma	10	2.1	8	1.9	
	8261	Adenocarcinoma in villous adenoma	8	1.7	9	2.1	
	8010	Carcinoma, NOS	9	1.9	6	1.4	
	8144	Adenocarcinoma, intestinal type	7	1.5	7	1.6	
	8210	Adenocarcinoma in adenomatous polyp Others	6 16	1.3 3.3	8 8	1.9 1.9	
NHL	9680	Malignant lymphoma, large B-cell, diffuse, NOS	155	47.8	156	54.2	
	9590	Malignant lymphoma, NOS	19	5.9	22	7.6	
	9591	Malignant lymphoma, non-Hodgkin, NOS	15	4.6	21	7.3	
	9699	Marginal zone B-cell lymphoma, NOS	12	3.7	15	5.2	
	9687	Burkitt lymphoma, NOS	14	4.3	7	2.4	
	9700	Mycosis fungoides	13	4.0	7	2.4	
	9670	Malignant lymphoma, small B lymphocytic, NOS	10	3.1	8	2.8	
	9695	Follicular lymphoma, grade 1	9	2.8	8	2.8	
	9702	Mature T-cell lymphoma, NOS	10	3.1	6	2.1	
	9690	Follicular lymphoma, NOS	9	2.8	6	2.1	
	9691	Follicular lymphoma, grade 2	6	1.9	8	2.8	
	9698	Follicular lymphoma, grade 3	11	3.4	3	1.0	
	9714	Anaplastic large cell lymphoma, T cell and Null cell type	8	2.5	4	1.4	
	9671	Malignant lymphoma, lymphoplasmacytic	5	1.5	4	1.4	
	9673	Mantle cell lymphoma	5	1.5	3	1.0	
9684	Malignant lymphoma, large B-cell, diffuse, immunoblastic, NOS Others	4 19	1.2 5.9	2 8	0.7 2.8		
Thyroid	8260	Papillary adenocarcinoma, NOS	75	57.7	273	58.0	
	8340	Papillary carcinoma, follicular variant	15	11.5	79	16.8	
	8341	Papillary micro carcinoma	10	7.7	39	8.3	
	8343	Papillary carcinoma, encapsulated	4	3.1	20	4.2	
	8510	Medullary carcinoma, NOS	3	2.3	11	2.3	
	8330	Follicular adenocarcinoma, NOS	6	4.6	7	1.5	
	8021	Carcinoma, anaplastic, NOS	4	3.1	8	1.7	
	8290	Oxyphilic adenocarcinoma	1	0.8	7	1.5	
	8335	Follicular carcinoma, minimally invasive	1	0.8	6	1.3	
	8344	Papillary carcinoma, columnar cell Others	3 8	2.3 6.2	3 18	0.6 3.8	
	Liver	8170	Hepatocellular carcinoma, NOS	250	84.2	81	71.7
		8000	Neoplasm, malignant	17	5.7	14	12.4
8140		Adenocarcinoma, NOS	7	2.4	7	6.2	
8160		Cholangiocarcinoma	7	2.4	5	4.4	
8010		Carcinoma, NOS	5	1.7	0	0.0	
8180		Combined hepatocellular carcinoma and cholangiocarcinoma Others	3 8	1.0 2.7	2 4	1.8 3.5	
Lung		8140	Adenocarcinoma, NOS	69	24.2	27	32.9
	8070	Squamous cell carcinoma, NOS	62	21.8	8	9.8	
	8046	Non-small cell carcinoma	34	11.9	9	11.0	
	8000	Neoplasm, malignant	26	9.1	7	8.5	
	8041	Small cell carcinoma, NOS	29	10.2	4	4.9	
	8010	Carcinoma, NOS	19	6.7	5	6.1	
	8250	Bronchiolo-alveolar adenocarcinoma, NOS	14	4.9	8	9.8	
	8240	Carcinoid tumor, NOS	4	1.4	2	2.4	
	8480	Mucinous adenocarcinoma	4	1.4	2	2.4	
	8071	Squamous cell carcinoma, keratinizing, NOS Others	4 20	1.4 7.0	0 10	0.0 12.2	
	Leukemia	9863	Chronic myeloid leukemia, NOS	35	16.4	32	21.9
9861		Acute myeloid leukemia, NOS	35	16.4	18	12.3	
9823		B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma	26	12.1	20	13.7	
9835		Precursor cell lymphoblastic leukemia, NOS	18	8.4	9	6.2	
9836		Precursor B-cell lymphoblastic leukemia	14	6.5	10	6.8	
9800		Leukemia, NOS	11	5.1	8	5.5	
9801		Acute leukemia, NOS	10	4.7	7	4.8	
9866		Acute promyelocytic leukemia, t(15;17) (q22; q11-12)	10	4.7	5	3.4	
9837		Precursor T-cell lymphoblastic leukemia	10	4.7	1	0.7	
9873		Acute myeloid leukemia without maturation	3	1.4	7	4.8	
9805		Acute biphenotypic leukemia	6	2.8	3	2.1	
9874		Acute myeloid leukemia with maturation	4	1.9	4	2.7	
9867		Acute myelomonocytic leukemia	3	1.4	3	2.1	
9875		Chronic myelogenous leukemia, BCR/ABL positive	5	2.3	1	0.7	
9891		Acute monocytic leukemia	4	1.9	2	1.4	
9872		Acute myeloid leukemia, minimal differentiation	2	0.9	3	2.1	
9896		Acute myeloid leukemia, t(8;21)(q22;q22)	3	1.4	2	1.4	
9820	Lymphoid leukemia, NOS Others	4 11	1.9 5.1	0 11	0.0 7.5		

Table 2.5 Number and Proportion of Morphological Types for the Most Common Types of Cancer among Saudi Adults, 2008

Table 2.5 continued

Primary Site	Code	Morphology	Male	%	Female	%
Skin	8090	Basal cell carcinoma, NOS	58	37.2	64	51.6
	8070	Squamous cell carcinoma, NOS	41	26.3	25	20.2
	8832	Dermatofibrosarcoma, NOS	17	10.9	8	6.5
	8071	Squamous cell carcinoma, keratinizing, NOS	6	3.8	4	3.2
	8094	Basosquamous carcinoma	5	3.2	4	3.2
	8097	Basal cell carcinoma, nodular	5	3.2	4	3.2
	8410	Sebaceous adenocarcinoma	4	2.6	2	1.6
	8091	Multifocal superficial basal cell carcinoma	2	1.3	3	2.4
	8051	Verrucous carcinoma, NOS	4	2.6	0	0.0
	8000	Neoplasm, malignant	1	0.6	2	1.6
	8076	Squamous cell carcinoma, micro invasive	2	1.3	1	0.8
	8092	Infiltrating basal cell carcinoma, NOS Others	2 9	1.3 5.8	1 6	0.8 4.8
Prostate	8140	Adenocarcinoma, NOS	236	88.4	–	–
	8010	Carcinoma, NOS	11	4.1	–	–
	8000	Neoplasm, malignant	9	3.4	–	–
	8550	Acinar cell carcinoma	6	2.2	–	–
	8041	Small cell carcinoma, NOS	3	1.1	–	–
	8020	Carcinoma, undifferentiated, NOS 8120 Transitional cell carcinoma, NOS	1 1	0.4 0.4	– –	– –
Stomach	8140	Adenocarcinoma, NOS	86	51.8	30	30.0
	8490	Signet ring cell carcinoma	37	22.3	35	35.0
	8144	Adenocarcinoma, intestinal type	15	9.0	7	7.0
	8145	Carcinoma, diffuse type	5	3.0	3	3.0
	8936	Gastrointestinal stromal sarcoma	2	1.2	6	6.0
	8000	Neoplasm, malignant	3	1.8	4	4.0
	8480	Mucinous adenocarcinoma	2	1.2	5	5.0
	8481	Mucin-producing adenocarcinoma	1	0.6	3	3.0
	8070	Squamous cell carcinoma, NOS	2	1.2	1	1.0
	8240	Carcinoid tumor, NOS Others	2 11	1.2 6.6	1 5	1.0 5.0
Hodgkin Disease	9663	Hodgkin lymphoma, nodular sclerosis, NOS	59	43.1	64	56.6
	9652	Hodgkin lymphoma, mixed cellularity, NOS	30	21.9	16	14.2
	9650	Hodgkin lymphoma, NOS	14	10.2	12	10.6
	9659	Hodgkin lymphoma, nodular lymphocyte predominance	12	8.8	3	2.7
	9665	Hodgkin lymphoma, nodular sclerosis, grade 1	5	3.6	8	7.1
	9653	Hodgkin lymphoma, lymphocyte depletion, NOS	4	2.9	5	4.4
	9651	Hodgkin lymphoma, lymphocyte-rich	7	5.1	1	0.9
	9667	Hodgkin lymphoma, nodular sclerosis, grade 2 Others	3 3	2.2 2.2	4 0	3.5 0.0
Bladder	8120	Transitional cell carcinoma, NOS	74	43.0	17	44.7
	8130	Papillary transitional cell carcinoma	73	42.4	15	39.5
	8000	Neoplasm, malignant	6	3.5	1	2.6
	8070	Squamous cell carcinoma, NOS	4	2.3	2	5.3
	8010	Carcinoma, NOS	4	2.3	0	0.0
	8071	Squamous cell carcinoma, keratinizing, NOS	3	1.7	1	2.6
	8041	Small cell carcinoma, NOS	3	1.7	0	0.0
	8140	Adenocarcinoma, NOS	0	0.0	2	5.3
	8480	Mucinous adenocarcinoma	2	1.2	0	0.0
	8490	Signet ring cell carcinoma	2	1.2	0	0.0
	9130	Hemangioendothelioma, malignant	1	0.6	0	0.0
Corpus Uteri	8380	Endometrioid adenocarcinoma, NOS	–	–	119	61.3
	8140	Adenocarcinoma, NOS	–	–	26	13.4
	8950	Mullerian mixed tumor	–	–	6	3.1
	8980	Carcinosarcoma, NOS	–	–	6	3.1
	8010	Carcinoma, NOS	–	–	5	2.6
	8460	Papillary serous cyst adenocarcinoma	–	–	5	2.6
	8890	Leiomyosarcoma, NOS	–	–	5	2.6
	8310	Clear cell adenocarcinoma, NOS	–	–	4	2.1
	8441	Serous cyst adenocarcinoma, NOS	–	–	4	2.1
	8931	Endometrial stromal sarcoma, low grade Others	– –	– –	3 11	1.5 5.7
Ovary	8441	Serous cyst adenocarcinoma, NOS	–	–	32	20.8
	8460	Papillary serous cyst adenocarcinoma	–	–	23	14.9
	8010	Carcinoma, NOS	–	–	15	9.7
	8140	Adenocarcinoma, NOS	–	–	15	9.7
	8480	Mucinous adenocarcinoma	–	–	11	7.1
	8461	Serous surface papillary carcinoma	–	–	10	6.5
	8470	Mucinous cyst adenocarcinoma, NOS	–	–	8	5.2
	8000	Neoplasm, malignant	–	–	6	3.9
	8380	Endometrioid adenocarcinoma, NOS	–	–	5	3.2
	9071	Yolk sac tumor	–	–	5	3.2
	8310	Clear cell adenocarcinoma, NOS	–	–	4	2.6
	9060	Dysgerminoma	–	–	3	1.9
	9080	Teratoma, malignant, NOS	–	–	3	1.9
	8260	Papillary adenocarcinoma, NOS	–	–	2	1.3
	8620	Granulosa cell tumor, malignant	–	–	2	1.3
8980	Carcinosarcoma, NOS Others	– –	– –	2 8	1.3 5.2	

Childhood Cancers in Saudi Arabia, 2008 (≤ 14 years)

The total incident cases reported among children (0-14 years) between January and December 2008 were 770. This represents 6.4 % of the total number of cancers in Saudi Arabia. The reported incidents show that cancer was more common among boys than girls. 452 (58.7%) cases were reported among boys and 318 (41.3%) among girls, with a male to female ratio of 142:100. Of all the cases reported there were 640 Saudis, 122 non-Saudis and 8 of "unknown nationality". Based on table 2.6, the total number of cases analyzed was 756 including 635 (84%) Saudis and 121 (14%) non-Saudis. Among Saudis, 374 (58.9%) were male and 261 (41.1%) were female.

The male to female ratio among Saudis was 143:100. Childhood cancer is very important, not only because of the age of occurrence, but also because 41.7% of the Saudi population is under 15 years of age. In addition to this, recent years have shown a breakthrough for the cure of many childhood cancers. Childhood cancers accounted for 7.1% of all cancer among Saudis. The leading cancer among Saudi children was leukemia, which accounted for 35%, followed by Brain, CNS 13.1% then NHL 9.8% and Hodgkin disease 8.8%. Figure 2.7 shows the top ten sites by sex and frequency, and table 2.7 shows the number and proportion of the morphological types for the most common types of cancer.

	Saudis			Non-Saudis			Unknown Nationality			All
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Total
Analyzed *	374	261	635	69	52	121	0	0	0	756
Invasive	378	262	640	69	52	121	0	0	0	761
In Situ	0	0	0	1	0	1	0	0	0	1
ICD 10 **	4	1	5	0	0	0	0	0	0	5
Total	378	262	640	70	52	122	4	4	8	770

Table 2.6.1 Distribution of Reported Childhood Cancer Cases in Saudi Arabia by Nationality and Sex, 2008

Cancer	No.	%
Leukemia	222	35.0
Brain, CNS	83	13.1
NHL	62	9.8
Hodgkin disease	56	8.8
Bone	44	6.9
Kidney	37	5.8
Eye	31	4.9
Connective, Soft tissue	28	4.4
Adrenal gland	20	3.1
Liver	8	1.3

Table 2.6.2 Ten Most Common Cancers among Saudi Children, 2008

* Unknown nationalities, in situ cases and ICD-10 conversion failures are excluded from analysis
 ** ICD-10 conversion failure

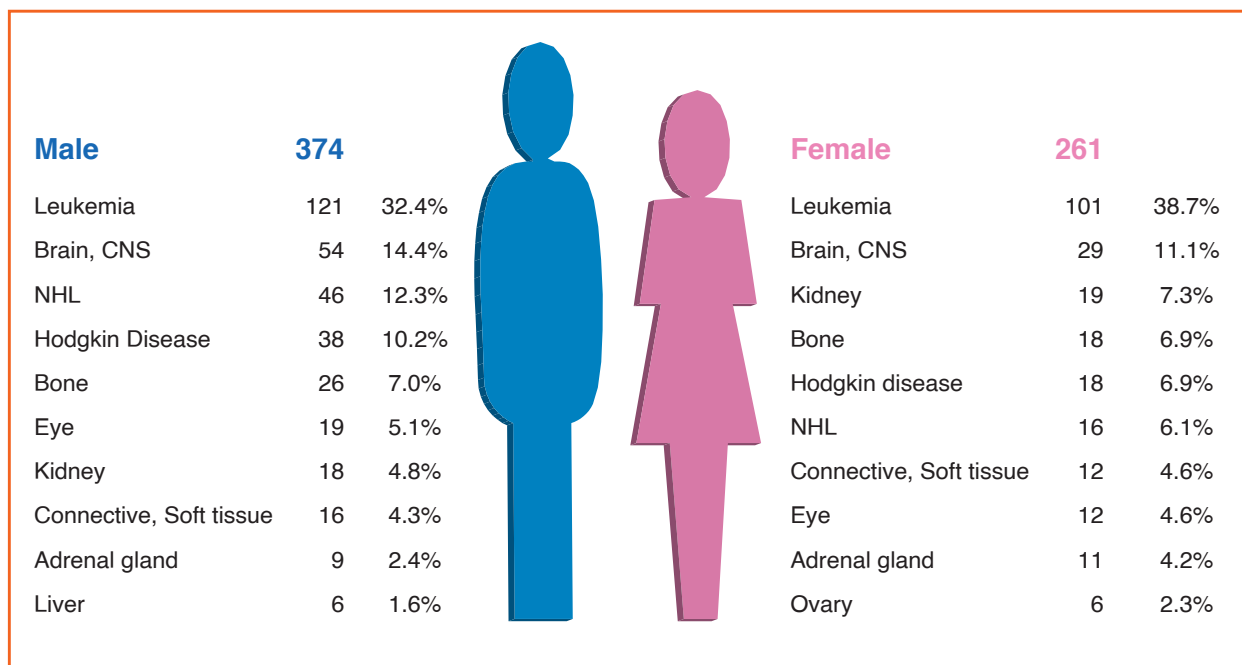


Figure 2.7 Ten Most Common Cancers among Saudi Children by Sex, 2008

Primary Site	Code	Morphology	Male	%	Female	%
Leukemia	9836	Precursor B-cell lymphoblastic leukemia	50	41.3	40	39.6
	9835	Precursor cell lymphoblastic leukemia, NOS	20	16.5	26	25.7
	9861	Acute myeloid leukemia, NOS	11	9.1	10	9.9
	9837	Precursor T-cell lymphoblastic leukemia	8	6.6	3	3.0
	9801	Acute leukemia, NOS	3	2.5	7	6.9
	9805	Acute biphenotypic leukemia	6	5.0	3	3.0
	9800	Leukemia, NOS	3	2.5	3	3.0
	9946	Juvenile myelomonocytic leukemia	2	1.7	4	4.0
	9863	Chronic myeloid leukemia, NOS	4	3.3	1	1.0
	9866	Acute promyelocytic leukemia, t(15;17)(q22;q11-12)	3	2.5	2	2.0
	9874	Acute myeloid leukemia with maturation	2	1.7	1	1.0
		Others	9	7.4	1	1.0
Brain, CNS	9470	Medulloblastoma, NOS	20	37.0	14	48.3
	9380	Glioma, malignant	9	16.7	5	17.2
	9400	Astrocytoma, NOS	4	7.4	3	10.3
	9473	Primitive neuroectodermal tumor, NOS	4	7.4	1	3.4
	9391	Ependymoma, NOS	3	5.6	1	3.4
	9392	Ependymoma, anaplastic	3	5.6	0	0.0
	9080	Teratoma, malignant, NOS	2	3.7	0	0.0
	9440	Glioblastoma, NOS	2	3.7	0	0.0
	9471	Desmoplastic nodular medulloblastoma	0	0.0	2	6.9
	9508	Atypical teratoid/rhabdoid tumor	2	3.7	0	0.0
	8963	Malignant rhabdoid tumor	0	0.0	1	3.4
	9085	Mixed germ cell tumor	0	0.0	1	3.4
	9382	Mixed glioma	1	1.9	0	0.0
	9401	Astrocytoma, anaplastic	1	1.9	0	0.0
	9420	Fibrillary astrocytoma	0	0.0	1	3.4
		Others	3	5.6	0	0.0

Table 2.7 Number and Proportion of Morphological Types for the Most Common Types of Cancer among Saudi Children, 2008

Table 2.7 continued

Primary Site	Code	Morphology	Male	%	Female	%
NHL	9687	Burkitt lymphoma, NOS	21	45.7	4	25.0
	9729	Precursor T-cell lymphoblastic lymphoma	5	10.9	2	12.5
	9680	Malignant lymphoma, large B-cell, diffuse, NOS	5	10.9	1	6.3
	9714	Anaplastic large cell lymphoma, T cell and Null cell type	2	4.3	2	12.5
	9590	Malignant lymphoma, NOS	3	6.5	0	0.0
	9702	Mature T-cell lymphoma, NOS	3	6.5	0	0.0
	9691	Follicular lymphoma, grade 2	1	2.2	1	6.3
	9699	Marginal zone B-cell lymphoma, NOS	1	2.2	1	6.3
	9727	Precursor cell lymphoblastic lymphoma, NOS	2	4.3	0	0.0
	9728	Precursor B-cell lymphoblastic lymphoma	1	2.2	1	6.3
	9754	Langerhans cell histiocytosis, disseminated	2	4.3	0	0.0
	9591	Malignant lymphoma, non-Hodgkin, NOS	0	0.0	1	6.3
	9675	Malignant lymphoma, mixed small and large cell, diffuse	0	0.0	1	6.3
	9700	Mycosis fungoides	0	0.0	1	6.3
	9740	Mast cell sarcoma	0	0.0	1	6.3
Hodgkin Disease	9663	Hodgkin lymphoma, nodular sclerosis, NOS	21	55.3	9	50.0
	9652	Hodgkin lymphoma, mixed cellularity, NOS	5	13.2	3	16.7
	9650	Hodgkin lymphoma, NOS	4	10.5	1	5.6
	9665	Hodgkin lymphoma, nodular sclerosis, grade 1	4	10.5	1	5.6
	9651	Hodgkin lymphoma, lymphocyte-rich	1	2.6	3	16.7
	9659	Hodgkin lymphoma, nodular lymphocyte predominance	2	5.3	0	0.0
	9664	Hodgkin lymphoma, nodular sclerosis, cellular phase	1	2.6	1	5.6
Connective Tissue	9500	Neuroblastoma, NOS	4	25.0	2	16.7
	8900	Rhabdomyosarcoma, NOS	4	25.0	1	8.3
	8910	Embryonal rhabdomyosarcoma, NOS	3	18.8	1	8.3
	9071	Yolk sac tumor	1	6.3	1	8.3
	9080	Teratoma, malignant, NOS	0	0.0	2	16.7
	9364	Peripheral neuroectodermal tumor	1	6.3	1	8.3
	8804	Epithelioid sarcoma	0	0.0	1	8.3
	8830	Malignant fibrous histiocytoma	1	6.3	0	0.0
	8920	Alveolar rhabdomyosarcoma	0	0.0	1	8.3
	9040	Synovial sarcoma, NOS	0	0.0	1	8.3
	9043	Synovial sarcoma, biphasic	1	6.3	0	0.0
	9085	Mixed germ cell tumor	0	0.0	1	8.3
	9490	Ganglioneuroblastoma	1	6.3	0	0.0
Bone	9260	Ewing sarcoma	13	50.0	11	61.1
	9180	Osteosarcoma, NOS	10	38.5	3	16.7
	8910	Embryonal rhabdomyosarcoma, NOS	1	3.8	1	5.6
	9181	Chondroblastic osteosarcoma	1	3.8	1	5.6
	9043	Synovial sarcoma, biphasic	1	3.8	0	0.0
	9310	Ameloblastoma, malignant	0	0.0	1	5.6
	9370	Chordoma, NOS	0	0.0	1	5.6
Kidney	8960	Nephroblastoma, NOS	12	66.7	17	89.5
	8963	Malignant rhabdoid tumor	1	5.6	2	10.5
	8964	Clear cell sarcoma of kidney	3	16.7	0	0.0
	9500	Neuroblastoma, NOS	2	11.1	0	0.0
Eye	9510	Retinoblastoma, NOS	11	57.9	9	75.0
	9512	Retinoblastoma, undifferentiated	3	15.8	1	8.3
	9511	Retinoblastoma, differentiated	1	5.3	1	8.3
	8004	Malignant tumor, spindle cell type	1	5.3	0	0.0
	8070	Squamous cell carcinoma, NOS	0	0.0	1	8.3
	8072	Squamous cell carcinoma, large cell, nonkeratinizing, NOS	1	5.3	0	0.0
	8910	Embryonal rhabdomyosarcoma, NOS	1	5.3	0	0.0
9581	Alveolar soft part sarcoma	1	5.3	0	0.0	
Adrenal Gland	9500	Neuroblastoma, NOS	8	88.9	7	63.6
	9490	Ganglioneuroblastoma	1	11.1	4	36.4
Liver	8970	Hepatoblastoma	4	66.7	1	50.0
	8170	Hepatocellular carcinoma, NOS	1	16.7	1	50.0
	9500	Neuroblastoma, NOS	1	16.7	0	0.0
Ovary	9080	Teratoma, malignant, NOS	-	-	2	33.3
	9060	Dysgerminoma	-	-	1	16.7
	9064	Germinoma	-	-	1	16.7
	9071	Yolk sac tumor	-	-	1	16.7
	9085	Mixed germ cell tumor	-	-	1	16.7

International Comparison of Age-Standardized Incidence Rates

Worldwide, it is estimated that 12,662,554 people developed cancer in 2008. Of these, 56.1% were in developing countries and 43.9% were in developed countries. According to 2008 estimates, the most common cancer site worldwide among men was lung cancer, followed by prostate then colo-rectal then stomach. However; in developed countries prostate was the leading cancer in men followed by lung, colo-rectal, and bladder, while in developing countries, lung cancer was first

followed by stomach, liver, colo-rectal and oesophagus cancers. In women, the most common cancer site was breast followed by colo-rectal then cervix uteri then lung cancers. Among women, breast cancer was the most common followed by colo-rectal, lung and corpus uteri cancers in developed countries. While in the developing countries breast cancer was the leading cancer followed by cancers of the cervix, lung then stomach.

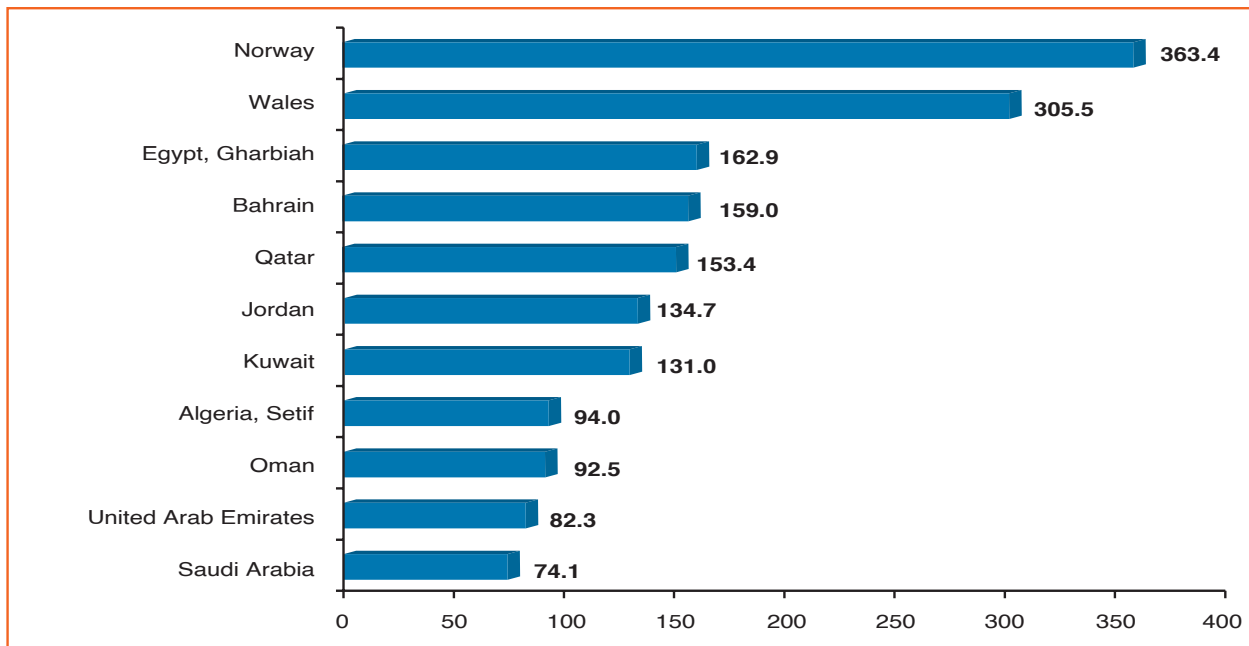


Figure 2.9.A Comparison of ASR* for Saudi Males with Selected Countries**

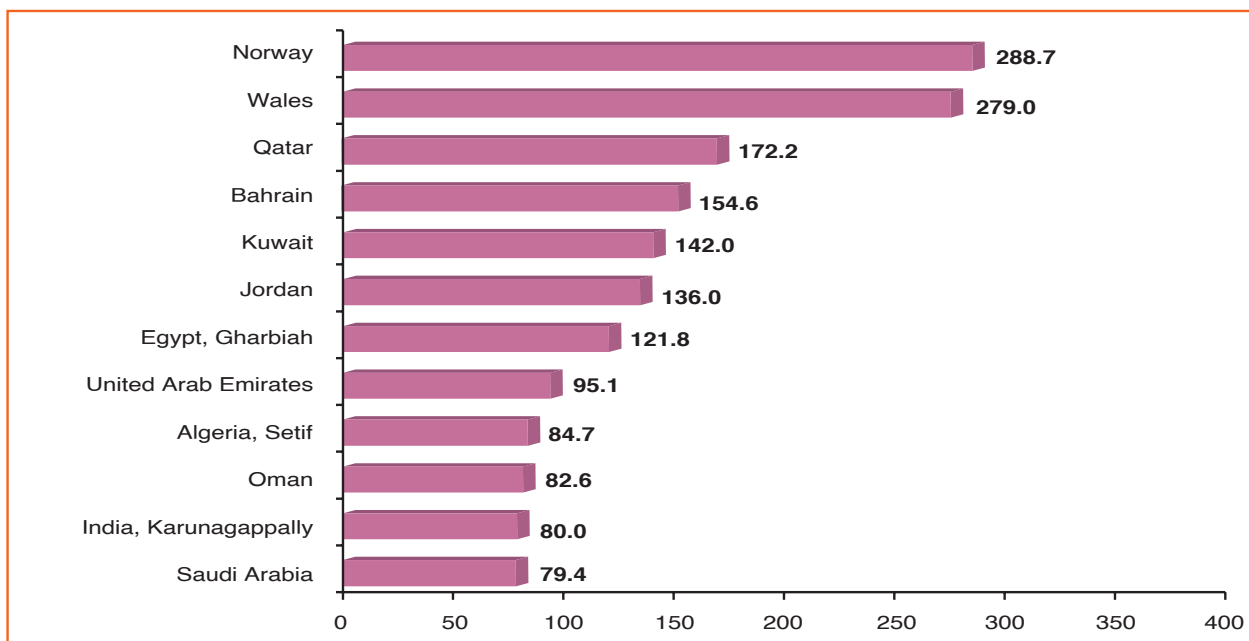


Figure 2.9.B Comparison of ASR* for Saudi Females with Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 64

PART III
CANCER INCIDENCE FOR MOST COMMON SITES
2008

Cancer Incidence for Most Common Sites, 2008

In this section, the incidence of the most common cancers among Saudi males and females are outlined in accordance to their relative

frequencies. The relevant data incorporate details for all patients presented over the period of January through December 2008.

Cancer	Male	Female	All	%
Breast	17	1152	1169	13.2
Colo-rectal	478	426	904	10.2
NHL	370	304	674	7.6
Thyroid	131	475	606	6.8
Leukemia	335	247	582	6.6
Liver	303	115	418	4.7
Lung	285	82	367	4.1
Hodgkin disease	175	131	306	3.5
Skin	159	125	284	3.2
Prostate	267	–	267	3.0
Corpus Uteri	–	194	194	2.2
Bladder	173	38	211	2.4
Stomach	166	100	266	3.0
Ovary	–	160	160	1.8

Table 3.1 Most Common Cancers among Saudis by sex, 2008

Female Breast (C 50)

There were 1152 female breast cancer cases for year 2008. Breast cancer ranked first among females accounting for 25% of all newly diagnosed female cancers (4,617) in year 2008. The ASR was

19.2/100,000 for female population. The median age at diagnosis was 47 years (Range 17-96 years).

