



مركز الإحصاء - أبوظبي  
STATISTICS CENTRE - ABU DHABI

Demographic Statistics

# DEATHS

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# Demographic Statistics

## **Deaths**

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# Introduction

Vital statistics span all statistics related to the life cycle of individuals including birth, marriage and divorce, family formation, death and cause of death. These phenomena are studied extensively to understand the dynamics of the population and to produce estimates of life expectancy, a key indicator of the health status of the population. Vital statistics include legal registration of events such as births, deaths, marriages and divorces, and are collected through specialised surveys and administrative records. They are important because they are the main additional source of data for calculating population projections, estimates, growth and dynamics. Vital statistics enable us to measure population changes in terms of population size, structure or distribution, and family structure, through comparison between different periods.

Ultimately this data is necessary to identify structural demographic changes to society, for the purpose of developing suitable plans and programs to manage these changes.

This study focuses on 2010 death statistics. It consists of two parts: deaths and life expectancy, and provides the definitions of the listed indicators.

## Deaths - Key Indicators, Abu Dhabi Emirate 2010

<b>Crude Death Rate (Per 1000 Population)</b>	
Total	1.5
Nationals	2.2
Non-nationals	1.2
<b>New-born Mortality Rate – (Below one month) (Per 1000 Live Births)</b>	
Total	4.5
Nationals	4.6
Non-nationals	4.2
<b>Infant Mortality Rate – (Below 1 Year) (Per 1000 Live Births)</b>	
Total	8.0
Nationals	7.8
Non-nationals	7.8
<b>Child Mortality Rate – (Under 5 Years) (Per 1000 Live Births)</b>	
Total	10.0
Nationals	10.0
Non-nationals	9.7
<b>Life Expectancy at Birth</b>	
Total	75.9
Nationals	76.2
Non-nationals	74.6

# Part 1: Deaths

The dynamic movement of population is affected by births, deaths and migration. Two essential elements, births and deaths, comprise the natural increase of population. This part discusses deaths relationship to the age and sex structure of the population that reflects the demographic status of the population, affects population growth and enables understanding of the health levels within the community.

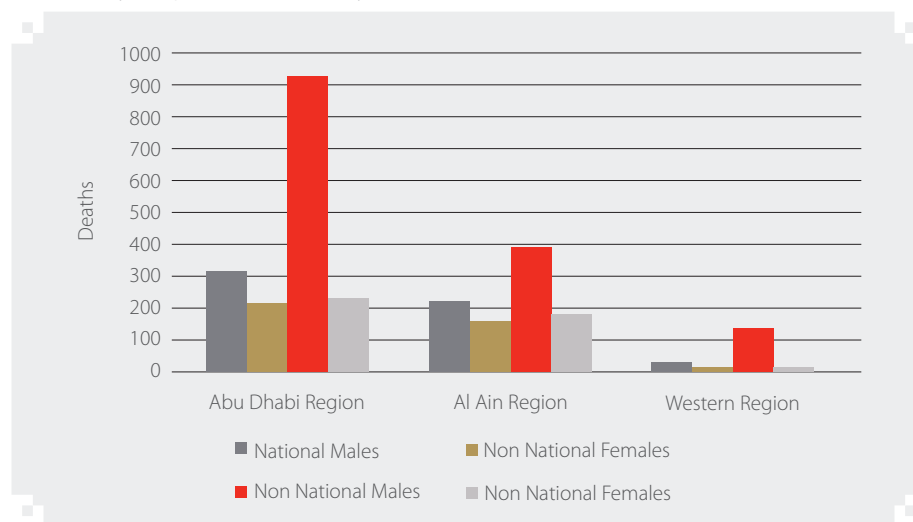
## Total Deaths

The administrative records indicate that 2,879 deaths occurred in 2010. It varies between regions. Abu Dhabi region had the highest number with 1,712 deaths, Al Ain region had 970 deaths, whereas the Western Region recorded the lowest number of deaths with 197.

Classifying deaths by gender, the number of deaths was 2.5 times higher for men than for women, partly reflecting the higher proportion of males in the total population and partly higher mortality among males. In Abu Dhabi Region there were 1,253 incidents (73%) of male deaths and 458 incidents (27%) of female deaths, and in the Western Region 8 times more male deaths with 175 (89%) among men and 22 (11%) among women. This big difference between the sexes in the Western Region and the islands of the Emirate results from the gender composition of the people living there, where 84.7% of the population are male, which partially accounts for the disparity in deaths. Also, deaths are recorded at the location of death, rather than the location of the deceased's usual residence, resulting in those deaths occurring in locations outside the region (such as major hospital locations) being recorded in a different region to the population to which they belong.

