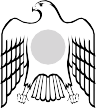


**UAE NATIONAL HEALTH**

**SURVEY REPORT 2017⁄2018**

**UAE NATIONAL HEALTH SURVEY REPORT 2017-2018**

**STATISTICS & RESEARCH CENTER (SARC)**









**WORD FROM THE MINISTER OF HEALTH AND PREVENTION**

The Ministry of Health & Prevention aims to achieve a world-class healthcare system by offering exceptional services delivered in a sustainable surrounding. The UAE National Agenda 2021 has been put forth as a comprehensive strategy to improve health, education, infrastructure, economy, judicial process, public safety, and overall health and well-being in the United Arab Emirates. Our strategic pillars focus on providing comprehensive and cutting-edge healthcare, evidence-based research, leading services and processes, and cost-effective innovations supporting this vision.

Preserving the momentum to achieve the National Vision 2021 goals is only possible if we have the political will and the capacity to prioritize timeliness, regular and reliable data collection to guide public health interventions and policy decisions. Ministry of Health and Prevention has placed a strong focus and attention to deliver healthcare services that is responsive to the needs of individuals along with providing the most trusted health- related data using national health surveys to effectively monitor the health of the nation.

We further look forward to the shared joint successes in advancing healthcare in the UAE and engaging our partners on this journey to ensure quality healthcare for all.

AbdulRahman bin Mohamed Al Owais

Minister of Health & Prevention

**WORD FROM THE ASSISTANT UNDERSECRETARY**

The Ministry of Health & Prevention (MoHAP) – Statistics & Research Centre (SRC) takes pleasure in presenting the principal report of the United Arab Emirates World Health Survey (UAE WHS) 2017-2018, in which the detailed results of the survey are further elaborated upon.

The UAE WHS 2017-2018 was funded by the Ministry of Health & Prevention. The collaborative nature between local entities made the success of the survey possible. The Federal Competitiveness & Statistics Authority (FCSA), WHO EMRO office, Abu Dhabi Department of Health, Dubai Health Authority, Abu Dhabi Statistics Center, and Dubai Statistics Center provided the technical support required.

The UAE government and leadership believe in providing the best quality of health system and health care to the population as it is an essential factor in the continuous prosperity of the nation. Moreover, the UAE Vision 2021 National Agenda aims to achieve a world-class healthcare system which can be achieved with the government’s concerted efforts in collecting health data, supporting research and development in the region, and working closely on monitoring and evaluation of both existing and future health policies.

The main objective of the survey is to provide comprehensive data on household health, risk factors for non-communicable diseases, under 5 health indicators including immunization coverage, mortality, family planning, and fertility preferences, as well as maternal and child health, and health expenditure to be used by program managers and policy makers to evaluate and improve existing programs. The data obtained will be useful for researchers and scholars interested in analyzing trends in the demographic parameters of the UAE as well as conducting comparative, regional or cross-national studies and in-depth analyses.

The UAE is a melting pot of nationalities and cultures where people from all over the world come to live and work. Therefore, the sample is nationally representative by having 40% locals and 60% non-local residents included, and has been designed to produce estimates of major survey variables at the national level, for the country’s seven Emirates. Approximately 9,000 households and more than 6,000 ever-married women were interviewed for the survey.

We would like to end by acknowledging the continuous support and effort from all our stakeholders without whom we could not have achieved the successful response rate of 94% and spreading awareness across the nation. Thank you to all the individuals who worked hard day and night, weekdays and weekends, on the success of the UAE WHS.

His Excellency Dr Hussain Mohammed Al Rand,

Assistant Undersecretary, Ministry of Health & Prevention

**WORD FROM THE DIRECTOR OF STATISTICS AND RESEARCH CENTER**

The Ministry of Health & Prevention (MoHAP) – Statistics & Research Centre (SRC) is pleased to present this report. The National Health Survey (NHS) is a part of Ministry of Health and Prevention ongoing surveillance of the health status of the UAE population. It provides useful information on the health state description and prevalence of major non-communicable diseases for example, diabetes Mellitus, cardiovascular diseases and hypertension together with associated risk factors such as smoking, and obesity from a representative sample of the resident population.

This report guides us to understand where estimates or data are available and where we lack insights. We are at a pivotal moment to ensure continued focus on measuring the health-related indicators. Our primary objectives are to improve the data collection at the source, strengthen the capacity of the country for data analysis along with introducing innovation in data capture, dissemination, and analysis.

Our sincere thanks is extended to Steering and Technical working committees that oversaw the implementation of the survey and to all those who helped in processing, collecting, and presenting this data at the country and international levels. UAE WHS 2017-2018 could not have been produced without this enormous dedicated collective effort. We further plan to improve the statistical analysis, strengthen civil registration and vital statistics systems and expand support for the dissemination and curation of national data along with promoting the availability of quality and timely data for the coming era.

I would like to gratefully acknowledge all who have, in one way or another contributed to the successful completion of UAE WHS 2017-2018. I would also thank all the survey participants who have given their time to take part and whose support made this report possible.

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This report summarizes the findings of the 2017-2018 UAE World Health Survey that was led by the Statistics and Research Centre, Ministry of Health & Prevention.

IQVIA provided technical assistance and implemented the field work for this survey.

The UAE World Health Survey 2017-2018 is part of the worldwide World Health Surveys Program, which is designed to collect data on household health, prevalence of risk factors for non-communicable diseases, and related clinical and biochemical indicators.

Additional information about the UAE WHS 2017-2018 survey may be obtained from the Statistics & Research Centre, Ministry of Health & Prevention, Muhaisna 2, beside Etisalat Academy on Sheikh Muhammed bin Zayed Road, Dubai.

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The Ministry of Health & Prevention (MOHAP) is indebted for the support of countless individuals, institutions, governments, nongovernmental and international organizations for their continual collaboration during this journey.

We wish to express our sincere gratitude for the generous support, and hard work offered by the employees of different sections of the Ministry of Health & Prevention (MOHAP). Without their dedication, support, and expertise this report would not have been possible.

We are thankful to and fortunate enough to get constant encouragement, support, advises and guidance from all the stakeholders and steering committees, the success and outcome of this project required plenty of guidance and assistance and we are extremely privileged to have got this all from the joint efforts .

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# GLOSSARY

|  |  |
| --- | --- |
| AED | Arab Emirates Dirham (Official Currency of UAE) |
| ANC | Antenatal care |
| BCG | Bacillus Calmette-Guérin (vaccine) |
| BMI | Body Mass Index |
| CAPI | Computer-Assisted Personal Interview |
| CVA | Cerebrovascular Accident |
| CVD | Cardiovascular Diseases |
| DBP | Diastolic Blood Pressure |
| DHA | Dubai Health Authority |
| DoH | Department of Health, Abu Dhabi |
| DPT | Diphtheria pertussis tetanus (vaccine) |
| DSC | Dubai Statistics Center |
| EMRO | Eastern Mediterranean Regional Office (WHO) |
| FBS | Fasting Blood Sugar |
| FCSA | Federal Competitiveness & Statistics Authority |
| HbA1C | Glycosylated Hemoglobin |
| HepB | Hepatitis B (vaccine) |
| HiB | Haemophilus influenzae type B (vaccine) |
| IUD | Intra-uterine device |
| IPV | Injectable Polio Vaccine |
| LAM | Lactational amenorrhea method |
| MOHAP | Ministry of Health and Prevention |
| NCDs | Non Communicable Diseases |
| OPV | Oral Polio Vaccine |
| PCV | Pneumococcal conjugate vaccine |
| PNC | Postnatal care |
| PSU | Primary sampling unit |

|  |  |
| --- | --- |
| RV1 | Rotavirus vaccine |
| SARC | Statistics and Research Center |
| SBP | Systolic Blood Pressure |
| SCAD | Statistics Center Abu Dhabi |
| UAE WHS | United Arab Emirates World Health Survey |
| WHO | World Health Organization |
| WHO STEPS | STEPwise approach to noncommunicable disease risk factor surveillance (STEPS) |

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# WHO FACTSHEET INDICATORS



**UAE (184) STEPS Survey 2017-2018**

**Fact Sheet**

The STEPS survey of non-communicable disease (NCD) risk factors in [UAE/184] was carried out from Nov 2017-Apr 2018. [UAE/184] carried out Step 1, Step 2 and Step 3. Socio demographic and behavioral information was collected in Step 1. Physical measurements such as height, weight and blood pressure were collected in Step 2. Blood glucose and cholesterol levels were checked in Step 3. The survey was a population-based survey of adults aged 18+. 10,000 Randomly selected Households across all seven Emirates were selected as sample design was used to produce representative data for that age range in [UAE/184]. A total of 8214 adults participated in the survey. The overall response rate was 87% among Adults Participants. A repeat survey is planned for 2022-2023.

|  |  |  |  |
| --- | --- | --- | --- |
| **Step 1 Tobacco Use** | | | |
| Percentage who currently smoke tobacco | **9.1%**  (8.3-10.0) | **15.7%**  (14.2-17.2) | **2.4%**  (1.8-3.0) |
| Percentage who currently smoke tobacco daily | **8.0%**  (7.2-8.8) | **13.9%**  (12.4-15.3) | **2.0%**  (1.4-2.5) |
| *For those who smoke tobacco DAILY* | | | |
| Average age started smoking (years) | **20.2**  (19.6-20.7) | **20.0**  (19.4-20.5) | **21.6**  (19.7-23.6) |
| Percentage of daily smokers smoking manufactured cigarettes | **100.0%**  (100.0-100.0) | **100.0%**  (100.0-100.0) | **100.0%**  (100.0-100.0) |
| Mean number of manufactured cigarettes smoked per day (by smokers of manufactured cigarettes) | **12.0**  (10.9-13.1) | **12.1**  (10.9-13.2) | **11.655**  (-- - --)\* |
| *\* Total number of respondents are very low = 46* | | | |
| **Step 1 Alcohol Consumption** | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Results for adults aged 18-69 years** (incl. 95% CI) (adjust if needed) | **Both Sexes** | **Males** | **Females** |
| Percentage who are lifetime abstainers | **94.8%**  (94.0-95.6) | **93.3%**  (92.0-94.6) | **96.3%**  (95.5-97.2) |
| Percentage who are past 12-month abstainers | **0.9%**  (0.6-1.2) | **0.8%**  (0.5-1.2) | **0.9%**  (0.5-1.3) |
| Percentage who currently drink (drank alcohol in the past 30 days) | **2.5%**  (2.0-3.0) | **3.7%**  (2.8-4.7) | **1.2%**  (0.8-1.6) |
| Percentage who engage in heavy episodic drinking  (6 or more drinks on any occasion in the past 30 days) | **1.4%**  (1.0-1.8) | **2.2%**  (1.4-3.0) | **0.5%**  (0.2-0.8) |
| **Step 1 Diet** | | | |
| Mean number of days fruit consumed in a typical week | **5.4**  (5.3-5.4) | **5.2**  (5.1-5.3) | **5.5**  (5.4-5.6) |
| Mean number of servings of fruit consumed on average per day | **1.6**  (1.5-1.7) | **1.5**  (1.5-1.6) | **1.7**  (1.6-1.7) |
| Mean number of days vegetables consumed in a typical week | **5.8**  (5.7-5.8) | **5.7**  (5.6-5.8) | **5.9**  (5.8-5.9) |
| Mean number of servings of vegetables consumed on aver- age per day | **1.9**  (1.8-2.0) | **1.9**  (1.7-2.0) | **2.0**  (1.9-2.1) |
| Percentage who ate less than 5 servings of fruit and/or vegetables on average per day | **82.8%**  (81.1-84.5) | **83.8%**  (81.7-85.9) | **81.8%**  (79.9-83.7) |
| Percentage who always or often add salt or salty sauce to their food before eating or as they are eating | **51.7%**  (49.3-54.1) | **47.7%**  (44.7-50.7) | **48.9%**  (46.2-51.6) |
| Percentage who always or often eat processed foods high in salt | **19.9%**  (18.2-21.5) | **20.3%**  (18.0-22.6) | **19.4%**  (17.4-21.4) |
| **Step 1 Physical Activity** | | | |
| Percentage with insufficient physical activity (defined as  < 150 minutes of moderate-intensity activity per week, or equivalent) \* | **70.8%**  (69.0-72.6) | **66.8%**  (64.5-69.1) | **74.8%**  (72.5-77.1) |
| Median time spent in physical activity on average per day (minutes) (presented with inter-quartile range) | **0.0**  0.0-25.7 | **0.0**  0.0-30 | **0.0**  0.0-20 |
| Percentage not engaging in vigorous activity | **90.5%**  (89.5-91.4) | **87.3%**  (85.9-88.8) | **93.6%**  (92.4-94.8) |
| **Step 1 Cervical Cancer Screening** | | | |
| Percentage of women aged 30-49 years who have ever had a screening test for cervical cancer |  |  | **14.6%**  (12.6-16.6) |
| **Step 2 Physical Measurements** | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Results for adults aged 18-69 years** (incl. 95% CI) (adjust if needed) | **Both Sexes** | **Males** | **Females** |
| Mean body mass index - BMI (kg/m2) | 27.8 | 27.8 | 27.9 |
| (27.6-28.0) | (27.5-28.1) | (27.5-28.2) |
| Percentage who are overweight (BMI ≥ 25 kg/m2) | 67.9% | 70.8% | 64.9% |
| (66.0-69.8) | (68.1-73.4) | (62.2-67.6) |
| Percentage who are obese (BMI ≥ 30 kg/m2) | **27.8%** | **25.1%** | **30.6%** |
| (26.1-29.4) | (22.8-27.4) | (28.1-33.0) |
| Average waist circumference (cm) | **NA** | **97.2** | **90.5** |
| (96.4-98.0) | (89.7-91.2) |
| Mean systolic blood pressure - SBP (mmHg), including those currently on medication for raised BP | **121.5**  (120.8-122.2) | **127.1**  (126.2-127.9) | **115.8**  (114.9-116.7) |
| Mean diastolic blood pressure - DBP (mmHg), including those currently on medication for raised BP | **81.9**  (81.4-82.4) | **84.5**  (83.9-85.2) | **79.2**  (78.6-79.8) |
| Percentage with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP) | **28.8%**  (27.0-30.6) | **37.8%**  (35.1-40.6) | **19.5%**  (17.5-21.6) |
| Percentage with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg) who are not currently on medication for raised BP | **72.5%**  (69.4-75.7) | **74.9%**  (71.2-78.6) | **67.8%**  (62.4-73.3) |
| **Step 3 Biochemical Measurement** | | | |
| Mean fasting blood glucose, including those currently on medication for raised blood glucose [choose accordingly: mmol/L or mg/dl] | **103.8**  (102.1-105.4) | **106.1**  (103.6-108.6) | **101.4**  (99.3-103.6) |
| Percentage with impaired fasting glycaemia as defined below |  |  |  |
| * plasma venous value ≥6.1 mmol/L (110 mg/dl) and <7.0 mmol/L (126 mg/dl) | **11.7%**  (10.0-13.3) | **13.6%**  (11.3-15.9) | **9.7%**  (7.8-11.6) |
| * capillary whole blood value ≥5.6 mmol/L (100 mg/dl) and <6.1 mmol/L (110 mg/dl) |  |  |  |
| Percentage with raised fasting blood glucose as defined below or currently on medication for raised blood glucose   * plasma venous value ≥ 7.0 mmol/L (126 mg/dl) * capillary whole blood value ≥ 6.1 mmol/L (110 mg/dl) | **11.8%**  (10.3-13.3) | **13.3%**  (11.2-15.4) | **10.3%**  (8.4-12.2) |
| Mean total blood cholesterol, including those currently on medication for raised cholesterol [choose accordingly: mmol/L or mg/dl] | **182.3**  (180.0-184.6) | **181.1**  (178.3-184.0) | **183.5**  (180.3-186.7) |
| Percentage with raised total cholesterol (≥ 5.0 mmol/L or ≥ 190 mg/dl or currently on medication for raised cholesterol) | **43.7%**  (41.3-46.0) | **44.4%**  (41.2-47.6) | **42.9%**  (39.8-46.1) |
| Mean intake of salt per day (in grams) | **NA** | **NA** | **NA** |
| **Cardiovascular disease (CVD) risk** | | | |

UAE NATIONAL HEALTH SURVEY 2017-2018

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Results for adults aged 18-69 years** | (incl. 95% CI) (adjust if needed) | **Both Sexes** | **Males** | **Females** |
| Percentage aged 40-69 years with a 10-year CVD risk ≥ 30%, or with existing CVD\*\* | | **2.7%** | **3.6%** | **1.7%** |
| **Summary of combined risk factors**   * current daily smokers * less than 5 servings of fruits & vegetables per day * insufficient physical activity * overweight (BMI ≥ 25 kg/m2) * raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP) | | | | |
| Percentage with none of the above risk factors | | **1.5%**  **(0.9-2.0)** | **1.8%**  **(0.9-2.6)** | **1.1%**  **(0.6-1.7)** |
| Percentage with three or more of the above risk factors, aged 18 to 44 years | | **49.5%**  **(47.1-51.9)** | **54.4%**  **(50.9-58.0)** | **45.1%**  **(42.0-48.2)** |
| Percentage with three or more of the above risk factors, aged 45 to 69 years | | **61.7%**  **(58.0-65.5)** | **63.3%**  **(58.2-68.4)** | **59.3%**  **(53.6-65.1)** |
| Percentage with three or more of the above risk factors, aged 18 to 69 years | | **52.5%**  **(50.5-54.6)** | **57.1%**  **(54.2-60.0)** | **47.9%**  **(45.3-50.6)** |

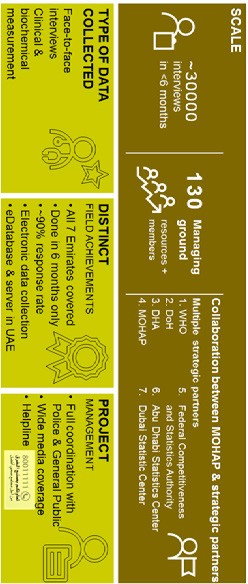
\*\* A 10-year CVD risk of ≥30% is defined according to age, sex, blood pressure, smoking status only current smokers, total cholesterol, and diabetes (previously diagnosed OR a fasting plasma glucose

concentration >7.0 mmol/l (126 mg/dl).

# SURVEY OVERVIEW

21

INTRODUCTION

UAE NATIONAL HEALTH SURVEY 2017-2018

## Background to the survey

Established on December 2, 1971, the United Arab Emirates (UAE) is a federation of seven emirates (Abu Dhabi, Ajman, Dubai, Fujairah, Ras Al Khaimah, Sharjah, and Umm Al Quwain). The discovery of oil drove significant economic and industrial growth in the UAE, which has impacted the demographic landscape of the nation. (Sheikh Saud bin Saqr Al Qasimi Foundation for Policy Research, 2015).

Population growth in the UAE is currently reported to be among the highest in world, with census data recording a seven-fold increase in population between the years of 1975 and 2005 (Population of the UAE, 2014). The fact that this growth is bolstered by an influx of migrant workers, coupled with the high percentage of men working in the expansive construction industry, means that a large portion of the demographic are pre-retirement age males. The UAE population for the year 2016 is 9,121,167 according to administrative records available with the Federal Competitiveness and Statistics Authority dated until 31 December 2016. The population administrative records also showed that 6,298,294 are male and 2,822,873 are female, making the gender split in the UAE 69% male and 31% female (Federal Competitiveness and Statistics Authority, FCSA 2016).

This ever-changing demographic landscape has had a direct impact on the healthcare landscape of the country, with evolving vital parameters such as life expectancy, under-5 mortality, age-standardized mortality, total fertility, etc. With an intention to accurately account for this change, UAE has been commissioning periodic nationwide demographic and health surveys.

The World Health Survey (WHS) is a large-scale, multi-round survey conducted in a representative sample of households in 70 countries that are members of World Health Organization. The WHS is a collaborative project between the World Health Organization and respective Ministries of Health in these 70 countries. Building on the 2000-01 WHO Multi-Country Survey Study, these surveys were launched by the World Health Organization to strengthen national capacity to monitor critical health outcomes and health systems through the fielding of a valid, reliable, and comparable household survey instrument. The first round of WHS was implemented between 2002 and 2004 in countries selected to represent all regions of the world. Study samples were nationally representative and probabilistically selected. Sampling weights were generated and adjusted for the population distribution with final post- stratification corrections for non-response. Household data includes a household roster, health insurance coverage, health expenditures, and indicators of permanent income or wealth. Individual level data include sociodemographic information, health state descriptions, health state evaluation, risk factors, chronic conditions, mortality, health care utilization, health systems responsiveness and social capital. UAE being a signatory to this collaborative project has undertaken 2 previous rounds of WHS – in 2003 and in 2009 (World Health Organization, 2016). These nationwide surveys were to be repeated every 5 years to reflect any changes in the healthcare indicators. The Federal Ministry of Health & Prevention of UAE is now keen to implement the 3rd round of the WHS starting 2017, retaining objectives as previous rounds with some additional objectives.

The UAE Ministry of Health and Prevention (MOHAP) over the past 10 years has taken social and

economic aspects of UAE into consideration when developing its health strategies as health constitutes an important aspect of the overall human development as well as national development.

As has been mentioned prominently by the MOHAP, the strategic objectives are the following:

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To provide excellent health services to UAE society according to the international standards

To improve the quality of existing systems & develop healthcare facilities & ensure accessibility in accordance to international standards Healthy Society.

To promote a healthy lifestyle in UAE Society to prevent it from lifestyle related diseases

Development of health care system to protect & control the community from communicable as well as non-communicable diseases.

To enhance the healthcare legislations and policies in UAE and to enforce its implementation in collaboration with the public and private sectors.

To ensure and guarantee the provision of all administrative services according to the standards of quality, efficiency and transparency.

To build innovation culture in the working environment.

The MOHAP has also paid special attention to coordinate its activities closely with other sectors that cater to the healthcare provision in the country as well as fostering cooperation with regional and international organizations.

By adopting such policies, the MOHAP achieved many of the objectives specified in its national plans and managed to provide high quality healthcare which has been widely recognized and lauded by professional and academic bodies.

Building on its first edition of the World Health Survey (WHS) conducted in 2009, the UAE MOHAP in collaboration with the WHO conducted the WHS 2017-2018 across the country. This version of the survey was a combination of behavioral interviews and STEPS survey. The STEPS is a WHO-developed, standardized but flexible framework for countries to monitor the main NCDs risk factors through questionnaire assessment and physical and biochemical measurements. STEPS survey methodology is expected to help implementing countries to develop their own surveillance system to monitor and fight against non-communicable diseases.

UAE NATIONAL HEALTH SURVEY 2017-2018

The results of the WHS are expected to aid the MOHAP in developing / enhancing strategies for the following sectors of health services delivery:

## Objectives of the survey:

Integrated health services and increase quality of care

Healthcare reform, community mobilization and maximizing access to quality services

Women’s health, maternal health and safe motherhood Child survival, breast feeding, nutrition

Family planning and reproductive health

Environment health

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The primary objectives of the WHS 2017-2018 in UAE were to obtain:

Measures of knowledge, attitudes, behaviors related to individual’s health competency and their trends across time

Quantifiable indicators of current health status and clinical, anthropometric and biochemical- markers

Information on national health behavior and service utilization indicators.

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These objectives will be focal point for gathering data on health behaviors that will be monitored across the community and health competency that will be measured at individual, family as well as community level.

## Methodology and Organization of the Survey

This section explains the important features of the UAE World Health Survey (WHS), including the sample design, the questionnaire and major aspects of the analysis of the survey. This includes the training procedure for interviewers and the data entry process for the completed questionnaires.

As the UAE WHS 2017-18 is a part of the World Health Survey series developed by the (WHO) which means to compile comprehensive baseline information on the health of populations in different countries and due to the standardized questionnaire, this information is also comparable between countries, and currently the WHS has been implemented in more than 70 countries.

The survey was designed on a modular basis, with the intention of providing low-cost information that supplements data from national health information systems in order to build up an evidence base for policymakers.

The initial preparation for the survey was done in coordination with a team of experts from across UAE, drawn from the fields of public health, epidemiology and statistics. The implementation was assisted by a technical team from the WHO EMRO. There were two main stakeholders in the UAE WHS 2017-18. These were the Federal Competitiveness and Statistics Authority (FCSA) and the Statistics & Research Center (SARC), Ministry of Health & Prevention, UAE.

The SARC team provided the main leadership to this project through the main steering committee and three sub-committees to help coordinate the planning and implementation of the WHS:

**The main steering committee** – constituted for the management and supervision of the national health survey project. The committee had significant role in the development and preparing the project plan, making vital decisions. It also had continues auditing over the project progress, monitoring the compliance of project implementation. Other responsibilities were assigned to the main committee such as leading and supervising the sub committees, liaising and coordinating with international stakeholders like WHO EMRO.

**The sampling sub committee** – constituted for review of the sampling plan with FCSA & other statistics authorities in UAE. The main task of this sub committee was to provide the Emirate level sample frames from the respective Emirates and consolidate them into a single sample frame before allocating them to the operational team to conduct the fieldwork. The sub committee was also responsible to check the validity of the households within individual clusters to ensure that only the most updated list of households with correct address and names were included for the survey. The sub committee also determined the eligibility criteria for households to be selected in the survey as well as the criteria for replacing a sample in case of low or non-response. The sub committee also decided on the total number of respondents to be selected from each household as well as the selection criteria for those respondents.



1

**The public health sub committee** – constituted for the review of the questionnaires, its final programming on the tablet computer and also on the data output from the survey. Working in close technical collaboration with the WHO EMRO office team, the sub committee determined the number of questions that can be added or modified within the expanded modules of the questionnaires. Accordingly, the sub committee deliberate on the feasibility of retaining certain questions including on culturally sensitive matters such as contraception, alcohol and substance abuse and including questions on risk factors for non-communicable diseases such as diet, tobacco usage and depression. The questionnaires to be used for the UAE WHS were modified and finalized into three modules, the Household questionnaire, Adult questionnaire which include the STEPS and Ever-married questionnaire.



2

**The marketing sub committee** – constituted for the review and coordination with civic, religious and law enforcement authorities to ensure smooth conduct of field work. Successful involvement of the general public in such large surveys was the key objective of the marketing sub committee to implement a well planned and executed public relationship campaign. The marketing sub committee headed by members of MOHAP used proven public relations (PR) tools and activities to promote positive attitudes and behaviors towards UAE WHS. These were hoped to increase public awareness



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and increasing the participation of communities. Key activities considered and implemented were: a Consultation and on-boarding of government bodies - at Emirate & Federal level.



b Public relations campaign using all channels - print and electronic c Different approaches successfully employed:

1. SMS campaigns
2. Toll free number set-up by MoHAP team in close working with the police to answer any question from general public about the survey

UAE NATIONAL HEALTH SURVEY 2017-2018

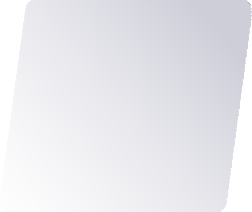
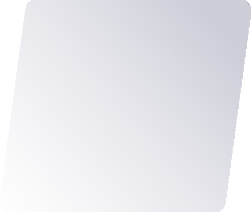
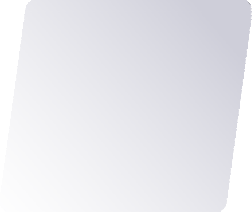
1. Banners and hoardings on UAE NHS at prominent public locations
2. Announcements in mosques during prayer times
3. Social media: Using social networking sites such as MOHP Facebook and Twitter
4. Radio announcements
5. Newspaper advertisements

## Project timelines

The project planning started in early 2017 with the discussions between the MOHAP and FCSA on the approach and methodology to the UAE WHS. These discussions also were held with the WHO EMRO team to ensure that the design adopted was consistent with the WHS done elsewhere in the World.

The subsequent activities of planning, survey questionnaire design, translations, validations, sampling design and final sample frame, programming on the CAPI tool and field work are as shown in the illustration below.

**2018**



Aug - Nov

Oct 2017

Sample Design and Final Sample Frame

(Sampling Committee)

Training, pilot & testing

(MOHAP+IQVIA)

**2017**

May - Sept

July - Nov

Review, translation and

Finalize Questionnaires (PH committee)

Programming and Server setup

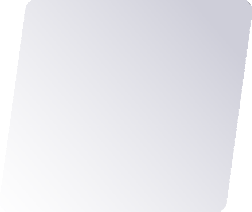
(PH Commiiee + IQVIA)



May 2018 - March 2019

Data cleaning, Data weights, tabulations & PH Committee Reviews final report preparation (MOHAP+IQVIA+FCSA)

**2019**



Nov - Apr (6 months)

Actual fieldwork (MOHAP+IQVIA)

## Sample Design

The UAE WHS was a nationally representative survey. To ensure that the sample of households and individuals who were interviewed were representative of all the seven Emirates, a detailed sample design was implemented and led by the FCSA.

In order to obtain reliable results for both citizens and non-citizens at the level of each Emirate, The first stage of sampling design was stratification of Each Emirate of the seven emirates into two strata, (except for some Emirates which use a stratification of more than two strata like the Emirate of Abu Dhabi), each strata was according to the nationality of Emirate population, strata 1: Emirati and strata 2: non-Emirati.

The second stage of sampling design was dividing each strata into clusters. The number of clusters per each strata will be depending on population size, geographical distribution of population, density of population per km2.

Each cluster was classified either as Emirati if more than 50% of its households were citizens, or Non- Emirati if more than 50% of its households were non-emirate.

The WHS sampling guidelines recommended a target sample size of 10000 households in UAE wherein the primary sampling units (PSUs) will be the households.

The FCSA provided operational definitions for the household which is (All persons living under one roof or occupying a separate housing unit (dwelling), having either direct access to the outside (or to a public area) or a separate cooking facility, share at meals and living in accommodation more than 6 months in the year preceded the survey. The members of a household shall be related by blood or

law, where they constitute a family. The household and may consist of a single family or some other grouping of people)

A household is classified as either:

a A one-person household is a person who makes provision for his or her own food or other essentials for living without combining with any other person to form part of a multi-person household; or

b A multi-person household (private families) is a group of two or more persons living together who share meals (‘eat out of the same pot’) and usually stay in the household for at least six months (continuous or intermittent) a year. They may be related or unrelated persons or constitute a combination of persons both related and unrelated. combination of persons both related and unrelated.1

For the UAE WHS, both one-person household and multi-person (private families) households were included.

The head of the household is a member of the household “15 years and older” whom the family considers to be its head and who is related to some or all of its members and is most often responsible for spending on it and does not have to be the oldest person, with highest income, or male.

Relationship to the head of the family is the social relationship between any member of the family and the head, and this field is fulfilled only for members of private families, whether a citizen or non-citizen. Who can qualify as head of the household?

± Husband / wife of the head of the family

± Son / daughter of the head of the family

± The son / daughter of the wife of the head of the family

± Father / mother of the head of the family

± The wife/husband of the son/daughter of the head of the family

± Grandson / granddaughter of the head of the family

± Brother / sister of the head of the family

± Grandfather / grandmother of the head of the family

± Father/mother-in-law of the husband/wife of the head of the family

± Another similarity is the case in which there is a relative to the head of the family but not from the cases mentioned earlier

As a background to the sampling exercise for the UAE WHS, the UAE population was divided into the following groups and subgroups:

1

Non-institutional population (people living in regular households):

a Emirati households

b Non-Emirati households

2

Institutional population:

a Emirati and non-Emirati population living in institutions (e.g., army barracks, hospitals, dormitories, prisons)

b Emirati and non-Emirati population living in collective households – which were defined as temporary residential units of group of individuals not related to one another but sharing the same living space

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c Labor camps – these were the residential settlements meant for the laborers working in the various construction and other infrastructure works across UAE.

The UAE WHS 2017-18 included only the non-institutional population and excluded the institutional population.

1. Report II. Household income and expenditure statistics. International Labour Organization. Seventeenth International Conference of Labour Statisticians. 2003.

The sample design and related descriptions reported in next sections refer only to the sample design for these non-institutional households.

The non-response rate from UAE nationals (Emirati households) for the previous survey conducted in UAE has been relatively small, less than 20%. Since the present round of UAE WHS involved completion of long and complex questionnaires by more than one individual in a household, coupled with many physical and biochemical measurements with specialized instruments, a higher rate of non-response was anticipated from the Emirati households. Hence, the proportion of the Emirati households in the sample frame was doubled to 40% (as against approximately 20% proportion of Emiratis in the general UAE population). The remaining 60% of the sample frame comprised of non-Emirati households.

## Sampling Frame

While Abu Dhabi, Dubai and Sharjah had recently held population censuses in their respective Emirates for immediate reference to prepare a sampling frame, the Northern Emirates of Ajman, Umm Al Quwain, Fujairah and Ras Al Khaimah did not have a recent population register to refer to. The Statistical Authorities on Abu Dhabi and Dubai provided the sample frames for their regions whereas the FCSA provided the sample frames for Sharjah and the 4 Northern Emirates.

The task of compiling the sample frames for all the 7 Emirates and providing the target sample frame for the field team was led by FCSA.

Due to different geographic settlements of Emirati and non-Emiratis, a cluster-based approach to sample was adopted. Each cluster identified had a fairly homogenous population type (Emirati or non-Emirati). A total of 1000 clusters were identified from across the 7 Emirates based on the sample frames provided by the respective statistical authorities. After selecting the required clusters from each of the Emirates, based on probability proportionate to population size, all the households within these clusters were enumerated. This was to ensure that all households in a given cluster had an equal chance of being selected in the final sampling frame.

After this enumeration procedure has been completed, the final sample was obtained. Random sampling methods were implemented to obtain the final sample of 15 households from each of cluster. These 15 households were identified with the details of the name of head of household, building name, street name and city in each Emirate. 10 households were determined to be selected for primary sample whereas 5 households were determined to be kept as reserve sample to compensate for low response or refusals.

Table 2.1 Sample size spread across the UAE

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| --- | --- | --- | --- | --- |
| **Households** | | | | |
| **No. of Clusters** | **Total** | **Non-Emirati** | **Emirati** | **Emirate** |
| 300 | 3000 | 1800 | 1200 | AUH |
| 300 | 3000 | 1830 | 1170 | DXB |
| 146 | 1460 | 1010 | 450 | SHJ |
| 64 | 640 | 440 | 200 | AJM |
| 44 | 440 | 220 | 220 | UAQ |
| 86 | 860 | 430 | 430 | RAK |
| 60 | 600 | 240 | 360 | FUJ |
| **1,000** | **10,000** | **5,970** | **4,030** | **TOTAL** |

## Sample weights:

Prior to the data tabulations and analysis, the data were weighted to account for differential selection probabilities and differential sizes of each of the clusters used in the selection of the final sample of households. These weights are calculated from the sizes of the different PSUs and to account for households that did not respond to the survey.

The sample design was not self-weighting design at the country level as mentioned before, but it is self-weighting at the stratum level prior to conducting the survey. This was Due to changes that could happen after conducting the survey like changes in the number of households covered in each cluster or non-response of some households; so it was important to calculate the final weights after completing the survey and cleaning the data for each cluster.

The basic weight for each household was equals to the reverse of the probability of selection the household in the sample (it calculated by multiply the probability of all stages).

Relative weight was also calculated to find a factor to change the sample from not self-weighting to the self-weighting sample, this factor is called the relative weight and this operation is applied to make use of the relative weight advantage.

Therefore, the relative weight calculated for each observation and the summation of relative weights will be equal to the total number of observations. This method provides high flexibility to the researchers when using the data for analysis purposes and deals with the results in the best way to estimate means, or proportions, or totals of the sample at different levels, like Emarah. The relative weight for each household from a specific cluster is equal to the adjusted weight of the cluster divided by the result of mean weight multiplied by the number of completed questionnaires.

After weighting the counts of respondents in each category, it may not be a round number; If this was the case, the count was rounded to the nearest whole number. Therefore, one will observe that in many tables described in later sections, the total number of respondents may differ from the sum of the respondents in each of the categories.

## Survey Process and Questionnaires

The questionnaires used in the UAE WHS were adapted from the international survey instruments provided by the WHO, with separate modules for various components. The modules cover key aspects of the health system outcomes, inputs to the health system and aspects of the way the health systems function.

The different modules cover:

± The health states of the population: measuring health in multiple domains.

± The risk factors and their association with health states: measuring various risk factors such as tobacco, nutrition and physical activity levels.

± The responsiveness of health systems: whether a health system meets the legitimate expectations of the population.

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± The coverage, access and use of key health services such as immunization, treatment of childhood illness, safe motherhood interventions, essential treatments, mental health interventions, etc.

± The health care expenditures: how much households contribute to the health system.

There were totally 3 distinct questionnaires used in the survey.

While the questionnaires retained the core variables by the WHO, certain sections were modified to include UAE specific context such as functioning assessment for elderly aged more than 60 years old.

The household questionnaire

The adult questionnaire comprising of a detailed behavioral component and another smaller questionnaire referred to as STEPS questionnaire that used to assess certain physical and biochemical parameters of health related to the survey objectives.

The ever-married questionnaire used to assess health parameters of married women and health status of children under 5.

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**Face-to-face Interviews**

Household Questionnaire:

The aim of the household questionnaire is to collect information that is common to all those who live in the same household. To answer the household questionnaire one person, a key informant, was interviewed from each of the sampled households.

This questionnaire first collected information regarding all the residents in the selected household, including their ages, education, marital status and whether any person had a disability or there were any deaths in the household. Further questions on the household questionnaire related to information about the facilities in the household, expenditure on health and other items, assets owned and the income of the household. The household questionnaire recorded every member of the household in a household roaster. Using a random selection algorithm programmed in the CAPI tool, one adult was randomly selected from the list of eligible men and women in the household roaster to answer the individual questionnaire.

Adult Questionnaire (had both behavioral, physical & biochemical components) :

One person aged over 18 from each of the sampled households was randomly (using a random selection algorithm programmed in the CAPI tool) selected to answer the individual questionnaire. This individual may or may not have to be the same person who answered the household questionnaire.

The individual questionnaire consisted of two main components: the behavioral component and a physical & biochemical component.

The behavioral component of adult interview included the following sections:

Sociodemographic characteristics: This section includes questions on the date of birth, education, and marital status.



1

Work history and benefits: Information regarding the working history of the individual was collected, reasons for not working and occupation data was also collected.



2

Risk factors and preventative health behavior: this module contained questions related to risk factors such as consumption of tobacco, alcohol consumption, diet and physical activity including both vigorous and moderate activity.



3

Health state description: self-ratings of health on a number of different domains, such as mobility, self-care, sleep and energy, interpersonal relationships, pain and functional assessments were included here. These will be explained in further sections in tables.



4

Chronic conditions and health services coverage: this section included questions on raised blood pressure, diabetes, hypercholesterolemia, cardiovascular conditions, arthritis, chronic lung diseases, depression, cataract, medications for these conditions, Injuries, oral health and vision. Further subsections were asked in this module, including questions on cervical and breast cancer screening for women aged 18-69 years, a subsection for elderly respondents those aged 60yrs and above.



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Health care utilization: use of the health system was investigated in this module, including an assessment of the responsiveness of the system. The module covered areas such as the importance of health care, seeing health care providers, outpatient care, care at home and inpatient hospital care.

STEPS Questionnaire and physical & biochemical measurements:

Related components that were captured through another module within the adult questionnaire was referred to as “STEPS Questionnaire”. All the measurements within the STEPS questionnaire were collected by trained nurses. STEPS is a sequential process. It started with gathering key information on risk factors with a questionnaire, followed by physical measurements and then to more complex blood tests for biochemical analysis.

After completion of the interviews, the respondents were requested to respond to all the measurements within the STEPS survey followed by introducing the nurses. The nurses after explaining the process of the various measurements proceeded to perform the height, weight and hip circumference measurement as per the standardized protocol. After this, the pulse rate of the respondents was evaluated followed by measurement of blood pressure. After these physical measurements, blood samples were collected for the biochemical measurements which included hemoglobin, fasting blood glucose & glycosylated hemoglobin (only for diabetics) and lipid profile assay.

Ever Married Questionnaire:

Depending upon the number of women who were ever-married in the household, one ever married woman was selected randomly through the CAPI program.

The key parameters of enquiry for this segment of respondents included socio-demographic variables such as education and work history of women, questions on their reproductive health including total pregnancies, healthcare provided during pregnancy, total live births, type of delivery, place of delivery, healthcare provided after pregnancy, important neonate and infant care practices including full details of immunizations and anthropometric measures for all children below 5 years and contraceptive usage.

## Programming the questionnaires on CAPI

All these questionnaires were administered by face-to-face interviews, using Computer Assisted Personal Interview (CAPI) techniques. The CAPI tool is a digital version of the questionnaires, wherein all the questionnaires were programmed onto an android based application.

All the questionnaires were initially translated into Arabic by a certified translator and adapted to suit the culture in UAE. The questionnaires were then tested for cultural applicability and sensitivity through word and pilot testing of the questionnaires before programming onto the CAPI tool.

UAE NATIONAL HEALTH SURVEY 2017-2018

After all the questionnaires were finalized, they were programmed on the CAPI tool. The application was thoroughly tested, validated and piloted before introducing into the main survey. The application was installed onto mobile tablet computers to be used by the field interviewers and was capable of collecting data even when the tablets were not connected to the internet. Data from all the interviews conducted during the daytime were later pushed to an electronic database at the end of each day, when the tablets were connected to the internet.

