



*Kingdom Of Bahrain  
Ministry of Health*

**الصحة العامة**  
التقرير السنوي  
**2014**  
Annual report  
**Public Health Directorate**





*His Royal Highness  
Prince Khalifa bin  
Salman Al Khalifa*

*Prime Minister*



*His Royal Majesty  
King Hamad bin Isa  
Al Khalifa*

*King of The Kingdom  
of Bahrain*



*His Royal Highness  
Prince Salman bin  
Hamad Al Khalifa  
Crown Prince, Deputy  
Supreme Commander  
and First Deputy  
Prime Minister*

# Foreword



*“ The Public Health Annual Report ” is the best way to document another eventful year, with all its unparalleled changes that are always challenging and exciting.*

*Ministry of Health in Bahrain has a foremost role in changing illness to wellbeing. Primary Care and Public Health services through their variable programs are of the uppermost preventable systems in the country.*

*The Ministry of Health is dedicated to move to services focusing on maintaining a good health by supporting the public and enabling them to take better control of their health, hence, strengthening Public Health programs is the main area of focus.*

*It is with great pleasure that we release this issue of the Public Health Annual Report to share all our achievements with you.*

**Dr. Mariam Al Jalahma**  
*Assistant Undersecretary for  
Primary Care & Public Health*

# Foreword



*Throughout the past year, The Public Health Directorate implemented, enhanced and continued a wide range of programs and projects to support people in the Bahraini community make healthier choices.*

*Our various programs empower us all to improve and safeguard our own health, that of our families, neighbours, friends and the whole community.*

*The programs varied from Immunization, Communicable and Non-Communicable diseases fighting and prevention activities, Anti-Smoking, Nutrition, Food Safety, Environmental Health and School Health related training and educational activities and campaigns in addition to various laboratory analysis.*

*This Annual Report comes to mark our success and to give you a taste of some of the approaches we are working on with local people and partners to enable better levels of health and wellbeing.*

*We look forward to build on what we accomplished so far and to continue achieving together as a public health team to enhance the health and wellbeing of our community.*

**Dr. Mariam Al Hajeri**

*Director of Public health*

*Sincere Thanks to the Public Health Team who's cooperative efforts enabled the production of this report:*

***Overall Revision & Authorization:***

*Dr. Mariam Al Hajeri*

***Report Groundwork, Design & Amending:***

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*Mrs. Rehab Ahmad Gomaa*

*Dr. Adel Al-Sayyad*

*Dr. Kubra S. Nasser*

*Dr. AbdulHussain Alajmi*

*Dr. Jaleela S. Jawad*

*Dr. Sameer Al-Haddad*

*Dr. Mona Al-Musawi*

*Dr. Ejlal Al-Alawi*

*Dr. Basma Al-Saffar*

*Ali Almawali*

*Mrs. Mariam Janahi*

*Mr. Hussain Al-Raees*

*Mr. Abdulaziz Al-Khudri*

*Mr. Khalil Ebrahim Ali*

*Ms. Raja Al-Saloom*

*Mr. Mohsin Jassim Ali*

*Mrs. Afifa Jaffar Bader*

*Mr. Mohammed Salman*

*Mr. Faisal Al-Sari*

*Mrs. Amjad Ghanim*

*Mrs. Jameela Ghazwan*

*Mr. Qassim Al-Oraibi*

*Dr. Abbas Salman*

*Dr. Nadia Ghareeb*

*Mrs. Mariam Al-Amer*

*Dr. Eman Haji*

*S. Mustafa Abbas Alawi*

# ABBREVIATIONS AND GLOSSARY



PHD	Public Health Directorate
MOH	Ministry Of Health
WHO	World Health Organization
PAHO	Pan-American Health Organization
ECP	Excellence Coordination Program
BCE	Bahrain Center for Excellence
DCS	Disease Control Section
CDC	Communicable Diseases Control
EPI	Expanded Program on Immunization
AEFI	Adverse Events Following Immunization
NCD	Non-Communicable Disease
OHG	Occupational Health Group
ASC	Anti-Smoking Committee
IHR	International Health Regulations
WESG	Water & Enterprises Sanitation Group
MVCG	Malaria and Vector Control Group
EG	Entomology Group
CPSG	Consumer Product Safety Group
PHL	Public Health laboratory
NIC	National Influenza Center
PFGE	Pulse Field Gel Electrophoresis

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# *Public Health Directorate*



## *Section 1*



## Definition:

Public health is defined as:

“The art and science of preventing disease, prolonging life and promoting health through the organized efforts of society”

(Acheson, 1988; WHO)

## Key Functions:

Key functions are essential for the accomplishment of the aim and objectives of Public Health Directorate, the Pan-American Health Organization/World Health Organization (PAHO/WHO) defined these functions:

1. Monitoring, evaluation, and analysis of health status.
2. Surveillance, research, and control of the risks and threats to public health.
3. Health promotion.
4. Social participation in health.
5. Development of policies and institutional capacity for public health planning and management.
6. Strengthening of public health regulation and enforcement capacity.
7. Evaluation and promotion of equitable access to necessary health services.
8. Human resources development and training in public health.
9. Quality assurance in personal and population-based health services.
10. Research in public health.
11. Reduction of the impact of emergencies and disasters on health.

## Vision:

Lifelong high quality and comprehensive preventive health services.

## Mission:

Our mission goes in line with the Bahrain Health Strategy (Framework for Action) in which it works in partnership with stakeholders to ensure provision of accessible preventive health Services to the community of Bahrain, using available resources as efficiently and effectively as possible to provide a high standard of Preventive care based on research, evidence and relevant international and best practice.

## Aim:

To promote physical, mental and social well-being and prevent disease, injury and disability in the community through comprehensive community-based services which will be responsive to people's needs and will ensure efficient and effective use of state of art technology and human resources to provide high standard Preventive Health Services.

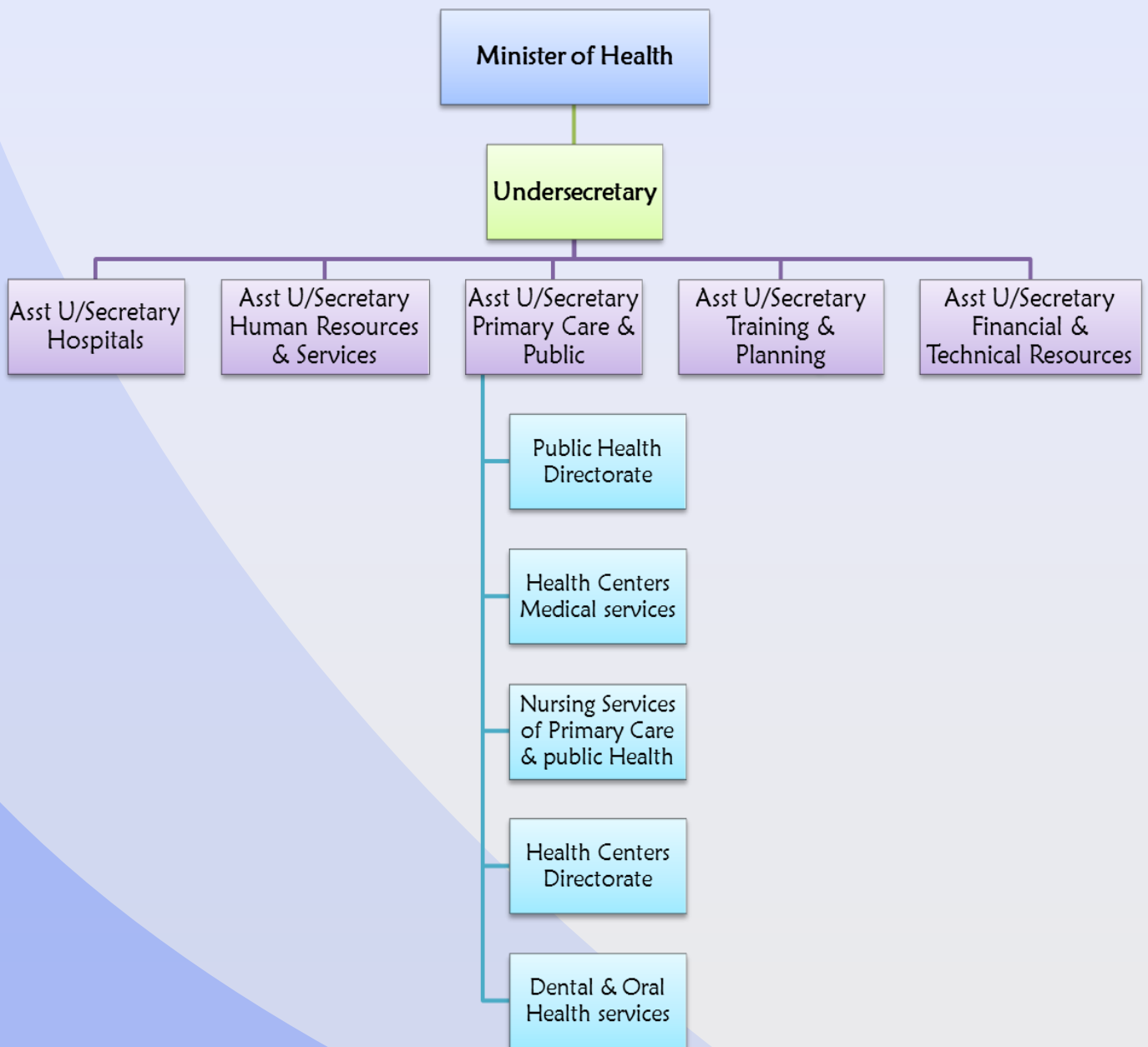
## Strategic Goals:

Public Health Directorate should act as the central body for the Ministry of Health for establishing and monitoring of health standards and policies through achieving the following strategic goals:

1. Prevents epidemics and control communicable & non communicable disease
2. Promotes and encourages healthy lifestyle behaviors
3. Prevents injuries
4. Protects against occupational and environmental hazards
5. Responds to disasters and emergency
6. Maintain accurate registries and efficient information

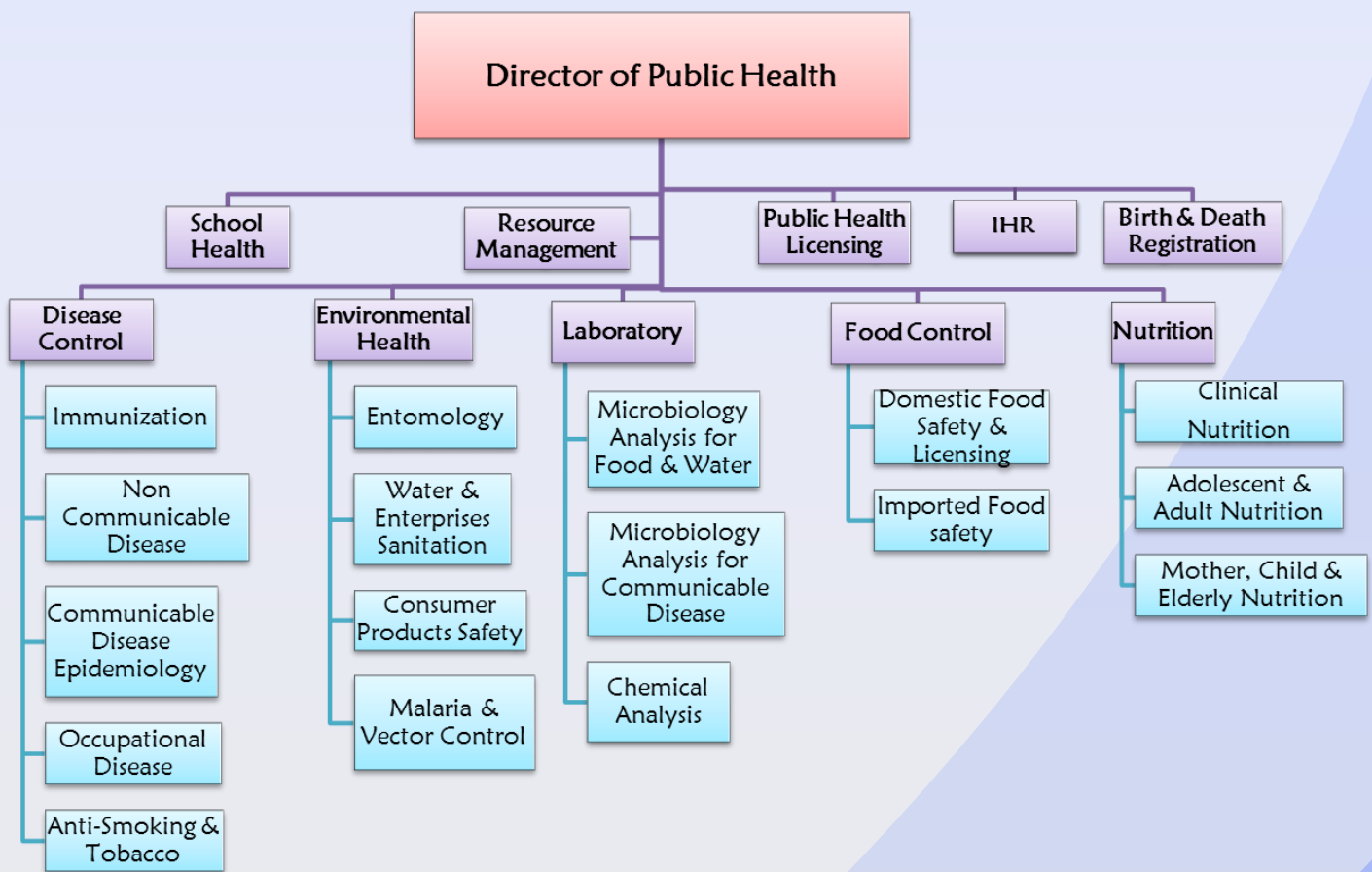
# Organizational Structure of Public Health

Organizational Structure of Public Health within the  
Ministry of Health in the Kingdom of Bahrain



# Organizational Structure of Public Health

## Organizational Structure of the Public Health Directorate



## Public Health Services

In terms of services, all the Public Health Services are delivered through the above mentioned sections, and include the followings:-

- Monitor health status to identify community health problems.
- Diagnose and investigate health problems and health hazards in the community.
- Promote and protect the population's health and wellbeing.
- Facilitate community involvement and regional and international partnership.
- Develops policies and strategies.
- Enforces laws and regulations that protect health and ensure safety.
- Identify Public Health service needs of population.
- Assure a competent public health workforce.
- Evaluate and monitor the provided public health services.
- Plans and implements on-going research.

### Note:

In the following pages, background information about each section or unit in the directorate will be presented, as well as the main statistics of the section.

Most statistics will be listed by yearly quarter as follows:

Quarter 1 (Q1): January – March

Quarter 2 (Q2): April – June

Quarter 3 (Q3): July – September

Quarter 4 (Q4): October – December

Unless indicated otherwise.



# *Resource Management*



## *Section 2*





## Background Introduction & Overview

Health Resource Management Unit is the focal point and the artery that connects the sections and units of the Public Health Directorate and other bodies within the Ministry of Health via competence of managing human and financial resources, processing and services.

In other words; overall work maintenance since all of these services are passed through the Unit of Health Resource Management which holds the responsibility of the preparation of transactions by implementation and follow-up.

### Main Tasks & Duties:

In response to the instructions of the Director of Public Health, the unit is responsible of coordination and follow-up with:

- ◆ Department of Human Resources with respect to the affairs of the employee since the start of joining until the end of the job he left for retirement.
- ◆ Department of Finance regarding the financial budget for jobs and office furniture, Materials and devices for the PHD.
- ◆ The Directorate of Materials and Equipment in term of providing the PHD needs.
- ◆ Other link sections of Management such as Service Management, Management of Engineering & Maintenance.
- ◆ Public and International relations Directorate for various media articles submission and managing printable materials, in addition to activity media coverage and arrangements.
- ◆ Supervision of leaning services & gardening in PHD.

## Vision

- Leadership in providing a comprehensive and integrated administrative and financial services.
- Provide comprehensive, distinct administrative and financial services; to meet the needs of staff working at Public Health, through the optimum use of human and material resources; to achieve the goals of the Ministry efficiently and effectively.

## Mission

Resource Management Unit of Public Health targeted to build an appropriate administrative and financial work environment and effective through the provision of administrative and financial services to meet the needs of the employees of the Directorate, and the introduction of the principle of team-work.

It works to employ information and communication technology in all of its work. Also developing a strategic plan for the organization of administrative, financial management of the business, the clarity of tasks, simplify the procedures and the design of business models for all its sections. And working on human capacity development of best management practices followed in the overall quality standards.

## Aim

Administrative Affairs aims to develop a sound basis for the administrative and financial work at the Directorate and is working to achieve the expected goals.

## Key Functions

- Coordination and follow-up with the Human Resources Department of the Ministry in regard to recruitment and personnel since joining the service through the appointment and joining the crew of public health till their retirement procedures.
- Coordination and follow-up with the financial management mechanism of the ministry in regard to the budget planned for the management of public health, such as salaries, furniture, appliances and other.
- Coordination and follow-up with the hardware and materials management in the ministry to provide the Directorate of Public Health its various sections devices and equipment required.
- Coordination and follow-up with other related departments such as management services and management of engineering and maintenance.
- The overall supervision of the administration side services such as cleaning, agriculture and transportation.

## Strategic Goals

Administrative Affairs Department is seeking to be distinct to the Ministry of Health in the performance of its strategic role of Directorate of Public Health. To become the best to attract, recruit, develop and expand the value-added human resources which are contributing to the realization of the vision and mission and goals of the Ministry of Health.

The unity of administrative affairs strategy in public health management stems from the vision and strategy of the Ministry of Health associated with the national vision of the Kingdom of Bahrain (2030) and improve health strategy (2015-2018), where these strategies can be summarized as follows:

### **1<sup>st</sup> Strategic Goal - The sustainability of health services :**

Effective Planning for human resource needs in line with Business requirement and Strategic directions of Public Health Directorate

### **KPI Indicators**

The number of studies carried out by the Section for the development of the PHD organizational structure.

## 2<sup>nd</sup> Strategic Goal - The sustainability of health services :

Diversifying the sources of access to qualified personnel and to follow modern methods of recruitment and selection of qualified manpower to supplement the Directorate of Public Health with cadres that contribute to the achievement of the goals and vision of Ministry of Health, and Retain the qualified manpower.

### KPI Indicators

The achievement of the objectives set in the annual work plans.

## 3<sup>rd</sup> Strategic Goal – Quality First

Provide true and accurate database for all employees of the Directorate of Public Health and provide the best possible services for staff.

### KPI Indicators

Provide reliable and fast statistics when you needed.

## Resource Management Organizational Structure

DIRECTOR, PUBLIC HEALTH مدير الصحة العامة		
GRADE	JOB TITLE	2015
E-0340-2	ADMINISTRATOR, RESOURCE إداري موارد	1
G-0240-10	SR. ADMIN ANALYST محلل إداري أول	1
G-0240-9	ADMIN ANALYST محلل إداري	3
G-2003-8	SUPPLY SPEC. أخصائي تجهيزات	1

## Unit employees

As Per the Organizational Structure

No. of male employees	2
No. of female employees	4
Total employees	6
Vacancies	0

Actual Situation

No. of male employees	0
No. of female employees	4
Total employees	4
Vacancies	2

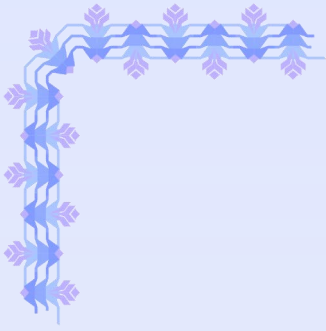
## Main Statistics

Table 1: Resource Management Unit Transactions

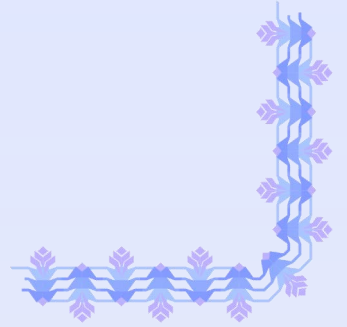
Transaction Type	No.
INCENTIVES & REWARDS	109
PROMOTIONS	35
TRANSFERES	16
NEW RECRUTMENTS	9
RETIREMENT	21
DEPUTIZING	187
LEAVES	2958

## Future Programs & Projects





# *Legal Affairs*



## *Section 3*





## Achievements of the Legal Affairs of Public Health Directorate

### First:

- ◆ Follow-up and amendment of health laws and ministerial decisions.
- ◆ Follow-up project of Public Health Law No. 3 of 1975 and work on amending it, in addition to attending with the Commission services at the House of Representatives and parliament, in line with the current requirements.
- ◆ Follow-up proposal to amend some provisions of the anti-smoking Law No. 8 of 2009 with the addition of many materials to meet the deficiencies.
- ◆ Follow-up project to amend some provisions of Decree Law No. 3 of 1985 on imported food control.
- ◆ Modify some of the provisions of the Ministerial Decree No. 83 of 2006 on the requirements of cafes and restaurants that offer tobacco and its derivatives for the purposes of smoking.
- ◆ Organization hosting a delegation from the World Health Organization to review laws and health legislation in the Kingdom.

## Second:

Preparation and conducting workshops for the Public Health Directorate inspectors in all related sections who have the status of judicial officer to introduce them to the concept of judicial officers and how to prepare the minutes of the judicial arrest of offenders in preparation for referring them to public prosecution.

## Third:

Study all laws related and relevant to Public Health Law No. 3 of 1975 regarding Veterinary Quarantine Law which indicates the transfer of oversight responsibility of meat at the ports to the Ministry of Municipalities instead of the Ministry of Health, and that the Ministry of Health role starts at the local/internal markets. Therefore, meat inspection at the ports should be carried by the veterinarian in accordance with the mentioned law.

Also, we follow up the implementation of this law with the senior management of ports.

## Fourth:

Communication with the citizens to respond to their legal inquiries about their transactions in the Ministry of Health through seminars and consultative meetings such as the open consultation that was conducted in the Chamber of Commerce with Cafes owners.

## Fifth:

Follow up the implementation of the Office of the complaints of patients in the Ministry of Health as per the directives of His Excellency the Prime Minister and the following decision of HE Undersecretary of the Ministry of Health, which had a profound impact on the customer and patient satisfaction in the ministry, where through the legal opinion in all the complaints received and categorized and forwarded to the authority concerned.

## Sixth:

Follow-up to the recommendations issued by the Office of Financial and Administrative Control on patients' complaints.





# *Excellence & Quality*



## *Section 4*



## Background Introduction & Overview

Excellence Coordination Program is continuing to follow up excellence projects in public health directorate; namely

1 - The Intelligent Inspection Project (launched April 2012),

2 - The Green Sticker Project (Launched August 2013),

These two projects have been approved by the higher authority in the Ministry of Health and have been adopted in the Ministries' strategy for Health improvement.

Moreover, the projects have been enrolled in the Kingdom of Bahrain Government Programs for the years 2015 - 2018.

Among other responsibilities, the excellence program continues to provide technical support to the abovementioned programs by means of regular monitoring and evaluation in order to maintain the achieved level of success and unleash new opportunities for enhancement and improvement based on solid scientific evidence and knowledge.

*“Information is power, however, sharing and using this information is more important and powerful”.*

## Main Goals:

The main goals of Excellence Program are to:

- Practically support excellence projects to make a pace change: from good or very good to 'Excellent'.
- Change the mindset focus from reflection to action, and from being reactive to proactive.
- Facilitate information flow, link and comparison of data within the public health directorate, within the Ministry of Health, as well as nationally (between the Ministry of Health and other segments applying excellence programs in Bahrain both governmental and non-governmental).
- Ensure the project's full compliance with the agreed plan and goals.

## Main Tasks & Duties:

The Excellence & Quality Coordinator is responsible of:

- Preparation of annual goals and determination of excellence and quality standards in the Public Health Directorate.
- Periodic evaluation to facilitate active participation and application of Bahrain Center of Excellence recommendations.
- Coordination and cooperation with all excellence teams and projects within the Ministry of Health.
- Identification of improvement areas and opportunities according to their importance, besides prioritization & implementation follow up.
- Review and follow-up the measurements and outcomes of key processes and indicators to ensure alignment with main goals.
- Facilitate the establishment of an excellence culture in the practical reality within the Directorate.
- Work on the development of methodologies for integration, and support mechanisms of learning and knowledge management.
- Preparation of reports based on the indications given by all sections of Public Health Directorate.

## Public Health Excellence Projects:

### 4.1. “Consumer Protection from Foodborne Diseases”

Commonly called “The Intelligent Inspection Project”, which has sustained its progress since April 2012 and has grown into a more solid and mature project to the extent that it is now an essential part of the inspection planning and procedures in the Food Control Section.

#### Project Aim:

Minimize Food-Bourne Diseases

#### Project main goals:

- Increase community partnership
- Change “Punishment Inspection” to “Smart Inspection”
- Enforce consumer protection

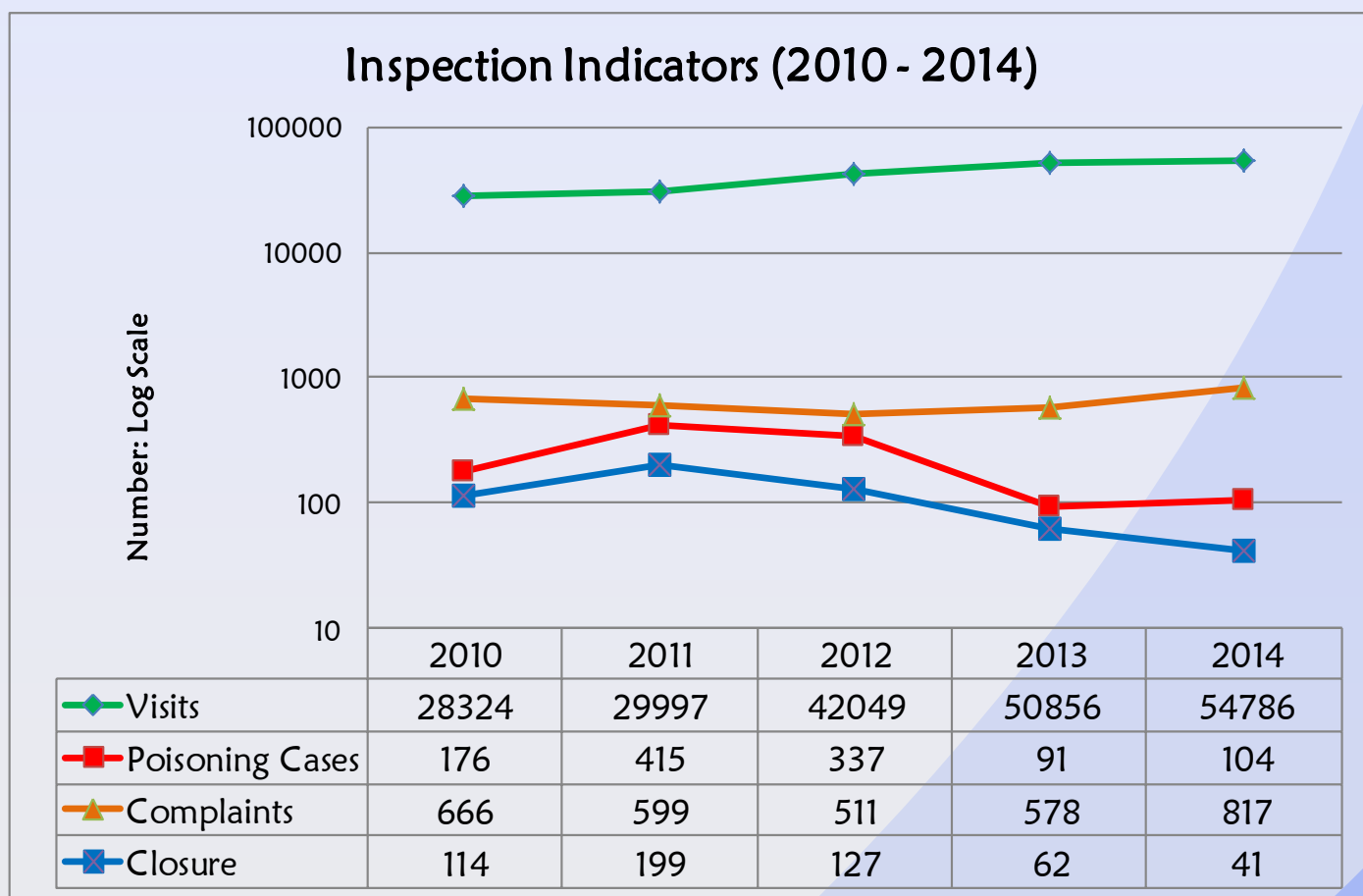
#### Main Achievements:

- The project has been accepted as a “Best Practice” at the Third International Best Practice Competition held in Abu Dhabi (November 2014)
- The project has been qualified to enter the “United Nations Public Service Awards Competition - UNPSA - ”
- It has been chosen as a best practice in Bahrain Government and would be published in the new annual book listing “Best Practices in Bahrain” approved by His Royal Highness the Prime Minister, and His Royal Highness the Crown Prince, Deputy Supreme Commander and First Deputy Prime Minister.

## Main Statistics & Impact Measurement:

As shown in the graph below, favorable changes occurred such as :

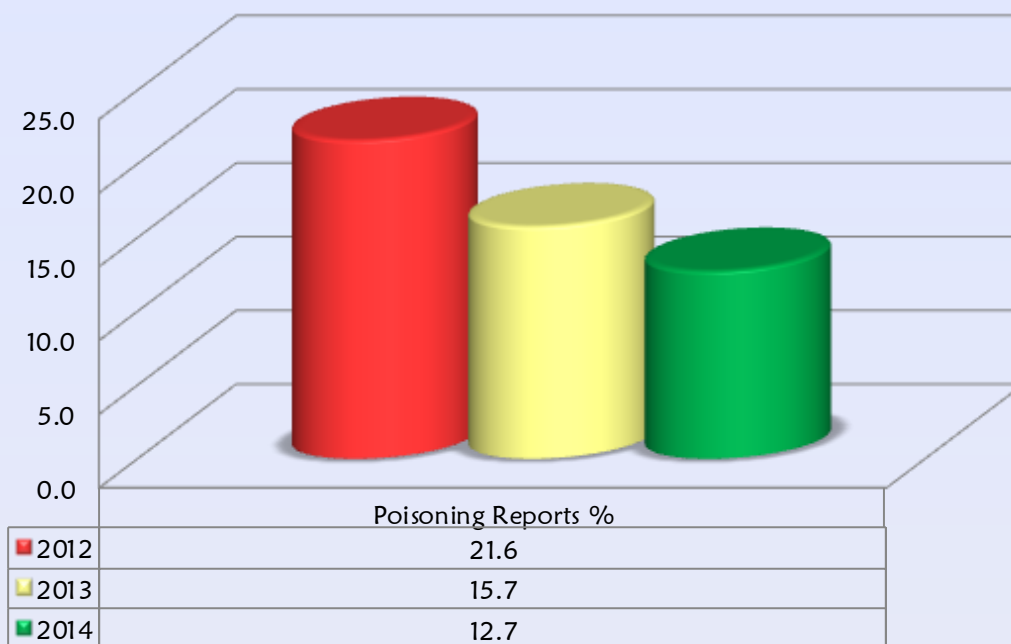
- Increase in routine inspection visits.
- Reduction in Poisoning Cases
- Reduction in closure actions
- Increase in complaints due to stronger contact with the public, however, we are aiming to reduce this during the next year of years by at least 10% by strengthening inspection within the areas that have more complaints.