When deaths are categorized by nationality, it is observed that incidents among nationals account for about one third (34%) of the total number of death incidents, which is partly a reflection of the proportion of nationals in the population (22%), and partly an expression of non-nationals returning to their home country after retirement. Abu Dhabi Region had most deaths with 317 and 219 for national males and females, respectively, and 929 and 233 for non-national males and females, respectively. The lowest numbers are in the Western Region with 35 and 11 for national males and females, respectively, and 138 and 11 for non-national males and females, respectively.

**Figure 1:**  
Deaths by Region, Nationality and Gender, Abu Dhabi Emirate, 2010



Source: Health Authority - Abu Dhabi (HAAD)

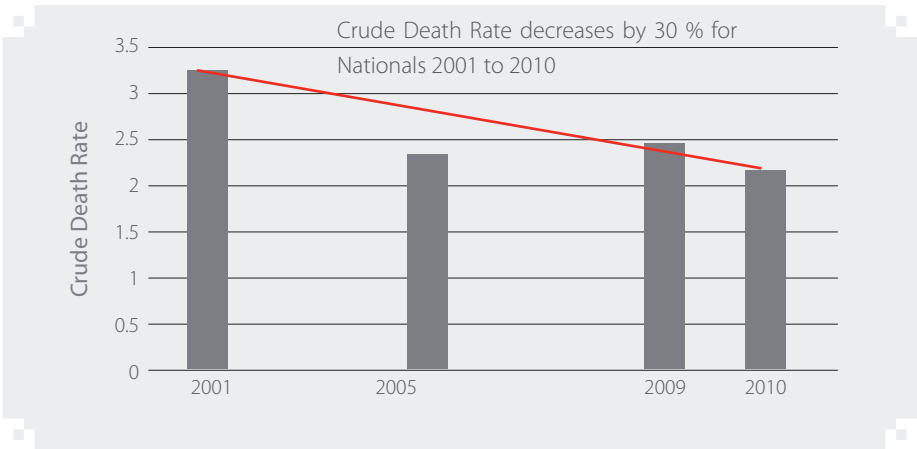
# Crude Death Rate

The Crude Death Rate (CDR) is an important and simple indicator to reflect improvements in the prevention of deaths and the standard of healthcare and emergency services provided by the government.

The CDR takes into account the sizes of the population in which deaths are occurring. Its numerator is the registered death incidents and its denominator is the population in the middle of the year in which the deaths occurred.

Generally, mortality rates for nationals by sex have decreased. In 2001 the CDR was 3.18 deaths per 1000 persons. It decreased to 2.38 and 2.37 in 2005 and 2009 respectively. The CDR dropped further to 2.23 in 2010, which is a reduction by 30% from 2001 to 2010.

**Figure 2:**  
Crude Death Rate Nationals, Abu Dhabi Emirate



Source: Statistics Centre - Abu Dhabi

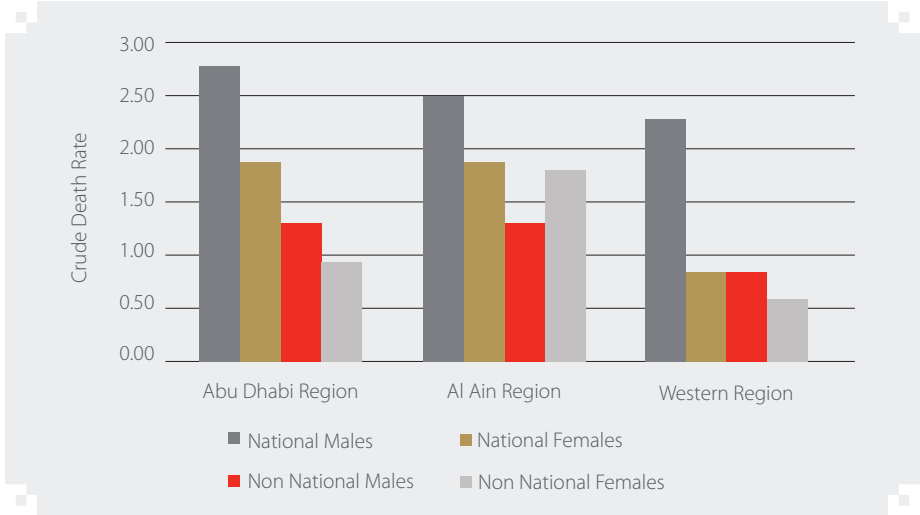


For non-nationals, the CDR decreased from 2001, when it was 1.9 death incidents per 1000 persons, to 1.23 death incidents per 1000 in 2010, a 35.3% decrease between 2001 and 2010, indicating health improvements for both nationals and non-nationals in Abu Dhabi Emirate.

