

Kingdom of Saudi Arabia
Ministry of Health
National Cancer Registry

**Cancer Incidence Report
Saudi Arabia
1999 - 2000**

Report prepared by:

Haya S. Al-Eid, BDS, DFE, CTR
Suad O. Arteh, MA

Reviewed by:

Shouki Bazarbashi, MD
Edward B. De Vol, PhD
Susan Young, CTR, CCHRA(C)

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FOREWARD

The 1999-2000 Cancer Incidence Report is the fourth publication of the National Cancer Registry. The information in this report is a very important part of the infrastructure which is required in the efforts to reduce the burden of cancer. The registry data will assist researchers studying cancer and authorities involved in the planning of cancer services (epidemiological research, identification of risk factors for use in cancer control, development of screening and prevention programs, planning for diagnostic and treatment services.)

The registry continues to be committed to quality data focusing on improving case-ascertainment, patient and tumor linkage and editing processes through training and quality control procedures. Throughout the data collection and analysis process, every effort is made to ensure both patient and facility confidentiality.

Some changes from the previous reports have been made in the presentation of the data although we have tried to maintain consistency to enable easy comparison of data over the years. Since it is our goal to present this report in a manner that will be easily understood by all, we welcome and, indeed, encourage feedback from readers for consideration in the preparation of future reports.

Dr. Shouki Bazarbashi
Chairman
National Cancer Registry

INTRODUCTION

This is the fourth report to be published in an effort designed to provide information on cancer incidence in Saudi Arabia. The first of its kind was the 1994 Summary Report, the second and the third were the 1994-1996 and 1997-1998 Incidence Reports respectively, and this one covers cancer Incidence Report for the years 1999-2000. It is the objective of the National Cancer Registry of Saudi Arabia to present the data on a period of two-three years now and in a more extended period of time in later years. Data on an extended period of time has advantages of presenting more stable incidence rates and time-trends studies.

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 National 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 explain the software program we used to analyze the data.

Part II Overview

Part II contains figures and tables that show overall cancer incidence in Saudi Arabia for the years 1999-2000. We present these figures and tables mainly by sex and in certain areas we have it analyzed by different age groups. There are pie and bar charts representing the age distribution of cancer incidence for the years 1994-2000 among Saudis by sex and age groups. We present separate incidence and morphology tables for the most common types of cancers among adults and children. In addition, a bar chart depicts the 10 most common types of cancer, by sex.

Part III Incidence of Selected-Sites

In this part the incidences of selected cancer types among Saudis are outlined in order of relative frequency. A standardized layout presents data for all patients and both sexes where applicable. For each selected site we list the number and the percentage of all newly diagnosed cases for the years 1999 and 2000, the Age-Standardized Incidence Rate (ASR) per 100,000 population for each sex, and the specific cancer rank for both sexes. In addition, we provide (whenever available) international statistics for the specified cancer including the ranking of the cancer worldwide, estimated number of cases for 1999-2000, and areas of the world that have the highest ranking.

Part IV Cancer Incidence among non-Saudis

In this part we have the incidence cases of cancer among non-Saudis. We present the most common types of cancer among them and the age-specific incidence rates. The age distribution of non-Saudis is over-represented in the 25-54 age-group as a result of the nature of the expatriate population. For this reason we have opted to do the analysis separately.

Part V Tables of Incidences

Part V contains the following detailed tables for all newly diagnosed cancer types among Saudis and non-Saudis for 1999-2000.

For the years 1999 and 2000 we have separate tables for male and female

- age-distribution of cancer cases among Saudis
- age-standardized incidence rate for cancer cases among Saudis by age group (per 100,000 population)

For the years 1999 and 2000 we have for each region

- age-standardized incidence rate and relative frequencies for all cancer cases among Saudis by site and sex

For the years 1999 and 2000 we have separate tables for male and female

- age-distribution of cancer cases among non-Saudis
- crude incidence rates for cancer cases among non-Saudis by age group (per 100,000 population)

Part VI Appendices

Reporting hospitals list

- Includes hospital names in each administrative region. The objective is to receive feedback from hospitals in order to minimize under-reporting.
- Addresss of the National Cancer Registry offices
- Cancer Registration Form
- The Data Request Form

TABLES OF CONTENTS

ACKNOWLEDGEMENT	3
FOREWARD	4
INTRODUCTION	5

PART I

Background on Saudi Arabia	13
NATIONAL CANCER REGISTRY	15
Definitions of Statistical Terms	19

PART II

Cancer in Saudi Arabia 1994-2000	22
Reported Cancer Incidence Cases in Saudi Arabia, 1999-2000	25
Distribution of Cancer Cases in Saudi Arabia by Nationality and Sex	25
Ten Most Common Types of Cancer Among Saudis, 1999-2000 (All Ages)	27
Adult Cancers in Saudi Arabia, 1999-2000 (above 14 years)	29
Childhood Cancers in Saudi Arabia 1999-2000 (14 years and under)	32
International comparison of age-standardized incidence rates	35

PART III

Cancer Incidence for Specific Sites 1999-2000	37
Female Breast (C50)	38
Non-Hodgkins Lymphoma (C82-C85;C96)	41
Leukaemia (C91-C95)	44
Colo-rectal (C18-C21)	46
Liver (ICD-10 C22)	49
Thyroid (C73)	52
Brain, nervous system (C70-C72)	55
Lung (C33-C34)	58
Hodgkin's Disease (C81)	61
Urinary Bladder (C67)	64
Skin (Non-Melanoma) (C44)	67
Prostate Cancer (ICD-10 C61)	69
Ovary (C56)	72
Cervix Uteri (C53)	75

PART IV

Cancer among the non- Saudi Population 1999-2000	79
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PART V

TABLES OF INCIDENCE	82-97
---------------------------	-------

PART VI

APPENDIX A	99
APPENDIX B	100
APPENDIX C	101
APPENDIX D	102
APPENDIX E	103
APPENDIX F	104

FIGURES

PART I

Figure 1-1 Administrative Regions of Saudi Arabia	13
Figure 1-2 Population Pyramid of Saudis by Sex and Age Groups, 2000	14
Figure 1-3 Population Pyramid of non-Saudis by Sex and Age Groups, 2000	14
Figure 1-4 Organizational Chart of the National Cancer Registry of Saudi Arabia	16

PART II

Fig. 2-1 Percentage Distribution of Cancer Incidence among Saudis by Age Group and Sex, 1994-2000	22
Fig. 2-2 A Most Frequent Types of Cancer by Age and Sex among Saudis, 1994-2000	22
Fig. 2-3 Ten Most Common Cancers for Saudis by Sex, 1999-2000	27
Fig. 2-4 Average Age-Specific Incidence Rates (AIR) for All Cancers among Saudis, 1999-2000	28
Fig. 2-5 Age Standardized Rate (ASR) Regional Distribution of All Sites of Cancer among Saudis, 1999-2000	28
Fig. 2-6 Ten Most Common Types of Cancer among Adult Saudis by Sex, 1999-2000	30
Fig. 2-7 Ten Most Common Types of Cancer among Saudi Children by Sex, 1999-2000	33
Fig. 2-9 Shows the 2000 ASR Estimation in Selected Countries among the Females and Male	35

PART III

Fig. 3-1 Average Age-Specific Incidence Rate (AIR) for Female Breast Cancer in Saudi Arabia, 1999-2000	38
Fig. 3-3 Stage Distribution of Female Breast Cancer in Saudi Arabia, 1999-2000	39
Fig. 3-4 Average Age-Specific Incidence Rates (AIR) for NHL in Saudi Arabia, 1999-2000	41
Fig. 3-6 Stage Distribution of NHL in Saudi Arabia, 1999-2000	42
Fig. 3-7 Average Age-Specific Incidence Rate (AIR) for Leukaemia in Saudi Arabia, 1999-2000	44
Fig. 3-9 Average Age Specific Incidence rate (AIR) for Colo-rectal Cancer in Saudi Arabia, 1999-2000	46
Fig. 3-11 Stage Distribution of Colo-rectal Cancer, 1999-2000	47
Fig. 3-12 Average Age-Specific Incidence Rate (AIR) for Liver Cancer in Saudi Arabia, 1999-2000	49
Fig. 3-14 Stage Distribution of Liver Cancer in Saudi Arabia, 1999-2000	50
Fig. 3-15 Average Age-Specific Incidence Rate (AIR) for Thyroid Cancer in Saudi Arabia, 1999-2000	52
Fig. 3-17 Stage Distribution of Thyroid Cancer in Saudi Arabia, 1999-2000	53
Fig. 3-18 Average Age-Specific Incidence Rate (AIR) for Brain, CNS Cancer in Saudi Arabia, 1999-2000	55
Fig. 3-20 Stage Distribution of Brain, CNS Cancer in Saudi Arabia, 1999-2000	56
Fig. 3-21 Average Age-Specific Incidence Rate (AIR) for Lung Cancer in Saudi Arabia, 1999-2000	58
Fig. 3-23 Stage Distribution of Lung Cancer in Saudi Arabia, 1999-2000	59
Fig. 3-24 Average Age-Specific Incidence Rate (AIR) for Hodgkin's Disease in Saudi Arabia, 1999-2000	61
Fig. 3-26 Stage Distribution of Hodgkin's Disease in Saudi Arabia, 1999-2000	62
Fig. 3-27 Average Age-Specific Incidence Rate (AIR) for Urinary Bladder Cancer in Saudi Arabia, 1999-2000	64
Fig. 3-29 Stage Distribution of Urinary Bladder Cancer in Saudi Arabia, 1999-2000	65
Fig. 3-30 Average Age-Specific Incidence Rates (AIR) for Skin Cancer in Saudi Arabia, 1999-2000	67
Fig. 3-32 Stage Distribution of Skin Cancer in Saudi Arabia, 1999-2000	68

Fig. 3-33 Average Age-Specific Incidence Rate (AIR) for Prostate Cancer in Saudi Arabia, 1999-2000 ..	69
Fig. 3-35 Stage Distribution of Prostate Cancer in Saudi Arabia, 1999-2000	70
Fig. 3-36 Average Age-Specific Incidence Rate (AIR) for Ovary Cancer in Saudi Arabia, 1999-2000	72
Fig. 3-38 Stage Distribution of Ovary Cancer in Saudi Arabia, 1999-2000	73
Fig. 3-39 Average Age-Specific Incidence Rate (AIR) for Cervix Uteri Cancer in Saudi Arabia, 1999-2000	75
Fig. 3-41 Stage Distribution of Cervix Uteri Cancer in Saudi Arabia, 1999-2000	76

PART IV

Fig. 4-1 Ten Most Common Cancers among non-Saudis by Sex, 1999-2000	80
Fig. 4-2 Average Age-Specific Incidence Rate (AIR) for All Cancers among non-Saudis in Saudi Arabia, 1999-2000	80

TABLES

PART II

Table 2-1 Distribution of Cancer Cases in Saudi Arabia by Nationality and Sex, 1999-2000	25
Table 2-2 Number of New Cases by Primary Site and Sex among Saudis, 1999-2000	26
Table 2-3 Distribution of Adult's Cancers Cases in Saudi Arabia by Nationality and Sex, 1999-2000	29
Table 2-4 Number and Proportion of Morphological Types for the Most	30
Table 2-5 Distribution of Childhood Cancer Cases in Saudi Arabia by Nationality and Sex, 1999-2000	32
Table 2-6 Number and Proportion of the Most Common Types of Childhood Cancer among Saudis, 1999-2000	34

PART III

Table 3-1 Histology of Female Breast Cancer in Saudi Arabia, 1999-2000	39
Table 3-2 Comparison of ASR for Breast Cancer among Saudi Females with 2000 ASR Estimation in Selected Countries	40
Table 3-3 Histology of NHL, 1999-2000	42
Table 3-4 Comparison of ASR for NHL among Saudis with 2000 ASR Estimation in Selected Countries	43
Table 3-5 Histology of Leukemia, 1999-2000	45
Table 3-6 Comparison of ASR for Leukemia among Saudis with 2000 ASR Estimation in Selected Countries	45
Table 3-7 Histology of Colo-rectal Cancer, 1999-2000	47
Table 3-8 Comparison of ASR for Colo-rectal among Saudis with 2000 ASR Estimation in Selected Countries	48
Table 3-9 Histology of Liver Cancer, 1999-2000	50
Table 3-10 Comparison of ASR for Liver Cancer among Saudis with 2000 ASR Estimation in Selected Countries	51
Table 3-11 Histology of Thyroid Cancer, 1999-2000	53
Table 3-12 Comparison of ASR for Thyroid Cancer among Saudis with 2000 ASR Estimation in Selected Countries	54
Table 3-13 Histology of Brain, CNS Cancer, 1999-2000	56
Table 3-14 Comparison of ASR for Brain, CNS Cancer among Saudis with 2000 ASR Estimation in Selected Countries	57
Table 3-15 Histology of Lung Cancer, 1999-2000	59
Table 3-16 Comparison of ASR for Lung Cancer among Saudis with 2000 ASR Estimation in Selected Countries	60
Table 3-17 Histology of Hodgkin's Disease, 1999-2000	62
Table 3-18 Comparison of ASR for Hodgkin's Disease among Saudis with 2000 ASR Estimation in Selected Countries	63
Table 3-19 Histology of Urinary Bladder Cancer, 1999-2000	65
Table 3-20 Comparison of ASR for Urinary Bladder Cancer among Saudis with 2000 ASR Estimation in Selected Countries	66
Table 3-21 Histology of Skin Cancer (Non-Melanoma), 1999-2000	68
Table 3-22 Histology of Prostate Cancer, 1999-2000	70
Table 3-23 Comparison of ASR for Prostate Cancer among Saudis with 2000 ASR Estimation in Selected Countries	71
Table 3-24 Histology of Ovary Cancer, 1999-2000	73
Table 3-25 Comparison of ASR for Ovary Cancer among Saudis with 2000 ASR Estimation in Selected	74
Table 3-26 Histology of Cervix Uteri, 1999-2000	76
Table 3-27 Comparison of ASR for Cervix Uteri Cancer among Saudis with 2000 ASR Estimation in Selected Countries	77

PART V

Table 5-1-1 Age Distribution of Cancer Cases among Saudi Males, 1999	82
Table 5-1-2 Age Distribution of Cancer Cases among Saudi Females, 1999	83
Table 5-1-3 Incidence Rates for Cancer Cases among Saudi Males by Age Group (per 100,000), 1999 ..	84
Table 5-1-4 Incidence Rates for Cancer Cases among Saudi Females by Age Group (per 100,000), 1999	85
Table 5-1-5 Age Distribution of Cancer Cases among Saudi Males, 2000	86
Table 5-1-6 Age Distribution of Cancer Cases among Saudi Females, 2000	87
Table 5-1-7 Incidence Rates for Cancer Cases among Saudi Males by Age Group (per 100,000), 2000 ..	88
Table 5-1-8 Incidence Rates for Cancer Cases among Saudi Females by Age Group (per 100,000), 2000	89
Table 5-3-1 Age Distribution of Cancer Cases among non-Saudi Males, 1999	90
Table 5-3-2 Age Distribution of Cancer Cases among non-Saudi Females, 1999	91
Table 5-3-3 Incidence Rates for Cancer Cases among non-Saudi Males by Age Group (per 100,000), 1999	92
Table 5-3-4 Incidence Rates for Cancer Cases among non-Saudi Females by Age Group (per 100,000), 1999	93
Table 5-3-5 Age Distribution of Cancer Cases among non-Saudi Males, 2000	94
Table 5-3-6 Age Distribution of Cancer Cases among non-Saudi Females, 2000	95
Table 5-3-7 Incidence Rates for Cancer Cases among non-Saudi Males by Age Group (per 100,000), 2000	96
Table 5-3-8 Incidence Rates for Cancer Cases among non-Saudi Females by Age Group (per 100,000), 2000	97

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. It is divided into 13 administrative regions (Figure 1-1).

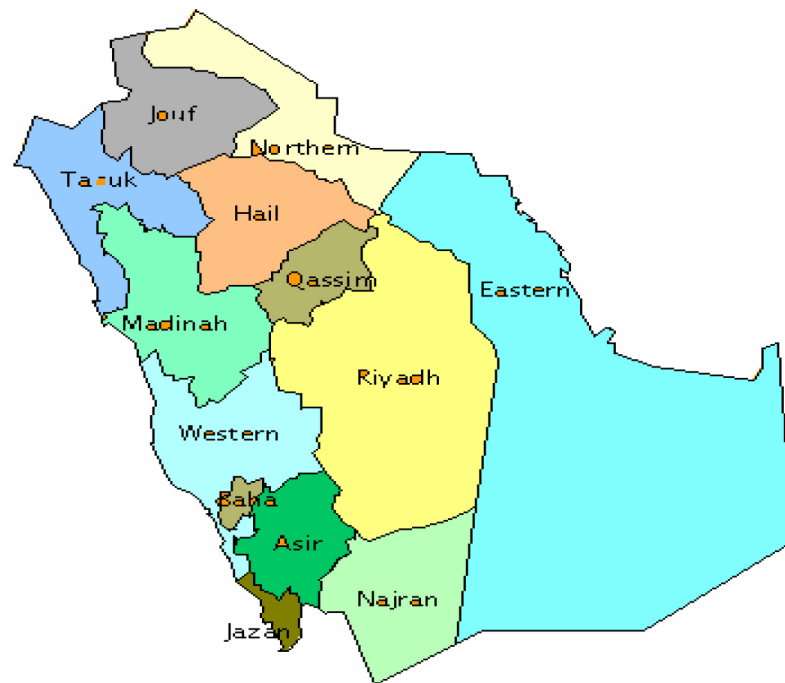


Figure 1-1 Administrative Regions of Saudi Arabia

The estimated Saudi National population for year 2000 was 15,588,805**. Of these 7,800,051 were males and 7,788,754 were females. The estimated non-Saudi population in 2000 was 5,258,079; of these 3,514,915 were males and 1,743,164 females.

Figures 1-2 and 1-3 shows the Saudi and non-Saudi population pyramids by sex and age-group.

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

** Source: Central Department for Statistics (CDS). Ministry of Planning.

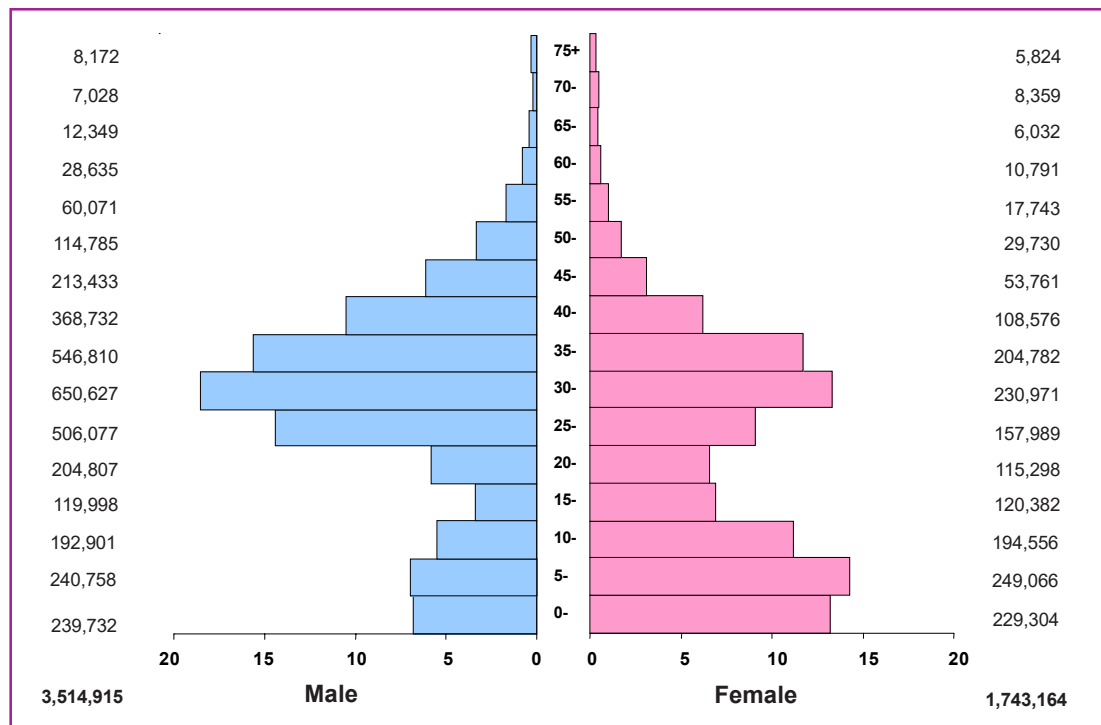


Figure 1-3 Population Pyramid of non-Saudis by Sex and Age Groups, 2000

National Cancer Registry

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

Objectives:

The primary goal of the NCR is to define the population-based incidence of cancer in Saudi Arabia. Programs for early detection and cancer screening, as well as cancer research projects are planned for future consideration.

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 NCR'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 NCR.

The NCR Main Office, including administrative and technical staff, is located on the premises of the KFSH&RC in Riyadh. Additionally, five regional branches and three hospital-based offices were set up to ensure comprehensive data collection from all over the Kingdom Figure 1-4.

- Central Region: King Khalid University Hospital in Riyadh, covering Riyadh, Qassim, and Hail Health Regions.
- Eastern Region: King Fahad Hospital of the University, Khobar, covering Dammam, Al Ahsa, and Hafr Al-Batin Health Regions.
- Western Region: King Abdulaziz Hospital and Cancer Center, Jeddah, covering Jeddah, Makkah, Taif and Qunfudah Health Regions.
- Southern Region: King Khalid University, Abha, covering Asir, Baha, Najran, Jazan and Bisha Health Regions.
- Madinah/Northern: King Fahad Hospital, Madinah, covering Madinah, Tabuk, Jouf and Northern Health Regions.
- Offices at the Medical Services Division or Oncology Department of the following establishments:
 - Ministry of Defense and Aviation, Armed Forces Hospital, Riyadh
 - National Guard, King Fahad Hospital, Riyadh covering KFNGH & KKNHG.
 - Ministry of Interior, Security Forces Hospital, Riyadh.

Each of these branches and offices are under the supervision of a member of the Board of Directors who is responsible for the daily management of that office and for ensuring the accuracy of information reported to the NCR. In addition to tumor registrars and secretarial staff, each office is provided with the necessary computer facilities, printers, and other office equipment.

Functions of the NCR Main office include:

- compilation of data collected from all the regions and offices
- merging of all cases to ensure that each case is counted only once
- verification of diagnosis
- conducting quality control review of all abstracts submitted
- preparation of regular reports for dissemination of information to the medical community, government establishment, international organizations and the media.
- training of staff.

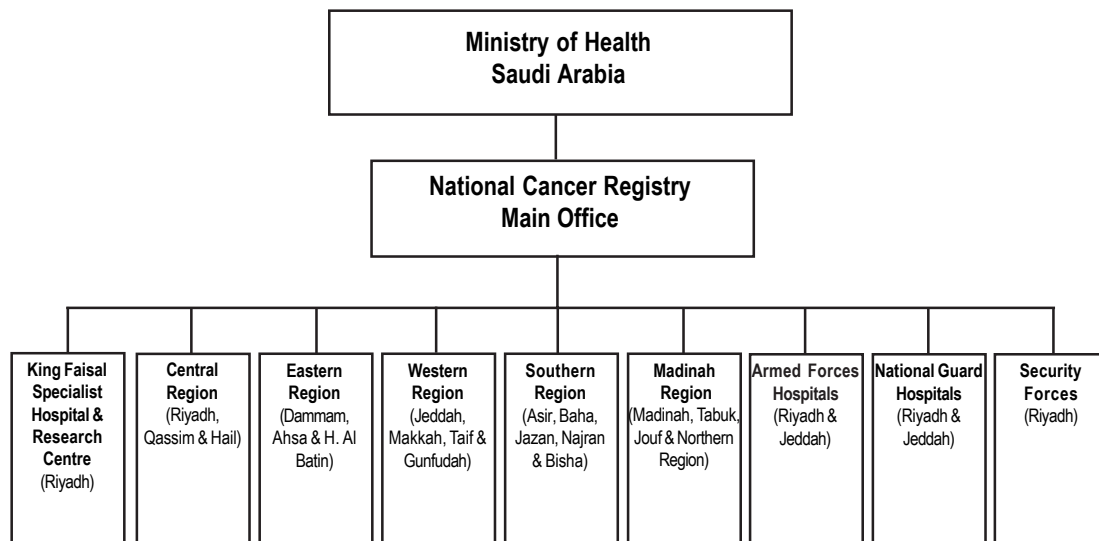


Figure 1-4 Organizational Chart of the National Cancer Registry of Saudi Arabia

Format

The format of the current report is similar to the previous reports; however the first part has been extended by adding a section for childhood and adult cancer and morphology of the most common types of childhood and adult cancer. We also report the ten most common cancers for each region and present a comparative bar chart in which we compare age standardized rate (ASR) of cancer incidence among Saudis with other countries.

Data management

A ministerial decree has categorized cancer as a mandatory notifiable disease. This ensures the opportunity for comprehensive data collection. The NCR strives for full access to cancer data from all MOH, 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 NCR-trained cancer registrars.

The data abstract (see appendix E) includes the patient's 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, 2nd Edition (ICD-O-2)*, published by the World Health Organization (WHO), 1990.

Every effort is made to accurately code patient and tumor information, to ensure that all data can be reviewed, matched, and merged, as appropriate, so that each malignancy is counted only once for statistical analysis. The computer software program used for data entry and incidence tables output is CanReg 3.21, 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 clinic-pathological details for the 14 most common cancers among Saudi nationals for the years of 1999 and 2000. A standardized layout is used to present data for all patients and both sexes where applicable.

For each cancer site the first paragraph includes the number and the percentage of all newly diagnosed cases for the years 1999 and 2000, the age-standardized incidence rate for each sex (ASR) (per 100,000 population), and the specific cancer rank in comparison to all cancers for both sexes.

The second paragraph contains useful international statistics for the specified cancer. It includes the ranking of the cancer worldwide, the estimated number of cases for 1999-2000, and the high incidence areas of the world. The relevant source of this information is *World Health Organization. GLOBOCAN 2000: Cancer Incidence Mortality and Prevalence Worldwide. International Agency for research on Cancer (IARC), Lyon, 2001.*

The relevant data incorporate details for all patients presented over the years 1999 and 2000. For each cancer there are four figures- a line chart, a bar chart, a pie chart and a table outlined as follows:

1. Arithmetic line graphs represent the change in average age-specific incidence rate (AIR) for all age groups at five-year intervals. The graphs are plotted by sex, where applicable.
2. Bar charts show regional distribution of ASR for particular cancer across the administrative regions and are given separately for males and females.
3. Tables list the percentages of the most common histology subtypes for each cancer.
4. Pie charts show the distribution of the clinical stages of each cancer such as in-situ, localized, regional, distant metastasis and unknown.
5. Tables show comparison of age-standardized incidence rate (ASR) for each cancer type in Saudi Arabia with 2000 ASR estimation in selected countries

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

- a. The number of patients presenting with malignant disease from the 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, and instead, provide a temporary Riyadh address. It is anticipated that this situation will be resolved as soon as computerization of identification documents is completed.
- b. As previously noted, the software used in analyzing this report, CanReg-3 Ver.3.21, did not enroll in-situ cases in the incidence tables. These cases were added to the total cancer cases in the overview.

Notification

The data used for this report was extracted in January 2003. Additional cases diagnosed in 1999 and 2000 may be added later in subsequent incidence reports, which means an increase of the total cases for those two year, which has not been included in the analysis.

Definitions of Statistical Terms

ICD-10

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

ICD-02

The World Health Organization's International Classification of Diseases for Oncology, 2nd Edition.

Metastasis

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

Incidence Rate

It is defined as the rate at which new event occur 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.

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.

Prevalence

This reflects the total number of patients with a disease in a specified population at a specified time, including both new and old cases.

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.

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.

Average 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 mid-year 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.

The World Standard Population

Age Class	Population	Age Class	Population
0 - 4	12,000	45 - 49	6,000
5 - 9	10,000	50 - 54	5,000
10 - 14	9,000	55 - 59	4,000
15 - 19	8,000	60 - 64	4,000
20 - 24	8,000	65 - 69	3,000
25 - 29	6,000	70 - 74	2,000
30 - 34	6,000	75 - 79	1,000
35 - 39	6,000	80 - 84	500
40 - 44	6,000	85 +	500
		Total	100,000

The World Standard Population (Doll et al., 1966)

PART II

OVERVIEW OF CANCER

Cancer in Saudi Arabia 1994-2000

The total number of cancer cases reported among Saudis during the years 1994-2000 were 39209. Fifty two percent (20,532) of the cases were reported among men and 48% (18677) among women. In Saudi Arabia, taking into consideration the population structure and the fact that cancer is primarily a disease of the old, the pattern of cancer has some unique characteristics. During this period, 49% of the cases in men and 33% of the cases in women were found in the above-59 age-group. This age-group accounts for only 5.2% of the Saudi population. This signifies that a large proportion of cancer cases in women occur in younger age-group. If we look at the age-group between 30-44 year, we will find that 22% of the cases in women and 12% of the cases in men were found in this group. It can be safely said that Saudi women are affected in early ages more than men and this can be attributed to breast and thyroid cancer (figure 2-1).

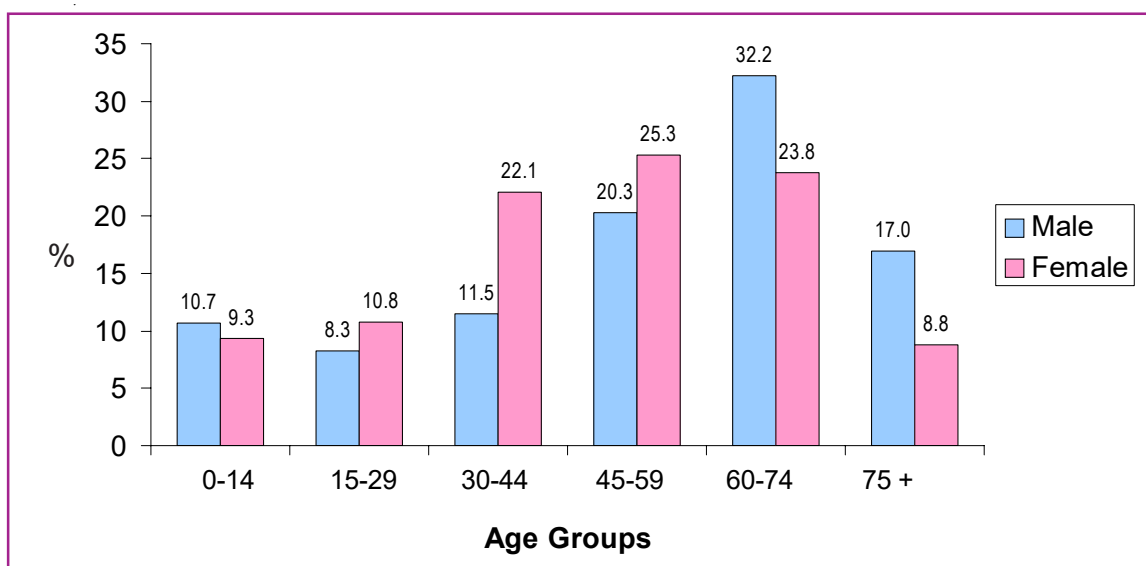


Fig. 2-1 Percentage Distribution of Cancer Incidence among Saudis by Age Group and Sex, 1994-2000

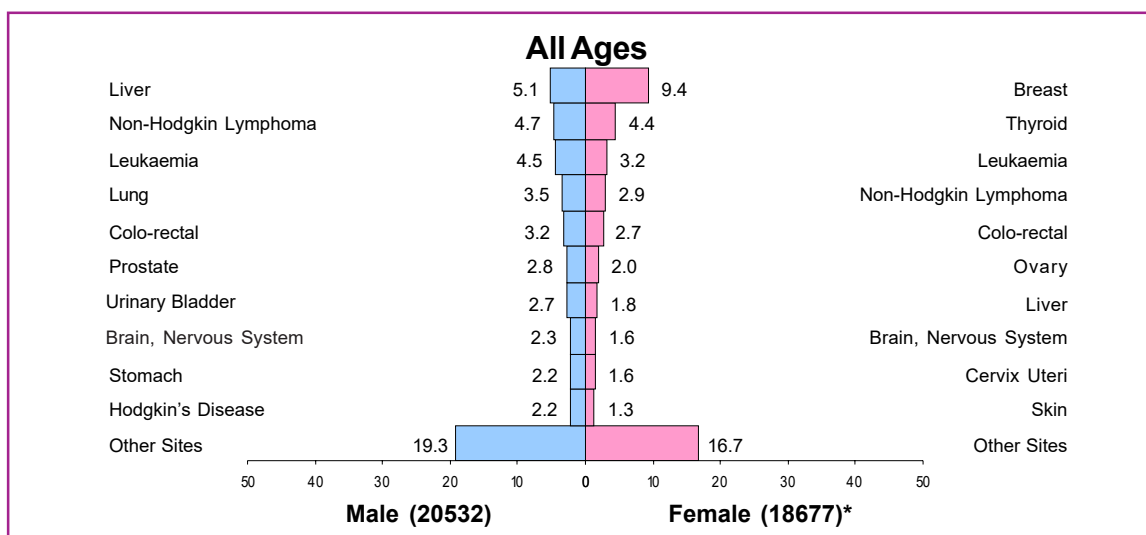


Fig. 2-2-A Most Frequent Types of Cancer by Age and Sex among Saudis, 1994-2000

* One case of unknown age shows only in total as it could not be added to any age group.