## Progress in Reported Poisoning Incidence:

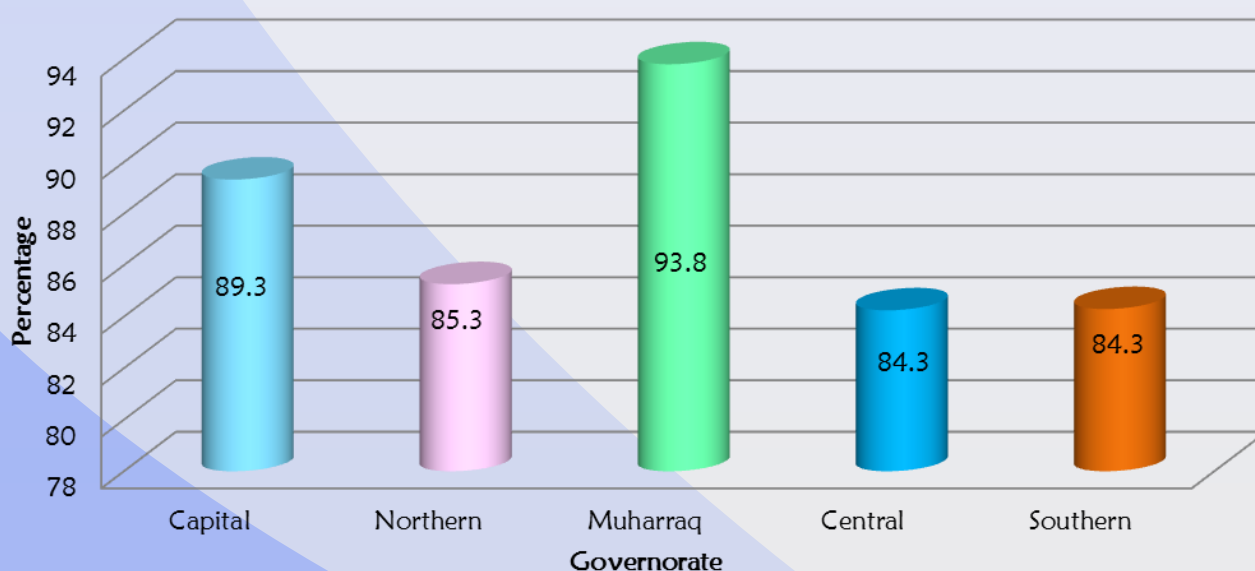
Poisoning % of total complaints by year



## Coverage:

The net coverage percentage was counted which is the total coverage adjusted according to national holidays and leaves.

Coverage % by Governorate 2014



## 4.2. “Green Sticker”

The Green Sticker project started in August 2013 where it was applied to 12 restaurants only in Juffair area, and reached 220 restaurants by December 2014.

More areas, restaurant types were covered through out this period which facilitates the next coming project (Food Entities Ratings) which will cover all grades and types of stickers according to the hygiene and safety status of the food entity.

The Green Sticker is now displayed on the front window of assessed restaurants that have shown 80% or more compliance to health standards, as this reflects the tendency to provide safer food & protect consumers from food poisoning.

The sticker is valid for six months, after which, it is reassessed to ensure that its maintaining the compliance with our requirements.

### Project Aim:

Raise the hygiene and safety level of food provided to consumers.

### Project main goals:

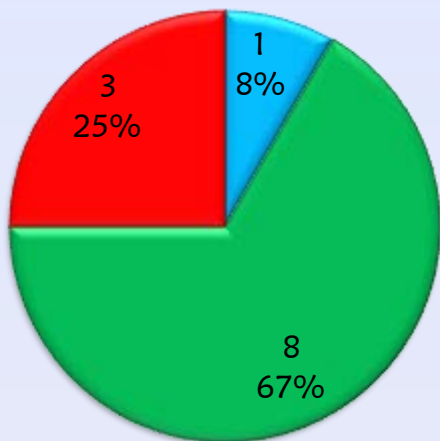
- Raise Transparency level
- Strengthen Community Partnership
- Encourage Positive Competitiveness

### Main Achievements:

- The project has encouraged participating restaurants to reach and maintain a very high safety level.
- Other restaurants have been encouraged to participate as many approached us asking about the requirements and requesting an assessment.

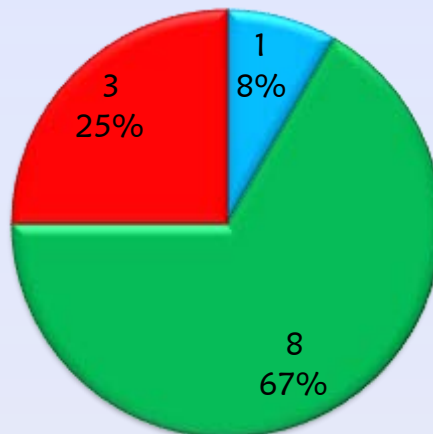
## Green Sticker Progress from August 2013 to December 2014:

Assessment up to Aug 2013  
12 Restaurants



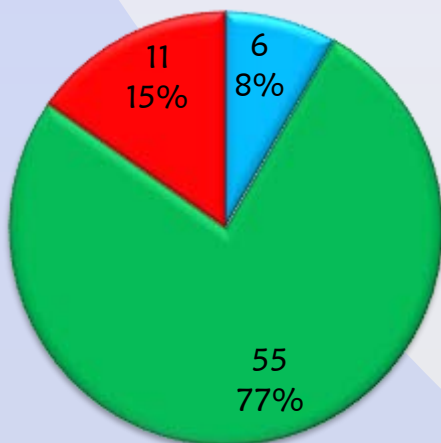
Blue Green Red

Assessment up to Feb 2014  
49 Restaurants



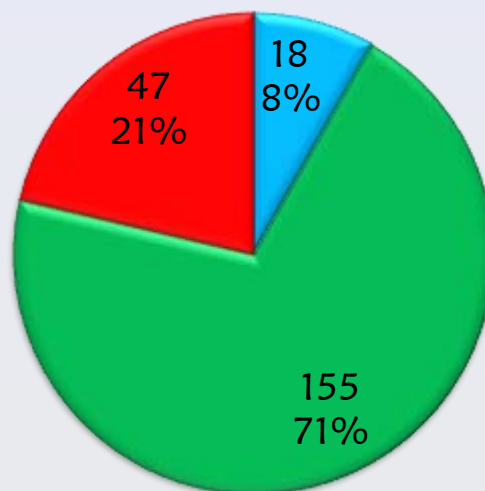
Blue Green Red

Assessment up to Jul 2014  
72 Restaurants



Blue Green Red

Assessment up to Dec 2014  
220 Restaurants



Blue Green Red



# *International Health Regulations*



## *Section 5*



## Background Introduction & Overview

The International Health Regulations 2005 (IHR) are an international agreement legally binding on 194 States Parties, including all WHO Member States. They entered into force on 15 June 2007. States Parties are obligated by the Regulations to develop, strengthen and maintain national minimum core public health capacities. The national core capacities are described in functional terms in Annex 1 of the Regulations and include surveillance and response capacities to public health events including capacities at designated points of entry.

The Regulations are intended to rapidly identify and stop the emergence and spread of public health risks including emergency events. These risks are not restricted to communicable diseases with epidemic and pandemic potential but apply across all relevant hazards of zoonotic, food safety, chemical, radiological.

The IHR set out a time frame within which States Parties are to develop, strengthen and maintain national core capacities. According to the provisions of Articles 5 and 13 and Annex 1 of the IHR, State Parties should have assessed their core capacities for surveillance and response, including at designated points of entry, by 15 June 2009. The vision of the Bahrain IHR is to “minimize the health, economic and social impact of any public health emergencies of international concern.”

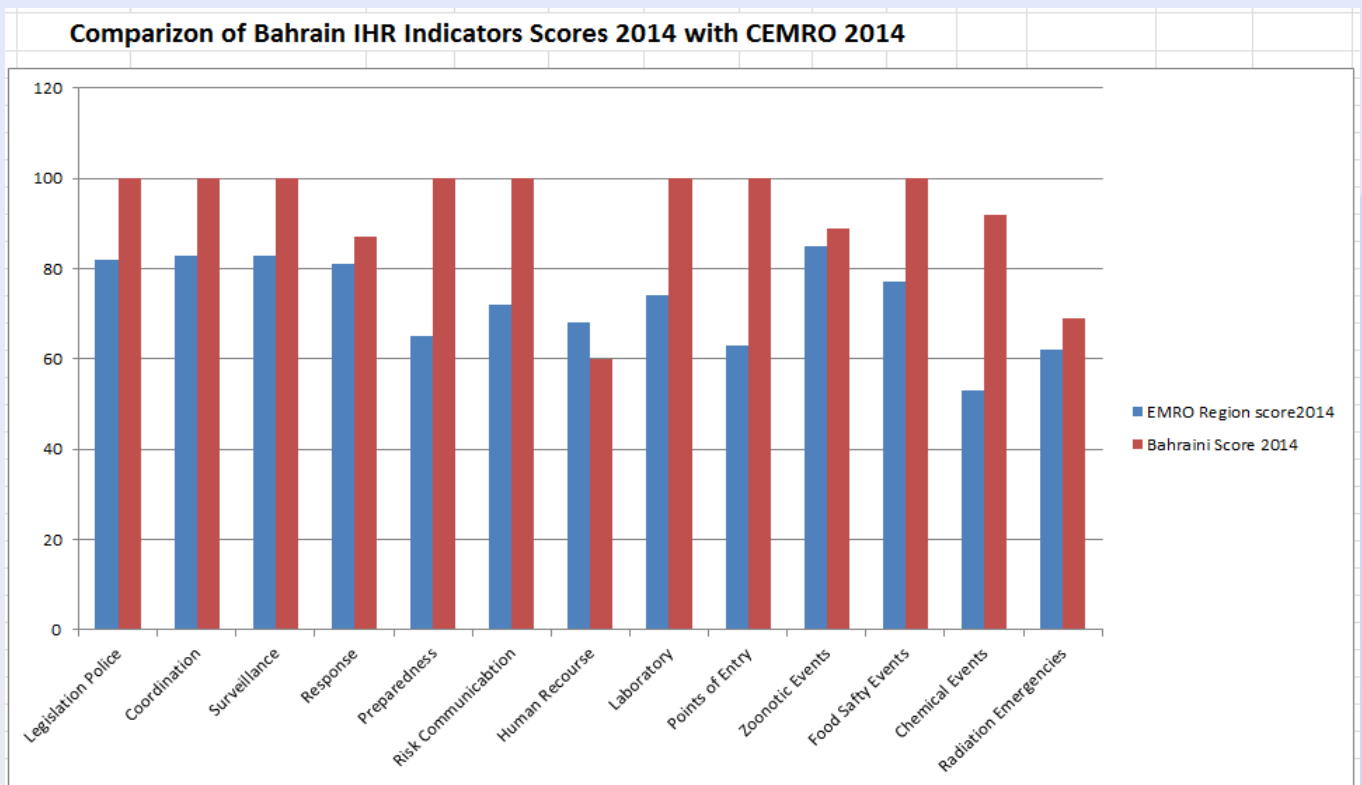
Bahrain IHR mission is to “improve health protection in Bahrain, to be prepared and to respond to a public health emergency of international concern”.

In 2014, Bahrain met the IHR core capacity obligations by fulfilling all the requirements for IHR implementation through building the capacities before the global deadline (June 2014) by strengthening of existing structures, systems and institutional capacities for implementation of the International Health Regulations. Initiation of IHR activities among the various administrative levels and other concerned ministries and institutions in Bahrain which lead to advanced achievement whereby knowledge, findings, lessons learnt and experience gained from the outputs and outcomes.

Progress in building capacities for surveillance and response was achieved in Bahrain as per annex 1 of the regulations that facilitate implementation in a more efficient, effective or beneficial manner.

Strengthening the IHR communication Program was done in Bahrain by establishing Bahrain IHR website which facilitates coordination among the different entities involved in implementation of the IHR.

### Comparison of Bahrain IHR Indicators Scores 2014 with CEMRO 2014

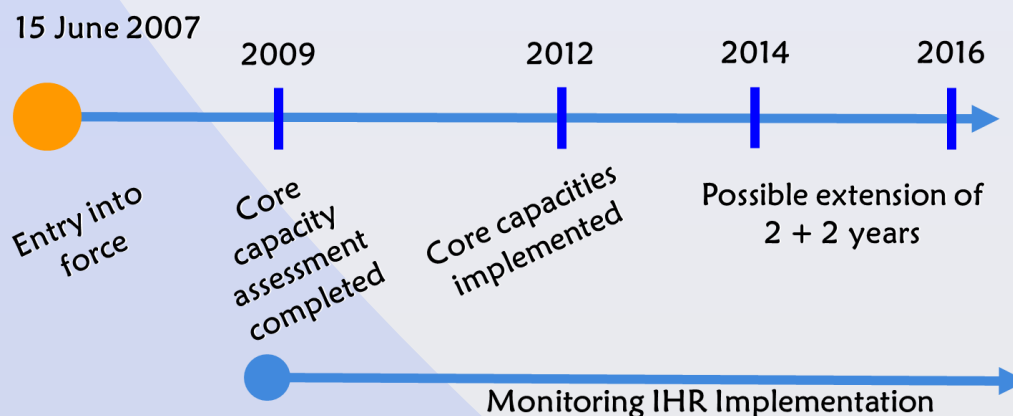


## Achievements of the IHR

- IHR points of entry monitoring program
- IHR Electronic Monitoring Program for Environmental Health at the Points of Entry
- IHR WHO Review Mission to Bahrain and its Recommendations, April 2014
- WHO IHR mission Recommendations plan of implementation
- IHR National chemical Plan of action for -Bahrain 1,3.4.2014
- Budget proposal for IHR monitoring program 2014
- IHR National Action Plan for Chemical Events in Bahrain May 2014
- IHR annual report 2013 June 2014
- Bahrain profile 2013, June 2014
- Lecture regarding preparedness to face Ebola in Bahrain August 2014.

## IHR Agenda for National Core Capacities Strengthening

May 2005: Adoption of IHR(2005)



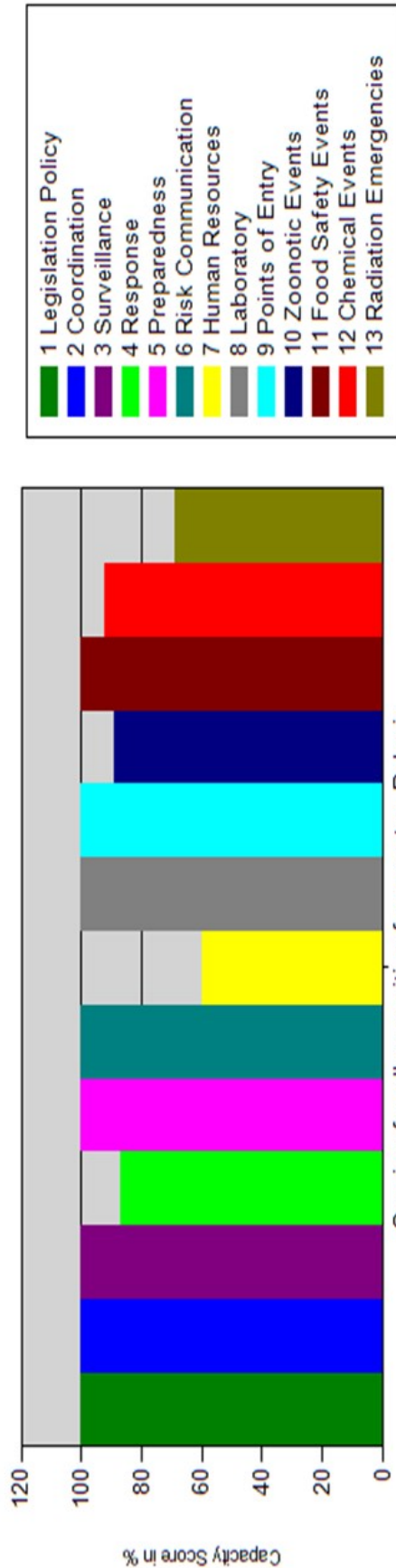
# Bahrain Capacity Scoring 2014



## 2014 Capacity Scoring

All Country Specific Data is **CONFIDENTIAL** and must not be shared.

Capacity Scores are defined as the proportion of attributes present expressed as a percentage



[Click on a country name to display its Indicator Score Report](#)

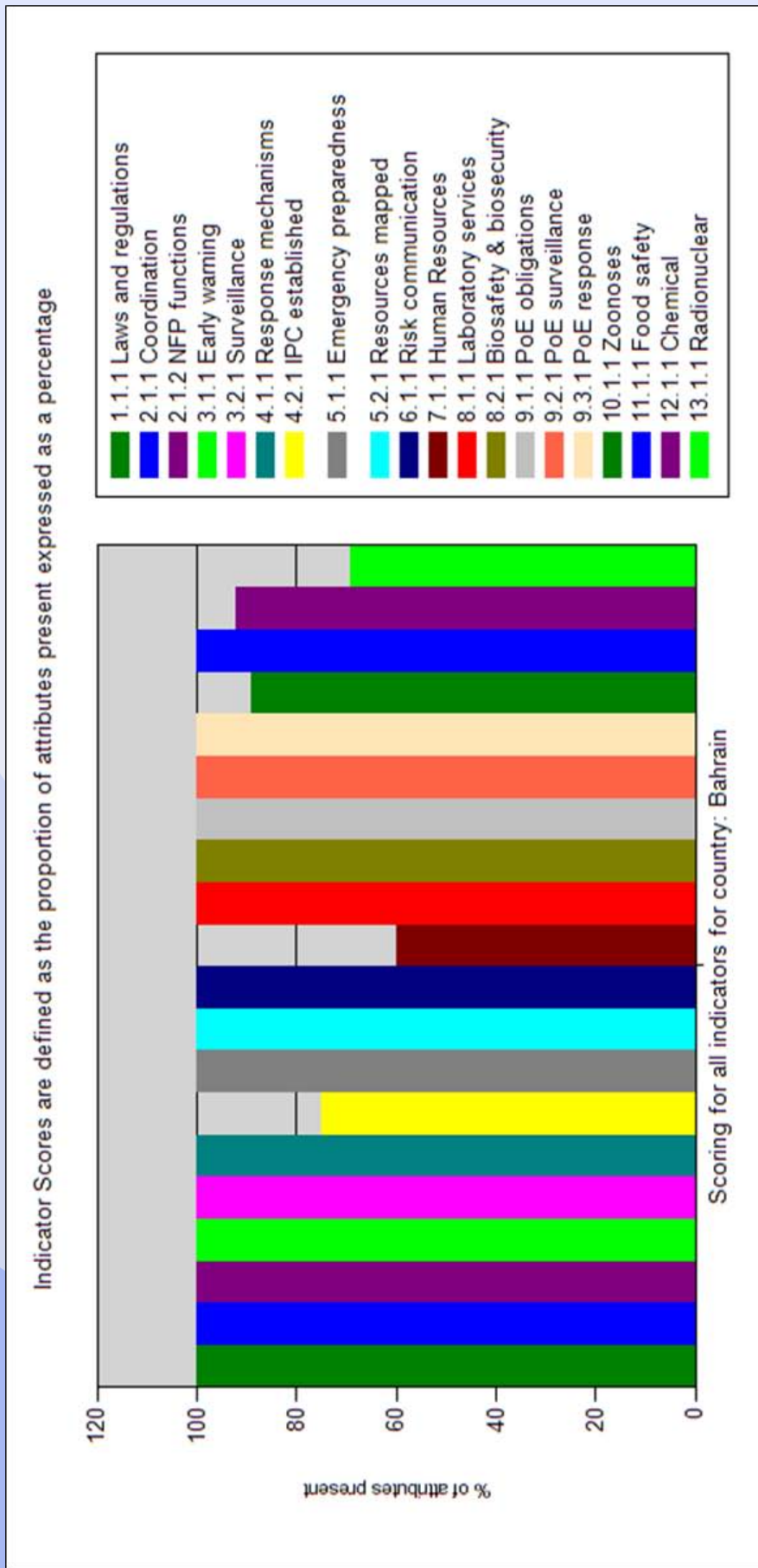
Reporting Year	Region	Capacity: Score as %	1	2	3	4	5	6	7	8	9	10	11	12	13
2014	Eastern Mediterranean	Bahrain	100	100	100	87	100	100	100	60	100	89	100	92	69

Scoring Capacity Number Legend:

- 1 Legislation Policy    2 Coordination    3 Surveillance    4 Response    5 Preparedness    6 Risk Communication    7 HR Capacity
- 8 Laboratory    9 Points of Entry    10 Zoonotic Events    11 Food Safety Events    12 Chemical Events    13 Radiation Emergencies



# Bahrain Indicator Scoring 2014



Indicator	Score as %	1.1.1	2.1.1	2.1.2	3.1.1	3.2.1	4.1.1	4.2.1	5.1.1	5.2.1	6.1.1	7.1.1	8.1.1	8.2.1	9.1.1	9.2.1	9.3.1	10.1.1	11.1.1	12.1.1	13.1.1
Bahrain		100	100	100	100	100	100	75	100	100	100	60	100	100	100	100	100	89	100	92	69



# *Disease Control Section*



## *Section 6*



## Background Introduction & Overview

Overall objectives of Diseases Control Section (DCS) are disease prevention and health promotion of the population. Therefore, Diseases Control section has to keep pace with rapid development of health care services and changing health patterns. The section must maintain control programs of diseases of low incidence with potential for re-emergence, as well as develop and maintain new programs.

Diseases Control and prevention are integrated into all programs of health care from Primary Care to Secondary and Tertiary Care.

Like any other country in the world, the Kingdom of Bahrain is at risk not only from chronic diseases, but from emerging new infectious diseases. Significant achievement has been made in the control of communicable diseases in the Kingdom. This was coupled with an increasing importance of chronic diseases as leading causes of mortality. In the recent past years, some of the Communicable Diseases have been newly known to affect humans (e.g. HIV, SARS and avian influenza) and some of the old ones reemerged (e.g. Tuberculosis) with enhanced virulence and resistance to treatment.

Bahrain has eradicated or eliminated most of the communicable diseases which were relatively highly prevalent in the first half of this century. Morbidity and mortality data indicate that non-communicable diseases such as cardiovascular diseases, cancers, diabetes and accidents now represent today's main health problems. However, there is a real danger of re-emergence of already eradicated and controlled communicable diseases and of importation of dangerous infectious diseases, particularly in view of the continued and changing imported labor force.

The future of chronic disease amelioration, injury prevention, communicable and emerging diseases control will require a complex Diseases Control Section infrastructure to provide adequate services to every community, i.e. adequately trained personnel, information and communication systems for collecting and disseminating accurate data at the national and regional levels.

## Directions & strategies:

### Vision:

The section works in collaboration with various parties to improve the health of population of Bahrain through prevention and control of diseases.

### Mission:

The section's mission goes in line with the Bahrain health strategy in which it works in partnership with stakeholder to ensure the prevention & control of disease and provide accessible preventive health services to the community of Bahrain, using available resources as effectively as possible to provide a high standard of preventive care based on research, evidence and relevant international and best practice .

### Aim:

To plan, monitor and evaluate the national disease control plans in Bahrain by integrating prevention & control activities with in the context of primary & secondary health care systems. It also aims to provide epidemiological surveillance, epidemic diagnosis and investigation for existing and emerging epidemics, immunization and other prevention services to the whole nation of the kingdom of Bahrain

### Strategic goals:

Disease control should act as the central body for the ministry of health for establishing and monitoring of disease control plans and policies, through achieving the following strategic goals:

- ◆ Promotes and encourage healthy life style behaviours.
- ◆ Prevents communicable diseases, NCD and injuries.
- ◆ Prevents epidemics and control the emerging diseases.
- ◆ Protects against vaccine preventable diseases through expanding immunization services.
- ◆ Protects against occupational and environmental hazards.
- ◆ Maintain accurate registries, surveillance and efficient data management system.
- ◆ Responds to disasters and emergency.

## 6.1. Communicable Diseases Control Group (CDC):

### Vision:

Keep Kingdom of Bahrain free from communicable diseases with severe impact on public health

### Mission

To implement plans and strategies that aim at preventing communicable diseases, reduce its transmission if it occur and minimize complications from these diseases in the short, medium and long term.

### Purpose

To protect the citizens and residents of the Kingdom by immunization and reduce the spread of communicable diseases.

### The main objectives

- ◆ To Eradicate or eliminate communicable diseases with severe impact on public health which are consistent with the goals of the World Health Organization.
- ◆ To prevent communicable diseases occurrence.
- ◆ To limit the spread of communicable diseases.
- ◆ To prevent and reduce complications resulting from communicable diseases.

## Core functions

- ◆ Follow-up of cases of communicable diseases and their contacts through:
  - ◇ Foodborne Control Program
  - ◇ Vaccine Preventable Diseases Control Program
  - ◇ Tuberculosis Control Program
  - ◇ HIV Control Program
  - ◇ Hepatitis A Control Program
  - ◇ Hepatitis B Control Program
  - ◇ Hepatitis C Control Program
  - ◇ Hepatitis E Control Program
  - ◇ Leprosy Control Program
  - ◇ Sexually Transmitted Diseases Control Program
  - ◇ Emerging and re-emerging diseases control program
  
- ◆ Activation of the early warning system to detect outbreaks .
- ◆ Participate in the development of policies & strategies to prevent communicable diseases or minimize their impact on public health.
- ◆ Inspection of arriving and departing ships from the Kingdom to ensure that they are free from the risk of infections.
- ◆ Prepare and analyze statistics on weekly, monthly and yearly basis to take appropriate action in timely manner.
- ◆ Increase awareness among the health care workers and the community about ways to reduce the incidence of communicable diseases and their prevention.

## Unit Staff:

Number of male staff	3
Number of female staff	8
Current Vacancies	Public health consultant
Needs	Upgrade the hierarchy of the group to suit the contentiously evolving needs to detect and manage communicable diseases.

## 6.1.1 Program Related Information

Strategic Goals	Initiatives / Program	Implementation plan	Key Performance Indicators
<ol style="list-style-type: none"> <li>1. Prevents epidemics and control communicable &amp; non communicable disease</li> <li>2. Promotes and encourages healthy lifestyle behaviors</li> <li>3. Prevents injuries</li> <li>4. Protects against occupational and environmental hazards</li> </ol>	<ul style="list-style-type: none"> <li>◆ Follow-up of infectious diseases cases and their contacts.</li> <li>◆ Educate health workers in family medicine program on infectious diseases and prevention methods .</li> <li>◆ Educate healthcare workers in the private and public sectors about recent developments in the field of infectious diseases.</li> <li>◆ Educate workers in the educational sector on communicable disease prevention.</li> <li>◆ Increase community awareness about infectious diseases through participation in media</li> </ul>	<ul style="list-style-type: none"> <li>◆ Home visits/ telephone code.</li> <li>◆ Workshops</li> <li>◆ Workshops/ lectures</li> <li>◆ Workshops</li> <li>◆ TV &amp; Radio interviews / newspapers</li> </ul>	<ul style="list-style-type: none"> <li>◆ Number of reported suspected cases</li> <li>◆ Case investigation on timely manner.</li> <li>◆ Yearly workshops for the newly joining FPRP residents.</li> <li>◆ At least 4 workshops &amp; lectures to be conducted yearly</li> <li>◆ At least 2 workshops s to be conducted for public and private schools yearly.</li> <li>◆ At least 3 media participation yearly.</li> </ul>
<ol style="list-style-type: none"> <li>1. Prevents epidemics &amp; control communicable &amp; non communicable disease</li> <li>2. Promotes and encourages healthy lifestyle behaviors</li> <li>3. Prevents injuries</li> <li>4. Responds to disasters and emergency</li> <li>5. Maintain accurate registries and efficient information</li> </ol>	<ul style="list-style-type: none"> <li>◆ Follow-up cases and their contacts</li> <li>◆ Activation of the early warning system to detect outbreaks of communicable diseases.</li> <li>◆ Assess Reporting of communicable infectious diseases from all health facilities in the Kingdom</li> </ul> <p>Staff competencies development through training</p>	<ul style="list-style-type: none"> <li>◆ Calls /Visits</li> <li>◆ Monitor the thresholds and baseline for each communicable disease with epidemic potential</li> <li>◆ Calculating timeliness and completeness of reporting</li> </ul> <ul style="list-style-type: none"> <li>◆ Conduct workshops in the section</li> <li>◆ Attendance of local or regional workshops</li> </ul>	<ul style="list-style-type: none"> <li>◆ Case and contacts investigation on timely manner.</li> <li>◆ Actions taken based on exceeding the thresholds.</li> <li>◆ timeliness and completeness</li> </ul> <p>At least 50 training hours for each staff annually.</p>
<ol style="list-style-type: none"> <li>1. Protects against occupational and environmental hazards</li> <li>2. Maintain accurate registries and efficient information</li> </ol>	<p>Staff competencies development through training</p>	<ul style="list-style-type: none"> <li>◆ Conduct workshops in the section</li> <li>◆ Attendance of local or regional workshops</li> </ul>	<p>At least 50 training hours for each staff annually.</p>

## 6.1.2 Achievements in 2014

- ◆ Preparation and updating of the standard operating procedures the various programs.
- ◆ Strengthening Influenza surveillance system in the health centers, as well as the strengthening of surveillance for a Sever Acute Respiratory Infections (SARI) in the hospital. (Salmaniya Medical Complex) and the collection of samples of influenza and other emerging viruses.
- ◆ Strengthening surveillance of targeted communicable disease by active surveillance system through increasing number of visits to health facilities and passive reporting of diseases through the daily and weekly reporting forms.
- ◆ Enhance cooperation and coordination between the various ministries in order to ensure control of communicable diseases .
- ◆ Send periodic information about communicable diseases to World Health Organization and other stakeholders .
- ◆ Continuous update of the investigation forms for enteric disease in line with international health organization recommendations.
- ◆ Contentious staff training on the latest developments in the field of controlling of communicable disease.



