

Kingdom of Saudi Arabia
Ministry of Health
Saudi Cancer Registry

**Cancer Incidence Report
Saudi Arabia
2004**

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Foreword

This annual report presents the cancer incidence data for the start of the second decade of the Saudi Cancer Registry operation. Analysis of the last 10 years trends in cancer incidence will be presented in a separate report in the near future.

The Saudi Cancer Registry (SCR) is in continuous evolution. Starting with the name, we have personalized our name to be more descriptive of our identity (from National to Saudi Cancer Registry). We are fortunate in being now overseen by the Higher counsel for health services which will hopefully help in overcoming many of the obstacle that we face in our operation. We are in the process of changing software from the International Agency Against Cancer (IARC) supported CanReg program to a custom-made web-based program that will hopefully connect all our regional offices instantaneously and will facilitate data cleaning and filtering of duplication. We are also working toward registering mortality data so that both cancer incidence and mortality can be presented, and projection of incidence and prevalence based on current data.

In an effort to disseminate the data the Saudi Cancer Registry makes every effort to participate in any major cancer conference or symposium. More and more people are becoming aware of the valuable data collected by the registry. Over the past 12 months we have responded to data request. The SCR is committed to provide all requesters with the required available data and believe that our data is much underutilized. Epidemiological studies using our data need to be encouraged and is one way this data should be used for.

In addition we are looking forward to a starting fruitful collaboration with several nongovernmental agencies in the country to include but not restricted to the Saudi Cancer Society and the Saudi Oncology Society as well as others.

Shouki Bazarbashi, MD
Chairman
Riyadh, April 2008

Acknowledgment

The Saudi Cancer Registry is funded by The Ministry of Health. The work of the Saudi Cancer Registry including the production of this report is the result of teamwork by our valuable cancer registrars, main office staff and members of the board of directors.

Special thanks to the support provided by the Ministry of Health represented by his Excellency the Minister of Health Dr. Hamad Al Manea and the deputy Minister of Health Dr. Mansour Al Hawasi. In addition we continue to be in debt for the support of King Faisal Specialist Hospital and Research Center leadership represented by Dr. Qasem Al Qasabi and Dr. Adnan Ezzat.

We also would like to record our thanks to the support from The Saudi Cancer Society represented by Dr. Abdullah Al Amro in their effort to support the registry in many aspects.

Many thanks to several pharmaceutical companies who have supported us with unrestricted grants. In particular we would like to thank Roche Oncology, Merck AG and Sanofi-Aventis for their support

Introduction

This is the eighth incidence report published by the Saudi Cancer Registry of Saudi Arabia. Previous publications include the 1994 Summary Report, 1994-1996 Incidence Report, 1997-1998 Incidence Report, 1999-2000 Incidence Report, 2001 Incidence Report, 2002 and 2003 Incidence Report.

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 2004. 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 2004 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 2004, the ASR for each sex, and the specific cancer rank for both sexes. 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 25- 44 age group.

Part V Incidence Tables

Part V contains the following detailed tables for all newly diagnosed cancer types among Saudis and Non-Saudis for 2004:

- 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.

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: Data request form which may be copied, filled and submitted to the SCR Main Office.

Appendix D: Copy of the cancer registration abstract form which is completed by cancer registrars for each cancer case.

Table of Contents

Acknowledgment.....	3
Foreword.....	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 2004.....	16
Adult Cancers in Saudi Arabia, 2004 (above 14 years).....	22
Childhood Cancers in Saudi Arabia 2004 (14 years and below).....	24
International Comparison of Age-Standardized Incidence Rates.....	26
PART III.....	28
Cancer Incidence for Specific Sites, 2004.....	30
Female Breast (C 50).....	31
Colo-rectal (C18-C20).....	33
Non-Hodgkin Lymphoma (C82-C85; C96).....	35
Leukemia (C91-C95).....	37
Thyroid (C 73).....	39
Liver (C 22).....	41
Lung (C33-C34).....	43
Hodgkins disease (C 81).....	45
Skin (Non-Melanoma) (C 44).....	47
Brain, Nervous System (.....	49
Prostate (C 61).....	51
Stomach (C 16).....	53
Bladder (C 67).....	55
Corpus Uteri (C 55).....	57
Ovary Cancer (C 56).....	59
PART IV.....	62
Cancer Among Non-Saudi Population 2004.....	64

PART V 66

Table 5.1.1 Age Distribution of Cancer Cases among Saudi Males, 2004 67
Table 5.1.2 Age Distribution of Cancer Cases among Saudi Females, 2004 68
Table 5.1.3 Cancer Incidence Cases among Saudi Males by Age Group (per 100,000), 2004 69
Table 5.1.4 Cancer Incidence Cases among Saudi Females by Age Group (per 100,000), 2004 70
Table 5.3.1 Age Distribution of Cancer Cases among non-Saudi Males, 2004 71
Table 5.3.2 Age Distribution of Cancer Cases among non-Saudi Females, 2004 72
Table 5.3.3 Incidence Rates for Cancer Cases among non-Saudi Males by
Age Group (per 100,000), 2004 83
Table 5.3.4 Incidence Rates for Cancer Cases among non-Saudi Females by
Age Group (per 100,000), 2004 74

PART VI 76

APPENDIX A: Reporting Health Care Facilities 77-80
APPENDIX B: Members of SCR Board of Directors 81-82
APPENDIX C: SCR Data Request Form 83
APPENDIX D: Cancer Registration Abstract Form 84

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 Saudi national population for year 2004 was 16,527,340**. Of these, 8,287,370 were males and 8,239,970 were females. The Non-Saudi population in 2004 was 6,150,922**, of these 4,269,870 were males and 1,881,052 females.

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

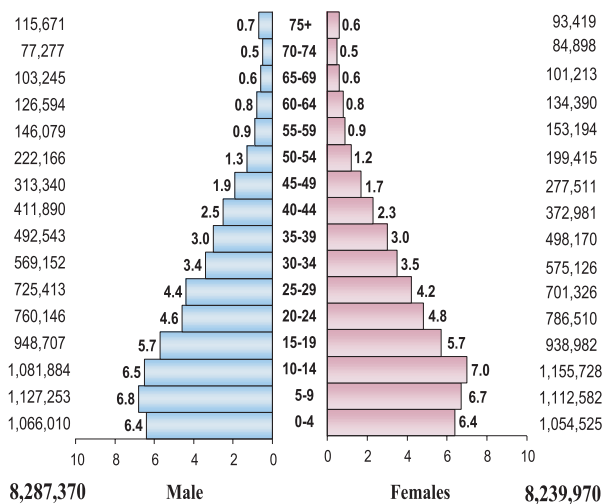


Figure 1.2 Population Pyramid of Saudis (%) by Sex and Age Group, 2004

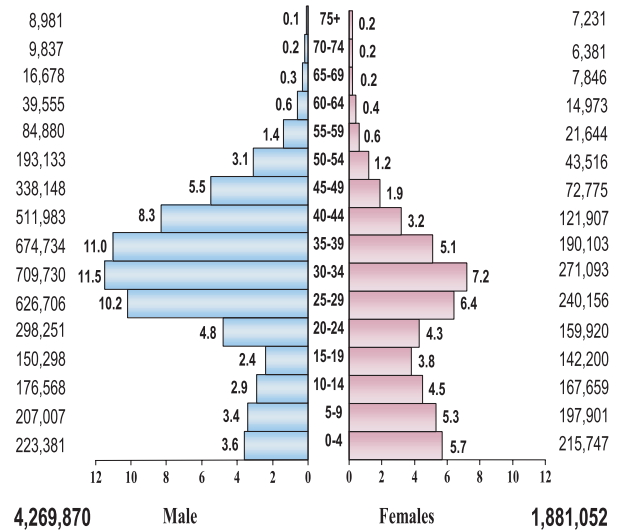


Figure 1.3 Population Pyramid of non-Saudis (%) by Sex and Age Group, 2004

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: Census 2004, 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 Khalid University Hospital 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: King Khalid University, Abha, covering Asir, Baha, Najran, Jazan and Bisha Health Regions.
- 5 Madinah/Northern Region: King Fahad Hospital, Madinah, covering Madinah, Tabuk, Jouf and Northern Health Regions.

Offices at the Medical Service Division or Oncology Department of the following establishment

- 1 Ministry of Defense and Aviation, Armed Forces Hospital, Riyadh
- 2 King Abdulaziz Medical City.
- 3 Ministry of Interior, Security Forces Hospital, Riyadh.
- 4 King Faisal Specialist Hospital and Research Centre, Riyadh.
- 5 King Abdul Aziz University Hospital, Jeddah

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.

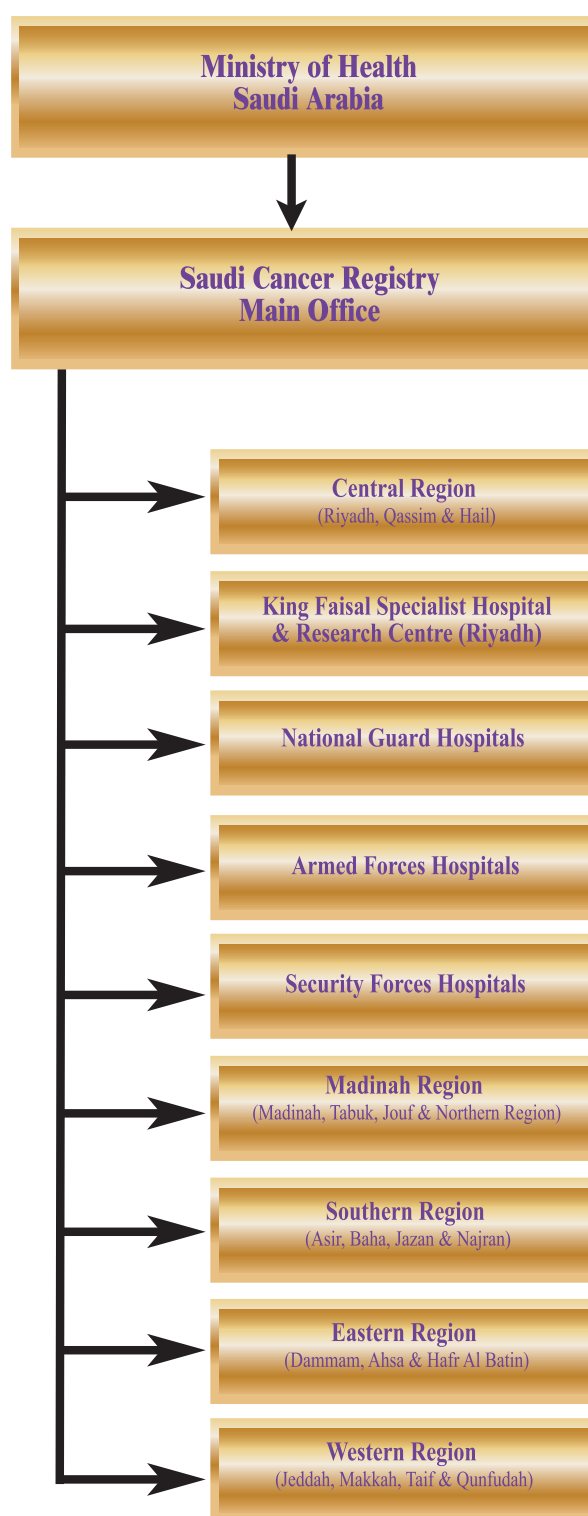


Figure 1.4 Organizational Chart of the Saudi Cancer Registry of Saudi Arabia

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 staging according to different time period and some sites are coded differently using the new staging 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 2004 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 4.31, 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. This way each malignancy is counted only once for statistical analysis.

The computer software programs used for data entry and incidence tables output are *CanReg 4.31*, 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 2004. For each cancer site, the number and the percentage of all newly diagnosed cases for the year 2004, the age-standardized incidence rate (ASR) per 100,000 population for each sex, and the specific cancer rank in comparison to all cancers for both sexes are presented. Useful international statistics for the specified cancer include the ranking of the cancer worldwide. The source for this information is summarized on page 66.

The relevant data incorporate details for all patients presented over the year 2004. 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 anticipated number per population. The reason for this is that Riyadh has many referral centers providing patients from outside the region with cancer-related care. Many of these patients fail to 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 4.31, 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 2005. 2004 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 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
2004

Reported Cancer Incidence Cases in Saudi Arabia, 2004

Between January 01 and December 31, 2004, the total number of cancer incident cases reported to the SCR was 9381. Overall, cancer was slightly more in men than in women. Cancers affected 4,778 (50.9%) males and 4,603 (49.1%) females, with a male to female ratio of 104:100. 7,138 cases were reported among Saudis, 1,987 among Non-Saudis. The total number of cases excluded from analysis included 256 cases of unknown nationalities. Other exclusions were 191 in situ cases. The current software program CanReg-4 version 4.31, does not include in situ cases in the statistical analysis. Also, 27 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 468 cases. Table 2.1 illustrates the distribution of the cases by sex.

Diagnosis of malignancy was confirmed histologically and/or cytologically in 97.3% of the cases. Clinically confirmed cases were 0.2%; radiologically confirmed cases were 1.9%; and cases confirmed by Death Certificate were 0.1%. The method of diagnosis was unknown for 0.6% of the cases.

As shown in table 2.1, 8,913 cases were analyzed, of which 6,969 (78%) were Saudis and 1,944 (22.%) were Non-Saudis. Among the Saudis, 3,478 (49.9%) were male and 3,491 (50.1 %) were female. The male to female ratio was 99.6:100. The crude incidence rate (CIR) of all cancers among the Saudi population was 41.9/100,000 (41.6/100,000 among males and 42.1/100,000 among females). The overall age-standardized incidence rate (ASR) for all Saudis with a world standard population reference was 69.7/100,000 (70.2/100,000 in males and 69.3/100,000 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 two folds for males compared to females. The median age at diagnosis was 59 years for men (Range 0-110) and 49 years for women (Range 0-100).

	Saudis			Non-Saudis			Unknown Nationality			All
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Total
Total	3551	3587	7138	1092	895	1987	135	121	256	9381
Invasive	3488	3507	6995	1066	878	1944	131	119	250	9189
In Situ	63	80	143	26	17	43	3	2	5	191
ICD 10 *	10	16	26	0	0	0	1	0	1	27
Analyzed **	3478	3491	6969	1066	878	1944	131	119	250	8913

Table 2.1 Distribution of Cancer Cases in Saudi Arabia by Nationality and Sex 2004

* ICD-10 conversion failure

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

Cancer among Saudis 2004

The total number of cancer cases analyzed among Saudis during the year 2004 were 6,969. Of those cases 49.9 % (3,478) were reported among men and 50.1% (3,491) among women.

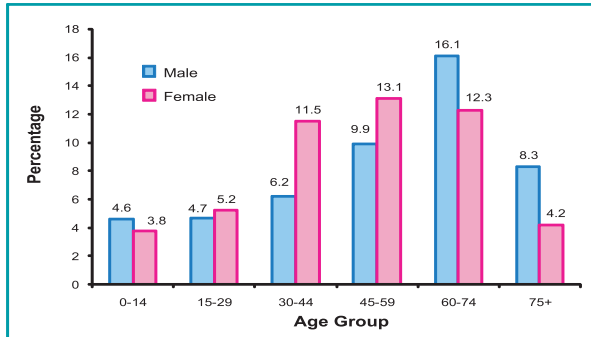


Figure 2.1 Percentage Distribution of Cancer Incidence among Saudis by Sex according to Age Group, 2004

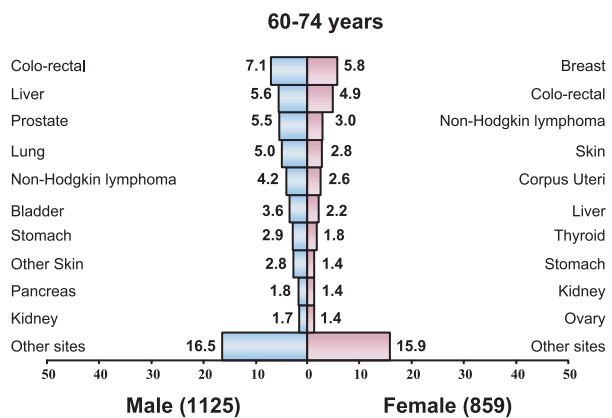
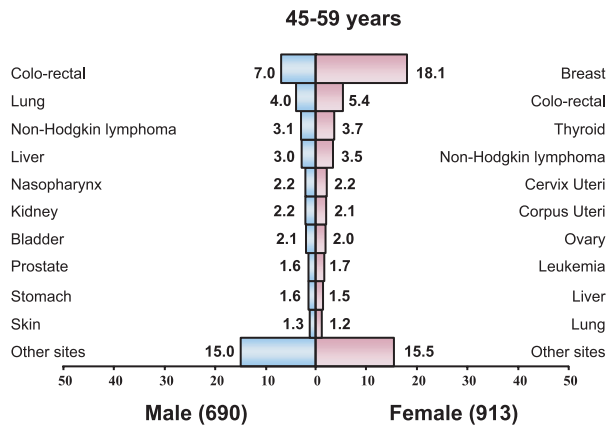
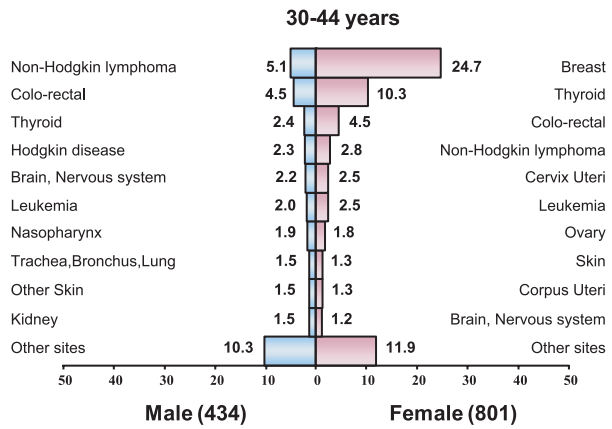
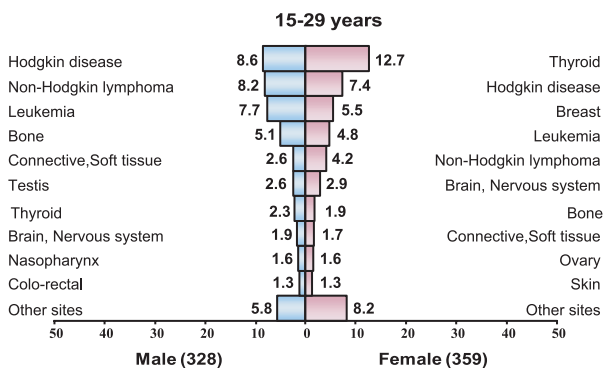
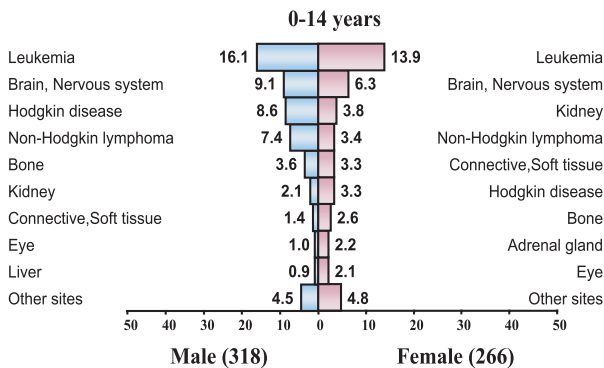
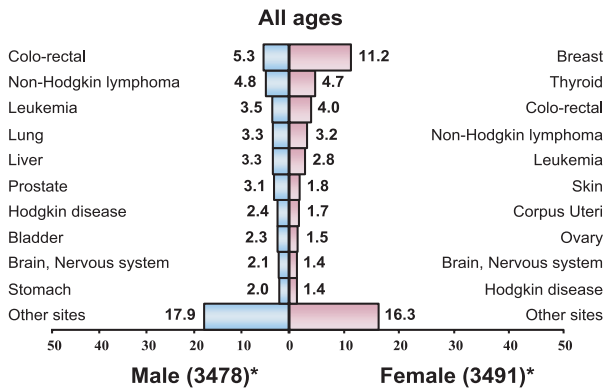


Figure 2.2 Percentage Distribution of Most Frequent Types of Cancer by Sex among Saudis, 2004

* 5 cases (2 male and 3 female) of unknown age are included only in the total as they may not be added to any age group.

Cancer	No.	%
Breast	798	11.5
Colo-rectal	647	9.3
Non-Hodgkin lymphoma	556	8.0
Leukemia	435	6.2
Thyroid	415	6.0
Liver	324	4.6
Lung	296	4.2
Hodgkin disease	264	3.8
Skin	261	3.7
Brain, Nervous system	247	3.5

Table 2.2 Ten Most Common Cancers among Saudis, 2004 (All Ages)

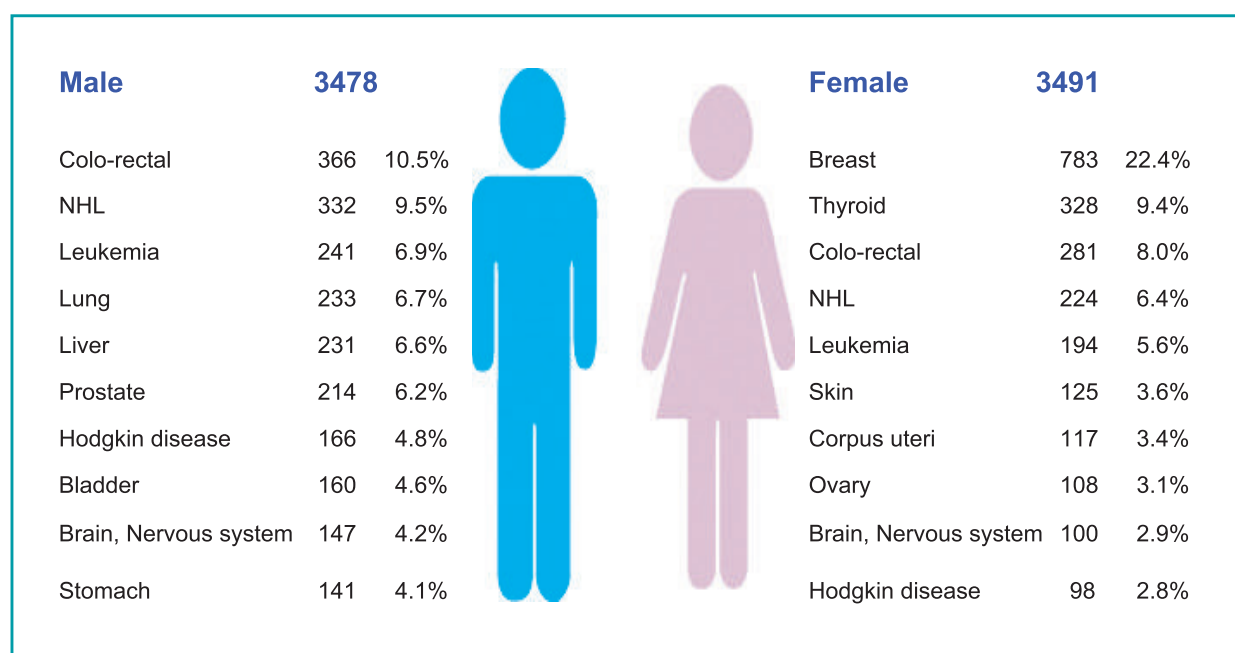


Figure 2.3 Ten Most Common Cancers among Saudis by Sex, 2004

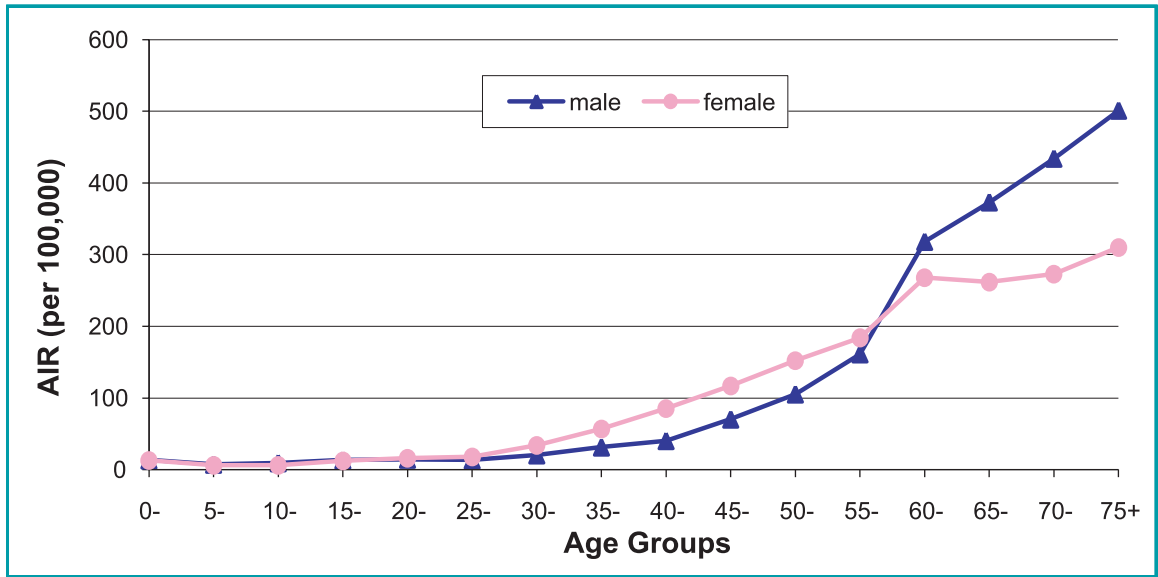


Figure 2.4 Age-Specific Incidence Rates (AIR) for All Cancers among Saudis, 2004

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	3478	100	41.6	70.2	40.72	81.08	3491	100	42.1	69.3	48.405	75.21
Not C44	All sites but C44	3342	96.1	40.0	67.2	39.46	77.3	3366	96.4	40.6	66.4	47.05	71.70
C00	Lip	8	0.2	0.1	0.2	0.09	0.21	6	0.2	0.1	0.2	0.16	0.21
C01-C02	Tongue	31	0.9	0.4	0.7	0.50	0.99	30	0.9	0.4	0.7	0.48	0.88
C03-C06	Mouth	35	1.0	0.4	0.7	0.33	0.81	22	0.6	0.3	0.5	0.33	0.64
C07-C08	Salivary glands	11	0.3	0.1	0.2	0.09	0.27	10	0.3	0.1	0.2	0.13	0.35
C09	Tonsil	2	0.1	0	0.1	0.04	0.11	1	0.0	-	-	0.03	0.03
C10	Other Oropharynx	2	0.1	0	0	0.00	0.00	2	0.1	-	0.1	0.00	0.10
C11	Nasopharynx	100	2.9	1.2	2	1.55	2.12	45	1.3	0.5	0.9	0.76	0.98
C12-C13	Hypopharynx	6	0.2	0.1	0.1	0.15	0.15	16	0.5	0.2	0.4	0.35	0.40
C14	Pharynx unspec.	4	0.1	0	0.1	0.04	0.09	3	0.1	-	0.1	0.02	0.12
C15	Oesophagus	50	1.4	0.6	1.1	0.39	1.06	51	1.5	0.6	1.2	0.62	1.45
C16	Stomach	141	4.1	1.7	3.2	1.89	3.60	70	2.0	0.8	1.6	0.74	1.87
C17	Small intestine	21	0.6	0.3	0.4	0.34	0.49	13	0.4	0.2	0.3	0.16	0.31
C18	Colon	190	5.5	2.3	4.2	2.80	5.17	173	5.0	2.1	3.9	2.67	4.60
C19-C20	Rectum	176	5.1	2.1	4.1	2.76	5.23	108	3.1	1.3	2.4	1.56	2.76
C21	Anus	18	0.5	0.2	0.4	0.36	0.47	4	0.1	-	0.1	0.02	0.07
C22	Liver	231	6.6	2.8	5.5	2.67	7.04	93	2.7	1.1	2.2	1.43	2.76
C23-C24	Gallbladder etc.	24	0.7	0.3	0.6	0.39	0.57	51	1.5	0.6	1.2	0.76	1.41
C25	Pancreas	71	2.0	0.9	1.7	1.00	2.24	28	0.8	0.3	0.7	0.47	0.93
C30-C31	Nose, sinuses etc.	10	0.3	0.1	0.2	0.07	0.23	6	0.2	0.1	0.1	0.09	0.09
C32	Larynx	49	1.4	0.6	1.2	0.74	1.56	5	0.1	0.1	0.1	0.00	0.10
C33-C34	Trachea,Bronchus,Lung	233	6.7	2.8	5.5	3.62	6.78	63	1.8	0.8	1.5	1.08	1.78
C37-C38	Other Thoracic organs	12	0.3	0.1	0.2	0.16	0.21	10	0.3	0.1	0.2	0.16	0.32
C40-C41	Bone	63	1.8	0.8	0.6	0.38	0.38	38	1.1	0.5	0.5	0.32	0.32
C43	Melanoma of Skin	13	0.4	0.2	0.3	0.21	0.34	12	0.3	0.1	0.2	0.14	0.25
C44	Other Skin	136	3.9	1.6	3	1.26	3.75	125	3.6	1.5	2.9	1.36	3.51
C45	Mesothelioma	6	0.2	0.1	0.1	0.05	0.17	4	0.1	-	0.1	0.11	0.11
C46	Kaposi sarcoma	25	0.7	0.3	0.5	0.28	0.73	6	0.2	0.1	0.1	0.09	0.09
C47;C49	Connective,Soft tissue	57	1.6	0.7	0.8	0.58	0.78	70	2.0	0.8	1.2	0.79	1.08
C50	Breast	15	0.4	0.2	0.3	0.28	0.35	783	22.4	9.5	15.4	13.24	15.73
C51	Vulva	-	-	-	-	-	-	11	0.3	0.1	0.2	0.11	0.27
C52	Vagina	-	-	-	-	-	-	3	0.1	-	0.1	0.01	0.06
C53	Cervix Uteri	-	-	-	-	-	-	89	2.5	1.1	1.8	1.48	2.13
C54	Corpus Uteri	-	-	-	-	-	-	117	3.4	1.4	2.8	1.84	3.43
C55	Uterus unspec.	-	-	-	-	-	-	9	0.3	0.1	0.2	0.20	0.25
C56	Ovary	-	-	-	-	-	-	108	3.1	1.3	2.2	1.57	2.37
C57	Other Female Genital	-	-	-	-	-	-	9	0.3	0.1	0.2	0.15	0.21
C58	Placenta	-	-	-	-	-	-	5	0.1	0.1	0.1	0.06	0.06
C60	Penis	3	0.1	-	0.1	0.07	0.14	-	-	-	-	-	-
C61	Prostate	214	6.2	2.6	5.1	1.89	6.47	-	-	-	-	-	-
C62	Testis	44	1.3	0.5	0.6	0.48	0.48	-	-	-	-	-	-
C63	Other male genital	3	0.1	-	0.1	0.05	0.10	-	-	-	-	-	-
C64	Kidney	122	3.5	1.5	2.5	1.54	2.83	76	2.2	0.9	1.6	1.03	1.94
C65	Renal Pelvis	8	0.2	0.1	0.2	0.12	0.24	-	-	-	-	0.00	0.00
C66	Ureter	2	0.1	0	0.1	0.02	0.07	2	0.1	-	-	0.05	0.05
C67	Bladder	160	4.6	1.9	3.7	1.81	4.50	41	1.2	0.5	1	0.70	1.08
C68	Other Urinary organs	1	0.0	-	-	0.04	0.04	1	-	-	-	0.00	0.00
C69	Eye	19	0.5	0.2	0.3	0.21	0.37	18	0.5	0.2	0.3	0.13	0.23
C70-C72	Brain, Nervous system	147	4.2	1.8	2.3	1.42	2.37	100	2.9	1.2	1.5	0.78	1.53
C73	Thyroid	87	2.5	1	1.6	1.00	1.82	328	9.4	4	5.3	4.19	4.93
C74	Adrenal gland	5	0.1	0.1	0.1	0.03	0.03	16	0.5	0.2	0.2	0.09	0.09
C75	Other Endocrine	3	0.1	-	-	0.02	0.02	2	0.1	-	-	0.02	0.02
C81	Hodgkin disease	166	4.8	2	2.1	1.44	1.79	98	2.8	1.2	1.2	0.74	1.01
C82-C85;C96	Non-Hodgkin lymphoma	332	9.5	4	5.9	3.57	6.39	224	6.4	2.7	4.5	2.96	4.88
C88	Immunoproliferative dis.	1	0.0	-	-	0.04	0.04	-	-	-	-	0.00	0.00
C90	Multiple Myeloma	37	1.1	0.4	0.9	0.48	1.06	21	0.6	0.3	0.5	0.34	0.68
C91	Lymphoid Leukemia	128	3.7	1.5	1.7	0.95	1.48	81	2.3	1.0	1.0	0.53	0.81
C92-C94	Myeloid Leukemia	102	2.9	1.2	1.6	0.75	1.45	106	3.0	1.3	1.6	1.26	1.48
C95	Leukemia unspec.	11	0.3	0.1	0.1	0.09	0.09	7	0.2	0.1	0.1	0.06	0.06
Other	Other & unspecified	143	4.1	1.7	3.2	1.79	3.55	171	4.9	2.1	3.9	2.19	4.53

Table 2.3 Number, Percentage, ASR, CIR, and Cumulative Rates (per 1000) of New Cases by Primary Site and Sex among Saudis, 2004

Adult Cancers in Saudi Arabia, 2004 (>14 years)

Between January and December 2004, the total number of adult cancer incidence cases reported was 8,595. Overall cancer was slightly more in males than in females. Cancer affected 4,341 (50.5%) males and 4,254 (49.5%) females, with a ratio of

104:100. Of all cases, there were 6,549 Saudis, 1,883 of Non-Saudis and 163 of unknown nationalities. As shown on table 2.4, the total number of analysed cases were 8,220.

