

EPI PLAN FOR YEAR 2002 - 2006

STRATEGIES AND GOALS

Polio Eradication

- 1) To reach 99% coverage of OPV3 by the year 2005.
- 2) To maintain zero incidence rate of poliomyelitis.
- 3) To fully investigate all AFP cases by 2002.

Elimination of Measles

- 1) To eliminate measles by reaching zero incidence by the year 2005.
- 2) To raise immunization coverage rate for MMR2 from 92% to 98% by 2003.

Elimination of rubella and CRS

To establish a base line data for C.R.S by the year 2002

Hepatitis B Reduction Plan

To reduce the present low incidence of HBsAg positive from 2 to zero by the year 2006 among 0-20 years age group.

- 1) To raise the HB immunization coverage rate to 100% among health care workers.
- 2) To reduce perinatal transmission of Hepatitis B close to zero level by the year 2004.
- 3) To reduce the co-infection of Hepatitis B and C to 50% by the year 2006.

AEFI Surveillance

To evaluate and monitor AEFIs incidence by 2002.

Cold Chain Monitoring

To reduce the faults in the cold chain by 80% by the year 2006.

Injection Safety: Evaluation, monitoring & interventions

To ensure the safety of injection practices to all health care workers by the year 2004.

Evaluation process for vaccination units in the Health Centers

To ensure a quality of vaccination services at the health centers by 2004.

Data Management Workshop

To upgrade the knowledge and ensure proper data Management by the year 2006.

Workshop on how to deal with press

To ensure that the press are dealt with properly by 2004.

Surveillance

To strengthen EPI diseases data surveillance by 2005.

Tuberculosis Control

To reduce the present low incidence of tuberculosis infection rate among Bahrainis children by 20% by the year 2006.

Haemophilus influenzae type (b) diseases

- 1) To maintain-zero incidence rate of Haemophilus influenzae type (b) among children (0-5years).
- 2) To ensure proper laboratory diagnosis by the year 2003.

Training of Staff on status of EPI and other interventions

To update the knowledge of related health care workers on immunization by the year 2003.

Research (2002 - 2006)

- o Measles serosurvey data analysis
- o Study of mumps outbreak among highly vaccinated school children.
- o Rubella serosurvey
- o Evaluation study on Hepatitis B vaccination program for health care workers.



Editorial



This newsletter focuses on various topics related to immunization, namely a new immunization certificate, polio certification, a manual on adverse events following immunization (AEFI) and a Task Force Group for immunization, a new vaccine, immunization of adolescents and screening of women for rubella during their first trimester,

The Ministry of Health's Expanded Programme on Immunization (EPI) designed and issued a new immunization certificates which will be valid throughout one's life.

We are proud that the Kingdom of Bahrain had been declared a polio free country. This effort could not be achieved without the support of all health care-givers.

The Ministry of Health in the Kingdom of Bahrain provides vaccination to every person on this island, in each governorate, in all villages and cities with the support of His Majesty the King of Bahrain, H.H. the Prime Minister and H.H. the Crown Prince and Commander-in-Chief of BDF. The Expanded Programme on Immunization develops plans and programs to achieve set goals. These goals aim at providing health for school students. This comes from their beliefs of the importance of providing mental, social and physical health for the future carriers.

A booklet on "Surveillance of Adverse Events Following Immunization in Bahrain" has been published. It describes the steps towards the surveillance of adverse events following immunization. All health workers dealing with immunization in Bahrain should understand these steps.