## Recruitment of the Survey Teams

The survey team for the UAE WHS were selected and recruited at 3 main levels: Team level comprising of 2 interviewers and 1 nurse – a total of 20 teams in the field

2 Interviewers – both male and females of mixed ethnic and culture background and with prior experience in household surveys

1 Nurse – all females and trained in point-of-care testing to accompany the interviewers for the collecting data on physical and biochemical parameters (STEPS questionnaire)

1 Field supervisor was assigned for every team to help in ground level planning and preparation before the teams can go into the households

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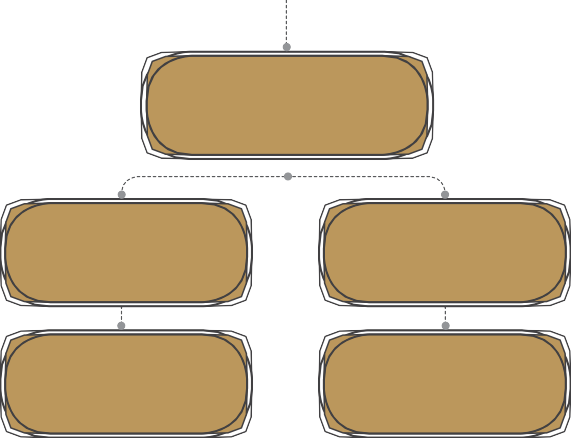
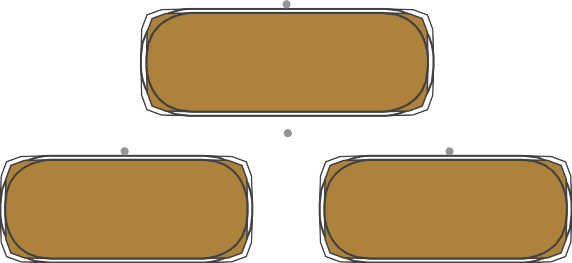
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There were Zonal level comprising of 4 zones of Abu-Dhabi & Al Ain, Dubai, Sharjah and all Northern Emirates. Each zone was managed by one zonal lead who oversaw the work of 3 to 6 supervisors depending upon the zone. There were 4 Zonal leads to oversee the work of a team of 10 supervisors

There were 2 regional team leads or field executives, who managed 2 zonal leads and supervised the work of all the teams under those zonal leads. The figure in the following page illustrates the team structure adopted for the survey.

To comply with the regulations of the law enforcement agencies in UAE, all survey team members had to mandatorily receive a police clearance and security clearance before he/she was allotted an identity card from the MOHAP and the FCSA.

Anyone not having such an authorized identity card issued both by the MOHAP and the FCSA was not allowed to participate in the field work.



Survey Manager

Regional team leader 1

Field teams lead

Regional team leader 2

Abu Dhabi & Al Ain Zone lead

Sharjah Zone lead

Northern Emirates Zone lead

Dubai Zone lead

6 supervisors

heading 6 teams

3 supervisors heading 3teams

5 supervisors

heading 5 teams

6 supervisors

heading 6 teams

Each field team had 2 interviewers and 1 nurse. There were a total of 20 field teams spread across 4 zones covering all 7 Emirates

## Training

A series of training events was conducted to ensure:

Highest possible standards and quality of data being collected. Field teams are qualified by training, experience and education.



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First, an orientation session lasting 2 days was conducted by IQVIA team to train the supervisors and field executives in preparation for conducting the training of the field interviewers and nurses. This was held in August 2017. Following this, there was a workshop organized by the Statistics and Research Center with inputs by the WHO experts from the EMRO office and was carried out in Dubai from 5th to 7th September for the survey teams. This discussed the objectives, research methodology and data collection tools used in the survey.

IQVIA and MOHAP team organized 2 main training sessions before start of the main survey field work and monthly refresher trainings.

The first training program was conducted prior to the pilot survey between 25th and 27th September for 3 days.

The pilot survey was held immediately after the first training program in 1st week of October.

Based on the feedback received from the pilot study, the questionnaire and the CAPI tool was modified.

The training for the main survey fieldwork was scheduled in two batches. This was done to accommodate the large field team and also to ensure adequate ratio between trainer and trainees.

Training for batch 1 was held between 22nd and 26th October 2017 (5 days). This also included a separate 3 days training schedule for the nurses.

Training for batch 2 was held between 30th October and 2nd November 2017 (4 days).

These daily sessions involved 6 hours of training at the workshop, and an additional 2 hours home assignment each evening. After the opening session, interviewers were divided into groups including a separate group for the nurses, three of which consisted of Arabic-speaking interviewers. A detailed discussion for each of the 3 questionnaires was performed. Every question was explained for its purpose, and appropriate modes of administration

**TRAINING FOR STEPS SURVEY**

The nurses’ training was focused mainly on discussing about the objectives of the survey and how to convey the need for collecting the physical, physiological and biochemical data in the survey to the public.

Their training therefore, specifically focused on the procedures for collecting the body weight, height, hip and waist circumference, heart rate, blood pressure using standardized measuring devices.

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Upon successful collection of the above physical and physiological data, the nurses supposedly conducted blood tests for assessing the hemoglobin, glycosylated hemoglobin, fasting blood glucose, and fasting cholesterol assay, again using WHO approved portable devices that used finger prick blood

/ capillary blood to conduct these tests to provide results on-the-spot. The results of all the physical, physiological and biochemical measurements were entered into standard feedback forms that were shared back with the respondents after entering the same data onto the data collection templates of the survey.

The following table lists all the devices and instruments used to collect the physical, physiological and biochemical measurements:

|  |  |
| --- | --- |
| Type of measurement Device / Instrument Details | |
| Body weight | Omron weighing scale |
| Body height | Stadiometer |
| Blood pressure & heart rate | Omron automated sphygmomanometer |
| Waist and hip circumference | Standard measuring tapes |
| Hemoglobin | HemoCue Hb201 analyzer and microcuvettes |
| Glycated hemoglobin (HbA1C) | BioHermes GluCoA1C Analysis System |
| Fasting glucose and cholesterol levels | PTS diagnostics with separate e-glucose strips and lipid panel strips |

\*HBA1C was done either on individuals previously diagnosed with diabetes (by oral confirmation of participant) or were currently on active diabetes treatment

All the devices and instruments used were in accordance to the WHO quality requirements for devices to be used in World Health Surveys. Prior to the using them, these devices were calibrated and standardized after repeated measurements.

In addition to the standard devices and instruments, all the consumables such as gloves, finger pricking lancets were disposable and designed for single use. Finger prick was performed after cleaning with single use alcohol prep pads.

All the waste generated in the field was collected in the separate color-coded bags. Moreover, economical puncture proof containers were used for sharp wastes, as per the standard protocol of segregating biomedical wastes that were ultimately disposed safely.

## Pilot Survey

A short pilot survey was undertaken in the selected households in Dubai and Abu-Dhabi during 1st week of October 2017 as an initial preparatory assessment of the survey tools and the survey teams. The findings from the pilot survey was helpful to incorporate important changes to the survey questionnaires before initiating the main survey on 12th November 2018

## Quality assurance during the fieldwork

Data quality measures were put in place at all levels during the survey – starting from: Questionnaire and CAPI Program level:

a Questionnaires were programmed on the CAPI tool in a manner that significantly minimized the

chances of erroneous data entry

b Thorough testing of the CAPI tool was executed to ensure only valid and correct entries were recorded on the data collection tool, before proceeding with the field work

c Quality assurance in CAPI design:

1. Arabic translation and validation by a certified Arabic translating agency.
2. Scripting and programming including randomization algorithm and branching.
3. Define logic, range, skip and consistency checks.
4. Most responses were close-ended and pre-coded.
5. Minimum free text entries.
6. Modular construction and navigation rules between sections.
7. User interface for data collection team.
8. Full functionality testing and user acceptance testing.
9. Pilot testing and further refinement of the CAPI.

d Final release for main survey and ongoing vigil for any bugs or functional issues. Team level:

1. The team was structured in a manner that could permit maximum field supervision from individual teams, to the 4 zones and 2 regions
2. Supervisor must ensure team members are working in the allocated clusters efficiently during the specified time for fieldwork
3. Supervisor must ensure that the right respondents were interviewed
4. Supervisor must do a random spot check of completed households
5. Supervisor to conduct at least 1 accompanied interview per day with his team interviewers a day
6. Zonal Team Leader must visit an average of 1 team per day
7. Field Team Leader must visit a different team each day, without giving prior notice of which team will be visited on a day
8. Field Team Leader must ensure that supervisors are following all QC measures

Database level:

1. The data entered on the tablet devices were synced at the end of each day by all interviewers to an electronic database that was maintained on a secure server which is located inside UAE.

g Data fed to the database too had certain preconditions and the data had several back-ups to ensure

zero data loss and complete data confidentiality

* 1. Server is accepting data only by means of the electronic mechanism, i.e. through devices only
  2. Consumption of data through secured channels only.
  3. Data at the server end is accessed only by the Authentic Users based on the access rights.
  4. Data check points/logic at multiple layers at application server layer as well as data base layer.
  5. Data is maintained in a structured manner on the server.
  6. Full audit-ready systems:

 Server logs are maintained for possible system failures

 Server resources (CPU, Memory, Storage , network Etc.) are under observation and optimized regularly.

 Server capacity is designed to support concurrent users.

 Database level logs are maintained so to ensure who updated what

 Regular back-up of the data on the server to prevent any data-loss

 Daily data backup and delete the oldest file after 7 days

In addition, the data collected on the electronic database was checked for completeness and correctness on a regular basis. Call-backs with respondents for missing entries or incomplete data was supported by the MOHAP team members, which helped to further ensure data collected was complete to the highest possible extent.

## Data Processing after completion of the field work

After completion of field work on 30th April and verifying that no data was pending on tablets to be uploaded to electronic database, the database was locked from receiving any fresh data on 5th May 2018. The final data files was then retrieved for a detailed check and cleaning before the sampling weights were applied to discount for any non-response or low response. Summary tables from the survey data are presented in the subsequent sections.

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HOUSEHOLD CHARACTERISTICS

In this section, the main findings of the interviews with the households are presented. In total we had reached 10,000 households using the sample frame provided by the FCSA across the 7 Emirates. Of these, we managed to secure the participation of 9,171 households who were successfully interviewed, yielding a response rate of 91.7%.

The survey represents data collected from the head of households.

In the interviewed households, there were a total of 14208 males and 14680 females. From each household, a household roaster was prepared by the field team comprising of all members in the household. Using a software program embedded within the electronic data collection, one adult member aged 18 years and above and one ever-married woman aged 15-49 years were randomly selected for participation in the survey. Similarly, one elderly resident (aged equal to or more than 60 years) of the household too was selected randomly whenever there were more than 1 elderly members as usual residents of the household.Table 1 shows by respondent background characteristics - both the weighted and unweighted numbers and the weighted percent distributions of the household residents. About 80% of usual residents were aged below 49 years with males and females being equally represented across the various age-groups.

Although the unweighted numerical and percentage distribution of Emirati and Non-Emirati population does not represent the national distribution, the same was corrected after applying the relative weights. Hence the weighted numbers and distribution represents the national distribution between Emirati and non-Emirati population

The representation of the various Emirates in the household population follows that of the national distribution. Abu-Dhabi, Dubai and Sharjah comprise of the majority of the survey respondents (more than 85%) while the remaining Northern Emirates represent the remaining household population.

Literacy rate:

The overall weighted literacy rate in the survey population was more than 99.5% in both males and females having received formal education above primary grade with more than 50% of the household members having bachelor’s degree or higher.

Health insurance coverage:

More than 88% of the household members had health insurance.

## Demographics of household population

Table 1. Distribution of household survey respondents

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Male Female Male Female  Variable  UW N UW % UW N UW % W N W % W N W % | | | | | | | | |
| Age Group | | | | | | | | |
| Less than one year | 282 | 1.7% | 285 | 1.7% | 237 | 1.7% | 246 | 1.7% |
| 1 - 4 | 1478 | 9.2% | 1336 | 8.0% | 1349 | 9.5% | 1196 | 8.1% |
| 5 - 9 | 1932 | 12.0% | 1823 | 10.9% | 1627 | 11.5% | 1499 | 10.2% |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 - 14 | 1667 | 10.3% | 1487 | 8.9% | 1314 | 9.2% | 1233 | 8.4% |
| 15 - 19 | 1229 | 7.6% | 1140 | 6.8% | 944 | 6.6% | 859 | 5.9% |
| 20 - 24 | 907 | 5.6% | 1075 | 6.4% | 611 | 4.3% | 779 | 5.3% |
| 25 - 29 | 1048 | 6.5% | 1694 | 10.1% | 780 | 5.5% | 1554 | 10.6% |
| 30 - 34 | 1479 | 9.2% | 1984 | 11.9% | 1409 | 9.9% | 1974 | 13.4% |
| 35 - 39 | 1514 | 9.4% | 1684 | 10.1% | 1540 | 10.8% | 1745 | 11.9% |
| 40 - 44 | 1244 | 7.7% | 1302 | 7.8% | 1320 | 9.3% | 1293 | 8.8% |
| 45 - 49 | 1057 | 6.5% | 1074 | 6.4% | 1082 | 7.6% | 1024 | 7.0% |
| 50 - 54 | 783 | 4.9% | 623 | 3.7% | 790 | 5.6% | 512 | 3.5% |
| 55 - 59 | 589 | 3.6% | 448 | 2.7% | 562 | 4.0% | 331 | 2.3% |
| 60 - 64 | 402 | 2.5% | 296 | 1.8% | 317 | 2.2% | 176 | 1.2% |
| 65 - 69 | 246 | 1.5% | 223 | 1.3% | 170 | 1.2% | 129 | 0.9% |
| 70 - 74 | 136 | 0.8% | 128 | 0.8% | 90 | 0.6% | 73 | 0.5% |
| 75 - 79 | 85 | 0.5% | 65 | 0.4% | 38 | 0.3% | 34 | 0.2% |
| 80 - 84 | 38 | 0.2% | 34 | 0.2% | 19 | 0.1% | 13 | 0.1% |
| 85+ | 24 | 0.1% | 25 | 0.1% | 9 | 0.1% | 10 | 0.1% |
| Marital Status | | | | | | | | |
| Never married | 3014 | 27.8% | 2843 | 24.0% | 2209 | 22.6% | 2012 | 19.0% |
| Currently married | 7641 | 70.5% | 8203 | 69.2% | 7456 | 76.3% | 8179 | 77.1% |
| Divorced /separated | 121 | 1.1% | 315 | 2.7% | 72 | 0.7% | 181 | 1.7% |
| Widowed | 59 | 0.5% | 492 | 4.1% | 25 | 0.3% | 232 | 2.2% |
| Do not know | 8 | 0.1% | 5 | 0.0% | 6 | 0.1% | 1 | 0.0% |
| Emirate of residence | | | | | | | | |
| Abu Dhabi | 4994 | 30.9% | 5228 | 31.3% | 4956 | 34.9% | 4999 | 34.0% |
| Dubai | 4140 | 25.7% | 4407 | 26.3% | 5039 | 35.5% | 5472 | 37.3% |
| Sharjah | 2046 | 12.7% | 2039 | 12.2% | 2361 | 16.6% | 2319 | 15.8% |
| Ajman | 1294 | 8.0% | 1310 | 7.8% | 749 | 5.3% | 797 | 5.4% |
| Umm al-Quwain | 980 | 6.1% | 956 | 5.7% | 160 | 1.1% | 161 | 1.1% |
| Ras Al Khaimah | 1542 | 9.6% | 1564 | 9.4% | 587 | 4.1% | 578 | 3.9% |
| Fujairah | 1144 | 7.1% | 1222 | 7.3% | 355 | 2.5% | 358 | 2.4% |
| Nationality | | | | | | | | |
| Emirati | 7043 | 43.6% | 7585 | 45.3% | 2074 | 14.6% | 2279 | 15.5% |
| Non-Emirati | 9097 | 56.4% | 9141 | 54.7% | 12135 | 85.4% | 12405 | 84.5% |

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|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Education Level | | | | | | | | |
| Never educated | 50 | 0.4% | 48 | 0.3% | 51 | 0.4% | 51 | 0.4% |
| Pre-Primary | 434 | 3.1% | 423 | 3.0% | 343 | 2.8% | 324 | 2.5% |
| Primary | 608 | 4.4% | 541 | 3.8% | 593 | 4.8% | 479 | 3.7% |
| Lower secondary | 2372 | 17.0% | 2248 | 15.8% | 1842 | 14.8% | 1755 | 13.7% |
| Upper secondary | 1721 | 12.3% | 1634 | 11.5% | 1276 | 10.3% | 1234 | 9.6% |
| Post-secondary non-tertiary | 2513 | 18.0% | 2460 | 17.2% | 1518 | 12.2% | 1621 | 12.6% |
| Short-cycle tertiary | 465 | 3.3% | 556 | 3.9% | 448 | 3.6% | 549 | 4.3% |
| Bachelor’s or equivalent | 634 | 4.5% | 693 | 4.9% | 597 | 4.8% | 658 | 5.1% |
| Master’s or equivalent | 4192 | 30.1% | 4715 | 33.1% | 4503 | 36.3% | 4889 | 38.1% |
| Doctoral or equivalent | 815 | 5.8% | 816 | 5.7% | 1088 | 8.8% | 1117 | 8.7% |
| Not elsewhere classified | 124 | 0.9% | 103 | 0.7% | 136 | 1.1% | 121 | 0.9% |
| Refused | 17 | 0.1% | 26 | 0.2% | 23 | 0.2% | 22 | 0.2% |
| Don’t Know |  |  | 1 | 0.0% |  |  | 0 | 0.0% |
| Health Insurance Coverage | 14396 | 89.2% | 14718 | 88.0% | 12612 | 88.8% | 12833 | 87.4% |
| Household population structure | | | | | | | | |
| Total 15-49 years | 8478 | 78.6% | 9953 | 84.4% | 7686 | 79.4% | 9229 | 87.8% |
| Total 50-59 years | 1372 | 12.7% | 1071 | 9.1% | 1352 | 14.0% | 843 | 8.0% |
| Total 60 years and above | 931 | 8.6% | 771 | 6.5% | 643 | 6.6% | 436 | 4.1% |

UW = Unweighted; W = Weighted numbers and percentage

Age-Gender Pyramid of all respondents in surveyed households in UAE

**0.1%**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 85+ |  |  |  |  |  |  |  |  | Male |
| 80 - 84 | **0.1%** |  |  |  | **0.1%** |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 75 - 79 | **0.2%** |  |  |  | **0.3%** |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 70 - 74 | **0.5%** |  |  |  | **0.6%** |  |  |  |  |

**0.1%**

Female

65 - 69

60 - 64

55 - 59

50 - 54

45 - 49

Age Groups

40 - 44

35 - 39

**11.9%**

**8.8%**

**7.0%**

**3.5%**

**0.9%**

**1.2%**

**2.3%**

**1.2%**

**2.2%**

**4.0%**

**5.6%**

**7.6%**

**9.3%**

**10.8%**

30 - 34 **13.4%**

25 - 29

20 - 24

**10.6%**

**5.3%**

**4.3%**

**5.5%**

**9.9%**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15 - 19 |  |  |  | **5.9%** |  |  |  |  | **6.6%** |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 10 - 14 |  | **8.4%** |  |  |  |  |  |  |  |  | **9.2%** |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 5 - 9 | **10.2%** |  |  |  |  |  |  |  |  |  |  | **11.5%** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 - 4 |  | **8.1%** |  |  |  |  |  |  |  |  | **9.5%** |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than one year |  |  |  |  | **1.7%** |  |  | **1.7%** |  |  |  |  |

2,000

1,500

1,000

500

500

1,000

1,500

2,000

Male and Female Population

**Figure 1: Age-gender pyramid of all respondents**

Age-Gender Pyramid of all Emirati respondents

**0.2%**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 85+ |  |  |  |  |  |  | Male |
| 80 - 84 | **0.4%** |  | **0.4%** |  |  |  |  |

**0.3%**

Female

75 - 79

70 - 74

65 - 69

**2.0%**

**0.6%**

**1.1%**

**0.8%**

**1.3%**

**2.0%**

**6.5%**

Age Groups

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 60 - 64 |  | **2.6%** |  |  |  |  |  |  |  |  | **2.6%** |  |  | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55 - 59 |  | **3.4%** |  |  |  |  |  |  |  |  | **3.2** | **%** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50 - 54 |  | **4.3%** |  |  |  |  |  |  |  |  |  |  | **4.3%** |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45 - 49 |  | **5.7%** |  |  |  |  |  |  |  |  |  |  | **5.0%** |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40 - 44 |  | **6.5%** |  |  |  |  |  |  |  |  |  |  | **5.0%** |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35 - 39 |  | **7.9%** |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30 - 34 | **9.1%** |  |  |  |  |  |  |  |  |  |  |  |  |  |

**7.1%**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 25 - 29 | **8.5%** |  |  |  | **7.7%** |  |
|  |  |  |  |  |  |  |
| 20 - 24 | **8.4%** |  |  |  | **8.0%** |  |
|  |  |  |  |  |  |  |
| 15 - 19 | **8.5%** |  |  |  |  | **9.5%** |

10 - 14

5 - 9

1 - 4

**11.8%**

**10.2%**

**7.0%**

**9.1%**

**12.4%**

**13.2%**

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Less than one year

300

200

**1.7%**

100

**1.6%**

100

200

300

Male and Female Population

**Figure 2: Age-gender pyramid of all Emirati respondents**

Age-Gender Pyramid of all non-Emirati respondents

**0.03%**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 85+ |  |  |  |  |  |  |  |  | Male |
|  |  |  |  |  |  |  |  |  |  |
| 80 - 84 |  |  | **0.04%** |  |  | **0.09%** |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 75 - 79 |  |  | **0.17%** |  |  | **0.18%** |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 70 - 74 |  |  | **0.40%** |  |  | **0.51%** |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 65 - 69 |  |  | **0.7%** |  |  | **1.1%** |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 60 - 64 |  |  | **0.9%** |  |  | **2.2%** |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 55 - 59 |  |  | **2.0%** |  |  |  | **4.1%** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 50 - 54 |  |  | **3.3%** |  |  |  | **5.8%** |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 45 - 49 |  | **7.2%** |  |  |  |  |  | **8.1%** |  |
|  |  |  |  |  |  |  |  |  |  |
| 40 - 44 |  | **9.2%** |  |  |  |  |  | **10.0%** |  |
|  |  |  |  |  |  |  |  |  |  |
| 35 - 39 | **12.6%** |  |  |  |  |  |  | **11.6%** |  |
|  |  |  |  |  |  |  |  |  |  |
| 30 - 34 | **14.2%** |  |  |  |  |  |  | **10.4%** |  |

**0.03%**

Female

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25 - 29 | **11.0%** |  |  |  |  |  | **5.1%** |  |  |
|  |  |  |  |  |  |  |  |  |
| 20 - 24 |  |  | **4.7%** |  |  |  | **3.7%** |  |
|  |  |  |  |  |  |  |  |  |
| 15 - 19 |  |  | **5.4%** |  |  |  | **6.2%** |  |
|  |  |  |  |  |  |  |  |  |
| 10 - 14 |  | **8.1%** |  |  |  |  |  | **8.7%** |
|  |  |  |  |  |  |  |  |  |  |
| 5 - 9 | **9.9%** |  |  |  |  |  |  |  | **11.2%** |

1 - 4

Age Groups

Less than one year

2,000

1,500

**8.4%**

1,000

500

**1.7%**

**1.7%**

500

**9.6%**

1,000

1,500

2,000

Male and Female Population

**Figure 3: Age-genderpyramidofallnon-Emiratirespondents**

A population pyramid, also called an “age-gender pyramid”, is a graphical illustration that shows the distribution of various age groups in a population (typically that of a country or region of the world). In the above illustrations, we have tried to illustrate the total population covered in the survey. Males are shown on the right and females on the left and length of the bars in each age-group shows the relative size of the population. The percentage shown against each bar is the relative size of that particular age-group and gender.

When reviewing the structure of the age-gender pyramids among the Emirati and non-Emirati population, it was noted that size of the population gets smaller in age-group above 50 years in the non-Emiratis whereas the Emirati population is characterized by a large base denoting large share of the young population and narrower tip, denoting a decrease in the number of elderly populations. These characteristics are also a reflection of the overall demographic structure of UAE.

## Healthcare insurance coverage and care seeking behavior

Table 2: Distribution of the members within the household according to health insurance coverage stratified as per Nationality

|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL Emirati Non-Emirati | | | |
| (Denominator: Total members in the households who had health insurance coverage) | 28,729 | 4,340 | 24,389 |
| 100.0% | 100.0% | 100.0% |
| No health insurance coverage | 3,381 | . | 3,381 |
| 11.8% | . | 13.9% |
| Government funded health insurance | 7,274 | 3,782 | 3,493 |
| 25.3% | 87.1% | 14.3% |

|  |  |  |  |
| --- | --- | --- | --- |
| Private health insurance | 17,238 | 451 | 16,787 |
| 60.0% | 10.4% | 68.8% |
| Other forms of health insurance | 835 | 107 | 728 |
| 2.9% | 2.5% | 3.0% |

Table 3: Distribution of the members within the household according to health insurance coverage stratified as per gender

|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL Male Female | | | |
| (Denominator: Total members in the households who had health insurance coverage) | 28,729 | 14,128 | 14,600 |
| 100.0% | 100.0% | 100.0% |
| No health insurance coverage | 3,381 | 1,568 | 1,814 |
| 11.8% | 11.1% | 12.4% |
| Government funded health insurance | 7,274 | 3,595 | 3,679 |
| 25.3% | 25.4% | 25.2% |
| Private health insurance | 17,238 | 8,534 | 8,703 |
| 60.0% | 60.4% | 59.6% |
| Other forms of health insurance | 835 | 432 | 404 |
| 2.9% | 3.1% | 2.8% |

More than 88% of population surveyed were covered by a form of insurance. Government funded insurance was the most common form of insurance among Emirati population, many of whom also had an additional private health insurance. More than 65% of non-Emiratis were covered by private health insurance whereas about 14% of non-Emirati population did not have any health insurance cover.

Table 4: Distribution of frequency of seeing a healthcare provider in the last 30 days for outpatient care stratified as per nationality

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|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL Emirati Non-Emirati | | | |
| (Denominator: Total members in the households) | 28,291 | 4,308 | 23,983 |
| 100.0% | 15.2% | 84.8% |
| Never | 22,581 | 3,228 | 19,353 |
| 79.8% | 74.9% | 80.7% |
| 1-5 times | 5,633 | 1,053 | 4,580 |
| 19.9% | 24.5% | 19.1% |
| More than 5 times | 77 | 27 | 50 |
| 0.3% | 0.6% | 0.2% |

Table 5: Distribution of frequency of seeing a healthcare provider in the last 30 days for outpatient care stratified as per gender

|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL Male Female | | | |
| (Denominator: Total members in the households) | 28,268 | 13,929 | 14,339 |
| 100.0% | 100.0% | 100.0% |
| Never | 22,581 | 11,317 | 11,263 |
| 79.9% | 81.3% | 78.5% |
| 1-5 times | 5,633 | 2,588 | 3,045 |
| 19.9% | 18.6% | 21.2% |
| More than 5 times | 54 | 23 | 31 |
| 0.2% | 0.2% | 0.2% |

Table 6: Average number of per capita visits to OPD in last 30 days

|  |  |  |  |
| --- | --- | --- | --- |
|  | TOTAL | Male | Female |
| Total members of household who answered YES to outpatient visits in past 30 days | 5687 | 2611 | 3076 |
| Average number of Per capita visits | 1.48 | 1.43 | 1.53 |

As can be seen in the above tables, less than 20% of people surveyed had visited a healthcare provider for outpatient consultation for less than 5 times in the 30 days preceding the survey. Females has more OPD health consultations (21.2%) than males (18.6%). The average per capita OPD visit in both the genders was 1.48

Table 7: Distribution of any member of household admitted in a hospital for at least one night during the last 12 months stratified as per nationality

|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL Emirati Non-Emirati | | | |
| (Denominator: Total members in the households) | 28,041 | 4,266 | 23,775 |
| 100.0% | 100.0% | 100.0% |
| Zero Hospital admissions | 24,361 | 3,587 | 20,774 |
| 86.9% | 84.1% | 87.4% |
| Up to 2 admissions | 2,096 | 399 | 1,697 |
| 7.5% | 9.4% | 7.1% |
| Between 3 and 5 admissions | 1,117 | 184 | 933 |
| 4.0% | 4.3% | 3.9% |
| More than 5 admissions | 467 | 96 | 371 |
| 1.7% | 2.2% | 1.6% |

Table 8: Distribution of any member of household admitted in a hospital for at least one night during the last 12 months stratified as per gender

|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL Male Female | | | |
| (Denominator: Total members in the surveyed households) | 28,026 | 13,777 | 14,249 |
| 100.0% | 100.0% | 100.0% |
| 00 Hospital admissions | 24,361 | 12,069 | 12,291 |
| 86.9% | 87.6% | 86.3% |
| Up to 2 admissions | 2,096 | 950 | 1,146 |
| 7.5% | 6.9% | 8.0% |
| Between 3 and 5 admissions | 1,117 | 571 | 546 |
| 4.0% | 4.1% | 3.8% |
| More than 5 admissions | 452 | 186 | 266 |
| 1.6% | 1.3% | 1.9% |

Table 9: Average per capita admissions and overnight stay in the last 12 months

|  |  |  |  |
| --- | --- | --- | --- |
|  | TOTAL | Male | Female |
| Total members of household who answered YES to hospital admissions in past 12 months | 3665 | 1707 | 1958 |
| Average number of Per capita admissions | 3.23 | 3.37 | 3.11 |

As can be seen from the tables above, less than 14% of the survey population had hospital admissions with an overnight stay during the last 12 months. Among survey respondents who were hospitalized, majority had up to 2 admissions. More number of females (8%) were hospitalized than the males (6.9%). The average per capita hospitalization was less than 4.

## Safe drinking water and improved sanitation

Table 10: Distribution of household according to the source of drinking water

|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL Emirati Non-Emirati | | | |
| (Denominator: Total Households answering) | 9171 | 997 | 8174 |
| 100.0% | 100.0% | 100.0% |
| Improved Source of Drinking Water | 9168 | 995 | 8173 |
| 100.0% | 99.8% | 100.0% |
| Unimproved Source of Drinking Water | 3 | 2 | 1 |
| 0.0% | 0.2% | 0.0% |

As per the United Nations Organization, safe drinking water for the sustained development goals (SDGs) is defined as drinking water that is located on premises, available when needed and free from contamination. Accordingly, we have considered the following categories:

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Safe drinking water - piped water into dwelling, piped to yard/plot, bottled water; public tap/standpipe; tube well/borehole; protected well; protected spring; tanker-truck; cart small tank; Unsafe drinking water - unprotected spring; surface water (river, dam, lake, pond)

Table 11: Distribution of households according to the type of toilet facility used by the members

|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL Emirati Non-Emirati | | | |
| (Denominator: Total Households answering) | 9171 | 997 | 8174 |
| 100.0% | 100.0% | 100.0% |
| Improved form of sanitation | 9146 | 992 | 8154 |
| 99.7% | 99.5% | 99.7% |
| Unimproved form of sanitation | 25 | 5 | 21 |
| 0.3% | 0.5% | 0.3% |

Improved sanitation included following: Piped sewer systems, septic tank, pit latrine, ventilated improved pit latrine, pit latrine with slab and don’t know where

Unimproved sanitation included the following: No. of facilities / bush field, pit latrine without slab, to somewhere else

## Household Income Characteristics

Table 12: Average monthly income of the households

|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL Emirati Non-Emirati | | | |
| (Total respondents answering the household income question) | 8181 | 795 | 7386 |
| 100.0% | 100.0% | 100.0% |
| Less than or equal to 5000 AED | 1010 | 25 | 985 |
| 12.3% | 3.2% | 13.3% |
| 5001-10,000 AED | 2139 | 87 | 2052 |
| 26.1% | 10.9% | 27.8% |
| 10,001 - 15,000 AED | 1598 | 109 | 1489 |
| 19.5% | 13.7% | 20.2% |
| 15,001 - 20,000 AED | 1158 | 153 | 1005 |
| 14.2% | 19.3% | 13.6% |
| 20,001 AED - and more | 2276 | 421 | 1855 |
| 27.8% | 52.9% | 25.1% |

More than 85% of households surveyed had monthly income above AED5000 with almost 30% households having income above AED20000. More than 50% of Emirati households surveyed had monthly income above AED20000

Table 13: Distribution of households below the international poverty line (below AED210 per capita per month)

|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL Emirati Non-Emirati | | | |
| (Denominator: Total Answering) | 8181 | 795 | 7386 |
| 100.0% | 100.0% | 100.0% |
| Below international Poverty line | 12 | 0 | 12 |
| 0.1% | 0.0% | 0.2% |
| Above international Poverty line | 8169 | 795 | 7374 |
| 99.9% | 100.0% | 99.8% |

The poverty line was defined as per the World Bank definition. Accordingly, more than 99% of non- Emirati and all Emirati households had income above the defined poverty line. Although this definition may not be the best indicator of poverty in UAE, wherein people who participated in the survey were able to afford rentals, which is a significant portion of a household’s income and have incomes higher than AED210 per capita per month, in the absence of any other global indicator, we are using the international poverty line. The international poverty line definition needs scrutiny as well, in order to adjust for the inflation and current costs of living.

## Household expenditure characteristics

Table 14: Number of households spending (either in cash or kind) on out-patient health care in the last 30 days

|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL Emirati Non-Emirati | | | |
| Total households | 9,171 | 997 | 8,174 |
| 100.0% | 10.9% | 89.1% |
| Yes | 504 | 95 | 409 |
| 5.5% | 9.6% | 5.0% |
| No | 8,667 | 901 | 7,765 |
| 94.5% | 90.4% | 95.0% |

Table 15: Number of households spending (either in cash or kind) on in-patient healthcare in the last 1 year

|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL Emirati Non-Emirati | | | |
| Total households | 9,168 | 997 | 8,171 |
| 100.0% | 10.9% | 89.1% |
| Yes | 266 | 51 | 215 |
| 2.9% | 5.1% | 2.6% |
| No | 8,902 | 946 | 7,956 |
| 97.1% | 94.9% | 97.4% |

Out of the 9171 households, only 5.5% of households said that they had spent in cash or kind on all healthcare services that did not require any overnight stay in the 30 days preceding the survey and only 2.9% of households said that they had spent in cash or kind on all healthcare services that required any overnight stay in the 12 months preceding the survey. In order to compute the out of pocket expenses, all expenditures were first added and any reimbursement from health insurance was adjusted. The resulting amount was then equated into monthly expenditure to comparison.

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After these adjustments, we had 211 households who had incurred expenditures for health (both in-patient and out-patient combined). The tables below provide additional characteristics of these households including their nationality, income and educational details.

Table 16: Total out of pocket expenditure on health against the total income of the households

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|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TOTAL | | Emirati | | | | | Non-Emirati | | | | |
| Less than or equal to 5000 AED | 5001 -  10000 AED | 10001 -  15000 AED | 15001 -  20000 AED | 20001 AED  - and more | Less than or equal to 5000 AED | 5001 -  10000 AED | 10001 -  15000 AED | 15001 -  20000 AED | 20001 AED -  and more |
| (Denominator: Total House- holds incurring out of pocket expenses per month) | 211 | 2 | 4 | 6 | 4 | 23 | 26 | 43 | 32 | 26 | 44 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Less Than 10% | 153 | . | 2 | 5 | 3 | 20 | 9 | 27 | 27 | 24 | 37 |
| 72.2% | . | 35.2% | 79.9% | 59.5% | 87.7% | 34.7% | 61.2% | 83.2% | 90.1% | 85.2% |
| 10% to 25% | 29 | 0 | 1 | 1 | 1 | 2 | 4 | 11 | 3 | 1 | 5 |
| 13.9% | 24.6% | 16.4% | 12.9% | 24.4% | 7.1% | 17.1% | 24.7% | 9.1% | 5.6% | 11.7% |
| More Than 25% | 29 | 1 | 2 | 0 | 1 | 1 | 12 | 6 | 2 | 1 | 1 |
| 13.9% | 75.4% | 48.4% | 7.3% | 16.1% | 5.1% | 48.2% | 14.1% | 7.7% | 4.3% | 3.1% |

Table 17: Total out of pocket expenditure on health distributed against nationality and gender of head of households

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | Emirati | | Non-Emirati  Male Female | |
| Total Male | | | Female |
| (Denominator: Total Households incurring out of pocket expenses per month) | 211 | 20 | 20 | 122 | 49 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Less Than 10% | 153 | 14 | 15 | 83 | 40 |
| 72.2% | 69.9% | 77.7% | 68.3% | 80.9% |
| 10% to 25% | 29 | 3 | 2 | 20 | 5 |
| 13.9% | 14.9% | 8.4% | 16.3% | 9.5% |
| More Than 25% | 29 | 3 | 3 | 19 | 5 |
| 13.9% | 15.2% | 13.9% | 15.4% | 9.6% |

It is to be noted that of all the households incurring out-of-pocket expenditure, 14% of households expended more than 25% of their monthly income. Majority of such households incurring more than 25% of their household income were the non-Emiratis and belonged to the low-income category.

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Table 18: Total out of pocket expenditure on health distributed against the educational status of head of households

48

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Total Households | | Total of out of pocket expenditure | | |
| Less Than 10% | 10% to 25% More Than 25% | |
| (Denominator: Total Households incurring out of pocket expenses per month) | 205\* | 149 | 29 | 27 |
| 100% | 100% | 100% | 100% |
| Never educated | 0 | 0 | 0 | 0 |
| 0% | 0% | 0% | 0% |
| Pre-Primary & Primary Education | 4 | 4 | . | . |
| 2% | 2% | . | . |
| Secondary Education | 23 | 18 | 1 | 4 |
| 11% | 12% | 3% | 15% |
| Tertiary Education | 33 | 24 | 6 | 3 |
| 16% | 16% | 21% | 11% |
| Bachelor’s education | 13 | 7 | 4 | 2 |
| 6% | 5% | 14% | 7% |
| Higher education (including master’s & doctoral) | 132 | 96 | 18 | 18 |
| 64% | 65% | 62% | 67% |

\*educational details were not available for 6 households

We see the out-of-pocket happening in the higher income category. It is noteworthy that many healthcare transactions require co-payment even if an individual is covered by health insurance. Often these co-payments vary significantly depending upon the type of insurance and are non-reimbursable. It was not possible to delineate such expenses within the scope of the survey and it is therefore necessary to examine the nature of these out-of-pocket expenses through another survey or source to inform any decision making.

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1. ADULTS RESPONDENTS CHARACTERISTICS

## General Socio-Demographic Characteristics of Adult Respondents

A total of. 8188 individuals (weighted numbers) responded to the adult questionnaire. The following tables and sections describe the key characteristics of these respondents

Table 19: Summary of the socio-demographic characters of respondents to the adult questionnaire

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | Male  UNW N UNW % | | Female  UNW N UNW % | | Male  Wt N Wt % | | Fe  Wt N | male  Wt % |
| Age Group | | | | | | | | |
| 18 To 27 Years | 521 | 13.2% | 683 | 16.0% | 638 | 15.4% | 835 | 20.6% |
| 28 To 36 Years | 1126 | 28.5% | 1481 | 34.7% | 1236 | 29.8% | 1479 | 36.6% |
| 37 To 46 Years | 1150 | 29.1% | 1185 | 27.8% | 1186 | 28.6% | 1059 | 26.2% |
| 47 To 60 Years | 832 | 21.1% | 658 | 15.4% | 855 | 20.6% | 529 | 13.1% |
| 60 and Above | 315 | 8.0% | 259 | 6.1% | 228 | 5.5% | 143 | 3.5% |
| Nationality | | | | | | | | |
| Emirati | 1188 | 30.1% | 1481 | 34.7% | 566 | 13.7% | 563 | 13.9% |
| Non-Emirati | 2760 | 69.9% | 2785 | 65.3% | 3577 | 86.3% | 3482 | 86.1% |
| Marital Status | | | | | | | | |
| Never married | 674 | 17.1% | 443 | 10.4% | 762 | 18.4% | 399 | 9.9% |
| Currently married | 3171 | 80.3% | 3418 | 80.1% | 3320 | 80.1% | 3418 | 84.5% |
| Separated | 27 | 0.7% | 71 | 1.7% | 23 | 0.6% | 42 | 1.0% |
| Divorced | 36 | 0.9% | 96 | 2.3% | 22 | 0.5% | 63 | 1.6% |
| Widowed | 40 | 1.0% | 238 | 5.6% | 16 | 0.4% | 123 | 3.0% |
| Education Level | | | | | | | | |
| Never educated | 115 | 2.9% | 217 | 5.1% | 75 | 1.8% | 91 | 2.3% |
| Pre-Primary Education | 19 | 0.5% | 33 | 0.8% | 13 | 0.3% | 18 | 0.4% |
| Primary Education | 184 | 4.7% | 191 | 4.5% | 147 | 3.5% | 129 | 3.2% |
| Lower secondary education | 255 | 6.5% | 271 | 6.4% | 219 | 5.3% | 187 | 4.6% |
| Upper secondary  education | 732 | 18.5% | 721 | 16.9% | 598 | 14.4% | 506 | 12.5% |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Post-secondary non-tertiary  education | 201 | 5.1% | 215 | 5.0% | 214 | 5.2% | 207 | 5.1% |
| Short-cycle tertiary  education | 208 | 5.3% | 205 | 4.8% | 184 | 4.4% | 172 | 4.2% |
| Bachelor’s or equivalent  level | 1800 | 45.6% | 2002 | 46.9% | 2121 | 51.2% | 2214 | 54.7% |
| Master’s or equivalent  level | 382 | 9.7% | 366 | 8.6% | 511 | 12.3% | 475 | 11.7% |
| Doctoral or equivalent  level | 45 | 1.1% | 44 | 1.0% | 50 | 1.2% | 45 | 1.1% |
| Not elsewhere classified | 7 | 0.2% | 1 | 0.0% | 11 | 0.3% | 0 | 0.0% |
| Respondents who are  currently working | 3339 | 84.6% | 1632 | 38.3% | 3673 | 88.7% | 1774 | 43.8% |

UNW N = Unweighted numbers; UNW % = Unweighted percentage; Wt N = Weighted numbers; Wt

% = Weighted percentage

Age-Gender Pyramid of respondents to adult questionnaire

60 and Above

47 to 60 years

37 to 46 years

28 to 36 years

18 to 27 years

**28.60%**

**29.80%**

**20.60%**

**15.40%**

**5.50%**

**3.50%**

**13.10%**

**20.60%**

**26.20%**

**36.60%**

Male

1500

1000

-500 0

500

1000

1500 2000

Female

**Fig: Age-gender distribution of respondents answering adult questionnaire**

As can be seen from the summary table earlier and the age-gender pyramid above, there was an equal distribution of respondents who responded to the adult questionnaires across all age groups. There was also an equal distribution of respondents between the 2 genders.