	Saudis			Non-Saudis			Unknown Nationality			All
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Total	3231	3318	6549	1026	857	1883	84	79	163	8595
Invasive	3168	3238	6406	1000	840	1840	81	77	158	8404
In-Situ	63	80	143	26	17	43	3	2	5	191
ICD 10*	10	16	26	0	0	0	0	0	0	26
Analyzed**	3158	3222	6380	1000	840	1840	81	77	158	8220

Table 2.4 Distribution of Reported Adult Cancer Cases in Saudi Arabia by Nationality and Sex 2004

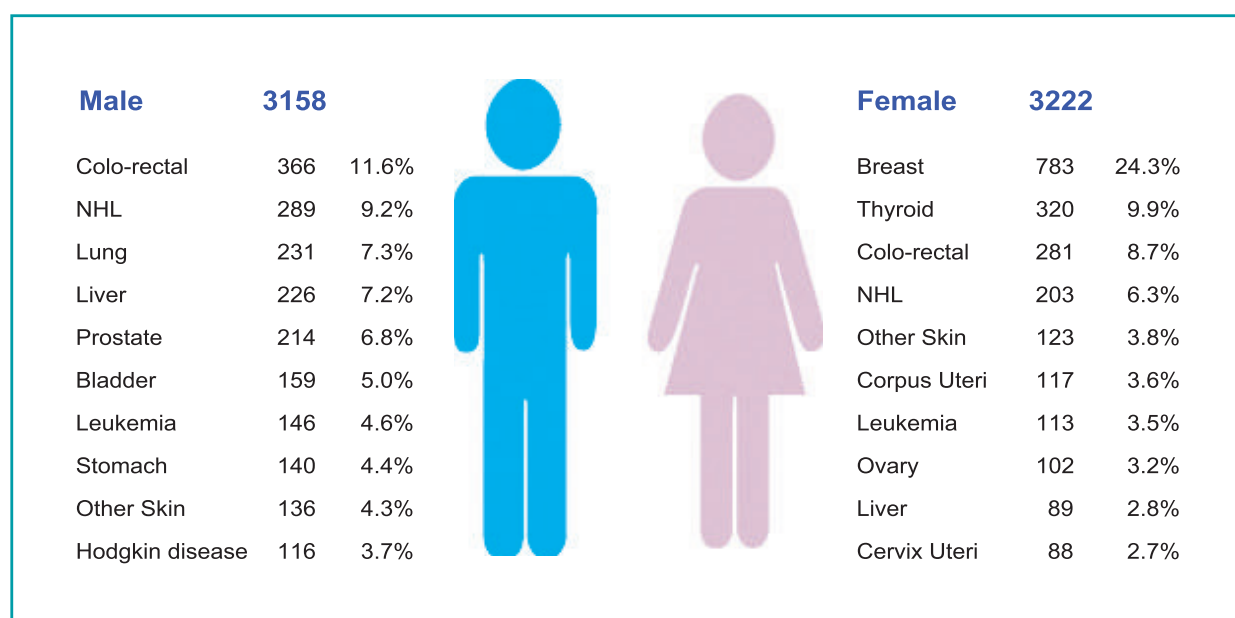


Figure 2.6 Ten Most Common Cancers among Saudi Adults, 2004

Primary Site	Code	Morphology	Male	%	Female	%
Breast	8500	Infiltrating duct carcinoma, NOS	11	73.3	616	78.7
	8520	Lobular carcinoma, NOS	0	0.0	38	4.9
	8523	Infiltrating duct mixed with other types of carcinoma	1	6.7	20	2.6
	8522	Infiltrating duct and lobular carcinoma	0	0.0	20	2.6
	8010	Carcinoma, NOS	0	0.0	18	2.3
	8510	Medullary carcinoma, NOS	0	0.0	14	1.8
	9020	Phyllodes tumor, malignant	0	0.0	9	1.1
	8140	Adenocarcinoma, NOS	1	6.7	7	0.9
		All Others	2	13.3	41	5.2
Colo-rectal	8140	Adenocarcinoma, NOS	264	72.1	203	72.2
	8480	Mucinous adenocarcinoma	36	9.8	31	11.0
	8481	Mucin-producing adenocarcinoma	15	4.1	4	1.4
	8261	Adenocarcinoma in villous adenoma	11	3.0	5	1.8
	8263	Adenocarcinoma in tubulovillous adenoma	9	2.5	6	2.1
	8010	Carcinoma, NOS	6	1.6	7	2.5
	8490	Signet ring cell carcinoma	6	1.6	5	1.8
	8210	Adenocarcinoma in adenomatous polyp	6	1.6	2	0.7
	8260	Papillary adenocarcinoma, NOS	4	1.1	3	1.1
			All Others	9	2.5	15
NHL	9680	Malignant lymphoma, large B-cell, diffuse, NOS	148	51.2	104	51.2
	9590	Malignant lymphoma, NOS	18	6.2	14	6.9
	9591	Malignant lymphoma, non-Hodgkin, NOS	16	5.5	16	7.9
	9699	Marginal zone B-cell lymphoma, NOS	14	4.8	10	4.9
	9714	Anaplastic large cell lymphoma, T cell and Null cell type	10	3.5	7	3.4
	9702	Mature T-cell lymphoma, NOS	11	3.8	5	2.5
	9687	Burkitt lymphoma, NOS	9	3.1	4	2.0
	9700	Mycosis fungoides	10	3.5	3	1.5
	9690	Follicular lymphoma, NOS	8	2.8	4	2.0
	9670	Malignant lymphoma, small B lymphocytic, NOS	5	1.7	6	3.0
	9691	Follicular lymphoma, grade 2	4	1.4	6	3.0
			All Others	36	12.5	24
Thyroid	8260	Papillary adenocarcinoma, NOS	58	66.7	193	60.3
	8340	Papillary carcinoma, follicular variant	7	8.0	46	14.4
	8341	Papillary microcarcinoma	4	4.6	28	8.8
	8330	Follicular adenocarcinoma, NOS	3	3.4	7	2.2
	8335	Follicular carcinoma, minimally invasive	0	0.0	9	2.8
	8343	Papillary carcinoma, encapsulated	2	2.3	7	2.2
	8510	Medullary carcinoma, NOS	4	4.6	4	1.3
		All Others	9	10.3	26	8.1
Liver	8170	Hepatocellular carcinoma, NOS	208	92.0	69	77.5
	8160	Cholangiocarcinoma	6	2.7	6	6.7
	8010	Carcinoma, NOS	4	1.8	2	2.2
	8000	Neoplasm, malignant	2	0.9	3	3.4
	8140	Adenocarcinoma, NOS	1	0.4	4	4.5
		All Others	5	2.2	5	5.6
Lung	8140	Adenocarcinoma, NOS	50	21.6	18	28.6
	8070	Squamous cell carcinoma, NOS	57	24.7	7	11.1
	8041	Small cell carcinoma, NOS	29	12.6	6	9.5
	8046	Non-small cell carcinoma	26	11.3	5	7.9
	8010	Carcinoma, NOS	13	5.6	6	9.5
	8240	Carcinoid tumor, NOS	7	3.0	6	9.5
	8071	Squamous cell carcinoma, keratinizing, NOS	7	3.0	1	1.6
	8250	Bronchiolo-alveolar adenocarcinoma, NOS	5	2.2	3	4.8
	8000	Neoplasm, malignant	5	2.2	2	3.2
	8012	Large cell carcinoma, NOS	7	3.0	0	0.0
			All Others	25	10.8	9
Skin	8090	Basal cell carcinoma, NOS	70	51.5	52	42.3
	8070	Squamous cell carcinoma, NOS	24	17.6	33	26.8
	8094	Basosquamous carcinoma	12	8.8	4	3.3
	8832	Dermatofibrosarcoma, NOS	6	4.4	9	7.3
	8071	Squamous cell carcinoma, keratinizing, NOS	6	4.4	6	4.9
	8410	Sebaceous adenocarcinoma	7	5.1	3	2.4
	8097	Basal cell carcinoma, nodular	3	2.2	6	4.9
		All Others	8	5.9	10	8.1

Table 2.5 Number and Proportion of Morphological Types for the Most Common Types of Cancer among Saudi Adults, 2004

Table 2.5 continued

Primary Site	Code	Morphology	Male	%	Female	%
Leukemia	9863	Chronic myeloid leukemia, NOS	19	13.0	28	24.8
	9823	B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma	24	16.4	11	9.7
	9835	Precursor cell lymphoblastic leukemia, NOS	22	15.1	8	7.1
	9861	Acute myeloid leukemia, NOS	14	9.6	12	10.6
	9867	Acute myelomonocytic leukemia	9	6.2	9	8.0
	9866	Acute promyelocytic leukemia, t(15;17) (q22;q11-12)	7	4.8	9	8.0
	9874	Acute myeloid leukemia with maturation	6	4.1	9	8.0
	9891	Acute monocytic leukemia	7	4.8	5	4.4
	9836	Precursor B-cell lymphoblastic leukemia	8	5.5	3	2.7
	9873	Acute myeloid leukemia without maturation	5	3.4	4	3.5
	9837	Precursor T-cell lymphoblastic leukemia	7	4.8	1	0.9
	9872	Acute myeloid leukemia, minimal differentiation	2	1.4	4	3.5
		All Others	16	11.0	10	8.8
Prostate	8140	Adenocarcinoma, NOS	187	87.4	-	-
	8010	Carcinoma, NOS	20	9.3	-	-
		All Others	7	3.3	-	-
Stomach	8140	Adenocarcinoma, NOS	66	47.1	29	41.4
	8490	Signet ring cell carcinoma	27	19.3	28	40.0
	8144	Adenocarcinoma, intestinal type	17	12.1	4	5.7
	8480	Mucinous adenocarcinoma	5	3.6	2	2.9
	8010	Carcinoma, NOS	5	3.6	-	0.0
	8145	Carcinoma, diffuse type	3	2.1	2	2.9
		All Others	17	12.1	5	7.1
Bladder	8120	Transitional cell carcinoma, NOS	84	52.8	20	48.8
	8130	Papillary transitional cell carcinoma	54	34.0	11	26.8
	8070	Squamous cell carcinoma, NOS	11	6.9	4	9.8
	8010	Carcinoma, NOS	3	1.9	1	2.4
	8071	Squamous cell carcinoma, keratinizing, NOS	3	1.9	0	0.0
	8140	Adenocarcinoma, NOS	1	0.6	2	4.9
	All Others	3	1.9	3	7.3	
Hodgkin Disease	9663	Hodgkin lymphoma, nodular sclerosis, NOS	51	44.0	39	49.4
	9652	Hodgkin lymphoma, mixed cellularity, NOS	16	13.8	11	13.9
	9665	Hodgkin lymphoma, nodular sclerosis, grade 1	8	6.9	10	12.7
	9667	Hodgkin lymphoma, nodular sclerosis, grade 2	9	7.8	8	10.1
	9650	Hodgkin lymphoma, NOS	11	9.5	4	5.1
	9651	Hodgkin lymphoma, lymphocyte-rich	6	5.2	6	7.6
	9659	Hodgkin lymphoma, nodular lymphocyte predominance	12	10.3	0	0.0
		All Others	3	2.6	1	1.3
Corpus Uterine	8380	Endometrioid adenocarcinoma, NOS	-	-	63	53.8
	8140	Adenocarcinoma, NOS	-	-	27	23.1
	8950	Mullerian mixed tumor	-	-	4	3.4
	8010	Carcinoma, NOS	-	-	3	2.6
	8260	Papillary adenocarcinoma, NOS	-	-	2	1.7
	8310	Clear cell adenocarcinoma, NOS	-	-	2	1.7
	8441	Serous cystadenocarcinoma, NOS	-	-	2	1.7
	8460	Papillary serous cystadenocarcinoma	-	-	2	1.7
	8480	Mucinous adenocarcinoma	-	-	2	1.7
	8933	Adenosarcoma	-	-	2	1.7
		All Others	-	-	8	6.8
Ovary	8460	Papillary serous cystadenocarcinoma	-	-	26	25.5
	8441	Serous cystadenocarcinoma, NOS	-	-	14	13.7
	8140	Adenocarcinoma, NOS	-	-	7	6.9
	8380	Endometrioid adenocarcinoma, NOS	-	-	7	6.9
	8470	Mucinous cystadenocarcinoma, NOS	-	-	6	5.9
	8000	Neoplasm, malignant	-	-	5	4.9
	8461	Serous surface papillary carcinoma	-	-	5	4.9
	8010	Carcinoma, NOS	-	-	4	3.9
	8260	Papillary adenocarcinoma, NOS	-	-	4	3.9
	8480	Mucinous adenocarcinoma	-	-	4	3.9
	8310	Clear cell adenocarcinoma, NOS	-	-	3	2.9
	8810	Fibrosarcoma, NOS	-	-	2	2.0
	9071	Yolk sac tumor	-	-	2	2.0
	All Others	-	-	13	12.7	
Cervix Uteri	8070	Squamous cell carcinoma, NOS	-	-	28	31.8
	8072	Squamous cell carcinoma, large cell, nonkeratinizing, NOS	-	-	24	27.3
	8071	Squamous cell carcinoma, keratinizing, NOS	-	-	12	13.6
	8140	Adenocarcinoma, NOS	-	-	11	12.5
	All Others	-	-	13	14.8	

Childhood Cancers in Saudi Arabia, 2004 (≤ 14 years)

The total incident cases reported among children (0-14 years) between January and December 2004 were 713. This represents 7.6 % of the total number of cancers in Saudi Arabia. The reported incidents show that cancer was more common among boys than girls. 400 (56.1%) cases were reported among boys and 313 (43.9%) among girls, with a male to female ratio of 128:100. Of all the

cases reported there were 584 Saudis, 115 non-Saudis and 14 of "unknown nationality". Based on table 2.6, the total number of cases analyzed was 685 including 584 (85.3%) Saudis and 101 (14.7%) non-Saudis. Among Saudis, 318 (54.5%) were male and 266 (45.5%) were female. The male to female ratio among Saudis was 120:100.

	Saudis			Non-Saudis			Unknown Nationality			All
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Total
Total	318	266	584	73	42	115	9	5	14	713
Invasive	0	0	0	0	0	0	0	0	0	0
In-situ	0	0	0	0	0	0	0	0	0	0
ICD 10*	0	0	0	0	0	0	1	0	0	1
Analyzed**	318	266	584	73	42	115	8	5	13	685

Table 2.6 Distribution of Reported Childhood Cancer Cases in Saudi Arabia by Nationality and Sex, 2004

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 8.2% of all cancer among Saudis. The leading cancer

among Saudi children was leukemia, which accounted for 30%, followed by Brain (CNS) then Hodgkins disease and NHL. 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.

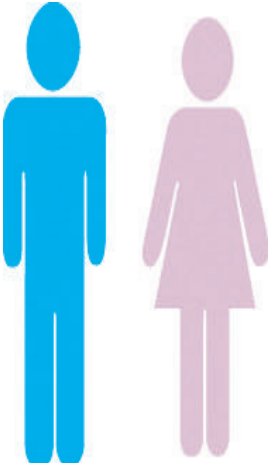
Boys			318	Girls			266
Leukemia	94	29.6%		Leukemia	81	30.5%	
Brain, Nervous system	53	16.7%		Brain, Nervous system	37	13.9%	
Hodgkin disease	50	15.7%		Kidney	22	8.3%	
NHL	43	13.5%		NHL	20	7.5%	
Bone	21	6.6%		Connective, Soft tissue	19	7.1%	
Kidney	12	3.8%		Hodgkin disease	19	7.1%	
Connective, Soft tissue	8	2.5%		Bone	15	5.6%	
Eye	6	1.9%		Adrenal gland	13	4.9%	
Liver	5	1.6%		Eye	12	4.5%	
Nasopharynx	4	1.3%		Thyroid	8	3.0%	
Testis	4	1.3%					
Adrenal gland	4	1.3%					

Figure 2.7 Ten Most Common Cancers among Saudi Children by Sex, 2004

* ICD-10 conversion failure

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

Primary Site	Code	Morphology	Male	%	Female	%
Leukemia	9835	Precursor cell lymphoblastic leukemia, NOS	39	41.5	28	34.6
	9836	Precursor B-cell lymphoblastic leukemia	19	20.2	25	30.9
	9861	Acute myeloid leukemia, NOS	4	4.3	6	7.4
	9874	Acute myeloid leukemia with maturation	6	6.4	2	2.5
	9805	Acute biphenotypic leukemia	2	2.1	4	4.9
	9837	Precursor T-cell lymphoblastic leukemia	4	4.3	2	2.5
	9891	Acute monocytic leukemia	2	2.1	4	4.9
	9801	Acute leukemia, NOS	4	4.3	1	1.2
	9866	Acute promyelocytic leukemia, t(15;17)(q22;q11-12)	2	2.1	2	2.5
	9867	Acute myelomonocytic leukemia	2	2.1	2	2.5
		All Others	10	10.6	5	6.2
Brain	9470	Medulloblastoma, NOS	27	50.9	11	29.7
	9380	Glioma, malignant	3	5.7	8	21.6
	9400	Astrocytoma, NOS	5	9.4	3	8.1
	9391	Ependymoma, NOS	2	3.8	2	5.4
	9392	Ependymoma, anaplastic	2	3.8	2	5.4
	9440	Glioblastoma, NOS	3	5.7	1	2.7
	9471	Desmoplastic nodular medulloblastoma	3	5.7	1	2.7
	9401	Astrocytoma, anaplastic	1	1.9	2	5.4
	All Others	7	13.2	7	18.9	
Hodgkin Disease	9663	Hodgkin lymphoma, nodular sclerosis, NOS	20	40.0	8	42.1
	9652	Hodgkin lymphoma, mixed cellularity, NOS	13	26.0	4	21.1
	9650	Hodgkin lymphoma, NOS	6	12.0	1	5.3
	9665	Hodgkin lymphoma, nodular sclerosis, grade 1	4	8.0	0	0.0
	9667	Hodgkin lymphoma, nodular sclerosis, grade 2	2	4.0	2	10.5
	9651	Hodgkin lymphoma, lymphocyte-rich	2	4.0	1	5.3
	9659	Hodgkin lymphoma, nodular lymphocyte predominance	1	2.0	1	5.3
	9664	Hodgkin lymphoma, nodular sclerosis, cellular phase	1	2.0	1	5.3
	All Others	1	2.0	1	5.3	
NHL	9687	Burkitt lymphoma, NOS	15	34.9	7	35.0
	9729	Precursor T-cell lymphoblastic lymphoma	8	18.6	3	15.0
	9680	Malignant lymphoma, large B-cell, diffuse, NOS	4	9.3	5	25.0
	9591	Malignant lymphoma, non-Hodgkin, NOS	6	14.0	0	0.0
	9727	Precursor cell lymphoblastic lymphoma, NOS	2	4.7	1	5.0
	9728	Precursor B-cell lymphoblastic lymphoma	1	2.3	2	10.0
	9590	Malignant lymphoma, NOS	1	2.3	1	5.0
	9699	Marginal zone B-cell lymphoma, NOS	2	4.7	0	0.0
	9700	Mycosis fungoides	2	4.7	0	0.0
	All Others	5	11.6	1	5.0	
Bone	9260	Ewing sarcoma	11	52.4	5	33.3
	9180	Osteosarcoma, NOS	5	23.8	9	60.0
		All Others	5	23.8	1	6.7
Kidney	8960	Nephroblastoma, NOS	11	91.7	21	95.5
	8001	Tumor cells, malignant	1	8.3	0	0.0
	8963	Malignant rhabdoid tumor	0	0.0	1	4.5
Connective Tissue	8900	Rhabdomyosarcoma, NOS	2	25.0	3	15.8
	9500	Neuroblastoma, NOS	2	25.0	3	15.8
	8910	Embryonal rhabdomyosarcoma, NOS	0	0.0	3	15.8
	8963	Malignant rhabdoid tumor	0	0.0	2	10.5
	9040	Synovial sarcoma, NOS	0	0.0	2	10.5
	9364	Peripheral neuroectodermal tumor	0	0.0	2	10.5
	9473	Primitive neuroectodermal tumor, NOS	2	25.0	0	0.0
		All Others	2	25.0	4	21.1
Eye	9512	Retinoblastoma, undifferentiated	4	66.7	10	83.3
	9510	Retinoblastoma, NOS	2	33.3	0	0.0
	9511	Retinoblastoma, differentiated	0	0.0	1	8.3
	9513	Retinoblastoma, diffuse	0	0.0	1	8.3
Adrenal Gland	9500	Neuroblastoma, NOS	3	75.0	12	92.3
	8370	Adrenal cortical carcinoma	1	25.0	1	7.7
Liver	8970	Hepatoblastoma	4	80.0	2	50.0
	8170	Hepatocellular carcinoma, NOS	1	20.0	2	50.0
Thyroid	8260	Papillary adenocarcinoma, NOS	-	-	7	87.5
	8341	Papillary microcarcinoma	-	-	1	12.5
Nasopharynx	8010	Carcinoma, NOS	0	0.0	1	100.0
	8020	Carcinoma, undifferentiated, NOS	3	75.0	0	0.0
	8910	Embryonal rhabdomyosarcoma, NOS	1	25.0	0	0.0
Testis	9061	Seminoma, NOS	1	25.0	-	-
	9071	Yolk sac tumor	3	75.0	-	-

Table 2.7 Number and Proportion of Morphological Types for the Most Common Types of Cancer among Saudi Children, 2004

International Comparison of Age-Standardized Incidence Rates

Worldwide, it is estimated that around 11 million people developed cancer in 2002. Of these, 53.7% were in developing countries and 46.5% were in developed countries. According to 2002 estimates, the most common cancer site among all men was lung cancer. However, in developed countries prostate was the leading cancer followed by lung, colo-rectal, and stomach.

While in developing countries, lung cancer was first followed by stomach, liver, esophagus and colo-rectal 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 followed by cancers of the cervix, stomach and lung.

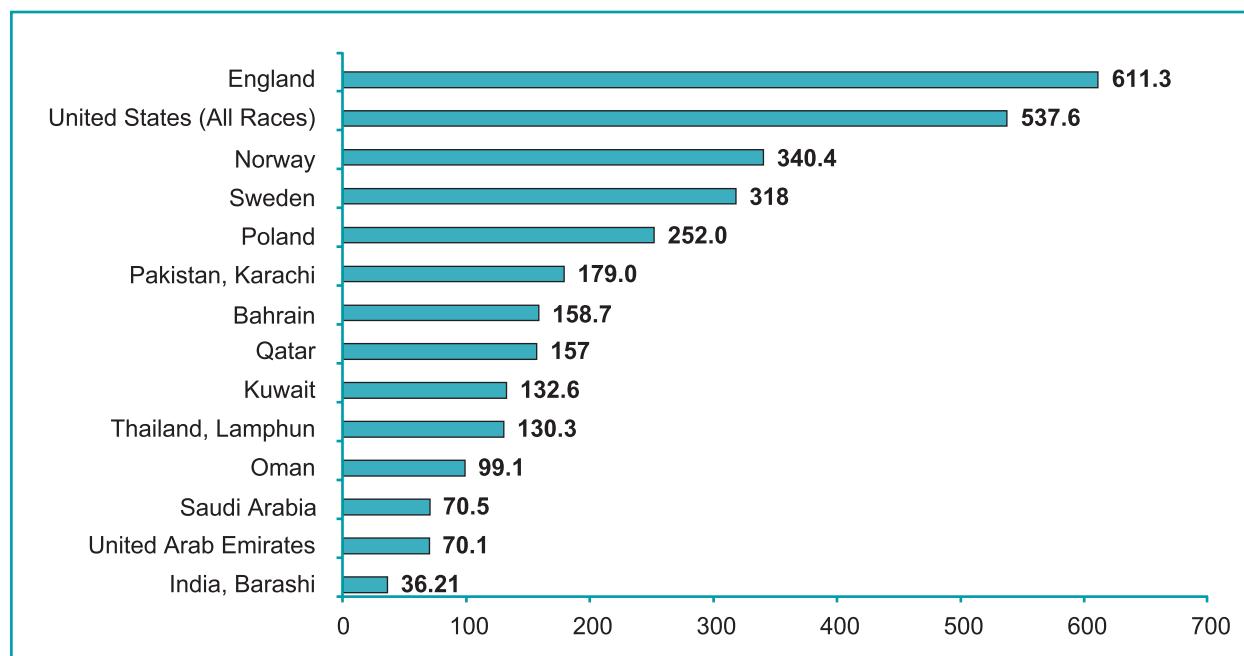


Figure 2.9.A Comparison of ASR* for Saudi Males with Selected Countries**

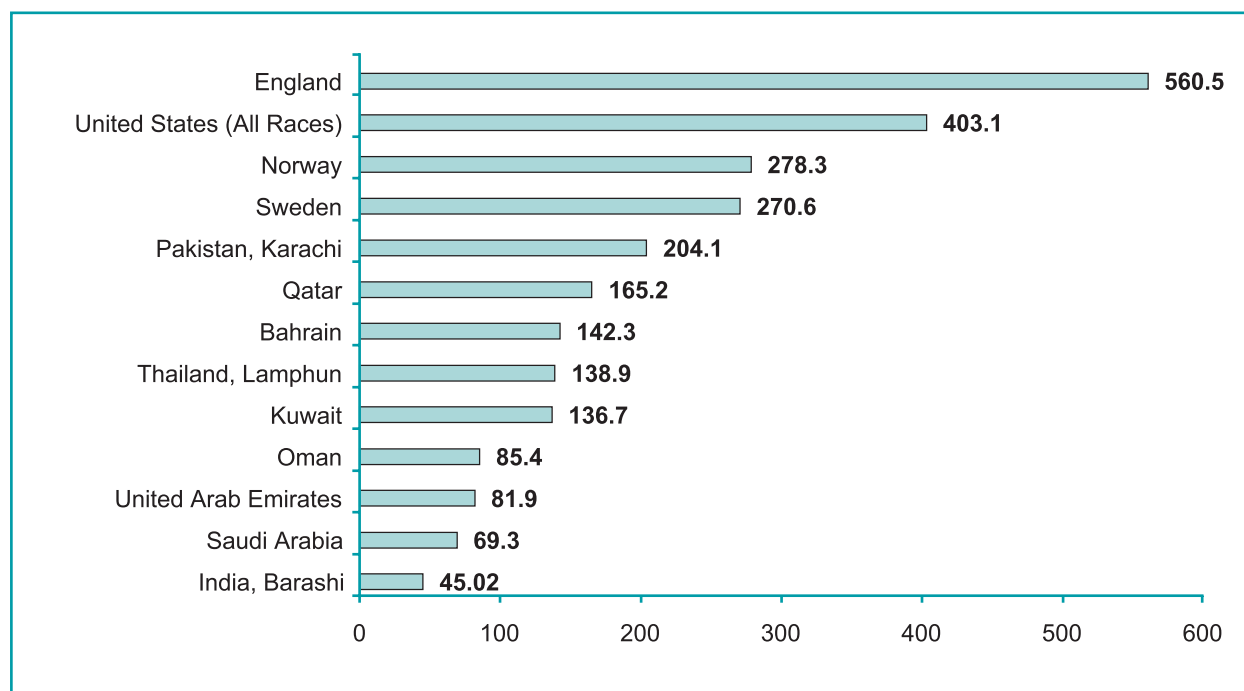


Figure 2.9.B Comparison of ASR* for Saudi Females with Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 66

PART III
CANCER INCIDENCE FOR MOST COMMON SITES
2004

Cancer Incidence for Most Common Sites, 2004

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 2004

Cancer	Male	Female	All	%
Breast	15	783	798	11.5
Colo-rectal	366	281	647	9.3
Non-Hodgkin lymphoma	332	224	556	8.0
Leukemia	241	194	435	6.2
Thyroid	87	328	415	6.0
Liver	231	93	324	4.6
Lung	233	63	296	4.2
Hodgkin disease	166	98	264	3.8
Skin	136	125	261	3.7
Brain, Nervous system	147	100	247	3.5
Prostate	214	-	214	3.1
Stomach	141	70	211	3.0
Bladder	160	41	201	2.9
Corpus uteri	-	117	117	1.7
Ovary	-	108	108	1.5
Other sites	1009	866	1875	26.9
Total	3478	3491	6969	100

Table 3.1 Most Common Cancers among Saudis, 2004

Female Breast (C 50)

There were 783 female breast cancer cases analyzed for year 2004. Breast cancer ranked first among females accounting for 22.4% of all newly diagnosed

female cancers (3,491). The ASR was 15.4/100,000 for female population. The median age at diagnosis was 47 years (Range 18-96 years).