In 2010, the CDR was 1.46 for the whole Emirate, It was 1.71 in Al Ain Region, with 1.65 for males and 1.82 for females. This is higher than that of Abu Dhabi Region where the total rate was 1.43, comprising 1.51 and 1.25 for males and females respectively.

By comparing the rates by nationality and region, it is found that CDR among nationals is 2.23, with 2.35 for Abu Dhabi Region and 2.17 for Al Ain. The CDR for non-nationals was 1.23, with 1.20 in Abu Dhabi Region and 1.48 in Al Ain Region.

**Figure 3:**  
**Crude Death Rate (Per 1000 Population) by Nationality, Gender and Region, Abu Dhabi Emirate 2010**



Source: Health Authority - Abu Dhabi (HAAD)

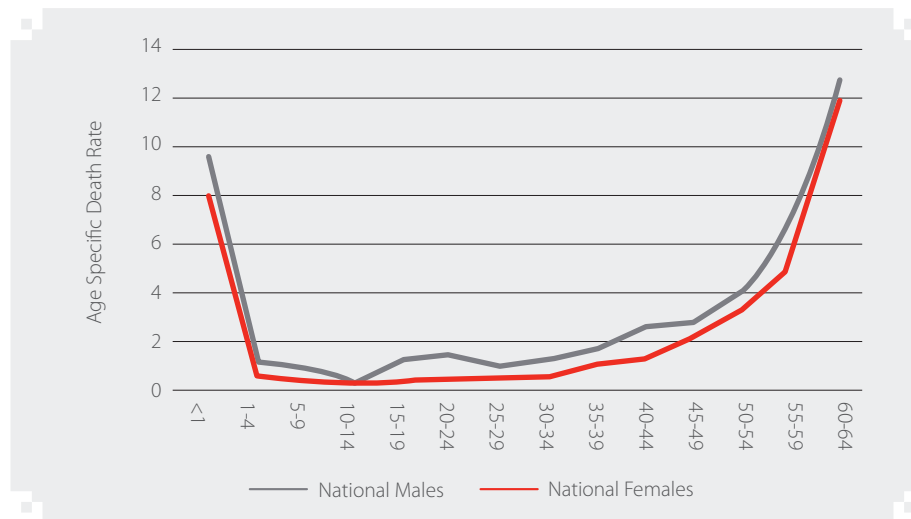
## Age and Sex Specific Death Rates (ASDR)

Death rates by age and sex are important rates giving more precise information to separately analyse the mortality level of males and females of each age category. The mortality rate for an age and sex group is the number of deaths in that age/sex group per 1000 population in the group.

In 2010, the death rates by age and sex for nationals are higher among males than they are among females in all age categories except for the age groups 10-14 years and 70-74 years. Death rates for national children younger than 1 year are higher for males (9.5 per 1000) than females (7.8). There is a large decrease in the rates for both sexes in the age category of 1 to 4 years, with 0.9 per 1000 for males and 0.4 for females. Starting from this category, the rates gradually decreased for both sexes to the age category 15-19 years, where the rate increased to 0.90 for males and 0.23 for females. Then, the rate fluctuated in the age categories of 20-24, 25-29 and 30-34 till reaching the age category 35-39 years. Thereafter, the ASDR experienced a gradual and continuing increase for both males and females.

**Figure 4:**

Age Specific Death Rate for Nationals (Per 1000 Population) (0 – 64 years) by Gender, Abu Dhabi Emirate – 2010



