

## **MECC JOINT REGISTRATION PROJECT**

# Cyprus Cancer Registry (CyCR)

**Progress Report for 2008-2009** 

(Data 2003-2005)

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# CYPRUS CANCER REGISTRY (CyCR) Progress Report 2008-2009

The Cyprus Cancer Registry (CyCR) continued its productive work during 2008 and 2009. The main activities of the CyCR, undertaken in these two years, are described below, in line with the proposed structure of the report by MECC.

#### a) Hiring of New Staff

In 2008 the direction of the CyCR was transferred to the Coordinator of the Health Monitoring Unit (HMU) of the Ministry of Health. The Cyprus Cancer Registry is now part of the HMU. Duties for statistical analysis were assigned to one of the statisticians and duties for information technology tasks were assigned to one of the information technology officers of the HMU. There have been no other changes since the establishment of the Cyprus Cancer Registry in 1998.

#### **Registry Staff**

- Dr Pavlos Pavlou, Principal Investigator.
- Ms Christiana Soteriou, Secretary / Cancer Registrar.
- Ms Koula Lysandridou, Itinerary Cancer Registrar.
- Ms Maria Kleridou, Itinerary Cancer Registrar.
- Ms Anna Demetriou, Statistician.
- Mr. Xenios Anastassiades, Information Technology Officer.

#### b) Purchasing of New Equipment

New equipment has not been purchased. However, the HMU computers are being used for the purposes of the CyCR since 2008.

#### c) Training

Three members of the staff, the Principal Investigator, the Secretary/Registrar and the Information Technology Officer, attended the IARC/MECC/NCI Training Course on CanReg-5 Software, in Istanbul, Turkey in June 9-12, 2009.

#### d) Data Collection

We continued with the usual casefinding, abstraction, resolution and deletion procedures as in previous years. However, during the last two years we also made a lot of quality checks, including the IARC tools and the computer edits recommended in the SEER Summary Staging Manual. This helped us to correct many previous inconsistencies that were previously undetected.

We cooperated with the Bank of Cyprus Oncology Centre and succeeded in exporting and importing electronic data for 2006, 2007 and 2008. Most of the demographic fields and some clinical fields,

including first radiotherapy date, were imported successfully. The BOCOC staff prepared text files for us, according to specified data structure and we imported the data in CanReg4. Exporting of chemotherapy data from the BOCOC database proved to be more difficult. It very much depends on BOCOC being able to export these data if we are to import first chemotherapy dates. First surgery dates and other types of treatment are not routinely and systematically recorded in the clinical notes or the electronic files of BOCOC. These data will have to be abstracted from the paper clinical records as best we can. We have explored various possibilities of recording treatment data in the clinical records. They require certain changes in hospital procedures. Their implementation may need some time.

The electronic records were imported as 'pending'. They are being checked and 'confirmed', case by case by the Cancer Registrars, and the Principal Investigator, if necessary. This data transfer will save a lot of typing and probably avoid many typing mistakes. The major benefit is improvement in completeness and quality of the data. Speed of registration does not seem to be a major improvement because most of the delay occurs while checking the entries in clinical records and assigning the correct topography, morphology, staging and differentiation codes. Details of the numbers and percentages of the pending records are given in APPENDIX II and APPENDIX III.

Similar exporting and importing procedures are being developed for the public hospitals admissions and discharges data.

We have also succeeded in importing a lot of 'Death Certificate Notified' cases. They were imported from the electronic Causes of Death Database that was created in 2004. Death data before 2004 are only available in electronic files obtained from the Ministry of Interior. Copies of the death certificates are not available to check the accuracy of codification. Consequently, the quality of the older data are not as reliable as that for the data since 2004. We imported records that had no matching National ID in the Cancer Registry. They are also imported as pending and are being individually checked and confirmed. We hope his will also make a big improvement in the completeness of cancer registration as well as the recording of follow-up data for the purpose of calculating cancer survival.

Another important change is that we have succeeded in converting nearly all the Resident Addresses from 'text' to 'coded' format. We are now using a coded list of all the streets of Cyprus in our dictionary. This has made the recording of residence much more accurate and consistent. We are keeping all the old text data until we are confident that the new recording system works properly. The coded field for occupation was modified to facilitate data entry. Some of the fields that were previously text have been converted to coded fields. The entire data structure has been modified to accommodate all the changes in the new edition of the MECC Manual of Coding and Staging (5<sup>th</sup> Edition v5.1, July 2009).

Table i) Sources that have been examined for casefinding and abstraction.

Type of Source	Source Names	Public Sector	Private Sector
Histopathology Laboratories	Lefkosia GH, Private Laboratories	1	5
Cytology Department	Lefkosia GH	1	
Bone Marrow Registry	Lefkosia Makarios Hospital	1	
Pediatric Oncology Department	Lefkosia Makarios Hospital	1	
Hematology Departments	Lefkosia GH, Lemesos GH	2	
Oncology Departments	Lefkosia GH, Lemesos GH and BOCOC (Hospital Records)	2	1
Private Doctors	About 110 private doctors have notified cancer cases.		110

Table ii) Numbers and percentages of new Cancer cases abstracted from various sources, 2003-2005, categorized by type of healthcare institution, health sector and district.

Institution	Cases	% of cases
Hospital	5741	93.1%
Clinic	208	3.4%
Unknown	217	3.5%
Total	6166	100.0%

Health Sector	Cases	% of cases
Private	4176	67.7%
Public	1773	28.8%
Unknown	217	3.5%
Total	6166	100.0%

District	Cases	% of cases
Lefkosia	5043	81.8%
Lemesos	619	10.0%
Larnaka	142	2.3%
Pafos	135	2.2%
Ammochostos	10	0.2%
Unknown	217	3.5%
Total	6166	100.0%

Table iii) Number of new Cancer cases abstracted from various sources, 2003-2005.

		2003 2004 2005				3					
Facility	Male	Female	Total	Male	Female	Total	Male	Female	Total	Year Total	%
Bank of Cyprus Oncology C.	570	626	1196	580	622	1202	571	654	1225	3623	58.76%
Lefkosia General Hospital	173	128	301	157	95	252	143	82	225	778	12.62%
Lemesos General Hospital	58	35	93	107	67	174	103	69	172	439	7.12%
Makario Nosokomio Lefkosia	53	49	102	71	69	140	68	65	133	375	6.08%
UNKNOWN	37	26	63	46	28	74	43	37	80	217	3.52%
Lemesos Private Hospital 1	23	19	42	28	19	47	25	24	49	138	2.24%
Larnaka General Hospital	25	14	39	16	16	32	31	12	43	114	1.85%
Lefkosia Private Hospital 1	18	3	21	24	13	37	32	14	46	104	1.69%
Pafos General Hospital	8	5	13	12	11	23	14	13	27	63	1.02%
Lefkosia Private Hospital 2	6	4	10	8	5	13	5	10	15	38	0.62%
Lefkosia Private Hospital 3	6	10	16	8	10	18		2	2	36	0.58%
Pafos Private Clinic 1	4	1	5	5	3	8	8	3	11	24	0.39%
Pafos Private Clinic 2	4		4	3	5	8	6	3	9	21	0.34%
Paraskevaidio Transplant C.	5	5	10	4	1	5	2	2	4	19	0.31%
Lemesos Private Clinic 1	4		4	4		4	8		8	16	0.26%
Lefkosia Private Clinic 1	İ						14	1	15	15	0.24%
Lefkosia Private Clinic 2				6	8	14				14	0.23%
Lefkosia Private Clinic 3		3	3	2		2	1	6	7	12	0.19%
Pafos Private Clinic 3	l I	-		5	2	7	1	2	3	10	0.16%
Ammochostos Priv. Clinic 1	1	1	2	1	1	2	2	3	5	9	0.15%
Lefkosia Private Hospital 4	<u> </u>		_	<u> </u>	2	2	3	4	7	9	0.15%
Larnaka Private Clinic 1	1	2	3	3	2	5		·		8	0.13%
Lemesos Private Clinic 2		1	1	1	6	7				8	0.13%
Larnaka Private Clinic 2	2		2	! !	Ū		4	1	5	7	0.11%
Lefkosia Private Clinic 4	3	1	4		1	1	1	1	2	7	0.11%
Pafos Private Clinic 4	1	1	2	1	3	4	<u>'</u>	'		6	0.11%
Larnaka Private Clinic 3	'	2	2	3	1	4				6	0.10%
Pafos Private Clinic 5	1	1	2	2	'	2		1	1	5	0.08%
Pafos Private Clinic 6	'	1	1	3		3	1	'	1	5	0.08%
Lefkosia Private Clinic 5		1	'	2	2	4	'		'	4	0.06%
Larnaka Private Clinic 4		2	2		1	1		1	1	4	0.06%
Kyperounta Hospital	1		1	3	1	3			'	4	0.06%
Lemesos Private Clinic 3	'	2	2	3	1	1				3	0.05%
Lefkosia Private Clinic 6	2	2	2		1	'	1		1	3	0.05%
	2	3	3	İ			1		1	3	0.05%
Lemesos Private Clinic 4		·					2		2	3	0.05%
Lemesos Private Clinic 5		1	1		1	1	2		2	_	
Lefkosia Private Clinic 7		1	1		1	1				2	0.03%
Larnaka Private Clinic 5		1	1		1	1		4	4	2	0.03%
Lemesos Private Clinic 6								1	1	1	0.02%
Lefkosia Private Clinic 8								1	1	1	0.02%
Ammochostos Priv. Clinic 1	ļ	1	1							1	0.02%
Lefkosia Private Clinic 9			_				1		1	1	0.02%
Lemesos Private Clinic 7	ļ	1	1							1	0.02%
Pafos Private Clinic 7							1		1	1	0.02%
Lemesos Private Clinic 8	ļ			1		1				1	0.02%
Lemesos Private Clinic 9	]	1	1							1	0.02%
Lefkosia Private Clinic 10	[	1	1							1	0.02%
Lemesos Private Clinic 10	[	1	1							1	0.02%
Lefkosia Private Clinic 11	[	1	1							1	0.02%
Larnaka Private Clinic 6					1	1				1	0.02%
Total	1006	954	1960	1106	997	2103	1091	1012	2103	6166	100%

Table iv) Basis of Diagnosis, 2003-2005.