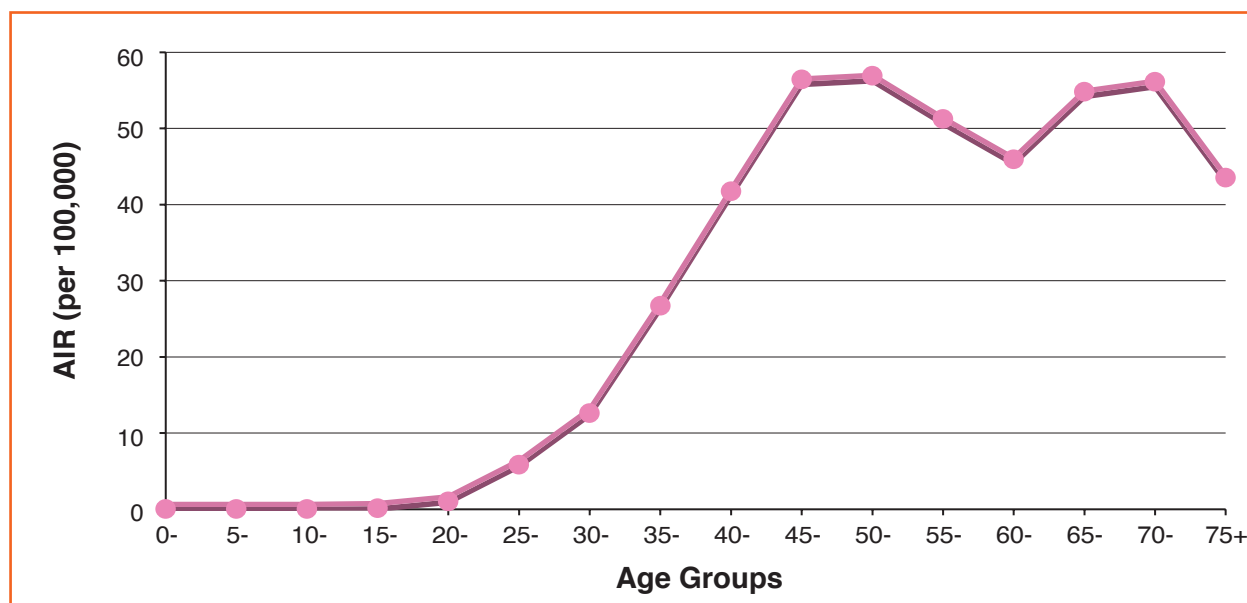


Figure 3.1.1 Age-Specific Incidence Rate (AIR) for Female Breast Cancer in Saudi Arabia, 2008

ICD-O-3	Morphology	Female	%
8500	Infiltrating duct carcinoma, NOS	897	77.9
8520	Lobular carcinoma, NOS	57	4.9
8010	Carcinoma, NOS	35	3.0
8523	Infiltrating duct mixed with other types of carcinoma	28	2.4
8000	Neoplasm, malignant	27	2.3
8510	Medullary carcinoma, NOS	22	1.9
8522	Infiltrating duct and lobular carcinoma	13	1.1
8140	Adenocarcinoma, NOS	12	1.0
	Others	61	5.3

Table 3.1.1 Morphological Distribution of Female Breast Cancer in Saudi Arabia, 2008

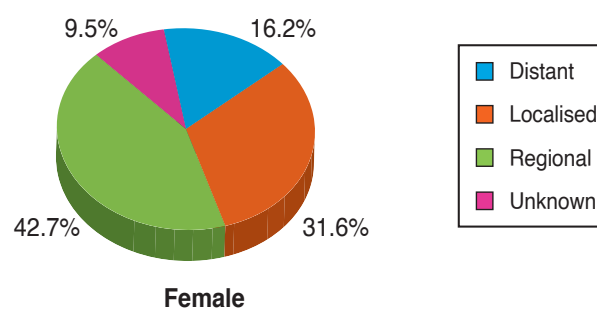


Figure 3.1.2 Stage Distribution of Female Breast Cancer, 2008

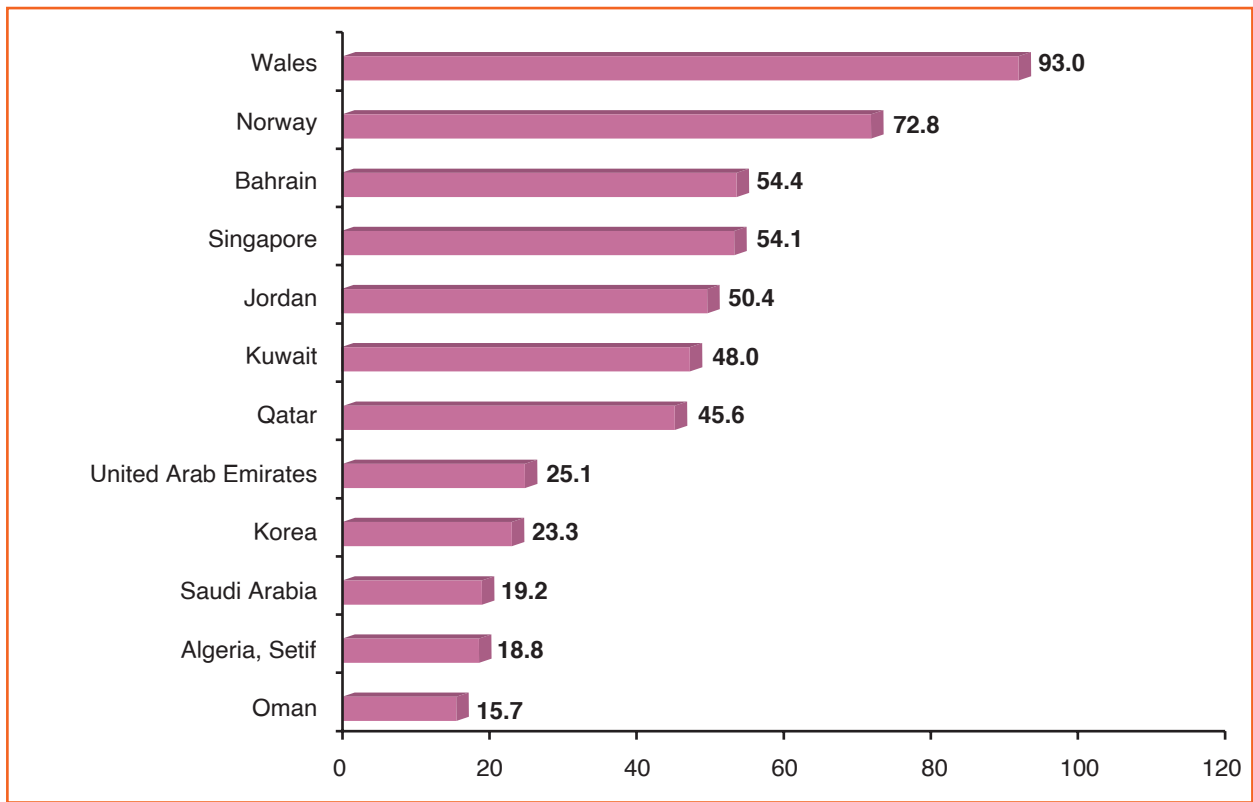


Figure 3. I.4 Comparison of ASR* for Female Breast Cancer among Saudi Females with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 64

Colo-rectal (C18-C20)

There were 904 cases of colo-rectal cancer accounting for 10.2% of all newly diagnosed cases in year 2008. This cancer ranked first among male population and third among female population. It affected 478 (52.9%) males and 426 (47.1%) females with a male to female ratio of 112:100. The overall ASR was 8.6/100,000. ASR for males

was 9/100,000 and for females 8.2/100,000. The median age at diagnosis was 59 years among males (range 18-103 years) and 57 years among females (range 18-98 years).

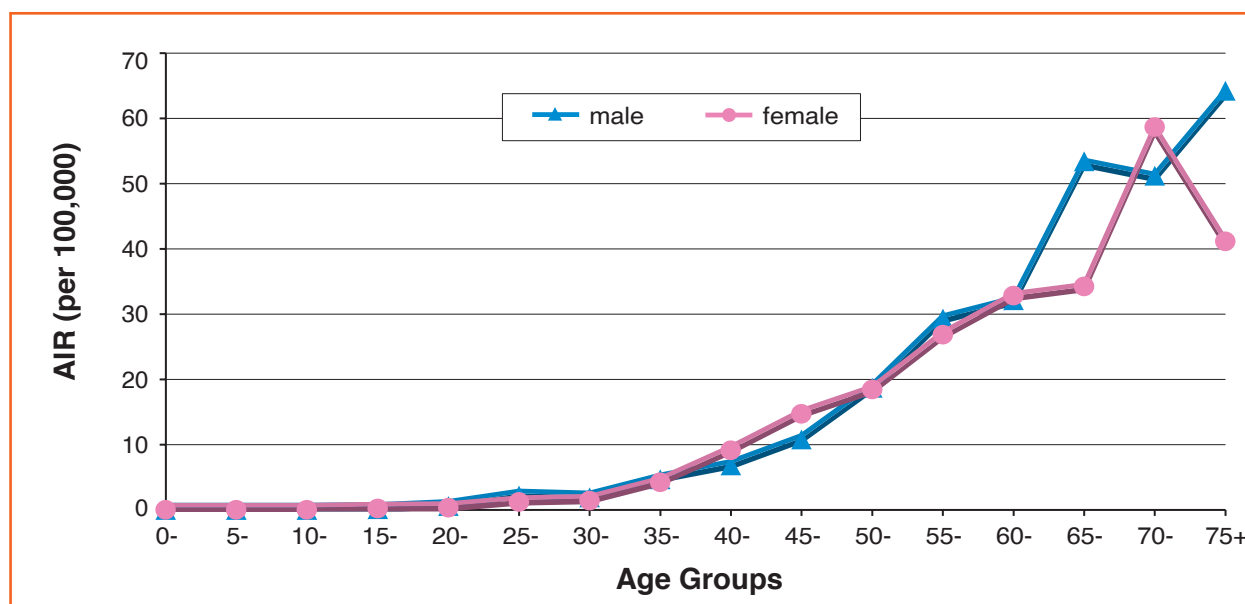


Figure 3.2.1 Age-Specific Incidence Rate (AIR) for Colo-rectal Cancer in Saudi Arabia, 2008

ICD-O-3	Morphology	Male	%	Female	%
8140	Adenocarcinoma, NOS	350	73.2	312	73.2
8480	Mucinous adenocarcinoma	31	6.5	42	9.9
8490	Signet ring cell carcinoma	17	3.6	9	2.1
8263	Adenocarcinoma in tubulovillous adenoma	10	2.1	11	2.6
8000	Neoplasm, malignant	14	2.9	6	1.4
8481	Mucin-producing adenocarcinoma	10	2.1	8	1.9
8261	Adenocarcinoma in villous adenoma	8	1.7	9	2.1
8010	Carcinoma, NOS	9	1.9	6	1.4
8144	Adenocarcinoma, intestinal type	7	1.5	7	1.6
8210	Adenocarcinoma in adenomatous polyp	6	1.3	8	1.9
	Others	16	3.3	8	1.9

Table 3.2.1 Morphological Distribution of Colo-rectal Cancer in Saudi Arabia, 2008

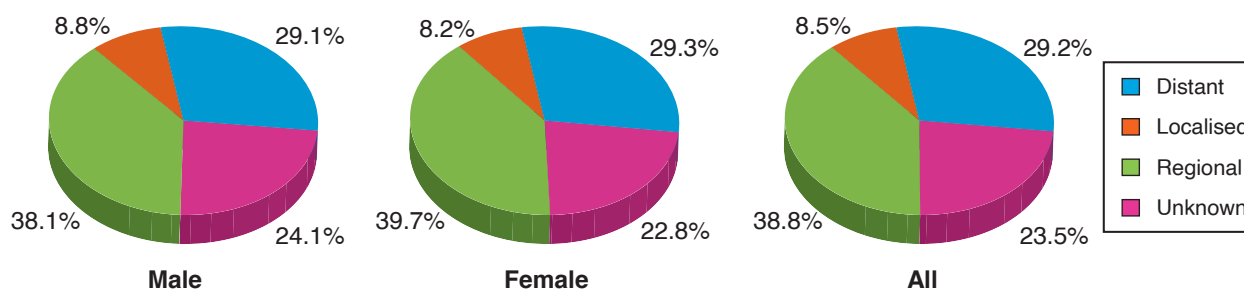


Figure 3.2.2 Stage Distribution of Colo-rectal Cancer in Saudi Arabia, 2008

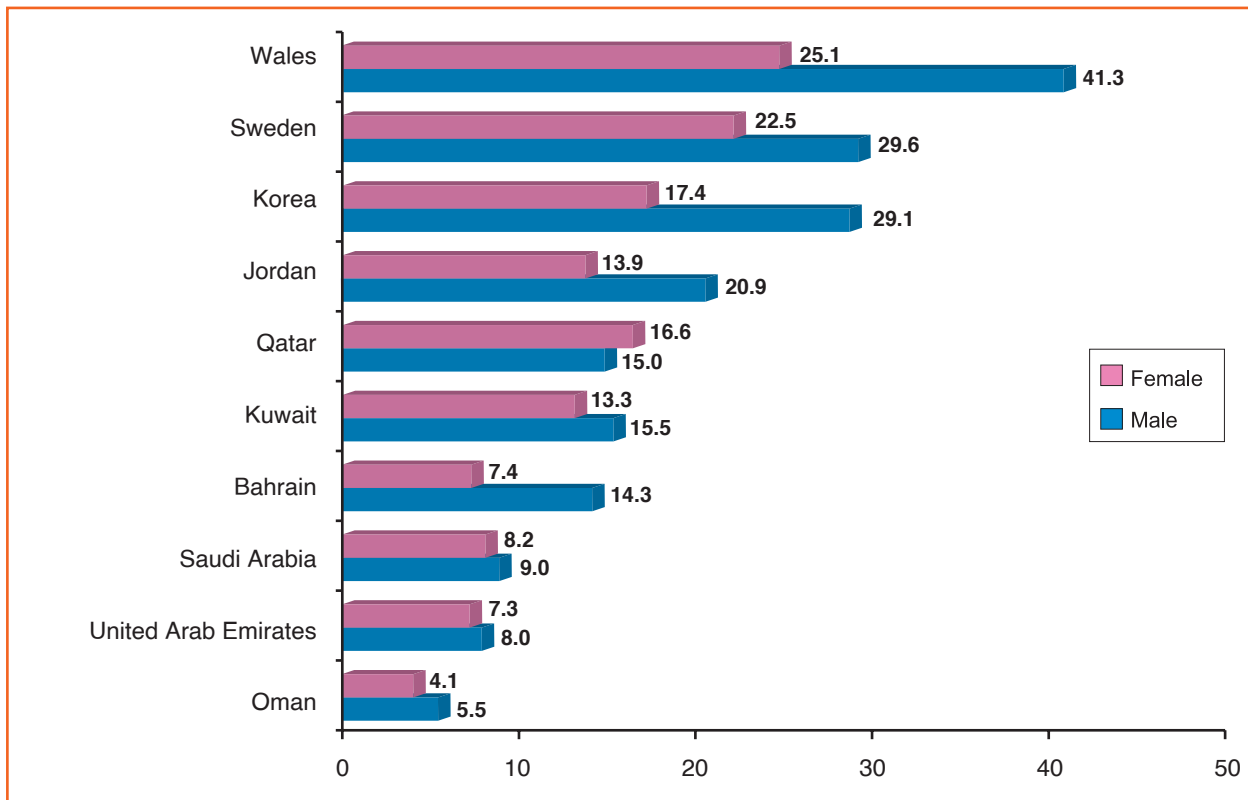


Figure 3.2.4 Comparison of ASR* for Colo-rectal Cancer among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 64

Non-Hodgkin Lymphoma (C82-C85; C96)

There were 674 cases of Non-Hodgkin Lymphoma accounting for 7.6 % of all newly diagnosed cancers in year 2008. This cancer ranked second among male population and fourth among female population. It affected 370 (54.9%) males and 304 (45.1%) females with a male to female ratio of 122:100. The overall

ASR was 5.7/100,000. ASR for males was 6/100,000. The median age at diagnosis was 50 years among males (range 0-92 years) and 56 years among females (range 0-97 years).

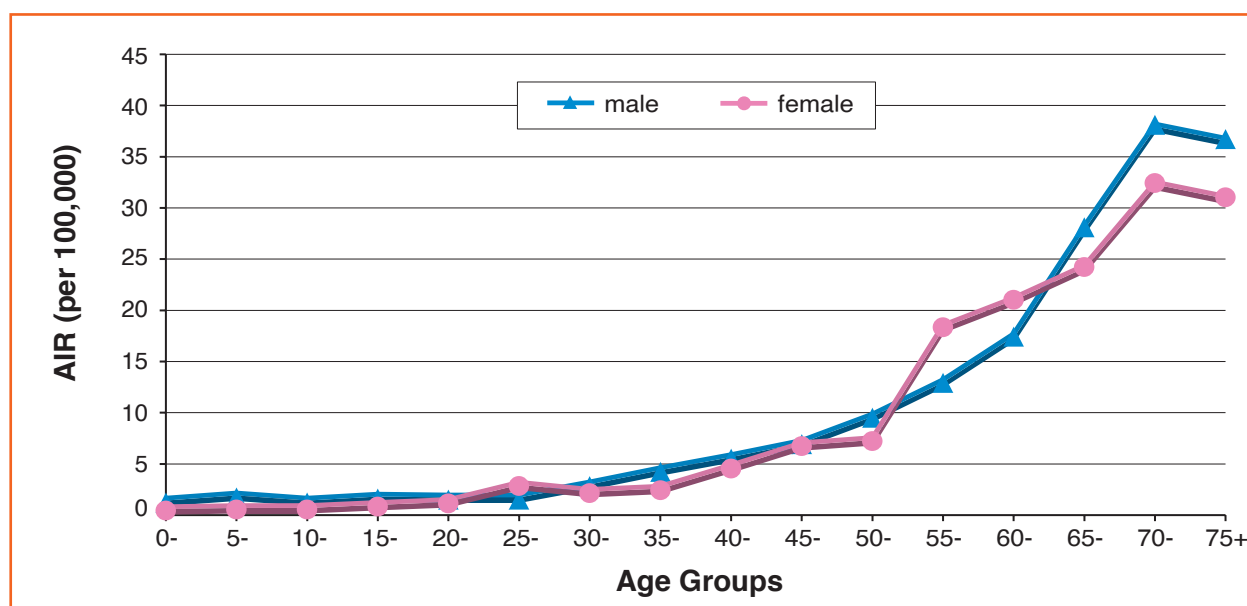


Figure 3.3.1 Age-Specific Incidence Rate (AIR) for NHL in Saudi Arabia, 2008

ICD-O-3	Morphology	Male	%	Female	%
9680	Malignant lymphoma, large B-cell, diffuse, NOS	160	43.2	157	51.6
9687	Burkitt lymphoma, NOS	35	9.5	11	3.6
9590	Malignant lymphoma, NOS	22	5.9	22	7.2
9591	Malignant lymphoma, non-Hodgkin, NOS	15	4.1	22	7.2
9699	Marginal zone B-cell lymphoma, NOS	13	3.5	16	5.3
9700	Mycosis fungoides	13	3.5	8	2.6
9702	Mature T-cell lymphoma, NOS	13	3.5	6	2.0
9670	Malignant lymphoma, small B lymphocytic, NOS	10	2.7	8	2.6
9695	Follicular lymphoma, grade 1	9	2.4	8	2.6
9691	Follicular lymphoma, grade 2	7	1.9	9	3.0
9714	Anaplastic large cell lymphoma, T cell and Null cell type	10	2.7	6	2.0
9690	Follicular lymphoma, NOS	9	2.4	6	2.0
9698	Follicular lymphoma, grade 3	11	3.0	3	1.0
9729	Precursor T-cell lymphoblastic lymphoma	9	2.4	2	0.7
9671	Malignant lymphoma, lymphoplasmacytic	5	1.4	4	1.3
9673	Mantle cell lymphoma	5	1.4	3	1.0
	Others	24	6.5	13	4.3

Table 3.3.1 Morphological Distribution of NHL in Saudi Arabia, 2008

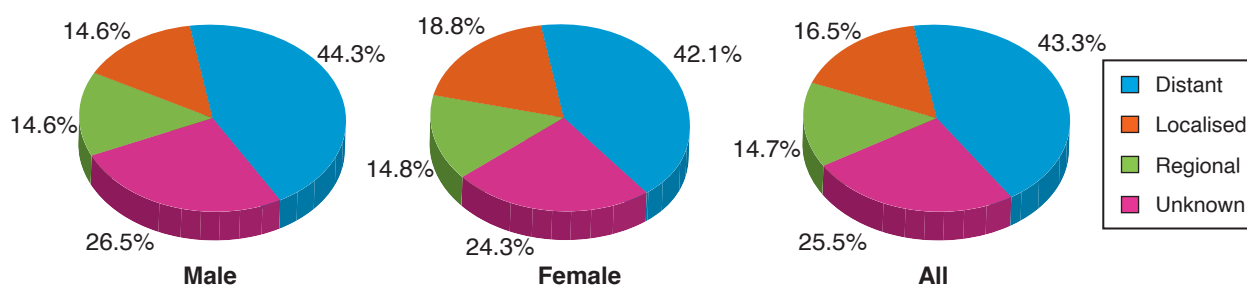


Figure 3.3.2 Stage Distribution of NHL Cancer, 2008

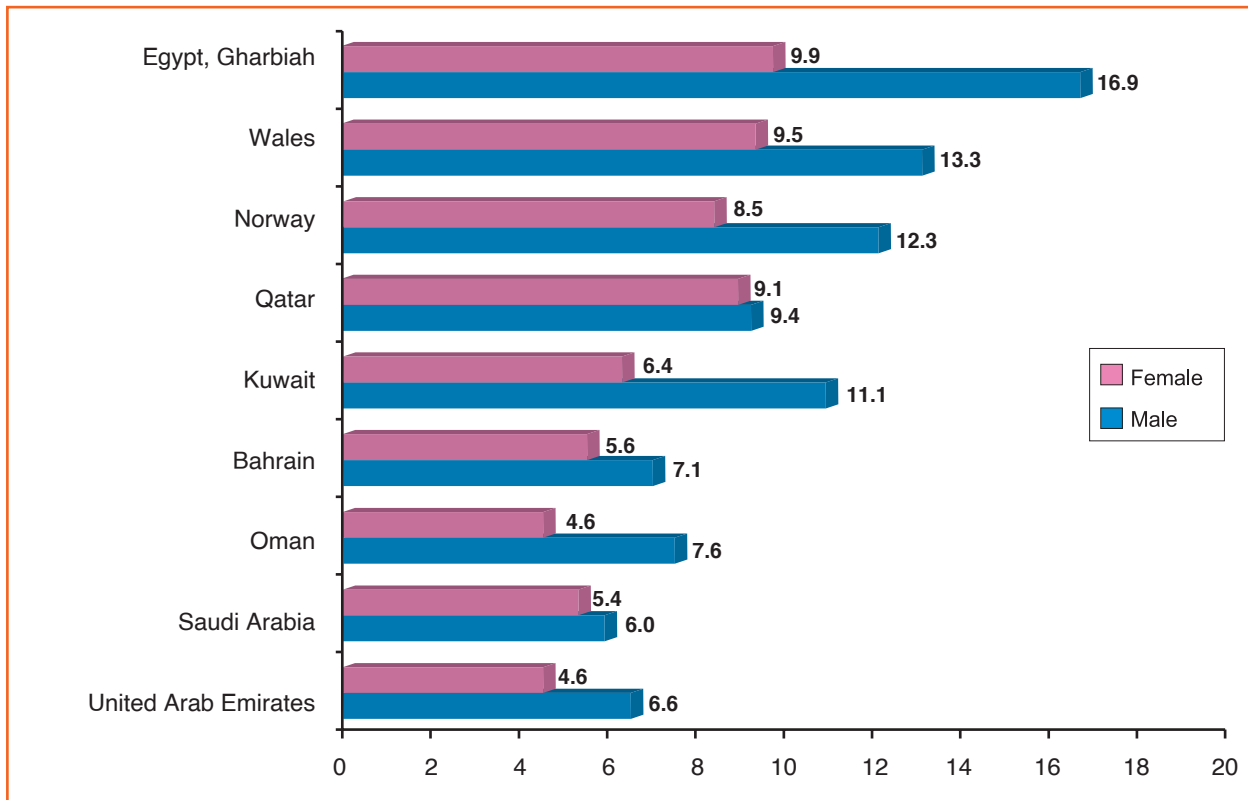


Figure 3.3.4 Comparison of ASR* for NHL Cancer among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 64

Thyroid (C 73)

There were 606 cases of thyroid cancer accounting for 6.8% of all newly diagnosed cases for the year 2008. This cancer ranked second among female population and thirteenth among male population. It affected 131 (21.6%) males and 475 (78.4%) females with a male to female ratio of 28:100. The overall ASR was 4.4/100,000. ASR was 2/100,000 for

males and 6.8/100,000 for females. The median age at diagnosis was 44 years among males (range 9-92 years) and 40 years among females (range 9-91 years).

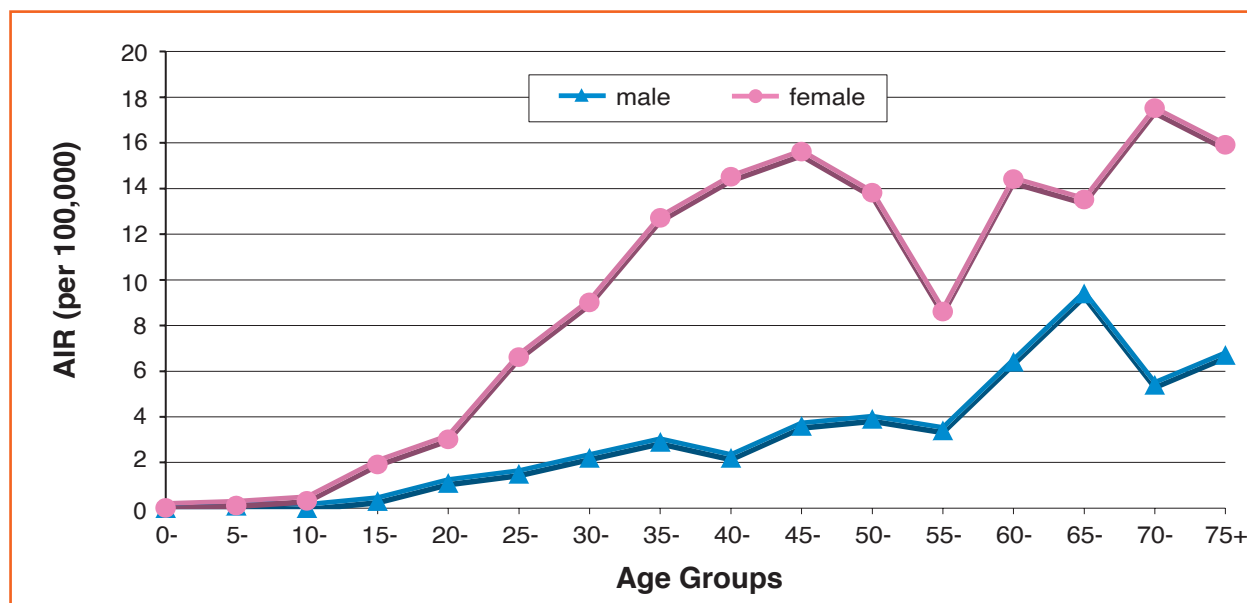


Figure 3.4.1 Age-Specific Incidence Rate (AIR) for Thyroid Cancer in Saudi Arabia, 2008

ICD-O-3	Morphology	Male	%	Female	%
8260	Papillary adenocarcinoma, NOS	76	58.0	276	58.1
8340	Papillary carcinoma, follicular variant	15	11.5	79	16.6
8341	Papillary microcarcinoma	10	7.6	39	8.2
8343	Papillary carcinoma, encapsulated	4	3.1	20	4.2
8510	Medullary carcinoma, NOS	3	2.3	11	2.3
8330	Follicular adenocarcinoma, NOS	6	4.6	7	1.5
8021	Carcinoma, anaplastic, NOS	4	3.1	8	1.7
8290	Oxyphilic adenocarcinoma	1	0.8	7	1.5
8335	Follicular carcinoma, minimally invasive	1	0.8	6	1.3
8344	Papillary carcinoma, columnar cell	3	2.3	3	0.6
	Others	8	6.1	19	4.0

Table 3.4.1 Morphological Distribution of Thyroid Cancer in Saudi Arabia, 2008

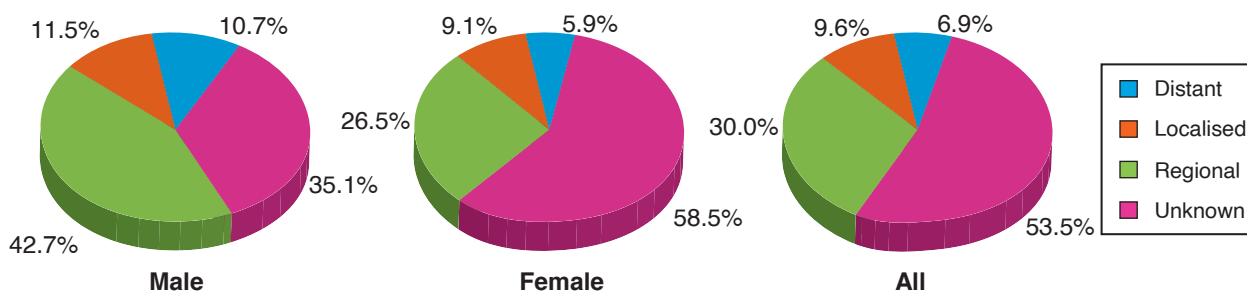


Figure 3.4.2 Stage Distribution of Thyroid Cancer, 2008

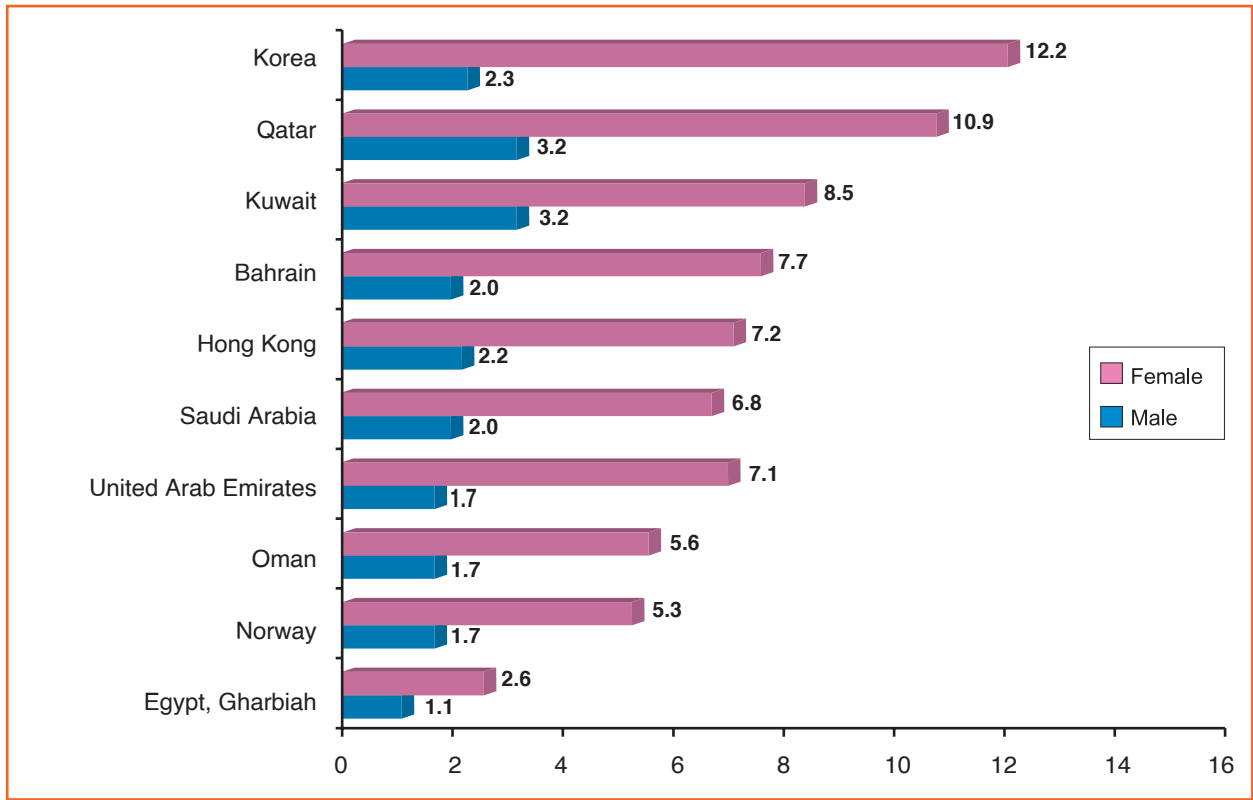


Figure 3.4.4 Comparison of ASR* for Thyroid Cancer among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 64

Leukemia (C91-C95)

There were 582 cases of leukemia accounting for 6.6% of all newly diagnosed cancers in year 2008. This cancer ranked third for males and fifth for females and affected 335 (57.6%) males and 247 (42.4%) females with a male to female ratio of 136:100. The overall ASR was

3.9/100,000. ASR for males was 4.5/100,000 and 3.2/1000,000 for females. The median age at diagnosis is 26 years among males (range 0-92years) and 22 years among females (range 0-93 years).