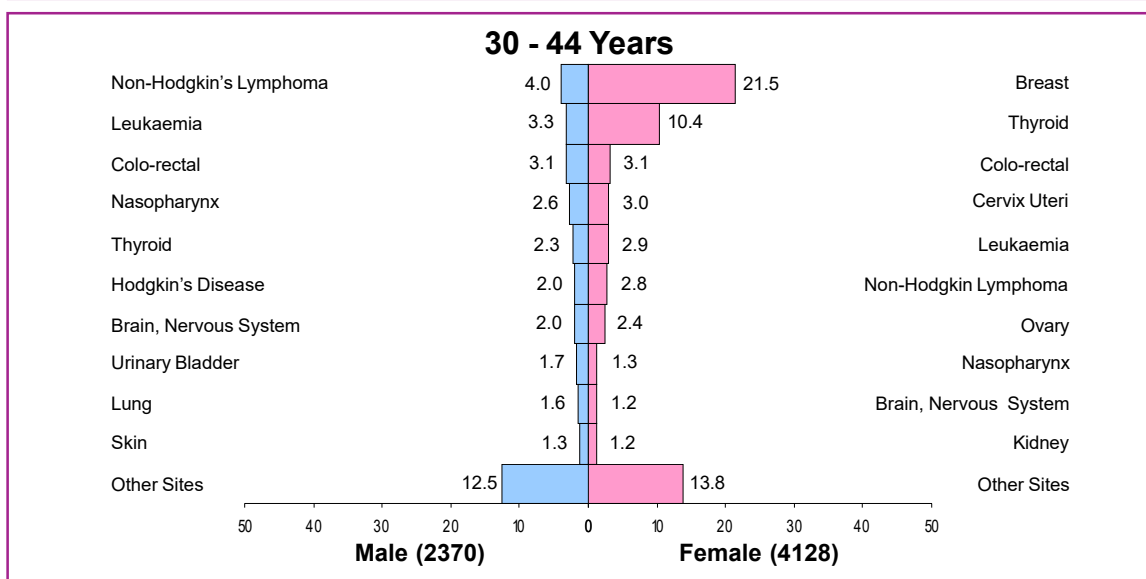
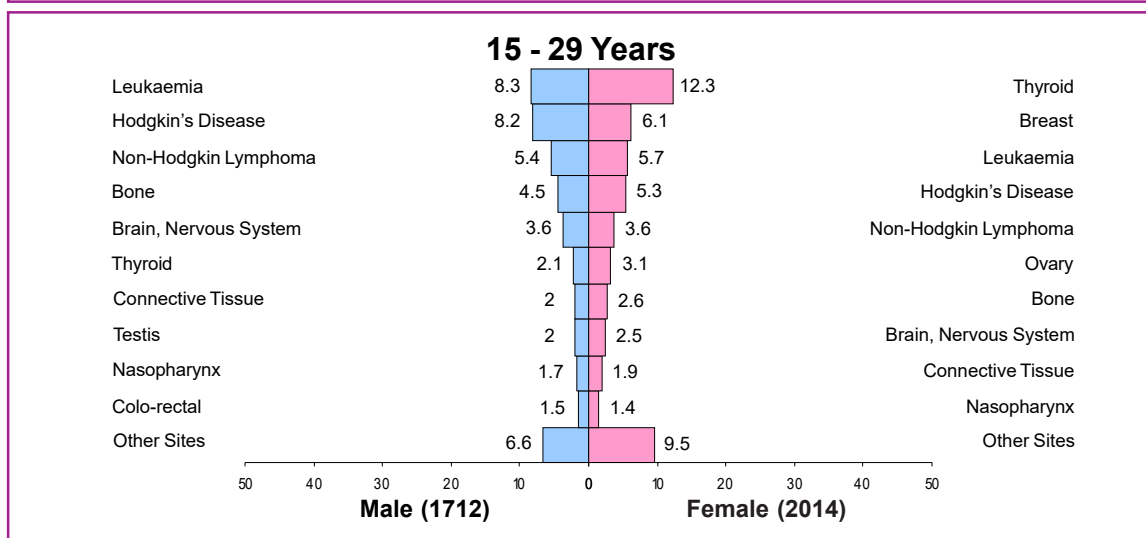
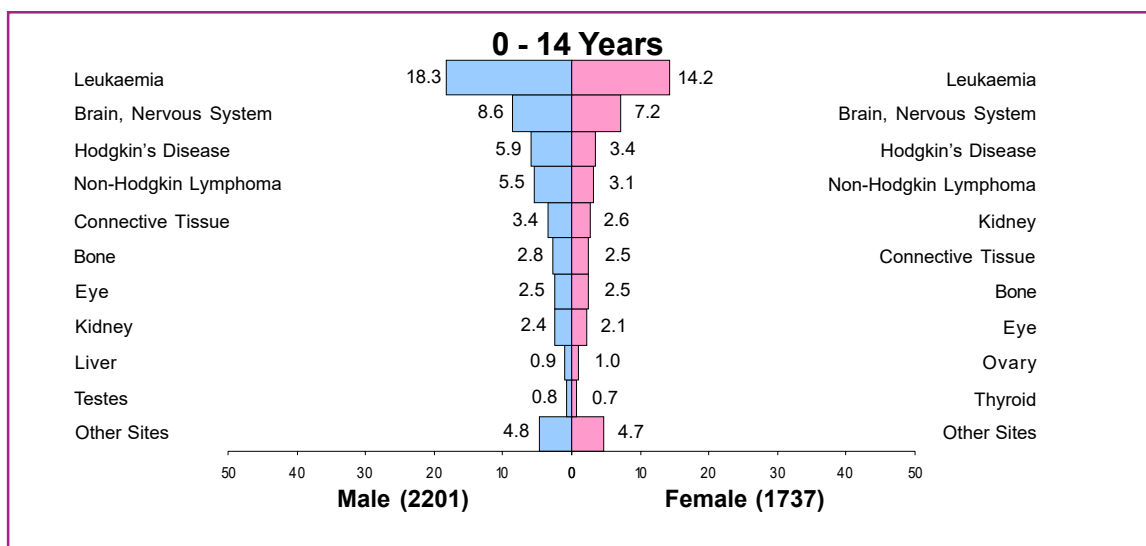


Fig. 2-2-B Most Frequent Types of Cancer by Age and Sex among Saudis, 1994-2000

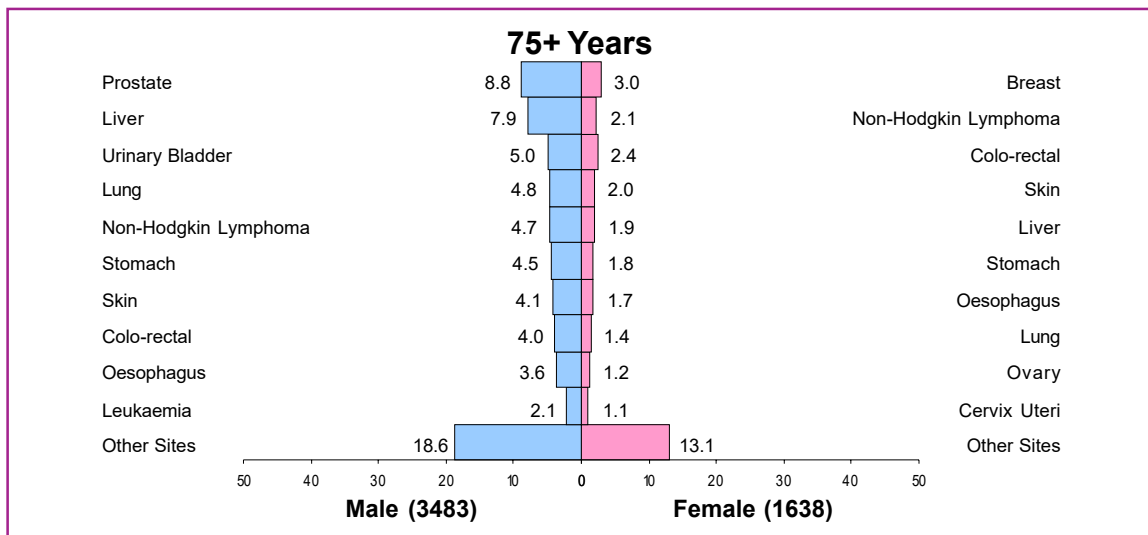
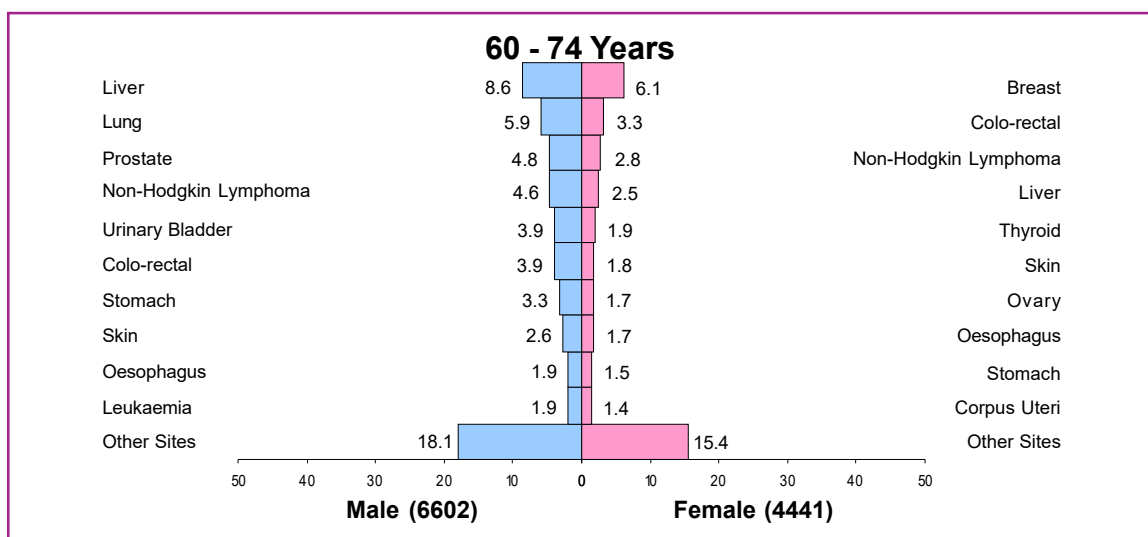
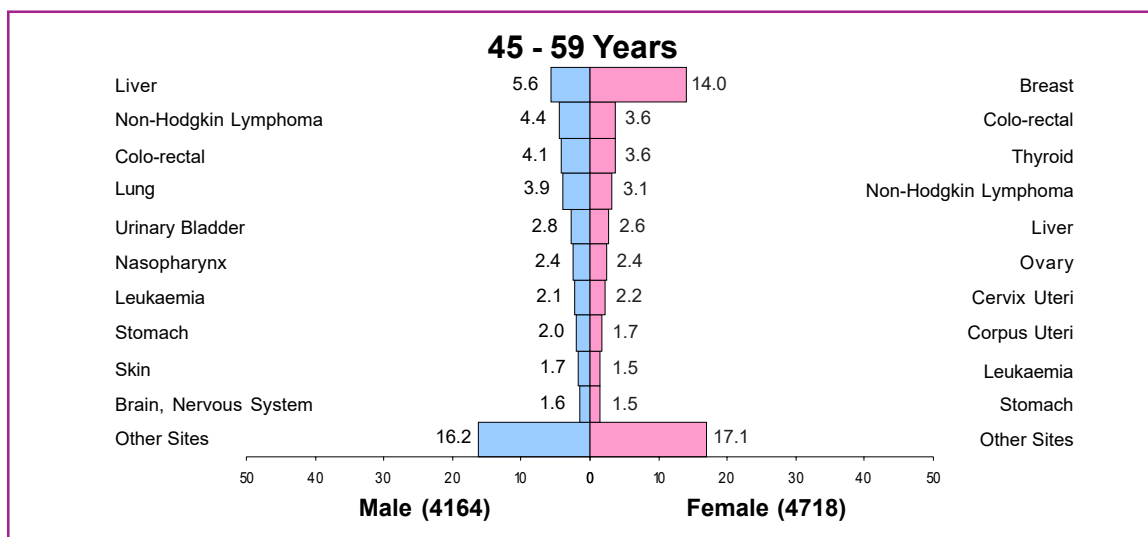


Fig. 2-2-C Most Frequent Types of Cancer by Age and Sex among Saudis, 1994-2000*

Reported Cancer Incidence Cases in Saudi Arabia, 1999-2000

Between January 1999 and December 2000, the total number of cancer cases reported to the NCR was 14,856. Overall, cancer was more predominant in men than in women. Cancers affected 7,616 (51.3%) males and 7,240 (48.7%) females, with a male to female ratio of 105:100. Eleven thousand three hundred eighty three (11,383) cases were reported among Saudis, 3,242 among non-Saudis and 231 are of unknown nationality. Histological and/or cytological diagnosis of malignancy was confirmed in 94.3% of the cases. One-sixth percent of the cases were confirmed clinically, 3.2% radiologically, and 0.6% were diagnosed by other methods. The method of diagnosis was unknown for 0.3% of the cases.

Distribution of Cancer Cases in Saudi Arabia by Nationality and Sex

Out of 14,856 cancer cases reported, there were 231 cases of “unknown nationality” reported to the NCR for 1999 and 2000. Since these cases can be included in neither the Saudi category nor in the non-Saudis category, they were excluded from the overall analysis. There were also 68 *in-situ* cases reported during 1999 and 2000 (Table 2-1). The current software program, CanReg 3.21, does not include *in-situ* cases in the statistical analysis. The total number of cases excluded from the analysis was 299.

Behavior	Saudis			Non-Saudis			Unknown Nationality			Total
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Invasive	5713	5617	11330	1765	1462	3227	120	111	231	14788
In-situ	14	39	53	4	11	15	0	0	0	68
Total	5727	5656	11383	1769	1473	3242	120	111	231	14856

Table 2-1 Distribution of Cancer Cases in Saudi Arabia by Nationality and Sex, 1999-2000

Based on the above, 14,557 cases were analyzed of which 11,330 (77.8%) were Saudis and 3,227 (22.2%) were non-Saudis. Among the Saudis, 5,713 (50.4%) were male and 5,617 (49.6%) were female. The male to female ratio was 102:100. The crude incidence rate (CIR) of all cancers among the Saudi population was 37.2/100,000 (37.5/100,000 among males and 36.8/100,000 among females). The overall age-standardized incidence rate (ASR) for all Saudis with a world standard population reference was 62.6/100,000 (61.6/100,000 in males and 63.5/100,000 in females). For all sites, the age-specific incidence rate (AIR) increased with age for both males and females. After the age of 65 years, the increase was twofold for males compared to females. The mean age at diagnosis was 52 years for men and 47 years for women.

ICD(10)	PRIMARY SITE	Males	Females	All
	All sites	5713	5617	11330
C00	Lip	7	11	18
C01-C02	Tongue	55	51	106
C07-C08	Salivary gland	19	23	42
C03-C06	Mouth	50	68	118
C09-C10	Oropharynx	6	5	11
C11	Nasopharynx	191	60	251
C12-C13	Hypopharynx	10	27	37
C14	Pharynx unspec.	0	2	2
C15	Oesophagus	119	109	228
C16	Stomach	210	124	334
C17	Small intestine	24	17	41
C18	Colon	201	201	402
C19-C21	Rectum	188	163	351
C22	Liver	512	184	696
C23-C24	Gallbladder etc.	49	104	153
C25	Pancreas	110	65	175
C30-C31	Nose, sinuses etc.	19	13	32
C32	Larynx	93	18	111
C33-C34	Bronchus, lung	354	100	454
C37-C38	Other thoracic organs	22	14	36
C40-C41	Bone	112	74	186
C47;C49	Connective tissue	123	94	217
C45	Mesothelioma	8	5	13
C46	Kaposi's sarcoma	30	11	41
C43	Melanoma of skin	18	15	33
C44	Other skin	226	154	380
C50	Male breast	22	-	22
C50	Female breast	-	1157	1157
C55	Uterus unspec.	-	15	15
C53	Cervix uteri	-	167	167
C58	Placenta	-	18	18
C54	Corpus uteri	-	141	141
C56	Ovary etc.	-	205	205
C51-C52;C57	Other female genital	-	24	24
C61	Prostate	304	-	304
C62	Testis	70	-	70
C60	Penis	2	-	2
C63	Other male genital	4	-	4
C67	Bladder	301	80	381
C64-C66;C68	Kidney etc.	168	114	282
C69	Eye	46	49	95
C70-C72	Brain, nervous system	270	186	456
C73	Thyroid	156	539	695
C74-C75	Other endocrine	21	26	47
C81	Hodgkin's disease	260	173	433
C82-C85;C96	Non-Hodgkin lymphoma	528	354	882
C88;C90	Multiple myeloma	71	49	120
C91	Lymphoid leukaemia	278	191	469
C92	Myeloid leukaemia	186	176	362
C93	Monocytic leukaemia	6	3	9
C94	Other leukaemia	1	3	4
C95	Leukaemia unspec.	8	9	17
	Other & unspecified	255	226	481

Table 2-2 Number of New Cases by Primary Site and Sex among Saudis, 1999-2000

Ten Most Common Types of Cancer Among Saudis, 1999-2000 (All Ages)

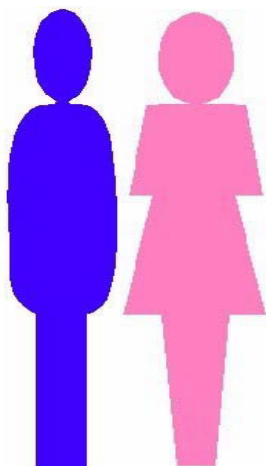
During 1999-2000, 9.6% of all cancers among Saudis occurred before the age of 15, and 20.6% occurred after the age of 64 years. For the total Saudi population the ten most common cancers were as follows:

CANCER	NO. OF CASES	PERCENTAGE (%)
Female breast	1157	10.2
Non-Hodgkin's lymphoma (NHL)	882	7.8
Leukaemia	861	7.6
Colo-rectal	753	6.6
Liver	696	6.1
Thyroid	695	6.1
Brain, nervous system (CNS)	456	4.0
Lung	454	4.0
Hodgkin's disease	433	3.8
Bladder	381	3.4

Male

NHL 528 (9.2%)
 Liver 512 (9%)
 Leukaemia 479 (8.4%)
 Colo-rectal 389 (6.8%)
 Lung 354 (6.2%)
 Prostate 304 (5.3%)
 Bladder 301 (5.3%)
 Brain & CNS 270 (4.7%)
 Hodgkin's 260 (4.6%)
 Skin 226 (4%)

Total = 5713



Female

Breast 1157 (20.6%)
 Thyroid 539 (9.6%)
 Leukaemia 382 (6.9%)
 Colo-rectal 364 (6.5%)
 NHL 354 (6.3%)
 Ovary 205 (3.6%)
 Brain & CNS 186 (3.3%)
 Liver 184 (3.3%)
 Hodgkin's 173 (3.1%)
 Cervix uteri 167 (3%)

Total = 5617

Fig. 2-3 Ten Most Common Cancers for Saudis by Sex, 1999-2000

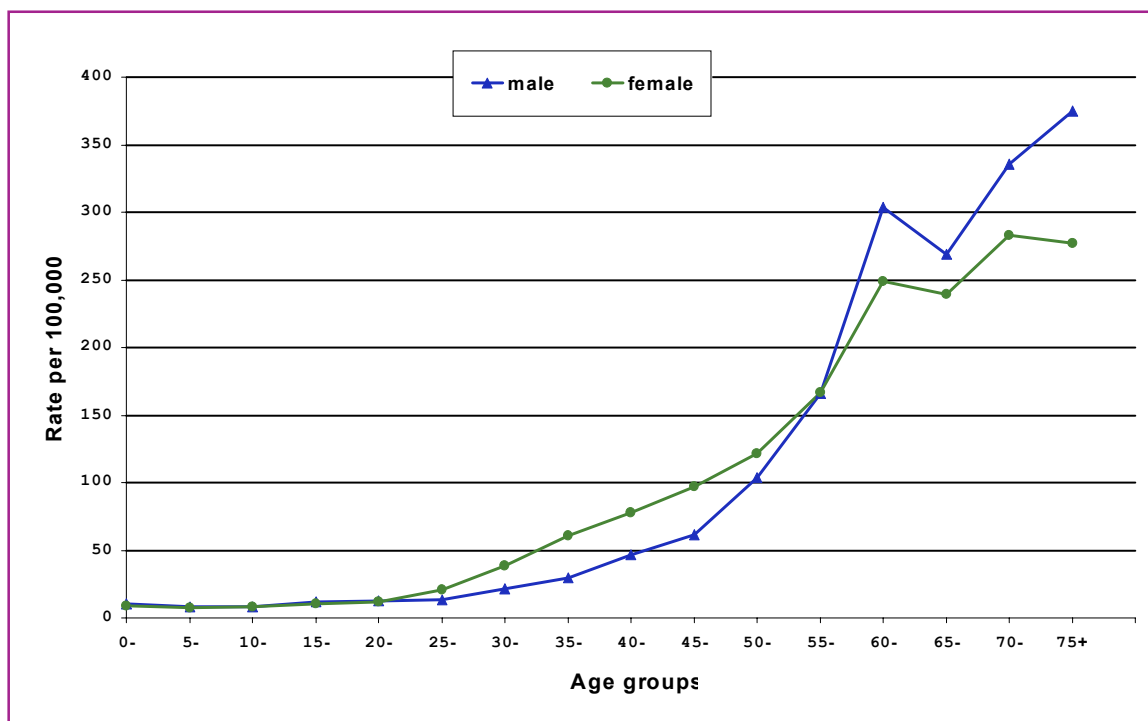


Fig. 2-4 Average Age-Specific Incidence Rates (AIR) for All Cancers among Saudis, 1999-2000

Adult Cancers in Saudi Arabia, 1999-2000 (above 14 years)

Between January 1999 and December 2000, the total number of adult cancer cases reported to the NCR was 13,463. Overall, cancer was more predominant in males than in females. Cancer affected 6,859 (50.9%) males and 6,604 (49.1%) females, with a ratio of 104:100. Of all cases, there were 10,205 Saudis, 3,033 non-Saudis and 225 of unknown nationality. As explained above, cases with unknown nationality - in this case 210 cases- and in-situ cases (68) were excluded from the analysis. Table 2-3 illustrates the distribution of adult cancer cases by nationality and sex.

Behavior	Saudis			Non-Saudis			Unknown Nationality			Total
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Invasive	5086	5066	10152	1648	1385	3033	107	103	210	13395
In-situ	14	39	53	0	0	0	4	11	15	68
Total	5100	5105	10205	1648	1385	3033	111	114	225	13463

Table 2-3 Distribution of Adult's Cancers Cases in Saudi Arabia by Nationality and Sex, 1999-2000

As shown in table 2-3, the total number of cases analyzed was 13,185 including 10,152 (77%) Saudis and 3,033 (23%) non-Saudis. Among Saudis, 5,086 (50.1%) cases were male and 5,066 (49.9%) were female. The male to female ratio was 100.4:100. For all sites, the age-specific incidence rate (AIR) increased with age for both males and females. The mean age at diagnosis was 58 years in males and 51 years in females.

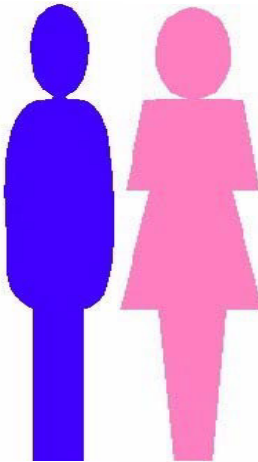
During the 1999-2000, adult cancers accounted for 89.6% of all cancers among Saudis. Thirty point nine percent (30.9%) of these cases occurred after the age of 60 years. For the total adult Saudi population the ten most common cancers were as follows:

CANCER	NO. OF CASES	PERCENTAGE (%)
Female breast	1157	11.4
Non-Hodgkin's lymphoma (NHL)	800	7.9
Colo-rectal	749	7.4
Thyroid	683	6.7
Liver	678	6.7
Leukaemia	479	4.7
Lung	454	4.5
Bladder	381	3.8
Skin (non-melanoma)	369	3.6
Stomach	334	3.3

Male

Liver 500 (9.8%)
 NHL 481 (9.5%)
 Colo-rectal 389 (7.6%)
 Lung 354 (7%)
 Prostate 303 (6%)
 Bladder 301 (5.9%)
 Leukaemia 280 (5.5%)
 Skin 220 (4.3%)
 Stomach 210 (4.1%)
 Nasopharynx 185 (3.6%)

Total = 5086



Female

Breast 1157 (22.8%)
 Thyroid 533 (10.5%)
 Colo-Rectal 360 (7.1%)
 NHL 319 (6.3%)
 Leukaemia 199 (4%)
 Ovary 191 (3.8%)
 Liver 178 (3.5%)
 Cervix uteri 166 (3.3%)
 Skin 149 (2.9%)
 Corpus uteri 141 (2.8%)

Total = 5066

Fig. 2-6 Ten Most Common Types of Cancer among Adult Saudis by Sex, 1999-2000

Primary Site	Morphology	Males No.	%*	Females No.	%*
Female breast cancer	Infiltrating duct carcinoma	-	-	913	78.9
	Carcinoma, NOS	-	-	55	4.8
	Lobular carcinoma, NOS	-	-	52	4.5
	Infiltrating duct and lobular carcinoma	-	-	18	1.6
	Medullary carcinoma, NOS	-	-	18	1.6
	Paget's disease and Infiltrating duct carcinoma	-	-	16	1.4
	All other	-	-	85	7.3
NHL	Malignant lymphoma large cell, diffuse NOS	210	43.7	155	48.6
	Malignant lymphoma, NOS	58	12.1	40	12.5
	Malignant lymphoma, non-Hodgkin's, NOS	52	10.8	20	6.3
	Malignant lymphoma, small lymphocytic, NOS	16	3.3	14	4.4
	Malignant lymphoma, mixed small and large cell, diffuse	19	4.0	9	2.8
	Malignant lymphoma, follicular, NOS	10	2.1	14	4.4
	All other	116	24.1	67	21.0
Colo-rectal	Adenocarcinoma, NOS	297	76.3	287	79.7
	Mucinous adenocarcinoma	34	8.7	16	4.4
	Carcinoma, NOS	9	2.3	15	4.2
	Signet ring cell carcinoma	9	2.3	5	1.4
	Adenocarcinoma in villous adenoma	6	1.5	7	1.9
	All other	34	8.7	30	8.3
Thyroid	Papillary carcinoma, NOS	114	76.0	384	72.0
	Papillary and follicular carcinoma	13	8.7	78	14.6
	Follicular adenocarcinoma, NOS	8	5.3	30	5.6
	Medullary carcinoma, NOS	3	2.0	11	2.1
	All other	12	8.0	30	5.6
Liver	Hepatocellular carcinoma, NOS	425	85.0	135	75.8
	Malignant tumor, NOS	31	6.2	8	4.5
	Cholangiocarcinoma	10	2.0	15	8.4
	Adenocarcinoma, NOS	9	1.8	7	3.9
	All other	25	5.0	13	7.3

Primary Site	Morphology	Males No.	%*	Females No.	%*
Leukaemia	Acute myeloid leukaemia	68	24.3	56	28.1
	Acute lymphoblastic leukaemia, NOS	63	22.5	25	12.6
	Chronic myeloid leukaemia	55	19.6	67	33.7
	Chronic lymphoblastic leukaemia	51	18.2	26	13.1
	All other	43	15.4	25	12.6
Lung	Squamous cell carcinoma, NOS	100	28.2	22	22.0
	Adenocarcinoma, NOS	96	27.1	39	39.0
	Carcinoma, NOS	38	10.7	10	10.0
	Small cell carcinoma, NOS	39	11.0	5	5.0
	All other	81	22.9	24	24.0
Urinary bladder	Papillary transitional cell carcinoma	134	44.5	29	36.3
	Transitional cell carcinoma, NOS	124	41.2	38	47.5
	Squamous cell carcinoma, NOS	15	5.0	4	5.0
	Adenocarcinoma, NOS	6	2.0	1	1.3
	All other	22	7.3	8	10.0
Skin (non-melanoma)	Basal cell carcinoma	105	47.7	84	56.4
	Squamous cell carcinoma	68	30.9	34	22.8
	Dermatofibrosarcoma	13	5.9	10	6.7
	Squamous cell carcinoma, keratinizing, NOS	10	4.5	7	4.7
	Basosquamous carcinoma	8	3.6	3	2.0
	All other	16	7.3	11	7.4
Stomach	Adenocarcinoma, NOS	127	60.5	60	48.4
	Signet ring cell carcinoma	32	15.2	36	29.0
	Adenocarcinoma, intestinal type	19	9.0	7	5.6
	Carcinoma, NOS	12	5.7	6	4.8
	All other	20	9.5	15	12.1
Ovary	Papillary serous cystadenocarcinoma	-	-	29	15.2
	Adenocarcinoma, NOS	-	-	22	11.5
	Endometrioid carcinoma	-	-	15	7.9
	Serous surface papillary carcinoma	-	-	14	7.3
	All other	-	-	80	41.9
Nasopharynx	Carcinoma, undifferentiated, NOS	53	28.6	24	41.4
	Carcinoma, NOS	52	28.1	11	19.0
	Squamous cell carcinoma, large cell, nonkeratinizing	39	21.1	11	19.0
	Squamous cell carcinoma, NOS	34	18.4	9	15.5
	All other	7	3.8	3	5.2
Cervix uteri	Squamous cell carcinoma, NOS	-	-	96	57.8
	Squamous cell ca, non-keratinizing, NOS	-	-	22	13.3
	Adenocarcinoma, NOS	-	-	16	9.6
	Squamous cell, keratinizing, NOS	-	-	13	7.8
	All other	-	-	19	11.4
Corpus uteri	Adenocarcinoma, NOS	-	-	62	44.0
	Endometrioid carcinoma	-	-	29	20.6
	Endometrial stromal sarcoma	-	-	5	3.5
	Mullerian mixed tumor	-	-	5	3.5
	All other	-	-	40	28.4
Prostate	Adenocarcinoma, NOS	254	83.8	-	-
	Carcinoma, NOS	36	11.9	-	-
	All other	13	4.3	-	-

Table 2-4 Number and Proportion of Morphological Types for the Most Common Types of Cancer among Saudi Adults, 1999-2000

* Relative percentage of morphology type within primary site.

Childhood Cancers in Saudi Arabia 1999-2000 (14 years and under)

The total of cases reported among children (0-14 years as defined by the WHO) between January 1999 and December 2000 was 1,393. This represented 9.4 % of the total number of cancers in Saudi Arabia. The total reported incidence shows that cancer was more predominant in males than in females. Seven hundred fifty eight (758) (54.4%) cases were reported among males and 635 (45.6%) among females, with a male to female ratio of 119:100. Of all the cases reported, there were 1,177 Saudis, 195 non-Saudis and 21 of “unknown nationality”.

Childhood cancer is very important not only because of the age of occurrence, but also because more than 45% 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 10.4% of all cancers among Saudis.

As explained earlier, 21 cases of unknown nationality were excluded from the statistical analysis. Table 2-5 demonstrates the distribution of childhood cancer cases by nationality and sex.

Behavior	Saudis			Non-Saudis			Unknown Nationality			Total
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Invasive	627	550	1177	118	77	195	13	8	21	1393
In-situ	0	0	0	0	0	0	0	0	0	0
Total	627	550	1177	118	77	195	13	8	21	1393

Table 2-5 Distribution of Childhood Cancer Cases in Saudi Arabia by Nationality and Sex, 1999-2000

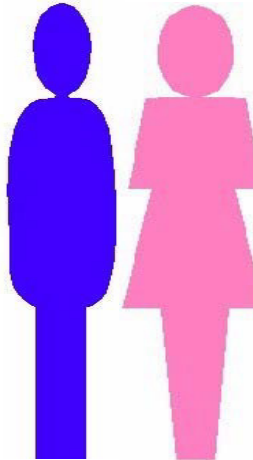
Based on the above, the total number of cases analysed was 1,393 including 1,177 (85.8%) Saudis and 195 (14.2%) non-Saudis. Among Saudis, 627 (53.3%) were male and 550 (46.7%) were female. The male to female ratio was 114: 100. The leading cancer among the Saudi children was leukaemia, which accounted for 32.5%, followed by Brain (CNS) and Hodgkin’s disease. The following is a listing of the ten most common types of cancer among Saudi children in order of relative frequency. Figure 2-7 shows the top ten sites by sex and frequency, and table 2-6 shows the number and proportion of the morphological types for the most common types of cancer.