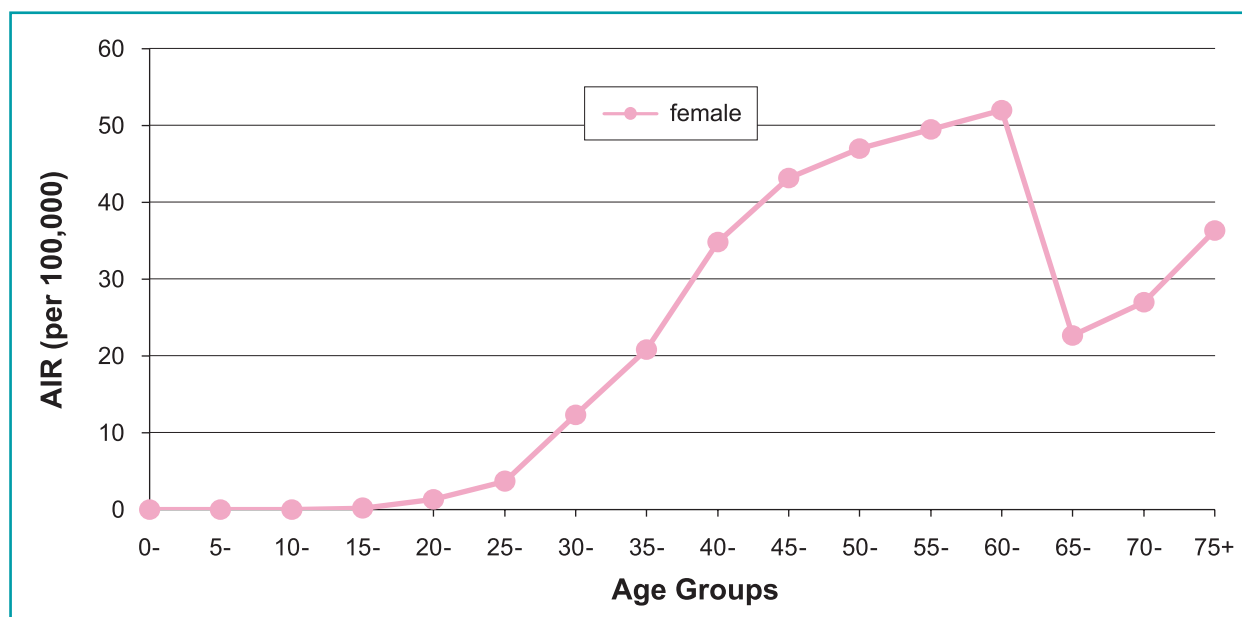


Figure 3.1.1 Age-Specific Incidence Rate (AIR) for Female Breast Cancer in Saudi Arabia, 2004

ICD-O Code	Morphology	Total	%
8500	Infiltrating duct carcinoma, NOS	616	78.7%
8520	Lobular carcinoma, NOS	38	4.9%
8522	Infiltrating duct and lobular carcinoma	20	2.6%
8523	Infiltrating duct mixed with other types of carcinoma	20	2.6%
8010	Carcinoma, NOS	18	2.3%
8510	Medullary carcinoma, NOS	14	1.8%
9020	Phyllodes tumor, malignant	9	1.1%
	All Others	48	6.1%

Table 3.1.1 Morphological Distribution of Female Breast Cancer in Saudi Arabia, 2004

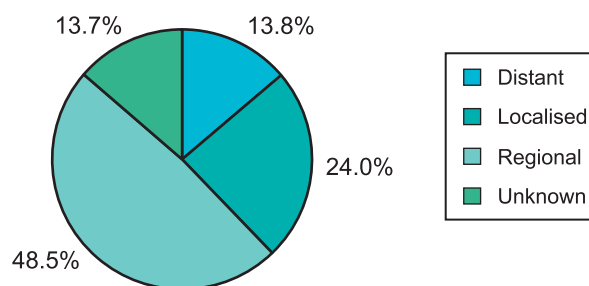


Figure 3.1.2 Stage Distribution of Female Breast Cancer, 2004

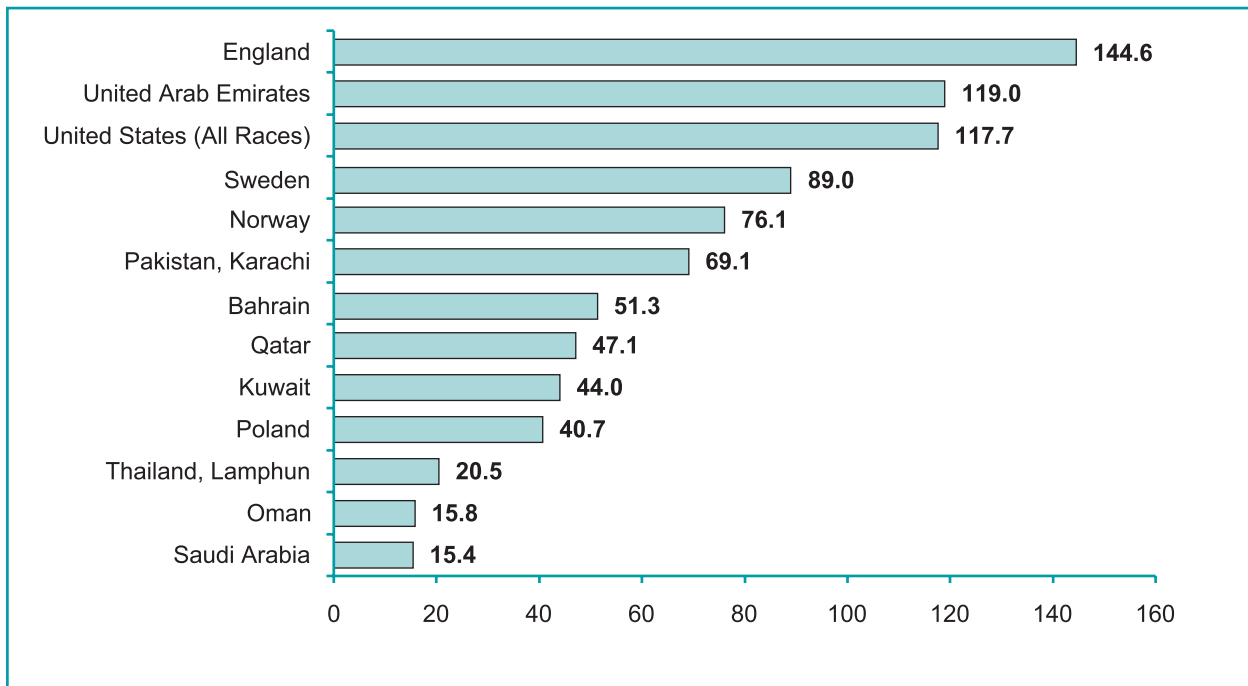


Figure 3.1.4 Comparison of ASR* for Female Breast Cancer among Saudi Females with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 66

Colo-rectal (C18-C20)

There were 647 cases of colo-rectal cancer accounting for 9.3% of all newly diagnosed cases in year 2004. This cancer ranked first among male population and third among female population. It affected 366 (56.6%) males and 281 (43.4%) females with a male to female ratio of 130:100. The overall ASR was 7.3/100,000. ASR for males was

8.3/100,000 and for females 6.3/100,000.

The median age at diagnosis was 60 years among males (range 19-105 years) and 58 years among females (range 16-100 years).

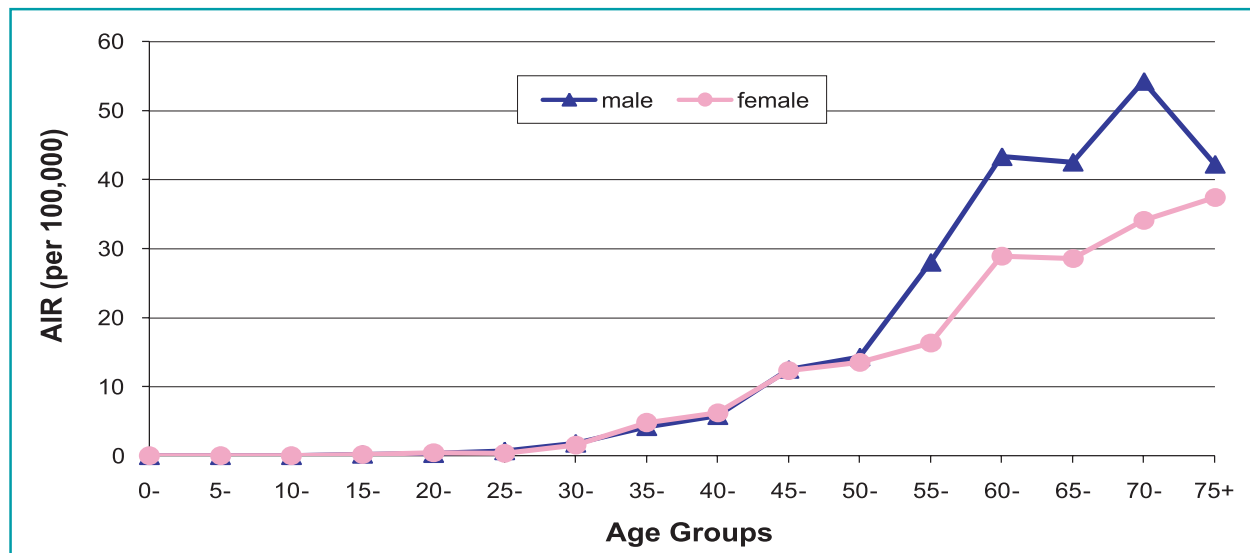


Figure 3.2.1 Age-Specific Incidence Rate (AIR) for Colo-rectal Cancer in Saudi Arabia, 2004

ICD-O-3 Code	Morphology	Male	%	Female	%
8140	Adenocarcinoma, NOS	264	40.8%	203	31.4%
8480	Mucinous adenocarcinoma	36	5.6%	31	4.8%
8481	Mucin-producing adenocarcinoma	15	2.3%	4	0.6%
8261	Adenocarcinoma in villous adenoma	11	1.7%	5	0.8%
8263	Adenocarcinoma in tubulovillous adenoma	9	1.4%	6	0.9%
8010	Carcinoma, NOS	6	0.9%	7	1.1%
8490	Signet ring cell carcinoma	6	0.9%	5	0.8%
8210	Adenocarcinoma in adenomatous polyp	6	0.9%	2	0.3%
8260	Papillary adenocarcinoma, NOS	4	0.6%	3	0.5%
	All Others	9	1.4%	15	2.3%

Table 3.2.1 Morphological Distribution of Colo-rectal Cancer in Saudi Arabia, 2004

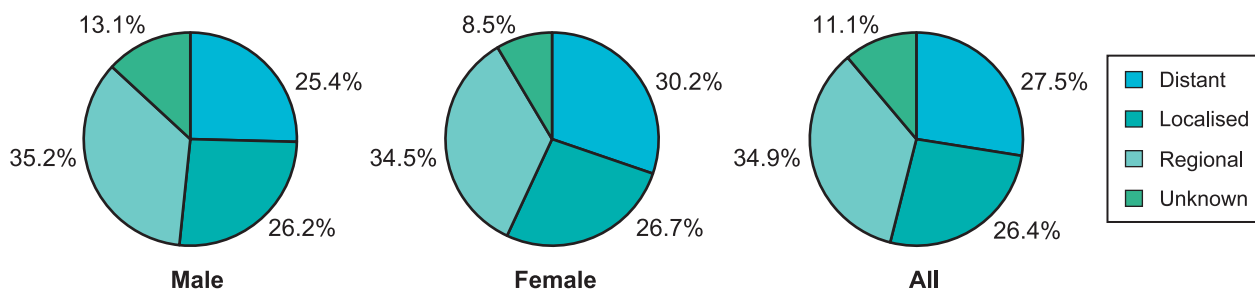


Figure 3.2.2 Stage Distribution of Colo-rectal Cancer, 2004

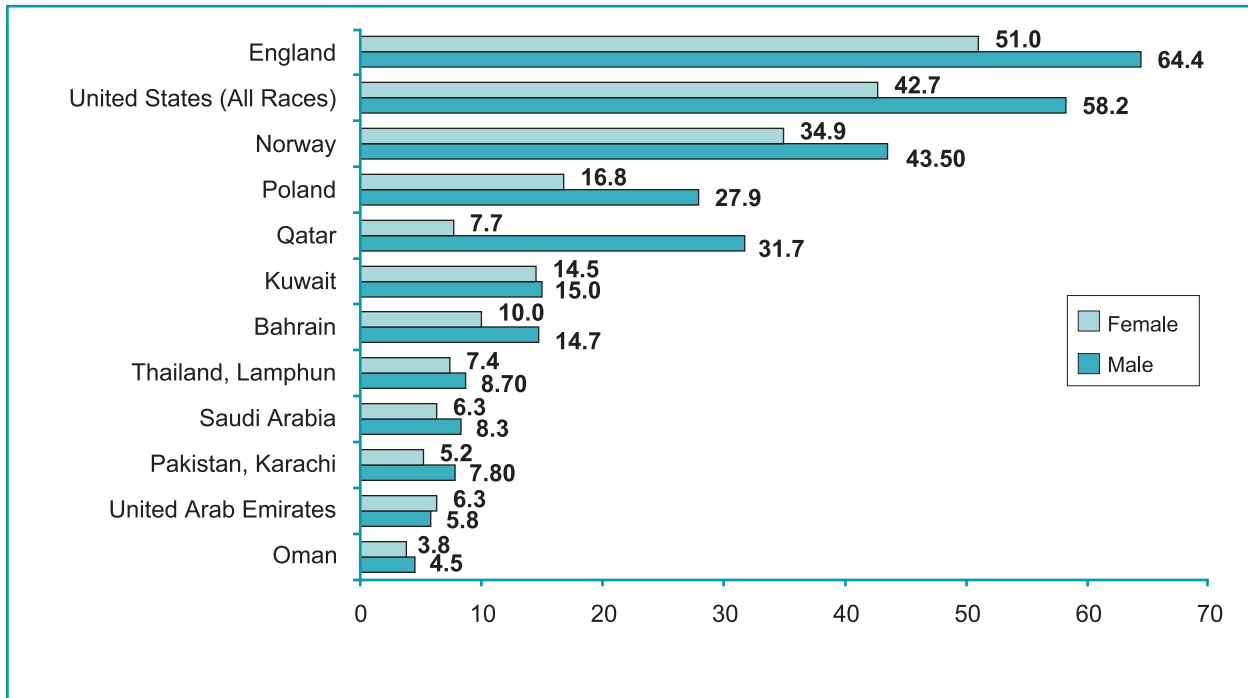


Figure 3.2.4 Comparison of ASR* for Colo-rectal Cancer among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 66

Non-Hodgkin Lymphoma (C82-C85; C96)

There were 556 cases of Non-Hodgkin Lymphoma accounting for 8% of all newly diagnosed cancers in year 2004. This cancer ranked second among male population and fourth among female population. It affected 332(59.7%) males and 224(40.3%) females with a male to female ratio of 148:100. The overall ASR was 5.2/100,000. ASR for males

was 5.9/100,000 and 4.5/100,000 for females. The median age at diagnosis was 46 years among males (range 2-103 years) and 53 years among females (range 1-94 years).

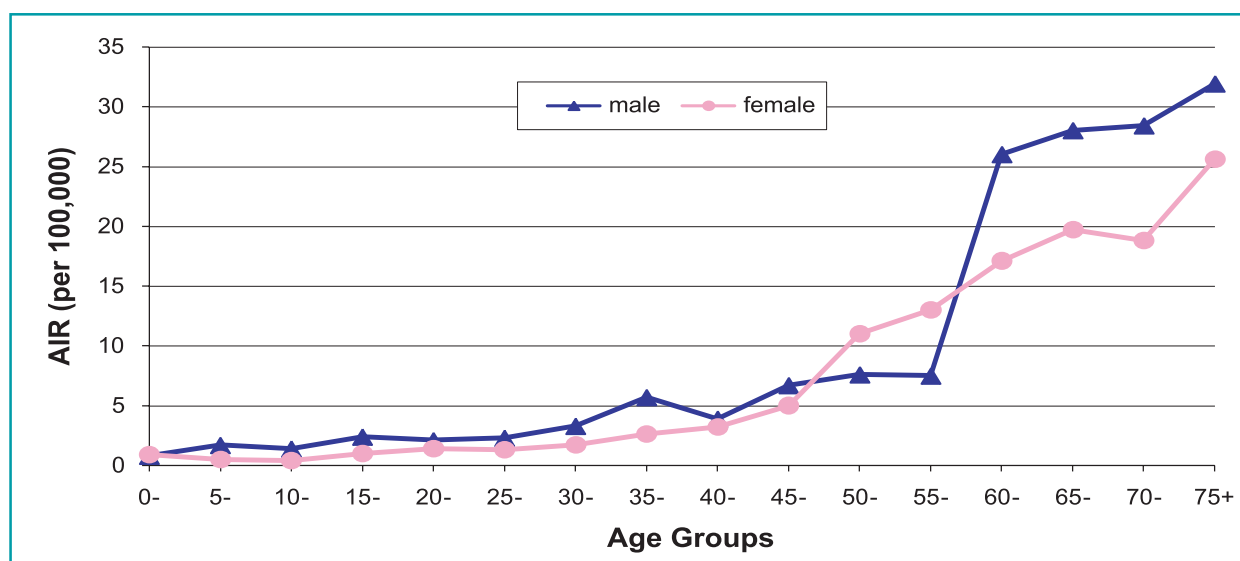


Figure 3.3.1 Age-Specific Incidence Rate (AIR) for NHL in Saudi Arabia, 2004

ICD-O-3 Code	Morphology	Male	%	Female	%
9680	Malignant lymphoma, large B-cell, diffuse, NOS	152	27.3%	109	19.6%
9591	Malignant lymphoma, non-Hodgkin, NOS	22	4.0%	16	2.9%
9687	Burkitt lymphoma, NOS	24	4.3%	11	2.0%
9590	Malignant lymphoma, NOS	19	3.4%	15	2.7%
9699	Marginal zone B-cell lymphoma, NOS	16	2.9%	10	1.8%
9714	Anaplastic large cell lymphoma, T cell and Null cell type	11	2.0%	7	1.3%
9702	Mature T-cell lymphoma, NOS	11	2.0%	6	1.1%
9729	Precursor T-cell lymphoblastic lymphoma	11	2.0%	5	0.9%
9700	Mycosis fungoides	12	2.2%	3	0.5%
9690	Follicular lymphoma, NOS	8	1.4%	4	0.7%
9670	Malignant lymphoma, small B lymphocytic, NOS	5	0.9%	6	1.1%
9691	Follicular lymphoma, grade 2	4	0.7%	6	1.1%
9695	Follicular lymphoma, grade 1	4	0.7%	5	0.9%
9698	Follicular lymphoma, grade 3	6	1.1%	2	0.4%
9675	Malignant lymphoma, mixed small and large cell, diffuse	5	0.9%	2	0.4%
9684	Malignant lymphoma, large B-cell, diffuse, immunoblastic, NOS	3	0.5%	3	0.5%
	All Others	19	3.4%	14	2.5%

Table 3.3.1 Morphological Distribution of NHL in Saudi Arabia, 2004

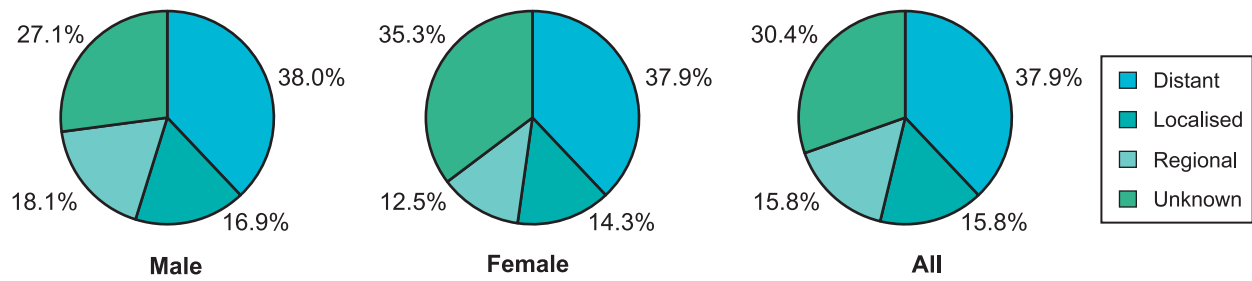


Figure 3.3.2 Stage Distribution of NHL Cancer, 2004

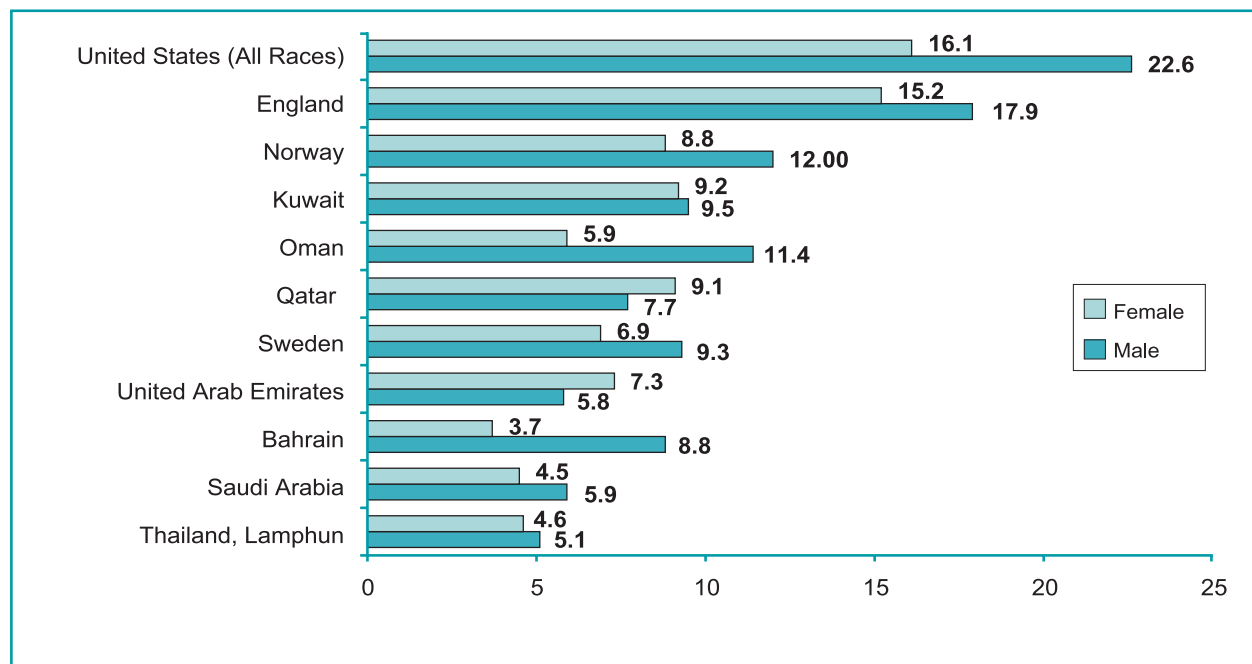


Figure 3.3.4 Comparison of ASR* for NHL Cancer among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 66

Leukemia (C91-C95)

There were 435 cases of leukemia accounting for 6.2% of all newly diagnosed cancers in year 2004. This cancer ranked third for males and fifth among females and affected 241 (55.4%) males and 194 (44.6%) females with a male to female ratio of 124:100. The overall ASR was 3.1/100,000. ASR for

males was 3.4/100,000 and 2.7/100,000 for females. The median age at diagnosis is 20 years among males (range 0-90 years) and 20 years among (range 0-88 years).

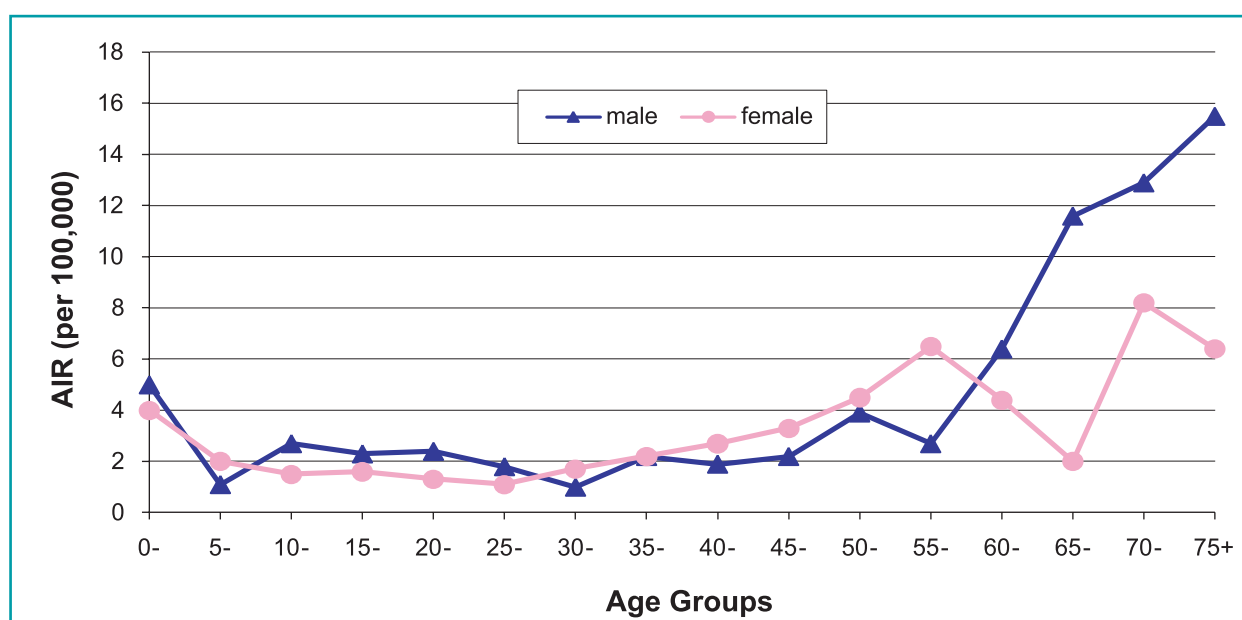


Figure 3.4.1 Age-Specific Incidence Rate (AIR) for Leukemia in Saudi Arabia, 2004

ICD-O-3 Code	Morphology	Male	%	Female	%
9835	Precursor cell lymphoblastic leukemia, NOS	61	14.0%	36	8.3%
9836	Precursor B-cell lymphoblastic leukemia	27	6.2%	28	6.4%
9863	Chronic myeloid leukemia, NOS	20	4.6%	29	6.7%
9861	Acute myeloid leukemia, NOS	19	4.4%	18	4.1%
9823	B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma	24	5.5%	11	2.5%
9874	Acute myeloid leukemia with maturation	12	2.8%	11	2.5%
9867	Acute myelomonocytic leukemia	11	2.5%	11	2.5%
9866	Acute promyelocytic leukemia, t(15;17) (q22; q11-12)	9	2.1%	11	2.5%
9891	Acute monocytic leukemia	9	2.1%	9	2.1%
9837	Precursor T-cell lymphoblastic leukemia	11	2.5%	3	0.7%
9801	Acute leukemia, NOS	8	1.8%	2	0.5%
9873	Acute myeloid leukemia without maturation	6	1.4%	4	0.9%
9805	Acute biphenotypic leukemia	2	0.5%	5	1.1%
9872	Acute myeloid leukemia, minimal differentiation	2	0.5%	5	1.1%
9910	Acute megakaryoblastic leukemia	5	1.1%	0	0.0%
	All Others	15	3.4%	11	2.5%

Table 3.4.1 Morphological Distribution of Leukemia in Saudi Arabia, 2004

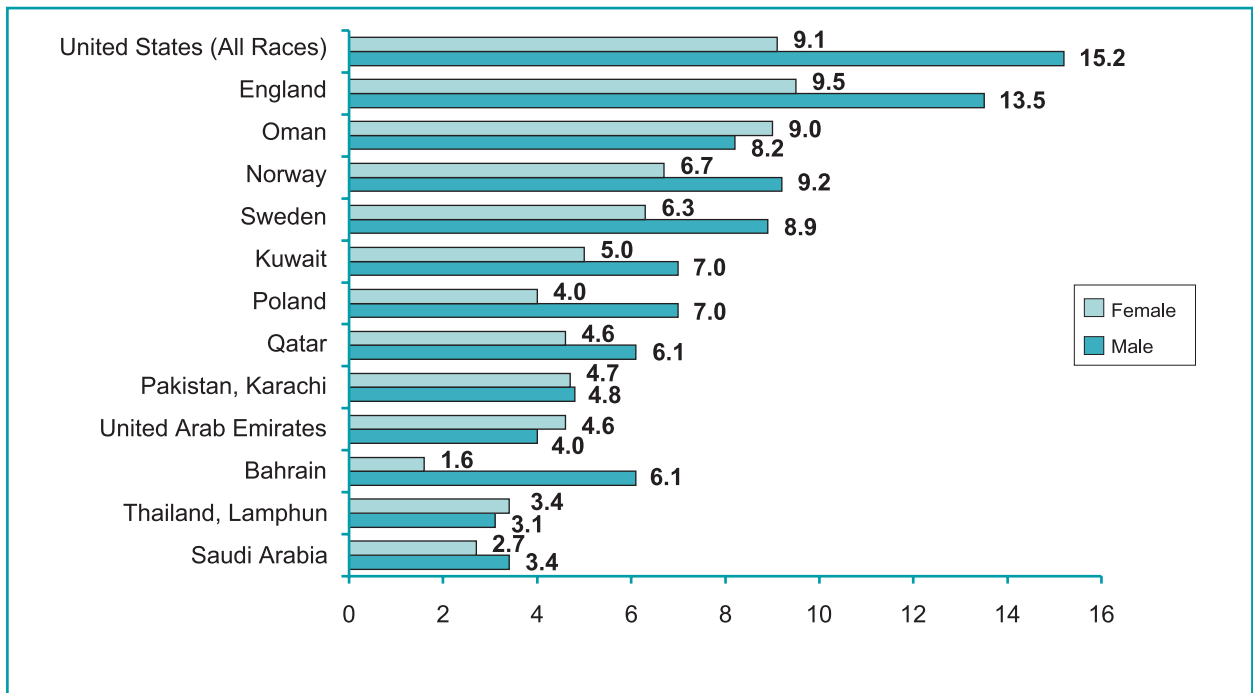


Figure 3.4.3 Comparison of ASR* for Leukemia among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 66

Thyroid (C 73)

There were 415 cases of thyroid cancer accounting for 6% of all newly diagnosed cases in year 2004. This cancer ranked second among female population and 14th among male population. It affected 87 (21%) males and 328 (79%) females with a male to female ratio of 100:266. The overall ASR was

3.5/100,000. ASR was 1.6/100,000 for males and 5.3/100,000 for females. The median age at diagnosis was 43 years among males (range 17-90 years) and 37 years among females (range 5-92 years).