	Basis of diagnosis	2003	2004	2005	Total
0	Death Certificate Only				
1	Clinical only	8	9	7	24
2	Clinical Investigation (X-ray, US etc.)	23	18	20	61
3	Exploratory surgery/autopsy				
4	Specific biochemistry/Immun. test				
5	Cytology or hematology	140	144	72	356
6	Histology of metastases	56	69	74	199
7	Histology of primary	1 717	1 854	1 923	5 494
8	Autopsy with Histology				
9	Unknown	16	9	7	32
	Total	1 960	2 103	2 103	6 166

#### Main problems in collecting the data

- Incomplete Hospital Records.
- Incomplete Information Technology System in Government Hospitals.
- Inappropriate Storage of records in the hospitals (inaccessible or mislaid).
- Lack of Notification Law.

#### e) Changes in the Cancer Statistical Form

A new Cancer Registration Form was designed in 2009. The new form is based on recent changes in the structure of the database. The form will be used on data starting in 2007 (as far as possible) and fully in 2008. It is shown in APPENDIX I.

#### f) Computer Database Management

Changes have been made in the computer programme CanReg4. New fields were added (particularly on treatment data), other fields were modified. No fields were deleted. The current structure contains some data fields that are now considered to be redundant. This is done on purpose in order to allow some time to make sure the new data fields are correctly entered.

New procedures of electronic data uploading from text files obtained from the BOCOC and the Public Hospitals Discharges database. Uploading of data is not yet complete. This is due to weaknesses in the hospital information systems and incomplete codification of diagnoses and procedures. This situation is expected to improve with time, thus allowing more extensive data transfer in electronic format. Morphology data are not available from electronic hospital data. All such data uploaded in the Cancer Registry are entered as pending. They are checked in the usual manner by the Cancer Registrars before being confirmed.

#### g) MECC Standardized Tables

Table 1. Number of Persons Living in Cyprus, 2003-2005. (Source: Demographic Report, Statistical Service of Cyprus, Ministry of Finance).

Age		2003			2004			2005			Average	
Group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	21200	20200	41400	21100	20000	41100	21000	19900	40900	21100	20033	41133
5-9	25500	24200	49700	24300	23200	47500	23400	22400	45800	24400	23267	47667
10-14	28400	26700	55100	28200	26900	55100	28000	26500	54500	28200	26700	54900
15-19	28900	27600	56500	29000	27600	56600	28900	28000	56900	28933	27733	56667
20-24	30000	28300	58300	32000	30400	62400	32500	31800	64300	31500	30167	61667
25-29	26300	26500	52800	28500	28200	56700	31400	30500	61900	28733	28400	57133
30-34	25500	27500	53000	27100	28000	55100	27700	28600	56300	26767	28033	54800
35-39	25200	27900	53100	25800	28100	53900	26200	27900	54100	25733	27967	53700
40-44	27100	28300	55400	27600	28600	56200	27900	29200	57100	27533	28700	56233
45-49	24500	25700	50200	25800	27000	52800	27100	27900	55000	25800	26867	52667
50-54	22600	23200	45800	23100	23900	47000	23800	24400	48200	23167	23833	47000
55-59	19100	19900	39000	20200	21200	41400	21200	22500	43700	20167	21200	41367
60-64	16100	17100	33200	16400	17600	34000	17100	18200	35300	16533	17633	34167
65-69	13300	14800	28100	14000	15200	29200	14700	15800	30500	14000	15267	29267
70-74	10100	12300	22400	10500	12600	23100	10900	12900	23800	10500	12600	23100
75-79	7500	9700	17200	7600	10000	17600	7800	10200	18000	7633	9967	17600
80-84	4600	6100	10700	4700	6400	11100	4900	6800	11700	4733	6433	11167
85+	3400	5100	8500	3300	5100	8400	3300	5100	8400	3333	5100	8433
All ages	359300	371100	730400	369200	380000	749200	377800	388600	766400	368767	379900	748667

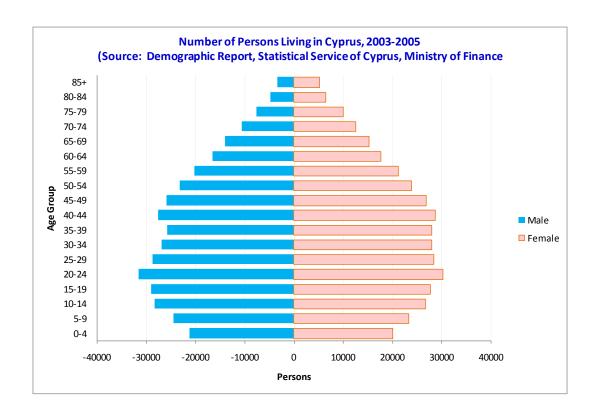


Table 2. Number of new cases of cancer by IARC Group, incidence year and sex, 2003 - 2005. (excluding cases among non-residents of the Cyprus Government Controlled Area).

		2003			2004			2005		
IARC Group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Year Total
C00 Lip	1	2	3	6	1	7	3	1	4	14
C01-C02 Tongue	6	3	9	6	1	7	7	4	11	27
C03-C06 Mouth	3	2	5	4	3	7	3	1	4	16
C07-C08 Salivary glands	2	2	4				5	2	7	11
C09 Tonsil	1		1				Ì	1	1	2
C10 Other Oropharynx	1		1				1		1	2
C11 Nasopharynx	4	1	5	2		2	1	1	2	9
C12-C13 Hypopharynx	2	1	3		1	1				4
C14 Pharynx unspec.		1	1							1
C15 Oesophagus	3	4	7	1		1	5	1	6	14
C16 Stomach	32	15	47	35	18	53	38	17	55	155
C17 Small intestine				1	2	3	2	1	3	6
C18 Colon	80	66	146	101	88	189	104	82	186	521
C19-C20 Rectum	42	25	67	40	23	63	42	37	79	209
C21 Anus	72	1	1	3	1	4	72	3	3	8
C22 Liver	19	3	22	11	3	14	15	5	20	56
C23-C24 Gallbladder etc.	8	7	15	13	8	21	5	13	18	54
C25 Pancreas	23	8	31	20	11	31	15	11	26	88
	23	0	31	1	11			11		1
C30-C31 Nose, sinuses etc.	_	_	4.4	1		1	1	_	1	2
C32 Larynx	9	2	11	16	1	17	19	2	21	49
C33-C34 Trachea, Bronchus, Lung	133	19	152	127	38	165	118	38	156	473
C37-C38 Other Thoracic organs	9		9				3		3	12
C40-C41 Bone	8	4	12	7	6	13	1	4	5	30
C43 Melanoma of Skin	13	21	34	14	17	31	16	15	31	96
C45 Mesothelioma	6	2	8	5	2	7	3	3	6	21
C46 Kaposi sarcoma		1	1	3	1	4	3	1	4	9
C47;C49 Connective, Soft tissue	11	12	23	10	12	22	12	8	20	65
C50 Breast	3	378	381	6	379	385	4	386	390	1156
C51 Vulva		7	7		8	8		7	7	22
C52 Vagina								1	1	1
C53 Cervix Uteri		18	18		27	27		24	24	69
C54 Corpus Uteri		69	69		65	65		80	80	214
C55 Uterus unspec.		2	2		2	2	Ì	6	6	10
C56 Ovary		24	24		38	38	Ì	32	32	94
C57 Other Female Genital		1	1					1	1	2
C58 Placenta								1	1	1
C60 Penis	3		3	6		6	6		6	15
C61 Prostate	242		242	322		322	308		308	872
C62 Testis	27		27	29		29	23		23	79
C63 Other male genital				20		20	1		1	1
C64 Kidney	20	17	37	25	10	35	18	10	28	100
C65 Renal Pelvis	3	1	4	1	10	1	4	10	4	9
000 11 :		1		1		1			-	8
C66 Ureter C67 Bladder	103	15	4 118	85	25	110	103	19	3 122	350
	1	10		ဝ၁	20	110	103	19	122	1
C68 Other Urinary organs	1	4	1		4	2	4	2	4	1
C69 Eye	1	1	2	2	1	3	1	3	4	9
C70-C72 Brain, Nervous system	20	19	39	21	12	33	12	12	24	96
C73 Thyroid	16	55	71	17	49	66	15	50	65	202
C74 Adrenal gland		2	2	1	4.5	1	1	3	4	7
C81 Hodgkin disease	14	16	30	8	16	24	20	11	31	85
C82-C85;C96 NHL	57	37	94	64	37	101	56	40	96	291
C90 Multiple Myeloma	16	17	33	18	17	35	14	8	22	90
C91 Lymphoid Leukaemia	20	17	37	22	20	42	26	26	52	131
C92-C94 Myeloid Leukaemia	7	12	19	16	13	29	11	10	21	69
C95 Leukaemia unspecified	1	1	2				3	1	4	6
MDS Myelodysplastic syndrome	5	3	8	4	3	7	7	3	10	25
MPD Myeloproliferative disorders	2	2	4							4
O&U Other & Unspecified	26	37	63	32	38	70	33	27	60	193
Total	1006	954	1960	1106	997	2103	1091	1012	2103	6166

Table 3. Six most common Male Cancers, 2003-2005.