### 6.1.3 Activities in 2014

DONE BY	DATE	PLACE	LECTURE TITLE
Dr. Kubra	21/4/2014	Public Health Directorate (PHD)	Measles (FPRP)
Dr. Kubra	31/3/2014	PHD	T.B (FPRP)
Dr. Wafa	28/05/2014	PHD	Drill to evaluate the emergency MERS-cov plan in the public health. For Public Health Staff
Dr. Wafa	29/05/2014	KHUH	Middle East Respiratory Syndrome coronavirus (MERS-cov) (healthcare workers)
Dr. Kubra + Dr. Wafa	11/06/2014	PHD	Workshop On Middle East Respiratory Syndrome Coronavirus (MERS-cov) (Doctors, nurses & healthcare workers)
Dr. Kubra	19/06/14	Y.E.HC	Communicable Disease in School Setting (School Health Nurses)
Fathiya + Mona Sayed	19/08/2014	Noaim HC	Your Health in Summer
Dr. Wafa	3/09/2014	EWA	Ebola Virus (Staff of EWA )
Dr. Wafa	04/09/2014	Movambic Hotel	Communicable Disease in Hajj
Mona Sayed + Mona Yahya	23/09/2014	Noaim HC	Your Health in Hajj
Dr. Kubra	30/10/2014	Government Schools	Workshop Of School Health
Dr. Kubra	05/11/2014	Private Schools	Workshop Of School Health
Dr. Kubra	10/11/2014	AGU	Ebola Virus (FPRP)

## 6.2. The Expanded Program on Immunization

### (EPI / Immunization) Group:

#### Vision:

Community protection Lifelong through Expansion of immunization services against vaccine preventable diseases to cover different ages groups and targets

#### Mission

provision of comprehensive high standard of immunization services which will be responsive to people's needs and continuous throughout their life span, and encouraging personal responsibility for their well-being through proper use of allocated resources as efficiently and effectively as possible in collaboration with various stakeholders to protect the population against vaccine preventable diseases of public health concern and improved health in the kingdom of Bahrain.

#### Aim

To protect the population and control the spread of vaccine preventable diseases.

#### The main objectives

- ◆ Expand the use of all existing cost-effective vaccines.
- ◆ Improve access to sustainable immunization services.
- ◆ Accelerate the development and introduction of new vaccines.
- ◆ Make immunization coverage an integral part of the design and assessment of health systems and national development efforts.
- ◆ Integrate the Immunization activities into general health services including preventive, as well as curative activities.
- ◆ Advocate for preventive Immunization Health Services to all age groups throughout their life span.
- ◆ Develop and adopt a multi-sectorial and multi-disciplinary approach.
- ◆ Emphasize the role of the individual in being responsible for his/her health.
- ◆ Achieve and maintain health and vaccination of all people.
- ◆ Develop sustainable and environmentally sound policies and programs that lead to improved immunization and health for both present and future generations.
- ◆ Implement quality improvement measures within health plans

## Key Functions:

### **A. Immunization safety programs:**

- Cold chain monitoring program
- Adverse events following immunization program
- Safe injection practices program
- Immunization units monitoring program

### **B. Quality Control programs:**

- Data management program
- Scientific research program
- Training and development program
- Active surveillance program

### **C. EPI Diseases programs:**

- Polio eradication program
- Measles elimination program
- Rubella & C.R.S elimination program
- Childhood Hepatitis B elimination program
- Meningitis data management program
- Rota virus data management program
- Hepatitis A reduction program
- Haemophilus Influenza type b monitoring program

### **D. Screening programs:**

- Childhood TB infection screening program
- Antenatal hepatitis B screening program (Infant of Hepatitis B surveillance)
- Antenatal rubella screening (Risk of CRS predication )
- Pre-school screening program (Pre-school vaccination coverage estimate)

### **E. Vaccination programs:**

- Childhood vaccination program
- Adolescent vaccination program
- School students vaccination program
- People with special needs in Rehabilitation centers vaccination program
- Elderly Vaccination program
- High risk group vaccination program
- Health care workers vaccination program
- Pregnancy vaccination program
- Travelers Vaccination program

### Strategic Goals:

- ◆ The provision of services related to vaccine.
- ◆ Planning and program management.
- ◆ Storage of vaccines at the right temperature.
- ◆ Distribution and monitoring.
- ◆ Healthy trained staff.

### Unit Staff:

Number of male staff	1
Number of female staff	13
Current Vacancies	None
Needs	Upgrade the group, for the staff additional staff

## 6.2.1 Program Related Information

Initiatives / Programs	Strategic Goal	The goals of the program	Implementation plan	Key Performance Indicators
1. Supply (cold) chain monitoring.	<p><b>Ministry of Health goals:</b></p> <ul style="list-style-type: none"> <li>◆ 5th strategic goal: Enhancing MOH's role in policy making and governance.</li> <li>◆ 3<sup>rd</sup> strategic goal: Putting quality first.</li> <li>◆ 1st strategic goal: Sustaining the population's health through health promotion and prevention.</li> </ul> <p><b>Public Health goals:</b></p> <ul style="list-style-type: none"> <li>◆ Prevents epidemics and control communicable &amp; non communicable disease.</li> <li>◆ Maintain accurate registries and efficient information.</li> </ul>	<ul style="list-style-type: none"> <li>◆ To maximize the efficiency of cold chain system.</li> <li>◆ To reduce the faults in the cold chain to zero.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Ensure the safety of the vaccine shipment during arrival and recipient and the proper ways for the storage and monitoring of the vaccines safety use in the central store, primary health centers, hospitals, clinics and other health facilities providing vaccination services.</li> <li>◆ Cold Chain monitoring quarterly around 4 times per year to all the governmental and private health facilities and during the monitoring visit done by public health specialists of immunization group they will be assessed in the following areas: proper storage of the vaccines in the fridge, the proper use of the temperature monitoring devices to monitor the temperature and to reduce the percentage of errors in vaccine storage.</li> <li>◆ Write feedback report to the governmental and private health units if any practice was not performed according to Ministry of Health recommendations that are attained from the World Health Organization and the National Health Regulatory Authority.</li> <li>◆ Stop the provision of vaccination services in the health unit if unsatisfactory monitoring visits reports given in coordination with the National Health Regulatory Authority and DMM.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Number of vaccine safety reports that has been reviewed, approved or rejected.</li> <li>◆ The percentage of health units visited according to the plan.</li> <li>◆ The number of health units achieved satisfactory monitoring visit report and those with unsatisfactory visit report.</li> </ul>
2. Immunization unit monitoring program.		The best quality of vaccination services at all health facilities and the safety of the vaccine recipient.	<ul style="list-style-type: none"> <li>◆ Continuous evaluation of the vaccine management and monitoring of the vaccination services in the governmental and private health units including hospitals, clinic and others one or twice yearly.</li> <li>◆ Training on vaccine management and ensure proper use of the temperature monitoring devices used to monitor the temperature in the fridge and cold chain boxes and the use of auto-disable syringes.</li> <li>◆ Ensure the recommendations of defaulters vaccinations are followed, and reducing the obstacles of achieving the goals of the expanded program of immunization.</li> </ul>	<ul style="list-style-type: none"> <li>◆ The number of the monitoring visits done according to the plan.</li> <li>◆ The percentage of health units with satisfactory report of monitoring visit and the percentage of the health units with unsatisfactory report monitoring visit.</li> </ul>

Initiatives / Programs	Strategic Goal	The goals of the program	Implementation plan	Key Performance Indicators
<b>3. Data Management program.</b>	<b>Ministry of Health goals:</b> <ul style="list-style-type: none"> <li>◆ Enhancing MOH's role in policy making and governance.</li> <li>◆ Putting quality first.</li> <li>◆ Sustaining the population's health through health promotion and prevention.</li> </ul> <b>Public Health goals:</b> <ul style="list-style-type: none"> <li>◆ Prevents epidemics &amp; control communicable &amp; non communicable disease</li> <li>◆ Maintain accurate registries &amp; efficient information.</li> </ul>	<p>To monitor the precision and quality of the data and statistics of immunization for the governmental and private health units.</p>	<ul style="list-style-type: none"> <li>◆ Annual Monitoring visits based on WHO recommendations.</li> <li>◆ Data analysis to reflect the population immunity level through the highly precise immunization coverage data.</li> </ul>	<p>The number of monitoring visits conducted to calculate the data accuracy of immunization coverage.</p>
<b>4. Adverse events following Immunization Program (AEFI).</b>	<b>Ministry of Health goals:</b> <ul style="list-style-type: none"> <li>Sustaining the population's health through health promotion &amp; prevention.</li> </ul> <b>Public Health goals:</b> <ul style="list-style-type: none"> <li>◆ Prevent injuries.</li> <li>◆ Maintain accurate registries &amp; efficient information.</li> </ul>	<p>Ensure safety of vaccine recipient and raise reliance of the citizens and residences regarding the preventive services including vaccines and to explore the reasons of complications in order to overcome it.</p>	<p>Monitor AEFI cases and classify them to vaccine induced, coincidental, vaccine potentiated, and programmatic errors or due to other reasons.</p>	<ul style="list-style-type: none"> <li>◆ Number of AEFI cases investigated within 24 hours from reporting.</li> <li>◆ Percentage of AEFI happened and its causes.</li> </ul>
<b>5. Injection Safety and using the injection safely program</b>	<b>Ministry of Health goals:</b> <ul style="list-style-type: none"> <li>Sustaining the population's health through health promotion and prevention.</li> </ul> <b>Public Health goals:</b> <ul style="list-style-type: none"> <li>◆ Prevent injuries.</li> <li>◆ Protects against occupational &amp; environmental hazards.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Ensure safe injection usage by health care workers.</li> <li>◆ Monitor current practices in giving the injections.</li> <li>◆ Train health care workers on safe methods of administering vaccines and using auto-disable syringes.</li> </ul>	<p>Monitoring visits in the governmental &amp; private health units to monitor the use of injections safely by the health care workers.</p>	<ul style="list-style-type: none"> <li>◆ Number of health units evaluated for the use of auto-disable syringes during monitoring visits.</li> <li>◆ Number of health units gets unsatisfactory monitoring report due to injection safety issues.</li> </ul>
<b>6. Quality control program regarding vaccinations and vaccine preventable diseases.</b>	<b>Ministry of Health goals:</b> <ul style="list-style-type: none"> <li>◆ Enhancing MOH's role in policy making and governance.</li> <li>◆ Putting quality first.</li> <li>◆ Sustaining the population's health through health promotion and prevention.</li> </ul> <b>Public Health goals:</b> <ul style="list-style-type: none"> <li>◆ Prevents epidemics &amp; control communicable &amp; non communicable disease</li> <li>◆ Maintain accurate registries &amp; efficient information.</li> </ul>	<p>To monitor and analyze data regarding immunization coverage.</p>	<p>To analyze data and compare it with number of cases of vaccine preventable diseases to assess the population immunity and the percentage of immunization coverage with the routine vaccines.</p>	<ul style="list-style-type: none"> <li>◆ The number of report's data that has been entered.</li> <li>◆ The number of reports that has been prepared based on immunization data and other data.</li> </ul>

Initiatives / Programs	Strategic Goal	The goals of the program	Implementation plan	Key Performance Indicators
<b>7. Scientific research program.</b>	<b>Ministry of Health goals:</b> <ul style="list-style-type: none"> <li>◆ Enhancing MOH's role in policy making and governance.</li> <li>◆ Putting quality first.</li> <li>◆ Sustaining the population's health through health promotion and prevention.</li> </ul> <b>Public Health goals:</b> <ul style="list-style-type: none"> <li>◆ Prevents epidemics &amp; control communicable &amp; non communicable disease</li> <li>◆ Maintain accurate registries &amp; efficient information.</li> </ul>	<ul style="list-style-type: none"> <li>◆ To train health care workers belonging to MOH on immunization.</li> <li>◆ To perform surveys and researches related to immunization, vaccines, and vaccine preventable diseases to monitor health situation and to study the possibility of new vaccine introduction and the communicable disease burden in Bahrain following its introduction.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Train the students of the collage of Health science, the medical colleges, FPRP and school health nurses in the immunization group and to train and improve the skills of the staffs working in the group and others.</li> <li>◆ Conducting training workshops about the vaccine management and other related workshops.</li> </ul>	<p>The number of workshops and lectures that have been conducted.</p>
<b>8. Follow-up of childhood Vaccination program.</b>	<b>Ministry of Health goals:</b> <p>Sustaining the population's health through health promotion and prevention.</p> <b>Public Health goals:</b> <ul style="list-style-type: none"> <li>◆ Prevents epidemics and control communicable &amp; non communicable disease.</li> <li>◆ Promotes and encourages healthy lifestyle behaviors.</li> </ul>	<p>To analyze the data of completion of childhood vaccination and to study the changes in the routine immunization schedule based on the updated</p>	<p>To analyze data that reflects the percentage of immunized children with routine vaccines.</p>	<p>The number of reports' data that has been analyzed and the estimated percentage of coverage with the routine childhood immunization.</p>
<b>9. Follow-up of adolescents and adult's vaccination program.</b>	<b>Ministry of Health goals:</b> <ul style="list-style-type: none"> <li>◆ Sustaining the population's health through health promotion and prevention.</li> <li>◆ Integrating services throughout the health system.</li> </ul> <b>Public Health goals:</b> <ul style="list-style-type: none"> <li>◆ Prevents epidemics &amp; control communicable &amp; non communicable disease.</li> <li>◆ Promotes and encourages healthy lifestyle behaviors.</li> </ul>	<p>To analyze the data of completion of government and private school students', university students and other institutions vaccination.</p>	<p>To analyze data that reflects the percentage of immunized students against diseases and to maintain the health of the adolescents by immunization against communicable diseases and to boost their immunity by administering booster doses of vaccines that have been given during childhood.</p>	<p>The number of reports' data that has been analyzed and the estimated percentage of immunization coverage in both the government and private schools.</p>

Initiatives / Programs	Strategic Goal	The goals of the program	Implementation plan	Key Performance Indicators
<b>10. Follow-up of Health Care Workers and other occupations Vaccination Program.</b>	<b>Ministry of Health goals:</b> <ul style="list-style-type: none"> <li>◆ Sustaining the population's health through health promotion and prevention.</li> <li>◆ Integrating services throughout the health system.</li> </ul> <b>Public Health goals:</b> <ul style="list-style-type: none"> <li>◆ Prevents epidemics &amp; control communicable &amp; non communicable disease.</li> <li>◆ Protects against occupational and environmental hazards.</li> <li>◆ Promotes and encourages healthy lifestyle behaviors.</li> <li>◆ Prevent injuries.</li> </ul>	Analyze the data of completion of health care workers vaccination of health centers, governmental hospitals & other health facilities in order to protect them and to prevent infection with communicable diseases and to protect their patients and others.	<ul style="list-style-type: none"> <li>◆ To analyze data that reflects the immunization coverage among health care workers and other occupations in the monthly statistics.</li> <li>◆ To coordinate for administering vaccines and providing recommendations related to Immunizations of other occupations each based on the risk status based on their occupation through the different facilities providing preventative services and with coordination with the occupational health group.</li> </ul>	The number of reports' about health care workers and other occupations immunizations data that has been analyzed based on approved schedules.
<b>11. Follow-up of elderly vaccination Program.</b>	<b>Ministry of Health goals:</b> <ul style="list-style-type: none"> <li>◆ Sustaining the population's health through health promotion and prevention.</li> <li>◆ Integrating services throughout the health system.</li> </ul> <b>Public Health goals:</b> <ul style="list-style-type: none"> <li>◆ Prevents epidemics &amp; control communicable &amp; non communicable disease.</li> <li>◆ Promotes and encourages healthy lifestyle behaviors.</li> </ul>	To analyze the data of completion of vaccination of elderly population in nursing homes in coordination with the concerned.	<ul style="list-style-type: none"> <li>◆ To prepare the recommendation about of vaccination of this age category.</li> <li>◆ Provide the recommendations about vaccination and to coordinate to administer vaccines with the concerned.</li> <li>◆ Analyze data that reflects the immunization coverage of elderly in elderly nursing home.</li> </ul>	The number of reports' data that has been analyzed about elderly population vaccinated in nursing homes and elderly institutions.
<b>12. Follow-up of special needs vaccination program.</b>		To analyze the data of completion of vaccination of special needs population in their institutions according to their age category.	<ul style="list-style-type: none"> <li>◆ To prepare the recommendation about of vaccination of this category.</li> <li>◆ Provide the recommendations about vaccination and to coordinate to administer vaccines to special needs population from different age group in the special institutions and follow-up of defaults' of vaccination.</li> </ul>	The number of reports' data that has been analyzed about the number of special needs population given the vaccines in their special institutions and care centers.



Initiatives / Programs	Strategic Goal	The goals of the program.	Implementation plan	Key Performance Indicators
13. Follow-up of High Risk group vaccination program.	<p><b>Ministry of Health goals:</b> Sustaining the population's health through health promotion and prevention.</p> <p><b>Public Health goals:</b></p> <ul style="list-style-type: none"> <li>◆ Prevents epidemics and control communicable &amp; non communicable disease.</li> <li>◆ Promotes and encourages healthy lifestyle behaviors.</li> <li>◆</li> </ul>	<p>Follow the international and immunization committee (NITAG) recommendations about vaccination of patients with chronic diseases and those with risk factors of disease.</p>	<ul style="list-style-type: none"> <li>◆ To prepare the recommendation about of vaccination of this risk category.</li> <li>◆ Prepare the statistics with numbers of individuals vaccinated based on the reports sent from health units providing vaccination services.</li> </ul>	<p>The number of reports' data that has been analyzed about the number of high risk group patients that have been vaccinated with the recommended vaccines based on their risk status.</p>
14. Follow-up of travelers Vaccination Program.		<p>Follow the international and immunization committee (NITAG) recommendations about travel and updating the immunization schedule accordingly.</p>	<ul style="list-style-type: none"> <li>◆ Continuous review of the international update about travel and health in regards to diseases targeted by vaccines.</li> <li>◆ Updating the circulars about traveler vaccination.</li> </ul>	<ul style="list-style-type: none"> <li>◆ The number of reports' data that has been analyzed about traveler's vaccination.</li> <li>◆ Circulars issued in relation to travelers health.</li> </ul>
15. Follow-up of pregnancy vaccination program.		<p>To monitor the child protection at birth with some diseases targeted by vaccinations.</p>	<ul style="list-style-type: none"> <li>◆ To calculate the percentage of child protection at birth from neonatal tetanus and maintain it at 0%.</li> <li>◆ To calculate the percentage of immunity against Rubella among pregnant women and maintain 0% of Congenital Rubella Syndrome (CRS).</li> <li>◆ Calculate the Hepatitis B vaccination coverage for infants of Hepatitis b positive mothers given the vaccine within 24 hours of birth.</li> <li>◆ Monitor the immunity status of women.</li> </ul>	<ul style="list-style-type: none"> <li>◆ The percentage of child protection at birth from neonatal tetanus.</li> <li>◆ Hepatitis B vaccination coverage for infants of Hepatitis b positive mothers or unknown Hepatitis B status.</li> <li>◆ Number of suspected cases of Congenital Rubella Syndrome through blood testing of the newborns.</li> <li>◆ The percentage of immunity against rubella among pregnant mothers and vaccination of women that were discovered to be non-immune during their pregnancy.</li> </ul>

Initiatives / Programs	Strategic Goal	The goals of the program.	Implementation plan	Key Performance Indicators
16. Polio eradication and Acute Flaccid Paralysis (AFP) program.	<b>Ministry of Health goals:</b> <ul style="list-style-type: none"> <li>◆ Sustaining the population's health through health promotion and prevention.</li> </ul> <b>Public Health goals:</b> <ul style="list-style-type: none"> <li>◆ Prevents epidemics and control communicable &amp; non communicable disease.</li> <li>◆ Promotes and encourages healthy lifestyle behaviors.</li> </ul>	To maintain poliomyelitis free status in the kingdom.	<ul style="list-style-type: none"> <li>◆ Follow Acute Flaccid Paralysis cases in children below 15 years and to do the laboratory investigation.</li> <li>◆ Follow the investigations to ensure sustainability of polio free status in Bahrain based on local and World Health Organization (WHO) recommendations.</li> </ul>	<ul style="list-style-type: none"> <li>◆ The rate of AFP cases that has been followed-up in population below the age of 15 years.</li> <li>◆ The numbers of reports prepared and reviewed.</li> </ul>
17. Rubella and Congenital Rubella Syndrome (CRS) Surveillance Program.		To eliminate the Congenital Rubella Syndrome.	<ul style="list-style-type: none"> <li>◆ Estimate the Rubella immunity level in pregnant women and maintain 0% of CRS.</li> <li>◆ Monitor the CRS suspected cases in newborns and infants reported with congenital anomalies.</li> </ul>	<ul style="list-style-type: none"> <li>◆ The number of suspected CRS cases that has been followed.</li> <li>◆ The percentage of rubella immune pregnant mothers.</li> </ul>
18. Childhood Hepatitis B control Program.		Reduction of hepatitis B infection in children.	<ul style="list-style-type: none"> <li>◆ Analyze data about vaccination of children with required doses of hepatitis B vaccine.</li> <li>◆ Monitor the administration of both hepatitis B vaccine and hepatitis B immune-globulin to newborn infants of hepatitis B positive mothers to reduce the risk of acquiring the infection from the mother to her child.</li> </ul>	<ul style="list-style-type: none"> <li>◆ The vaccination coverage with 3 doses of hepatitis B vaccine in infants.</li> <li>◆ The vaccine coverage of hepatitis B vaccine to infant of hepatitis B positive mothers or of unknown status.</li> </ul>
19. Measles elimination Program.		Measles elimination in the Kingdom of Bahrain	<ul style="list-style-type: none"> <li>◆ Surveillance of cases and evaluate their vaccination status in coordination with communicable disease group.</li> <li>◆ Prepare the recommendations to health units providing vaccination services to organize for vaccination campaigns in case a measles case has been diagnosed in residency block, school or workplace to prevent measles virus importation and to contain the disease and prevent its spread in the community.</li> </ul>	The rate of endogenous cases of measles.

Initiatives / Programs	Strategic Goal	The goals of the program.	Implementation plan	Key Performance Indicators
20. Childhood Tuberculosis infection assessment program.	<b>Ministry of Health goals:</b> Sustaining the population's health through health promotion and prevention. <b>Public Health goals:</b> ♦ Prevents epidemics and control communicable & non communicable disease. ♦ Promotes and encourages healthy lifestyle behaviors.	Evaluate the exposure to the micro-organism that causes pulmonary TB in children before school entry.  To reduce the rate of meningitis in children.	To analyze data of the PPD test result done to pre-school children.  ♦ Update the immunization schedule based on NITAG recommendations regarding vaccines. ♦ Evaluate data regarding routine immunization in children. ♦ Study the immunization status among cases reported with vaccine targeted bacterial meningitis.	The rate of PPD test positive among pre-school children.  ♦ Routine vaccination coverage with quadrivalent meningococcal conjugate vaccine among children. ♦ Immunity rate among cases reported with vaccine targeted bacterial meningitis.
21. Control of bacterial meningococcal infection targeted by vaccine program.	<b>Ministry of Health goals:</b> Sustaining the population's health through health promotion and prevention. <b>Public Health goals:</b> ♦ Prevents epidemics and control communicable & non communicable disease. ♦ Promotes and encourages healthy lifestyle behaviors.	Reduce morbidity and mortality from rotavirus infections and reduce the rate of infection and deaths among children from rotavirus enteritis.	♦ Monitor the morbidity and mortality due to rotavirus infection after the rotavirus vaccine introduction in the routine immunization schedule in the kingdom. ♦ Surveillance of intussusception cases and compares the number of cases before and after the vaccine introduction.	♦ Coverage rate with rotavirus vaccine in children. ♦ The rate of intussusception cases identified after vaccine introduction.
22. Reduction of morbidity and mortality from rotavirus gastroenteritis & surveillance of intussusception cases program.	<b>Ministry of Health goals:</b> Sustaining the population's health through health promotion and prevention. <b>Public Health goals:</b> ♦ Prevents epidemics and control communicable & non communicable disease. ♦ Promotes and encourages healthy lifestyle behaviors.	Reduction of hepatitis A infection among children.	♦ Analyze data regarding immunization of children, adolescents in school and ensure completion of the recommended doses of Hepatitis A vaccine. ♦ To study the immunity status among hepatitis A confirmed cases.	The rate of hepatitis A infection after vaccine introduction according to age category.
23. Reduction of Hepatitis A infection Program.	<b>Ministry of Health goals:</b> Sustaining the population's health through health promotion and prevention. <b>Public Health goals:</b> ♦ Prevents epidemics and control communicable & non communicable disease. ♦ Promotes and encourages healthy lifestyle behaviors.	To control mumps infection.	♦ Evaluate data regarding routine immunization in children. ♦ Evaluate the immunization status by monitoring statistics of coverage with two doses of Measles Mumps & Rubella (MMR) vaccine.	The rate of vaccination coverage with Measles Mumps and Rubella (MMR) vaccine
24. Mumps control program.	<b>Ministry of Health goals:</b> Sustaining the population's health through health promotion and prevention. <b>Public Health goals:</b> ♦ Prevents epidemics and control communicable & non communicable disease. ♦ Promotes and encourages healthy lifestyle behaviors.			

## 6.2.2 Achievements in 2014

### Details:

- Updating the Vaccine Supply Chain Monitoring program and data quality assessment visits to include all governmental and private vaccination units.
- Updating data entry for the Elderly vaccination program in all governmental and private rehabilitation centers in Bahrain, to ensure that all vaccination related data is entered in the computerized system to obtain accurate statistical data and easily analyze it to be used in future research work.
- Updating data entry for High Risk group vaccination program, to ensure that all data entered in the computer system to obtain accurate statistical data and easily analyze it to be used in future research work.
- Upgrading of Congenital Rubella Syndrome program to follow up the suspected cases and to include (ICD10) diagnosis to identify suspected cases. Also, developing the electronic data entry system for this program.
- Updating data entry for the Vaccination Campaign Program to ensure complete data entry in the electronic program to obtain accurate statistical data and easily analyze the data to be utilized in future research work.
- Updating data entry for the Adverse Event Following Immunization Program (AEFI), to ensure that all vaccination information is entered in the computer system to obtain accurate statistical data and easily analyze it to be utilized in future research work.
- Updating Health Care Workers program and encouraging the use of the electronic system to enter all health care workers immunization data in the system.
- Implement new program for tracing immunization defaulter's students in certain private schools with high percentage of expatriates and those with high numbers of defaulters for routine vaccinations.
- Develop collaboration and coordination between the various ministries in order to ensure proper control of communicable diseases and ensuring the access of immunization services for all targeted populations.
- Send periodic information on infectious diseases and immunization coverages to the World Health Organization (WHO) and other concerned parties.
- Updating the forms used in data entry for childhood and high risk immunization programs.

## Events:

- Celebrated the global Immunization Week with the eastern Mediterranean region (EMRO). The immunization group participated actively in this week through vaccination campaigns, awareness campaigns and printing posters about this activity and sharing the final report of the activities with the EMRO.
- The Disease Control Section participated in the World Health Organization WHO meetings concerning vaccinations and vaccine preventable diseases, including the regional meeting of measles elimination.
- Many lectures were conducted about vaccine preventable diseases and the importance of completing the vaccination.
- Participation in local, regional and global workshops and in various committees such as the Measles elimination committee in the Ministry of Health and Hajj coordination Committee and other committees.
- Participation in radio and television programs regarding vaccines and vaccine preventable diseases.
- Workshop on vaccine management, vaccine supply chain monitoring and Adverse Event Following Immunization were conducted to the nurses in primary health care and private sector.
- Vaccine management workshops were conducted in collaboration with the World Health Organization Training Center of Oman to train nurses and pharmacists providing vaccination services in both governmental and private sectors.
- Training workshops about vaccination, adverse event following immunization and contraindications were conducted to the doctors and nurses.
- Training workshops about Acute Flaccid Paralysis, communicable diseases, vaccines and the updated vaccination data forms was conducted to the nurses in the treatment room and Mother and child care health and to the doctors in primary health care.
- Training workshop about communicable diseases and immunization was conducted in coordination with the school health section to the governmental and private schools.
- Lectures about infectious diseases and vaccine preventable disease were held in collaboration with various health sectors, such as the Royal Medical Services, the Ministry of the Interior and at certain departments of the Ministry of Health including pediatric department.
- Training of medical students in Arabian Gulf University and others and provide lectures to training doctors in the Family Practice Residency Program.

## **Publications:**

- Many press reports in local newspapers.
- Guideline booklet about vaccinations and vaccine preventable diseases was published by the EPI group and communicable disease group.
- Updating the vaccination certificate.
- Printing vaccination certificates for completion of vaccinations to all students in grade seven at the government and private schools.
- Printing vaccination certificates for all medical students for completing all the required vaccinations.
- Issuing guideline circulars on the surveillance of communicable diseases and vaccinations to all health facilities.
- Issuing a Guideline poster for vaccinations.
- An educational poster about vaccinations contraindications and about information that must be obtained before giving vaccination was published.
- Periodic health bulletins about communicable diseases and vaccinations were published.
- Issuing circulars about communicable diseases and vaccinations.

## **Campaigns:**

- In terms of providing protection for all, several awareness campaigns has been done for different population of society and several vaccination campaigns were held to vaccinate the school students, health care workers, medical students and others.
- Vaccination campaigns to the elderly and handicap and health care workers.
- MMR vaccinations campaigns were conducted in residency block where suspected cases of measles, mumps or Rubella have diagnosed.
- A wide response vaccination campaign with MMR vaccine and a pandemic analysis of cases and contacts was done in some areas.
- Vaccination campaign with MMR vaccine in one of the churches to raise the immunity level in the community especially among defaulters.
- Vaccination campaign with MMR vaccine in governmental and private schools where measles, mumps or Rubella cases were diagnosed.