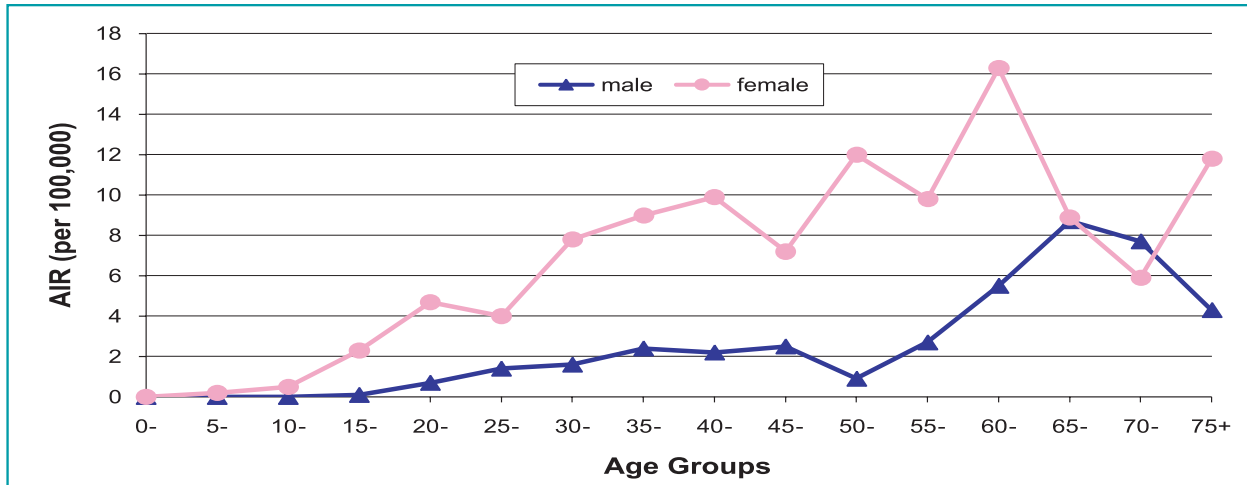


Figure 3.5.1 Age-Specific Incidence Rate (AIR) for Thyroid Cancer in Saudi Arabia, 2004

ICD-O-3 Code	Morphology	Male	%	Female	%
8260	Papillary adenocarcinoma, NOS	58	14.0%	200	48.2%
8340	Papillary carcinoma, follicular variant	7	1.7%	46	11.1%
8341	Papillary microcarcinoma	4	1.0%	29	7.0%
8330	Follicular adenocarcinoma, NOS	3	0.7%	7	1.7%
8335	Follicular carcinoma, minimally invasive	0	0.0%	9	2.2%
8343	Papillary carcinoma, encapsulated	2	0.5%	7	1.7%
8510	Medullary carcinoma, NOS	4	1.0%	4	1.0%
8021	Carcinoma, anaplastic, NOS	1	0.2%	6	1.4%
8050	Papillary carcinoma, NOS	2	0.5%	5	1.2%
8010	Carcinoma, NOS	1	0.2%	4	1.0%
8290	Oxyphilic adenocarcinoma	2	0.5%	3	0.7%
	All Others	3	0.7%	8	1.9%

Table 3.5.1 Morphological Distribution of Thyroid Cancer in Saudi Arabia, 2004

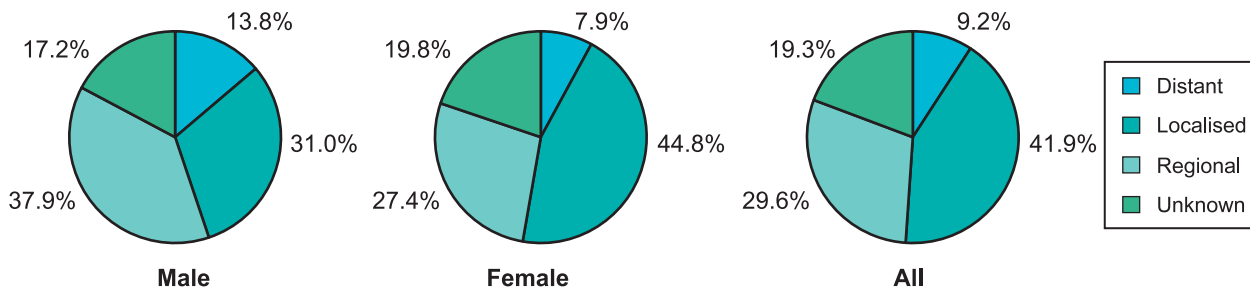


Figure 3.5.2 Stage Distribution of Thyroid Cancer, 2004

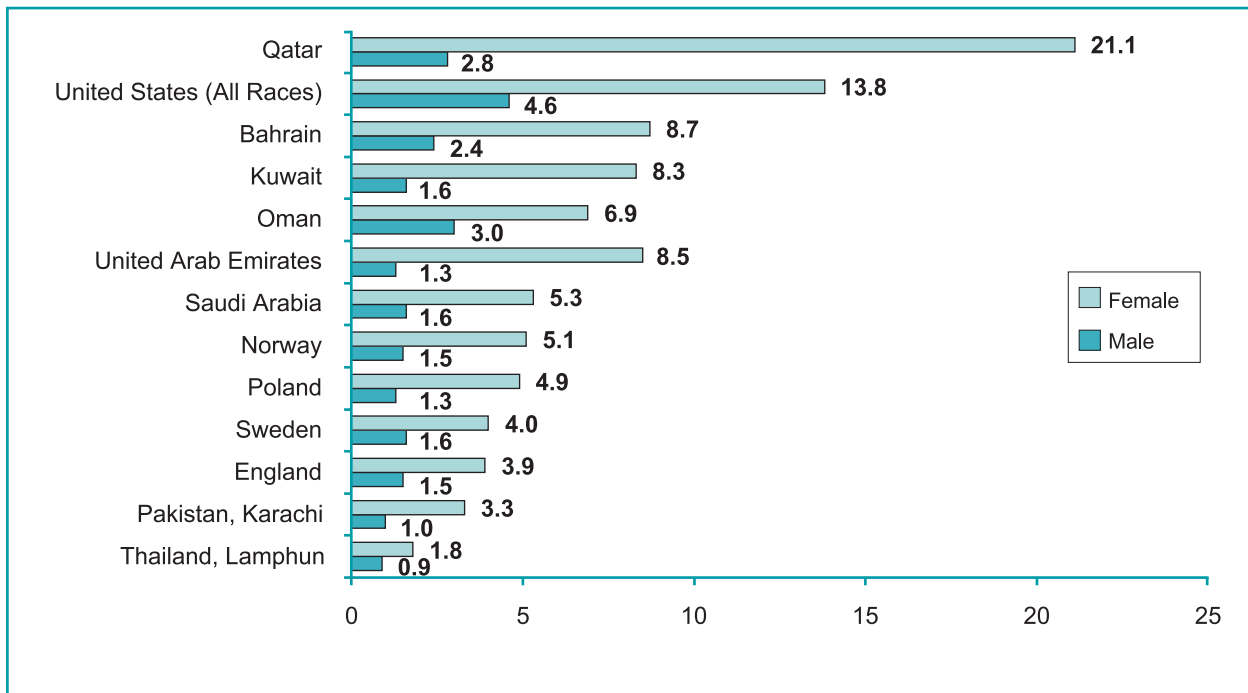


Figure 3.5.4 Comparison of ASR* for Thyroid Cancer among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 66

Liver (C 22)

There were 324 cases of liver cancer accounting for 4.6% of all newly diagnosed cases in year 2004. This cancer ranked fifth in males, and eleventh in females and affected 231 (71.3%) males and 93 (28.7%) females with a male to female ratio of 248:100. The overall ASR was 3.9/100,000. ASR was

5.5/100,000 for males and 2.2/100,000 for females. The median age at diagnosis was 66 years in males (range 1-110 years) and 63 years in female (range 1-98 years).

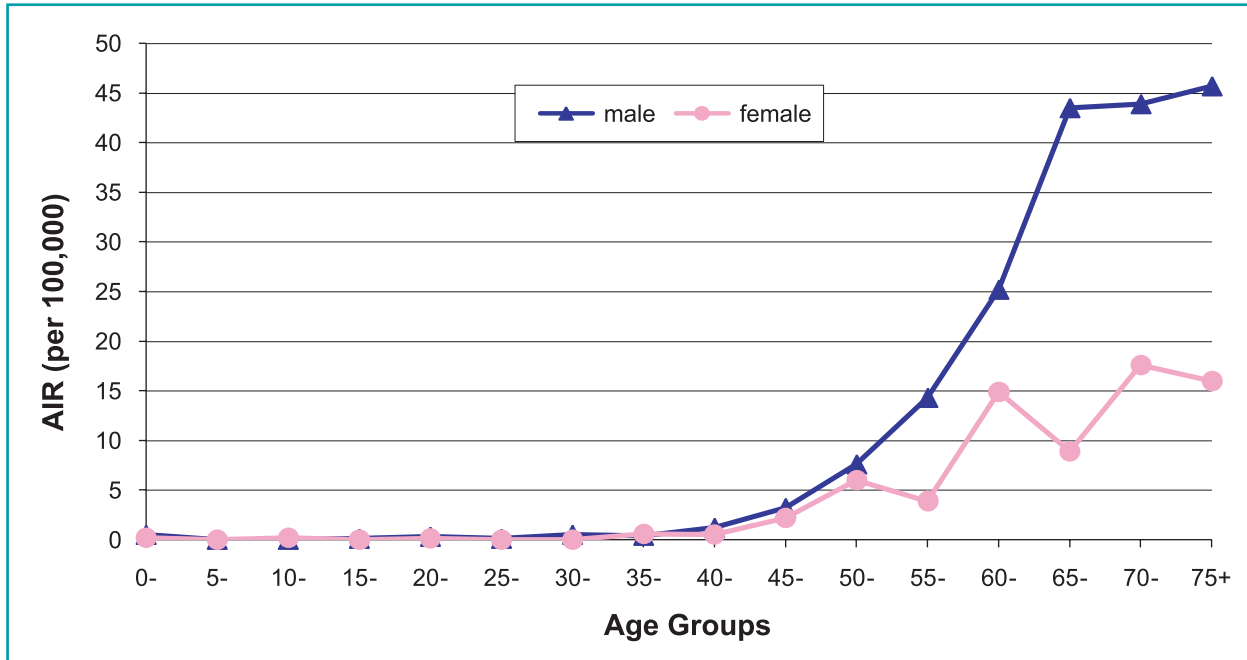


Figure 3.6.1 Age-Specific Incidence Rate (AIR) for Liver Cancer in Saudi Arabia, 2004

ICD-O-3 Code	Morphology	Male	%	Female	%
8170	Hepatocellular carcinoma, NOS	209	64.5%	71	21.9%
8160	Cholangiocarcinoma	6	1.9%	6	1.9%
8010	Carcinoma, NOS	4	1.2%	2	0.6%
8970	Hepatoblastoma	4	1.2%	2	0.6%
8000	Neoplasm, malignant	2	0.6%	3	0.9%
8140	Aden carcinoma, NOS	1	0.3%	4	1.2%
	All Others	5	1.5%	5	1.5%

Table 3.6.1 Morphological Distribution of Liver Cancer in Saudi Arabia, 2004

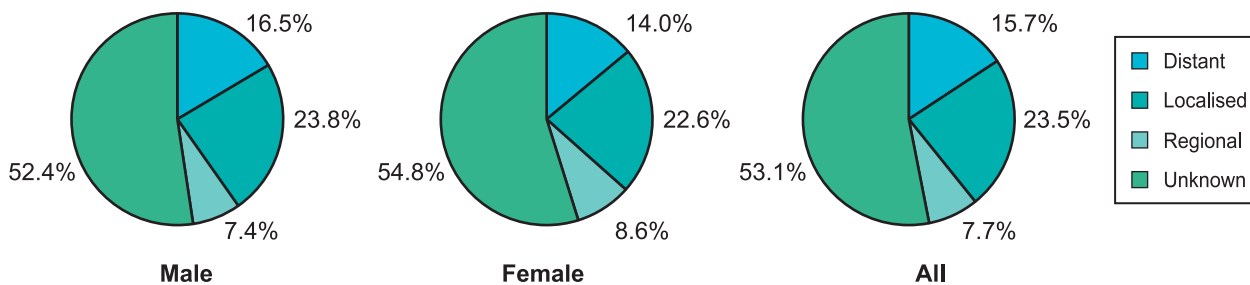


Figure 3.6.2 Stage Distribution of Liver Cancer, 2004

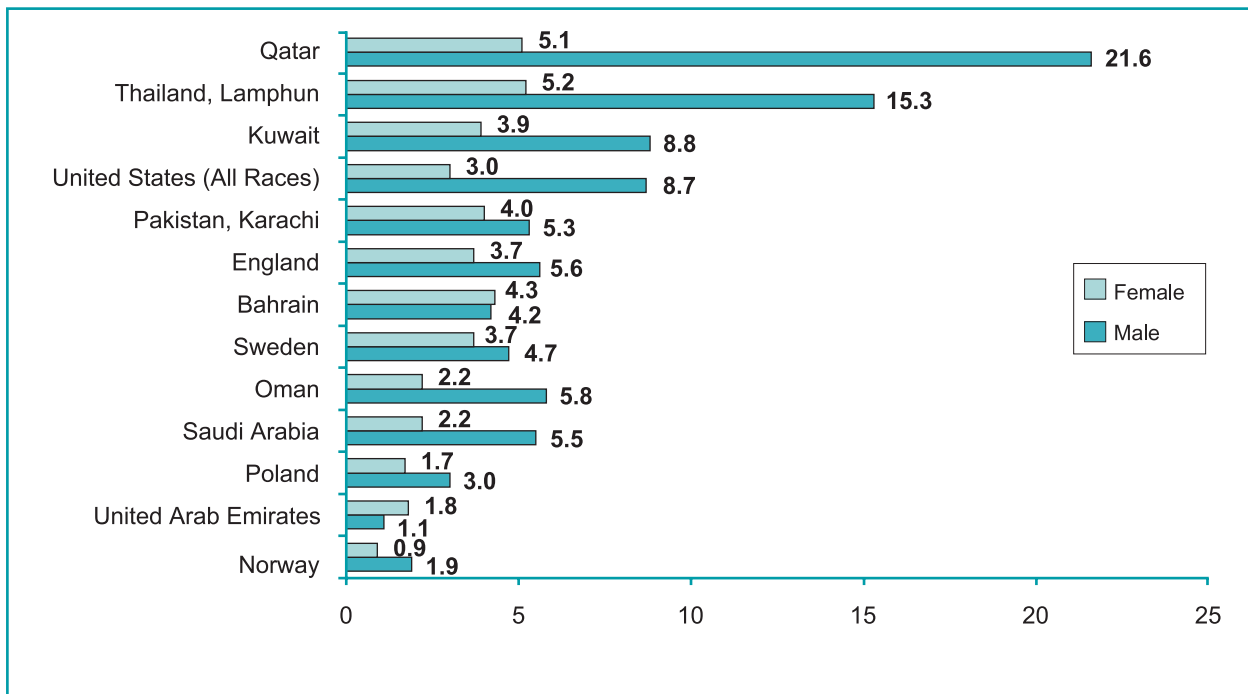


Figure 3.6.4 Comparison of ASR* for Liver Cancer among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 66

Lung (C33-C34)

There were 296 cases of lung cancer accounting for 4.2% of all diagnosed cases in year 2004. Lung cancer ranked fourth among male population and 16th among female population. It affected 233 (78.7%) males and 63 (21.3%) females with a male to female ratio of 369:100. The overall ASR was 3.1/100,000. ASR was 5.5/100,000 for males and 1.5/100,000 for females.

The median age at diagnosis was 63 years among (range 0-94 years) and 61 years among females (range 17-90 years).

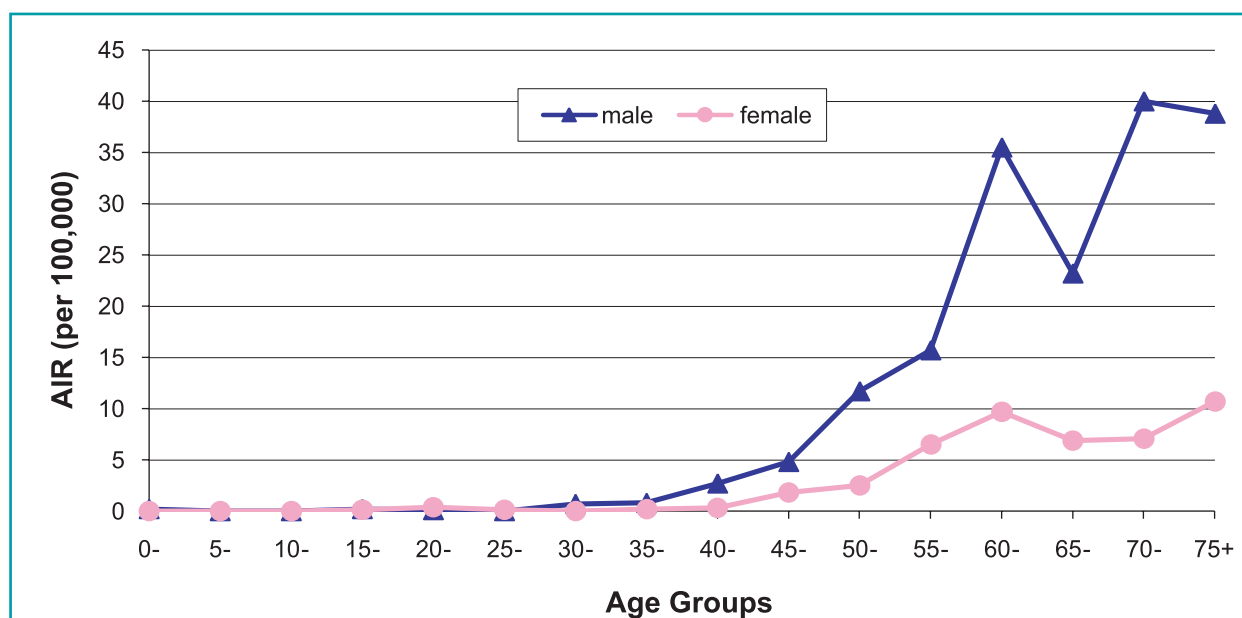


Figure 3.7.1 Age-Specific Incidence Rate (AIR) for Lung Cancer in Saudi Arabia, 2004

ICD-O-3 Code	Morphology	Male	%	Female	%
8140	Adenocarcinoma, NOS	50	16.9%	18	6.1%
8070	Squamous cell carcinoma, NOS	57	19.3%	7	2.4%
8041	Small cell carcinoma, NOS	29	9.8%	6	2.0%
8046	Non-small cell carcinoma	26	8.8%	5	1.7%
8010	Carcinoma, NOS	13	4.4%	6	2.0%
8240	Carcinoid tumor, NOS	7	2.4%	6	2.0%
8071	Squamous cell carcinoma, keratinizing, NOS	7	2.4%	1	0.3%
8250	Bronchiolo-alveolar adenocarcinoma, NOS	5	1.7%	3	1.0%
8000	Neoplasm, malignant	5	1.7%	2	0.7%
8012	Large cell carcinoma, NOS	7	2.4%	0	0.0%
8246	Neuroendocrine carcinoma, NOS	1	0.3%	3	1.0%
8560	Adenosquamous carcinoma	3	1.0%	1	0.3%
8001	Tumor cells, malignant	1	0.3%	2	0.7%
8020	Carcinoma, undifferentiated, NOS	3	1.0%	0	0.0%
8072	Squamous cell carcinoma, large cell, nonkeratinizing, NOS	3	1.0%	0	0.0%
8480	Mucinous adenocarcinoma	2	0.7%	1	0.3%
	All Others	14	4.7%	2	0.7%

Table 3.7.1 Morphological Distribution of Lung Cancer in Saudi Arabia, 2004

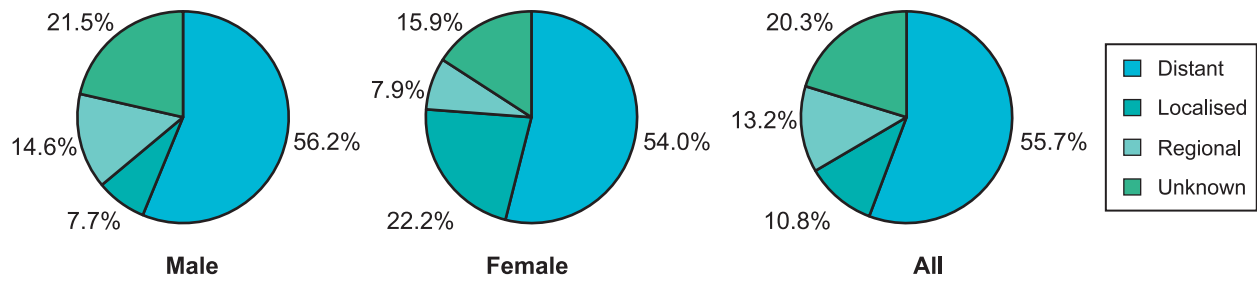


Figure 3.7.2 Stage Distribution of Lung Cancer, 2004

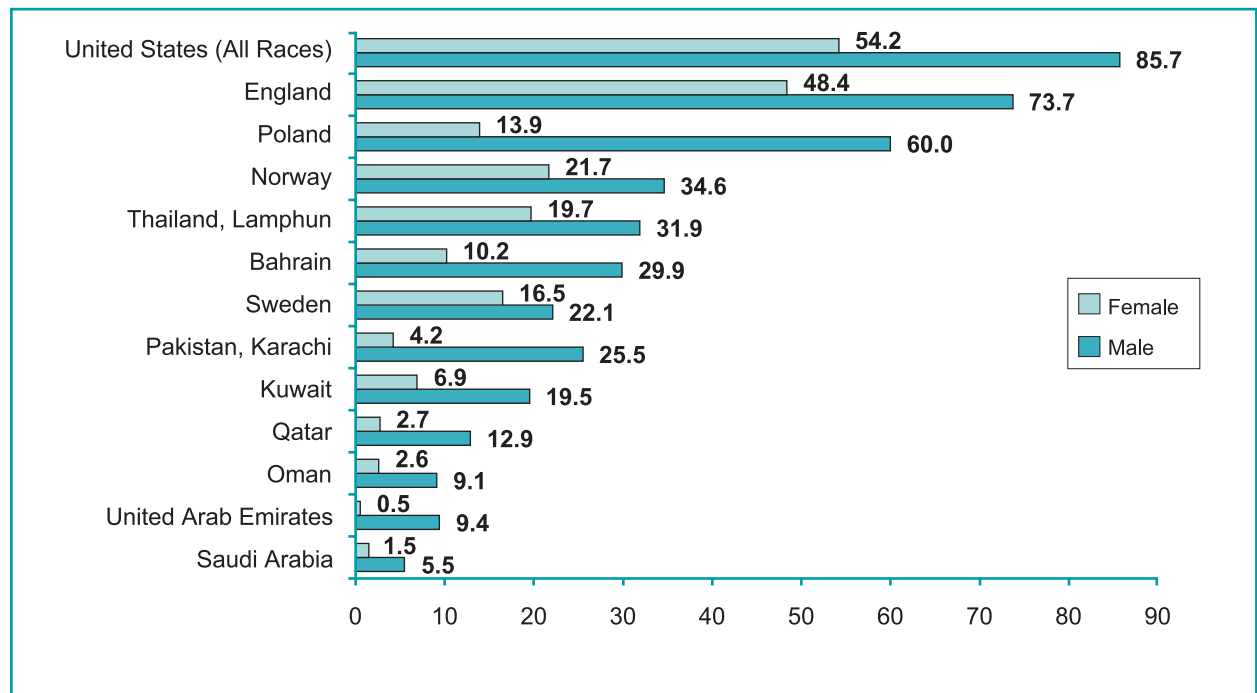


Figure 3.7.4 Comparison of ASR* for Lung Cancer among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 66

Hodgkins disease (C 81)

There were 264 cases of Hodgkins disease accounting for 3.8% of all newly diagnosed cases in year 2004. This cancer ranked seventh among male and tenth in female population. It affected 166 (62.9%) males and 98 (37.1%) females with a male to female ratio of 167:100. The overall ASR was 1.65/100,000. ASR was 2.1/100,000 for males

and 1.2/100,000 for females. The median age at diagnosis was 21 years (range 2-76 years) in males and 21 year in females (range 4-85).

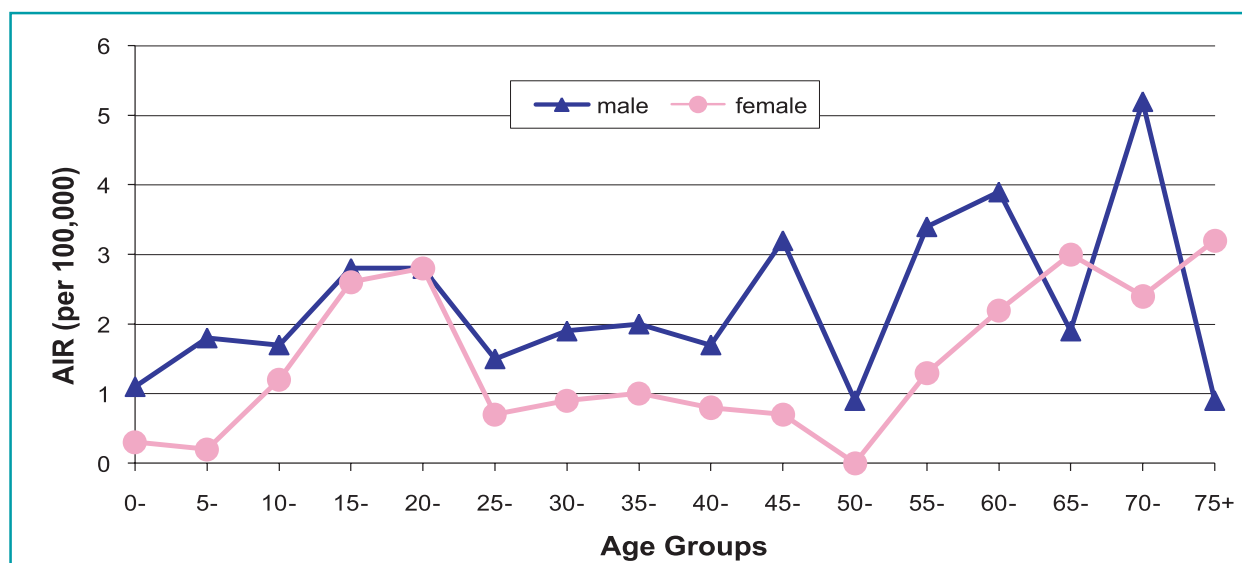


Figure 3.8.1 Age-Specific Incidence Rate (AIR) for Hodgkins disease in Saudi Arabia, 2004

ICD-O-3 Code	Morphology	Male	%	Female	%
9663	Hodgkin lymphoma, nodular sclerosis, NOS	71	26.9%	47	17.8%
9652	Hodgkin lymphoma, mixed cellularity, NOS	29	11.0%	15	5.7%
9650	Hodgkin lymphoma, NOS	17	6.4%	5	1.9%
9665	Hodgkin lymphoma, nodular sclerosis, grade 1	12	4.5%	10	3.8%
9667	Hodgkin lymphoma, nodular sclerosis, grade 2	11	4.2%	10	3.8%
9651	Hodgkin lymphoma, lymphocyte-rich	8	3.0%	7	2.7%
9659	Hodgkin lymphoma, nodular lymphocyte predominance	13	4.9%	1	0.4%
9653	Hodgkin lymphoma, lymphocyte depletion, NOS	3	1.1%	0	0.0%
	All Others	2	0.8%	3	1.1%

Table 3.8.1 Morphological Distribution of Hodgkins disease in Saudi Arabia, 2004

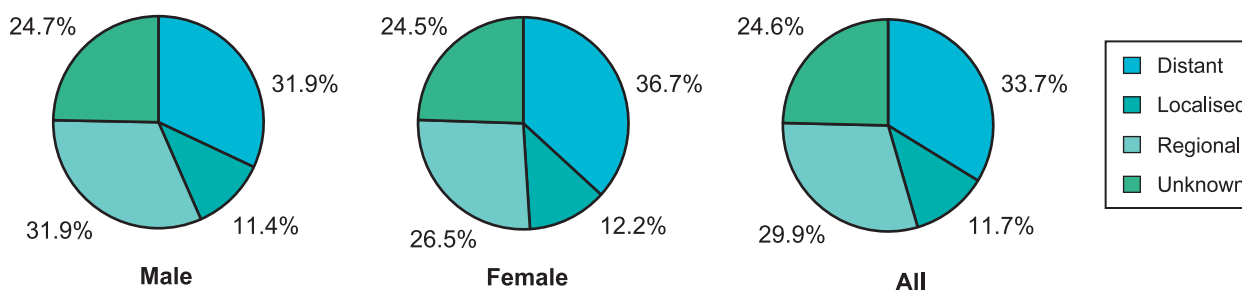


Figure 3.8.2 Stage Distribution of Hodgkins disease, 2004

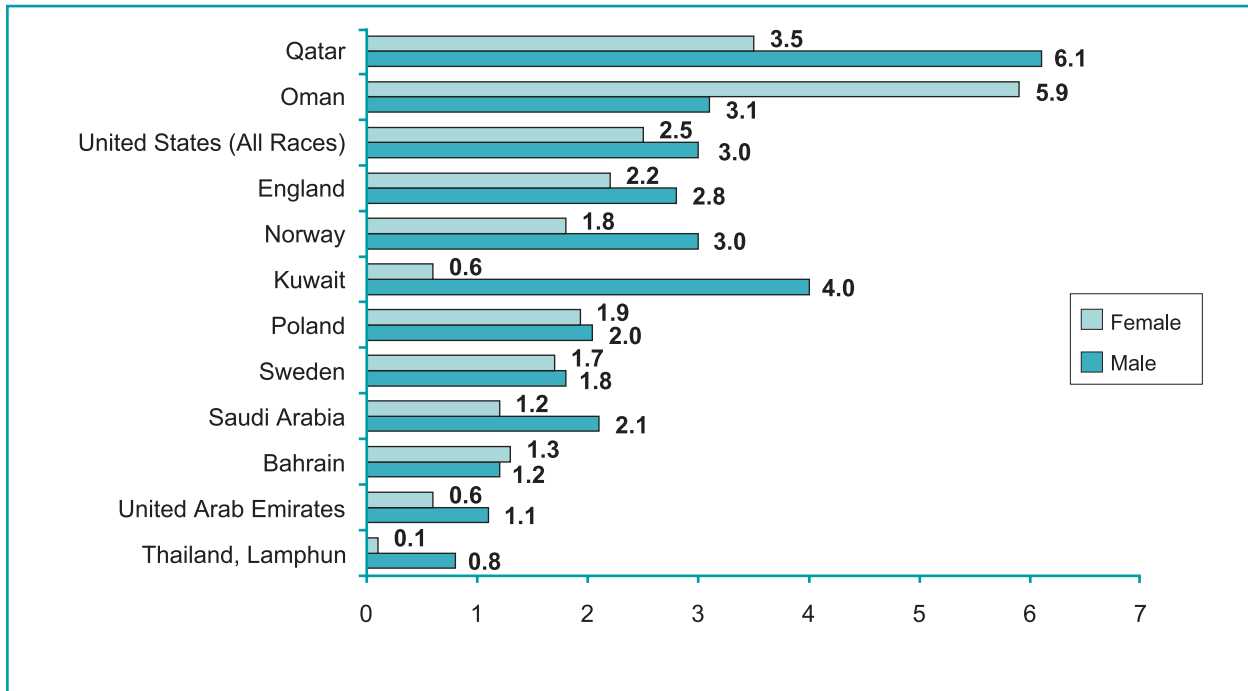


Figure 3.8.4 Comparison of ASR* for Hodgkins disease among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 66

Skin (Non-Melanoma) (C 44)

There were 261 cases of skin cancer accounting for 3.7% of all newly diagnosed cases in year 2004. This cancer ranked eleventh for males and sixth for females. It affected 136(52.1%) males and 125(47.9%) females with a male to female ratio of 109:100. The overall ASR was 2.95/100,000. ASR was 3.0/100,000 for males and 2.9/100,000 for females.