**Literacy rate among Adults respondents:**

The overall weighted literacy rate in the adults respondents was 97.6% in both males and females having received formal education above primary grade, with more than 66% of the adults respondents having bachelor’s degree or higher.

**Unemployment Rate**

The employment status was one of the key indicators studied in the adult questionnaire, data on working history such as current employer & occupation, total years of working or not working, and reasons for not working.

The unemployment ratio was calculated among the total workforce those who are eligible to work, they are actively looking for a job and reported that they are not able to find a job.

|  |  |
| --- | --- |
| Unemployment Rate Total | |
| Currently employed | 97.03% |

|  |  |
| --- | --- |
| Not employed | 2.97% |
| Grand Total | 100% |

## Tobacco Usage

Table 20: Distribution of respondents who are currently smoking tobacco products such as cigarettes, cigars or pipes according to gender and nationality

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati  TOTAL Male Female Male Female | | | | | |
| (Denominator: Total Answering) | 8,188 | 566 | 563 | 3,577 | 3,482 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Yes, currently smoking | 747 | 116 | 5 | 534 | 92 |
| 9.1% | 20.5% | 1.0% | 14.9% | 2.6% |
| No, not currently smoking | 7,441 | 450 | 558 | 3,043 | 3,390 |
| 90.9% | 79.5% | 99.0% | 85.1% | 97.4% |
| Daily smokers | 654 | 101 | 5 | 468 | 80 |
| 8.0% | 17.8% | 0.9% | 13.1% | 2.3% |

Distribution of respondents who are currently smoking tobacco products by gender and nationality

|  |  |  |  |
| --- | --- | --- | --- |
| Gender  TOTAL Male Female | | | |
| Emirati | 16% | 96% | 4% |
| 121 | 116 | 5 |
| Non-Emirati | 84% | 85% | 15% |
| 626 | 534 | 92 |
| Total | 100% | 87% | 13% |
| 747 | 650 | 97 |

Distribution of current users of Tobacco

120%

100%

80%

60%

40%

20%

0%

**96%**

Emirati Non-Emirati Over All

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  | **85% 87%**  **15% 13%** |
|  |  |
|  |  |
|  |  |
|  | **4%** |

Male Female

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There was a total of 747 respondents who were currently smoking among all the respondents who answered the adult questionnaires. The graph above further illustrates the characteristics of the current smokers.

The number of male smokers was significantly higher than the female smokers among all respondents as well as within the Emirati and non-Emirati population

Table 21: Distribution of current smokers according to their age

|  |  |  |  |
| --- | --- | --- | --- |
| Age group Total current tobacco users Male Female | | | |
| TOTAL | 747 | 650 | 97 |
| 100.0% | 100.0% | 100.0% |
| 18 To 27 Years | 128 | 114 | 14 |
| 17.1% | 17.5% | 14.7% |
| 28 To 36 Years | 278 | 231 | 48 |
| 37.2% | 35.5% | 48.9% |
| 37 To 46 Years | 210 | 191 | 19 |
| 28.2% | 29.5% | 19.5% |
| 47 To 60 Years | 109 | 98 | 10 |
| 14.5% | 15.1% | 10.5% |
| 60 and Above | 22 | 16 | 6 |
| 2.9% | 2.4% | 6.4% |

Distribution of daily and non-daily smokers

**8%**

**92%**

**13.9%**

**86%**

**2%**

**98%**

All Respondents Males Females

Non Daily Smokers Daily Smokers

The table above illustrates the age and gender distribution of current smokers. There were higher number of smokers between 18 and 46 years age group and males smokers exceeded female smokers. The graph above illustrates the distribution of daily smokers and non-daily smokers among the total respondents. Majority of smokers were non-daily smokers

Table 22: Distribution of the type of tobacco smoked

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Manufactured Shisha Cigar Medwakh E-Cigarettes cigarettes | | | | | |
| Total current smokers | 528 | 69 | 6 | 51 | 27 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| 18 To 27 Years | 77 | 9 | . | 29 | 12 |
| 14.5% | 12.6% | . | 57.3% | 43.6% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 28 To 36 Years | 204 | 30 | 2 | 12 | 7 |
| 38.7% | 43.8% | 26.7% | 23.3% | 27.2% |
| 37 To 46 Years | 153 | 23 | 1 | 7 | 8 |
| 29.0% | 33.9% | 8.8% | 14.2% | 27.9% |
| 47 To 60 Years | 78 | 6 | 4 | 0 | 0 |
| 14.7% | 8.4% | 59.1% | 0.5% | 0.9% |
| 60 and Above | 16 | 1 | 0 | 2 | 0 |
| 3.1% | 1.2% | 5.5% | 4.7% | 0.4% |

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Of the 747 current smokers who responded to the question on “what form of tobacco they consumed”, we have tabulated their responses to the most common form of tobacco consumed against the age- groups. As can be seen, the most common form of smoked tobacco use was in the form of manufactured cigarettes followed by Shisha, Medwakh and E-Cigarettes. As noted before, the consumption of smoked form of tobacco was more common among younger age-groups between the aged 18 to 46 years.

Table 23: Distribution of the exposure to second hand smoke at home during the last 30 days

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati  TOTAL Male Female Male Female | | | | | |
| Total respondents to adult questionnaire | 8188 | 566 | 563 | 3577 | 3482 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Yes | 506 | 71 | 47 | 227 | 162 |
| 6.2% | 12.5% | 8.3% | 6.3% | 4.6% |
| No | 7682 | 496 | 516 | 3350 | 3321 |
| 93.8% | 87.5% | 91.7% | 93.7% | 95.4% |

Males were more subjected to second hand smoking. Overall 6.2% of the respondent was exposed to second hand smoke at home during last 30 days.

Table 24: Distribution of the exposure to second hand smoke at workplaces during the last 30 days

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati  TOTAL Male Female Male Female | | | | | |
| Total respondents to adult questionnaire | 8188 | 566 | 563 | 3577 | 3482 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Yes | 440 | 31 | 16 | 261 | 132 |
| 5.4% | 5.5% | 2.9% | 7.3% | 3.8% |
| No | 7464 | 513 | 517 | 3198 | 3236 |
| 91.2% | 90.6% | 91.8% | 89.4% | 92.9% |
| Don't work in a closed area | 284 | 23 | 30 | 118 | 114 |
| 3.5% | 4.0% | 5.4% | 3.3% | 3.3% |

Overall only 5.4% of the respondent who responded to the adult questionnaires, were exposed to second hand smoking at work place, which shows that passive smoking prevalence may not be a major public health problem in UAE.

Table 25: Tobacco Economics

|  |  |
| --- | --- |
| Average amount spent on 20 manufactured cigarettes [AED] | AED 60.1 |
| Range (43.7 to 76.6) |
| Average monthly expenditure on manufactured cigarettes [AED] | AED 882.8 |
| Range (575.7 to 1189.9) |
| Cost of 100 packs of manufactured cigarettes as a percentage of per capita Gross Domestic Product (GDP) [2016] | 4.4 % |
| Range (3.2 to 5.5) |

Overall, cigarettes still appear to be affordable in UAE as can be seen from the table above.

Table 26: Seeing advertisements or signs promoting cigarette smoking in cinema theatres / movie halls during the last 30 days

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati  TOTAL Male Female Male Female | | | | | |
| Total respondents to adult questionnaire | 8188 | 566 | 563 | 3577 | 3482 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Yes | 1579 | 91 | 100 | 729 | 659 |
| 19.3% | 16.0% | 17.7% | 20.4% | 18.9% |
| No | 6154 | 440 | 429 | 2647 | 2639 |
| 75.2% | 77.7% | 76.1% | 74.0% | 75.8% |
| Don't Know | 455 | 36 | 34 | 200 | 184 |
| 5.6% | 6.3% | 6.1% | 5.6% | 5.3% |

Above 20% of the respondents recall seeing some form of advertisements or signs promoting cigarette smoking in cinema theatres / movie halls during the last 30 days before the survey. This is something to be taken note by program and policy managers towards the need to target places of public recreation to create more awareness about the dangers of tobacco usage.

Table 27: Hearing information on radio about the dangers of smoking cigarettes or messages that encourage quitting during the last 30 days

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati  TOTAL Male Female Male Female | | | | | |
| Total respondents to adult questionnaire | 8188 | 566 | 563 | 3577 | 3482 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Yes | 3054 | 194 | 219 | 1403 | 1238 |
| 37.3% | 34.2% | 38.8% | 39.2% | 35.6% |
| No | 4602 | 344 | 308 | 1941 | 2008 |
| 56.2% | 60.8% | 54.7% | 54.3% | 57.7% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Don't Know | 532 | 28 | 36 | 232 | 235 |
| 6.5% | 5.0% | 6.5% | 6.5% | 6.8% |

More than 50% of respondents did not hear any information on radio about the dangers of smoking

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cigarettes or messages that encouraged people to quit smoking in the 30 days preceding the survey. Whether respondents listened to radio often or used other means of mass-communication was not clear and hence in order to know the effectiveness of radio for spreading awareness on anti-tobacco programs, it is first necessary to know people’s access and use of radio as a means of communication and entertainment.

Table 28: Noticing health warnings on cigarette packages during the past 30 days

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati TOTAL Male Female Male Female | | | | | |
| Total respondents to adult questionnaire | 8188 | 566 | 563 | 3577 | 3482 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Yes | 2091 | 174 | 83 | 1162 | 671 |
| 25.5% | 30.7% | 14.8% | 32.5% | 19.3% |
| No | 3181 | 179 | 209 | 1357 | 1436 |
| 38.8% | 31.5% | 37.1% | 38.0% | 41.2% |
| Did not see any cigarette packages in last 30 days | 2796 | 201 | 263 | 1002 | 1330 |
| 34.1% | 35.4% | 46.7% | 28.0% | 38.2% |
| Don't Know | 121 | 13 | 8 | 55 | 44 |
| 1.5% | 2.3% | 1.5% | 1.5% | 1.3% |

About a quarter of respondents were aware of noticing health warnings on cigarette packages in the 30 days before survey and majority of them were current smokers

## Alcohol Consumption

Table 29: Distribution of respondents who responded to the question of ever consuming alcoholic drinks

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati  TOTAL Male Female Male Female | | | | | |
| Total respondents to adult questionnaire | 8188 | 566 | 563 | 3577 | 3482 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Yes, ever consumed alcoholic drinks | 423 | 7 | 0 | 269 | 147 |
| 5.2% | 1.3% | 0.1% | 7.5% | 4.2% |
| No, never consumed alcohol drinks (lifetime abstainers) | 7766 | 559 | 562 | 3308 | 3336 |
| 94.8% | 98.8% | 99.8% | 92.5% | 95.8% |

Only 5.2% of the respondent ever consumed alcohols. The number were more in Non-Emirati respondents compared to the Emirati respondents. The majority of Emirati’s reported that they had never consumed alcohol.

Table 30: Distribution of respondents who had ever consumed alcohol and responded to the question of drinking in the past 12 months

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati  TOTAL Male Female Male Female | | | | | |
| Those who have ever consumed alcohol | 423 | 7 | . | 269 | 147 |
| 100.0% | 100.0% | . | 100.0% | 100.0% |
| Yes, have consumed alcohol in past 12 months | 351 | 6 | . | 236 | 110 |
| 83.2% | 75.7% | . | 87.7% | 75.3% |
| No, have not consumed alcohol in past 12 months | 71 | 1 | . | 33 | 36 |
| 16.8% | 19.6% | . | 12.3% | 24.7% |
| Refused to answer this question | 0 | 0 | . | . | . |
| 0.1% | 4.7% | . | . | . |

Out of 423 respondents who ever consumed alcohol, 83.2% have consumed alcohol in past 12 months, whereas the majority of them were Non- Emirati 98.3%.

Table 31: Distribution of respondents who responded to the question “Have you stopped drinking due to health reasons, such as a negative impact on your health or on the advice of your doctor or other health worker?”

|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL Male Female | | | |
| Only for those who have not consumed alcohol in past 12 months | 71 | 35 | 36 |
| 100% | 100% | 100% |
| Yes | 18 | 8 | 10 |
| 25.3% | 22.9% | 27.8% |
| No | 53 | 27 | 26 |
| 74.6% | 77.1% | 72.2% |

Out of 71 respondent who have not consumed alcohol in past 12 months, 25.3% stopped drinking due to health reasons, such as a negative impact on their health or on the advice of their doctor or other health worker. More percentage of females had stopped drinking due to the negative impact on health and advice from their doctor.

Table 32: Average number of times that respondents had six or more standard drinks in the last 30 days

|  |  |  |  |
| --- | --- | --- | --- |
|  | TOTAL | Male | Female |
| Percentage who engage in heavy episodic drinking (6 or more drinks on any occasion in the past 30 days) | 1.4% | 2.2% | 0.5% |
| Average largest number of standard drinks among those who engage in heavy episodic drinking (6 or more drinks on any occasion in the past 30 days) | 2.2 | 2.4 | 1.5 |

Only 1.4% of the respondents reported that they were engaged in heavy episodic drinking (6 or more drinks on any occasion in the past 30 days before the survey.

## Diet

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Table 33: Summary of consumption of fruits and vegetables

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | TOTAL | Emirati  Male Female | | Non-Emirati  Male Female | |
| Denominator all respondents responding to number of servings of fruit and/or vegetables on average per day | 8188 | 566 | 563 | 3577 | 3482 |
| Total respondents who ate less than 5 servings of fruit and/or vegetables on average per day | 6780 | 474 | 458 | 2998 | 2851 |
| Percentage of respondents eating less than 5 servings of fruits and/or vegetables on average per day | 82.8% | 83.7% | 81.3% | 83.8% | 81.9% |
| Total respondents who ate at least 5 or more than 5 servings of fruit and/or vegetables on average per day | 1408 | 92 | 105 | 579 | 631 |
| Percentage of respondents eating at least 5 or more than 5 servings of fruits/vegetables on average per day | 16.7% | 16.3% | 18.7% | 16.2% | 18.1% |
| Age wise distribution of respondents eating less than 5 servings of fruits and/or vegetables on aver- age per day | | | | | |
| 18-29 years | 1831 | 170 | 160 | 624 | 876 |
| Percentage | 27.0% | 21.4% | 15.5% | 78.6% | 84.6% |
| 30-44 years | 3254 | 171 | 161 | 1448 | 1475 |
| Percentage | 48.0% | 10.6% | 9.8% | 89.5% | 90.2% |
| 45-59 years | 1349 | 70 | 76 | 782 | 420 |
| Percentage | 19.9% | 8.3% | 15.4% | 91.8% | 84.6% |
| 60+ years | 346 | 43 | 44 | 166 | 93 |
| Percentage | 5.1% | 20.4% | 31.9% | 79.6% | 68.2% |

*For additional details on the diet related questions asked in the adult questionnaire, please refer to the annexure section*

It is recognized that consuming a requisite amount of fruit and vegetables each day can lead to better health. The WHO has defined five portions of fruit and vegetables as being the requisite level. In the WHS, respondents were asked about their dietary intake and the percentage of those who consumed less than five portions were calculated. 82.8% of the respondents interviewed consumed less than 5 servings of fruits and/or vegetables on average per day. This finding was most noticeable in the age group of 30-44 years of age.

Table 34: Summary of other dietary practices\*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Dietary Factors | TOTAL | Emirati  Male Female | | Non-E  Male | mirati  Female |
| **How often do you add salt or a salty sauce such as soya sauce to your food right before you eat it or as you are eating it?** | | | | | |
| Total respondents | 8,117 | 559 | 559 | 3,525 | 3,474 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Always | 2,024 | 55 | 71 | 990 | 909 |
| 24.9% | 9.8% | 12.6% | 28.1% | 26.2% |
| Often | 1,304 | 53 | 62 | 550 | 638 |
| 16.1% | 9.6% | 11.1% | 15.6% | 18.4% |
| Sometimes | 2,394 | 181 | 171 | 1,047 | 995 |
| 29.5% | 32.3% | 30.6% | 29.7% | 28.6% |
| Rarely | 1,170 | 102 | 100 | 477 | 491 |
| 14.4% | 18.3% | 17.8% | 13.5% | 14.1% |
| Never | 1,225 | 168 | 155 | 461 | 441 |
| 15.1% | 30.0% | 27.8% | 13.1% | 12.7% |
| **How often do you eat processed food high in salt? By processed food high in salt I mean foods that have been altered from their natural state, such as packaged salty snacks, canned salty food including pickles and preserves, salty food prepared at a fast food restaurant** | | | | | |
| Total respondents | 8,103 | 563 | 557 | 3,515 | 3,467 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Always | 373 | 23 | 26 | 169 | 155 |
| 4.6% | 4.0% | 4.6% | 4.8% | 4.5% |
| Often | 837 | 43 | 57 | 382 | 354 |
| 10.3% | 7.7% | 10.3% | 10.9% | 10.2% |
| Sometimes | 2,703 | 184 | 170 | 1,157 | 1,192 |
| 33.4% | 32.7% | 30.5% | 32.9% | 34.4% |
| Rarely | 2,174 | 119 | 123 | 960 | 973 |
| 26.8% | 21.1% | 22.0% | 27.3% | 28.1% |
| Never | 2,015 | 194 | 181 | 846 | 793 |
| 24.9% | 34.5% | 32.6% | 24.1% | 22.9% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **What type of meat do you usually eat in one day?** | | | | | |
| Total respondents | 8,072 | 564 | 555 | 3,517 | 3,437 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Red meat (goat, lamb, cow) | 1,764 | 180 | 128 | 831 | 626 |
| 21.9% | 31.8% | 23.0% | 23.6% | 18.2% |
| Fish and seafood | 2,015 | 189 | 168 | 842 | 816 |
| 25.0% | 33.5% | 30.2% | 24.0% | 23.8% |
| Poultry (chicken) | 3,737 | 193 | 249 | 1,585 | 1,711 |
| 46.3% | 34.2% | 44.9% | 45.1% | 49.8% |
| I do not eat meat | 556 | 3 | 11 | 259 | 284 |
| 6.9% | 0.5% | 2.0% | 7.4% | 8.3% |

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41.0% of the total respondents reported they always or often add salt or a salty sauce such as soya sauce to their food right before eating or as they at. This points to the need for public awareness

14.9% of the total respondents reported they always or often eat processed food high in salt, such as foods that have been altered from their natural state including packaged salty snacks, canned salty food including pickles and preserves, and salty food prepared at a fast food restaurant.

It was also noted that majority of respondents (more than 95%) used vegetable oils for cooking and the use of other forms of fat was relatively less frequent. Among the vegetable oil users, majority used refined oils and oils with unsaturated fatty acids such as olive oil, sunflower oil, corn oil and canola oil. As can be noted from further tables, about 70% of respondents consumed white meat such as chicken/ poultry and fish/seafood vs 21.9% who consumed red meats. About 7% of respondents interviewed reported that they are not consuming any type of meats. We have excluded the “don’t know” category of responses.

*\*The tables above have been consolidated based on the responses to the various questions on individual dietary habits. The tables exclude the ‘don’t know’ category of responses.*

## CORE - Physical Activity

Sufficient Physical Activity is defined by WHO in this report as over 150 minutes per week of an activity defined as moderate or vigorous. In order to calculate sufficient Physical Activity, the total time spent in physical activity during a typical week and the intensity of the physical activity was taken into account.

To compute the WHO Indicator on percentage of respondents with insufficient physical activity, defined as at least 150 minutes of moderate-intensity aerobic physical activity throughout the week or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week or an equivalent combination of moderate- and vigorous-intensity activity, we had to combine multiple variables on physical activities at home and work place in order to derive the final estimates.

Those with less than 150 minutes in total were classified with insufficient levels of Physical Activity. It was noted that majority of respondents interviewed (70.8%) did not meet the WHO recommendations for sufficient physical activity and majority of such respondents were aged less than 45 years. Females report higher levels of insufficient physical activity than males. The age group 30-44 years has the highest percentage of insufficient physical activity compared to other age groups disregarding the gender or nationality.

Table 35: Summary of the physical activities

60

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | Gender | | TOTAL  Emirati Non- Emirati | | Emirati | | Non-Emirati | |
| Population Male Total | | | Female | Male | Female Male | | Female |
| Denominator all respondents responding to physical activity questions | 8188 | 4143 | 4045 | 1129 | 7059 | 566 | 563 | 3577 | 3482 |
| Total respondents not meeting the WHO recommendations | 5797 | 2769 | 3028 | 912 | 4885 | 424 | 489 | 2345 | 2539 |
| Percentage with insufficient physical activity\* | 70.8% | 66.8% | 74.8% | 80.8% | 69.2% | 74.9% | 86.9% | 65.6% | 72.9% |
| Total respondents meeting the WHO recommendations on physical activity for health | 2391 | 1374 | 1017 | 217 | 2174 | 142 | 74 | 1232 | 943 |
| Percentage with sufficient physical activity\* | 29.2% | 33.2% | 25.1% | 19.2% | 30.8% | 25.1% | 13.1% | 34.4% | 27.1% |
| Distribution of respondents not meeting WHO definition by age group | | | | | | | | | |
| 18-29 years | 1490 | 579 | 911 | 308 | 1182 | 143 | 162 | 439 | 746 |
| Percentage | 25.7% | 20.9% | 30.1% | 33.8% | 24.2% | 33.8% | 33.2% | 18.7% | 29.4% |
| 30-44 years | 2777 | 1282 | 1496 | 346 | 2433 | 158 | 185 | 1123 | 1310 |
| Percentage | 47.9% | 46.3% | 49.4% | 37.9% | 49.8% | 37.3% | 37.9% | 47.9% | 51.6% |
| 45-59 years | 1183 | 717 | 466 | 162 | 1021 | 70 | 90 | 647 | 376 |
| Percentage | 20.4% | 25.9% | 15.4% | 17.8% | 20.9% | 16.5% | 18.5% | 27.6% | 14.8% |
| 60+ years | 348 | 191 | 156 | 100 | 247 | 50 | 48 | 143 | 107 |
| Percentage | 6.0% | 6.9% | 5.2% | 11.0% | 5.0% | 11.9% | 9.9% | 6.1% | 4.2% |

\*WHO recommendations for sufficient physical activity should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week or an equivalent combination of moderate- and vigorous-intensity activity.

Table 36: Summary tables on physical activity at work and home

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|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Type of physical activity AT WORK | TOTAL | Emirati  Male Female | | Non-E  Male | mirati  Female |
| **Does your work involve vigorous-intensity activity that causes large increases in breathing or heart rate like [carrying or lifting heavy loads, digging or construction work] for at least 10 minutes continuously?** | | | | | |
| Yes | 353 | 34 | 24 | 180 | 116 |
| 4.3% | 6.0% | 4.2% | 5.0% | 3.3% |
| No | 7835 | 532 | 540 | 3396 | 3367 |
| 95.7% | 94.0% | 95.8% | 95.0% | 96.7% |
| Average number of days of vigorous-intensity activities as a part of your work | 3.9 | 3.8 | 2.3 | 4.2 | 3.6 |
| Average time spent doing the vigorous-intensity activities as a part of your work in hours | 2.4 | 2.1 | 2.8 | 3.0 | 1.7 |
| **Does your work involve moderate-intensity activity, that causes small increases in breath- ing or heart rate such as brisk walking [or carrying light loads] for at least 10 minutes continuously?** | | | | | |
| Yes | 484 | 35 | 14 | 270 | 165 |
| 5.9% | 6.1% | 2.5% | 7.5% | 4.7% |
| No | 7704 | 532 | 549 | 3307 | 3317 |
| 94.1% | 93.9% | 97.5% | 92.5% | 95.3% |
| Average number of days of moderate—intensity activities as a part of your work | 4.8 | 4.2 | 3.4 | 4.9 | 4.9 |
| Average time spent doing the moderate-intensi- ty activities as a part of your work in hours | 2.9 | 3.5 | 1.7 | 3.9 | 1.4 |

## Physical activity at home (leisure and sports)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Type of physical activity AT WORK | TOTAL | Emirati  Male Female | | Non-Emirati  Male Female | |
| **Do you do any vigorous-intensity sports, fitness or recreational (leisure) activities that cause large increases in breathing or heart rate like [running or football] for at least 10 minutes continuously?** | | | | | |
| Yes | 703 | 98 | 26 | 381 | 198 |
| 8.6% | 17.3% | 4.5% | 10.7% | 5.7% |
| No | 7485 | 468 | 538 | 3195 | 3284 |
| 91.4% | 82.7% | 95.5% | 89.3% | 94.3% |
| Average number of days in a week on vigorous- intensity sports, fitness or recreational (leisure) | 3.9 | 3.7 | 3.8 | 3.8 | 4.2 |
| Average time spent on vigorous-intensity sports, fitness or recreational activities on a typical day (in Hours) | 1.4 | 1.6 | 1.2 | 1.5 | 1.1 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Do you do any moderate-intensity sports, fitness or recreational (leisure) activities that cause a small increase in breathing or heart rate such as brisk walking, [cycling, swimming, volleyball] for at least 10 minutes continuously?** | | | | | |
| Yes | 593 | 77 | 20 | 300 | 196 |
| 7.2% | 13.5% | 3.5% | 8.4% | 5.6% |
| No | 7595 | 490 | 543 | 3276 | 3286 |
| 92.8% | 86.5% | 96.5% | 91.6% | 94.4% |
| Average number of days in a week on mod- erate-intensity sports, fitness or recreational (leisure) | 3.6 | 3.7 | 4.4 | 3.5 | 3.6 |
| Average time spent on moderate-intensity sports, fitness or recreational activities on a typical day (in Hours) | 1.5 | 1.2 | 2.3 | 1.7 | 1.3 |

As can be noted from the tables above, a majority of respondents interviewed did not do moderate or

vigorous activity at their work or during their leisure. It is also to be noted that doing moderate vigorous intensity activity during leisure or recreation, there were more females than males who did not engage in such activities.

* 1. **EXPANDED – Physical Activity**

Table 37: Time spent by respondents in sedentary / sitting or reclining posture in hours in a day

|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL (hours) | | Emirati | Non-Emirati |
| Average time spent on sitting or reclining on a typical day | 4.9 | 1.7 | 4.0 |

Table 38: Respondents’ views on factors that will encourage them to do more physical activity

|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL Emirati Non-Emirati | | | |
| Total respondents to adult questionnaire | 8,188 | 1,130 | 7,059 |
| 100.00% | 100.00% | 100.00% |
| Availability of public parks near my residence | 4,974 | 777 | 4,198 |
| 60.7% | 68.8% | 59.5% |
| Availability of physical activity times during usual working hours | 2,196 | 216 | 1,981 |
| 26.8% | 19.1% | 28.1% |
| Availability of sidewalks on main roads (for walking and biking) | 1,942 | 251 | 1,690 |
| 23.7% | 22.2% | 23.9% |
| Availability of GYMS in residence \ near my residence | 1,847 | 300 | 1,546 |
| 22.6% | 26.6% | 21.9% |
| reasonable fees for subscription in GYMS | 1,843 | 220 | 1,623 |
| 22.5% | 19.5% | 23.0% |
| Availability of GYMS separate for men and women | 1,379 | 230 | 1,150 |
| 16.8% | 20.4% | 16.3% |

* 1. **Health State Descriptions**

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Each adult respondent in the survey was asked to rate their health status on a five point scale of none to extreme. The question was “Overall in the last 30 days, how much difficulty did you have?”. The following tables displays the results for self-rated difficulties with a number of selected tasks, such as work and household activities, self-care, bodily aches and other aspects of health.

15.8% of the respondent had mild to moderate difficulty in moving around and only 0.8% of the total respondent had severe to extreme difficulty in moving. 17.1% of the total population had

breathlessness and increase heart rate when doing any vigorous activities. 1.2% of the total respondent had severe to extreme increase in heart rate and breathlessness.19.4 % of the respondent were having bodily aches or pains from mild to moderate. 1.3% had severe to extreme body ache and pain.

13.1% of the total respondent were having mild to moderate difficulty in learning some kind of new activities. 12.4% of the respondent were having mild to moderate problem in personal relationship and community participation. 17.1% of the respondent were having mild to moderate problem of not feeling rested or refreshed during the day. Around 13 % of the respondent faced mild to moderate issue in making new friends.

Table 39: Summary of the health state descriptions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Health state descriptions and difficulty with  specific activities | TOTAL | Emirati  Male Female | | Non-E  Male | mirati  Female |
| Total people responding to these questions | 8188 | 566 | 563 | 3577 | 3482 |
| Overall in the last 30 days, how much difficulty did you have: | | | | | |
| **1. With moving around?** | | | | | |
| None | 6787 | 421 | 380 | 3076 | 2910 |
| 82.9% | 74.4% | 67.5% | 86.0% | 83.6% |
| Mild to Moderate | 1291 | 131 | 159 | 458 | 543 |
| 15.8% | 23.2% | 28.2% | 12.8% | 15.6% |
| Severe to Extreme | 67 | 11 | 17 | 19 | 20 |
| 0.8% | 2.0% | 3.0% | 0.5% | 0.6% |
| **2. In vigorous activities (vigorous activities require hard physical effort and cause large increases in breathing or heart rate)?** | | | | | |
| None | 6622 | 403 | 370 | 2982 | 2868 |
| 80.9% | 71.2% | 65.7% | 83.4% | 82.4% |
| Mild to Moderate | 1398 | 137 | 160 | 533 | 567 |
| 17.1% | 24.3% | 28.4% | 14.9% | 16.3% |
| Severe to Extreme | 102 | 22 | 24 | 29 | 27 |
| 1.2% | 3.9% | 4.3% | 0.8% | 0.8% |
| **3. With self-care, such as bathing/washing or dressing yourself?** | | | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| None | 7120 | 454 | 430 | 3183 | 3054 |
| 87.0% | 80.1% | 76.4% | 89.0% | 87.7% |
| Mild to Moderate | 964 | 102 | 120 | 349 | 392 |
| 11.8% | 18.0% | 21.3% | 9.8% | 11.3% |
| Severe to Extreme | 63 | 9 | 6 | 24 | 23 |
| 0.8% | 1.6% | 1.1% | 0.7% | 0.7% |
| **4. Of bodily aches or pains?** | | | | | |
| None | 6439 | 410 | 360 | 2884 | 2786 |
| 78.6% | 72.4% | 63.9% | 80.6% | 80.0% |
| Mild to Moderate | 1588 | 141 | 177 | 621 | 650 |
| 19.4% | 24.9% | 31.4% | 17.4% | 18.7% |
| Severe to Extreme | 104 | 14 | 23 | 29 | 38 |
| 1.3% | 2.5% | 4.2% | 0.8% | 1.1% |
| **5. Bodily discomfort ?** | | | | | |
| None | 6543 | 418 | 369 | 2957 | 2800 |
| 79.9% | 73.8% | 65.5% | 82.7% | 80.4% |
| Mild to Moderate | 1500 | 131 | 171 | 556 | 641 |
| 18.3% | 23.2% | 30.4% | 15.6% | 18.4% |
| Severe to Extreme | 92 | 15 | 20 | 29 | 27 |
| 1.1% | 2.7% | 3.5% | 0.8% | 0.8% |
| **6. In your daily life because of your pain?** | | | | | |
| None | 534 | 26 | 32 | 237 | 239 |
| 26.4% | 15.1% | 14.4% | 29.7% | 28.7% |
| Mild to Moderate | 1363 | 131 | 168 | 501 | 563 |
| 67.3% | 77.1% | 75.7% | 62.9% | 67.3% |
| Severe to Extreme | 87 | 12 | 17 | 29 | 28 |
| 4.3% | 7.0% | 7.8% | 3.7% | 3.4% |
| **7. With concentrating or remembering things?** | | | | | |
| None | 6828 | 434 | 413 | 3051 | 2930 |
| 83.4% | 76.6% | 73.4% | 85.3% | 84.2% |
| Mild to Moderate | 1215 | 115 | 129 | 462 | 509 |
| 14.8% | 20.4% | 22.8% | 12.9% | 14.6% |
| Severe to Extreme | 97 | 16 | 18 | 28 | 35 |
| 1.2% | 2.9% | 3.1% | 0.8% | 1.0% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **8. In learning a new task (for example, learning how to get to a new place, learning a new game, learning a new recipe)?** | | | | | |
| None | 6963 | 440 | 418 | 3098 | 3007 |
| 85.0% | 77.7% | 74.2% | 86.6% | 86.4% |
| Mild to Moderate | 1071 | 107 | 129 | 413 | 423 |
| 13.1% | 18.8% | 22.9% | 11.5% | 12.1% |
| Severe to Extreme | 104 | 19 | 12 | 37 | 36 |
| 1.3% | 3.4% | 2.1% | 1.0% | 1.0% |
| **9. With personal relationships or participation in the community?** | | | | | |
| None | 7026 | 451 | 424 | 3124 | 3028 |
| 85.8% | 79.6% | 75.3% | 87.3% | 86.9% |
| Mild to Moderate | 1011 | 95 | 117 | 399 | 401 |
| 12.4% | 16.7% | 20.7% | 11.2% | 11.5% |
| Severe to Extreme | 103 | 20 | 17 | 29 | 38 |
| 1.3% | 3.5% | 3.0% | 0.8% | 1.1% |
| **10. With dealing with conflicts and tensions with others** | | | | | |
| None | 6824 | 429 | 400 | 3045 | 2950 |
| 83.3% | 75.7% | 70.9% | 85.1% | 84.7% |
| Mild to Moderate | 1221 | 120 | 139 | 480 | 482 |
| 14.9% | 21.1% | 24.7% | 13.4% | 13.9% |
| Severe to Extreme | 99 | 18 | 21 | 29 | 31 |
| 1.2% | 3.1% | 3.7% | 0.8% | 0.9% |
| **11. With making new friendships or maintaining current friendships?** | | | | | |
| None | 6972 | 443 | 425 | 3090 | 3015 |
| 85.1% | 78.2% | 75.4% | 86.4% | 86.6% |
| Mild to Moderate | 1064 | 106 | 116 | 423 | 419 |
| 13.0% | 18.7% | 20.6% | 11.8% | 12.0% |
| Severe to Extreme | 108 | 16 | 16 | 42 | 34 |
| 1.3% | 2.9% | 2.9% | 1.2% | 1.0% |
| **12. With sleeping, such as falling asleep, waking up frequently during the night or waking up too early in the morning?** | | | | | |
| None | 6644 | 416 | 385 | 2989 | 2854 |
| 81.1% | 73.5% | 68.4% | 83.6% | 82.0% |
| Mild to Moderate | 1414 | 133 | 159 | 549 | 572 |
| 17.3% | 23.5% | 28.3% | 15.3% | 16.4% |
| Severe to Extreme | 95 | 16 | 14 | 20 | 44 |
| 1.2% | 2.8% | 2.5% | 0.6% | 1.3% |

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|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **13. Due to not feeling rested and refreshed during the day (for example, feeling tired, not having energy)?** | | | | | |
| None | 6705 | 410 | 385 | 2993 | 2916 |
| 81.9% | 72.5% | 68.4% | 83.7% | 83.7% |
| Mild to Moderate | 1400 | 144 | 165 | 546 | 544 |
| 17.1% | 25.5% | 29.4% | 15.3% | 15.6% |
| Severe to Extreme | 46 | 10 | 8 | 15 | 13 |
| 0.6% | 1.8% | 1.4% | 0.4% | 0.4% |

* 1. **Functional Assessment (only for Elderly respondents aged ≥ 60 years)**

37.2% of the total elderly respondents interviewed were facing mild to moderate difficulty in sitting for long periods, while 40% of the elderly respondents were faced mild to moderate difficulty in walking short distances. It would be interesting to further probe these parameters on the impact of such limitations in mobility on the mental health of individuals.

Table 40: Summary of the functional state assessments

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Descriptions of various functional activities &  difficulty levels | TOTAL | Emirati  Male Female | | Non-E  Male | mirati  Female |
| Think back over the last 30 days and please tell us about how much difficulty you had doing the following activities. | | | | | |
| **1. In sitting for long periods?** | | | | | |
| Total Respondents | 406 | 56 | 51 | 191 | 109 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 230 | 27 | 22 | 125 | 55 |
| 56.5% | 48.5% | 42.9% | 65.6% | 51.0% |
| Mild to Moderate | 151 | 21 | 24 | 62 | 44 |
| 37.2% | 37.0% | 47.8% | 32.4% | 40.9% |
| Severe to Extreme | 25 | 8 | 5 | 4 | 9 |
| 6.3% | 14.5% | 9.3% | 2.0% | 8.1% |
| **2. In walking 100 meters?** | | | | | |
| Total Respondents | 402 | 55 | 47 | 191 | 108 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 198 | 22 | 14 | 114 | 48 |
| 49.2% | 39.5% | 28.9% | 59.7% | 44.6% |
| Mild to Moderate | 161 | 24 | 23 | 67 | 47 |
| 40.0% | 43.6% | 47.5% | 35.3% | 43.2% |
| Severe to Extreme | 43 | 9 | 11 | 10 | 13 |
| 10.8% | 16.8% | 23.6% | 5.0% | 12.2% |

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53.4% of total respondents had mild to moderate difficulty in standing up from sitting down. This problem was more common in female population irrespective of nationality. More Female respondents were facing mild to moderate difficulties on taking in flight of stairs without resting in comparison to male respondent. Once again, this finding of limited functionality was consistent with the previous observations on the mobility. Such restrictions on mobility may impact the social and emotional well-being of individuals and the relationships between these two factors needed further investigation.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **3. In standing up from sitting down?** | | | | | |
| Total Respondents | 410 | 56 | 50 | 193 | 111 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 219 | 24 | 16 | 134 | 46 |
| 53.4% | 42.9% | 31.4% | 69.2% | 41.2% |
| Mild to Moderate | 153 | 24 | 25 | 52 | 52 |
| 37.3% | 42.8% | 50.4% | 26.8% | 46.9% |
| Severe to Extrem | 38 | 8 | 9 | 8 | 13 |
| 9.3% | 14.4% | 18.2% | 4.0% | 11.9% |
| **4. With climbing one flight of stairs without resting?** | | | | | |
| Total Respondents | 389 | 56 | 47 | 187 | 99 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 176 | 19 | 12 | 114 | 32 |
| 45.2% | 33.9% | 24.8% | 60.8% | 31.9% |
| Mild to Moderate | 156 | 23 | 20 | 65 | 48 |
| 40.2% | 41.7% | 42.1% | 34.7% | 48.8% |
| Severe to Extreme | 57 | 14 | 16 | 8 | 19 |
| 14.6% | 24.4% | 33.2% | 4.5% | 19.3% |

61.9 % of Non-Emirati Females were facing mild to moderate difficulty with stooping, kneeling or crouching in compared to 45.7% of Emirati Females. There was no significant difference between the males and females among Emiratis who were facing mild to moderate trouble in picking up things with fingers, whereas among the Non-Emiratis, more female respondents were having mild to moderate difficulty in picking up things from the finger.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **5. With stooping, kneeling or crouching?** | | | | | |
| Total Respondents | 403 | 56 | 49 | 191 | 107 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 168 | 17 | 11 | 113 | 26 |
| 41.6% | 30.2% | 23.5% | 59.2% | 24.5% |
| Mild to Moderate | 189 | 28 | 22 | 72 | 66 |
| 46.8% | 50.6% | 45.7% | 37.6% | 61.9% |
| Severe to Extreme | 47 | 11 | 15 | 6 | 15 |
| 11.6% | 19.3% | 30.8% | 3.2% | 13.7% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **6. Picking up things with your fingers (such as picking up a coin from a table)?** | | | | | |
| Total Respondents | 406 | 56 | 49 | 192 | 109 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 266 | 29 | 26 | 151 | 60 |
| 65.5% | 51.7% | 52.5% | 78.5% | 55.5% |
| Mild to Moderate | 117 | 21 | 18 | 39 | 40 |
| 28.9% | 36.7% | 35.8% | 20.5% | 36.8% |
| Severe to Extreme | 23 | 7 | 6 | 2 | 8 |
| 5.6% | 11.7% | 11.7% | 1.0% | 7.7% |

Overall 34.2% of the respondents were having mild to moderate issues in taking care of household responsibilities. 49.8 % Female non-Emiratis respondent were not able to take care of household responsibility that was quite higher percentage when compared among gender and nationality.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **7. In taking care of your household responsibilities?** | | | | | |
| Total Respondents | 386 | 48 | 45 | 186 | 107 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 231 | 25 | 20 | 141 | 45 |
| 59.8% | 52.7% | 43.9% | 75.5% | 42.4% |
| Mild to Moderate | 132 | 17 | 17 | 44 | 53 |
| 34.2% | 36.6% | 38.5% | 23.6% | 49.8% |
| Severe to Extreme | 23 | 5 | 8 | 2 | 8 |
| 6.0% | 10.7% | 17.6% | 0.9% | 7.8% |
| **8. In joining in community activities (for example, festivities, religious or other activities) in the same way as anyone else can?** | | | | | |
| Total Respondents | 396 | 52 | 43 | 190 | 111 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 240 | 23 | 20 | 139 | 58 |
| 60.7% | 44.8% | 45.5% | 73.4% | 52.1% |
| Mild to Moderate | 129 | 22 | 17 | 47 | 44 |
| 32.6% | 42.3% | 38.7% | 24.8% | 39.3% |
| Severe to Extreme | 27 | 7 | 7 | 4 | 10 |
| 6.7% | 12.9% | 15.8% | 1.8% | 8.6% |

There was a significant difference between males and females respondents with mild to moderate issues in extending arms above shoulder. In Emirati Nationals more males were having such issues with movement of arms and shoulders than females but in non-Emiratis Nationals more females were having issues in extending arms above shoulder.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **9. In extending your arms above shoulder** | | | | | |
| Total Respondents | 410 | 56 | 50 | 192 | 111 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 255 | 24 | 23 | 147 | 61 |
| 62.3% | 42.6% | 45.4% | 76.6% | 55.0% |
| Mild to Moderate | 129 | 25 | 19 | 42 | 42 |
| 31.4% | 45.0% | 37.9% | 21.9% | 38.1% |
| Severe to Extreme | 26 | 7 | 8 | 3 | 8 |
| 6.3% | 12.4% | 16.7% | 1.5% | 6.9% |
| **10. Concentrating on doing something for 10 minutes?** | | | | | |
| Total Respondents | 410 | 56 | 50 | 193 | 111 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 261 | 25 | 24 | 152 | 60 |
| 63.5% | 44.5% | 47.5% | 78.8% | 53.8% |
| Mild to Moderate | 133 | 26 | 20 | 41 | 45 |
| 32.3% | 46.3% | 41.0% | 21.2% | 40.6% |
| Severe to Extreme | 17 | 5 | 6 | . | 6 |
| 4.2% | 9.2% | 11.5% | . | 5.6% |

There was difference in male and female non-Emirati respondents who were having mild or moderate problem in bathing whole body. More number of female respondents (38.5%) had difficulties than male respondents (19.2%).