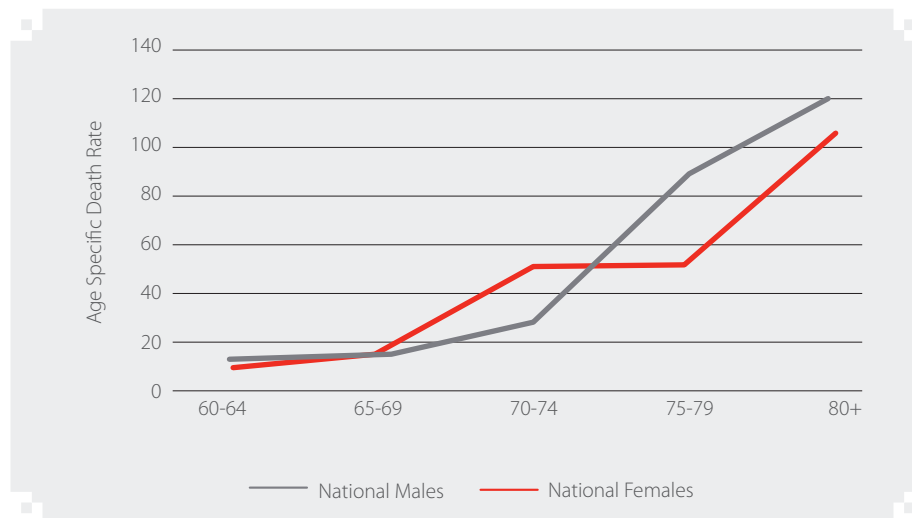
Source: Statistics Centre - Abu Dhabi

\* Age range truncated in the figure to depict variation for these age groups

%  
4  
4  
8  
%  
9  
5  
1

**Figure 5:**

Age Specific Death Rate for Nationals (Per 1000 Population) (60 years and over) by Gender, Abu Dhabi Emirate – 2010

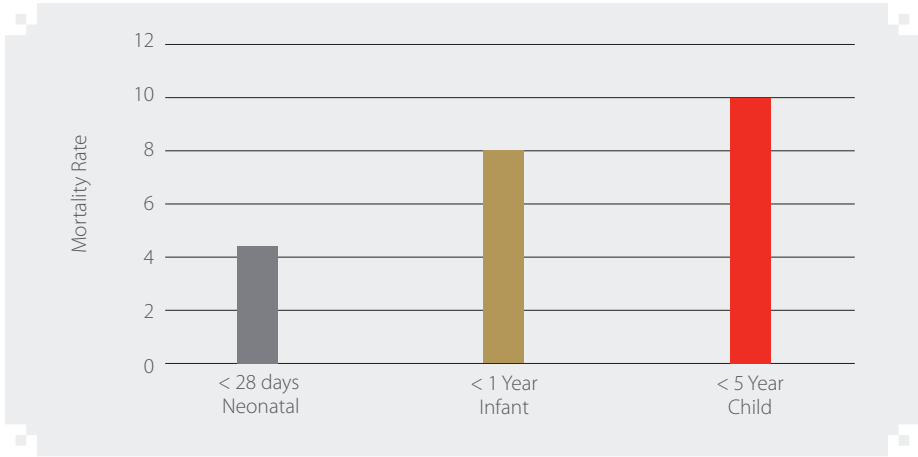


Source: Statistics Centre - Abu Dhabi

# Part 2: Child Mortality

Child Mortality forms a considerable share of all deaths, especially among the infants less than 1 year of age. The problems facing infant mortality statistics are to be addressed as the registration of infant deaths is not complete; a case might not be registered in the same domicile as their usual residence, which provides a source of error when comparing this data upon registration to population by place of usual residence. This is clear in the case of infant deaths in the Western Region, in which case Infant and Child Mortality Rates are not published by the Statistics Centre – Abu Dhabi.

**Figure 6:**  
child Mortality Rates Abu Dhabi Emirate, 2010

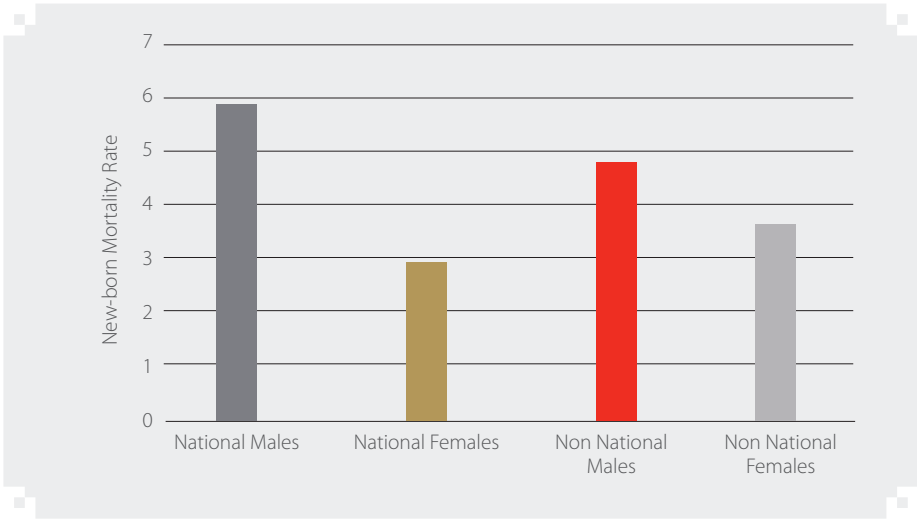


Source: Statistics Centre - Abu Dhabi

# New-born Mortality Rates

New-born infant death rates (under 1 month) indicate 4.6 deaths per 1000 live-born nationals, with 5.9 for males and 2.9 for females. As for distribution by region, the Abu Dhabi region had 4.7 deaths per 1000 with 6.7 for males and 2.3 for females while Al Ain region has 4.8 deaths per 1000 live-born with 5.4 and 3.9 for males and females respectively.