Lecture	Lecturer	Attendance	Date
Pneumococcal Update	Dr. Jaleela S.Jawad	EPI & Communicable Diseases Staff	14/1/2014
Vaccine management		Pharmacist in PHC & DMM	Feb /2014
Pneumococcal diseases and Vaccines		EPI & Communicable Diseases Staff	20/03/2014
Importance of elderly vaccination		HCW	10/4/2014
Influenza Vaccination		EPI Staffs & Communicable Diseases	28/4/2014
Vaccination Schedule ( Polio Update )		EPI Staffs & Nurses	7/05/2014
AFP and High risk group Vaccination	Dr. Jaleela S.Jawad & Dr. Basma Al Saffar	MCH Doctor and Nurses in private and governmental facilities	27/05/2014
Defaulters and traveler Vaccination			28/05/2014
WHO/UNICEF Vaccine management workshop	Dr. Jaleela & Dr Basma WHO/ UNICEF Collaborate Center in Oman	EPI staff, Nurses in governmental and private sections Pharmacists Central store staff	31/05/2014 - 2/06/2014
High risk group Defaulter Vaccination	Dr. Basma Al Saffar	School Nurses	19 and 23 06/2014
Vaccine management, AEFI, and cold chain	Dr. Jaleela & Dr. Basma	PHC Nurses	July/2014
Vaccination for students at school	Dr. Jaleela S.Jawad	School health nurses and MOE instructors	October + November 2014
“Update in vaccination” workshop		DCS staff, Doctors & Nurses in governmental and private sections, Pharmacists	13/11/2014

### 6.3. Non-Communicable Diseases Group:

Non communicable diseases (NCDs) are a group of diseases of long duration and generally slow progression. The four main types of NCDs are cardiovascular diseases (CVD), cancer, chronic respiratory diseases and Diabetes Mellitus (DM). These diseases share these risk factors: tobacco use, physical inactivity, unhealthy diets and the harmful use of alcohol.

NCDs kill more than 36 million people each year, representing 63% of all annual deaths.

Around 80% of all NCD deaths occur in low- and middle-income countries.

The National Non-communicable Diseases Risk Factors Survey conducted in the Kingdom of Bahrain in 2007, showed that the prevalence of DM was 14.3%, Hypertension 38.2% and high cholesterol level 40.6%. Also, the study revealed that the overall prevalence of obesity was 36.3%; while the overall prevalence of overweight was 32.9%.

Furthermore, 62.0% reported daily intake of vegetables while only 49.6% reported daily intake of fruits. In addition, 57.1% of the participants in the survey, stated that they do not practice any physical activity at leisure time. The overall prevalence of smoking was found to be 19.9%.

Similar to the situation in the industrialized countries, the data of 2013 in Bahrain showed that NCD mortality constituted about 63% of total death, with CVD accounting for about 34%, cancer 14%, diabetes accounted for 24% , chronic respiratory diseases 3% and for other NCD diseases has reached 24% of total deaths.

Data also showed that in the age group 30-70 years, NCD accounted for 65% of the total deaths, with CVD accounting for 34%, diabetes for 23%, and cancer 18%. This constitutes a challenge for the health authorities to urgently start the implementation of the national comprehensive plan in order to reduce the life loss during productive age.

As these diseases share the same risk factors, therefore the strategies for prevention can be integrated into one common approach by adopting an Integrated National Action Plan (INAP).



In addition, it is important to strengthen the public-private partnership that are built on shared responsibility so that the government is not solely responsible for getting these programs out to the communities, but can rely on groups and national organizations that have complementary mandates.

## General roles of NCD unit:

### Mission

To prevent and control major Non-Communicable Diseases (NCDs) in the Kingdom of Bahrain by integrating a comprehensive non-communicable disease prevention and control program within the context of intra sectorial and inter sectorial approach (integrated national action plan).

### General Goal

To reduce the preventable and avoidable burden of morbidity, mortality and disability due to Non communicable diseases in the kingdom of Bahrain by means of multi sectorial collaboration and cooperation at national levels, by enabling the population to reach the highest attainable standards of health, quality of life, and productivity at every age so making these diseases no longer a barrier to well-being or socioeconomic development, through reducing risk factors associated with them such as obesity, high blood pressure, tobacco use, diabetes and physical inactivity and unhealthy diet.

This will be accomplished through implementing the following steps:

- \* Collecting relevant health data to evaluate the current status of NCDs in the community.
- \* Adopting a comprehensive national awareness campaigns to promote healthy life style.
- \* Implementing an integrated plan to enhance preventive and therapeutic health services in the primary and secondary health care.
- \* Enhancing tertiary and rehabilitation services.

## Main Objectives

### Long Term Objectives :

25% reduction in current NCD ( CVD, Cancers, Diabetes and chronic respiratory diseases ) mortality in adults (30-70)during 15 years.

### Strategic Objectives:

- ◆ Primordial prevention of NCDs
- ◆ Primary prevention of NCDs
- ◆ Secondary prevention of NCDs
- ◆ Quality improvement of health services with its three levels as provided to NCD patients and its complications.
- ◆ Conduction and support of NCD research and Studies
- ◆ Empowerment of NCD patients and their families to take part in the services provided and its quality control.
- ◆ Community participation for control of NCDs
- ◆ Support of methods of controlling, monitoring and evaluation of NCDs.

### General Recommendation:

Given the magnitude of the NCDs problem in the Kingdom of Bahrain and its profound adverse impact on health and the economy, there is an urgent need for initiation of the national preventive action plan.

## Specific recommendations:

- 1- Inclusion of prevention of NCDs within the national development plans and policies for each country.
- 2- Work towards allocation of a specific part in the MOH budget to implement NCD control plans and programs.
- 3- Improvement of healthcare quality and provision of human and financial resources necessary to tackle these diseases at the three levels of healthcare.
- 4- Development of the PHC centers infrastructure to make these centers more appropriate to combat NCDs through improvements of diagnostic services and provision of essential drugs.
- 5- Enacting regulations and setting national policies aiming at reduction of risk factors and prevention of unhealthy life styles to cope with international directions in this respect.
- 6- Implementation of community initiatives for early detection of NCDs as well as health awareness campaigns for promotion of healthy life styles.
- 7- Strengthening partnership between governmental and non- governmental institutions as well as private sector with emphasis on joint community responsibility and the importance of coordinating efforts to control NCDs.
- 8- Setting an effective system for surveillance and control of NCDs.
- 9- Conduction and support of research and studies on NCDs.
- 10- Calling upon all concerned sections in MOH to update their plans based on the national action plan for NCDs (2014 – 2025) endorsed in the expanded meeting.

## Main Activities in 2014:

### 1– Protect Your Heart Campaigns in Governmental sites:

Year	2010	2011	2012	2013	2014
Total Campaigns	15	5	14	4	15



### 2– Protect Your Heart Campaigns in Non-Governmental sites:

Year	2010	2011	2012	2013	2014
Total Campaigns	0	0	4	9	3



### 3- NCD Clinics:

KINGDOM OF BAHRAIN  
MINISTRY OF HEALTH  
PUBLIC HEALTH  
DISEASES CONTROL SECTION  
NON-COMMUNICABLE DISEASES UNIT

**NCD Clinics Monitoring Monthly Report 2014 (Actual Visits)**

مملكة البحرين  
وزارة الصحة  
إدارة الصحة العامة  
قسم معالجة الأمراض  
وحدة الأمراض المزمنة غير السارية

No	GOVERNORATE/HCS	Clinic Started Date	Working Days	Hour	Registered Patients	Monthly Average	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Total Visits	% Total
1	CAPITAL GOVERNORATE		3.3	4.7	19,981	713	736	751	849	800	902	748	456	655	739	654	668	703	8,561	28.69%
1	ALHOORA HEALTH CENTER	01-04-12	2	3	2,858	98	73	72	68	89	102	119	103	90	97	108	125	128	1,174	3.93%
2	ALNAIM HEALTH CENTER	01-10-09	4	5	8,933	186	204	216	205	201	195	154	112	197	218	188	180	166	2,236	7.49%
3	ALKAZI (WORKERS HEALTH CENTRE)	01-01-12	5	5	1,691	175	197	186	226	202	170	71							1,052	3.53%
4	BILAD ALGADEEM HEALTH CENTER	01-03-11	3	5	1,973	195	86	122	137	130	138	163	95	156	188	132	138	140	1,625	5.45%
5	IBN SINNA HEALTH CENTER	12-04-12	2	5	2,834	78	69	40	77	78	59	85	60	93	81	81	108	102	933	3.13%
6	SH. SABAH AL SALEM H. CENTER	01-01-11	4	5	1,692	128	107	115	136	100	138	156	86	119	155	145	117	167	1,541	5.17%
2	CENTRAL GOVERNORATE		2.4	3.5	22,749	430	426	398	484	436	419	457	237	398	572	433	445	459	5,164	17.31%
7	AALI HEALTH CENTER	15-06-11	3	3	4,787	103	118	104	136	115	114	112		56	101	94	101	86	1,137	3.81%
8	AHMED ALI KANOO HEALTH CENTER	01-05-11	2	3	540	56	65	59	47	73	43	54	38	68	77	39	45	59	667	2.24%
9	ISA TOWN HEALTH CENTER	12-06-12	2	5	5,515	75	52	51	59	45	63	84	43	81	121	107	94	98	898	3.01%
10	SITRA HEALTH CENTER	01-03-10	3	3.5	11,907	114	114	97	138	87	115	121	90	93	166	118	104	123	1,366	4.58%
11	YUSUF ENGINEER HEALTH CENTER	20-02-13	2	3	0	91	77	87	104	116	84	86	66	100	107	75	101	93	1,096	3.67%
8	MUHARRAQ GOVERNORATE		2.2	4.3	20,666	540	542	498	588	609	515	508	301	516	878	564	811	593	6,485	21.74%
12	NBB HEALTH CENTRE - DAIR	26-04-12	1	3.5	889	46	21	28	26	47	48	40	29	53	55	49	65	88	549	1.84%
13	MUHARRAQ HEALTH CENTER	01-01-09	3	5	6,318	149	191	167	174	154	154	177	75	140	160	120	117	154	1,783	5.98%
14	NBB HEALTH CENTRE -ARAD	01-05-12	2	5	5,425	93	67	72	80	119	93	99	48	69	145	97	123	98	1,110	3.72%
15	NBB HEALTH CENTRE -HIDO	16-02-12	3	5	216	159	204	157	168	180	139	115	115	131	198	153	188	161	1,909	6.40%
16	SH. SALMAN HEALTH CENTER	01-11-12	2	5	7,818	95	59	74	100	109	81	77	34	123	118	145	118	96	1,134	3.80%
4	NORTHERN GOVERNORATE		3.4	4.6	22,805	641	613	586	654	661	696	751	405	683	853	562	579	644	7,687	25.77%
17	BUDAIYA HEALTH CENTER	01-10-09	3	5	3,483	168	168	176	195	203	184	201	112	191	182	125	125	157	2,019	6.77%
18	HAMAD TOWN HEALTH CENTER	01-02-12	4	5	3,064	143	144	141	140	123	139	188	74	151	205	108	135	163	1,711	5.73%
19	JOHAFS HEALTH CENTER	31-05-12	3	3	10,872	91	53	39	52	86	94	91	68	125	173	122	84	104	1,091	3.66%
20	KUWAIT HEALTH CENTRE	15-01-11	4	5	3,876	128	116	121	139	148	145	159	71	93	169	106	136	137	1,540	5.16%
21	MOHD J.KANOO H.CENTRE	23-02-12	3	5	1,510	111	132	109	128	101	134	112	80	123	124	101	99	83	1,326	4.44%
5	SOUTHERN GOVERNORATE		1.3	3	8,262	162	120	118	126	154	159	174	158	154	226	211	148	190	1,938	6.50%
22	EAST RIFFA HEALTH CENTER	01-04-12	1	3	3,651	65	20	36	36	37	54	80	74	77	108	96	66	93	777	2.60%
23	HAMAD KANOO HEALTH CENTER	01-10-09	2	3	3,686	83	85	77	77	99	95	83	74	72	94	87	63	86	992	3.32%
24	JAW & ASKAR CLINIC				150	0	0												0	0.00%
25	ZALLAG HEALTH CENTER	01-02-12	1	3	775	14	15	5	13	18	10	11	10	5	24	28	19	11	169	0.57%
<b>Total</b>			<b>2.7</b>	<b>4.2</b>	<b>94,463</b>	<b>2,486</b>	<b>2,437</b>	<b>2,351</b>	<b>2,661</b>	<b>2,660</b>	<b>2,591</b>	<b>2,638</b>	<b>1,557</b>	<b>2,406</b>	<b>3,066</b>	<b>2,424</b>	<b>2,451</b>	<b>2,593</b>	<b>29,835</b>	<b>100.00%</b>

DATA AUDIT & ANALYSIS BY: AHMED MARAJ

Legend:  Data Not Received     Data Missing     No NCD Clinic

Date: 9-Feb-2015



# 4- Non Communicable Diseases Bulletin:



**Kingdom of Bahrain**  
Ministry of Health  
Public Health Directorate  
Non Communicable Diseases Unit



**17.3 million** deaths a year

**No.1 Killer**

**Cardiovascular disease**

**ISSUE NO. 4**  
**October 2014**

**20**

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**Non Communicable Diseases Bulletin**

**100%** **100%** **100%** **100%**

**3%**

**Acknowledgement:**

Deep sense of gratitude to Dr. Mervin ...

Editorial Board: ...

**Bahrain**

Progress in Implementation the regional Framework for action

**Noncommunicable diseases (NCDs) account for 61% of all deaths**

**31%**

Cardiovascular disease

**10%**

Cancer

**10%**

Diabetes

**10%**

Chronic Respiratory Disease

**100%** **100%** **100%** **100%**

**Contributions:**

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**Table 3: Total Patients of Non-communicable Diseases Registered in PHC by Nationality & Gender (April 2007 - December 2013)**

No	GOVERNORATE/CENTRE	Bahraini		Non-Bahraini		Total	N (%)
		Female	Male	Female	Male		
1	CAPITAL GOVERNORATE	4,648	5,175	27,554	2,623	33,980	21.17%
2	MUHAJIRI GOV. CENTER	607	794	3,146	504	4,451	2.75%
3	AL-BAHRAH GOV. CENTER	3,566	3,641	12,806	841	15,814	9.92%
4	MADINA SAUDI GOV. CENTER	5	50	62	1,617	1,674	0.01%
5	AL-KHAFJA GOV. CENTER	725	725	4,956	121	5,781	3.58%
6	AL-ARBAIN GOV. CENTER	371	429	3,566	543	4,449	2.75%
7	AL-MADINA GOV. CENTER	442	397	3,762	371	4,532	2.82%
8	TOTAL PATIENTS	31,208	25,879	115,328	13,328	154,743	95.97%
9	CENTRAL GOVERNORATE	10,024	7,665	18,138	1,141	20,009	12.92%
10	MUHAJIRI GOV. CENTER	2,371	1,879	9,163	254	11,677	7.54%
11	AL-BAHRAH GOV. CENTER	2,810	1,909	13,666	10	16,495	10.65%
12	MADINA SAUDI GOV. CENTER	2,810	1,909	13,666	10	16,495	10.65%
13	AL-ARBAIN GOV. CENTER	2,810	1,909	13,666	10	16,495	10.65%
14	AL-KHAFJA GOV. CENTER	2,810	1,909	13,666	10	16,495	10.65%
15	AL-MADINA GOV. CENTER	2,810	1,909	13,666	10	16,495	10.65%
16	TOTAL PATIENTS	40,009	31,679	154,743	2,328	157,071	100.00%
17	AL-KHAFJA GOV. CENTER	442	397	3,762	371	4,532	2.82%
18	AL-ARBAIN GOV. CENTER	371	429	3,566	543	4,449	2.75%
19	AL-BAHRAH GOV. CENTER	3,566	3,641	12,806	841	15,814	9.92%
20	MUHAJIRI GOV. CENTER	607	794	3,146	504	4,451	2.75%
21	CAPITAL GOVERNORATE	4,648	5,175	27,554	2,623	33,980	21.17%
22	MADINA SAUDI GOV. CENTER	5	50	62	1,617	1,674	0.01%
23	AL-KHAFJA GOV. CENTER	725	725	4,956	121	5,781	3.58%
24	AL-ARBAIN GOV. CENTER	371	429	3,566	543	4,449	2.75%
25	AL-MADINA GOV. CENTER	442	397	3,762	371	4,532	2.82%
26	TOTAL PATIENTS	31,208	25,879	115,328	13,328	154,743	95.97%
27	CENTRAL GOVERNORATE	10,024	7,665	18,138	1,141	20,009	12.92%
28	MUHAJIRI GOV. CENTER	2,371	1,879	9,163	254	11,677	7.54%
29	AL-BAHRAH GOV. CENTER	2,810	1,909	13,666	10	16,495	10.65%
30	MADINA SAUDI GOV. CENTER	2,810	1,909	13,666	10	16,495	10.65%
31	AL-ARBAIN GOV. CENTER	2,810	1,909	13,666	10	16,495	10.65%
32	AL-KHAFJA GOV. CENTER	2,810	1,909	13,666	10	16,495	10.65%
33	AL-MADINA GOV. CENTER	2,810	1,909	13,666	10	16,495	10.65%
34	TOTAL PATIENTS	40,009	31,679	154,743	2,328	157,071	100.00%
35	AL-KHAFJA GOV. CENTER	442	397	3,762	371	4,532	2.82%
36	AL-ARBAIN GOV. CENTER	371	429	3,566	543	4,449	2.75%
37	AL-BAHRAH GOV. CENTER	3,566	3,641	12,806	841	15,814	9.92%
38	MUHAJIRI GOV. CENTER	607	794	3,146	504	4,451	2.75%
39	CAPITAL GOVERNORATE	4,648	5,175	27,554	2,623	33,980	21.17%
40	MADINA SAUDI GOV. CENTER	5	50	62	1,617	1,674	0.01%
41	AL-KHAFJA GOV. CENTER	725	725	4,956	121	5,781	3.58%
42	AL-ARBAIN GOV. CENTER	371	429	3,566	543	4,449	2.75%
43	AL-MADINA GOV. CENTER	442	397	3,762	371	4,532	2.82%
44	TOTAL PATIENTS	31,208	25,879	115,328	13,328	154,743	95.97%
45	CENTRAL GOVERNORATE	10,024	7,665	18,138	1,141	20,009	12.92%
46	MUHAJIRI GOV. CENTER	2,371	1,879	9,163	254	11,677	7.54%
47	AL-BAHRAH GOV. CENTER	2,810	1,909	13,666	10	16,495	10.65%
48	MADINA SAUDI GOV. CENTER	2,810	1,909	13,666	10	16,495	10.65%
49	AL-ARBAIN GOV. CENTER	2,810	1,909	13,666	10	16,495	10.65%
50	AL-KHAFJA GOV. CENTER	2,810	1,909	13,666	10	16,495	10.65%
51	AL-MADINA GOV. CENTER	2,810	1,909	13,666	10	16,495	10.65%
52	TOTAL PATIENTS	40,009	31,679	154,743	2,328	157,071	100.00%

**Table 4: Total Patients of Coxs Non Communicable Diseases & Coxs Risk Factors Patients Registered in PHC by Age Groups, Nationality & Gender (April 2007 - December 2013).**

AGE GROUP	Bahraini		Non-Bahraini		TOTAL	% NCD
	Female	Male	Female	Male		
Age 20 to 29	2,019	1,728	323	396	4,266	5.33%
Age 30 to 39	3,678	2,659	1,128	1,462	8,027	11.16%
Age 40 to 49	7,579	5,022	2,064	4,039	18,694	23.37%
Age 50 to 59	10,645	7,066	1,876	4,552	24,539	30.67%
Age 60+	11,729	9,330	789	1,743	23,581	29.87%
TOTAL	35,650	25,795	6,180	12,382	80,007	100.00%
% TOTAL	44.56%	32.24%	7.72%	15.48%	100.00%	

### WHO Calls on Individuals and Countries to Reduce Salt and Improve Health

On World Heart Day 2014, the World Health Organization (WHO) calls on individuals and countries to support public health efforts to reduce salt intake, and on individuals to consume less salt to avoid high blood pressure and heart disease. High salt intake is a key contributor to the increase in non-communicable diseases (NCDs) worldwide, NCDs account for over 2.2 million deaths, or over 57% of mortality, in the Eastern Mediterranean Region annually. Cardiovascular diseases alone, in which high salt intake plays a major role, account for 1.5 million deaths, or over 40% of mortality, in the region. The scientific evidence linking high blood pressure to high salt intake, and conversely reducing salt intake to improve health outcomes, is conclusive. In countries where salt intake was reduced by a gram per person per day, deaths from stroke and heart disease were reduced by 13% and 10% respectively. "Data from the Eastern Mediterranean Region shows that the average salt consumption in most countries is around 10 grams per person per day, which is double the amount recommended by WHO. Reducing salt intake to less than 5 grams per person per day can prevent cardiovascular disease, which is the number one killer in the region. High salt intake is a major risk factor for heart disease, stroke, kidney disease, osteoporosis and other chronic diseases. Reducing salt intake is a simple and effective way to improve health and reduce the burden of NCDs. WHO is launching a global voluntary target, endorsed by the World Health Assembly in May 2013, to reduce salt intake by 30% by the year 2025. Reducing salt intake is a key public health action to reduce salt intake; several countries are in the process of implementing this guidance. A key measure is setting national standards for the amount of salt in various food items. Food is the first priority for action since up to 90% of people's salt intake in the region comes from salt in bread.

WHO press release 2014

### Non-communicable Diseases Clinics in PHC 2009-2013

Data analysis shows that 59.2% of those attended NCD clinics are Diabetes, Type 2, reflecting the effectiveness of these clinics, and 31% are hypertensive, which indicate a need for more efforts to encourage doctors to refer more hypertensive patients to NCD clinics.

The most important objectives of these clinics is to estimate the 10-year cardiovascular risk for these patients. The highest risk were those with a total cholesterol category (62.8%) in primary health care. Most of NCD patients can be managed in primary health care.

Graph (11): NCD registered patients NCD risk stratification

### Antismoking Group Activities

The Kingdom of Bahrain ratified the WHO Framework Convention on Tobacco Control in 2007 and this agreement aims to set the agenda for international laws to reduce initiation of tobacco use and promote cessation of use.

Since then work began immediately to implement the terms of the agreement starting with the issuance of Royal Decree-Law No. (1) for the year 2009 on the control of tobacco smoking in the Kingdom, also contributed to the formation of the National Committee to combat smoking and tobacco, headed by the Minister of Health, which includes representatives from the various governmental sectors.

In accordance, in August 2010 a special committee to follow up and implement the Anti-Smoking Law was formulated in Public Health Directorate in 2013, the functional structure of anti-smoking group was approved, and since that time the committee has been transformed to the anti-smoking group under the name of the National Committee for Tobacco Control.

The main objectives of the anti-smoking group are:

- Follow up on complaints received about smoking violations.
- Conduct the records of the violations which have been written in accordance with the provisions of Law No. 8 of 2009 to the Public Prosecution.
- Prepare reports and statistics and making recommendations on steps that require a license for the provision of services of different kinds of tobacco or the provision of services for shops.
- Collaborate with the competent authorities inside and outside the Ministry of Health to facilitate the implementation of Antismoking Law.

The group has specialized staff in the field of control and inspection of health who were assigned after being subjected to a training course at the Public Prosecution Department about how to dispose of offenses, collect evidence and refer them to the prosecuting authorities.

Graph (10): Antismoking group activities by Quarter - 2013

Graph (10): Antismoking group activities by Quarter - 2013

### Protect Your Heart Campaigns 2010-2014

Activity	2010	2011	2012	2013	2014
1. Public awareness campaigns	100,000	120,000	150,000	180,000	200,000
2. Community health workers	50,000	60,000	70,000	80,000	90,000
3. Health fairs	30,000	35,000	40,000	45,000	50,000
4. Mobile health units	20,000	25,000	30,000	35,000	40,000
5. School health programs	10,000	12,000	15,000	18,000	20,000
6. Workplace health programs	5,000	6,000	7,000	8,000	9,000
7. Media campaigns	15,000	18,000	22,000	25,000	30,000
8. Community health committees	8,000	10,000	12,000	15,000	18,000
9. Health education materials	12,000	15,000	18,000	22,000	25,000
10. Health promotion activities	7,000	8,000	10,000	12,000	15,000
11. Health education materials	6,000	7,000	8,000	10,000	12,000
12. Health education materials	5,000	6,000	7,000	8,000	9,000
13. Health education materials	4,000	5,000	6,000	7,000	8,000
14. Health education materials	3,000	4,000	5,000	6,000	7,000
15. Health education materials	2,000	3,000	4,000	5,000	6,000
16. Health education materials	1,000	2,000	3,000	4,000	5,000
17. Health education materials	1,000	2,000	3,000	4,000	5,000
18. Health education materials	1,000	2,000	3,000	4,000	5,000
19. Health education materials	1,000	2,000	3,000	4,000	5,000
20. Health education materials	1,000	2,000	3,000	4,000	5,000

### Graph (4): Percentage of Non Communicable Diseases Cases Registered in PHC (April 2007 - December 2013)

Graph (4): Percentage of Non Communicable Diseases Cases Registered in PHC (April 2007 - December 2013)

Table 2: Total Cases of Non-communicable Diseases Registered in PHC by Health Center & Diseases (April 2007 - December 2013)

Health Center	Diabetes	Hypertension	Ischemic heart disease	Stroke	Chronic obstructive pulmonary disease	Cancer
PHC 1	100	120	150	180	200	250
PHC 2	110	130	160	190	210	260
PHC 3	120	140	170	200	220	270
PHC 4	130	150	180	210	230	280
PHC 5	140	160	190	220	240	290
PHC 6	150	170	200	230	250	300
PHC 7	160	180	210	240	260	310
PHC 8	170	190	220	250	270	320
PHC 9	180	200	230	260	280	330
PHC 10	190	210	240	270	290	340
PHC 11	200	220	250	280	300	350
PHC 12	210	230	260	290	310	360
PHC 13	220	240	270	300	320	370
PHC 14	230	250	280	310	330	380
PHC 15	240	260	290	320	340	390
PHC 16	250	270	300	330	350	400
PHC 17	260	280	310	340	360	410
PHC 18	270	290	320	350	370	420
PHC 19	280	300	330	360	380	430
PHC 20	290	310	340	370	390	440

## 6.4. Occupational Health Group:

### Introduction & Overview of Occupational Health Group

The Occupational Health Unit at the Ministry of Health was established in 1976. During the past 34 years or so, sections of the Unit has been either transferred to other ministries or rotated within different directorates at the Ministry of Health.

Currently the Occupational Health Unit functions under the auspices of the Disease Control Section. The current manpower of the occupational health is five staff. The head of the unit, two occupational physicians and two staff nurse.

### Functions:

The main functions of Occupational Health Unit are: Periodic Medical Examination of workers in private and government sector; medical consultation for referred cases; awareness and training in occupational health.

### Vision:

The health of workforce is the cornerstone of economic development.

### Mission:

Strive to create a better working environment and to provide integrated and quality occupational health services that will help to achieve the highest degree of physical fitness, psychological and social wellbeing of all workers in all occupations and to ensure that their health is not affected because of their professions.

### Aim:

- To promote health of workers.
- To contribute positively to productivity, quality of work, work motivation and job satisfaction.
- To improve overall quality of life of workers and society.



## Values:

- Be committed to excellence and quality in every aspect of our work.
- Treat those we serve with concern, kindness and respect.
- Act openly and truthfully in everything we do.
- Ensure equity and fairness
- Make workers feel valued and demonstrate integrity.
- Promote team work by recognizing that our combined efforts exceed what we can accomplish individually.

## Priority objectives:

- Strengthening national policies for health at work and developing necessary policy tools.
- Developing health work environment, and health work practices.
- Establishment of support services for occupational health.
- Development of occupational health standards based on scientific risk assessment.
- Establishment of registration and data system information services for effective transmission and data rising of public awareness through public information.
- Workplace Health promotion.
- Radiation protection.
- Research.

## Goals

- Execute the Ministerial order (3) of 2001 concerning Periodic Medical Examination for workers at risk in establishments.
- Early detection/ management of occupational diseases.
- Minimize the damage caused by occupational diseases.
- Reduce the ill effect of exposure to physical, chemical, biological, as well as ergonomically factors.
- Improve workers social, mental & social well being.
- Increase workforce awareness about Occupational hazards.
- Increase productivity and reduce the cost of absenteeism, and treatment.
- Prevent or reduce occupational accidents.
- Reducing financial burden on the whole community.
- Identify the magnitude of occupational related diseases, injuries and cancers in Bahrain.
- Identification and Quality Control for general Radiography equipment in SMC and local health centers.

## Duties Occupational Health Group:

- Periodic Medical examination
- Carry out Workplace inspection visits to factories and various work sites.
- Medical education and training courses for health workers to deepen and increase medical knowledge in the field of occupational health.
- Health education and promotion at workplace
- Implementing the Action Plan prepared by the Commission on Safety and Occupational Health.
- Preparation of periodic reports on activities and achievements of the occupational health department and proposals on development work.
- Analysis of reports and questionnaires received from international organizations and Arab, regional and to take the necessary action in respect thereof.
- Receiving and recording of Occupational diseases and Injuries reports for Health Care Workers in the Ministry of Health.
- Supervision and in collaboration with a group of immunization on vaccination of health workers at the Ministry of Health.
- Conducting studies and research in the field of occupational health.
- Consultations on referrals from medical commissions or local health centers.
- Identification and Quality Control for general Radiography equipment in SMC and local health centers.

## Programs

### 6.4.1 Periodic Medical Examination.

Compliance with Ministerial order (3) of 2001 concerning Periodic Medical Examination for workers at risk in establishments, where there is no Occupational Health Units (Occupational clinic). Occupational diseases are unique in the sense that hazards that cause them are known even before exposure of the workers takes place. This fact characterizes occupational diseases as being entirely preventable; exposure can be controlled or prevented.

To minimize the damage caused by occupational diseases, the best alternative is early detection of pathological changes at a stage when they are reversible. Certain occupational exposures cause early clinical, functional, biochemical or morphological changes which when detected early enough, are reversible. Unfortunately, there are other occupational diseases which cannot be detected at a reversible stage.