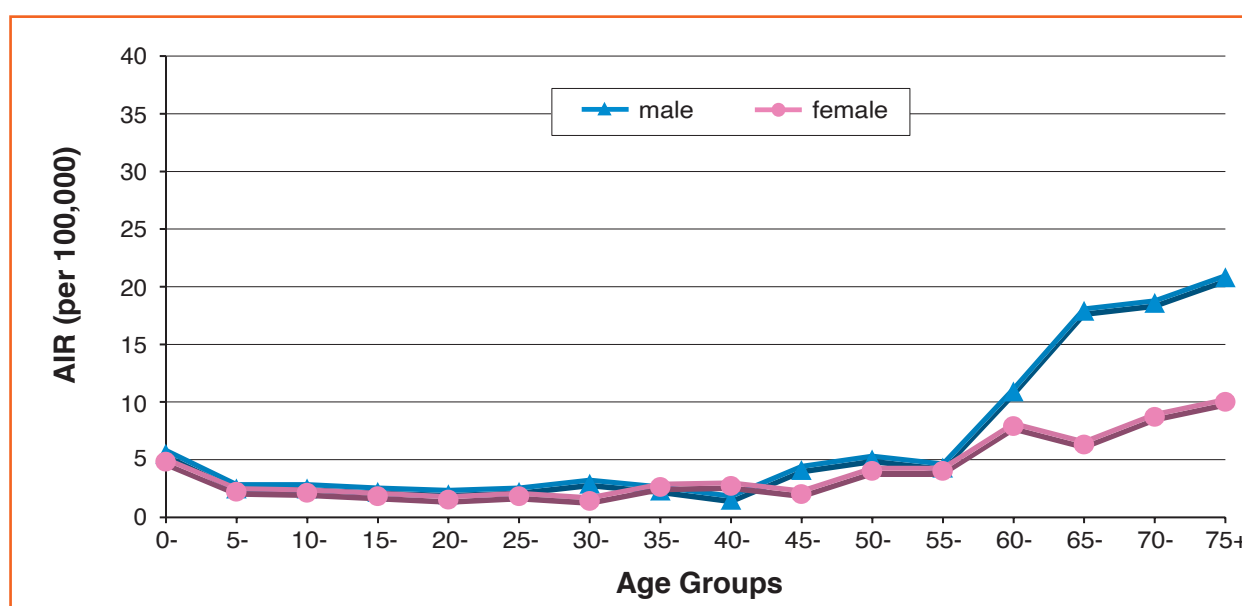


Figure 3.5.1 Age-Specific Incidence Rate (AIR) for Leukemia in Saudi Arabia, 2008

ICD-O-3	Morphology	Male	%	Female	%
9836	Precursor B-cell lymphoblastic leukemia	64	19.1	50	20.2
9861	Acute myeloid leukemia, NOS	46	13.7	28	11.3
9835	Precursor cell lymphoblastic leukemia, NOS	38	11.3	35	14.2
9863	Chronic myeloid leukemia, NOS	39	11.6	33	13.4
9823	B-cell chronic lymphocytic leukemia/small lymphocytic lymphom	26	7.8	20	8.1
9801	Acute leukemia, NOS	13	3.9	14	5.7
9800	Leukemia, NOS	14	4.2	11	4.5
9837	Precursor T-cell lymphoblastic leukemia	18	5.4	4	1.6
9866	Acute promyelocytic leukemia, t(15;17)(q22;q11-12)	13	3.9	7	2.8
9805	Acute biphenotypic leukemia	12	3.6	6	2.4
9873	Acute myeloid leukemia without maturation	4	1.2	8	3.2
9874	Acute myeloid leukemia with maturation	6	1.8	5	2.0
9867	Acute myelomonocytic leukemia	5	1.5	3	1.2
9891	Acute monocytic leukemia	6	1.8	2	0.8
9875	Chronic myelogenous leukemia, BCR/ABL positive	5	1.5	1	0.4
9946	Juvenile myelomonocytic leukemia	2	0.6	4	1.6
	Others	24	7.2	16	6.5

Table 3.5.1 Morphological Distribution of Leukemia in Saudi Arabia, 2008

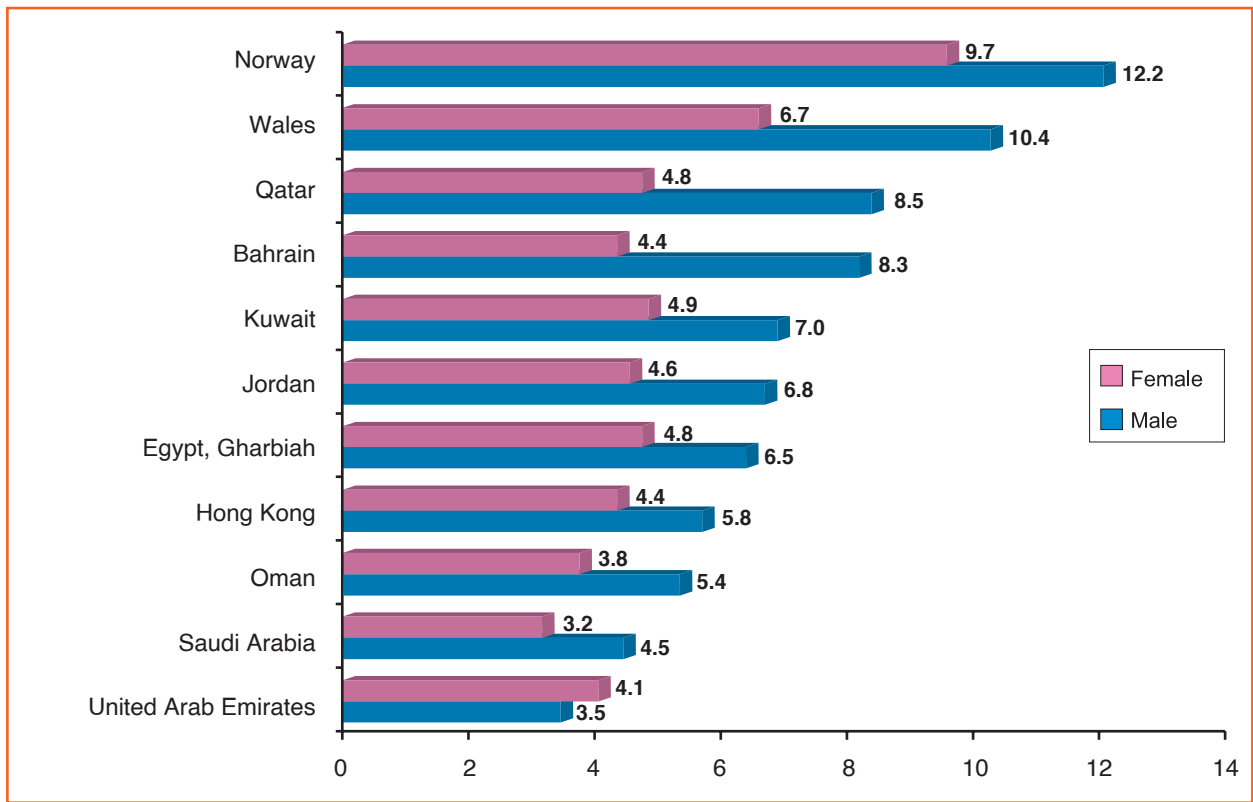


Figure 3.5.3 Comparison of ASR* for Leukemia among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 64

Liver (C 22)

There were 418 cases of liver cancer accounting for 4.7% of all newly diagnosed cases in year 2008. This cancer ranked fourth in males, and tenth in females and affected 303 (72.5%) males and 115 (27.5%) females with a male to female ratio of 263:100. The overall ASR was

4.3/100,000. ASR was 6.2/100,000 for males and 2.3/100,000 for females. The median age at diagnosis was 68 years in males (range 0-100 years) and 64 years in female (range 0-90 years).

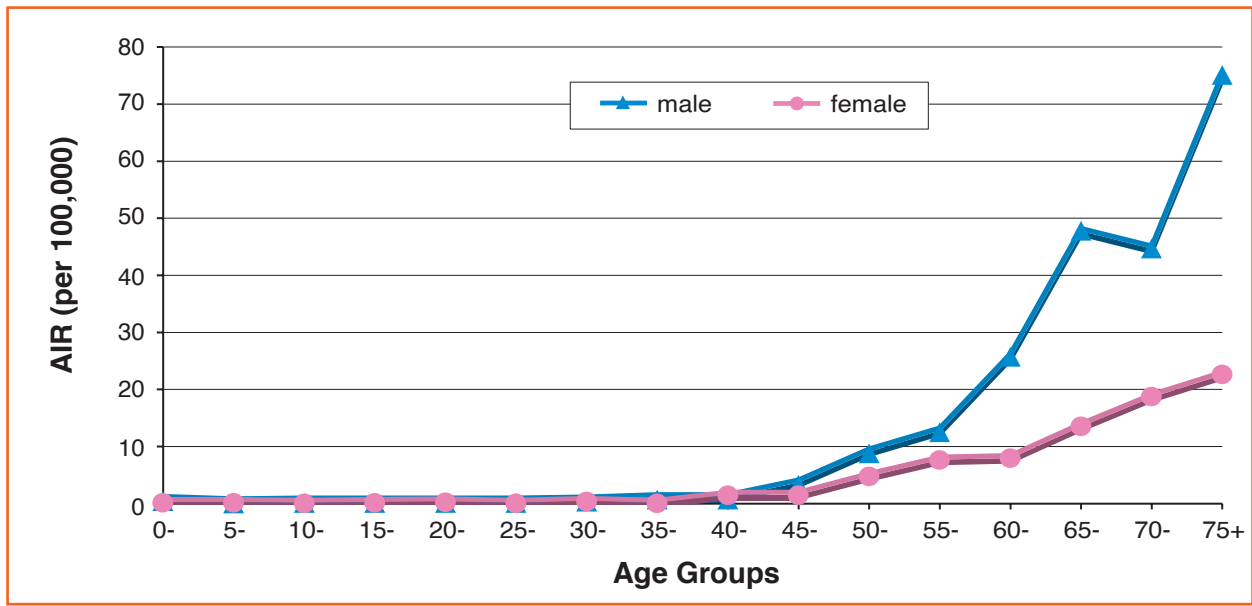


Figure 3.6.1 Age-Specific Incidence Rate (AIR) for Liver Cancer in Saudi Arabia, 2008

ICD-O-3	Morphology	Male	%	Female	%
8170	Hepatocellular carcinoma, NOS	251	82.8	82	71.3
8000	Neoplasm, malignant	17	5.6	14	12.2
8140	Adenocarcinoma, NOS	7	2.3	7	6.1
8160	Cholangiocarcinoma	7	2.3	5	4.3
8010	Carcinoma, NOS	5	1.7	0	0.0
8180	Combined hepatocellular carcinoma and cholangiocarcinoma	3	1.0	2	1.7
8970	Hepatoblastoma	4	1.3	1	0.9
	Others	9	3.0	4	3.5

Table 3.6.1 Morphological Distribution of Liver Cancer in Saudi Arabia, 2008

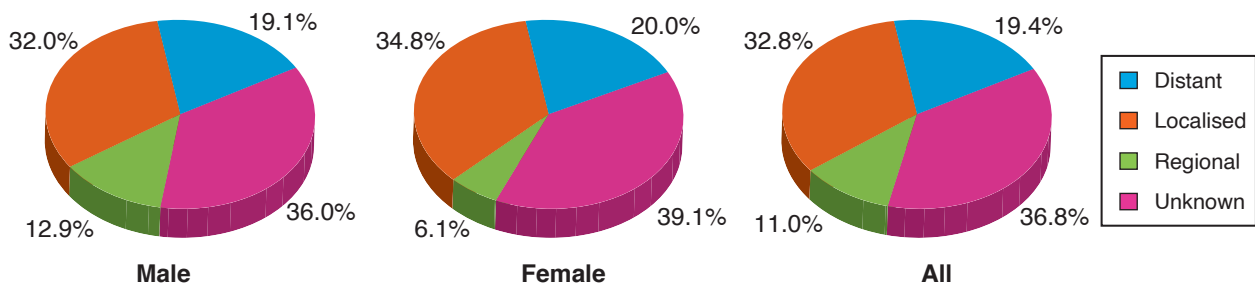


Figure 3.6.2 Stage Distribution of Liver Cancer, 2008

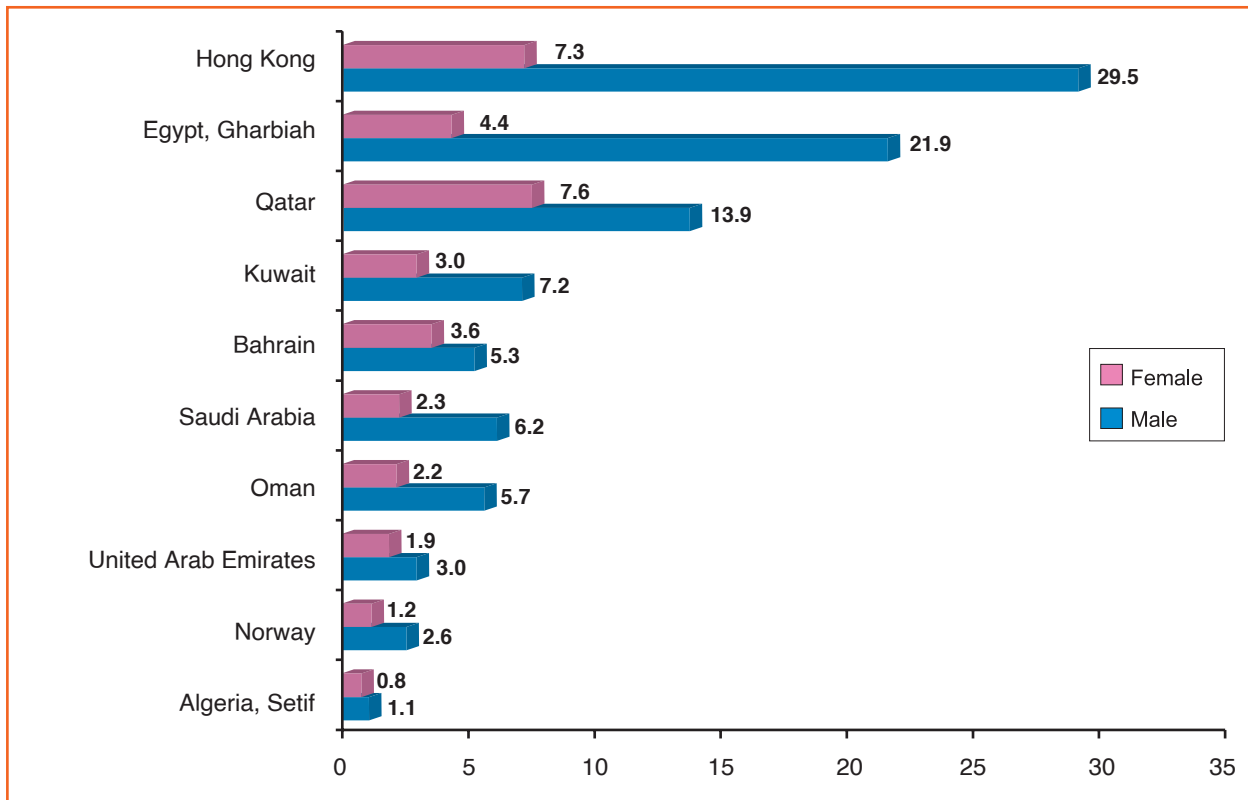


Figure 3.6.4 Comparison of ASR* for Liver Cancer among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 64

Lung (C33-C34)

There were 367 cases of lung cancer accounting for 4.1% of all diagnosed cases in year 2008. Lung cancer ranked fifth among male population and fifteenth among female population. It affected 285 (77.7%) males and 82 (22.3%) females with a male to female ratio of 348:100. The overall ASR was 3.8/100,000. ASR was

5.8/100,000 for males and 1.7/100,000 for females. The median age at diagnosis was 65 years among males (range 26-109 years) and 61 years among females (range 20-100 years).

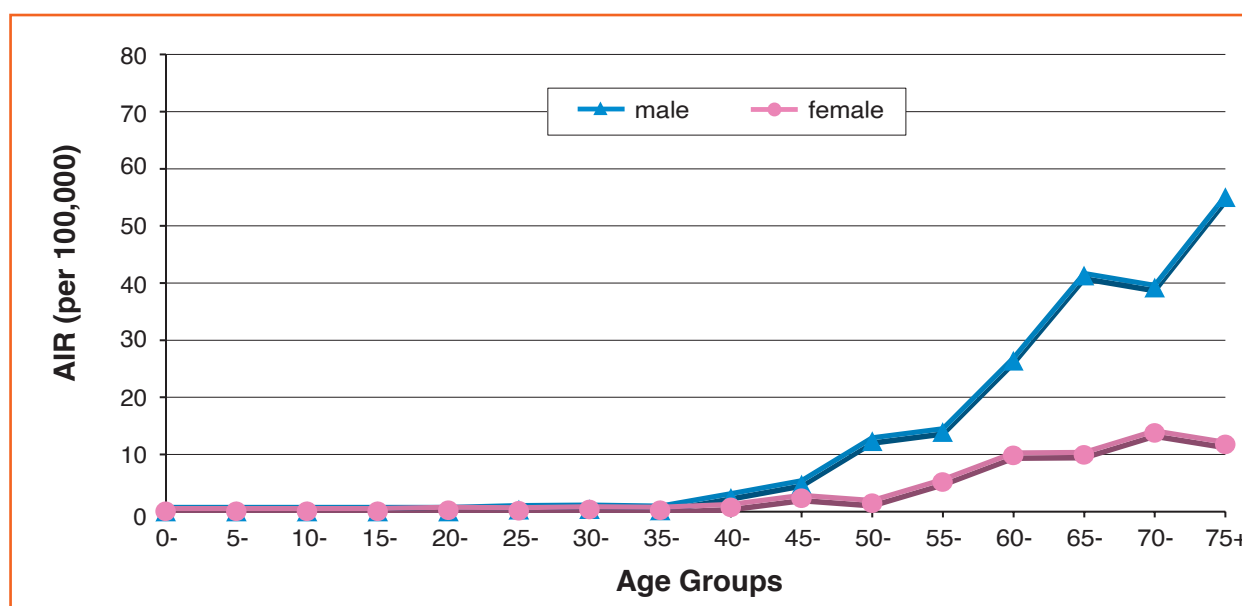


Figure 3.7.1 Age-Specific Incidence Rate (AIR) for Lung Cancer in Saudi Arabia, 2008

ICD-O-3	Morphology	Male	%	Female	%
8140	Adenocarcinoma, NOS	69	24.2	27	32.9
8070	Squamous cell carcinoma, NOS	62	21.8	8	9.8
8046	Non-small cell carcinoma	34	11.9	9	11.0
8000	Neoplasm, malignant	26	9.1	7	8.5
8041	Small cell carcinoma, NOS	29	10.2	4	4.9
8010	Carcinoma, NOS	19	6.7	5	6.1
8250	Bronchiolo-alveolar adenocarcinoma, NOS	14	4.9	8	9.8
8240	Carcinoid tumor, NOS	4	1.4	2	2.4
8480	Mucinous adenocarcinoma	4	1.4	2	2.4
8071	Squamous cell carcinoma, keratinizing, NOS	4	1.4	0	0.0
	Others	20	7.0	10	12.2

Table 3.7.1 Morphological Distribution of Lung Cancer in Saudi Arabia, 2008

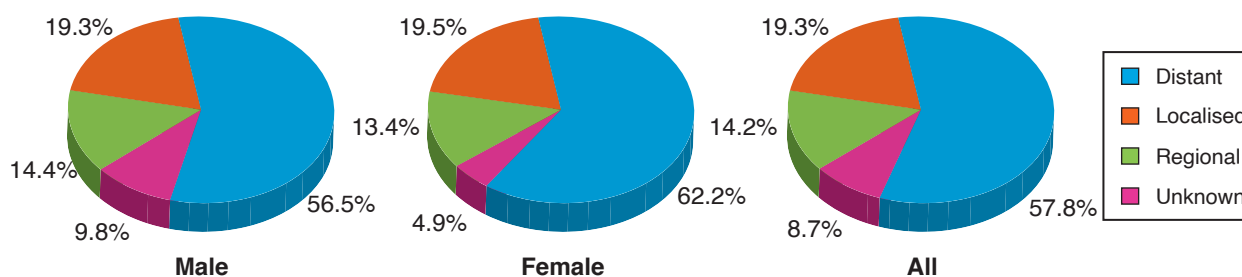


Figure 3.7.2 Stage Distribution of Lung Cancer, 2008

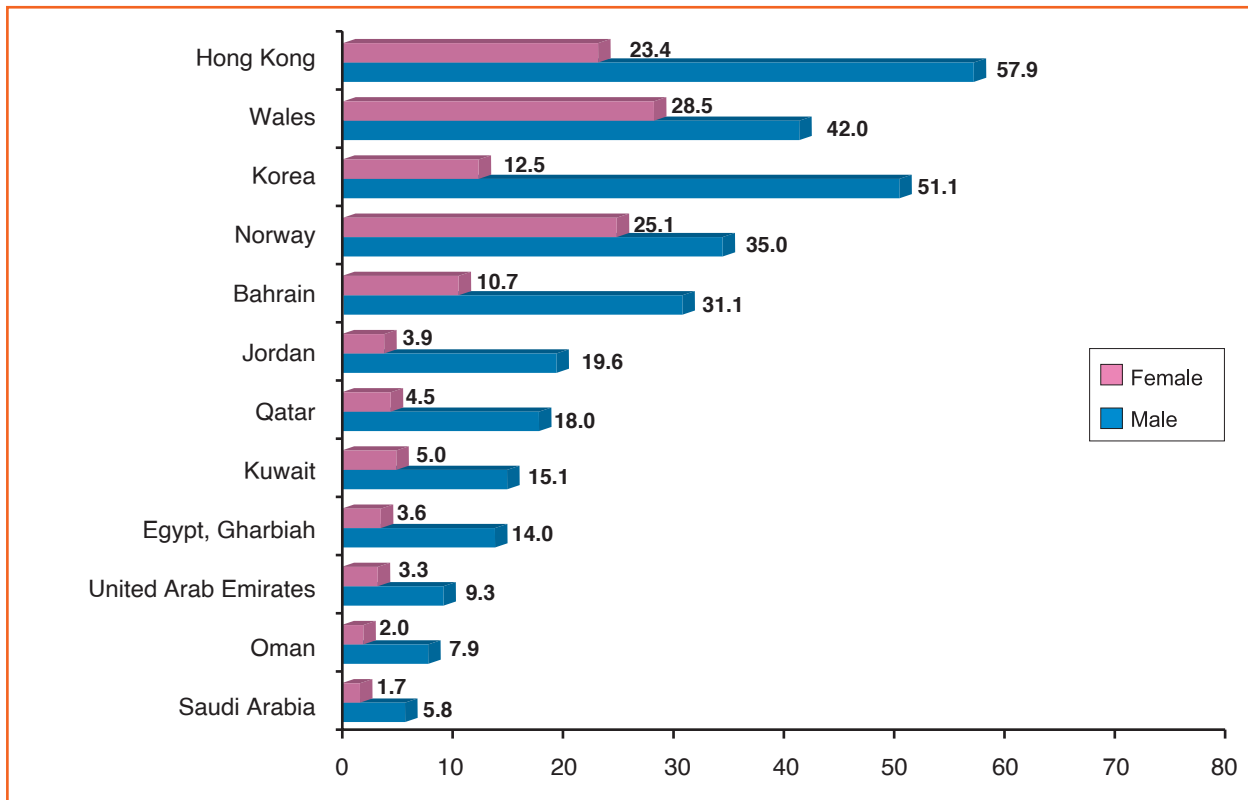


Figure 3.7.4 Comparison of ASR* for Lung Cancer among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 64

Hodgkin disease (C 81)

There were 306 cases of Hodgkin disease cancer accounting for 3.5% of all newly diagnosed cases in year 2008. This cancer ranked seventh among male and eighth in female population. It affected 175 (57.2%) males and 131 (42.8%) females with a male to female ratio of 134:100. The overall ASR

was 1.7/100,000. ASR was 1.9/100,000 for males and 1.5/100,000 for females. The median age at diagnosis was 23 years (range 3-86 years) in males and 23 year in females (range 3-80).

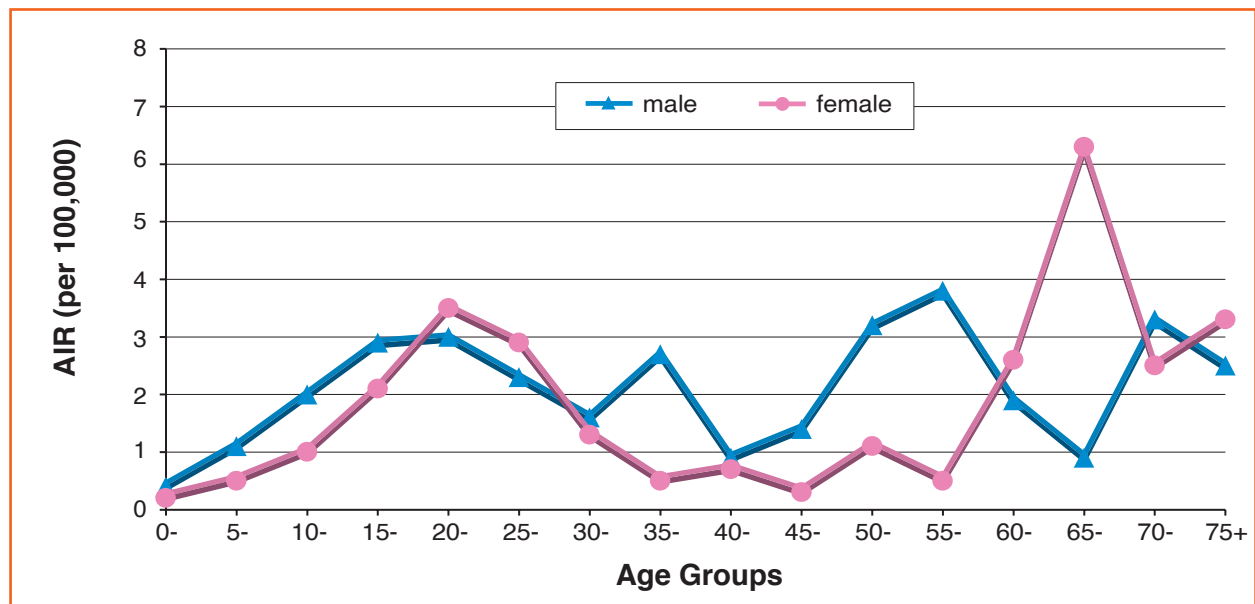


Figure 3.8.1 Age-Specific Incidence Rate (AIR) for Hodgkins disease in Saudi Arabia, 2008

ICD-O-3	Morphology	Male	%	Female	%
9663	Hodgkin lymphoma, nodular sclerosis, NOS	80	45.7	73	55.7
9652	Hodgkin lymphoma, mixed cellularity, NOS	35	20.0	19	14.5
9650	Hodgkin lymphoma, NOS	18	10.3	13	9.9
9665	Hodgkin lymphoma, nodular sclerosis, grade 1	9	5.1	9	6.9
9659	Hodgkin lymphoma, nodular lymphocyte predominance	14	8.0	3	2.3
9651	Hodgkin lymphoma, lymphocyte-rich	8	4.6	4	3.1
9653	Hodgkin lymphoma, lymphocyte depletion, NOS	4	2.3	5	3.8
9667	Hodgkin lymphoma, nodular sclerosis, grade 2	3	1.7	4	3.1
9664	Hodgkin lymphoma, nodular sclerosis, cellular phase	3	1.7	1	0.8
9662	Hodgkin sarcoma	1	0.6	0	0.0

Table 3.8.1 Morphological Distribution of Hodgkins disease in Saudi Arabia, 2008

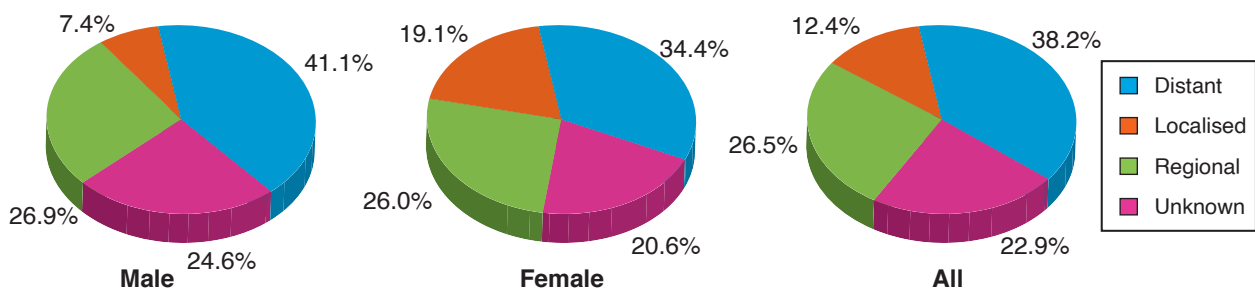


Figure 3.8.2 Stage Distribution of Hodgkins disease, 2008

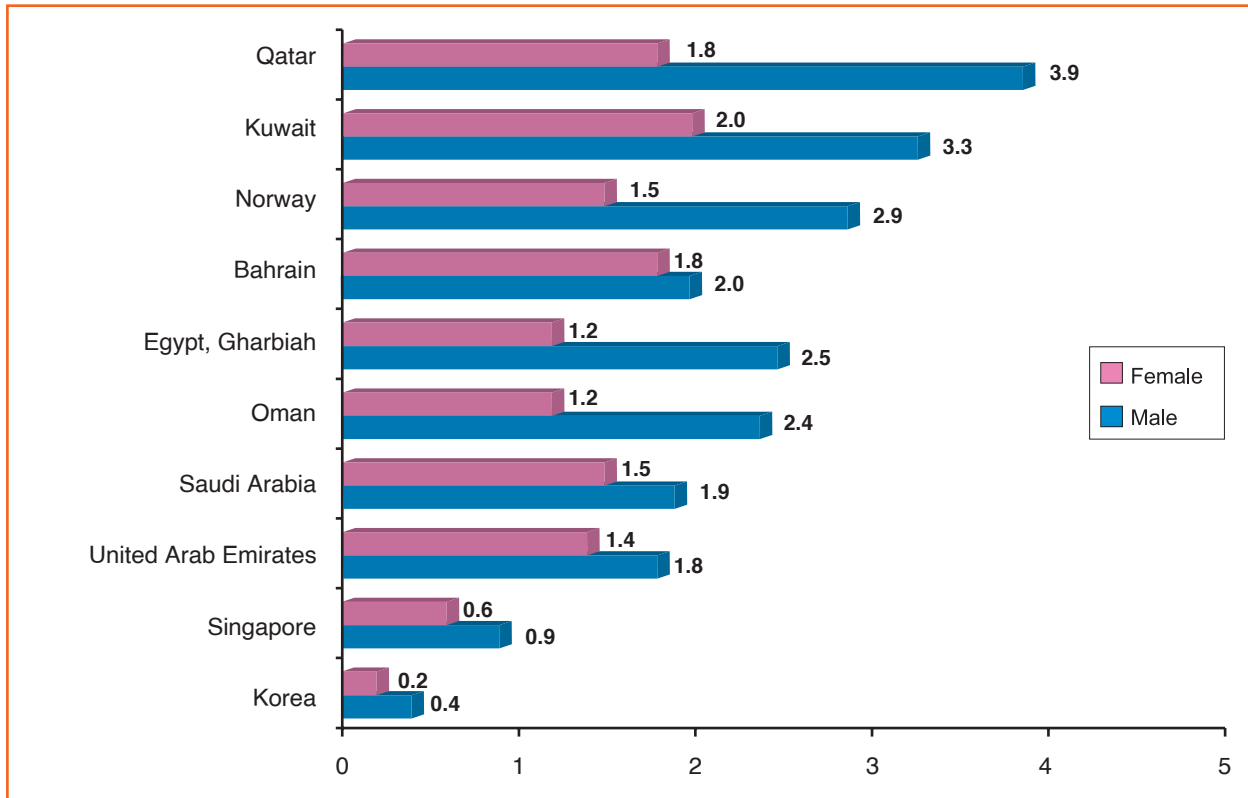


Figure 3.8.4 Comparison of ASR* for Hodgkins disease among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 64

Skin (Non-Melanoma) (C 44)

There were 284 cases of skin cancer accounting for 3.2% of all newly diagnosed cases in year 2008. This cancer ranked tenth for males and ninth for females. It affected 159 (56%) males and 125 (44%) females with a male to female ratio of 127:100. The overall ASR was 2.7/100,000. ASR was 3/100,000 for male and 2.4/100,000 for females.

The median age at diagnosis was 64 years among males (range 10-102 years) and 66 years among female (range 11-91 years).