The median age at diagnosis was 67 years among males (range 17-101 years) and 65 years among female (range 3-99 years).

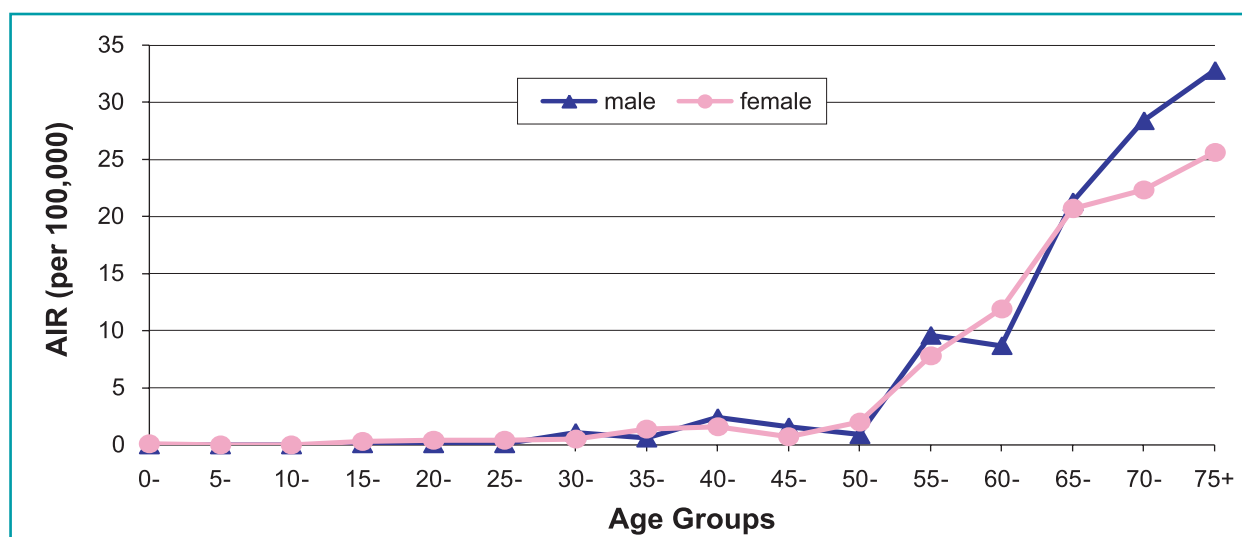


Figure 3.9.1 Age-Specific Incidence Rate (AIR) for Skin Cancer in Saudi Arabia, 2004

ICD-O-3 Code	Morphology	Male	%	Female	%
8090	Basal cell carcinoma, NOS	70	26.8%	53	20.3%
8070	Squamous cell carcinoma, NOS	24	9.2%	33	12.6%
8094	Basosquamous carcinoma	12	4.6%	4	1.5%
8832	Dermatofibrosarcoma, NOS	6	2.3%	9	3.4%
8071	Squamous cell carcinoma, keratinizing, NOS	6	2.3%	6	2.3%
8410	Sebaceous adenocarcinoma	7	2.7%	3	1.1%
8097	Basal cell carcinoma, nodular	3	1.1%	6	2.3%
8091	Multifocal superficial basal cell carcinoma	2	0.8%	1	0.4%
	All Others	6	2.3%	10	3.8%

Table 3.9.1 Morphological Distribution of Skin Cancer in Saudi Arabia, 2004

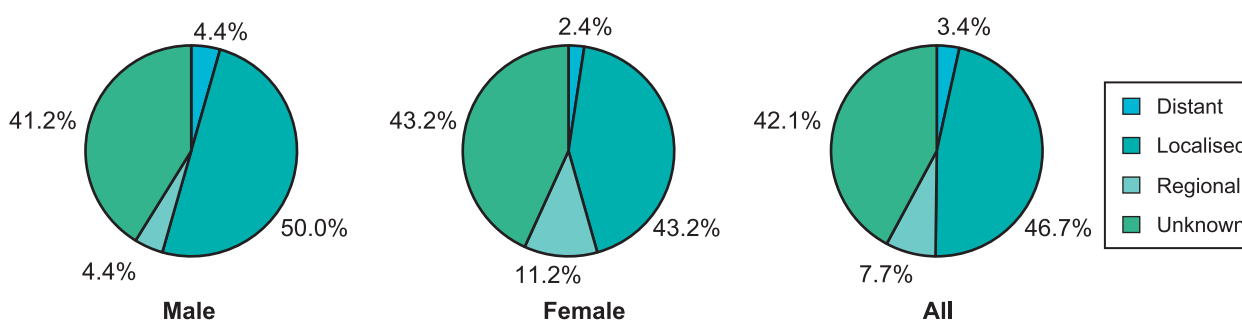


Figure 3.9.2 Stage Distribution of Skin Cancer in Saudi Arabia, 2004

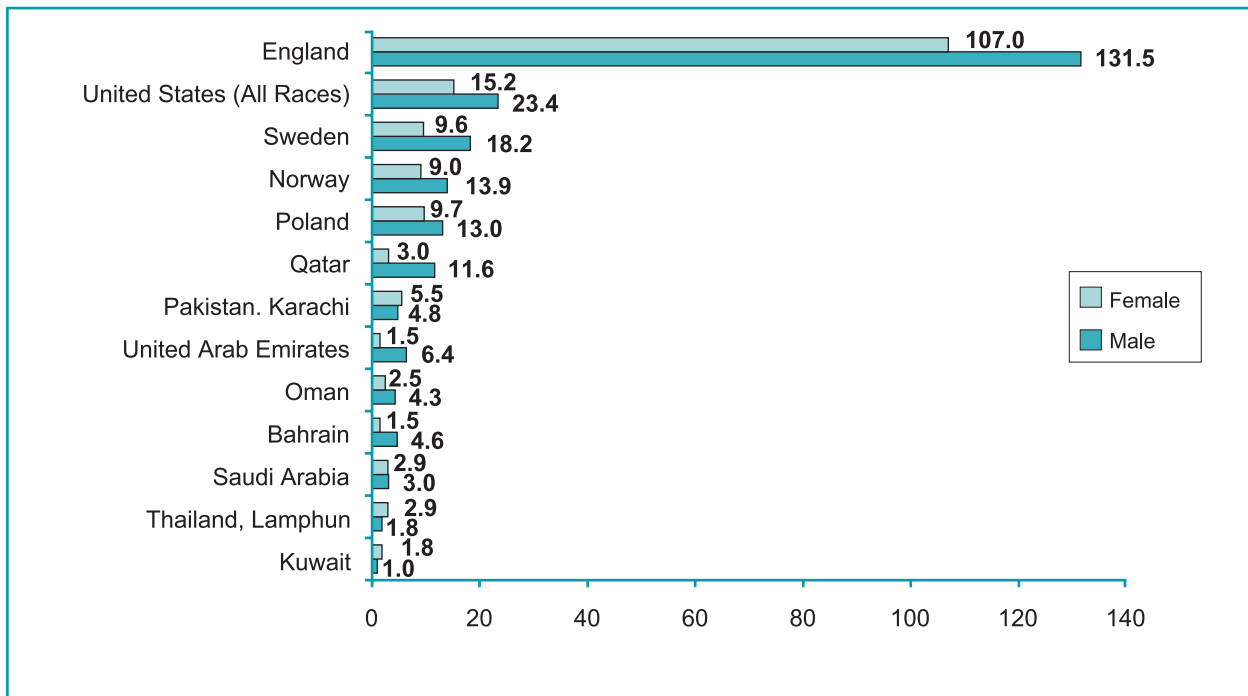


Figure 3.9.4 Comparison of ASR* for Skin Cancer among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 66

Brain, Nervous System (C70-C72)

There were 247 cases of brain and nervous system cancer accounting for 3.5% of all newly diagnosed cases in year 2004. This cancer ranked ninth for both males and females. It affected 147(59.5%) males and 100(40.5%) females with a male to female ratio of 147:100. The overall ASR was 2.5/100,000. ASR was 2.3/100,000 for males and 1.5/100,000

for females. The median age at diagnosis was 35 years among males (range 0-88 years) and 22 years among female (range 0-90 years).

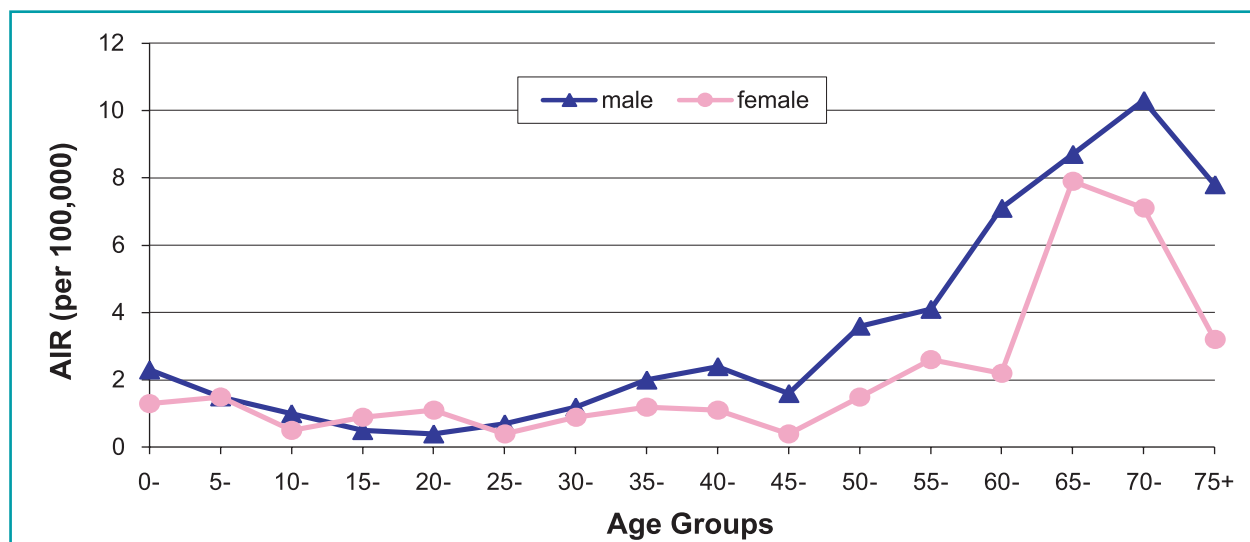


Figure 3.10.1 Age-Specific Incidence Rate (AIR) for Brain Cancer in Saudi Arabia, 2004

ICD-O Code	Morphology	Male	%	Female	%
9440	Glioblastoma, NOS	42	17.0%	29	11.7%
9470	Medulloblastoma, NOS	31	12.6%	14	5.7%
9400	Astrocytoma, NOS	17	6.9%	8	3.2%
9380	Glioma, malignant	7	2.8%	12	4.9%
9391	Ependymoma, NOS	5	2.0%	6	2.4%
9401	Astrocytoma, anaplastic	8	3.2%	2	0.8%
9450	Oligodendroglioma, NOS	7	2.8%	3	1.2%
9382	Mixed glioma	3	1.2%	4	1.6%
9471	Desmoplastic nodular medulloblastoma	4	1.6%	2	0.8%
8000	Neoplasm, malignant	4	1.6%	1	0.4%
9392	Ependymoma, anaplastic	3	1.2%	2	0.8%
9451	Oligodendroglioma, anaplastic	4	1.6%	1	0.4%
9473	Primitive neuroectodermal tumor, NOS	2	0.8%	3	1.2%
	All Others	10	4.0%	13	5.3%

Table 3.10.1 Morphological Distribution of Brain Cancer in Saudi Arabia, 2004

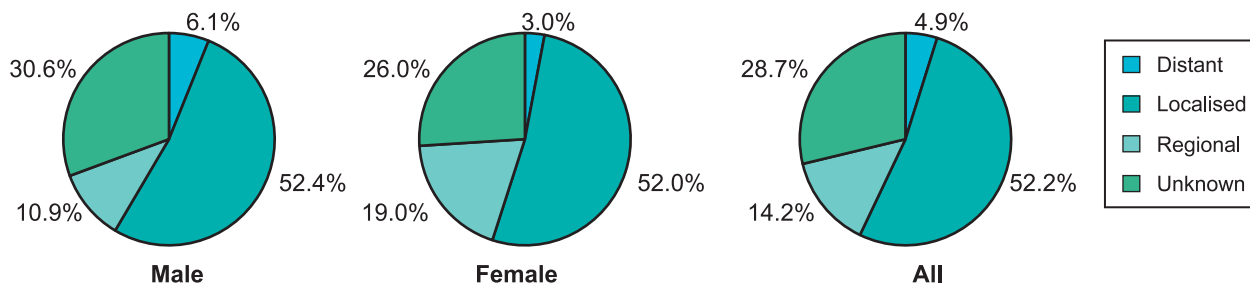


Figure 3.10.2 Stage Distribution of Brain Cancer in Saudi Arabia, 2004

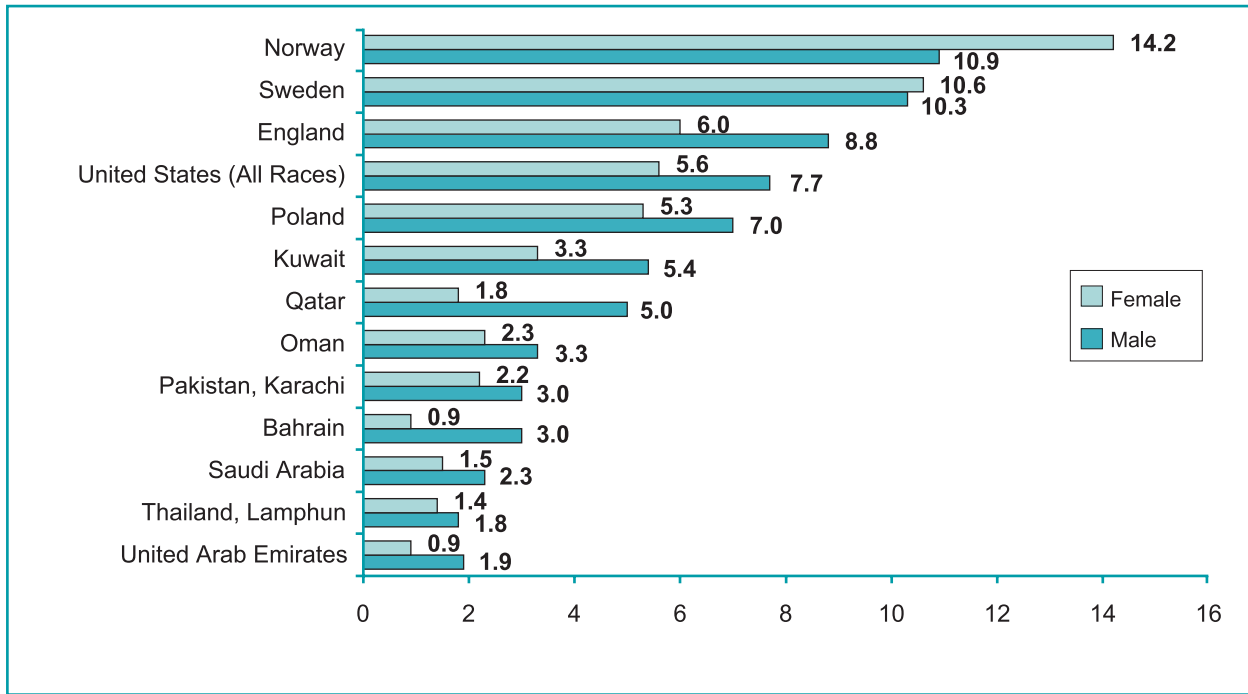


Figure 3.10.4 Comparison of ASR* for Brain Cancer among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 66

Prostate (C 61)

There were 214 cases of prostate cancer accounting for 6.2% of all newly diagnosed cases among males in year 2004. The ASR was 5.1/100,000 among male population. This cancer

ranked sixth among males. The median age at diagnosis was 71 years (range 25-107 years).

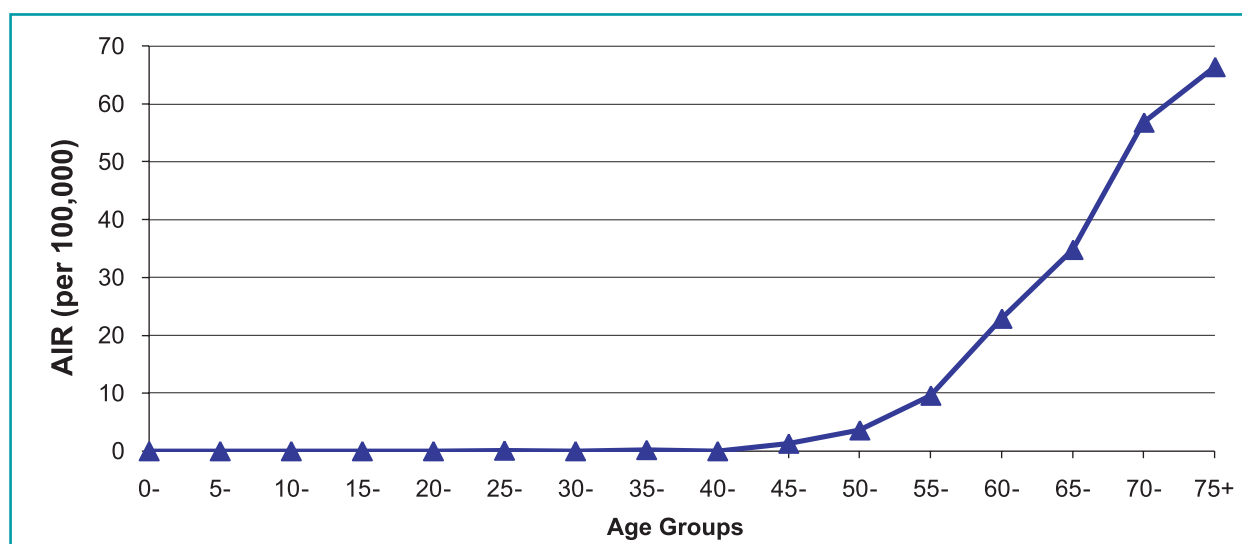


Figure 3.11.1 Age-Specific Incidence Rate (AIR) for Prostate Cancer in Saudi Arabia, 2004

ICD-O Code	Morphology	Total	%
8140	Adenocarcinoma, NOS	187	87.4%
8010	Carcinoma, NOS	20	9.3%
8000	Neoplasm, malignant	2	0.9%
8120	Transitional cell carcinoma, NOS	2	0.9%
8050	Papillary carcinoma, NOS	1	0.5%
8070	Squamous cell carcinoma, NOS	1	0.5%
8550	Acinar cell carcinoma	1	0.5%

Table 3.11.1 Morphological Distribution of Prostate Cancer in Saudi Arabia, 2004

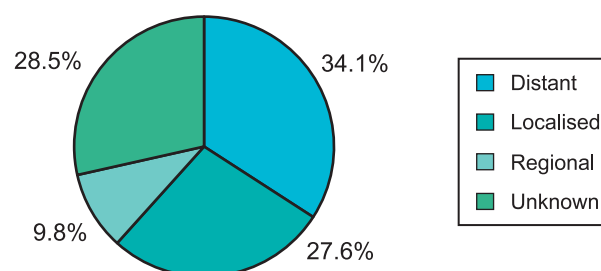


Figure 3.11.2 Stage Distribution of Prostate Cancer, 2004

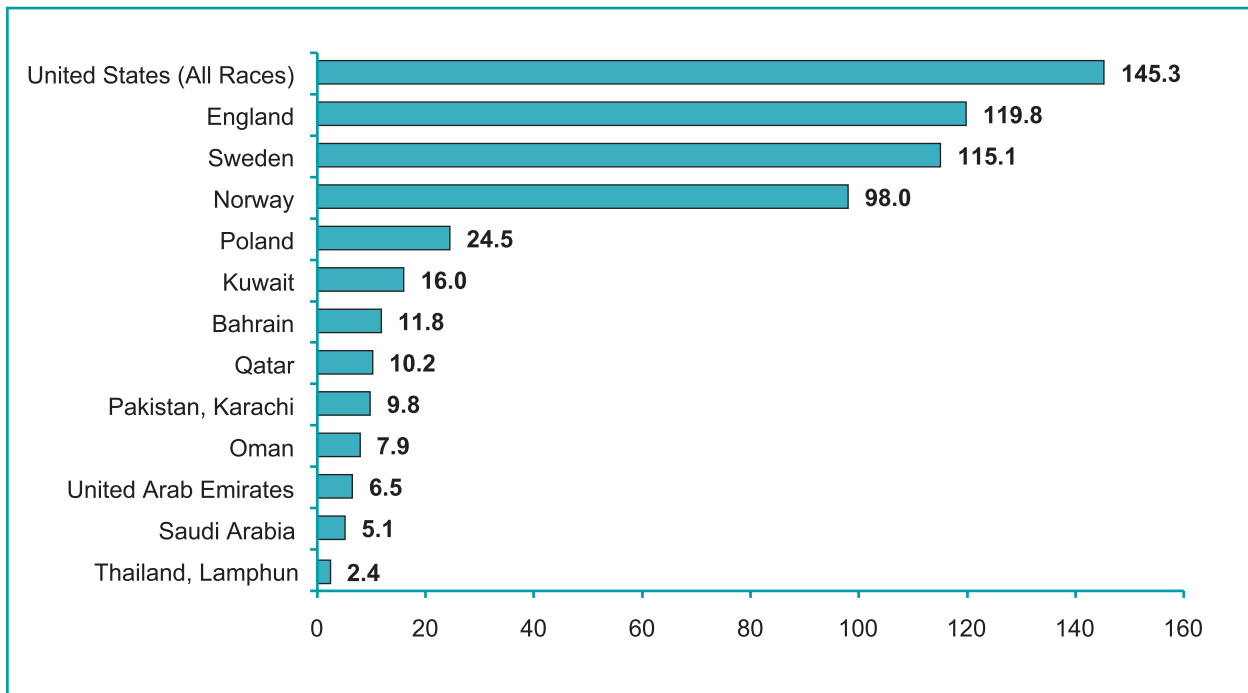


Figure 3.11.4 Comparison of ASR* for Prostate Cancer among Saudi Males with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 66

Stomach (C 16)

There were 211 cases of stomach cancer accounting for 3% of all newly diagnosed cases in year 2004. This cancer ranked tenth among male population and 14th among female population. It affected 141(66.8%) males and 70(33.2%) females with a male to female ratio of 201:100. The overall ASR was 3.1/100,000. ASR was 4.1/100,000 for male and 2/100,000 for females.

The median age at diagnosis was 65 years among males (range 28-103 years) and 64 years among female (range 17-92 years).

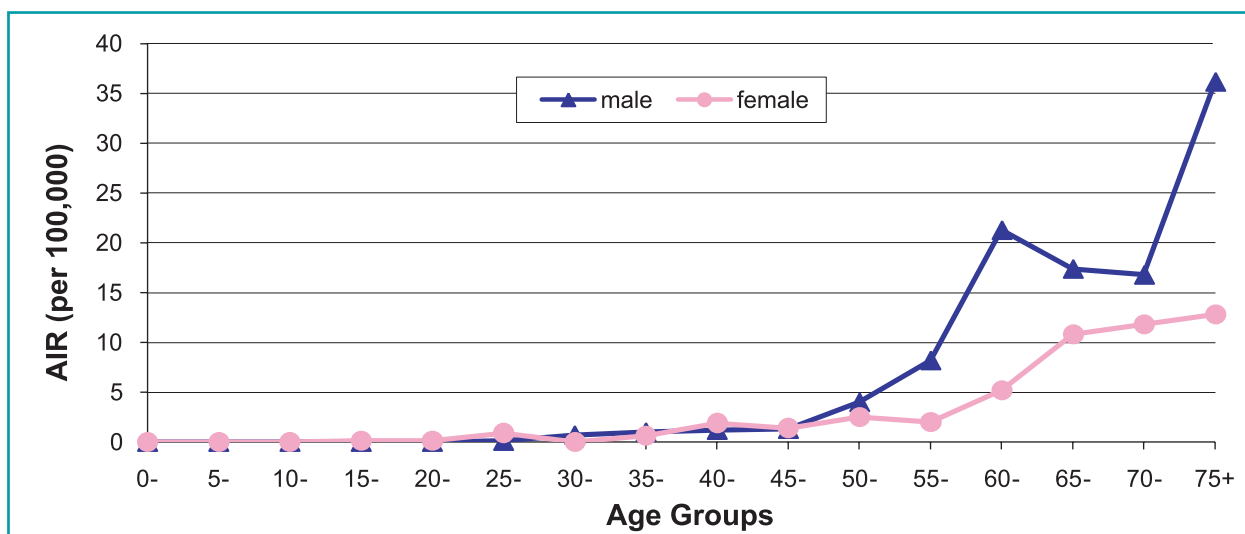


Figure 3.12.1 Age-Specific Incidence Rate (AIR) for Stomach Cancer in Saudi Arabia, 2004

ICD-O-3 Code	Morphology	Male	%	Female	%
8140	Adenocarcinoma, NOS	66	31.3%	29	13.7%
8490	Signet ring cell carcinoma	27	12.8%	28	13.3%
8144	Adenocarcinoma, intestinal type	18	8.5%	4	1.9%
8480	Mucinous adenocarcinoma	5	2.4%	2	0.9%
8010	Carcinoma, NOS	5	2.4%	0	0.0%
8145	Carcinoma, diffuse type	3	1.4%	2	0.9%
8481	Mucin-producing adenocarcinoma	4	1.9%	0	0.0%
8936	Gastrointestinal stromal sarcoma	3	1.4%	1	0.5%
8000	Neoplasm, malignant	2	0.9%	1	0.5%
8070	Squamous cell carcinoma, NOS	3	1.4%	0	0.0%
	All Others	5	2.4%	3	1.4%

Table 3.12.1 Morphological Distribution of Stomach Cancer in Saudi Arabia, 2004

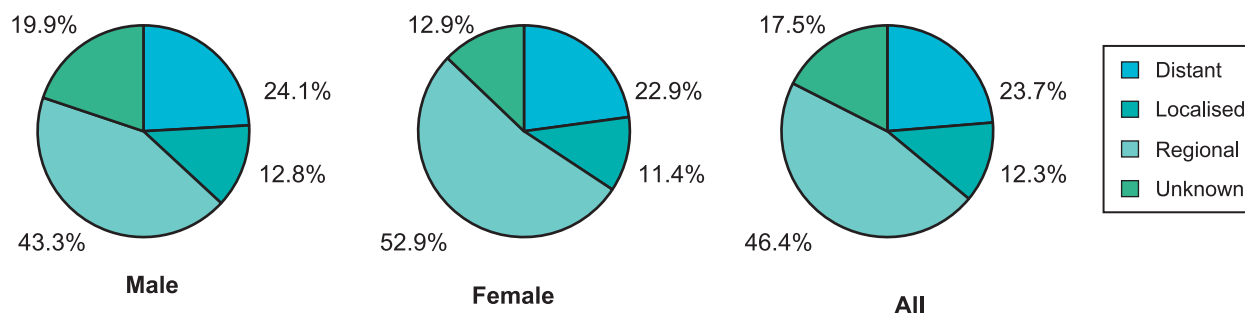


Figure 3.12.2 Stage Distribution of Stomach Cancer, 2004

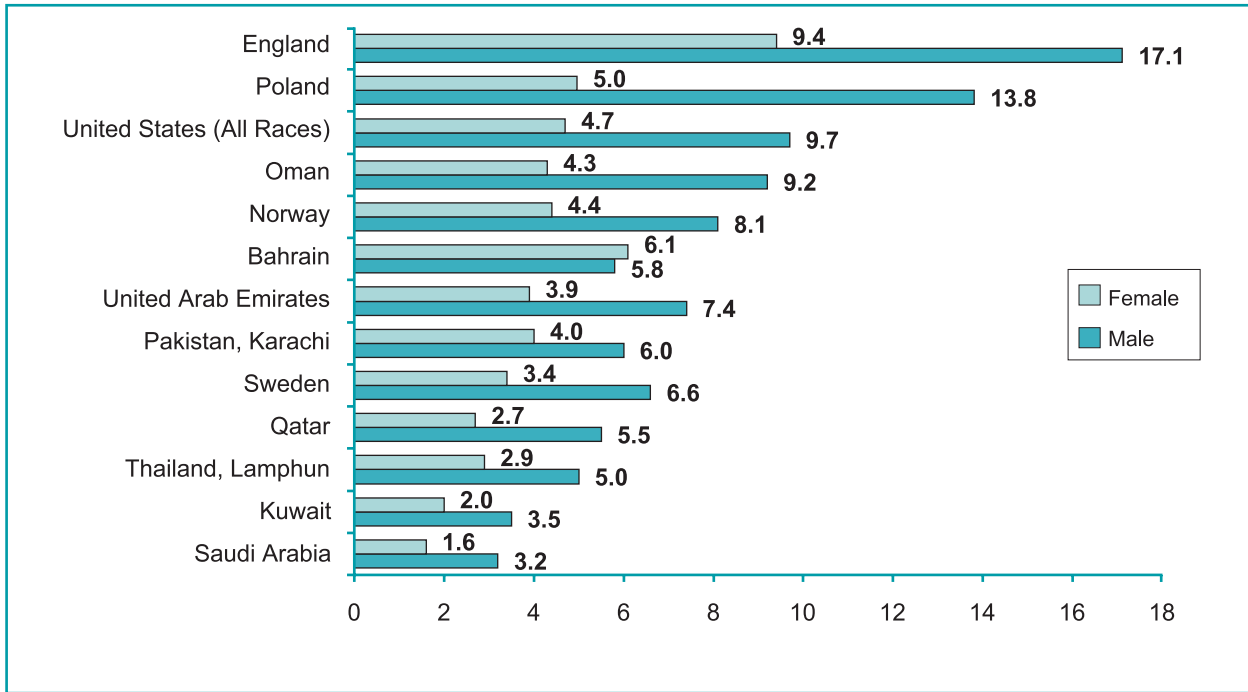


Figure 3.12.4 Comparison of ASR* for Stomach Cancer among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 66

Bladder (C 67)

There were 201 cases of bladder cancer accounting for 2.9% of all newly diagnosed cases in year 2004. This cancer ranked eighth among male population and 20th among female population. It affected 160(79.6%) males and 41(20.4%) females with a male to female ratio of 390:100. The overall ASR was 2.4/100,000. ASR was 3.7/100,000 for males and 1/100,000 for females.

The median age at diagnosis was 67 among males (range 6-110 years) and 60 among females (range 16-100 years).