### Objectives of the Program

1. To execute the Ministerial order (3) of 2001 concerning Periodic Medical Examination for workers at risk in establishments.
2. To minimize the damage caused by the occupational diseases.

### 6.4.2 Occupational Health Education

Dissemination of information about the patterns of occupational diseases, occupational related diseases & occupational accidents. This will involve description of the relationship of different work environments and worker's health and how to prevent or reduce its detrimental effects.

#### Objectives of the Program

1. Improve workers social, mental & social well being.
2. Identify causes of work accidents and methods of prevention.
3. Describe how different styles of work practices might affect the health and safety of the worker, colleagues and others.
4. Reducing financial burden on the whole community.

### 6.4.3 Development of Occupational Health Services

#### Objectives of the Program

1. To execute the Ministerial order (3) of 2001 concerning Periodic Medical Examination for workers at risk in establishments
2. Assess the Magnitude of Occupational related diseases, injuries and cancers.
3. Improve workers social, mental & social well being.
4. To minimize the damage caused by the occupational diseases.
5. Identify causes of work accidents and methods of prevention.

### 6.4.4 Occupational Health Monitoring

#### Objectives of the Program

1. To execute the Ministerial order (3) of 2001 concerning Periodic Medical Examination for workers at risk in establishments
2. Know health system and legislation.
3. Have first aid knowledge.
4. Be aware of all health and safety- related hazards.

### 6.4.5 Radiation Protection

Radiation protection services program at MOH is actively involved in, or available for consultation on, all matters concerning radiation safety and medical physics issues in diagnostic, interventional, nuclear medicine and radiation oncology areas, including research applications.

Its involvement is especially warranted where radiation doses are known to be high, and for optimization of doses for high risk groups such as infants, for dose constraints in health screening and risk assessment in research proposals.

Also, it is actively engaged in quality control & quality assurance program of radiation equipment modalities in the three areas of radiology, nuclear medicine and radiation oncology.

## Roles

### In justification:

- Generic risk assessment, especially for new equipment of techniques
- Communication with practitioner
- Risk assessment for research proposals, and
- Dose constrains in research.

### In Optimization, including dosimetry and equipment quality assurance (QA)

- System for dose calibration and quantification
- Diagnostic reference levels and review
- Patients dose monitoring program and review, including dose reduction strategy
- Image quality evolution and outcome performance indicators
- Selection of equipment to include specification of radiology equipment
- Commissioning of new equipment & communication with applications specialist
- Advice on suspension of existing equipment
- Maintenance of equipment inventory
- Imaging equipment replacement policy review
- Audit and development of audit for medical exposures
- Operator function as identified for the medical physicist in the employer's procedures,
- Communication with other employees and with maintenance engineers on practical aspects.

### In Other radiation protection matters concerning medical exposures:

- Incident investigation including patient dose assessment
- Radiation protection of comforters and carers.
- Communication role during inspection by the relevant statutory authorities
- Communication with other employers
- Advice on implementation of employer's procedures
- Training
- Role in multidisciplinary medical audit and review, and
- Clarifying overlaps with other radiation protection and exposure legislation.

## Highlights of OHG activities for 2014:

### Within Ministry of Health:

- Periodic Medical Examination (PME) that include completion of Occupational Health questionnaire, Blood tests, X-Rays, ECG, Visual acuity, color vision, Audiometry and Spirometry.

### Ministry of Health:

Laundry  
CSSD  
Radiology  
Artificial Kidney Unit  
Oncology wards  
Food hygiene (Kitchen Staff)  
Psychiatric Hospital  
Maintenance Staff  
Environmental Health Workers

### Other Ministries

Ministry of Works. Sewerage Workers

### Private Sector

Midal Cable  
Ahmadi Security  
Bahrain Atomaizars  
Bahrain Maintenance and Marine Services (BMDS)  
Durrat Resort  
Metal of Bahrain  
Oil Field Services (MTQ)  
Nasser Abd Mohammed B.S.C  
New Island Contracting (NIC)  
Yateem Oxygen

- Consultations on referrals from medical commissions and Local Health Centers.
- Update DPPs on Health Care workers (HCW) Health and Safety.
- Participation in the meetings of Infection control teams in SMC.
- Participation in the Accreditation task groups meeting for Radiology, oncology and health centers.
- Participation in the International Health Regulations committee meetings.
- Participation in the meetings with Immunization group and I-Seha team to develop the Immunization Health Care Workers electronic system.
- Participation in the meetings of the Hearing protection Committee.
- Participation in the Primary care Incidence Committee Meetings.
- Implementing health promotion through periodic medical examination.
- Preparation of the statistics of Health Care Workers vaccinations.
- Vaccination of health care workers in SMC.
- Workplace visit to Radiology sections in SMC and local Health Centers.

## Outside Ministry of Health Participation:

- The 7<sup>th</sup> GCC Occupational Health & Safety meeting: Qatar (December 2014).
- The Occupational Safety & Health Supreme Committee meetings.
- The Supreme council for environment Radiation Safety Information Managements Systems (RASIMS) committee.
- The Mutual Emergency Marine Aid Centre (MEMAC) committee: development of the action plan for response to radiological or nuclear emergencies.

## Education & Training

The unit is actively participating in many continuous educational and training activities within & outside MOH through workshops, conferences, lectures, courses and campaigns to facilitate the exchange of knowledge and skills concerning OH&S.

## Inside the Ministry of Health:

- Deliver a course and Training in OH&S for FPRP residents.
- Deliver a presentation on Occupational Injuries during the introductory course for FPRP Residents.
- Deliver a presentation on Reporting of Occupational Diseases & Injuries to Ahmed Ali Kanoo H.C staff.

## Outside the Ministry of Health:

- Deliver a presentation on Occupational Health & Safety for BANAGAS workers during the Safety, Health & Environment Week.
- Participation in the National Health Insurance Forum.
- Participation in the Expert mission meeting on Technical cooperation Advisory mission from IAEA by Dr. Petra Salme 27-29 May, 2014
- Participation in the IAEA expert mission by Dr. Belal Moftah, September ,2014

## Conferences and Seminars

- Organizing the GCC Sub-regional workshop on “Developing Mechanisms and Plans of Action for Applying Occupational & Environmental Health Standards for Accrediting Hospitals and other Health Care Facilities” Bahrain, Sep 2014.
- Organizing the IAEA workshop on Diagnostic reference levels.
- Organizing the IAEA workshop on the Role of medical physicist in radiotherapy.

## Projects involvements:

- Radiation oncology linear accelerators replacements.
- Proposed nuclear Medicine suites at old pharmacy at SMC.
- Rehabilitation center at Aali.
- Halat Bu Maher HC.
- Jaber Al Sabah HC.
- North Muharreq HC X-ray suite renovation.

OCCUPATIONAL HEALTH CLINIC: (Naim Health Centre)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Periodic Examination	32	29	122	20	41	2	0	17	10	29	194	179	675
Pension Fund Exam	180	244	273	283	237	248	134	254	268	22	194	179	2516
Vision	22	193	313	269	169	47	47	224	7	21	194	179	1685
E.C.G	189	246	298	265	250	230	127	258	271	21	194	179	2528
Audio	12	8	57	4	39	2	0	14	9	0	0	0	145
X-Ray	179	220	316	269	229	230	127	247	270	21	194	179	2481
Lab	183	250	323	269	266	231	127	257	271	21	194	179	2571
Spirometry	9	0	55	4	0	0	0	2	2	0	0	0	72
Referrals from medical commission	1	0	2	0	1	2	1	2	1	0	0	1	11
General Referrals	0	1	1	1	1	0	0	1	1	0	0	0	6
Others Tests	211	252	394	298	277	249	134	268	275	51	0	0	2409

OCCUPATIONAL HEALTH CLINIC: (SALMANIYA MEDICAL COMPLEX)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Periodic Examination	134	317	306	758	377	199	81	226	673	325	274	238	3908
E.C.G	2	41	9	0	0	0	0	0	0	1	0	0	53
X-Ray	0	6	6	0	7	0	1	2	11	1	8	4	46
Lab	3	98	51	74	8	21	13	10	154	20	50	12	514
BP	3	85	39	0	4	0	0	0	0	0	0	0	131
Weight	3	83	39	0	4	0	0	0	50	0	0	0	179
Height	3	95	43	0	9	2	1	1	0	0	1	0	155
Others	2	18	40	100	50	10	0	30	94	20	50	30	444



## IMMUNIZATIONS

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>Meningococcal</b>	37	69	43	132	111	55	39	45	192	68	74	50	915
<b>Typhoid</b>	32	61	61	92	88	32	18	48	146	61	58	46	743
<b>MMR1</b>	21	29	64	448	39	9	6	18	97	22	33	30	816
<b>MMR2</b>	18	15	37	96	132	34	9	27	24	64	40	27	523
<b>Flu</b>	48	99	97	81	44	39	16	88	307	150	106	96	1171
<b>H1N1</b>	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TD</b>	13	20	20	21	40	29	11	42	99	35	20	16	366
<b>HBV1</b>	4	12	10	7	18	5	5	4	40	21	11	10	147
<b>HBV2</b>	10	6	11	9	16	11	5	10	6	22	19	10	135
<b>HBV3</b>	3	6	10	38	16	11	4	7	11	5	10	9	130
<b>HAV1</b>	15	25	24	69	54	26	18	18	155	33	31	30	498
<b>HAV2</b>	14	22	61	69	39	11	4	32	30	24	24	16	346
<b>Varicella</b>	1	3	2	4	7	1	1	0	6	2	3	1	31

**PPD DETAIL**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>PPD Read</b>	0	31	25	1	21	10	5	23	59	17	38	32	262
<b>PPD Def Read</b>	1	4	6	1	4	2	1	2	3	1	9	11	45
<b>PPD +ve</b>	0	21	19	1	14	10	1	2	16	16	21	26	147
<b>PPD -ve</b>	0	9	6	0	7	0	1	21	40	1	16	6	107

**DETAILS OF CLINICAL EXAMINATION**

	Jan	Feb	Mar	April	May	June	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>Follow Up</b>	9	33	21	6	20	26	14	9	7	7	2	10	164
<b>Referral</b>	1	7	1	2	5	4	1	0	1	1	0	0	23
<b>Consultation</b>	1	0	12	7	20	16	1	3	10	0	2	4	76

## 6.5. The Anti Smoking Group

### Vision:

Tobacco-free Bahrain: healthy people, communities, and environments

### Mission:

- To protect present and future generations from the devastating health, social, environmental and economic consequences of tobacco consumption and exposure to tobacco smoke by implementing tobacco control measures in order to reduce continually and substantially the prevalence of tobacco use and exposure to tobacco smoke.
- To advocate, enable and mobilize multi-sectoral support for stronger tobacco policies and programs in line with WHO FCTC
- To strengthen national capacity, leadership, governance, multisectoral action and partnerships to accelerate country response for the prevention and control of tobacco.

### Aim:

Full implementation of antismoking law, framework convention of tobacco control (FCTC), national decrees and regulations.

### Main objectives:

- Follow up on complaints received about smoking violations.
- Follow up the implementation of Antismoking Law.
- Convert the records of the violations which have been written in accordance with the provisions of Law No. 8 of 2009 to the Public Prosecution.
- Prepare reports and statistics and making recommendations on shops that require a license for the import, distribution, or sale of different kinds of tobacco or the provision of services for sheesha.
- Collaborate with the competent authorities inside and outside the Ministry of Health to facilitate the implementation of Antismoking Law.

### Key Functions:

- Health inspection.
- Policy development.
- Laws and legislations.
- Training and education.
- Research.
- Support of tobacco use surveillance and epidemiology.

## Strategic Goals:

- Prevents epidemics and the control of communicable & non communicable disease
- Promotes and encourages healthy lifestyle behaviors
- Protects against occupational and environmental hazards
- Maintain accurate registries and efficient information

## Unit Staff:

No. of male employees	4
No. of female employees	6
Vacancies	0
Needs	1 (Data Management)



## 6.5.1 Program Related Information:

Strategic Goal	Initiatives / Programs	Implementation plan	Key Performance Indicators
Prevents epidemics and the control of communicable & non communicable disease	Antismoking / Tobacco control	<ul style="list-style-type: none"> <li>◆ Full implementation of the WHO Framework Convention on Tobacco Control (FCTC).</li> <li>◆ Full implementation of Antismoking law, decrees and regulations</li> <li>◆ Raise taxes on all tobacco products, to reduce tobacco consumption.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Number of health inspection visits.</li> <li>◆ Percentage of violations that action was taken against.</li> <li>◆ The imposition of selective tax on tobacco products</li> </ul>
Promotes and encourages healthy lifestyle behaviours		<ul style="list-style-type: none"> <li>◆ Warn people about the dangers of tobacco use, including through hard-hitting evidence-based mass-media campaigns and large, clear, visible and legible health warnings.</li> <li>◆ Implement comprehensive bans on tobacco advertising, promotion and sponsorship.</li> <li>◆ Offer help to people who want to stop using tobacco</li> <li>◆ Protect people from exposure to environmental tobacco smoke, especially pregnant women and children.</li> <li>◆ Regulate the contents and emissions of tobacco products and require manufacturers and importers of tobacco products to disclose to governmental authorities information about the contents and emissions of tobacco products.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Formulate health education plan for tobacco control.</li> <li>◆ Number of health awareness campaigns.</li> <li>◆ Formulate smoking cessation guidelines.</li> <li>◆ Number of smoking cessation clinics.</li> <li>◆ Percentage of trained staff on smoking cessation.</li> <li>◆ Tobacco manufacturers submit annual report to disclose content and emissions of tobacco products.</li> </ul>
Protects against occupational and environmental hazards		<ul style="list-style-type: none"> <li>◆ Legislate for 100% tobacco smoke-free environments in all indoor workplaces, public transport, indoor public places and, as appropriate, other public places.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Percentage of closed public places which are smoking free</li> </ul>
Maintain accurate registries and efficient information		<ul style="list-style-type: none"> <li>◆ Monitor tobacco use, particularly initiation by and current tobacco use among youth, in line with the indicators of the global monitoring framework,</li> <li>◆ Monitor the implementation of tobacco control policies and measures.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Number of surveys done to measure tobacco use in accordance with WHO recommendations.</li> <li>◆ Percentage of surveys that were repeated every 3-5 years.</li> </ul>

## 6.5.2 Information of the year 2014:

<p><b>Main Achievements of 2014</b></p>	<ul style="list-style-type: none"> <li>➤ Kingdom of Bahrain won the World No Tobacco Day (WNTD) 2014 award for EMRO region.</li> <li>➤ Total health inspection visits accomplished to implement antismoking law increased from 6372 in 2013 to 140039 in 2014.</li> <li>➤ Health inspectors issued 9373 written warnings and converted 333 persons and/or entities to public prosecution for violating Antismoking Law.</li> <li>➤ Five new health inspectors joined anti-smoking group to complete the existing vacancies in the structure of the group.</li> <li>➤ Joined the newly opened Smoking Cessation clinic in BBK health center in Hidd.</li> <li>➤ Expand the scope of Antismoking Group objectives to include health education about harmful effects of tobacco and implementation of antismoking Law.</li> <li>➤ Participated in the FCTC conference of parties (COP) meeting which was held in Moscow in October 2014.</li> </ul>
<p><b>Main Activities of 2014</b></p>	<ul style="list-style-type: none"> <li>➤ Daily health inspection visits to monitor implementation of Antismoking Law.</li> <li>➤ Participated in all health campaigns to raise public awareness about tobacco and antismoking law.</li> <li>➤ Prepared kingdom of Bahrain 3rd FCTC report which was submitted in April 2014.</li> <li>➤ Participated in amendments to Antismoking Law and GCC tobacco products specifications.</li> <li>➤ The group conducted 14039 visits throughout 2014,</li> <li>➤ The group took 11629 actions throughout 2014</li> </ul>





# *Environmental Health Section*



## *Section 7*





## Background Introduction & Overview

Environmental Health Section consists of the following groups:

### 7.1. Water & Enterprises Sanitation Group:

The main duty of the group is to ensure water safety and portability for human consumption, with respect to international standards, through collecting samples from different sources such as main production stations, water network distribution systems in all towns and villages and civil societies institution like school, hotels, hospitals, and swimming pools. The group also controls licensing of institutions to ensure they meet health regulations e.g. tourism, hairdressing and beauty salons to ensure compliance with health requirements by carrying out periodical inspection.

Conduct educational campaigns such as: lectures, seminars, and exhibitions for both schools staff and students, workers at salons in order to improve their knowledge about hygiene and to enhance sanitation standards.

Water Supply Bacteriological and Chemical Test Results by Source 2010 - 2014

Year	Result	Source		Total
		Public water	Schools, Hospitals, Hotels	
2014	% Unsatisfactory	0.54	1.96	2.50
	No. Of samples	910.00	1017.00	1,927
2013	% Unsatisfactory	1.65	4.90	6.55
	No. Of samples	1269.00	1285.00	2,554
2012	% Unsatisfactory	1.18	7.78	8.96
	No. Of samples	1437.00	1310.00	2,747
2011	% Unsatisfactory	1.91	5.21	7.12
	No. Of samples	1,622	1,035	2,657
2010	% Unsatisfactory	1.08	2.43	3.51
	No. Of samples	1,472	2,383	3,855

## 7.2. Malaria and Vector Control Group

The Group monitors the environment and controls the vector in all governorates in the kingdom. This is carried out through three environmental health centers, which provide their integrated control programs to citizens and residents (Tubli, Jidhafs, & Muharraq EHC). Each center provides its preventive measures and covers part of the kingdom. In addition to controlling the vectors, the malaria cases are followed up and investigated let alone attending the citizens and residents' complaints.

### 1. Mosquitoes control:

The group applies three control methods:

- Chemical: By introducing various types of insecticides and oiling.
- Physical: By cleaning up the stagnant water and drains and different breeding spots to minimize the optimum environment for mosquitoes to breed in.
- Biological: By introducing a particular type of fish (Aphanius dispar) which feed and nourish on larva.

Flies are controlled by eliminating human & animals' excreta and by monitoring the refuse collections, cattle sheds, stables by using residual spraying and fly bait. Insects such as cockroaches are heavily controlled by residual spray. Dusting powder is distributed to people to destruct crawling insects such as cockroaches and ants.

### 2. Rodents control:

Is efficiently achieved by using different types of rodenticide in places of the rodents presence in the houses, farms, sewerage systems, central markets, premises and coasts.

Furthermore, low poisonous powder is distributed to citizens and residents to control rodents in their residence provided rodents exist.

## Examined and Positive Breeding Spots of Mosquito by Governorate 2010 - 2014

Governorate	2014	2013	2012	2011	2010
<b>Potential spots examined</b>					
Muharrag	9,737	8,527	7,372	6,358	7,457
Capital	27,914	25,311	27,232	25,301	28,204
Central	28,357	30,461	28,301	25,390	25,309
Northern	46,931	47,032	31,248	29,582	37,073
Southern	10,901	8,938	9,186	5,913	7,352
<b>Total</b>	<b>123,840</b>	<b>120,269</b>	<b>103,339</b>	<b>92,544</b>	<b>105,395</b>
<b>Positive Culex spots</b>					
Muharrag	253	151	174	119	99
Capital	1,182	701	376	688	912
Central	704	942	831	706	551
Northern	2,372	3,526	2,560	2	2,319
Southern	283	221	284	77	132
<b>Total</b>	<b>4,794</b>	<b>5,541</b>	<b>4,225</b>	<b>1,592</b>	<b>4,013</b>
<b>Positive Anopheles spots</b>					
Muharrag	4	-	-	-	-
Capital	5	2	7	2	6
Central	15	27	47	13	26
Northern	74	125	95	97	119
Southern	1	-	7	-	1
<b>Total</b>	<b>99</b>	<b>154</b>	<b>156</b>	<b>112</b>	<b>152</b>

### 7.3. Entomology Group:

Conducting annual assessment of pesticides efficacy received from local suppliers according to the M.O.H requirements. Detecting and recording possible and positive mosquito larvae breeding spots in all governorates beside installation of mosquito light traps for collecting adult mosquitoes and other flying insects for classification and density measurement. Rodent traps are also installed in different governorates to rear captured rodents in the Entomology laboratory to use them in the annual pesticide experiments as well. In addition to participating in special school lectures to educate students about public health topics and the annual ongoing calibration with Arabian Gulf University as part of community health programs for 2<sup>nd</sup> year students for an two month period.

#### Main Activities 2014:

- ◆ Report of the RQ pesticide was completed.
- ◆ Identification of insects sample brought from different places.
- ◆ Preparation and participation for EXPO 2014 exhibition from 15, 16, 17 April.
- ◆ Preparation for the world malaria day.
- ◆ Collecting mosquito larvae from field for pesticides experiments.
- ◆ Preparation & participation in 2 workshops for ministry of education employees on 1, 2 April.
- ◆ Graphic analysis was done for the workshops which were done on 1, 2 April.
- ◆ Preparation and participation in a health fair in Al-Hayat mall.
- ◆ Participating in Municipal work week in SH. Khalifa Garden.
- ◆ Supervising, participating the 3rd workshop of malaria & vector control for Yemen delegation.
- ◆ Two lab experiments on a biological pesticide used for mosquito larvae brought from K.S.A.
- ◆ A one week long Field experiment on biological pesticide used for mosquito larvae brought from K.S.A.
- ◆ Preparations for the awareness and education Magazine of Environmental Health Section.
- ◆ Numbering and registration of pesticides received from suppliers.
- ◆ Sorting and drawing tables for the pesticides received from the suppliers.
- ◆ Identification of spider sample was sent from Durat AlBahrain.
- ◆ Installing agricultural insects light trap in AL-Kawara and collecting insects daily.
- ◆ Finishing the report of pesticides samples for the year 2014.
- ◆ Participation in the international lead poisoning preventing week of action.

## Entomology Group detailed Activities by Governorate

During 2014

Accomplished Activity	Unit	GOVERNORATES					Totals
		Muharraq	Capital	Central	Northern	Southern	
Pesticide samples received from suppliers.	No.	0	86	0	0	0	86
Pesticide samples rejected.	No.	0	22	0	0	0	22
Pesticide samples tested for efficacy.	No.	0	64	0	0	0	64
Examination of susceptible spots for mosquito breeding.	Spots Examined	147	213	91	442	308	1201
Examination of positive spots for Anopheline mosquito breeding.	Spots Examined	41	14	0	26	17	98
Examination of positive spots for Culex mosquito breeding.	Spots Examined	3	68	26	193	21	311
Light – traps installed for insects collection.	No.	0	0	5	0	0	5
Rat – traps installed for insects collection.	No.	0	0	10	26	0	36

## 7.4. Consumer Products Safety Group

Established almost seven years ago, the Consumer Product Safety Group (CPSG) assumes the responsibility of monitoring and controlling the import, export, and sale of non-pharmaceutical consumer products: such as cosmetics and Attar's herbs. CPSG, and in collaboration with the National Health Regulatory Authority, inspects products entering the kingdom through customs, and grants licenses to those that meet the set criteria.

The group also conducts routine visits to vendor shops selling the aforementioned products, assessing the storage conditions and inspecting for any unauthorized commercial activity of such products within the scope of the group's responsibility.

The CPSG assesses consumers' complaints and conducts relevant investigations and follow-ups in that regard. In addition, it works on increasing the public's awareness by providing up-to-date information through various articles published in the local newspapers: including the latest international updates, warnings if any, and reassurances when relevant.

The group also organizes several workshops to train and educate workers handling the products.

## CPSG Activities by Quarter (up to November 2014)

Unit	No.	Accomplished Activities	Q1	Q2	Q3	Q4	Total
CUSTOMS AFFAIRS	1	Total Examine Products from Custom *	929	1029	1064	630	3652
	2	Total Allowed Products Through Customs	5064728	7031225	6526690	4101787	22724430
IMPORT	3	Prohibited Products Through Customs	8844	348	7447	115925	132564
	4	Approved Products for Importing	592	942	805	830	3169
ANALYSIS	5	Non-Approved Products for Importing	25	1	4	4	34
	6	Satisfactory results of analysis	1	0	0	0	1
Media	7	Unsatisfactory results of analysis	3	0	0	0	3
	8	Media & Public Awareness	0	3	0	0	3
conven-tions	9	Complaints 'Local Consumers'/ Warnings 'Regional & International'	0	2	3	0	5
	10	Delivered Lectures/ Conducted Workshops & Seminars to Audience	2	5	1	4	12
FSC	11	Attended Lectures, Workshops & Seminars for staff	1	0	0	0	1
	12	Total number of issued contraventions	0	0	1	2	3
APPROVED NEW	13	Issuing Free Sale Certificate	4	3	5	0	12
	14	Approved New Attar Shops	6	8	1	2	17
REFUSED	15	Approved New Institutes for Importing Cosmetics	82	99	80	50	311
	16	Approved New Institutes for Selling Cosmetics	83	74	86	76	319
Inspection	17	Total Approved New institutes by CPSC	171	181	167	128	647
	18	Refused Institutes (Attar shop, Importing, Selling, etc)	15	0	0	5	20
	19	Inspection and Approval visits (Routine visits, Licensing)	106	139	81	52	378



# *Food Control Section*

## *Section 8*





## Vision

The vision is to work jointly hand in hand with all segments of the society and involve them actively as far as possible so that we develop a food safety program that is the best in the region and a model that others follow in order to secure the highest levels of food safety. This can be achieved by being flexible, and dynamic able to renew ourselves, scanning the environment and monitoring changes.

## Mission

The mission of Food Safety in the Ministry of Health in the Kingdom of Bahrain is to protect the health of the consumers from any health hazard through ensuring that food is safe and fit for human consumption whether imported from outside, prepared, or manufactured locally. In addition to maintaining a clean environment for the people in Bahrain as well as ensuring economic interests in food trade.

## Aim

To ensure that all food served and sold within the Kingdom of Bahrain is compositionally sound, free from contaminants at levels that could cause harm or illness and is labeled with the correct safety instructions for use and storage.

## Key Functions Responsibilities

- Prevention & control of food borne illnesses.
- Coordinating with local and international organizations (WHO, WTO ... etc) on all matters pertaining food safety.
- Representing the country in national and international meetings (GCC Standardization & Metrology Organization, WHO, WTO, . . .etc).
- Conducting researches and risk analysis to establish standards for maximum levels of contaminants and additives accepted in food and bottled water.
- Supporting food trade & ensuring fair practices.
- Prepare technical and statistical food safety reports.
- Ensuring safe and healthy discarding of unfit food products.
- Prevention of commercial fraud & adulteration of food products.
- Ensuring fitness and wholesomeness of imported food and water.
- Provide importers and exporters with expert technical, scientific and regulatory advice.
- Follow up and application of international food hazard notifications.
- Implementing sampling plans and procedures as recommended by regional and international organizations.
- Ensuring validity & authenticity of all documents accompanied with imported & exported food consignments.
- Ensuring the safety and quality of locally produced food products.
- Licensing all food establishments.
- Improvement of food industry by applying international advanced recommendations and systems related to food safety & quality.

- Developing and revising hygiene requirements for food establishments.
- Formulating and implementing requirements/specifications for equipment & facilities, based on scientific international recommendations.
- Investigating & follow up consumer's complaints concerning food quality and safety.
- Designing, revising and implementing educational programs for food workers, importers, consumers and health professionals.
- Continuous follow up of innovations in food industry.

## 8.1. Domestic Food Safety Group

The group is responsible for two main activities:

1. Licensing new food establishments to ensure that they meet the requirements and comply with the health regulations. To do so, scheduled inspection visits are performed to evaluate the opening of new commercial activities dealing with food by any means, e.g.: restaurants, fast food cafeterias, cold stores, canteens, and hotels.
2. Monitoring the safety of food available in local market; to achieve this, frequent routine visits are conducted for inspection and verification of establishments based on daily scheduled duties as well as complaints from the public related to food.

Main activities are conducted to elevate the safety level of displayed and presented food, and ensure that it is free from all types of contaminants, these activities include:

1. Routine full checkup visits,
2. Withdrawing samples from food establishments and public society establishment including educational establishments, tourism, health centers, hospitals, and other establishments for laboratory examination (Microbial and Chemical) to safeguard suitability for human consumption.
3. Educating and training food handlers and/or consumers via conducting symposiums, workshops, or preparing printable educational materials.

Based on the Public Health Law No. 3 of 1975, authority was given the title of inspector commissioner to carry out inspections and issue notifications and warnings, fines, with closure notices for offenders with litigation before forwarded to the courts.

الإنجازات الشهرية لمجموعة سلامة الأغذية المحلية والتراخيص  
للفترة من تاريخ 01/01/2014 حتى تاريخ 31/12/2014

الزيارات التفتيشية للمحال التجارية المحلية

إخطار بالمخالفة مادة 4	12145	معالجة مواد إتلاف	34	زيارة سحب عينات	826
الغرامة مادة 5	1283	معالجة مواد تصدير	1999	زيارة مقاصف مدرسية ومتعديين	172
إخطار بالغلط مادة 77	317	زيارة حالات تسمم	104	زيارة كافتيريا المراكز الصحية	131
الغلط الإداري	41	زيارة شكاوى	817	حضور ورشة عمل / تدريب	123
إخطار بالتهديد مادة 72	37	معالجة محلات جندبة	8073	أعمال أخرى	26686
أخطارات المصادر 1	288	الكشف على سيارات تبريد	1695	مجموع عدد الزيارات	54968
المصادر بالطن المترى	3.654	الكشف على سيارات مياه	154	المحلات التي تم ترخيصها	614
إخطارات الحجز	41	زيارة لتصنيف محل	2		

العينات

نتائج العينات المسحوبة من المحال التجارية المحلية

عينات الأغذية		عدد زيارات سحب العينات		عينات المشروبات		
صالح	غير صالح	صالح	غير صالح	صالح	غير صالح	
لحوم ودواجن طازجة	76	22	لحوم مطبوخة	121	23	
سمك طازج	17	1	دجاج مطبوخ	134	25	
سلطات ومقبلات	75	84	سمك مطبوخ	22	0	
خضروات وفواكه	32	11	رز مطبوخ	29	5	
أغذية جاهزة ومكسرات	76	8	خضروات مطبوخة	76	14	
			أغذية أخرى	515	110	
				صناعات ومشروبات خفيفة	33	21
				ألبان وأيس كريم	51	17
				مياه	185	63
				براز	108	2
				مسحات	229	52
				أخرى	63	18
1842	476	2318	إجمالي الزيارات			
مجموع العينات الصالحة	مجموع العينات الغير صالحة	المجموع الكلي للعينات				

شهادات التصدير

10629

شهادات الإلتفاف

55

## 8.2. Imported Food Safety Group

Responsibility of imported foods safety, and inspection is performed by the Imported Food Safety Group (IFSG). This group is responsible of all imported foods enter through various ports in the Kingdom of Bahrain and they are Air Cargo, Khalifa Bin Salman and King Fahad Causeway Ports, to insure it is safety and authenticity. Law of Imported Foods is issued in 1985 under law number (3). GCC's food standards are followed plus the regional and international standards.