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|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **11. In walking a long distance such as a kilometer?** | | | | | |
| Total Respondents | 384 | 51 | 42 | 191 | 100 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 174 | 15 | 11 | 112 | 36 |
| 45.4% | 29.6% | 26.5% | 58.8% | 35.8% |
| Mild to Moderate | 155 | 23 | 16 | 70 | 46 |
| 40.5% | 45.2% | 37.9% | 36.9% | 45.8% |
| Severe to Extreme | 54 | 13 | 15 | 8 | 18 |
| 14.2% | 25.3% | 35.6% | 4.3% | 18.4% |
| **12. In bathing/washing your whole body?** | | | | | |
| Total Respondents | 412 | 56 | 50 | 194 | 111 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 273 | 30 | 26 | 157 | 61 |
| 66.4% | 53.0% | 52.3% | 80.8% | 54.4% |
| Mild to Moderate | 118 | 21 | 18 | 37 | 43 |
| 28.8% | 36.6% | 35.4% | 19.2% | 38.5% |
| Severe to Extreme | 20 | 6 | 6 | . | 8 |
| 4.8% | 10.3% | 12.3% | . | 7.1% |

About 50% of respondents reported to have mild to moderate and severe to extreme difficulty in carrying things. This number was reported more among Non-Emirati respondents. About a quarter of respondents (24.9%) had mild to moderate issue in eating including cutting up food items.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **13. With carrying things?** | | | | | |
| Total Respondents | 397 | 54 | 44 | 190 | 109 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 198 | 18 | 14 | 131 | 36 |
| 49.9% | 32.6% | 31.4% | 68.8% | 33.1% |
| Mild to Moderate | 160 | 25 | 21 | 55 | 59 |
| 40.3% | 46.4% | 48.6% | 28.9% | 53.7% |
| Severe to Extreme | 39 | 11 | 9 | 4 | 14 |
| 9.8% | 21.0% | 20.0% | 2.3% | 13.2% |
| **14. With eating (including cutting up your food)?** | | | | | |
| Total Respondents | 407 | 56 | 49 | 193 | 109 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 295 | 34 | 30 | 163 | 68 |
| 72.4% | 60.0% | 61.1% | 84.4% | 62.4% |
| Mild to Moderate | 102 | 19 | 14 | 30 | 39 |
| 24.9% | 33.3% | 28.8% | 15.6% | 35.5% |
| Severe to Extreme | 11 | 4 | 5 | . | 2 |
| 2.7% | 6.7% | 10.1% | . | 2.1% |

37.8% and 30.4% of the total respondent had mild to moderate difficulties in getting up from lying down and using the toilet respectively.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **15. With getting up from lying down?** | | | | | |
| Total Respondents | 411 | 56 | 50 | 193 | 111 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 242 | 25 | 25 | 142 | 50 |
| 58.9% | 44.2% | 50.4% | 73.5% | 45.0% |
| Mild to Moderate | 155 | 26 | 21 | 51 | 58 |
| 37.8% | 46.3% | 40.8% | 26.5% | 51.9% |
| Severe to Extreme | 13 | 5 | 4 | . | 3 |
| 3.2% | 9.5% | 8.8% | . | 3.1% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **16. With getting to and using the toilet?** | | | | | |
| Total Respondents | 412 | 56 | 50 | 194 | 111 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 271 | 31 | 29 | 149 | 61 |
| 65.8% | 55.0% | 58.4% | 76.9% | 55.2% |
| Mild to Moderate | 125 | 22 | 16 | 44 | 44 |
| 30.4% | 38.2% | 31.1% | 22.6% | 39.8% |
| Severe to Extreme | 16 | 4 | 5 | 1 | 6 |
| 3.8% | 6.8% | 10.5% | 0.5% | 5.0% |

30.2% of the total respondents had mild to moderate difficulty in using private or public transport. With reference to being emotionally affected by health condition, only 25.9% reported mild to moderate being emotionally affected by their health condition.

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|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **17. With getting where you want to go, using private or public transport if needed?** | | | | | |
| Total Respondents | 392 | 50 | 44 | 189 | 110 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 254 | 29 | 23 | 143 | 60 |
| 64.9% | 58.2% | 51.9% | 75.6% | 54.7% |
| Mild to Moderate | 118 | 17 | 14 | 45 | 42 |
| 30.2% | 34.2% | 31.4% | 24.0% | 38.6% |
| Severe to Extreme | 19 | 4 | 7 | 1 | 7 |
| 4.9% | 7.7% | 16.7% | 0.5% | 6.6% |
| **18. In the last 30 days, how much have you been emotionally affected by your health con- dition(s)?** | | | | | |
| Total Respondents | 411 | 56 | 51 | 193 | 111 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 287 | 33 | 31 | 154 | 69 |
| 69.8% | 58.5% | 61.3% | 79.7% | 62.2% |
| Mild to Moderate | 107 | 19 | 16 | 37 | 34 |
| 25.9% | 34.6% | 31.0% | 19.2% | 30.9% |
| Severe to Extreme | 18 | 4 | 4 | 2 | 8 |
| 4.3% | 6.9% | 7.7% | 1.1% | 7.0% |

Only 23.8% of the total respondents had used any assistive device other than eye glasses. 37.3 % of respondents were far-sighted and this percentage was the highest among the non-Emiratis females. 44.1% of the total respondents were having mild to moderate difficulty in seeing distant object with no significant difference between gender or nationality.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **19. Besides any vision aids (eyeglasses or contact lenses) or hearing aids, do you use any other assistive devices (cane, walker or other) for any difficulties you experience?** | | | | | |
| Yes" | 98 | 16 | 11 | 48 | 23 |
| 23.8% | 29.1% | 21.0% | 24.9% | 20.5% |
| No | 315 | 40 | 41 | 146 | 88 |
| 76.2% | 70.9% | 79.0% | 75.1% | 79.5% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **20. Do you use eyeglasses to see up close (for example at arm’s length, like when you are reading)?** | | | | | |
| Yes" | 154 | 16 | 12 | 79 | 48 |
| 37.3% | 27.6% | 24.1% | 40.5% | 42.7% |
| No | 259 | 41 | 39 | 116 | 64 |
| 62.7% | 72.4% | 75.9% | 59.5% | 57.3% |
| **21. In seeing and recognizing an object or a person you know across the road (from a dis- tance of about 20 meters)?** | | | | | |
| Total Respondents | 405 | 54 | 51 | 191 | 109 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 208 | 27 | 24 | 103 | 55 |
| 51.5% | 50.3% | 47.0% | 53.6% | 50.4% |
| Mild to Moderate | 179 | 24 | 22 | 82 | 51 |
| 44.1% | 45.2% | 43.4% | 42.8% | 46.4% |
| Severe to Extreme | 18 | 2 | 5 | 7 | 3 |
| 4.3% | 4.5% | 9.6% | 3.6% | 3.2% |
| **22. In seeing and recognizing an object at arm’s length (for example, reading)?** | | | | | |
| Total Respondents | 406 | 55 | 50 | 191 | 110 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| None | 193 | 25 | 22 | 100 | 46 |
| 47.6% | 46.4% | 43.2% | 52.5% | 41.8% |
| Mild to Moderate | 193 | 26 | 24 | 83 | 59 |
| 47.5% | 47.1% | 48.6% | 43.6% | 54.0% |
| Severe to Extreme | 20 | 4 | 4 | 8 | 5 |
| 4.9% | 6.5% | 8.2% | 3.9% | 4.3% |

* 1. **Chronic Conditions**
     1. **Blood Pressure**

More than 50% of the respondents who said they were diagnosed by their doctors to have high blood pressure were in the age group of 47 years and above. There was no significant difference between males and females or nationalities of the respondents in this age group. A sizeable proportion of people taking medications for control of raised blood pressure were also taking herbal and traditional medicines. Among those respondents taking herbal or traditional medicines for control of raised blood pressure, there was no significant difference between their ages. Around 38.4% of the total respondent in the age

group of 47 to 59 years were told that they have high blood pressure.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati  Question asked TOTAL Male Female Male Female | | | | | |
| **Have you ever been told by a doctor or other health worker that you have raised blood pressure or hypertension?** | | | | | |
| Respondents who answered NO | 4465 | 335 | 334 | 1798 | 1999 |
| Respondents who answered YES | 708 | 72 | 78 | 348 | 211 |
| 18 To 36 Years | 124 | 16 | 14 | 37 | 57 |
| 17.5% | 21.9% | 17.9% | 10.8% | 27.0% |
| 37 To 46 Years | 186 | 12 | 13 | 119 | 42 |
| 26.2% | 16.2% | 16.7% | 34.3% | 19.8% |
| 47 To 59 Years | 272 | 22 | 24 | 140 | 85 |
| 38.4% | 31.1% | 31.4% | 40.2% | 40.4% |
| 60 and Above | 127 | 22 | 26 | 51 | 27 |
| 17.9% | 30.8% | 33.9% | 14.7% | 12.8% |
| **In the past two weeks, have you taken any drugs (medication) for raised blood pressure prescribed by a doctor or other health worker?** | | | | | |
| Respondents who answered NO | 156 | 14 | 15 | 67 | 61 |
| Respondents who answered YES | 552 | 58 | 63 | 281 | 150 |
| 18 To 36 Years | 66 | 8 | 8 | 21 | 29 |
| 12.0% | 14.5% | 12.0% | 7.6% | 19.2% |
| 37 To 46 Years | 138 | 9 | 9 | 91 | 29 |
| 25.0% | 15.3% | 15.0% | 32.3% | 19.2% |
| 47 To 59 Years | 228 | 19 | 22 | 121 | 66 |
| 41.4% | 33.7% | 35.2% | 42.9% | 44.2% |
| 60 and Above | 119 | 21 | 24 | 49 | 26 |
| 21.7% | 36.6% | 37.8% | 17.3% | 17.4% |
| **Are you currently taking any herbal or traditional remedy for your raised blood pressure?** | | | | | |
| Respondents who answered NO | 631 | 63 | 70 | 309 | 189 |
| Respondents who answered YES | 77 | 9 | 8 | 39 | 21 |
| 18 To 36 Years | 12 | 1 | 0 | 5 | 6 |
| 15.0% | 8.7% | 6.5% | 11.6% | 26.9% |
| 37 To 46 Years | 26 | 2 | 1 | 19 | 5 |
| 34.0% | 18.4% | 16.2% | 48.1% | 21.4% |
| 47 To 59 Years | 25 | 3 | 4 | 10 | 8 |
| 32.1% | 32.3% | 48.1% | 26.8% | 35.9% |
| 60 and Above | 15 | 4 | 2 | 5 | 3 |
| 18.9% | 40.7% | 29.1% | 13.5% | 15.9% |

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* + 1. **Diabetes**

Overall, the highest self-reported raised blood sugar or diabetes was 34.7% among the adults’ respondents in the age group (47 – 59). The Non-Emirati Males had the highest rate of 38.3%. In the same age group of (47 to 59) years, 38.6 % reported that they were using herbal or traditional remedy for diabetes..

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati  Question asked TOTAL Male Female Male Female | | | | | |
| **Have you ever been told by a doctor or other health worker that you have raised blood sugar or diabetes?** | | | | | |
| Respondents who answered NO | 3964 | 286 | 289 | 1622 | 1767 |
| Respondents who answered YES | 864 | 92 | 89 | 395 | 288 |
| 18 To 36 Years | 185 | 24 | 19 | 57 | 85 |
| 21.4% | 26.0% | 20.8% | 14.5% | 29.4% |
| 37 To 46 Years | 224 | 16 | 20 | 118 | 70 |
| 25.9% | 17.4% | 22.2% | 30.0% | 24.1% |
| 47 To 59 Years | 299 | 26 | 25 | 151 | 97 |
| 34.7% | 27.9% | 28.2% | 38.3% | 33.8% |
| 60 and Above | 156 | 26 | 26 | 68 | 36 |
| 18.1% | 28.7% | 28.7% | 17.2% | 12.6% |
| **In the past two weeks, have you taken any drugs (medication) for diabetes prescribed by a doctor or other health worker?** | | | | | |
| Respondents who answered NO | 292 | 30 | 31 | 129 | 102 |
| Respondents who answered YES | 572 | 62 | 58 | 266 | 186 |
| 18 To 36 Years | 70 | 6 | 9 | 21 | 34 |
| 12.2% | 10.0% | 15.0% | 7.7% | 18.6% |
| 37 To 46 Years | 153 | 10 | 9 | 85 | 49 |
| 26.8% | 15.6% | 15.6% | 32.0% | 26.4% |
| 47 To 59 Years | 229 | 22 | 21 | 114 | 72 |
| 40.0% | 36.0% | 35.4% | 42.7% | 39.0% |
| 60 and Above | 120 | 24 | 20 | 47 | 30 |
| 21.0% | 38.4% | 34.0% | 17.5% | 16.1% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Are you currently taking insulin for diabetes prescribed by a doctor or other health worker?** | | | | | |
| Respondents who answered NO | 641 | 61 | 65 | 301 | 214 |
| Respondents who answered YES | 223 | 31 | 24 | 94 | 75 |
| 18 To 36 Years | 26 | 3 | 3 | 7 | 13 |
| 11.6% | 9.0% | 13.7% | 7.1% | 17.5% |
| 37 To 46 Years | 51 | 6 | 3 | 23 | 19 |
| 22.9% | 19.0% | 12.0% | 24.9% | 25.6% |
| 47 To 59 Years | 83 | 10 | 9 | 38 | 26 |
| 37.3% | 32.3% | 39.0% | 40.3% | 35.0% |
| 60 and Above | 63 | 12 | 8 | 26 | 16 |
| 28.2% | 39.6% | 35.3% | 27.7% | 21.8% |
| **Are you currently taking any herbal or traditional remedy for your diabetes?** | | | | | |
| Respondents who answered NO | 777 | 87 | 85 | 354 | 251 |
| Respondents who answered YES | 88 | 4 | 4 | 42 | 37 |
| 18 To 36 Years | 18 | . | . | 9 | 8 |
| 19.7% | . | . | 21.8% | 22.0% |
| 37 To 46 Years | 17 | 0 | 1 | 12 | 4 |
| 19.3% | 7.2% | 13.5% | 28.2% | 11.5% |
| 47 To 59 Years | 34 | 2 | 3 | 11 | 19 |
| 38.6% | 34.3% | 58.2% | 26.7% | 50.2% |
| 60 and Above | 20 | 3 | 1 | 10 | 6 |
| 22.4% | 58.5% | 28.3% | 23.3% | 16.3% |

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* + 1. **Blood cholesterol**

40.2% of the total respondent in the age group of (47 to 59) years were on treatment of raised cholesterol, around 70% of the respondent having raised cholesterol were taking traditional medicine to manage cholesterol.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati  Question asked TOTAL Male Female Male Female | | | | | |
| **Have you ever been told by a doctor or other health worker that you have raised cholesterol?** | | | | | |
| Respondents who answered NO | 3478 | 252 | 250 | 1406 | 1570 |
| Respondents who answered YES | 559 | 56 | 58 | 313 | 132 |
| 18 To 36 Years | 90 | 8 | 8 | 57 | 16 |
| 16.0% | 14.2% | 14.3% | 18.3% | 12.1% |
| 37 To 46 Years | 175 | 13 | 12 | 106 | 44 |
| 31.3% | 23.4% | 20.6% | 33.9% | 33.2% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 47 To 59 Years | 204 | 19 | 20 | 114 | 50 |
| 36.5% | 34.0% | 34.7% | 36.5% | 38.2% |
| 60 and Above | 91 | 16 | 18 | 35 | 22 |
| 16.2% | 28.4% | 30.4% | 11.2% | 16.6% |
| **In the past two weeks, have you taken any oral treatment (medication) for raised total cholesterol prescribed by a doctor or other health worker?** | | | | | |
| Respondents who answered NO | 178 | 19 | 14 | 105 | 39 |
| Respondents who answered YES | 381 | 37 | 44 | 208 | 93 |
| 18 To 36 Years | 39 | 4 | 4 | 25 | 7 |
| 10.4% | 10.8% | 9.1% | 11.9% | 7.2% |
| 37 To 46 Years | 107 | 5 | 7 | 65 | 30 |
| 28.1% | 13.9% | 15.5% | 31.3% | 32.4% |
| 47 To 59 Years | 153 | 15 | 17 | 84 | 38 |
| 40.2% | 40.8% | 39.6% | 40.1% | 40.5% |
| 60 and Above | 81 | 13 | 16 | 35 | 19 |
| 21.4% | 34.5% | 35.8% | 16.7% | 20.0% |
| **Are you currently taking any herbal or traditional remedy for your raised cholesterol?** | | | | | |
| Respondents who answered NO | 486 | 48 | 51 | 277 | 110 |
| Respondents who answered YES | 73 | 8 | 7 | 37 | 21 |
| 18 To 36 Years | 8 | 2 | . | 3 | 3 |
| 11.2% | 28.7% | . | 9.1% | 11.9% |
| 37 To 46 Years | 24 | 1 | 1 | 13 | 9 |
| 33.7% | 16.2% | 21.9% | 36.0% | 39.8% |
| 47 To 59 Years | 28 | 2 | 2 | 17 | 7 |
| 38.3% | 22.8% | 35.0% | 45.5% | 32.4% |
| 60 and Above | 12 | 3 | 3 | 3 | 3 |
| 16.9% | 32.3% | 43.1% | 9.4% | 15.9% |

* + 1. **Cardio Vascular Disease (CVD)**

Less than 2% (151) of the respondents surveyed responded as yes to a past history of heart attack or chest pain from heart disease (angina) or stroke (cerebrovascular accident) and of them, only 51 respondents (about 33%) were taking aspirin regularly for prevention or treatment of heart disease.

Among the same 151 respondents, who ever had a history of heart attack or chest pain from heart disease (angina) or a stroke (cerebrovascular accident or incident), 60 respondents (about 40%) were taking statins (Lovastatin/Simvastatin/Atorvastatin or any other statin) regularly to prevent or treat heart disease

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati  Question asked TOTAL Male Female Male Female | | | | | |
| **Have you ever had a heart attack or chest pain from heart disease (angina) or a stroke (cerebrovascular accident or incident)?** | | | | | |
| Respondents who answered NO | 8037 | 545 | 544 | 3509 | 3439 |
| Respondents who answered YES | 151 | 21 | 19 | 68 | 43 |
| 18 To 27 Years | 22 | 4 | 4 | 5 | 8 |
| 14.3% | 18.8% | 23.5% | 7.2% | 19.2% |
| 28 To 36 Years | 39 | 1 | 5 | 18 | 16 |
| 25.8% | 4.3% | 23.8% | 26.2% | 36.5% |
| 37 To 46 Years | 37 | 5 | 2 | 19 | 10 |
| 24.4% | 24.1% | 11.8% | 28.3% | 24.1% |
| 47 To 59 Years | 29 | 5 | 4 | 14 | 6 |
| 18.9% | 24.2% | 19.1% | 20.8% | 13.2% |
| 60 and Above | 25 | 6 | 4 | 12 | 3 |
| 16.6% | 28.6% | 21.8% | 17.5% | 7.0% |
| **Are you currently taking aspirin regularly to prevent or treat heart disease? (among re- spondents who ever had a heart attack or chest pain from heart disease or a stroke)** | | | | | |
| Respondents who answered NO | 101 | 12 | 13 | 42 | 34 |
| Respondents who answered YES | 51 | 10 | 6 | 26 | 9 |
| 18 To 36 Years | 5 | 0 | 1 | 2 | 2 |
| 11.2% | 3.2% | 14.4% | 8.5% | 25.6% |
| 37 To 46 Years | 11 | 2 | 0 | 6 | 3 |
| 22.1% | 20.3% | 1.7% | 23.1% | 34.4% |
| 47 To 59 Years | 16 | 3 | 2 | 10 | 1 |
| 32.3% | 30.5% | 33.5% | 39.4% | 12.9% |
| 60 and Above | 17 | 5 | 3 | 7 | 2 |
| 34.4% | 46.0% | 50.4% | 29.0% | 27.0% |
| **Are you currently taking statins (Lovastatin/Simvastatin/Atorvastatin or any other statin) regularly to prevent or treat heart disease?** | | | | | |
| Respondents who answered NO | 91 | 14 | 10 | 37 | 29 |
| Respondents who answered YES | 60 | 7 | 9 | 30 | 14 |
| 18 To 27 Years | 2 | . | 1 | . | 1 |
| 3.7% | . | 8.6% | . | 10.4% |
| 28 To 36 Years | 14 | 0 | 2 | 7 | 5 |
| 23.3% | 4.3% | 18.7% | 24.3% | 33.7% |

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|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 37 To 46 Years | 16 | 2 | 1 | 7 | 5 |
| 25.9% | 23.1% | 13.3% | 24.2% | 38.7% |
| 47 To 59 Years | 15 | 2 | 3 | 11 | . |
| 25.0% | 21.0% | 30.3% | 36.2% | . |
| 60 and Above | 13 | 4 | 3 | 5 | 2 |
| 22.1% | 51.6% | 29.1% | 15.3% | 17.2% |

* + 1. **Arthritis**

The prevalence and treatment levels of arthritis are also displayed in Tables above. Overall, 241 adult respondents (3%) reported that they had been diagnosed with arthritis, of which only 32 respondents (12%) were taking any medications or treatment for it during the 2 weeks preceding the survey. Levels of reported arthritis among age group (47-59) were much higher than those in other age groups, same trend noted in the treatment as well.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati  Question asked TOTAL Male Female Male Female | | | | | |
| **Have you ever been diagnosed with/told by health care professional that you have arthritis (sometimes called rheumatism or osteoarthritis)?** | | | | | |
| Respondents who answered NO | 7947 | 540 | 517 | 3503 | 3388 |
| Respondents who answered YES | 241 | 26 | 47 | 74 | 94 |
| 18 To 36 Years | 44 | 7 | 6 | 13 | 19 |
| 18.5% | 25.8% | 12.6% | 17.8% | 19.8% |
| 37 To 46 Years | 46 | 3 | 6 | 15 | 23 |
| 19.2% | 10.6% | 12.2% | 20.2% | 24.2% |
| 47 To 59 Years | 78 | 4 | 16 | 24 | 34 |
| 32.5% | 16.6% | 33.9% | 32.8% | 36.1% |
| 60 and Above | 72 | 12 | 19 | 22 | 19 |
| 29.8% | 47.1% | 41.2% | 29.2% | 19.8% |
| **Have you been taking medications or other treatment for it During the last 2 weeks?** | | | | | |
| Respondents who answered NO | 78 | 9 | 10 | 25 | 34 |
| Respondents who answered YES | 32 | 1 | 7 | 14 | 10 |
| 18 To 36 Years | 7 | . | 2 | . | 5 |
| 22.6% | . | 33.8% | . | 48.4% |
| 37 To 46 Years | 7 | 0 | 1 | 3 | 3 |
| 22.1% | 16.5% | 7.9% | 21.0% | 33.3% |
| 47 To 59 Years | 11 | 0 | 2 | 7 | 2 |
| 34.5% | 40.7% | 30.9% | 47.6% | 18.3% |
| 60 and Above | 7 | 0 | 2 | 4 | . |
| 20.8% | 42.8% | 27.3% | 31.4% | . |

* + 1. **Stroke**

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The respondents to the survey were asked whether they had ever been told by a health professional that they had suffered from a stroke in their lifetime. It is important to bear in mind that the results may not accurately reflect coverage of treatment for people who have had a stroke, partly because of the relatively high case fatality rate of stroke and partly because many stroke patients become

confined to the hospital given the potential severity of the condition. Those in this situation, have not been included in the survey.

Of the 14 respondents who had suffered from stroke, 8 respondents had taken medications or other treatment for stroke in the 2 weeks preceding the survey.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati  Question asked TOTAL Male Female Male Female | | | | | |
| **Have you ever been diagnosed by health professional or health care provider with stroke?** | | | | | |
| Respondents who answered NO | 8174 | 564 | 560 | 3571 | 3479 |
| Respondents who answered YES | 14 | 3 | 3 | 6 | 3 |
| 18 To 36 Years | 0 | 0 | 0 | 0 | 0 |
| 2.0% | 0 | 0 | 0 | 8.5% |
| 37 To 46 Years | 3 | . | . | 1 | 2 |
| 23.9% | . | . | 16.6% | 74.1% |
| 47 To 59 Years | 5 | 0 | 0 | 5 | . |
| 35.3% | 7.9% | 5.6% | 83.4% | . |
| 60 and Above | 5 | 2 | 3 | . | 1 |
| 38.8% | 92.1% | 94.4% | . | 17.3% |
| **Have you been taking any medications or other treatment for stroke during the last 2 weeks?** | | | | | |
| Respondents who answered NO | 5 | 2 | 2 | 0 | 1 |
| Respondents who answered YES | 8 | 1 | 1 | 6 | 1 |
| 18 To 36 Years | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 |
| 37 To 46 Years | 1 | . | . | 1 | . |
| 11.9% | . | . | 16.6% | . |
| 47 To 59 Years | 5 | 0 | . | 5 | . |
| 60.8% | 11.5% | . | 83.4% | . |
| 60 and Above | 2 | 1 | 1 | . | 1 |
| 27.4% | 88.5% | 100.0% | . | 100.0% |

* + 1. **Chronic Lung Disease**

Of the 8188 adult respondents surveyed, 68 respondents (less than 1%) were diagnosed by health professional or healthcare provider with chronic lung disease (emphysema, bronchitis, COPD) of which only 7 respondents were taking any medications or other treatment (like Oxygen) for chronic lung diseases during the last 2 weeks before the survey.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati  Question asked TOTAL Male Female Male Female | | | | | |
| **Have you ever been diagnosed by health professional or health care provider with chronic lung disease (emphysema, bronchitis, COPD)?** | | | | | |
| Respondents who answered NO | 8120 | 556 | 553 | 3556 | 3455 |
| Respondents who answered YES | 68 | 10 | 10 | 20 | 27 |
| 18 To 27 Years | 10 | 0 | 2 | 3 | 4 |
| 14.5% | 3.3% | 20.5% | 15.6% | 15.7% |
| 28 To 36 Years | 18 | 4 | 1 | 1 | 12 |
| 27.2% | 38.0% | 11.9% | 6.0% | 44.4% |
| 37 To 46 Years | 13 | 3 | 3 | 3 | 4 |
| 19.4% | 30.5% | 26.3% | 17.1% | 14.4% |
| 47 To 59 Years | 17 | 1 | 1 | 9 | 5 |
| 24.7% | 13.0% | 14.0% | 44.2% | 18.6% |
| 60 and Above | 10 | 2 | 3 | 3 | 2 |
| 14.2% | 15.2% | 27.4% | 17.1% | 7.0% |
| **Have you been taking any medications or other treatment (like oxygen) for chronic lung diseases during the last 2 weeks?** | | | | | |
| Respondents who answered NO | 19 | 4 | 2 | 4 | 8 |
| Respondents who answered YES | 7 | 1 | 2 | 2 | 2 |
| 18 To 36 Years | 1 | . | 1 | . | 1 |
| 23.8% | . | 38.4% | . | 38.8% |
| 37 To 46 Years | 2 | 0 | 1 | . | 1 |
| 32.5% | 71.2% | 24.6% | . | 61.2% |
| 47 To 59 Years | 2 | 0 | . | 2 | . |
| 32.5% | 28.8% | . | 100.0% | . |
| 60 and Above | 1 | . | 1 | . | . |
| 11.1% | . | 37.0% | . | . |

* + 1. **Depression**

The following tables shows the prevalence and treatment rates for depression of adults respondents. Of the 8188 adult respondents surveyed, only 46 (less than 1%) respondents had been clinically diagnosed by health professional or healthcare provider with depression. The level of reported depression was very similar for both the non-Emirati and Emirati population. The age group apparently most affected by depression was the (28-36) age group, where 34.3% reported depression.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati  Question asked TOTAL Male Female Male Female | | | | | |
| **Have you ever been diagnosed by health professional or health care provider with depression?** | | | | | |
| Respondents who answered NO | 8143 | 562 | 558 | 3567 | 3456 |
| Respondents who answered YES | 46 | 5 | 5 | 10 | 27 |
| 18 To 27 Years | 4 | . | 1 | . | 3 |
| 8.5% | . | 20.8% | . | 10.7% |
| 28 To 36 Years | 16 | 1 | 2 | 2 | 10 |
| 34.3% | 32.0% | 34.1% | 23.0% | 38.8% |
| 37 To 46 Years | 15 | 1 | 1 | 5 | 8 |
| 32.6% | 33.0% | 21.1% | 49.4% | 28.6% |
| 47 To 59 Years | 10 | 1 | 1 | 3 | 5 |
| 20.9% | 27.8% | 21.7% | 27.6% | 17.2% |
| 60 and Above | 2 | 0 | 0 | . | 1 |
| 3.7% | 7.2% | 2.4% | . | 4.7% |
| **Do you have regular consultation for depression?** | | | | | |
| Respondents who answered NO | 30 | 1 | 2 | 6 | 21 |
| Respondents who answered YES | 16 | 4 | 3 | 3 | 6 |
| 18 To 27 Years | 2 | . | 1 | . | 1 |
| 11.6% | . | 31.5% | . | 14.5% |
| 28 To 36 Years | 2 | 1 | . | . | 1 |
| 11.9% | 29.3% | . | . | 14.2% |
| 37 To 46 Years | 9 | 1 | 1 | 3 | 3 |
| 58.0% | 40.8% | 32.0% | 100.0% | 59.6% |
| 47 To 59 Years | 2 | 1 | 1 | . | . |
| 11.5% | 21.0% | 32.9% | . | . |
| 60 and Above | 1 | 0 | 0 | . | 1 |
| 7.0% | 8.9% | 3.6% | . | 11.7% |
| **Have you been taking any medications or other treatment for depression during the last 2 weeks?** | | | | | |
| Respondents who answered NO | 31 | 2 | 3 | 3 | 23 |
| Respondents who answered YES | 14 | 2 | 2 | 6 | 3 |
| 18 To 27 Years | 2 | . | 1 | . | 1 |
| 12.9% | . | 47.0% | . | 24.7% |
| 28 To 36 Years | 1 | 0 | . | 1 | . |
| 10.5% | 12.3% | . | 18.9% | . |
| 37 To 46 Years | 7 | 1 | 1 | 4 | 1 |
| 48.7% | 57.9% | 47.6% | 57.4% | 26.5% |
| 47 To 59 Years | 3 | 0 | . | 2 | 1 |
| 20.1% | 15.6% | . | 23.8% | 28.9% |
| 60 and Above | 1 | 0 | 0 | . | 1 |
| 7.8% | 14.2% | 5.4% | . | 19.8% |

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Of the 46 respondents clinically diagnosed with depression, only 16 were having regular consultations for the condition and only 14 of them were taking regular medications or other treatment for depression during the 2 weeks before the survey. Of these 46 respondents clinically diagnosed with depression, 14 respondents said they had a period lasting several days (more than 3 days) when they felt sad, empty or depressed during the 12 months preceding the survey.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **During the last 12 months, have you had a period lasting several days (>3) when you felt sad, empty or depressed?** | | | | | |
| Respondents who answered NO | 31 | 2 | 2 | 7 | 21 |
| Respondents who answered YES | 14 | 3 | 3 | 3 | 6 |
| 18 To 27 Years | 2 | . | 1 | . | 1 |
| 13.1% | . | 32.5% | . | 14.6% |
| 28 To 36 Years | 3 | 0 | 1 | . | 2 |
| 20.4% | 10.4% | 20.4% | . | 34.2% |
| 37 To 46 Years | 7 | 1 | 1 | 3 | 2 |
| 51.6% | 49.1% | 32.9% | 100.0% | 41.2% |
| 47 To 59 Years | 1 | 1 | 0 | . | . |
| 7.8% | 28.4% | 10.5% | . | . |
| 60 and Above | 1 | 0 | 0 | . | 1 |
| 7.2% | 12.0% | 3.7% | . | 10.0% |

* + 1. **Cataract**

98 respondents (about 1.25%) were diagnosed with a cataract in one or both eyes. The condition was more common among males in both Emirati and non-Emirati population. Of those diagnosed, 55 (more than 50%) respondents had underwent eye surgery to remove the cataract in the 12 months preceding the survey. Among these 96 respondents, 59 respondents had vision problems with light, such as glare from bright lights, or halos around lights.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati  Question asked TOTAL Male Female Male Female | | | | | |
| **In the last 12 months, were you diagnosed with a cataract in one or both of your eyes (cloudiness in the lens of the eye)?** | | | | | |
| Respondents who answered NO | 8033 | 542 | 546 | 3510 | 3435 |
| Respondents who answered YES | 98 | 22 | 16 | 32 | 28 |
| 18 To 36 Years | 18 | 5 | 3 | 7 | 4 |
| 18.4% | 22.5% | 16.0% | 21.1% | 13.5% |
| 37 To 46 Years | 22 | 3 | 2 | 8 | 9 |
| 22.4% | 12.2% | 15.4% | 25.7% | 30.6% |
| 47 To 59 Years | 26 | 3 | 4 | 10 | 9 |
| 26.7% | 15.8% | 25.7% | 29.6% | 32.5% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 60 and Above | 32 | 11 | 7 | 8 | 7 |
| 32.5% | 49.5% | 42.9% | 23.6% | 23.5% |
| **In the last 12 months, have you had eye surgery to remove this cataract(s)?** | | | | | |
| Respondents who answered NO | 44 | 3 | 7 | 20 | 14 |
| Respondents who answered YES | 55 | 19 | 9 | 12 | 15 |
| 18 To 36 Years | 7 | 5 | 2 | 0 | . |
| 12.2% | 26.1% | 18.6% | 0.9% | . |
| 37 To 46 Years | 10 | 2 | 1 | 3 | 5 |
| 18.7% | 9.7% | 9.2% | 25.1% | 30.5% |
| 47 To 59 Years | 16 | 3 | 3 | 4 | 5 |
| 28.4% | 18.3% | 28.7% | 36.2% | 34.7% |
| 60 and Above | 22 | 9 | 4 | 5 | 5 |
| 40.7% | 45.9% | 43.4% | 37.9% | 34.9% |
| **Vision problems with light, such as glare from bright lights, or halos around lights?** | | | | | |
| Respondents who answered NO | 39 | 11 | 8 | 12 | 8 |
| Respondents who answered YES | 59 | 11 | 8 | 20 | 20 |
| 18 To 36 Years | 4 | 2 | . | 2 | . |
| 7.0% | 15.7% | . | 12.4% | . |
| 37 To 46 Years | 16 | 2 | 1 | 5 | 8 |
| 26.4% | 16.3% | 17.0% | 24.6% | 37.5% |
| 47 To 59 Years | 19 | 2 | 3 | 6 | 7 |
| 31.8% | 22.2% | 35.1% | 30.6% | 36.8% |
| 60 and Above | 21 | 5 | 4 | 6 | 5 |
| 34.8% | 45.8% | 47.9% | 32.5% | 25.7% |

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**2.9.10. Injuries**

About 1.2% of the total respondents (97) were involved in a road traffic accident in the 12 months preceding the survey where they suffered from bodily injuries. Another 76 respondents had other form of bodily injury (other than road traffic accident). Mostly these injuries were accidents (unintentional). No major Differences were observed between both genders and nationalities.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati  Question asked TOTAL Male Female Male Female | | | | | |
| **In the last 12 months, have you been involved in a road traffic accident where you suffered from bodily injury?** | | | | | |
| Total respondents answering | 8188 | 566 | 563 | 3577 | 3482 |
| Yes, once only | 80 | 16 | 10 | 30 | 25 |
| 1.0% | 2.8% | 1.8% | 0.8% | 0.7% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Yes, more than once | 17 | 1 | 0 | 6 | 10 |
| 0.2% | 0.2% | 0.1% | 0.2% | 0.3% |
| **In the last 12 months, have you had any other event where you suffered from bodily injury? (other than road traffic accident)** | | | | | |
| Total respondents answering | 8188 | 566 | 563 | 3577 | 3482 |
| No bodily injury | 8112 | 556 | 553 | 3548 | 3455 |
| Yes, once only | 67 | 10 | 10 | 23 | 25 |
| 0.8% | 1.7% | 1.8% | 0.6% | 0.7% |
| Yes, more than once | 9 | 0 | . | 6 | 3 |
| 0.1% | 0.0% | . | 0.2% | 0.1% |
| **Reason for the bodily injuries (other than road traffic accident) (multiple)** | | | | | |
| Total respondents with bodily injuries | 97 | 17 | 11 | 35 | 34 |
| It was an accident (unintentional) | 79 | 15 | 9 | 30 | 26 |
| 81.4% | 90.7% | 79.8% | 84.2% | 74.7% |
| Someone did it deliberately (intentional) | 6 | 0 | 1 | . | 4 |
| 5.8% | 2.4% | 12.7% | . | 11.2% |
| I did it to myself deliberately (self-inflicted) | 7 | 0 | 0 | 1 | 5 |
| 6.8% | 2.2% | 1.2% | 3.4% | 14.1% |
| **What was the cause of injury?** | | | | | |
| Total respondents responding | 76 | 10 | 10 | 29 | 28 |
| Fall | 22 | 4 | 5 | 5 | 9 |
| 29.3% | 43.0% | 45.8% | 17.1% | 31.1% |
| Struck/hit by person or object | 25 | 5 | 1 | 13 | 7 |
| 32.9% | 48.8% | 6.4% | 44.9% | 24.3% |
| Fire, flames or heat | 12 | . | 1 | 4 | 7 |
| 15.3% | . | 9.3% | 12.8% | 25.4% |
| Poisoning | 5 | . | 1 | 2 | 2 |
| 6.7% | . | 8.9% | 7.4% | 7.4% |
| Animal bite | 1 | . | 0 | . | 1 |
| 1.9% | . | 3.7% | . | 3.9% |
| Electricity shock | 3 | . | 2 | . | 2 |
| 4.6% | . | 15.5% | . | 7.0% |
| Other | 3 | 1 | 1 | 2 | 0 |
| 4.5% | 8.2% | 7.2% | 5.9% | 0.8% |

* 1. **Health Promotional Messages**

The section was intended to understand the trend of healthcare professionals in UAE spreading health promotional messages during their consultations with patients. Overall, around 45% of the total respondents received Health promotional messages given by their physicians or health care professionals. Quit using tobacco was least communicated advice (28.5%) between physicians and their patients.

Table 41: Summary Summary of the health promotional messages

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|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Health promotional and preventative messages Emirati Non-Emirati given by physicians to their patients TOTAL Male Female Male Female | | | | | |
| Quit using tobacco or don’t start | 2338 | 185 | 120 | 1163 | 869 |
| 28.5% | 32.6% | 21.4% | 32.5% | 25.0% |
| Reduce salt in your diet | 3456 | 262 | 257 | 1590 | 1347 |
| 42.2% | 46.3% | 45.7% | 44.4% | 38.7% |
| Eat at least five servings of fruit and/or vegetables each day | 4050 | 297 | 301 | 1839 | 1613 |
| 49.5% | 52.5% | 53.4% | 51.4% | 46.3% |
| Reduce fat in your diet | 4092 | 291 | 296 | 1828 | 1677 |
| 50.0% | 51.4% | 52.5% | 51.1% | 48.2% |
| Start or do more physical activity | 4055 | 287 | 278 | 1829 | 1661 |
| 49.5% | 50.7% | 49.3% | 51.2% | 47.7% |
| Maintain a healthy body weight or lose weight | 4320 | 294 | 301 | 1916 | 1809 |
| 52.8% | 51.9% | 53.4% | 53.6% | 52.0% |
| Reduce sweetened beverages (soft drinks such as Pepsi and Cola)? | 3353 | 266 | 261 | 1537 | 1288 |
| 40.9% | 47.0% | 46.4% | 43.0% | 37.0% |

* 1. **Cervical & Breast Cancer Screening (for women between 18-69 years only)**

The question of pelvic examination and screening for cervical cancer were asked only to the ever- married women only aged (18-69) whereas the questions on breast cancer screening by mammography were asked from women aged 40 years and above regardless of their marital status.