Recommended Immunization Schedule for the Expanded Program on Immunization, Kingdom of Bahrain

AGE	VACCINE	DOSE
At birth	BCG	BCG for non Bahraini newborns
2 months	DTP + HB + Hib	1st Dose OPV1st Dose
4 months	DPT + HB + Hib OPV	2nd Dose 2nd Dose
6 months	DPT + HB + Hib OPV	3rd Dose 3rd Dose
12 months	MMR (Measles, Mumps & Rubella)	1st Dose
18 months	DPT + OPV Hepatitis B + Hib	1st Booster Booster
2 years	Meningococcal	Single Dose
5 - 6 years	DPT OPV MMR	2nd Booster 2nd Booster 2nd Dose
12 years	MMR	
13 years	Tetanus diphtheria	Booster
14 years	Hepatitis B	3 Doses
Pregnant	Tetanus toxoid	For previously unimmunized

Other Vaccines Present in Bahrain

VACCINE CATEGORY	VACCINE	DOSE
For unimmunized adults weeks	Tetanus diphtheria	3 doses 0-4 - 6 months apart. Booster doses at 10 year intervals
For elderly Haj pilgrims	Influenza	Single Dose
Haj pilgrims Umra travelers	- Meningococcal - Tetanus diphtheria	Single Dose 2 doses 4 wks apart
Travelers to endemic areas	- Yellow Fever - Typhoid	Single Dose Single Dose
For post exposure treatment to persons returning from a rabies - infected country and give a history of exposure to a rabid animal	Rabies	Six dose series on days 0,3,7,14,30 and 90
For contacts of hepatitis B case/carrier.	Hepatitis B vaccine	3 Dose series 0, 1 and 6 months
For immuno-compromised children	Inactivated polio vaccine	4 Dose series - 3 doses in the 1st year of life and one booster in the 2nd year of life
For children at high-risk of infection	Pneumococcal Influenza	Dose according to type Single Dose

School Immunizations Programme in Kingdom of Bahrain

Immunization is one of the best achievements accomplished by man providing freedom from diseases. The Chinese were the early pioneers of immunization dating back to 590 B.C. People in China used to collect the scabs of smallpox and after grinding and drying them they would snuff the powder to get immunity against smallpox. In the 18th century Turkish people injected serum of smallpox lesions into their arms hoping to get immunity and these trials continued and improved till Edward Jenner in England discovered smallpox vaccine after he successfully used cowpox lesions to induce immunity in a child against smallpox. Then Pasteur in the 19th century tried to vaccinate patients against rabies. Thereafter the viral and bacterial vaccines were developed and immunizations were administered by injecting the vaccines to induce immunity against certain diseases. Vaccines are composed of one or more germs, which may be killed or attenuated. Vaccine gives immunity and protection against diseases. Vaccination have many advantages, It gives protection against infectious diseases, minimizes the complications of these diseases, reduces the mortality among infants and children and prevents infectious diseases that are not treatable like poliomyelitis, measles, mumps, rubella, tetanus, diphtheria, pertussis, haemophilus influenzae type b, hepatitis B, meningococcal meningitis and rabies. Vaccines dose not need a change in peoples habits, life style or social rules.

The Ministry of Health in Kingdom of Bahrain provides vaccination to every person on this island, in each governorate, in all villages and cities with the support of His Majesty the King of Bahrain, H.H. the Prime Minister and H.H. the Crown Prince and Commander-in-Chief of BDF. The Expanded Program on Immunization puts plans and pro-

grams to achieve set goals. These goals aims at providing health for school students. This comes from their beliefs of the importance of providing mental, social and physical health for the future carriers.

The Expanded Programme on Immunization (EPI) in Bahrain is part of the world-wide Programme of WHO to protect children against common diseases of childhood. The goal of EPI is to ensure that all children in Bahrain are immunized and protected against measles, polio, diphtheria, tetanus, whooping cough, mumps, rubella, hepatitis B haemophilus influenza type b and meningococcal meningitis.

The EPI has achieved very high coverage more than (98%) for DTP, OPV, Hib, Hepatitis B, MMR immunizations and meningococcal immunization.

School health service is a personal health service which began in Bahrain in 1938 when the first time medical examinations of school children were carried out. In 1941, Dr. Kidarnath, a male school doctor was appointed. In 1943, girls school medical examination was strengthened. In 1944, a trachoma clinic was tried out as an experiment, 28 boys were treated by doctors for six weeks. In 1946, a Public Health and Welfare Committee was set up, comprising heads of Hospitals, Education and Municipality. In 1952, the Health Services was divided into Medical (hospital and dispensaries) and Public Health which embraced Port and Quarantine, Anti-Malaria, Sanitation and Hygiene, and Boys Schools.