Beside National Standards and Regional Standards, IFSG is following the World Trade Organization's Agreement on Sanitary and Phytosanitary Measures (SPS Agreement) and the Agreement on Technical Barriers to Trade (TBT Agreement) as guides to international trade regarding food safety topics.

IFSG is responsible for the inspection of foods to determine whether they conform to relevant criteria and food standards with regard to standards for raw materials, food additives, foods labelling and hazardous substances such as pesticides, veterinary drugs etc.

As mentioned IFSG is responsible for the controlling and monitoring all types of foods & drinks from being contaminated with pathogenic bacteria, viruses ... etc and other chemical and physical contaminants that make foods unsuitable for human consumption.

As a monitoring tool, sampling protocol is implemented, and this protocol is based on the frequency of taking samples and the laboratory results. The sampling process enables a compliance history to be created, and every food shipment may need to be sent to laboratory tests, until a defined number of consecutive consignments meets the requirements.

Once the laboratory show satisfactory results, the consignment will be released in case there were no other health problem. If the results show unsatisfactory, then the consignment will be rejected. In the case of rejection, option of destruction or re-exporting will be the choice of importer where he will be responsible for any expenses, and in both cases a specialist will supervise any taken option according to IFSG's strategy and protocol in the case of rejected shipments.

الإنجازات الشهرية لمجموعة سلامة الأغذية المستوردة  
للفترة من تاريخ 01/01/2014 حتى تاريخ 31/12/2014

الزيارات التفتيشية وحجم الأغذية المستوردة والعينات المسحوبة

عدد الزيارات:		71886
العينات الصالحة:	طن متري	883584.175
العينات الغير الصالحة:	طن متري	1872.694
مجموع عدد العينات:	طن متري	885456.869

# *Public Health Laboratories*



## *Section 9*



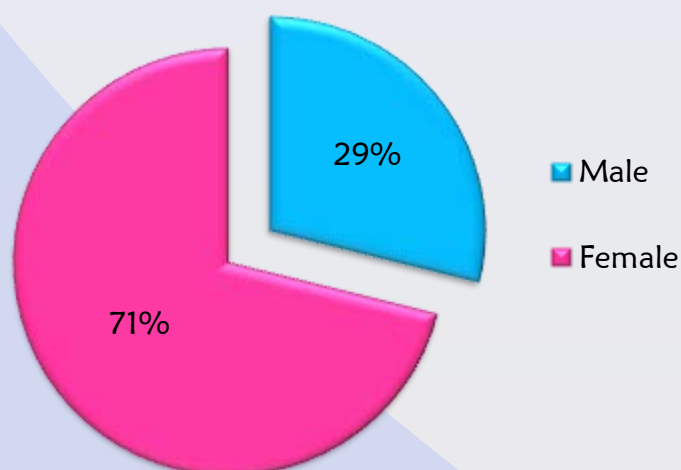
## Background Introduction & Overview

Public Health laboratory (PHL) is a critical component of the public health directorate which operates as a first line of defense to protect the public against diseases and other health hazards. It is the provincial reference laboratory for chemical and microbiological diagnostic testing that critically linked to all sectors of the public health infrastructure (e.g. disease control and prevention, food control, environmental health, epidemiology, emergency preparedness and response) and performs several public health surveillance testing within and outside the Ministry of Health.

The Laboratory is divided into three main groups based on the provided services namely: Microbiology Analysis for Communicable Disease Group, Food & Water Chemistry Analysis Group and Food & Water Microbiology Analysis Group.

The lab currently has 45 employees, 32 females and 13 males. There are 4 current vacancies while the need is for 5 more employees.

### Public Health Lab Employees 2014



## Vision

Promote laboratory services that reflect best practices contributing to optimal public health protection and wellbeing.

## Mission

- To provide comprehensive, cost effective and reliable clinical, environmental and food laboratory services (policies, programs and technologies) that assure continuous improvement in the quality of laboratory practice and health outcomes.
- To maintain international standards by adopting the principles of quality assurance.

## Aim

- Provide accurate and timely analytical data and services to protect and enhance the public Health.

## Main Objectives

- Provide quality services with dependable results.
- Provide timely laboratory results to clinicians so that treatment of patients can be initiated as soon as possible.
- Provide reliable results to the health authorities so that necessary action can be taken.
- Continually upgrade existing laboratory facilities to provide faster, economical and more reliable result.
- Control epidemics by identifying the causative agent and source of infection and prevent spread of infection by identifying carriers of communicable diseases.

## Key Functions

- Disease identification and outbreak investigation
- Support of disease surveillance and epidemiology investigations
- Integrated data management
- Reference and specialized testing
- Environmental health and protection
- Food safety
- Policy development
- Emergency response
- Research
- Training and education

## Strategic Goals

- Enhance protection against communicable disease & newly emerging disease.
- Sustaining population's health through health promotion & prevention.
- Establish capabilities for responding to any newly emerging food additives and Contaminants in food and beverages.
- Enhance protection against foodborne diseases.
- Ensure food & Water safety and Quality.

## Programs by groups

### 9.1. Chemical Analysis Group

Strategic Goal	Initiatives / Programs	Implementation plan	Key Performance Indicators
<ul style="list-style-type: none"> <li>➤ Establish capabilities for responding to any newly emerging chemical contaminants in food, beverages and water.</li> <li>➤ Ensure food &amp; Water safety and Quality</li> </ul>	<p>Chemical Contaminants in Food, Beverages and Water</p>	<ul style="list-style-type: none"> <li>◆ Determination of genetically modified food group.</li> <li>◆ Determination of industrial processing contaminants (e.g. plasticizers, printing ink, migration of solvent, mineral oil and lubricants, etc.) group.</li> <li>◆ Determination of marine biotoxins (shellfish, pufferfish, red tide, etc.</li> <li>◆ Determination of Ergot alkaloids, and cyanoglycosides.</li> <li>◆ Determination of phytates.</li> <li>◆ Determination of polyphenols.</li> <li>◆ Determination of food allergens group.</li> <li>◆ Determination of aliphatic hydrocarbons residues group.</li> <li>◆ Determination of poly aromatic hydrocarbons (PAH) residues group.</li> <li>◆ Determination of other hydrocarbons residues group (e.g. MCPDs, tri halomethane, phenols, polychlorinated biphenyls, acrylamide, nitrosamines, etc.).</li> <li>◆ 12-Determination of organo-phosphorus pesticides residues group.</li> <li>◆ Determination of organo-sulphurs pesticides residues group.</li> <li>◆ Determination of organo-nitrogen pesticides residues group.</li> <li>◆ Determination of urea pesticides residues group.</li> <li>◆ Determination of phenoxy alkanolic pesticides group.</li> <li>◆ Determination of triazines pesticides group.</li> <li>◆ Determination of asbestos fibers group.</li> <li>◆ Determination of <math>\alpha</math> and <math>\beta</math> emitters groups.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Percentage of Satisfactory Proficiency Test results</li> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> </ul>

Strategic Goal	Initiatives / Programs	Implementation plan	Key Performance Indicators
<ul style="list-style-type: none"> <li>➤ Establish capabilities for responding to any newly emerging chemical contaminants in food, beverages and water.</li> <li>➤ Ensure food &amp; Water safety and Quality</li> </ul>	Additives in Food and Beverages	<ul style="list-style-type: none"> <li>◆ Determination of food emulsifiers group.</li> <li>◆ Determination of food stabilizers group.</li> <li>◆ Determination of food thickening agents group.</li> <li>◆ Determination of food humidifying agents group.</li> <li>◆ Determination of solvents group.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Percentage of Satisfactory Proficiency Test results</li> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> </ul>
<ul style="list-style-type: none"> <li>➤ Establish capabilities for responding to any newly emerging chemical contaminants in food, beverages and water.</li> <li>➤ Ensure food &amp; Water safety and Quality.</li> </ul>	Composition & Quality Analyses in Food, Beverages and Water.	<ul style="list-style-type: none"> <li>◆ Determination of fat-soluble vitamins.</li> <li>◆ Determination of water-soluble vitamins.</li> <li>◆ Determination of amino acids.</li> <li>◆ Determination of sterols.</li> <li>◆ Determination of tannin in tea.</li> <li>◆ Determination of protein breakdown in flesh.</li> <li>◆ Determination of meat speciation.</li> <li>◆ Determination of tar and nicotine in tobacco and tobacco products.</li> <li>◆ Quality testing of fruit juices and other beverages.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Percentage of Satisfactory Proficiency Test results</li> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> </ul>
<ul style="list-style-type: none"> <li>➤ Establish capabilities for responding to any newly emerging chemical contaminants in food, beverages and water.</li> <li>➤ Ensure food &amp; Water safety and Quality</li> </ul>	Analysis of Inorganic metals in food and water	<ul style="list-style-type: none"> <li>◆ Determination of Lead, Cadmium and Mercury in food and water.</li> <li>◆ Determination of Arsenic in food and water.</li> <li>◆ Determination of Copper, Zinc and Manganese in Food and Water.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Percentage of Satisfactory Proficiency Test results</li> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> </ul>

Strategic Goal	Initiatives / Programs	Implementation plan	Key Performance Indicators
<ul style="list-style-type: none"> <li>➤ Establish capabilities for responding to any newly emerging chemical contaminants in food, beverages and water.</li> <li>➤ Ensure food &amp; Water safety and Quality</li> </ul>	<p>Analysis of Mycotoxins in food</p>	<ul style="list-style-type: none"> <li>◆ Determination of Aflatoxin in food.</li> <li>◆ Determination of Aflatoxin M1 in milk.</li> <li>◆ Determination of ZON toxin in food.</li> <li>◆ Determination of OCT toxin in food.</li> <li>◆ Determination of Pauline in beverages.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Percentage of Satisfactory Proficiency Test results</li> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> </ul>
<ul style="list-style-type: none"> <li>➤ Establish capabilities for responding to any newly emerging food additives and Contaminants in food and beverages.</li> </ul>	<p>Detection of DNA traces in processed meat products</p>	<ul style="list-style-type: none"> <li>◆ Identification of traces Pork DNA in processed meat products by using Real time PCR technology.</li> <li>◆ Identification of traces Horse in processed meat products by using Real time PCR technology.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> </ul>
<ul style="list-style-type: none"> <li>➤ Sustaining population's health through health promotion &amp; prevention.</li> </ul>	<p>Analysis of Tobacco and its products</p>	<ul style="list-style-type: none"> <li>◆ Determination of Nicotine in cigarettes and other Tobacco products.</li> <li>◆ Determination of Tar in cigarettes and other Tobacco products.</li> <li>◆ Determination of pesticides and organic contaminants in cigarettes and other Tobacco products.</li> <li>◆ Determination of water contents in cigarettes distillate.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> </ul>

## 9.2. Food Microbiology Analysis Group

Strategic Goal	Initiatives / Programs	Implementation plan	Key Performance Indicators
<ul style="list-style-type: none"> <li>➤ Enhance protection against food-borne diseases</li> <li>➤ Ensure food &amp; water safety and Quality</li> </ul>	<p>Quality control of food commodities for harmful microbial and parasites. This includes all imported and locally manufactured food products.</p>	<ul style="list-style-type: none"> <li>◆ Routinely analyze randomly selected food products for various parameters such as Salmonella spp., Staph aureus, E. coli O157, Listeria spp. and others.</li> <li>◆ Analysis of spoilage bacteria and fungus to evaluate the spoilage degree in food products</li> </ul>	<ul style="list-style-type: none"> <li>◆ Percentage of Satisfactory Proficiency Test results</li> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> </ul>
<ul style="list-style-type: none"> <li>➤ Enhance protection against food-borne diseases</li> <li>➤ Ensure food &amp; water safety and Quality</li> </ul>	<p>Quality control of drinking water for harmful microbial and parasites. This includes all imported and locally manufactured water products, water tanks and all other related water products.</p>	<ul style="list-style-type: none"> <li>◆ Analysis of harmful microbes and parasites that can affect the public such as total viable count, spoilage microbes, total coliform count, pathogenic nematode eggs in treated waste water and others.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Percentage of Satisfactory Proficiency Test results</li> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> </ul>
<ul style="list-style-type: none"> <li>➤ Enhance protection against food-borne diseases</li> <li>➤ Ensure food &amp; water safety and Quality</li> </ul>	<p>Investigation of food-borne outbreaks</p>	<ul style="list-style-type: none"> <li>◆ Carry out all necessary laboratory investigations in order to identify the microbial agent.</li> <li>◆ Carry out all necessary laboratory investigations in order to identify the causative agent such as toxins in food produced by pathogenic microbes.</li> <li>◆ Deal with all outbreak related issues on priority basis and provide results as expediently as possible by using latest technology provided by VIDAS system.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Percentage of Satisfactory Proficiency Test results</li> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> </ul>

Strategic Goal	Initiatives / Programs	Implementation plan	Key Performance Indicators
<ul style="list-style-type: none"> <li>➤ Enhance protection against food-borne diseases</li> <li>➤ Ensure food &amp; water safety and Quality</li> </ul>	<p>Rapid Identification of Presence / Absence of Pathogens in food and water samples by Real time PCR &amp; mass spectrophotometry technology.</p>	<ul style="list-style-type: none"> <li>◆ Perform rapid bacterial identification of Presence / Absence of Pathogens in food and water samples by using Real time PCR kit provided through specialized food proof companies and by cooperation with CDC lab in PHD lab.</li> <li>◆ Perform rapid bacterial identification of isolated microbial pathogens and others from food and water samples by using mass spectrophotometry technology.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Percentage of satisfactory and unsatisfactory results.</li> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> </ul>
<ul style="list-style-type: none"> <li>➤ Outline the services that public health lab can provide for the public especially for researchers and educational purposes.</li> </ul>	<p>Provide training needs and participate in researches for public and private sectors.</p>	<ul style="list-style-type: none"> <li>◆ Provide and participate in training and researches investigations related to public health for all governments and private sectors such as university and school students.</li> <li>◆ Provide continuous and remarkable training for CHS and UOB student to enroll in the local market employments.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Total number of training program provided per year</li> </ul>
<ul style="list-style-type: none"> <li>➤ Ensuring the effectiveness of the analysis methods and procedures followed in public health lab.</li> </ul>	<p>Participate in external and internal quality assurance programs.</p>	<ul style="list-style-type: none"> <li>◆ Participate with specialized external quality assurance for food microbiology laboratories programs provided by international recognized bodies such as FEPAS program.</li> <li>◆ Participate in internal quality control program within the lab.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Proficiency Test: Total number of proficiency tests performed</li> <li>◆ Percentage of Satisfactory Proficiency Test results</li> </ul>



### 9.3. Microbiology Analysis for Communicable Disease Group

Strategic Goal	Initiatives / Programs	Implementation plan	Key Performance Indicators
<ul style="list-style-type: none"> <li>➤ Enhance protection against communicable disease &amp; newly emerging disease.</li> <li>➤ Sustaining population's health through health promotion &amp; prevention.</li> </ul>	<p>Serological testing for HIV, hepatitis, rubella, measles and syphilis</p>	<ul style="list-style-type: none"> <li>◆ Testing blood samples for HIV, hepatitis A, B, C and E, Rubella IgG and IgM, measles, syphilis etc.</li> <li>◆ Verify results of other laboratories for HIV &amp; hepatitis.</li> <li>◆ Performing confirmation tests for all positive results.</li> <li>◆ Notify health authorities about any positive results.</li> <li>◆ All data and results entry into the HID RFW system.</li> <li>◆ Continually strive to improve on the methodology in order to expedite and provide more reliable results.</li> <li>◆ Keep statistical records up to date.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> <li>◆ Percentage of Satisfactory Proficiency Test results</li> </ul>
<ul style="list-style-type: none"> <li>➤ Enhance protection against communicable disease &amp; newly emerging disease.</li> <li>➤ Sustaining population's health through health promotion &amp; prevention.</li> </ul>	<p>Pre-employment screening of blood for HIV, hepatitis B and V.D.R.L</p>	<ul style="list-style-type: none"> <li>◆ Screening all pre-employment blood samples for HIV, hepatitis B and V.D.R.L.</li> <li>◆ Confirmation of all positive samples by various methods.</li> <li>◆ Re-testing repeat samples from positive cases.</li> <li>◆ Notifying Communicable Disease Section about all positive cases.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> <li>◆ Percentage of Satisfactory Proficiency Test results</li> </ul>
<ul style="list-style-type: none"> <li>➤ Enhance protection against communicable disease &amp; newly emerging disease.</li> <li>➤ Sustaining population's health through health promotion &amp; prevention.</li> </ul>	<p>Premarital Examination</p>	<ul style="list-style-type: none"> <li>◆ Testing blood samples for HIV, hepatitis B and E, Rubella and syphilis.</li> <li>◆ Confirmation of all positive samples by various methods.</li> <li>◆ Re-testing repeat samples from positive cases.</li> <li>◆ Notifying Communicable Disease Section about all positive cases.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> <li>◆ Percentage of Satisfactory Proficiency Test results</li> </ul>

Strategic Goal	Initiatives / Programs	Implementation plan	Key Performance Indicators
<ul style="list-style-type: none"> <li>➤ Enhance protection against communicable disease &amp; newly emerging disease.</li> <li>➤ Sustaining population's health through health promotion &amp; prevention.</li> </ul>	Pregnant examination	<ul style="list-style-type: none"> <li>◆ Testing blood samples for hepatitis B and Rubella.</li> <li>◆ Confirmation of all positive samples by various methods.</li> <li>◆ Re-testing repeat samples from positive cases.</li> <li>◆ Notifying Communicable Disease Section about all positive cases.</li> <li>◆ All data and results entry into the HID RFW system.</li> <li>◆ Keep statistical records up to date.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> <li>◆ Percentage of Satisfactory Proficiency Test results</li> </ul>
<ul style="list-style-type: none"> <li>➤ Enhance protection against communicable disease &amp; newly emerging disease.</li> <li>➤ Sustaining population's health through health promotion &amp; prevention.</li> </ul>	Laboratory investigation of disease outbreaks And screening of contacts.	<ul style="list-style-type: none"> <li>◆ Isolation of the same causative agent as isolated from other outbreak cases.</li> <li>◆ Biochemical and serologic confirmation of the species and serotype.</li> <li>◆ Any other investigations that may be required to confirm the causative agent.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Number of all outbreak cases at the laboratory</li> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> <li>◆ Percentage of Satisfactory Proficiency Test results</li> </ul>
<ul style="list-style-type: none"> <li>➤ Enhance protection against communicable disease &amp; newly emerging disease.</li> <li>➤ Sustaining population's health through health promotion &amp; prevention.</li> </ul>	Mycobacterium Tuberculosis Detection	<ul style="list-style-type: none"> <li>◆ Performing TB detection tests (AFB Microscopy, AFB Culture and Real time PCR).</li> <li>◆ Detection of Multi-Drug Resistant Mycobacterium Tuberculosis (MDR-TB)</li> <li>◆ Notifying Communicable Disease Section about all positive cases.</li> <li>◆ All data and results entry into the HID RFW system.</li> <li>◆ Keep statistical records up to date.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> <li>◆ Percentage of Multi-Drug Resistant Mycobacterium Tuberculosis (MDR-TB)</li> <li>◆ Percentage of Satisfactory Proficiency Test results</li> </ul>

Strategic Goal	Initiatives / Programs	Implementation plan	Key Performance Indicators
<ul style="list-style-type: none"> <li>➤ Enhance protection against communicable disease &amp; newly emerging disease.</li> <li>➤ Sustaining population's health through health promotion &amp; prevention.</li> </ul>	<p>Laboratory investigation of disease outbreaks and screening of contacts.</p>	<ul style="list-style-type: none"> <li>◆ Isolation of the same causative agent as isolated from other outbreak cases.</li> <li>◆ Biochemical and serologic confirmation of the species and serotype.</li> <li>◆ Any other investigations that may be required to confirm the causative agent.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> <li>◆ Percentage of Satisfactory Proficiency Test results</li> </ul>
<ul style="list-style-type: none"> <li>➤ Enhance protection against communicable disease &amp; newly emerging disease.</li> <li>➤ Sustaining population's health through health promotion &amp; prevention.</li> </ul>	<p>Ensure the effectiveness of vaccinations</p>	<ul style="list-style-type: none"> <li>◆ Performing immunity profile and vaccination status screening Test.</li> <li>◆ Performing confirmation tests for all positive results.</li> <li>◆ All data and results entry into the HID RFW system.</li> <li>◆ Keep statistical records up to date.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> <li>◆ Percentage of Satisfactory Proficiency Test results</li> </ul>
<ul style="list-style-type: none"> <li>➤ Enhance protection against communicable disease &amp; newly emerging disease.</li> <li>➤ Sustaining population's health through health promotion &amp; prevention.</li> </ul>	<p>Screening blood donors</p>	<ul style="list-style-type: none"> <li>◆ Testing blood samples for HIV, hepatitis A, B, C and E, Rubella IgG and IgM, measles, syphilis etc.</li> <li>◆ Verify results of other laboratories for HIV and hepatitis.</li> <li>◆ Performing confirmation tests for all positive results.</li> <li>◆ Notify health authorities about any positive results.</li> <li>◆ All data and results entry into the HID RFW system.</li> <li>◆ Continually strive to improve on the methodology in order to expedite and provide more reliable results.</li> <li>◆ Keep statistical records up to date.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> </ul>
<ul style="list-style-type: none"> <li>➤ Enhance protection against communicable disease &amp; newly emerging disease.</li> <li>➤ Sustaining population's health through health promotion &amp; prevention.</li> </ul>	<p>Isolation and classification of influenza virus</p>	<ul style="list-style-type: none"> <li>◆ Isolate and identify the type and sub type of seasonal influenza viruses.</li> <li>◆ Culturing of influenza viruses.</li> <li>◆ Sending the influenza virus isolates regularly to CDC-USA for sequencing.</li> <li>◆ All data and results entry into the HID RFW system.</li> <li>◆ Keep statistical records up to date.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> <li>◆ Percentage of Satisfactory Proficiency Test results</li> </ul>

Strategic Goal	Initiatives / Programs	Implementation plan	Key Performance Indicators
<ul style="list-style-type: none"> <li>➤ Enhance protection against communicable disease &amp; newly emerging disease.</li> <li>➤ Sustaining population's health through health promotion &amp; prevention.</li> </ul>	Molecular testing for viruses and bacteria	<ul style="list-style-type: none"> <li>◆ Confirmation of HIV, TB, Hepatitis B &amp; C, Measles, and Rubella results by PCR Technology.</li> <li>◆ by PCR Technology.</li> <li>◆ Identification of H5N1, SARS, H1N1, H7N9 Novel corona virus (MERS-CoV)...etc. by PCR Technology.</li> <li>◆ Set up a rapid response system to deal with any newly emerging disease in the future.</li> <li>◆ All data and results entry into the HID RFW system.</li> <li>◆ Keep statistical records up to date.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> <li>◆ Percentage of Satisfactory Proficiency Test results</li> </ul>
<ul style="list-style-type: none"> <li>➤ Enhance protection against communicable disease &amp; newly emerging disease.</li> <li>➤ Sustaining population's health through health promotion &amp; prevention.</li> </ul>	Virus genotyping	<ul style="list-style-type: none"> <li>◆ Classification of measles and rubella viruses genetically</li> <li>◆ Classification of influenza viruses genetically</li> <li>◆ Identify the sources of infection that compatible with gene Sequencing</li> </ul>	<ul style="list-style-type: none"> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> <li>◆ Percentage of Satisfactory Proficiency Test results</li> </ul>
<ul style="list-style-type: none"> <li>➤ Enhance protection against communicable disease &amp; newly emerging disease.</li> <li>➤ Sustaining population's health through health promotion &amp; prevention.</li> </ul>	Use of Pulsed Field Gel Electrophoresis (PFGE) as an epidemiological tool in the investigation of disease outbreaks of bacterial nature.	<ul style="list-style-type: none"> <li>◆ Perform purity cultures in order to eliminate contaminants.</li> <li>◆ Perform biochemical tests to confirm the type of organisms.</li> <li>◆ Perform PFGE on all the isolates from different sources but associated with a particular outbreak.</li> <li>◆ Reading, recording and interpretation of all data.</li> <li>◆ Provide a written report with conclusions.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Requests and analysis workload</li> <li>◆ Analysis turnaround time</li> </ul>

## Main Achievements of 2014

### ❖ Communicable Diseases Microbiology group

This group is the most important component of the public health laboratory that provides an extensive range of blood analytical testing for all hospitals and health centers in Bahrain. Its provide early detection of health risks associated with infectious agents, identify causes of disease and performs public health surveillance testing with cooperation with communicable disease section. It consists of 5 sub-units: Bacteriology, Serology, Molecular Biology, Virology, and Tuberculosis (TB). The main 2014 achievements for this group are:

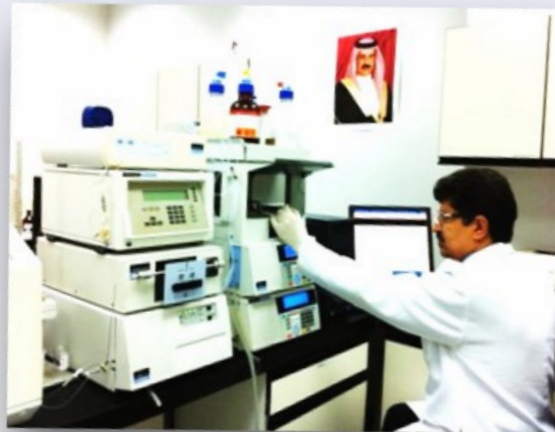
- ⇒ Serology unit contribute majority of CDM unit with a total work load of 402576 tests from January to December 2014. Among this load, Blood donors' tests were 97210 and pre-employment tests were 77007.
- ⇒ As a national lab for Tuberculosis diagnosis, 4293 samples received and undergone for 15002 tests for the same period of year.
- ⇒ Molecular detection and confirmation of Patient samples was done for 2426 patients. Out of the total, 1400 Influenza samples were enrolled for both influenza A, B, H1N1 and corona.
- ⇒ Molecular typing and detection of other than TB strain was done for 187 samples.
- ⇒ The number of Influenza typing and subtyping conducted for in the National Influenza center were in total 7676 tests.
- ⇒ Bacteriology unit received 1358 samples for food handlers in restaurants and Hajj communities. In addition to that, 111 samples shipped to Reference Lab in Oman for further detection methods.
- ⇒ Ashoora Blood Bank campaigns which enrolled over 700 donors in two days.
- ⇒ Recertifying National Influenza Center for the current year
- ⇒ Expanding TB diagnostic capacity with new culture machine with more quality control measures.
- ⇒ Achievement of excellent scores in external Quality Assurance program (QAP) including UK-NEGAS, REQAS, EQAP.
- ⇒ Introducing of RSV as new respiratory parameter Influenza samples

## ❖ Chemical Analysis group

This group provides an extensive range of analytical testing in area of food, water, animal feed and Biological fluids. It plays a vital role in food safety by providing objective scientific evidence and data for the proper risk assessment and risk analysis of food and water. It consists of 5 sub-units: Nutritive Value, Proximate Composition, Contaminants, Additives and Purity & Identity.

The main 2014 achievements for this group up to November are:

- ⇒ The Food samples contribute the majority of this group with a total work load of 17574 tests (2437 food samples).
- ⇒ The number of Water analysis conducted for in this group were in total 552 water samples (2706 tests).
- ⇒ Molecular detection and confirmation of processed meat samples was done for 37 samples. Out of the total, 24 processed meat samples were positive for pork DNA (65%).



## ❖ Food and Water Microbiology Analysis group

Food and water microbiology group specialized in microbiological analysis of all imported and locally manufactured food and water products to check for conformity with GCC and other international standards in terms of keeping quality, hygiene levels, absence of pathogens. It consists of 5 sub-unit: Sterilization unit, Media preparation unit, food microbiology, water microbiology and parasitology.

The main 2014 achievements for this group up to November are:

- ⇒ The Food microbiology unit contributes the majority of this group with a total work load of 11503 tests (4002 food samples).
- ⇒ Water analysis conducted for 2343 water samples.
- ⇒ Determining treated sewage water parasites done for 188 samples.
- ⇒ Food Poisoning Samples analysis was done for 393 suspected samples.
- ⇒ Achievement of excellent scores in external Quality Assurance program (QAP) including FEPAS, GFN and EQAP.