There were total of 3599 married women aged between 18-69 years who responded to the question on pelvic examination. A total of 682 women had undergone pelvic examination for examination of vagina and uterus. Majority of the women (65.7%) had undergone pelvic examination in the last 1 year prior to the survey and very few beyond 5 years since the survey.

Table 42: Respondents undergoing pelvic examination (for screening of vaginal and uterine pathologies) and time since last pelvic examination

|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL Emirati Non-Emirati | | | |
| Distribution of Respondents by Time since last pelvic examination | 680 | 148 | 533 |
| 100.0% | 100.0% | 100.0% |
| Below 2 Years | 447 | 99 | 348 |
| 65.7% | 67.1% | 65.4% |
| 2 to 5 Years | 211 | 43 | 169 |
| 31.1% | 28.9% | 31.7% |
| More than 5 years | 22 | 6 | 16 |
| 3.2% | 4.0% | 3.0% |

Table 43: Respondents who ever had a screening test\* for cervical cancer aged (18-69)

|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL Emirati Non-Emirati Percentage of respondents who ever had a  screening test\* for cervical cancer 12.60% 27.3% 10.6% | | | |
| **Distribution by age groups** | | | |
| 18 To 27 Years | 54 | 15 | 39 |
| 11.9% | 20.9% | 8.0% |
| 28 To 36 Years | 155 | 37 | 118 |
| 34.2% | 27.6% | 9.3% |
| 37 To 46 Years | 122 | 35 | 87 |
| 26.9% | 34.6% | 9.4% |
| 47 To 60 Years | 106 | 23 | 83 |
| 23.4% | 26.9% | 19.6% |
| 60 and Above | 16 | 5 | 11 |
| 3.5% | 15.9% | 16.9% |

Out of the total of 3599 women aged 18-69 years, 2613 women said that they had not undergone such screening tests whereas 255 respondents refused to answer this question while 278 women said they did not know if they had ever undergone any cervical cancer screening test.

Only 453 women responded yes to have ever undergone screening for cervical cancer by one of the methods - Visual Inspection with Acetic Acid/vinegar (VIA), Pap smear and Human Papillomavirus (HPV) test. There were no respondents below the age of 18 years in the survey population.

Out of 453 women aged 18-69 years, there were 210 women between 30 and 49 years age group. When we narrow down the age group of women undergoing any screening test for cervical cancer between 30 and 49 years, we see the following distribution

Table 44: Respondents who ever had a screening test\* for cervical cancer aged (30-49)

|  |  |  |
| --- | --- | --- |
| Total Women aged 30-49 years who had under- gone any cervical cancer screening | Emirati | Non-Emirati |
| 210 | 45 | 178 |
| 14.6% | 12.6% | 16.5% |

In the WHS, women aged 40+ were asked if they had a mammography, or a breast examination, to detect breast cancer, Only 8.5% of the total respondents reported having an examination. The Emirati females deemed in need of a breast examination (i.e. over the age of 40), 16.7% reported having received one. This figure is lower than that of the Non-Emirati females

Table 45: Respondents who responded to question – “Have you done a mammography (an X-ray of your breast taken to detect breast cancer at an early stage)

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|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL | | Emirati | Non-Emirati |
| This question was answered only by those Females aged more than 40 years regardless of their marital status | 3,993\* | 544 | 3,450 |
| 100.0% | 100.0% | 100.0% |
| Yes | 338 | 91 | 248 |
| 8.5% | 16.7% | 7.2% |
| No | 2,951 | 373 | 2,578 |
| 73.9% | 68.6% | 74.7% |
| Refused | 318 | 34 | 283 |
| 8.0% | 6.3% | 8.2% |
| Don’t Know | 387 | 46 | 341 |
| 9.7% | 8.4% | 9.9% |

\* Please note the difference between the numbers of married women respondents aged 18-69 years was 3599 and they answered the question on pelvic examination and cervical cancer screening whereas the question on mammography was answered by 3993 women aged above 40 years regardless of their marital status

Table 46: Age distribution of women who had underwent mammography

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Emirati | | | | | Non-Emirati | | | | |
| TOTAL | 18 To 27  Years | 28 To 36  Years | 37 To 46  Years | 47 To 60  Years | 60 and  Above | 18 To 27  Years | 28 To 36  Years | 37 To 46  Years | 47 To 60  Years | 60 and  Above |
| 338 | 6 | 8 | 31 | 36 | 11 | 7 | 40 | 79 | 104 | 17 |
| 8.5% | 3.8% | 4.9% | 27.0% | 40.5% | 35.0% | 1.0% | 3.1% | 8.4% | 23.6% | 24.5% |

* 1. **Health Services Coverage, Utilization & Satisfaction**

This section shows the results on respondents’ self-assessed need for healthcare services for different time periods, according to selected healthcare services (inpatient or outpatient). It also shows the results for healthcare utilization separately for inpatient and outpatient treatment.

About 9% of total respondents (258) said that they did not get healthcare the last time when they needed. The main reason for these respondents to seek healthcare was acute conditions (21.2%) followed by non-communicable diseases such as cardiovascular, respiratory diseases, diabetes, hypertension, arthritis.

Table 47: Summary of the healthcare coverage and utilization parameters

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati  Healthcare Utilization Question TOTAL Male Female Male Female | | | | | |
| **The last time you needed health care, did you get health care?** | | | | | |
| No | 258 | 12 | 19 | 104 | 123 |
| 8.9% | 4.6% | 6.8% | 8.2% | 11.2% |
| Yes | 2647 | 250 | 267 | 1158 | 972 |
| 91.1% | 95.4% | 93.2% | 91.8% | 88.8% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **What was the main reason you needed care, even if you did not get care?** | | | | | |
| Respondents who did not get healthcare the last time they needed healthcare | 258 | 12 | 19 | 104 | 123 |
| Non-Communicable disease (cardiovascular, respiratory diseases, diabetes, hypertension, arthritis) | 49 | 4 | 5 | 17 | 24 |
| 19.0% | 31.0% | 23.3% | 16.1% | 19.5% |
| Communicable disease (infections, malaria, tuberculosis, HIV) | 17 | 0 | 2 | 3 | 12 |
| 6.6% | 2.1% | 9.7% | 3.2% | 9.4% |
| Maternal and perinatal conditions (pregnancy) | 16 | 0 | 1 | . | 14 |
| 6.3% | 4.1% | 6.8% | . | 11.8% |
| psychological or mental disorders | 1 | . | 1 | . | . |
| 0.3% | . | 4.5% | . | . |
| Acute conditions (pain, diarrhea, fever, flu, head- aches, cough, other) | 55 | 5 | 7 | 21 | 22 |
| 21.2% | 41.9% | 34.6% | 20.4% | 17.8% |
| Injuries (including occupation/work related condition/injury,) | 2 | 0 | . | 2 | . |
| 0.9% | 1.8% | . | 2.0% | . |
| Surgery or surgical intervention | 7 | 0 | 0 | 5 | 1 |
| 2.9% | 2.7% | 0.9% | 5.3% | 1.2% |
| Other | 111 | 2 | 4 | 55 | 50 |
| 42.8% | 16.3% | 20.1% | 52.9% | 40.4% |

* + 1. **Inpatient**

Of the 2647 respondents who received healthcare the last time they needed healthcare, 397 respondents (15.0%) had stayed overnight in a hospital in UAE.

51.3% of the respondents were very satisfied with the health care services while 44.6% were satisfied with the healthcare services. Majority of the respondent got better and much better after visiting the healthcare.

Majority of respondents were satisfied with care they received in their last hospital stay. Majority of the respondent got better or much better after their last hospital stay.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati Non-Emirati  Healthcare Utilization Question TOTAL Male Female Male Female | | | | | |
| **In the last 3 years, have you ever stayed overnight in a hospital in both private and public sector in UAE?** | | | | | |
| Total respondents who answered this question | 2647 | 250 | 267 | 1158 | 972 |
| Yes, I stayed overnight in a hospital | 397 | 46 | 80 | 99 | 173 |
| 15.0% | 18.2% | 30.1% | 8.5% | 17.8% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Overall, how satisfied were you with the care you received during your last hospital stay?** | | | | | |
| Total respondents who answered this question | 251 | 31 | 52 | 57 | 111 |
| Very satisfied | 128 | 18 | 27 | 29 | 54 |
| 51.3% | 58.0% | 51.9% | 51.8% | 48.9% |
| Satisfied | 112 | 11 | 24 | 25 | 52 |
| 44.6% | 36.3% | 46.2% | 43.8% | 46.6% |
| Neither satisfied nor dissatisfied | 8 | 1 | 1 | 2 | 4 |
| 3.1% | 2.2% | 1.9% | 4.4% | 3.2% |
| Dissatisfied | 2 | 0 | . | . | 2 |
| 0.7% | 1.0% | . | . | 1.4% |
| Very dissatisfied | 1 | 1 | . | . | . |
| 0.3% | 2.6% | . | . | . |
| **What was the outcome or result of your visit to the health care provider? Did your condition…….** | | | | | |
| Total respondents who answered this question | 251 | 31 | 52 | 57 | 111 |
| Get much better | 113 | 15 | 24 | 24 | 51 |
| 45.3% | 47.2% | 46.5% | 41.7% | 46.1% |
| Get better | 129 | 15 | 26 | 32 | 56 |
| 51.7% | 48.1% | 50.5% | 56.7% | 50.6% |
| No change | 5 | 0 | 2 | . | 3 |
| 2.0% | 0.7% | 3.0% | . | 2.9% |
| Get worse | 2 | 0 | . | 1 | 0 |
| 0.7% | 1.4% | . | 1.6% | 0.4% |
| Get much worse | 1 | 1 | . | . | . |
| 0.3% | 2.6% | . | . | . |

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* + 1. **Outpatient**

Private clinic or health care facility was most utilized in last 12 months by respondents. Non-Emiratis visited most in private clinic while Emiratis mostly visited to Public hospital in last 12 months.

Around 40% of the respondent went to seek healthcare services for Acute conditions (pain, diarrhea, fever, flu, headaches, cough, other) and 27.8% of the respondent visited for non-communicable diseases such as cardiovascular, respiratory diseases, diabetes, hypertension, arthritis.

Majority of respondents were satisfied with care they received in their last outpatient visit. Majority of the respondent got better or much better after their last outpatient visit

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Emirati  Healthcare Utilization Question TOTAL Male Female | | | | Non-Emirati | |
| Male | Female |
| **What was the last (most recent) health care facility / service you visited in the last 12 months for outpatient care and care at home?** | | | | | |
| Total respondents who answered this question on outpatient care and care at home | 1826 | 191 | 222 | 731 | 682 |
| Private doctor’s office | 527 | 45 | 68 | 223 | 192 |
| 28.9% | 23.3% | 30.7% | 30.5% | 28.1% |
| Private clinic or health care facility | 761 | 24 | 23 | 357 | 357 |
| 41.7% | 12.4% | 10.3% | 48.8% | 52.4% |
| Public clinic or health care facility | 135 | 26 | 25 | 44 | 40 |
| 7.4% | 13.6% | 11.4% | 6.1% | 5.8% |
| Public hospital | 387 | 95 | 105 | 101 | 86 |
| 21.2% | 49.4% | 47.2% | 13.9% | 12.6% |
| Home visit | 1 | . | . | . | 1 |
| 0.1% | . | . | . | 0.1% |
| Pharmacy | 7 | 1 | . | 3 | 3 |
| 0.4% | 0.4% | . | 0.4% | 0.5% |
| Do not know | 6 | 1 | 1 | 2 | 2 |
| 0.3% | 0.5% | 0.3% | 0.3% | 0.3% |
| Other | 1 | 1 | . | . | 1 |
| 0.1% | 0.3% | . | . | 0.1% |
| **Which reason best describes why you needed this visit for outpatient care and care at home?** | | | | | |
| Total respondents who answered this question | 1826 | 191 | 222 | 731 | 682 |
| Non-Communicable disease (cardiovascular, respiratory diseases, diabetes, hypertension, arthritis) | 507 | 60 | 75 | 223 | 149 |
| 27.8% | 31.5% | 33.8% | 30.6% | 21.8% |
| Communicable disease (infections, malaria, tuberculosis, HIV) | 49 | 5 | 3 | 17 | 23 |
| 2.7% | 2.7% | 1.5% | 2.4% | 3.4% |
| Maternal and perinatal conditions (pregnancy) | 175 | 2 | 33 | 7 | 133 |
| 9.6% | 1.2% | 15.0% | 0.9% | 19.4% |
| psychological or mental disorders | 7 | 3 | . | . | 4 |
| 0.4% | 1.6% | . | . | 0.6% |
| Acute conditions (pain, diarrhea, fever, flu, head- aches, cough, other) | 731 | 67 | 55 | 343 | 265 |
| 40.0% | 35.2% | 24.9% | 47.0% | 38.9% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Injuries (including occupation/work related condition/injury) | 34 | 7 | 3 | 19 | 4 |
| 1.9% | 3.8% | 1.5% | 2.6% | 0.6% |
| Surgery or surgical intervention | 58 | 10 | 8 | 14 | 26 |
| 3.2% | 5.5% | 3.6% | 2.0% | 3.7% |
| Do not know | 47 | 4 | 3 | 23 | 17 |
| 2.6% | 2.2% | 1.4% | 3.1% | 2.5% |
| Other | 217 | 31 | 40 | 84 | 61 |
| 11.9% | 16.2% | 18.2% | 11.5% | 9.0% |
| **Overall, how satisfied were you with the care you received during your last visit for outpatient care and care at home?** | | | | | |
| Total respondents who answered this question | 1826 | 191 | 222 | 731 | 682 |
| Very satisfied | 721 | 84 | 123 | 270 | 243 |
| 39.5% | 44.0% | 55.6% | 37.0% | 35.7% |
| Satisfied | 1008 | 89 | 80 | 427 | 413 |
| 55.2% | 46.4% | 35.9% | 58.4% | 60.6% |
| Neither satisfied nor dissatisfied | 70 | 16 | 17 | 21 | 16 |
| 3.8% | 8.3% | 7.7% | 2.8% | 2.4% |
| Dissatisfied | 20 | 3 | 2 | 8 | 7 |
| 1.1% | 1.3% | 0.7% | 1.1% | 1.1% |
| Very dissatisfied | 7 | . | 0 | 5 | 2 |
| 0.4% | . | 0.1% | 0.7% | 0.3% |
| **What was the outcome or result of your visit to the health care provider for outpatient care and care at home? Did your condition** | | | | | |
| Total respondents who answered this question | 1826 | 191 | 222 | 731 | 682 |
| Get much better | 519 | 64 | 88 | 172 | 194 |
| 28.4% | 33.7% | 39.6% | 23.6% | 28.5% |
| Get better | 1205 | 115 | 111 | 524 | 456 |
| 66.0% | 60.1% | 50.0% | 71.7% | 66.8% |
| No change | 92 | 11 | 21 | 30 | 29 |
| 5.0% | 5.8% | 9.6% | 4.2% | 4.3% |
| Get worse | 6 | 1 | 1 | 3 | 1 |
| 0.3% | 0.5% | 0.5% | 0.4% | 0.1% |
| Get much worse | 4 | . | 1 | 1 | 2 |
| 0.2% | . | 0.3% | 0.1% | 0.3% |

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* 1. **Clinical and Biochemical Measurements**

A total of 4971 individuals had provided physical, physiological and biochemical measurements that included weight, height, waist and hip circumference, heart rate, blood pressure, hemoglobin, glycated hemoglobin (HbA1c), fasting blood glucose levels and fasting blood cholesterol levels.

Overall 27.8% of the respondents were obese. Prevalence of obesity was more among female respondents and particularly in Emiratis. 41.8% of the female Emirati respondents were obese. Prevalence of obese was the highest in the 30-44 years age group.

Overall 67.9% of the respondents were overweight. Males were in particular more over weight than females. Prevalence of over-weight was more in the 30-44 years age group.

28.8% of total respondents were having high BP. High BP was more in the male respondent and in the Non-Emiratis group. 72.5% of the population were suffering from the raised BP. Majority were non- Emiratis and particularly male respondents in the age group 30-44 years.

11.8% of the respondents were having raised fasting glycaemia (Diabetes) and most were males. Non- Emiratis males (14.2%) had higher prevalence of raised fasting glycaemia than Emiratis males (10.3%). Overall 11.7% of the respondents were having impaired fasting glycaemia and most were males. Non- Emiratis males (14.1%) had higher prevalence of impaired fasting glycaemia than Emiratis males (12.1%).

43.7% of the total respondents had raised blood cholesterol. The peak prevalence of raised cholesterol was noted in the age-group of 30-44 years and female in this age group were most affected. More number of Emirati female respondents had higher cholesterol level in comparison to Emirates males. On the contrary number of male population with higher cholesterol levels was higher among non- Emiratis.

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Table 48: Summary of the Clinical and Biochemical Measurements

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | Gender | | TOTAL  Emirati Non- Emirati | | Emirati | | Non-Emirati | |
| Population Male Total | | | Female | Male | Female Male | | Female |
| **Respondents who are overweight with BMI 25 kg/m2 among different age groups** | | | | | | | | | |
| Denominator all respondents with valid BMI readings | 4815 | 2481 | 2334 | 656 | 4159 | 336 | 321 | 2145 | 2013 |
| Numerator (Total respondents with BMI ≥ 25 kg/m2) | 3270 | 1756 | 1515 | 466 | 2805 | 237 | 228 | 1518 | 1287 |
| 67.9% | 70.8% | 64.9% | 70.9% | 67.4% | 70.7% | 71.1% | 70.8% | 63.9% |
| 18-29 years | 667 | 331 | 336 | 133 | 534 | 75 | 58 | 256 | 278 |
| 20% | 19% | 22% | 29% | 19% | 32% | 25% | 17% | 22% |
| 30-44 years | 1028 | 235 | 793 | 193 | 835 | 101 | 92 | 134 | 701 |
| 31% | 13% | 52% | 41% | 30% | 43% | 40% | 9% | 54% |
| 45-59 years | 788 | 480 | 308 | 91 | 697 | 38 | 53 | 442 | 255 |
| 24% | 27% | 20% | 20% | 25% | 16% | 23% | 29% | 20% |
| 60+ years | 188 | 110 | 78 | 49 | 139 | 23 | 26 | 87 | 52 |
| 6% | 6% | 5% | 11% | 5% | 10% | 11% | 6% | 4% |
|  | | Gender | | TOTAL  Emirati Non- Emirati | | Emirati | | Non-Emirati | |
| Population Male Total | | | Female | Male | Female Male | | Female |
| **Respondents who are obese with BMI 30 kg/m2 among different age groups** | | | | | | | | | |
| Denominator all respondents with valid BMI readings | 4815 | 2481 | 2334 | 656 | 4159 | 336 | 321 | 2145 | 2013 |
| Numerator (Total respondents with BMI ≥ 30 kg/m2) | 1337 | 624 | 713 | 242 | 1095 | 108 | 134 | 516 | 579 |
| 27.8% | 25.1% | 30.6% | 36.9% | 26.3% | 32.2% | 41.8% | 24.1% | 28.8% |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18-29 years | 260 | 129 | 131 | 60 | 200 | 32 | 28 | 97 | 103 |
| 19% | 21% | 18% | 25% | 18% | 30% | 21% | 19% | 18% |
| 30-44 years | 667 | 300 | 367 | 104 | 563 | 52 | 52 | 248 | 315 |
| 50% | 48% | 51% | 43% | 51% | 48% | 39% | 48% | 54% |
| 45-59 years | 317 | 157 | 160 | 50 | 267 | 16 | 34 | 141 | 126 |
| 24% | 25% | 22% | 21% | 24% | 15% | 25% | 27% | 22% |
| 60+ years | 93 | 38 | 55 | 28 | 65 | 8 | 20 | 30 | 35 |
| 7% | 6% | 8% | 12% | 6% | 7% | 15% | 6% | 6% |
|  | | Gender | | TOTAL  Emirati Non- Emirati | | Emirati | | Non-Emirati | |
| Population Male Total | | | Female | Male | Female Male | | Female |
| **Respondents with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)** | | | | | | | | | |
| Denominator all respondents with valid BP readings | 4971 | 2515 | 2456 | 678 | 4293 | 338 | 340 | 2177 | 2116 |
| Numerator (Total Respondents with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)) | 1432 | 951 | 481 | 184 | 1248 | 101 | 83 | 850 | 398 |
| 28.8% | 37.8% | 19.5% | 27.1% | 29.1% | 29.9% | 24.4% | 39.0% | 18.8% |
| 18-29 years | 170 | 101 | 69 | 23 | 147 | 14 | 9 | 87 | 60 |
| 11.9% | 10.6% | 14.3% | 13% | 12% | 14% | 11% | 10% | 15% |
| 30-44 years | 625 | 434 | 191 | 67 | 558 | 41 | 26 | 393 | 165 |
| 43.6% | 45.6% | 39.7% | 36% | 45% | 41% | 31% | 46% | 41% |
| 45-59 years | 476 | 311 | 165 | 50 | 426 | 25 | 25 | 286 | 140 |
| 33.2% | 32.7% | 34.3% | 27% | 34% | 25% | 30% | 34% | 35% |
| 60+ years | 161 | 105 | 56 | 44 | 117 | 21 | 23 | 84 | 33 |
| 11.2% | 11.0% | 11.6% | 24% | 9% | 21% | 28% | 10% | 8% |

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|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | Gender | | TOTAL  Emirati Non- Emirati | | Emirati | | Non-Emirati | |
| Population Male Total | | | Female | Male | Female Male | | Female |
| **Respondents with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg) BUT who were not currently taking any medications for raised BP** | | | | | | | | | |
| Denominator all respondents with valid BP readings | 1432 | 951 | 481 | 184 | 1248 | 101 | 83 | 850 | 398 |
| Numerator (Total respondents with raised BP as per definition above) | 1036 | 712 | 324 | 114 | 922 | 67 | 47 | 645 | 277 |
| 72.5% | 74.9% | 67.8% | 62.0% | 73.9% | 66.3% | 56.6% | 75.9% | 69.6% |
| 18-29 years | 157 | 94 | 63 | 22 | 135 | 14 | 8 | 80 | 55 |
| 15% | 13% | 19% | 19% | 15% | 21% | 17% | 12% | 20% |
| 30-44 years | 524 | 364 | 160 | 54 | 470 | 33 | 21 | 331 | 139 |
| 51% | 51% | 49% | 47% | 51% | 49% | 45% | 51% | 50% |
| 45-59 years | 284 | 201 | 83 | 25 | 259 | 13 | 12 | 188 | 71 |
| 27% | 28% | 26% | 22% | 28% | 19% | 26% | 29% | 26% |
| 60+ years | 71 | 53 | 18 | 13 | 58 | 7 | 6 | 46 | 12 |
| 7% | 7% | 6% | 11% | 6% | 10% | 13% | 7% | 4% |
|  | | Gender | | TOTAL  Emirati Non- Emirati | | Emirati | | Non-Emirati | |
| Population Male Total | | | Female | Male | Female Male | | Female |
| **Respondents with impaired fasting glycaemia as defined below:**  **1) Plasma venous value ≥6.1 mmol/L (110 mg/dl) and <7.0 mmol/L (126 mg/dl) or 2) Capillary whole blood value ≥5.6 mmol/L (100 mg/dl) and <6.1 mmol/L (110 mg/dl)** | | | | | | | | | |
| Denominator all respondents with valid blood glucose readings | 3294 | 1667 | 1627 | 448 | 2846 | 224 | 225 | 1443 | 1403 |
| Numerator (Total respondents with impaired fasting glycaemia as per definition) | 387 | 230 | 157 | 44 | 343 | 27 | 17 | 203 | 140 |
| 11.7% | 13.6% | 9.7% | 9.8% | 12.1% | 12.1% | 7.6% | 14.1% | 10.0% |

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|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18-29 years | 63 | 29 | 34 | 12 | 51 | 7 | 5 | 22 | 29 |
| 16.3% | 12.6% | 21.7% | 27% | 15% | 26% | 29% | 11% | 21% |
| 30-44 years | 178 | 105 | 73 | 17 | 161 | 10 | 7 | 95 | 66 |
| 46.0% | 45.7% | 46.5% | 39% | 47% | 37% | 41% | 47% | 47% |
| 45-59 years | 125 | 83 | 42 | 10 | 115 | 7 | 3 | 76 | 39 |
| 32.3% | 36.1% | 26.8% | 23% | 34% | 26% | 18% | 37% | 28% |
| 60+ years | 21 | 13 | 8 | 5 | 16 | 3 | 2 | 10 | 6 |
| 5.4% | 5.7% | 5.1% | 11% | 5% | 11% | 12% | 5% | 4% |
|  | | Gender | | TOTAL  Emirati Non- Emirati | | Emirati | | Non-Emirati | |
| Population Male Total | | | Female | Male | Female Male | | Female |
| **Respondents with raised fasting blood glucose as defined below or currently on medication for raised blood glucose:**  **1) Plasma venous value ≥ 7.0 mmol/L (126 mg/dl) OR 2) Capillary whole blood value ≥ 6.1 mmol/L (110 mg/dl)** | | | | | | | | | |
| Denominator all respondents with valid blood glucose readings | 3294 | 1667 | 1627 | 448 | 2846 | 224 | 225 | 1443 | 1403 |
| Numerator (Total respondents with raised fasting blood glucose as per definition above) | 395 | 228 | 167 | 45 | 350 | 23 | 22 | 205 | 145 |
| 11.8% | 13.3% | 10.3% | 10.0% | 12.3% | 10.3% | 9.8% | 14.2% | 10.3% |
| 18-29 years | 34 | 19 | 15 | 5 | 29 | 4 | 1 | 15 | 14 |
| 9% | 8% | 8.9% | 11% | 8% | 17% | 5% | 7% | 10% |
| 30-44 years | 139 | 71 | 68 | 10 | 129 | 6 | 4 | 65 | 64 |
| 35% | 31% | 40.7% | 22% | 37% | 26% | 18% | 32% | 44% |
| 45-59 years | 171 | 105 | 66 | 17 | 154 | 6 | 11 | 99 | 55 |
| 43% | 46% | 39.5% | 37.8% | 44% | 26% | 50% | 48% | 38% |
| 60+ years | 51 | 33 | 18 | 13 | 38 | 7 | 6 | 26 | 12 |
| 13% | 14% | 10.8% | 28.9% | 11% | 30% | 27% | 13% | 8% |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | Gender | | TOTAL  Emirati Non- Emirati | | Emirati | | Non-Emirati | |
| Population Male Total | | | Female | Male | Female Male | | Female |
| **Respondents with raised total cholesterol (≥ 5.0 mmol/L or ≥ 190 mg/dl or currently on medication for raised cholesterol)** | | | | | | | | | |
| Denominator all respondents with valid blood cholesterol read- ings | 3270 | 1652 | 1618 | 442 | 2827 | 220 | 223 | 1432 | 1395 |
| Numerator (Total respondents with raised total cholesterol as per definition or currently on medication for raised cholesterol)) | 1429 | 734 | 695 | 197 | 1232 | 81 | 116 | 653 | 579 |
| 43.7% | 44.4% | 42.9% | 44.5% | 43.6% | 36.9% | 52.1% | 45.6% | 41.5% |
| 18-29 years | 237 | 93 | 144 | 48 | 189 | 17 | 31 | 76 | 113 |
| 17% | 13% | 21% | 24% | 15% | 21% | 27% | 12% | 20% |
| 30-44 years | 719 | 386 | 333 | 79 | 640 | 35 | 44 | 351 | 289 |
| 50% | 53% | 48% | 40% | 52% | 43% | 38% | 54% | 50% |
| 45-59 years | 378 | 205 | 172 | 43 | 335 | 17 | 26 | 188 | 147 |
| 26% | 28% | 25% | 22% | 27% | 21% | 22% | 29% | 25% |
| 60+ years | 95 | 50 | 45 | 27 | 68 | 12 | 15 | 38 | 30 |
| 7% | 7% | 6% | 14% | 6% | 15% | 13% | 6% | 5% |

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1. EVER MARRIED WOMEN RESPONDENTS’ CHARACTERISTICS
   1. **General Socio-Demographic Characteristics of Ever Married Women Respondents**

Table 49: Summary of the socio-demographic characteristics of ever-married women respondents

|  |  |  |  |
| --- | --- | --- | --- |
| Characteristic of the ever-married women participating in the survey | TOTAL | Natio  Emirati | nality  Non-Emirati |
| **Nationality** | 7467 | 735 | 6732 |
| 100% | 9.8% | 90.2% |
| **Current marital status** | | | |
| Currently married | 7250 | 673 | 6577 |
| 97.1% | 91.6% | 97.7% |
| Divorced/Separated | 162 | 48 | 114 |
| 2.2% | 6.6% | 1.7% |
| Widowed | 54 | 13 | 41 |
| 0.7% | 1.8% | 0.6% |
| **Age** | | | |
| 15 - 19 Years | 33 | 4 | 29 |
| 0.4% | 0.6% | 0.4% |
| 20 - 24 Years | 293 | 49 | 244 |
| 3.9% | 6.6% | 3.6% |
| 25 - 29 Years | 1263 | 107 | 1156 |
| 16.9% | 14.6% | 17.2% |
| 30 - 34 Years | 1849 | 153 | 1696 |
| 24.8% | 20.8% | 25.2% |
| 35 - 39 Years | 1696 | 160 | 1536 |
| 22.7% | 21.7% | 22.8% |
| 40 - 44 Years | 1294 | 137 | 1157 |
| 17.3% | 18.6% | 17.2% |
| 45 - 49 Years | 1039 | 125 | 914 |
| 13.9% | 17.0% | 13.6% |
| **Women who were currently working** | 3178 | 274 | 2903 |
| 42.6% | 37.3% | 43.1% |
| **Education status** | | | |
| Never Educated | 95 | 14 | 81 |
| 1.3% | 1.9% | 1.2% |

|  |  |  |  |
| --- | --- | --- | --- |
| Pre-Primary Education | 23 | 6 | 17 |
| 0.3% | 0.9% | 0.2% |
| Primary Education | 228 | 47 | 180 |
| 3.0% | 6.4% | 2.7% |
| Lower secondary education | 333 | 81 | 252 |
| 4.5% | 11.0% | 3.7% |
| Upper secondary education | 894 | 198 | 697 |
| 12.0% | 26.9% | 10.3% |
| Post-secondary non-tertiary education | 376 | 52 | 324 |
| 5.0% | 7.0% | 4.8% |
| Short-cycle tertiary education | 393 | 34 | 359 |
| 5.3% | 4.6% | 5.3% |
| Bachelor’s or equivalent level | 4081 | 284 | 3796 |
| 54.7% | 38.7% | 56.4% |
| Master’s or equivalent level | 933 | 16 | 917 |
| 12.5% | 2.2% | 13.6% |
| Doctoral or equivalent level | 97 | 2 | 95 |
| 1.3% | 0.3% | 1.4% |
| **Ever-married women who ever given birth to a live baby** | 5581 | 618 | 4963 |
| 74.7% | 84.1% | 73.7% |
| **Women who gave birth in 5 years preceding the survey** | 2369 | 291 | 2078 |
| 42.4% | 47.1% | 41.9% |
| **Women who gave birth inside UAE** | 1,556 | 281 | 1,275 |
| 65.7% | 96.5% | 61.4% |
| **Place of delivery for all deliveries in UAE** | | | |
| Hospital and health facility based | 1546 | 279 | 1267 |
| 99.4% | 99.3% | 99.4% |
| Home based | 10 | 2 | 8 |
| 0.6% | 0.7% | 0.6% |
| **Women who saw a doctor, nurse or midwife for post-natal care in UAE** | 1,324 | 231 | 1,093 |
| 87.6% | 84.9% | 88.2% |
| **At least 3 antenatal visits (computed only for last child born in UAE)** | 1140 | 212 | 928 |
| 97.3% | 97.7% | 97.2% |
| **Exclusive breastfeeding** | 138 | 21 | 117 |
| 59.70% | 63.40% | 60.30% |

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A total of 7467 women (weighted number) who were ever married participated in the survey of which about 10% were Emirati and 90% were non-Emirati women.

About 97% of the ever-married women who participated in the survey were currently married. More than 40% of ever-married women respondents were working with the literacy rates being more than 98%. The participating women were found to be highly literate with more than 65% of women being either graduate or above.

Among the ever-married women about 75% of them had ever given birth to a live baby with more number of Emirati women having ever given birth to a live baby than non-Emirati women. About 43% of women had given birth to a child in the 5 years preceding the survey and here again, the proportion of Emirati women with live birth in the 5 years preceding the survey was more than the non-Emirati women.

In total, among the women who had given live birth in the 5 years before the survey, 65% of them had delivered in UAE, with the number of Emirati women delivering inside UAE being obviously much higher (about 97%) than non-Emirati women (about 61%).

It is noteworthy that more than 99% of all deliveries were conducted inside hospitals. More than 87% of women who gave birth also saw a doctor, nurse or midwife for post-natal care in UAE.

More than 97% of women delivering inside UAE had at least 3 antenatal visits, this number was computed for the last-born child.

About 60% of women reported to have exclusively breast fed their children with the number being higher among Emirati women than non-Emirati women.

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Table 50: Average number of children borne by the ever-married women respondents

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| How many children  have you ever given Total  birth to? | | Nationality Abu Dhabi | | | | Dubai  Non-  Emirati  Emirati | | Sharjah  Non-  Emirati  Emirati | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah  Non-  Emirati  Emirati | |
| Emirati | Non-  Emirati  Emirati | | Non- Emirati | Emirati | Non-  Emirati  Emirati | | Non-  Emirati  Emirati | | Non- Emirati |
| 15 - 19 Years | 1.9 | 1.1 | 2.0 | - | 2.2 | 1.0 | - | - | 1.0 | - | 1.0 | - | - | - | - | 2.0 | 2.0 |
| 20 - 24 Years | 1.5 | 1.8 | 1.4 | 2.2 | 1.4 | 1.2 | 1.2 | 2.0 | 1.7 | 1.8 | 1.5 | 1.6 | 1.1 | 1.2 | 1.6 | 1.3 | 1.3 |
| 25 - 29 Years | 1.6 | 2.1 | 1.6 | 2.4 | 1.7 | 1.6 | 1.3 | 2.0 | 1.6 | 2.1 | 1.5 | 2.3 | 1.6 | 1.9 | 2.3 | 1.9 | 1.6 |
| 30 - 34 Years | 2.0 | 3.0 | 1.9 | 3.1 | 2.2 | 2.4 | 1.5 | 3.4 | 2.0 | 2.7 | 2.1 | 2.8 | 2.4 | 3.0 | 1.9 | 2.8 | 1.8 |
| 35 - 39 Years | 2.3 | 3.5 | 2.1 | 3.9 | 2.6 | 2.7 | 1.7 | 3.0 | 2.2 | 4.3 | 2.8 | 3.3 | 3.5 | 3.6 | 2.8 | 3.9 | 3.0 |
| 40 - 44 Years | 2.6 | 4.1 | 2.4 | 4.4 | 3.0 | 3.5 | 1.7 | 3.5 | 3.2 | 4.9 | 3.2 | 4.8 | 2.4 | 5.2 | 2.9 | 3.8 | 3.0 |
| 45 - 49 Years | 2.7 | 4.5 | 2.4 | 4.7 | 2.7 | 3.6 | 1.9 | 5.1 | 3.9 | 5.1 | 3.0 | 5.4 | 3.6 | 4.6 | 3.8 | 4.5 | 2.6 |
| Total | 2.2 | 3.4 | 2.1 | 3.6 | 2.4 | 2.9 | 1.6 | 3.3 | 2.3 | 3.9 | 2.3 | 3.9 | 2.6 | 3.5 | 2.6 | 3.5 | 2.4 |

The average number of children born by the ever-married women gradually increased from 25 years onwards, with an average of 2.2 children being born by all ever married women across the age-groups. Emirati women born more children (3.4 average number of children) than non-Emirati women (2.1).

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* 1. **Antenatal Care**

Table 51: Number of antenatal visits among ever married women with their last birth in UAE

|  |  |  |  |
| --- | --- | --- | --- |
| Number of antenatal visits among women who had seen a doctor, nurse or midwife for their  checkup in UAE | TOTAL | Emirati | Non-Emirati |
| Minimum 1 antenatal visit | 1157 | 215 | 942 |
| 98.8% | 99.1% | 98.6% |
| At least 2 antenatal visits | 1155 | 215 | 941 |
| 98.5% | 98.9% | 98.5% |
| At least 3 antenatal visits | 1140 | 212 | 928 |
| 97.3% | 97.8% | 97.2% |
| Total | 1172 | 217 | 955 |
| 100.0% | 100.0% | 100.0% |

Please note that the responses above are overlapping and hence the column total will not be 1172, which is the total number of women who had seen a healthcare provider in UAE during their last pregnancy. Please note the small decline in the percentage of women receiving antenatal visits from only 1 visit to the at least 3 antenatal visits. Couple of explanations could be as per the prevailing policy in UAE, pregnant women are required to go to a hospital after their 7th month of pregnancy, which may reduce the visits to clinics. Also, many non-Emirati women prefer to deliver in their home countries where they have care and support available from their relatives and extended family members and hence they travel outside the country before their expected delivery date. The 2nd reason can be illustrated in a later table on the place of delivery – inside or outside UAE.

Table 52: Use of iron supplements during antenatal care

|  |  |  |  |
| --- | --- | --- | --- |
| Women who were visiting a health care TOTAL Emirati Non-Emirati provider during their last pregnancy | | | |
| Yes, have taken iron tables &/or syrup | 1,725 | 260 | 1,466 |
| 92.1% | 90.8% | 93.4% |
| No, have not taken iron tablets &/or syrup | 107 | 21 | 86 |
| 5.7% | 7.7% | 6.0% |
| Do not know | 41 | 4 | 37 |
| 2.2% | 1.5% | 0.6% |
| Total | 1,873 | 285 | 1,588 |
| 100.0% | 100.0% | 100.0% |

More than 92% of women receiving antenatal care within UAE had taken iron tablets or syrups as supplement during their last pregnancy.

* 1. **Post-natal care**

Table 53: Place of delivery for the last-born child – inside or outside UAE

|  |  |  |  |
| --- | --- | --- | --- |
| Women who were visiting a health care TOTAL Emirati Non-Emirati provider during their last pregnancy | | | |
| Inside UAE | 1,556 | 281 | 1,275 |
| 65.7% | 96.3% | 61.4% |
| Outside UAE | 813 | 11 | 803 |
| 34.3% | 1.4% | 19.6% |

|  |  |  |  |
| --- | --- | --- | --- |
| Total | 2,369 | 291 | 2,078 |
| 100.0% | 100.0% | 100.0% |

Among all the women who had given a live birth in the 5 years preceding the survey, about 66% of

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them had delivered inside UAE and the number of Emirati women who delivered inside UAE was much higher than non-Emirati women delivering inside UAE

Table 54: For all deliveries done in UAE for last born child - type of healthcare professional who provided assistance in delivery

|  |  |  |  |
| --- | --- | --- | --- |
| Multiple responses TOTAL Emirati Non-Emirati | | | |
| Doctor | 1,453 | 257 | 1,196 |
| 93.5% | 91.7% | 93.9% |
| Nurse or midwife | 404 | 105 | 299 |
| 26.0% | 37.5% | 23.5% |
| None | 9 | 1 | 8 |
| 0.6% | 0.5% | 0.6% |
| Relative/friend with no medical training | 5 | 4 | 1 |
| 0.3% | 1.3% | 0.1% |
| Traditional birth attendant | 0 | 0 | 0 |
| 0.0% | 0.1% | 0.0% |
| Other | 0 | 0 | 0 |
| 0.0% | 0.0% | 0.0% |
| Total | 1,554 | 281 | 1,273 |
| 100.0% | 100.0% | 100.0% |

Majority of women delivering inside UAE were assisted by a doctor or a nurse. As can be seen from the later tables, more than 99% of women who delivered inside UAE had delivered within a hospital.

Table 55: Place of delivery for all last- born child born in UAE

|  |  |  |  |
| --- | --- | --- | --- |
| Place of delivery | TOTAL | Emirati | Non-Emirati |
| TOTAL Women who were seeing a doctor, nurse or midwife in UAE for their last pregnancy & delivered in UAE | 1,556 | 281 | 1,275 |
| 100% | 100% | 100% |
| Hospital & Health Facility Based Deliveries (District/regional Governmental hospital, private hospital & other health facilities) | 1,543 | 278 | 1,265 |
| 99.2% | 99.0% | 99.2% |
| Home Based Deliveries | 10 | 2 | 8 |
| 0.64% | 0.6% | 0.7% |
| Other type of health facility | 2 | 0 | 2 |
| 0.45% | 0.00% | 0.47% |

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Table 56: Respondents who answered, “After your delivery, did you see a doctor, nurse or midwife for post-natal care in UAE?”

|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL Emirati Non-Emirati | | | |
| Total number of women aged 15-49 years with a live birth in last 5 years | 1,511 | 272 | 1,240 |
| 100.00% | 100.00% | 100.00% |
| Yes, I saw a doctor, nurse or midwife for PNC in UAE | 1,324 | 231 | 1,093 |
| 87.6% | 84.9% | 88.2% |
| No, I did not see any doctor, nurse or midwife for PNC in UAE | 187 | 40 | 147 |
| 12.4% | 15.1% | 11.9% |

More than 99% of all women delivering inside UAE had delivered inside a hospital and more than 87% of them saw a doctor, nurse or a midwife for postnatal care in UAE.