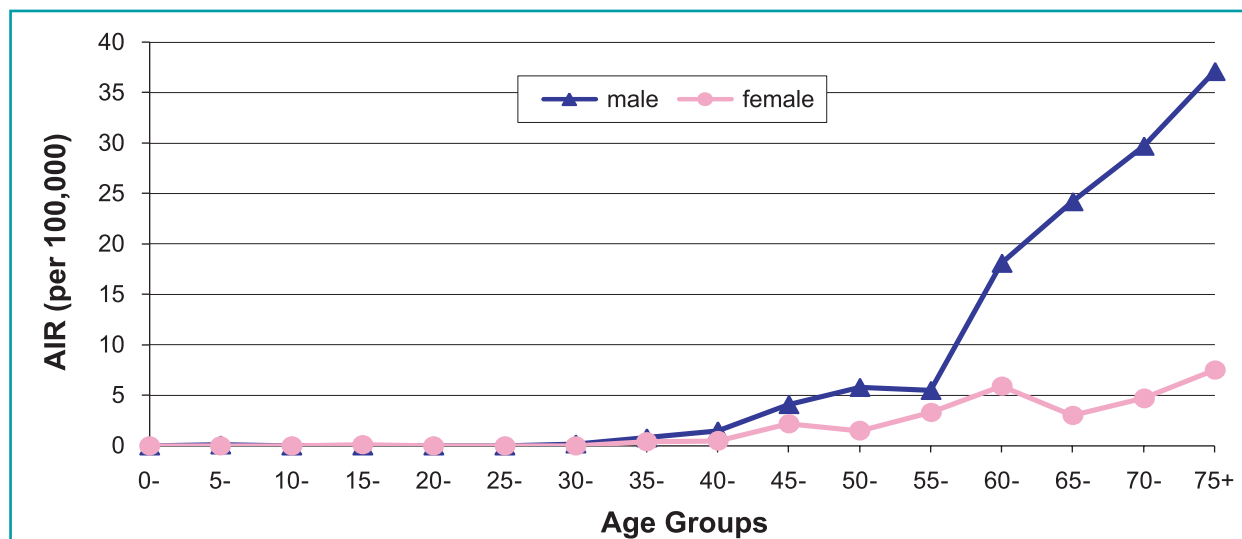


Figure 3.13.1 Age-Specific Incidence Rate (AIR) for Bladder Cancer in Saudi Arabia, 2004

ICD-O-3 Code	Morphology	Male	%	Female	%
8120	Transitional cell carcinoma, NOS	84	41.8%	20	10.0%
8130	Papillary transitional cell carcinoma	54	26.9%	11	5.5%
8070	Squamous cell carcinoma, NOS	11	5.5%	4	2.0%
8010	Carcinoma, NOS	3	1.5%	1	0.5%
8071	Squamous cell carcinoma, keratinizing, NOS	3	1.5%	0	0.0%
8140	Adenocarcinoma, NOS	1	0.5%	2	1.0%
8910	Embryonal rhabdomyosarcoma, NOS	1	0.5%	1	0.5%
	All Others	3	1.5%	2	1.0%

Table 3.13.1 Morphological Distribution of Bladder Cancer in Saudi Arabia, 2004

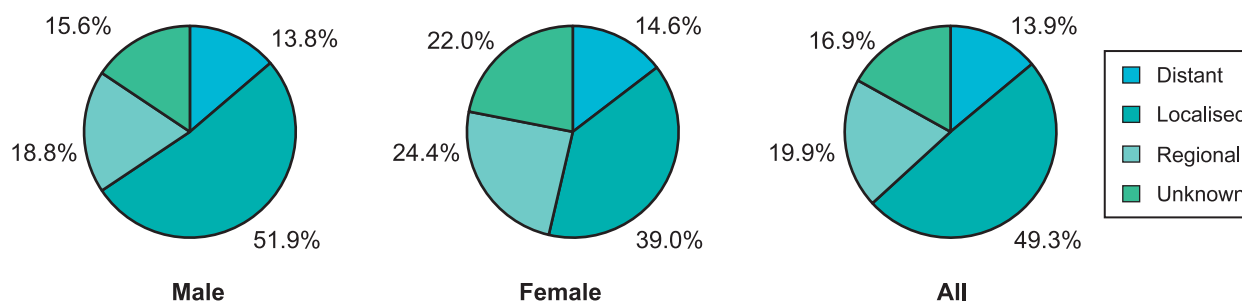


Figure 3.13.2 Stage Distribution of Bladder Cancer, 2004

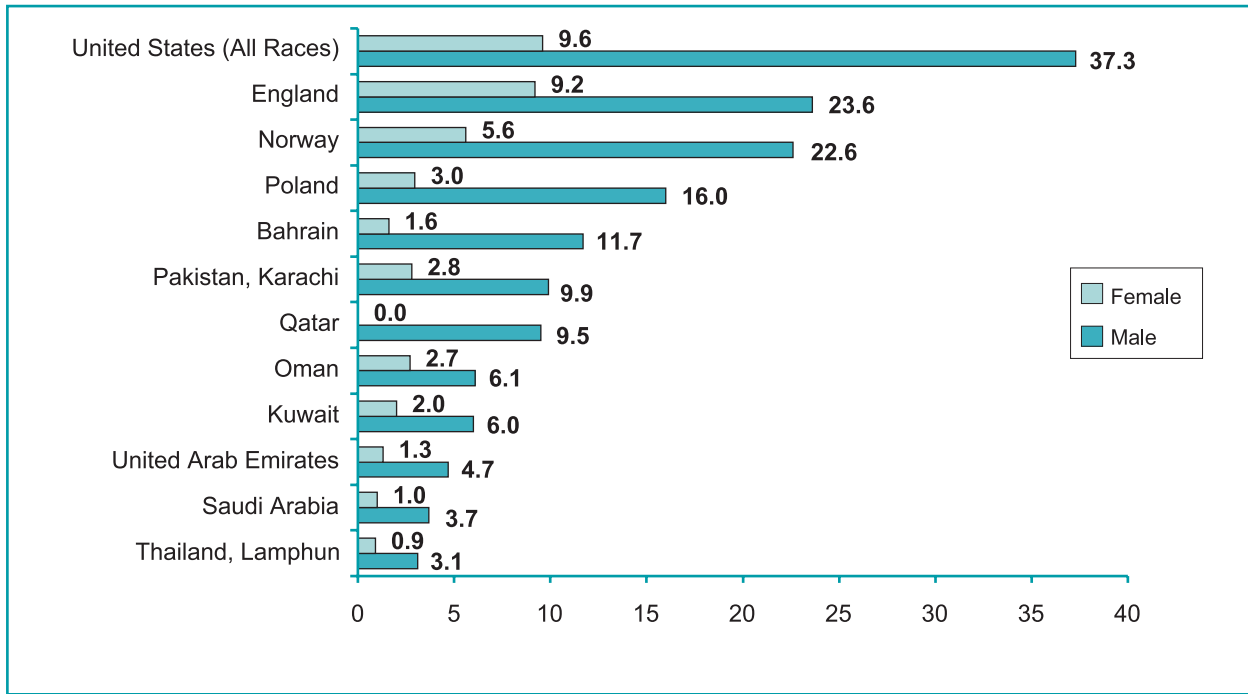


Figure 3.13.4 Comparison of ASR* for Bladder Cancer among Saudis with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 66

Corpus uteri (C 54)

There were 117 cases of corpus uterine cancer among females accounting for 3.4 % of all newly diagnosed cases for females in year 2004. This cancer ranked seventh among female population.

The ASR was 2.8/100,000 for female population. The median age at diagnosis was 61 years at diagnosis was 61 years (range 18-92 years).

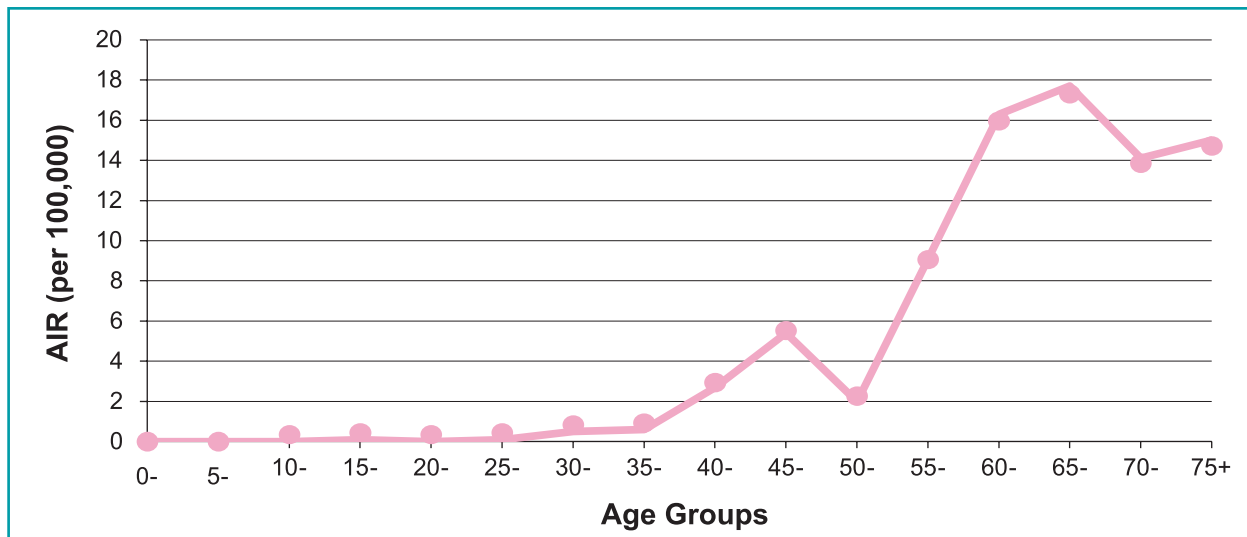


Figure 3.14.1 Age-Specific Incidence Rate (AIR) for Corpus uterine Cancer in Saudi Arabia, 2004

ICD-O-3 Code	Morphology	Total	%
8380	Endometrioid adenocarcinoma, NOS	63	53.8%
8140	Adenocarcinoma, NOS	27	23.1%
8950	Mullerian mixed tumor	4	3.4%
8010	Carcinoma, NOS	3	2.6%
8260	Papillary adenocarcinoma, NOS	2	1.7%
8310	Clear cell adenocarcinoma, NOS	2	1.7%
8441	Serous cystadenocarcinoma, NOS	2	1.7%
8460	Papillary serous cystadenocarcinoma	2	1.7%
8480	Mucinous adenocarcinoma	2	1.7%
8933	Adenosarcoma	2	1.7%
	All Others	8	6.8%

Table 3.14.1 Morphological Distribution of Corpus uterine Cancer in Saudi Arabia, 2004

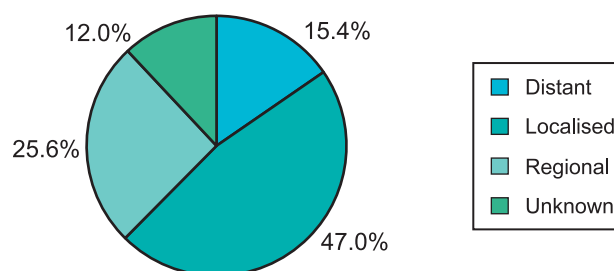


Figure 3.14.2 Stage Distribution of Corpus uterine Cancer, 2004

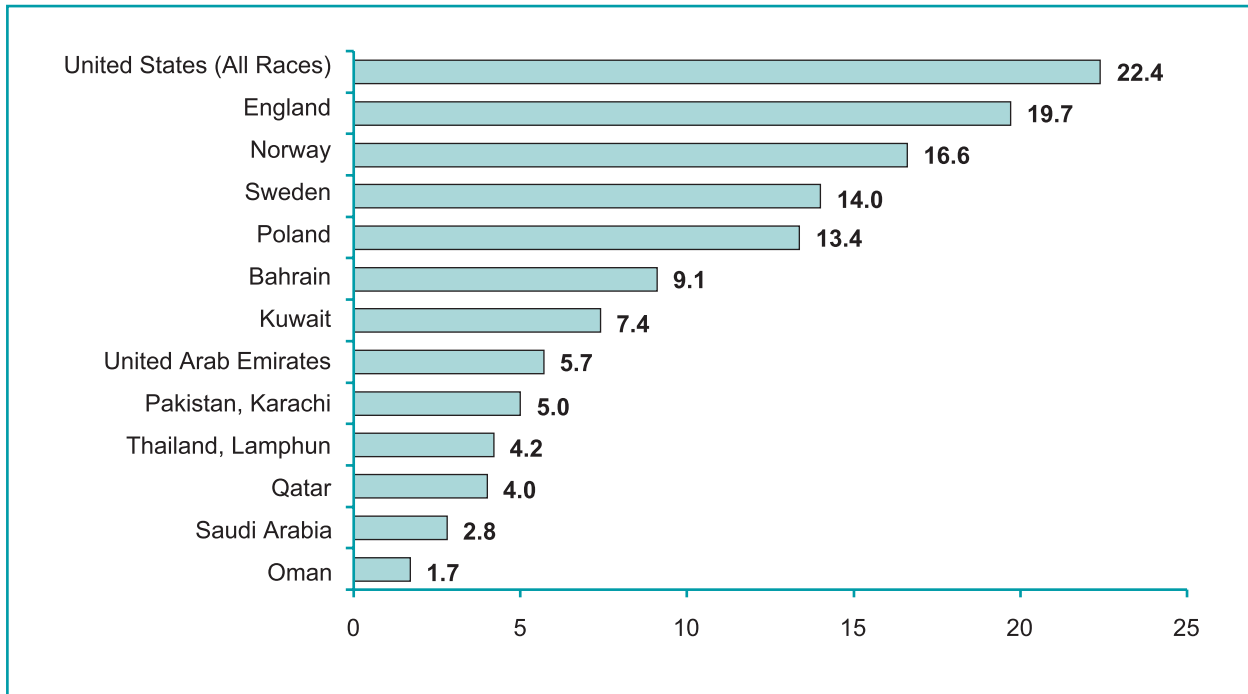


Figure 3.14.4 Comparison of ASR* for Corpus uterine Cancer among Saudi Females with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 66

Ovary Cancer (C 56)

There were 108 cases of ovarian cancer among females accounting for 3.1% of all newly diagnosed cases among females in year 2004. This cancer ranked eighth among female population. The ASR

was 2.2/100,000 for females. The median age at diagnosis was 51 years (range 6-93 years).

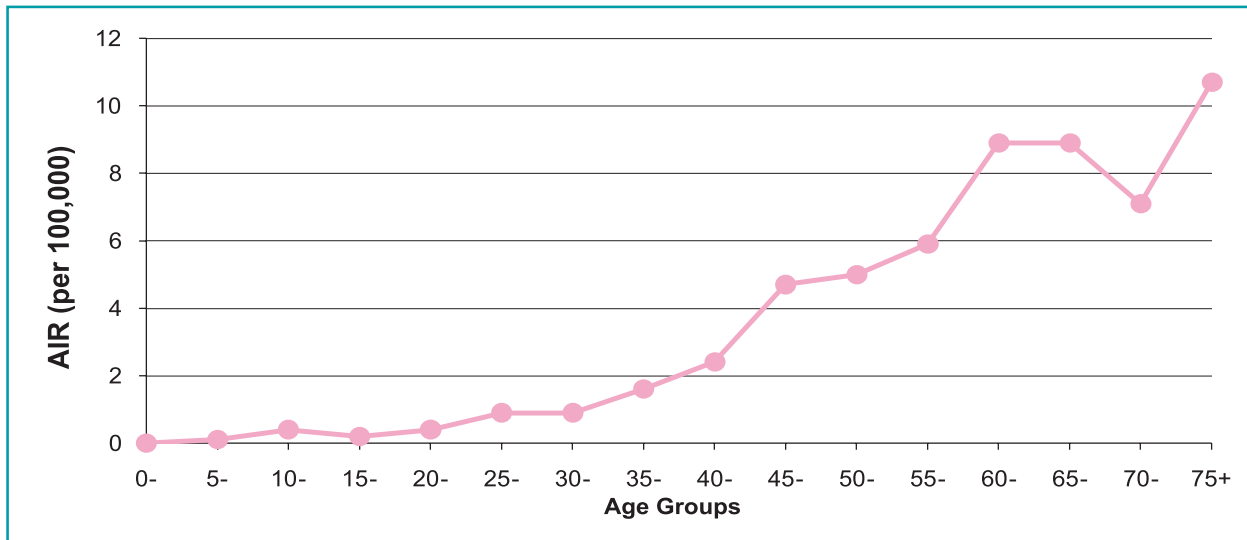


Figure 3.15.1 Age-Specific Incidence Rate (AIR) for Ovarian Cancer in Saudi Arabia, 2004

ICD-O Code	Morphology	Total	%
8460	Papillary serous cystadenocarcinoma	26	24.1%
8441	Serous cystadenocarcinoma, NOS	14	13.0%
8140	Adenocarcinoma, NOS	7	6.5%
8380	Endometrioid adenocarcinoma, NOS	7	6.5%
8470	Mucinous cystadenocarcinoma, NOS	6	5.6%
8000	Neoplasm, malignant	5	4.6%
8461	Serous surface papillary carcinoma	5	4.6%
9071	Yolk sac tumor	5	4.6%
8010	Carcinoma, NOS	4	3.7%
8260	Papillary adenocarcinoma, NOS	4	3.7%
8480	Mucinous adenocarcinoma	4	3.7%
8310	Clear cell adenocarcinoma, NOS	3	2.8%
8810	Fibrosarcoma, NOS	2	1.9%
9060	Dysgerminoma	2	1.9%
	All Others	14	13.0%

Table 3.15.1 Morphological Distribution of Ovarian Cancer in Saudi Arabia, 2004

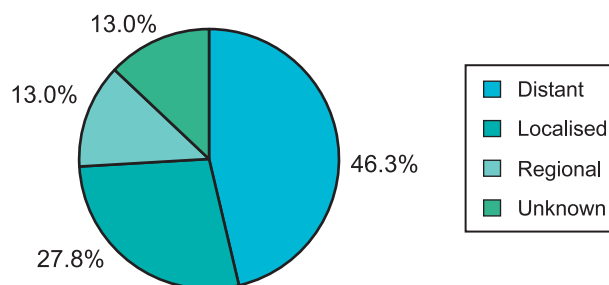


Figure 3.15.2 Stage Distribution of Ovarian Cancer, 2004

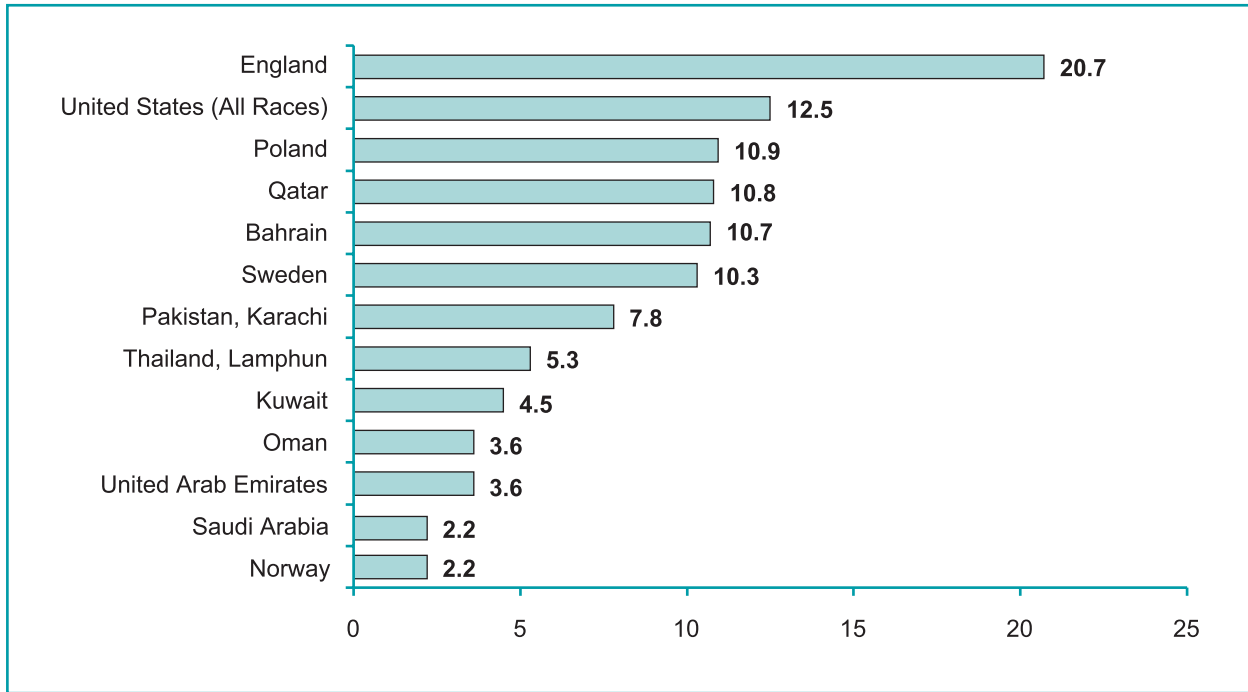


Figure 3.15.4 Comparison of ASR* for Ovarian Cancer among Saudi Females with ASR in Selected Countries**

* ASR Per 100,000

** Source for this information is summarized on page 66

**** References:**

- 1 United States Cancer Statistics. 2004 Incidence and Mortality, 2007
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http://www.thaigraphic.com/apocp/download/Volume5/Vol5_No1/Yasmin%20Bhurgri.pdf
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- 7 Cancer Incidence in Lamphun, Thailand. Volume I, 1998-2002
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- 10 Cancer in Poland in 2004. The Maria Sklodowska-Curie Memorial Cancer Center and Institute of Oncology. Warszawa 2006.

PART IV
CANCER AMONG NON-SAUDIS
2004

Cancer Among Non-Saudi Population 2004

Between January and December 2004, a total of 1,987 cancer cases were reported among the Non-Saudi population. Forty three in situ cases were excluded from the analysis. As a result, the total number of cases analyzed were 1944 out of this 1066(54.8%) were males and 878 (45.2%) were females. The male to female ratio was 121:100. 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 only 1.8 % and the 20 to 54 age-group represented 72.4% of non-Saudi population. During 2004, approximately 5.8% of all cancers occurred before the age of 15, 28 % occurred between the ages 15 to 40 years, 54.6% were between the ages 41-64, and 12% occurred after the age of 64. The median age at diagnosis was 49 years in males (range 0-96 years) and 45 years in females (range 0-98 years).

Cancer	All	%
Breast	333	17.1%
Colo-rectal	198	10.2%
NHL	121	6.2%
Skin	117	6.0%
Leukemia	106	5.5%
Thyroid	72	3.7%
Stomach	67	3.4%
Bladder	64	3.3%
Lung	63	3.2%
Prostate	60	3.1%

Table 4.1 Ten Most common Cancers among non-Saudis, 2004

Nationality	Male	%	Female	%	Total
Yemen	209	10.5%	159	8.0%	368
Egypt	117	5.9%	77	3.9%	194
Sudan	109	5.5%	75	3.8%	184
Philippines	60	3.0%	78	3.9%	138
Pakistan	76	3.8%	48	2.4%	124
India	69	3.5%	30	1.5%	99
Syrian Arab Republic	51	2.6%	38	1.9%	89
Bangladesh	72	3.6%	9	0.5%	81
Gaza Strip (Palestine)	39	2.0%	39	2.0%	78
Indonesia	6	0.3%	58	2.9%	64
Jordan	30	1.5%	26	1.3%	56
Bahrain	13	0.7%	38	1.9%	51
United Kingdom	30	1.5%	13	0.7%	43
United States of America	30	1.5%	11	0.6%	41
Kuwait	8	0.4%	8	0.4%	16
Qatar	5	0.3%	3	0.2%	8
Iraq	4	0.2%	2	0.1%	6
Oman	3	0.2%	0	0.0%	3
United Arab Emirates	1	0.1%	1	0.1%	2
Other Nationalities	160	8.1%	182	9.2%	342
Total	1092	55.0%	895	45.0%	1987

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

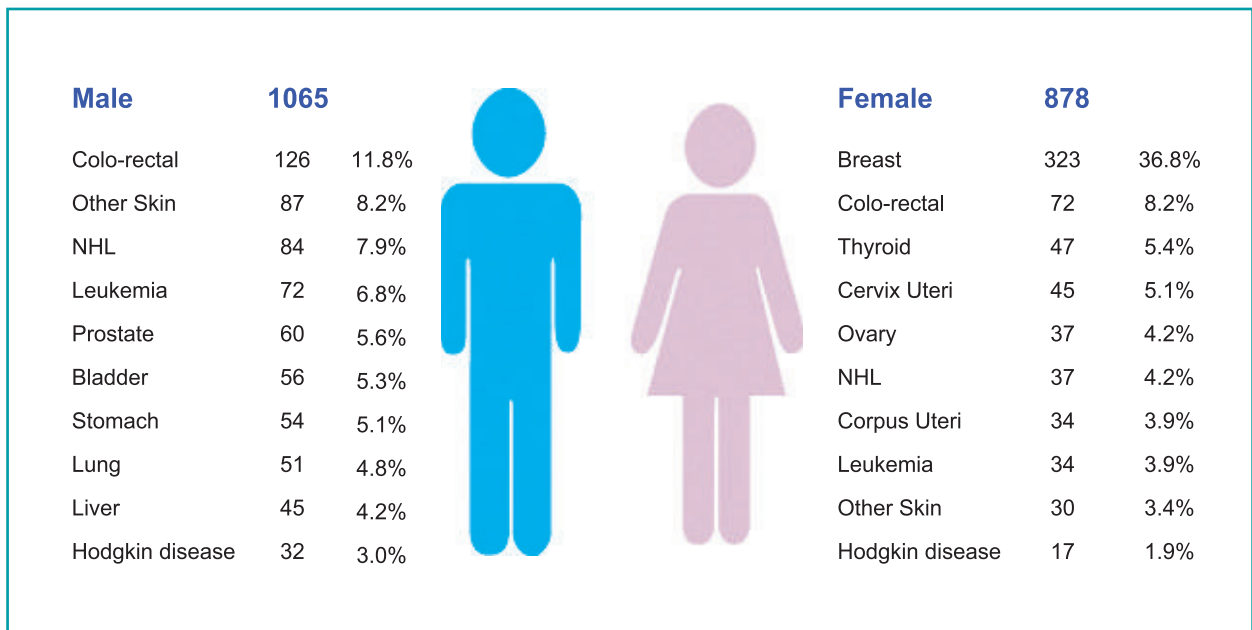


Figure 4.1 Ten Most Common Cancer among non-Saudis, 2004

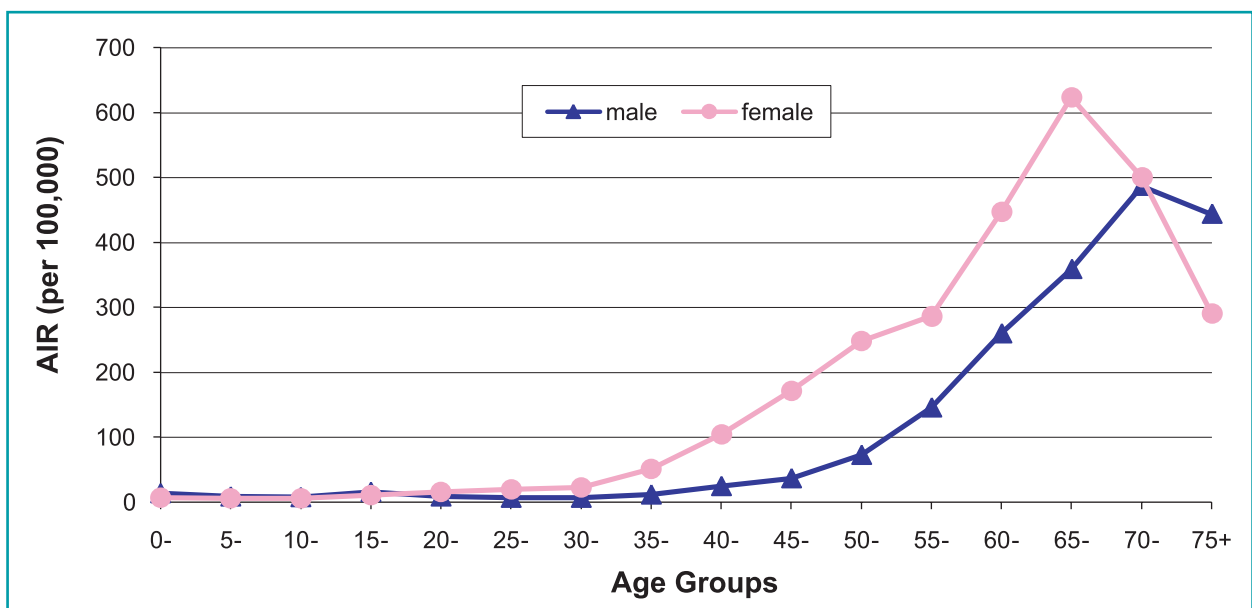


Figure 4.2 Age-Specific Incidence Rate (AIR) for All Cancers among non-Saudis in Saudi Arabia, 2004

PART V

TABLES

Table 5.1.1 Age Distribution of Cancer Cases among Saudi Males, 2004

ICD (10)	SITE	Tot.	UNK	0-4	5-9	10-14	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+	%
C00	Lip	8	0	0	0	0	0	0	0	0	0	0	0	1	2	0	1	1	3	0.2
C01-C02	Tongue	31	0	0	0	0	0	0	1	2	1	1	0	4	3	6	6	3	2	0.9
C03-C06	Mouth	35	0	0	0	1	1	0	1	0	1	3	1	3	1	4	2	6	12	1.0
C07-C08	Salivary Glands	11	0	0	1	0	1	0	2	2	0	0	0	0	1	0	1	2	1	0.3
C9	Tonsil	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0.1
C10	Other oropharynx	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.1
C11	Nasopharynx	100	0	1	3	6	4	1	6	13	14	9	10	9	10	9	2	5	2.9	
C12-C13	Hypopharynx	6	0	0	1	1	0	0	0	1	2	0	2	0	2	0	0	0	0	0.2
C14	Pharynx unsp. etc.	4	0	0	0	0	0	0	0	0	1	1	0	1	0	0	1	0	0	0.1
C15	Oesophagus	50	0	0	0	0	0	0	1	4	5	5	4	9	12	27	18	13	42	4.1
C16	Stomach	141	1	0	0	0	0	0	1	4	5	5	4	9	12	27	18	13	42	4.1
C17	Small intestine	21	0	0	0	1	1	0	1	1	1	2	3	4	2	2	3	0	2	0.6
C18	Colon	190	0	0	0	0	2	4	5	11	16	25	15	15	13	31	21	21	26	5.5
C19-C20	Rectum	176	0	0	0	2	0	1	5	10	8	14	17	28	24	23	21	23	5.1	
C21	Anus	18	0	0	0	0	0	0	0	0	0	0	0	2	1	5	1	1	3	0.5
C22	Liver	231	0	5	0	1	2	1	3	2	1	5	10	17	21	32	45	34	53	6.6
C23-C24	Gall bladder etc.	24	0	0	0	0	0	0	0	0	0	2	0	4	1	6	1	2	8	0.7
C25	Pancreas	71	0	0	0	0	0	0	1	2	3	3	5	5	7	12	15	8	10	2.0
C30-C31	Nose, sinuses, etc.	10	0	0	1	0	0	0	0	0	1	1	0	0	1	0	2	1	2	0.3
C32	Larynx	49	0	0	0	0	0	0	0	0	1	0	6	6	3	10	9	6	8	1.4
C33-C34	Trachea, Bronchus, Lung	233	0	2	0	2	1	0	4	4	4	11	15	26	23	45	24	31	45	6.7
C37-C38	Other Thoracic Organs	12	0	2	0	0	2	0	0	0	1	0	0	2	0	2	1	0	2	0.3
C40-C41	Bone	63	0	2	5	14	20	12	3	3	1	1	0	0	1	0	0	0	1	1.8
C43	Melanoma of Skin	13	0	0	0	0	0	0	0	0	0	0	1	0	0	5	0	2	5	0.4
C44	Other Skin	136	0	0	0	0	1	1	1	6	3	10	5	2	14	11	22	22	38	3.9
C45	Mesothelioma	6	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	2	0.2
C46	Kaposi sarcoma	25	0	0	0	0	0	0	1	4	0	1	3	3	2	1	4	4	2	0.7
C47; C49	Connective, Soft Tissue	57	0	4	1	3	4	8	6	3	6	6	3	1	1	4	0	3	4	1.6
C50	Breast	15	0	0	0	0	0	0	0	1	2	1	3	5	0	2	0	1	0	0.4
C60	Penis	3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0.1
C61	Prostate	214	0	0	0	0	0	0	0	1	0	4	8	14	14	29	36	44	77	6.2
C62	Testis	44	0	2	1	1	4	8	6	2	7	4	5	2	1	1	0	0	0	1.3
C63	Other male genital	3	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	0.2
C64	Kidney	122	0	8	3	1	0	2	4	4	5	9	13	9	13	10	16	8	17	3.5
C65	Renal pelvis	8	0	0	0	0	0	0	0	0	0	0	0	2	1	1	1	1	2	0.2
C66	Ureter	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0.1
C67	Bladder	160	0	0	1	0	0	0	0	1	4	6	13	13	8	23	25	23	43	4.6
C68	Other urinary organs	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.0
C69	Eye	19	0	6	0	0	1	0	1	0	1	0	0	2	2	1	2	1	2	0.5
C70-C72	Brain, Nervous System	147	0	25	17	11	5	3	5	7	10	10	5	8	6	9	9	8	9	4.2
C73	Thyroid	87	0	0	0	1	5	10	9	12	9	8	2	4	7	9	9	6	5	2.5
C74	Adrenal gland	5	0	3	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.1
C75	Other Endocrine	3	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.1
C81	Hodgkin Disease	166	0	12	20	18	27	21	11	11	10	7	10	2	5	5	2	4	1	4.8
C82-C85; C96	Non Hodgkin lymphoma	332	0	9	19	15	23	16	17	19	28	16	21	17	11	33	29	22	37	9.5
C88	Immunoproliferative dis.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.0
C90	Multiple Myeloma	37	0	0	0	0	0	0	1	0	1	5	3	1	3	6	8	3	7	1.1
C91	Lymphoid Leukemia	128	0	36	12	14	12	9	4	3	5	2	2	5	3	4	3	6	8	3.7
C92-C94	Myeloid Leukemia	102	1	14	0	11	9	9	9	3	6	5	4	3	1	4	9	4	10	2.9
C95	Leukemia unsp. etc.	11	0	3	0	4	1	0	0	0	1	1	1	1	0	0	0	0	0	0.3
Other	Other & unspecified	143	0	4	1	0	1	1	4	1	5	3	11	13	12	19	19	13	36	4.1
All	All Sites	3478	2	138	83	97	124	108	96	112	155	167	221	233	236	403	386	336	581	100
All but C44	All sites but C44	3342	2	138	83	97	123	107	95	106	152	157	216	231	222	392	364	314	543	96.09