CANCER	NO. OF CASES	PERCENTAGE (%)
Leukaemia	382	32.5
Brain, nervous system	180	15.3
Hodgkin’s disease	127	10.8
Non-Hodgkin lymphoma	82	7.0
Bone	72	6.1
Connective tissue	64	5.4
Kidney	60	5.1
Eye	60	5.1
Liver	18	1.5
Ovary	14	1.2

Male

Leukaemia 199 (31.8%)
Brain, nervous system 101 (16.1%)
Hodgkin's 76 (12.1%)
NHL 47 (7.5%)
Bone 39 (6.2%)
Connective tissue 35 (5.6%)
Kidney 30 (4.8%)
Eye 28 (4.5%)
Liver 12 (1.9%)
Testes 10 (1.6%)

Total = 627



Female

Leukaemia 183 (33.3%)
Brain, nervous system 79 (14.4%)
Hodgkin's 51 (9.3%)
NHL 35 (6.4%)
Bone 33 (6%)
Eye 32 (5.8%)
Kidney 30 (5.5%)
Connective tissue 29 (5.3%)
Ovary 14 (2.5%)
Liver & Thyroid 6 (1.1%) each

Total = 550

Fig. 2-7 Ten Most Common Types of Cancer among Saudi Children by Sex, 1999-2000

Primary Site	Morphology	Males No.	%*	Females No.	%*
Leukaemia	Acute lymphoblastic leukaemia, NOS	153	76.9	134	73.2
	Acute myeloid leukaemia	32	16.1	28	15.3
	Chronic myeloid leukaemia	3	1.5	7	3.8
	All other	11	5.5	14	7.7
Brain, nervous system	Medulloblastoma, NOS	39	38.6	14	17.7
	Pilocytic astrocytoma	18	17.8	25	31.6
	Glioma, malignant	10	10	16	20.3
	Ependyoma, NOS	4	4	9	11.4
	Glioblastoma, NOS	11	10.9	2	2.5
	All other	19	18.8	13	16.5
Hodgkin's disease	Hodgkin's disease, nodular sclerosis, NOS	42	55.3	31	60.8
	Hodgkin's disease, mixed cellularity, NOS	16	21.1	6	11.8
	Hodgkin's disease, lymphocytic predominance, NOS	3	3.9	7	13.7
	All other	15	19.7	7	13.7
NHL	Burkitt's lymphoma, NOS	18	38.3	12	34.3
	Malignant lymphoma, large cell, diffuse, NOS	7	14.9	6	17.1
	Malignant lymphoma, lymphoblastic	7	14.9	3	8.6
	All other	15	31.9	41	40.0
Bone	Ewing's sarcoma	17	43.6	16	48.5
	Osteosarcoma, NOS	16	41.0	14	42.4
	All other	6	15.4	3	9.1
Connective tissue	Embryonal rhabdomyosarcoma	10	28.6	4	13.8
	Ganglioneuroblastoma	5	14.3	9	31.0
	Infantile fibrosarcoma	5	14.3	1	3.4
	All other	15	42.9	15	51.7
Kidney	Nephroblastoma, NOS	28	93.3	27	90.0
	All other	2	0.7	3	10.0
Eye	Retinoblastoma, NOS	17	60.7	16	50.0
	Retinoblastoma, undifferentiated	8	28.6	11	34.3
	Retinoblastoma, differentiated	3	10.7	3	9.4
	All other	-	-	2	6.3
Liver	Hepatoblastoma	9	75	6	100.0
	All other	3	25	-	-
Ovary	Dysgerminoma	-	-	7	50.0
	Endodermal sinus tumor	-	-	2	14.3
	Mixed germ cell tumor	-	-	2	14.3
	All other	-	-	3	21.4
Thyroid	Papillary carcinoma, NOS	3	50.0	6	100.0
	Medullary carcinoma, NOS	2	33.3	-	-
	Papillary carcinoma, follicular variant	1	16.6	-	-

Table 2-6 Number and Proportion of Morphological types of the Most Common Types of Childhood Cancer among Saudis, 1999-2000

* Relative percentage of morphology type within primary site

International Comparison of Age-Standardized Incidence Rates

Worldwide, it is estimated that over 10,055,551 people developed cancer in 2000. Of these, 53.5% were in developing countries and 46.5% were in more developed countries. According to 2000 estimates, the most common cancer site in men was lung cancer. In developed countries it was followed by prostate, colo-rectal and stomach cancers. In developing regions, stomach cancer is the second most frequently appearing cancer, followed by liver, esophagus and colo-rectal cancers, with wide regional variations. In women, breast cancer was the most common followed by colo-rectal, lung and stomach cancers in developed countries and cancers of the cervix, stomach and lung in developing regions.

Comparison of ASR for Saudi Males and Females with 2000 ASR Estimation in Selected Countries

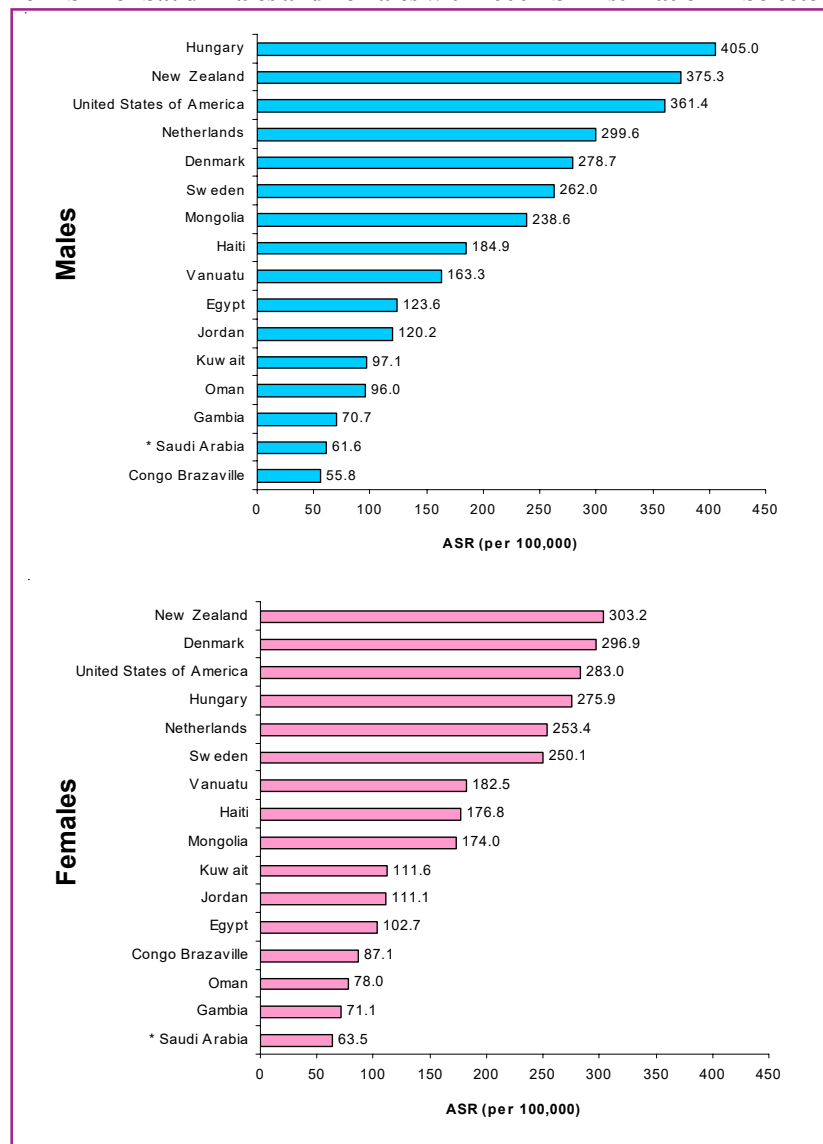


Fig. 2-9 Shows the 2000 ASR Estimation in Selected Countries among the Females and Male

* Actual Rate (Not Estimation)

PART III
CANCER INCIDENCE FOR SPECIFIC SITES
1999-2000

Cancer Incidence for Specific Sites 1999-2000

In this section the incidence of the 14 most predominant cancers in Saudi Arabia is outlined in order, according to their relative frequency in the whole Saudi population. The relevant data incorporate details for all patients presented over the period of January 1999 through December 2000.

CANCER	NO. OF CASES	PERCENTAGE (%)
Female breast	1157	10.2
Non-Hodgkin lymphoma	882	7.8
Leukaemia	861	7.6
Colo-rectal	753	6.6
Liver	696	6.1
Thyroid	695	6.1
Brain, nervous system	456	4.0
Lung	454	4.0
Hodgkin's disease	433	3.8
Bladder	381	3.4
Skin	380	3.4
Prostate	304	2.7
Ovary	205	1.8
Cervix uteri	167	1.5

Female Breast (C50)

Between January 1999 and December 2000, there were 1,157 cases of female breast cancer. Breast cancer is the most common cancer, ranked first among females and it accounted for 20.6% of all newly diagnosed female cancers (5,617). The ASR was 13.6/100,000 for female population. The mean age at diagnosis was 49 years.

Cancer of the breast is the most common cancer in the world among women. The estimated number of cases diagnosed worldwide in 2000 was 1,050,346. Fifty-five point two percent (55.2%) were in more developed countries. Incidence rates were highest in Western Europe, North America, and Northern Europe.



Fig. 3-1 Average Age-Specific Incidence Rate (AIR) for Female Breast Cancer in Saudi Arabia, 1999-2000

ICD-0 Code	Histology	%
8500	Infiltrating duct carcinoma	78.9
8010	Carcinoma, NOS	4.8
8520	Lobular carcinoma, NOS	4.5
8522	Infiltrating duct and lobular carcinoma	1.6
8510	Medullary carcinoma, NOS	1.6
8541	Paget's disease and infiltrating duct Carcinoma	1.4
8480	Mucinous adenocarcinoma	1.0
8501	Comedocarcinoma, NOS	1.0
9020	Phyllodes tumor, malignant	0.9
8140	Adenocarcinoma, NOS	0.8
	All others	3.5

Table 3-1 Histology of Female Breast Cancer in Saudi Arabia, 1999-2000

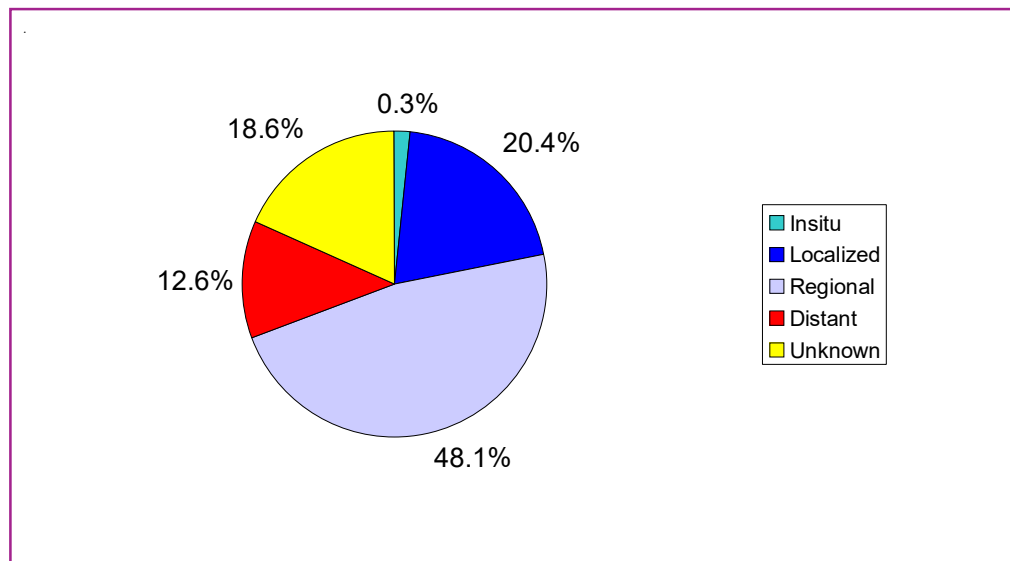


Fig. 3-3 Stage Distribution of Female Breast Cancer in Saudi Arabia, 1999-2000

Country	ASR* (Female)
Netherlands	91.6
United States of America	91.4
France	83.2
Pakistan	50.1
Jordan	33.0
Japan	31.4
<i>Saudi Arabia</i>	<i>13.6**</i>
Korea, Republic	12.5
Oman	11.7
Haiti	4.7

Table 3-2 Comparison of ASR for Breast Cancer among Saudi Females with 2000 ASR Estimation in Selected Countries

* Source: GLOBOCAN 2000: Cancer Incidence Mortality and Prevalence Worldwide. International Agency for research on Cancer (IARC), Lyon, 2001

** *Actual rate (not estimation)*

Non-Hodgkin's Lymphoma (C82-C85;C96)

Between January 1999 and December 2000 there were 882 cases of non-Hodgkin's lymphoma accounting for 7.8% of all newly diagnosed cancers (11,330). The overall ASR was 4.9/100,000. The ASR was 5.7/100,000 in males and 4.0/100,000 in females. This cancer ranked first in males and fifth in females and affected 528(59.9%) males and 354(40.1%) females with a male to female ratio of 149:100. The mean age at diagnosis was 51 years in males and 48 years in females.

NHL is the tenth most common cancer in the world. The estimated number of cases diagnosed worldwide in 2000 was 287,428, with 50.9% in more developed countries. Incidence rates were highest in North America, Australia/New Zealand, Northern and Western Europe.

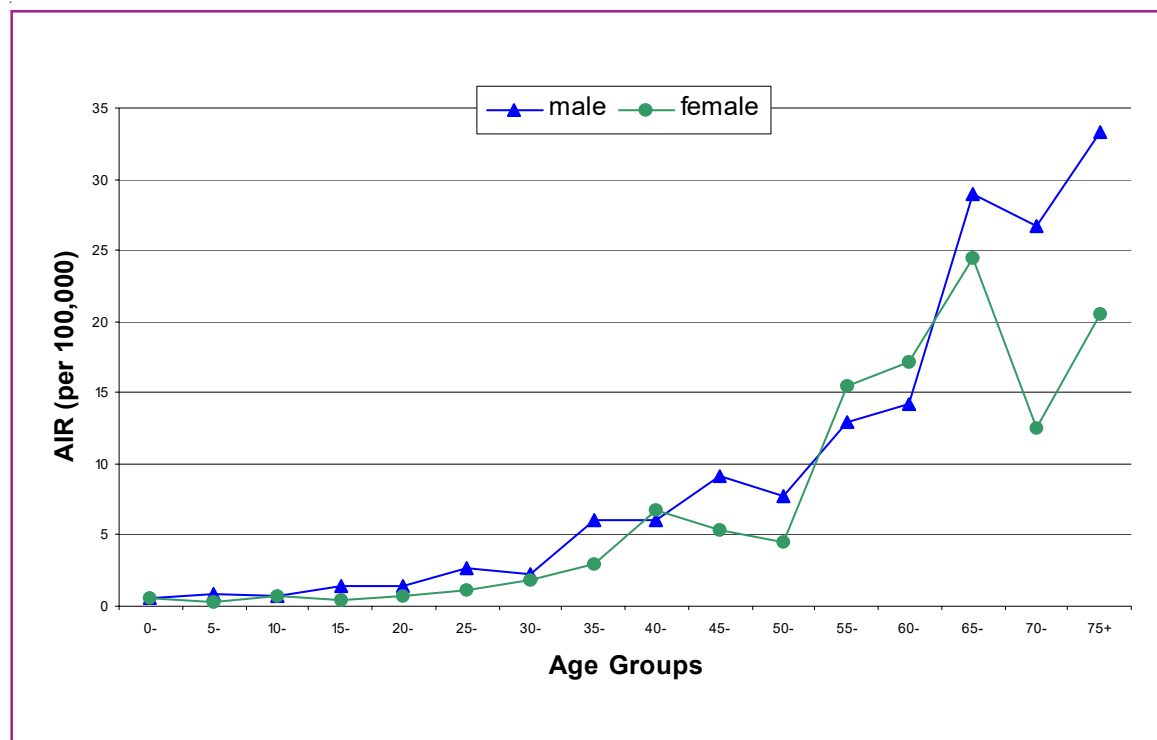


Fig. 3-4 Average Age-Specific Incidence Rates (AIR) for NHL in Saudi Arabia, 1999-2000

ICD-0 Code	Histology	%
9680	Malignant lymphoma large cell, diffuse, NOS	42.9
9590	Malignant lymphoma, NOS	11.9
9591	Malignant lymphoma, non-Hodgkin's, NOS	8.8
9687	Burkitt's lymphoma	4.5
9670	Malignant lymphoma, small lymphocytic, NOS	3.4
9675	Malignant lymphoma, mixed small and large cell, diffuse	3.3
9690	Malignant lymphoma, follicular, NOS	2.7
	All other	22.5

Table 3-3 Histology of NHL, 1999-2000

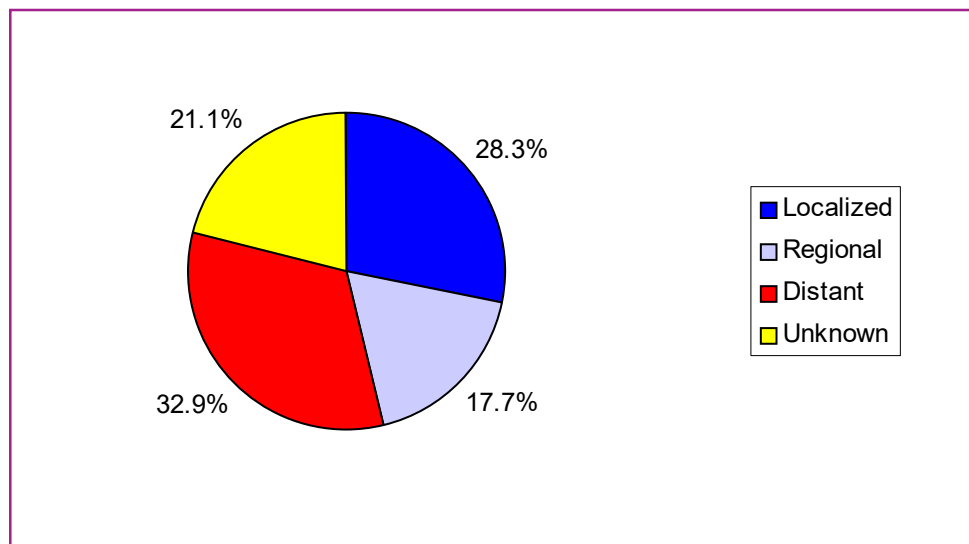


Fig. 3-6 Stage Distribution of NHL in Saudi Arabia, 1999-2000

Country	ASR* (Male)	ASR* (Female)
United States of America	16.1	10.9
Australia	14.4	10.8
Germany	10.5	6.7
China, Hong Kong	8.7	6.4
Iraq	6.6	5.0
<i>Saudi Arabia</i>	<i>5.7**</i>	<i>4.0**</i>
Iran, Islamic Republic	4.1	3.8
India	3.2	1.7
Gambia	2.6	1.5
Sri Lanka	1.0	0.4

Table 3-4 Comparison of ASR for NHL among Saudis with 2000 ASR Estimation in Selected Countries

* Source: GLOBOCAN 2000: Cancer Incidence Mortality and Prevalence Worldwide. International Agency for research on Cancer (IARC), Lyon,2001

** *Actual rate (not estimation)*

Leukaemia (C91-C95)

Between January 1999 and December 2000 there were 861 cases of leukaemia accounting for 7.6% of all 11,330 newly diagnosed cancers. The overall ASR was 3.3/100,000. The ASR was 3.7/100,000 and 3.0/100,000 in males and females respectively. This cancer ranked third for both males and females and affected 479 (55.6%) males and 382 (44.4%) females with a male to female ratio of 125:100. The mean age at diagnosis is 28 years in males and 26 years in females.

Leukaemia is the twelveth most common cancer in the world. The estimated number of cases diagnosed worldwide in 2000 was 257,076, with 58.8% in less developed countries. Incidence rates were highest in the Caribbean, Australia/New Zealand, Northern Europe, and Eastern Africa.

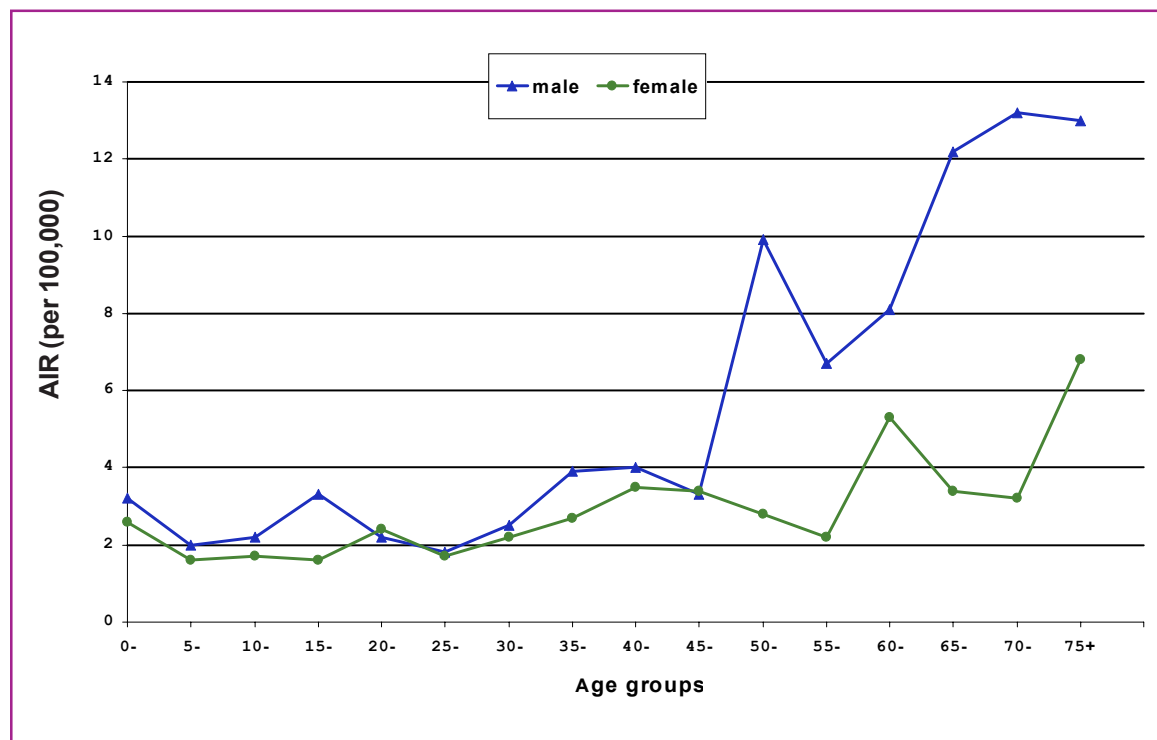


Fig. 3-7 Average Age-Specific Incidence Rate (AIR) for Leukaemia in Saudi Arabia, 1999-2000

ICD-0 Code	Histology	%
9821	Acute lymphoblastic leukaemia, NOS	43.6
9861	Acute myeloid leukaemia	21.4
9863	Chronic myeloid leukaemia	15.3
9823	Chronic lymphocytic leukaemia	8.9
9866	Acute promyelocytic leukaemia	1.7
9867	Acute myelomonocytic leukaemia	1.6
9801	Acute Leukaemia, NOS	1.5
	All Others	6.0

Table 3-5 Histology of Leukaemia, 1999-2000

Country	ASR* (Male)	ASR* (Female)
Haiti	15.2	10.2
New Zealand	11.9	8.7
Jordan	8.1	5.0
China, Hong Kong	6.7	4.8
Cuba	6.1	4.8
Tunisia	4.8	4.4
<i>Saudi Arabia</i>	<i>3.7**</i>	<i>3.0**</i>
India	3.1	2.1
Algeria	2.8	1.5
Senegal	0.9	0.2

Table 3-6 Comparison of ASR for Leukaemia among Saudis with 2000 ASR Estimation in Selected Countries

* Source: GLOBOCAN 2000: Cancer Incidence Mortality and Prevalence Worldwide. International Agency for research on Cancer (IARC), Lyon, 2001

** Actual rate (not estimation)

Colo-rectal (C18-C21)

Between January 1999 and December 2000 there were 753 cases of colo-rectal cancer accounting for 6.6% of all 11,330 newly diagnosed cases. The overall ASR was 4.9/100,000. The ASR was 5.0/100,000 in males and 4.7/100,000 in females. This cancer ranked fourth in both males and females and affected 389 (51.7%) males and 364 (48.3%) females with a male to female ratio of 107:100. The mean age at diagnosis was 59 years in males and 56 years for females.

Colo-rectal cancer is the third most common cancer in the world. The estimated number of cases diagnosed worldwide in 2000 was 944,717, with 64.6% in more developed countries. Incidence rates were highest in Australia/New Zealand, Eastern, Northern and Western Europe, and Northern America.

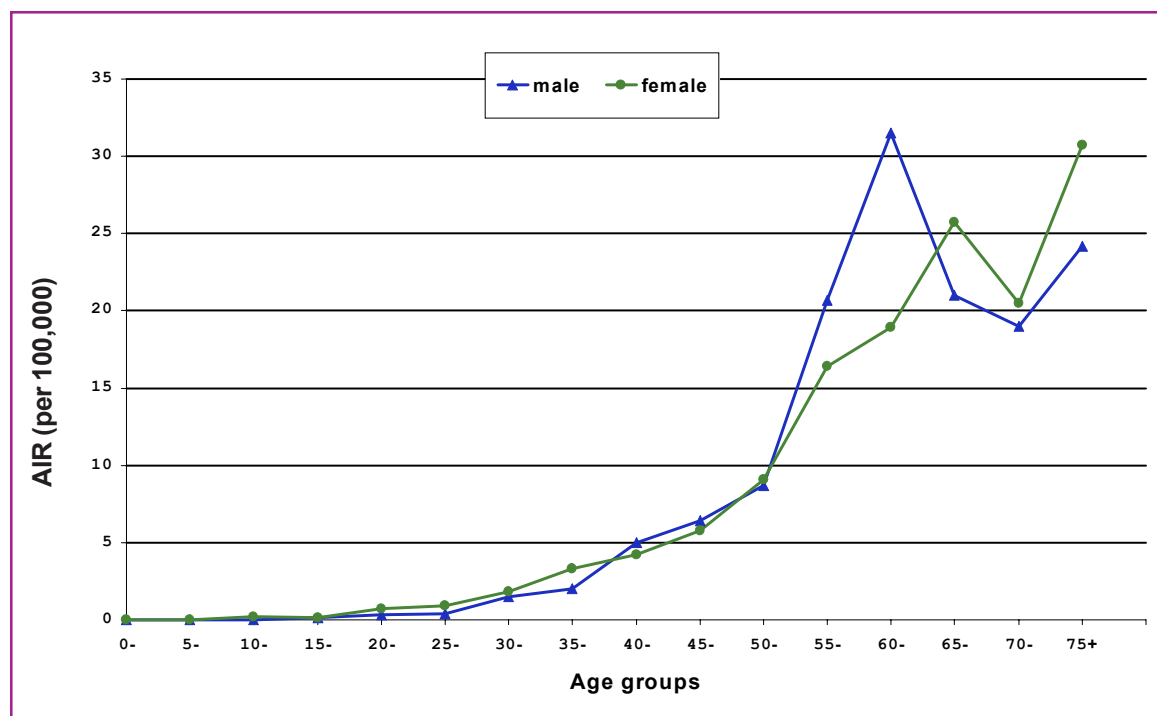


Fig. 3-9 Average Age Specific Incidence rate (AIR) for Colo-rectal Cancer in Saudi Arabia, 1999-2000

ICD-0 Code	Histology	%
8140	Adenocarcinoma, NOS	77.7
8480	Mucinous adenocarcinoma	6.8
8010	Carcinoma, NOS	3.2
8490	Signet ring cell carcinoma	1.9
8261	Adenocarcinoma in villous adenoma	1.7
8481	Mucin-producing adenocarcinoma	1.5
	All Others	7.2

Table 3-7 Histology of Colo-rectal Cancer, 1999-2000

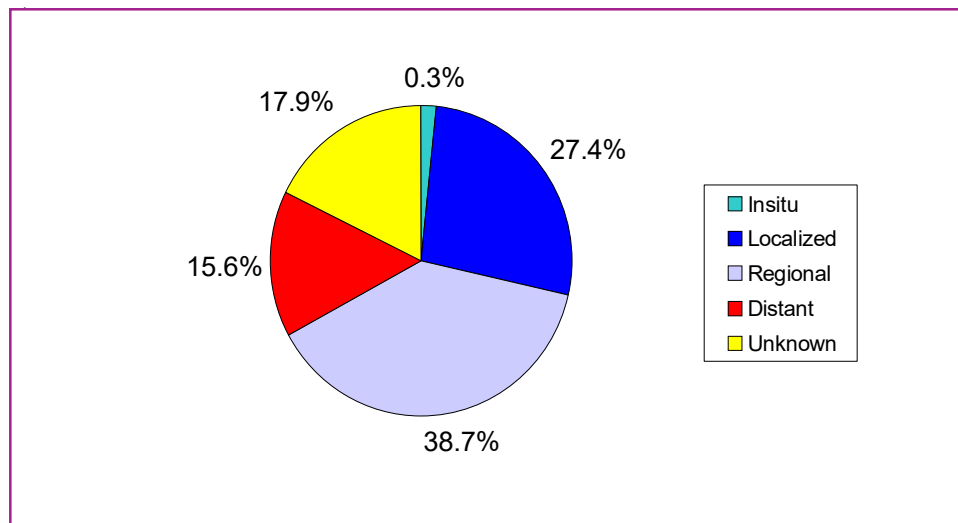


Fig. 3-11 Stage Distribution of Colo-rectal Cancer, 1999-2000

Country	ASR* (Male)	ASR* (Female)
New Zealand	55.3	43.4
United States of America	40.6	30.6
China, Hong Kong	35.0	28.9
Indonesia	12.0	10.6
Bahrain	9.4	8.0
Iraq	5.5	4.6
<i>Saudi Arabia</i>	<i>5.0**</i>	<i>4.7**</i>
India	4.7	3.2
Malawi	3.5	1.6
Bangladesh	1.0	0.9

Table 3-8 Comparison of ASR for Colo-rectal among Saudis with 2000 ASR Estimation in Selected Countries

* Source: GLOBOCAN 2000: Cancer Incidence Mortality and Prevalence Worldwide. International Agency for research on Cancer (IARC), Lyon,2001

** *Actual rate (not estimation)*

Liver (C22)

Between January 1999 and December 2000 there were 696 cases of liver cancer accounting for 6.1% of all 11,330 newly diagnosed cases. The overall ASR was 4.5/100,000. The ASR was 6.5/100,000 in males and 2.6/100,000 in females. This cancer ranked second in males, and eighth in females and affected 512 (73.6%) males and 184 (26.4%) females with a male to female ratio of 279:100. The mean age at diagnosis was 64 years in males and 58 years in females.

Liver cancer is the fifth most common cancer in the world. The estimated number of cases diagnosed worldwide in 2000 was 564,336, with 81.1% in less developed countries. Incidence rates were highest in Eastern Asia, Eastern and Western Africa, and South-Eastern Asia.