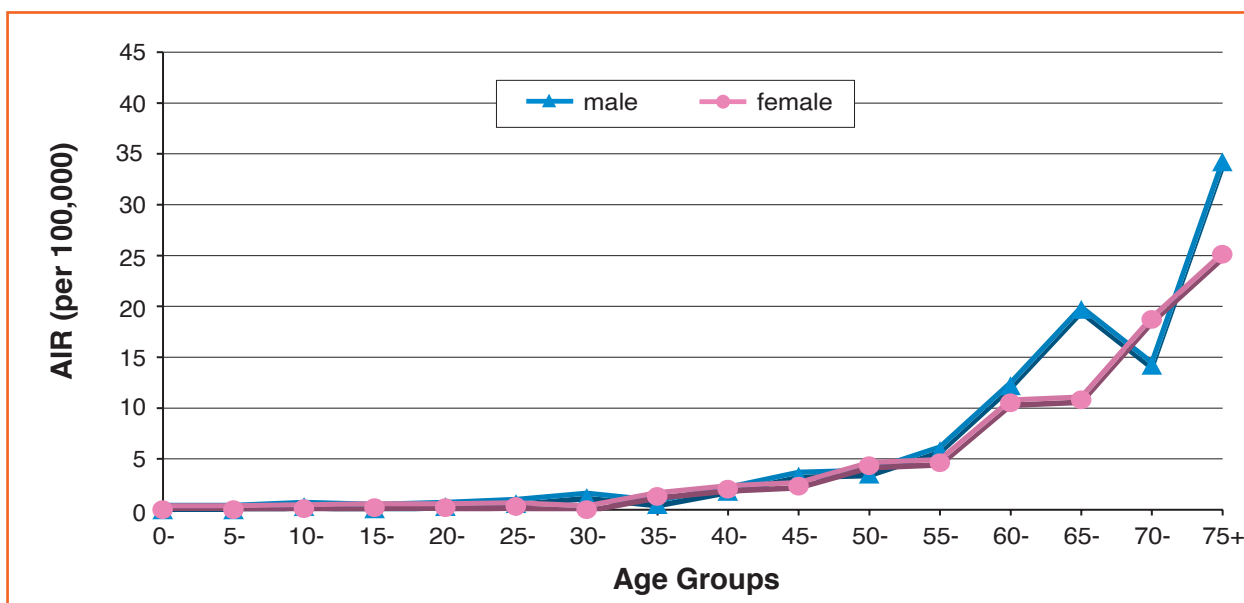


Figure 3.9.1 Age-Specific Incidence Rate (AIR) for Skin Cancer in Saudi Arabia, 2008

ICD-O-3	Morphology	Male	%	Female	%
8090	Basal cell carcinoma, NOS	58	36.5	64	51.2
8070	Squamous cell carcinoma, NOS	42	26.4	26	20.8
8832	Dermatofibrosarcoma, NOS	18	11.3	8	6.4
8071	Squamous cell carcinoma, keratinizing, NOS	6	3.8	4	3.2
8094	Basosquamous carcinoma	5	3.1	4	3.2
8097	Basal cell carcinoma, nodular	5	3.1	4	3.2
8410	Sebaceous adenocarcinoma	4	2.5	2	1.6
8051	Verrucous carcinoma, NOS	5	3.1	0	0.0
8091	Multifocal superficial basal cell carcinoma	2	1.3	3	2.4
8000	Neoplasm, malignant	1	0.6	2	1.6
8076	Squamous cell carcinoma, microinvasive	2	1.3	1	0.8
8092	Infiltrating basal cell carcinoma, NOS	2	1.3	1	0.8
	Others	9	5.7	6	4.8

Table 3.9.1 Morphological Distribution of Skin Cancer in Saudi Arabia, 2008

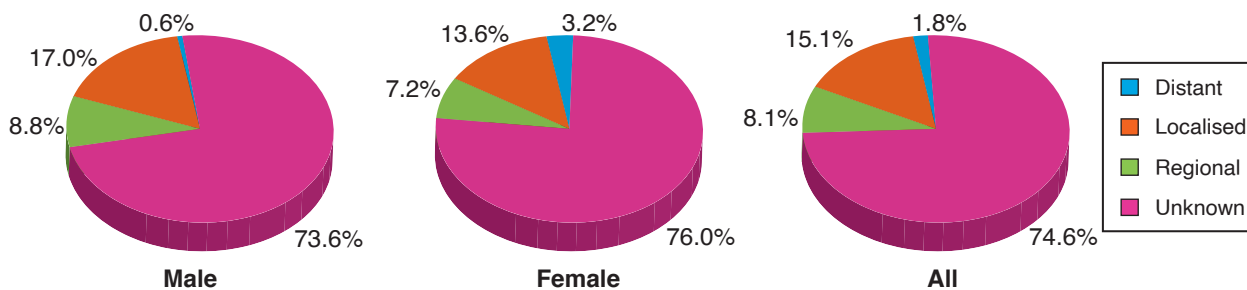


Figure 3.9.2 Stage Distribution of Skin Cancer, 2008

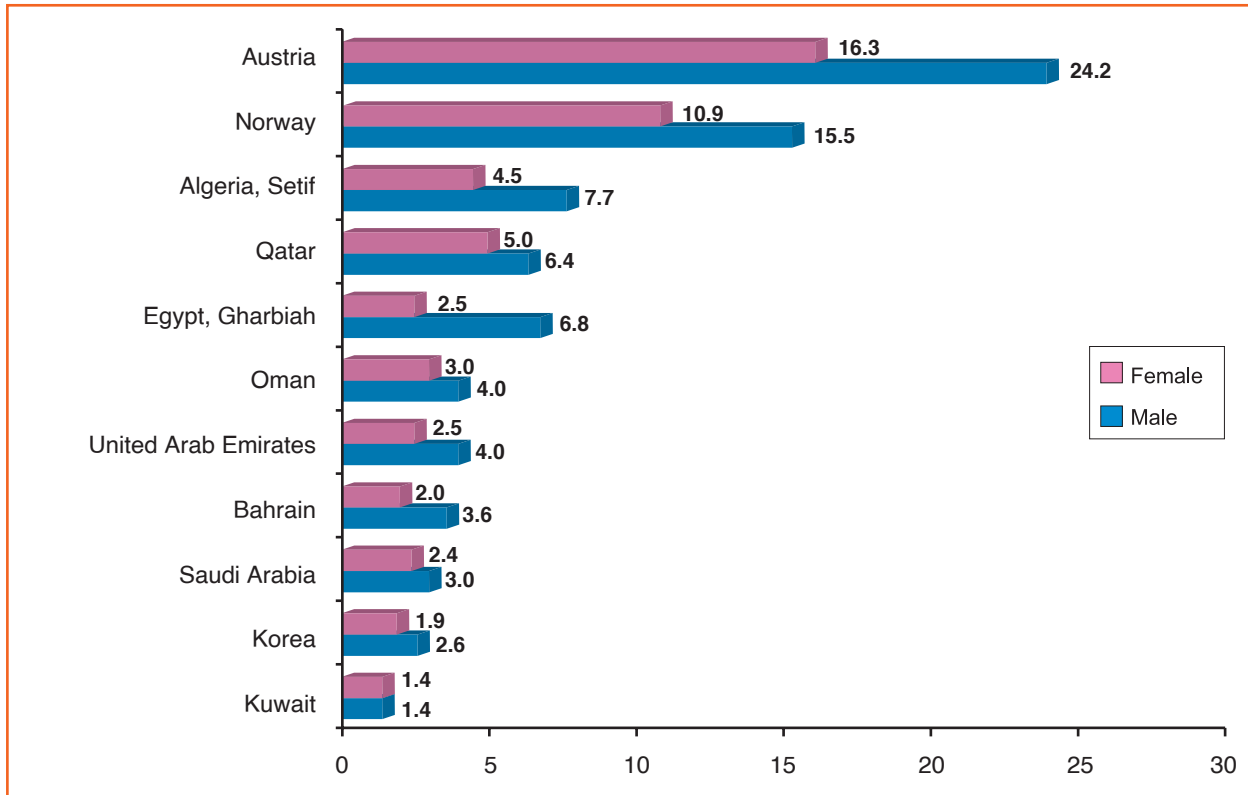


Figure 3.9.4 Comparison of ASR* for Skin Cancer among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 64

Prostate (C 61)

There were 267 cases of prostate cancer accounting for 6.3% of all newly diagnosed cases among males in year 2008. This cancer ranked sixth among males. The ASR was 5.7/100,000 among male

population. The median age at diagnosis was 70 years (range 41-107 years).

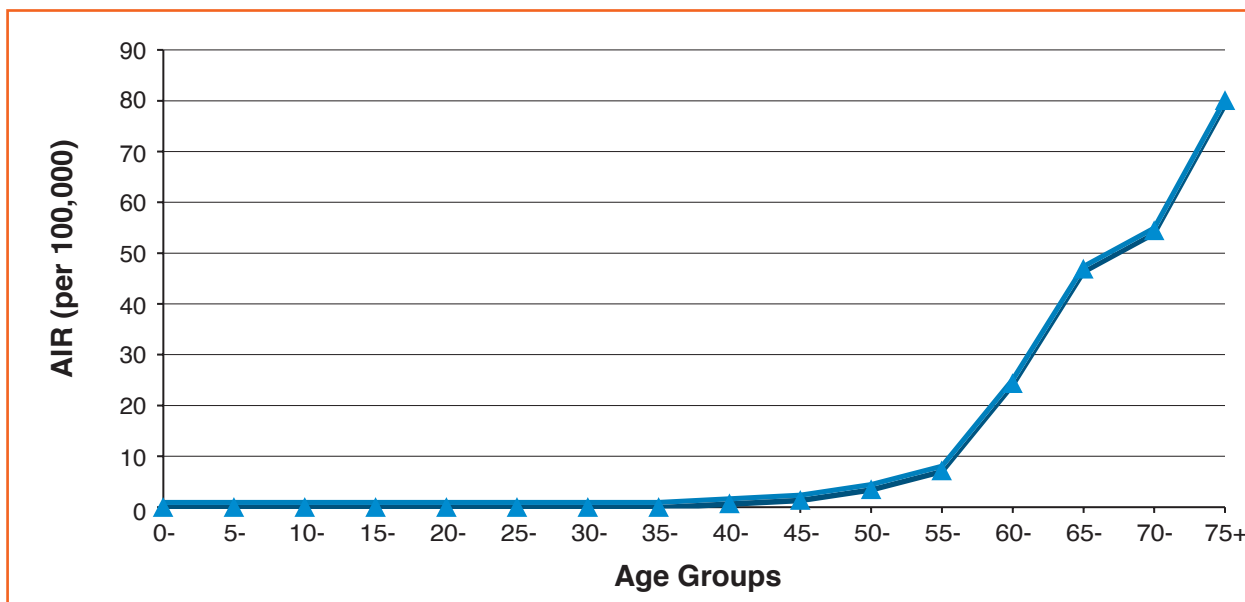


Figure 3.10.1 Age-Specific Incidence Rate (AIR) for Prostate Cancer in Saudi Arabia, 2008

ICD-O-3	Morphology	Male	%
8140	Adenocarcinoma, NOS	236	88.4
8010	Carcinoma, NOS	11	4.1
8000	Neoplasm, malignant	9	3.4
8550	Acinar cell carcinoma	6	2.2
8041	Small cell carcinoma, NOS	3	1.1
8020	Carcinoma, undifferentiated, NOS	1	0.4
8120	Transitional cell carcinoma, NOS	1	0.4

Table 3.10.1 Morphological Distribution of Prostate Cancer in Saudi Arabia, 2008

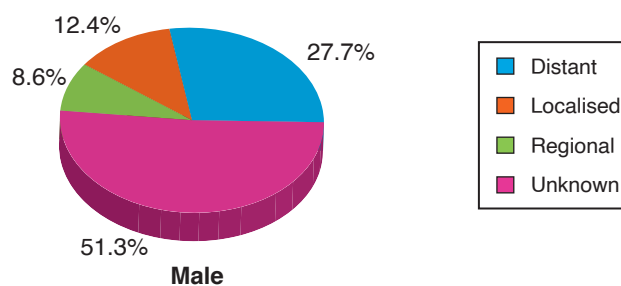


Figure 3.10.2 Stage Distribution of Prostate Cancer in Saudi Arabia, 2008

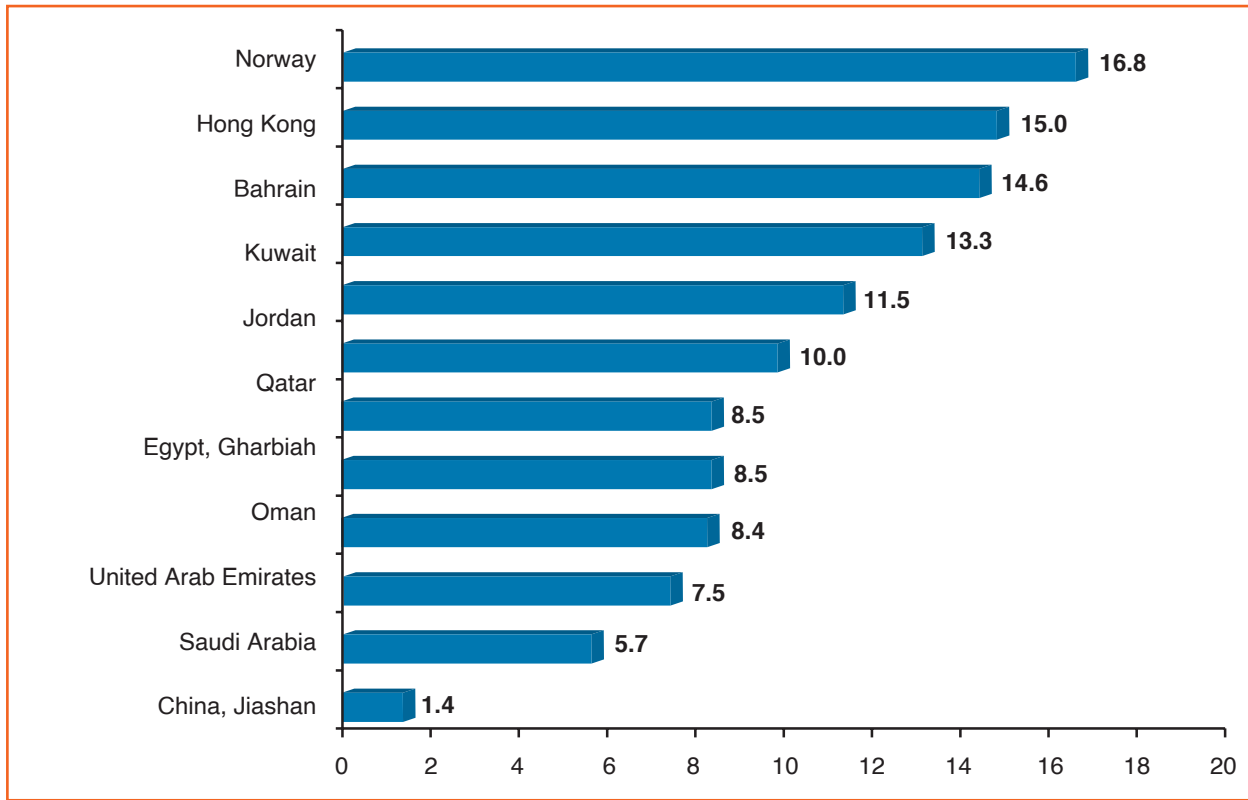


Figure 3.10.4 Comparison of ASR* for Prostate Cancer among Saudi males with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 64

Corpus uteri (C 54)

There were 194 cases of corpus uteri cancer among females accounting for 4.2 % of all newly diagnosed cases for females (4,617) in year 2008. This cancer ranked sixth among female population.

The ASR was 4/100,000 for female population. The median age at diagnosis was 59 years (range 21-90 years).

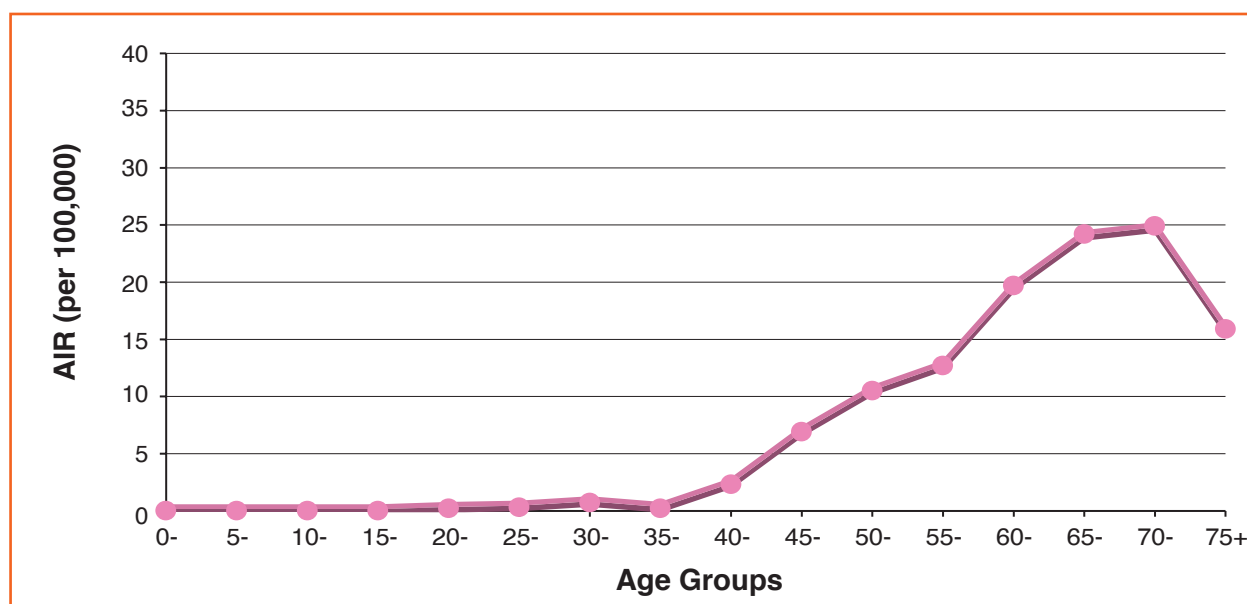


Figure 3.11.1 Age-Specific Incidence Rate (AIR) for Corpus uteri Cancer in Saudi Arabia, 2008

ICD-O-3	Morphology	Female	%
8380	Endometrioid adenocarcinoma, NOS	119	61.3
8140	Adenocarcinoma, NOS	26	13.4
8950	Mullerian mixed tumor	6	3.1
8980	Carcinosarcoma, NOS	6	3.1
8010	Carcinoma, NOS	5	2.6
8460	Papillary serous cystadenocarcinoma	5	2.6
8890	Leiomyosarcoma, NOS	5	2.6
8310	Clear cell adenocarcinoma, NOS	4	2.1
8441	Serous cystadenocarcinoma, NOS	4	2.1
8931	Endometrial stromal sarcoma, low grade	3	1.5
	Others	11	5.7

Table 3.11.1 Morphological Distribution of Corpus uteri Cancer in Saudi Arabia, 2008

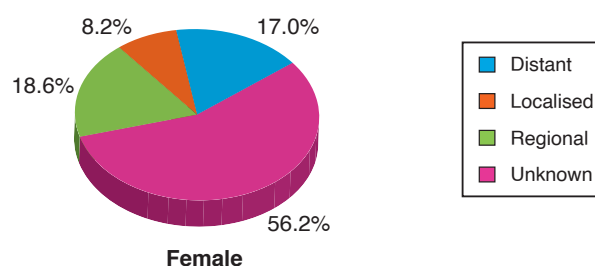


Figure 3.11.2 Stage Distribution of Corpus uteri Cancer, 2008

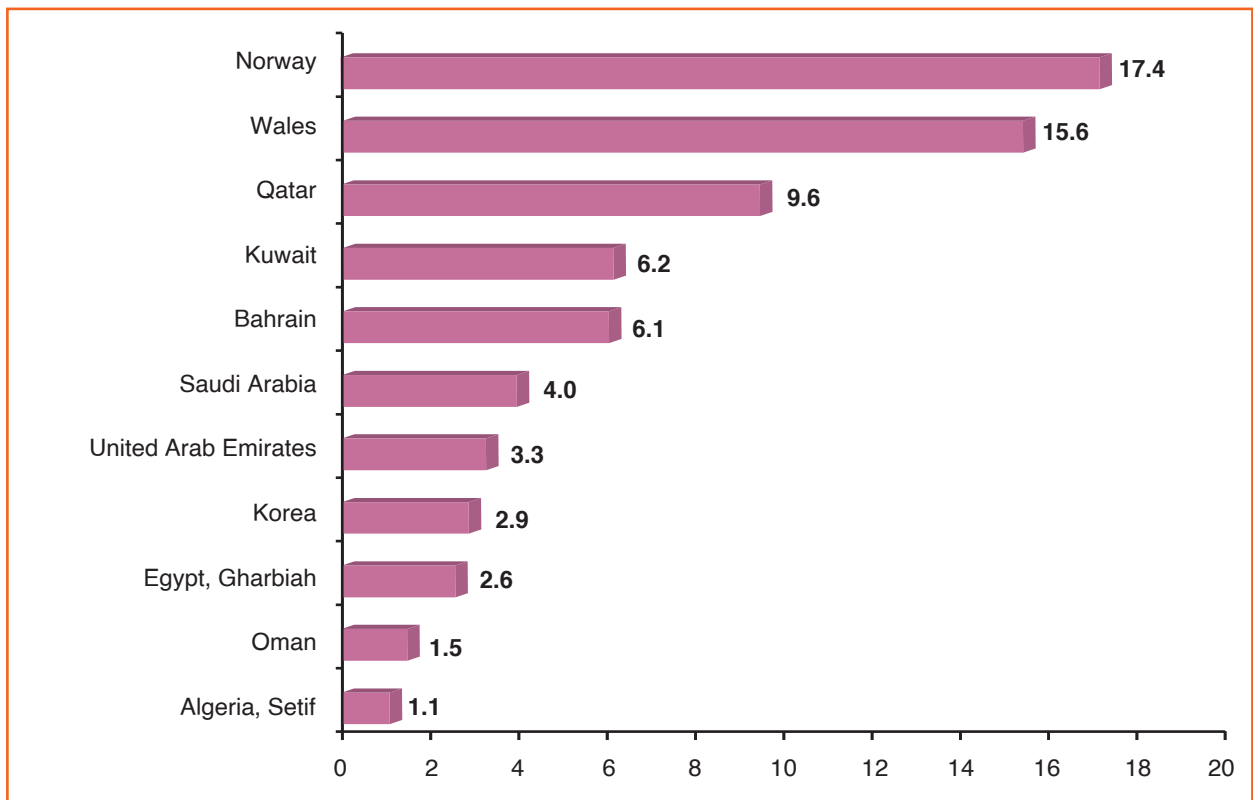


Figure 3.11.4 Comparison of ASR* for Corpus uteri Cancer among Saudi females with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 64

Bladder (C 67)

There were 211 cases of bladder cancer accounting for 2.4% of all newly diagnosed cases in year 2008. This cancer ranked eighth among male population and 23rd among female population. It affected 173 (82%) males and 38 (18%) females with a male to female ratio of 455:100. The overall ASR was

2.2/100,000. ASR was 3.6/100,000 for males and 0.8/100,000 for females. The median age at diagnosis was 65 among males (range 6-108 years) and 69 among females (range 21-90 years).

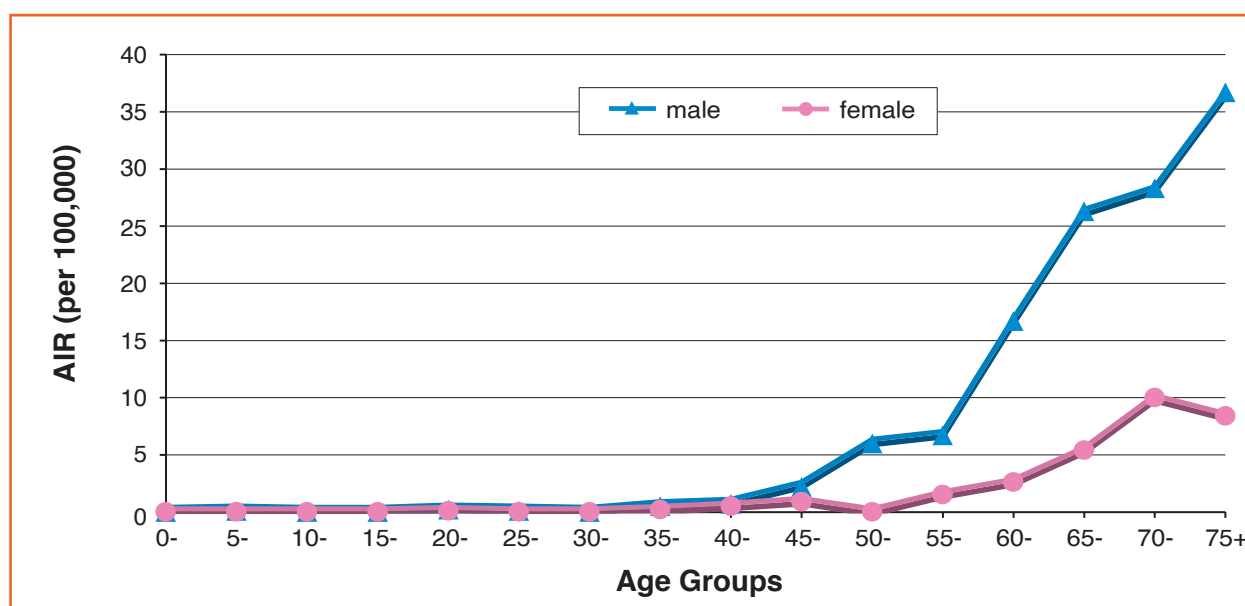


Figure 3.12.1 Age-Specific Incidence Rate (AIR) for Bladder Cancer in Saudi Arabia, 2008

ICD-O-3	Morphology	Male	%	Female	%
8120	Transitional cell carcinoma, NOS	74	42.8	17	44.7
8130	Papillary transitional cell carcinoma	73	42.2	15	39.5
8000	Neoplasm, malignant	6	3.5	1	2.6
8070	Squamous cell carcinoma, NOS	4	2.3	2	5.3
8010	Carcinoma, NOS	4	2.3	0	0.0
8071	Squamous cell carcinoma, keratinizing, NOS	3	1.7	1	2.6
8041	Small cell carcinoma, NOS	3	1.7	0	0.0
	Others	6	3.5	2	5.3

Table 3.12.1 Morphological Distribution of Bladder Cancer in Saudi Arabia, 2008

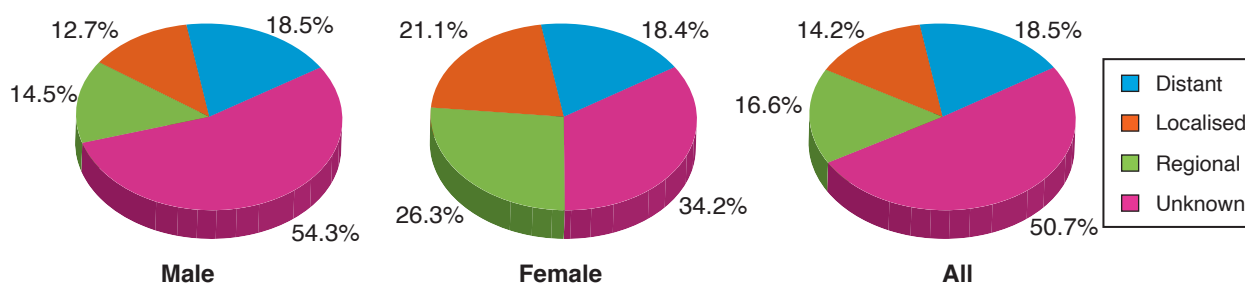


Figure 3.12.2 Stage Distribution of Bladder Cancer, 2008

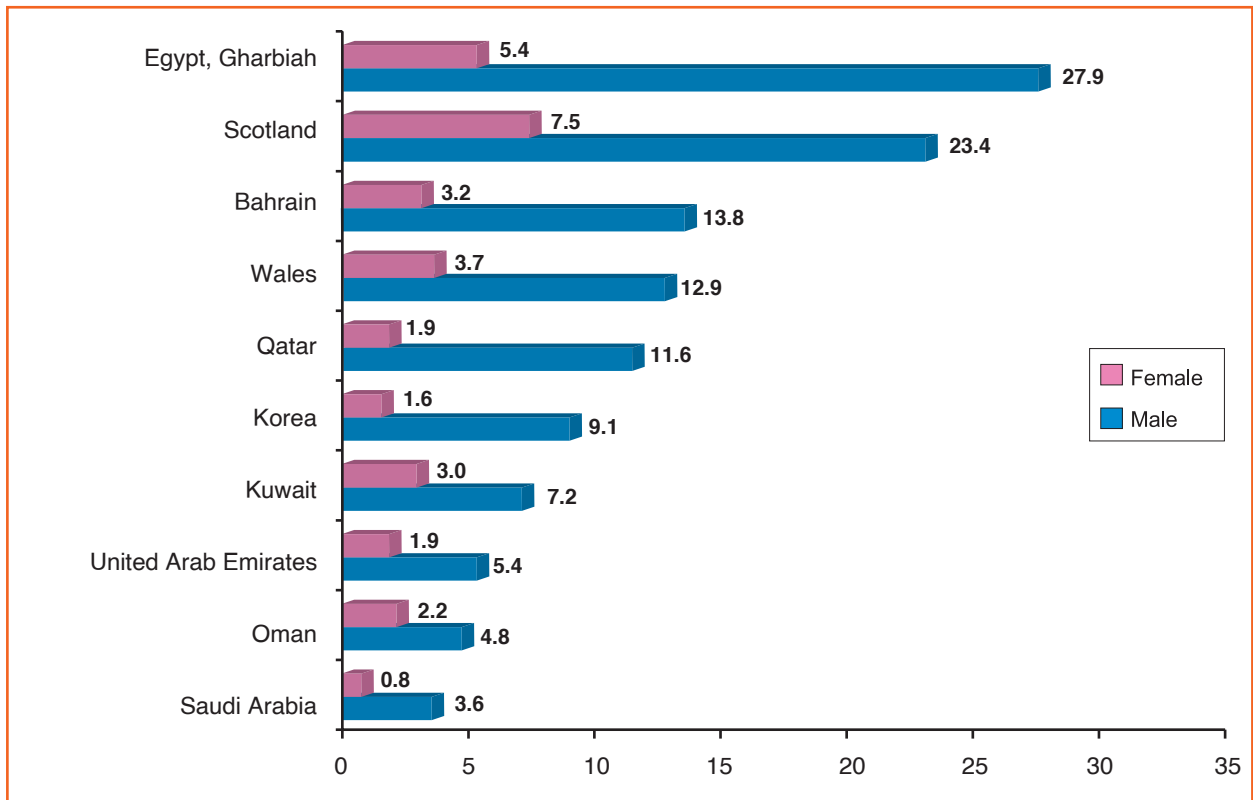


Figure 3.12.4 Comparison of ASR* for Bladder Cancer among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 64

Stomach (C 16)

There were 266 cases of stomach cancer accounting for 3% of all newly diagnosed cases in year 2008. This cancer ranked ninth among male population and eleventh among female population. It affected 166 (62.4%) males and 100 (37.6%) females with a male to female ratio of 166:100. The overall ASR was

2.6/100,000. ASR was 3.2/100,000 for male and 1.9/100,000 for females. The median age at diagnosis was 63 years among males (range 18-97 years) and 62 years among female (range 24-93 years).