## Main Activities of 2014

- ⇒ Participation in the examination and analysis of blood bank and food samples for the season of Ashura campaign
- ⇒ Creating in-house training activity once a week for each laboratory group.
- ⇒ Creating in-house training activity on the importance of Biorisk management.
- ⇒ Participation in the Biorisk Management Advanced Trainer Programme (BRM-ATP II) - Jordon.
- ⇒ Participation in Laboratory, training workshop on measles and rubella virus detection, sequencing and sequence analysis - Oman.
- ⇒ Participation in FAO/IAEA Workshop on Application of Quality Assurance and Control in Analytical Laboratories to Address Food Safety and Quality - Austria.
- ⇒ Participation in Infectious Substance Shippers Training (ISST) workshop - Switzerland, Geneva
- ⇒ Participation in Pesticides residue analysis in food training program - QCAP - Egypt





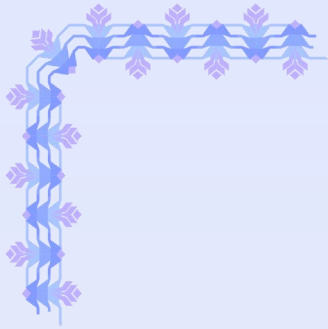
## Lab statistics through the years 2012 to 2014

Number of Lab Tests by Group & Year

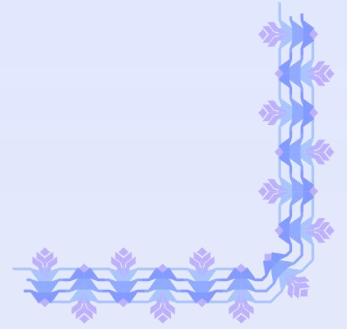
Public Health Lab Groups	2012	2013	2014	Change %
Food Microbiology	45705	34912	29504	-35.45
Communicable Diseases Microbiology	374459	425827	429038	14.58
Chemical Analysis	23231	20092	23699	2.01
<b>Grand Total</b>	<b>443395</b>	<b>480831</b>	<b>482241</b>	<b>8.76</b>

Number of Communicable Diseases Tests by Year

Tests	2012	2013	2014	Change %
Bacteriology (e.g. Sal-serotyping, Stool R/M, Urine R/M)	3717	753	1358	-63.47
Serology (e.g. HBV, HIV, Anti-Rubella, Rot, VDRL)	348225	398177	402576	15.61
Molecular Biology (e.g. all PCR: Rubella, Measles, HIV)	917	1998	2426	164.56
Virology (NIC)	6069	8754	7676	26.48
TB	15531	16145	15002	-3.41
<b>Grand Total</b>	<b>374459</b>	<b>425827</b>	<b>429038</b>	<b>14.58</b>



# *Nutrition Section*



## *Section 10*



## Background Introduction & Overview

Nutrition Section of Public Health Directorate is taking the role of promoting Bahraini population health through increasing community nutritional awareness and healthy food choices to get the optimum nutrition, further establishing studies that illustrate the prevalence of nutrition-related diseases such as obesity and micronutrients deficiencies among different population age groups.

Nutrition Section is publicizing and providing multiple nutritional and health awareness to elevate nutrition and health status of the community through its work units.

### Nutrition Section Units

Nutrition Section is subdivided into three units designed to cover the major life cycle nutrition related health problems:

1. Adolescents and adults Nutrition Group
2. Clinical Nutrition Group
3. Child, Mother and Elderly Nutrition Group

Nutrition Section currently has 13 employees, 12 females and 1 male. There are 6 current vacancies while the need is for 4 more employees until 2020.



## Vision

To enhance the well-being of people by promoting informed food choices and optimal nutrition.

## Mission

To discover, disseminate, and apply knowledge to promote improved food choices, nutritional status, and well-being of people.

## Aim

Cover major life cycle & nutrition related health problems.

## Main Objectives

To focus on nutritional and bio-nutritional, with an emphasis on basic and applied approaches to consumer behavior; and Public Health Nutrition and nutrition education.



## Key Functions

- Set rules and regulations that ensure healthier life for the community.
- Establish projects and national nutrition programs that address nutrition related health problems and improve nutritional status of population groups.
- Lectures and presentations.
- Health and nutrition events.
- Workshops and seminars.

## Strategic Goals

- To achieve and maintain health and nutritional well-being of all people.
- To ensure continued access by all people to sufficient supplies of safe foods for a nutritionally adequate diet.
- To provide promotive, preventive and curative nutrition health services to all age groups throughout their life span.
- To integrate the nutrition activities into general health services including preventive as well as curative activities.
- To develop a sustainable and environmentally sound policies and programs that lead to improved nutrition and health for both present and future generations.
- To emphasize the role of the individual in being responsible for his/her health.

## Programs by groups

### 10.1. Adolescents and Adults Nutrition Group

Strategic Goal	Initiatives/Programs	Implementation plan	Key Performance Indicators
Improving nutritional status of young and school children and Adults based on World Health Organization (WHO) Global Strategy for Diet and Physical Activity.	amend the quality of current list of allowable food and beverages provided throughout school canteens containing more healthy food choices with limited content of fats and sugars	<p>Surveys of <i>school canteens</i> generally by:</p> <ul style="list-style-type: none"> <li>◆ Ask students to give their opinion of the foods sold in school canteens.</li> <li>◆ <i>Analysis</i> of the <i>composition</i> of school <i>canteen</i> menus.</li> <li>◆ updating healthier nutrition standards for All Foods and beverages Sold in School canteens</li> </ul>	Improving the quality of food served in school canteens through the report of the school canteens
	Nutritional surveillance program of school age in order to study their nutritional health status and dietary behavior	Ongoing school nutrition surveillance which school children aged between 6-18 years undergo anthropometric measurements (weight, height, BMI), dietary & physical activity assessments, Blood Pressure and hemoglobin level measurements.	The rates of overweight and Obesity amongst adolescent
Healthy Foods Management in MOH Cafeterias		<ul style="list-style-type: none"> <li>◆ Establish healthy food standards and criteria for suppliers</li> <li>◆ Establish evaluation and management tools.</li> </ul>	Improving the quality of food served in MOH cafeterias
Nutrition Awareness Programs & Activities		<ul style="list-style-type: none"> <li>◆ Prepare educational materials (leaflets &amp; booklets, etc), lectures &amp; conducted campaigns report etc</li> <li>◆ Participate in Health &amp; Nutritional campaigns and events</li> <li>◆ Conduct Health &amp; Nutrition Awareness Campaigns for adults.</li> </ul>	Improving the nutritional awareness level through decreasing rates of prevalence of malnutrition diseases.

## 10.2. Clinical Nutrition Group

Strategic Goal	Initiatives/Programs	Implementation plan	Key Performance Indicators
Decreasing the prevalence of obesity and overweight through nutrition clinics at primary care level	Nutrition clinics are specialized clinics that deliver early and comprehensive long-term care and management to obese and overweight individuals.	The weight management program implemented in these clinics is provided by a well-trained team of family physicians and nutritionists based on international guidelines that enable individuals making dietary, physical activity and behavior modifications. Currently five clinics are functioning once a week and are attached to NBB-Dair, NBB-Arad, BBK-Hidd, Hamad Kanoo-Riffa and Hamad Town Health centers.	<ul style="list-style-type: none"> <li>Percentage of loss weight during follow up visits in the clinic.</li> <li>Nutrition clinics annual report.</li> </ul>

## 10.3. Child, Mother & Elderly Nutrition Group

Strategic Goal	Initiatives/Programs	Implementation plan	Key Performance Indicators
Improving the nutritional status of Infants, pregnant women & Elderly.	An effective intervention to improve exclusive breastfeeding rates  nutritional awareness campaign for pregnancy	<ul style="list-style-type: none"> <li>Updated the law No 4, 1995 "Concerning the control on the use, Marketing and Promotion of Breast Milk Substitutes". was reviewed, and a number of amendments were introduced but decision under study.</li> <li>celebrate World Breastfeeding Week.</li> <li>number of lectures and workshops on healthy nutrition for pregnant women.</li> <li>Health programs educate the pregnant women about preventing gestational diabetes healthy lifestyles, including healthy eating and physical activity</li> </ul>	<p>Rates of Exclusive Breastfeeding for the First 6 Months</p> <p>reducing malnutrition diseases during pregnancy such as anemia and gestational diabetes.</p>
	assessment of nutritional status of elderly through national survey conducted in 2013-2014	<ul style="list-style-type: none"> <li>By offering a workshop on healthy nutrition for the elderly in community centers.</li> <li>Group of elderly were given food questionnaires and then followed up.</li> </ul>	the extent of improvement in nutritional status among elders

## Main Achievements of 2014

- ⇒ Recently (2012 Updated) of the law No 4, 1995 “Concerning the control on the use, Marketing and Promotion of Breast Milk Substitutes”. was reviewed, and a number of amendments were introduced but decision under study
- ⇒ Mobile Unit for management obesity and overweight among school children (hand over and received) .
- ⇒ National Iodine Nutritional Survey (submitted, Declaration)
- ⇒ Ministerial Regulation of Salt Reduction in local, Arab and European bakeries (submitted prepared to MOH).
- ⇒ Ministerial Regulation of Trans Fat Reduction (submitted proposed).
- ⇒ Success Story for Management of Overweight and Obesity (International).
- ⇒ Success Story for Breastfeeding.
- ⇒ Nutrition Survey of Sodium (spot urine) for children and adults
- ⇒ Nutrition Survey of 24-hour urinary sodium excretion for adults.
- ⇒ Update School Meals Menu for canteens suppliers.
- ⇒ Nutrition Surveillance for school children (13-15 years).
- ⇒ Overweight and Obesity Management for school children age (13-16 years)
- ⇒ Survey of Vitamin D (pregnant and children)





## Main Activities of 2014

- ⇒ Educational booklets, brochures and leaflets related to nutritional aspects: printing
- ⇒ Ass. Off Body Composition among children and adolescents using Stable Isotope Technique include:
  - ⇒ 2 days Training workshop on DEXA machine in AlHidd Health Center
  - ⇒ Training workshop on Ftir machine in AlHidd Health Center.
- ⇒ GCC Standardization Organization (GSO): propose and review
- ⇒ Nutritional Awareness and Publications through lectures at workplaces, schools, health centers, mass media.
- ⇒ Nutritional awareness Campaign of Ramadan healthy food choices
- ⇒ Nutritional awareness Campaign of World Breastfeeding Week
- ⇒ Nutritional awareness Campaign of World Diabetes Day
- ⇒ Nutritional awareness Campaign of World Nutrition Day
- ⇒ Nutrition Products received from NHRA and Food Hygiene Section (analysis and review)





# *Public Health Licensing Unit*



## *Section 11*



## Background Introduction & Overview

In accordance with Bahrain vision 2030, Public Health Licensing Unit and in coordination with other governmental sectors are going to launched the Electronic Program in integration with other concerned parties within the Ministry of Health and other ministries, specially Ministry of Industry & Commerce.

This giant step, will keep the Unit as an essential member in the commercial Licensing matrix as a Public Health Directorate representative with other concerned sections, to ensure the implementation of Public Health Regulations to license the institutions & companies to facilitate the investment in the kingdom according to the high recommendations issued by the government.

Being a part of the Electronic Government to regulate the steady increase in the numbers of licenses issued by each concerned sector. As the statistics shows this increasing.

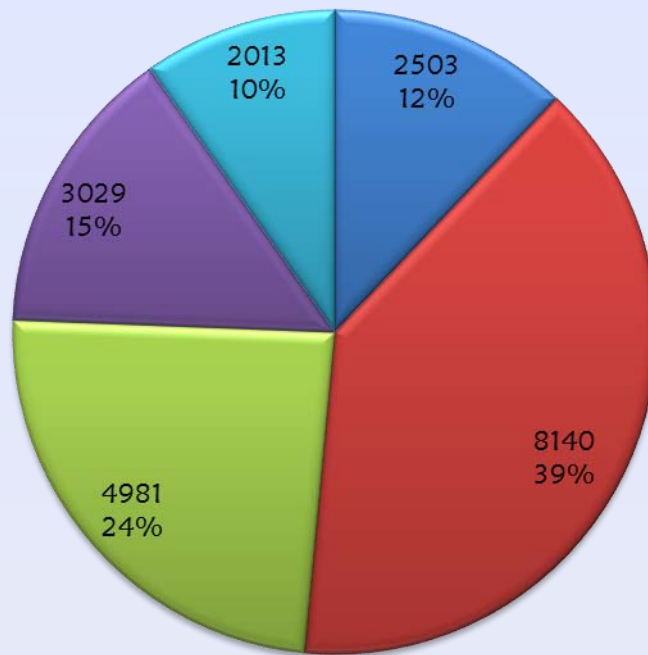
The Public Health Licensing Unit going forward to be a coordination part to facilitate the services offered by the Public Health Directorate to the investors in coordination with other parties.

## Main Statistics of Public Health Licensing Unit

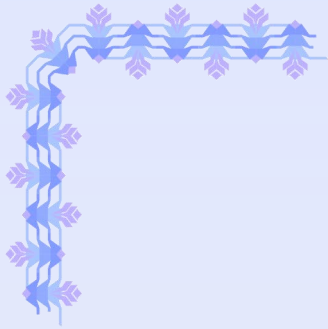
Number of Licensed & Registered activities (Est. & Co.) for 2014

Quarter	Issued Health Certificate	Visits	Registered Transactions	Licensed Transactions	Food & Water vehicles	Total
Q1	685	2514	1393	766	474	5832
Q2	705	2362	1417	771	605	5860
Q3	512	1551	1103	621	480	4267
Q4	601	1713	1068	871	454	4707
<b>Total</b>	<b>2503</b>	<b>8140</b>	<b>4981</b>	<b>3029</b>	<b>2013</b>	<b>20666</b>

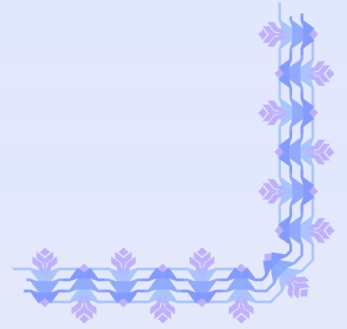
## Percentage of Licensing & Registration Activities for 2014



- Issued Health Certificate
- Visits
- Registered Transactions
- Licensed Transactions
- Food & Water vehicles



# *School Health*



## *Section 12*



## Vision

(( All children and youth living healthy active lives))

## Mission

Looking for introducing a best health service with a higher quality, equitable and sustainable for all the pioneers of schools with motivating staff and students to practice healthy patterns, as we seek to raise the level of health awareness for employees of schools and community next door and involvement of parents the involvement of parents in achieving our goal. By this way we can produce an emergence a conscious generation able share and participants in the Renaissance development of future requirements

## Aim

Improve the lifestyle of schools and young people and students to encourage healthy practices

## Main Objectives

- ◆ The development of school health strategic objectives and improve school health programs and services and improve the quality of performance all these objectives can be provided through the establishment of school health services department as follows:
- ◆ Strengthen primary care services for school students and the development of ongoing programs to promote school health such as comprehensive health examination for all students before each stage of study and even before entering the university.
- ◆ Raise the level the educational awareness and the community against health problems by applying the methods of prevention through raising awareness, knowledge and behaviors of the school community from chronic diseases by knowing the risk factors, this can be performed by cooperation with the relevant authorities.
- ◆ Upgrading knowledge, awareness and behavior of the school community for prevention and control and reduce the spread of infectious diseases.
- ◆ Upgrading the nutritional situation in schools through the continuous work and development
- ◆ Expand and strengthen the health-promoting schools and let the other schools to be under its umbrella.

## Main Objectives (continued)

- ◆ Provide schools by school nursing services, that can be a n existence permanent service present in all schools over the five coming years.
- ◆ Early detection of learning difficulties, mental and behavioral disorders and to develop treatment plans in collaboration with its stakeholders.
- ◆ Facilitating access to psychological services and reduce the stigma associated with mental health.
- ◆ Improving the concept of mental health and reduce the stigma associated with visiting the psychiatric hospitals, through awareness and education programs and referral's to mental health clinic as part of school health department .
- ◆ Attention to preventive mental health
- ◆ Improve and treat the speech disorder
- ◆ Completion, of manpower, and qualified and specialized operating school health services (increase specialized in the field of school health personnel), which include mental health services, student services, nurses and school health nurses over the next five years to cover all needs.
- ◆ Develop and strengthen the capacity of human resources and school health services.
- ◆ Follow-up to the establishment of the School Health Information System database and update the website of school health.
- ◆ Encouraged to do surveys and special studies related to school health data analysis and decisions upon which to build national strategies.
- ◆ Preparation of evidence related to awareness and updated health-related issues
- ◆ Strengthen legislation and regulatory decisions and regulations on school health
- ◆ Encouraged to do surveys and special studies related to school health data analysis and decisions upon which to build national strategies



## Core Functions

- ◆ Participation in meetings related to the health of students and their parents and school staff.
- ◆ Develop plans and programs for the care of the students and those with special needs and their families and the community.
- ◆ Follow-up and provide medical care for students, especially those who suffer from chronic diseases
- ◆ Encourage parents and community and school staff on health promotion.
- ◆ Follow-up growth and development of the student through the follow-up measurement of weight and height, and physical and psychological changes, so this examination annually.
- ◆ Ensure completion of all vaccinations, and coordination and cooperation with the concerned authorities to give immunizations on time.
- ◆ limited to students who suffer from chronic diseases and follow up
- ◆ teacher training school in first aid.
- ◆ Follow-up growth and development of the student through the follow-up measurement of weight and height, and physical and psychological changes, so this examination annually.
- ◆ Ensure completion of all vaccinations, and coordination and cooperation with the concerned authorities to give immunizations on time.
- ◆ limited to students who suffer from chronic diseases and follow-up
- ◆ teacher training school in first aid.
- ◆ Blood pressure measurement and analysis of the work of sugar for people with hypertension and hyperglycemia of students and workers and help them to control and control of these diseases.
- ◆ health education for chronic diseases and genetic and how to deal with it.
- ◆ Conduct health education about infectious diseases and how to prevent them and treat them.

## Strategic objectives

Sharing the ministry of education in continuation the program of health promoting schools:

### Key strategies at the level of the Ministry of Health:

- raise awareness.
- Partnership.
- Provide resources and development.
- teacher training.
- Research and Evaluation.
- management, planning and support.

### Key strategies at the level of the Ministry of Education

- Health Services
- Health Education
- healthy school environment
- Sports and recreation
- Nutrition and Food Safety
- Mental Health
- promote the health of workers
- community participation

### Section Staff:

Male staff	13
Female staff	75
Needs	<ul style="list-style-type: none"><li>◆ Increase specialized in the field of school health personnel.</li><li>◆ Create Information School Health and database system.</li><li>◆ Strengthen the legislation and regulatory decisions and regulations on school health.</li><li>◆ strengthen the relationship and partnership with various media.</li><li>◆ Assessing the overall "national school health program" School Health Initiative</li></ul>

## Main Groups:

### 12.1. Primary health care group:

Provide health promotion and covers a wide range of programs, activities and services provided in schools and surrounding communities in order to enhance students' health and the health of their environment.

#### **Specific objectives:**

1. Promote and develop programs to raise the level of health of the community.
2. Emphasize the importance of health & preventive education in early childhood.
3. Improving medical services, availability, accessibility and acceptance.
4. Improve the information base of children and adolescent health.

### 12.2. School health nurse group:

Promote health within the school community to elevate the level of educational achievement, and link students, school administration, parents and health centers.

#### **Tasks and responsibilities:**

1. Provide health care for cases of simple first aid.
2. Health education for chronic, hereditary & infectious diseases.
3. Annual Periodic students examination for height, weight, vision & dental.
4. Follow the students vaccination state and take action to complete them.
5. Survey of chronic diseases among students and school staff and follow-up.
6. Cooperation with the Committee on Safety and Health in the school to develop and implement plans and health programs.
7. Preparation of statistics and submitted to the concerned authorities.

### 12.3. School mental health group:

Early detection of learning difficulties and psychological and behavior disorders and planning the treatment programs in cooperation with concerned departments.

#### **Services offered:**

1. Counseling services to teachers, social workers in schools as well as parents.
2. Assessing and treating psychological and behavior disorders in students referred from Ministry of Education and Public Health Centers.
3. Applying psychological criteria, IQ tests, and learning difficulties special tests.
4. Assessing and treating speech disorders.
5. Organizing educational lectures, workshops and training courses.

### 12.4. Youth & adolescent health program:

Established in the School Health Services in May 2012.

#### **Main Goals:**

1. Establish a strategic plan to improve health services both curative & preventative service based from MOH strategy and WHO recommendation.
2. Construct a database, and establish an adolescent health service guideline.
3. Coordinate between sections who are providing adolescent and youth services.
4. Follow the national and international policies and legislations related to adolescent youth health at the level of kingdom of Bahrain.
5. To develop a program that reduce risk-taking behaviors of adolescents.

## Programs by groups

### 12.1. School health promotion program

The strategic goal	initiatives / programs	mechanism of application	performance indicators
<ul style="list-style-type: none"> <li>◆ Health-promoting schools initiative strategies:               <ul style="list-style-type: none"> <li>◆ Health promotion starting school</li> <li>◆ Actively engage students in a way that health promotion within the school</li> </ul> </li> <li>◆ Participation of school management and educators in health matters and how to focus on the role of teachers</li> <li>◆ Involve educational and health authorities and the benefit from relevant sectors.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Committee health awareness and enhance the overall health of the Gulf Expert Meeting</li> <li>◆ Recommendations for the development of standards and activation of the World Health Organization's policies and the United Nations Governments and schools enable optimal use of its potential to improve the health of children and emerging teaching staff, families and individuals.</li> <li>◆ adoption of the eight major school health components</li> <li>◆ namely:               <ul style="list-style-type: none"> <li>◆ Health Education</li> <li>◆ healthy school environment</li> <li>◆ Sports and Recreation</li> <li>◆ nutrition and food safety</li> <li>◆ mental health</li> <li>◆ promote the health of workers</li> <li>◆ community participation</li> </ul> </li> <li>◆ Decision issued by the Ministry of Education and application of compulsory health-enhancing program for all governmental schools in the Kingdom</li> <li>◆ Application of health-promoting schools competition.</li> <li>◆ Health projects competition according to the age Group.</li> <li>◆ Development of health facilities project.</li> <li>◆ Development of canteen school project .</li> </ul>	<ul style="list-style-type: none"> <li>◆ composition of a working group / for the inclusion of improvement projects that include the school environment and the building school needs and the development of vaccination schedule and monitor the optimization steps</li> <li>◆ School self-evaluation.</li> <li>◆ School evaluation by a central team of the Ministries of Health and Education to grant the certificate level due .</li> <li>◆ The presence of team work for school projects.</li> <li>◆ The presence of prioritizing record of school health problems .</li> <li>◆ Selection of the project-a preliminary assessment Identify a period of time to improve-impact measurement</li> </ul>	<ul style="list-style-type: none"> <li>◆ Number of public schools to participate in the enhanced competition for schools of different levels of health (gold- Silver – bronze)</li> <li>◆ The number of schools participating in school projects contest .</li> </ul>

## 12.2. Prevention and surveillance program.

Strategic goal	initiatives / programs	mechanism of application	performance indicators
<ul style="list-style-type: none"> <li>◆ Reduce the burden of sickness in the school environment through health promotion.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Promote primary health care system through early detection of disease for all Newcomer school students.</li> <li>◆ Health awareness about communicable and chronic diseases and how to deal with it in the schools.</li> <li>◆ Surveillance and prevention of communicable diseases.</li> <li>◆ Preparation of school workers to provide first aid.</li> <li>◆ Promote students and school workers behaviors related to health.</li> <li>◆ Improve the quality of school health performance.</li> <li>◆ Promote the Guarantee for quality of school clinic facilities to be congruent with Specifications of world health organization.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Mandatory examination of all Newcomer school students in all stages.</li> <li>◆ Provide annual workshops for health care providers in the governmental and private schools to increase the awareness of chronic, hereditary and communicable diseases.</li> <li>◆ Provide annual first aid workshops for health care providers in the schools.</li> <li>◆ Educate about: Nutrition, physical activities and food safety.</li> <li>◆ Improve school health care and preventive services.</li> <li>◆ Provide training and educational workshops for nurses.</li> <li>◆ Apply infection control requirements.</li> <li>◆ Follow up school clinic's Collectibles with the ministry of education.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Presence of progress medical examination completion document for Newcomer school students in all stages.</li> <li>◆ Number of annual workshops about chronic, hereditary and communicable diseases for health care providers in the governmental and private schools.</li> <li>◆ Number of workshops about first aid for the health care providers in the schools.</li> <li>◆ Percentage of health care providers who have first aid certificates.</li> <li>◆ Number of lectures and workshops Executed at schools.</li> <li>◆ Percentage of attendants of lectures and workshops.</li> <li>◆ Percentage of attendants (school health nurses) of lectures and workshops.</li> <li>◆ Percentage of school health clinics which is Presence of qualified for providing high quality preventive and promotion health care.</li> <li>◆ Develop vaccination completion follow up mechanism for governmental and private schools.</li> <li>◆ Participate in Precautionary vaccination campaign against measles and mumps.</li> <li>◆ Carry out tuberculosis test campaigns.</li> <li>◆ Coverage percentage of intermediate vaccination.</li> <li>◆ Number of workshops about vaccination completion.</li> </ul>

## 12.3. Nursing services.

Strategic Goal	Initiatives / Programs	Implementation Plan	Key Performance Indicators
Protect health of all students through health promotion and prevention of disease.	<ol style="list-style-type: none"> <li>Promote primary health care system through early detection and prevention.</li> <li>Prevention and control of non-communicable diseases.</li> <li>Encourage healthy life style to reduce non communicable disease.</li> <li>Promote protection from infectious disease and new diseases.</li> </ol>	<ul style="list-style-type: none"> <li>Annual screening (height, weight, BMI, vision).</li> <li>Spine examination.</li> <li>Breast examination.</li> <li>Examination of genetic disease.</li> <li>Check sugar, blood pressure and Hb.</li> <li>prepare lectures, workshops, brochures and camping about:</li> <li>Healthy food.</li> <li>Exercise.</li> <li>Food safety.</li> <li>Smoking.</li> <li>Follow up the completion of vaccination</li> <li>Participate in Precautionary vaccination camping against infectious disease.</li> <li>Vaccination campaigns supplementary for intermediate stage.</li> <li>Prepared workshops regarding importance of vaccination.</li> </ul>	<ul style="list-style-type: none"> <li>% of students who benefit from annual screening program</li> <li>% of student who benefit from visual acuity screening .</li> <li>% of student who benefit from vertebral column deviation screening program.</li> <li>% of school workers who benefit from breast self-examination.</li> <li>% of school employee who benefit from the health screening campaign.</li> <li>Number of lectures, workshops, brochures and camping.</li> <li>Presence of a guideline regarding follow up of completion of vaccination for students in governmental and private schools.</li> <li>% of school health nurses who involve on precautionary vaccination camping against measles and mumps.</li> <li>% of school health nurses who involve on Tuberculosis screening campaigns.</li> <li>% of Coverage of vaccination for intermediate stage.</li> <li>Number of workshops prepared about importance of vaccination and completion.</li> </ul>
Improve the quality of health care services in the school clinic.	<ol style="list-style-type: none"> <li>Improve the quality of school health nurses performance.</li> <li>Enhance the quality of school facilities to ensure the clinic.</li> </ol>	<ol style="list-style-type: none"> <li>Prepared training workshops.</li> <li>Send them for higher studies.</li> <li>Send them for courses, workshops and conferences.</li> <li>Follow up job performance for school health nurses.</li> <li>Application requirements for infection control.</li> <li>Follow up school health clinic holdings with the Ministry of Education.</li> </ol>	<ul style="list-style-type: none"> <li>Number of workshops prepared.</li> <li>Number of school health nurses sends for higher studies.</li> <li>Number of courses, workshops and conferences that attended by school health nurses.</li> <li>Number of visits to school health clinics.</li> <li>Number of visits of infection control coordinator to school health clinics.</li> <li>Inventory of the contents of the clinic .</li> <li>Number of reports regarding deficiencies for all school clinics and report to the Ministry of Education.</li> </ul>

## 12.4. School mental health

Goals	Initiatives / programs	Implementation Plan	Key Performance Indicators
<ul style="list-style-type: none"> <li>◆ Improved mental school health services.</li> <li>◆ Protection and early detection of mental cases.</li> <li>◆ cooperation and collaboration with the related institutions.</li> </ul>	<ul style="list-style-type: none"> <li>◆ promote Mental health and facilitation of access to mental school services.</li> <li>◆ Reduce the rate of psychological and behavioral in school age students &amp; adolescent.</li> <li>◆ improve the mental health programs and training of specialized personnel and attention to Mental health and preventive.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Provide school mental health clinics in the local health centers in average of one clinic in each governorate and guided by a team of ( child and adolescent Psychiatrist, Psychologist and social worker and learning difficulties specialist ).</li> <li>◆ Reduce the waiting list period to get an appointment in Mental Health Clinic.</li> <li>◆ integrate the school mental services members in a training programs about the early symptoms of mental and behavioral disorders , risk factors and difficulties.</li> <li>◆ Providing a hotline service and a website for advice.</li> <li>◆ Provide and train specialized members in school mental health services in proportion world ratio.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Number of school mental health clinics in local health centers.</li> <li>◆ Reducing waiting time to 4 weeks.</li> <li>◆ Number of specialized Doctors in school mental health.</li> <li>◆ Numbers of referred cases from local health center to mental clinics in secondary care.</li> <li>◆ Number of cases that have psychiatric problems in students.</li> <li>◆ Number of workshops and supporting therapy session done for the cases and their parents .</li> <li>◆ Number of clients that benefit from the workshops.</li> <li>◆ Provide the psychiatric disorder booklet.</li> <li>◆ Provide a hot line services.</li> <li>◆ Number of training done for school health members.</li> </ul>

## 12.5. Youth & adolescent health

Strategic objective	Initiatives / programs	Application mechanism	Performance measurement indicators
<p>Reduce the burden of disease and improve the quality of life of individuals by improving the quality of health services and preventive, curative and rehabilitative promotional all age groups throughout their lives in the context of the concepts of primary health care</p>	<ol style="list-style-type: none"> <li>1. Promote healthy nutrition and physical activity among young people &amp; adolescents</li> <li>2. Enhance oral and dental hygiene of young people and adolescents</li> <li>3. Prevention of tobacco use and addiction</li> <li>4. Reduce impact of health problem secondary to road traffic accidents among youth &amp; adolescents group</li> <li>5. Development of service periodic comprehensive examination for students schools at all school stages.</li> <li>6. Reduce burden of disease and risky behaviors on the health of youth &amp; adolescent secondary to reproductive health problems.</li> <li>7. design and develop the information and monitoring health of adolescents and youth to provide a health database for this category</li> </ol>	<p>Development and implementation of the national strategy on food , physical activity and health ( in the light of the World Health Organization 's strategy .</p> <ul style="list-style-type: none"> <li>◆ The inclusion of physical activity schools as one of the main subject in the school.</li> <li>◆ Implementation of campaigns to encourage the practice of walking in the community .</li> <li>◆ Encourage the creation of more walking tracks and parks within a reasonable distance from the residents in the area.</li> <li>◆ Improve the quality of food served in school canteens .</li> <li>◆ Implementation of general oral &amp; dental screening .and paint program campaign for school students.</li> <li>◆ Implementation of awareness and educational campaigns for the target group .</li> <li>◆ Provide smoking cessation services in schools, local health centers.</li> <li>◆ integration topics prevention of accidents within the school curriculum .</li> <li>◆ Implementation of awareness campaigns regarding tobacco use and addiction for adolescents and young people.</li> <li>◆ Implementation of awareness campaigns for youth&amp; adolescents and their guardians about risk of road traffic accidents and how to prevent it .</li> <li>◆ Inclusion of road traffic accidents prevention in the school curriculum.</li> <li>◆ Implementation of periodic comprehensive examination for students schools at all school stages.</li> <li>◆ Inclusion of reproductive health in school curriculum .</li> <li>◆ Increase the awareness of the target group towards reproductive health and related risky behaviors.</li> <li>◆ Implement an information system for youth &amp; adolescent health indicators.</li> <li>◆ To review all the researches related to youth &amp; adolescents</li> </ul>	<p>Adopt the national strategy on food and physical activity and health.</p> <ul style="list-style-type: none"> <li>◆ NO. of campaigns to increase the awareness of physical activity.</li> <li>◆ NO. of walking tracks/100000/population.</li> <li>◆ % of schools offering healthy foods in canteens .</li> <li>◆ % of students from a comprehensive examination of teeth and paint programs .</li> <li>◆ proportion of cases transferred to the oral &amp; dental health centers .</li> <li>◆ Number of oral &amp; dental health clinics in school , which opened in health centers.</li> <li>◆ Incidence of oral &amp; dental diseases in target group .</li> <li>◆ proportion of young people who have benefited from smoking cessation services in health centers.</li> <li>◆ Proportion of awareness programs targeting addiction &amp; tobacco carried out in schools , clubs, universities, and health centers for youth.</li> <li>◆ % of awareness campaigns for youth, and their guardians about risk of road traffic accidents .</li> <li>◆ % of the students who benefit from the campaigns.</li> <li>◆ Existence of curriculum for prevention of accidents.</li> <li>◆ % of students who received periodic health examination .</li> <li>◆ The school curriculum , which has been the inclusion of reproductive health in proportion .</li> <li>◆ proportion of pregnant teen from 15-19 years</li> <li>◆ The existence of SARA report indicators.</li> </ul>



## Main Achievements of 2014

### Primary health care group achievement 2014 :

- ◆ Renewal of the handbook visits to students and staff in public schools to health centers.
- ◆ Coordinate the work of the meetings between the departments of health centers and departments near each health center schools, to develop a mechanism for dealing treatment and restricting health problems and community celebrations.
- ◆ Follow-up primary health care programs such as Optometry program and examination of students and second grade students at the secondary screening program for oral and dental genetic blood diseases.
- ◆ Follow chronic conditions in schools.
- ◆ Follow-up of infectious cases and establish a mechanism to deal with (head lice, insect bed).
- ◆ Do Health Survey to identify health behaviors in schools.
- ◆ Continue to examine new students in school.
- ◆ Participate in educational, social and cultural programs.
- ◆ Participation in public health and preventive and precautionary and therapeutic vaccines projects (mumps campaign + Hepatitis).
- ◆ Health-promoting schools program and evaluation.
- ◆ Implementation of the annual program of awareness of public and private schools in:
  1. Education and awareness of infectious diseases and methods of prevention and the importance of vaccinations and the establishment of annual workshops.
  2. Education for non-communicable diseases and methods of prevention by fighting risk factors and establish an annual workshops.
  3. Chronic diseases and how to deal with it.
  4. Training of health providers in public schools in first aid.
  5. The participation of the public health department of nutrition in the fight against obesity to start a project for school students using modern diagnostic techniques, and so on (BBK center).