1953, Dr. Mustafa was recruited to restart a boy's school medical service. In 1957, a Boys school was built close to the Secondary School in Manama and a second doctor was installed.

The school children, both boy's and girls, were examined once during the year. Children found to be unvaccinated against smallpox were vaccinated, subject to the consent of the parents.

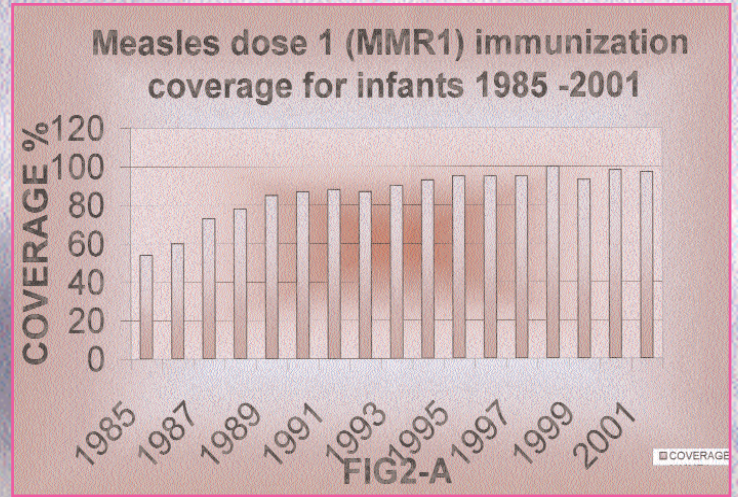
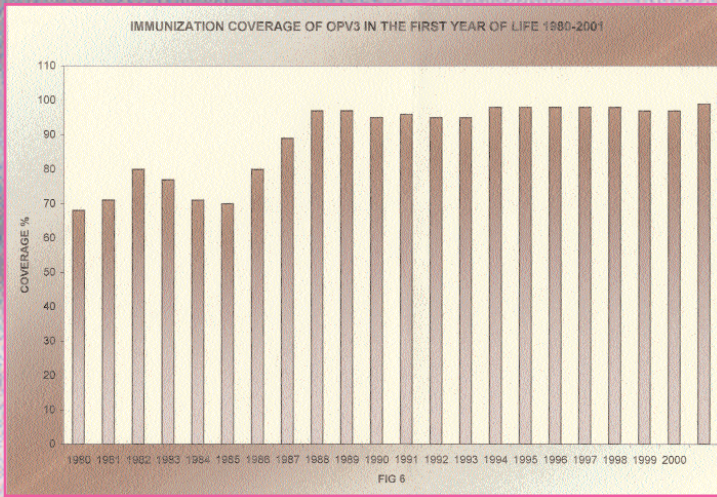
The Medical Officer recommended that medical inspection of the school children should be carried out bi-annually in view of the high incidence of malaria, eye diseases and malnutrition among the children.

In 1940, Mr. Adrian Vallance, Director of Education, did his utmost to ensure that many schools in Bahrain should have regular medical attention. The school authorities realized how important public health work in schools is even for the eradication of trachoma alone. Much work was needed to raise the standard of health. Mr. Vallance has worked very hard to spread the message to all departments concerned that school health is an index of the future health of Bahraini.

The school health programme was well functioning and provided health education to school children through lectures, the goal of which was to bring about changes in health knowledge and attitudes. The school authorities tried to raise the level of personal hygiene at a time when trachoma was highly prevalent. The prevention and control of childhood diseases through immunization was introduced in the school health service. As early as 1956, BCG vaccination were given to boys in 3 schools.

In 1962, over 3000 doses of oral polio vaccine were given to children under 10 years of age.

