



INSTITUT KANSER NEGARA
MINISTRY OF HEALTH

SUMMARY OF
MALAYSIA
NATIONAL CANCER



**REGISTRY
REPORT**

2012-2016

THIS HANDBILL GIVES SUMMARY OF INFORMATION ON LATEST CANCER DATA FROM THE SECOND MALAYSIA NATIONAL CANCER REGISTRY (MNCR) REPORT 2012-2016 PUBLISHED IN 2019.

NATIONAL CANCER REGISTRY DEPARTMENT INSTITUT KANSER NEGARA

DIRECTOR OF INSTITUT KANSER NEGARA

Dr. Mohd Anis bin Haron @ Harun

REGISTRY STAFF MEMBERS:

HEAD OF NATIONAL CANCER REGISTRY DEPARTMENT

Dr. Siti Norbayah binti Yusof

MEDICAL OFFICERS

Dr. Sukumaran a/I Raman

Dr. Nabihah binti Ali

Dr. Balqis binti Bahtiar

CO-STAFF

Puan Azlina binti Abdul Aziz
Health Education Officer

Puan Nur Alham binti Othman
Statistician

ASSISTANT ADMINISTRATOR

Puan Nor Hafizah binti Mohd Nor



INSTITUT KANSER NEGARA

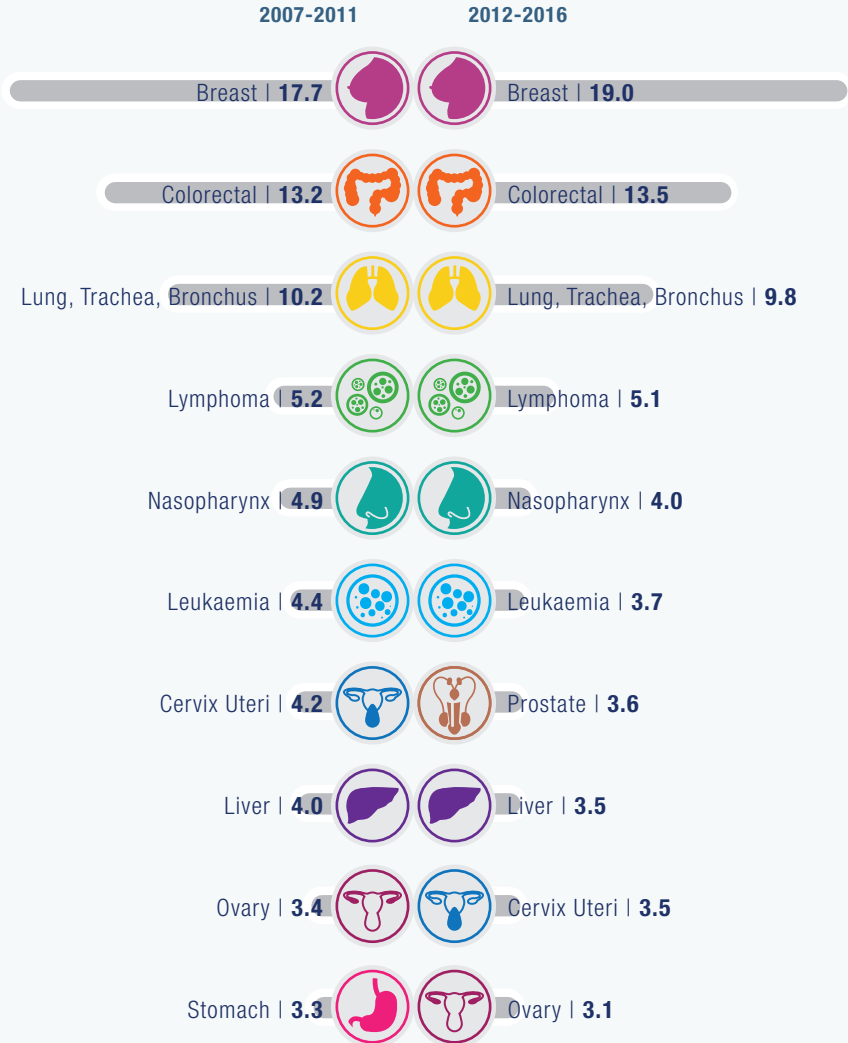
MINISTRY OF HEALTH

No. 4, Jalan P7, Precinct 7, 62250 Putrajaya

Tel: (603)88925555 Fax: (603)88925625

Email: ncr.putrajaya@nci.gov.my

TEN MOST COMMON CANCERS IN MALAYSIA (PERCENTAGES)