Table 5.1.2 Age Distribution of Cancer Cases among Saudi Females, 2004

ICD10	SITE	Tot	UNK	0-4	5-9	10-14	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+	%
C00	Lip	6	0	0	0	0	0	0	0	0	0	0	1	0	2	1	0	0	0.2	
C01-C02	Tongue	30	0	0	0	0	1	0	3	0	2	1	0	5	1	7	2	5	3	0.9
C03-C06	Mouth	22	0	0	0	0	0	1	1	1	0	3	0	2	4	4	2	2	0.6	
C07-C08	Salivary Glands	10	0	0	0	0	0	0	0	1	0	0	2	2	0	1	2	2	0.3	
C9	Tonsil	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.0	
C10	Other oropharynx	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0.1	
C11	Nasopharynx	45	0	0	0	1	1	0	4	3	3	7	9	2	4	6	2	2	1.3	
C12-C13	Hypopharynx	16	0	0	0	0	0	0	1	1	0	2	3	3	2	3	1	0	0.5	
C14	Pharynx unsp.	3	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0.1	
C15	Oesophagus	51	0	0	0	0	0	0	0	3	4	4	4	1	3	9	6	9	1.5	
C16	Stomach	70	0	0	0	0	1	1	6	0	3	7	4	5	3	7	11	10	2.0	
C17	Small intestine	13	0	0	0	0	0	0	0	0	1	1	2	0	3	0	3	0	0.4	
C18	Colon	173	0	0	0	0	2	3	0	7	15	13	23	15	18	24	19	17	5.0	
C19-C20	Rectum	108	0	0	0	0	2	3	0	2	9	10	11	12	7	15	10	12	3.1	
C21	Anus	4	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	0.1	
C22	Liver	93	0	2	0	2	0	1	0	0	3	2	6	12	6	20	9	15	2.7	
C23-C24	Gall bladder etc.	51	0	0	0	0	0	0	0	1	2	5	6	4	7	6	6	8	1.5	
C25	Pancreas	28	0	0	0	0	0	0	0	0	0	1	2	5	1	7	2	6	0.8	
C30-C31	Nose, sinuses, etc.	6	0	0	0	1	1	0	1	0	0	0	0	2	0	0	0	0	0.2	
C32	Larynx	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0.1	
C33-C34	Trachea, Bronchus, Lung	63	0	0	0	0	1	3	1	0	1	1	5	5	10	13	7	6	1.8	
C37-C38	Other Thoracic Organs	10	0	0	0	0	0	1	0	1	0	1	0	1	2	1	2	1	0.3	
C40-C41	Bone	38	0	2	5	8	9	4	0	2	1	0	3	4	0	0	0	0	1.1	
C43	Melanoma of Skin	12	0	0	0	0	0	1	0	1	0	1	0	0	2	1	1	1	0.3	
C44	Other Skin	125	1	1	0	0	3	3	3	3	7	6	2	4	12	16	21	19	24	3.6
C45	Mesothelioma	4	0	0	0	0	0	0	0	0	0	0	0	1	2	1	0	0	0.1	
C46	Kaposi sarcoma	6	0	0	0	0	0	0	1	0	1	0	2	0	0	1	0	0	0.2	
C47; C49	Connective, Soft Tissue	70	0	12	3	4	3	1	8	6	3	3	4	7	1	6	6	0	3	2.0
C50	Breast	783	0	0	0	0	2	10	26	71	104	130	120	94	76	70	23	23	34	22.4
C51	Vulva	11	0	1	0	0	1	0	1	0	2	0	0	0	0	2	2	1	1	0.3
C52	Vagina	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.1
C53	Cervix Uteri	89	0	1	0	0	0	0	2	5	14	12	11	17	8	6	6	6	1	2.5
C54	Corpus Uteri	117	0	0	0	0	1	0	1	3	3	10	15	4	14	22	18	12	14	3.4
C55	Uterus Unspec.	9	0	0	0	0	0	0	0	0	0	1	0	2	4	0	1	0	1	0.3
C56	Ovary	108	0	0	1	5	2	3	6	5	8	9	13	10	9	12	9	6	10	3.1
C57	Other Female Genital	9	0	0	0	0	0	0	0	0	0	2	1	0	2	1	0	1	2	0.3
C58	Placenta	5	0	0	0	0	0	2	1	1	0	0	0	1	0	0	0	0	0	0.1
C64	Kidney	76	0	21	1	0	0	1	0	2	3	4	5	5	6	11	10	7	0	2.2
C65	Renal pelvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
C66	Ureter	2	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0.1
C67	Bladder	41	0	0	0	0	1	0	0	0	2	2	6	3	5	8	3	4	7	1.2
C68	Other urinary organs	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0
C69	Eye	18	0	12	0	0	0	0	0	0	0	0	0	0	1	1	2	0	2	0.5
C70-C72	Brain, Nervous System	100	0	14	17	6	8	9	3	5	6	4	1	3	4	3	8	6	3	2.9
C73	Thyroid	328	0	0	2	6	22	37	28	45	45	37	20	24	15	22	9	5	11	9.4
C74	Adrenal gland	16	0	12	1	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0.5
C75	Other Endocrine	2	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.1
C82-C85; C96	Hodgkin Disease	98	0	3	2	14	24	22	5	5	5	3	2	0	2	3	3	2	3	2.8
C88	Non Hodgkin lymphoma	224	1	9	6	5	9	11	9	10	13	12	14	22	20	23	20	16	24	6.4
C89	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	21	0	0	0	0	0	0	0	0	1	0	2	3	2	4	1	5	3	0.6
C91	Lymphoid Leukemia	81	0	34	14	8	6	2	1	2	1	0	0	1	4	1	1	4	2	2.3
C92-C94	Myeloid Leukemia	106	0	6	5	9	9	8	7	8	10	9	8	8	6	5	1	3	4	3.0
C95	Leukemia unsp.	7	0	2	3	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0.2
Other	Other & unspecified	171	1	1	1	1	1	1	1	5	13	11	16	13	17	18	26	18	28	4.9
All	All Ages Total	3491	3	135	62	69	109	125	125	198	285	318	326	304	283	361	266	232	290	100
Not C44	All sites but C44	3366	2	134	62	69	106	122	122	195	278	312	324	300	271	345	245	213	266	96

Table 5.1.3 Cancer Incidence Cases among Saudi Males by Age Group (per 100,000), 2004

ICD 10	SITE	Tot	UNK	0-4	5-9	10-14	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	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.4	0.0	1.0	1.3	2.6	0.1	0.2
C01-C02	Tongue	31	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.0	1.3	1.3	2.0	4.7	5.8	3.9	1.7	0.4	0.7
C03-C06	Mouth	35	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.0	0.7	0.3	1.3	0.7	3.2	1.9	7.7	10.4	0.4	0.7
C07-C08	Salivary Glands	11	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.4	0.4	0.0	0.0	0.0	0.7	0.0	1.0	2.6	0.9	0.1	0.2
C9	Tonsil	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.1
C10	Other oropharynx	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0
C11	Nasopharynx	100	0.0	0.0	0.1	0.3	0.6	0.5	0.1	0.7	1.2	3.1	4.1	6.3	6.1	7.9	8.7	2.6	4.3	1.2	2.0
C12-C13	Hypopharynx	6	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.9	0.0	1.6	0.0	0.0	0.0	0.1	0.1
C14	Pharynx unspec.	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.4	0.0	0.0	1.0	0.0	0.0	0.0	0.1
C15	Oesophagus	50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.9	2.7	3.9	5.8	7.7	22.4	0.6	1.1
C16	Stomach	141	1.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7	1.0	1.2	1.3	4.0	8.2	21.3	17.4	16.8	36.2	1.7	3.2
C17	Small intestine	21	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.2	0.5	1.0	1.8	1.4	1.6	2.9	0.0	1.7	0.3	0.4
C18	Colon	190	0.0	0.0	0.0	0.0	0.0	0.3	0.6	0.9	2.2	3.9	8.0	6.7	8.9	24.4	20.3	27.1	22.4	2.3	4.2
C19-C20	Rectum	176	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.9	2.0	1.9	4.5	7.6	19.1	18.9	22.2	27.1	19.8	2.1	4.1
C21	Anus	18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.9	0.7	3.9	1.0	1.3	2.6	0.2	0.4
C22	Liver	231	0.0	0.0	0.0	0.0	0.1	0.3	0.1	0.5	0.4	1.2	3.2	7.6	14.3	25.2	43.5	43.9	45.7	2.8	5.5
C23-C24	Gall bladder etc.	24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	1.8	0.7	4.7	1.0	2.6	6.9	0.3	0.6
C25	Pancreas	71	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.6	0.7	1.6	2.2	4.8	9.5	14.5	10.3	8.6	0.9	1.7
C30-C31	Nose, sinuses, etc.	10	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	1.9	1.3	1.7	0.1	0.2
C32	Larynx	49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	1.9	2.7	2.0	7.9	8.7	7.7	6.9	0.6	1.2
C33-C34	Trachea, Bronchus, Lung	233	0.0	0.2	0.0	0.0	0.2	0.1	0.0	0.7	0.8	2.7	4.8	11.7	15.7	35.5	23.2	40.0	38.8	2.8	5.5
C37-C38	Other Thoracic Organs	12	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.0	0.9	0.0	1.6	1.0	0.0	1.7	0.1	0.2
C40-C41	Bone	63	0.0	0.2	0.4	1.3	2.1	1.6	0.4	0.5	0.2	0.2	0.0	0.0	0.7	0.0	0.0	0.0	0.9	0.8	0.6
C43	Melanoma of Skin	13	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.1	0.6	2.4	1.6	0.9	9.6	8.7	21.3	28.4	32.8	1.6	3.0
C44	Other Skin	136	0.0	0.0	0.0	0.0	0.1	0.1	0.1	1.1	0.6	2.4	1.6	0.9	9.6	8.7	21.3	28.4	32.8	1.6	3.0
C45	Mesothelioma	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.8	1.0	1.3	1.7	0.1	0.1
C46	Kaposi sarcoma	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.2	1.0	1.3	1.4	0.8	3.9	5.2	1.7	0.3	0.5
C47; C49	Connective, Soft Tissue	57	0.0	0.4	0.1	0.3	0.4	1.1	0.8	0.5	1.2	1.5	1.0	0.4	0.7	3.2	0.0	3.9	3.5	0.7	0.8
C50	Breast	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.2	1.0	2.2	0.0	1.6	0.0	1.3	0.0	0.2	0.3
C60	Penis	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.1
C61	Prostate	214	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.0	1.3	3.6	9.6	22.9	34.8	56.8	66.4	2.6	5.1
C62	Testis	44	0.0	0.2	0.1	0.1	0.4	1.1	0.8	0.4	1.4	1.0	1.6	0.9	0.7	0.8	0.0	0.0	0.0	0.5	0.6
C63	Other male genital	3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.0	0.0	0.0	0.0	0.1
C64	Kidney	122	0.0	0.7	0.3	0.1	0.0	0.3	0.6	0.7	1.0	2.2	4.1	4.0	8.9	7.9	15.5	10.3	14.7	1.5	2.5
C65	Renal pelvis	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.8	1.0	1.3	1.7	0.1
C66	Ureter	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	1.0	0.0	0.0	0.0	0.1
C67	Bladder	160	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.8	1.5	4.1	5.8	5.5	18.1	24.2	29.7	37.1	1.9	3.7
C68	Other urinary organs	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
C69	Eye	19	0.0	0.6	0.0	0.0	0.1	0.0	0.1	0.0	0.2	0.0	0.0	0.9	1.4	0.8	1.9	1.3	1.7	0.2	0.3
C70-C72	Brain, Nervous System	147	0.0	2.3	1.5	1.0	0.5	0.4	0.7	1.2	2.0	2.4	1.6	3.6	4.1	7.1	8.7	10.3	7.8	1.8	2.3
C73	Thyroid	87	0.0	0.0	0.0	0.0	0.1	0.7	1.4	1.6	2.4	2.2	2.5	0.9	2.7	5.5	8.7	7.7	4.3	1.0	1.6
C74	Adrenal gland	5	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C75	Other Endocrine	3	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C81	Hodgkin Disease	166	0.0	1.1	1.8	1.7	2.8	2.8	1.5	1.9	2.0	1.7	3.2	0.9	3.4	3.9	1.9	5.2	0.9	2.0	2.1
C82-C85; C96	Non Hodgkin lymphoma	332	0.0	0.8	1.7	1.4	2.4	2.1	2.3	3.3	5.7	3.9	6.7	7.6	7.5	26.0	28.0	28.4	31.9	4.0	5.9
C88	Immunoproliferative dis.	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
C90	Multiple Myeloma	37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	1.2	1.0	0.4	2.0	4.7	7.7	3.9	6.0	0.4	0.9
C91	Lymphoid Leukemia	128	0.0	3.4	1.1	1.3	1.3	1.2	0.6	0.5	1.0	0.5	0.6	2.2	2.0	3.2	2.9	7.7	6.9	1.5	1.7
C92-C94	Myeloid Leukemia	102	1.0	1.3	0.0	1.0	0.9	1.2	1.2	0.5	1.2	1.2	1.3	1.3	0.7	3.2	8.7	5.2	8.6	1.2	1.6
C95	Leukemia unspec.	11	0.0	0.3	0.0	0.4	0.1	0.0	0.0	0.0	0.0	0.2	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Other	Other & unspecified	143	0.0	0.4	0.1	0.0	0.1	0.1	0.6	0.2	1.0	0.7	3.5	5.8	8.2	15.0	18.4	16.8	31.1	1.7	3.2
All	All Ages Total	3478	2.0	13.0	7.5	9.1	12.8	14.4	12.8	19.9	31.1	40.2	70.6	103.8	161.3	317.9	373.4	433.8	501.0	41.6	70.2
Not C44	All sites but C44	3342	2.0	13.0	7.5	9.1	12.7	14.3	12.7	18.8	30.5	37.8	69.0	102.9	151.7	309.2	352.1	405.4	468.2	40.0	67.2

Table 5.1.4 Cancer Incidence Cases among Saudi Females by Age Group (per 100,000), 2004

ICD 10	SITE	Tot	UNK	0-4	5-9	10-14	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	6	0	0	0	0	0	0	0	0	0	0	0.4	0	1.3	1.5	1	0	0	0.1	0.2
C01-C02	Tongue	30	0	0	0	0	0.1	0	0.4	0	0.4	0.3	0	2.5	0.7	5.2	2	5.9	3.2	0.4	0.7
C03-C06	Mouth	22	0	0	0	0	0	0.1	0.1	0.2	0	0.8	0	1	1.3	3	3.9	2.4	2.1	0.3	0.5
C07-C08	Salivary Glands	10	0	0	0	0	0	0	0	0.2	0	0	0.7	1	0	0.7	2	2.4	0	0.1	0.2
C9	Tonsil	1	0	0	0	0	0	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0
C10	Other oropharynx	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0.1
C11	Nasopharynx	45	0	0	0.1	0.1	0.1	0.6	0.5	0.6	1.9	3.2	1	2.6	4.5	2	2.4	1.1	0.5	0.9	0.9
C12-C13	Hypopharynx	16	0	0	0	0	0	0	0.1	0.2	0	0.3	0	1.5	1.3	2.2	1	0	0	0.2	0.4
C14	Pharynx unspec.	3	0	0	0	0	0	0	0	0	0	0.3	0	0	0	0	2	0	0	0	0.1
C15	Oesophagus	51	0	0	0	0	0.1	0.1	0.1	0.9	0.6	1.9	1.4	2.5	2	5.2	10.8	11.8	12.8	0.8	1.6
C16	Stomach	70	0	0	0	0.1	0.1	0.1	0.9	0	0.6	1.9	1.4	2.5	2	5.2	10.8	11.8	12.8	0.8	1.6
C17	Small intestine	13	0	0	0	0	0	0	0	0	0.2	0.3	0.7	0	2	0	3	0	3.2	0.2	0.3
C18	Colon	173	0	0	0	0	0.3	1.2	3	3.5	8.3	7.5	11.7	17.8	18.7	20	21.4	21	3.9	2.9	3.9
C19-C20	Rectum	108	0	0	0	0.2	0.4	0	0.3	1.8	2.7	4	6	4.6	11.1	9.9	14.1	16	1.3	2.4	2.4
C21	Anus	4	0	0	0	0	0.1	0	0.2	0	0	0	0	0	0	0	1	0	1.1	0	0.1
C22	Liver	93	0	0.2	0	0.2	0	0.1	0	0.6	0.5	2.2	6	3.9	14.9	8.9	17.6	16	1.1	2.2	2.2
C23-C24	Gall bladder etc.	51	0	0	0	0	0	0	0.2	0.4	1.3	2.2	2	4.6	4.5	5.9	7.1	8.5	0.6	1.1	1.2
C25	Pancreas	28	0	0	0	0	0	0	0	0	0.3	0.7	2.5	0.7	5.2	2	7.1	4.3	0.3	0.7	0.7
C30-C31	Nose, sinuses, etc.	6	0	0	0	0.1	0.1	0	0.1	0	0	0	0.4	1	0	0	0	0	0.1	0.1	0.1
C32	Larynx	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	3.2	0.1	0.1
C33-C34	Trachea, Bronchus, Lung	63	0	0	0	0.1	0.4	0.1	0.2	0.3	1.8	2.5	6.5	9.7	6.9	7.1	10.7	0.8	1.5	1.5	1.5
C37-C38	Other Thoracic Organs	10	0	0	0	0	0	0	0.2	0	0.3	0	0.5	1.3	0.7	2	1.2	0	0.1	0.2	0.2
C40-C41	Bone	38	0	0.2	0.4	0.7	1	0.5	0	0.3	0.2	1.1	2	0	0	0	0	0	0	0.5	0.5
C43	Melanoma of Skin	12	0	0	0	0.1	0.1	0.1	0.1	0.2	0	0.3	0	1.3	0.7	1	1.2	3.2	0.1	0.2	0.2
C44	Other Skin	125	1	0.1	0	0	0.3	0.4	0.4	0.5	1.4	1.6	0.7	2	7.8	11.9	20.7	22.3	25.6	1.5	2.9
C45	Mesothelioma	4	0	0	0	0	0	0	0	0	0	0	0.4	1	0.7	0	0	0	0	0	0.1
C46	Kaposi sarcoma	6	0	0	0	0	0	0	0.1	0	0.2	0	0.7	0	0.7	0	0	0	1.1	0.1	0.1
C47; C49	Connective, Soft Tissue	70	0	1.1	0.3	0.3	0.3	0.1	1.1	1	0.6	0.8	1.4	3.5	0.7	4.5	5.9	0	3.2	0.8	1.2
C50	Breast	783	0	0	0	0.2	1.3	3.7	12.3	20.8	34.8	43.2	47	49.5	52	22.7	27	36.3	9.5	15.4	15.4
C51	Vulva	11	0	0.1	0	0	0.1	0	0.1	0	0.4	0	0	0	0	1.5	2	1.2	1.1	0.1	0.2
C52	Vagina	3	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.1
C53	Cervix Uteri	89	0	0.1	0	0	0	0.3	0.9	2.8	3.2	4	8.5	5.2	4.5	5.9	7.1	1.1	1.1	1.1	1.8
C54	Corpus Uteri	117	0	0	0	0.1	0	0.1	0.5	0.6	2.7	5.4	2	9.1	16.3	17.7	14.1	15	1.4	2.8	2.8
C55	Uterus Unspec.	9	0	0	0	0	0	0	0	0	0.3	0	1	2.6	0	1	0	1.1	0.1	0.2	0.2
C56	Ovary	108	0	0.1	0.4	0.2	0.4	0.9	0.9	1.6	2.4	4.7	5	5.9	8.9	8.9	7.1	10.7	1.3	2.2	2.2
C57	Other Female Genital	9	0	0	0	0	0	0	0	0.5	0.4	0	0.5	0	0	0	0	1.2	2.1	0.1	0.2
C58	Placenta	5	0	0	0	0	0.3	0.1	0.2	0	0	0	0	0.5	0	0	0	0	0	0.1	0.1
C64	Kidney	76	0	2	0.1	0	0.1	0	0.3	0.6	1.1	1.8	2.5	3.9	8.2	9.9	8.2	0	0.9	1.6	1.6
C65	Renal pelvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C66	Ureter	2	0	0	0	0	0	0	0	0.2	0	0	0	0.7	0	0	0	0	0	0	0
C67	Bladder	41	0	0	0	0.1	0	0	0	0.4	0.5	2.2	1.5	3.3	5.9	3	4.7	7.5	0.5	1	1
C68	Other urinary organs	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	0	0
C69	Eye	18	0	1.1	0	0	0	0	0	0	0	0	0	0.7	0.7	2	0	2.1	0.2	0.3	0.3
C70-C72	Brain, Nervous System	100	0	1.3	1.5	0.5	0.9	1.1	0.4	0.9	1.2	1.1	0.4	1.5	2.6	2.2	7.9	7.1	3.2	1.2	1.5
C73	Thyroid	328	0	0.2	0.5	2.3	4.7	4	7.8	9	9.9	7.2	12	9.8	16.3	8.9	5.9	11.8	4	5.3	5.3
C74	Adrenal gland	16	0	1.1	0.1	0	0	0.1	0	0	0.5	0	0	0	0	0	0	0	0.2	0.2	0.2
C75	Other Endocrine	2	0	0	0.1	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0
C81	Hodgkin Disease	98	0	0.3	0.2	1.2	2.6	2.8	0.7	0.9	1	0.8	0.7	0	1.3	2.2	3	2.4	3.2	1.2	1.2
C82-C85; C96	Non Hodgkin lymphoma	224	1	0.9	0.5	0.4	1	1.4	1.3	1.7	2.6	3.2	5	11	13	17.1	19.7	18.8	25.6	2.7	4.5
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	21	0	0	0	0	0	0	0	0	0.2	0	0.7	1.5	1.3	3	1	5.9	3.2	0.3	0.5
C91	Lymphoid Leukemia	81	0	3.2	1.3	0.7	0.6	0.3	0.1	0.3	0.2	0	0	0.5	2.6	0.7	1	4.7	2.1	1	1
C92-C94	Myeloid Leukemia	106	0	0.6	0.4	0.8	1	1	1.4	2	2.4	2.9	4	3.9	3.7	1	3.5	4.3	1.3	1.6	1.6
C95	Leukemia unspec.	7	0	0.2	0.3	0	0	0	0	0	0	0.3	0.4	0	0	0	0	0	0	0.1	0.1
Other	Other & unspecified	171	1	0.1	0.1	0	0.1	0.1	0.1	0.9	2.6	2.9	5.8	6.5	11.1	13.4	25.6	21.2	29.9	2.1	3.9
All	All Ages Total	3491	3	12.8	5.6	5.9	11.6	15.8	17.3	34.4	57	85.3	117.6	152	184.8	268	262.7	273.3	309.9	42.1	69.3
Not C44	All sites but C44	3366	2	12.7	5.6	5.9	11.3	15.4	16.9	33.9	55.6	83.7	116.9	150	177	256.1	242	251	284.3	40.6	66.4

Table 5.3.1 Age Distribution of Cancer Cases among non-Saudi Males, 2004

ICD (10)	SITE	Tot.	UNK	0-4	5-9	10-14	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+	%
C00	Lip	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0.2
C01-C02	Tongue	9	0	0	0	0	0	0	0	1	0	3	2	2	0	1	0	0	0	0.8
C03-C06	Mouth	5	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	1	0.5
C07-C08	Salivary Glands	4	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0.4
C9	Tonsil	4	0	0	0	0	0	0	0	0	1	1	0	1	0	0	1	0	0	0.4
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	23	0	0	0	2	3	1	0	3	3	3	4	4	2	1	0	0	0	2.2
C12-C13	Hypopharynx	2	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.2
C14	Pharynx unsp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
C15	Oesophagus	17	0	0	0	0	0	0	0	0	0	1	5	5	3	1	0	1	1	1.6
C16	Stomach	54	0	0	0	0	1	2	2	2	6	7	3	10	6	8	4	5	0	5.1
C17	Small intestine	7	0	0	0	0	0	1	0	0	0	1	2	2	0	0	0	0	0	0.7
C18	Colon	79	0	0	0	0	0	1	0	5	8	8	7	15	11	13	7	3	1	7.4
C19-C20	Rectum	47	0	0	0	0	2	3	3	3	5	10	8	3	4	5	1	1	2	4.4
C21	Anus	6	0	0	0	0	0	1	1	0	1	1	0	2	0	0	0	0	0	0.6
C22	Liver	45	0	1	0	1	0	0	2	0	3	3	7	7	9	2	4	3	3	4.2
C23-C24	Gall bladder etc.	16	0	0	0	0	0	0	0	1	1	2	0	1	3	3	1	2	1	1.5
C25	Pancreas	15	0	0	0	0	0	0	0	0	0	2	0	2	4	2	2	2	1	1.4
C30-C31	Nose, sinuses, etc.	6	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	0.6
C32	Larynx	19	0	0	0	0	0	0	0	0	1	3	1	3	3	4	2	2	0	1.8
C33-C34	Trachea, Bronchus, Lung	51	0	0	0	0	0	0	1	1	2	2	6	9	8	9	7	2	4	4.8
C37-C38	Other Thoracic Organs	3	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	0.3
C40-C41	Bone	7	0	0	0	0	2	1	0	1	2	0	0	0	1	0	0	0	0	0.7
C43	Melanoma of Skin	5	0	0	0	0	0	0	0	0	1	0	2	0	1	0	1	0	0	0.5
C44	Other Skin	87	1	1	1	0	0	0	2	5	8	11	9	14	18	8	3	3	3	8.2
C45	Mesothelioma	3	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0.3
C46	Kaposi sarcoma	4	0	1	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0.4
C47; C49	Connective, Soft Tissue	26	0	4	2	1	1	0	2	2	1	4	5	3	0	0	1	0	0	2.4
C50	Breast	10	0	0	0	0	0	0	0	0	1	1	3	2	2	1	0	0	0	0.9
C60	Penis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
C61	Prostate	60	0	0	0	0	0	0	0	0	0	1	2	6	8	16	6	9	12	5.6
C62	Testis	22	0	0	0	1	0	3	3	6	4	3	2	0	0	0	0	0	0	2.1
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	24	0	3	0	0	0	0	0	2	0	6	5	2	5	1	0	0	0	2.3
C65	Renal pelvis	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.1
C66	Ureter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
C67	Bladder	56	0	0	0	0	0	0	0	0	2	4	5	13	9	9	7	3	4	5.3
C68	Other urinary organs	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.1
C69	Eye	8	0	2	0	0	1	0	0	1	1	0	1	2	0	0	0	0	0	0.8
C70-C72	Brain, Nervous System	31	0	5	3	1	2	1	1	1	2	2	5	2	4	1	0	0	1	2.9
C73	Thyroid	25	0	0	1	0	1	1	2	0	6	5	3	4	1	1	0	0	0	2.3
C74	Adrenal gland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
C75	Other Endocrine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
C81	Hodgkin Disease	32	0	2	2	1	3	2	2	4	7	2	5	0	2	0	0	0	0	3.0
C82-C85; C96	Non Hodgkin lymphoma	84	1	4	3	3	4	3	11	7	6	14	7	8	5	4	1	2	1	7.9
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	8	0	0	0	0	0	0	0	0	0	0	1	3	2	0	0	0	0	0.8
C91	Lymphoid Leukemia	33	0	5	5	4	5	6	1	1	0	0	2	2	1	0	0	1	0	3.1
C92-C94	Myeloid Leukemia	32	0	2	0	2	3	1	6	0	3	8	4	1	0	1	0	1	0	3.0
C95	Leukemia unsp.	7	0	0	1	0	0	0	0	0	0	2	0	1	0	1	1	1	0	0.7
Other	Other & unspecified	85	0	1	0	1	0	2	2	8	2	14	14	8	11	7	8	6	1	8.0
All	All Sites	1065	2	31	18	15	24	28	43	52	82	127	126	142	124	103	60	48	40	100
All but C44	All sites but C44	978	1	30	17	15	24	28	41	47	74	116	117	128	106	95	57	45	37	91.831