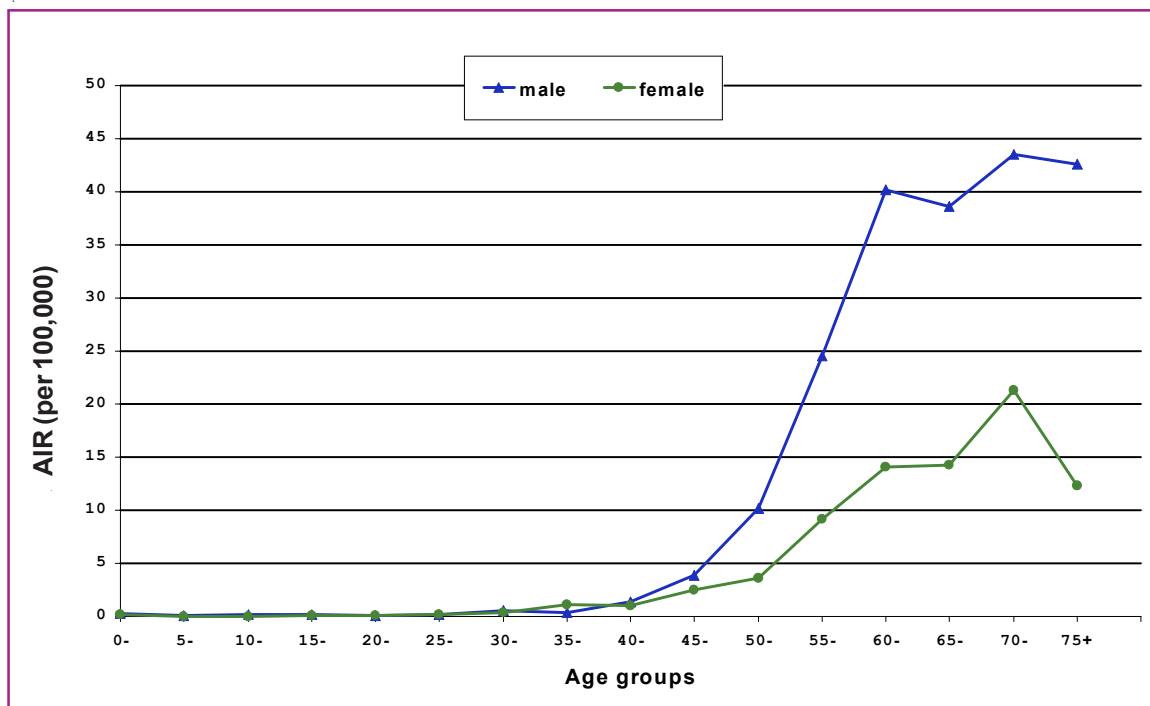


Fig. 3-12 Average Age-Specific Incidence Rate (AIR) for Liver Cancer in Saudi Arabia, 1999-2000

ICD-0 Code	Histology	%
8170	Hepatocellular carcinoma, NOS	80.5
8000	Malignant tumor, NOS	5.7
8160	Cholangiocarcinoma	3.6
8140	Adenocarcinoma, NOS	2.3
8970	Hepatoblastoma	2.2
8230	Solid carcinoma, NOS	1.6
	All Others	4.1

Table 3-9 Histology of Liver Cancer, 1999-2000

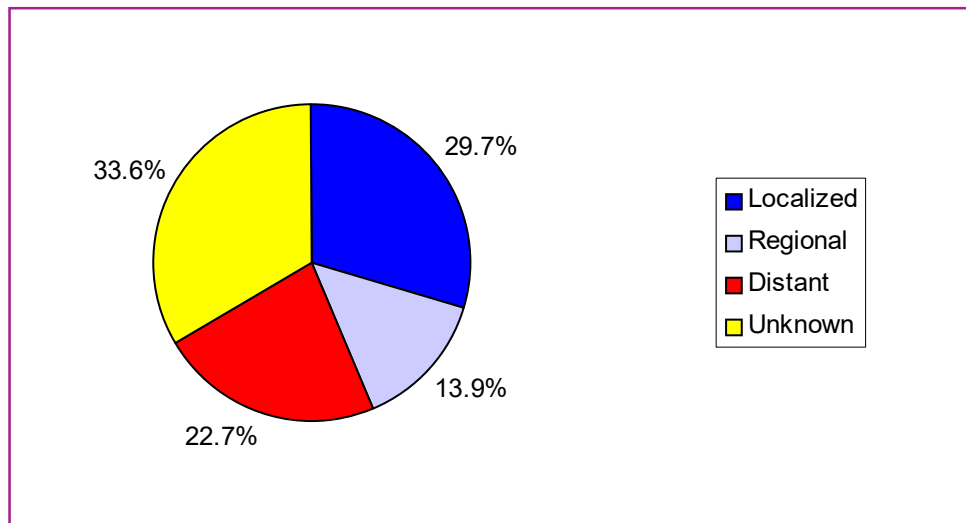


Fig. 3-14 Stage Distribution of Liver Cancer in Saudi Arabia, 1999-2000

Country	ASR* (Male)	ASR* (Female)
Mongolia	98.9	57.3
Thailand	36.9	15.2
Japan	29.2	8.1
Sudan	8.3	3.0
Spain	7.5	2.4
Kuwait	6.8	2.3
<i>Saudi Arabia</i>	<i>6.5**</i>	<i>2.6**</i>
Turkey	3.6	1.0
United Kingdom	2.2	1.1
Sri Lanka	0.7	0.4

Table 3-10 Comparison of ASR for Liver Cancer among Saudis with 2000 ASR Estimation in Selected Countries

* Source: GLOBOCAN 2000: Cancer Incidence Mortality and Prevalence Worldwide. International Agency for research on Cancer (IARC), Lyon,2001

** *Actual rate (not estimation)*

Thyroid (C73)

Between January 1999 and December 2000 there were 695 cases of thyroid cancer accounting for 6.1% of all 11,330 newly diagnosed cases. The overall ASR was 3.3/100,000. ASR in males was 1.6/100,000 and 5.1/100,000 in females. This cancer ranked fourth in males and second in females and affected 156 (22.4%) males and 539 (77.6%) females with a male to female ratio of 346:100. The mean age at diagnosis was 44 years in males and 39 years in females.

Thyroid cancer is the twelfth most common cancer in the world. The estimated number of cases diagnosed worldwide in 2000 was 122,803, with 60.5% in less developed countries. Incidence rates were highest in Melanesia, Polynesia, Northern Europe, Western Asia, and South-Eastern Asia.

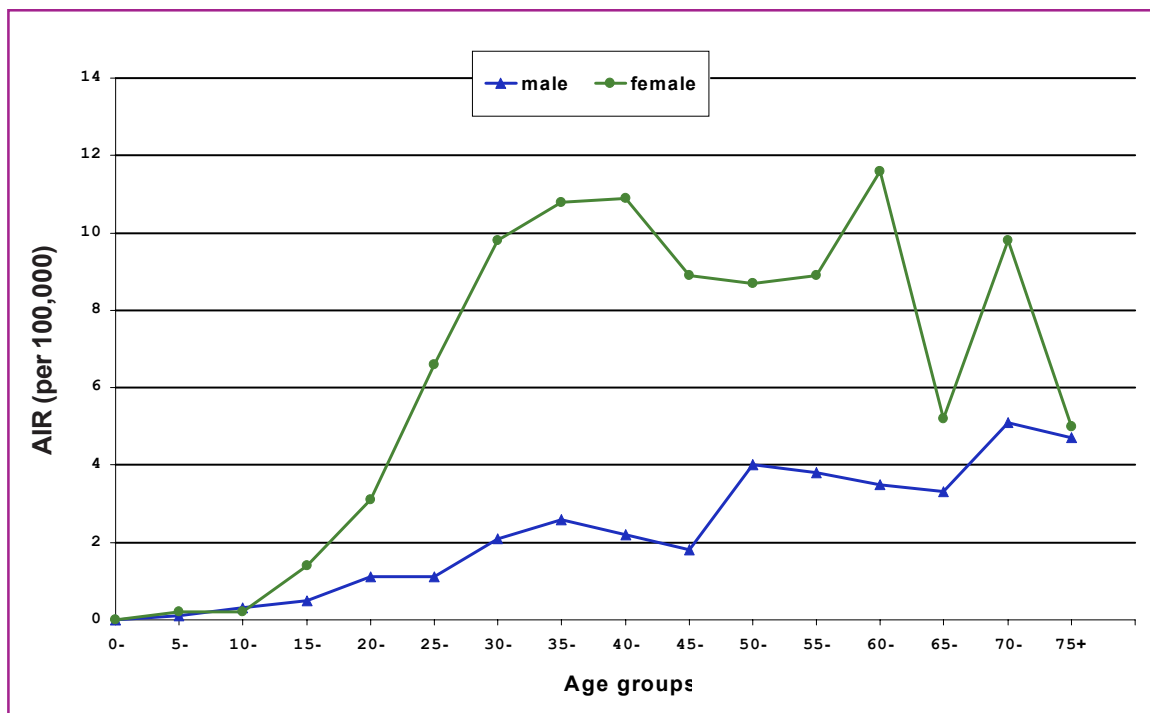


Fig. 3-15 Average Age-Specific Incidence Rate (AIR) for Thyroid Cancer in Saudi Arabia, 1999-2000

ICD-0 Code	Histology	%
8050	Papillary carcinoma, NOS	72.9
8340	Papillary and follicular carcinoma	13.2
8330	Follicular adenocarcinoma, NOS	5.5
8510	Medullary carcinoma, NOS	2.3
8021	Carcinoma, anaplastic, NOS	1.6
8290	Oxyphilic adenocarcinoma	1.4
	All Others	3.1

Table 3-11 Histology of Thyroid Cancer, 1999-2000

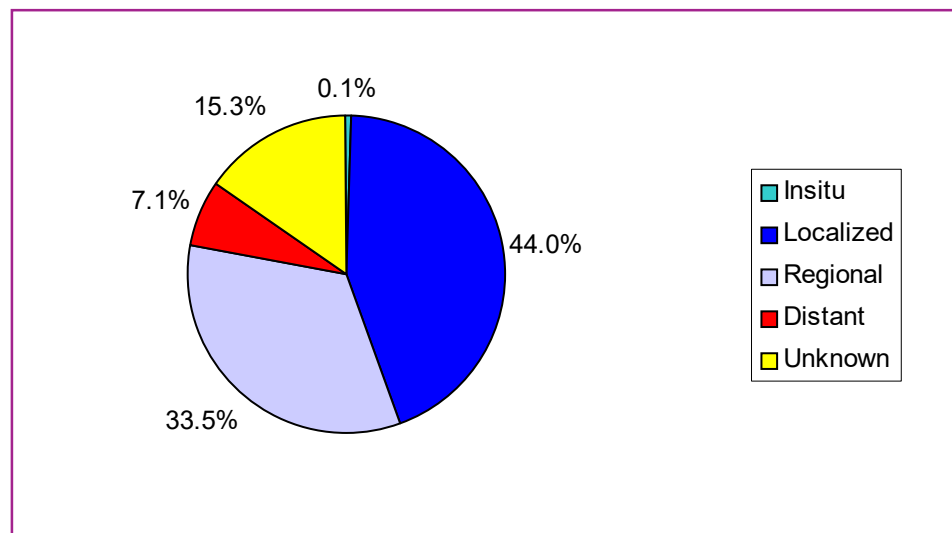


Fig. 3-17 Stage Distribution of Thyroid Cancer in Saudi Arabia, 1999-2000

Country	ASR* (Male)	ASR* (Female)
Vanuatu	4.1	23.2
Iceland	3.9	10.8
Philippines	2.5	8.2
China, Hong Kong	2.1	7.3
Germany	2.0	3.7
<i>Saudi Arabia</i>	<i>1.6**</i>	<i>5.1**</i>
Japan	1.4	4.8
Yemen	1.5	3.1
India	1.0	1.9
Mongolia	0.1	1.0

Table 3-12 Comparison of ASR for Thyroid Cancer among Saudis with 2000 ASR Estimation in Selected Countries

* Source: GLOBOCAN 2000: Cancer Incidence Mortality and Prevalence Worldwide. International Agency for research on Cancer (IARC), Lyon, 2001

** *Actual rate (not estimation)*

Brain, nervous system (C70-C72)

Between January 1999 and December 2000 there were 456 cases of brain and central nervous system cancer accounting for 4% of all newly diagnosed cases. The overall ASR was 1.9/100,000. The ASR was 2.3/100,000 in males and 1.6/100,000 in females. This cancer ranked eighth in males and seventh in females and affected 270(59.2%) males and 186 (40.8%) females with a male to female ratio of 145:100. The mean age diagnosis was 32 years in males and 30 years in females.

Brain and CNS cancer is the seventeenth most common cancer in the world. The estimated number of cases diagnosed worldwide in 2000 was 176,056, with 58.2% in less developed countries. Incidence rates were highest in Northern and Southern Europe, and Western Asia.

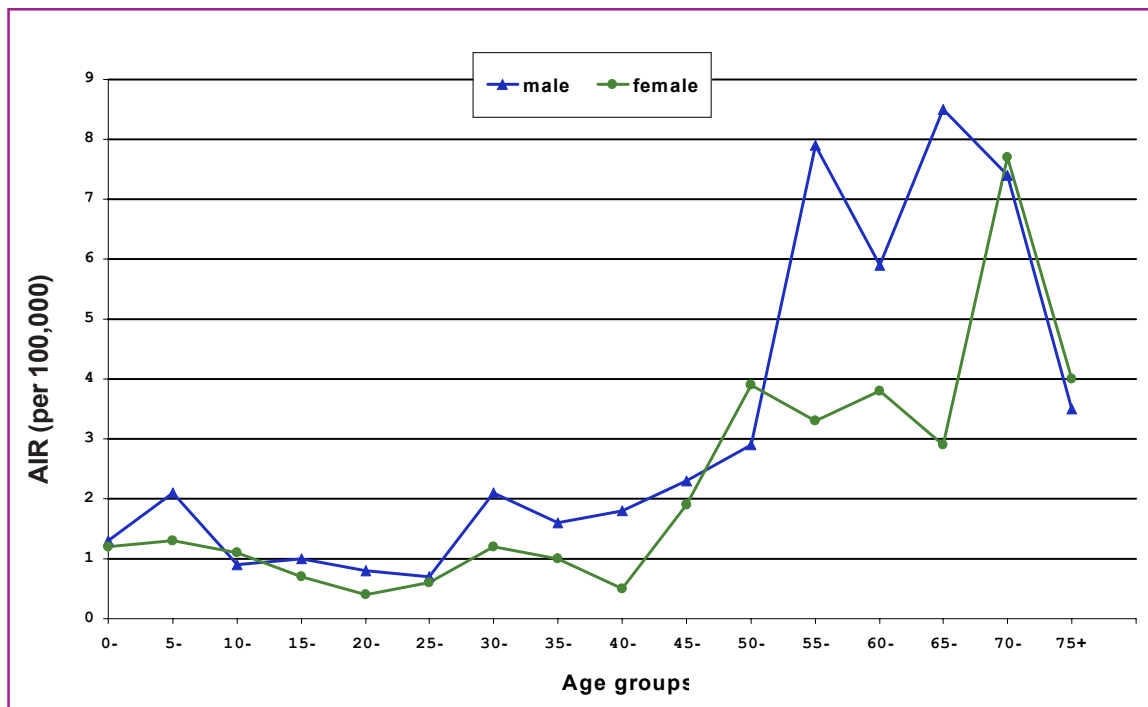


Fig. 3-18 Average Age-Specific Incidence Rate (AIR) for Brain, CNS Cancer in Saudi Arabia, 1999-2000

ICD-0 Code	Histology	%
9440	Glioblastoma, NOS	20.4
9400	Astrocytoma, NOS	15.5
9470	Medulloblastoma, NOS	12.9
9421	Pilocytic Astrocytoma	9.4
9380	Malignant glioma	9.0
9391	Ependymoma, NOS	5.5
	All Others	27.3

Table 3-13 Histology of Brain, CNS Cancer, 1999-2000

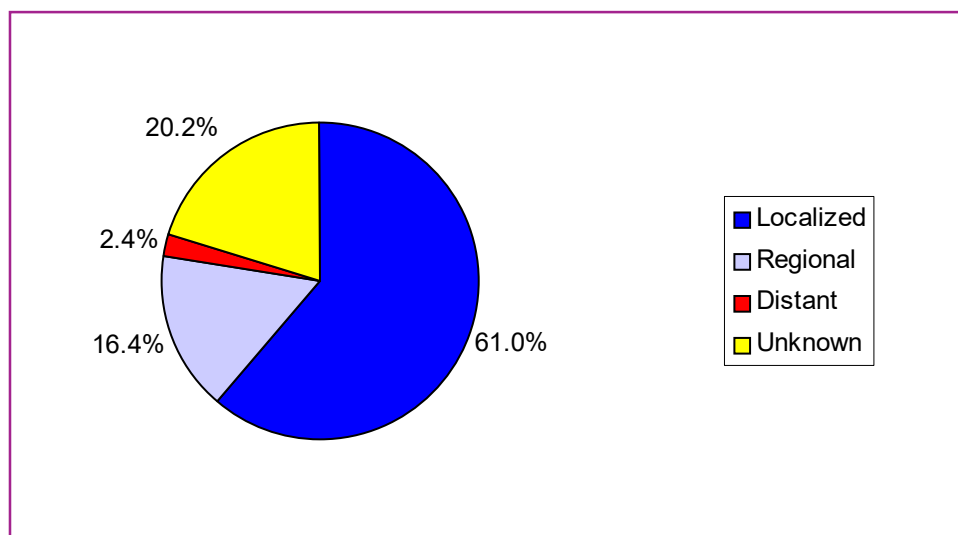


Fig. 3-20 Stage Distribution of Brain, CNS Cancer in Saudi Arabia, 1999-2000

Country	ASR* (Male)	ASR* (Female)
Sweden	11.1	11.3
Greece	10.6	7.1
Norway	8.0	6.6
United States of America	6.5	4.4
China, Hong Kong	4.4	3.4
Bahrain	4.7	2.6
<i>Saudi Arabia</i>	<i>2.3**</i>	<i>1.6**</i>
Tunisia	2.1	1.2
Indonesia	1.4	0.8
Zambia	0.1	0.1

Table 3-14 Comparison of ASR for Brain, CNS Cancer among Saudis with 2000 ASR Estimation in Selected Countries

* Source: GLOBOCAN 2000: Cancer Incidence Mortality and Prevalence Worldwide. International Agency for research on Cancer (IARC), Lyon,2001

** *Actual rate (not estimation)*

Lung (C33-C34)

Between January 1999 and December 2000 there were 454 cases of lung cancer accounting for 4.0% of all 11,330 newly diagnosed cases. The overall ASR was 2.9/100,000. The ASR was 4.5/100,000 in males and 1.4/100,000 in females and affected 354 (78%) males and 100 (22%) females with a male to female ratio of 355:100. Lung cancer ranked fifth in males and seventeenth in females. The mean age at diagnosis was 64 years for males and females.

Lung cancer is the most common cancer in the world. The estimated number of cases diagnosed worldwide in 2000 was 1,238,861, with 52.2% in more developed countries. Incidence rates were highest in Eastern Europe, Eastern Asia, South Europe, North America, and Western Europe.

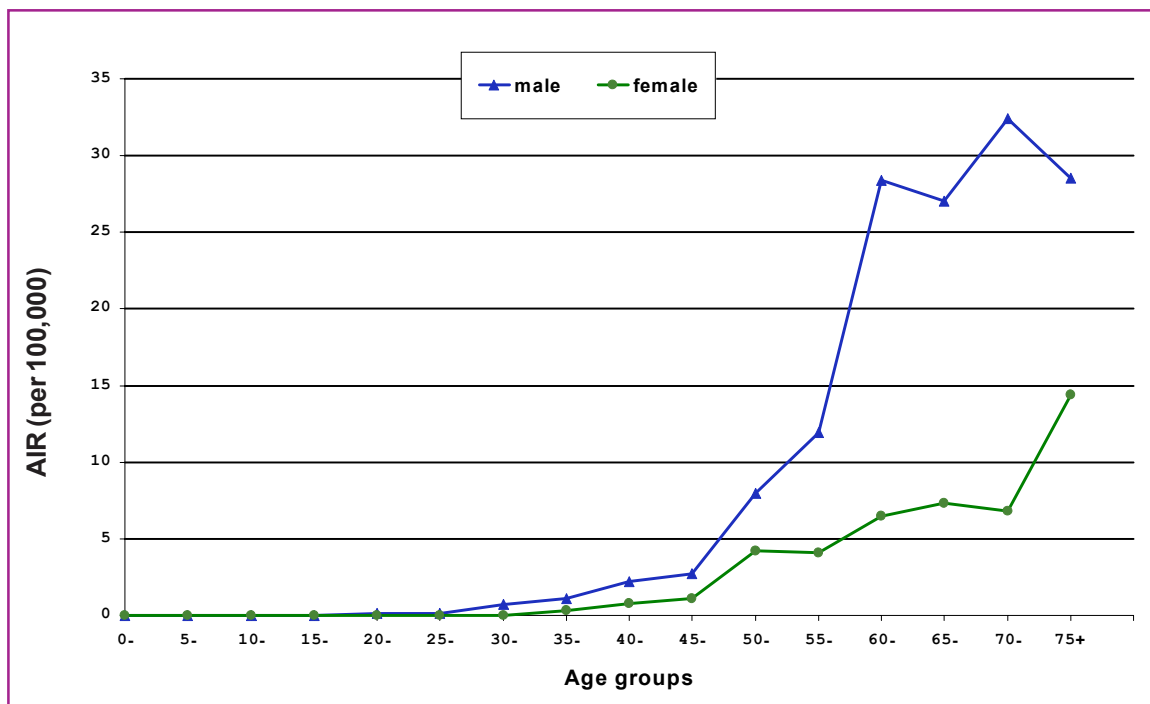


Fig. 3-21 Average Age-Specific Incidence Rate (AIR) for Lung Cancer in Saudi Arabia, 1999-2000

ICD-0 Code	Histology	%
8140	Adenocarcinoma, NOS	29.7
8070	Squamous cell carcinoma, NOS	26.9
8010	Carcinoma, NOS	10.6
8041	Small cell carcinoma, NOS	9.7
8012	Large cell carcinoma, NOS	6.2
	All Others	16.9

Table 3-15 Histology of Lung Cancer, 1999-2000

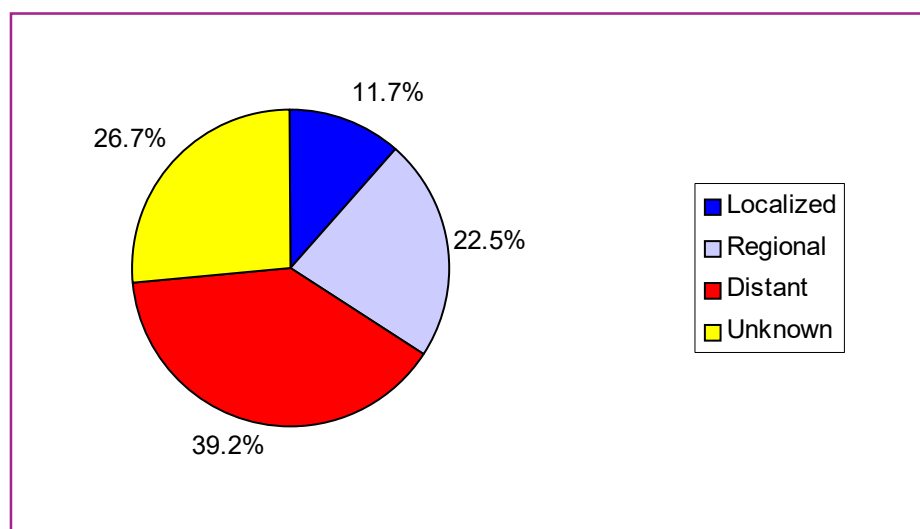


Fig. 3-23 Stage Distribution of Lung Cancer in Saudi Arabia, 1999-2000

Country	ASR* (Male)	ASR* (Female)
Hungary	95.5	22.6
China, Hong Kong	74.7	32.1
United States of America	58.6	34.0
Japan	40.3	12.1
Yemen	31.2	4.8
Morocco	25.6	2.7
India	9.0	2.0
<i>Saudi Arabia</i>	<i>4.5**</i>	<i>1.4**</i>
Sri Lanka	1.9	1.1
Senegal	1.3	0.1

Table 3-16 Comparison of ASR for Lung Cancer among Saudis with 2000 ASR Estimation in Selected Countries

* Source: GLOBOCAN 2000: Cancer Incidence Mortality and Prevalence Worldwide. International Agency for research on Cancer (IARC), Lyon, 2001

** *Actual rate (not estimation)*

Hodgkin's Disease (C81)

Between January 1999 and December 2000 there were 433 cases of Hodgkin's disease accounting for 3.8% of all 11,330 newly diagnosed cases. The overall ASR was 1.5/100,000. The ASR was 1.9/100,000 in males and 1.2/100,000 in females. This cancer ranked ninth in both males and females and affected 260 (60%) males and 173 (40%) females with a male to female ratio of 150:100. The mean age at diagnosis was 27 years in males and 26 years in females.

Hodgkin's disease is the twenty-fourth most common cancer in the world. The estimated number of cases diagnosed worldwide in 2000 was 62,158, with 56.5% in less developed countries. Incidence rates were highest in Western Asia, Western Europe, and Northern Africa.

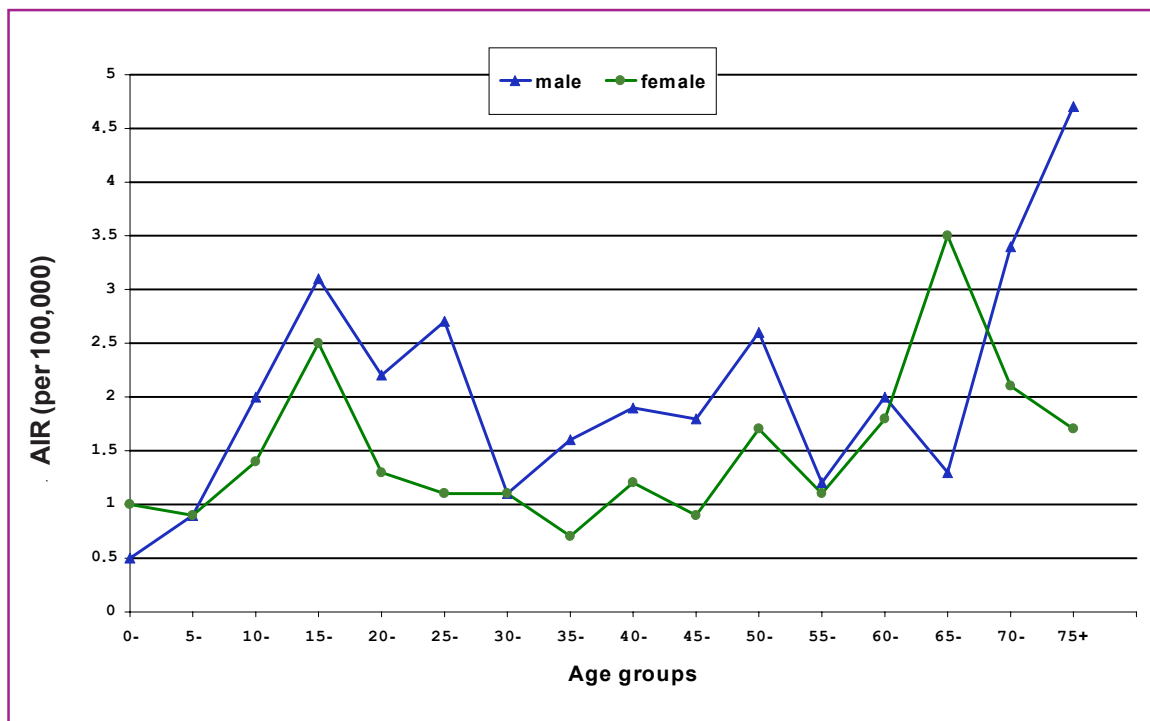


Fig. 3-24 Average Age-Specific Incidence Rate (AIR) for Hodgkin's Disease in Saudi Arabia, 1999-2000

ICD-0 Code	Histology	%
9663	Hodgkin's disease, nodular sclerosis, NOS	53.1
9652	Hodgkin's disease, mixed cellularity, NOS	16.4
9650	Hodgkin's disease, NOS	13.9
9657	Hodgkin's disease, lymphocytic predominance	6.9
	All Others	9.7

Table 3-17 Histology of Hodgkin's Disease, 1999-2000

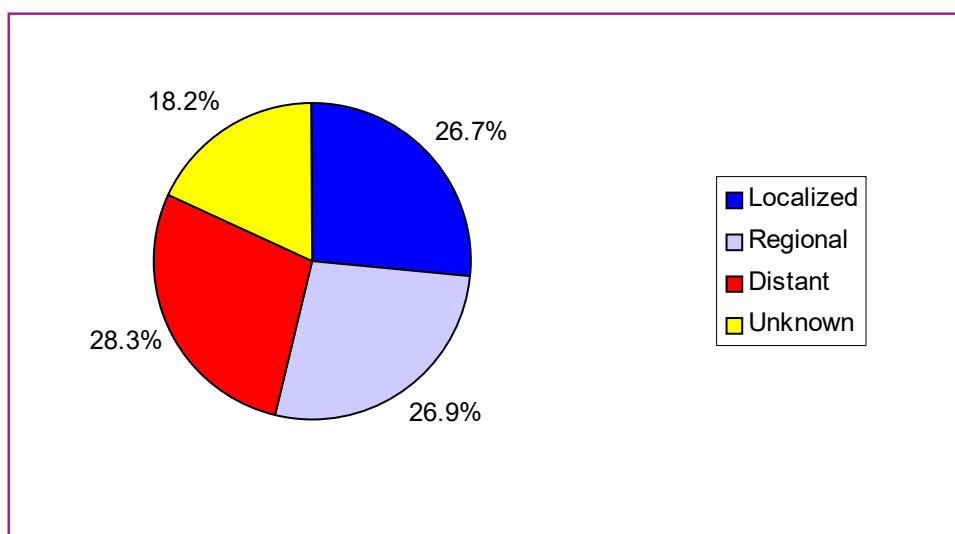


Fig. 3-26 Stage Distribution of Hodgkin's Disease in Saudi Arabia, 1999-2000

Country	ASR* (Male)	ASR* (Female)
Oman	8.0	5.5
Jordan	7.0	6.1
Kuwait	6.8	6.0
Austria	6.4	6.3
Bahrain	6.0	3.6
Qatar	6.0	3.6
United Arab Emirates	6.0	3.6
Canada	2.7	2.2
<i>Saudi Arabia</i>	<i>1.9**</i>	<i>1.2**</i>
Egypt	0.1	0.1

Table 3-18 Comparison of ASR for Hodgkin's Disease among Saudis with 2000 ASR Estimation in Selected Countries

* Source: GLOBOCAN 2000: Cancer Incidence Mortality and Prevalence Worldwide. International Agency for research on Cancer (IARC), Lyon, 2001

** *Actual rate (not estimation)*

Urinary Bladder (C67)

Between January 1999 and December 2000 there were 381 cases of urinary bladder cancers accounting for 3.4% of all 11,330 newly diagnosed cases. The overall ASR was 2.4/100,000. The ASR was 3.7/100,000 in males and 1.1/100,000 in females. This cancer ranked seventh in male and nineteenth in females and affected 301 (79%) males and 80 (21%) females with a male to female ratio of 376:100. The mean age at diagnosis was 62 in males and 61 in females.

Bladder cancer is the ninth most common cancer in the world. The estimated number of cases diagnosed worldwide in 2000 was 335,795, with 58.6% in less developed countries. Incidence rates were highest in Northern Africa, Western Asia, Southern Europe and Eastern Africa.

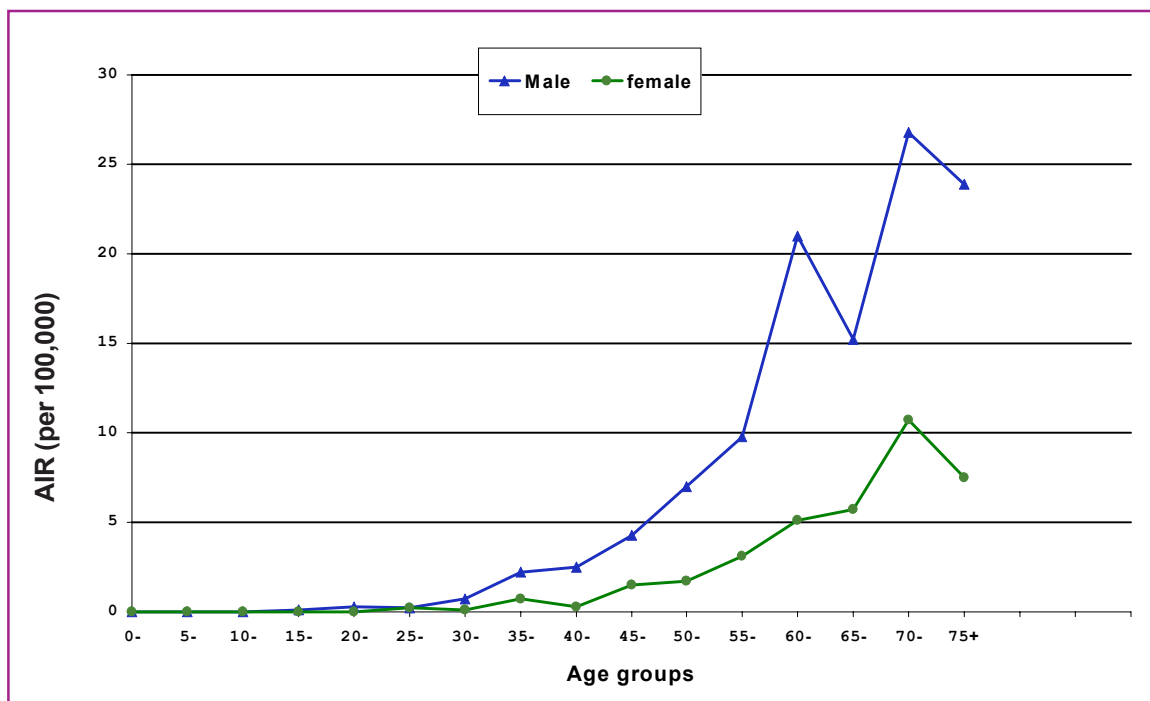


Fig. 3-27 Average Age-Specific Incidence Rate (AIR) for Urinary Bladder Cancer in Saudi Arabia, 1999-2000

ICD-0 Code	Histology	%
8130	Papillary transitional cell carcinoma	42.8
8120	Transitional cell carcinoma, NOS	42.5
8070	Squamous cell carcinoma, NOS	5
8140	Adenocarcinoma, NOS	1.8
8010	Carcinoma, NOS	1.6
	All Others	6.3

Table 3-19 Histology of Urinary Bladder Cancer, 1999-2000

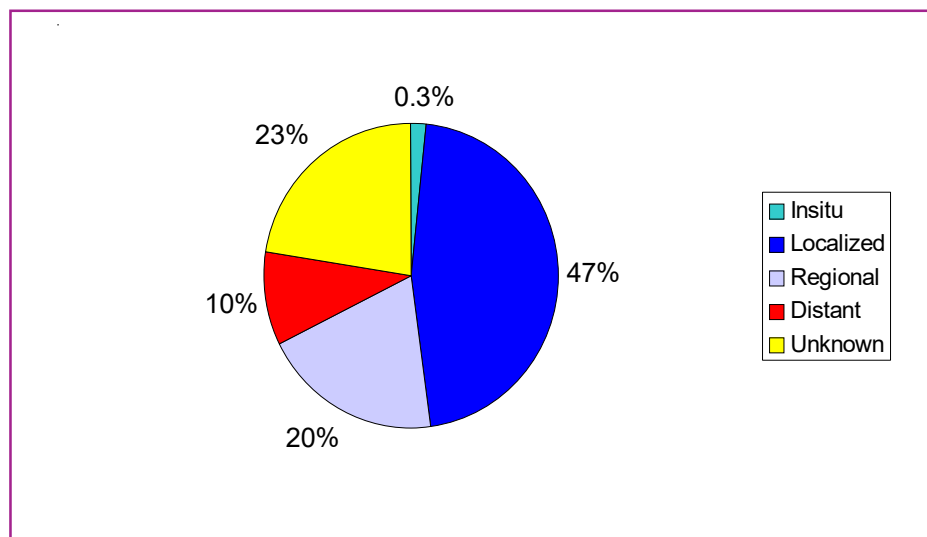


Fig. 3-29 Stage Distribution of Urinary Bladder Cancer in Saudi Arabia, 1999-2000

Country	ASR* (Male)	ASR* (Female)
Egypt	45.4	8.6
Italy	28.0	5.0
United States of America	23.4	5.4
United Kingdom	19.0	6.0
Algeria	13.8	2.0
Japan	9.2	2.0
Pakistan	8.8	3.4
<i>Saudi Arabia</i>	<i>3.7**</i>	<i>1.1**</i>
India	3.2	0.7
Bangladesh	1.3	0.1

Table 3-20 Comparison of ASR for Urinary Bladder Cancer among Saudis with 2000 ASR Estimation in Selected Countries

* Source: GLOBOCAN 2000: Cancer Incidence Mortality and Prevalence Worldwide. International Agency for research on Cancer (IARC), Lyon,2001

** *Actual rate (not estimation)*

Skin (Non-Melanoma) (C44)

Between January 1999 and December 2000 there were 380 cases of skin cancers. Accounting for 3.4% of all 11,330 newly diagnosed cases. The overall ASR was 2.2/100,000. The ASR was 2.5/100,000 in males and 2.0/100,000 in females. This cancer ranked tenth in males and eleventh in females and affected 226 (59.5%) males and 154 (40.5%) females with a male to female ratio of 147:100. The mean age at diagnosis was 62 years in males and 58 years in females.