**Figure 7:**  
New-born Mortality rates (under one month) by Nationality and Gender, Abu Dhabi - 2010



Source: Statistics Centre - Abu Dhabi

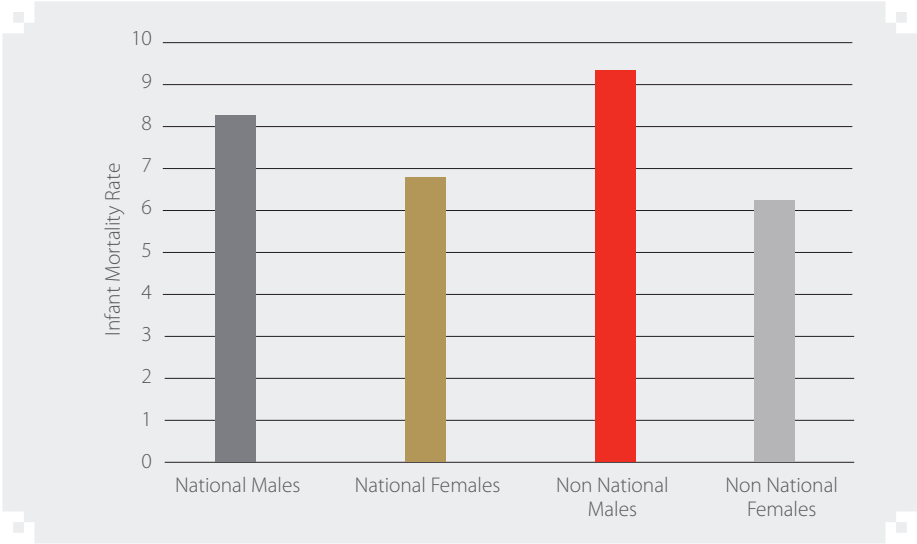
# Infant Mortality Rates

The Infant Mortality Rate (below 1 year) was 8.0 per 1000 live-born in 2010. As for distribution by sex, males were 9.1 and females 6.7 per 1000 live-born. By comparing these rates by region, Abu Dhabi region was 9.5 and 6.6 for males and females respectively and Al Ain region was 9.1 and 7.7 for males and females respectively.

Rates for nationals show 7.8 infant death cases per 1000 live-born, with 9.2 and 7.2 for males and females respectively for Abu Dhabi Region and 7.9 and 6.7 for males and females respectively for Al Ain Region. This indicates that Abu Dhabi Region has higher mortality rates among national new-born infants.

Rates for non-nationals show 7.8 infant deaths per 1000 live-born, with 9.4 and 5.7 for males and females respectively for Abu Dhabi Region and 10.3 and 7.6 for males and females respectively for Al Ain Region.