		2003			2004		2005			2003-2005		
IARC Group	Cases	Cases % ASR C			%	ASR	Cases	%	ASR	Cases	%	ASR
C61 Prostate	242	24.1%	44.8	322	29.1%	59.1	308	28.2%	53.6	872	27.2%	52.7
C33-C34 T,B, Lung	133	13.2%	24.9	127	11.5%	24.2	118	10.8%	21.1	378	11.8%	23.4
C67 Bladder	103	10.2%	19.1	85	7.7%	15.8	103	9.4%	17.3	291	9.1%	17.5
C18 Colon	80	8.0%	15.6	101	9.1%	18.4	104	9.5%	19.0	285	8.9%	17.7
C82-C85;C96 NHL	57	5.7%	12.3	64	5.8%	14.1	56	5.1%	11.2	177	5.5%	12.5
C19-C20 Rectum	42	4.2%	7.3	40	3.6%	7.1	42	3.8%	7.9	124	3.9%	7.4
All cancers	1006	100%	202.3	1106	100%	215.8	1091	100%	203.6	3203	100%	207.5

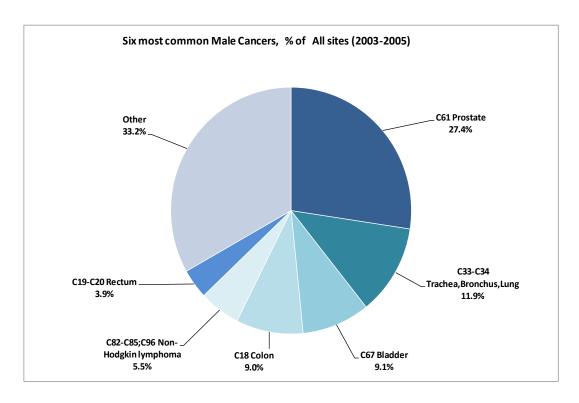


Table 4. Most Common Female Cancers, 2003-2005.

IARC Group		2003			2004			2005		20	003-200	5
·	Cases	%	ASR	Cases	%	ASR	Cases	%	ASR	Cases	%	ASR
C50 Breast	378	39.6%	74.9	379	38.0%	73.0	386	38.1%	72.0	1143	38.6%	73.2
C18 Colon	66	6.9%	10.9	88	8.8%	14.7	82	8.1%	13.0	236	8.0%	12.9
C54 Corpus Uteri	69	7.2%	13.1	65	6.5%	12.1	80	7.9%	13.8	214	7.2%	13.0
C73 Thyroid	55	5.8%	12.7	49	4.9%	11.0	50	4.9%	10.7	154	5.2%	11.4
C82-C85;C96 NHL	37	3.9%	7.4	37	3.7%	6.5	40	4.0%	6.8	114	3.8%	6.9
C33-C34 T,B, Lung	19	2.0%	3.1	38	3.8%	7.0	38	3.8%	6.3	95	3.2%	5.5
Total	954	100%	186.6	997	100%	189.3	1012	100%	182.3	2963	100%	186.0

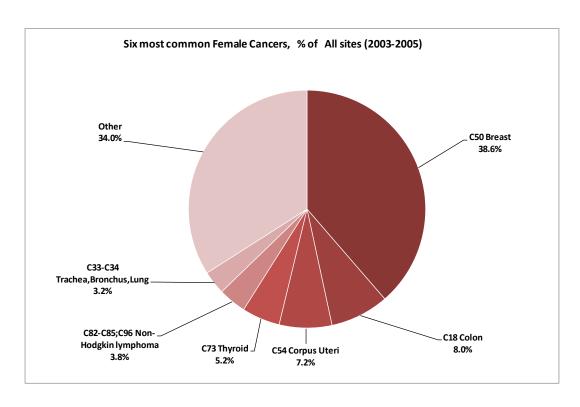


Table 5. World Age Standardized Incidence Rates by Sex, by IARC group, 2003 - 2005.

IADC Croun	20	03	200	)4	200	05	2003-	2005
IARC Group	Male	Female	Male	Female	Male	Female	Male	Female
C00 Lip	0.1	0.3	1.2	0.2	0.5	0.1	0.6	0.2
C01-C02 Tongue	1.1	0.8	1.3	0.2	1.3	0.8	1.2	0.6
C03-C06 Mouth	0.7	0.4	0.7	0.5	0.6	0.2	0.7	0.3
C07-C08 Salivary glands	0.4	0.5		Ì	0.8	0.3	0.4	0.2
C09 Tonsil	0.1					0.2	0.1	0.1
C10 Other Oropharynx	0.2	ĺ			0.2		0.2	
C11 Nasopharynx	0.9	0.2	0.4		0.2	0.2	0.5	0.1
C12-C13 Hypopharynx	0.5	0.2		0.2	-		0.1	0.1
C14 Pharynx unspec.		0.2		Ì		ì		0.1
C15 Oesophagus	0.6	0.8	0.2	İ	1.0	0.2	0.6	0.3
C16 Stomach	6.3	2.7	6.5	3.2	7.1	3.2	6.6	3.0
C17 Small intestine	0.0		0.2	0.4	0.4	0.2	0.2	0.2
C18 Colon	15.6	10.9	18.4	14.7	19.0	13.0	17.7	12.9
C19-C20 Rectum	7.3	4.0	7.1	3.9	7.9	5.6	7.4	4.5
C21 Anus	7.0	0.2	0.5	0.2	7.0	0.5	0.2	0.3
C22 Liver	3.4	0.5	2.3	0.5	2.5	0.9	2.7	0.6
C23-C24 Gallbladder etc.	1.4	1.0	2.1	1.3	0.9	1.8	1.5	1.4
C25-C24 Galibladdel etc.	4.6	1.0	3.5	1.8	3.0	1.0	3.7	1.4
C30-C31 Nose, sinuses etc.	4.0	1.11	0.2	1.0	0.2	1.7	0.1	1.5
C30-C31 Nose, sinuses etc.	2.0	0.4	3.2	0.2	3.9	0.3	3.1	0.3
1								
C33-C34 Trachea, Bronchus, Lung	24.9	3.1	24.2	7.0	21.1	6.3	23.4	5.5
C37-C38 Other Thoracic organs	2.5			4 -	0.8		1.1	4.0
C40-C41 Bone	2.0	1.1	1.7	1.5	0.3	1.1	1.3	1.2
C43 Melanoma of Skin	2.9	4.4	3.0	3.1	3.2	2.9	3.0	3.4
C44 Other Skin								
C45 Mesothelioma	1.2	0.3	0.9	0.4	0.6	0.4	0.9	0.4
C46 Kaposi sarcoma		0.2	0.4	0.1	0.6	0.2	0.3	0.2
C47;C49 Connective, Soft tissue	3.0	2.9	2.2	2.8	2.5	1.5	2.6	2.4
C50 Breast	0.6	74.9	1.3	73.0	0.8	72.0	0.9	73.2
C51 Vulva		1.3		1.0		1.1		1.1
C52 Vagina						0.1		0.0
C53 Cervix Uteri		3.6		5.4		4.2		4.4
C54 Corpus Uteri		13.1		12.1		13.8		13.0
C55 Uterus unspec.		0.3		0.3		1.2		0.6
C56 Ovary		5.2		7.2		6.4		6.3
C57 Other Female Genital		0.2				0.2		0.1
C58 Placenta						0.3		0.1
C60 Penis	0.6		1.3		1.0		1.0	
C61 Prostate	44.8	Ì	59.1		53.6	ĺ	52.7	
C62 Testis	6.9	ĺ	7.4		5.5	į	6.6	
C63 Other male genital		Ì			0.2	Ì	0.1	
C64 Kidney	4.4	3.1	5.1	1.4	3.6	1.8	4.4	2.1
C65 Renal Pelvis	0.7	0.1	0.1		0.6		0.5	0.0
C66 Ureter	0.6	0.2	0.2	j	0.6		0.5	0.1
C67 Bladder	19.1	2.0	15.8	3.8	17.3	2.7	17.5	2.9
C68 Other Urinary organs	0.1	2.0	10.0	0.0	17.5	2.1	0.0	2.0
C69 Eye	0.1	0.2	0.6	0.2	0.6	0.6	0.5	0.4
C70-C72 Brain, Nervous system	5.3	3.6	5.3	3.1	2.6	2.1	4.4	2.9
C73 Thyroid	3.9	12.7	4.0	11.0	3.3	10.7	3.8	11.4
C73 Thyroid C74 Adrenal gland	3.9		0.2	11.0	0.6	0.8	0.3	0.5
_	1	0.6	0.2	ŀ	0.0	0.8	0.3	0.5
C75 Other Endocrine	1 4	4.0	0.4	4.0	4.0	2.0	0.7	2.7
C81 Hodgkin disease	4.1	4.0	2.1	4.3	4.9	2.9	3.7	3.7
C82-C85;C96 NHL	12.3	7.4	14.1	6.5	11.2	6.8	12.5	6.9
C88 Immunoproliferative diseases				2 -	2 -			
C90 Multiple Myeloma	3.2	3.4	3.5	3.2	2.5	1.5	3.1	2.7
C91 Lymphoid Leukaemia	5.3	4.5	5.1	4.7	6.6	5.5	5.7	4.9
C92-C94 Myeloid Leukaemia	1.6	2.3	4.0	2.9	2.1	1.7	2.6	2.3
C95 Leukaemia unspecified	0.2	0.2			0.5	0.1	0.3	0.1
MDS Myelodysplastic syndrome	1.0	0.5	0.6	0.3	1.1	0.4	0.9	0.4
MPD Myeloproliferative disorders	0.4	0.4					0.1	0.1
O&U Other & Unspecified	5.0	6.3	5.6	6.6	5.9	4.2	5.5	5.7
Total	202.3	186.6	215.8	189.3	203.6	182.3	207.5	186.0

Table 6. Annual Age Specific Incidence Rates of Prostate Cancer, 2003 - 2005.