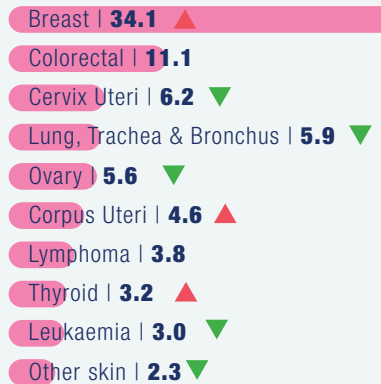
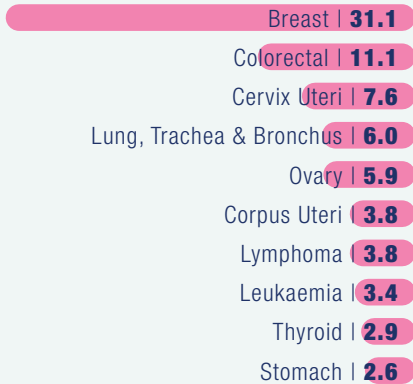
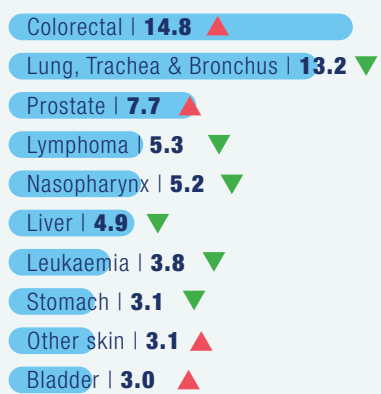
INCIDENCE RATE (ASR) FOR TEN MOST COMMON CANCERS BY SEX

AGE STANDARDISED RATE (WORLD) PER 100,000 POPULATION

2007-2011



2012-2016

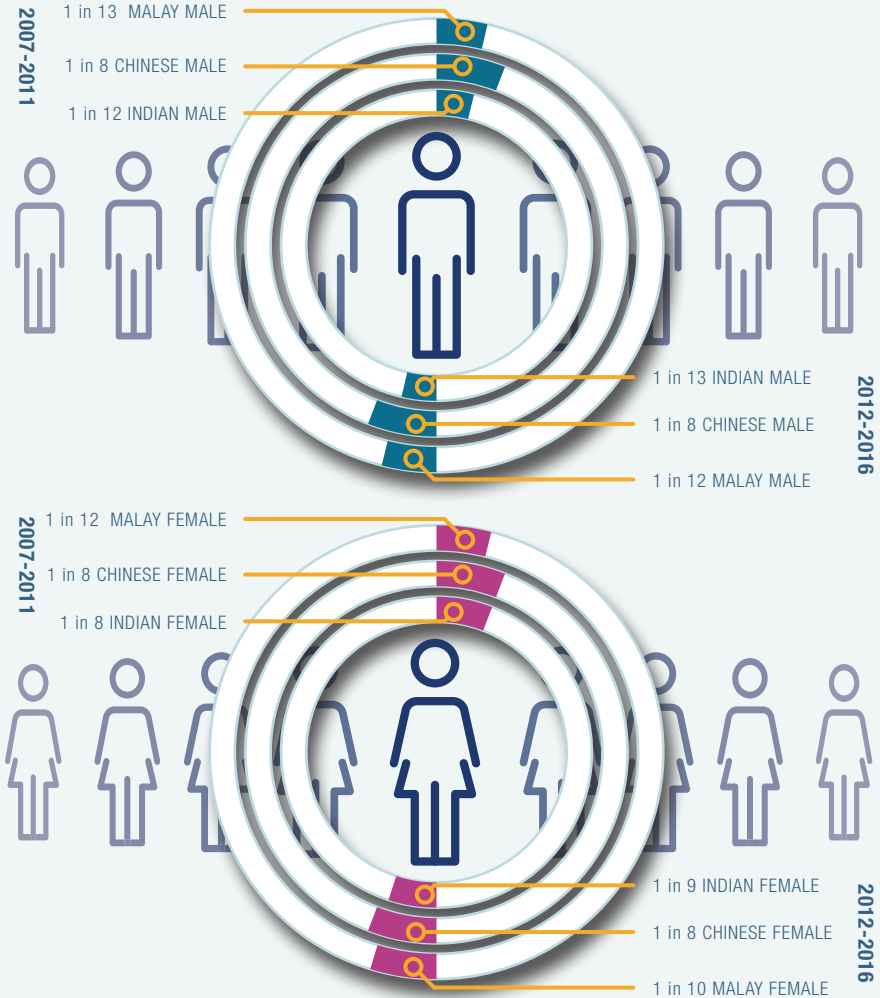


Definition of Age-Standardised Rate (ASR): ASR is a summary measure, indicating the incidence rate that a population would have if it had a standard age structure.