**Figure 8:**  
Infant Mortality rates (below one year) by Nationality and Gender, Abu Dhabi Emirate - 2010

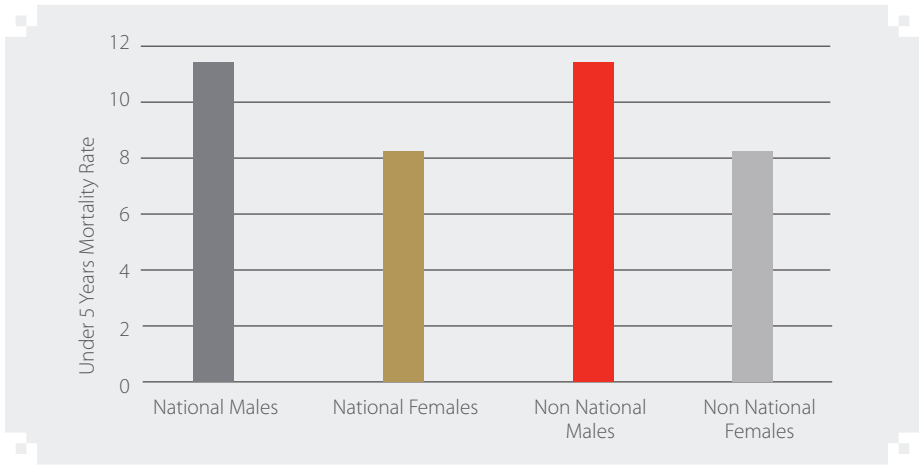


Source: Statistics Centre - Abu Dhabi

# Under 5 years Mortality Rates

The Mortality rate for children under the age of five years is one of the most important indicators measuring healthcare and welfare improvement all over the world. Reducing under-five-year old child mortality to two thirds between 1990 and 2015 is an indicator of development sought by countries in cooperation with the UN. Child Mortality Rates (under five years of age) among nationals show 10.0 child deaths per 1000 live-born, with 11.3 per 1000 males live-born and 8.3 per 1000 female live-born. As for their distribution by region, the Child Mortality Rate of Abu Dhabi Region was 13.1 for males and 9.5 for females and for of Al Ain Region Child Mortality Rates was 10.2 for males and 7.0 for females.

**Figure 9:**  
Under 5 years Mortality rates (per 1,000 live born) by Nationality and Gender, Abu Dhabi Emirate - 2010



Source: Statistics Centre - Abu Dhabi

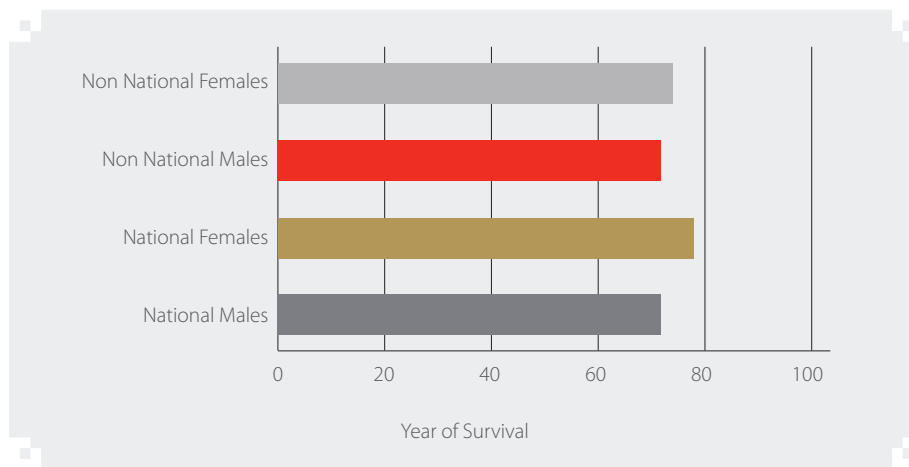
## Part 3: Life Expectancy and Survival

Life expectancy at birth varies by nationality, gender and region. In 2010, the life expectancy at birth was 75.9 years for the whole emirate, 74.9 years for males and 77.0 years females, and by region it was 75.9 for Abu Dhabi Region and 74.7 years for Al Ain Region.

Life expectancy for all nationals is 76.2 years with 74.1 years for males and 78.4 years for females. The life expectancy by region for males was 74.6 years and 74.0 years in Abu Dhabi Region and Al Ain Region, respectively, and for females 77.2 years and 75.4 years respectively.

**Figure 10:**

**Life Expectancy by Nationality and Gender, Abu Dhabi Emirate, 2010**



Source: Statistics Centre - Abu Dhabi

The percentage of live-born surviving till the age of 65 years in the Emirate of Abu Dhabi reached 85.8% in 2010, with a lower percentage among national males than national females; 83.2% and 87.0% respectively. The percentage of live-born surviving till the age of 65 years among nationals and non-nationals was convergent with 85.0% and 84.9% respectively. Values of the same year for Abu Dhabi and Al Ain Regions were 86.0% and 83.7% respectively.

In 2010, the percentage of individuals aged 15 years old expected to live to 60 years in the Emirate of Abu Dhabi was 93.0%, where nationals accounted for 91.7%, while the percentage was slightly higher for the non-nationals with 92.9%. It was lower among national males than national females with 90.1% for national males and 93.4% for national females. Of this percentage, the values of the same year for Abu Dhabi and Al Ain regions were 93.3% and 91.8% respectively.



# Definitions

## Age Specific Death Rate (ASDR)

The number of death incidents of an age group taking place within a period of time (usually one calendar year) per 1000 population of the same age category as at the middle of that period.

## Crude death rate

The number of death incidents taking place within a period of time (usually one calendar year) per 1000 population as at the middle of that period.

## Death

The death incident is "the state of permanent end of all aspects of life of an individual at any time after birth including psychosis, cardiac arrest, respiratory arrest, response arrest". This definition is related to the live-birth and excludes the category of the stillbirth and all other cases of foetus loss, i.e. spontaneous abortion and induced abortion.

## Infant mortality rate

The number of death incidents per 1000 live-births within a certain year before completing the first year of life.