Table 5.3.2 Age Distribution of Cancer Cases among non-Saudi Females, 2004

ICD10	SITE	Tot	UNK	0-4	5-9	10-14	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+	%
C00	Lip	2	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0.2
C01-C02	Tongue	5	0	0	0	0	0	0	0	0	2	0	1	0	0	1	0	1	0	0.6
C03-C06	Mouth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
C07-C08	Salivary Glands	2	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0.2
C9	Tonsil	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.1
C10	Other oropharynx	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.1
C11	Nasopharynx	10	0	0	0	0	2	0	0	2	1	1	1	1	0	1	1	0	0	1.1
C12-C13	Hypopharynx	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
C14	Pharynx unspc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
C15	Oesophagus	8	0	0	0	0	0	0	0	0	1	1	1	1	0	1	2	0	1	0.9
C16	Stomach	13	0	0	0	0	0	0	1	0	1	2	2	1	1	0	2	3	0	1.5
C17	Small intestine	2	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.2
C18	Colon	46	0	0	0	0	0	0	2	4	5	6	9	5	5	3	0	0	2	5.2
C19-C20	Rectum	26	0	0	0	0	1	1	1	3	4	2	2	2	2	2	1	1	1	3.0
C21	Anus	5	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	1	0.6
C22	Liver	12	0	0	0	0	0	0	1	0	0	0	1	5	1	1	2	0	1	1.4
C23-C24	Gall bladder etc.	10	0	0	0	0	0	0	0	0	0	3	0	2	1	1	3	0	0	1.1
C25	Pancreas	5	0	0	0	0	0	0	0	0	1	0	0	1	1	0	1	0	0	0.6
C30-C31	Nose, sinuses, etc.	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.1
C32	Larynx	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
C33-C34	Trachea, Bronchus, Lung	12	0	0	0	0	0	1	1	1	1	0	1	3	1	1	1	1	0	1.4
C37-C38	Other Thoracic Organs	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.1
C40-C41	Bone	8	0	1	1	2	1	1	0	0	0	2	0	0	0	0	0	0	0	0.9
C43	Melanoma of Skin	8	0	0	0	0	0	1	0	0	1	0	1	1	0	2	1	1	0	0.9
C44	Other Skin	30	0	0	0	0	0	0	1	1	2	2	3	6	5	5	1	1	3	3.4
C45	Mesothelioma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
C46	Kaposi sarcoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
C47; C49	Connective, Soft Tissue	7	0	0	0	0	1	0	1	0	1	1	2	0	1	0	0	0	0	0.8
C50	Breast	323	0	0	0	0	1	2	17	23	45	68	63	38	23	22	8	6	7	36.8
C51	Vulva	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
C52	Vagina	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.1
C53	Cervix Uteri	45	0	0	0	0	1	0	2	6	8	4	5	6	0	5	3	4	1	5.1
C54	Corpus Uteri	34	0	0	0	0	0	0	0	1	6	7	0	0	9	4	5	2	0	3.9
C55	Uterus Unspec.	6	0	0	0	0	0	0	0	0	0	0	2	1	2	1	0	0	0	0.7
C56	Ovary	37	0	0	0	0	0	2	4	1	5	5	4	6	0	4	5	1	0	4.2
C57	Other Female Genital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
C58	Placenta	3	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0.3
C64	Kidney	11	0	2	1	0	0	0	3	3	0	0	0	2	0	0	0	0	0	1.3
C65	Renal pelvis	0	0	0	0	0	0	0	0	0	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	0	0.1
C67	Bladder	8	0	0	0	0	0	0	0	0	1	0	0	1	2	0	1	2	1	0.9
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	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.2
C70-C72	Brain, Nervous System	14	0	1	3	2	1	1	0	0	0	2	3	0	0	0	1	0	0	1.6
C73	Thyroid	47	0	0	0	0	0	2	5	6	11	8	5	5	2	2	0	1	0	5.4
C74	Adrenal gland	3	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0.3
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	17	0	0	2	2	1	5	2	1	1	1	1	1	0	0	0	0	0	1.9
C82-C85; C96	Non Hodgkin lymphoma	37	0	0	1	1	3	2	2	5	3	3	2	5	0	4	4	1	1	4.2
C88	Immunoproliferative dis.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.1
C90	Multiple Myeloma	8	0	0	0	0	0	0	0	0	1	0	0	1	2	1	1	2	0	0.9
C91	Lymphoid Leukemia	19	0	8	3	1	1	2	1	0	0	0	0	1	2	0	0	0	0	2.2
C92-C94	Myeloid Leukemia	15	0	0	1	1	2	1	2	2	0	0	2	0	1	0	0	1	0	1.7
C95	Leukemia unspc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Other	Other & unspecified	28	1	2	0	0	1	1	1	3	3	3	4	4	0	1	0	4	0	3.2
All	All Ages Total	878	1	15	12	10	15	26	48	62	98	127	125	108	62	67	49	32	21	100.0
Not C44	All sites but C44	848	1	15	12	10	15	26	47	61	96	125	122	102	57	62	48	31	18	96.6

Table 5.3.3 Incidence Rates for Cancer Cases among non-Saudi Males by Age Group (per 100,000), 2004

ICD 10	SITE	Tot	UNK	0-4	5-9	10-14	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	0.3	0	0	0	6	0	0	0	0.2
C01-C02	Tongue	9	0	0	0	0	0	0	0	0.1	0	0.6	0.6	1	0	2.5	0	0	0	0.2	0.2
C03-C06	Mouth	5	0	0	0	0	0	0	0	0	0.1	0	0.3	0	0	2.5	0	10.1	11.1	0.1	0.6
C07-C08	Salivary Glands	4	0	0	0	0	0	0	0	0	0.4	0.2	0	0	0	0	0	0	0	0.1	0
C9	Tonsil	4	0	0	0	0	0	0	0	0	0.1	0.2	0	0.5	0	0	6	0	0	0.1	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	23	0	0	0	1.3	1	0.2	0	0.4	0.6	1.2	2.1	2.4	2.5	0	0	0	0	0.5	0.6
C12-C13	Hypopharynx	2	0	0	0	0	0	0	0	0	0	0	0.3	0.5	0	0	0	0	0	0	0
C14	Pharynx unspec.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C15	Oesophagus	17	0	0	0	0	0	0	0	0	0	0.2	1.5	2.6	3.5	2.5	0	10.1	11.1	0.4	0.9
C16	Stomach	54	0	0	0	0	0	0.3	0.3	0.3	0.9	1.4	0.9	5.2	7.1	20.2	23.9	50.7	0	1.3	3.3
C17	Small intestine	7	0	0	0	0	0	0	0.2	0	0	0.2	0.6	1	0	0	0	0	0	0.2	0.3
C18	Colon	79	0	0	0	0	0	0.3	0	0.7	1.2	1.6	2.1	7.8	12.9	32.8	41.9	30.4	11.1	1.8	4.7
C19-C20	Rectum	47	0	0	0	0	0	0.7	0.5	0.4	0.7	1.9	2.4	1.6	4.7	12.6	6	10.1	22.2	1.1	2
C21	Anus	6	0	0	0	0	0	0.3	0	0.1	0.1	0.2	0	1	0	0	0	0	0	0	0.1
C22	Liver	45	0	0.4	0	0.6	0	0	0.3	0	0.4	0.6	2.1	3.6	10.6	5	23.9	30.4	33.3	1.1	3.1
C23-C24	Gall bladder ect.	16	0	0	0	0	0	0	0	0.1	0.1	0.4	0.3	0.5	3.5	7.6	6	20.3	11.1	0.4	1.3
C25	Pancreas	15	0	0	0	0	0	0	0	0	0	0.4	0	1	4.7	5	12	20.3	11.1	0.4	1.5
C30-C31	Nose, sinuses, etc.	6	0	0	0	0	0	0	0.2	0	0	0	0.6	1	0	0	0	0	0	0.1	0.1
C32	Larynx	19	0	0	0	0	0	0	0	0	0.1	0.6	0.3	1.6	3.5	10.1	12	20.3	0	0.4	1.4
C33-C34	Trachea, Bronchus, Lung	51	0	0	0	0	0	0	0.2	0.1	0.3	0.4	1.8	4.7	9.4	22.7	41.9	20.3	44.4	1.2	4.2
C37-C38	Other Thoracic Organs	3	0	0	0	0	0	0	0	0	0	0.2	0	0.5	0	0	0	0	0	0.1	0.3
C40-C41	Bone	7	0	0	0	0	1.3	0.3	0	0.1	0.3	0	0	0	1.2	0	0	0	0	0.2	0.2
C43	Melanoma of Skin	5	0	0	0	0	0	0	0	0.1	0.1	0	0.6	0	0	1.2	0	6	0	0	0.3
C44	Other Skin	87	1	0.4	0.5	0	0	0	0.3	0.7	1.2	2.1	2.7	7.2	21.2	20.2	18	30.4	33.3	2	4.4
C45	Mesothelioma	3	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0	2.5	0	0	0.1	0.3
C46	Kaposi sarcoma	4	0	0.4	0	0	0	0	0	0	0	0.2	0	0	1.2	0	0	0	0	0.1	0.3
C47; C49	Connective, Soft Tissue	26	0	1.8	1	0.6	0.7	0	0.3	0.3	0.1	0.8	1.5	1.6	0	0	6	0	0	0.6	0.9
C50	Breast	10	0	0	0	0	0	0	0	0	0.1	0.2	0.9	1	2.4	2.5	0	0	0	0.2	0.3
C60	Penis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C61	Prostate	60	0	0	0	0	0	0	0	0	0	0.2	0.6	3.1	9.4	40.4	35.9	91.3	133.3	1.4	7.8
C62	Testis	22	0	0	0	0.6	0	1	0.5	0.8	0.6	0.6	0	0	0	0	0	0	0	0.5	0.3
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	24	0	1.3	0	0	0	0	0	0.3	0	1.2	1.5	1	5.9	2.5	0	0	0	0.6	0.7
C65	Renal pelvis	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2.5	0	0	0	0	0.1
C66	Ureter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C67	Bladder	56	0	0	0	0	0	0	0	0	0.3	0.8	1.5	6.7	10.6	22.7	41.9	30.4	44.4	1.3	4.6
C68	Other urinary organs	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2.5	0	0	0	0	0.1
C69	Eye	8	0	0.9	0	0	0.7	0	0	0.1	0.1	0	0.3	1	0	0	0	0	0	0.2	0.3
C70-C72	Brain, Nervous System	31	0	2.2	1.4	0.6	1.3	0.3	0.2	0.1	0.3	0.4	1.5	1	4.7	2.5	0	0	11.1	0.7	1.3
C73	Thyroid	25	0	0	0.5	0	0.7	0.3	0.3	0	0.9	1	0.9	2.1	1.2	2.5	0	0	0	0.6	0.6
C74	Adrenal gland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C75	Other Endocrine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C81	Hodgkin Disease	32	0	0.9	1	0.6	2	0.7	0.3	0.6	1	0.4	1.5	0	2.4	0	0	0	0	0.7	0.8
C82-C85; C96	Non Hodgkin lymphoma	84	1	1.8	1.4	1.7	2.7	1	1.8	1	0.9	2.7	2.1	4.1	5.9	10.1	6	20.3	11.1	2	3.1
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	8	0	0	0	0	0	0	0	0	0	0	0.3	1.6	2.4	0	12	0	0	0.2	0.5
C91	Lymphoid Leukemia	33	0	2.2	2.4	2.3	3.3	2	0.2	0.1	0	0	0.6	1	1.2	0	0	10.1	0	0.8	1.5
C92-C94	Myeloid Leukemia	32	0	0.9	0	1.1	2	0.3	1	0	0.4	1.6	1.2	0.5	0	2.5	0	10.1	0	0.7	1
C95	Leukemia unspec.	7	0	0	0.5	0	0	0	0	0	0	0.4	0	0.4	0	2.5	6	10.1	0	0.2	0.6
Other	Other & unspecified	85	0	0.4	0	0.6	0	0.7	0.3	1.1	0.3	2.7	4.1	4.1	12.9	17.7	47.9	60.9	11.1	2	5
All	All Ages Total	1065	2.0	14.0	9.0	8.0	16.0	9.0	7.0	7.0	11.0	23.0	35.0	66.0	125.0	240.0	341.0	457.0	411.0	22.9	55.9
Not C44	All sites but C44	978	1.0	13.0	8.0	8.0	16.0	9.0	7.0	7.0	11.0	23.0	35.0	66.0	125.0	240.0	341.0	457.0	411.0	22.9	55.9

Table 5.3.4 Incidence Rates for Cancer Cases among non-Saudi Females by Age Group (per 100,000), 2004

ICD10	SITE	Tot	UNK	0-4	5-9	10-14	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	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.1	0.3
C01-C02	Tongue	5	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.4	0.0	0.0	6.7	0.0	15.6	0.0	0.3	0.7
C03-C06	Mouth	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0
C07-C08	Salivary Glands	2	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0	0.2
C9	Tonsil	1	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C10	Other oropharynx	1	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.1	0.2
C11	Nasopharynx	10	0	0.0	0.0	0.0	1.2	0.0	0.0	0.7	0.5	0.8	1.4	2.3	0.0	6.7	12.7	0.0	0.0	0.5	1.1
C12-C13	Hypopharynx	1	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C14	Pharynx unspec.	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0
C15	Oesophagus	8	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.8	1.4	2.3	0.0	6.7	25.4	0.0	13.8	0.4	1.6
C16	Stomach	13	0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.5	1.6	2.7	2.3	4.6	0.0	25.4	46.9	0.0	0.7	2.3
C17	Small intestine	2	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.3	0.0	0.0	0.0	0.0	0.0	0.1	0.2
C18	Colon	46	0	0.0	0.0	0.0	0.0	0.0	0.8	1.5	2.6	4.9	12.3	11.5	23.1	33.3	38.2	0.0	27.6	2.4	5.9
C19-C20	Rectum	26	0	0.0	0.0	0.0	0.7	0.6	0.4	1.1	2.1	1.6	2.7	11.5	9.2	13.3	12.7	15.6	13.8	1.4	3
C21	Anus	5	0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.8	1.4	0.0	0.0	0.0	12.7	0.0	13.8	0.3	0.8
C22-C24	Liver	12	0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	1.4	11.5	4.6	6.7	25.4	0.0	0.6	2.2
C25	Gall bladder ect.	10	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	4.6	4.6	6.7	38.2	0.0	0.0	0.5	2
C30-C31	Pancreas	5	0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	2.3	4.6	0.0	12.7	0.0	13.8	0.3	1
C32	Nose, sinuses, etc.	1	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C33-C34	Larynx	1	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.7	0.0	0.0	0.1	0.4
C37-C38	Trachea, Bronchus, Lung	12	0	0.0	0.0	0.0	0.0	0.6	0.4	0.4	0.5	0.0	1.4	6.9	4.6	6.7	12.7	15.6	0.0	0.6	1.7
C40-C41	Other Thoracic Organs	1	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C42	Bone	8	0	0.5	1.2	0.7	0.6	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4
C43	Melanoma of Skin	8	0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C44	Other Skin	30	0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	1.0	1.6	4.1	13.8	23.1	33.3	12.7	15.6	41.4	1.6	4.9
C45	Mesothelioma	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C46	Kaposi sarcoma	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C47; C49	Connective, Soft Tissue	7	0	0.0	0.0	0.0	0.7	0.0	0.4	0.0	0.5	0.8	2.7	0.0	4.6	0.0	0.0	0.0	0.0	0.4	0.5
C50	Breast	323	0	0.0	0.0	0.0	0.7	1.2	7.1	8.5	23.6	55.7	86.4	87.1	106.6	146.6	101.8	93.8	96.6	17.1	32.5
C51	Vulva	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0
C52	Vagina	1	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.1	0.3
C53	Cervix Uteri	45	0	0.0	0.0	0.0	0.0	0.7	0.8	2.2	4.2	3.3	6.9	13.8	0.0	33.3	38.2	62.6	13.8	2.4	5.8
C54	Corpus Uteri	34	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	4.9	9.6	2.3	41.5	26.7	63.6	31.3	0.0	1.8	6.2
C55	Uterus Unspec.	6	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	9.2	6.7	0.0	0.0	0.0	0.3	0.9
C56	Ovary	37	0	0.0	0.0	0.0	0.0	1.2	1.7	0.4	2.6	4.1	5.5	13.8	0.0	26.7	63.6	15.6	0.0	2	5
C57	Other Female Genital	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0
C58	Placenta	3	0	0.0	0.0	0.0	0.0	0.6	0.4	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1
C64	Kidney	11	0	0.9	0.5	0.0	0.0	1.2	1.1	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.6	0.6
C65	Renal pelvis	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C67	Bladder	8	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	2.3	9.2	0.0	12.7	31.3	13.8	0.4	1.8
C68	Other urinary organs	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.1	0.4
C70-C72	Brain, Nervous System	14	0	0.5	1.5	1.2	0.7	0.6	0.0	0.0	0.0	1.6	4.1	0.0	0.0	0.0	12.7	0.0	0.0	0.7	1.2
C73	Thyroid	47	0	0.0	0.0	0.0	0.0	1.2	2.1	2.2	5.8	6.5	6.9	11.5	9.2	13.3	0.0	15.6	0.0	2.5	3.3
C74	Adrenal gland	3	0	0.5	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
C75	Other Endocrine	1	0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C81	Hodgkin Disease	17	0	0.0	1.0	1.2	0.7	3.1	0.8	0.4	0.5	0.8	1.4	2.3	0.0	0.0	0.0	0.0	0.0	0.9	0.9
C82-C85; C96	Non Hodgkin lymphoma	37	0	0.0	0.5	0.6	2.1	1.2	0.8	1.8	1.6	2.5	2.7	11.5	0.0	26.7	50.9	15.6	13.8	2	4.7
C88	Immunoproliferative dis.	1	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.1	0.3
C90	Multiple Myeloma	8	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	2.3	9.2	6.7	12.7	31.3	0.0	0.4	1.8
C91	Lymphoid Leukemia	19	0	0.0	0.0	0.0	0.0	1.2	0.4	0.0	0.0	0.0	0.0	2.3	9.2	0.0	0.0	0.0	0.0	1	1.3
C92-C94	Myeloid Leukemia	15	0	0.0	0.5	0.6	1.4	0.6	0.8	0.7	0.0	1.6	2.7	0.0	4.6	0.0	0.0	15.6	0.0	0.8	1.2
C95	Leukemia unspec.	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0
Other	Other & unspecified	28	1	0.9	0.0	0.0	0.7	0.6	0.4	1.1	1.6	2.5	5.5	9.2	0.0	6.7	0.0	62.6	0.0	1.5	3
All	All Ages Total	878	1	7.0	6.0	6.0	11.0	16.0	20.0	23.0	51.0	104.0	171.0	248.0	286.0	447.0	623.0	500.0	290.0	46.6	103.1
Not C44	All sites but C44	848	1	7.0	6.0	6.0	11.0	16.0	20.0	22.0	50.0	102.0	167.0	234.0	263.0	413.0	611.0	485.0	248.0	45.0	98.2

PART VI
APPENDICES

Asir Region

Abha Private Hospital	Majaridah General Hospital
Armed Forces Hospital South	Maternity & Children's Hospital
Ahad Rafidah General Hospital	Namas General Hospital
Ahli Hospital	King Abdullah Bin Abdul Aziz
Asir Central Hospital	Sarat Obeidah General Hospital
Asir Hospital NOS	Saudi German Hospital (Abha)
Bashayer Hospital	Thaleeth General Hospital
Dhahran Al Janoob	Unknown Asir Hospital
Khamys Mishayt Civil Hospital	Zafer
King Fahd Armed Forces Hospital	
King Faisal Military Hospital	
Mahael General Hospital	

Baha Region

Baha Hospital NOS	Mandaq
Baljurashi General Hospital	Physical Therapy Center
King Fahd Hospital	Unknown Baha Hospital

Eastern Province

Al Ahsa Hospital (Hofuf)	King Fahd Hospital (Hofuf)
Al Mana General Hospital (Dammam)	King Fahd Hospital in the Eastern Province
Al Mana General Hospital (Khobar)	King Fahd Military
Al Mana General Hospital (Hofuf)	King Khalid General Hospital
Al Mana General Hospital (Jubail)	Luluatt International Hospital
Arabian Oil Company Hospital	Maternity & Children's Hospital
ARAMCO Clinic	Mousa Hospital (Hofuf)
Armed Forces Hospital (Hafr Baten)	Mouwasat Hospital
Astoon Hospital (Thomairy) (Dammam)	Mouwasat Dispensary
Dammam Central Hospital	Naireia
Dammam National Dispensary	Noor Khan Hospital (Hafr Batin)
Dhahran Medical Center	Prince Saud Bin Jalawi Hospital
Dossary Hospital	Qaisuma
Dr Fakhry & Mouhawis	Qatif Central Hospital
Eastern Province Hospital	Qatif General Hospital
Fanateer Hospital	Rowdha Dispensary
Hofuf Polyclinic	Saad Specialist Medical Center
Imam Abdu Rahman Bin Fahd	Salama Hospital
Jubail Hospital	Tadawy General Hospital
Jufer Hospital	Thukhair Dispensary
King Abdul Aziz Air Base Hospital	Unknown Eastern Province Hospital
King Abdul Aziz Navy Hospital	Zamil Hospital
King Abdul Aziz National hospital	

Hail Region

Hail General Hospital	Baqa Hospital
King Khaled General Hospital, Hail	Unknown Hail Hospital
Rashid Hospital	

Jazan Region

Jazan General	King Fahd Specialist Hospital
Jazan Hospital NOS	Samtah General Hospital
King Fahd Central Hospital	Unknown Jazan Hospital

Jouf Region

Prince Abdul Rahman Sudairi Hospital	Tabarjal General Hospital
Qurayyat General Hospital	Unknown Jouf Hospital
Skaka General Hospital	

Madinah Region

Al Dar Hospital	Mouwasat Hospital
Ansar Hospital	Ohoud Hospital
Badr General Hospital	Psychaitric Hospital
Dr. Hamed Al Ahmadi Hospital	Tariq Bin Laden Hospital
Hanakyah Hospital	Ula General (Prince Abdullah Bin Abdul Aziz)
Khaybar General Hospital	Unknown Madinah Hospital
King Fahd Hospital	Yanboa General Hospital
Madinah National Hospital	Zahra Private Hospital
Mahad Hospital	Zen Laboratory
Maternity & Children's Hospital	
Meeqat Hospital	

Makkah Region

Abdrahman Qari Center	King Fahad Armed Forces Hospital
Abuzinada Hospital	King Fahad General Hospital
Ahmed Hassan Fetahi Hospital	King Fahad Air Base Hospital
Ajjiyad General Hospital	King Faisal (Taif)
Al Abraj Laboratory	King Faisal Al Sheshah Hospital
Alawi Tunsi & Bros Hospital	King Faisal Specialist Hospital & Research Centre
Amen Hospital	King Hospital
Bakhsh Hospital	Makkah Hospital NOS
Bugshan General Hospital	Maternity & Children's Hospital
Children & Maternity Hospital	Mustaqbal (Dhagastani)
Dar Shifa Saudi	Nahda National Hospital
Dr. Erfan & Bagedo Hospital	New Jeddah Clinic
Dr. Ghassan Pharaon	Noor Specialist Hospital
Dr. Khalid Idriss	Quen Hospital
Dr. Siddiqa Maternity	Qunfudah General Hospital
Dr. Solaiman Fakeeh Hospital	Rabegh General Hospital
El Maghraby Eye Hospital	Rafie Hospital
Eye Hospital (JD)	Royal Commission Medical Center
Hada Military Hospital	Salamah Hospital

Makkah Region continued

Hai Al Jamea	Saudi German Hospital, Jeddah
Hamra Hospital	Saudi Hospital
Hera General Hospital	Saudia Airlines Medical Services
Jedaani Hospital	Sheffaa Hospital
Jeddah General	Taif Chest Hospital
King Abdul Aziz Hospital (Taif)	Taif Children's Hospital
King Abdul Aziz Al Zaher	Thagher Hospital
King Abdul Aziz Hospital & Oncology Center	Umm Al Qura Poly Clinic
King Abdul Aziz Medical City	United Doctors
King Abdul Aziz University Hospital	Yanboa General Hospital

Najran Region

Armed Forces Hospital Najran	Najran General Hospital
Armed Forces Hospital Sharoura	Sharourah General Hospital
Chest and Fever Center	Unknown Najran Hospital
King Khaled General Hospital	

Northern Region

Arar Central Hospital	Rafha General Hospital
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Qassim Region

Bukairiya General Hospital	Midhnab General Hospital
Buraidah Central Hospital	Onaizah General Hospital
King Fahd Specialist Hospital	Rass General Hospital
King Saud Hospital (Onaizah)	
Maternity and Children Hospital	

Riyadh Region

Riyadh-Al Kharj Armed forces Hospital	King Khaled General (Majma'a)
Aff General	King Khaled International Hospital
Aflaj General Hospital	King Khaled University Hospital
Al Amal Clinic	Mamlaka (Kingdom) Hospital
Al Borg Laboratory	Maternity and Children's Hospital
Armed Forces Wadi Dawasir	Mobarak Hospital
Bustan Clinic	Mouwasat Riyadh
Chest Diseases Center	Muzahamiah General
College of Dentistry	Nukhba Medical Center
Consulting Clinic	Obeid Hospital
Dallah Hospital	Olaya Medical Center
Dawadmi General Hospital	Prince Salman Bin Abdul Aziz Hospital
Dr Abdul Rahman Al Mishari Hospital	Quwayyah Hospital
Dr. Al Moagel's Polyclinic	Riyadh Care Hospital (Social Insurance Hospital)
Dr Al Mofarreh Polyclinic	Riyadh Hospital (NOS)
Dr. Fahd Al Shedoukhy	Riyadh Medical Complex
Dr Suliman Al Habib Medical Center	Saati Medical Center

Riyadh Region continued...

Elaj Laboratory	Saudi German Hospital (Riyadh)
Eman General Hospital	Saudi Medical Services
Faleh International hospital	Security Forces
Green Crescent Hospital	Shaqra Hospital
Hammadi Hospital	Sharif Poly Clinic
Hotta Bani Tammim Hospital	Specialized Medical Center
Howtat Sudair	Sports Medicine
Huraymila General Hospital	Sulail
Jafel International Hospital	Thadeq General Hospital
Kharj Hospital	Unknown Riyadh hospital
King Abdul Aziz Medical City	Usrah Hospital
King Abdul Aziz University Hospital	Wadi Al Dawasser
King Fahad Medical City	Watani (Riyadh National hospital)
King Faisal Specialist Hospital & Research Centre	Yamamah Hospital
King Khaled Eye Specialist Hospital	Zulfi general Hospital
King Khaled General Hospital	

Tabuk Region

Dhuba Hospital	North West Armed Forces Hospital
Haql General Hospital	Prince Fahad Bin Sultan Hospital
King Abdul Aziz Military Hospital	Tabuk Civil Hospital
King Fahad Hospital	Umm Lujj General Hospital
King Khalid General Hospital	Unknown Tabuk Hospital
Maternity and Children's Hospital	Wajh General Hospital

International Hospitals in the Following Countries

Bahrain	Pakistan
Bangladesh	Philippines
Canada	Samoa, America
France	Sudan
Germany	Sweden
Hong Kong (SARC)	Syrian Arab republic
India	Thailand
Jordan	Tunisia
Kuwait	United Arab Emirates
Lebanon	United Kingdom
Libyan Arab Republic	United States of America
Malaysia	Western Sahara
Netherlands	Yemen
Niger	
Nigeria	

SCR Main Office

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Fax: 01-442-3941
Website: www.kfshrc.edu.sa/NCR/
Email: bazarbashi@kfshrc.edu.sa
haleid@kfshrc.edu.sa

Chairman: Shouki Bazarbashi, MD

Dep. Chairman: Nasser Al Hamdan, MD

Admin. Director: Haya Al Eid, BDS, DFE, CTR
Registrar: Mohamed Hayder, CTR

Epidemiologist: Haya Al Eid, BDS, DFE, CTR
Data Manager: Suad O. Arteh, MA

Armed Forces Hospitals

Riyadh Military Hospital
PO Box 7897, Riyadh 11159
Tel: 01-477-7714 x 6747
Fax: 01-477-6743 x 6743

Director: Rizq Allah Assiri, MD

Central Region

King Khalid University Hospital
PO Box 2925, Riyadh 11461
Tel: 01-467-9488/2398
Fax: 01-467-9487

Director: Dahish Ajarim, MD

Eastern Region

King Fahd Hospital of the University
PO Box 40004, Al Khobar 31952
Tel: 03-896-6741
Fax: 03-869-6741

Director: Prof. Hassan Al Idrissi, MD

**King Abdulaziz University
Hospital**

Faculty of Medicine & Allied Science
PO Box 80215, Jeddah 21589
Tel: 02-624-0000 x 18244/18253
Fax: 02-617-1412

Director: Prof. Mohamoud Shaheen Al Ahwal, MD

**King Faisal Specialist Hospital &
Research Center**

MBC-64
PO Box 3354, Riyadh 11211
Tel: 01-442-3938, 464-7272 x 24541

Directors: Shouki Bazarbashi, MD
Ali Al-Zahrani, MD, PhD

Madinah & Northern Region

King Fahad Hospital
Madinah Al Monawarah
Tel: 04-486-1500 x 3760
Fax: 04-836-0951

Director:**Ahmed Tarawa, MD****National Guard Hospitals**

King Abdulaziz Medical City (KKNHG)
PO Box 9515, Jeddah 21423
Tel: 02-624-0000 x 4085/4086
Fax: 02-624-0000 x 7242

Director:**Abdulwahab Andejani, MD****Security Forces Hospital**

PO Box 3643, Riyadh 11481
Tel: 01-477-4480 x 1193
Fax: 01-476-4757, 01-477-4480 x 3184

Director:**Abdulaziz Saleh Aba Hussein, MD****Southern Region**

King Khalid University
PO Box 641, Abha
Tel: 07-224-0711 / 224-7800 x 118
Fax: 07-224-0964 / 224-7570

Director:**Hassan Trabulsi, MD****Western Region**

King Abdulaziz Hosp. & Oncology
Center
PO Box 31467, Jeddah 21497
Tel: 02-637-5555 x 2283/2200
Fax: 02-637-9811

Director:**Hasnah Al Ghamdi, MD****Edward De Vol, PhD****Director****January 2001 - April 2006****Hadir Meir, MD****Director****January 2001 - August 2005****Susan E. Young, CCHRA®, CTR****Administrative
Director****March 2003 -May 2006**

**Saudi Cancer Registry
Ministry of Health
Kingdom of Saudi Arabia**



**السجل السعودي للأورام
وزارة الصحة
المملكة العربية السعودية**

Request for data from the Saudi Cancer Registry

All requests should be submitted to the attention of the Chairman of Directors, National Cancer Registry,
MCB 64, P.O. Box 3354, Riyadh 11211, Saudi Arabia, Fax: +966 1 442 3941

Name : _____
Department : _____
Hospital : _____
Telephone : _____

Date Submitted : _____

Information Requested:

(Specify Patient Population, Time Period, Year/s, Anatomic Site/Histology, Staging information, Region, etc.)

Purpose of Request:

(Specify Presentation at conference/meeting/publication, clinical/epidemiological study, personal information, etc.)

Collaborators and Co-authors:

Requesters affirmation statement:

I hereby, the requester of the above data affirm that the data given to me by the NCR will be treated with utmost confidentiality in relation to patient's identity. I also affirm that the data given to me will not be presented or published by me or any of my collaborators as an original work but rather can be cited in my presentations and/or publication with acknowledgment of the NCR.

Requesters Signature _____

Date _____

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For Official use only:

Request : Approved

Denied

Chairman SCR Board of Directors Signature _____

Date _____