LIFETIME RISK

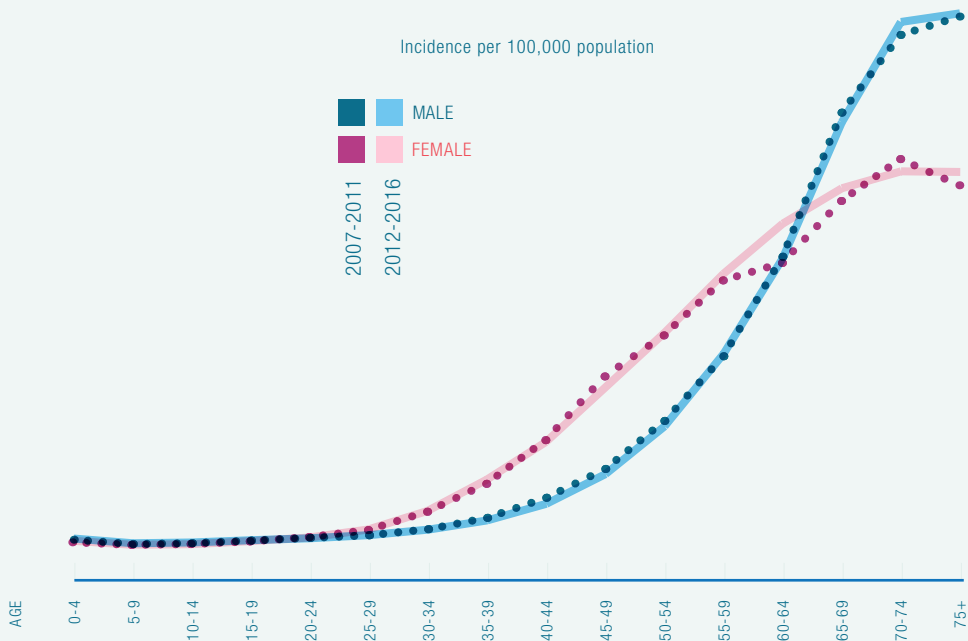
IN 2012-2016, THE LIFETIME RISK FOR MALE (1 IN 10 MALES)
AND FEMALE (1 IN 9 FEMALES) ARE STILL THE SAME AS IN 2007-2011

LIFETIME RISK FOR MAJOR ETHNIC GROUPS



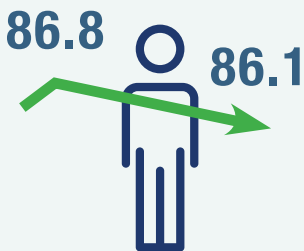
Definition of Lifetime Risk: The probability of an individual developing cancer before the age of 75 years in the absence of other causes of death.

AGE-SPECIFIC INCIDENCE RATE FOR ALL CANCERS



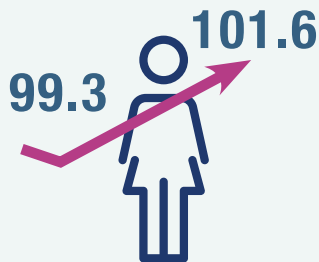
The incidence of cancer were higher among females between the age of 25 and 64 years old. After the age of 65 years old, the incidence among males peaks.

2007-2011 2012-2016



PER 100,000 MALES WERE
DIAGNOSED WITH CANCER

2007-2011 2012-2016



PER 100,000 FEMALES WERE
DIAGNOSED WITH CANCER

Definition of Age-specific Rate (AR): AR is the incidence rate in a specific age group.



11 SELECTED CANCERS BY GENDER

MALE

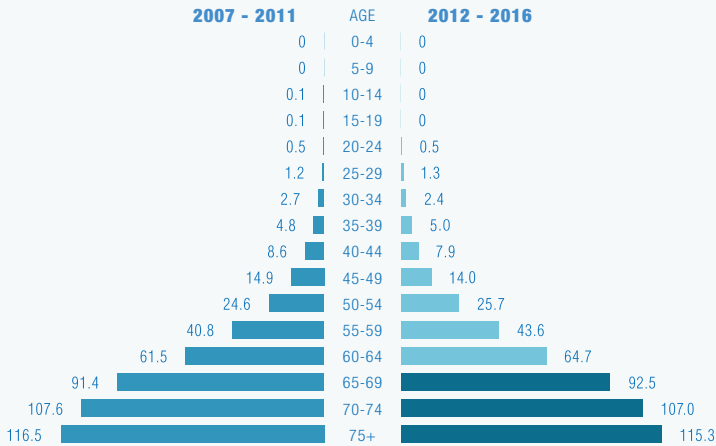
- Colorectal • Page 6
- Lung, Trachea, Bronchus • Page 7
- Prostate • Page 8
- Nasopharynx • Page 9
- Liver • Page 10