## Neonatal mortality rate (less than one month)

The number of deaths within a year of infants whose age is 28 days or less per 1000 live-births within the same year.

## The life expectancy at birth

The life expectancy at birth is defined as the average number of years to be lived by a new born baby if he/she experiences throughout his/her life the set of age-specific mortality rates observed in a certain time period.

## Under 5 Years mortality rate (Under-five) (per 1000 live-born)

The number of death incidents of children under the age of five within a certain year per 1000 live-births within the same year.

# Tables

**Table 1: Deaths by Nationality, Gender and Region, Abu Dhabi Emirate 2010**

Nationality & Gender	Total Emirate	Abu Dhabi Region	Al Ain Region	Western Region
<b>Total</b>	<b>2853</b>	<b>1698</b>	<b>960</b>	<b>195</b>
Males	2034	1246	615	173
Females	819	452	345	22
<b>Nationals</b>	<b>965</b>	<b>536</b>	<b>383</b>	<b>46</b>
Males	572	317	220	35
Females	393	219	163	11
<b>Non-Nationals</b>	<b>1888</b>	<b>1162</b>	<b>577</b>	<b>149</b>
Males	1462	929	395	138
Females	426	233	182	11

Source: Statistics Centre - Abu Dhabi

\* Excluding 24 case with not stated Nationality or Gender

**Table 2: Crude Death Rate (Per 1000 Population) by Nationality, Abu Dhabi Emirate**

Nationality	2001	2005	2009	2010
<b>Total</b>	<b>2.23</b>	<b>1.78</b>	<b>1.64</b>	<b>1.46</b>
Nationals	3.18	2.38	2.37	2.23
Non-Nationals	1.91	1.58	1.41	1.23

Source: Statistics Centre - Abu Dhabi

**Table 3: Crude Death Rate (Per 1000 Population) by Nationality, Gender and Region, Abu Dhabi Emirate 2010**

Nationality & Gender	Total Emirate	Abu Dhabi Region	Al Ain Region	Western Region
<b>Total</b>	<b>1.46</b>	<b>1.43</b>	<b>1.71</b>	<b>0.97</b>
Males	1.49	1.51	1.65	1.02
Females	1.4	1.25	1.82	0.71
<b>Nationals</b>	<b>2.23</b>	<b>2.35</b>	<b>2.17</b>	<b>1.62</b>
Males	2.63	2.77	2.51	2.22
Females	1.82	1.92	1.82	0.87
<b>Non-Nationals</b>	<b>1.23</b>	<b>1.2</b>	<b>1.48</b>	<b>0.86</b>
Males	1.26	1.3	1.36	0.89
Females	1.14	0.92	1.8	0.6

Source: Statistics Centre - Abu Dhabi

**Table 4: Age Specific Death Rates (per 1000 population) by Nationality and Gender, 2010**

Age Group	Nationality and Gender								
	Nationals			Non-Nationals			Total		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Total	2.6	1.8	2.2	1.3	1.1	1.2	1.5	1.4	1.5
Less than 1 Year	9.5	7.8	8.7	8.8	7.0	8.0	9.1	7.4	8.3
1-4	0.9	0.4	0.6	0.4	0.5	0.4	0.6	0.5	0.5
5-9	0.6	0.2	0.4	0.3	0.1	0.2	0.4	0.2	0.3
10-14	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1
15-19	1.0	0.2	0.6	0.3	0.1	0.2	0.6	0.1	0.4
20-24	1.2	0.4	0.8	0.9	0.2	0.6	0.9	0.3	0.7
25-29	0.8	0.3	0.6	0.8	0.3	0.7	0.8	0.3	0.7
30-34	1.0	0.4	0.7	0.7	0.3	0.6	0.7	0.3	0.7
35-39	1.4	0.9	1.2	0.8	0.6	0.7	0.8	0.6	0.8
40-44	2.3	1.2	1.7	1.1	0.8	1.1	1.2	0.9	1.2
45-49	2.6	2.0	2.3	1.3	1.6	1.4	1.4	1.7	1.4
50-54	3.9	3.1	3.5	2.7	2.8	2.7	2.8	2.9	2.8
55-59	6.7	5.1	6.0	4.6	9.4	5.2	4.9	7.5	5.4
60-64	12.6	11.9	12.3	11.9	18.9	13.3	12.2	15.2	13.1
65-69	16.7	16.6	16.6	24.8	27.3	25.6	20.7	20.3	20.6
70-74	28.8	48.0	37.0	38.0	40.8	39.2	32.7	45.3	38.1
75-79	84.4	50.9	68.3	109.5	81.4	94.1	92.3	61.1	76.7
80+	119.7	104.9	112.6	163.7	127.8	141.2	131.5	115.0	122.9