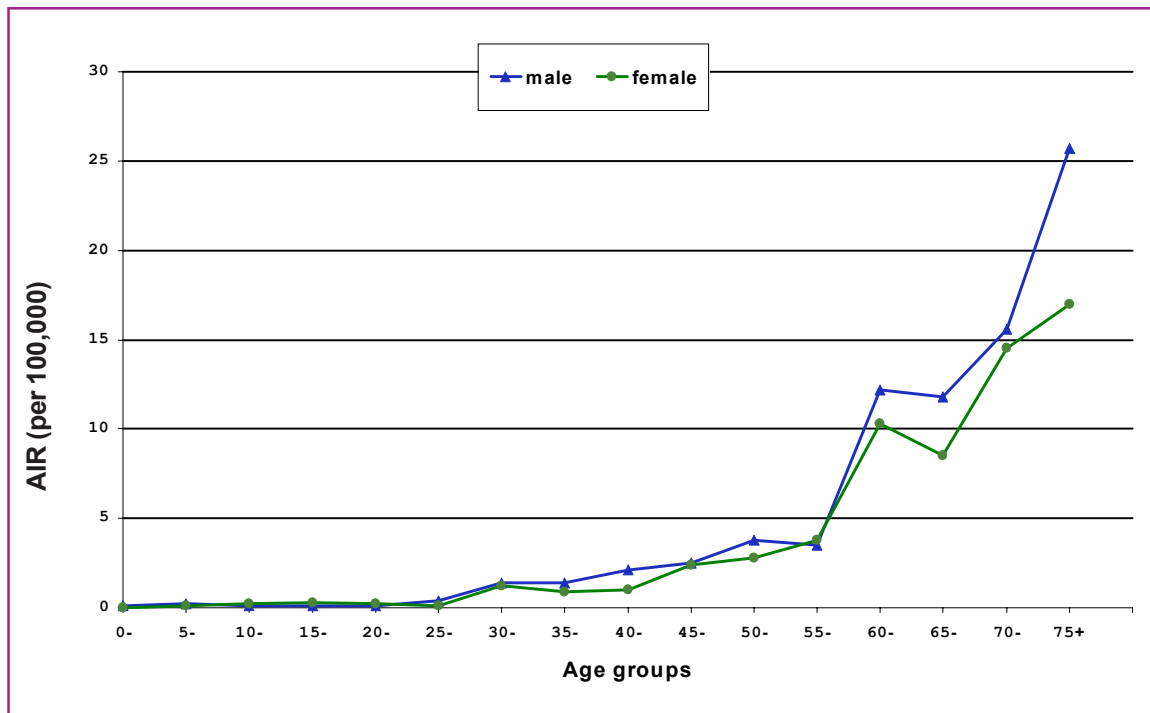


Fig. 3-30 Average Age-Specific Incidence Rates (AIR) for Skin Cancer in Saudi Arabia, 1999-2000

ICD-0 Code	Histology	%
8090	Basal cell carcinoma	51.1
8070	Squamous cell carcinoma	27.6
8832	Dermatofibrosarcoma, NOS	6.3
8071	Squamos cell carcinoma, keratinizing, NOS	4.5
8094	Basosquamous carcinoma	2.4
	All Others	8.1

Table 3-21 Histology of Skin Cancer (Non-Melanoma), 1999-2000

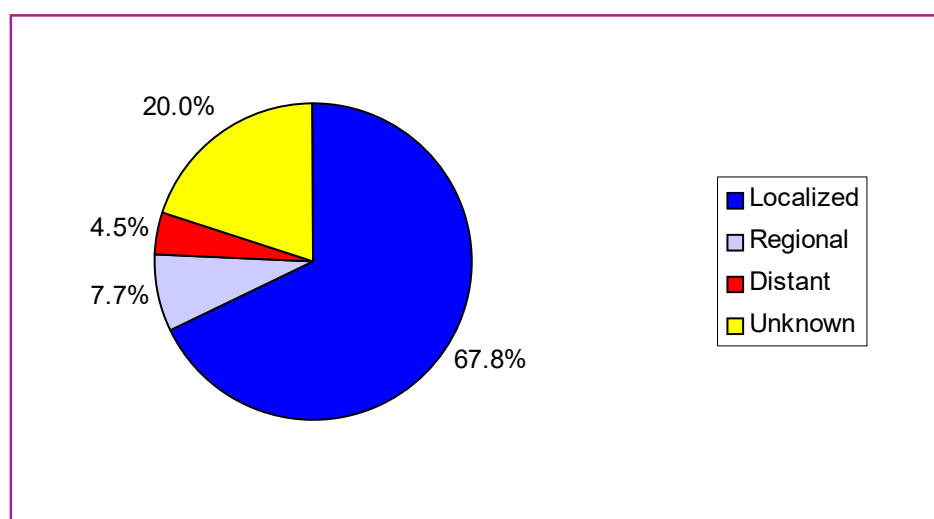


Fig. 3-32 Stage Distribution of Skin Cancer in Saudi Arabia, 1999-200

Prostate (C61)

Between January 1999 and December 2000 there were 304 cases of prostate cancer accounting for 5.3% of all 5,713 newly diagnosed cases among males. The ASR was 3.5/100,000 among males. This cancer ranked sixth in males. The mean age at diagnosis was 71 years.

Prostate cancer is the sixth most common cancer in the world among males. The estimated number of cases diagnosed worldwide in 2000 was 542,990, with 76.5% in more developed countries. Incidence rates were highest in Northern America, Australia/New Zealand, Caribbean, and Northern Europe.

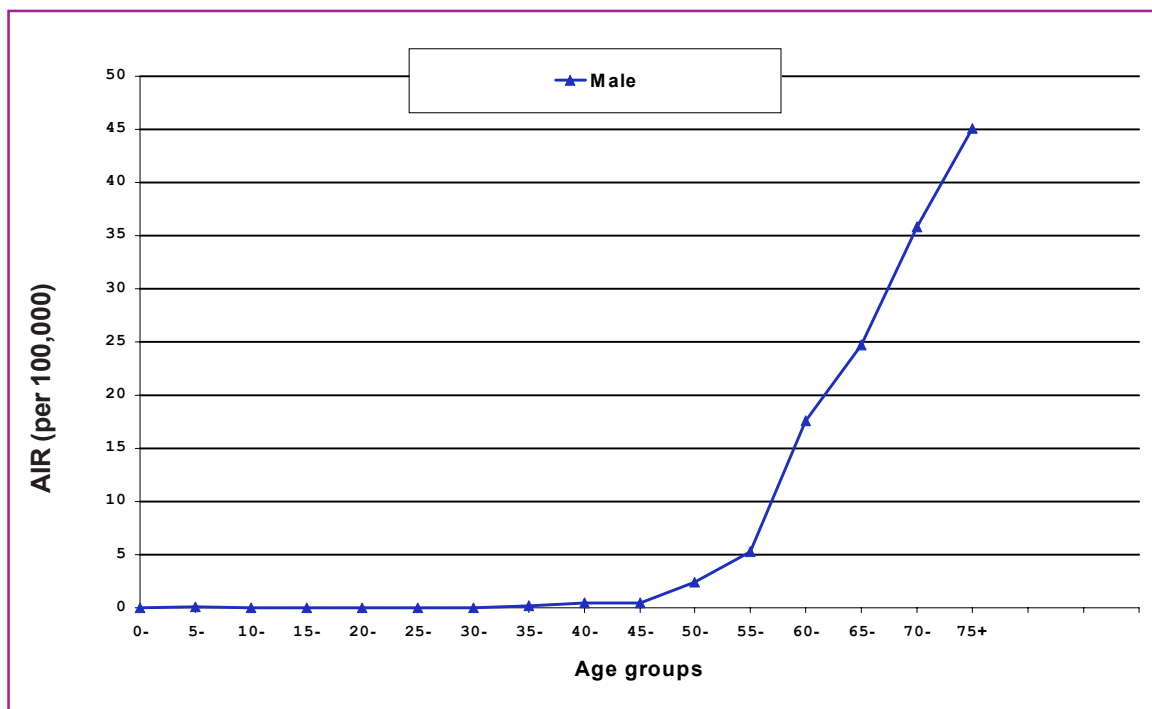


Fig. 3-33 Average Age-Specific Incidence Rate (AIR) for Prostate Cancer in Saudi Arabia, 1999-2000

ICD-0 Code	Histology	%
9140	Adenocarcinoma, NOS	83.6
8010	Carcinoma, NOS	11.8
	All Others	4.6

Table 3-22 Histology of Prostate Cancer, 1999-2000

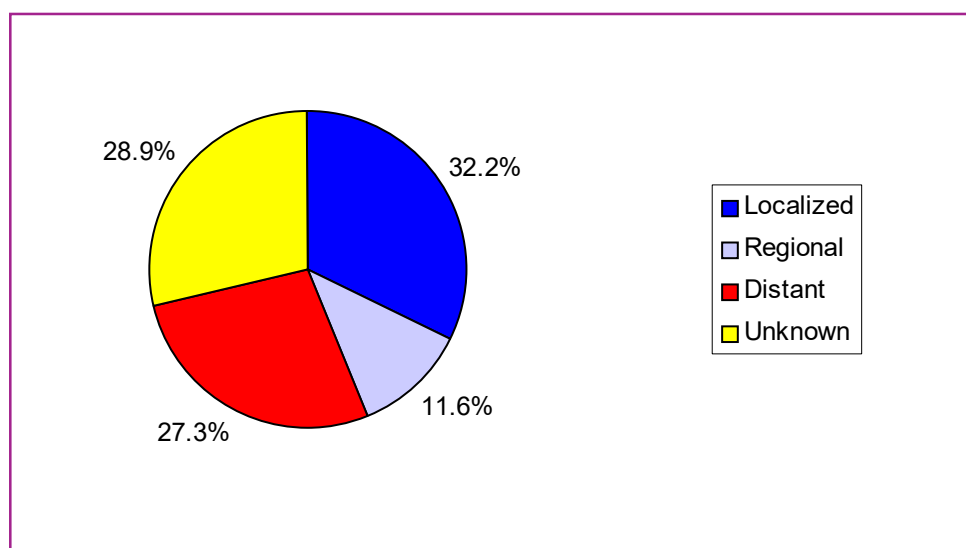


Fig. 3-35 Stage Distribution of Prostate Cancer in Saudi Arabia, 1999-2000

Country	ASR* (Male)
United States of America	104.3
Canada	102.2
France	56.5
Philippines	18.8
Jordan	11.2
Egypt	5.6
Thailand	4.4
<i>Saudi Arabia</i>	3.5**
Iran, Islamic Republic	3.1
China	1.7

Table 3-23 Comparison of ASR for Prostate Cancer among Saudis with 2000 ASR Estimation in Selected Countries

* Source: GLOBOCAN 2000: Cancer Incidence Mortality and Prevalence Worldwide. International Agency for research on Cancer (IARC), Lyon, 2001

** *Actual rate (not estimation)*

Ovary (C56)

Between January 1999 and December 2000 there were 205 cases of ovary cancer among females accounting for 3.6% of all 5,617 newly diagnosed cases among females. The ASR was 2.3/100,000 female populations. This cancer ranked sixth in females. The mean age at diagnosis was 46 years.

Ovarian cancer is the sixth most common cancer in the world among women. The estimated number of cases diagnosed worldwide in 2000 was 192,379, with 53.3% in less developed countries. Incidence rates were highest in Northern Europe, South America, Eastern Europe, and Eastern Africa.

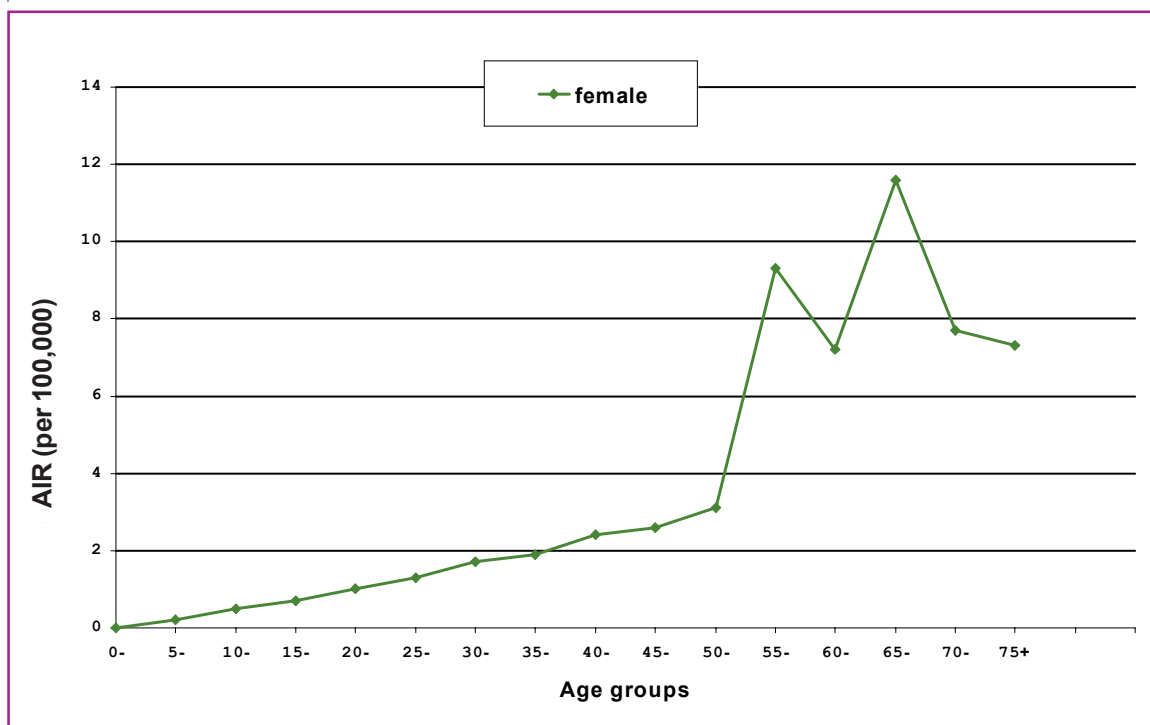


Fig. 3-36 Average Age-Specific Incidence Rate (AIR) for Ovary Cancer in Saudi Arabia, 1999-2000

ICD-0 Code	Histology	%
8460	Papillary serous cystadenocarcinoma	14.1
8140	Adenocarcinoma, NOS	10.7
9060	Dysgerminoma	8.8
8380	Endometrioid carcinoma	7.3
8461	Serous surface papillary carcinoma	6.8
9080	Teratoma, malignant, NOS	5.9
8462	Papillary serous cystadenoma, borderline malignancy	4.9
8441	Serous cystadenocarcinoma, NOS	4.4
8471	Mucinous cystadenocarcinoma, NOS	4.4
	All Others	32.7

Table 3-24 Histology of Ovary Cancer, 1999-2000

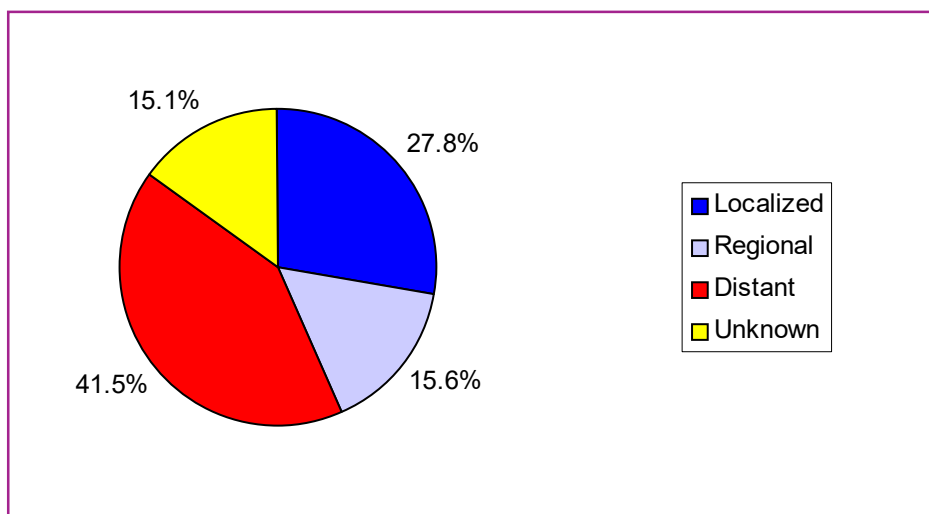


Fig. 3-38 Stage Distribution of Ovary Cancer in Saudi Arabia, 1999-2000

Country	ASR* (Female)
Denmark	16.1
Iceland	15.8
Ethiopia	14.7
United Kingdom	12.2
China, Hong Kong	7.5
Yemen	5.9
India	4.9
Tunisia	3.0
<i>Saudi Arabia</i>	2.3**
Egypt	1.2

Table 3-25 Comparison of ASR for Ovary Cancer among Saudis with 2000 ASR Estimation in Selected Countries

* Source: GLOBOCAN 2000: Cancer Incidence Mortality and Prevalence Worldwide. International Agency for research on Cancer (IARC), Lyon, 2001

** *Actual rate (not estimation)*

Cervix Uteri (C53)

Between January 1999 and December 2000, there were 167 cases of cervix uteri cancer among females accounting for 3.0 % of all 5,617 newly diagnosed cases for females. The ASR was 2.0/100,000 among female population. This cancer ranked tenth in females. The mean age at diagnosis was 51 years.

Cervix uteri cancer is the second most common cancer in the world among women. The estimated number of cases diagnosed worldwide in 2000 was 470,606, with 80.6% in less developed countries. Incidence rates were highest in the Caribbean, Eastern Africa, Central and South America.

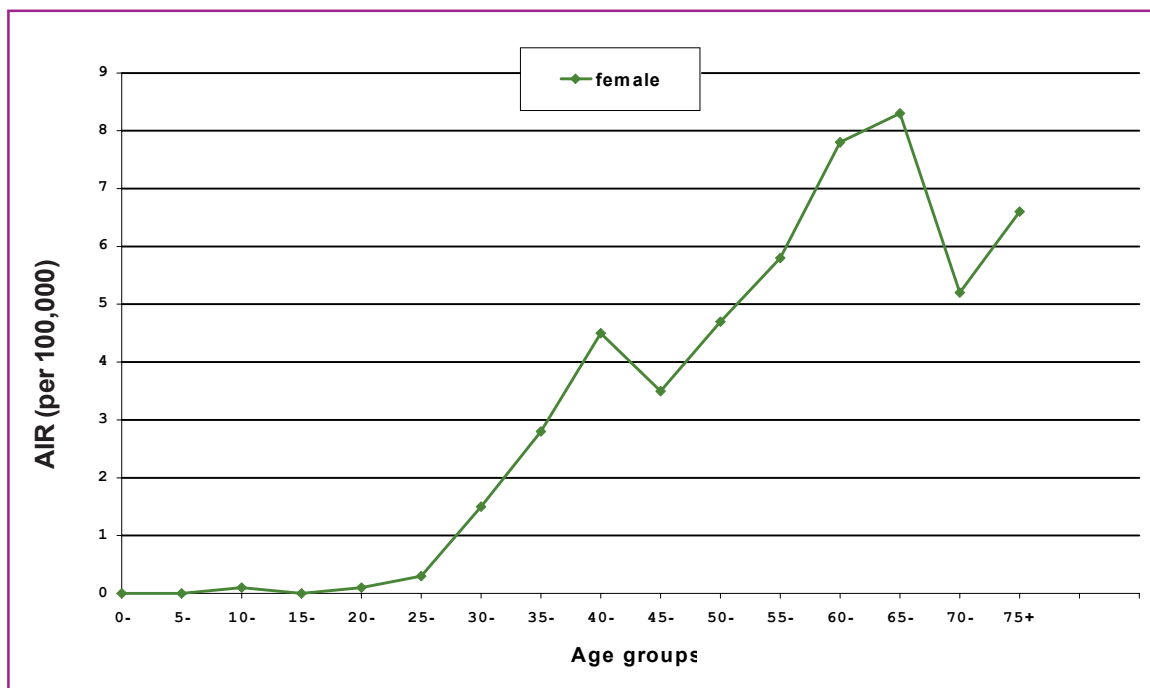


Fig. 3-39 Average Age-Specific Incidence Rate (AIR) for Cervix Uteri Cancer in Saudi Arabia, 1999-2000

ICD-0 Code	Histology	%
8070	Squamous cell carcinoma, NOS	57.5
8072	Squamous cell carcinoma, non-keratinizing, NOS	13.2
8140	Adenocarcinoma, NOS	9.6
8071	Squamous cell, keratinizing, NOS	7.8
	All Others	11.9

Table 3-26 Histology of Cervix Uteri, 1999-2000

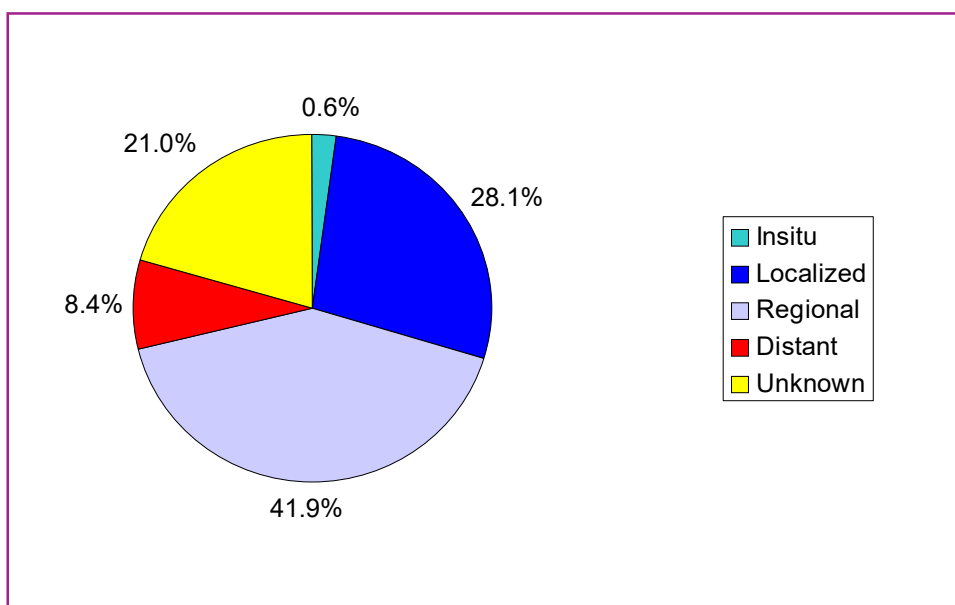


Fig. 3-41 Stage Distribution of Cervix Uteri Cancer in Saudi Arabia, 1999-2000

Country	ASR* (Female)
Haiti	93.9
Tanzania	61.4
Zimbabwe	52.1
Peru	40.0
Egypt	14.0
Japan	11.1
China	5.2
Yemen	4.8
Turkey	3.9
Syrian Arab Republic	3.0
<i>Saudi Arabia</i>	<i>2.0**</i>

Table 3-27 Comparison of ASR for Cervix Uteri Cancer among Saudis with 2000 ASR Estimation in Selected Countries

* Source: GLOBOCAN 2000: Cancer Incidence Mortality and Prevalence Worldwide. International Agency for research on Cancer (IARC), Lyon,2001

** *Actual rate (not estimation)*

PART IV
CANCER INCIDENCE AMONG NON-SAUDIS IN
SAUDI ARABIA, 1999-2000

Cancer among the non- Saudi Population 1999-2000

Between January 1999 and December 2000, 3,242 non-Saudi cases were reported to the NCR. Males accounted for 1,769 (54.6%) cases while females accounted for 1,473 (45.4%) . The male to female ratio is 120:100.

The 15 in-situ cases reported during this period were excluded from the analysis as the current software program, CanReg 3.21, does not include in-situ cases in the statistical analysis. Therefore, the total number of cases analyzed was 3,227 (1,765 (54.7%) males and 1,462 (45.3%) females). The male to female ratio is 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 1.7% and the 25 to 54 age-group represented 61% of non-Saudi population. During the 1999 and 2000, just over 6.0% of all cancers occurred before the age of 15, and 60% occurred between age 25 to 54 years. The mean age at diagnosis was 46 years in males and 45 years in females. The crude incidence rate (CIR) of all cancers in the non-Saudi population was 31.4/100,000 (25.8/100,000 in males and 42.7/100,000 in females). The ten most common cancers seen among the non-Saudi population are as follows:

CANCER	NO. OF CASES	PERCENTAGE (%)
Female breast	505	15.6
Colo-rectal	255	7.9
Leukaemia	229	7.1
Non-Hodgkin lymphoma	208	6.4
Skin (non-melanoma)	149	4.6
Bladder	134	4.2
Liver	111	3.4
Lung	110	3.4
Brain, CNS	110	3.4
Stomach	107	3.3

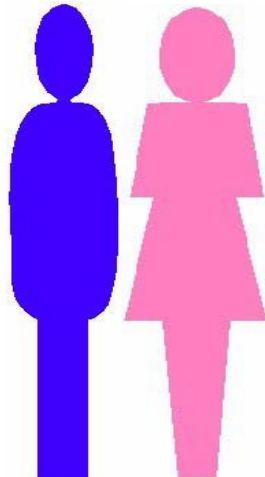
The distribution of cancer cases among the different nationalities in order of relative frequency is as follows 612 Yemenis (19%), 435 Sudanese (13.5%), 325 Egyptians (10.1%), 215 Pakistanis (6.7%), 210 Philippines (6.5%), 135 Syrians (4.2%), 133 Indians (4.1%), 118 Jordanians (3.7%), 106 Bangladeshis (3.3%), 85 Palestinians (2.6%), 75 Americans (2.3%), 71 Indonesians (2.2%), 70 Eritreans (2.2%), 49 Bahrainis (1.5%), 48 Ethiopians (1.5%), 43 Lebanese (1.3%), 42 Somalis (1.3%), 41 Nigerians (1.3%), 41 British (1.3%), and 373 cases (11.6%) among other nationalities.

Figure 4-1 represents the most common sites of cancer among all non-Saudi patients designated by sex. The data were ranked using ICD-9 to include the frequency for the two years.