### School health nurse group:

1. Total of school visits around 206.
2. Participate in different health, medical program and investigation in schools and Governmental institutions.
3. Participate in Bahrain national, arab and international celebrations ( formula 1, world diabetic day, gulf week for adolescents and youth, nursing day, week vaccinations, gulf week for the health of dental,.....).
4. Prepared and arrange a clinic for the Bahrain First Festival.
5. Participate in annual students camping camps.
6. Participate in summer clubs for school students.
7. Participate in adolescents and youth programs (exp: we grown).
8. Participate in vaccination campaigns against measles and mumps.
9. Prepared some brochures for the section.
10. Join 5 school health nurses.
11. Join infection control department with school health section.
12. Administer new clear roles and regulation regarding follow up of completion of vaccination for students in governmental and private schools.
13. Provide introductory lectures about school health section including nursing services for private schools on 5th June 2014.

### School mental health group :

- ◆ Introductory meetings with the coordination of Ministry of Education.
- ◆ Follow up filed visits.
- ◆ Organizing annual program for lectures and workshops

### Youth & adolescent health program 2014 :

- ◆ Review of school children health and the adolescent health strategy.
- ◆ Attend the GCC committee for the school health & youth and adolescent health in February 2014 meeting.
- ◆ Attend the GCC committee for the school health & youth and adolescent to develop a formal strategy in May 2014 .
- ◆ Continue to coordinate the program for new students general screening in the preparatory phase.
- ◆ Coordination to celebrate the GCC Day of the school student & youth and adolescent health and in 2014.

# Public Health Directorate in Media



## Section 11

3 ملايين دينار لشراء التطعيمات سنويا..

### الصحة تقضي على بعض أمراض الطفولة وتحصر البعض الآخر



تلتزم قطرة تلي...  
 وزير الصحة عبدالله بن مبارك الجابر...  
 مدير الخدمات الصحية سعد السعيد السعيد...

وزير الصحة عبدالله بن مبارك الجابر...  
 مدير الخدمات الصحية سعد السعيد السعيد...

### الوسط

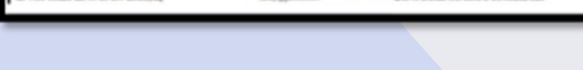


وزير الصحة يفتح فعاليات أسبوع التطعيم العالمي...  
 تواجبه تحدي الحفاظ على المستوى المتقدم لمكافحة «الحمى»

مرحور الشؤون المحلية...  
 قال وزير الصحة سابق الشهر: «إن مملكة البحرين قد تولت مكاتبتها الرائدة في مجال التطعيم من مرضى الحمى والتي تم...»

# Immunisation plan in focus

The voice of Bahrain...  
 Health Minister Dr. Abdullah bin Mubarak Al-Jaber...  
 Director of Health Services Dr. Saad Al-Sayid Al-Sayid...



وزير الصحة يفتح فعاليات أسبوع التطعيم العالمي...  
 تواجبه تحدي الحفاظ على المستوى المتقدم لمكافحة «الحمى»

مرحور الشؤون المحلية...  
 قال وزير الصحة سابق الشهر: «إن مملكة البحرين قد تولت مكاتبتها الرائدة في مجال التطعيم من مرضى الحمى والتي تم...»

لا تخوفات من إجراءات مواجهة الحمى

### وزير الصحة: 98% نسبة التطعيم بين البحرينيين



وزير الصحة عبدالله بن مبارك الجابر...  
 مدير الخدمات الصحية سعد السعيد السعيد...

وزير الصحة عبدالله بن مبارك الجابر...  
 مدير الخدمات الصحية سعد السعيد السعيد...

وزير الصحة عبدالله بن مبارك الجابر...  
 مدير الخدمات الصحية سعد السعيد السعيد...

### مفتتحاً فعاليات «الأسبوع» التطعيم العالمي... الشماهي لـ «البلاد»

3 ملايين دينار ميزانية التطعيم ومكافحة أي «جائحة» بشكل فوري



وزير الصحة عبدالله بن مبارك الجابر...  
 مدير الخدمات الصحية سعد السعيد السعيد...

وزير الصحة عبدالله بن مبارك الجابر...  
 مدير الخدمات الصحية سعد السعيد السعيد...

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وزير الصحة عبدالله بن مبارك الجابر...  
 مدير الخدمات الصحية سعد السعيد السعيد...









## تحديث المعايير الميكروبيولوجية للبضائع الخليجية



وقد تمت تلبية مقترح ملكة البحرين بضرورة تحديث الاشتراطات والمعايير الخاصة بالايضاء الدقيقة الواجب تحليقها في البضائر والتوابل اسوة بالمواصفات القياسية الدولية المعتمدة الامر الذي سيسهل على شركات تصنيع التوابل البحرينية مستقبلا وتجنبيها الخسائر المادية الضخمة نظير تناقصها مع الحدود الميكروبيولوجية للتوابل المذكورة في المواصفة السابقة، وإن ازالة هذه العوائق الفنية امام التجارة البحرينية جاء من خلال التوافق مع العالمية وتحقيق متطلبات الجودة والسلامة الغذائية للمستهلك.

النامية - إدارة الصحة العامة، شاركت إدارة الصحة العامة في الاجتماع الخاص لدراسة مشروع تحديث اللائحة الفنية الخليجية رقم (GSO1016:1998) للحدود الميكروبيولوجية للمواد الغذائية التي نظمتها هيئة التقييس لدول مجلس التعاون لدول الخليج العربية ضمن برنامج عمل اللجنة الفنية "5" للجنة الفنية الخليجية للمواصفات الغذائية والزراعية". شارك في الاجتماع نخبة من الخبراء والمتخصصين الميكروبيولوجيين وبعض ممثلي الجهات الحكومية المعنية ذات العلاقة لتقديم المشورة الفنية في تحديث المعايير الميكروبيولوجية لجميع البضائع والسلع الغذائية.

## «الصحة»: مستعدون لإجراء 5500 تحليل لفيروس «كورونا»



«الصحة»: مستعدون لإجراء 5500 تحليل لفيروس «كورونا»

الوسط - محرر الشؤون المحلية  
فلت حذرة إدارة الصحة العامة مريم الهاجري: «إنه يتوافر لدينا مطرون لإجراء 5500 تحليل للتأكد من الإصابة بفيروس «كورونا». كما أنه بالإمكان القيام بمزيد من التحليل، وتشير إلى أن منظمة الصحة العالمية قامت بخصوص مختبر إدارة الصحة العامة، والتأكد من استيفائه لجميع الشروط الخاصة لفحص مرضى كورونا، وأن هناك 5 من المؤهلين من حملة شهادات الكالوريوس والماجستير لعمل فحوصات الكورونا، وهم على أهبة الاستعداد لعمل التحليل متى ما اقتضت الحاجة إليهم»  
جاء ذلك خلال ترويض وزير الصحة صادق التنتاهي أمس الثلاثاء (6 مايو/ أيار 2014) اجتماع فريق عمل متابعة فيروس كورونا لوقوف على آخر الجهود المبذولة من جانب وزارة الصحة في مجال منع دخول المرض إلى مملكة البحرين، وذلك بحضور الركنل المساعد للرعاية الأولية والصحة العامة مريم عيسى الحاتمة وعدد من المسؤولين الصحيين من داخل وخارج الوزارة.  
أكد الوزير لجمع المسؤولين ضرورة التأكد من سير التردد الوياتي لمرض فيروس كورونا بجمع مرافق وزارة الصحة، والتشديد على مراقبة مدى التزام المؤسسات الصحية بإجراءات التردد الوياتي وإجراءات أخذ العينات وتحویل الحالات المشبهة بها ومعايير مكافحة العدوى.  
كما أكد أن البحرين ما زالت خالية من فيروس «كورونا»، وأن الاستعدادات للتصدى للمرض ومواجهته تجري على قدم وساق من أجل احتوائه في حال ظهوره لإسبح الله، والحد من انتشاره، من خلال التجهيزات الاحترازية والوقائية بالمستشفيات الحكومية والتنسيق مع المستشفيات الخاصة.  
بعد ذلك استمع وزير الصحة إلى الوكالة الحاتمة، حيث استعرضت الإجراءات والخطوات المتخذة حتى الآن عبر تقرير موجز عن الوضع الصحي، وقالت: «إنه تم التواصل مع العاملين الصحيين من خلال تشكيل فريق متكامل لمعالجة المرض ومن مهامه وضع استراتيجية لمعالجة الفيروس ووضع الخطط والبرامج ومتابعة تنفيذها والتنسيق مع جميع الأقسام والوحدات المعنية بالوزارة أو الجهات الطبية المتخصصة الأخرى، والتعاون والتنسيق مع المؤسسات الحكومية والأهلية ذات العلاقة لتنفيذ استراتيجية وزارة الصحة والعمل على تثليل كل المعوقات التي تصادف التنفيذ إلى جانب وضع خطة إعلامية للتواصل مع الجمهور». وتابعت «وضمن الإجراءات التي قام الفريق باتخاذها، القيام بالتواصل مع الخبراء المعنيين بمنظمة الصحة العامة للاطلاع على آخر المستجدات والإرشادات التي يتم اتخاذها والتواصل مع المسؤولين الإقليميين الصحيين بنول الجوار، وخصوصاً المملكة العربية السعودية للاطلاع على عدد الحالات والإجراءات التي يتم اتخاذها»  
بنورها أوضحت مديرية إدارة الصحة العامة مريم الهاجري أن الفريق قام بتصديق خطة شاملة للعاملين الصحيين تضمنت التعرف بمرض كورونا والخطوات الاحترازية مع الإجراءات الوقائية وكيفية أخذ العينات والتعامل مع المخالطين والتوعية والوقاية، كما قام الفريق بإطلاع العاملين الصحيين على الوضع الوياتي للمرض حالياً وإقليمياً وسحباً عن طريق إصدار التعاميم الخاصة بذلك بصورة دورية وإعطاء المحاضرات، وإنتاج القيادة العليا بالوزارة مع المستشفيات الخاصة وإبلاغهم على خطط الوزارة للتعامل مع هذه المشكلة وأضافت أن الفريق قام بالتأكد على جميع العاملين الصحيين للالتزام بقواعد مكافحة العدوى كغسل اليدين وليس الكمامات عند معالجة المرضى وغيرها، كما قام بإرسال تعاميم إلى جميع المستشفيات الحكومية والخاصة من كيفية الإلتزام بالاحتياطات والتعامل معها، وأردفت: «كما تولت الوزارة متابعة معالجة الحالات المنفصلة عن طريقة أخذ العينات للتحليل المختبري، وطريقة نقل هذه العينات، إلى جانب توعية نظام التردد للحرصات التنفسية المعتادة في المستشفيات عن طريق تنسيق الحالات التنفسية المعتادة مثل استمرار خاصة بذلك مع إرسالها إلى قسم مكافحة الأمراض بإدارة الصحة العامة، والتواصل مع المستشفيات الحكومية والخاصة بصورة يومية، سواء بالزيارة أو بالاتصال من قبل أخصائيي الصحة العامة للتأكد من وجود حالات مشبهة بها بأعراض تنفسية، والتأكد على الخطوات اللازمة للتعامل مع هذه الحالات، وأخذ عينات حيوانية للحالات المشابهة بالمرض تنفسية لمعرفة أنواع الفيروسات المسببة لها، إلى جانب وضع أرقام الخط الساخن لجميع العاملين الصحيين، وذلك للتواصل مع قسم مكافحة العدوى في إدارة الصحة العامة مباشرة في حال كانت لديهم أية استفسارات بشأن تشخيص المرض أو فحص العينات»



وزارة الصحة  
Ministry of Health

بجهودكم وخدماتكم نرتقي!

النظام الوطني للمعلومات الصحية  
I-SEHA  
INFORMED HEALTHCARE

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Moh Intranet Portal > News

مختبر الصحة العامة بمملكة البحرين يطابق نتائج تحليل فيروس كورونا مع مختبر أقليمي مرجعي

18/06/2014 11:15 AM



صرحت الأستاذة أمجد هانم زايد رئيس قسم مختبرات الصحة العامة بوزارة الصحة على خلو مملكة البحرين من أي حالة مصابة بفيروس كورونا المستجد مشيرة إلى أن وزارة الصحة ستظل مستمرة في تعزيز التردد الوياتي للأمراض التنفسية الحادة، والتأكد من جاهزية وفترات مختبراتها الوطنية ومتابعة آخر المستجدات على الصعيد الدولي والإقليمي.

وفي إطار تعزيز جودة ومصداقية نتائج مختبرات الصحة العامة تم إرسال عينات عشوائية للفحص التأكيدي لفيروس كورونا في المختبر الإقليمي بالمملكة العربية السعودية، حيث أفضت النتائج عن خلو جميع العينات من فيروس كورونا (MERS-CoV)، والجدير بالذكر أن العينات المرسله كانت لمرضى مصابين بأعراض تنفسية حادة ومشبهه إصابتهم بفيروس كورونا، وقد تم فحصها سبفاً والتأكد من خلوها من الفيروس في مختبرات الصحة العامة بمملكة البحرين.

وأشارت رئيسة المختبرات إلى أنه قد تم فحص مايقارب 663 حالة مشبهه إصابتها بفيروس كورونا بمختبرات الصحة العامة مشيرة إلى إن تطابق نتائج مختبرنا الوطني بالمختبر المرجعي يؤكد مدى جاهزية ونفقه نتائج مختبرنا، ويعزز خلو البحرين من مرضى مصابين بفيروس كورونا وأكدت بأن جميع العاملين بوزارة الصحة على استعداد تام لمعالجة المرض على مختلف الأصعدة.



## «الصحة»: فريق أممي اعتمد تحليلات مختبر المملكة بنسبة 100% جهاز جديد لفحص «كورونا» في البحرين

أعلنت وزارة الصحة استيرادها جهازاً جديداً لفحص فيروس كورونا، يصل إلى البحرين خلال 3 أسابيع ليضاف إلى جهاز آخر يعمل حالياً بالمملكة، مشيرة إلى أن فريقاً من خبراء منظمة الصحة العامة اعتمد نتائج تحاليل مختبر الصحة العامة في البحرين لـ «كورونا» بنسبة 100 %، بعد إجراء 537 تحليلاً منذ 2013 وثبتت عدم وجود أي إصابة بالبحرين حتى الآن. وقال وزير الصحة صادق الشهابي، في تصريح أعقب زيارة إلى مختبرات الصحة العامة، «تأكدت من الاستعداد التام لاستقبال العينات وفحصها بأحدث الأجهزة المعتمدة عالمياً والسرعة الفائقة لإجراء التحاليل والفحوصات»، مشدداً على أن «وزارة الصحة ستبقى ساهرة لترصد حالات الكورونا، حيث إن الوزارة تعمل بكل جهد منذ ظهور المرض في العالم والسول المحاورة لمنع وصول الفيروس من خلال التنشيط والحد على التوالي». كما اتخذت الوزارة جميع الاحتياطات اللازمة والتأهب لاستقبال أية حالة مشتببه بها وعزلها بالطريقة المثبتة لمنع انتشار المرض في حال ظهوره في البحرين».

وأكد الوزير أن «البحرين خالية من المرض ونعالج تسلياً أي إصابة حتى تاريخه»، مشيراً إلى «متابعة وزارة الصحة لكل مستجدات المرض على الصعيد الإقليمي والدولي، والتواصل المستمر وبشكل يومي مع دول الخليج في كل ما يستجد حول المرض». وتقدم الوزير الشهابي بجزيل الشكر

لمملكة البحرين والكويت على دعمهما في جميع أنحاء العالم، وأكد وزير الصحة صادق الشهابي، في تصريح أعقب زيارة إلى مختبرات الصحة العامة في البحرين لـ «كورونا» بنسبة 100 %، بعد إجراء 537 تحليلاً منذ 2013 وثبتت عدم وجود أي إصابة بالبحرين حتى الآن. وقال وزير الصحة صادق الشهابي، في تصريح أعقب زيارة إلى مختبرات الصحة العامة، «تأكدت من الاستعداد التام لاستقبال العينات وفحصها بأحدث الأجهزة المعتمدة عالمياً والسرعة الفائقة لإجراء التحاليل والفحوصات»، مشدداً على أن «وزارة الصحة ستبقى ساهرة لترصد حالات الكورونا، حيث إن الوزارة تعمل بكل جهد منذ ظهور المرض في العالم والسول المحاورة لمنع وصول الفيروس من خلال التنشيط والحد على التوالي». كما اتخذت الوزارة جميع الاحتياطات اللازمة والتأهب لاستقبال أية حالة مشتببه بها وعزلها بالطريقة المثبتة لمنع انتشار المرض في حال ظهوره في البحرين».

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### إخضاع عينات عشوائية للتحليل المخبري

## مشروبات الشوكولاتة خالية من بكتيريا «البسلس»



... مشروبات الشوكولاتة سليمة من أية بكتيريا، وأرشيفه

أكدت مديرة إدارة الصحة العامة د. مريم الهاجري، سلامة الأسواق المحلية وخلوها من منتجات شركة «مارس» لمشروبات الشوكولاتة للموتة بيكتيريا «البسلس» المسببة للتسمم الغذائي. وصرحت الهاجري أنه فور استلام الإذاز الصادر عن مركز الإذاز الخليجي السريع للغذاء والمتعلق بمنتجات شركة «مارس» لمشروبات الشوكولاتة، تم الإيعاز لنفسم مراقبة الأغذية بإدارة الصحة العامة بإجراء مسح ميداني للمنتجات التي حذرت منها الشركة المصنعة في جميع محافظات المملكة ومنافذها، وسحب عينات عشوائية وإخضاعها للتحليل المخبري للتأكد من سلامتها.

### «الصحة»: نمتك تفتيات تمكنا من رصد «الحصبة» ومنع انتشاره

الحجر - وزارة الصحة  
أكدت رئيسة قسم المختبرات بإدارة الصحة العامة أمجاد غانم زايد أنه مع حدوث زيادة بسيطة في عدد المصابين بمرض الحصبة في مملكة البحرين فإن مختبرات إدارة الصحة العامة تعمل على إظهار النتائج في زمن قياسي وذلك في إطار حرصها وسعيها للسيطرة على المرض ومنع انتشاره. وأوضحت زايد، أنه لطمأنة الجمهور فإن مختبر الصحة العامة يعد المختبر المرجعي للحصبة والحصبة الألمانية في مملكة البحرين، وقد نال الاعتماد الأول من قبل منظمة الصحة العالمية في العام 2005 كما تم إعادة اعتماده في العام 2013 بعد أن حقق المختبر جدارة عالية في تحاليل، الجودة الخارجية والحصبة. وتابعت رئيسة قسم المختبرات، أن المختبر يمتلك تقنية عالية خاصة لفحص مرض الحصبة والحصبة الألمانية كما يمتلك تقنيات عالية تمكنه من عمل الفحص الجزيئي للفيروس الخاص بهذا المرض، كما يستقبل المختبر العينات من جميع المستشفيات والمراكز الصحية في مملكة البحرين الحكومية والخاصة، وبعد المرجح الوحيد للنتائج المعتمدة في مملكة البحرين.

وعن تدريب الكوادر قالت زايد إنه يتم تدريب العاملين في مختبر إدارة الصحة العامة في سلطنة عُمان الشقيقة وذلك بمجال عمل الفحوصات الروتينية للحصبة وزراعة فيروس الحصبة وتصنيف الموروثات الجينية لمعرفة أنواع الفيروسات، كما يتم وفي إطار التعاون مع دول الخليج العربية إرسال النتائج الموجبة و10 في المئة من النتائج السالبة للمختبر المرجعي في سلطنة عُمان. وجمدت رئيسة قسم المختبرات بإدارة الصحة العامة مماناتها للجمهور الكريم مؤكدة في الوقت نفسه قدرة وكفاءة العاملين بوزارة الصحة في مواجهة مرض الحصبة والحد من انتشاره، متمنية للجميع دوام الصحة والعافية.

## قسم التغذية بـ"الصحة" ينظم حملة "رمضان والتغذية الصحية"



آخر تحديث: 1:41 مساءً

نشر: 09:19 صباحاً

### الجفير - وزارة الصحة

فدية بإدارة الصحة العامة حملة بعنوان "رمضان والتغذية الصحية" صحة في منطقة الجفير تمهيداً لتنفيذ الحملة في عدد من وزارات ، خلال الأسبوعين القادمين من شهر رمضان المبارك. إلى زيادة وعي الموظفين والمراجعين في المؤسسات الرسمية من ية الصحية والتي تحمي من التعرض للأمراض والوقاية منها. من استعراض للأطعمة الشعبية والمشروبات مع بيان محتواها من ضمن من سعرات حرارية ومن دهون وسكريات وأملاح مثل د والتي يكثر تناولهم خلال شهر رمضان. ، الحملة استعراض للأطعمة المعلبة الشائع استخدامها في ت الرمضانية مثل (القيمر، الفواكه المشكلة، الشوربات ، الماجي، الكريما بأنواعها) وغيرها واستعراض المشروبات أيضا التي ن تناولها خلال شهر رمضان المبارك مثل شراب الفواكه، الفيمتو. ، الحملة المواد التثقيفية كالكتيبات والمطويات التي تخص المواضيع ة في رمضان، الوجبات السريعة، السمنة ومحاضريها، الرياضة ن الوزن والطول ومعدل كتلة الجسم).

نسبة الإقبال على الرضاعة الطبيعية لدى الأمهات في مملكة البحرين تجاوزت 90 بالمائة  
PM 02 - 53 - 2014/08/12

المنامة في 12 أغسطس/ بنا / قالت رئيس قسم التغذية بإدارة الصحة العامة الدكتورة نادية الغريب إن مملكة البحرين شاركت مبكراً في النهوض بصحة الأم والطفل وخصوصاً في مجال الرضاعة الطبيعية، وذلك لما لها من فضل في تأسيس صحة الطفل.

وأشارت الدكتورة الغريب إلى أن وزارة الصحة أوجدت العديد من المبادرات الهادفة لنشر ودعم الرضاعة الطبيعية في مملكة البحرين إلى أن ارتقت لمستويات عالمية، حيث بلغ متوسط فترة الرضاعة الطبيعية إلى أكثر من 7 شهور. أما نسبة مواصلة الرضاعة الطبيعية لمدة سنة كاملة فقد بلغت نسبة 60%. وبشكل عام فإن نسبة الإقبال على الرضاعة الطبيعية لدى الأمهات في مملكة البحرين قد تجاوزت 90%. ويعتبر ذلك إنجازاً مرموقاً في مجال النهضة الصحية.

وأضافت الغريب: "إن برامج تشجيع الرضاعة الطبيعية بمملكة البحرين بدأت مع برنامج تشكيل لجنة الرضاعة الطبيعية في فبراير 1992م، وتعتبر الوزارة أن نسبة الإقبال على الرضاعة الطبيعية والمواصلة فيها إنجازاً رائعاً في هذا المجال. ومن الخطوات المهمة التي اتخذتها الوزارة كان نشر وتطبيق مبادرة المستشفيات الصديقة للطفل على جميع مستشفيات الولادة والمرافق الصحية المعنية برعاية الطفل والأمومة بمملكة البحرين". وتابعت: "وعلى مستوى التشريعات فإن الإنجازات التي تفخر بها الوزارة هو صدور المرسوم الملكي في يوليو 2006 بخصوص إجازة الأمومة من 45 يوم إلى 60 يوم، إضافة إلى منح الأم العاملة ساعتين أمومة من أجل الرضاعة الطبيعية لمدة تصل إلى سنتين".

وأوضحت الدكتورة الغريب أن مملكة البحرين قد بادرت بتطبيق أحكام المدونة الدولية لقواعد تسويق بدائل حليب الأم ورصد استخدام وتسويق وترويج بدائل لبن الأم، وذلك من خلال سنّ المرسوم الأميري رقم 4 الصادر في عام 1995. كما أن الوزارات قد قامت بدعم العديد من البرامج المجتمعية لخلق بيئة داعمة تشجيعاً وتسهيلاً للأمهات لممارسة الرضاعة الطبيعية.

وأفادت الغريب بأن وزارة الصحة قد أطلقت حملة 2014 للرضاعة الطبيعية بعنوان "الاحتفال بأسبوع الرضاعة الطبيعية" يتم تنفيذها بجهد مشترك من قسم التغذية بإدارة الصحة العامة والخدمات الطبية والتمريض بالرعاية الصحية الأولية والتي انطلقت بدءاً من 7 أغسطس وتستمر حتى 14 أغسطس 2014 على مستوى المراكز الصحية بالمملكة، وتتلخص محاور الحملة على إلقاء محاضرات حول التغذية الصحية للأم الحامل والمرضع وأهمية الرضاعة الطبيعية وكيفيةها والعوامل والمؤثرات إضافة إلى نشر وتوزيع المطبوعات التثقيفية والمواد الإعلامية المتعلقة بها.

المنامة في 17 يونيو/ بنا / أقام قسم التغذية بإدارة الصحة العامة بوزارة الصحة حفل إعلان خلو مملكة البحرين من اضطرابات عوز (نقص) اليود اليوم وذلك تحت رعاية الدكتورة عائشة بو عنق وكيل وزارة الصحة وبحضور كل من الدكتور عبدالله



المطوع وكيل وزارة التربية والتعليم لشؤون التعليم والمناهج والدكتورة مريم الجلاهمة الوكيل المساعد للرعاية الأولية والصحة العامة و الدكتور أيوب الجوالده المستشار الإقليمي للتغذية في منظمة الصحة العالمية والمكتب الإقليمي لشرق البحر الأبيض المتوسط و البروفسور عز الدين حسين المنسق الإقليمي للمجلس الدولي لمكافحة اضطرابات عوز اليود.

وقد ألقى الدكتورة عائشة مبارك كلمة شكرت فيها الحضور على المشاركة في الاحتفال بإعلان مملكة البحرين خالية من اضطرابات عوز (نقص) اليود. وأوضحت الدكتورة بو عنق في كلمتها أهمية عنصر اليود وخطر الإصابة باضطرابات نقص اليود المتمثلة في التخلف العقلي وتلف خلايا الدماغ وفقدان نسبة الذكاء وضعف الأداء الذهني خاصة لدى فئة السن المدرسي إلى جانب الآثار السلبية الأخرى مثل الإصابة بالصمم والبكم وتضخم الغدة الدرقية والإجهاد لدى الأمهات الحوامل.

كما وأشارت وكيل وزارة الصحة في كلمتها إلى أن مملكة البحرين ولتفادي هذه المشكلة قامت بإعادة الدراسة الوطنية ذاتها التي أجريت عام 2000 على الفئة العمرية المدرسية 8-12 سنة والتي أشرف عليها قسم التغذية بإدارة الصحة العامة خلال عام 2012 بالتعاون مع المجلس الدولي لاضطرابات عوز اليود ووزارة التربية والتعليم لتقييم المستوى التغذوي لسكان مملكة البحرين بالنسبة لعنصر اليود في عينة وطنية من طلبة المدارس من الفئة العمرية 6-12 سنة.

وذكرت الدكتورة بو عنق وكيل وزارة الصحة بأن منهجية الدراسة جاءت استنادا إلى التوصيات والمؤشرات المعتمدة من منظمة الصحة العالمية واليونسيف والمجلس الدولي لمكافحة اضطرابات عوز اليود وذلك عن