FEMALE

- Breast • Page 11
- Colorectal • Page 12
- Cervix Uteri • Page 13
- Lung, Trachea, Bronchus • Page 14
- Ovary • Page 15
- Thyroid • Page 16

MALE COLORECTAL CANCER

AGE SPECIFIC INCIDENCE RATE



Colorectal cancer is the commonest cancer among males. The trend of incidence in **2012-2016** is similar to 2007-2011 with **increased rates seen between age 55 and 64 years old.**

THE LIFETIME RISK:

2007 - 2011: **1 in 56 for all males | 1 in 72 for Malays | 1 in 39 for Chinese | 1 in 82 for Indians**
 2012 - 2016: **1 in 55 for all males | 1 in 65 for Malays | 1 in 43 for Chinese | 1 in 70 for Indians**

STAGING

2007 - 2011 (n = 4,263)

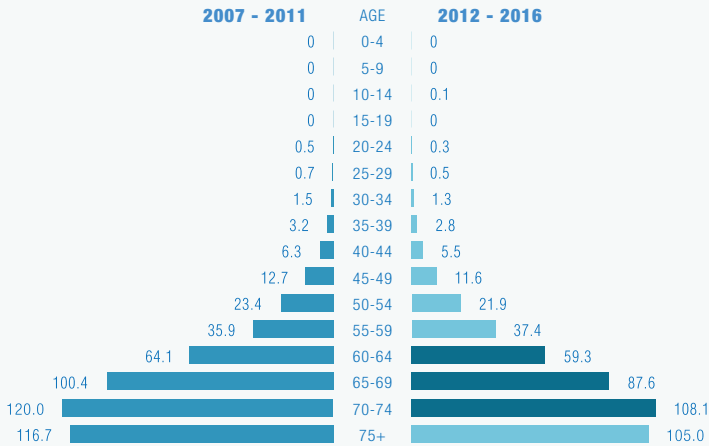
2012 - 2016 (n = 4,806)



In 2012-2016, percentage diagnosed at late stage (Stage 3 & 4) increased to 72.4%.

MALE LUNG, TRACHEA & BRONCHUS CANCER

AGE SPECIFIC INCIDENCE RATE



Lung, trachea, bronchus cancer is the **second commonest cancer** amongst males. The trend of incidence in 2012-2016 is similar to 2007-2011 which peaks at the age of 60-74 years old. However, **reduced** rate is seen in most **age groups**.

THE LIFETIME RISK:

2007 - 2011: **1 in 55 for all males | 1 in 62 for Malays | 1 in 43 for Chinese | 1 in 103 for Indians**
 2012 - 2016: **1 in 60 for all males | 1 in 62 for Malays | 1 in 51 for Chinese | 1 in 145 for Indians**

STAGING

2007 - 2011 (n = 4,189)

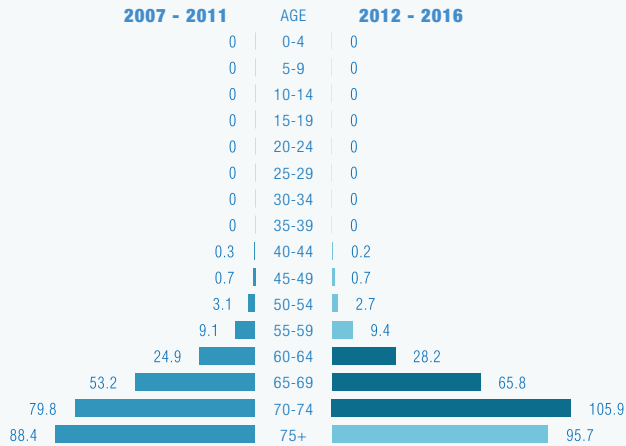
2012 - 2016 (n = 4,633)



In 2012-2016, percentage diagnosed at late stage (Stage 3 & 4) increased to 93.5%.

PROSTATE CANCER

AGE SPECIFIC INCIDENCE RATE



Prostate cancer is the **third commonest cancer** amongst males. Compared to 2007-2011, **increased incidence rates are seen** in 2012-2016 after the age of 55 years old and the highest incidence is in the age group of 70-74 years old.