Age Group	2003	2004	2005	2003-2005
0-4				
5-9				
10-14				
15-19				
20-24				
25-29				
30-34				
35-39				
40-44		3.8		1.3
45-49	8.3	20.3	12.3	13.7
50-54	36.1	36.3	18.7	30.6
55-59	58.8	166.7	78.7	102.1
60-64	190.1	268.6	260.5	240.2
65-69	313.5	443.6	326.8	362.7
70-74	583.9	592.3	785.6	655.2
75-79	640.6	812.0	740.2	733.0
80-84	558.0	641.4	454.4	553.8
85+	456.2	383.0	643.1	492.7
Crude IR	67.3	87.0	80.5	78.5
ASR (W)	44.8	59.1	53.6	52.7

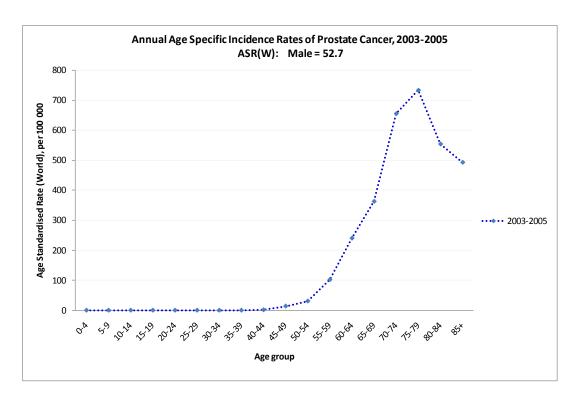


Table 7. Annual Age Specific Incidence Rates of Bladder Cancer, 2003-2005.

Age		2003			2004			2005			2003-2005	
Group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4												
5-9												
10-14												
15-19				3.8		1.9				1.3		0.7
20-24				3.4		1.8	3.7		1.9	2.4		1.2
25-29												
30-34	4.0		2.0	4.0		2.0				2.8		1.4
35-39					8.0	4.1		4.1	2.2		4.1	2.1
40-44	15.2		7.5	11.9	3.9	7.8				9.4	1.3	5.3
45-49	21.0		10.4	16.9	8.3	12.5	4.4		2.2	14.3	2.8	8.5
50-54	4.6		2.3	9.5	4.7	7.0	50.5		24.8	20.8	1.6	11.1
55-59	32.3	5.7	18.7	43.4		21.3	45.4	10.3	27.4	40.4	5.4	22.5
60-64	57.5	6.6	31.4	80.0	6.4	42.1	63.4	19.0	40.6	67.1	10.7	38.1
65-69	146.5	15.4	77.9	62.7	29.4	45.2	98.6		47.1	103.2	14.9	57.1
70-74	172.6	9.2	83.5	94.2	17.8	52.5	121.3	27.0	70.4	130.3	18.0	69.1
75-79	274.8	23.5	133.7	172.1	44.9	100.0	215.4	22.7	106.4	222.6	30.5	114.0
80-84	247.5	36.8	126.3	138.3	69.8	98.5	245.6	51.3	133.3	210.7	52.8	119.5
85+	214.7	89.3	136.0	332.7	21.9	144.2	219.6	45.4	114.1	257.0	52.0	132.6
Crude IR	28.6	4.0	16.1	22.8	6.5	14.5	26.1	4.8	15.3	26.0	5.1	15.4
ASR (W)	19.1	2.0	10.0	15.8	3.8	9.4	17.3	2.7	9.5	17.5	2.9	9.7

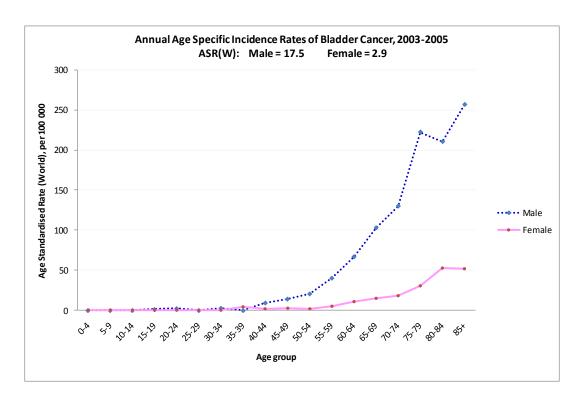


Table 8. Annual Age Specific Incidence Rates of Trach., Bronch. & Lung Cancer, 2003 - 2005.

Age		2003			2004			2005			2003-2005	
Group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4												
5-9												
10-14												
15-19												
20-24												
25-29												
30-34				3.8		1.8		3.6	1.8	1.3	1.2	1.2
35-39				4.0	3.6	3.8				1.3	1.2	1.3
40-44	7.4		3.6	3.7	3.5	3.6	3.6	3.5	3.5	4.9	2.3	3.6
45-49	8.2		4.0	19.8	7.4	13.5	22.1	11.0	16.4	16.9	6.3	11.5
50-54	26.6	8.6	17.5	31.0	4.2	17.3	16.8		8.4	24.6	4.2	14.3
55-59	78.6	15.0	46.1	55.9	37.8	46.8	75.4	18.2	46.0	70.0	23.8	46.3
60-64	111.7	17.6	63.3	74.8	34.2	54.0	81.9	16.9	48.4	89.4	22.9	55.1
65-69	157.3	6.8	78.3	234.6	65.6	146.4	143.3	71.4	105.7	177.8	48.5	110.3
70-74	207.1	32.4	111.2	235.0	31.8	123.8	201.6	47.8	118.4	214.3	37.4	117.8
75-79	373.9	10.3	169.1	281.8	20.0	133.0	255.7	50.4	139.7	303.2	27.1	147.2
80-84	284.3	48.7	149.1	172.5	46.8	100.3	224.4	30.3	112.1	226.8	41.8	120.2
85+	208.6	39.4	106.7	31.1		12.1	91.2	20.1	48.0	111.6	19.8	56.0
Crude IR	37.0	5.1	20.8	34.4	10.0	22.0	31.2	9.8	20.4	34.2	8.3	21.1
ASR (W)	24.9	3.1	13.2	24.2	7.0	15.0	21.1	6.3	13.2	23.4	5.5	13.8

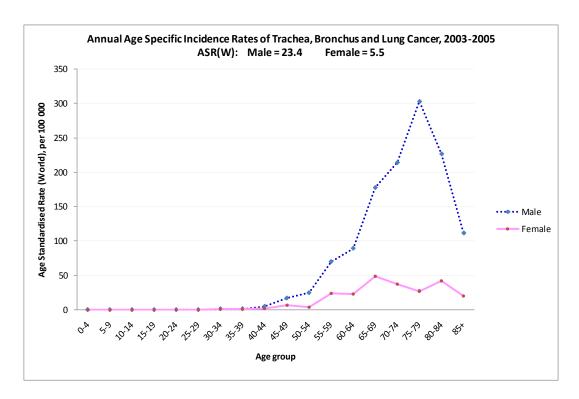


Table 9. Annual Age Specific Incidence Rates of Colon Cancer, 2003-2005.

Age		2003			2004			2005			2003-2005	
Group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4												
5-9												
10-14												
15-19												
20-24	3.4	3.5	3.5							1.1	1.1	1.1
25-29							3.2		1.6	1.2		0.6
30-34	4.0	3.6	3.8	3.8	3.6	3.7				2.5	2.4	2.5
35-39	4.1	10.8	7.6		3.6	1.9	3.9	7.3	5.6	2.6	7.2	5.1
40-44	3.8	3.5	3.7	18.5	10.7	14.6	7.3	10.4	8.9	9.9	8.2	9.0
45-49	12.5	3.9	8.1	19.7	22.7	21.2	15.0	18.1	16.6	15.8	15.1	15.4
50-54	13.6	43.2	28.8	13.2	12.9	13.0	51.3	29.1	40.0	26.4	28.4	27.4
55-59	16.1	40.1	28.6	70.8	48.3	59.3	24.0	27.0	25.6	37.2	38.2	37.7
60-64	63.6	17.6	39.7	55.9	46.6	51.1	71.5	49.9	60.4	63.8	38.3	50.6
65-69	115.2	47.4	79.3	80.4	107.3	94.4	139.1	70.4	103.4	111.9	75.1	92.7
70-74	171.9	64.8	112.7	165.8	122.0	141.9	140.1	94.2	115.3	158.8	93.8	123.3
75-79	136.9	51.7	88.7	227.3	112.7	162.4	247.5	129.2	180.6	204.8	98.5	144.6
80-84	156.9	162.4	160.6	236.4	111.6	164.7	166.3	164.5	165.4	186.7	146.6	163.7
85+	183.3	157.6	168.3	186.0	100.2	133.8	92.9	39.7	60.5	154.2	99.4	121.0
Crude IR	22.3	17.8	20.0	27.3	23.1	25.2	27.5	21.1	24.3	25.8	20.7	23.2
ASR (W)	15.6	10.9	13.0	18.4	14.7	16.3	19.0	13.0	15.8	17.7	12.9	15.1

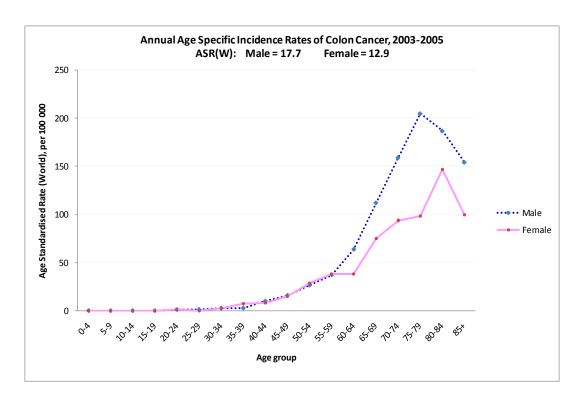


Table 10. Annual Age Specific Incidence Rates of Rectal Cancer, 2003-2005.