* 1. **Birth Weight of Last-Born Child**

Table 57: Birth weight of last-born children

|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL Emirati Non-Emirati | | | |
| Total number of last-born children among women in the last 5 years | 1,996 | 238 | 1,758 |
| 100.0% | 100.0% | 100.0% |
| Low birth weight (Below 2500grams) | 331 | 57 | 273 |
| 16.6% | 24.1% | 15.5% |
| Normal birth weight (2500 grams to 4500 grams) | 1,644 | 178 | 1,466 |
| 82.4% | 74.8% | 83.4% |
| Above normal (more than 4500 grams) | 22 | 3 | 19 |
| 1.1% | 1.1% | 1.1% |

Among the women who had delivered a live birth inside UAE in the 5 years before the survey, 1996 women recall having birth weight of their last-borne children being checked. Among these 1996 last-borne children, 331 (16.6%) children had birth weights below 2500 grams, which is below the international cutoff for low-birth weight. This number is consistent with the prevalence of low-birth weight among other OECD countries as per the report published by World Bank and UNICEF.

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Table 58: Type of deliveries for the youngest 4 children

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Order of birth  GROSS TOTAL | | Type of Delivery Total | | TOTAL | | Emirati | | Non-Emirati | |
| Normal | Cesarean | Emirati | Non- Emirati | Normal | Cesarean | Normal | Cesarean |
| 1st order births | 2341 | 1504 | 838 | 290 | 2052 | 215 | 75 | 1289 | 763 |
| 100% | 64% | 36% | 12% | 88% | 74.1% | 25.9% | 62.8% | 37.2% |
| 2nd order births | 505 | 314 | 191 | 104 | 401 | 75 | 29 | 239 | 162 |
| 100% | 62.2% | 37.8% | 20.6% | 79.4% | 72.1% | 27.9% | 59.6% | 40.4% |
| 3rd order births | 60 | 40 | 20 | 20 | 40 | 15 | 5 | 25 | 15 |
| 100% | 66.7% | 33.3% | 33.3% | 66.7% | 75.0% | 25.0% | 62.5% | 37.5% |
| 4th order births | 4 | 3 | 1 | 1 | 3 | 1 | 0 | 3 | 0 |
| 100% | 75.0% | 25.0% | 25.0% | 75.0% | 100.0% | 0.0% | 100.0% | 0.0% |

We have recorded the type of deliveries for the last 4 children. As can be seen, majority of deliveries were normal vaginal deliveries and the proportion of normal deliveries was higher among Emirati women than in non-Emirati women.

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Table 59: Distribution of women who had delivered a live birth in the 5 years preceding the survey and had ever breast fed

|  |  |  |  |
| --- | --- | --- | --- |
| Question: Have you ever breastfed your baby? TOTAL Emirati Non-Emirati | | | |
| Yes, have ever breast fed | 2,168 | 259 | 1,910 |
| 91.8% | 89.0% | 92.2% |
| No, never breast fed | 193 | 32 | 161 |
| 8.2% | 11.0% | 7.8% |
| Total women who delivered live birth in last 5 years | 2,361 | 291 | 2071 |
| 100.0% | 100.0% | 100.0% |

We recorded the breast feeding and other infant feeding practices of ever-married women who had delivered in the 5 years preceding the survey. Of the 2361 women with history of live birth in the 5 years preceding the survey, about 92% of women (2168) had ever breast fed.

Table 60: Distribution of women who had ever breast fed and currently breast feeding their children

|  |  |  |  |
| --- | --- | --- | --- |
| Question: Are you still breastfeeding your baby? TOTAL Emirati Non-Emirati | | | |
| Yes | 795 | 119 | 677 |
| 36.5% | 45.7% | 35.3% |
| No | 1,381 | 141 | 1,240 |
| 63.5% | 54.3% | 64.7% |
| Total | 2,176 | 259 | 1,917 |
| 100.0% | 100.0% | 100.0% |

Among the women with live birth in 5 years preceding the survey and with a history of ever-breast feeding their children, 795 women (36.5%) were currently breast feeding their children and 1381 women were not currently breast feeding. Among the 795 women who were currently breast-feeding, we further narrowed down the list of breast-feeding to infants below the age of 6 months.

We noted that there were 231 women who currently breast feeding their infants who were aged below 6 months of age. We have used this number to further compute the prevalence of exclusive breast- feeding among infants less than 6 months of age. The steps and details of the exclusive breast-feeding have been explained in detail in the next table.

* 1. **Exclusive Breast Feeding among Children Up to 6 months**

We have used the WHO definition of Exclusive breastfeeding rate 0-5 months of age, which is defined as “Percentage of infants 0–5 months of age (<6 months) who are fed exclusively with breast milk”.

The method of measurement: Percentage of infants 0–5 months of age who received only breast milk on the previous day = (infants 0–5 months of age who received only breast milk during the previous day/infants 0–5 months of age) x 100. Current status data are used. Vitamins and minerals drops, or medicines are not counted.

The formula is as below:

*Prevalence of exclusive breast feeding among children upto 6 months*

*=*

(Number of infants 0-5 months of age (<6 months) who are fed exclusively with breast milk during the previous day)

(Total number of children upto 6 months of age in the survey)

Accordingly, we have followed the below steps:

* + 1. We collected the date of birth of youngest child for such women with children below 5 years living with them in UAE = 2369
    2. From these records of date of births of all children below 5 years, we looked at all youngest children records below the age of 6 months (180 days) = 231
    3. We then reviewed the number of all youngest children who were ever breastfed by their mothers = 217
    4. From the above, we narrowed the records to those children who were fed in the last 24 hours and how many of them had been exclusively breastfed = 138

Therefore, the numerator is 138, denominator is 231, and the prevalence was 59.7%

Table 61: Distribution of ever-married women respondents with infants between 0-6 months of age and who reported exclusive breast-feeding them

|  |  |  |  |
| --- | --- | --- | --- |
| Question: Are you still breastfeeding your baby? TOTAL Emirati Non-Emirati | | | |
| (Denominator: Total infants below 6 months) | 231 | 37 | 194 |
| 100.0% | 100.0% | 100.0% |
| Exclusive Breastfed | 138 | 21 | 117 |
| 59.7% | 56.8% | 60.3% |
| Not Exclusive Breastfed | 93 | 16 | 77 |
| 40.3% | 43.2% | 39.7% |

* 1. **Contraceptive Indicators**

Table 62. Contraceptive prevalence among currently married women

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | TOTAL | 15 - 19  Years | 20 - 24  Years | 25 - 29  Years | 30 - 34  Years | 35 - 39  Years | 40 - 44  Years | 45 - 49  Years |
| Using Some Contraceptive Methods | 420 | . | 16 | 113 | 136 | 114 | 39 | 3 |
| 19.5% | . | 16.0% | 20.2% | 17.5% | 22.7% | 21.2% | 10.7% |
| Not Using Any Contraceptive Method | 1729 | 6 | 84 | 448 | 640 | 388 | 143 | 22 |
| 80.5% | 100.0% | 84.0% | 79.8% | 82.5% | 77.3% | 78.8% | 89.3% |
| Total | 2149 | 6 | 100 | 561 | 776 | 501 | 181 | 25 |
| 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Please note only those women who were currently married, had ever given a live birth and had given a live birth in the last 5 years and who were not currently pregnant answered the question on contraceptive usage. From the total pool of 7467 ever married women, only 2149 women fulfilled this criterion and answered this question

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As per the WHO definition, contraceptive prevalence is the percentage of women aged 15−49 years,

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married or in union, who are currently using, or whose sexual partner is using, at least one method of contraception, regardless of the method used.

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In the UAE WHS, the topic of contraception included the following methods:

Female sterilization; Male sterilization; IUD; Injectable; Implants; Pills; Male condom; Female condom; Diaphragm; Foam / Jelly; Lactational amenorrhea method; Periodic abstinence / Rhythm; Withdrawal

* 1. **Child Immunization History**

Table 63: Coverage of BCG vaccine

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non-  Emirati | Emirati | Non-  Emirati | Emirati | Non-  Emirati | Emirati | Non-  Emirati | Emirati | Non-  Emirati | Emirati | Non-  Emirati | Emirati | Non-  Emirati | Emirati | Non-  Emirati |
| Total records for BCG vaccine | Covered | 1,510 | 202 | 1,308 | 103 | 490 | 15 | 545 | 25 | 155 | 15 | 74 | 4 | 7 | 24 | 17 | 15 | 19 |
| 99.2% | 99.3% | 99.1% | 100.0% | 99.2% | 97.9% | 99.5% | 100.0% | 98.1% | 100.0% | 98.3% | 100.0% | 88.9% | 98.7% | 100.0% | 94.5% | 100.0% |
| Not Covered | 13 | 1 | 11 | . | 4 | 0 | 3 | . | 3 | . | 1 | . | 1 | 0 | . | 1 | . |
| 0.8% | 0.7% | 0.9% | . | 0.8% | 2.1% | 0.5% | . | 1.9% | . | 1.7% | . | 11.1% | 1.3% | . | 5.5% | . |
| Below 1 Year | Covered | 295 | 37 | 259 | 17 | 97 | 2 | 110 | 7 | 31 | 4 | 12 | 1 | 1 | 4 | 5 | 2 | 4 |
| 98.2% | 99.2% | 98.0% | 100.0% | 97.9% | 100.0% | 100.0% | 100.0% | 91.1% | 100.0% | 100.0% | 100.0% | 89.3% | 92.8% | 100.0% | 100.0% | 100.0% |
| Not Covered | 5 | 0 | 5 | . | 2 | . | . | . | 3 | . | . | . | 0 | 0 | . | . | . |
| 1.8% | 0.8% | 2.0% | . | 2.1% | . | . | . | 8.9% | . | . | . | 10.7% | 7.2% | . | . | . |
| 1 - 2 Years | Covered | 343 | 47 | 297 | 25 | 131 | 3 | 110 | 5 | 27 | 2 | 19 | 1 | 1 | 7 | 3 | 2 | 5 |
| 99.0% | 99.0% | 98.9% | 100.0% | 100.0% | 91.7% | 97.7% | 100.0% | 100.0% | 100.0% | 96.7% | 100.0% | 100.0% | 100.0% | 100.0% | 94.0% | 100.0% |
| Not Covered | 4 | 0 | 3 | . | . | 0 | 3 | . | . | . | 1 | . | . | . | . | 0 | . |
| 1.0% | 1.0% | 1.1% | . | . | 8.3% | 2.3% | . | . | . | 3.3% | . | . | . | . | 6.0% | . |
| Above 2 years  upto 5 years | Covered | 871 | 119 | 752 | 61 | 262 | 9 | 326 | 13 | 97 | 9 | 43 | 3 | 5 | 13 | 9 | 10 | 11 |
| 99.6% | 99.4% | 99.6% | 100.0% | 99.3% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 98.6% | 100.0% | 85.7% | 100.0% | 100.0% | 93.6% | 100.0% |
| Not Covered | 4 | 1 | 3 | . | 2 | . | . | . | . | . | 1 | . | 1 | . | . | 1 | . |
|  | 0.6% | 0.4% | . | 0.7% | . | . | . | . | . | 1.4% | . | 14.3% | . | . | 6.4% | . |

The BCG is a live attenuated vaccine for tuberculosis (TB) disease given as a single dose and intradermal immediately after birth. BCG is used in many countries with a high prevalence of TB to prevent childhood tuberculous meningitis and military / disseminated disease. In the survey, both referring to the vaccination card as well

as direct recall of the mother-collected information on the vaccination status of the children. More than 99.2% of children were given the single dose of BCG. Table 64: Coverage of Hep B vaccine 1st dose

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 1st dose of Hep B vaccine | Covered | 1,511 | 205 | 1,306 | 104 | 487 | 15 | 540 | 25 | 161 | 15 | 74 | 4 | 8 | 24 | 17 | 16 | 19 |
| 98.4% | 99.6% | 98.2% | 99.2% | 98.1% | 100.0% | 98.6% | 100.0% | 96.7% | 100.0% | 98.6% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Not Covered | 24 | 1 | 24 | 1 | 9 | . | 8 | . | 6 | . | 1 | . | . | . | . | . | . |
| 1.6% | 0.4% | 1.8% | 0.8% | 1.9% | . | 1.4% | . | 3.3% | . | 1.4% | . | . | . | . | . | . |
| Below 1 Year | Covered | 301 | 38 | 264 | 18 | 99 | 2 | 110 | 7 | 34 | 4 | 12 | 1 | 1 | 4 | 5 | 2 | 4 |
| 98.2% | 98.9% | 98.1% | 97.6% | 98.0% | 100.0% | 100.0% | 100.0% | 91.8% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Not Covered | 5 | 0 | 5 | 0 | 2 | . | . | . | 3 | . | . | . | . | . | . | . | . |
| 1.8% | 1.1% | 1.9% | 2.4% | 2.0% | . | . | . | 8.2% | . | . | . | . | . | . | . | . |
| 1 - 2 Years | Covered | 339 | 48 | 291 | 26 | 130 | 4 | 107 | 5 | 27 | 2 | 18 | 1 | 1 | 7 | 3 | 3 | 5 |
| 97.0% | 100.0% | 96.5% | 100.0% | 98.6% | 100.0% | 95.5% | 100.0% | 91.5% | 100.0% | 94.5% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Not Covered | 11 | . | 11 | . | 2 | . | 5 | . | 3 | . | 1 | . | . | . | . | . | . |
| 3.0% | . | 3.5% | . | 1.4% | . | 4.5% | . | 8.5% | . | 5.5% | . | . | . | . | . | . |
| Above 2 years  upto 5 years | Covered | 871 | 119 | 751 | 61 | 259 | 9 | 324 | 13 | 100 | 9 | 44 | 3 | 5 | 13 | 9 | 11 | 11 |
| 99.0% | 99.6% | 98.9% | 99.3% | 97.9% | 100.0% | 99.2% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Not Covered | 8 | 0 | 8 | 0 | 5 | . | 3 | . | . | . | . | . | . | . | . | . | . |
| 1.0% | 0.4% | 1.1% | 0.7% | 2.1% | . | 0.8% | . | . | . | . | . | . | . | . | . | . |

The hepatitis B vaccine is an injection (or shot) that is generally given in the arm and as a three-dose series on a 0, 1, and 6-month schedule. The recommended doses depend on the vaccine brand and the person’s age. 1st dose - At any given time, newborns should receive this dose in the delivery room; 2nd dose - At least one month (or 28 days) after the 1st shot; 3rd dose - At least 4 months (16 weeks) after the 1st dose (or at least 2 months after the 2nd shot). Infants should be a minimum of 24 weeks old at the time of the 3rd shot. In the UAE WHS, more than 98% of children had received the first dose of Hep B vaccine but as can be seen from the next 2 tables, the coverage of vaccine for the 2nd and 3rd dose slightly decreases. While there may be many reasons for this decline, the most obvious one may be (and which needs investigation) is loss to follow-up for the subsequent doses or if the first dose was started later in childhood, then the vaccination card

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may not have captured the information. Table 65: Coverage of Hep B vaccine 2nd dose

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 2nd dose of Hep B vaccine | Covered | 1,464 | 198 | 1,266 | 101 | 479 | 15 | 519 | 25 | 157 | 13 | 68 | 4 | 7 | 24 | 16 | 16 | 19 |
| 95.9% | 96.6% | 95.8% | 96.7% | 97.5% | 97.6% | 94.8% | 100.0% | 96.3% | 85.5% | 91.3% | 89.2% | 84.2% | 98.7% | 92.9% | 99.1% | 100.0% |
| Not Covered | 63 | 7 | 56 | 3 | 12 | 0 | 28 | . | 6 | 2 | 6 | 0 | 1 | 0 | 1 | 0 | . |
| 4.1% | 3.4% | 4.2% | 3.3% | 2.5% | 2.4% | 5.2% | . | 3.7% | 14.5% | 8.7% | 10.8% | 15.8% | 1.3% | 7.1% | 0.9% | . |
| Below 1 Year | Covered | 272 | 33 | 239 | 16 | 91 | 2 | 99 | 7 | 31 | 2 | 10 | 1 | 1 | 4 | 4 | 2 | 4 |
| 89.7% | 87.5% | 90.0% | 89.3% | 91.4% | 84.1% | 90.5% | 100.0% | 87.3% | 46.1% | 82.9% | 100.0% | 55.4% | 92.8% | 85.0% | 93.7% | 100.0% |
| Not Covered | 31 | 5 | 27 | 2 | 8 | 0 | 10 | . | 5 | 2 | 2 | . | 0 | 0 | 1 | 0 | . |
| 10.3% | 12.5% | 10.0% | 10.7% | 8.6% | 15.9% | 9.5% | . | 12.7% | 53.9% | 17.1% | . | 44.6% | 7.2% | 15.0% | 6.3% | . |
| 1 - 2 Years | Covered | 340 | 46 | 294 | 25 | 129 | 4 | 107 | 5 | 30 | 2 | 18 | 1 | 1 | 7 | 3 | 3 | 5 |
| 97.7% | 97.4% | 97.7% | 95.7% | 99.0% | 100.0% | 95.9% | 100.0% | 100.0% | 100.0% | 96.6% | 86.5% | 100.0% | 100.0% | 92.9% | 100.0% | 100.0% |
| Not Covered | 8 | 1 | 7 | 1 | 1 | . | 5 | . | . | . | 1 | 0 | . | . | 0 | . | . |
| 2.3% | 2.6% | 2.3% | 4.3% | 1.0% | . | 4.1% | . | . | . | 3.4% | 13.5% | . | . | 7.1% | . | . |
| Above 2 years  upto 5 years | Covered | 852 | 119 | 733 | 61 | 260 | 9 | 313 | 13 | 97 | 9 | 40 | 3 | 5 | 13 | 9 | 11 | 11 |
| 97.3% | 99.2% | 97.0% | 99.3% | 99.0% | 100.0% | 95.9% | 100.0% | 98.5% | 97.6% | 91.2% | 87.9% | 85.7% | 100.0% | 97.2% | 100.0% | 100.0% |
| Not Covered | 23 | 1 | 22 | 0 | 3 | . | 13 | . | 2 | 0 | 4 | 0 | 1 | . | 0 | . | . |
| 2.7% | 0.8% | 3.0% | 0.7% | 1.0% | . | 4.1% | . | 1.5% | 2.4% | 8.8% | 12.1% | 14.3% | . | 2.8% | . | . |

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Table 66: Coverage of Hep B vaccine 3rd dose

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 3rd dose of Hep B vaccine | Covered | 1,416 | 192 | 1,224 | 99 | 462 | 14 | 506 | 25 | 154 | 13 | 62 | 4 | 6 | 23 | 16 | 15 | 18 |
| 93.0% | 93.9% | 92.8% | 94.4% | 94.2% | 92.3% | 92.4% | 97.3% | 94.4% | 83.2% | 84.8% | 85.5% | 82.7% | 96.1% | 91.4% | 95.7% | 94.4% |
| Not Covered | 107 | 13 | 94 | 6 | 29 | 1 | 42 | 1 | 9 | 3 | 11 | 1 | 1 | 1 | 1 | 1 | 1 |
| 7.0% | 6.1% | 7.2% | 5.6% | 5.8% | 7.7% | 7.6% | 2.7% | 5.6% | 16.8% | 15.2% | 14.5% | 17.3% | 3.9% | 8.6% | 4.3% | 5.6% |
| Below 1 Year | Covered | 243 | 29 | 215 | 13 | 82 | 1 | 90 | 7 | 28 | 2 | 7 | 0 | 0 | 4 | 4 | 2 | 3 |
| 80.4% | 76.6% | 80.9% | 75.0% | 82.7% | 59.0% | 82.6% | 100.0% | 78.7% | 46.1% | 61.3% | 75.1% | 44.7% | 85.5% | 85.0% | 68.8% | 71.0% |
| Not Covered | 60 | 9 | 51 | 4 | 17 | 1 | 19 | . | 8 | 2 | 5 | 0 | 1 | 1 | 1 | 1 | 1 |
| 19.6% | 23.4% | 19.1% | 25.0% | 17.3% | 41.0% | 17.4% | . | 21.3% | 53.9% | 38.7% | 24.9% | 55.3% | 14.5% | 15.0% | 31.2% | 29.0% |
| 1 - 2 Years | Covered | 336 | 47 | 289 | 26 | 127 | 4 | 105 | 5 | 30 | 2 | 17 | 1 | 1 | 7 | 3 | 3 | 5 |
| 97.2% | 98.8% | 96.9% | 97.9% | 99.0% | 100.0% | 93.8% | 100.0% | 100.0% | 100.0% | 96.4% | 100.0% | 100.0% | 100.0% | 92.9% | 100.0% | 100.0% |
| Not Covered | 10 | 1 | 9 | 1 | 1 | . | 7 | . | . | . | 1 | . | . | . | 0 | . | . |
| 2.8% | 1.2% | 3.1% | 2.1% | 1.0% | . | 6.2% | . | . | . | 3.6% | . | . | . | 7.1% | . | . |
| Above 2 years  upto 5 years | Covered | 837 | 116 | 720 | 60 | 253 | 9 | 310 | 12 | 97 | 9 | 37 | 2 | 5 | 13 | 8 | 11 | 11 |
| 95.7% | 97.3% | 95.4% | 98.5% | 96.1% | 97.7% | 95.2% | 94.8% | 98.5% | 93.6% | 86.4% | 82.9% | 85.7% | 97.4% | 94.4% | 100.0% | 100.0% |
| Not Covered | 38 | 3 | 35 | 1 | 10 | 0 | 16 | 1 | 2 | 1 | 6 | 1 | 1 | 0 | 0 | . | . |
| 4.3% | 2.7% | 4.6% | 1.5% | 3.9% | 2.3% | 4.8% | 5.2% | 1.5% | 6.4% | 13.6% | 17.1% | 14.3% | 2.6% | 5.6% | . | . |

Table 67: Coverage of Hep B vaccine 4th dose

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 4th dose of Hep B vaccine | Covered | 1,343 | 182 | 1,161 | 93 | 446 | 14 | 484 | 24 | 133 | 13 | 58 | 4 | 6 | 21 | 15 | 15 | 18 |
| 88.4% | 89.4% | 88.2% | 89.5% | 91.0% | 88.9% | 88.4% | 94.2% | 81.7% | 83.2% | 81.0% | 85.5% | 81.3% | 86.2% | 90.0% | 92.9% | 94.4% |
| Not Covered | 177 | 22 | 155 | 11 | 44 | 2 | 64 | 1 | 30 | 3 | 14 | 1 | 1 | 3 | 2 | 1 | 1 |
| 11.6% | 10.6% | 11.8% | 10.5% | 9.0% | 11.1% | 11.6% | 5.8% | 18.3% | 16.8% | 19.0% | 14.5% | 18.7% | 13.8% | 10.0% | 7.1% | 5.6% |
| Below 1 Year | Covered | 197 | 24 | 173 | 12 | 69 | 1 | 76 | 7 | 15 | 2 | 7 | 0 | 0 | 2 | 4 | 1 | 3 |
| 65.2% | 65.1% | 65.2% | 65.8% | 69.4% | 37.2% | 69.1% | 100.0% | 41.3% | 46.1% | 59.5% | 75.1% | 44.7% | 36.4% | 80.0% | 61.8% | 71.0% |
| Not Covered | 106 | 13 | 92 | 6 | 30 | 1 | 34 | . | 21 | 2 | 5 | 0 | 1 | 3 | 1 | 1 | 1 |
| 34.8% | 34.9% | 34.8% | 34.2% | 30.6% | 62.8% | 30.9% | . | 58.7% | 53.9% | 40.5% | 24.9% | 55.3% | 63.6% | 20.0% | 38.2% | 29.0% |
| 1 - 2 Years | Covered | 330 | 46 | 284 | 24 | 127 | 4 | 102 | 5 | 30 | 2 | 16 | 1 | 1 | 7 | 3 | 3 | 5 |
| 95.8% | 96.2% | 95.7% | 93.0% | 99.0% | 100.0% | 91.2% | 100.0% | 100.0% | 100.0% | 92.6% | 100.0% | 92.6% | 100.0% | 92.9% | 100.0% | 100.0% |
| Not Covered | 15 | 2 | 13 | 2 | 1 | . | 10 | . | . | . | 1 | . | 0 | . | 0 | . | . |
| 4.2% | 3.8% | 4.3% | 7.0% | 1.0% | . | 8.8% | . | . | . | 7.4% | . | 7.4% | . | 7.1% | . | . |
| Above 2 years  upto 5 years | Covered | 815 | 112 | 703 | 57 | 250 | 9 | 306 | 12 | 89 | 9 | 35 | 2 | 5 | 13 | 8 | 11 | 11 |
| 93.5% | 94.3% | 93.4% | 94.9% | 95.4% | 97.7% | 93.9% | 88.8% | 90.8% | 93.6% | 82.2% | 82.9% | 85.7% | 95.1% | 94.4% | 97.5% | 100.0% |
| Not Covered | 57 | 7 | 50 | 3 | 12 | 0 | 20 | 1 | 9 | 1 | 8 | 1 | 1 | 1 | 0 | 0 | . |
| 6.5% | 5.7% | 6.6% | 5.1% | 4.6% | 2.3% | 6.1% | 11.2% | 9.2% | 6.4% | 17.8% | 17.1% | 14.3% | 4.9% | 5.6% | 2.5% | . |

Table 68: Coverage of DPT 1st dose

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 1st dose of DPT vaccine | Covered | 1,460 | 197 | 1,263 | 101 | 472 | 14 | 532 | 25 | 153 | 13 | 64 | 4 | 6 | 24 | 16 | 16 | 19 |
| 96.1% | 96.3% | 96.0% | 96.1% | 96.2% | 96.4% | 97.2% | 100.0% | 95.3% | 85.5% | 88.2% | 91.2% | 82.8% | 98.7% | 94.3% | 99.1% | 100.0% |
| Not Covered | 60 | 8 | 52 | 4 | 18 | 1 | 15 | . | 8 | 2 | 9 | 0 | 1 | 0 | 1 | 0 | . |
| 3.9% | 3.7% | 4.0% | 3.9% | 3.8% | 3.6% | 2.8% | . | 4.7% | 14.5% | 11.8% | 8.8% | 17.2% | 1.3% | 5.7% | 0.9% | . |
| Below 1 Year | Covered | 268 | 32 | 235 | 15 | 88 | 2 | 102 | 7 | 28 | 2 | 9 | 1 | 1 | 4 | 4 | 2 | 4 |
| 89.3% | 86.0% | 89.8% | 86.1% | 88.7% | 84.1% | 93.1% | 100.0% | 86.6% | 46.1% | 76.6% | 100.0% | 69.4% | 92.8% | 85.0% | 93.7% | 100.0% |
| Not Covered | 32 | 5 | 27 | 2 | 11 | 0 | 8 | . | 4 | 2 | 3 | . | 0 | 0 | 1 | 0 | . |
| 10.7% | 14.0% | 10.2% | 13.9% | 11.3% | 15.9% | 6.9% | . | 13.4% | 53.9% | 23.4% | . | 30.6% | 7.2% | 15.0% | 6.3% | . |
| 1 - 2 Years | Covered | 339 | 47 | 292 | 26 | 125 | 4 | 112 | 5 | 28 | 2 | 17 | 1 | 1 | 7 | 3 | 3 | 5 |
| 98.6% | 98.2% | 98.7% | 97.9% | 97.5% | 95.6% | 100.0% | 100.0% | 100.0% | 100.0% | 96.4% | 86.5% | 92.6% | 100.0% | 100.0% | 100.0% | 100.0% |
| Not Covered | 5 | 1 | 4 | 1 | 3 | 0 | . | . | . | . | 1 | 0 | 0 | . | . | . | . |
| 1.4% | 1.8% | 1.3% | 2.1% | 2.5% | 4.4% | . | . | . | . | 3.6% | 13.5% | 7.4% | . | . | . | . |
| Above 2 years  upto 5 years | Covered | 854 | 118 | 736 | 60 | 259 | 9 | 318 | 13 | 96 | 9 | 38 | 3 | 4 | 13 | 9 | 11 | 11 |
| 97.4% | 98.7% | 97.2% | 98.3% | 98.4% | 100.0% | 97.6% | 100.0% | 96.8% | 97.6% | 87.8% | 91.0% | 82.9% | 100.0% | 97.2% | 100.0% | 100.0% |
| Not Covered | 23 | 2 | 22 | 1 | 4 | . | 8 | . | 3 | 0 | 5 | 0 | 1 | . | 0 | . | . |
| 2.6% | 1.3% | 2.8% | 1.7% | 1.6% | . | 2.4% | . | 3.2% | 2.4% | 12.2% | 9.0% | 17.1% | . | 2.8% | . | . |

As per the US CDC, infants and children should receive 5 doses of DPT. Each of the 5 doses to be given at: 2 months, 4 months, 6 months, 15 through 18 months, and 4 years through 6 years. Just like the pattern seen for Hep B vaccine, the coverage for DPT vaccine too decreases from 1st dose to the 5th dose. There is a sharp decline in the coverage of the 5th dose of DPT vaccine and one of the plausible reasons could be that this detail was not captured in the vaccination card as the dose was due only after 5 years of age.

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Table 69: Coverage of DPT 2nd dose

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 2nd  dose of DPT vaccine | Covered | 1,436 | 192 | 1,244 | 99 | 469 | 14 | 521 | 24 | 151 | 13 | 62 | 4 | 6 | 23 | 16 | 15 | 18 |
| 94.5% | 93.8% | 94.6% | 94.4% | 95.3% | 91.4% | 95.2% | 97.3% | 95.2% | 83.2% | 85.9% | 91.4% | 80.8% | 96.1% | 92.9% | 94.7% | 94.4% |
| Not Covered | 84 | 13 | 71 | 6 | 23 | 1 | 26 | 1 | 8 | 3 | 10 | 0 | 1 | 1 | 1 | 1 | 1 |
| 5.5% | 6.2% | 5.4% | 5.6% | 4.7% | 8.6% | 4.8% | 2.7% | 4.8% | 16.8% | 14.1% | 8.6% | 19.2% | 3.9% | 7.1% | 5.3% | 5.6% |
| Below 1 Year | Covered | 247 | 29 | 219 | 13 | 84 | 1 | 91 | 7 | 27 | 2 | 9 | 1 | 1 | 4 | 4 | 1 | 3 |
| 82.5% | 76.6% | 83.3% | 75.1% | 85.1% | 59.0% | 83.1% | 100.0% | 81.5% | 46.1% | 82.2% | 100.0% | 55.4% | 85.5% | 85.0% | 61.8% | 71.0% |
| Not Covered | 52 | 9 | 44 | 4 | 15 | 1 | 19 | . | 6 | 2 | 2 | . | 0 | 1 | 1 | 1 | 1 |
| 17.5% | 23.4% | 16.7% | 24.9% | 14.9% | 41.0% | 16.9% | . | 18.5% | 53.9% | 17.8% | . | 44.6% | 14.5% | 15.0% | 38.2% | 29.0% |
| 1 - 2 Years | Covered | 340 | 46 | 294 | 26 | 127 | 4 | 112 | 5 | 28 | 2 | 17 | 1 | 1 | 7 | 3 | 3 | 5 |
| 99.1% | 98.2% | 99.3% | 97.9% | 99.0% | 95.6% | 100.0% | 100.0% | 100.0% | 100.0% | 96.3% | 86.5% | 92.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Not Covered | 3 | 1 | 2 | 1 | 1 | 0 | . | . | . | . | 1 | 0 | 0 | . | . | . | . |
| 0.9% | 1.8% | 0.7% | 2.1% | 1.0% | 4.4% | . | . | . | . | 3.7% | 13.5% | 8.0% | . | . | . | . |
| Above 2 years  upto 5 years | Covered | 849 | 117 | 732 | 60 | 258 | 9 | 318 | 12 | 97 | 9 | 36 | 3 | 4 | 13 | 8 | 11 | 11 |
| 96.8% | 97.5% | 96.7% | 98.5% | 97.4% | 98.0% | 97.6% | 94.8% | 98.5% | 93.6% | 82.7% | 91.3% | 82.9% | 97.4% | 94.4% | 100.0% | 100.0% |
| Not Covered | 28 | 3 | 25 | 1 | 7 | 0 | 8 | 1 | 2 | 1 | 8 | 0 | 1 | 0 | 0 | . | . |
| 3.2% | 2.5% | 3.3% | 1.5% | 2.6% | 2.0% | 2.4% | 5.2% | 1.5% | 6.4% | 17.3% | 8.7% | 17.1% | 2.6% | 5.6% | . | . |

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Table 70: Coverage of DPT 3rd dose

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 3rd dose of DPT vaccine | Covered | 1,349 | 181 | 1,168 | 93 | 453 | 13 | 491 | 24 | 129 | 13 | 60 | 4 | 6 | 20 | 13 | 15 | 17 |
| 88.7% | 88.5% | 88.7% | 88.6% | 91.7% | 86.6% | 89.6% | 94.2% | 81.1% | 83.2% | 83.3% | 85.4% | 77.9% | 84.8% | 77.1% | 92.0% | 86.0% |
| Not Covered | 172 | 24 | 148 | 12 | 41 | 2 | 57 | 1 | 30 | 3 | 12 | 1 | 2 | 4 | 4 | 1 | 3 |
| 11.3% | 11.5% | 11.3% | 11.4% | 8.3% | 13.4% | 10.4% | 5.8% | 18.9% | 16.8% | 16.7% | 14.6% | 22.1% | 15.2% | 22.9% | 8.0% | 14.0% |
| Below 1 Year | Covered | 197 | 23 | 174 | 10 | 75 | 1 | 73 | 7 | 13 | 2 | 7 | 0 | 0 | 1 | 1 | 1 | 3 |
| 65.7% | 61.0% | 66.4% | 59.3% | 76.2% | 37.2% | 66.8% | 100.0% | 41.0% | 46.1% | 66.0% | 71.0% | 44.7% | 28.2% | 30.0% | 61.8% | 71.0% |
| Not Covered | 103 | 15 | 88 | 7 | 24 | 1 | 36 | . | 19 | 2 | 4 | 0 | 1 | 3 | 3 | 1 | 1 |
| 34.3% | 39.0% | 33.6% | 40.7% | 23.8% | 62.8% | 33.2% | . | 59.0% | 53.9% | 34.0% | 29.0% | 55.3% | 71.8% | 70.0% | 38.2% | 29.0% |
| 1 - 2 Years | Covered | 329 | 46 | 283 | 25 | 124 | 4 | 107 | 5 | 28 | 2 | 15 | 1 | 1 | 7 | 3 | 3 | 5 |
| 95.6% | 96.8% | 95.4% | 95.3% | 95.2% | 95.6% | 95.5% | 100.0% | 100.0% | 100.0% | 86.5% | 86.5% | 92.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Not Covered | 15 | 2 | 14 | 1 | 6 | 0 | 5 | . | . | . | 2 | 0 | 0 | . | . | . | . |
| 4.4% | 3.2% | 4.6% | 4.7% | 4.8% | 4.4% | 4.5% | . | . | . | 13.5% | 13.5% | 8.0% | . | . | . | . |
| Above 2 years  upto 5 years | Covered | 823 | 112 | 711 | 57 | 253 | 9 | 311 | 12 | 87 | 9 | 38 | 3 | 4 | 13 | 8 | 11 | 9 |
| 93.9% | 93.8% | 93.9% | 94.1% | 95.8% | 95.6% | 95.3% | 88.8% | 89.1% | 93.6% | 86.4% | 87.9% | 80.8% | 95.1% | 94.4% | 96.2% | 85.2% |
| Not Covered | 54 | 7 | 46 | 4 | 11 | 0 | 15 | 1 | 11 | 1 | 6 | 0 | 1 | 1 | 0 | 0 | 2 |
| 6.1% | 6.2% | 6.1% | 5.9% | 4.2% | 4.4% | 4.7% | 11.2% | 10.9% | 6.4% | 13.6% | 12.1% | 19.2% | 4.9% | 5.6% | 3.8% | 14.8% |

Table 71: Coverage of DPT 4th dose

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 4th dose of DPT vaccine | Covered | 1,019 | 145 | 874 | 73 | 330 | 10 | 353 | 18 | 110 | 10 | 52 | 3 | 5 | 17 | 10 | 13 | 14 |
| 67.4% | 71.1% | 66.8% | 69.6% | 67.4% | 68.1% | 64.7% | 72.7% | 69.1% | 68.3% | 72.8% | 72.0% | 59.4% | 72.0% | 61.4% | 81.9% | 74.3% |
| Not Covered | 494 | 59 | 435 | 32 | 159 | 5 | 192 | 7 | 49 | 5 | 19 | 1 | 3 | 7 | 7 | 3 | 5 |
| 32.6% | 28.9% | 33.2% | 30.4% | 32.6% | 31.9% | 35.3% | 27.3% | 30.9% | 31.7% | 27.2% | 28.0% | 40.6% | 28.0% | 38.6% | 18.1% | 25.7% |
| Below 1 Year | Covered | 75 | 9 | 66 | 4 | 31 | . | 22 | 2 | 8 | 1 | 4 | 0 | . | 1 | 0 | 1 | 1 |
| 25.2% | 24.5% | 25.3% | 21.1% | 31.3% | . | 20.4% | 32.2% | 23.5% | 29.0% | 38.5% | 24.9% | . | 29.9% | 10.0% | 35.1% | 17.4% |
| Not Covered | 223 | 28 | 195 | 14 | 68 | 2 | 87 | 5 | 25 | 3 | 6 | 0 | 1 | 3 | 4 | 1 | 3 |
| 74.8% | 75.5% | 74.7% | 78.9% | 68.7% | 100.0% | 79.6% | 67.8% | 76.5% | 71.0% | 61.5% | 75.1% | 100.0% | 70.1% | 90.0% | 64.9% | 82.6% |
| 1 - 2 Years | Covered | 170 | 31 | 139 | 17 | 69 | 2 | 35 | 5 | 15 | 2 | 12 | 0 | 1 | 4 | 2 | 2 | 4 |
| 50.2% | 64.8% | 47.8% | 63.8% | 54.8% | 42.8% | 32.4% | 91.2% | 54.2% | 73.7% | 70.9% | 40.8% | 67.3% | 56.7% | 57.1% | 73.3% | 82.6% |
| Not Covered | 168 | 17 | 152 | 9 | 57 | 2 | 74 | 0 | 13 | 1 | 5 | 1 | 0 | 3 | 1 | 1 | 1 |
| 49.8% | 35.2% | 52.2% | 36.2% | 45.2% | 57.2% | 67.6% | 8.8% | 45.8% | 26.3% | 29.1% | 59.2% | 32.7% | 43.3% | 42.9% | 26.7% | 17.4% |
| Above 2 years  upto 5 years | Covered | 774 | 105 | 669 | 53 | 230 | 9 | 295 | 11 | 87 | 8 | 36 | 3 | 4 | 12 | 8 | 10 | 10 |
| 88.3% | 88.3% | 88.4% | 86.0% | 87.0% | 96.0% | 90.5% | 87.9% | 88.6% | 82.5% | 81.6% | 91.3% | 69.4% | 92.8% | 91.7% | 93.3% | 90.1% |
| Not Covered | 102 | 14 | 88 | 9 | 34 | 0 | 31 | 1 | 11 | 2 | 8 | 0 | 2 | 1 | 1 | 1 | 1 |
| 11.7% | 11.7% | 11.6% | 14.0% | 13.0% | 4.0% | 9.5% | 12.1% | 11.4% | 17.5% | 18.4% | 8.7% | 30.6% | 7.2% | 8.3% | 6.7% | 9.9% |

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Table 72: Coverage of DPT 5th dose

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 5th dose of DPT vaccine | Covered | 268 | 55 | 214 | 31 | 119 | 1 | 21 | 14 | 54 | 2 | 13 | 2 | 1 | 3 | 2 | 1 | 4 |
| 17.8% | 26.8% | 16.4% | 29.5% | 24.4% | 6.2% | 3.8% | 59.2% | 34.6% | 14.2% | 18.0% | 45.1% | 16.1% | 12.1% | 14.3% | 8.1% | 18.5% |
| Not Covered | 1,236 | 149 | 1,087 | 74 | 367 | 14 | 522 | 10 | 102 | 13 | 59 | 2 | 7 | 21 | 15 | 15 | 16 |
| 82.2% | 73.2% | 83.6% | 70.5% | 75.6% | 93.8% | 96.2% | 40.8% | 65.4% | 85.8% | 82.0% | 54.9% | 83.9% | 87.9% | 85.7% | 91.9% | 81.5% |
| Below 1 Year | Covered | 37 | 6 | 31 | 2 | 20 | . | 3 | 2 | 8 | 0 | 1 | 0 | . | 0 | . | 0 | . |
| 12.5% | 15.4% | 12.1% | 12.9% | 19.9% | . | 2.4% | 32.2% | 23.5% | 13.1% | 10.3% | 24.9% | . | 7.2% | . | 15.4% | . |
| Not Covered | 257 | 32 | 225 | 15 | 79 | 2 | 102 | 5 | 25 | 3 | 9 | 0 | 1 | 4 | 5 | 2 | 4 |
| 87.5% | 84.6% | 87.9% | 87.1% | 80.1% | 100.0% | 97.6% | 67.8% | 76.5% | 86.9% | 89.7% | 75.1% | 100.0% | 92.8% | 100.0% | 84.6% | 100.0% |
| 1 - 2 Years | Covered | 67 | 17 | 50 | 10 | 28 | 0 | 7 | 5 | 11 | 0 | 3 | 0 | 0 | 2 | . | 0 | . |
| 19.7% | 36.6% | 16.9% | 36.4% | 21.9% | 8.0% | 6.6% | 91.2% | 39.3% | 12.6% | 19.0% | 30.9% | 17.3% | 28.5% | . | 12.1% | . |
| Not Covered | 274 | 30 | 244 | 17 | 99 | 3 | 105 | 0 | 17 | 2 | 14 | 1 | 1 | 5 | 3 | 2 | 5 |
| 80.3% | 63.4% | 83.1% | 63.6% | 78.1% | 92.0% | 93.4% | 8.8% | 60.7% | 87.4% | 81.0% | 69.1% | 82.7% | 71.5% | 100.0% | 87.9% | 100.0% |
| Above 2 years  upto 5 years | Covered | 164 | 31 | 133 | 19 | 71 | 1 | 11 | 7 | 35 | 1 | 8 | 2 | 1 | 1 | 2 | 1 | 4 |
| 18.9% | 26.4% | 17.7% | 31.3% | 27.4% | 7.0% | 3.4% | 60.5% | 37.0% | 15.0% | 19.4% | 53.6% | 19.1% | 5.5% | 27.8% | 5.8% | 32.6% |
| Not Covered | 705 | 87 | 618 | 42 | 189 | 8 | 315 | 5 | 60 | 8 | 35 | 1 | 4 | 12 | 6 | 11 | 7 |
| 81.1% | 73.6% | 82.3% | 68.7% | 72.6% | 93.0% | 96.6% | 39.5% | 63.0% | 85.0% | 80.6% | 46.4% | 80.9% | 94.5% | 72.2% | 94.2% | 67.4% |

Table 73: Coverage of Hemophilus influenza 1st dose

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 1st dose of Hemophilus influenza  vaccine | Covered | 1,373 | 194 | 1,179 | 100 | 460 | 15 | 473 | 25 | 147 | 12 | 59 | 4 | 6 | 22 | 14 | 16 | 18 |
| 91.2% | 94.8% | 90.6% | 95.9% | 94.7% | 96.5% | 86.4% | 100.0% | 95.9% | 78.1% | 85.4% | 87.7% | 77.5% | 93.4% | 82.9% | 98.0% | 95.8% |
| Not Covered | 133 | 11 | 122 | 4 | 26 | 1 | 75 | . | 6 | 3 | 10 | 1 | 2 | 2 | 3 | 0 | 1 |
| 8.8% | 5.2% | 9.4% | 4.1% | 5.3% | 3.5% | 13.6% | . | 4.1% | 21.9% | 14.6% | 12.3% | 22.5% | 6.6% | 17.1% | 2.0% | 4.2% |
| Below 1 Year | Covered | 255 | 32 | 223 | 15 | 86 | 2 | 93 | 7 | 28 | 2 | 8 | 1 | 1 | 4 | 3 | 2 | 4 |
| 85.4% | 86.0% | 85.3% | 86.1% | 87.3% | 85.1% | 84.6% | 100.0% | 86.6% | 43.3% | 75.2% | 100.0% | 66.1% | 92.8% | 70.0% | 93.7% | 100.0% |
| Not Covered | 44 | 5 | 38 | 2 | 13 | 0 | 17 | . | 4 | 2 | 3 | . | 0 | 0 | 1 | 0 | . |
| 14.6% | 14.0% | 14.7% | 13.9% | 12.7% | 14.9% | 15.4% | . | 13.4% | 56.7% | 24.8% | . | 33.9% | 7.2% | 30.0% | 6.3% | . |
| 1 - 2 Years | Covered | 309 | 46 | 264 | 25 | 122 | 4 | 92 | 5 | 25 | 2 | 15 | 1 | 1 | 6 | 2 | 3 | 5 |
| 91.4% | 95.1% | 90.8% | 96.0% | 96.9% | 100.0% | 82.5% | 100.0% | 100.0% | 91.6% | 86.5% | 86.5% | 92.6% | 85.0% | 71.4% | 100.0% | 100.0% |
| Not Covered | 29 | 2 | 27 | 1 | 4 | . | 20 | . | . | 0 | 2 | 0 | 0 | 1 | 1 | . | . |
| 8.6% | 4.9% | 9.2% | 4.0% | 3.1% | . | 17.5% | . | . | 8.4% | 13.5% | 13.5% | 7.4% | 15.0% | 28.6% | . | . |
| Above 2 years  upto 5 years | Covered | 808 | 116 | 692 | 60 | 251 | 9 | 288 | 13 | 94 | 8 | 36 | 2 | 4 | 13 | 8 | 11 | 10 |
| 93.1% | 97.5% | 92.4% | 98.7% | 96.4% | 98.2% | 88.3% | 100.0% | 98.0% | 88.0% | 87.7% | 85.5% | 75.7% | 97.7% | 94.4% | 98.4% | 92.6% |
| Not Covered | 60 | 3 | 57 | 1 | 9 | 0 | 38 | . | 2 | 1 | 5 | 0 | 1 | 0 | 0 | 0 | 1 |
| 6.9% | 2.5% | 7.6% | 1.3% | 3.6% | 1.8% | 11.7% | . | 2.0% | 12.0% | 12.3% | 14.5% | 24.3% | 2.3% | 5.6% | 1.6% | 7.4% |

Haemophilus influenzae type b (Hib) disease is a serious disease caused by bacteria. It usually affects children under 5 years old. It can also affect adults with certain medical conditions. The germs spread from person to person. If the germs stay in the child’s nose and throat, the child probably will not get sick. But sometimes the germs spread into the lungs or the bloodstream, leading Hib to cause serious problems. Doses of Hib vaccine are usually recommended at these ages: First Dose: 2 months of age; Second Dose: 4 months of age; third Dose: 6 months of age (if needed, depending on brand of vaccine); and Final/Booster Dose: 12-15 months of age.