Male

Colo-rectal 186(10.5%)
 Leukaemia 159 (9%)
 NHL 159 (9%)
 Bladder 110 (6.2%)
 Skin 102 (5.8%)
 Liver 89 (5%)
 Lung 85 (4.8%)
 Brain & CNS 81 (4.6%)
 Stomach 80 (4.5%)
 Prostate 65 (3.7%)

Total = 1765



Female

Breast 505 (34.5%)
 Cervix uteri 106 (7.3%)
 Leukaemia 70 (4.8%)
 Colo-rectal 69 (4.7%)
 Thyroid 65 (4.4%)
 Ovary 57 (3.9%)
 NHL 49 (3.4%)
 Skin 47 (3.2%)
 Corpus uteri 40 (2.7%)
 Hodgkin's 31 (2.1%)

Total = 1462

Fig. 4-1 Ten Most Common Cancers among non-Saudis by Sex, 1999-2000

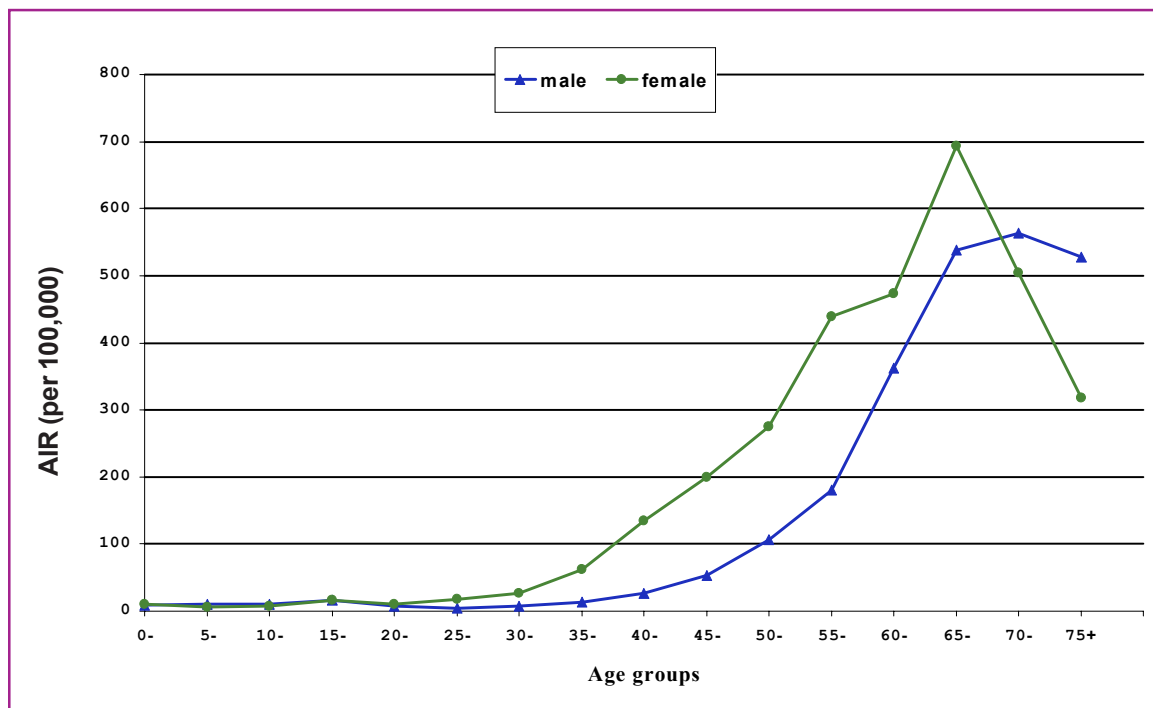


Fig. 4-2 Average Age-Specific Incidence Rate (AIR) for All Cancers among non-Saudis in Saudi Arabia, 1999-2000

PART V

TABLES

Table 5-1-1 Age Distribution of Cancer Cases among Saudi Males, 1999

ICD(10)	ALL SITES	Tot.	UNK.	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	%
C00	Lip	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0
C01-C02	Tongue	25	-	-	-	-	-	-	1	-	2	-	1	-	3	3	4	4	7	0.9
C07-C08	Salivary gland	12	-	-	1	-	-	-	1	1	2	1	-	2	-	-	3	1	-	0.4
C03-C06	Mouth	29	-	-	-	-	-	1	1	1	-	-	3	2	3	1	4	6	7	1.0
C09-C10	Oropharynx	6	-	-	-	-	-	-	-	-	1	1	-	1	-	2	-	-	1	0.2
C11	Nasopharynx	103	-	-	1	1	5	4	2	4	8	15	14	7	13	10	6	9	4	3.6
C12-C13	Hypopharynx	6	-	1	-	-	-	-	1	-	-	-	-	-	-	1	2	-	1	0.2
C14	Pharynx unspec.	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0
C15	Oesophagus	57	-	-	-	-	-	-	-	-	-	-	1	3	4	4	12	10	23	2.0
C16	Stomach	98	-	-	-	-	-	-	1	3	5	3	4	5	8	11	16	16	26	3.4
C17	Small intestine	13	-	-	-	-	-	-	-	1	-	-	1	4	-	2	1	2	2	0.4
C18	Colon	102	-	-	-	-	-	1	1	3	7	8	6	7	12	17	14	8	18	3.5
C19-C21	Rectum	96	-	-	-	-	1	1	2	3	-	5	5	6	17	22	10	8	16	3.3
C22	Liver	269	-	4	1	2	1	1	2	3	3	4	14	16	36	44	44	36	58	9.3
C23-C24	Gallbladder etc.	25	-	-	-	-	-	-	1	1	-	1	-	3	-	5	5	3	6	0.9
C25	Pancreas	50	-	-	-	-	-	-	1	1	1	2	3	5	3	6	10	5	14	1.7
C30-C31	Nose, sinuses etc.	13	-	1	-	-	-	2	1	-	2	-	2	-	1	1	1	-	2	0.4
C32	Larynx	44	-	-	-	-	-	-	-	-	3	-	2	8	7	5	7	2	10	1.5
C33-C34	Bronchus, lung	186	-	-	-	-	-	-	1	4	5	8	4	19	13	27	37	28	40	6.4
C37-C38	Other Thoracic organs	18	-	5	1	-	2	-	1	1	-	1	-	1	-	1	1	1	3	0.6
C40-C41	Bone	58	-	2	8	14	14	4	-	2	3	2	1	-	1	2	-	4	1	2.0
C47-C49	Connective tissue	72	-	10	3	6	4	6	7	3	-	2	4	5	2	2	6	3	9	2.5
C45	Mesothelioma	2	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	0.1
C46	Kaposi's sarcoma	11	-	-	-	1	-	-	-	1	2	2	1	1	-	-	1	1	1	0.4
C43	Melanoma of skin	9	-	-	-	-	-	-	-	-	-	2	3	-	-	1	1	1	1	0.3
C44	Other skin	116	-	-	3	-	-	-	2	5	7	9	9	7	7	11	13	10	33	4.0
C50	Breast	9	-	-	-	-	-	-	-	1	-	2	1	-	1	-	1	1	2	0.3
C61	Prostate	138	-	-	-	-	-	-	-	-	-	1	2	5	8	18	29	31	44	4.8
C62	Testis	33	-	4	-	-	-	2	5	2	2	8	4	3	3	-	-	-	-	1.1
C60	Penis	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	0.0
C63	Other male genital	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	0.1
C67	Bladder	151	-	-	-	-	1	-	-	3	9	8	11	11	15	15	16	22	40	5.2
C64-C66;C68	Kidney etc.	83	-	15	2	-	1	2	-	4	4	7	4	6	4	11	9	7	7	2.9
C69	Eye	23	-	12	-	-	-	1	-	-	-	-	1	-	1	4	1	1	2	0.8
C70-C72	Brain, nervous system	128	-	17	24	7	7	4	4	8	5	4	6	4	11	6	9	9	3	4.4
C73	Thyroid	85	-	-	1	2	5	9	5	10	12	5	4	5	5	6	5	5	6	2.9
C74-C75	Other endocrine	10	-	3	2	1	1	-	1	1	-	-	-	-	-	-	1	-	-	0.3
C81	Hodgkin's disease	123	-	6	14	21	21	12	14	5	5	6	6	3	2	1	2	3	2	4.2
C82-C85;C96	Non-Hodgkin lymphoma	269	-	13	4	9	11	9	10	9	12	8	15	22	25	35	31	21	35	9.3
C88;C90	Multiple myeloma	34	-	-	-	-	-	-	-	-	2	2	2	2	6	6	2	3	9	1.2
C91	Lymphoid leukaemia	137	-	31	35	13	11	7	3	2	2	2	2	3	3	8	3	5	7	4.7
C92	Myeloid leukaemia	107	-	7	9	8	7	10	5	13	5	13	2	8	3	2	3	4	8	3.7
C93	Monocytic leukaemia	2	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	0.1
C94	Other leukaemia	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	0.0
C95	Leukaemia unspec.	5	-	1	-	-	-	2	-	-	1	-	-	-	-	1	-	-	-	0.2
	Other & unspecified	134	-	3	-	-	1	-	2	2	5	8	8	12	18	13	19	18	25	4.6
	All sites	2,896	0	135	110	85	94	79	74	97	115	140	147	187	235	306	329	289	474	100

Table 5-1-2 Age Distribution of Cancer Cases among Saudi Females, 1999

ICD(10)	ALL SITES	Tot.	UNK.	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	%
C00	Lip	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C01-C02	Tongue	29	-	1	-	-	-	-	-	-	-	-	-	1	3	7	5	3	6	3
C07-C08	Salivary gland	8	-	-	1	-	-	1	-	-	2	-	2	1	-	-	-	-	1	-
C03-C06	Mouth	41	-	-	-	-	-	-	1	-	2	2	4	5	4	6	4	4	9	1.5
C09-C10	Oropharynx	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	0.0
C11	Nasopharynx	36	-	-	-	1	1	1	-	4	6	6	1	3	6	5	1	1	1	-
C12-C13	Hypopharynx	17	-	-	-	-	-	-	1	-	1	2	2	2	2	-	1	-	6	0.6
C14	Pharynx unspec.	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15	Oesophagus	55	-	-	-	-	-	-	-	-	5	2	1	3	3	14	8	8	11	2.0
C16	Stomach	68	-	-	-	-	-	1	1	2	4	5	4	4	4	8	5	12	18	2.4
C17	Small intestine	7	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	1	0.3
C18	Colon	99	-	-	-	1	-	4	2	4	6	5	3	8	14	15	10	10	17	3.5
C19-C21	Rectum	86	-	-	-	2	1	3	2	4	5	7	8	4	10	8	13	5	14	3.1
C22	Liver	82	-	3	-	-	1	-	1	2	1	2	2	4	12	15	9	16	14	2.9
C23-C24	Gallbladder etc.	59	-	-	-	-	-	-	1	-	2	4	7	6	7	8	9	4	11	2.1
C25	Pancreas	33	-	-	-	-	-	-	-	1	-	2	5	3	5	6	1	5	5	1.2
C30-C31	Nose, sinuses etc.	7	-	-	-	-	1	-	-	1	-	-	-	-	1	-	2	1	1	0.3
C32	Larynx	10	-	-	-	-	-	-	-	-	-	-	-	1	3	1	-	3	-	0.4
C33-C34	Bronchus, lung	52	-	-	-	-	-	-	-	-	2	3	3	6	8	10	3	3	14	1.9
C37-C38	Other Thoracic organs	6	-	2	-	-	-	-	-	-	-	-	-	1	-	1	-	-	1	0.2
C40-C41	Bone	39	-	-	3	10	12	6	3	1	-	-	1	1	1	1	-	-	-	1.4
C47-C49	Connective tissue	49	-	9	2	3	2	1	3	5	2	2	2	2	2	-	5	3	5	1.8
C45	Mesothelioma	4	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	-	0.1
C46	Kaposi's sarcoma	8	-	-	-	-	-	-	-	1	-	1	3	-	-	-	1	-	2	0.3
C43	Melanoma of skin	8	-	-	-	-	-	1	-	-	-	1	-	1	-	1	-	-	3	0.3
C44	Other skin	75	1	-	1	2	3	-	1	5	2	1	7	6	7	13	4	10	12	2.7
C50	Breast	543	-	-	-	-	-	-	3	26	51	79	78	73	52	50	45	34	27	19.4
C55	Uterus unspec.	11	-	-	-	-	-	-	-	-	1	-	-	5	3	1	-	-	1	0.4
C53	Cervix uteri	76	-	-	-	-	-	1	2	6	8	13	10	6	8	12	6	2	2	2.7
C58	Placenta	11	-	-	-	-	3	2	1	-	1	2	-	1	1	1	-	-	-	0.4
C54	Corpus uteri	57	-	-	-	-	-	1	1	1	5	4	4	5	8	14	3	7	4	2.0
C56	Ovary etc.	103	-	-	1	7	3	8	10	7	5	10	5	6	14	7	12	4	4	3.7
C51-C52;C57	Other female genital	10	-	-	-	-	-	-	-	-	-	-	2	1	1	2	1	2	1	0.4
C67	Bladder	43	-	-	-	-	-	-	1	1	4	-	3	4	5	3	7	8	7	1.5
C64-C66;C68	Kidney etc.	67	-	12	1	2	2	1	1	1	4	9	6	4	4	8	4	4	4	2.4
C69	Eye	25	-	15	2	-	1	-	-	-	-	1	-	1	-	2	1	2	-	0.9
C70-C72	Brain, nervous system	83	-	13	11	12	5	1	5	4	4	-	4	5	1	4	3	7	4	3.0
C73	Thyroid	291	-	-	3	3	17	25	37	48	40	36	21	20	11	16	6	7	1	10.4
C74-C75	Other endocrine	12	-	7	3	-	-	-	-	1	-	-	-	-	-	-	-	-	-	0.4
C81	Hodgkin's disease	84	-	2	8	11	22	5	6	4	2	6	4	4	2	3	4	-	1	3.0
C82-C85;C96	Non-Hodgkin lymphoma	173	-	5	7	6	5	11	11	6	9	5	11	16	15	18	14	14	20	6.2
C88-C90	Multiple myeloma	25	-	-	-	-	-	-	-	1	2	-	1	3	6	7	-	3	2	0.9
C91	Lymphoid leukaemia	92	-	38	23	10	6	-	1	1	1	2	-	1	2	3	2	2	-	3.3
C92	Myeloid leukaemia	87	-	7	9	5	5	4	5	5	12	8	8	7	3	3	2	2	2	3.1
C93	Monocytic leukaemia	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	0.1
C94	Other leukaemia	2	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	0.1
C95	Leukaemia unspec.	4	-	1	-	1	-	-	-	-	-	-	-	1	-	-	1	-	-	0.1
	Other & unspecified	111	-	7	2	1	1	1	5	2	4	9	9	5	9	15	12	11	18	4.0
	All sites	2,798	1	122	77	78	91	81	129	170	222	229	218	215	238	288	194	198	247	100

Table 5-1-3 Incidence Rates for Cancer Cases among Saudi Males by Age Group (per 100,000), 1999

ICD(10)	ALL SITES	Tot.	UNK.	0 -	5 -	10 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75+	CIR	ASR
C00	Lip	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	-	-
C01-C02	Tongue	25	-	-	-	-	-	-	0.2	-	0.5	-	0.5	-	2.3	3	3.1	4.6	5.5	0.3	0.6
C07-C08	Salivary gland	12	-	-	0.1	-	-	-	0.2	0.2	0.5	0.3	-	1.2	-	-	2.4	1.1	-	0.2	0.2
C03-C06	Mouth	29	-	-	-	-	-	0.2	0.2	0.2	-	-	1.4	1.2	2.3	1	3.1	6.9	5.5	0.4	0.7
C09-C10	Oropharynx	6	-	-	-	-	-	-	-	-	0.3	0.3	-	0.6	-	2	-	-	0.8	0.1	0.2
C11	Nasopharynx	103	-	-	0.1	0.1	0.6	0.7	0.4	0.9	2.2	5.2	6.5	4.2	10.2	9.9	4.7	10.3	3.2	1.4	2.5
C12-C13	Hypopharynx	6	-	0.1	-	-	-	-	0.2	-	-	-	-	-	-	-	1	1.6	-	0.8	0.1
C14	Pharynx unspec.	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15	Oesophagus	57	-	-	-	-	-	-	-	-	-	-	0.5	1.8	3.1	4	9.4	11.4	18.1	0.8	1.3
C16	Stomach	98	-	-	-	-	-	-	0.2	0.7	1.4	1	1.9	3	6.3	10.9	12.6	18.3	20.5	1.3	2.3
C17	Small intestine	13	-	-	-	-	-	-	-	0.2	-	-	0.5	2.4	-	0.2	0.8	2.3	1.6	0.2	0.3
C18	Colon	102	-	-	-	-	-	0.2	0.2	0.7	1.9	2.8	2.8	4.2	9.4	16.8	11	9.1	14.2	1.4	2.6
C19-C21	Rectum	96	-	-	-	-	0.1	0.2	0.4	0.7	-	1.7	2.3	3.6	13.3	21.8	7.8	9.1	12.6	1.3	2.6
C22	Liver	269	-	0.3	0.1	0.2	0.1	0.2	0.4	0.7	0.8	1.4	6.5	9.7	28.1	43.6	34.5	41.1	45.8	3.6	6.8
C23-C24	Gallbladder etc.	25	-	-	-	-	-	-	0.2	0.2	-	0.3	-	1.8	-	5	3.9	3.4	4.7	0.3	0.6
C25	Pancreas	50	-	-	-	-	-	-	-	0.2	0.3	0.7	1.4	3	2.3	5.9	7.8	5.7	11	0.7	1.2
C30-C31	Nose, sinuses etc.	13	-	0.1	-	-	-	0.3	0.2	-	0.5	-	0.9	-	0.8	1	0.8	-	1.6	0.2	0.3
C32	Larynx	44	-	-	-	-	-	-	-	-	0.8	-	0.9	4.8	5.5	5	5.5	2.3	7.9	0.6	1.1
C33-C34	Bronchus, lung	186	-	-	-	-	-	-	0.2	0.9	1.4	2.8	1.9	11.5	10.2	26.8	29	32	31.6	2.5	4.6
C37-C38	Other Thoracic organs	18	-	0.4	0.1	-	0.2	-	0.2	0.2	-	0.3	0.5	-	-	1	0.8	1.1	2.4	0.2	0.3
C40-C41	Bone	58	-	0.1	0.7	1.4	1.7	0.7	-	0.5	0.8	0.7	0.5	-	0.8	2	-	4.6	0.8	0.8	0.8
C47;C49	Connective tissue	72	-	0.7	0.3	0.6	0.5	1	1.3	0.7	-	0.7	1.9	3	1.6	2	4.7	3.4	7.1	1	1.2
C45	Mesothelioma	2	-	-	-	-	-	-	-	-	-	-	-	0.6	-	1	-	-	-	-	0.1
C46	Kaposi's sarcoma	11	-	-	-	0.1	-	-	0.2	0.5	0.7	0.5	0.6	-	-	-	0.8	1.1	0.8	0.1	0.2
C43	Melanoma of skin	9	-	-	-	-	-	-	-	-	0.7	1.4	-	-	-	1	0.8	1.1	0.8	0.1	0.2
C44	Other skin	116	-	-	0.3	-	-	-	0.4	1.2	1.9	3.1	4.2	4.2	5.5	10.9	10.2	11.4	26	1.6	2.6
C50	Breast	9	-	-	-	-	-	-	-	0.2	-	0.7	0.5	-	0.8	-	0.8	1.1	1.6	0.1	0.2
C61	Prostate	138	-	-	-	-	-	-	-	-	-	0.3	0.9	3	6.3	17.8	22.8	35.4	34.7	1.9	3.3
C62	Testis	33	-	0.3	-	-	-	0.3	1	0.5	0.5	2.8	1.9	1.8	2.3	-	-	-	-	0.4	0.7
C60	Penis	1	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	-
C63	Other male genital	2	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	1.1	-	-	-
C67	Bladder	151	-	-	-	-	0.1	-	-	0.7	2.5	2.8	5.1	6.7	11.7	14.9	12.6	25.1	31.6	2	3.6
C64-C66;C68	Kidney etc.	83	-	1.1	0.2	-	0.1	0.3	-	0.9	1.1	2.4	1.9	3.6	3.1	10.9	7.1	8	5.5	1.1	1.8
C69	Eye	23	-	0.9	-	-	-	0.2	-	-	-	-	0.5	-	0.8	4	0.8	1.1	1.6	0.3	0.4
C70-C72	Brain, nervous system	128	-	1.3	2.1	0.7	0.9	0.7	0.8	1.9	1.4	1.4	2.8	2.4	8.6	5.9	7.1	10.3	2.4	1.7	2.2
C73	Thyroid	85	-	-	0.1	0.2	0.6	1.5	1	2.3	3.3	1.7	1.9	3	3.9	5.9	3.9	5.7	4.7	1.1	1.7
C74-C75	Other endocrine	10	-	0.2	0.2	0.1	0.1	-	0.2	0.2	-	-	-	-	-	-	0.8	-	-	0.1	0.1
C81	Hodgkin's disease	123	-	0.4	1.2	2.1	2.6	2	2.7	1.2	1.4	2.1	2.8	1.8	1.6	1	1.6	3.4	1.6	1.7	1.8
C82-C85;C96	NonHodgkin lymphoma	269	-	1	0.3	0.9	1.4	1.5	1.9	2.1	3.3	2.8	7	13.3	19.5	34.7	24.3	24	27.6	3.6	6.1
C88;C90	Multiple myeloma	34	-	-	-	-	-	-	-	-	0.5	0.7	0.9	1.2	4.7	5.9	1.6	3.4	7.1	0.5	0.9
C91	Lymphoid leukaemia	137	-	2.3	3	1.3	1.4	1.2	0.6	0.5	0.5	0.7	0.9	1.8	2.3	7.9	2.4	5.7	5.5	1.8	1.9
C92	Myeloid leukaemia	107	-	0.5	0.8	0.8	0.9	1.7	1	3	1.4	4.5	0.9	4.8	2.3	2	2.4	4.6	6.3	1.4	1.8
C93	Monocytic leukaemia	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
C94	Other leukaemia	1	-	-	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C95	Leukaemia unspec.	5	-	0.1	-	-	-	0.3	-	-	0.3	-	-	-	-	-	1	-	-	0.1	0.1
	Other & unspecified	134	-	0.2	-	-	0.1	-	0.4	0.5	1.4	2.8	3.7	7.3	14.1	12.9	14.9	20.6	19.7	1.8	3.3
	All sites	2,896	0.0	10.0	9.7	8.5	11.5	13.4	14.5	22.4	31.4	48.4	68.7	112.7	183.7	303.4	258.4	329.8	374.0	38.8	63.3

Table 5-1-4 Incidence Rates for Cancer Cases among Saudi Females by Age Group (per 100,000), 1999

ICD(10)	ALL SITES	Tot.	UNK.	0	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	CIR	ASR
C00	Lip	7	-	-	-	-	-	-	-	-	0.3	-	-	0.6	-	0.9	-	3.6	2.4	0.1	0.2
C01-C02	Tongue	29	-	0.1	-	-	-	-	-	-	-	-	0.5	1.7	4.9	4.4	3.3	10.9	3.6	0.4	0.9
C07-C08	Salivary gland	8	-	-	0.1	-	-	0.1	-	-	0.5	-	0.9	0.6	-	-	-	1.8	-	0.1	0.2
C03-C06	Mouth	41	-	-	-	-	-	-	0.2	-	0.5	0.7	1.8	2.9	2.8	5.3	4.4	7.3	10.9	0.6	1.2
C09-C10	Oropharynx	1	-	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-
C11	Nasopharynx	36	-	-	-	0.1	0.1	0.1	-	0.9	1.6	2.1	0.5	1.7	4.2	4.4	1.1	1.8	-	0.5	0.8
C12-C13	Hypopharynx	17	-	-	-	-	-	-	0.2	-	0.3	0.7	0.9	1.2	1.4	-	1.1	-	7.3	0.2	0.4
C14	Pharynx unspec.	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15	Oesophagus	55	-	-	-	-	-	-	-	-	1.4	0.7	0.5	1.7	2.1	12.4	8.7	14.6	13.3	0.7	1.6
C16	Stomach	68	-	-	-	-	-	0.1	0.2	0.5	1.1	1.7	1.8	2.3	2.8	7.1	5.5	21.8	21.8	0.9	1.9
C17	Small intestine	7	-	-	-	-	-	-	-	-	-	-	-	0.6	1.4	-	-	1.8	3.6	0.1	0.2
C18	Colon	99	-	-	-	0.1	-	0.6	0.4	0.9	1.6	1.7	1.4	4.6	9.9	13.3	10.9	18.2	20.6	1.3	2.7
C19-C21	Rectum	86	-	-	-	0.2	0.1	0.4	0.4	0.9	1.4	2.4	3.6	2.3	7	7.1	14.2	9.1	16.9	1.2	2.2
C22	Liver	82	-	0.2	-	-	0.1	-	0.2	0.5	0.3	0.7	0.9	2.3	8.5	13.3	9.8	29.1	16.9	1.1	2.4
C23-C24	Gallbladder etc.	59	-	-	-	-	-	-	0.2	-	0.5	1.4	3.2	3.5	4.9	7.1	9.8	7.3	13.3	0.8	1.7
C25	Pancreas	33	-	-	-	-	-	-	-	0.2	-	0.7	2.3	1.7	3.5	5.3	1.1	9.1	6	0.4	1
C30-C31	Nose, sinuses etc.	7	-	-	-	-	0.1	-	-	0.2	-	-	-	-	0.7	-	2.2	1.8	1.2	0.1	0.2
C32	Larynx	10	-	-	-	-	-	-	-	-	-	-	0.5	1.7	0.7	-	3.3	-	2.4	0.1	0.3
C33-C34	Bronchus, lung	52	-	-	-	-	-	-	-	-	0.5	1	1.4	3.5	5.6	8.9	3.3	5.5	16.9	0.7	1.5
C37-C38	Other Thoracic organs	6	-	0.2	-	-	-	-	-	-	-	-	-	0.6	-	0.9	1.1	-	1.2	0.1	0.1
C40-C41	Bone	39	-	0.3	1	1.5	0.9	0.5	0.2	-	-	-	0.5	0.6	0.7	0.9	-	-	-	0.5	0.5
C47-C49	Connective tissue	49	-	0.7	0.2	0.3	0.2	0.1	0.5	1.1	0.5	0.7	0.9	1.2	-	4.4	3.3	9.1	3.6	0.7	1
C45	Mesothelioma	4	-	-	-	-	-	-	-	-	-	-	-	-	0.7	0.9	1.1	1.8	-	0.1	0.1
C46	Kaposi's sarcoma	8	-	-	-	-	-	-	-	0.2	-	0.3	1.4	-	-	0.9	-	-	2.4	0.1	0.2
C43	Melanoma of skin	8	-	-	-	-	-	0.1	-	-	-	0.3	-	0.6	-	0.9	1.1	-	3.6	0.1	0.2
C44	Other skin	75	1	-	0.1	0.2	0.4	-	0.2	1.1	0.5	0.3	3.2	3.5	4.9	11.5	4.4	18.2	14.5	1	2
C50	Breast	543	-	-	-	-	-	0.4	4.7	11.5	21.4	26.9	33.3	30	35.2	39.9	37.2	49.1	30.2	7.3	13.2
C55	Uterus unspec.	11	-	-	-	-	-	-	-	-	0.3	-	-	2.9	2.1	0.9	-	-	1.2	0.1	0.3
C53	Cervix uteri	76	-	-	-	-	-	0.1	0.4	1.4	2.2	4.5	4.6	3.5	5.6	10.6	6.6	3.6	2.4	1	1.9
C58	Placenta	11	-	-	-	-	0.4	0.3	0.2	-	0.3	0.7	-	0.6	0.7	-	-	-	-	0.1	0.2
C54	Corpus uteri	57	-	-	-	-	-	0.1	0.2	0.2	1.4	1.4	1.8	2.9	5.6	12.4	3.3	12.7	4.8	0.8	1.6
C56	Ovary etc.	103	-	-	0.1	0.7	0.4	1.2	1.8	1.6	1.4	3.4	2.3	3.5	9.9	6.2	13.1	7.3	4.8	1.4	2.3
C51-C52;C57	Other female genital	10	-	-	-	-	-	-	-	-	-	-	0.9	0.6	0.7	1.8	1.1	3.6	1.2	0.1	0.3
C67	Bladder	43	-	-	-	-	-	-	0.2	0.2	1.1	-	1.4	2.3	3.5	2.7	7.6	14.6	8.5	0.6	1.2
C64-C66;C68	Kidney etc.	67	-	0.9	0.1	0.2	0.2	0.1	0.2	0.2	1.1	3.1	2.7	2.3	2.8	7.1	4.4	7.3	4.8	0.9	1.5
C69	Eye	25	-	1.2	0.2	-	0.1	-	-	-	-	0.3	-	0.6	-	1.8	1.1	3.6	-	0.3	0.4
C70-C72	Brain, nervous system	83	-	1	1	1.2	0.6	0.1	0.9	0.9	1.1	-	1.8	2.9	0.7	3.5	3.3	12.7	4.8	1.1	1.5
C73	Thyroid	291	-	-	0.3	0.3	2.1	3.6	6.7	10.9	10.8	12.4	9.6	11.5	7.8	14.2	6.6	12.7	1.2	3.9	5.6
C74-C75	Other endocrine	12	-	0.5	0.3	-	-	-	-	0.2	-	0.3	-	-	-	-	-	-	-	0.2	0.1
C81	Hodgkin's disease	84	-	0.2	0.7	1.1	2.7	0.7	1.1	0.9	0.5	2.1	1.8	2.3	1.4	2.7	4.4	-	1.2	1.1	1.3
C82-C85;C96	NonHodgkin lymphoma	173	-	0.4	0.6	0.6	0.6	1.6	2	1.4	2.4	1.7	5	9.2	10.6	16	15.3	25.5	24.2	2.3	4.1
C88;C90	Multiple myeloma	25	-	-	-	-	-	-	-	0.2	0.5	-	0.5	1.7	4.2	6.2	-	5.5	2.4	0.3	0.7
C91	Lymphoid leukaemia	92	-	2.9	2	1	0.7	-	0.2	0.2	0.3	0.7	-	0.6	1.4	2.7	2.2	3.6	-	1.2	1.1
C92	Myeloid leukaemia	87	-	0.5	0.8	0.5	0.6	0.6	0.9	1.1	3.3	2.8	3.6	4	2.1	2.7	2.2	3.6	2.4	1.2	1.6
C93	Monocytic leukaemia	2	-	-	-	-	-	-	0.2	-	-	-	-	-	-	0.9	-	-	-	-	-
C94	Other leukaemia	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	-
C95	Leukaemia unspec.	4	-	0.1	-	0.1	-	-	-	-	-	-	-	0.6	-	-	1.1	-	-	0.1	0.1
	Other & unspecified	111	-	0.5	0.2	0.1	0.1	0.1	0.9	0.5	1.1	3.1	4.1	2.9	6.3	13.3	13.1	20	21.8	1.5	2.9
	All sites	2,798	1	9.4	7	7.8	11	11.3	23.6	38.3	60.2	78.8	99.6	124.3	167.3	255.5	212.3	360	298.3	37.4	65.4

Table 5-1-5 Age Distribution of Cancer Cases among Saudi Males, 2000

ICD(10)	ALL SITES	Tot.	UNK.	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	%
C00	Lip	6	-	-	-	-	-	-	-	-	-	1	1	-	-	-	2	1	1	0.2
C01-C02	Tongue	30	-	-	-	-	1	1	-	1	3	-	1	2	5	8	2	3	3	1.1
C07-C08	Salivary gland	7	-	-	-	1	-	-	1	1	-	-	1	-	1	1	-	1	-	0.2
C03-C06	Mouth	21	-	-	-	-	-	2	-	-	1	2	-	2	1	3	2	1	7	0.7
C09-C10	Oropharynx	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C11	Nasopharynx	88	-	-	2	2	1	3	6	2	6	15	11	8	11	9	5	3	4	3.1
C12-C13	Hypopharynx	4	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	0.1
C14	Pharynx unspec.	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C15	Oesophagus	62	-	-	-	-	-	-	-	-	-	2	3	2	5	10	5	6	29	2.2
C16	Stomach	112	-	-	-	-	-	-	1	2	1	7	8	6	7	18	12	21	29	4
C17	Small intestine	11	-	-	-	-	-	-	-	-	1	-	-	1	4	-	2	1	2	0.4
C18	Colon	99	-	-	-	-	-	1	1	2	3	6	8	6	15	16	14	7	20	3.5
C19-C21	Rectum	92	-	-	-	-	-	-	-	5	4	11	10	11	11	9	12	11	8	3.3
C22	Liver	243	-	4	-	1	2	-	-	2	-	4	3	19	29	38	48	42	51	8.6
C23-C24	Gallbladder etc.	24	-	-	-	-	-	-	-	-	-	-	-	1	3	5	5	3	7	0.9
C25	Pancreas	60	-	-	-	-	-	1	-	-	1	7	5	1	5	9	12	6	13	2.1
C30-C31	Nose, sinuses etc.	6	-	-	1	-	-	-	-	-	-	-	1	1	-	-	1	1	1	0.2
C32	Larynx	49	-	-	-	-	-	-	-	1	3	2	5	7	6	7	7	3	8	1.7
C33-C34	Bronchus, lung	168	-	-	-	-	-	1	-	2	3	5	8	8	19	31	28	30	33	6
C37-C38	Other Thoracic organs	4	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	1	0.1
C40-C41	Bone	54	-	4	2	9	18	7	1	2	2	2	1	2	1	1	2	-	-	1.9
C47;C49	Connective tissue	51	-	13	1	2	3	6	2	2	3	1	1	2	1	3	5	2	4	1.8
C45	Mesothelioma	6	-	-	-	-	-	-	-	-	-	2	-	-	1	1	-	2	-	0.2
C46	Kaposi's sarcoma	19	-	-	-	-	-	-	-	-	3	-	1	1	2	1	1	3	7	0.7
C43	Melanoma of skin	9	-	-	-	-	-	-	-	-	1	-	1	-	-	2	1	2	2	0.3
C44	Other skin	110	-	1	-	2	1	1	2	7	3	3	2	6	2	14	15	18	33	3.9
C50	Breast	13	-	-	-	-	-	-	-	1	2	-	1	2	2	1	2	-	2	0.5
C61	Prostate	166	-	-	1	-	-	-	-	-	1	2	-	3	6	18	30	33	72	5.9
C62	Testis	37	-	5	1	-	3	1	9	4	4	3	3	-	-	3	-	-	1	1.3
C60	Penis	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	0
C63	Other male genital	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	0.1
C67	Bladder	150	-	-	-	-	-	4	2	3	7	7	8	13	11	28	20	26	21	5.3
C64-C66;C68	Kidney etc.	85	-	9	3	1	1	-	-	3	5	4	4	8	5	13	9	11	9	3
C69	Eye	23	-	14	1	1	-	-	-	-	-	-	-	1	-	-	1	3	2	0.8
C70-C72	Brain, nervous system	142	-	15	27	11	9	6	3	10	7	7	4	6	10	6	11	4	6	5
C73	Thyroid	71	-	-	-	3	3	4	6	8	7	8	4	9	5	1	3	4	6	2.5
C74-C75	Other endocrine	11	-	3	2	-	1	1	1	-	-	1	-	-	1	1	-	-	-	0.4
C81	Hodgkin's disease	137	-	8	7	20	31	15	14	4	7	5	2	6	1	3	1	3	10	4.9
C82-C85;C96	Non-Hodgkin lymphoma	259	-	6	7	8	14	4	8	17	14	10	21	20	13	20	26	24	47	9.2
C88;C90	Multiple myeloma	37	-	-	-	-	-	-	-	1	1	2	2	1	2	5	8	9	7	1.3
C91	Lymphoid leukaemia	141	-	41	24	12	19	5	3	1	1	3	2	2	4	5	8	6	5	5
C92	Myeloid leukaemia	79	-	9	5	1	3	6	5	6	6	8	1	6	6	5	2	6	4	2.8
C93	Monocytic leukaemia	4	-	-	-	-	-	1	-	-	-	-	1	-	-	2	-	-	-	0.1
C94	Other leukaemia	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C95	Leukaemia unspec.	3	-	1	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	0.1
	Other & unspecified	121	-	4	1	-	1	-	1	6	1	11	6	6	12	17	9	15	31	4.3
	All sites	2,817	0	137	84	76	112	70	66	93	102	141	130	170	207	315	314	312	488	100