Age		2003			2004			2005			2003-2005	
Group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4												
5-9												
10-14												
15-19												
20-24												
25-29												
30-34												
35-39								3.6	1.8		1.2	0.6
40-44				3.6		1.8	3.6	3.4	3.5	2.4	1.2	1.8
45-49	8.2		4.0	7.7	11.1	9.5	3.7	3.6	3.6	6.5	5.0	5.7
50-54	8.9	8.6	8.7	17.3	4.2	10.6	25.2	4.1	14.5	17.3	5.6	11.4
55-59	15.7	15.0	15.4	34.7	14.2	24.2	33.0	35.6	34.3	28.1	22.0	25.0
60-64	24.8	5.9	15.1	6.1	11.4	8.8	23.4	11.0	17.0	18.1	9.5	13.7
65-69	22.5	27.1	24.9	50.1	32.8	41.1	61.4	31.6	45.9	45.3	30.5	37.6
70-74	78.9	64.8	71.2	19.1	23.9	21.7	36.6	38.8	37.8	44.4	42.3	43.3
75-79	106.8	20.7	58.3	118.0	20.0	62.5	76.7	39.3	55.5	100.3	26.8	58.8
80-84	196.8	65.0	121.2	105.4	31.2	62.7	20.4	73.9	51.4	105.5	56.9	77.5
85+	89.4	19.7	47.4	60.8	39.2	47.7	91.2	78.4	83.4	80.5	45.8	59.5
Crude IR	11.7	6.7	9.2	10.8	6.1	8.4	11.1	9.5	10.3	11.2	7.5	9.3
ASR (W)	7.3	4.0	5.5	7.1	3.9	5.4	7.9	5.6	6.7	7.4	4.5	5.9

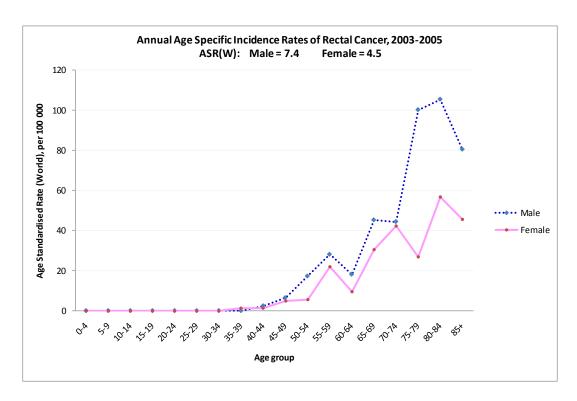


Table 11. Annual Age Specific Incidence Rates of Non-Hodgkin Lymphoma, 2003-2005.

Age		2003			2004			2005			2003-2005	
Group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4												
5-9	4.0		2.0	12.7		6.5	8.5		4.4	8.3		4.3
10-14	3.6		1.8	7.3		3.7	3.6		1.8	4.8		2.5
15-19	3.5	3.6	3.6	10.7		5.5	3.5		1.8	5.9	1.2	3.6
20-24		3.5	1.7		6.8	3.3	3.1		1.6	1.1	3.3	2.2
25-29	11.6		5.7	7.2		3.6				5.9		3.0
30-34	8.0		3.8		11.0	5.6	7.2		3.5	5.1	3.6	4.3
35-39	8.1	7.2	7.6	8.0	3.7	5.7	7.6	7.2	7.4	7.9	6.0	6.9
40-44	7.5	3.5	5.5	15.0		7.3	7.2		3.5	9.9	1.2	5.4
45-49	16.6	7.8	12.1	8.0	15.2	11.7	11.1	14.3	12.7	11.8	12.5	12.2
50-54		12.9	6.6	17.9	12.9	15.3	16.8	8.2	12.4	11.7	11.3	11.5
55-59	53.3	25.1	38.8	30.7	24.2	27.4	23.6	26.7	25.2	35.3	25.4	30.2
60-64	63.2	35.1	48.7	37.7	17.6	27.3	29.2	21.9	25.5	43.0	24.8	33.6
65-69	15.2	54.2	36.0	59.1	20.2	38.8	41.0	50.6	45.9	38.8	41.8	40.4
70-74	60.2	24.3	40.5	98.6	8.2	49.2	91.6	46.6	67.2	83.9	26.7	52.6
75-79	149.5	31.0	82.5	40.6	82.3	64.3	89.5	58.9	72.2	93.1	57.5	73.0
80-84	22.3	16.2	18.8	65.2	16.0	36.9	81.6	29.6	51.4	57.2	20.9	36.2
85+		19.7	12.0	125.4	40.2	73.6	30.4		11.9	51.2	19.8	32.2
Crude IR	15.9	10.0	12.9	17.3	9.7	13.5	14.8	10.3	12.5	16.0	10.0	13.0
ASR (W)	12.3	7.4	9.7	14.1	6.5	10.2	11.2	6.8	8.9	12.5	6.9	9.6

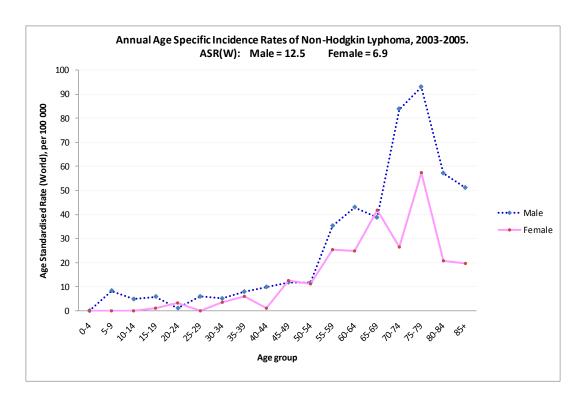


Table 12. Annual Age Specific Incidence Rates of Breast Cancer, 2003-2005.

Age		2003			2004			2005			2003-2004	
Group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4												
5-9												
10-14												
15-19		3.6	1.8								1.2	0.6
20-24		3.6	1.7		3.3	1.6					2.2	1.1
25-29		18.9	9.5		3.6	1.8		16.5	8.1		13.0	6.5
30-34		43.9	22.8		7.2	3.7		24.6	12.5		25.1	12.9
35-39		57.7	30.3		43.1	22.5		61.2	31.6		54.0	28.1
40-44		102.8	52.6		141.5	72.0		158.3	81.0		134.5	68.7
45-49		195.3	100.0	3.9	145.8	76.5	3.7	208.6	107.6	2.6	183.4	94.8
50-54	4.4	151.9	79.1	8.7	194.9	103.3		152.5	77.1	4.3	166.4	86.4
55-59	5.2	242.1	126.2	5.0	300.5	156.4		250.2	128.8	3.3	264.3	137.1
60-64		253.1	130.2	6.1	287.9	151.7		214.9	110.9	2.0	251.4	130.7
65-69		394.9	207.4	7.2	331.5	176.4	13.7	273.2	148.4	7.1	331.8	176.6
70-74		252.5	138.6		289.3	157.9		257.4	139.3		266.4	145.3
75-79	13.4	208.1	123.1		141.7	80.3	12.8	197.5	117.2	8.7	182.3	106.9
80-84		261.2	149.9		267.7	153.9		193.1	112.0		239.5	138.0
85+		217.9	131.2		79.2	48.2		197.0	119.8		164.7	99.8
Crude IR	0.8	101.9	52.2	1.6	99.7	51.4	1.1	99.3	50.9	1.2	100.3	51.5
ASR (W)	0.6	74.9	39.2	1.3	73.0	38.5	8.0	72.0	37.6	0.9	73.2	38.4

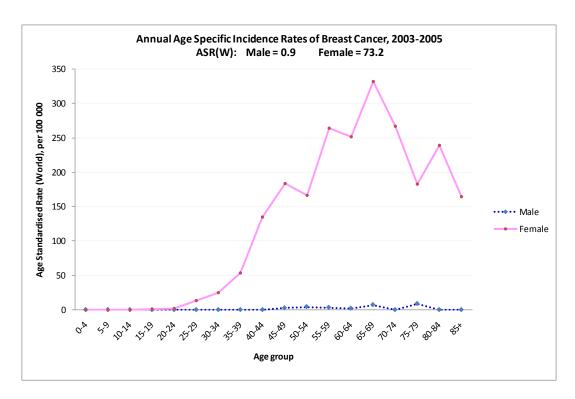


Table 13. Annual Age Specific Incidence Rates of Corpus Uteri Cancer, 2003-2005.

Age group	2003	2004	2005	2003-2005
0-4				
5-9				
10-14				
15-19				
20-24				
25-29				
30-34				
35-39	10.8		3.6	4.8
40-44	14.1	3.6	3.5	7.1
45-49	3.9	11.4	3.6	6.3
50-54	38.8	25.9	37.4	34.1
55-59	50.2	29.2	40.5	39.8
60-64	46.8	94.0	83.3	74.8
65-69	115.1	74.4	102.4	97.4
70-74	56.7	98.4	94.3	83.1
75-79	62.1	51.6	69.6	61.2
80-84	48.7	32.1	74.8	52.4
85+	19.7	20.2	59.5	33.2
Crude IR	18.6	17.1	20.6	18.8
ASR (W)	13.1	12.1	13.8	13.0

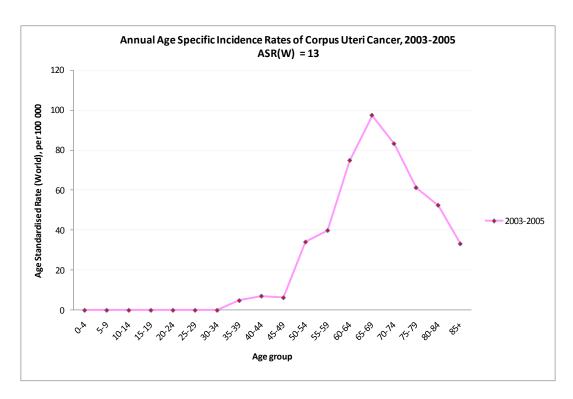


Table 14. Annual Age Specific Incidence Rates of Stomach Cancer, 2003-2005.