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Hib vaccine may be given at the same time as other vaccines.

In the survey, the coverage rates for the first dose of the HiB vaccine was more than 91% with the higher coverage among Emirati than non-Emirati children. However, the coverage for later doses of the vaccines starts declining with less than 65% coverage rate for the final/booster dose of the HiB vaccine.

Table 74: Coverage of Haemophilus influenza 2ndt dose

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 2nd dose of  Haemophilus influenza  vaccine | Covered | 1,334 | 186 | 1,148 | 96 | 448 | 14 | 457 | 24 | 143 | 12 | 62 | 4 | 6 | 21 | 14 | 15 | 18 |
| 89.1% | 91.4% | 88.8% | 92.1% | 92.4% | 90.3% | 83.8% | 97.3% | 95.9% | 77.4% | 88.3% | 83.7% | 81.5% | 92.1% | 80.0% | 92.4% | 94.4% |
| Not Covered | 163 | 18 | 145 | 8 | 37 | 2 | 88 | 1 | 6 | 3 | 8 | 1 | 1 | 2 | 3 | 1 | 1 |
| 10.9% | 8.6% | 11.2% | 7.9% | 7.6% | 9.7% | 16.2% | 2.7% | 4.1% | 22.6% | 11.7% | 16.3% | 18.5% | 7.9% | 20.0% | 7.6% | 5.6% |
| Below 1 Year | Covered | 233 | 27 | 206 | 13 | 78 | 1 | 87 | 7 | 24 | 2 | 9 | 0 | 1 | 3 | 3 | 1 | 3 |
| 78.4% | 73.1% | 79.2% | 71.8% | 79.2% | 55.1% | 79.1% | 100.0% | 80.2% | 41.2% | 85.1% | 75.1% | 66.1% | 84.4% | 70.0% | 52.7% | 71.0% |
| Not Covered | 64 | 10 | 54 | 5 | 21 | 1 | 23 | . | 6 | 2 | 2 | 0 | 0 | 1 | 1 | 1 | 1 |
| 21.6% | 26.9% | 20.8% | 28.2% | 20.8% | 44.9% | 20.9% | . | 19.8% | 58.8% | 14.9% | 24.9% | 33.9% | 15.6% | 30.0% | 47.3% | 29.0% |
| 1 - 2 Years | Covered | 305 | 45 | 260 | 25 | 122 | 4 | 90 | 5 | 23 | 2 | 16 | 1 | 1 | 6 | 2 | 3 | 5 |
| 91.9% | 94.1% | 91.5% | 93.8% | 98.1% | 95.8% | 82.2% | 100.0% | 100.0% | 91.6% | 93.8% | 76.6% | 92.6% | 90.8% | 71.4% | 100.0% | 100.0% |
| Not Covered | 27 | 3 | 24 | 2 | 2 | 0 | 20 | . | . | 0 | 1 | 0 | 0 | 1 | 1 | . | . |
| 8.1% | 5.9% | 8.5% | 6.2% | 1.9% | 4.2% | 17.8% | . | . | 8.4% | 6.2% | 23.4% | 7.4% | 9.2% | 28.6% | . | . |
| Above 2 years  upto 5 years | Covered | 796 | 114 | 682 | 59 | 247 | 9 | 280 | 12 | 96 | 8 | 37 | 2 | 4 | 12 | 8 | 11 | 11 |
| 91.7% | 96.0% | 91.0% | 97.2% | 94.7% | 97.7% | 85.9% | 94.8% | 100.0% | 88.2% | 86.8% | 87.9% | 81.5% | 95.0% | 88.9% | 98.6% | 100.0% |
| Not Covered | 72 | 5 | 67 | 2 | 14 | 0 | 46 | 1 | . | 1 | 6 | 0 | 1 | 1 | 1 | 0 | . |
| 8.3% | 4.0% | 9.0% | 2.8% | 5.3% | 2.3% | 14.1% | 5.2% | . | 11.8% | 13.2% | 12.1% | 18.5% | 5.0% | 11.1% | 1.4% | . |

Table 75: Coverage of Haemophilus influenza 3rd dose

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 3rd dose of  Hemophilus influenza  vaccine | Covered | 1,259 | 179 | 1,080 | 93 | 430 | 13 | 434 | 23 | 123 | 12 | 56 | 4 | 6 | 19 | 14 | 14 | 18 |
| 84.1% | 87.5% | 83.6% | 88.8% | 88.8% | 85.9% | 80.0% | 94.1% | 81.1% | 77.4% | 80.3% | 83.7% | 74.3% | 80.8% | 80.0% | 90.7% | 91.1% |
| Not Covered | 238 | 26 | 212 | 12 | 54 | 2 | 108 | 1 | 29 | 3 | 14 | 1 | 2 | 5 | 3 | 1 | 2 |
| 15.9% | 12.5% | 16.4% | 11.2% | 11.2% | 14.1% | 20.0% | 5.9% | 18.9% | 22.6% | 19.7% | 16.3% | 25.7% | 19.2% | 20.0% | 9.3% | 8.9% |
| Below 1 Year | Covered | 178 | 22 | 155 | 10 | 67 | 1 | 64 | 7 | 12 | 2 | 6 | 0 | 1 | 1 | 3 | 1 | 2 |
| 59.5% | 59.5% | 59.5% | 59.3% | 67.9% | 34.7% | 58.5% | 100.0% | 35.8% | 41.2% | 61.9% | 75.1% | 55.4% | 22.6% | 70.0% | 52.7% | 53.6% |
| Not Covered | 121 | 15 | 106 | 7 | 32 | 2 | 46 | . | 21 | 2 | 4 | 0 | 0 | 3 | 1 | 1 | 2 |
| 40.5% | 40.5% | 40.5% | 40.7% | 32.1% | 65.3% | 41.5% | . | 64.2% | 58.8% | 38.1% | 24.9% | 44.6% | 77.4% | 30.0% | 47.3% | 46.4% |
| 1 - 2 Years | Covered | 302 | 45 | 256 | 25 | 121 | 4 | 90 | 5 | 23 | 2 | 14 | 1 | 1 | 6 | 2 | 3 | 5 |
| 91.1% | 95.3% | 90.4% | 96.0% | 96.8% | 95.8% | 82.0% | 100.0% | 100.0% | 91.6% | 86.0% | 76.6% | 92.6% | 90.8% | 71.4% | 100.0% | 100.0% |
| Not Covered | 29 | 2 | 27 | 1 | 4 | 0 | 20 | . | . | 0 | 2 | 0 | 0 | 1 | 1 | . | . |
| 8.9% | 4.7% | 9.6% | 4.0% | 3.2% | 4.2% | 18.0% | . | . | 8.4% | 14.0% | 23.4% | 7.4% | 9.2% | 28.6% | . | . |
| Above 2 years  upto 5 years | Covered | 779 | 111 | 668 | 57 | 242 | 9 | 280 | 12 | 88 | 8 | 35 | 2 | 4 | 12 | 8 | 11 | 11 |
| 89.9% | 93.1% | 89.4% | 94.1% | 92.9% | 95.6% | 86.7% | 88.8% | 92.1% | 88.2% | 82.6% | 87.9% | 73.1% | 92.8% | 88.9% | 96.1% | 100.0% |
| Not Covered | 87 | 8 | 79 | 4 | 19 | 0 | 43 | 1 | 8 | 1 | 7 | 0 | 1 | 1 | 1 | 0 | . |
| 10.1% | 6.9% | 10.6% | 5.9% | 7.1% | 4.4% | 13.3% | 11.2% | 7.9% | 11.8% | 17.4% | 12.1% | 26.9% | 7.2% | 11.1% | 3.9% | . |

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Table 76: Coverage of Hemophilus influenza 4th (booster) dose

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 4th dose of  Hemophilus influenza  vaccine | Covered | 955 | 140 | 816 | 72 | 335 | 10 | 301 | 18 | 102 | 9 | 49 | 3 | 4 | 15 | 10 | 13 | 13 |
| 63.9% | 68.5% | 63.2% | 68.3% | 69.2% | 65.5% | 55.4% | 71.4% | 68.3% | 61.4% | 71.0% | 59.8% | 57.9% | 65.0% | 61.4% | 81.7% | 69.2% |
| Not Covered | 539 | 64 | 475 | 33 | 149 | 5 | 242 | 7 | 48 | 6 | 20 | 2 | 3 | 8 | 7 | 3 | 6 |
| 36.1% | 31.5% | 36.8% | 31.7% | 30.8% | 34.5% | 44.6% | 28.6% | 31.7% | 38.6% | 29.0% | 40.2% | 42.1% | 35.0% | 38.6% | 18.3% | 30.8% |
| Below 1 Year | Covered | 72 | 8 | 64 | 4 | 36 | . | 15 | 2 | 8 | 1 | 4 | . | 0 | 1 | 0 | 1 | . |
| 24.4% | 22.0% | 24.7% | 22.3% | 36.3% | . | 13.5% | 32.2% | 26.7% | 24.1% | 44.4% | . | 10.7% | 15.6% | 10.0% | 26.1% | . |
| Not Covered | 224 | 29 | 195 | 14 | 63 | 2 | 95 | 5 | 23 | 3 | 5 | 1 | 1 | 3 | 4 | 2 | 4 |
| 75.6% | 78.0% | 75.3% | 77.7% | 63.7% | 100.0% | 86.5% | 67.8% | 73.3% | 75.9% | 55.6% | 100.0% | 89.3% | 84.4% | 90.0% | 73.9% | 100.0% |
| 1 - 2 Years | Covered | 156 | 30 | 126 | 16 | 74 | 2 | 24 | 4 | 10 | 2 | 11 | 0 | 1 | 3 | 2 | 2 | 4 |
| 47.1% | 62.3% | 44.6% | 62.8% | 59.3% | 45.2% | 22.4% | 90.3% | 44.2% | 73.7% | 67.3% | 30.9% | 67.3% | 42.9% | 57.1% | 81.1% | 75.6% |
| Not Covered | 175 | 18 | 157 | 10 | 51 | 2 | 85 | 0 | 13 | 1 | 5 | 1 | 0 | 4 | 1 | 0 | 1 |
| 52.9% | 37.7% | 55.4% | 37.2% | 40.7% | 54.8% | 77.6% | 9.7% | 55.8% | 26.3% | 32.7% | 69.1% | 32.7% | 57.1% | 42.9% | 18.9% | 24.4% |
| Above 2 years  upto 5 years | Covered | 727 | 102 | 625 | 51 | 225 | 8 | 261 | 11 | 84 | 7 | 34 | 2 | 3 | 12 | 8 | 10 | 10 |
| 83.9% | 85.4% | 83.6% | 83.9% | 86.4% | 92.3% | 80.8% | 85.2% | 87.6% | 73.2% | 78.6% | 81.9% | 65.2% | 90.6% | 91.7% | 92.9% | 90.1% |
| Not Covered | 140 | 17 | 122 | 10 | 35 | 1 | 62 | 2 | 12 | 2 | 9 | 1 | 2 | 1 | 1 | 1 | 1 |
| 16.1% | 14.6% | 16.4% | 16.1% | 13.6% | 7.7% | 19.2% | 14.8% | 12.4% | 26.8% | 21.4% | 18.1% | 34.8% | 9.4% | 8.3% | 7.1% | 9.9% |

Table 77: Coverage of IPV 1st dose

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 1st dose of injectable polio vaccine | Covered | 1,437 | 196 | 1,241 | 100 | 459 | 15 | 525 | 25 | 155 | 13 | 62 | 4 | 6 | 23 | 15 | 16 | 19 |
| 94.8% | 95.8% | 94.7% | 95.9% | 94.3% | 95.5% | 95.9% | 100.0% | 97.2% | 84.4% | 84.7% | 94.9% | 77.8% | 97.5% | 87.0% | 97.9% | 100.0% |
| Not Covered | 78 | 9 | 70 | 4 | 28 | 1 | 22 | . | 4 | 2 | 11 | 0 | 2 | 1 | 2 | 0 | . |
| 5.2% | 4.2% | 5.3% | 4.1% | 5.7% | 4.5% | 4.1% | . | 2.8% | 15.6% | 15.3% | 5.1% | 22.2% | 2.5% | 13.0% | 2.1% | . |
| Below 1 Year | Covered | 264 | 32 | 232 | 15 | 85 | 2 | 102 | 7 | 30 | 2 | 7 | 1 | 1 | 4 | 4 | 2 | 4 |
| 87.9% | 84.6% | 88.4% | 86.1% | 86.3% | 78.5% | 92.8% | 100.0% | 87.1% | 41.2% | 66.7% | 100.0% | 80.1% | 92.8% | 78.9% | 84.6% | 100.0% |
| Not Covered | 36 | 6 | 30 | 2 | 14 | 1 | 8 | . | 4 | 2 | 4 | . | 0 | 0 | 1 | 0 | . |
| 12.1% | 15.4% | 11.6% | 13.9% | 13.7% | 21.5% | 7.2% | . | 12.9% | 58.8% | 33.3% | . | 19.9% | 7.2% | 21.1% | 15.4% | . |
| 1 - 2 Years | Covered | 328 | 46 | 283 | 25 | 122 | 4 | 107 | 5 | 27 | 2 | 17 | 1 | 1 | 6 | 3 | 3 | 5 |
| 96.0% | 96.0% | 96.0% | 94.6% | 96.5% | 95.8% | 95.9% | 100.0% | 100.0% | 100.0% | 89.9% | 100.0% | 84.6% | 95.4% | 85.7% | 100.0% | 100.0% |
| Not Covered | 14 | 2 | 12 | 1 | 4 | 0 | 5 | . | . | . | 2 | . | 0 | 0 | 0 | . | . |
| 4.0% | 4.0% | 4.0% | 5.4% | 3.5% | 4.2% | 4.1% | . | . | . | 10.1% | . | 15.4% | 4.6% | 14.3% | . | . |
| Above 2 years  upto 5 years | Covered | 845 | 119 | 726 | 61 | 251 | 9 | 316 | 13 | 98 | 9 | 38 | 3 | 4 | 13 | 8 | 11 | 11 |
| 96.7% | 99.3% | 96.3% | 99.3% | 96.2% | 100.0% | 97.0% | 100.0% | 100.0% | 97.6% | 86.9% | 92.2% | 75.4% | 100.0% | 91.7% | 100.0% | 100.0% |
| Not Covered | 28 | 1 | 28 | 0 | 10 | . | 10 | . | . | 0 | 6 | 0 | 1 | . | 1 | . | . |
| 3.3% | 0.7% | 3.7% | 0.7% | 3.8% | . | 3.0% | . | . | 2.4% | 13.1% | 7.8% | 24.6% | . | 8.3% | . | . |

Two types of vaccines are used for vaccination against poliomyelitis: an inactivated poliovirus given by injection (IPV) and a live-attenuated poliovirus given by mouth called oral polio vaccine (OPV). The World Health Organization recommends all children must be fully vaccinated against polio. In countries with >90% primary immunization coverage and low risk of importation, the WHO has recommended one or two IPV doses starting at 2 months of age followed by at least two OPV doses, with the doses separated by 4–8 weeks depending on the risk of exposure. In the UAE National Immunization schedule, currently both IPV and OPV are used in line with the WHO recommendation. Approximately 95% of children were covered by the first dose of the IPV and 92% of children covered by the 2nd dose. The coverage rates for the first dose of OPV was also more than 90% with the coverage decreasing for the 2nd and 3rd dose of OPV.

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Table 78: Coverage of IPV 2nd dose

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 2nd dose of injectable polio vaccine | Covered | 1,409 | 188 | 1,220 | 97 | 466 | 14 | 505 | 24 | 148 | 13 | 63 | 4 | 6 | 23 | 14 | 14 | 18 |
| 92.9% | 92.1% | 93.0% | 92.3% | 94.6% | 90.3% | 92.1% | 97.3% | 95.2% | 82.0% | 87.2% | 94.6% | 76.3% | 94.8% | 84.1% | 89.1% | 94.4% |
| Not Covered | 108 | 16 | 92 | 8 | 27 | 2 | 43 | 1 | 7 | 3 | 9 | 0 | 2 | 1 | 3 | 2 | 1 |
| 7.1% | 7.9% | 7.0% | 7.7% | 5.4% | 9.7% | 7.9% | 2.7% | 4.8% | 18.0% | 12.8% | 5.4% | 23.7% | 5.2% | 15.9% | 10.9% | 5.6% |
| Below 1 Year | Covered | 242 | 28 | 213 | 13 | 84 | 1 | 88 | 7 | 26 | 2 | 8 | 1 | 1 | 4 | 4 | 1 | 3 |
| 81.2% | 75.7% | 82.0% | 75.1% | 85.1% | 55.1% | 80.5% | 100.0% | 81.3% | 41.2% | 77.4% | 100.0% | 55.4% | 85.5% | 78.9% | 58.0% | 71.0% |
| Not Covered | 56 | 9 | 47 | 4 | 15 | 1 | 21 | . | 6 | 2 | 2 | . | 0 | 1 | 1 | 1 | 1 |
| 18.8% | 24.3% | 18.0% | 24.9% | 14.9% | 44.9% | 19.5% | . | 18.7% | 58.8% | 22.6% | . | 44.6% | 14.5% | 21.1% | 42.0% | 29.0% |
| 1 - 2 Years | Covered | 326 | 44 | 282 | 24 | 127 | 4 | 100 | 5 | 28 | 2 | 18 | 1 | 1 | 6 | 3 | 2 | 5 |
| 94.6% | 93.7% | 94.8% | 91.0% | 99.0% | 95.8% | 89.3% | 100.0% | 100.0% | 100.0% | 93.3% | 100.0% | 84.6% | 95.4% | 78.6% | 94.0% | 100.0% |
| Not Covered | 18 | 3 | 15 | 2 | 1 | 0 | 12 | . | . | . | 1 | . | 0 | 0 | 1 | 0 | . |
| 5.4% | 6.3% | 5.2% | 9.0% | 1.0% | 4.2% | 10.7% | . | . | . | 6.7% | . | 15.4% | 4.6% | 21.4% | 6.0% | . |
| Above 2 years  upto 5 years | Covered | 841 | 116 | 725 | 60 | 254 | 9 | 316 | 12 | 94 | 9 | 38 | 3 | 4 | 13 | 8 | 10 | 11 |
| 96.2% | 96.6% | 96.1% | 97.8% | 96.0% | 97.7% | 97.0% | 94.8% | 98.6% | 93.6% | 86.9% | 91.8% | 78.3% | 97.4% | 88.9% | 93.6% | 100.0% |
| Not Covered | 34 | 4 | 30 | 1 | 10 | 0 | 10 | 1 | 1 | 1 | 6 | 0 | 1 | 0 | 1 | 1 | . |
| 3.8% | 3.4% | 3.9% | 2.2% | 4.0% | 2.3% | 3.0% | 5.2% | 1.4% | 6.4% | 13.1% | 8.2% | 21.7% | 2.6% | 11.1% | 6.4% | . |

Table 79: Coverage of OPV 1st dose

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 1st dose of oral polio vaccine | Covered | 1,423 | 191 | 1,233 | 98 | 470 | 14 | 504 | 24 | 156 | 13 | 63 | 4 | 7 | 23 | 15 | 15 | 18 |
| 93.6% | 93.2% | 93.6% | 93.6% | 95.5% | 90.3% | 92.4% | 97.3% | 96.3% | 82.0% | 84.9% | 97.5% | 90.7% | 94.8% | 90.0% | 94.6% | 94.4% |
| Not Covered | 98 | 14 | 84 | 7 | 22 | 2 | 41 | 1 | 6 | 3 | 11 | 0 | 1 | 1 | 2 | 1 | 1 |
| 6.4% | 6.8% | 6.4% | 6.4% | 4.5% | 9.7% | 7.6% | 2.7% | 3.7% | 18.0% | 15.1% | 2.5% | 9.3% | 5.2% | 10.0% | 5.4% | 5.6% |
| Below 1 Year | Covered | 252 | 28 | 223 | 13 | 86 | 1 | 94 | 7 | 28 | 2 | 9 | 1 | 1 | 4 | 4 | 1 | 3 |
| 83.8% | 75.7% | 85.0% | 75.1% | 86.4% | 55.1% | 85.4% | 100.0% | 82.2% | 41.2% | 84.8% | 100.0% | 55.4% | 85.5% | 85.0% | 58.0% | 71.0% |
| Not Covered | 49 | 9 | 39 | 4 | 14 | 1 | 16 | . | 6 | 2 | 2 | . | 0 | 1 | 1 | 1 | 1 |
| 16.2% | 24.3% | 15.0% | 24.9% | 13.6% | 44.9% | 14.6% | . | 17.8% | 58.8% | 15.2% | . | 44.6% | 14.5% | 15.0% | 42.0% | 29.0% |
| 1 - 2 Years | Covered | 332 | 46 | 287 | 25 | 127 | 4 | 105 | 5 | 30 | 2 | 16 | 1 | 1 | 6 | 3 | 3 | 5 |
| 95.8% | 96.0% | 95.8% | 94.6% | 99.0% | 95.8% | 93.4% | 100.0% | 100.0% | 100.0% | 83.7% | 100.0% | 91.9% | 95.4% | 78.6% | 100.0% | 100.0% |
| Not Covered | 15 | 2 | 13 | 1 | 1 | 0 | 7 | . | . | . | 3 | . | 0 | 0 | 1 | . | . |
| 4.2% | 4.0% | 4.2% | 5.4% | 1.0% | 4.2% | 6.6% | . | . | . | 16.3% | . | 8.1% | 4.6% | 21.4% | . | . |
| Above 2 years  upto 5 years | Covered | 840 | 117 | 723 | 60 | 257 | 9 | 306 | 12 | 98 | 9 | 37 | 3 | 5 | 13 | 9 | 11 | 11 |
| 96.0% | 97.6% | 95.8% | 98.5% | 97.3% | 97.7% | 94.4% | 94.8% | 100.0% | 93.6% | 85.4% | 96.2% | 97.6% | 97.4% | 97.2% | 100.0% | 100.0% |
| Not Covered | 35 | 3 | 32 | 1 | 7 | 0 | 18 | 1 | . | 1 | 6 | 0 | 0 | 0 | 0 | . | . |
| 4.0% | 2.4% | 4.2% | 1.5% | 2.7% | 2.3% | 5.6% | 5.2% | . | 6.4% | 14.6% | 3.8% | 2.4% | 2.6% | 2.8% | . | . |

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Table 80: Coverage of OPV 2nd dose

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 2nd dose of oral polio vaccine | Covered | 1,331 | 180 | 1,151 | 93 | 448 | 13 | 467 | 23 | 133 | 13 | 62 | 4 | 7 | 20 | 16 | 14 | 18 |
| 87.9% | 88.1% | 87.9% | 88.4% | 91.3% | 86.9% | 86.1% | 94.0% | 83.5% | 82.0% | 84.0% | 87.1% | 92.3% | 83.5% | 91.4% | 90.7% | 94.4% |
| Not Covered | 184 | 24 | 159 | 12 | 43 | 2 | 75 | 1 | 26 | 3 | 12 | 1 | 1 | 4 | 1 | 1 | 1 |
| 12.1% | 11.9% | 12.1% | 11.6% | 8.7% | 13.1% | 13.9% | 6.0% | 16.5% | 18.0% | 16.0% | 12.9% | 7.7% | 16.5% | 8.6% | 9.3% | 5.6% |
| Below 1 Year | Covered | 194 | 22 | 171 | 10 | 71 | 1 | 71 | 7 | 15 | 2 | 8 | 0 | 1 | 1 | 4 | 1 | 3 |
| 64.5% | 59.4% | 65.2% | 59.3% | 71.5% | 34.7% | 64.4% | 100.0% | 44.5% | 41.2% | 72.7% | 46.1% | 55.4% | 28.2% | 80.0% | 52.7% | 71.0% |
| Not Covered | 107 | 15 | 91 | 7 | 28 | 2 | 39 | . | 19 | 2 | 3 | 0 | 0 | 3 | 1 | 1 | 1 |
| 35.5% | 40.6% | 34.8% | 40.7% | 28.5% | 65.3% | 35.6% | . | 55.5% | 58.8% | 27.3% | 53.9% | 44.6% | 71.8% | 20.0% | 47.3% | 29.0% |
| 1 - 2 Years | Covered | 322 | 45 | 276 | 25 | 124 | 4 | 97 | 5 | 30 | 2 | 17 | 1 | 1 | 6 | 3 | 2 | 5 |
| 93.3% | 95.7% | 92.9% | 94.6% | 97.7% | 95.7% | 86.2% | 100.0% | 100.0% | 100.0% | 87.0% | 100.0% | 91.9% | 95.4% | 100.0% | 94.0% | 100.0% |
| Not Covered | 23 | 2 | 21 | 1 | 3 | 0 | 15 | . | . | . | 3 | . | 0 | 0 | . | 0 | . |
| 6.7% | 4.3% | 7.1% | 5.4% | 2.3% | 4.3% | 13.8% | . | . | . | 13.0% | . | 8.1% | 4.6% | . | 6.0% | . |
| Above 2 years  upto 5 years | Covered | 816 | 112 | 703 | 57 | 253 | 9 | 300 | 11 | 88 | 9 | 37 | 3 | 5 | 13 | 8 | 11 | 11 |
| 93.8% | 94.1% | 93.8% | 94.1% | 95.7% | 97.7% | 93.5% | 88.4% | 92.1% | 93.6% | 85.4% | 91.2% | 100.0% | 95.1% | 94.4% | 97.5% | 100.0% |
| Not Covered | 54 | 7 | 47 | 4 | 11 | 0 | 21 | 1 | 8 | 1 | 6 | 0 | . | 1 | 0 | 0 | . |
| 6.2% | 5.9% | 6.2% | 5.9% | 4.3% | 2.3% | 6.5% | 11.6% | 7.9% | 6.4% | 14.6% | 8.8% | . | 4.9% | 5.6% | 2.5% | . |

Table 81: Coverage of OPV 3rd dose

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 3rd dose of oral polio vaccine | Covered | 986 | 143 | 843 | 72 | 335 | 10 | 321 | 18 | 110 | 10 | 48 | 3 | 5 | 17 | 10 | 13 | 13 |
| 64.9% | 69.8% | 64.2% | 68.4% | 68.0% | 67.4% | 58.8% | 71.4% | 69.2% | 64.7% | 66.0% | 71.5% | 70.4% | 70.4% | 61.4% | 82.6% | 69.2% |
| Not Covered | 532 | 62 | 471 | 33 | 158 | 5 | 225 | 7 | 49 | 5 | 25 | 1 | 2 | 7 | 7 | 3 | 6 |
| 35.1% | 30.2% | 35.8% | 31.6% | 32.0% | 32.6% | 41.2% | 28.6% | 30.8% | 35.3% | 34.0% | 28.5% | 29.6% | 29.6% | 38.6% | 17.4% | 30.8% |
| Below 1 Year | Covered | 70 | 8 | 62 | 3 | 35 | . | 14 | 2 | 9 | 1 | 4 | . | 0 | 1 | 0 | 1 | . |
| 23.4% | 21.4% | 23.7% | 19.7% | 35.1% | . | 12.3% | 32.2% | 26.3% | 24.1% | 41.8% | . | 10.7% | 21.7% | 10.0% | 26.1% | . |
| Not Covered | 230 | 30 | 201 | 14 | 64 | 2 | 96 | 5 | 25 | 3 | 6 | 1 | 1 | 3 | 4 | 2 | 4 |
| 76.6% | 78.6% | 76.3% | 80.3% | 64.9% | 100.0% | 87.7% | 67.8% | 73.7% | 75.9% | 58.2% | 100.0% | 89.3% | 78.3% | 90.0% | 73.9% | 100.0% |
| 1 - 2 Years | Covered | 166 | 30 | 136 | 17 | 72 | 2 | 29 | 4 | 17 | 2 | 11 | 1 | 1 | 3 | 2 | 2 | 4 |
| 48.1% | 64.3% | 45.5% | 63.2% | 56.3% | 43.3% | 26.0% | 90.3% | 56.8% | 73.7% | 59.4% | 54.3% | 64.5% | 55.4% | 57.1% | 73.3% | 75.6% |
| Not Covered | 179 | 17 | 163 | 10 | 56 | 2 | 83 | 0 | 13 | 1 | 8 | 0 | 0 | 3 | 1 | 1 | 1 |
| 51.9% | 35.7% | 54.5% | 36.8% | 43.7% | 56.7% | 74.0% | 9.7% | 43.2% | 26.3% | 40.6% | 45.7% | 35.5% | 44.6% | 42.9% | 26.7% | 24.4% |
| Above 2 years  upto 5 years | Covered | 749 | 104 | 645 | 52 | 227 | 9 | 278 | 11 | 85 | 7 | 33 | 3 | 4 | 12 | 8 | 11 | 10 |
| 85.9% | 87.3% | 85.7% | 84.7% | 86.0% | 96.0% | 85.9% | 85.2% | 88.3% | 78.6% | 74.7% | 91.2% | 84.1% | 92.8% | 91.7% | 96.1% | 90.1% |
| Not Covered | 123 | 15 | 108 | 9 | 37 | 0 | 46 | 2 | 11 | 2 | 11 | 0 | 1 | 1 | 1 | 0 | 1 |
| 14.1% | 12.7% | 14.3% | 15.3% | 14.0% | 4.0% | 14.1% | 14.8% | 11.7% | 21.4% | 25.3% | 8.8% | 15.9% | 7.2% | 8.3% | 3.9% | 9.9% |

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Table 82: Coverage of OPV 4th dose

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 4th dose of oral polio vaccine | Covered | 252 | 55 | 197 | 30 | 117 | 1 | 18 | 14 | 46 | 2 | 6 | 2 | 3 | 2 | 3 | 3 | 3 |
| 16.7% | 27.1% | 15.1% | 28.9% | 23.9% | 7.0% | 3.4% | 57.9% | 29.9% | 15.7% | 8.6% | 46.8% | 34.9% | 9.6% | 17.1% | 17.5% | 16.8% |
| Not Covered | 1,257 | 149 | 1,108 | 74 | 373 | 14 | 524 | 10 | 109 | 13 | 66 | 2 | 5 | 21 | 14 | 13 | 16 |
| 83.3% | 72.9% | 84.9% | 71.1% | 76.1% | 93.0% | 96.6% | 42.1% | 70.1% | 84.3% | 91.4% | 53.2% | 65.1% | 90.4% | 82.9% | 82.5% | 83.2% |
| Below 1 Year | Covered | 41 | 4 | 37 | 2 | 24 | . | 3 | 2 | 8 | . | 1 | . | 0 | 0 | . | 0 | . |
| 13.7% | 11.9% | 14.0% | 9.1% | 24.4% | . | 3.1% | 32.2% | 22.5% | . | 12.1% | . | 21.5% | 7.2% | . | 15.4% | . |
| Not Covered | 259 | 33 | 226 | 16 | 75 | 2 | 106 | 5 | 27 | 4 | 9 | 1 | 1 | 4 | 5 | 2 | 4 |
| 86.3% | 88.1% | 86.0% | 90.9% | 75.6% | 100.0% | 96.9% | 67.8% | 77.5% | 100.0% | 87.9% | 100.0% | 78.5% | 92.8% | 100.0% | 84.6% | 100.0% |
| 1 - 2 Years | Covered | 61 | 15 | 46 | 9 | 28 | 0 | 0 | 4 | 14 | 0 | 3 | 0 | 0 | 1 | 0 | 1 | . |
| 17.9% | 32.2% | 15.6% | 32.7% | 22.5% | 4.3% | 0.2% | 90.3% | 48.2% | 12.6% | 16.2% | 40.8% | 26.9% | 9.7% | 14.3% | 27.2% | . |
| Not Covered | 280 | 32 | 248 | 18 | 98 | 4 | 112 | 0 | 14 | 2 | 15 | 1 | 1 | 6 | 3 | 2 | 5 |
| 82.1% | 67.8% | 84.4% | 67.3% | 77.5% | 95.7% | 99.8% | 9.7% | 51.8% | 87.4% | 83.8% | 59.2% | 73.1% | 90.3% | 85.7% | 72.8% | 100.0% |
| Above 2 years  upto 5 years | Covered | 150 | 36 | 114 | 20 | 64 | 1 | 15 | 8 | 25 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 |
| 17.3% | 29.8% | 15.3% | 33.0% | 24.3% | 10.0% | 4.6% | 59.4% | 27.1% | 22.8% | 4.5% | 58.0% | 39.7% | 10.4% | 27.8% | 15.7% | 29.6% |
| Not Covered | 717 | 84 | 633 | 41 | 200 | 8 | 306 | 5 | 68 | 7 | 42 | 1 | 3 | 12 | 6 | 9 | 8 |
| 82.7% | 70.2% | 84.7% | 67.0% | 75.7% | 90.0% | 95.4% | 40.6% | 72.9% | 77.2% | 95.5% | 42.0% | 60.3% | 89.6% | 72.2% | 84.3% | 70.4% |

Table 83: Coverage of Pneumococcal conjugate vaccine 1st dose

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 1st dose of pneumococcal conjugate vaccine | Covered | 1,417 | 192 | 1,225 | 100 | 460 | 15 | 533 | 25 | 136 | 11 | 57 | 3 | 6 | 23 | 16 | 15 | 18 |
| 94.2% | 93.9% | 94.2% | 95.4% | 94.8% | 96.5% | 97.3% | 100.0% | 89.5% | 73.4% | 79.0% | 70.9% | 79.6% | 95.2% | 92.9% | 95.9% | 94.4% |
| Not Covered | 87 | 12 | 75 | 5 | 25 | 1 | 15 | . | 16 | 4 | 15 | 1 | 2 | 1 | 1 | 1 | 1 |
| 5.8% | 6.1% | 5.8% | 4.6% | 5.2% | 3.5% | 2.7% | . | 10.5% | 26.6% | 21.0% | 29.1% | 20.4% | 4.8% | 7.1% | 4.1% | 5.6% |
| Below 1 Year | Covered | 265 | 32 | 234 | 15 | 89 | 2 | 102 | 7 | 28 | 2 | 7 | 0 | 1 | 4 | 4 | 2 | 3 |
| 88.2% | 83.9% | 88.8% | 86.1% | 90.0% | 85.1% | 93.1% | 100.0% | 82.8% | 41.2% | 66.7% | 75.1% | 55.4% | 85.5% | 80.0% | 84.6% | 71.0% |
| Not Covered | 35 | 6 | 29 | 2 | 10 | 0 | 8 | . | 6 | 2 | 4 | 0 | 0 | 1 | 1 | 0 | 1 |
| 11.8% | 16.1% | 11.2% | 13.9% | 10.0% | 14.9% | 6.9% | . | 17.2% | 58.8% | 33.3% | 24.9% | 44.6% | 14.5% | 20.0% | 15.4% | 29.0% |
| 1 - 2 Years | Covered | 325 | 45 | 280 | 25 | 124 | 4 | 110 | 5 | 24 | 2 | 13 | 1 | 1 | 6 | 3 | 2 | 5 |
| 95.7% | 94.5% | 95.9% | 94.3% | 98.2% | 95.8% | 98.0% | 100.0% | 92.6% | 100.0% | 70.8% | 71.0% | 92.0% | 91.7% | 100.0% | 94.0% | 100.0% |
| Not Covered | 15 | 3 | 12 | 1 | 2 | 0 | 2 | . | 2 | . | 5 | 0 | 0 | 1 | . | 0 | . |
| 4.3% | 5.5% | 4.1% | 5.7% | 1.8% | 4.2% | 2.0% | . | 7.4% | . | 29.2% | 29.0% | 8.0% | 8.3% | . | 6.0% | . |
| Above 2 years  upto 5 years | Covered | 827 | 115 | 712 | 60 | 246 | 9 | 321 | 13 | 84 | 7 | 37 | 2 | 4 | 13 | 9 | 11 | 11 |
| 95.7% | 96.9% | 95.5% | 98.6% | 95.0% | 100.0% | 98.5% | 100.0% | 91.1% | 79.5% | 85.4% | 69.9% | 81.2% | 100.0% | 97.2% | 98.6% | 100.0% |
| Not Covered | 37 | 4 | 34 | 1 | 13 | . | 5 | . | 8 | 2 | 6 | 1 | 1 | . | 0 | 0 | . |
| 4.3% | 3.1% | 4.5% | 1.4% | 5.0% | . | 1.5% | . | 8.9% | 20.5% | 14.6% | 30.1% | 18.8% | . | 2.8% | 1.4% | . |

Pneumococcal conjugate vaccine (PCV13 or Prevnar13®) is recommended for all children younger than 2 years of age as per the UAE National Immunization schedule.

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The vaccine is given to infants as a series of 4 doses, one dose at each of these ages: 2 months, 4 months, 6 months, and 12 through 15 months.