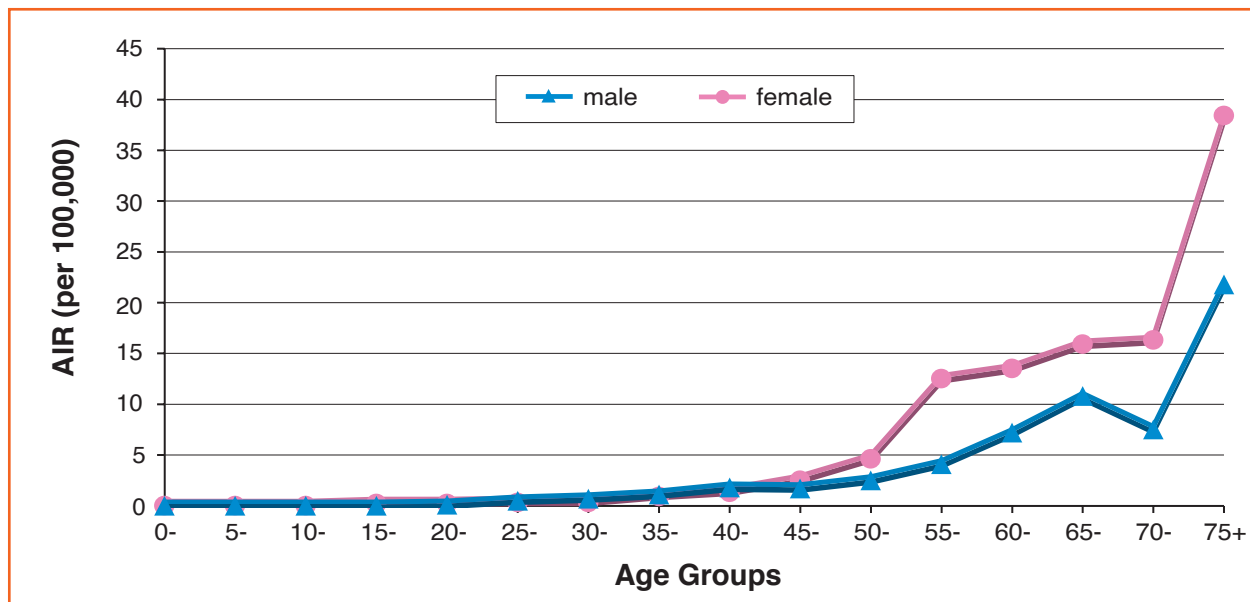


Figure 3.13.1 Age-Specific Incidence Rate (AIR) for Stomach Cancer in Saudi Arabia, 2008

ICD-O-3	Morphology	Male	%	Female	%
8140	Adenocarcinoma, NOS	86	51.8	30	30.0
8490	Signet ring cell carcinoma	37	22.3	35	35.0
8144	Adenocarcinoma, intestinal type	15	9.0	7	7.0
8145	Carcinoma, diffuse type	5	3.0	3	3.0
8936	Gastrointestinal stromal sarcoma	2	1.2	6	6.0
8000	Neoplasm, malignant	3	1.8	4	4.0
8480	Mucinous adenocarcinoma	2	1.2	5	5.0
8481	Mucin-producing adenocarcinoma	1	0.6	3	3.0
8070	Squamous cell carcinoma, NOS	2	1.2	1	1.0
8240	Carcinoid tumor, NOS	2	1.2	1	1.0
	Others	11	6.6	5	5.0

Table 3.13.1 Morphological Distribution of Stomach Cancer in Saudi Arabia, 2008

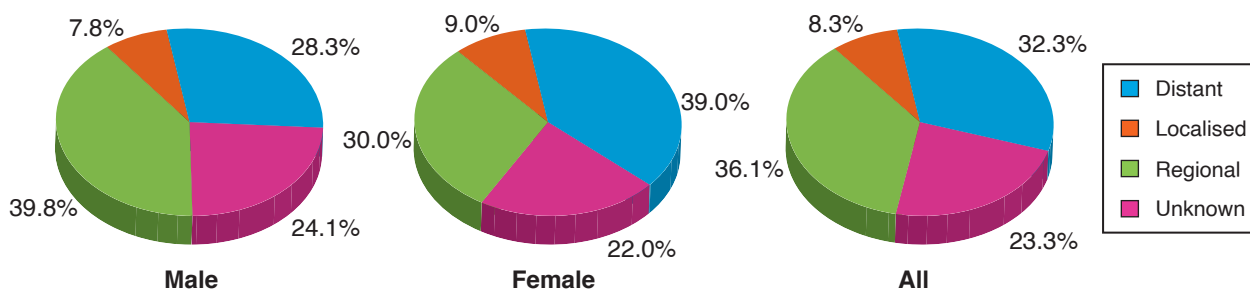


Figure 3.13.2 Stage Distribution of Stomach Cancer, 2008

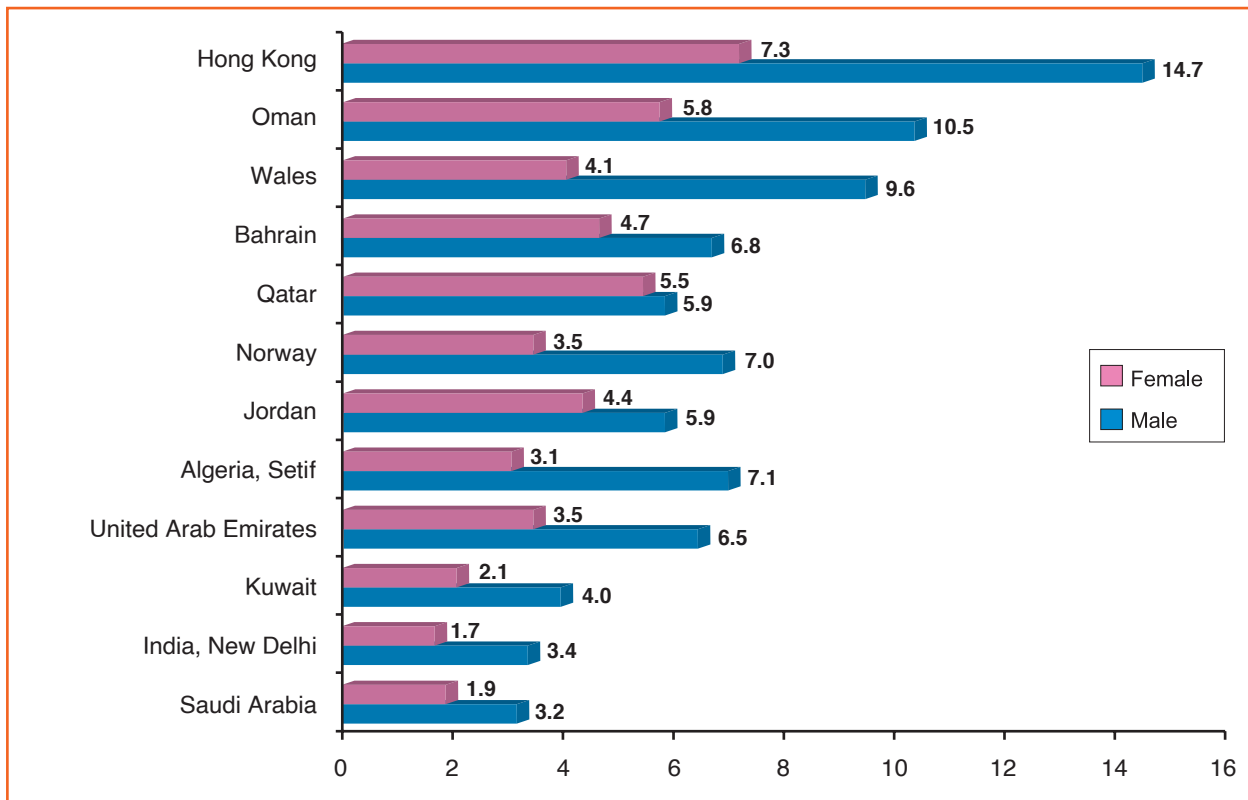


Figure 3.13.4 Comparison of ASR* for Stomach Cancer among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 64

Ovarian Cancer (C 56)

There were 160 cases of ovarian cancer among females accounting for 3.5% of all newly diagnosed cases among females (4,617) in year 2008. This cancer ranked seventh among female population.

The ASR was 3/100,000 for females. The median age at diagnosis was 55 years (range 0-86 years).

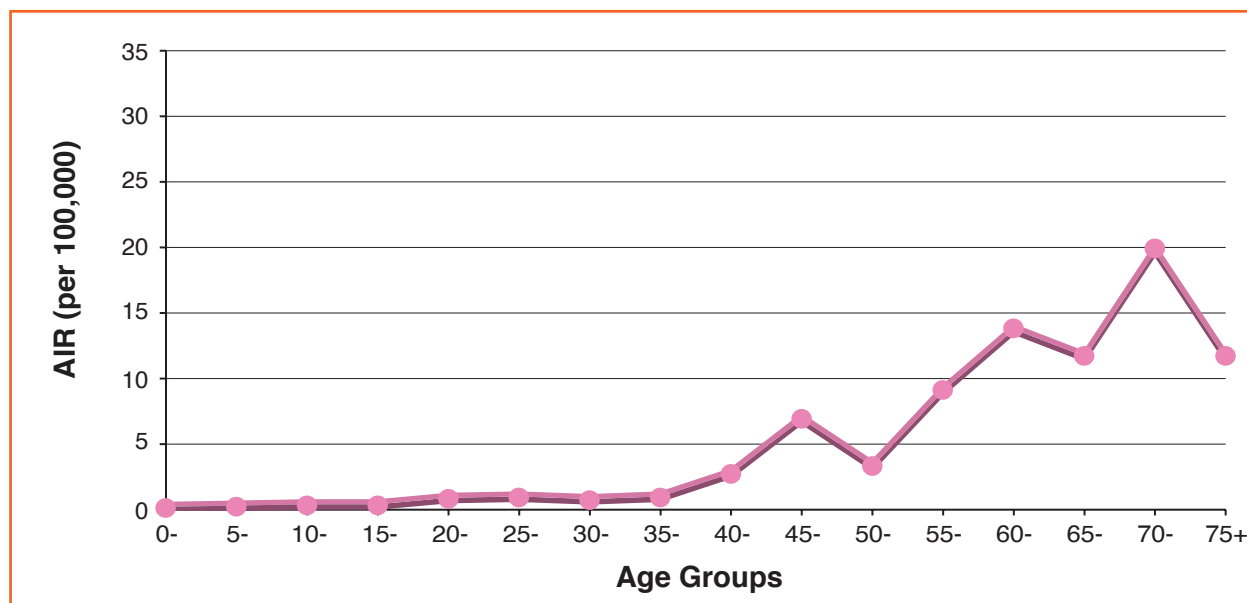


Figure 3.14.1 Age-Specific Incidence Rate (AIR) for Ovarian Cancer in Saudi Arabia, 2008

ICD-O-3	Morphology	Female	%
8441	Serous cystadenocarcinoma, NOS	32	20.0
8460	Papillary serous cystadenocarcinoma	23	14.4
8010	Carcinoma, NOS	15	9.4
8140	Adenocarcinoma, NOS	15	9.4
8480	Mucinous adenocarcinoma	11	6.9
8461	Serous surface papillary carcinoma	10	6.3
8470	Mucinous cystadenocarcinoma, NOS	8	5.0
8000	Neoplasm, malignant	6	3.8
9071	Yolk sac tumor	6	3.8
8380	Endometrioid adenocarcinoma, NOS	5	3.1
9080	Teratoma, malignant, NOS	5	3.1
8310	Clear cell adenocarcinoma, NOS	4	2.5
9060	Dysgerminoma	4	2.5
8260	Papillary adenocarcinoma, NOS	2	1.3
8620	Granulosa cell tumor, malignant	2	1.3
8980	Carcinosarcoma, NOS	2	1.3
	Others	10	6.3

Table 3.14.1 Morphological Distribution of Ovarian Cancer in Saudi Arabia, 2008

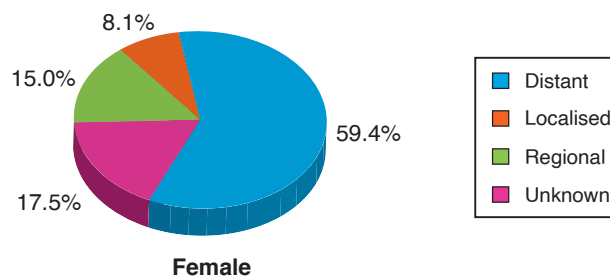


Figure 3.14.2 Stage Distribution of Ovarian Cancer, 2008

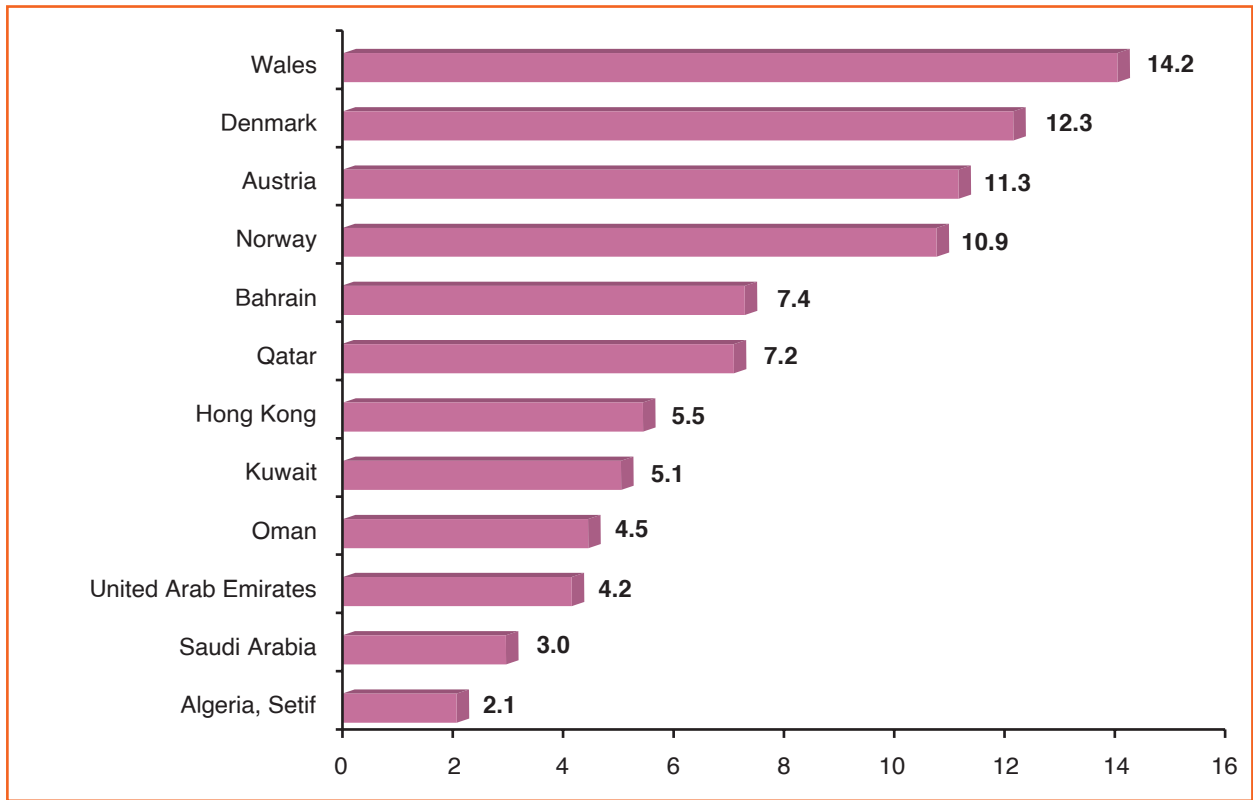


Figure 3.14.4 Comparison of ASR* for Ovarian Cancer among Saudi Females with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 64

**** Sources:**

- 1 Welsh Cancer and Intelligence and Surveillance Unit (WCISU). Trends in Incidence, 1985-2009. Available from: <http://www.wales.nhs.uk/sites3/page.cfm?orgid=242&pid=27758>
- 2 Cancer Incidence, Mortality, Survival and Prevalence in Norway. Cancer in Norway, 2009.
- 3 Cancer Incidence in Jordan, 2008
- 4 Ten-Year Cancer Incidence among Nationals of the GCC States 1998-2007.
- 5 Descriptive Epidemiology Group, IARC. GLOBOCAN 2002. Available from.: <http://www-dep.iarc.fr/>
- 6 Cancer Incidence in Five Continents Vol. IX, IARC Scientific Publication. Lyon, France, 2007

PART IV
CANCER AMONG NON-SAUDIS
2008

Cancer Among Non- Saudi Population 2008

Between January and December 2008, a total of 2,701 cancer cases were reported among the Non-Saudi population. Eighty one in situ cases and 12 were ICD-O-3 coded cases that failed to convert to ICD-10 codes as described in the data Management (see page 12). This puts the total number of exclusions from the analysis as 93 cases. As a result, the total number of cases analyzed were 2,608 out of this 1422 (54.5%) were males and 1,186 (45.5%) were females. The male to female ratio was 120:100. Taking into consideration the population structure of non-Saudis and the fact

that cancer is primarily a disease of the elderly, the pattern of cancer had some significant differences. Those over 60 years represented 20% and the 20 to 54 age-group represented 60% of non-Saudi population. During 2008, approximately 5% of all cancers occurred before the age of 15, 23.2% occurred between the ages 15 to 39 years, 57.6% were between the ages 40-64, and 14.2% occurred after the age of 64. The median age at diagnosis was 51 years in males (range 0-90 years) and 46 years in females (range 0-95 years).

Cancer	No.	%
Breast	440	16.9
Colo-rectal	285	10.9
NHL	166	6.4
Leukemia	157	6.0
Skin	127	4.9
Thyroid	121	4.6
Lung	102	3.9
Prostate	92	3.5
Stomach	89	3.4
Liver	72	2.8

Table 4.1 Ten Most common Cancers among non-Saudis, 2008

Nationality	Male	%	Female	%	All	%
Yemen	258	17.4	181	14.8	439	16.3
Egypt	176	11.9	123	10.1	299	11.1
Sudan	128	8.6	115	9.4	243	9.0
Philippines	105	7.1	137	11.2	242	9.0
Pakistan	108	7.3	64	5.3	172	6.4
India	92	6.2	35	2.9	127	4.7
Syrian Arab Republic	72	4.9	47	3.9	119	4.4
Bangladesh	81	5.5	17	1.4	98	3.6
Palestine	53	3.6	56	4.6	109	4.0
Indonesia	15	1.0	64	5.3	79	2.9
Jordan	40	2.7	31	2.5	71	2.6
Bahrain	22	1.5	46	3.8	68	2.5
United States of America	34	2.3	15	1.2	49	1.8
Eritrea	16	1.1	32	2.6	48	1.8
Ethiopia	17	1.1	31	2.5	48	1.8
Somalia	21	1.4	23	1.9	44	1.6
Afghanistan	25	1.7	15	1.2	40	1.5
Nigeria	21	1.4	16	1.3	37	1.4
Lebanon	24	1.6	10	0.8	34	1.3
United Kingdom	19	1.3	10	0.8	29	1.1
Chad	12	0.8	16	1.3	28	1.0
Kuwait	9	0.6	18	1.5	27	1.0
Qatar	4	0.3	6	0.5	10	0.4
United Arab Emirates	1	0.1	2	0.2	3	0.1
Oman	1	0.1	1	0.1	2	0.1
Iraq	5	0.3	4	0.3	9	0.3
Other Nationalities	123	8.3	104	8.5	227	8.4

Table 4.2 Distribution of Cancer Cases among Different Nationalities in Order of Relative Frequency, 2008

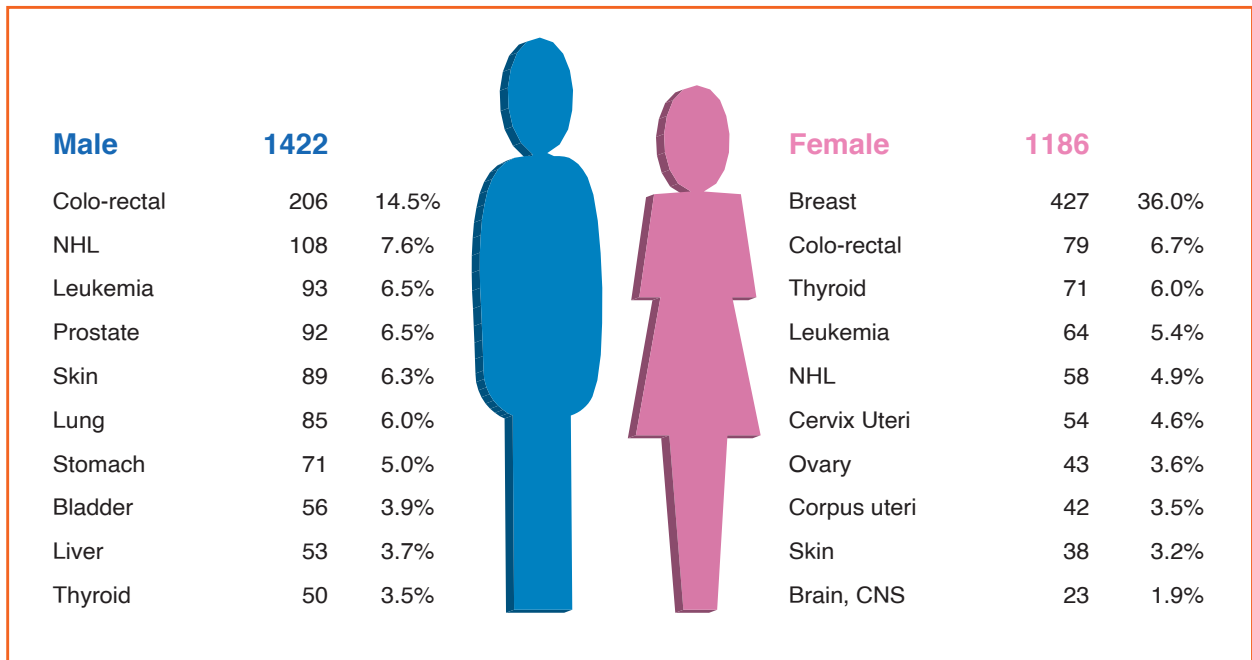


Figure 4.1 Ten Most Common Cancer among non-Saudis by sex, 2008

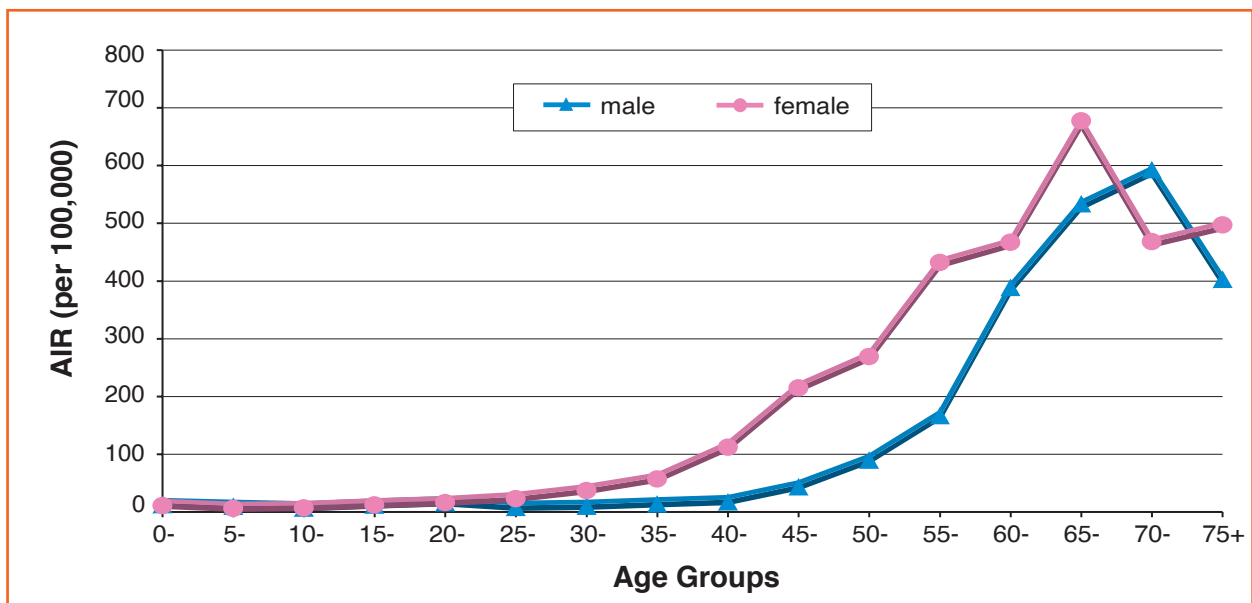


Figure 4.2 Age-Specific Incidence Rate (AIR) for All Cancers among non-Saudis in Saudi Arabia, 2008

PART V

TABLES

Table 5.1.1 Age Distribution of Cancer Cases among Saudi Males, 2008

ICD (10th)	Site	All Ages	Age Unk	0-4	5-9	15-19	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	% of Total
C00	Lip	9	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	6	0.2%
C01-C02	Tongue	30	0	0	0	1	0	0	0	0	0	0	6	4	5	1	5	3	5	0.7%
C03-C06	Mouth	39	1	0	0	0	1	6	0	0	0	2	4	2	2	3	8	4	6	0.9%
C07-C08	Salivary glands	17	0	0	0	1	0	0	1	1	1	1	0	1	0	2	1	4	4	0.4%
C09	Tonsil	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0%
C10	Other Oropharynx	2	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.0%
C11	Nasopharynx	122	0	0	2	1	5	14	13	29	17	10	6	6	10	6	10	4	4	2.9%
C12-C13	Hypopharynx	5	0	0	0	0	0	0	0	1	2	0	1	1	0	0	0	0	0	0.1%
C14	Pharynx unspecified	3	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0.1%
C15	Oesophagus	51	0	0	0	0	0	1	1	1	0	1	2	5	5	5	4	8	19	1.2%
C16	Stomach	166	0	0	0	0	2	2	2	2	5	6	9	13	26	21	17	15	46	3.9%
C17	Small intestine	31	0	0	0	1	1	4	11	11	17	16	21	30	40	31	30	23	51	6.8%
C18	Colon	286	0	0	0	1	4	11	11	17	16	15	18	23	21	19	27	24	26	4.5%
C19-C20	Rectum	192	0	0	0	0	0	2	6	2	9	15	18	23	21	19	27	24	26	4.5%
C21	Anus	10	0	0	0	0	0	0	0	0	1	0	1	1	3	1	1	1	1	0.2%
C22	Liver	303	0	5	0	1	1	1	1	2	4	3	12	25	26	40	51	41	90	7.2%
C23-C24	Gallbladder etc.	54	0	0	0	0	0	0	1	2	3	2	6	3	5	9	4	4	15	1.3%
C25	Pancreas	100	0	0	0	0	1	1	3	2	8	7	10	7	17	12	12	20	20	2.4%
C30-C31	Nose, sinuses etc.	14	0	0	1	2	0	0	0	1	2	1	2	0	2	1	1	1	0	0.3%
C32	Larynx	57	0	0	0	0	0	1	0	0	0	3	5	3	10	9	7	7	12	1.3%
C33-C34	Trachea, Bronchus, Lung	285	0	0	0	0	0	0	2	3	11	11	17	35	29	41	44	36	66	6.7%
C37-C38	Other Thoracic organs	11	0	0	0	1	2	1	1	1	1	1	1	0	0	1	2	0	0	0.3%
C40-C41	Bone	73	0	5	3	18	18	7	6	1	1	1	3	2	0	1	2	3	3	1.7%
C43	Melanoma of Skin	12	0	0	0	0	1	0	0	0	0	1	0	3	1	1	2	2	1	0.3%
C44	Other Skin	159	0	0	0	3	1	3	5	8	3	8	12	10	12	19	21	13	41	3.8%
C45	Mesothelioma	17	0	0	0	0	0	0	0	0	2	0	1	2	0	2	3	2	5	0.4%
C46	Kaposi sarcoma	16	0	0	0	0	1	0	1	1	0	1	1	1	1	3	1	1	4	0.4%
C47,C49	Connective, Soft tissue	66	0	6	4	6	4	4	5	5	5	3	1	5	1	6	2	6	3	1.6%
C50	Breast	177	0	0	0	0	0	0	0	1	1	1	0	2	2	1	2	3	0	0.4%
C60	Penis	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0.1%
C61	Prostate	267	0	0	0	0	0	0	0	0	0	0	3	5	10	15	38	50	96	6.3%
C62	Testis	74	0	3	1	0	8	15	12	9	9	5	6	4	1	0	0	0	1	1.7%
C63	Other male genital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C64	Kidney	144	0	14	4	0	2	1	4	13	7	14	7	14	19	13	17	8	10	3.4%
C65	Renal Pelvis	5	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	3	0.1%
C66	Ureter	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0.1%
C67	Bladder	173	0	0	0	1	0	2	1	0	3	3	8	17	14	26	28	26	44	4.1%
C68	Other Urinary organs	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.0%
C69	Eye	27	0	17	1	1	2	0	0	0	1	1	1	0	1	0	0	1	2	0.6%
C70-C72	Brain, Nervous system	158	0	25	21	8	4	5	9	14	9	10	5	10	6	9	6	7	10	3.7%
C73	Thyroid	131	0	0	1	0	3	10	12	15	16	10	13	11	7	10	10	5	8	3.1%
C74	Adrenal gland	14	0	8	1	0	1	1	1	0	0	1	0	0	0	0	0	0	1	0.3%
C75	Other Endocrine	9	0	0	0	1	6	1	0	0	1	0	0	0	0	0	0	0	0	0.2%
C81	Hodgkin disease	175	0	5	12	21	29	28	18	11	15	4	5	9	8	3	1	3	3	4.1%
C82-C85;C96	Non-Hodgkin lymphoma	370	0	14	19	13	16	14	12	19	23	25	25	27	27	27	30	35	44	8.7%
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C90	Multiple Myeloma	37	0	0	0	0	0	1	1	0	1	4	1	3	4	6	3	4	9	0.9%
C91	Lymphoid Leukemia	157	0	47	21	11	15	7	6	7	3	0	3	1	1	7	13	3	12	3.7%
C92-C94	Myeloid Leukemia	139	0	16	2	12	5	9	9	13	10	7	12	8	8	7	4	10	7	3.3%
C95	Leukemia unspecified	39	0	4	4	4	2	3	2	0	0	0	0	0	3	2	4	6	6	0.9%
Other	Other & unspecified	156	0	4	0	0	1	1	1	1	3	5	13	10	15	26	14	22	40	3.7%
All	All sites Total	4231	1	173	96	105	126	133	136	146	180	182	273	339	332	423	436	406	744	100.0%
Not C44	All sites but C44	4072	1	173	96	102	125	130	131	138	177	174	261	329	320	404	415	393	703	96.2%

Table 5.1.2 Age Distribution of Cancer Cases among Saudi Females, 2008

ICD (10th)	Site	All Ages	Age Unk	0-4	5-9	15-19	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	% of Total
C00	Lip	5	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	1	1	0.1%
C01-C02	Tongue	29	0	0	0	0	0	0	0	1	1	2	2	6	7	3	1	3	3	0.6%
C03-C06	Mouth	46	0	0	0	0	0	0	1	1	1	2	4	6	8	2	8	7	6	1.0%
C07-C08	Salivary glands	18	0	1	0	0	0	1	2	4	2	1	1	2	1	1	0	0	2	0.4%
C09	Tonsil	3	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0.1%
C10	Other Oropharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C11	Nasopharynx	45	0	0	0	1	2	2	4	8	4	8	4	5	4	3	3	2	3	1.0%
C12-C13	Hypopharynx	16	0	0	0	0	0	0	0	1	3	0	2	1	2	1	2	4	2	0.3%
C14	Pharynx unspecified	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C15	Oesophagus	54	0	0	0	0	0	0	0	1	1	2	6	8	7	7	4	4	14	1.2%
C16	Stomach	100	0	0	0	0	0	1	4	5	6	8	6	7	8	11	12	6	26	2.2%
C17	Small intestine	14	0	0	0	0	0	0	0	1	0	0	0	2	1	2	1	1	4	0.3%
C18	Colon	274	0	0	0	0	2	0	7	7	16	29	33	31	33	28	22	35	31	5.9%
C19-C20	Rectum	152	0	0	0	0	0	3	2	3	7	11	18	20	20	22	16	12	18	3.3%
C21	Anus	7	0	0	0	0	0	0	0	0	0	1	0	0	2	1	0	1	1	0.2%
C22	Liver	115	0	0	0	0	1	2	0	2	0	6	5	13	15	12	15	15	27	2.5%
C23-C24	Gallbladder etc.	77	0	0	0	0	0	0	0	1	1	5	6	10	7	9	12	10	16	1.7%
C25	Pancreas	67	0	0	0	0	0	0	0	1	2	5	5	6	10	12	15	4	7	1.5%
C30-C31	Nose, sinuses etc.	6	0	0	0	0	0	0	0	1	0	0	1	1	0	2	0	0	1	0.1%
C32	Larynx	5	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1	0	0	0.1%
C33-C34	Trachea, Bronchus, Lung	82	0	0	0	0	2	1	2	1	3	8	4	10	15	11	11	11	14	1.8%
C37-C38	Other Thoracic organs	11	0	2	0	0	0	0	0	0	1	0	1	1	0	0	0	0	1	0.2%
C40-C41	Bone	47	0	3	9	6	10	4	1	1	1	2	2	3	3	1	0	1	0	1.0%
C43	Melanoma of Skin	10	0	0	0	0	1	0	0	1	1	1	2	0	0	2	1	0	3	0.2%
C44	Other Skin	125	0	0	0	1	2	2	0	0	7	9	8	12	9	16	12	15	30	2.7%
C45	Mesothelioma	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.0%
C46	Kaposi sarcoma	5	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0.1%
C47,C49	Connective,Soft tissue	54	0	5	4	3	6	1	8	1	2	6	4	4	3	2	5	1	2	1.2%
C50	Breast	1152	0	0	0	0	1	9	46	84	147	184	195	157	101	70	61	45	52	25.0%
C51	Vulva	5	0	0	0	0	0	0	0	0	0	1	0	0	2	0	1	0	0	0.1%
C52	Vagina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C53	Cervix Uteri	93	0	0	0	0	0	0	0	11	6	12	9	11	9	11	6	9	5	2.0%
C54	Corpus Uteri	194	0	0	0	0	2	5	10	24	29	25	30	27	20	30	27	20	19	4.2%
C55	Uterus unspecified	22	0	0	0	0	0	0	0	2	0	1	2	1	4	2	2	2	2	0.5%
C56	Ovary	160	0	1	2	3	7	7	7	5	5	12	24	9	18	21	13	16	14	3.5%
C57	Other Female Genital	5	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2	1	0	0.1%
C58	Placenta	12	0	0	0	0	1	2	1	2	3	2	1	0	0	0	0	0	0	0.3%
C64	Kidney	93	0	17	2	0	2	3	4	6	10	6	6	5	9	10	4	10	3	2.0%
C65	Renal Pelvis	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.0%
C66	Ureter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C67	Bladder	38	0	0	0	0	0	1	0	0	1	2	3	0	3	4	6	8	10	0.8%
C68	Other Urinary organs	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C69	Eye	17	0	11	0	1	0	0	0	1	0	0	0	0	0	0	2	1	1	0.4%
C70-C72	Brain, Nervous system	92	0	12	13	4	4	4	3	6	4	4	6	8	10	2	5	4	3	2.0%
C74	Thyroid	475	0	0	1	3	19	27	52	60	70	64	54	38	17	22	15	14	19	10.3%
C75	Adrenal gland	13	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0.3%
C75	Other Endocrine	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0.0%
C81	Hodgkin disease	131	0	2	5	11	21	32	23	9	3	3	1	3	1	4	7	2	4	2.8%
C82-C85;C96	Non-Hodgkin lymphoma	304	0	5	6	5	8	10	22	14	13	20	23	20	36	32	27	26	37	6.6%
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C90	Multiple Myeloma	25	0	0	0	0	0	0	0	0	1	0	3	3	3	3	1	6	5	0.5%
C91	Lymphoid Leukemia	112	0	38	17	14	8	3	3	1	2	2	1	6	2	3	4	3	5	2.4%
C92-C94	Myeloid Leukemia	104	0	10	5	4	6	9	10	8	11	9	6	5	4	5	2	4	6	2.3%
C95	Leukemia unspecified	31	0	7	2	4	2	1	1	1	1	1	1	0	2	4	1	0	1	0.7%
Other	Other & unspecified	165	0	6	0	1	1	1	1	2	2	9	11	9	14	17	29	19	43	3.6%
All	All sites Total	4617	0	132	67	62	102	132	214	250	338	445	491	450	413	394	362	325	440	100.0%
Not C44	All sites but C44	4492	0	132	67	61	100	130	212	250	331	436	483	438	404	378	350	310	410	97.3%