Source: Statistics Centre - Abu Dhabi

**Table 5: New-born Mortality Rate (under 1 month) (Per 1000 Live Births) by Nationality, Gender and Region, 2010\***

Nationality & Gender	Total Emirate	Abu Dhabi Region	Al Ain Region
<b>Total</b>	<b>4.5</b>	<b>4.1</b>	<b>5.5</b>
Males	5.5	5.4	6.1
Females	3.3	2.7	4.7
<b>Nationals</b>	<b>4.6</b>	<b>4.7</b>	<b>4.8</b>
Males	5.9	6.7	5.4
Females	2.9	2.3	3.9
<b>Non-Nationals</b>	<b>4.2</b>	<b>3.5</b>	<b>6.2</b>
Males	4.7	4.2	6.6
Females	3.6	2.8	5.8

Source: Statistics Centre - Abu Dhabi

\* Excluding 8 case with not Stated Nationality or Gender

Specific values for the Western Region are excluded due to technical issues, however are included in totals

**Table 6: Infant Mortality Rate (Under 1 year) (Per 1000 Live Births) by Nationality , Gender and Region, 2010\***

Nationality & Gender	Abu Dhabi Emirate	Abu Dhabi Region	Al Ain Region
<b>Total</b>	<b>8.0</b>	<b>8.2</b>	<b>8.2</b>
Males	9.1	9.5	9.1
Females	6.7	6.6	7.1
<b>Nationals</b>	<b>7.8</b>	<b>8.4</b>	<b>7.5</b>
Males	8.3	9.2	7.9
Females	6.9	7.2	6.7
<b>Non-Nationals</b>	<b>7.8</b>	<b>7.6</b>	<b>9.0</b>
Males	9.3	9.4	10.3
Females	6.2	5.7	7.6

Source: Statistics Centre - Abu Dhabi

\* Excluding 8 cases with not Stated Nationality or Gender

Specific values for the Western Region are excluded due to technical issues, however are included in totals

**Table 7: Child Mortality Rate (Under 5 years)(Per 1000 Live Births) by Nationality, Gender and Region, 2010\***

Nationality & Gender	Abu Dhabi Emirate	Abu Dhabi Region	Al Ain Region
<b>Total</b>	<b>10.0</b>	<b>10.6</b>	<b>9.7</b>
Males	11.5	12.3	11.1
Females	8.4	8.8	8.1
<b>Nationals</b>	<b>10.0</b>	<b>11.5</b>	<b>8.8</b>
Males	11.3	13.1	10.2
Females	8.3	9.5	7.0
<b>Non-Nationals</b>	<b>9.7</b>	<b>9.7</b>	<b>10.5</b>
Males	11.0	11.4	11.5
Females	8.2	7.9	9.4

Source: Statistics Centre - Abu Dhabi

\*Excluding 1 case with not stated Nationality or Gender

Specific values for the Western Region are excluded due to technical issues, however are included in totals

**Table 8: Life Expectancy at Birth(in Years) by Nationality , Gender and Region, Abu Dhabi Emirate, 2010**

Nationality / Region	Total *	Males	Females
Total	75.9	74.9	77
Nationals	76.2	74.1	78.4
Non-Nationals	74.6	74.3	75
Abu Dhabi Region	75.9	74.6	77.2
Al-Ain Region	74.7	74	75.4
Western Region	-	-	-

Source: Statistics Centre - Abu Dhabi

\* Some specific values are excluded due to technical issues, however are included in totals

**Table 9: Percentage of Births Surviving to Age 65 Years by Nationality, Gender and Region, 2010**

Nationality / Region	Total *	Males	Females
<b>Total</b>	<b>85.8</b>	-	-
Nationals	85.0	83.2	87.0
Non-Nationals	84.9	-	-
Abu Dhabi Region	86.0	-	-
Al-Ain Region	83.7	-	-

Source: Statistics Centre - Abu Dhabi

\* Some specific values are excluded due to technical issues, however are included in totals

**Table 10: Percentage of Individuals Aged 15 who will Survive to Age 60 Years by Nationality, Gender and Region, 2010**

Nationality / Region	Total *	Males	Females
<b>Total</b>	<b>93.0</b>	-	-
Nationals	91.7	90.1	93.4
Non-Nationals	92.9	-	-
Abu Dhabi Region	93.3	-	-
Al-Ain Region	91.8	-	-

Source: Statistics Centre - Abu Dhabi

\* Some specific values are excluded due to technical issues, however are included in totals