Children who miss their shots or start the series later should still get the vaccine. The number of doses recommended and the intervals between doses will depend on the child’s age when vaccination begins. The coverage for the first dose of Pneumococcal conjugate vaccine was noted at 94.2% with almost similar coverage between Emirati and non-Emirati children. The coverage decreases for subsequent 3 doses of Pneumococcal conjugate vaccine with less than 65% coverage for the last dose of Pneumococcal conjugate vaccine.

Table 84: Coverage of Pneumococcal conjugate vaccine 2nd dose

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 2nd dose of pneumococcal conjugate vaccine | Covered | 1,393 | 186 | 1,206 | 97 | 454 | 14 | 517 | 23 | 135 | 12 | 60 | 3 | 6 | 22 | 16 | 15 | 18 |
| 92.7% | 91.9% | 92.8% | 93.0% | 93.8% | 91.4% | 94.4% | 97.1% | 89.3% | 79.1% | 83.6% | 76.2% | 79.9% | 92.5% | 91.4% | 92.4% | 94.4% |
| Not Covered | 109 | 16 | 93 | 7 | 30 | 1 | 31 | 1 | 16 | 3 | 12 | 1 | 2 | 2 | 1 | 1 | 1 |
| 7.3% | 8.1% | 7.2% | 7.0% | 6.2% | 8.6% | 5.6% | 2.9% | 10.7% | 20.9% | 16.4% | 23.8% | 20.1% | 7.5% | 8.6% | 7.6% | 5.6% |
| Below 1 Year | Covered | 244 | 28 | 216 | 13 | 84 | 2 | 91 | 7 | 27 | 2 | 7 | 0 | 1 | 3 | 4 | 1 | 3 |
| 81.3% | 73.5% | 82.4% | 71.8% | 84.9% | 61.7% | 83.3% | 100.0% | 77.9% | 46.1% | 71.0% | 75.1% | 55.4% | 78.3% | 80.0% | 52.7% | 71.0% |
| Not Covered | 56 | 10 | 46 | 5 | 15 | 1 | 18 | . | 8 | 2 | 3 | 0 | 0 | 1 | 1 | 1 | 1 |
| 18.7% | 26.5% | 17.6% | 28.2% | 15.1% | 38.3% | 16.7% | . | 22.1% | 53.9% | 29.0% | 24.9% | 44.6% | 21.7% | 20.0% | 47.3% | 29.0% |
| 1 - 2 Years | Covered | 325 | 45 | 280 | 25 | 125 | 4 | 107 | 5 | 24 | 2 | 14 | 1 | 1 | 6 | 3 | 2 | 5 |
| 95.9% | 95.7% | 96.0% | 96.0% | 98.9% | 95.8% | 95.9% | 100.0% | 92.6% | 100.0% | 79.0% | 86.5% | 90.3% | 91.7% | 100.0% | 94.0% | 100.0% |
| Not Covered | 14 | 2 | 12 | 1 | 1 | 0 | 5 | . | 2 | . | 4 | 0 | 0 | 1 | . | 0 | . |
| 4.1% | 4.3% | 4.0% | 4.0% | 1.1% | 4.2% | 4.1% | . | 7.4% | . | 21.0% | 13.5% | 9.7% | 8.3% | . | 6.0% | . |
| Above 2 years  upto 5 years | Covered | 824 | 113 | 711 | 60 | 245 | 9 | 318 | 11 | 85 | 8 | 39 | 2 | 4 | 13 | 8 | 11 | 11 |
| 95.4% | 96.3% | 95.3% | 97.8% | 94.6% | 97.7% | 97.6% | 94.2% | 92.6% | 87.5% | 88.3% | 72.8% | 82.6% | 97.4% | 94.4% | 100.0% | 100.0% |
| Not Covered | 40 | 4 | 35 | 1 | 14 | 0 | 8 | 1 | 7 | 1 | 5 | 1 | 1 | 0 | 0 | . | . |
| 4.6% | 3.7% | 4.7% | 2.2% | 5.4% | 2.3% | 2.4% | 5.8% | 7.4% | 12.5% | 11.7% | 27.2% | 17.4% | 2.6% | 5.6% | . | . |

Table 85: Coverage of Pneumococcal conjugate vaccine 3rd dose

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 3rd dose of pneumococcal conjugate vaccine | Covered | 1,298 | 174 | 1,124 | 91 | 428 | 13 | 484 | 21 | 114 | 12 | 58 | 3 | 6 | 19 | 16 | 15 | 18 |
| 86.2% | 86.0% | 86.3% | 86.4% | 87.9% | 86.9% | 88.4% | 91.3% | 74.7% | 79.2% | 81.5% | 72.2% | 75.9% | 81.3% | 91.4% | 91.7% | 94.4% |
| Not Covered | 207 | 28 | 179 | 14 | 59 | 2 | 64 | 2 | 39 | 3 | 13 | 1 | 2 | 4 | 1 | 1 | 1 |
| 13.8% | 14.0% | 13.7% | 13.6% | 12.1% | 13.1% | 11.6% | 8.7% | 25.3% | 20.8% | 18.5% | 27.8% | 24.1% | 18.7% | 8.6% | 8.3% | 5.6% |
| Below 1 Year | Covered | 184 | 21 | 164 | 9 | 68 | 1 | 71 | 7 | 12 | 2 | 7 | 0 | 1 | 1 | 4 | 1 | 3 |
| 61.5% | 54.6% | 62.5% | 49.8% | 68.5% | 41.3% | 64.5% | 100.0% | 34.3% | 41.2% | 66.7% | 46.1% | 55.4% | 21.0% | 80.0% | 52.7% | 71.0% |
| Not Covered | 116 | 17 | 98 | 9 | 31 | 1 | 39 | . | 22 | 2 | 3 | 0 | 0 | 3 | 1 | 1 | 1 |
| 38.5% | 45.4% | 37.5% | 50.2% | 31.5% | 58.7% | 35.5% | . | 65.7% | 58.8% | 33.3% | 53.9% | 44.6% | 79.0% | 20.0% | 47.3% | 29.0% |
| 1 - 2 Years | Covered | 313 | 44 | 269 | 24 | 119 | 4 | 102 | 4 | 24 | 2 | 15 | 1 | 1 | 6 | 3 | 3 | 5 |
| 92.4% | 93.2% | 92.3% | 93.2% | 93.7% | 95.8% | 91.4% | 87.9% | 92.6% | 100.0% | 83.7% | 86.5% | 90.3% | 91.7% | 100.0% | 100.0% | 100.0% |
| Not Covered | 26 | 3 | 23 | 2 | 8 | 0 | 10 | 1 | 2 | . | 3 | 0 | 0 | 1 | . | . | . |
| 7.6% | 6.8% | 7.7% | 6.8% | 6.3% | 4.2% | 8.6% | 12.1% | 7.4% | . | 16.3% | 13.5% | 9.7% | 8.3% | . | . | . |
| Above 2 years  upto 5 years | Covered | 801 | 110 | 691 | 57 | 241 | 9 | 311 | 10 | 79 | 8 | 37 | 2 | 4 | 13 | 8 | 11 | 11 |
| 92.4% | 93.1% | 92.3% | 94.1% | 92.5% | 95.6% | 95.3% | 87.4% | 84.7% | 89.5% | 83.9% | 72.8% | 76.8% | 95.1% | 94.4% | 97.5% | 100.0% |
| Not Covered | 66 | 8 | 58 | 4 | 20 | 0 | 15 | 1 | 14 | 1 | 7 | 1 | 1 | 1 | 0 | 0 | . |
| 7.6% | 6.9% | 7.7% | 5.9% | 7.5% | 4.4% | 4.7% | 12.6% | 15.3% | 10.5% | 16.1% | 27.2% | 23.2% | 4.9% | 5.6% | 2.5% | . |

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Table 86: Coverage of Pneumococcal conjugate vaccine 4th dose (booster)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 4th dose of pneumococcal conjugate vaccine | Covered | 964 | 136 | 827 | 69 | 321 | 10 | 340 | 15 | 93 | 10 | 48 | 2 | 4 | 16 | 10 | 13 | 12 |
| 64.4% | 67.4% | 63.9% | 66.1% | 66.8% | 67.6% | 62.1% | 67.8% | 61.5% | 62.9% | 66.9% | 51.2% | 51.4% | 68.4% | 59.4% | 82.6% | 60.9% |
| Not Covered | 533 | 66 | 467 | 36 | 159 | 5 | 208 | 7 | 58 | 6 | 24 | 2 | 4 | 8 | 7 | 3 | 8 |
| 35.6% | 32.6% | 36.1% | 33.9% | 33.2% | 32.4% | 37.9% | 32.2% | 38.5% | 37.1% | 33.1% | 48.8% | 48.6% | 31.6% | 40.6% | 17.4% | 39.1% |
| Below 1 Year | Covered | 67 | 8 | 60 | 3 | 32 | 0 | 16 | 2 | 8 | 1 | 3 | . | 0 | 1 | 0 | 1 | . |
| 22.5% | 20.8% | 22.7% | 18.2% | 32.3% | 6.6% | 14.7% | 32.2% | 22.5% | 29.0% | 33.7% | . | 10.7% | 14.5% | 10.5% | 26.1% | . |
| Not Covered | 232 | 30 | 202 | 14 | 67 | 2 | 94 | 5 | 27 | 3 | 7 | 1 | 1 | 4 | 4 | 2 | 4 |
| 77.5% | 79.2% | 77.3% | 81.8% | 67.7% | 93.4% | 85.3% | 67.8% | 77.5% | 71.0% | 66.3% | 100.0% | 89.3% | 85.5% | 89.5% | 73.9% | 100.0% |
| 1 - 2 Years | Covered | 163 | 28 | 135 | 15 | 70 | 2 | 40 | 4 | 10 | 2 | 11 | 0 | 1 | 4 | 1 | 2 | 2 |
| 48.4% | 59.8% | 46.5% | 58.6% | 55.8% | 45.2% | 35.4% | 78.3% | 39.8% | 73.7% | 62.7% | 30.9% | 60.5% | 53.6% | 42.9% | 73.3% | 40.9% |
| Not Covered | 174 | 19 | 155 | 11 | 55 | 2 | 72 | 1 | 15 | 1 | 7 | 1 | 0 | 3 | 2 | 1 | 3 |
| 51.6% | 40.2% | 53.5% | 41.4% | 44.2% | 54.8% | 64.6% | 21.7% | 60.2% | 26.3% | 37.3% | 69.1% | 39.5% | 46.4% | 57.1% | 26.7% | 59.1% |
| Above 2 years  upto 5 years | Covered | 733 | 100 | 633 | 51 | 219 | 9 | 284 | 9 | 75 | 7 | 33 | 2 | 3 | 12 | 8 | 11 | 10 |
| 85.3% | 85.5% | 85.2% | 83.0% | 85.5% | 94.0% | 87.2% | 86.3% | 82.1% | 73.9% | 76.1% | 69.4% | 57.7% | 92.8% | 91.7% | 96.1% | 90.1% |
| Not Covered | 127 | 17 | 110 | 10 | 37 | 1 | 42 | 1 | 16 | 2 | 10 | 1 | 2 | 1 | 1 | 0 | 1 |
| 14.7% | 14.5% | 14.8% | 17.0% | 14.5% | 6.0% | 12.8% | 13.7% | 17.9% | 26.1% | 23.9% | 30.6% | 42.3% | 7.2% | 8.3% | 3.9% | 9.9% |

Table 87: Coverage of MMR 1st dose

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 1st dose of MMR vaccine | Covered | 1,179 | 161 | 1,018 | 84 | 393 | 12 | 422 | 18 | 113 | 10 | 58 | 3 | 6 | 19 | 12 | 14 | 15 |
| 78.3% | 78.7% | 78.2% | 79.8% | 81.1% | 79.9% | 77.4% | 74.7% | 72.8% | 69.3% | 78.3% | 69.2% | 79.6% | 78.9% | 70.0% | 87.9% | 79.0% |
| Not Covered | 327 | 43 | 284 | 21 | 91 | 3 | 123 | 6 | 42 | 5 | 16 | 1 | 2 | 5 | 5 | 2 | 4 |
| 21.7% | 21.3% | 21.8% | 20.2% | 18.9% | 20.1% | 22.6% | 25.3% | 27.2% | 30.7% | 21.7% | 30.8% | 20.4% | 21.1% | 30.0% | 12.1% | 21.0% |
| Below 1 Year | Covered | 83 | 9 | 74 | 4 | 44 | 0 | 19 | 2 | 8 | 1 | 3 | . | 0 | 1 | 0 | 1 | . |
| 27.8% | 23.0% | 28.5% | 22.0% | 44.1% | 6.6% | 17.6% | 32.2% | 22.5% | 29.0% | 31.6% | . | 21.5% | 14.5% | 10.0% | 33.1% | . |
| Not Covered | 215 | 29 | 186 | 14 | 55 | 2 | 88 | 5 | 27 | 3 | 7 | 1 | 1 | 4 | 4 | 1 | 4 |
| 72.2% | 77.0% | 71.5% | 78.0% | 55.9% | 93.4% | 82.4% | 67.8% | 77.5% | 71.0% | 68.4% | 100.0% | 78.5% | 85.5% | 90.0% | 66.9% | 100.0% |
| 1 - 2 Years | Covered | 311 | 43 | 268 | 24 | 117 | 3 | 100 | 5 | 24 | 2 | 19 | 1 | 1 | 6 | 3 | 3 | 4 |
| 92.0% | 91.8% | 92.0% | 90.4% | 93.6% | 88.9% | 88.9% | 100.0% | 93.4% | 89.7% | 96.7% | 80.3% | 100.0% | 91.7% | 92.9% | 100.0% | 93.0% |
| Not Covered | 27 | 4 | 23 | 2 | 8 | 0 | 12 | . | 2 | 0 | 1 | 0 | . | 1 | 0 | . | 0 |
| 8.0% | 8.2% | 8.0% | 9.6% | 6.4% | 11.1% | 11.1% | . | 6.6% | 10.3% | 3.3% | 19.7% | . | 8.3% | 7.1% | . | 7.0% |
| Above 2 years  upto 5 years | Covered | 785 | 109 | 676 | 56 | 233 | 9 | 303 | 11 | 81 | 7 | 35 | 2 | 5 | 12 | 8 | 11 | 11 |
| 90.2% | 91.1% | 90.1% | 91.8% | 89.2% | 96.2% | 93.0% | 88.4% | 85.2% | 80.6% | 81.3% | 79.5% | 86.8% | 92.8% | 94.4% | 96.1% | 100.0% |
| Not Covered | 85 | 11 | 74 | 5 | 28 | 0 | 23 | 1 | 14 | 2 | 8 | 1 | 1 | 1 | 0 | 0 | . |
| 9.8% | 8.9% | 9.9% | 8.2% | 10.8% | 3.8% | 7.0% | 11.6% | 14.8% | 19.4% | 18.7% | 20.5% | 13.2% | 7.2% | 5.6% | 3.9% | . |

All children should be given two doses of MMR (measles-mumps-rubella) vaccine, starting with the first dose at 12 through 15 months of age, and the second dose at 4 through 6 years of age. Children can receive the second dose earlier as long as it is at least 28 days after the first dose. MMR vaccine is given later than some other childhood vaccines because antibodies transferred from the mother to the baby can provide some protection from disease and make the MMR vaccine less effective until about 1 year of age.

MMR vaccine was introduced recently in the UAE Immunization schedule. Prior to this, children received measles vaccine. It is plausible that children who had received

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measles vaccines earlier may not have taken the MMR vaccine. This may partly explain the low coverage rates for the MMR vaccine.

Table 88: Coverage of MMR 2nd dose

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 2nd dose of MMR vaccine | Covered | 977 | 138 | 840 | 69 | 329 | 11 | 333 | 18 | 98 | 10 | 51 | 2 | 5 | 16 | 10 | 12 | 13 |
| 64.7% | 67.4% | 64.3% | 65.6% | 67.5% | 70.8% | 60.9% | 72.7% | 63.2% | 64.7% | 69.9% | 46.5% | 62.1% | 67.3% | 61.4% | 76.7% | 69.2% |
| Not Covered | 533 | 67 | 467 | 36 | 158 | 5 | 214 | 7 | 57 | 5 | 22 | 2 | 3 | 8 | 7 | 4 | 6 |
| 35.3% | 32.6% | 35.7% | 34.4% | 32.5% | 29.2% | 39.1% | 27.3% | 36.8% | 35.3% | 30.1% | 53.5% | 37.9% | 32.7% | 38.6% | 23.3% | 30.8% |
| Below 1 Year | Covered | 74 | 8 | 66 | 3 | 38 | 0 | 16 | 2 | 8 | 1 | 3 | . | 0 | 1 | 0 | 1 | . |
| 24.5% | 20.8% | 25.0% | 18.2% | 38.4% | 6.6% | 14.7% | 32.2% | 22.5% | 29.0% | 31.6% | . | 10.7% | 14.5% | 10.0% | 26.1% | . |
| Not Covered | 227 | 30 | 197 | 14 | 61 | 2 | 94 | 5 | 27 | 3 | 7 | 1 | 1 | 4 | 4 | 2 | 4 |
| 75.5% | 79.2% | 75.0% | 81.8% | 61.6% | 93.4% | 85.3% | 67.8% | 77.5% | 71.0% | 68.4% | 100.0% | 89.3% | 85.5% | 90.0% | 73.9% | 100.0% |
| 1 - 2 Years | Covered | 167 | 28 | 138 | 15 | 74 | 2 | 32 | 4 | 13 | 2 | 13 | 0 | 1 | 4 | 2 | 2 | 4 |
| 49.1% | 59.9% | 47.3% | 55.8% | 58.6% | 49.4% | 28.4% | 90.3% | 49.7% | 73.7% | 68.1% | 30.9% | 74.7% | 53.6% | 57.1% | 73.3% | 75.6% |
| Not Covered | 173 | 19 | 154 | 12 | 53 | 2 | 80 | 0 | 13 | 1 | 6 | 1 | 0 | 3 | 1 | 1 | 1 |
| 50.9% | 40.1% | 52.7% | 44.2% | 41.4% | 50.6% | 71.6% | 9.7% | 50.3% | 26.3% | 31.9% | 69.1% | 25.3% | 46.4% | 42.9% | 26.7% | 24.4% |
| Above 2 years  upto 5 years | Covered | 737 | 101 | 636 | 51 | 216 | 9 | 285 | 11 | 78 | 7 | 35 | 2 | 4 | 12 | 8 | 10 | 10 |
| 84.7% | 85.1% | 84.7% | 83.4% | 82.9% | 97.7% | 87.5% | 88.4% | 81.4% | 76.7% | 80.0% | 60.7% | 69.3% | 90.8% | 91.7% | 87.6% | 90.1% |
| Not Covered | 133 | 18 | 115 | 10 | 44 | 0 | 41 | 1 | 18 | 2 | 9 | 1 | 2 | 1 | 1 | 1 | 1 |
| 15.3% | 14.9% | 15.3% | 16.6% | 17.1% | 2.3% | 12.5% | 11.6% | 18.6% | 23.3% | 20.0% | 39.3% | 30.7% | 9.2% | 8.3% | 12.4% | 9.9% |

Table 89: Coverage of MMR 3rd dose

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 3rd dose of MMR vaccine | Covered | 245 | 52 | 194 | 29 | 111 | 1 | 24 | 13 | 45 | 2 | 6 | 1 | 2 | 2 | 2 | 2 | 3 |
| 16.3% | 25.4% | 14.9% | 27.9% | 23.0% | 8.5% | 4.4% | 57.7% | 29.4% | 13.2% | 9.0% | 28.9% | 20.6% | 9.5% | 14.3% | 13.4% | 16.8% |
| Not Covered | 1,257 | 152 | 1,105 | 76 | 372 | 14 | 524 | 10 | 107 | 14 | 65 | 3 | 6 | 22 | 15 | 14 | 16 |
| 83.7% | 74.6% | 85.1% | 72.1% | 77.0% | 91.5% | 95.6% | 42.3% | 70.6% | 86.8% | 91.0% | 71.1% | 79.4% | 90.5% | 85.7% | 86.6% | 83.2% |
| Below 1 Year | Covered | 42 | 5 | 36 | 3 | 23 | 0 | 3 | 2 | 9 | 0 | 1 | . | 0 | . | . | 0 | . |
| 13.9% | 14.4% | 13.8% | 15.4% | 23.4% | 6.6% | 2.3% | 32.2% | 26.9% | 4.9% | 12.1% | . | 10.7% | . | . | 6.3% | . |
| Not Covered | 259 | 32 | 227 | 15 | 76 | 2 | 107 | 5 | 25 | 4 | 9 | 1 | 1 | 4 | 5 | 2 | 4 |
| 86.1% | 85.6% | 86.2% | 84.6% | 76.6% | 93.4% | 97.7% | 67.8% | 73.1% | 95.1% | 87.9% | 100.0% | 89.3% | 100.0% | 100.0% | 93.7% | 100.0% |
| 1 - 2 Years | Covered | 61 | 15 | 47 | 8 | 29 | 0 | 3 | 4 | 11 | 0 | 4 | 0 | 0 | 1 | . | 0 | . |
| 18.2% | 31.1% | 16.1% | 31.9% | 23.1% | 11.8% | 2.3% | 78.3% | 43.1% | 12.6% | 21.2% | 30.9% | 32.7% | 19.0% | . | 12.1% | . |
| Not Covered | 276 | 33 | 243 | 18 | 96 | 3 | 110 | 1 | 14 | 2 | 14 | 1 | 1 | 5 | 3 | 2 | 5 |
| 81.8% | 68.9% | 83.9% | 68.1% | 76.9% | 88.2% | 97.7% | 21.7% | 56.9% | 87.4% | 78.8% | 69.1% | 67.3% | 81.0% | 100.0% | 87.9% | 100.0% |
| Above 2 years  upto 5 years | Covered | 142 | 32 | 111 | 18 | 59 | 1 | 19 | 7 | 24 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 3 |
| 16.5% | 26.6% | 14.8% | 29.7% | 22.7% | 7.5% | 5.9% | 64.3% | 26.6% | 16.5% | 3.0% | 34.0% | 19.3% | 7.8% | 27.8% | 15.2% | 29.6% |
| Not Covered | 722 | 87 | 635 | 43 | 201 | 8 | 307 | 4 | 67 | 8 | 42 | 2 | 4 | 12 | 6 | 9 | 8 |
| 83.5% | 73.4% | 85.2% | 70.3% | 77.3% | 92.5% | 94.1% | 35.7% | 73.4% | 83.5% | 97.0% | 66.0% | 80.7% | 92.2% | 72.2% | 84.8% | 70.4% |

Table 90: Coverage of Rota virus 1st dose

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 1st dose of Rota virus vaccine | Covered | 1,384 | 190 | 1,194 | 100 | 455 | 15 | 502 | 22 | 138 | 12 | 60 | 4 | 7 | 22 | 13 | 15 | 19 |
| 92.1% | 94.0% | 91.8% | 95.3% | 93.9% | 94.4% | 91.7% | 100.0% | 89.9% | 77.0% | 84.6% | 83.7% | 92.0% | 93.8% | 75.0% | 96.9% | 100.0% |
| Not Covered | 118 | 12 | 106 | 5 | 30 | 1 | 45 | . | 15 | 4 | 11 | 1 | 1 | 1 | 4 | 0 | . |
| 7.9% | 6.0% | 8.2% | 4.7% | 6.1% | 5.6% | 8.3% | . | 10.1% | 23.0% | 15.4% | 16.3% | 8.0% | 6.2% | 25.0% | 3.1% | . |
| Below 1 Year | Covered | 258 | 32 | 226 | 15 | 87 | 2 | 97 | 7 | 28 | 2 | 8 | 1 | 1 | 4 | 2 | 2 | 4 |
| 85.7% | 84.4% | 85.9% | 85.3% | 87.6% | 85.1% | 88.5% | 100.0% | 82.8% | 46.1% | 74.7% | 100.0% | 66.1% | 85.5% | 35.0% | 84.6% | 100.0% |
| Not Covered | 43 | 6 | 37 | 3 | 12 | 0 | 13 | . | 6 | 2 | 3 | . | 0 | 1 | 3 | 0 | . |
| 14.3% | 15.6% | 14.1% | 14.7% | 12.4% | 14.9% | 11.5% | . | 17.2% | 53.9% | 25.3% | . | 33.9% | 14.5% | 65.0% | 15.4% | . |
| 1 - 2 Years | Covered | 313 | 45 | 268 | 25 | 122 | 4 | 97 | 5 | 24 | 2 | 16 | 1 | 1 | 6 | 3 | 3 | 5 |
| 93.1% | 94.7% | 92.8% | 94.3% | 98.1% | 95.8% | 86.6% | 100.0% | 93.4% | 100.0% | 90.5% | 100.0% | 92.6% | 87.1% | 100.0% | 100.0% | 100.0% |
| Not Covered | 23 | 2 | 21 | 1 | 2 | 0 | 15 | . | 2 | . | 2 | . | 0 | 1 | . | . | . |
| 6.9% | 5.3% | 7.2% | 5.7% | 1.9% | 4.2% | 13.4% | . | 6.6% | . | 9.5% | . | 7.4% | 12.9% | . | . | . |
| Above 2 years  upto 5 years | Covered | 813 | 113 | 699 | 60 | 246 | 9 | 308 | 11 | 85 | 8 | 37 | 2 | 5 | 13 | 8 | 11 | 11 |
| 94.0% | 96.9% | 93.5% | 98.5% | 94.2% | 96.3% | 94.6% | 100.0% | 91.6% | 83.3% | 84.7% | 74.5% | 97.1% | 100.0% | 87.5% | 98.6% | 100.0% |
| Not Covered | 52 | 4 | 48 | 1 | 15 | 0 | 18 | . | 8 | 2 | 7 | 1 | 0 | . | 1 | 0 | . |
| 6.0% | 3.1% | 6.5% | 1.5% | 5.8% | 3.7% | 5.4% | . | 8.4% | 16.7% | 15.3% | 25.5% | 2.9% | . | 12.5% | 1.4% | . |

Rotavirus spreads easily among infants and young children. The virus can cause severe watery diarrhea, vomiting, fever, and abdominal pain. As per US CDC, Rotavirus vaccine is the best way to protect your child against rotavirus disease. Most children (about 9 out of 10) who get the vaccine will be protected from severe rotavirus disease. About 7 out of 10 children will be protected from rotavirus disease of any severity. The recommended schedule for Rota virus vaccine in UAE is 2 doses given at 2nd and 4th month. As can be seen from the table above, the coverage for 1st dose of Rota virus vaccine is more than 92% whereas that of the 2nd dose is around 90%. One of plausible reason for the high coverage of Rota virus vaccine is that both the doses are to be given before the child turns 1 year old and the time when the coverage to immunization is highest.

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Table 91: Coverage of Rota virus 2nd dose

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 2nd dose of Rota virus vaccine | Covered | 1,353 | 186 | 1,167 | 98 | 445 | 14 | 490 | 22 | 136 | 12 | 58 | 4 | 6 | 22 | 13 | 15 | 18 |
| 90.1% | 91.6% | 89.9% | 93.4% | 91.9% | 90.3% | 89.7% | 93.1% | 88.7% | 79.4% | 82.2% | 83.7% | 78.9% | 92.4% | 78.6% | 91.2% | 94.4% |
| Not Covered | 149 | 17 | 132 | 7 | 39 | 2 | 56 | 2 | 17 | 3 | 13 | 1 | 2 | 2 | 4 | 1 | 1 |
| 9.9% | 8.4% | 10.1% | 6.6% | 8.1% | 9.7% | 10.3% | 6.9% | 11.3% | 20.6% | 17.8% | 16.3% | 21.1% | 7.6% | 21.4% | 8.8% | 5.6% |
| Below 1 Year | Covered | 237 | 28 | 209 | 13 | 82 | 2 | 89 | 7 | 27 | 2 | 7 | 1 | 0 | 3 | 2 | 1 | 3 |
| 78.9% | 74.3% | 79.5% | 71.8% | 82.7% | 68.3% | 81.0% | 100.0% | 77.9% | 46.1% | 68.7% | 100.0% | 32.2% | 78.3% | 35.0% | 52.7% | 71.0% |
| Not Covered | 63 | 10 | 54 | 5 | 17 | 1 | 21 | . | 8 | 2 | 3 | . | 1 | 1 | 3 | 1 | 1 |
| 21.1% | 25.7% | 20.5% | 28.2% | 17.3% | 31.7% | 19.0% | . | 22.1% | 53.9% | 31.3% | . | 67.8% | 21.7% | 65.0% | 47.3% | 29.0% |
| 1 - 2 Years | Covered | 313 | 46 | 268 | 25 | 122 | 4 | 97 | 5 | 24 | 2 | 16 | 1 | 1 | 6 | 3 | 3 | 5 |
| 93.4% | 96.3% | 92.9% | 96.0% | 98.1% | 95.8% | 86.8% | 100.0% | 93.4% | 100.0% | 90.5% | 100.0% | 92.6% | 91.7% | 100.0% | 100.0% | 100.0% |
| Not Covered | 22 | 2 | 21 | 1 | 2 | 0 | 15 | . | 2 | . | 2 | . | 0 | 1 | . | . | . |
| 6.6% | 3.7% | 7.1% | 4.0% | 1.9% | 4.2% | 13.2% | . | 6.6% | . | 9.5% | . | 7.4% | 8.3% | . | . | . |
| Above 2 years  upto 5 years | Covered | 803 | 112 | 691 | 60 | 241 | 9 | 305 | 10 | 85 | 8 | 35 | 2 | 4 | 12 | 8 | 11 | 11 |
| 92.7% | 95.1% | 92.4% | 98.5% | 92.5% | 94.0% | 93.7% | 86.1% | 91.3% | 87.1% | 82.2% | 74.5% | 84.8% | 97.3% | 94.4% | 96.8% | 100.0% |
| Not Covered | 63 | 6 | 57 | 1 | 20 | 1 | 21 | 2 | 8 | 1 | 8 | 1 | 1 | 0 | 0 | 0 | . |
| 7.3% | 4.9% | 7.6% | 1.5% | 7.5% | 6.0% | 6.3% | 13.9% | 8.7% | 12.9% | 17.8% | 25.5% | 15.2% | 2.7% | 5.6% | 3.2% | . |

Table 92: Coverage of varicella virus 1st dose

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 1st dose of varicella vaccine | Covered | 1,152 | 154 | 998 | 81 | 385 | 12 | 415 | 15 | 110 | 11 | 56 | 3 | 6 | 19 | 12 | 14 | 15 |
| 76.9% | 76.2% | 77.0% | 77.0% | 79.2% | 79.8% | 75.9% | 65.7% | 73.1% | 70.0% | 80.0% | 64.9% | 72.7% | 79.8% | 68.6% | 85.7% | 79.0% |
| Not Covered | 347 | 48 | 298 | 24 | 101 | 3 | 131 | 8 | 40 | 5 | 14 | 2 | 2 | 5 | 5 | 2 | 4 |
| 23.1% | 23.8% | 23.0% | 23.0% | 20.8% | 20.2% | 24.1% | 34.3% | 26.9% | 30.0% | 20.0% | 35.1% | 27.3% | 20.2% | 31.4% | 14.3% | 21.0% |
| Below 1 Year | Covered | 83 | 8 | 75 | 3 | 40 | 0 | 22 | 2 | 8 | 1 | 4 | . | 0 | 1 | 0 | 1 | . |
| 27.6% | 21.3% | 28.5% | 18.2% | 40.0% | 6.6% | 20.4% | 32.2% | 22.5% | 29.0% | 41.8% | . | 32.2% | 14.5% | 10.0% | 33.1% | . |
| Not Covered | 218 | 30 | 188 | 14 | 59 | 2 | 87 | 5 | 27 | 3 | 6 | 1 | 1 | 4 | 4 | 1 | 4 |
| 72.4% | 78.7% | 71.5% | 81.8% | 60.0% | 93.4% | 79.6% | 67.8% | 77.5% | 71.0% | 58.2% | 100.0% | 67.8% | 85.5% | 90.0% | 66.9% | 100.0% |
| 1 - 2 Years | Covered | 308 | 42 | 266 | 23 | 117 | 3 | 98 | 4 | 25 | 2 | 16 | 1 | 1 | 6 | 3 | 3 | 4 |
| 91.5% | 89.6% | 91.8% | 87.9% | 92.2% | 88.9% | 88.5% | 87.9% | 100.0% | 100.0% | 96.6% | 80.3% | 100.0% | 91.7% | 92.9% | 100.0% | 93.0% |
| Not Covered | 29 | 5 | 24 | 3 | 10 | 0 | 13 | 1 | . | . | 1 | 0 | . | 1 | 0 | . | 0 |
| 8.5% | 10.4% | 8.2% | 12.1% | 7.8% | 11.1% | 11.5% | 12.1% | . | . | 3.4% | 19.7% | . | 8.3% | 7.1% | . | 7.0% |
| Above 2 years  upto 5 years | Covered | 761 | 104 | 658 | 55 | 229 | 9 | 294 | 8 | 77 | 7 | 35 | 2 | 4 | 12 | 8 | 10 | 11 |
| 88.4% | 88.4% | 88.4% | 89.3% | 87.7% | 96.0% | 90.3% | 77.4% | 84.7% | 78.4% | 83.0% | 72.8% | 73.5% | 95.0% | 91.7% | 92.9% | 100.0% |
| Not Covered | 100 | 14 | 87 | 7 | 32 | 0 | 31 | 2 | 14 | 2 | 7 | 1 | 1 | 1 | 1 | 1 | . |
| 11.6% | 11.6% | 11.6% | 10.7% | 12.3% | 4.0% | 9.7% | 22.6% | 15.3% | 21.6% | 17.0% | 27.2% | 26.5% | 5.0% | 8.3% | 7.1% | . |

Varicella vaccine, also known as chickenpox vaccine, is a vaccine that protects against chickenpox. One dose of vaccine prevents 95% of moderate disease and 100% of severe disease. Two doses of vaccine are more effective than one as has been recommended in the UAE National Immunization Schedule. Children should receive two doses of the vaccine—the first dose at 12 through 15 months old and a second dose at 4 through 6 years old. The coverage of first dose of varicella immunization was more than 75% with similar coverage rates for Emirati and non-Emirati children. However, the coverage noted from the survey for the 2nd dose was very low at less than 15% with the rates in non-Emiratis much lesser than Emirati children. The exact reason for this anomaly in all the 2nd and later doses of immunizations should be investigated in future.

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Table 93: Coverage of varicella virus 2nd dose (given between 5-6 years)

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age | Status | Total | Nationality | | Abu Dhabi | | Dubai | | Sharjah | | Ajman | | Umm Al Quwain | | Ras  Al Khaimah | | Fujairah | |
| Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati | Emirati | Non- Emirati |
| Total records for 2nd dose of varicella vaccine | Covered | 218 | 51 | 167 | 31 | 102 | 1 | 13 | 12 | 38 | 2 | 6 | 1 | 2 | 2 | 2 | 2 | 3 |
| 14.6% | 25.5% | 12.9% | 29.9% | 21.0% | 6.2% | 2.4% | 51.7% | 25.7% | 10.2% | 9.0% | 28.1% | 30.8% | 10.4% | 14.3% | 15.1% | 16.8% |
| Not Covered | 1,275 | 149 | 1,126 | 72 | 384 | 15 | 531 | 11 | 109 | 14 | 65 | 3 | 5 | 21 | 15 | 14 | 16 |
| 85.4% | 74.5% | 87.1% | 70.1% | 79.0% | 93.8% | 97.6% | 48.3% | 74.3% | 89.8% | 91.0% | 71.9% | 69.2% | 89.6% | 85.7% | 84.9% | 83.2% |
| Below 1 Year | Covered | 36 | 5 | 31 | 2 | 20 | 0 | 3 | 2 | 8 | 0 | 1 | . | 0 | . | . | 0 | . |
| 12.0% | 13.8% | 11.7% | 12.9% | 19.7% | 6.6% | 2.3% | 32.2% | 23.5% | 4.9% | 6.1% | . | 21.5% | . | . | 15.4% | . |
| Not Covered | 263 | 32 | 231 | 15 | 80 | 2 | 107 | 5 | 25 | 4 | 10 | 1 | 1 | 4 | 5 | 2 | 4 |
| 88.0% | 86.2% | 88.3% | 87.1% | 80.3% | 93.4% | 97.7% | 67.8% | 76.5% | 95.1% | 93.9% | 100.0% | 78.5% | 100.0% | 100.0% | 84.6% | 100.0% |
| 1 - 2 Years | Covered | 61 | 15 | 46 | 9 | 27 | 0 | 5 | 4 | 8 | 0 | 4 | 0 | 1 | 1 | . | 0 | . |
| 18.1% | 31.6% | 15.9% | 33.7% | 21.6% | 7.6% | 4.3% | 78.3% | 35.6% | 8.4% | 25.5% | 30.9% | 67.3% | 19.1% | . | 12.1% | . |
| Not Covered | 274 | 32 | 243 | 17 | 99 | 4 | 106 | 1 | 15 | 2 | 13 | 1 | 0 | 5 | 3 | 2 | 5 |
| 81.9% | 68.4% | 84.1% | 66.3% | 78.4% | 92.4% | 95.7% | 21.7% | 64.4% | 91.6% | 74.5% | 69.1% | 32.7% | 80.9% | 100.0% | 87.9% | 100.0% |
| Above 2 years  upto 5 years | Covered | 122 | 31 | 90 | 20 | 55 | 0 | 6 | 6 | 22 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 |
| 14.2% | 26.8% | 12.2% | 33.2% | 21.1% | 5.5% | 1.7% | 52.3% | 24.0% | 12.7% | 3.0% | 32.8% | 22.4% | 9.5% | 27.8% | 15.7% | 29.6% |
| Not Covered | 737 | 85 | 652 | 40 | 206 | 9 | 318 | 5 | 69 | 8 | 42 | 2 | 4 | 12 | 6 | 9 | 8 |
| 85.8% | 73.2% | 87.8% | 66.8% | 78.9% | 94.5% | 98.3% | 47.7% | 76.0% | 87.3% | 97.0% | 67.2% | 77.6% | 90.5% | 72.2% | 84.3% | 70.4% |

LESSONS LEARNED AND RECOMMENDATIONS FOR FUTURE

UAE NATIONAL HEALTH SURVEY 2017-2018

**CAPI Development**

Freezing the questionnaires before starting the programming on the CAPI tool by involving all stakeholders into confidence. For the current survey, we provided the first cut by modifying the standard WHO questionnaires and involving WHO teams, who then did more changes to the questionnaires. This led to a lot of reprogramming and delays.

Always rely on industry standard tools for CAPI methods instead of developing a new platform. As the requirements to have the data server in UAE, we built the CAPI tool from the scratch, which had long testing and standardization timelines. This has affected the survey timelines.

**Public Relations campaign**

The need for solid Public Relations campaign, which is the backbone of such large scale and sensitive surveys, is very important and essential. Support from all stakeholders in terms of marketing and awareness campaigns should be made throughout the entire project time line as this definitely supports during the fieldwork.

**Researchers and Nurses ID**

Planning the issuance of relevant ID cards to carry out the fieldwork well in advance is of crucial importance. This has to be done by maintaining proper trackers of all the resources we have applied for and the status has to be updated.

Need to anticipate high refusal rates for resources whom we apply form and hence.

**Police support**

Police support is of utmost importance, and having everything in place and set up prior to project launch must be mandatory. Meeting the relevant contacts from the police face to face prior to fieldwork launch can be very beneficial in order not to lose any time during the actual fieldwork.

**Researchers’ communication skills**

Stronger communication skills lead to much better response rates overall, so there is a need to assess this specific attribute for all resources involved in the project, especially for those resources that will act as leaders in the roles of supervisors.

**Data tabulations and report writing**

Proper coordination between various stakeholders involved in the project is needed. There were many stakeholders who had different requirements, views, comments and feedback. This results in delays in completion of the data tabulations and final report writing.

**Field team**

Proper training session conducted along with monthly refresher training sessions to circulate best practices and Update field guidelines. Field SOP prepared for this survey as well as Stretched field team operating hours in Field (6 days a week) is very important. Interviews time scheduling as per respondent convenience was crucial for the success of the survey.

**Collaboration with police**

Informing police ahead of time to ensure that fieldwork progresses as smoothly as possible. After reaching the targeted clusters, researchers team are encouraged to call 999 and inform the police about the survey and provide them with their location, cars plate number, names … etc.

This step will help in solving any complaints that might come during the fieldwork in any cluster from households, as the front liner police officer will be aware about the field team and their names and can confirm to any household that the research team are representative of MOHAP.

Police patrols to accompany field team in some regions and whenever required.

LESSONS LEARNED AND RECOMMENDATIONS FOR FUTURE

**Field teams structure**

Proper structuring of field teams was one of the key elements in the survey success (further details on survey Field team’s structure can be found in the introduction section). Professional dress code with identification Badges/Cards played a significant role in smoothly running fieldwork.

**Field teams practices**

Weekly/daily field plan prepared and implemented during field work, Constant presence of field team leaders on daily basis,

Interviewers to immediately escalate any issues/ challenges/crisis to their supervisors, who in turn would escalate to the team leaders, who would then take immediate action to solve the problem.

Hotlines numbers and direct contacts from the ministry provided to households (whenever required). MOHAP involvement in convincing households to participate through calls and SMS as a part of the public relation campaign.

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APPENDIX

1. UAE World Health-Household Survey, Household Questionnaire, 2017-2018.
2. UAE World Health-Household Survey, Questionnaire for Persons 18 years and over, 2017-2018.
3. UAE World Health-Household Survey, Questionnaire Physical and Biochemical measurements, 2017-2018.
4. UAE World Health-Household Survey, Questionnaire for Ever-married women15-49 years, 2017-2018.