Table 5. I.3 Cancer Incidence Cases among Saudi Males by Age Group (per 100,000), 2008

ICD (10th)	Site	All Ages	Age Unk	0-4	5-9	15-19	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Crude Rate	ASR World
C00	Lip	9	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0.9	1.1	5	0.1	0.2
C01-C02	Tongue	30	0	0	0	0.1	0	0	0	0	0	0	1.7	1.4	2.4	0.6	4.7	3.3	4.2	0.3	0.6
C03-C06	Mouth	39	1	0	0	0	0.1	0.8	0	0	0.4	1.1	0.7	1	1.9	7.5	4.4	5	5	0.4	0.7
C07-C08	Salivary glands	17	0	0	0	0.1	0	0.1	0.1	0.2	0.2	0	0	0.4	0	1.3	0.9	4.4	3.3	0.2	0.3
C09	Tonsil	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	0	0
C10	Other Oropharynx	2	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	0	0	0	0	0	0
C11	Nasopharynx	122	0	0	0.2	0.1	0.5	0.1	0.6	2.6	2.9	8	6	4.8	3.9	5.6	10.9	3.3	3.3	1.3	2
C12-C13	Hypopharynx	5	0	0	0	0	0	0	0	0.1	0.4	0	0.3	0.4	0	0	0	0	0	0.1	0.1
C14	Pharynx unspecified	3	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0	0.9	0	0	0	0.1
C15	Oesophagus	51	0	0	0	0	0	0.1	0.1	0.1	0.2	0.6	1.8	2.4	3.2	3.8	8.7	15.8	3.8	0.6	1
C16	Stomach	166	0	0	0	0.2	0.2	0.3	0.3	0.9	1.3	2.5	4.6	12.5	13.5	15.9	16.3	38.4	1.8	3.2	3.2
C17	Small intestine	31	0	0	0	0.1	0.1	0	0	0	0	0.3	1.8	1.9	2.6	5.6	3.3	5	0.3	0.6	5.3
C18	Colon	286	0	0	0	0.1	0.4	1.4	1.6	3.1	3.5	5.8	10.6	19.2	19.9	28.1	25.1	42.5	3.1	3.1	5.3
C19-C20	Rectum	192	0	0	0	0	0.2	0.8	0.3	1.6	3.3	5	8.1	10.1	12.2	25.3	26.1	21.7	2.1	2.1	3.7
C21	Anus	10	0	0	0	0	0	0	0	0	0.2	0	0.3	0.4	1.4	0.6	0.9	1.1	0.8	0.1	0.2
C22	Liver	303	0	0.4	0	0.1	0.1	0.1	0.1	0.3	0.7	0.7	3.3	8.8	12.5	25.7	47.8	75.1	3.3	3.3	6.2
C23-C24	Gallbladder etc.	54	0	0	0	0	0	0	0.1	0.3	0.5	0.4	1.7	1.1	2.4	5.8	3.8	4.4	12.5	0.6	1
C25	Pancreas	100	0	0	0	0	0.1	0.1	0.1	0.4	0.4	1.8	1.9	3.5	3.4	10.9	11.3	13.1	16.7	1.1	2
C30-C31	Nose, sinuses etc.	14	0	0	0.1	0.2	0	0	0	0.1	0.4	0.2	0.6	0	1	0.6	0.9	1.1	0	0.2	0.2
C32	Larynx	57	0	0	0	0	0	0.1	0	0	0	0.7	1.4	1.1	4.8	5.8	6.6	7.6	10	0.6	1.2
C33-C34	Trachea, Bronchus, Lung	285	0	0	0	0	0	0.3	0.4	0.2	2.4	4.7	12.3	13.9	26.4	41.3	39.2	55	3.1	3.1	5.8
C37-C38	Other Thoracic organs	11	0	0	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0	0	0.6	1.9	0	0	0.1	0.2
C40-C41	Bone	73	0	0.4	0.3	1.7	1.8	0.7	0.8	0.1	0.2	0.2	0.8	0.7	0	0	1.9	3.3	2.5	0.8	0.8
C43	Melanoma of Skin	12	0	0	0	0	0.1	0	0	0	0.2	0	0	1.1	0.5	0.6	1.9	2.2	0.8	0.1	0.2
C44	Other Skin	159	0	0	0	0.3	0.1	0.3	0.6	1.2	0.5	1.8	3.3	3.5	5.8	12.2	19.7	14.2	34.2	1.7	3
C45	Mesothelioma	17	0	0	0	0	0	0	0	0	0.4	0	0.3	0.7	0	1.3	2.8	2.2	4.2	0.2	0.3
C46	Kaposi sarcoma	16	0	0	0	0.1	0	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.5	1.9	0.9	1.1	3.3	0.2	0.3
C47-C49	Connective, Soft tissue	66	0	0.5	0.4	0.6	0.4	0.4	0.6	0.7	0.9	0.7	0.3	1.8	0.5	3.9	1.9	6.5	2.5	0.7	0.9
C50	Breast	17	0	0	0	0	0	0	0	0.1	0.2	0	0.6	0.7	0.5	1.3	2.8	0	4.2	0.2	0.3
C60	Penis	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.9	1.1	0	0.1
C61	Prostate	267	0	0	0	0	0	0	0	0	0.7	1.4	3.5	7.2	24.4	46.9	54.5	80.1	2.9	2.9	5.7
C62	Testis	74	0	0.3	0.1	0	0.8	1.6	1.5	1.3	1.6	1.1	1.7	1.4	0.5	0	0	0	0.8	0.8	0.8
C63	Other male genital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C64	Kidney	144	0	1.2	0.4	0	0	0.2	0.1	0.6	2.4	1.5	3.9	6.7	6.2	10.9	7.5	10.9	15	1.6	2.5
C65	Renal Pelvis	5	0	0	0	0	0.1	0	0	0	0	0.3	0	0	0	0	0	0	2.5	0.1	0.1
C66	Ureter	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.9	1.1	0	0.1
C67	Bladder	173	0	0	0.1	0	0	0.2	0.1	0	0.5	0.7	2.2	6	6.7	16.7	26.3	28.3	36.7	1.9	3.6
C68	Other Urinary organs	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	0	0	0
C69	Eye	27	0	1.4	0.1	0.1	0.2	0	0	0	0.2	0.2	0	0.4	0	0	0.9	0	1.7	0.3	0.3
C70-C72	Brain, Nervous system	158	0	2.1	1.9	0.7	0.4	0.5	1.1	2.1	1.6	2.2	1.4	3.5	2.9	5.8	5.6	7.6	8.3	1.7	2.1
C73	Thyroid	131	0	0	0.1	0	0.3	1.1	1.5	2.2	2.9	2.2	3.6	3.9	3.4	6.4	9.4	5.4	6.7	1.4	2
C74	Adrenal gland	14	0	0.7	0.1	0	0.1	0.1	0.1	0	0	0.2	0	0	0	0	0	0	0.8	0.2	0.1
C75	Other Endocrine	9	0	0	0	0.1	0.6	0.1	0	0	0.2	0	0	0	0	0	0	0	0	0.1	0.1
C81	Hodgkin disease	175	0	0.4	1.1	2	2.9	3	2.3	1.6	2.7	0.9	1.4	3.2	3.8	1.9	0.9	3.3	2.5	1.9	1.9
C82-C85;C96	Non-Hodgkin lymphoma	370	0	1.2	1.7	1.2	1.6	1.5	1.5	2.8	4.2	5.5	6.9	9.5	12.9	17.4	28.1	38.1	36.7	4.1	6
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C90	Multiple Myeloma	37	0	0	0	0	0.1	0.1	0.1	0	0.2	0.9	0.3	1.1	1.9	3.9	2.8	4.4	7.5	0.4	0.7
C91	Lymphoid Leukemia	157	0	3.9	1.9	1	1.5	0.7	0.8	1	0.5	0	0.8	0.4	0.5	4.5	12.2	3.3	10	1.7	2
C92-C94	Myeloid Leukemia	139	0	1.3	0.2	1.1	0.5	1	1.1	1.9	1.8	1.5	3.3	2.8	3.8	4.5	3.8	10.9	5.8	1.5	1.9
C95	Leukemia unspecified	39	0	0.3	0.4	0.4	0.2	0.3	0.3	0	0	0	0	1.8	0	1.9	1.9	4.4	5	0.4	0.6
Other	Other & unspecified	156	0	0.3	0	0	0.1	0.1	0.1	0.1	0.5	1.1	3.6	3.5	7.2	16.7	13.1	24	33.4	1.7	3.1
All	All sites Total	4231	1	14	9	10	13	14	17	22	33	40	75	120	159	272	409	442	621	46.4	74.1
Not C44	All sites but C44	4072	1	14	9	10	12	14	17	21	32	38	72	116	153	260	389	428	586	44.7	71.1

Table 5.1.4 Cancer Incidence Cases among Saudi Females by Age Group (per 100,000), 2008

ICD (10th)	Site	All Ages	Age Unk	0-4	5-9	15-19	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Crude Rate	ASR World
C00	Lip	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
C01-C02	Tongue	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	0.6
C03-C06	Mouth	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.7	0.3
C07-C08	Salivary glands	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.2	0.5
C09	Tonsil	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.7	0.2
C10	Other Oropharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C11	Nasopharynx	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.7	0.5
C12-C13	Hypopharynx	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.8	0.2
C14	Pharynx unspecified	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C15	Oesophagus	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.6	0.6
C16	Stomach	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10.8	1.1
C17	Small intestine	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.3	0.2
C18	Colon	274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.4	3.1
C19-C20	Rectum	152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	1.7
C21	Anus	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	0.1
C22	Liver	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.0	0.8
C23-C24	Gallbladder etc.	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.9	1.3
C25	Pancreas	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.9	0.9
C30-C31	Nose, sinuses etc.	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.9	1.4
C32	Larynx	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	0.1
C33-C34	Trachea, Bronchus, Lung	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.8	1.7
C37-C38	Other Thoracic organs	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.1
C40-C41	Bone	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.5	0.5
C43	Melanoma of Skin	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	0.2
C44	Other Skin	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10.8	1.4
C45	Mesothelioma	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	0
C46	Kaposi sarcoma	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C47,C49	Connective, Soft tissue	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.5	0.8
C50	Breast	1152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56.4	19.2
C51	Vulva	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	0.1
C52	Vagina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C53	Cervix Uteri	93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.4	0
C54	Corpus Uteri	194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.2	1.7
C55	Uterus unspecified	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.2	4
C56	Ovary	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.8	0.4
C57	Other Female Genital	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.7	3
C58	Placenta	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
C64	Kidney	93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.6	1.5
C65	Renal Pelvis	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	0
C66	Ureter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C67	Bladder	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.4	0.8
C68	Other Urinary organs	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.2	0
C69	Eye	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.8	0.2
C70-C72	Brain, Nervous system	92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.5	1.3
C73	Thyroid	475	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.5	6.8
C74	Adrenal gland	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
C75	Other Endocrine	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C81	Hodgkin disease	131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.3	1.5
C82-C85;C96	Non-Hodgkin lymphoma	304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.2	5.4
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C90	Multiple Myeloma	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.4	0.5
C91	Lymphoid Leukemia	112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.2	0.3
C92-C94	Myeloid Leukemia	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.7	1.2
C95	Leukemia unspecified	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.8	1.4
Other	Other & unspecified	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.6	0.4
All	All sites Total	4617	0	11	6	6	10	15	27	37	62	101	142	163	209	259	325	405	368	51.5	79.4
Not C44	All sites but C44	4492	0	11	6	6	10	14	27	37	60	99	140	159	205	248	314	386	343	50.1	77

Table 5.4.1 Age Distribution of Cancer Cases among non-Saudi Males, 2008

ICD (10th)	Site	All Ages	Age Unk	0-4	5-9	15-19	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	% of Total	
C00	Lip	2	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0.1%	
C01-C02	Tongue	24	0	0	0	0	0	0	1	2	2	6	1	5	3	1	1	2	0	1.7%	
C03-C06	Mouth	17	0	0	0	0	0	0	1	0	2	1	3	4	3	1	1	1	0	1.2%	
C07-C08	Salivary glands	4	0	0	0	0	0	0	0	1	1	0	1	1	0	0	0	0	0	0.3%	
C09	Tonsil	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0.1%	
C10	Other Oropharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
C11	Nasopharynx	34	0	0	0	0	1	0	1	1	2	4	8	4	5	5	2	1	0	2.4%	
C12-C13	Hypopharynx	4	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0.3%	
C14	Pharynx unspecified	2	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0.1%	
C15	Oesophagus	15	0	0	0	0	0	0	1	0	0	0	1	0	4	2	5	0	1	1.1%	
C16	Stomach	71	0	0	0	0	0	1	0	5	8	7	7	7	11	13	3	3	6	5.0%	
C17	Small intestine	9	0	0	0	0	0	0	1	0	1	1	2	1	2	1	0	1	0	0.6%	
C18	Colon	117	0	0	0	0	0	0	5	5	8	7	18	22	14	16	12	6	4	8.2%	
C19-C20	Rectum	89	0	0	0	0	0	0	2	3	6	3	17	20	16	13	8	0	1	6.3%	
C21	Anus	12	0	0	0	0	0	0	1	0	1	0	1	3	1	1	1	0	1	0.8%	
C22	Liver	53	1	0	0	0	0	3	0	1	1	1	6	10	8	7	7	7	1	3.7%	
C23-C24	Gallbladder etc.	14	0	0	0	0	0	0	1	0	2	3	2	2	1	2	0	0	1	1.0%	
C25	Pancreas	20	0	0	0	0	0	0	0	3	0	1	1	6	4	3	0	0	2	1.4%	
C30-C31	Nose, sinuses etc.	4	0	0	0	0	0	0	0	0	1	0	0	2	0	1	0	0	0	0.3%	
C32	Larynx	18	0	0	0	0	0	0	0	0	0	0	1	4	3	4	3	0	2	1.3%	
C33-C34	Trachea, Bronchus, Lung	85	0	0	0	0	0	0	0	3	5	6	6	18	12	15	10	8	2	6.0%	
C37-C38	Other Thoracic organs	9	0	0	0	0	1	0	0	0	1	2	0	2	2	0	0	0	0	1	0.6%
C40-C41	Bone	17	0	2	0	2	0	2	0	2	2	2	1	4	0	0	0	0	0	1.2%	
C43	Melanoma of Skin	6	0	0	0	0	0	1	0	1	0	0	2	0	1	1	0	0	0	0.4%	
C44	Other Skin	89	0	0	0	1	1	2	1	0	7	15	10	11	16	12	7	2	4	6.3%	
C45	Mesothelioma	5	0	0	0	0	0	0	0	0	2	0	1	0	1	1	0	0	0	0.4%	
C46	Kaposi sarcoma	5	0	0	0	0	0	0	0	1	1	0	1	0	1	1	0	0	0	0.4%	
C47,C49	Connective, Soft tissue	28	0	4	0	1	1	2	4	5	1	5	2	1	2	1	2	0	0	2.0%	
C50	Breast	13	0	0	0	0	0	1	0	1	2	1	2	1	2	3	1	0	1	0.9%	
C60	Penis	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.1%	
C61	Prostate	92	0	0	0	0	0	0	0	0	0	0	3	11	20	22	14	9	13	6.5%	
C62	Testis	27	0	0	0	0	1	2	4	9	4	2	3	1	0	1	0	0	0	1.9%	
C63	Other male genital	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1%	
C64	Kidney	45	0	3	0	0	0	1	1	1	4	11	8	5	5	3	2	1	0	3.2%	
C65	Renal Pelvis	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1%	
C66	Ureter	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.1%	
C67	Bladder	56	0	1	0	0	0	0	0	0	2	6	3	8	9	12	5	7	3	3.9%	
C68	Other Urinary organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
C69	Eye	5	0	3	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0.4%	
C70-C72	Brain, Nervous system	46	0	4	6	4	3	1	2	4	2	2	4	3	6	3	1	1	0	3.2%	
C73	Thyroid	50	0	0	0	2	3	6	8	5	3	7	6	5	2	1	2	0	0	3.5%	
C74	Adrenal gland	2	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.1%	
C75	Other Endocrine	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.1%	
C81	Hodgkin disease	39	0	0	1	3	3	3	5	2	9	1	6	1	1	0	2	2	0	2.7%	
C82-C85;C96	Non-Hodgkin lymphoma	108	0	3	2	3	2	9	2	9	8	8	15	13	17	8	3	3	3	7.6%	
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
C90	Multiple Myeloma	17	0	0	0	0	0	0	0	1	2	0	4	2	3	1	3	0	1	1.2%	
C91	Lymphoid Leukemia	34	0	7	11	0	1	1	0	3	1	0	4	3	2	0	0	1	0	2.4%	
C92-C94	Myeloid Leukemia	44	0	2	2	1	0	3	6	5	7	4	6	3	1	1	1	0	2	3.1%	
C95	Leukemia unspecified	15	0	2	0	0	1	0	0	4	1	0	1	2	0	1	0	1	2	1.1%	
Other	Other & unspecified	69	0	1	0	0	0	2	3	4	14	6	5	9	4	10	8	2	1	4.9%	
All	All sites Total	1422	1	32	23	14	18	34	47	81	117	105	172	207	186	171	96	66	52	100.0%	
Not C44	All sites but C44	1333	1	32	23	13	17	32	46	81	110	90	162	196	170	159	89	64	48	93.7%	

Table 5.4.2 Age Distribution of Cancer Cases among non-Saudi Females, 2008

ICD (10th)	Site	All Ages	5-9	15-19	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	% of Total
C00	Lip	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C01-C02	Tongue	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.2%
C03-C06	Mouth	10	0	1	0	1	0	0	3	1	0	1	2	0	1	0	0	0.8%
C07-C08	Salivary glands	6	0	0	0	0	0	0	2	0	0	0	2	1	0	1	0	0.5%
C09	Tonsil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C10	Other Oropharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C11	Nasopharynx	3	0	0	0	0	0	4	3	0	0	1	0	0	0	0	0	0.7%
C12-C13	Hypopharynx	8	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0.3%
C14	Pharynx unspecified	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.1%
C15	Oesophagus	6	0	0	0	0	1	0	0	2	0	0	0	2	0	0	1	0.5%
C16	Stomach	18	0	0	0	0	0	3	4	2	2	3	3	1	0	0	0	1.5%
C17	Small intestine	6	0	0	0	0	0	0	1	2	0	1	2	0	0	0	0	0.5%
C18	Colon	47	0	0	0	1	3	3	3	3	13	8	7	0	4	1	1	4.0%
C19-C20	Rectum	32	0	0	0	0	3	6	6	3	3	4	1	1	0	3	2	2.7%
C21	Anus	1	0	0	0	0	0	0	0	2	1	2	2	0	0	0	0	0.1%
C22	Liver	19	0	0	0	0	0	0	0	2	1	2	2	2	4	0	3	1.6%
C23-C24	Gallbladder etc.	11	0	0	0	0	1	1	0	1	0	0	1	2	1	3	1	0.9%
C25	Pancreas	9	0	0	0	0	0	0	0	0	1	4	2	0	1	1	0	0.8%
C30-C31	Nose, sinuses etc.	4	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0.3%
C32	Larynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C33-C34	Trachea, Bronchus, Lung	17	0	0	0	0	1	1	0	1	1	3	1	1	3	1	4	1.4%
C37-C38	Other Thoracic organs	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1%
C40-C41	Bone	11	0	1	5	0	0	1	2	0	1	1	0	0	0	0	0	0.9%
C43	Melanoma of Skin	4	0	0	0	0	0	2	0	1	1	0	0	0	0	0	0	0.3%
C44	Other Skin	38	0	0	0	2	1	2	3	4	4	5	4	6	1	5	1	3.2%
C45	Mesothelioma	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.2%
C46	Kaposi sarcoma	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1%
C47-C49	Connective, Soft tissue	14	0	0	0	2	1	2	0	2	0	1	2	0	0	1	0	1.2%
C50	Breast	427	0	0	0	2	11	36	66	81	84	49	46	21	16	6	9	36.0%
C51	Vulva	4	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0.3%
C52	Vagina	4	0	0	0	0	0	1	1	0	0	1	0	1	0	0	0	0.3%
C53	Cervix Uteri	54	1	0	0	0	0	6	8	14	5	3	1	3	10	2	1	4.6%
C54	Corpus Uteri	42	0	0	1	0	0	0	2	5	3	10	8	5	2	2	3	3.5%
C55	Uterus unspecified	10	0	0	0	0	1	0	0	0	3	2	1	0	1	0	2	0.8%
C56	Ovary	43	0	0	1	1	4	8	3	7	2	3	4	3	4	2	1	3.6%
C57	Other Female Genital	4	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0.3%
C58	Placenta	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.2%
C64	Kidney	17	0	0	0	0	1	1	1	1	3	2	3	2	0	0	1	1.4%
C65	Renal Pelvis	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1%
C66	Ureter	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1%
C67	Bladder	5	0	0	0	0	0	1	0	0	0	1	0	0	2	0	1	0.4%
C68	Other Urinary organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C69	Eye	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2%
C70-C72	Brain, Nervous system	23	0	3	1	2	1	3	1	2	1	0	1	3	2	0	1	1.9%
C73	Thyroid	71	0	0	0	8	6	20	12	6	7	6	4	0	0	0	2	6.0%
C74	Adrenal gland	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1%
C75	Other Endocrine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C81	Hodgkin disease	18	0	1	3	4	1	2	1	1	1	2	0	1	0	0	0	1.5%
C82-C85;C96	Non-Hodgkin lymphoma	58	0	1	0	2	4	8	7	3	10	5	3	3	4	3	1	4.9%
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C90	Multiple Myeloma	8	0	0	0	0	0	0	0	2	1	2	1	1	0	1	0	0.7%
C91	Lymphoid Leukemia	31	0	4	1	1	3	1	1	1	3	0	3	1	1	0	0	2.6%
C92-C94	Myeloid Leukemia	26	0	2	1	3	2	4	3	1	0	0	2	0	0	3	0	2.2%
C95	Leukemia unspecified	7	0	1	0	0	0	3	1	0	0	0	0	0	0	0	0	0.6%
Other	Other & unspecified	56	0	0	0	1	1	1	4	6	7	9	7	6	6	2	5	4.7%
All	All sites Total	1186	1	14	12	17	25	54	115	144	155	163	129	117	70	63	41	100.0%
Not C44	All sites but C44	1148	1	14	12	17	23	53	113	141	151	159	124	113	64	62	36	96.8%

Table 5.4.3 Incidence Rates for Cancer Cases among non- Saudi Males by Age Group (per 100,000), 2008

ICD (10th)	Site	All Ages	Age Unk	0-4	5-9	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Crude Rate	ASR World	
C00	Lip	2	0	0	0	0	0	0	0	0	0	0.3	0	0.9	0	0	0	0	0	0.1	
C01-C02	Tongue	24	0	0	0	0	0	0.2	0.2	0.2	1	0.3	2.2	2.7	2.3	5.6	18	0	0.5	1	
C03-C06	Mouth	17	0	0	0	0	0	0.2	0.2	0.2	0.2	0.8	1.7	2.7	2.3	5.6	9	0	0.4	0.7	
C07-C08	Salivary glands	4	0	0	0	0	0	0	0.1	0.1	0	0.3	0.4	0	0	0	0	0	0.1	0.1	
C09	Tonsil	2	0	0	0	0	0	0	0	0	0	0	0.9	0	0	0	0	0	0	0	
C10	Other Oropharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
C11	Nasopharynx	34	0	0	0	0.7	0	0.2	0.1	0.2	0.7	2.1	1.7	4.5	11.4	11.1	9	0	0.7	1.5	
C12-C13	Hypopharynx	4	0	0	0	0	0	0	0	0.2	0	0	0	0	0	11.1	0	0	0.1	0.3	
C14	Pharynx unspecified	2	0	0	0	0	0	0	0	0	0	0.3	0	0	2.3	0	0	0	0	0.1	
C15	Oesophagus	15	0	0	0	0	0	0.2	0	0	0.2	1.8	1.7	1.8	11.4	0	9	7.7	0.3	1	
C16	Stomach	71	0	0	0	0	0.5	0	0.6	1	1.2	1.8	3	9.9	29.5	16.7	26.9	46.5	1.5	4	
C17	Small intestine	9	0	0	0	0	0	0.2	0	0.1	0.2	0.5	0.4	0.9	0	5.6	9	0	0.2	0.5	
C18	Colon	117	0	0	0	0	0	0.9	0.6	1	1.2	4.6	9.5	12.6	36.4	66.7	53.9	31	2.5	6.7	
C19-C20	Rectum	89	0	0	0	0	0	0.4	0.4	0.7	0.5	4.4	8.7	14.4	29.5	44.5	0	7.7	1.9	4.1	
C21	Anus	12	0	0	0	0	0	0.2	0	0	0.5	0.3	1.3	0.9	2.3	5.6	0	7.7	0.3	0.6	
C22	Liver	53	1	0	0	0	1.4	0	0.1	0.1	0.2	1.5	4.3	7.2	15.9	38.9	62.8	7.7	1.2	4	
C23-C24	Gallbladder etc.	14	0	0	0	0	0	0.2	0	0.2	0.5	0.5	0.9	0.9	4.5	0	0	7.7	0.3	0.5	
C25	Pancreas	20	0	0	0	0	0	0	0.4	0	0.2	0.3	2.6	3.6	6.8	0	15.5	0	0.4	0.9	
C30-C31	Nose, sinuses etc.	4	0	0	0	0	0	0	0	0.1	0	0	0.9	0	2.3	0	0	0	0.1	0.1	
C32	Larynx	18	0	0	0	0	0	0	0	0	0.2	1	1.3	3.6	6.8	0	18	7.7	0.4	1.1	
C33-C34	Trachea, Bronchus, Lung	85	0	0	0	0	0	0	0.4	0.6	1	1.5	7.8	10.8	34.1	55.6	71.8	15.5	1.8	5.8	
C37-C38	Other Thoracic organs	9	0	0	0	0.7	0	0	0	0.1	0.3	0	0.9	1.8	0	0	0	7.7	0.2	0.4	
C40-C41	Bone	17	0	0.8	0	1.1	0	0.9	0.7	1.1	0.5	0.3	0.8	0.4	0	2.3	0	0	0.6	0.5	
C43	Melanoma of Skin	6	0	0	0	0	0	0.2	0	0.2	0.3	0.3	0.4	0.9	2.3	0	0	0	0.1	0.2	
C44	Other Skin	89	0	0	0.5	0.7	0.9	0.2	0	0.9	2.6	2.6	4.8	14.4	27.3	38.9	18	31	1.9	4.6	
C45	Mesothelioma	5	0	0	0	0	0	0	0	0.2	0	0.3	0	0.9	2.3	0	0	0	0.1	0.2	
C46	Kaposi sarcoma	5	0	0	0	0	0	0	0.1	0.1	0	0.3	0	0.9	2.3	0	0	0	0.1	0.2	
C47;C49	Connective, Soft tissue	28	0	1.6	0	0.7	0.5	0.4	0.5	0.6	0.2	1.3	0.9	0.9	4.5	0	0	0	0.6	0.7	
C50	Breast	13	0	0	0	0	0	0.5	0	0	0.3	0.3	0.9	2.7	2.3	0	9	7.7	0.3	0.7	
C60	Penis	1	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	
C61	Prostate	92	0	0	0	0	0	0	0	0	0	0.8	4.8	17.9	50	77.9	80.8	101	2	9	
C62	Testis	27	0	0	0	0	0.7	0.9	0.7	1.1	0.5	0.3	0.8	0.4	0	2.3	0	0	0.6	0.5	
C63	Other male genital	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	
C64	Kidney	45	0	1.2	0	0	0	0.2	0.1	0.1	0.7	2.8	3.5	4.5	11.4	16.7	18	7.7	1	2.2	
C65	Renal Pelvis	1	0	0	0	0	0	0	0	0	0	0	0	0.9	0	0	0	0	0	0	
C66	Ureter	1	0	0	0	0	0	0	0	0	0	0.3	0	0	0	0	0	0	0	0	
C67	Bladder	56	0	0.4	0	0	0	0	0	0.2	1	0.8	3.5	8.1	27.3	27.8	62.8	23.2	1.2	4.3	
C68	Other Urinary organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
C69	Eye	5	0	1.2	0	0	0	0	0	0	0	0.3	0	0.9	0	0	0	0	0.1	0.2	
C70-C72	Brain, Nervous system	46	0	1.6	2.6	2.1	2.1	0.5	0.4	0.5	0.2	0.3	1	1.3	5.4	6.8	5.6	9	1	1.9	
C73	Thyroid	50	0	0	0	1.4	1.4	1.1	1	0.6	0.5	1.8	2.6	4.5	4.5	5.6	18	0	1.1	1.6	
C74	Adrenal gland	2	0	0	0.4	0	0	0	0	0	0	0	0.4	0	0	0	0	0	0	0.1	
C75	Other Endocrine	1	0	0	0	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	
C81	Hodgkin disease	39	0	0	0.4	1.6	2.1	1.4	0.9	0.2	1.1	0.2	1.5	0.4	0.9	0	11.1	18	0	1.5	
C82-C85;C96	Non-Hodgkin lymphoma	108	0	1.2	0.9	1.6	1.4	4.2	0.4	1.1	1.4	3.9	5.6	15.2	18.2	16.7	26.9	23.2	2.3	4.4	
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
C90	Multiple Myeloma	17	0	0	0	0	0	0	0	0.1	0.2	0	1	0.9	2.7	2.3	16.7	0	0.4	1	
C91	Lymphoid Leukemia	34	0	2.9	4.7	0	0.7	0.5	0	0.4	0.1	0	1	1.3	1.8	0	0	9	0	0.7	
C92-C94	Myeloid Leukemia	44	0	0.8	0.9	0.5	1.4	1.1	0.6	0.9	0.7	1.5	1.3	0.9	2.3	5.6	0	15.5	1	1.3	
C95	Leukemia unspecified	15	0	0.8	0	0	0.7	0	0	0.5	0.1	0	0.3	0.9	0	2.3	0	9	15.5	0.8	
Other	Other & unspecified	69	0	0.4	0	0	0	0.9	0.5	0.5	1.7	1	1.3	3.9	3.6	22.7	44.5	18	7.7	1.5	
All	All sites Total	1422	1	13	10	7	12	16	8	10	14	15	44	90	167	389	534	593	403	30.9	74.2
Not C44	All sites but C44	1333	1	13	10	7	12	15	8	10	14	15	42	85	152	361	495	575	372	29	69.6

Table 5.4.4 Incidence Rates for Cancer Cases among non-Saudi Females by Age Group (per 100,000), 2008