THE LIFETIME RISK:

2007 - 2011: **1 in 117 for all males | 1 in 146 Malays | 1 in 86 Chinese | 1 in 124 Indians**
2012 - 2016: **1 in 94 for all males | 1 in 117 Malays | 1 in 72 Chinese | 1 in 108 Indians**

STAGING

2007 - 2011 (n = 1,592)

2012 - 2016 (n = 1,682)

STAGE 1 | 15.6%

STAGE 1 | 13.4%

STAGE 2 | 24.4%

STAGE 2 | 18.0%

STAGE 3 | 18.7%

STAGE 3 | 15.4%

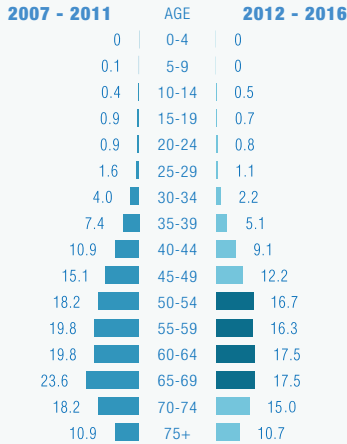
STAGE 4 | 41.3%

STAGE 4 | 53.2%

In 2012-2016, percentage diagnosed at late stage (Stage 3 & 4) increased to 68.6%.

MALE NASOPHARYNGEAL CANCER

AGE SPECIFIC INCIDENCE RATE



Nasopharyngeal cancer is the **fifth commonest cancer** amongst males and the Malaysian population in 2012-2016. The trend of incidence in 2012-2016 is similar to 2007-2011 with **reduced rate is seen in all age groups**.

THE LIFETIME RISK:

2007 - 2011: **1 in 143 for all males** | **1 in 417 for all females**
2012 - 2016: **1 in 175 for all males** | **1 in 482 for all females**

STAGING

2007 - 2011 (n = 2,072)

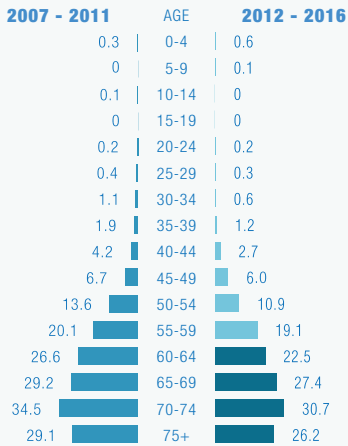
2012 - 2016 (n = 2,193)



In 2012-2016, percentage diagnosed at late stage (Stage 3 & 4) increased to 69.3%.

MALE LIVER CANCER

AGE SPECIFIC INCIDENCE RATE



Liver cancer is the **sixth commonest cancer** amongst males in 2012-2016. Incidence amongst females is relatively low. The trend of incidence in 2012-2016 is similar to 2007-2011 with **reduced rate is also seen in all age groups**.

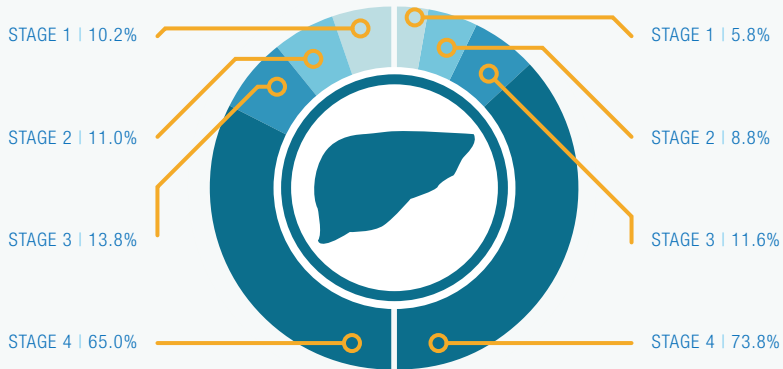
THE LIFETIME RISK:

2007 - 2011: **1 in 144 for all males** | **1 in 418 for all females**
2012 - 2016: **1 in 164 for all males** | **1 in 452 for all females**

STAGING

2007 - 2011 (n = 1,221)

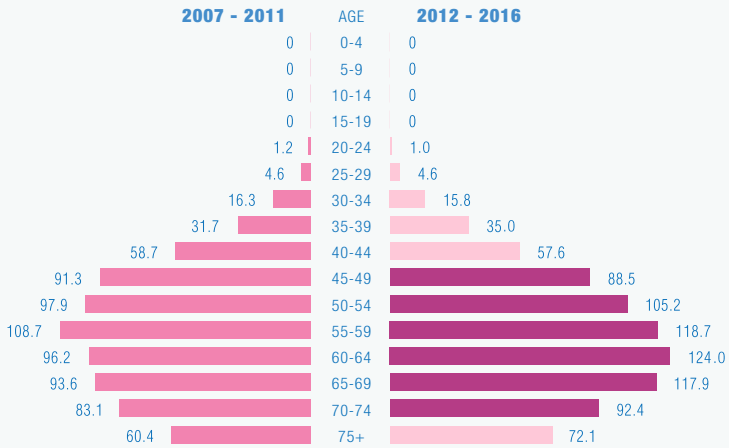
2012 - 2016 (n = 1,200)