Age		2003			2004			2005			2003-2005	
Group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4												
5-9												
10-14												
15-19												
20-24												
25-29												
30-34		3.6	1.9				3.7		1.8	1.3	1.2	1.2
35-39					3.6	1.9	3.9	3.6	3.8	1.3	2.4	1.9
40-44		10.6	5.4	3.6		1.8	3.7		1.8	2.4	3.5	3.0
45-49	8.2	3.9	6.0	7.7		3.8	18.9	10.7	14.8	11.7	5.0	8.3
50-54	8.9	4.3	6.6		12.6	6.4		4.1	2.1	2.9	7.0	5.0
55-59	15.7	10.0	12.8	9.9	14.2	12.1	33.9	13.3	23.3	20.0	12.6	16.2
60-64	31.0	11.7	21.1	18.3	11.4	14.7	18.0	11.0	14.4	22.4	11.3	16.7
65-69	59.9	6.8	32.0	35.8	13.1	24.0	42.0	25.3	33.4	45.7	15.3	29.8
70-74	29.6		13.3	114.8	31.8	69.5	56.4	15.5	34.2	67.3	15.9	39.2
75-79	26.7		11.7	13.1	30.1	22.7	39.4	9.8	22.6	26.4	13.4	19.1
80-84	109.3	48.7	74.6	84.3		35.8	83.7		34.9	92.3	15.5	48.0
85+	59.6	19.7	35.6	152.0		59.6				71.1	6.5	31.9
Crude IR	8.9	4.0	6.4	9.5	4.7	7.1	10.1	4.4	7.2	9.5	4.4	6.9
ASR (W)	6.3	2.7	4.4	6.5	3.2	4.6	7.1	3.2	5.0	6.6	3.0	4.7

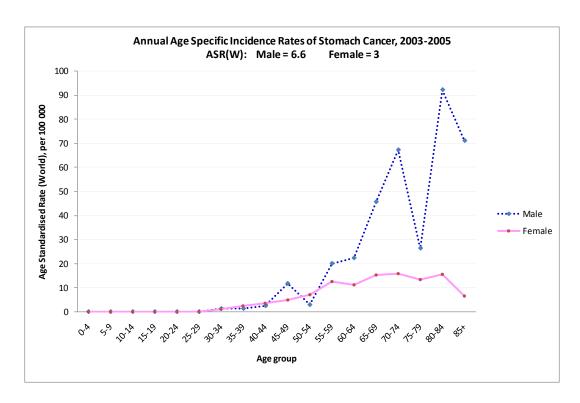
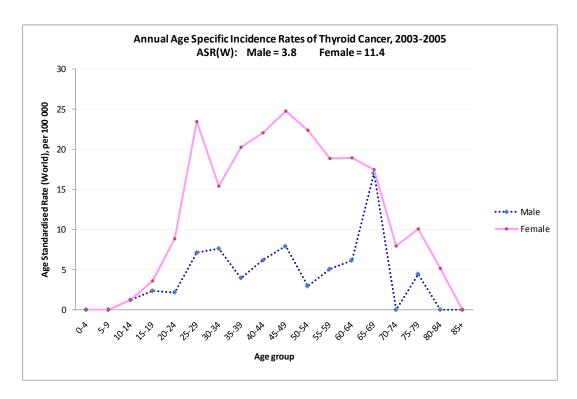


Table 15. Annual Age Specific Incidence Rates of Thyroid Cancer, 2003-2005.

Age		2003			2004			2005			2003-2005	
Group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4												
5-9												
10-14	3.5		1.8		3.7	1.8				1.2	1.2	1.2
15-19	3.5		1.8	3.4	7.2	5.3		3.6	1.8	2.4	3.6	3.0
20-24		10.6	5.1		6.6	3.2	6.6	9.4	7.9	2.2	8.8	5.4
25-29	3.8	37.7	20.8	14.0	21.3	17.6	3.4	13.1	8.2	7.1	23.5	15.2
30-34	3.9	10.9	7.6	18.5	17.8	18.1		17.5	9.0	7.6	15.4	11.6
35-39	4.0	25.1	15.1		14.2	7.4	8.1	21.5	15.0	4.0	20.3	12.5
40-44		21.2	10.8	3.6	28.0	16.0	15.3	17.1	16.0	6.2	22.1	14.3
45-49	12.2	35.0	23.9		18.5	9.5	11.8	21.5	16.6	7.9	24.8	16.5
50-54	8.9	21.6	15.3		16.8	8.5		28.7	14.7	2.9	22.4	12.8
55-59	10.5	20.1	15.4		18.9	9.7	5.0	17.8	11.6	5.1	18.9	12.1
60-64	6.2	5.9	6.0	12.2	22.8	17.7		27.4	14.4	6.2	18.9	12.7
65-69	22.5	33.9	28.5	21.5	6.6	13.7	7.3	12.6	10.0	17.0	17.5	17.2
70-74					15.9	8.7		7.8	4.3		7.9	4.3
75-79		10.3	5.8	13.1	10.0	11.4		9.8	5.6	4.5	10.1	7.6
80-84		16.2	9.3								5.2	3.0
85+												
Crude IR	4.5	14.8	9.7	4.6	12.9	8.8	4.0	12.9	8.5	4.3	13.5	9.0
ASR (W)	3.9	12.7	8.4	4.0	11.0	7.6	3.3	10.7	7.1	3.8	11.4	7.7



## **Childhood Cancer**

Table 16. Childhood cancer in Females for the age groups 0-4 yrs, 5-9 yrs, and 10-14 yrs, 2003 - 2005.

IARC Group		2003			2004			3 Year		
·	0-4	5-9	10-14	0-4	5-9	10-14	0-4	5-9	10-14	Total
C91 Lymphoid Leukaemia	2		2	2	1	1	1		2	11
C81 Hodgkin disease			1			3			3	7
C40-C41 Bone		1	1			2			1	5
C70-C72 Brain, Nervous system			1	2	1					4
C47;C49 Connective, Soft tissue	1			1		1				3
C74 Adrenal gland		1						1		2
C92-C94 Myeloid Leukaemia						2				2
C73 Thyroid						1				1
O&U Other & Unspecified				1						1
Total	3	2	5	6	2	10	1	1	6	36

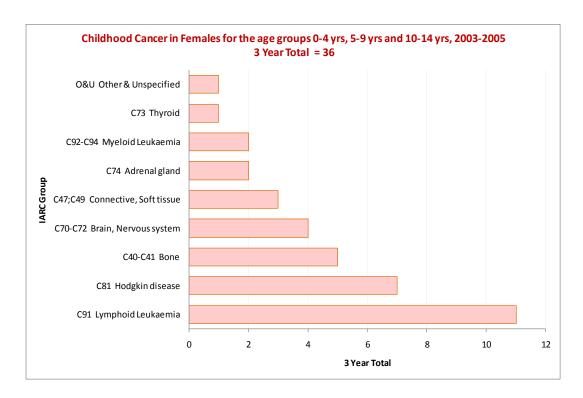


Table 17. Annual Age Specific Incidence Rates in Females for the age groups 0-4 yrs, 5-9 yrs and 10-14 yrs, 2003-2005.

IARC Group		2003			2004			2005		2	003-200	5
	0-4	5-9	10-14	0-4	5-9	10-14	0-4	5-9	10-14	0-4	5-9	10-14
C91 Lymphoid Leukaemia	9.9		7.5	10.0	4.3	3.7	5.0		7.5	8.3	1.4	6.2
C81 Hodgkin disease			3.8			11.2			11.3			8.7
C40-C41 Bone		4.1	3.8			7.4			3.8		1.4	5.0
C70-C72 Brain, Nervous system			3.8	10.0	4.3					3.3	1.4	1.2
C47;C49 Connective, Soft tissue	5.0			5.0		3.7				3.3		1.2
C74 Adrenal gland		4.1						4.5			2.9	
C92-C94 Myeloid Leukaemia						7.4						2.5
C73 Thyroid						3.7						1.2
O&U Other & Unspecified				5.1						1.7		
Total	14.9	8.3	18.8	30.2	8.6	37.2	5.0	4.5	22.6	16.7	7.2	26.2

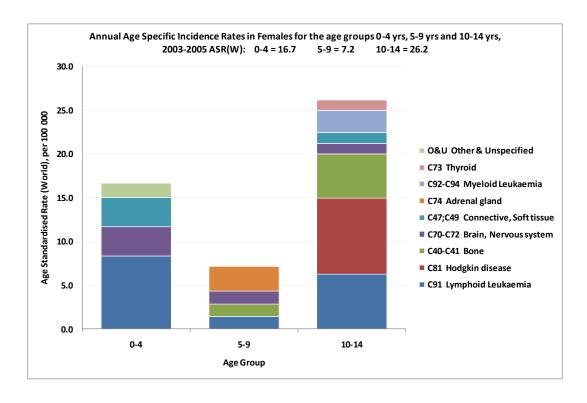


Table 18. Annual Age Specific Incidence Rates in Males for the age groups 0-4 yrs, 5-9 yrs, and 10-14 yrs, 2003-2005.