ICD (10th)	Site	All Ages	Age Unk	0-4	5-9	15-19	15-19	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Crude Rate	ASR World
C00	Lip	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C01-C02	Tongue	2	0	0	0	0	0	0	0	0	0	0	0	1.3	0	0	6.7	0	0	0	0	0.3
C03-C06	Mouth	10	0	0	0.5	0	0.6	0	0	0	0	1.2	0.7	0	2.1	7.4	0	10.7	0	0	0.5	0.9
C07-C08	Salivary glands	6	0	0	0	0	0	0	0	0	0	0.8	0	0	0	7.4	6.7	0	11.4	0	0.3	0.8
C09	Tonsil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C10	Other Oropharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C11	Nasopharynx	8	0	0	0	0	0	0	0	0	1.3	1.2	0	0	2.1	0	0	0	0	0	0.4	0.3
C12-C13	Hypopharynx	3	0	0	0	0	0	0	0	0.4	0	0	0	0	0	3.7	0	0	11.4	0	0.1	0.4
C14	Pharynx unspecified	1	0	0	0	0	0	0	0	0.4	0	0	1.4	0	0	0	13.3	0	0	0	0	0.1
C15	Oesophagus	6	0	0	0	0	0	0	0	0.4	0	0	1.4	0	0	0	0	0	12.4	0	0.3	0.9
C16	Stomach	18	0	0	0	0	0	0	0	0	1	1.6	1.4	2.6	6.3	11.1	6.7	0	0	0	0.9	1.4
C17	Small intestine	6	0	0	0	0	0	0	0	0	0.4	0.4	1.4	0	0	7.4	0	0	0	0	0.3	0.5
C18	Colon	47	0	0	0	0	0.6	1.3	1	1.2	1.3	1.2	2.2	17.1	16.7	25.9	0	43	11.4	12.4	2.3	5.1
C19-C20	Rectum	32	0	0	0	0	0	1.3	1.9	2.4	1.9	2.4	2.2	3.9	8.3	3.7	6.7	0	34.3	24.8	1.6	2.7
C21	Anus	1	0	0	0	0	0	0	0	0	0	0	0.7	0	0	0	0	0	0	0	0	0
C22	Liver	19	0	0	0	0	0	0	0	0	0.4	0.3	0	0.7	0	0	0	0	0	0	0	0
C23-C24	Gallbladder etc.	11	0	0	0	0	0	0	0	0	0	0.8	1.4	1.3	4.2	7.4	13.3	4.3	0	37.2	0.9	3.3
C25	Pancreas	9	0	0	0	0	0	0	0	0	0	0	0	1.3	8.3	7.4	0	10.7	11.4	0	0.5	2
C30-C31	Nose, sinuses etc.	4	0	0.5	0	0	0.6	0	0	0	0	0	0	2.6	0	0	0	0	0	0	0.4	0.3
C32	Larynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C33-C34	Trachea, Bronchus, Lung	17	0	0	0	0	0	0.4	0.3	0	0.4	0.3	0.7	1.3	6.3	3.7	6.7	32.2	11.4	49.7	0.8	3.1
C37-C38	Other Thoracic organs	1	0	0	0	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
C40-C41	Bone	11	0	0.5	2.7	0	0	0	0	0	0.3	0.8	0	1.3	2.1	0	0	0	0	0	0.5	0.5
C43	Melanoma of Skin	4	0	0	0	0	0	0	0	0	0.6	0	0.7	1.3	0	0	0	0	0	0	0.2	0.2
C44	Other Skin	38	0	0	0	0	1.3	0.4	0.6	1.2	2.9	5.3	10.4	14.8	10.4	14.8	40	10.7	57.1	12.4	1.8	5.2
C45	Mesothelioma	2	0	0	0	0	0	0	0	0	0	0	0	1.3	0	0	0	0	0	0	0.1	0.2
C46	Kaposi sarcoma	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.4	0	0.2
C47,C49	Connective, Soft tissue	14	0	0.4	0	0	1.4	0.6	0.9	0	0.8	1.4	0	0	2.1	7.4	0	0	11.4	0	0.7	1.1
C50	Breast	427	0	0	0	0	1.3	4.7	11.6	26.1	58.6	111	102	170	140	172	140	172	68.6	112	20.7	39.2
C51	Vulva	4	0	0	0	0	0	0	0	0	0	0	1.3	0	0	3.7	6.7	10.7	0	0	0.2	0.8
C52	Vagina	4	0	0	0	0	0	0	0	0	0.3	0.4	0	0	2.1	0	6.7	0	0	0	0.2	0.4
C53	Cervix Uteri	54	1	0	0	0	0	0	0	0	1.9	3.2	10.1	6.6	6.3	3.7	20	107	22.9	12.4	2.6	6.6
C54	Corpus Uteri	42	0	0	0	0.7	0	0	0	0.3	0.8	3.6	3.6	20.8	29.6	33.3	21.5	22.9	37.2	0	2	6
C55	Uterus unspecified	10	0	0	0	0	0	0	0.4	0	0	0	3.9	4.2	3.7	0	10.7	0	24.8	0	0.5	1.4
C56	Ovary	43	0	0	0	0	0.7	0.6	1.7	2.6	2.6	1.2	5.1	2.6	6.3	14.8	20	43	22.9	12.4	2.1	4.6
C57	Other Female Genital	4	0	0	0	0	0	0	0	0	0.4	0.7	1.3	0	0	6.7	0	0	0	0	0.2	0.4
C58	Placenta	2	0	0	0	0	0	0	0	0.3	0	0	0.7	0	0	0	0	0	0	0	0.1	0.1
C64	Kidney	17	0	0.8	0	0	0	0.4	0.3	0.4	0.7	3.9	4.2	11.1	13.3	0	0	0	12.4	0	0.8	1.9
C65	Renal Pelvis	1	0	0	0	0	0	0	0	0	0.4	0	0	0	0	0	0	0	0	0	0	0
C66	Ureter	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.4	0	0	0.2
C67	Bladder	5	0	0	0	0	0	0	0	0	0.3	0	0	0	2.1	0	0	21.5	0	12.4	0	1
C68	Other Urinary organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C69	Eye	2	0	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C70-C72	Brain, Nervous system	23	0	0.8	1.4	0.5	1.4	0.6	1.3	0.3	0.8	0.7	0	2.1	11.1	13.3	0	10.7	0	0	0.1	0.4
C73	Thyroid	71	0	0	0	0	5.2	2.6	6.5	4.7	4.3	9.2	4.3	9.2	12.5	14.8	0	0	24.8	0	3.4	3.8
C74	Adrenal gland	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.4	0	0	0.2
C75	Other Endocrine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C81	Hodgkin disease	18	0	0.5	1.6	2.8	0.6	0.9	0.3	0.4	0.7	1.3	4.2	0	6.7	0	0	0	0	0	0.9	1.2
C82-C85;C96	Non-Hodgkin lymphoma	58	0	0.8	0.5	0	1.4	1.3	1.7	2.6	2.8	2.8	13.2	10.4	11.1	20	43	34.3	12.4	0	2.8	5.7
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C90	Multiple Myeloma	8	0	0	0	0	0	0	0	0	0	1.4	1.3	2.1	7.4	6.7	0	11.4	0	0	0.4	1.1
C91	Lymphoid Leukemia	31	0	4.6	1.8	0.5	0.7	0.6	1.3	0.3	0.4	0	3.9	0	11.1	6.7	10.7	0	0	0	1.5	2.3
C92-C94	Myeloid Leukemia	26	0	1.3	0.9	0.5	2.1	1.3	0.9	1.3	1.2	0.7	0	0	0	13.3	0	34.3	0	0	1.3	2.1
C95	Leukemia unspecified	7	0	0.8	0.5	0	0	0	1.3	0.3	0	0	0	0	0	0	0	0	0	0	0.3	0.3
Other	Other & unspecified	56	0	0.4	0	0	0.6	0.4	0.3	1.6	4.3	9.2	18.8	25.9	40	64.5	22.9	62.1	0	0	2.7	8.3
All	All sites Total	1186	1	11	6	7	12	16	23	37	57	112	215	269	432	467	677	468	497	57.5	121.1	116
Not C44	All sites but C44	1148	1	11	6	7	12	15	23	37	56	109	209	258	418	427	666	411	484	55.7	116	116

Table 5.5.I Number of New Cases by Primary Site and Years among Saudi Males, 1994 - 2008

ICD-10	Site	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
C00	Lip	8	2	4	5	4	1	6	1	5	5	8	6	5	12	9
C01-C02	Tongue	32	15	21	24	13	26	29	14	24	29	33	38	37	40	30
C03-C06	Mouth	24	23	30	25	24	27	24	27	26	26	39	29	30	38	39
C07-C08	Salivary glands	4	10	6	11	7	12	8	16	14	11	14	15	17	21	17
C09	Tonsil	4	9	2	4	6	2	1	4	6	5	2	3	0	4	2
C10	Other Oropharynx	2	3	3	2	1	3	0	3	3	0	2	3	0	2	2
C11	Nasopharynx	78	60	86	99	109	97	89	122	85	89	103	114	98	93	122
C12-C13	Hypopharynx	11	10	18	7	6	6	5	8	6	7	7	11	9	14	5
C14	Pharynx unspecified	0	2	0	0	1	1	0	2	2	4	4	4	3	2	3
C15	Oesophagus	77	71	68	61	79	56	68	63	71	68	55	58	58	73	51
C16	Stomach	131	128	133	109	124	103	124	125	147	182	150	160	170	171	166
C17	Small intestine	10	8	11	10	15	13	15	13	17	15	22	23	21	28	31
C18	Colon	61	87	74	85	106	100	116	119	153	177	200	262	232	273	286
C19-C20	Rectum	83	66	66	66	64	89	83	108	123	143	173	190	182	206	192
C21	Anus	10	9	6	8	6	5	10	12	14	11	17	16	8	12	10
C22	Liver	299	298	277	269	327	296	290	274	288	284	276	289	313	331	303
C23-C24	Gallbladder etc.	24	31	25	22	28	25	27	39	42	39	26	36	48	54	54
C25	Pancreas	50	49	53	45	60	59	68	53	75	84	82	99	101	131	100
C30-C31	Nose, sinuses etc.	5	6	10	4	10	13	5	9	14	10	10	15	9	10	14
C32	Larynx	49	48	44	41	46	43	45	52	32	60	53	52	64	56	57
C33-C34	Trachea, Bronchus, Lung	189	185	187	163	223	204	197	190	195	203	251	282	236	325	285
C37-C38	Other Thoracic organs	7	11	12	13	8	17	7	6	5	12	12	21	15	19	11
C40-C41	Bone	47	50	34	46	51	55	52	67	50	45	67	55	65	67	73
C43	Melanoma of Skin	21	8	8	8	6	7	11	9	12	10	13	13	12	19	12
C44	Other Skin	104	118	113	109	99	122	112	156	149	166	140	156	190	168	159
C45	Mesothelioma	5	4	5	5	7	2	7	5	3	6	6	8	8	11	17
C46	Kaposi sarcoma	15	10	14	14	12	11	19	19	21	26	27	22	22	18	16
C47;C49	Connective, Soft tissue	84	68	51	60	50	68	55	47	64	69	60	76	64	73	66
C50	Breast	11	15	6	12	19	11	16	12	15	16	13	15	18	21	17
C60	Penis	3	4	1	8	0	1	1	1	3	1	3	5	1	0	3
C61	Prostate	150	147	155	125	162	148	186	169	200	192	247	273	234	260	267
C62	Testis	32	22	25	29	38	31	35	36	45	38	47	44	39	63	74
C63	Other male genital	1	2	0	3	1	2	3	3	3	4	3	2	4	0	0
C64	Kidney	69	80	57	63	72	79	74	86	90	84	124	104	117	146	144
C65	Renal Pelvis	5	5	0	0	10	2	6	2	1	7	8	4	5	4	5
C66	Ureter	1	3	1	0	3	0	4	1	0	6	3	3	1	2	3
C67	Bladder	164	154	127	126	154	151	159	143	161	177	175	168	173	177	173
C68	Other Urinary organs	1	1	1	0	1	1	0	0	1	1	1	0	0	1	1
C69	Eye	21	12	18	34	16	24	25	22	24	21	21	17	26	22	27
C70-C72	Brain, Nervous system	132	99	127	123	103	121	140	120	121	148	155	141	153	137	158
C73	Thyroid	72	61	58	72	84	85	76	74	93	87	95	93	119	123	131
C74	Adrenal gland	8	9	8	8	4	9	10	7	6	15	6	9	20	16	14
C75	Other Endocrine	2	3	5	1	2	2	1	4	1	5	3	6	5	4	9
C81	Hodgkin disease	104	106	105	98	135	121	126	136	121	145	178	167	180	183	175
C82-C85;C96	Non-Hodgkin lymphoma	272	215	232	228	284	270	265	248	272	328	351	356	363	428	370
C88	Immunoproliferative dis.	0	0	0	1	0	1	0	0	0	1	2	0	0	0	0
C90	Multiple Myeloma	59	41	30	36	47	37	46	36	29	39	45	62	51	46	37
C91	Lymphoid Leukemia	152	118	146	143	154	137	152	160	145	165	155	165	158	195	157
C92-C94	Myeloid Leukemia	95	90	84	105	94	109	93	128	115	90	117	107	125	113	139
C95	Leukemia unspecified	10	5	5	5	8	7	14	13	12	14	15	16	25	29	39
Other	Other & unspecified	148	122	98	132	143	140	126	136	152	143	150	179	183	172	156
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All	All sites Total	2946	2703	2650	2667	3026	2952	3031	3100	3256	3513	3769	3992	4017	4413	4231
Not C44	All sites but C44	2842	2585	2537	2558	2927	2830	2919	2944	3107	3347	3629	3836	3827	4245	4072

Table 5.5.2 Number of New Cases by Primary Site and Years among Saudi Females, 1994-2008

ICD-10	Site	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
C00	Lip	3	3	4	2	1	5	4	3	6	5	8	6	4	5	5
C01-C02	Tongue	21	20	28	28	29	31	23	19	30	30	29	22	24	37	29
C03-C06	Mouth	23	38	37	22	33	39	26	27	29	29	23	44	37	53	46
C07-C08	Salivary glands	8	7	6	3	11	8	14	8	6	10	12	13	14	19	18
C09	Tonsil	0	3	3	3	1	1	3	1	5	4	1	1	1	3	3
C10	Other Oropharynx	0	1	0	0	1	0	0	0	2	0	2	2	0	1	0
C11	Nasopharynx	38	28	39	31	37	36	23	41	41	39	45	35	44	57	45
C12-C13	Hypopharynx	19	10	15	15	19	16	10	12	12	2	16	16	10	9	16
C14	Pharynx unspecified	2	3	1	1	1	1	2	0	3	1	3	0	1	3	1
C15	Oesophagus	75	54	68	52	46	49	55	37	58	52	51	65	63	55	54
C16	Stomach	67	73	64	58	66	71	62	73	76	75	77	74	115	127	100
C17	Small intestine	9	11	9	10	16	8	10	14	8	10	13	13	14	14	14
C18	Colon	65	80	85	75	73	106	108	143	135	145	179	196	222	246	274
C19-C20	Rectum	44	50	52	59	57	86	73	88	104	107	119	143	141	154	152
C21	Anus	6	3	2	3	5	2	4	2	5	9	7	9	8	12	7
C22	Liver	111	88	101	87	123	93	121	101	115	128	120	114	137	130	115
C23-C24	Gallbladder etc.	51	38	25	32	51	59	46	54	41	60	53	68	72	86	77
C25	Pancreas	28	30	24	25	50	41	35	35	54	41	35	53	77	53	67
C30-C31	Nose, sinuses etc.	6	9	5	4	9	8	6	5	8	2	6	10	12	14	6
C32	Larynx	10	2	7	10	9	10	9	3	7	4	7	6	9	10	5
C33-C34	Trachea, Bronchus, Lung	51	55	48	53	51	49	52	57	52	64	71	87	80	92	82
C37-C38	Other Thoracic organs	7	6	5	6	5	5	8	5	3	10	9	13	11	7	11
C40-C41	Bone	26	38	38	25	44	37	38	42	35	39	40	41	39	29	47
C43	Melanoma of Skin	11	7	7	2	8	8	6	8	7	8	12	9	14	18	10
C44	Other Skin	78	55	87	59	82	77	80	104	95	123	134	132	135	120	125
C45	Mesothelioma	1	0	1	1	0	4	1	1	3	7	5	7	5	3	2
C46	Kaposi sarcoma	0	3	0	8	7	8	4	5	3	6	5	8	15	6	5
C47;C49	Connective, Soft tissue	42	55	42	46	61	50	48	43	39	53	75	51	41	64	54
C50	Breast	430	435	463	473	523	517	606	559	673	716	820	946	982	1176	1152
C51	Vulva	8	6	7	3	3	3	8	7	5	6	11	1	3	4	5
C52	Vagina	5	6	2	4	2	3	1	5	5	1	5	7	1	4	0
C53	Cervix Uteri	79	74	83	75	96	79	84	84	86	92	92	96	76	103	93
C54	Corpus Uteri	57	47	39	48	60	58	92	79	89	111	124	151	148	184	194
C55	Uterus unspecified	4	2	11	10	17	13	5	15	14	14	13	17	24	26	22
C56	Ovary	96	100	97	114	107	100	105	111	108	123	120	146	136	148	160
C57	Other Female Genital	1	1	0	2	2	4	3	5	4	5	10	6	9	8	5
C58	Placenta	16	10	11	7	9	12	9	14	16	5	8	14	23	12	12
C64	Kidney	61	37	50	57	53	64	49	70	68	68	85	65	80	84	93
C65	Renal Pelvis	0	1	0	2	3	3	2	1	1	2	1	5	4	1	1
C66	Ureter	0	1	1	0	1	1	0	1	1	1	2	4	2	0	0
C67	Bladder	29	40	23	30	41	37	39	52	41	45	42	39	42	36	38
C68	Other Urinary organs	0	0	0	0	0	1	1	0	0	0	1	1	0	0	1
C69	Eye	15	16	18	13	12	24	25	17	20	16	18	20	19	20	17
C70-C72	Brain, Nervous system	78	74	76	93	86	78	84	84	85	96	108	103	107	117	92
C73	Thyroid	206	218	199	211	269	280	263	260	276	366	347	392	433	460	475
C74	Adrenal gland	10	6	10	11	9	10	14	8	10	13	17	9	10	8	13
C75	Other Endocrine	2	1	2	1	2	3	1	0	0	1	2	5	5	4	2
C81	Hodgkin disease	59	70	59	59	75	75	87	78	76	113	105	104	120	135	131
C82-C85;C96	Non-Hodgkin lymphoma	143	150	142	147	184	177	187	201	202	238	244	258	246	290	304
C88	Immunoproliferative dis.	0	0	0	1	0	1	1	1	0	1	0	0	0	0	0
C90	Multiple Myeloma	20	33	20	13	25	27	25	19	20	16	26	27	34	48	25
C91	Lymphoid Leukemia	76	90	80	80	74	95	112	86	101	92	85	85	91	116	112
C92-C94	Myeloid Leukemia	78	81	74	90	82	91	93	103	100	98	123	101	118	105	104
C95	Leukemia unspecified	6	6	1	5	7	12	9	4	5	11	12	16	9	19	31
Other	Other & unspecified	106	95	93	95	140	128	124	116	120	162	179	147	173	151	165
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All	All sites Total	2387	2370	2364	2364	2778	2804	2900	2912	3108	3475	3757	4003	4240	4686	4617
Not C44	All sites but C44	2309	2315	2277	2305	2696	2727	2820	2808	3013	3352	3623	3871	4105	4566	4492

Table 5.5.3 Age Standardized Incidence Rate by Primary Site and Years among Saudi Males, 1994-2008

ICD-10	Site	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
C00	Lip	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0	0.1	0.1	0.2	0.1	0.1	0.2	0.2
C01-C02	Tongue	0.9	0.5	0.6	0.6	0.3	0.9	0.8	0.3	0.6	0.6	0.8	0.9	0.8	0.8	0.6
C03-C06	Mouth	0.7	0.7	0.9	0.6	0.6	0.7	0.5	0.7	0.6	0.6	0.8	0.7	0.8	0.8	0.7
C07-C08	Salivary glands	0.1	0.3	0.2	0.3	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.4	0.3
C09	Tonsil	0.1	0.2	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0	0.1	0
C10	Other Oropharynx	0.1	0.1	0.1	0.1	0	0.1	0	0.1	0.1	0	0	0.1	0	0	0
C11	Nasopharynx	2.1	1.6	2.3	2.5	2.6	2.1	2	2.5	1.9	1.7	2.1	2.2	1.7	1.5	2
C12-C13	Hypopharynx	0.3	0.2	0.4	0.2	0.2	0.3	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.1
C14	Pharynx unspecified	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0	0.1
C15	Oesophagus	2.2	1.9	1.7	1.5	1.9	2.2	1.6	1.6	1.6	1.6	1.2	1.3	1.4	1.5	1
C16	Stomach	3.7	3.6	3.5	2.7	3	3.7	3	2.9	3.2	4.2	3.5	3.5	4.2	3.6	3.2
C17	Small intestine	0.3	0.2	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.5	0.5	0.5	0.5	0.6
C18	Colon	1.8	2.4	2	2.1	2.6	1.8	2.9	2.8	3.5	4.1	4.4	5.8	5.3	5.5	5.3
C19-C20	Rectum	2.4	1.9	1.6	1.7	1.6	2.4	2	2.5	2.7	3.3	4	4.3	4.4	4.1	3.7
C21	Anus	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.2	0.2
C22	Liver	8.7	8.5	7.5	7.1	8.3	8.7	7.3	7.3	7	7.1	6.6	6.8	8.2	7.2	6.2
C23-C24	Gallbladder etc.	0.7	0.9	0.7	0.6	0.7	0.7	0.7	1	1	1	0.6	0.8	1.3	1.2	1
C25	Pancreas	1.4	1.3	1.5	1.2	1.5	1.4	1.6	1.3	1.7	2	2	2.3	2.6	2.7	2
C30-C31	Nose, sinuses etc.	0.1	0.2	0.3	0.1	0.2	0.1	0.1	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2
C32	Larynx	1.5	1.4	1.2	1.1	1.2	1.5	1.1	1.4	0.8	1.5	1.3	1.3	1.6	1.2	1.2
C33-C34	Trachea, Bronchus, Lung	5.6	5.4	5	4.4	5.8	5.6	5	4.9	5	5.2	5.9	6.6	6.2	6.9	5.8
C37-C38	Other Thoracic organs	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.3	0.2	0.3	0.2	0.3	0.2
C40-C41	Bone	0.7	0.7	0.5	0.7	0.7	0.7	0.7	0.8	0.6	0.6	0.7	0.6	0.7	0.7	0.8
C43	Melanoma of Skin	0.6	0.2	0.2	0.2	0.2	0.6	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.4	0.2
C44	Other Skin	2.7	3.1	2.8	2.8	2.4	2.7	2.5	3.6	3.2	3.7	3.1	3.4	4.5	3.3	3
C45	Mesothelioma	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
C46	Kaposi sarcoma	0.5	0.3	0.3	0.3	0.3	0.5	0.4	0.5	0.5	0.6	0.6	0.4	0.5	0.3	0.3
C47;C49	Connective, Soft tissue	1.7	1.4	1	1.2	0.8	1.7	1	0.8	1.1	1.2	0.9	1	1	1	0.9
C50	Breast	0.3	0.4	0.1	0.3	0.5	0.3	0.4	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.3
C60	Penis	0.1	0.1	0	0.2	0	0.1	0	0	0.1	0	0.1	0.1	0	0	0.1
C61	Prostate	4	3.8	3.8	3	3.9	4	4.1	4.3	4.4	4.6	5.8	6.4	6.3	5.7	5.7
C62	Testis	0.7	0.4	0.5	0.5	0.7	0.7	0.6	0.5	0.7	0.5	0.6	0.5	0.5	0.7	0.8
C63	Other male genital	0	0	0	0.1	0	0	0.1	0.1	0.1	0.1	0.1	0	0.1	0	0
C64	Kidney	1.8	2	1.4	1.5	1.7	1.8	1.7	1.9	1.8	1.8	2.5	2.1	2.5	2.8	2.5
C65	Renal Pelvis	0.1	0.1	0	0	0.3	0.1	0.1	0	0	0.2	0.2	0.1	0.1	0.1	0.1
C66	Ureter	0	0.1	0	0	0.1	0	0.1	0	0	0.2	0.1	0.1	0	0	0.1
C67	Bladder	4.6	4.3	3.4	3.2	3.9	4.6	4	3.4	3.5	4.1	4.1	3.6	4.1	3.6	3.6
C68	Other Urinary organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C69	Eye	0.5	0.2	0.3	0.5	0.2	0.5	0.3	0.5	0.4	0.3	0.4	0.3	0.3	0.3	0.3
C70-C72	Brain, Nervous system	2.9	1.8	2.4	2.2	1.7	2.9	2.3	2.1	2	2.5	2.5	2.2	2.6	2	2.1
C73	Thyroid	1.9	1.5	1.5	1.8	1.9	1.9	1.5	1.6	1.9	1.7	1.7	1.6	2.1	1.9	2
C74	Adrenal gland	0.1	0.1	0.2	0.1	0	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.1
C75	Other Endocrine	0.1	0.1	0.1	0	0	0.1	0	0	0	0.1	0	0.1	0.1	0	0.1
C81	Hodgkin disease	2.1	1.9	1.7	1.5	2.1	2.1	1.7	1.9	1.7	1.9	2.3	2.1	2.1	2.2	1.9
C82-C85;C96	Non-Hodgkin lymphoma	6.7	5.1	5.5	5	6.2	6.7	5.4	5	5.2	6.4	6.2	6.6	6.7	7.1	6
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0
C90	Multiple Myeloma	1.8	1.1	0.8	1	1.3	1.8	1.1	0.9	0.6	0.9	1.1	1.4	1.3	1	0.7
C91	Lymphoid Leukemia	2.2	1.8	2.1	2.1	2.4	2.2	2.1	2.4	2	2.2	2.1	2	2.3	2.4	2
C92-C94	Myeloid Leukemia	1.9	1.7	1.7	2	2	1.9	1.7	2	2	1.6	1.8	1.6	1.9	1.6	1.9
C95	Leukemia unspecified	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.4	0.4	0.6
Other	Other & unspecified	4	3.1	2.6	3.3	3.4	4	2.8	3.4	3.4	3.3	3.3	3.9	4.3	3.4	3.1
		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
All	All sites Total	75.9	67.2	63.3	61.3	68.9	75.9	65.3	67.7	67.5	74	76.4	80.1	86	81.1	74.1
Not C44	All sites but C44	73.2	64.1	60.5	58.5	66.5	73.2	62.8	64.1	64.3	70.3	73.3	76.7	81.5	77.8	71.1

Table 5.5.4 Age Standardized Incidence Rate by Primary Site and Years among Saudi Females, 1994-2008

ICD-10	Site	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
C00	Lip	0.1	0.1	0.1	0	0	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1
C01-C02	Tongue	0.7	0.7	0.9	0.8	0.9	0.7	0.6	0.5	0.8	0.7	0.7	0.5	0.6	0.8	0.6
C03-C06	Mouth	0.7	1.2	1.1	0.7	1.1	0.7	0.7	0.6	0.7	0.7	0.5	1	0.8	1	0.9
C07-C08	Salivary glands	0.2	0.2	0.2	0.1	0.3	0.2	0.2	0.2	0.1	0.2	0.3	0.2	0.2	0.3	0.2
C09	Tonsil	0	0.1	0.1	0.1	0	0	0.1	0	0.1	0.1	0	0	0	0.1	0.1
C10	Other Oropharynx	0	0	0	0	0	0	0	0	0.1	0	0.1	0.1	0	0	0
C11	Nasopharynx	0.9	0.6	1	0.7	0.9	0.9	0.4	0.7	0.8	0.7	0.9	0.7	0.8	0.9	0.7
C12-C13	Hypopharynx	0.6	0.3	0.5	0.5	0.6	0.6	0.3	0.3	0.2	0	0.4	0.4	0.2	0.2	0.3
C14	Pharynx unspecified	0	0.1	0	0	0	0	0.1	0	0.1	0	0.1	0	0	0	0
C15	Oesophagus	2.7	1.8	2.2	1.7	1.4	2.7	1.5	1	1.5	1.3	1.2	1.5	1.6	1.2	1.1
C16	Stomach	2.4	2.4	2.1	1.8	2	2.4	1.6	1.7	1.7	1.8	1.7	1.7	2.7	2.5	1.9
C17	Small intestine	0.3	0.4	0.3	0.3	0.5	0.3	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3
C18	Colon	2.3	2.7	2.6	2.2	2.2	2.3	2.6	3.4	3	3.4	4.1	4.2	5.1	4.6	5.2
C19-C20	Rectum	1.6	1.7	1.6	1.9	1.7	1.6	1.8	2	2.3	2.5	2.7	3.1	3.2	3	3
C21	Anus	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.1
C22	Liver	3.9	3	3.3	2.9	3.8	3.9	3.2	2.7	2.8	3.3	2.9	2.6	3.3	2.8	2.3
C23-C24	Gallbladder etc.	1.8	1.4	0.8	1	1.6	1.8	1.3	1.4	1.1	1.5	1.2	1.6	1.7	1.9	1.6
C25	Pancreas	1.1	1.1	0.8	0.9	1.6	1.1	0.9	0.8	1.4	1	0.9	1.3	1.9	1.2	1.4
C30-C31	Nose, sinuses etc.	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0	0.1	0.2	0.3	0.2	0.1
C32	Larynx	0.3	0.1	0.2	0.3	0.3	0.3	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.1
C33-C34	Trachea, Bronchus, Lung	1.9	2	1.5	1.6	1.6	1.9	1.5	1.5	1.2	1.6	1.7	1.9	1.9	1.9	1.7
C37-C38	Other Thoracic organs	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0	0.1	0.2	0.2	0.2	0.1	0.1
C40-C41	Bone	0.4	0.7	0.7	0.4	0.6	0.4	0.4	0.5	0.4	0.5	0.5	0.4	0.4	0.3	0.5
C43	Melanoma of Skin	0.3	0.2	0.2	0.1	0.2	0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.2
C44	Other Skin	2.7	1.7	2.7	1.9	2.4	2.7	2	2.5	2.2	2.9	3.1	2.9	3	2.5	2.4
C45	Mesothelioma	0	0	0	0	0	0	0	0	0.1	0.2	0.1	0.2	0.1	0.1	0
C46	Kaposi sarcoma	0	0.1	0	0.3	0.2	0	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.1	0.1
C47;C49	Connective, Soft tissue	0.9	1.3	1	1	1.1	0.9	0.8	0.6	0.6	0.8	1.3	0.7	0.6	0.8	0.8
C50	Breast	13.3	13	13.2	12.9	14	13.3	13.6	12	14	14.6	16.2	18.3	18.1	20.5	19.2
C51	Vulva	0.3	0.2	0.2	0.1	0.1	0.3	0.2	0.2	0.1	0.1	0.2	0	0.1	0.1	0.1
C52	Vagina	0.2	0.2	0	0.2	0	0.2	0	0.1	0.1	0	0.1	0.2	0	0.1	0
C53	Cervix Uteri	2.4	2.2	2.5	2.2	2.8	2.4	1.9	2	1.8	1.9	1.9	2	1.6	1.9	1.7
C54	Corpus Uteri	2.1	1.4	1.4	1.5	2	2.1	2.5	2	2.2	2.7	3	3.6	3.8	3.9	4
C55	Uterus unspecified	0.1	0.1	0.3	0.3	0.5	0.1	0.1	0.4	0.3	0.3	0.3	0.4	0.6	0.6	0.4
C56	Ovary	2.9	3	2.7	3.1	3.1	2.9	2.2	2.4	2.2	2.3	2.4	3	2.9	2.7	3
C57	Other Female Genital	0	0	0	0.1	0.1	0	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.1
C58	Placenta	0.4	0.2	0.2	0.1	0.2	0.4	0.2	0.2	0.2	0.1	0.1	0.2	0.3	0.2	0.1
C64	Kidney	1.5	1	1.1	1.3	1.4	1.5	0.9	1.4	1.4	1.4	1.8	1.2	1.5	1.4	1.5
C65	Renal Pelvis	0	0	0	0.1	0.1	0	0.1	0	0	0.1	0	0.1	0.1	0	0
C66	Ureter	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0
C67	Bladder	1	1.2	0.7	1	1.3	1	1.1	1.3	1	1.1	1	0.8	1	0.7	0.8
C68	Other Urinary organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C69	Eye	0.3	0.3	0.4	0.2	0.2	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.2
C70-C72	Brain, Nervous system	1.4	1.5	1.4	1.8	1.5	1.4	1.5	1.5	1.3	1.6	1.7	1.4	1.7	1.7	1.3
C73	Thyroid	5.5	5.2	4.6	4.9	5.7	5.5	4.8	4.6	4.7	6.1	5.7	6.3	6.6	6.4	6.8
C74	Adrenal gland	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1
C75	Other Endocrine	0.1	0	0	0	0	0.1	0	0	0	0	0	0.1	0.1	0.1	0
C81	Hodgkin disease	1.4	1.3	1	1.1	1.3	1.4	1.2	1.1	1	1.5	1.4	1.3	1.6	1.6	1.5
C82-C85;C96	Non-Hodgkin lymphoma	4.3	4.2	4.1	4	4.9	4.3	4.1	4.4	4.3	5	4.9	5.2	5.1	5.2	5.4
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C90	Multiple Myeloma	0.8	1.2	0.7	0.4	0.8	0.8	0.7	0.5	0.5	0.4	0.6	0.6	0.8	1	0.5
C91	Lymphoid Leukemia	1	1.6	1.2	1	1	1	1.6	1.2	1.2	1.2	1.1	1	1.2	1.5	1.4
C92-C94	Myeloid Leukemia	1.8	1.7	1.6	1.7	1.6	1.8	1.6	1.8	1.8	1.6	1.9	1.6	2.1	1.6	1.4
C95	Leukemia unspecified	0.1	0.1	0	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.4
Other	Other & unspecified	3.5	3.1	2.8	2.8	4.1	3.5	3.1	2.9	2.8	3.8	4.1	3.2	4.1	3.1	3.3
		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
All	All sites Total	70.9	67.2	64.4	62.5	72.4	70.9	63.4	62.3	64	71	75.1	77.8	84.3	82.9	79.4
Not C44	All sites but C44	68.2	65.5	61.7	60.7	70	68.2	61.5	59.8	61.8	68.1	72	74.9	81.3	80.4	77

PART VI
APPENDICES

APPENDIX: A Reporting Health care Facilities

Asir Region	
Abha General Hospital (Maternity)	King Fahad Hospital, AFH
Abha Private Hospital	Maghrabi Hospital & Center
AFS Military South Hospital	Mahael General Hospital
Ahli Hospital (Abha)	Majaridah General Hospital
Al-Borg Laboratory (Khamis Mushait)	Namas General Hospital
Asir Central Hospital (Abha)	Prince Abd Bin Abd Aziz Hospital
Balasmr General Hospital	Rijal Al Maa Hospital
Bashayer Hospital	Sabt Alaya Hospital
Ghassan Nagib Pharaon	Sarat Obeidah General Hospital
Hayat Hospital (Khamis Mushait)	Saudi German Hospital (Abha)
Khamis Mushayt Civil Hospital	Tathleeth General Hospital
Khamis Mushayt General Hospital	Unknown Asir Hospital
King Fahad Hospital (Bishah)	Zafer Hospital
Baha Region	
Baljurashi General Hospital	Mikhwah Hospital
King Fahd Hospital (Baha)	Qilwah Hospital
Eastern Province	
Abdullah Fouad Hospital	King Khalid General Hospital
Abqaiq Health Center	King Khalid Military Med Comp (AFH)
Ahsa Hospital (Hofuf)	Mana General Hospital (DM)
Amal Hospital (DM)	Mana General Hospital (Hofuf)
Anak General Hospital	Mana General Hospital (Jubail)
ARAMCO Clinic	Mana General Hospital (Khobar)
Armed Forces Hospital (Hafr Batin)	Maternity & Children's (Dammam)
Astoon Hospital (Thomairy)	Maternity & Children's (Hofuf)
Badr Rubaie Dispensary	Medical DX & TX Center
Dammam Central Hospital	Mohd Dossary Hospital
Dhukair Medical Center	Mousa Hospital (Hofuf)
Dossary Hospital (Khobar)	Mouwasat Dispensary (DM)
Dr Fakhry & Mouhawis Hospital	Mouwasat Hospital (DM)
Eastern Province Hospital	Mouwasat Hospital (Jubail)
Elaj Hospital (Ahsa)	Mouwasat Hospital (Qatif)
Fanateer Hospital	Naim Clinic (Hofuf)
Faraby Dispensary	Obeid Hospital (Hofuf)
Imam Abd Rahman Bin Faisal	Prince Saud Bin Jalawi Med Comp (AFH)
Jabir Eye & ENT Hospital	Qaisymah Dispensary
Jubail General Hospital	Qatif Central Hospital
Jufer Hospital (Hofuf)	Rowdha Dispensary
Khafji General Hospital	Royal Commission Hospital
Khafji Joint Operation	Saad Specialist Medical Center (Khobar)
King Abd Aziz Airbase	Saddiq Hospital
King Abdul Aziz Navy Base	Safwa Hospital
King Abdulaziz NGH Hospital	Salama Hospital
King Fahad Hospital (Hofuf)	Saudi ARAMCO Medical Services
King Fahad Hospital of the University	Tadawy General Hospital
King Fahad Military	Tapline Qaisuma Hospital
King Fahad Specialist Hospital	Yousif Hospital
Hail Region	
Ahli Polyclinic	Salamat Private Hospital
Baqa Hospital	Salimi Hospital (Shanan)
Hail General Hospital	Shamli Hospital (Hail)
King Khaled General Hospital	Sumiraa Hospital (Shanan)
Maternity & Children's Hospital	Unknown Hail Hospital
Rashid Hospital	Zamzam Private Hospital

APPENDIX: A (continued...)