In 2012-2016, percentage diagnosed at late stage (Stage 3 & 4) increased to 85.5%. **Presentation of cases at Stage 4 is still very high.**

FEMALE BREAST CANCER

AGE SPECIFIC INCIDENCE RATE



Breast cancer is **the commonest cancer** amongst females. The trend of incidence in 2012-2016 is similar to 2007-2011. However, **higher rates are seen after the age of 50 years old.**

THE LIFETIME RISK:

2007 - 2011: **1 in 30 for all females | 1 in 35 Malays | 1 in 22 Chinese | 1 in 24 Indians**
 2012 - 2016: **1 in 27 for all females | 1 in 30 Malays | 1 in 22 Chinese | 1 in 23 Indians**

STAGING

2007 - 2011 (n = 11,938)

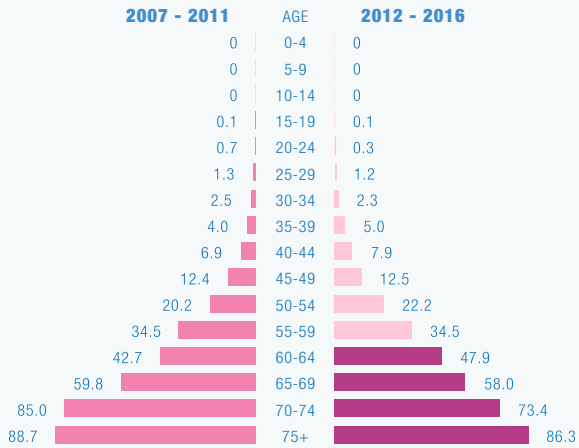
2012 - 2016 (n = 13,485)



In 2012-2016, the percentage diagnosed at late stage (Stage 3 & 4) increased to 47.9%

FEMALE COLORECTAL CANCER

AGE SPECIFIC INCIDENCE RATE



Colorectal cancer is the **second commonest cancer** amongst females. Compared to 2007-2011, **higher incidence rates are seen at the younger age group between 35 to 64 years old** in 2012-2016.

THE LIFETIME RISK:

2007 - 2011: **1 in 74 for all females | 1 in 100 Malays | 1 in 49 Chinese | 1 in 91 Indians**
 2012 - 2016: **1 in 76 for all females | 1 in 89 Malays | 1 in 57 Chinese | 1 in 95 Indians**

STAGING

2007 - 2011 (n = 3,372)

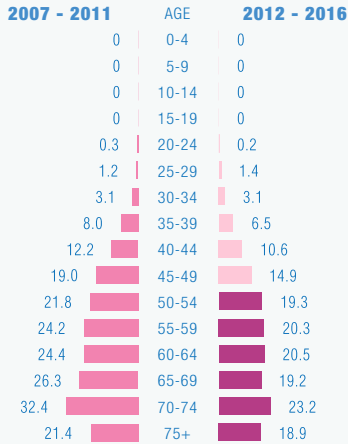
2012 - 2016 (n = 3,859)



In 2012-2016, percentage diagnosed at late stage (Stage 3 & 4) increased to 73.1%.

CERVIX UTERI CANCER

AGE SPECIFIC INCIDENCE RATE



Cervical cancer is **the third commonest cancer** amongst females. The trend of incidence in 2012-2016 is similar to 2007-2011 with the **highest incidence at the age group of 70-74 years**. However, **reduced incidence rate is seen in all age groups in 2012-2016**.

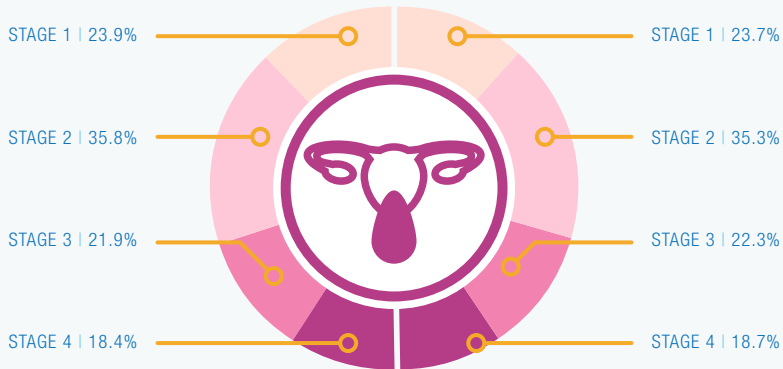
THE LIFETIME RISK:

2007 - 2011: **1 in 116 for all females | 1 in 176 Malays | 1 in 87 Chinese | 1 in 111 Indians**
 2012 - 2016: **1 in 144 for all females | 1 in 194 Malays | 1 in 129 Chinese | 1 in 157 Indians**