		2003			2004				3 Year	
IARC Group	0-4	5-9	10-14	0-4	5-9	10-14	0-4	5-9	10-14	Total
C91 Lymphoid Leukaemia	2		3	2		1	3	1		12
C82-C85;C96 NHL		1	1		3	2		2	1	10
C70-C72 Brain, Nervous system	1	2	1	2				1		7
C81 Hodgkin disease	2				1				2	5
C40-C41 Bone						2			1	3
C47;C49 Connective, Soft tissue	1		1					1		3
C92-C94 Myeloid Leukaemia				1		1			1	3
C64 Kidney	1						1			2
C69 Eye						1	1			2
C11 Nasopharynx			1							1
C22 Liver					1					1
C37-C38 Other Thoracic organs	1									1
C62 Testis				1						1
C73 Thyroid			1							1
C74 Adrenal gland							1			1
Total	8	3	8	6	5	7	6	5	5	53

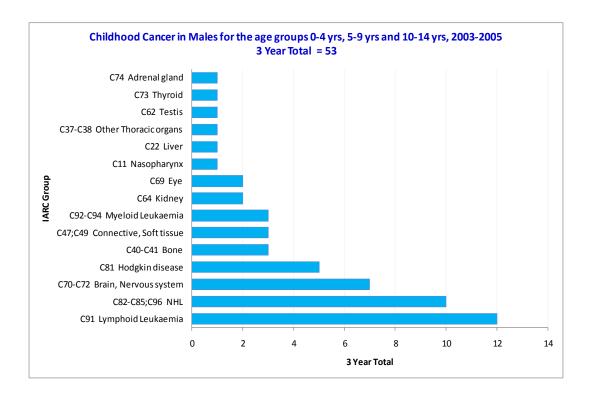
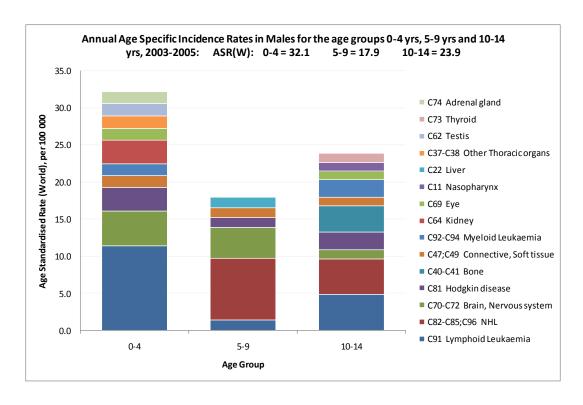


Table 19. Annual Age Specific Incidence Rates in Males for the age groups 0-4 yrs, 5-9 yrs and 10-14 yrs, 2003-2005.

		2003			2004		2005			2003-2005		
IARC Group	0-4	5-9	10-14	0-4	5-9	10-14	0-4	5-9	10-14	0-4	5-9	10-14
C91 Lymphoid Leukaemia	9.4		10.6	9.9		3.7	14.9	4.4		11.4	1.4	4.9
C82-C85;C96 NHL		4.0	3.6		12.7	7.3		8.5	3.6		8.3	4.8
C70-C72 Brain, Nervous system	4.7	7.8	3.5	9.5				4.3		4.7	4.1	1.2
C81 Hodgkin disease	9.4				4.1				7.1	3.2	1.4	2.4
C40-C41 Bone						7.1			3.6			3.5
C47;C49 Connective, Soft tissue	4.7		3.5					4.3		1.6	1.4	1.2
C92-C94 Myeloid Leukaemia				4.7		3.5			3.6	1.6		2.4
C64 Kidney	4.9						4.8			3.2		
C69 Eye						3.5	4.8			1.6		1.2
C11 Nasopharynx			3.5			ĺ						1.2
C22 Liver					4.1						1.4	
C37-C38 Other Thoracic organs	5.2									1.7		
C62 Testis				4.9						1.6		
C73 Thyroid			3.5									1.2
C74 Adrenal gland							4.8			1.6		
Total	38.5	11.8	28.3	29.0	20.9	25.2	29.2	21.5	17.8	32.1	17.9	23.9



#### h) Notifiability of Cancer in the Country

There has been no major improvement. Cancer is not yet a Notifiable Disease. A draft law has been prepared but has not been pushed forward in the legal process. The draft was prepared taking into account the recommendations of the MECC Standard Operating Procedures. The Ministry of Health in its recent Cancer Strategy has included the passing of legislation on Notifiability of Cancer as one of its major aims.

#### i) Linking up with death certificates

Another achievement in 2009 was the linkage of the Causes of Death Register of the Health Monitoring Unit with the Cancer Registry. This has allowed the uploading of a significant number of Death Certificate Notified (DCN) cancers, not previously found. A number of these are expected to remain Death Certificate Only (DCO) cancer cases. We hope this new procedure will improve the completeness of cancer registration in Cyprus. It will also make it possible to improve the completeness and accuracy of follow up data, thus enabling the calculation of cancer survival.

The quality of death certification and codification has improved since 2004. Coding is done on multiple and underlying causes of death. Manual and Automated coding is done using the MMDS (SUPERMICAR, MICAR and ACME/TRANSAX SOFTWARE). Querying of problematic death certificates is done on a regular basis by telephone and fax. The coverage of deaths in Cypriot nationals has also improved significantly since 2004.

#### j) Local Activities

A Casefinding study was done in 2009 in order to determine the percentage of missed reportable cases that would be found by searching the electronic admissions and discharges database of public hospitals. We are still working on its report. Preliminary results have shown that we can find a lot of cases admitted or discharged from public hospitals by searching the electronic admissions and discharges database of public hospitals. These cases would have otherwise been missed. Some of these are 'clinical only', others have been found to have associated microscopy reports, not previously reported. The exact figures will be available soon.

Cancer cluster investigations following claims by local communities have been done on a number of cases. Some statistical clusters were found with a smaller number of meaningful clusters. No real clusters have been found.

The Registry Data is requested and broadly used by many professionals.

A proposal for a project by TEPAK University to create the first mortality and cancer map of Cyprus is awaiting approval for funding.

#### k) Problems

Medical Records remain incomplete. However the implementation of an Integrated Government Hospitals Health Information System has already begun. This is expected to facilitate the abstracting of cases from state hospitals.

Clinical coding has only recently started. This is under the direction of the Health Monitoring Unit. The gradual increase in coverage and quality of codification of diagnoses and medical procedures is expected to improve the exporting capability of the public hospitals.

Current casefinding procedures regarding the collection of microscopy reports are imperfect leading to less than about 95% identification of new reportable cancer cases.

Although linkage with the Causes of Death Register and the Civil Death Register has been achieved, the problem of incomplete registration and low quality cause of death certification before 2004 still remains. The quality of the data after 2004 is much improved.

There has been a delay in entering data for 2006. This was due to the fact that we devoted a lot of our time in changing the database structure, arranging the export/import procedures, introducing new coded dictionaries, applying quality checks and correcting a lot of our data, carrying out the casefinding study, and dealing with cancer cluster claims.

There is a need to review the staffing needs of the Cancer Registry.

Doctors' cooperation needs to be further strengthened in providing more accurate abstracting information on cancer cases.

Treatment data for 2007 may prove difficult to complete because almost all of the casefinding and abstracting procedures have been completed without recording treatment data. Our hope in importing such data from BOCOC has proved rather difficult because of difficulties in exporting files from the center's database. Some of these data may be gradually recorded while abstracting and resolving new cases in the following years.

There has been no major progress in making cancer a Notifiable disease but this is in the agenda of the new Cancer Strategy of the Ministry of Health.

#### **APPENDIX I**

#### ΑΡΧΕΙΟ ΚΑΡΚΙΝΟΥ ΚΥΠΡΟΥ - ΜΟΝΑΔΑ ΠΑΡΑΚΟΛΟΥΘΗΣΗΣ ΥΓΕΙΑΣ ΕΝΤΥΠΟ ΚΑΤΑΓΡΑΦΗΣ ΔΕΔΟΜΕΝΩΝ - Εμπιστευτικό Έγγραφο του Υπουργείου Υγείας

BOCOC: 999999		PATIENT	Regi No: 0120099999			
NAME	SURNAME	FATHER'S NAME	Ethnicity:			
XRTEYDHFGY	JFHRYTURH	JFHRYTUR	1 GREEK			
NATIONAL ID: Date	of Birth: MPSeq:	MPTot: Sex:	1 Greek			
999999999	99/1962	1 Ma	2 Turk 3 Maronite 4 Armenian			
District of Birth: BirthP:	BirthP Town:	1 Male 2 Female	5 Latin 7 Other (Non-EU)			
LEFKOSIAS 9999	KDHHSIEJFJSK	3 Herma. 9 Unknown	8 European Union n 9 Unknown			
		ND SOCIOECONOMIC				
Resi District: Resi:  LEFKOSIA 9999	Resi Town:		TELEPHONES			
	KLIROU		99 9999999			
Strt: Strt Town:	Strt Odos:					
STREET NO TEXT	UECV	POST C 9999	Residential status:			
34 HDGFHHBVH HFGRYT			1 CYPRUS			
Smoking history:  0 Never smoked, 1 Current smo	ker 1 Single, nev. mar.	GLE, N. MAR.  2 Married 3 Separated	Cyprus     CY - Turkish control     British Bases     Other EU countries     Other non-EU			
2 Former smoker 9 Unknown sn		5 Widowed 9 Unknown	9 Unknown			
Occupation Category:  Professional	Occu: Occupation 9999 HOUSEV					
Professional	9999 HOUSEV	VIFE				
DATE ADMISSION: 31/03/	2009	TUMOR				
Incidence date AGE	SeqNo: PRIMARY SITE TEX	т	Behavior:			
078	LUNG C34					
Topography:			2 In situ 3 Malignant			
			5 Manghant			
MORPHOLOGY TEXT		ICDO3 Ba	sis of Diagnosis			
Histology			Death certificate only     Clinical only			
			2 Clin.Invest. (incl. X-ray, US etc.) 3 Exploratory surgery/autopsy			
Icd10: ICCC: SEEF	R SUMMARY STAGE TEXT		4 Specific biochem and/or Immun. test 5 Cytology or hematology			
C34.9			6 Histology of metastases 7 Histology of primary			
Laterality: S	EER Summary Stage:	Grade / Diff:	8 Autopsy with conc. or prev. histology     Unknown			
1 Right 1 2 Left 2 3 Unilateral NOS 3 4 Bilateral 4 9 Unknown / midline 5	In situ Localized (Stage I for lymphomas) Regional by Direct Extension Regional by Lymph Nodes Regional by both DE and LNs Regional NOS (Stage II for lymphor Distant (Stage III or IV for lymphon Unknown, undetermined	3 Stage III; poor 4 Stage IV; undi 5 T-celi; T-precu nas) 6 B-celi; Pre-B; E nas) 7 Null celi; Non 8 NK cell	erately differentiated ly differentiated fferentiated, anaplastic Irsor 3-precursor			