Table 5-1-6 Age Distribution of Cancer Cases among Saudi Females, 2000

ICD(10)	ALL SITES	Tot.	UNK.	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	%
C00	Lip	4	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1	0.1
C01-C02	Tongue	22	-	-	-	-	-	1	2	-	1	-	3	-	1	7	3	-	4	0.8
C07-C08	Salivary gland	15	-	-	-	1	1	1	4	-	2	2	1	-	2	-	-	-	1	0.5
C03-C06	Mouth	27	-	-	-	1	-	1	1	2	2	-	-	4	4	3	4	2	3	1
C09-C10	Oropharynx	4	-	-	-	-	-	1	-	-	-	-	-	1	1	-	-	1	-	0.1
C11	Nasopharynx	24	-	-	-	1	1	1	1	4	2	4	3	4	-	1	1	1	1	0.9
C12-C13	Hypopharynx	10	-	-	-	-	-	-	-	1	-	-	1	-	1	3	3	-	1	0.4
C14	Pharynx unspec.	2	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	0.1
C15	Oesophagus	54	-	-	-	-	-	-	-	-	2	2	2	4	7	10	8	11	8	1.9
C16	Stomach	56	-	-	-	-	-	2	1	-	4	3	6	-	7	7	11	6	9	2
C17	Small intestine	10	-	-	-	-	-	-	1	1	-	-	-	-	3	-	-	2	3	0.4
C18	Colon	102	-	-	-	1	-	3	4	4	7	9	6	13	16	10	13	3	13	3.6
C19-C21	Rectum	77	-	-	-	-	-	-	1	4	7	4	10	8	8	11	8	7	9	2.7
C22	Liver	102	-	3	-	-	1	1	1	1	7	4	10	9	15	18	15	10	7	3.6
C23-C24	Gallbladder etc.	45	-	-	-	-	-	-	-	1	-	4	4	4	5	7	9	1	10	1.6
C25	Pancreas	32	-	-	-	-	-	1	1	-	4	-	3	2	4	3	3	5	6	1.1
C30-C31	Nose, sinuses etc.	6	-	-	-	-	-	-	-	-	1	-	1	-	-	-	1	-	3	0.2
C32	Larynx	8	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	2	0.3
C33-C34	Bronchus, lung	48	-	-	-	-	-	-	-	-	-	2	2	9	4	5	9	6	11	1.7
C37-C38	Other Thoracic organs	8	-	-	1	-	1	-	-	-	-	-	1	1	-	2	-	1	1	0.3
C40-C41	Bone	35	-	1	7	12	6	4	1	2	-	-	1	-	1	-	-	-	-	1.2
C47-C49	Connective tissue	45	-	8	6	1	4	3	3	1	2	2	2	4	4	4	-	1	1	1.6
C45	Mesothelioma	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	0
C46	Kaposi's sarcoma	3	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	1	0.1
C43	Melanoma of skin	7	-	-	-	-	-	-	-	2	-	2	1	1	-	-	-	-	1	0.2
C44	Other skin	79	-	-	-	1	1	2	-	6	5	5	4	4	4	11	10	8	18	2.8
C50	Breast	614	-	-	-	-	-	8	22	52	78	101	91	71	54	64	29	23	21	21.8
C55	Uterus unspec.	4	-	-	-	-	-	-	-	-	2	1	-	-	-	-	-	-	1	0.1
C53	Cervix uteri	91	-	-	-	1	-	1	7	13	14	6	11	9	6	8	5	10	3	3.2
C58	Placenta	7	-	-	-	-	-	-	1	-	-	2	3	-	1	-	-	-	-	0.2
C54	Corpus uteri	84	-	-	-	-	-	1	1	3	1	6	6	14	11	16	10	8	7	3
C56	Ovary etc.	102	-	-	3	3	8	5	4	8	9	4	7	5	13	10	8	6	9	3.6
C51-C52;C57	Other female genital	14	-	-	-	-	-	1	1	1	-	4	2	1	-	2	-	1	1	0.5
C67	Bladder	37	-	-	-	-	-	1	1	-	1	2	4	2	4	9	3	5	6	1.3
C64-C66;C68	Kidney etc.	47	-	9	6	-	1	2	1	2	3	3	1	3	5	4	4	-	3	1.7
C69	Eye	24	-	13	1	1	-	-	1	1	-	-	1	-	1	-	3	1	1	0.9
C70-C72	Brain, nervous system	103	-	16	18	9	6	5	1	7	3	3	5	9	9	5	2	2	3	3.7
C73	Thyroid	248	-	-	-	-	5	18	39	41	42	30	20	11	15	11	3	5	8	8.8
C74-C75	Other endocrine	14	-	8	-	1	-	2	-	1	-	-	-	1	-	1	-	-	-	0.5
C81	Hodgkin's disease	89	-	-	13	17	19	13	6	6	3	1	-	2	1	1	2	3	2	3.2
C82-C85;C96	Non-Hodgkin lymphoma	181	-	6	5	6	8	8	3	14	18	10	8	11	17	24	14	11	18	6.4
C88-C90	Multiple myeloma	24	-	-	-	-	-	-	-	1	1	1	-	2	3	8	3	1	4	0.9
C91	Lymphoid leukaemia	99	-	39	17	8	5	1	2	1	1	1	2	-	2	5	9	2	4	3.5
C92	Myeloid leukaemia	89	-	4	5	11	10	4	3	8	8	7	4	8	4	9	-	2	2	3.2
C93	Monocytic leukaemia	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	0
C94	Other leukaemia	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C95	Leukaemia unspec.	5	-	-	2	1	1	-	-	-	-	-	-	-	-	1	-	-	-	0.2
	Other & unspecified	115	-	4	-	1	1	1	1	6	6	10	6	6	12	16	12	11	22	4.1
	All sites	2,819	0	111	85	77	80	88	107	187	236	246	232	224	251	295	212	152	236	100

Table 5-1-7 Incidence Rates for Cancer Cases among Saudi Males by Age Group (per 100,000), 2000

ICD(10)	ALL SITES	Tot.	UNK.	0	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	CIR	ASR
C00	Lip	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C01-C02	Tongue	30	-	-	-	-	0.1	0.2	-	0.2	0.8	-	0.4	1.1	3.6	7.7	1.8	3.3	2.3	0.4	0.8
C07-C08	Salivary gland	7	-	-	-	0.1	-	-	0.2	0.2	-	-	0.4	-	0.7	1	-	1.1	-	0.1	0.2
C03-C06	Mouth	21	-	-	-	-	-	0.3	-	-	0.3	0.6	-	1.1	0.7	2.9	1.8	1.1	5.4	0.3	0.5
C09-C10	Oropharynx	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C11	Nasopharynx	88	-	-	0.2	0.2	0.1	0.5	1.1	0.4	1.6	4.8	4.6	4.5	7.9	8.7	4.4	3.3	3.1	1.1	2
C12-C13	Hypopharynx	4	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.9	1.1	0.8	0.1	0.1
C14	Pharynx unspec.	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15	Oesophagus	62	-	-	-	-	-	-	-	-	-	0.6	1.3	1.1	3.6	9.7	4.4	6.6	22.3	0.8	1.4
C16	Stomach	112	-	-	-	-	-	-	0.2	0.4	0.3	2.2	3.4	3.3	5	17.4	10.7	23	22.3	1.4	2.7
C17	Small intestine	11	-	-	-	-	-	-	0.2	-	0.3	-	-	0.6	2.9	-	1.8	1.1	1.5	0.1	0.3
C18	Colon	99	-	-	-	-	-	0.2	-0.2	0.4	0.8	1.9	3.4	3.3	10.8	15.5	12.4	7.7	15.4	1.3	2.5
C19-C21	Rectum	92	-	-	-	-	-	-	-	1.1	1.1	3.5	4.2	6.1	7.9	8.7	10.7	12	6.2	1.2	2.2
C22	Liver	243	-	0.3	-	0.1	0.2	-	-	0.4	-	1.3	1.3	10.6	20.8	36.7	42.6	45.9	39.3	3.1	6.1
C23-C24	Gallbladder etc.	24	-	-	-	-	-	-	-	-	-	-	-	0.6	2.2	4.8	4.4	3.3	5.4	0.3	0.6
C25	Pancreas	60	-	-	-	-	-	0.2	-	-	0.3	2.2	2.1	0.6	3.6	8.7	10.7	6.6	10	0.8	1.5
C30-C31	Nose, sinuses etc.	6	-	-	-	0.1	-	-	-	-	-	-	0.4	0.6	-	-	0.9	1.1	0.8	0.1	0.1
C32	Larynx	49	-	-	-	-	-	-	-	0.2	0.8	0.6	2.1	3.9	4.3	6.8	6.2	3.3	6.2	0.6	1.2
C33-C34	Bronchus, lung	168	-	-	-	-	-	0.2	-	0.4	0.8	1.6	3.4	4.5	13.6	29.9	24.9	32.8	25.4	2.1	4.3
C37-C38	Other Thoracic organs	4	-	-	-	-	0.1	-	-	-	0.3	-	0.4	-	-	-	-	0.8	0.1	0.1	0.1
C40-C41	Bone	54	-	0.3	0.2	0.9	2.1	1.1	0.2	0.4	0.5	0.6	0.4	1.1	0.7	1	1.8	-	-	0.7	0.7
C47;C49	Connective tissue	51	-	1	0.1	0.2	0.3	0.9	0.4	0.4	0.8	0.3	0.4	1.1	0.7	2.9	4.4	2.2	3.1	0.7	0.8
C45	Mesothelioma	6	-	-	-	-	-	-	-	-	-	0.6	-	-	0.7	1	-	2.2	-	0.1	0.1
C46	Kaposi's sarcoma	19	-	-	-	-	-	-	-	-	0.8	-	0.4	0.6	1.4	-	0.9	3.3	5.4	0.2	0.4
C43	Melanoma of skin	9	-	-	-	-	-	-	-	-	-	-	0.4	-	-	1.9	0.9	2.2	1.5	0.1	0.2
C44	Other skin	110	-	0.1	-	0.2	0.1	0.2	0.4	1.5	0.8	1	0.8	3.3	1.4	13.5	13.3	19.7	25.4	1.4	2.4
C50	Breast	13	-	-	-	-	-	-	-	0.2	0.5	-	0.4	1.1	1.4	1	1.8	-	1.5	0.2	0.3
C61	Prostate	166	-	-	0.1	-	-	-	-	-	0.3	0.6	-	1.7	4.3	17.4	26.6	36.1	55.4	2.1	3.6
C62	Testis	37	-	0.4	0.1	-	0.3	0.2	1.7	0.9	1.1	1	1.3	-	-	2.9	-	-	0.8	0.5	0.6
C60	Penis	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9	-	-	-	-
C63	Other male genital	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C67	Bladder	150	-	-	-	-	-	0.6	0.4	0.7	1.8	2.2	3.4	7.2	7.9	27	17.8	28.4	16.2	1.9	3.7
C64-C66;C68	Kidney etc.	85	-	0.7	0.2	0.1	0.1	-	-	0.7	1.3	1.3	1.7	4.5	3.6	12.6	8	12	6.9	1.1	1.9
C69	Eye	23	-	1.1	0.1	0.1	-	-	-	-	-	-	-	0.6	-	-	0.9	3.3	1.5	0.3	0.3
C70-C72	Brain, nervous system	142	-	1.2	2.1	1.1	1	0.9	0.6	2.2	1.8	2.2	1.7	3.3	7.2	5.8	9.8	4.4	4.6	1.8	2.3
C73	Thyroid	71	-	-	-	0.1	0.3	0.6	1.1	1.8	1.8	2.6	1.7	5	3.6	1	2.7	4.4	4.6	0.9	1.4
C74-C75	Other endocrine	11	-	0.2	0.2	-	0.1	0.2	0.2	-	-	0.3	-	-	0.7	1	-	-	-	0.1	0.2
C81	Hodgkin's disease	137	-	0.6	0.6	1.9	3.5	2.3	2.6	0.9	1.8	1.6	0.8	3.3	0.7	2.9	0.9	3.3	7.7	1.8	1.9
C82-C85;C96	NonHodgkin lymphoma	259	-	0.5	0.6	0.1	1.6	0.6	1.5	3.8	3.7	3.2	8.8	11.1	9.3	19.3	23.1	26.3	36.2	3.3	5.3
C88;C90	Multiple myeloma	37	-	-	-	-	-	-	-	-	0.3	0.6	0.8	0.6	1.4	4.8	7.1	9.8	5.4	0.5	0.9
C91	Lymphoid leukaemia	141	-	3.2	1.9	1.2	2.2	0.8	0.6	0.2	0.3	1	0.8	1.1	2.9	4.8	7.1	6.6	3.8	1.8	1.9
C92	Myeloid leukaemia	79	-	0.7	0.1	0.1	0.3	0.9	0.9	1.3	1.6	2.6	0.4	3.3	4.3	4.8	1.8	6.6	3.1	1	1.4
C93	Monocytic leukaemia	4	-	-	-	-	-	0.2	-	-	-	-	0.4	-	-	1.9	-	-	-	0.1	0.1
C94	Other leukaemia	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C95	Leukaemia unspec.	3	-	0.1	-	0.1	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	-
	Other & unspecified	121	-	0.3	0.1	-	0.1	-	0.2	1.3	0.3	3.5	2.5	3.3	8.6	16.4	8	16.4	23.9	1.5	2.7
	All sites	2817	0	10.7	6.6	6.6	12.5	11.1	12.3	20.2	27.2	44.8	54.5	94.7	148.4	304.4	279.1	341.6	375.8	36.1	59.8

Table 5-1-8 Incidence Rates for Cancer Cases among Saudi Females by Age Group (per 100,000), 2000

ICD(10)	ALL SITES	Tot.	UNK.	0	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	CIR	ASR
C00	Lip	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C01-C02	Tongue	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C07-C08	Salivary gland	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C03-C06	Mouth	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C09-C10	Oropharynx	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C11	Nasopharynx	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C12-C13	Hypopharynx	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C14	Pharynx unspec.	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15	Oesophagus	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C16	Stomach	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C17	Small intestine	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C18	Colon	102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C19-C21	Rectum	77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C22	Liver	102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C23-C24	Gallbladder etc.	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C25	Pancreas	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C30-C31	Nose, sinuses etc.	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C32	Larynx	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C33-C34	Bronchus, lung	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C37-C38	Other Thoracic organs	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C40-C41	Bone	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C47-C49	Connective tissue	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C45	Mesothelioma	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C46	Kaposi's sarcoma	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C43	Melanoma of skin	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C44	Other skin	79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C50	Breast	614	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C55	Uterus unspec.	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C53	Cervix uteri	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C58	Placenta	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C54	Corpus uteri	84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C56	Ovary etc.	102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C51-C52;C57	Other female genital	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C67	Bladder	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C64-C66;C68	Kidney etc.	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C69	Eye	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C70-C72	Brain, nervous system	103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C73	Thyroid	248	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C74-C75	Other endocrine	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C81	Hodgkin's disease	89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C82-C85;C96	NonHodgkin lymphoma	181	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C88;C90	Multiple myeloma	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C91	Lymphoid leukaemia	99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C92	Myeloid leukaemia	89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C93	Monocytic leukaemia	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C94	Other leukaemia	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C95	Leukaemia unspec.	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Other & unspecified	115	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	All sites	2,819	0	8.7	7.1	7.7	9.2	11.8	18.4	39.1	60.5	76.9	94	119.9	165.5	241.8	266.5	206.2	255.4	36.2	61.5

Table 5-3-1 Age Distribution of Cancer Cases among non-Saudi Males, 1999

ICD(10)	ALL SITES	Tot.	UNK.	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	%
C00	Lip	2	-	-	-	-	-	-	-	1	-	1	4	-	1	-	-	-	-	0.2
C01-C02	Tongue	7	-	-	-	-	-	-	1	-	-	1	4	-	1	-	-	-	-	0.7
C07-C08	Salivary gland	5	-	-	-	-	-	-	-	1	3	-	-	-	-	-	1	-	-	0.5
C03-C06	Mouth	7	-	-	-	-	-	-	-	1	1	1	1	-	-	2	-	-	1	0.7
C09-C10	Oropharynx	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	0.1
C11	Nasopharynx	32	-	-	-	-	-	2	1	2	3	2	10	4	3	1	2	-	2	3.4
C12-C13	Hypopharynx	6	-	-	-	-	-	-	1	-	1	2	-	-	-	-	-	-	2	0.6
C14	Pharynx unspec.	2	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	0.2
C15	Oesophagus	16	-	-	-	-	-	-	-	2	4	-	1	2	1	-	2	-	4	1.7
C16	Stomach	43	-	-	-	-	1	-	1	2	3	7	6	8	4	6	1	3	1	4.6
C17	Small intestine	4	-	-	-	-	-	-	-	-	-	1	-	-	2	-	-	1	-	0.4
C18	Colon	47	-	-	-	-	-	-	2	4	6	10	5	6	4	1	5	1	3	5
C19-C21	Rectum	49	-	-	-	-	-	1	5	4	4	9	2	6	6	4	1	5	2	5.2
C22	Liver	49	-	1	-	-	-	-	-	1	2	6	6	12	9	2	6	2	2	5.2
C23-C24	Gallbladder etc.	11	-	-	-	-	-	-	-	1	1	-	1	2	-	3	1	1	1	1.2
C25	Pancreas	15	-	-	-	-	-	-	1	-	2	2	1	3	2	1	2	-	1	1.6
C30-C31	Nose, sinuses etc.	5	-	-	-	-	-	-	-	-	-	-	1	1	1	1	-	1	-	0.5
C32	Larynx	21	-	-	-	-	-	-	-	-	1	2	4	1	3	4	1	4	1	2.2
C33-C34	Bronchus, lung	37	-	-	-	-	-	-	-	1	3	7	4	6	2	7	1	3	3	3.9
C37-C38	Other Thoracic organs	3	-	-	-	-	-	1	-	-	1	1	-	-	-	-	-	-	-	0.3
C40-C41	Bone	27	-	1	1	2	5	2	5	4	1	3	2	-	-	1	-	-	-	2.9
C47-C49	Connective tissue	22	-	-	1	1	1	1	1	-	4	4	3	1	1	2	2	-	-	2.3
C45	Mesothelioma	6	-	-	-	-	-	-	-	1	-	-	1	1	2	1	-	-	-	0.6
C46	Kaposi's sarcoma	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	0.1
C43	Melanoma of skin	4	-	-	-	-	-	-	-	-	1	-	2	-	-	-	1	-	-	0.4
C44	Other skin	51	-	-	-	1	1	-	-	1	2	6	6	11	11	5	1	1	5	5.4
C50	Breast	5	-	-	-	-	-	-	-	-	-	-	-	1	1	2	-	1	-	0.5
C61	Prostate	37	-	-	-	-	-	-	-	-	-	-	2	6	6	3	6	4	10	3.9
C62	Testis	20	-	-	-	-	1	3	5	2	4	3	2	-	-	-	-	-	-	2.1
C60	Penis	2	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	0.2
C63	Other male genital	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C67	Bladder	62	-	-	-	-	-	-	1	-	3	7	6	14	7	8	6	6	4	6.6
C64-C66;C68	Kidney etc.	19	-	1	-	1	-	-	-	1	1	2	1	6	2	1	1	1	1	2
C69	Eye	3	-	2	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	0.3
C70-C72	Brain, nervous system	46	-	2	7	9	1	-	3	-	3	11	3	2	2	1	-	1	1	4.9
C73	Thyroid	23	-	-	-	1	1	1	-	2	5	2	6	2	1	-	1	1	-	2.4
C74-C75	Other endocrine	4	-	1	1	-	-	-	-	-	-	-	-	-	-	1	-	-	1	0.4
C81	Hodgkin's disease	27	-	-	-	3	1	1	2	1	6	3	4	1	3	2	-	-	-	2.9
C82-C85;C96	Non-Hodgkin lymphoma	83	-	4	2	3	2	5	5	9	7	11	7	11	6	4	3	1	3	8.8
C88;C90	Multiple myeloma	16	-	-	-	-	-	1	-	-	-	1	4	6	2	2	-	-	-	1.7
C91	Lymphoid leukaemia	28	-	4	1	5	2	2	1	1	3	1	-	2	4	2	-	-	-	3
C92	Myeloid leukaemia	45	-	1	2	3	2	3	4	4	7	6	3	8	1	-	-	-	1	4.8
C93	Monocytic leukaemia	2	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	0.2
C94	Other leukaemia	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C95	Leukaemia unspec.	2	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	0.2
	Other & unspecified	47	-	-	-	1	-	-	1	4	8	5	10	8	-	5	2	1	2	5
	All sites	944	0	16	17	30	19	23	42	53	91	117	109	130	87	75	46	38	51	100

Table 5-3-2 Age Distribution of Cancer Cases among non-Saudi Females, 1999

ICD(10)	ALL SITES	Tot.	UNK.	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	%
C00	Lip	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C01-C02	Tongue	2	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	0.3
C07-C08	Salivary gland	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C03-C06	Mouth	2	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	0.3
C09-C10	Oropharynx	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C11	Nasopharynx	5	-	-	-	-	-	-	-	-	-	1	1	-	1	-	2	-	-	0.7
C12-C13	Hypopharynx	4	-	-	-	-	-	-	1	1	-	1	-	1	-	-	-	-	-	0.5
C14	Pharynx unspec.	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C15	Oesophagus	10	-	-	-	-	-	-	-	1	-	-	3	-	-	2	2	1	1	1.4
C16	Stomach	14	-	-	-	-	-	-	-	2	1	1	1	1	2	4	1	-	1	1.9
C17	Small intestine	2	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	0.3
C18	Colon	19	-	-	-	-	-	1	-	-	2	1	2	1	6	2	2	1	1	2.6
C19-C21	Rectum	15	-	-	-	-	-	-	-	-	-	2	3	1	-	4	-	2	2	2.1
C22	Liver	12	-	-	-	-	-	1	1	-	2	2	2	1	-	-	1	-	1	1.6
C23-C24	Gallbladder etc.	6	-	-	-	-	-	-	-	1	-	-	2	-	2	1	-	-	-	0.8
C25	Pancreas	3	-	-	-	-	1	-	-	2	-	-	-	-	-	-	-	-	-	0.4
C30-C31	Nose, sinuses etc.	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.1
C32	Larynx	3	-	-	-	-	-	-	-	-	1	-	-	-	1	-	1	-	-	0.4
C33-C34	Bronchus, lung	19	-	1	1	-	-	-	-	2	-	4	3	2	3	2	1	-	-	2.6
C37-C38	Other Thoracic organs	2	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	0.3
C40-C41	Bone	6	-	1	-	2	-	-	-	-	1	2	-	1	-	-	1	-	-	0.8
C47-C49	Connective tissue	7	-	2	-	-	-	1	1	-	1	2	-	-	-	-	-	-	-	1
C45	Mesothelioma	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	0.1
C46	Kaposi's sarcoma	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C43	Melanoma of skin	5	-	-	-	-	-	-	-	-	-	2	1	1	-	-	1	-	-	0.7
C44	Other skin	19	-	-	-	-	-	-	-	-	1	1	6	2	2	1	1	2	3	2.6
C50	Breast	274	-	-	-	-	-	2	8	30	52	54	49	34	11	18	8	5	3	37.5
C55	Uterus unspec.	7	-	-	-	-	-	-	-	2	1	1	-	-	-	2	-	-	-	1
C53	Cervix uteri	51	-	-	-	-	-	1	-	5	8	13	5	6	4	6	2	1	-	7
C58	Placenta	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C54	Corpus uteri	21	-	-	-	-	-	-	-	1	1	5	1	3	2	3	3	2	-	2.9
C56	Ovary etc.	28	-	-	-	-	1	-	-	3	3	4	-	4	3	1	2	2	5	3.8
C51-C52;C57	Other female genital	5	-	-	-	-	-	-	-	-	-	-	2	1	1	-	-	1	-	0.7
C67	Bladder	11	-	-	-	-	-	-	1	-	-	1	1	1	2	2	1	1	1	1.5
C64-C66;C68	Kidney etc.	9	-	2	1	-	-	-	-	-	1	-	1	1	1	1	-	1	-	1.2
C69	Eye	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3
C70-C72	Brain, nervous system	16	-	1	8	2	-	-	1	1	-	-	-	1	-	1	-	1	-	2.2
C73	Thyroid	35	-	-	-	-	-	3	1	5	8	7	5	-	1	4	-	1	-	4.8
C74-C75	Other endocrine	2	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	0.3
C81	Hodgkin's disease	19	-	-	1	2	2	3	3	-	1	2	2	-	-	2	-	-	1	2.6
C82-C85;C96	Non-Hodgkin lymphoma	22	-	-	2	-	3	2	2	4	1	-	-	-	2	3	1	2	-	3
C88;C90	Multiple myeloma	12	-	-	-	-	-	-	-	-	-	-	1	-	4	4	-	-	3	1.6
C91	Lymphoid leukaemia	14	-	3	3	-	2	1	-	2	2	-	1	-	-	-	-	-	-	1.9
C92	Myeloid leukaemia	14	-	1	-	-	-	-	1	2	3	2	1	2	2	-	-	-	-	1.9
C93	Monocytic leukaemia	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	0.1
C94	Other leukaemia	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C95	Leukaemia unspec.	2	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	0.3
	Other & unspecified	29	-	1	-	-	-	1	1	4	2	3	3	4	-	2	5	1	2	4
	All sites	731	0	14	17	4	11	17	22	70	91	107	102	72	51	66	37	25	25	100

Table 5-3-3 Incidence Rates for Cancer Cases among non-Saudi Males by Age Group (per 100,000), 1999

ICD(10)	ALL SITES	Tot.	UNK.	0	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	CIR	ASR
C00	Lip	2	-	-	-	-	-	-	-	0.2	-	0.3	-	-	-	-	-	-	-	0.1	0
C01-C02	Tongue	7	-	-	-	-	-	-	0.2	-	-	0.3	2.3	-	2.3	-	-	-	-	0.2	0
C07-C08	Salivary gland	5	-	-	-	-	-	-	-	0.2	0.6	-	-	-	-	-	8.7	-	-	0.1	0.3
C03-C06	Mouth	7	-	-	-	-	-	-	-	0.2	0.2	0.3	0.6	-	-	8.6	-	-	20.8	0.2	0.8
C09-C10	Oropharynx	1	-	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	0
C11	Nasopharynx	32	-	-	-	-	-	0.8	0.2	0.3	0.6	0.6	5.7	4.2	7	4.3	17.4	-	41.5	1	2.5
C12-C13	Hypopharynx	6	-	-	-	-	-	-	0.2	-	0.2	0.6	-	-	-	-	-	-	41.5	0.2	0.9
C14	Pharynx unspec.	2	-	-	-	-	-	-	0.2	0.2	-	-	-	-	-	-	-	-	-	0.1	0
C15	Oesophagus	16	-	-	-	-	-	-	-	0.3	0.8	-	0.6	2.1	2.3	-	17.4	-	83	0.5	2.5
C16	Stomach	43	-	-	-	-	1.1	-	0.2	0.3	0.6	2.2	3.4	8.3	9.4	25.9	8.7	63.2	20.8	1.3	4.3
C17	Small intestine	4	-	-	-	-	-	-	-	-	-	0.3	-	-	4.7	-	21.1	-	0.1	0.6	
C18	Colon	47	-	-	-	-	-	-	0.3	0.6	1.2	3.1	2.9	6.2	9.4	4.3	43.6	21.1	62.3	1.4	4.3
C19-C21	Rectum	49	-	-	-	-	-	0.4	0.8	0.6	0.8	2.8	1.1	6.2	14	17.2	8.7	105	41.5	1.5	5.2
C22	Liver	49	-	-	0.5	-	-	-	-	0.2	0.4	1.9	3.4	12.5	21.1	8.6	52.3	42.1	41.5	1.5	5.5
C23-C24	Gallbladder etc.	11	-	-	-	-	-	-	-	0.2	0.2	-	0.6	2.1	-	12.9	8.7	21.1	20.8	0.3	1.8
C25	Pancreas	15	-	-	-	-	-	-	0.2	-	0.4	0.6	0.6	3.1	4.7	4.3	17.4	-	20.8	0.4	1.6
C30-C31	Nose, sinuses etc.	5	-	-	-	-	-	-	-	-	-	-	0.6	1	2.3	4.3	-	21.1	-	0.1	0.8
C32	Larynx	21	-	-	-	-	-	-	-	-	0.2	0.6	2.3	1	7	17.2	8.7	84.3	20.8	0.6	3.6
C33-C34	Bronchus, lung	37	-	-	-	-	-	-	-	0.2	0.6	2.2	2.3	6.2	4.7	30.2	8.7	63.2	62.3	1.1	4.8
C37-C38	Other Thoracic organs	3	-	-	-	-	-	0.4	-	-	0.2	0.3	-	-	-	-	-	-	-	0.1	0.1
C40-C41	Bone	27	-	0.4	0.5	1.3	5.4	0.8	0.8	0.6	0.2	0.9	1.1	-	-	4.3	-	-	-	0.8	1.2
C47-C49	Connective tissue	22	-	-	0.5	0.7	1.1	0.4	0.2	-	0.8	1.2	1.7	1	2.3	8.6	17.4	-	-	0.7	1.5
C45	Mesothelioma	6	-	-	-	-	-	-	-	0.2	-	-	0.6	1	4.7	4.3	-	-	-	0.2	0.5
C46	Kaposi's sarcoma	1	-	-	-	-	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1
C43	Melanoma of skin	4	-	-	-	-	-	-	-	-	0.2	-	1.1	-	-	-	8.7	-	-	0.1	0.3
C44	Other skin	51	-	-	-	0.7	1.1	-	0.2	0.4	1.9	3.4	11.4	25.8	21.6	8.7	21.1	104	1.5	5.7	
C50	Breast	5	-	-	-	-	-	-	-	-	-	-	0.6	-	2.3	8.6	-	21.1	-	0.1	0.9
C61	Prostate	37	-	-	-	-	-	-	-	-	-	-	1.1	6.2	14	12.9	52.3	84.3	208	1.1	8.9
C62	Testis	20	-	-	-	-	1.1	1.2	0.8	0.3	0.8	0.9	1.1	-	-	-	-	-	-	0.6	0.5
C60	Penis	2	-	-	-	-	-	-	0.2	0.2	-	-	-	-	-	-	-	-	-	0.1	0
C63	Other male genital	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C67	Bladder	62	-	-	-	-	-	-	0.2	-	0.6	2.2	3.4	14.6	16.4	34.5	52.3	126	83	1.9	8.9
C64-C66,C68	Kidney etc.	19	-	0.4	-	0.7	-	-	-	0.2	0.2	0.6	0.6	6.2	4.7	4.3	8.7	21.1	20.8	0.6	2
C69	Eye	3	-	0.8	-	-	-	-	-	-	-	-	-	-	-	4.3	-	-	-	0.1	0.3
C70-C72	Brain, nervous system	46	-	0.8	3.2	5.9	1.1	-	0.5	-	0.6	3.4	1.7	2.1	4.7	4.3	-	21.1	20.8	1.4	2.7
C73	Thyroid	23	-	-	-	0.7	1.1	0.4	-	0.3	1	0.6	3.4	2.1	2.3	-	8.7	21.1	-	0.7	1.4
C74-C75	Other endocrine	4	-	0.4	0.5	-	-	-	-	-	-	-	-	-	-	4.3	-	20.8	0.1	0.7	
C81	Hodgkin's disease	27	-	-	-	2	1.1	0.4	0.3	0.2	1.2	0.9	2.3	1	7	8.6	-	-	-	0.8	1.3
C82-C85,C96	Non-Hodgkin lymphoma	83	-	1.7	0.9	2	2.2	2	0.8	1.5	1.4	3.4	4	11.4	14	17.2	26.1	21.1	62.3	2.5	5.8
C88,C90	Multiple myeloma	16	-	-	-	-	-	0.4	-	-	-	0.3	2.3	6.2	4.7	8.6	-	-	-	0.5	1
C91	Lymphoid leukaemia	28	-	1.7	0.5	3.3	2.2	0.8	0.2	0.2	0.6	0.3	-	2.1	9.4	8.6	-	-	-	0.8	1.7
C92	Myeloid leukaemia	45	-	0.4	0.9	2	2.2	1.2	0.7	0.6	1.4	1.9	1.7	8.3	2.3	-	-	20.8	1.3	1.9	
C93	Monocytic leukaemia	2	-	-	0.5	-	-	-	-	-	-	-	-	-	-	4.3	-	-	-	0.1	0.2
C94	Other leukaemia	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C95	Leukaemia unspec.	2	-	-	-	-	-	-	-	-	0.2	-	-	-	-	4.3	-	-	-	0.1	0.2
	Other & unspecified	47	-	-	-	-	0.7	-	0.2	0.6	1.6	1.5	5.7	8.3	-	21.6	17.4	21.1	41.5	1.4	3.7
	All sites	944	0	7	8	20	21	9	7	9	18	36	62	135	204	323	401	800	1059	28.2	91.1

Table 5-3-4 Incidence Rates for Cancer Cases among non-Saudi Females by Age Group (per 100,000), 1999