STAGING

2007 - 2011 (n = 2,794)

2012 - 2016 (n = 2,771)



In both reports, 76% of cases are still diagnosed at later stage (Stage 2, 3 & 4)

FEMALE LUNG, TRACHEA & BRONCHUS CANCER

AGE SPECIFIC INCIDENCE RATE

2007 - 2011	AGE	2012 - 2016
0	0-4	0
0	5-9	0
0	10-14	0
0	15-19	0
0.2	20-24	0.1
0.5	25-29	0.5
0.8	30-34	0.9
1.9	35-39	1.9
3.6	40-44	3.6
7.3	45-49	5.8
10.8	50-54	11.2
16.9	55-59	18.2
24.4	60-64	25.1
39.9	65-69	35.0
42.2	70-74	42.9
42.9	75+	44.9

Lung, trachea and bronchus cancer is the **fourth commonest cancer** amongst females.

The incidence trend in 2012-2016 is similar to the trend in 2007-2011.

THE LIFETIME RISK:

2007 - 2011: **1 in 135 for all females | 1 in 185 for Malays | 1 in 97 for Chinese | 1 in 255 for Indians**

2012 - 2016: **1 in 138 for all females | 1 in 169 for Malays | 1 in 108 for Chinese | 1 in 251 for Indians**

STAGING

2007 - 2011 (n = 1,769)

2012 - 2016 (n = 2,187)



In 2012-2016, extremely high percentages of the lung, trachea and bronchus cases were still diagnosed at late stage (Stage 3 & 4).

OVARIAN CANCER

AGE SPECIFIC INCIDENCE RATE

2007 - 2011	AGE	2012 - 2016
0.2	0-4	0.3
0.2	5-9	0.3
0.7	10-14	0.6
1.5	15-19	1.4
1.9	20-24	1.6
2.3	25-29	2.1
3.0	30-34	3.3
4.7	35-39	4.4
8.2	40-44	7.7
14.6	45-49	12.7
18.0	50-54	16.4
18.4	55-59	18.0
17.1	60-64	18.0
20.4	65-69	18.6
16.1	70-74	14.7
11.9	75+	11.5

Ovarian cancer is the **fifth commonest cancer** amongst females. The incidence trend in 2012-2016 is similar to the trend in 2007-2011. **Reduced incidence rate** is seen in majority of the age groups.

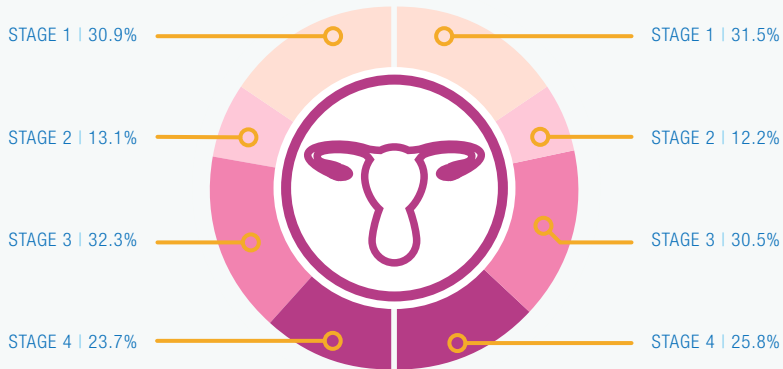
THE LIFETIME RISK:

2007 - 2011: **1 in 158 for all females | 1 in 159 Malays | 1 in 147 Chinese | 1 in 153 Indians**
 2012 - 2016: **1 in 167 for all females | 1 in 160 Malays | 1 in 169 Chinese | 1 in 164 Indians**

STAGING

2007 - 2011 (n = 2,358)

2012 - 2016 (n = 2,507)



Percentage diagnosed at late stage (Stage 3 & 4) remained around 56% in 2007-2011 and 2012-2016.

FEMALE THYROID CANCER

AGE SPECIFIC INCIDENCE RATE

2007 - 2011	AGE	2012 - 2016
0	0-4	0
0	5-9	0
0.2	10-14	0.3
0.9	15-19	1.2
1.7	20-24	2.2
2.4	25-29	2.9
2.8	30-34	3.8
4.0	35-39	3.9
4.3	40-44	4.6
5.4	45-49	6.3
6.3	50-54	6.2
6.4	55-59	7.3
6.7	60-64	9.3
11.4	65-69	8.9
7.1	70-74	9.4
5.9	75+	7.5

Thyroid cancer is the **eighth commonest cancer** amongst females. The incidence trend in 2007-2011 has a peak at the age group of 65-69 years old. This is not seen in 2012-2016 but **increased rate is seen in almost all age groups**.