		1	HOSPI	TAL			
BOCOC:	999999					Regi No:	0120099999
Place of	Diagnosis:			PatNo 1:			
	HDGFTREDFS						
Hospital	Referred from:			PatNo 2:			
	Referred to:			PatNo 3:			
115	восос			999999			
Contact				PatNo 4:			
9999	HDGFTERDFFF						
Histolog	ist 1:						
Histolog	ist 2:						
Histolog	ist 3:						
			FOLLO	WIIP			
Vital sta	atus:		DateLC:		UCOD:		0 Still alive
Treat Sec		0 Alive 1 Dead					1 Died of cancer 2 Died of non-cancer
		1 Dead					9 Died of unknown cause
	ent NOT GIVEN		TREATN	<b>JENT</b>			
	REFUSED					Date First Cance	er Treatment
9 UNKNO	MENDED, Unknown if Recei WN	ived					
Cancer Su	irgery given?					Date of Cancer	Surgery
Radiother	rapy given?					Date of Radioth	erapy
0	NOT GIVEN						
Chemoth	erapy given?					Date of Chemot	herapy
Hormone	therapy given?					Date of Hormor	ne therapy
Immunot	JL herapy given?					Date of Immuno	otherapy
Other trea	JL atment given?					Date of Other to	reatment
	JL						
Notes:							
2/2							Printed: 05/02/2010

#### **APPENDIX II.**

Table v) Numbers and percentages of records in CyCR by Record status, by Year by Behaviour.

		In sit	:u	Maligr	nant	(bla	nk)	Total	Total %
Record Status	Year	Records	% of Total	Records	% of Total	Records	% of Total	Records	of Total
Confirmed	1998	69	0.3%	1532	6.5%			1601	6.8%
	1999	45	0.2%	1567	6.6%			1612	6.8%
	2000	29	0.1%	1696	7.2%			1725	7.3%
	2001	38	0.2%	1724	7.3%			1762	7.4%
	2002	59	0.2%	1838	7.8%			1897	8.0%
	2003	68	0.3%	1963	8.3%			2031	8.6%
	2004	75	0.3%	2105	8.9%			2180	9.2%
	2005	80	0.3%	2111	8.9%			2191	9.3%
	2006	7	0.0%	235	1.0%			242	1.0%
<b>Confirmed Tot</b>	al	470	2.0%	14771	62.4%			15241	64.4%
Pending	1998			66	0.3%			66	0.3%
	1999			59	0.2%			59	0.2%
	2000			77	0.3%			77	0.3%
	2001			244	1.0%			244	1.0%
	2002			266	1.1%			266	1.1%
	2003			284	1.2%			284	1.2%
	2004			529	2.2%			529	2.2%
	2005			556	2.3%			556	2.3%
	2006			605	2.6%			605	2.6%
	2007			738	3.1%			738	3.1%
						4998	21.1%	4998	21.1%
Pending Total				3424	14.5%	4998	21.1%	8422	35.6%
Total		470	2.0%	18195	76.9%	4998	21.1%	23663	100.0%

At the time of writing this report, there were 23663 records in the CyCR.

Of these, 15241 (64.4%) are confirmed while 8422 (35.6%) were pending. The large number of pending records consists of the recently imported electronic data, obtained from BOCOC. The percentage of pending records increases with ascending year.

Of the confirmed records, 14771 (97%) were malignant) while 470 (3%) were in-situ.

Of the pending records, 3424 (40.7%) were provisionally recorded as malignant while 4998 (59.3%) were without stated behavior.

#### **APPENDIX III.**

Table vi) Numbers and percentages of records in CyCR by Record status, by Basis of diagnosis by Behavior.

		In site	u	Malign	ant	(blan	k)	Total	Total	
Record Status	Basis Diagnosis	Records	% of Total	Records	% of Total	Records	% of Total	Records	% of Total	
Confirmed	Histology of primary	468	2.0%	13039	55.1%			13507	57.1%	
	Cytology or hematology	1	0.0%	909	3.8%			910	3.8%	
	Histology of metastases			396	1.7%			396	1.7%	
	Clin.Invest. (X-ray, US etc.)			233	1.0%			233	1.0%	
	Unknown	1	0.0%	100	0.4%			101	0.4%	
	Clinical only			63	0.3%			63	0.3%	
	Exploratory surgery/autopsy			18	0.1%			18	0.1%	
	Specific bioch./Immun. test			13	0.1%			13	0.1%	
Confirmed <sup>-</sup>	Total	470	2.0%	14771	62.4%			15241	64.4%	
Pending	(blank)					4998	21.1%	4998	21.1%	
	Death Certificate Notified			3422	14.5%			3422	14.5%	
	Histology of primary			2	0.0%			2	0.0%	
Pending To	tal			3424	14.5%	4998	21.1%	8422	35.6%	
Total		470	2.0%	18195	76.9%	4998	21.1%	23663	100.0%	

Nearly all of the 3424 pending records, provisionally recorded as malignant, were Death Certificate Notified. These were imported from the Causes of Death Register of the Health Monitoring Unit, using the National ID number as linkage field.

The pending records without a stated basis of diagnosis were 4998 (59.3%). All of these were without a stated behavior either. They represent the electronic data obtained from the BOCOC

Table vii) Numbers and percentages of records in CyCR by Record status, by Primary Site text statement by Behavior.

		In situ Malignant (blank)		<b>(</b> )	Total Records	Total % of Total			
Record Status	Primary Site TEXT	Records	% of Total	Records	% of Total	Records	% of Total		
Confirmed	Stated	470	3.2%	14384	96.8%		0.0%	14854	100.0%
	Sated as Unknown		0.0%	387	100.0%		0.0%	387	100.0%
Confirmed Total		470	3.1%	14771	96.9%	0.0%		15241	100.0%
Pending	Stated		0.0%	2522	33.8%	4932	66.2%	7454	100.0%
	Not stated		0.0%	256	98.8%	3	1.2%	259	100.0%
	Sated as Unknown		0.0%	646	91.1%	63	8.9%	709	100.0%
Pending Total			0.0%	3424	40.7%	4998	59.3%	8422	100.0%
•									
Total		470	2.0%	18195	76.9%	4998	21.1%	23663	100.0%

# Table viii) The following tables are self explanatory and show the percentage of completeness of data transfer in pending records

**Record Status** 

Pending

#### **Primary Site Text**

		, one rem										
	Blank		Imported		Stated as Preliminary		Stated as Skin		Stated as Unknown		Total Records	Total %
Basis of Diagnosis	Records	%	Records	%	Records	%	Records	%	Records	%		
Death Certificate Notified	256	7.5%	3113	91.0%		0.0%	53	1.5%		0.0%	3422	100%
Histology of primary		0.0%	2	100.0%		0.0%		0.0%		0.0%	2	100%
(blank)	3	0.1%	4497	90.0%	172	3.4%	263	5.3%	63	1.3%	4998	100%
Total	259	3.1%	7612	90.4%	172	2.0%	316	3.8%	63	0.7%	8422	100%

**Record Status** 

Pending

#### First Name

	Blank		Import	ted	Total Records	Total %
Source	Records	%	Records	%		
восос	1	0.0%	4997	100.0%	4998	100.0%
Death Certificates	1	0.0%	3423 100.0%		3424	100.0%
Total	2	0.0%	8420 100.0%		8422	100.0%

**Record Status** 

Pending

#### Surname

	Blank		Imported		Total Records	Total %
Source	Records	%	Records	%		
BOCOC	1	0.0%	4997	100.0%	4998	100.0%
Death Certificates	1	0.0%	3423	100.0%	3424	100.0%
Total	2	0.0%	8420	100.0%	8422	100.0%

**Record Status** 

Pending

#### **National ID**

	Blank		Imported		Total Records	Total %
Source	Records	%	Records	%		
BOCOC	52	1.0%	4946	99.0%	4998	100.0%
Death Certificates	1	0.0%	3423	100.0%	3424	100.0%
Total	53	0.6%	8369	99.4%	8422	100.0%

**Record Status** 

Pending

#### Birth Date

	Blank		Imported		Total	Total %
Source	Records	%	Records	%	Records	70
ВОСОС	1	0.0%	4997	100.0%	4998	100.0%
Death Certificates	5	0.1%	3419	99.9%	3424	100.0%
Total	6	0.1%	8416	99.9%	8422	100.0%

**Record Status** 

Pending

#### Street and Number

	Blank		Imported		Total Records	Total %
Source	Records	%	Records	%		
BOCOC	5	0.1%	4993	99.9%	4998	100.0%
Death Certificates	1873	54.7%	1551	45.3%	3424	100.0%
Total	1878	22.3%	6544	77.7%	8422	100.0%

**Record Status** 

Pending

#### **Residential Town**

	Blank		Imported		Total Records	Total %
Source	Records	%	Records	%		
BOCOC	2026	40.5%	2972	59.5%	4998	100.0%
Death Certificates	1108	32.4%	2316	67.6%	3424	100.0%
Total	3134	37.2%	5288	62.8%	8422	100.0%

**Record Status** 

Pending

#### Radiotherapy with date

	Blank		Imported		Total Records	Total %
Source	Records	%	Records	%		
BOCOC	3	0.1%	4995	99.9%	4998	100.0%
Death Certificates	3424	100.0%		0.0%	3424	100.0%
Total	3427	40.7%	4995	59.3%	8422	100.0%

Record Status

Pending

#### Occupation Text

	Blank		Imported		Total Records	Total %
Source	Records	%	Records	%		
BOCOC		0.0%	4998	100.0%	4998	100.0%
Death Certificates	3424	100.0%		0.0%	3424	100.0%
Total	3424	40.7%	4998	59.3%	8422	100.0%

#### **APPENDIX IV**

Graphs showing trends in World Age Standardised Incidence Rates of main cancers.