ICD (10)	ALL SITES	Tot.	UNK.	0	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	CIR	ASR
C00	Lip	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C01-C02	Tongue	2	-	-	-	-	-	-	-	-	-	-	2.3	-	-	-	12.5	-	-	0.1	0.5
C07-C08	Salivary gland	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C03-C06	Mouth	2	-	-	-	-	-	-	-	-	-	1.2	-	-	8.1	-	-	-	-	0.1	0.4
C09-C10	Oropharynx	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C11	Nasopharynx	5	-	-	-	-	-	-	-	-	-	1.2	2.3	-	8.1	-	25.1	-	-	0.3	1.3
C12-C13	Hypopharynx	4	-	-	-	-	-	-	0.5	0.4	-	1.2	-	3.6	-	-	-	-	-	0.2	0.3
C14	Pharynx unspec.	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15	Oesophagus	10	-	-	-	-	-	-	-	0.4	-	-	6.8	-	-	17.5	25.1	26.4	20	0.6	2.8
C16	Stomach	14	-	-	-	-	-	-	-	0.7	0.6	1.2	2.3	3.6	16.1	35	12.5	-	20	0.8	3.3
C17	Small intestine	2	-	-	-	-	-	-	-	-	-	-	4.5	-	-	-	-	-	-	0.1	0.3
C18	Colon	19	-	-	-	-	-	0.8	-	-	1.2	1.2	4.5	3.6	48.4	17.5	25.1	26.4	20	1.1	5
C19-C21	Rectum	15	-	-	-	-	-	-	-	0.4	-	2.3	6.8	3.6	-	35	-	52.8	40	0.9	4
C22	Liver	12	-	-	-	-	-	0.8	0.5	0.4	-	2.3	4.5	7.2	8.1	-	12.5	-	20	0.7	2
C23-C24	Gallbladder etc.	6	-	-	-	-	-	-	-	0.4	-	-	4.5	-	16.1	8.7	-	-	-	0.4	1.3
C25	Pancreas	3	-	-	-	-	-	-	-	0.7	-	-	-	-	-	-	-	-	-	0.2	0.1
C30-C31	Nose, sinuses etc.	1	-	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	0.1	-
C32	Larynx	3	-	-	-	-	-	-	-	-	0.6	-	-	-	8.1	-	12.5	-	-	0.2	0.7
C33-C34	Bronchus, lung	19	-	0.4	0.4	-	-	-	-	-	1.2	-	9.1	10.8	16.1	26.2	25.1	26.4	-	1.1	4.2
C37-C38	Other Thoracic organs	2	-	-	-	-	-	0.8	-	-	-	-	2.3	-	-	-	-	-	-	0.1	0.2
C40-C41	Bone	6	-	-	0.4	-	2	-	-	-	-	1.2	-	3.6	-	-	12.5	-	-	0.4	0.9
C47-C49	Connective tissue	7	-	0.8	-	-	-	0.8	0.5	-	0.6	2.3	-	-	-	-	-	-	-	0.4	0.4
C45	Mesothelioma	1	-	-	-	-	-	-	-	-	-	-	2.3	-	-	-	-	-	-	0.1	0.1
C46	Kaposi's sarcoma	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C43	Melanoma of skin	5	-	-	-	-	-	-	-	-	-	2.3	2.3	3.6	-	-	12.5	-	-	0.3	0.8
C44	Other skin	19	-	-	-	-	-	-	-	-	0.6	1.2	13.6	7.2	16.1	8.7	12.5	52.8	60.1	1.1	4.9
C50	Breast	274	-	-	-	-	-	1.6	4.3	11	30.4	62.4	112	123	88.8	158	100	132	60.1	16.4	36.2
C55	Uterus unspec.	7	-	-	-	-	-	-	0.7	0.6	1.2	-	-	-	-	17.5	-	-	20	0.4	1.2
C53	Cervix uteri	51	-	-	-	-	-	0.8	-	1.8	4.7	15	11.4	21.7	32.3	52.5	25.1	26.4	-	3	7.8
C58	Placenta	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C54	Corpus uteri	21	-	-	-	-	-	-	0.4	0.6	5.8	2.3	10.8	16.1	26.2	37.6	52.8	-	1.3	5	-
C56	Ovary etc.	28	-	-	-	-	1	-	-	1.1	1.8	4.6	-	14.5	24.2	8.7	25.1	52.8	100	1.7	6.4
C51-C52;C57	Other female genital	5	-	-	-	-	-	-	-	-	-	-	4.5	3.6	8.1	-	-	26.4	-	0.3	1.3
C67	Bladder	11	-	-	-	-	-	-	0.5	-	-	1.2	2.3	3.6	16.1	17.5	12.5	26.4	20	0.7	3.1
C64-C66;C68	Kidney etc.	9	-	0.8	0.4	-	-	-	-	-	0.6	-	2.3	3.6	8.1	8.7	-	26.4	-	0.5	1.7
C69	Eye	2	-	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1
C70-C72	Brain, nervous system	16	-	0.4	3.6	1.3	-	-	0.5	0.4	-	-	-	3.6	-	8.7	-	26.4	-	1	1.6
C73	Thyroid	35	-	-	-	-	-	2.4	0.5	1.8	4.7	8.1	11.4	-	8.1	35	-	26.4	-	2.1	4
C74-C75	Other endocrine	2	-	0.4	-	-	-	-	-	-	-	-	-	3.6	-	-	-	-	-	0.1	0.2
C81	Hodgkin's disease	19	-	-	0.4	1.3	2	2.4	1.6	-	0.6	2.3	4.5	-	-	17.5	-	-	20	1.1	2.2
C82-C85;C96	Non-Hodgkin lymphoma	22	-	-	0.9	-	3	1.6	1.1	1.5	0.6	-	-	-	16.1	26.2	12.5	52.8	-	1.3	3.8
C88;C90	Multiple myeloma	12	-	-	-	-	-	-	-	-	-	-	-	2.3	-	32.3	35	-	60.1	0.7	4
C91	Lymphoid leukaemia	14	-	-	1.2	1.3	2	0.8	-	0.7	1.2	-	2.3	-	-	-	-	-	-	0.8	0.8
C92	Myeloid leukaemia	14	-	0.4	-	-	-	-	0.5	0.7	1.8	2.3	2.3	7.2	16.1	-	-	-	-	0.8	1.5
C93	Monocytic leukaemia	1	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	0.1	-
C94	Other leukaemia	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C95	Leukaemia unspec.	2	-	-	-	-	-	-	-	0.4	-	-	-	3.6	-	-	-	-	-	0.1	0.2
	Other & unspecified	29	-	0.4	-	-	-	0.8	0.5	1.5	1.2	3.5	6.8	14.5	-	17.5	62.7	26.4	40	1.7	5.6
	All sites	731	0	6	8	3	11	14	12	26	53	124	232	260	412	577	464	660	500	43.7	120.5

Table 5-3-5 Age Distribution of Cancer Cases among non-Saudi Males, 2000

ICD(10)	ALL SITES	Tot.	UNK.	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	%
C00	Lip	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2
C01-C02	Tongue	8	-	-	-	-	-	-	-	-	1	1	1	-	4	-	1	-	1	1
C07-C08	Salivary gland	5	-	-	-	-	-	-	-	1	1	2	1	-	-	-	-	-	-	0.6
C03-C06	Mouth	8	-	-	-	-	-	-	-	-	-	-	2	1	2	-	2	-	1	1
C09-C10	Oropharynx	2	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	0.2
C11	Nasopharynx	19	-	-	-	-	1	-	-	1	1	5	6	1	3	1	-	-	-	2.3
C12-C13	Hypopharynx	7	-	-	-	-	-	-	1	-	2	-	1	1	1	-	-	1	-	0.9
C14	Pharynx unspec.	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	0.1
C15	Esophagus	18	-	-	-	-	-	-	1	-	-	3	5	2	1	3	-	-	3	2.2
C16	Stomach	37	-	-	-	-	-	-	5	1	2	3	4	3	6	4	3	3	3	4.5
C17	Small intestine	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	0.2
C18	Colon	43	-	-	-	-	-	-	1	4	4	8	2	6	8	7	1	1	1	5.2
C19-C21	Rectum	47	-	-	-	-	-	2	2	3	6	7	11	4	4	5	3	-	-	5.7
C22	Liver	40	-	-	1	-	-	-	-	-	2	2	4	5	11	3	8	1	3	4.9
C23-C24	Gallbladder etc.	4	-	-	-	-	-	1	-	-	-	1	1	1	-	-	-	-	-	0.5
C25	Pancreas	8	-	-	-	-	-	-	-	-	-	-	1	1	2	1	1	1	1	1
C30-C31	Nose, sinuses etc.	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	0.1
C32	Larynx	12	-	-	-	-	-	-	-	-	1	1	1	1	2	4	2	-	-	1.5
C33-C34	Bronchus, lung	48	-	-	-	-	-	-	4	1	3	6	4	9	4	4	6	5	2	5.8
C37-C38	Other Thoracic organs	5	-	-	-	-	-	-	-	-	2	-	-	-	-	2	-	-	1	0.6
C40-C41	Bone	15	-	1	2	1	-	1	3	1	2	1	1	-	1	1	-	-	-	1.8
C47-C49	Connective tissue	9	-	-	-	1	1	1	1	-	-	1	1	-	-	1	1	-	1	1.1
C45	Mesothelioma	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C46	Kaposi's sarcoma	3	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	0.4
C43	Melanoma of skin	2	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	0.2
C44	Other skin	51	-	-	-	-	-	-	1	1	3	5	8	9	13	6	2	3	-	6.2
C50	Breast	3	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	0.4
C61	Prostate	28	-	-	-	-	-	-	-	-	-	-	1	4	6	5	5	3	4	3.4
C62	Testis	15	-	1	-	-	1	-	4	1	1	2	4	1	-	-	-	-	-	1.8
C60	Penis	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	0.1
C63	Other male genital	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	0.1
C67	Bladder	48	-	1	-	-	-	1	1	2	6	7	4	5	5	3	4	4	5	5.8
C64-C66;C68	Kidney etc.	29	-	2	1	-	1	-	1	1	-	5	3	5	5	1	3	1	-	3.5
C69	Eye	7	-	4	-	-	-	-	-	1	-	-	1	-	-	1	-	-	-	0.9
C70-C72	Brain, nervous system	35	-	-	1	-	3	-	2	3	6	3	5	4	3	2	2	-	1	4.3
C73	Thyroid	16	-	-	-	1	2	3	1	-	2	1	5	1	-	-	-	-	-	1.9
C74-C75	Other endocrine	6	-	5	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	0.7
C81	Hodgkin's disease	24	-	-	6	2	1	2	1	4	1	5	-	2	-	-	-	-	-	2.9
C82-C85;C96	Non-Hodgkin lymphoma	76	-	2	-	5	1	3	4	4	5	13	9	15	6	5	1	3	-	9.3
C88;C90	Multiple myeloma	15	-	-	-	-	-	-	-	1	4	1	4	3	1	-	1	-	-	1.8
C91	Lymphoid leukaemia	31	-	6	6	2	-	1	1	2	2	3	3	2	-	-	2	-	1	3.8
C92	Myeloid leukaemia	46	-	1	1	2	4	2	3	9	4	8	4	4	2	-	-	2	-	5.6
C93	Monocytic leukaemia	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	0.1
C94	Other leukaemia	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C95	Leukaemia unspec.	4	-	-	-	-	-	-	-	-	1	2	-	-	1	-	-	-	-	0.5
	Other & unspecified	38	-	-	-	-	-	1	4	2	2	9	5	5	5	3	1	1	-	4.6
	All sites	821	0	23	18	14	15	18	41	46	62	111	103	99	98	66	49	29	29	100

Table 5-3-6 Age Distribution of Cancer Cases among non-Saudi Females, 2000

ICD(10)	ALL SITES	Tot.	UNK.	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	%
C00	Lip	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	0.3
C01-C02	Tongue	8	-	-	-	-	1	-	-	-	-	2	-	1	-	3	-	1	-	1.1
C07-C08	Salivary gland	5	-	-	-	-	-	-	-	1	2	-	2	-	-	-	-	-	-	0.7
C03-C06	Mouth	6	-	-	-	-	-	-	-	1	-	1	2	-	1	1	-	-	-	0.8
C09-C10	Oropharynx	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	0.1
C11	Nasopharynx	7	-	-	1	-	-	-	1	-	-	2	2	1	-	-	-	-	-	1
C12-C13	Hypopharynx	8	-	-	-	-	-	-	1	-	1	1	-	1	1	1	2	-	-	1.1
C14	Pharynx unspec.	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C15	Oesophagus	7	-	-	-	-	-	-	-	-	1	-	1	-	-	3	-	1	1	1
C16	Stomach	13	-	-	-	-	-	-	-	-	2	2	-	-	1	4	-	4	-	1.8
C17	Small intestine	4	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	1	-	0.5
C18	Colon	17	-	-	-	-	-	-	1	1	1	5	2	3	3	1	-	-	-	2.3
C19-C21	Rectum	18	-	-	-	-	-	2	-	3	-	5	2	2	-	1	1	1	1	2.5
C22	Liver	10	-	-	-	-	-	-	-	1	2	1	1	-	1	1	-	1	2	1.4
C23-C24	Gallbladder etc.	9	-	-	-	-	-	-	-	3	-	-	-	2	1	1	2	-	-	1.2
C25	Pancreas	8	-	-	-	-	-	1	-	-	2	1	-	-	1	2	-	1	-	1.1
C30-C31	Nose, sinuses etc.	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C32	Larynx	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C33-C34	Bronchus, lung	6	-	-	-	-	-	-	-	-	1	-	1	-	3	1	-	-	-	0.8
C37-C38	Other Thoracic organs	3	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	0.4
C40-C41	Bone	12	-	1	3	2	3	-	-	1	-	-	-	-	-	1	1	-	-	1.6
C47-C49	Connective tissue	7	-	1	-	1	-	-	2	-	-	-	1	-	1	1	-	-	-	1
C45	Mesothelioma	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	0.1
C46	Kaposi's sarcoma	2	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	0.3
C43	Melanoma of skin	7	-	-	-	-	-	1	-	-	2	-	2	2	-	-	-	-	-	1
C44	Other skin	28	-	-	-	-	-	-	-	2	-	5	7	5	2	4	1	1	1	3.8
C50	Breast	231	-	-	-	-	-	-	4	25	34	54	45	24	15	16	6	5	3	31.6
C55	Uterus unspec.	4	-	-	-	-	-	-	-	-	3	-	-	-	1	-	-	-	-	0.5
C53	Cervix uteri	55	-	-	-	-	-	-	-	5	8	10	8	8	2	7	5	2	-	7.5
C58	Placenta	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0.1
C54	Corpus uteri	19	-	-	-	-	-	-	1	-	1	-	1	5	2	3	4	-	-	2.6
C56	Ovary etc.	29	-	-	-	1	2	-	-	1	3	9	5	1	2	1	2	1	1	4
C51-C52;C57	Other female genital	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1
C67	Bladder	13	-	-	-	-	-	1	-	1	-	1	3	-	3	1	1	2	-	1.8
C64-C66;C68	Kidney etc.	17	-	1	3	-	-	-	-	1	3	-	4	1	3	-	1	-	-	2.3
C69	Eye	5	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7
C70-C72	Brain, nervous system	13	-	2	-	-	1	-	-	3	4	-	-	1	2	-	-	-	-	1.8
C73	Thyroid	30	-	-	1	2	3	4	2	4	5	4	-	3	1	1	-	-	-	4.1
C74-C75	Other endocrine	5	-	1	1	2	-	-	-	-	-	-	-	1	-	-	-	-	-	0.7
C81	Hodgkin's disease	12	-	-	-	4	-	1	1	-	2	2	-	-	-	1	1	-	-	1.6
C82-C85;C96	Non-Hodgkin lymphoma	27	-	1	1	-	-	1	3	2	1	4	1	1	2	3	2	3	2	3.7
C88;C90	Multiple myeloma	7	-	-	-	-	-	1	-	-	-	-	2	1	1	-	-	2	-	1
C91	Lymphoid leukaemia	18	-	5	2	-	-	-	3	1	1	1	2	-	1	1	1	-	-	2.5
C92	Myeloid leukaemia	21	-	-	-	1	-	2	3	3	3	4	2	2	1	-	-	-	-	2.9
C93	Monocytic leukaemia	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C94	Other leukaemia	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
C95	Leukaemia unspec.	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
	Other & unspecified	34	-	2	-	-	-	1	1	1	4	5	7	2	-	3	3	2	3	4.7
	All sites	731	0	21	11	10	11	14	26	59	86	120	108	70	52	64	34	28	17	100

Table 5-3-7 Incidence Rates for Cancer Cases among non-Saudi Males by Age Group (per 100,000), 2000

ICD(10)	ALL SITES	Tot.	UNK.	0	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	CIR	ASR
C00	Lip	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C01-C02	Tongue	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C07-C08	Salivary gland	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C03-C06	Mouth	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C09-C10	Oropharynx	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C11	Nasopharynx	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C12-C13	Hypopharynx	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C14	Pharynx unspec.	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15	Oesophagus	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C16	Stomach	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C17	Small intestine	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C18	Colon	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C19-C21	Rectum	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C22	Liver	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C23-C24	Gallbladder etc.	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C25	Pancreas	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C30-C31	Nose, sinuses etc.	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C32	Larynx	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C33-C34	Bronchus, lung	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C37-C38	Other Thoracic organs	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C40-C41	Bone	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C47-C49	Connective tissue	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C45	Mesothelioma	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C46	Kaposi's sarcoma	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C43	Melanoma of skin	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C44	Other skin	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C50	Breast	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C61	Prostate	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C62	Testis	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C60	Penis	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C63	Other male genital	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C67	Bladder	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C64-C66;C68	Kidney etc.	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C69	Eye	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C70-C72	Brain, nervous system	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C73	Thyroid	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C74-C75	Other endocrine	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C81	Hodgkin's disease	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C82-C85;C96	Non-Hodgkin lymphoma	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C88;C90	Multiple myeloma	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C91	Lymphoid leukaemia	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C92	Myeloid leukaemia	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C93	Monocytic leukaemia	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C94	Other leukaemia	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C95	Leukaemia unspec.	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Other & unspecified	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	All sites	821	0	10	7	7	12	9	8	7	11	30	48	86	163	230	396	412	354	23.3	58

Table 5-3-8 Incidence Rates for Cancer Cases among non-Saudi Females by Age Group (per 100,000), 2000

ICD(10)	ALL SITES	Tot.	UNK.	0	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	CIR	ASR
C00	Lip	2	-	-	-	-	-	-	-	-	0.5	1.8	-	3.4	-	27.7	-	11.9	-	0.5	1.7
C01-C02	Tongue	8	-	-	-	-	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C07-C08	Salivary gland	5	-	-	-	-	-	-	-	0.4	1	-	3.7	-	-	-	-	-	-	0.3	0.3
C03-C06	Mouth	6	-	-	-	-	-	-	-	0.4	-	0.9	3.7	-	5.6	9.2	-	-	-	0.3	0.9
C09-C10	Oropharynx	1	-	-	-	-	-	-	-	-	-	-	-	-	-	9.2	-	-	-	0.1	0.4
C11	Nasopharynx	7	-	-	0.4	-	-	-	0.6	-	-	1.8	3.7	3.4	-	-	-	-	-	0.4	0.6
C12-C13	Hypopharynx	8	-	-	-	-	-	-	0.6	-	0.5	0.9	-	3.4	5.6	9.2	33.1	-	-	0.5	1.9
C14	Pharynx unspec.	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C15	Oesophagus	7	-	-	-	-	-	-	-	-	0.5	-	1.9	-	-	27.7	-	11.9	17.1	0.4	1.8
C16	Stomach	13	-	-	-	-	-	-	-	-	1	1.8	-	-	5.6	37	-	47.8	-	0.7	2.8
C17	Small intestine	4	-	-	-	-	-	-	-	-	-	-	1.9	6.7	-	-	-	11.9	-	0.2	0.7
C18	Colon	17	-	-	-	-	-	-	0.6	0.4	0.5	4.6	3.7	10.1	16.9	9.2	-	-	-	1	2.2
C19-C21	Rectum	18	-	-	-	-	-	1.7	-	1.3	-	4.6	3.7	6.7	-	9.2	16.5	11.9	17.1	1	2.5
C22	Liver	10	-	-	-	-	-	-	-	0.4	1	0.9	1.9	-	5.6	9.2	-	11.9	34.3	0.6	1.8
C23-C24	Gallbladder etc.	9	-	-	-	-	-	-	-	1.3	-	-	-	6.7	5.6	9.2	33.1	-	-	0.5	2
C25	Pancreas	8	-	-	-	-	-	0.9	-	-	1	0.9	-	-	5.6	18.5	-	11.9	-	0.5	1.4
C30-C31	Nose, sinuses etc.	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C32	Larynx	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C33-C34	Bronchus, lung	6	-	-	-	-	-	-	-	-	0.5	-	1.9	-	16.9	9.2	-	-	-	0.3	1.2
C37-C38	Other Thoracic organs	3	-	0.4	-	-	-	-	-	0.4	-	-	-	-	-	16.5	-	-	-	0.2	0.6
C40-C41	Bone	12	-	0.4	1.2	1	2.5	-	-	0.4	-	-	-	-	-	9.2	16.5	-	-	0.7	1.4
C47-C49	Connective tissue	7	-	0.4	-	0.5	-	-	1.3	-	-	-	1.9	-	5.6	9.2	-	-	-	0.4	0.9
C45	Mesothelioma	1	-	-	-	-	-	-	-	-	-	-	-	-	5.6	-	-	-	-	0.1	0.2
C46	Kaposi's sarcoma	2	-	-	-	-	-	-	-	-	-	-	-	3.4	-	9.2	-	-	-	0.1	0.5
C43	Melanoma of skin	7	-	-	-	-	-	0.9	-	-	1	-	3.7	6.7	-	-	-	-	-	0.4	0.7
C44	Other skin	28	-	-	-	-	-	-	-	0.9	-	4.6	13	16.8	11.2	37	16.5	11.9	17.1	1.6	5
C50	Breast	231	-	-	-	-	-	-	2.5	10.8	6.6	49.6	83.5	80.6	84.4	148	99.3	59.7	51.4	13.2	28.4
C55	Uterus unspec.	4	-	-	-	-	-	-	-	-	1.5	-	-	-	5.6	-	-	-	-	0.2	0.3
C53	Cervix uteri	55	-	-	-	-	-	-	-	-	2.2	3.9	9.2	14.9	26.9	11.2	64.7	82.7	23.9	-	9.1
C58	Placenta	1	-	-	-	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	0.1	0.1
C54	Corpus uteri	19	-	-	-	-	-	-	0.6	-	0.5	-	1.9	16.8	11.2	27.7	66.2	-	34.3	1.1	5.3
C56	Ovary etc.	29	-	-	-	0.5	1.7	-	-	0.4	1.5	8.3	9.3	3.4	11.2	9.2	33.1	11.9	17.1	1.7	3.9
C51-C52;C57	Other female genital	1	-	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1
C67	Bladder	13	-	-	-	-	-	0.9	-	0.4	-	0.9	5.6	-	16.9	9.2	16.5	23.9	-	0.7	2.5
C64-C66;C68	Kidney etc.	17	-	0.4	1.2	-	-	-	-	0.4	1.5	-	7.4	3.4	16.9	-	16.5	-	-	1	2.1
C69	Eye	5	-	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3	0.3
C70-C72	Brain, nervous system	13	-	0.9	-	-	0.8	-	-	1.3	1.9	-	-	3.4	11.2	-	-	-	-	0.7	1
C73	Thyroid	30	-	-	-	0.5	1.7	2.6	2.5	0.9	1.9	4.6	7.4	10.1	5.6	9.2	-	-	-	1.7	2.6
C74-C75	Other endocrine	5	-	0.4	0.4	-	1.7	-	-	-	-	-	-	3.4	-	-	-	-	-	0.3	0.4
C81	Hodgkin's disease	12	-	-	-	2.1	-	0.9	0.6	-	1	1.8	-	-	-	9.2	16.5	-	-	0.7	1.3
C82-C85;C96	Non-Hodgkin lymphoma	27	-	0.4	0.4	-	-	0.9	1.9	0.9	0.5	3.7	1.9	3.4	11.2	27.7	33.1	35.8	34.3	1.5	4.8
C88;C90	Multiple myeloma	7	-	-	-	-	-	0.9	-	-	-	-	3.7	3.4	5.6	-	-	23.9	-	0.4	1.2
C91	Lymphoid leukaemia	18	-	2.2	0.8	-	-	-	1.9	0.4	0.5	0.9	3.7	-	5.6	9.2	16.5	-	-	1	1.9
C92	Myeloid leukaemia	21	-	-	-	0.5	-	1.7	1.9	1.3	1.5	3.7	3.7	6.7	5.6	-	-	-	-	1.2	1.5
C93	Monocytic leukaemia	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C94	Other leukaemia	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C95	Leukaemia unspec.	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Other & unspecified	34	-	0.9	-	-	-	0.9	0.6	0.4	1.9	4.6	13	6.7	-	27.7	49.6	23.9	51.4	1.9	5.9
	All sites	731	0	9	4	5	9	12	16	25	42	110	200	235	292	592	563	334	291	41.8	104.3

PART VI

APPENDICES

APPENDIX A

Reporting Hospitals

Riyadh region

King Khaled University Hospital
King Faisal Specialist Hospital
Security Forces Hospital
King Fahad National Guard Hospital
AFH Military (RKH Programme)
King Abdul Aziz University Hospital
King Khaled Eye Specialist Hospital
Riyadh Medical Complex
Prince Salman Bin Abdul Aziz Hospital
King Khaled General Hospital (Kharj)
King Khaled General Hospital (Majmaa)
Al Hammadi Hospital
Al Mobarak Hospital
Al Yamamah Hospital
Social Insurance Hospital (GOSI)
Dallah Hospital
Dr Abdulrhman Al Mishari Hospital
Watani Hospital

Eastern region

Dhahran Health Center (ARAMCO)
King Fahad Hospital of the University
Dammam Central Hospital
Hofuf Hospital
Al Qatif Central Hospital
Al Mana General Hospital (Khobar)
Almana General Hospital (Dammam)
King Khalid General Hospital
Al Mouwasat Hospital
Prince Saud Bin Jalawi Hospital
Dr Fakhry Hospital
Maternity & Children's Hospital
Al Jubail Hospital
Al Salama Hospital
Al-Dossary Hospital
Al Thomairy Hospital
Chest Disease Hospital
Arabian Oil Comp Hospital
Abqaiq Health Centre
Al Qatif General Hospital
King Fahad Hospital (Hofuf)

Western region

King Abdul Aziz University Hospital
King Khaled National Guard Hospital
King Abdul Aziz Hospital & Oncology Center
King Fahad Armed Forces Hospital
King Fahad General Hospital
King Abdul Aziz, Al Zaher Hospital
King Faisal Hospital (Taif)
Al Jedaani Hospital
Al Salamah Hospital
United Doctors Hospital
Bugshan General Hospital
Al Dhagastani Hospital
Bakhsh Hospital
Dr Erfan & Bagedo Hospital
Dr Soliman Fakeeh Hospital
New Jeddah Clinic Hospital
Children & Maternity Hospital (Jeddah)
Aziziyah for Children & Maternity Hospital
Saudi German Hospital
Saudi Medical Services
Al Noor Specialist Hospital
Hera General Hospital
Maternity & Children Hospital (Taif)
Al Qunfudah General Hospital
Royal Commission Medical (Janboa)

Madinah region

Al Hanakyah Hospital
Al Miqat Hospital
Badr Hospital
Chest Diseases Hospital
Heatstroke Hospital
King Fahad Hospital
Maternity & Children's Hospital
Madina National Hospital
Ohoud Hospital
Al Ula General Hospital
Khaybar General Hospital
Al Mahd Hospital

APPENDIX B

Qassim region

King Fahd Specialist Hospital
King Saud University Hospital
Onaizah General Hospital
Buraidah Central Hospital
Al Midhnab General Hospital
Ar Rass General Hospital
Bukairiya General Hospital

Hail region

Hail General Hospital
King Khaled General
Al Rashid Hospital
Baqa Hospital

Jazan region

King Fahad Central Hospital
Jazan General Hospital
Jazan Military Hospital
Farasan General Hospital

Tabuk region

King Fahad Hospital
King Khalid General Hospital
Maternity & Children's Hospital
Umm Lujj General Hospital
Al Wajh General Hospital

Asir region

Asir Central Hospital
Al Zafer Hospital
Chest & Fever Hospital
Prince Abdullah Bin Abdul Aziz Hospital

Baha region

King Fahd Hospital
Al Mandaq Hospital

Najran region

King Khaled General Hospital

APPENDIX C

National Cancer Registry Offices

Armed Forces Hospital	P.O. Box 7897, Riyadh 11159 Tel.: 01-477-7714 x6747 Fax: 01-477-7714 x6743
Central Region	P.O. Box 2925, Riyadh 11461 Tel.: 01-467-9488 / 467-2398 Fax: 01-467-9487
Eastern Region	P.O. Box 4004, Al Khobar 31952 Tel.: 03-896-6741 Fax: 03-896-6741
Madinah & Northern Region	King Fahd Hospital, Madinah Al Monawarah Tel.: 04-846-1500 x3134/3146 Fax: 04-846-0951
Main Office	P.O. Box 3354 MBC 64, Riyadh 11211 Tel.: 01-442-3938 Fax: 01-442-3941
National Guard Hospitals	P.O. Box 6615, Jeddah 21452 Tel.: 02-624-0000 x4085/4086 Fax: 02-624-7242
Security Forces Hospital	P.O. Box 3643, Riyadh 11481 Tel.: 01-477-4480 x1193 Fax: 01-467-4757
Southern Region	P.O. Box 641, Abha Tel.: 07-226-0711/224-7800 x118 Fax: 07-224-0964/224-7570
Western Region	P.O. Box 31467, Jeddah 21497 Tel.: 02-637-5555 x2283/2200 Fax: 02-637-9811/637-9830

APPENDIX D

NATIONAL CANCER REGISTRY

BOARD OF DIRECTORS

CHAIRMAN:

Dr. Shouki Bazarbashi, King Faisal Specialist Hospital & Research Centre

DEPUTY CHAIRMAN:

Dr. Nasser Al Hamdan, Ministry of Health

BOARD MEMBERS:

Dr. Dahish Ajarim, King Saud University, Riyadh

Dr. Edward De Vol, Director, King Faisal Specialist Hospital & Research Center

Prof. Hassan Al Idrissi, King Faisal University, Dammam

Dr. Hadir Meir, King Abdulaziz Hospital and Cancer Center, Jeddah

Dr. Hassan Trabulsi, King Khalid University, Abha

Dr. Mohamoud Shaheen Al Ahwal, King Abdulaziz University, Jeddah

Dr. Rizq Allah Assiri, Armed Forces Hospital, Riyadh

Dr. Abdulwahab Andejani, National Guard Hospitals, Jeddah

Dr. Abdulaziz Saleh Aba Hussein, Security Forces Hospital, Riyadh

Dr. Hisham Ali Yousef, King Fahad Hospital, Madinah

NCR ADMINISTRATIVE STAFF:

Susan Young, CCHRA(C), CTR, Administrative Director (2003-present)

Mohammed Haydar, CTR, Tumor Registrar

Haya Al Eid, BDS, DFE, Epidemiologist, CTR

Suad O. Arteh, MA, Data Manager

ADDRESS:

NATIONAL CANCER REGISTRY

P.O. BOX 3354, MBC 64

Riyadh 11211, Saudi Arabia

Website:

www.kfshrc.edu.sa/NCR/

E-mail:

bazarbashi@kfshrc.edu.sa

syoung@kfshrc.edu.sa

PHONE: 966-1-442-3938

FAX: 966-1-442-3941

APPENDIX E

**NATIONAL CANCER REGISTRY
MINISTRY OF HEALTH
KINGDOM OF SAUDI ARABIA**



السجل الوطني للأورام
وزارة الصحة
المملكة العربية السعودية

Request for data from the National Cancer Registry

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

Name: _____

Date Submitted: _____

Department: _____

Hospital: _____

Telephone number: _____

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 to the NCR.

Requester signature: _____

Date: _____

For Official use only:

Request: Approved _____

Denied _____

Chairman NCR Board of Directors Signature: _____

Dr. Nasser Al Hamdan

Date: _____

APPENDIX F

KINGDOM OF SAUDI ARABIA
MINISTRY OF HEALTH
NATIONAL CANCER REGISTRY

CANCER REGISTRATION REPORT

1. ACCESSION NUMBER

2. ACCESSION DATE / /

NAME

3. FIRST	4. FATHER	5. GRAND FATHER	6. FAMILY

7. SAUDI ID Number

8. MARITAL STATUS 9. SEX 10. DATE OF BIRTH / / 11. AGE

1-Single
2-Married
3-Divorced
4-Widowed
9-Unknown

1-Male
2-Female
9-Unknown

12. NATIONALITY

13. ADDRESS 14. 15. TEL. NO.

16. DATE OF DIAGNOSIS / /

17. TOPOGRAPHY

18. MORPHOLOGY

19. BEHAVIOR 20. GRADE 21. EXTENT 22. T= 25. BASIS OF DIAGNOSIS

0-Benign
1-Uncertain
2-Insitu
3-Malignant

1-Well diff
2-Moderately diff
3-Poorly diff
4-Undifferentiated
5-T.cell
6-B.cell
7-Null cell
8-Natural killer cell
9-Unknown

1-Insitu
2-Localized
3-Regional by direct extension
4-Regional by lymph nodes
5-Regional (both 2 and 3)
6-Regional NOS
7-Distant metastases/systemic Disease
9-Unknown

0-DCO
1-Clinical
2-Radiology
3-Surg/Autopsy
4-LAB test
5-Cyto/Hematology
6-Histology of Metastasis
7-Histology of Primary
8-Histology/Autopsy
9-Unknown

27. REPORTING HOSPITAL

28. PATIENT M.R. No. 29. PATHOLOGY No.

30. SURGERY 31. CHEMOTHERAPY 32. HORMONE 33. RADIATION 34. IMMUNOTHERAPY

1-Yes
2-No
3-Unknown

1-Yes
2-No
3-Unknown

1-Yes
2-No
3-Unknown

1-Yes
2-No
3-Unknown

1-Yes
2-No
3-Unknown

35. LAST CONTACT / / 36. STATUS 37. CAUSE OF DEATH

d d m m y y y y

1-Dead
2-Alive
9-Unknown

1-Cancer
2-Other
9-Unknown

38. CANREG No.

39. SIGNATURE