THE LIFETIME RISK:

2007- 2011: **1 in 884 for all males** | **1 in 336 for all females**
2012 - 2016: **1 in 732 for all males** | **1 in 302 for all females**

STAGING

2007 - 2011 (n = 671)

2012 - 2016 (n = 810)



In 2012-2016, more cases are diagnosed at Stage 1 (42.6%) compared to Stage 4 (24.4%).

INCIDENCE SUMMARY TABLES

Incidence Summary by Sex, All Residents, 2007-2016

Year	Sex	Number	%	CR	ASR	CumR
2007-2011	MALE	46,794	45.2	71.4	86.9	9.8
	FEMALE	56,713	54.8	89.0	99.3	10.6
	Both	103,507	100.0			
2012-2016	MALE	51,505	44.7	75.4	86.1	9.8
	FEMALE	63,733	55.3	95.8	101.6	10.8
	Both	115,238	100.0			

Incidence Summary by Year and Sex, 2007-2016

Year	MALE				FEMALE			
	Number	CR	ASR	CumR	Number	CR	ASR	CumR
2007	8,969	70.8	89.7	10.1	11,035	89.5	102.6	10.8
2008	9,383	72.5	90.2	10.1	11,344	89.7	102.3	10.9
2009	9,495	72.5	87.9	9.9	11,216	88.0	98.4	10.6
2010	9,571	71.9	85.4	9.7	11,672	90.1	98.8	10.6
2011	9,376	68.6	80.9	9.3	11,446	87.2	93.8	10.0
2012	9,728	71.2	81.4	9.2	12,329	92.7	97.9	10.4
2013	10,211	73.8	82.6	9.5	12,244	90.8	94.3	10.0
2014	10,450	75.5	84.1	9.6	12,684	94.1	98.0	10.4
2015	10,436	74.4	81.2	9.2	13,046	95.4	97.6	10.4
2016	10,680	76.2	83.5	9.5	13,430	98.2	100.5	10.7

Incidence Summary by Ethnic Groups and Sex, 2007-2016

Ethnicity	MALE				FEMALE			
	Number	CR	ASR	CumR	Number	CR	ASR	CumR
2007-2011								
Malay	18,757	53.1	70.7	8.0	24,188	69.5	81.9	8.7
Chinese	20,424	124.4	112.9	12.5	22,114	143.2	126.2	13.2
Indian	2,679	56.0	70.4	8.1	4,798	101.2	110.1	12.2
2012-2016								
Malay	21,841	57.4	73.6	8.4	29,689	79.4	90.9	9.5
Chinese	21,385	127.6	106.1	11.9	22,440	142.1	117.3	12.5
Indian	2,842	58.1	66.7	7.6	5,196	106.7	106.9	11.7

Incidence Summary by States and Sex, 2012-2016

State	MALE				FEMALE			
	Number	CR	ASR	CumR	Number	CR	ASR	CumR
Johor	7,408	91.0	100.6	11.4	9,026	117.7	121.6	12.7
Selangor	5,972	44.9	60.5	7.1	8,812	68.8	82.9	9.2
Perak	5,627	95.7	85.8	9.2	6,578	114.7	113.5	10.2
Penang	4,807	127.7	123.2	13.6	5,903	155.5	140.3	14.7
Sarawak	4,869	78.6	84.2	9.7	5,428	90.6	96.0	10.2
Sabah	4,006	63.5	94.8	10.8	4,812	78.5	111.1	11.7
KL & Putrajaya	3,319	73.4	87.7	10.1	4,128	94.3	105.9	11.6
Kedah	2,944	61.0	64.7	7.5	3,815	79.3	76.4	8.0
Pahang	2,774	73.1	84.8	9.6	3,188	90.6	96.9	10.3
Kelantan	2,675	66.4	80.3	9.1	3,213	80.0	85.6	8.9
Melaka	2,395	120.0	124.5	13.4	2,847	141.0	136.1	14.1
N. Sembilan	2,227	88.8	92.9	10.4	2,989	122.4	117.6	12.3
Terengganu	1,953	71.8	92.1	10.6	2,280	86.8	100.5	10.5
Perlis	445	76.9	75.7	8.3	602	99.8	95.0	10.1
Labuan	84	40.7	102.4	6.2	112	56.3	120.7	10.4

CR: Crude incidence Rate (per 100,000); CumR: Cumulative Risk (Risk accumulated over age period of 0-74years).



MINISTRY OF HEALTH

Published by
National Cancer Registry Department
Institut Kanser Negara
Ministry of Health
Putrajaya
<http://nci.moh.gov.my>
ncr.putrajaya@nci.gov.my

Kuantiti/03/2020