Jazan Region	
Abu Arish General Hospital Ahad Masarha Hospital Aridah Hospital Baysh General Hospital Darb Hospital Dental Center (Jazan)	Emeis National Hospital Jazan General Hospital King Fahd Central Hospital Sabia General Hospital Samtah General Hospital Unknown Jazan Hospital
Jouf Region	
Dawamat Jandal Hospital King Faisal Qurayyat Hospital Maternity & Children's Hospital Prince Abd Rahman Sudairi Hospital	Qurayat General Hospital Qurayat Psychiatric Hospital Skaka General Hospital Tabarjal General Hospital
Madinah Region	
Al-Borg Laboratory Ansar Hospital Ansary Specialist Hospital Badr General Hospital (Yanboa) Dar Hospital Dr Erfan Saadi Hospital (Yanboa) Ees General Hospital (Yanboa) Hanakyah General Hospital Ijlal Hospital King Fahad Hospital Madina National Hospital Madinah Maternity & Children's Hospital Magrabi Eye Hospital	Mahd General Hospital Meeqat Hospital Mouwasat Hospital National Hospital (Yanboa) Ohoud Hospital Prince Abd Mohsen Ola Hospital Royal Commission Medical Center Saudi German Hospital Taiba Diagnostic Center Yanboa General Hospital Yanboa National Hospital Zahra Private Hospital
Makkah Region	
Abd Rahman Qari Center Abdullah Saeim Daher Abeer Polyclinic (Jeddah) Abuzinada Hospital Adhm Hospital (Leeth) Adwani General Hospital (Taif) Ahli Clinic Ahmed Hassan Fetahi Hospital Alawi Tunsi & Bros Hospital Al-Borg Laboratory (Jeddah) Al-Borg Laboratory (Makkah) Amal Hospital (Jeddah) Amen Hospital (Taif) Ansar Hospital (Jeddah) Badrddin Medical Group Bugshan General Hospital Dr Abd Rahman Bakhsh Hospital Dr Erfan & Bagedo Hospital Dr Ghassan Pharaon Hospital Dr Halla Bin Laden Hospital Dr Khalid Idriss Hospital Dr Solaiman Fakeeh Hospital Eye Hospital (Jeddah) Hada Military Hospital (Afh) Hai Jamea Hospital Hamra Hospital Hayat Hospital (Jeddah) Heda Sanatorium Hospital Hera General Hospital (Makkah) International Medical	King Fahad General Hospital King Fahad, AFH (Jeddah) King Fahd Air Base Hospital King Faisal Hospital (Al Sheshah) King Faisal Hospital (Taif) King Faisal Specialist Hospital & RC, Jeddah King Saud Hospital (Jeddah) Leeth Hospital Maghraby Eye Hospital (Jeddah) Maternity & Children's Hospital (Jeddah) Mhammad Saleh Bashrahil Hospital Misan Blhareth Hospital (Taif) Mustaf Iqbal Hospital Nahda National Hospital (Taif) New Jedaani Hospital (Qulail) New Jeddah Clinic Noor Specialist Hospital Nourah Oncology Cen, King Abdulaziz Med. City Pioneers Laboratory Qunfudah General Hospital Rafie Hospital (Makkah) Ranyah Hospital Royal Commission Medical center Saedy Medical Clinic Salam Hospital Saudi German Hospital (Jeddah) Saudi Hospital Saudia Airlines Med Services Sheffaa Hospital Taif Chest Hospital

APPENDIX: A (continued...)

Makkah Region Continued.....	
Jedaani (Safa) Hospital Jeddah Clinic Hospital Jeddah National Hospital Khadra Lab (Jeddah) Khalid Idriss Hospital (Jeddah) King Abd Aziz Hospital & Oncology Center King Abd Aziz Hospital (Al Zaher) King Abd Aziz Hospital (Taif) King Abd Aziz University Hospital	Taif Children's Hospital Thagher Hospital The Eye Consultant (Jeddah) Torbah Hospital Umm Qura General Private Umm Qura Poly Clinic United Doctors Hospital Zahra Hospital (Jeddah)
Najran Region	
Dhafer Hospital (Najran) King Khaled Hospital (Najran) Maternity & Children's Najran Armed Forces Hospital	Najran General Hospital Sharourah Armed Forces Hospital Sharourah General Hospital Unknown Najran Hospital
Northern Region	
Arar Central Hospital Arar Psychiatric Hospital Owaiqaliah Hospital Prince Abduaziz Bin MUSAAD Hospital (Arar)	Rafha General Hospital Turayf General Hospital Unknown Northern Hospital
Qassim Region	
Bukairiya General Hospital Buraidah Central Hospital King Fahd Specialist Hospital King Saud University Hospital	Maternity & Children's Hospital Midhnab General Hospital Onaizah General Hospital Rass General Hospital
Riyadh Region	
Abdul Azeem Bassam Medical center Adama Hospital Advance Cell Laboratory Advanced Medicine Center Adwa Sigal Dental Clinic AFH Military (RKH Program) Afif General Hospital Aflaj General Hospital Alam Medical Center Al-Borg Laboratory Amal Clinic (I) Amal Psychiatric Hospital Ameed Polyclinic (Kharj) Anda Medical Laboratory Armed Forces Wadi Dawaser Ashbelia Medical Clinic British Saudi Hospital Bustan Clinic Chest Diseases Hospital (Kharj) College of Dentistry KSU Consultative Medical Center Consulting Radiologist Dallah Hospital Dar Hekma Clinic Dar Shifa Hospital Dawadmi General Hospital Delta Medical Laboratory Derma Hospital Dilem General Hospital (Kharj)	King Abd Aziz Medical City King Abdul Aziz University King Fahad Medical City King Faisal Specialist Hospital & RC, Riyadh King Khaled Eye Specialist Hospital King Khaled General Hospital King Khaled International Hospital King Khaled University Hospital King Saudi Medical Complex Maghraby Eye Hospital (RY) Mamlaka Hospital (Kingdom) Maternity & Children's Hospital Medical World Clinic Mobarak Hospital Moewed Medical Center Mohd Anazi Medical Center Mouwasat Hospital Muzhamiyah General Hospital Obeid Hospital Olaya Medical Center Om Hammam Polyclinic Osrah Clinic Prince Nasser Bin Saad Prince Salman Bin Abdulaziz Quwayiyah General Hospital Rathawiah Medical Specialist Riyadh Care Hospital (Social) Riyadh Medical Center Rowaidha General Hospital

APPENDIX: A (continued....)

Riyadh Region continued....	
Dr Abdl Rahman Mishari Hospital Dr Fahd Sheduokhy Polyclinic Dr Moagel's Polyclinic Dr Mofarreh Polyclinic Dr Mohamed Anazi Med Center Dr Suleiman Habib Med Center Elite Medical & Surgical Eman General Hospital ENT Medical Center Faiha Medical Center Faleh International Hospital Finger Print Laboratory Green Crescent Hospital Hammadi Hospital Hammadi Hospital Hayat Polyclinic (Kharj) Heraa Medical Clinic Hotta Bani Tammim Hospital Howtat Sudair Hospital Huraymila General Hospital Huraymila General Hospital Dr. Ismail Raslan Polyclinic Jafel International Hospital Jazeera Medical Clinic Karama Polyclinic Khazan Clinic (2)	Sajir Hospital (Dawadmi) Saudi German Hospital Saudi Medical Services Security Forces Hospital Shaqra General Hospital Sharif Poly Clinic Shifa Health Center Specialized Medical Centre Sports Medicine Hospital Sulail Hospital Sulemaniya Children's Taawin Polyclinic Taif Medical Center Thadeq General Hospital Thuriah Medical Center Transad Clinic Tumayr (Majmaah) United Medical Laboratory Unknown Riyadh Hospital Wadi Dawasser Hospital Watan Clinic Watani Hospital Wroud Medical Clinic Yamamah Hospital Zulfi General Hospital
Tabuk Region	
Dhuba General Hospital King Abd Aziz Military King Fahad Hospital (Tabuk) King Fahad Hospital (Tabuk) King Khalid Civil King Khalid General King Khalid Military Hospital	North West Armed Force Prince Fahad Bin Sultan Tabuk Hospital NOS Umlujj General Hospital Unknown Tabuk Hospital Wajh General Hospital
International Hospitals in the following Countries	
Austria Bahrain Bangladesh Barbados Egypt Ethiopia France French Polynesia Germany Hong Kong (SARC) India Iran, Islamic Republic Jordan Kuwait Lebanon	Malaysia Morocco Nigeria Pakistan Philippines Qatar Senegal Sudan Syrian Arab Republic Taiwan Province of China Thailand United Arab Emirates United Kingdom United States of America Yemen

APPENDIX: B SCR Board Member Contact Information

SCR Main Office

MBC 64
PO Box 3354, Riyadh 11211
Saudi Arabia
Tel: 01-442-3929
Fax: 01-448-3924
Email: bazarbashi@kfshrc.edu.sa
haleid@kfshrc.edu.sa
Website: www.scr.org.sa

Chairman:

Shouki Bazarbashi, MD

Admin. Director: Haya Al Eid, BDS, DFE, CTR
Tumor Registrar: Mohamed Hayder, CTR
Asst. Tumor Registrar: Maisoun Khaled
Secretary: Marielen S. Manalo

Armed Forces Hospitals

Riyadh Military Hospital
PO Box 7897, Riyadh 11159
Tel: 01-477-7714 x6747
Fax: 01-477-6743 x6743
Email: rhalasiri@hotmail.com

Director:

Col. Dr. Ali Matar Al Zahrani

Central Region

King Fahad Medical City
PO Box 59046, Riyadh 11525
Tel: 01-288-9999 x7086
Fax: 01-288-1965
Email: aalhumaidi@kfmc.med.sa

Director:

Abdulaziz Al Humaidi, MD

Eastern Region

King Fahd Hospital of the University
PO Box 40004, Al Khobar 31952
Tel: 03-896-6741
Fax: 03-896-6741
Email: halidrissi@yahoo.com

Director:

Prof. Hassan Al Idrissi, MD

King Abdulaziz University Hospital

Faculty of Medicine
PO Box 80215, Jeddah 21589
Tel: 02-624-0000 x18244/18253
Fax: 02-617-1412
Email: kau_vdca@yahoo.com

Director:

Prof. Mahmoud Shaheen Al Ahwal, MD

King Faisal Specialist Hospital & Research Center

MBC -64
PO Box 3354, Riyadh 11211
Tel: 01-442-4286
Fax: 01-442-4542
Email: alisaz@kfshrc.edu.sa

Representative:

Ali Al-Zahrani, MD, PhD

APPENDIX: B Continued....

<p>Madinah & Northern Region King Fahad Hospital Madinah Al Monawarah Tel: 04-836-2000 x2465/2462 Fax: 04-836-0937 Email: tarawah@yahoo.com</p>	<p>Director:</p>	<p>Ahmed Tarawa, MD</p>
<p>National Guard Hospitals King Abdulaziz Medical City (KKNHG) PO Box 9515, Jeddah 21423 Tel: 02-624-0000 x24087 Fax: 02-624-7242 Email: radwiah@ngha.med.sa</p>	<p>Director:</p>	<p>Amer Naeem Radwi, MD</p>
<p>Security Forces Hospital PO Box 3643, Riyadh 11481 Tel: 01-476-5878 / 802-3113 Fax: 01-802-3814 Email: aabahussein@hotmail.com</p>	<p>Director:</p>	<p>Abdulaziz Saleh Aba Hussein, MD</p>
<p>Southern Region Assir Central Hospital PO Box 61421, Abha Tel: 07-224-0711 / 224-7800 x118 Fax: 07-224-0964 / 224-7570 Email: rehmanamjaddr@yahoo.com</p>	<p>Director:</p>	<p>Amjad Rehman, MD</p>
<p>Western Region King Abdulaziz Hosp. & Oncology Center PO Box 31467, Jeddah 21497 Tel: 02-637-5555 x2276 Fax: 02-635-6410 Email: hasna_ncr_w@hotmail.com</p>	<p>Director:</p>	<p>Hasnah Al Ghamdi, MD</p>
<p>Ministry of Health Kingdom of Saudi Arabia PO Box 335157, Riyadh 11314 Tel: 01-475-0426 x201 Fax: 01-475-0428 Email: mysa88@yahoo.com</p>	<p>Representative:</p>	<p>Mohammad Y. Saeedi, MD Dep. Chairman</p>
<p>Nasser Al Hamdan,</p>	<p>Chairman Dep. Chairman</p>	<p>1997 - 1998 1999 - 2006</p>
<p>Edward De Vol, PhD</p>	<p>Representative</p>	<p>January 2001 - April 2006</p>
<p>Hadir Meir, MD</p>	<p>Director</p>	<p>January 2001 - August 2005</p>
<p>Hassan Trabulsi, MD</p>	<p>Director</p>	<p>November 2001 - June 2007</p>
<p>Dahish Ajarim, MD</p>	<p>Director</p>	<p>1992 - December 2009</p>
<p>Susan E. Young, CCHRA®, CTR</p>	<p>Admin. Director</p>	<p>March 2003-May 2006</p>
<p>Rizq Allah Assiri, MD</p>	<p>Director</p>	<p>2001 - 2010</p>
<p>Abdulwahab Andejani, MD</p>	<p>Director</p>	<p>2001 - 2010</p>

APPENDIX C: Cancer Registration Abstract Form

SAUDI CANCER REGISTRY
Ministry of Health
Kingdom of Saudi Arabia

CANCER REGISTRATION ABSTRACT

Revised 03, 2010

1. ACCESSION DATE
d d m m y y y y

2. CanReg-4 No. (Accession Number)
(Computer Assigned)

PATIENT

3. First <small>(Must be filled)</small>	4. FATHER <small>(Must be filled)</small>	5. GRANDFATHER	6. FAMILY <small>(Must be filled)</small>
<input style="width: 95%;" type="text"/>	<input style="width: 95%;" type="text"/>	<input style="width: 95%;" type="text"/>	<input style="width: 95%;" type="text"/>

Use SCR standardized name spellings

7. Saudi ID/Passport/ Iqama Number

8. Sex - -
1-Male 2-Female 9-Unknown (if only year is known, use 01/07//_ _ _ _)

9. Date of Birth

10. Age at Diagnosis

11. Nationality Code

12. Nationality Text (Must be filled)

13. Marital Status
1. Single 4. Widowed
 2. Married 9. Unknown
 3. Divorced

14. Address Code (Must be filled)

15. Address Details (Must be filled)
 City: Suburb/District P.O. Box Zip Code:

16. Mobile Number (Must be filled)

17. Telephone Number 1 (Must be filled)

18. Extension 1

19. Telephone Number 2

20. Extension 2

TUMOR

21. Date of Diagnosis (First time physician states that patient has a malignancy clinically or pathologically) (if only year is known, use 01/07//_ _ _ _)
d d m m y y y y (Must be filled)

22. Topography Code

23. Topography Text (Must be filled)

24. Morphology Code /
(behavior)

25. Morphology Text (Must be filled)

26. Behavior
2. In situ
 3. Malignant/Invasive

27. Grade
1. Well differentiated / Differentiated, NOS
 2. Moderately / Moderately well differentiated
 3. Poorly Differentiated
 4. Undifferentiated / Anaplastic
 5. T-Cell*
 6. B-Cell/Pre-B/B-cursor*
 7. Null Cell/Non-T-Non-B*
 8. Natural Killer cell*
 9. Unknown*

28. SEER Summary Stage (Extent)
1. In situ
 2. Localized
 3. Regional by direct extent
 4. Regional by lymph node
 5. Regional (both 3 and 4)
 6. Regional, NOS
 7. Distant Metastasis / Systemic disease
 9. Unknown

* for leukemias & lymphomas only

29. Laterality
0. Not paired (unknown, ill defined)
 1. Right
 2. Left
 3. One side, but unknown
 4. Bilateral involvement, laterality origin unknown
 9. Paired site, laterally not stated

30. Basis of Diagnosis
0. DCO (death certificate only)
 1. Clinical
 2. Medical Imaging (Radiology)
 3. Surgery (Visualization without Biopsy)
 4. Lab test (tumor marker)
 5. Cytology / Hematology
 6. Histology of Metastasis
 7. Histology of Primary
 8. Autopsy
 9. Unknown

APPENDIX C: Cancer Registration Abstract Form

HOSPITAL

31. Date first seen at Source1 for this cancer
(Must be filled)

d	d	m	m	y	y	y	y

32. Source 1

--	--	--	--	--	--	--	--

33. Reporting Hospital Text

--

34. MRN 1

--	--	--	--	--	--	--	--	--	--	--	--

35. Path 1

--	--	--	--	--	--	--	--	--	--	--	--

36. Source 2

--	--	--	--	--	--	--	--

37. Referral Hospital Text

--

38. MRN 2

--	--	--	--	--	--	--	--	--	--	--	--

39. Path 2

--	--	--	--	--	--	--	--	--	--	--	--

40. Source 3

--	--	--	--	--	--	--	--

41. Referral Hospital Text

--

42. MRN 3

--	--	--	--	--	--	--	--	--	--	--	--

43. Path 3

--	--	--	--	--	--	--	--	--	--	--	--

44. Source 4

--	--	--	--	--	--	--	--

45. Referral Hospital Text

--

46. MRN 4

--	--	--	--	--	--	--	--	--	--	--	--

47. Path 4

--	--	--	--	--	--	--	--	--	--	--	--

48. Source 5

--	--	--	--	--	--	--	--

49. Referral Hospital Text

--

50. MRN 5

--	--	--	--	--	--	--	--	--	--	--	--

51. Path 5

--	--	--	--	--	--	--	--	--	--	--	--

52. Source 6

--	--	--	--	--	--	--	--

53. Referral Hospital Text

--

54. MRN 6

--	--	--	--	--	--	--	--	--	--	--	--

55. Path 6

--	--	--	--	--	--	--	--	--	--	--	--

FOLLOW-UP

56. Last Contact

d	d	m	m	y	y	y	y

57. Status

- 1. Dead
- 2. Alive
- 9. Unknown

58. Cause of Death

- 1. Cancer
- 2. Other
- 3. Not Applicable
- 9. Unknown

59. Coder ID #

--	--	--	--

60. Data Entry ID #

--	--	--	--

Signature: _____

Signature: _____

QUESTIONS / QUERIES / PROBLEMS

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APPENDIX D: Summary of Cancer Statistics in Saudi Arabia for the Year 2008

ملخص

إحصائيات السرطان في المملكة العربية السعودية لعام ٢٠٠٨ م

أنشئ السجل السعودي للأورام في عام ١٤١٢هـ (١٩٩٢م) بمستشفى الملك فيصل التخصصي ومركز الأبحاث تحت إشراف وزارة الصحة وبمشاركة من القطاعات الصحية الحكومية. يضم السجل خمسة فروع في مناطق المملكة بالإضافة إلى وجود مكاتب في كل من مستشفيات الملك فيصل التخصصي ومركز الأبحاث والقوات المسلحة بالرياض ومدينة الملك عبد العزيز الطبية بجدة وقوى الأمن بالرياض ومستشفى الملك خالد الجامعي بالرياض وجامعة الملك عبد العزيز بجدة.

بدأ السجل نشاطه في جمع المعلومات من شهر يناير في عام ١٩٩٤م. تدون المعلومات عن كل حالة سرطان وفق نموذج خاص بالسجل وتُرمز البيانات وتدخل حسب النظام المعتمد من منظمة الصحة العالمية وتحلل بشكل دوري. كما أن السجل يقوم بتزويد الجهات المختصة والباحثين بمعلومات إحصائية مفصلة بناءً على طلبهم وفق نموذج خاص على الموقع الرسمي الإلكتروني للسجل (<http://www.scr.org.sa>)

بلغ إجمالي عدد حالات السرطان المسجلة في عام ٢٠٠٨ ما مجموعه ١١,٤٥٦ حالة. من بين هذه الحالات ٨,٨٤٨ سعوديين بنسبة ٧٧,٢% و ٢,٦٠٨ غير سعوديين بنسبة ٢٢,٨%. من بين السعوديين ٤,٢٣١ حالة رجال بنسبة ٤٧,٨% والنساء ٤,٦١٧ حالة بنسبة ٥٢,٢%.

سعوديين		غير سعوديين		جنسيات غير محددة			الكل	
ذكر	انثى	المجموع	ذكر	انثى	المجموع	ذكر	انثى	المجموع
٤٢٣١	٤٦١٧	٨٨٤٨	١٤٢٢	١١٨٦	٢٦٠٨	٨١	١٠٨	١٨٩

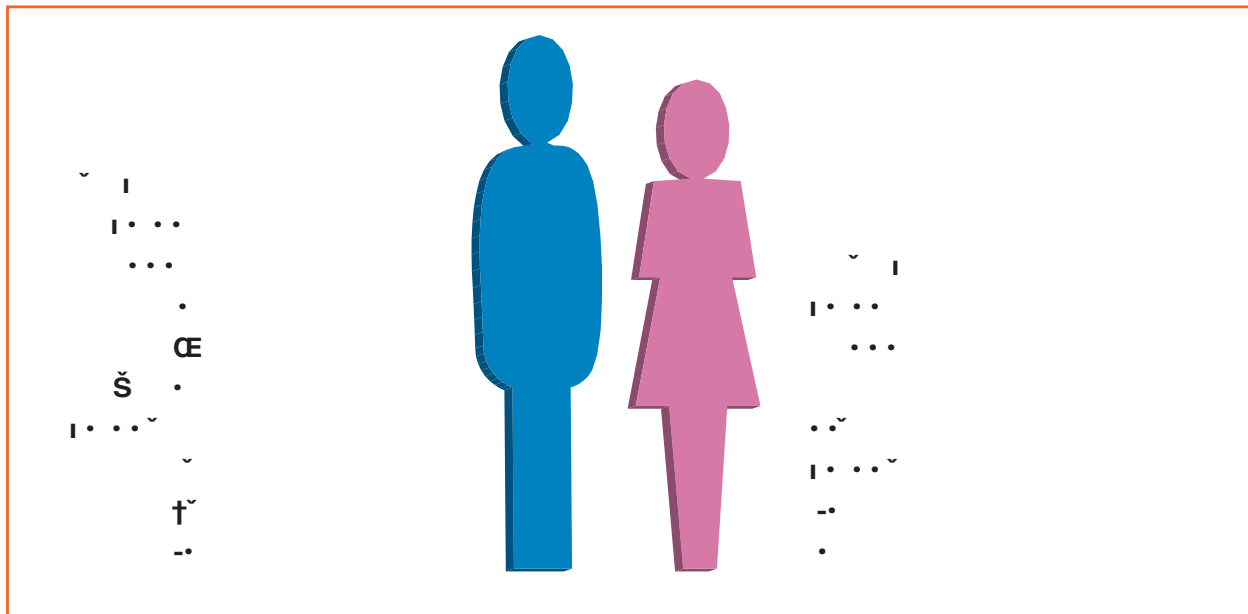
بلغ المعدل العمري المعياري للإصابة بالسرطان ٧٦,٨ في كل ١٠٠,٠٠٠ من السكان (٧٤,١ بين الرجال و ٧٩,٤ بين النساء).

السرطانات العشرة الأكثر شيوعاً بين السعوديين في كلا الجنسين

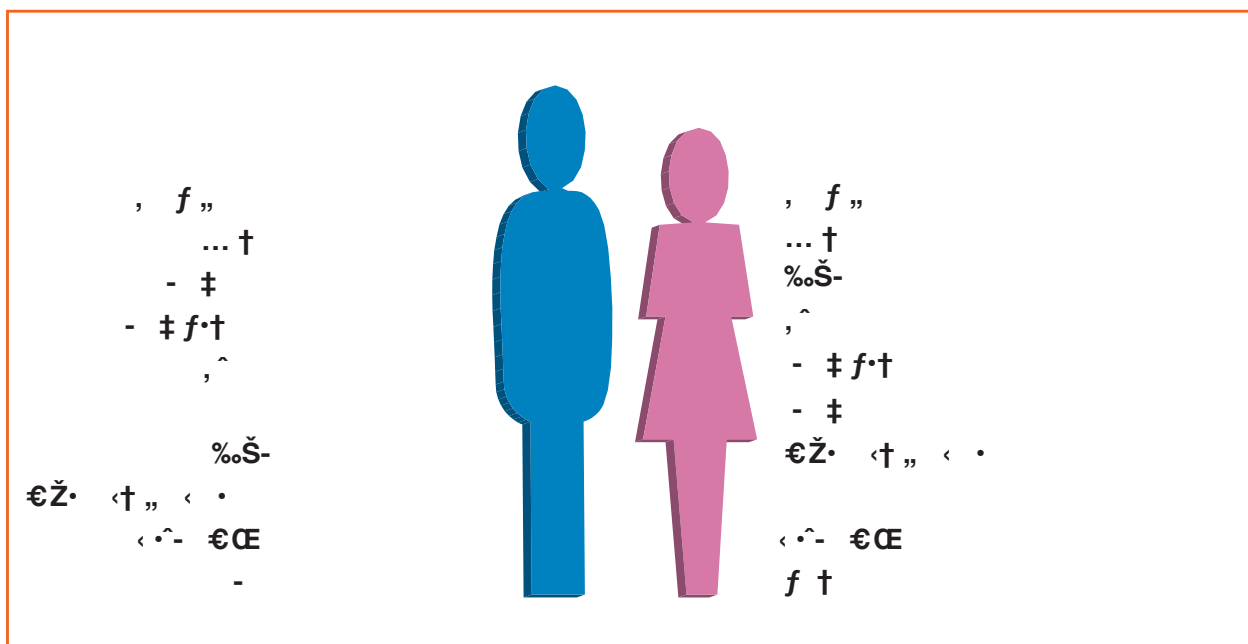
يحتل سرطان الثدي المرتبة الأولى (١١٦٩ حالة بنسبة ١٣,٢% ثم سرطان القولون والمستقيم (٩٠٤ حالة) بنسبة ١٠,٢% يليه السرطان اللمفاوي لاهودجكن (٦٧٤) بنسبة ٧,٦% ثم سرطان الغدة الدرقية (٦٠٦) بنسبة ٦,٨% يليه سرطان ابيضاض الدم (٥٨٢) بنسبة ٦,٦% يليه سرطان الكبد (٤١٨) بنسبة ٤,٧% يليه سرطان الرئة (٣٦٧) بنسبة ٤,١% يليه السرطان اللمفاوي هودجكن (٣٠٦) بنسبة ٣,٥% ثم سرطان الجلد (٢٨٤) بنسبة ٣,٢% وأخيراً سرطان البروستات (٢٦٧) بنسبة ٣%. بنسبة ٦,٨% يليه سرطان ابيضاض الدم (٥٨٢) بنسبة ٦,٦% يليه سرطان الكبد (٤١٨) بنسبة ٤,٧% يليه سرطان الرئة (٣٦٧) بنسبة ٤,١% يليه السرطان اللمفاوي هودجكن (٣٠٦) بنسبة ٣,٥% ثم سرطان الجلد (٢٨٤) بنسبة ٣,٢% وأخيراً سرطان البروستات (٢٦٧) بنسبة ٣%.

السرطانات العشرة الأكثر شيوعاً بين الأطفال السعوديين في كلا الجنسين

يحتل سرطان ابيضاض الدم المرتبة الأولى (٢٢٢) حالة بنسبة ٣٥ % يليه سرطان المخ (٨٣) حالة بنسبة ١٣,١ % ثم السرطان اللمفاوي لاهودجكن (٦٢ حالة) بنسبة ٩,٨ % يليه السرطان اللمفاوي هودجكن (٥٦) بنسبة ٨,٨ % ثم سرطان العظام (٤٤) بنسبة ٦,٩ % ثم الكلى (٣٧) بنسبة ٥,٨ % يليه سرطان العين (٣١) بنسبة ٤,٩ % ثم الأنسجة الضامة والرخوة (٢٨) بنسبة ٤,٤ % يليه سرطان الغدة الكظرية (٢٠) بنسبة ٣,١ % وأخيراً سرطان الكبد (٨) بنسبة ١,٣ %.



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