Diseases such as measles, mumps, poliomyelitis, diphtheria, tetanus and whooping cough that were public health problems up to the 1970's were eliminated or controlled in the 1980's. The high immunization coverage of DTP, OPV, Hib, Hepatitis B and MMR attained in recent years has successfully controlled the major childhood



Current Situation

The CDS and EPI jointly carries out surveillance of childhood diseases. The school authorities through the Directorate of Education are informed of activities that will be carried out by the EPI's school health programme.

The CDS/EPI teams investigate any reported communicable diseases that may occur in a school. The CDS give advice to schools regarding exclusion of children with communicable diseases. In the past, outbreaks of scabies have been dealt with efficiently by examining all the children in a school for evidence of skin lesions and treating those with scabies. The families of sick children were visited to ensure that all the members are treated as well. In recent years, the EPI teams have immunized over 6000 children in two private schools following an outbreak of mumps and successfully contained its spread.

The EPI teams have a busy schedule of immunizing school children all through the academic year viz October through June. The 1st intermediate class (12 years olds) students are given MMR vaccine. The 2nd Intermediate class (13 years olds) students are given a booster dose of tetanus diphtheria and the 3rd intermediate class (14 years olds) students are given a three dose series of hepatitis B vaccine.

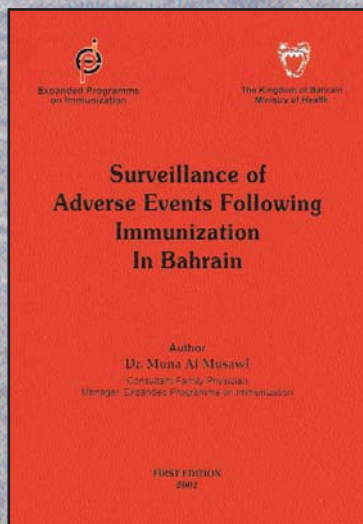
All children (5-6 years olds) are screened in their respective health centers prior to entering school. They are also tuberculin tested. A medical examination including tests for vision, hearing and speech is done as well. These children also receive a booster dose of DTP and OPV vaccines and a 2nd dose of MMR and their previous early childhood vaccinations checked and the defaulters received the missing

doses.

The EPI teams visit the schools each year to scrutinize the children's immunization records in the birth certificates. Those found to be missing any particular immunization for their age are referred to their health centers.

The EPI conducts research studies and surveys among school children, who are a captive group, and reliable information can be collected. The birth certificate contain the records of immunizations received. The data collected from a group of children provide information on the immunization coverage. The EPI teams give lectures on communicable diseases and immunizations to student and teachers. The EPI section conducts workshops before campaigns for the teachers and students.

Recent Publications



Recent Publications



EPI Update News

The Ministry of Health's Expanded Programme on Immunization (EPI) issued a new immunization certificates which will be valid throughout one's life.

The certificates are to be distributed to all health centers in Bahrain and contains all data concerning immunizations. The new certificate contains information on the immunization schedule by age-group and other information related to childhood immunizations.

The certificate contains information on adolescents and adult immunization, immunizations for travelers, information on supplementary immunizations, important facts about vaccines, information on misconceptions concerning contraindications to immunizations. The new certificate will solve the problem of having more than one certificate. At present there are seven certificates - childhood immunization certificate, pregnant women's tetanus vaccine certificate, hepatitis (B) vaccine for adult's certificate, Hajj vaccination certificate, traveler's immunization certificate and certificate for expatriate children delivered outside Bahrain and completing their immunizations in Bahrain. All the necessary data will be entered in one document which can be easily carried and is safe due to its plastic sealing. The new certificate is issued once an infant is registered for vaccinations at the health center linked with issuing the birth certificate. This certificate will replace the certificates used for pregnant women, travelers, Hajj post trauma vaccination etc. gradually.

The World Health Organization declared Bahrain a polio free country after reviewing the manual of operation submitted to them that fulfilled all the criteria needed for certification of polio eradication.

The recently marketed pneumococcal polysaccharide conjugated vaccine by Wyeth Lederle Vaccines can be given to infants from as early as 2 months of age. The vaccine will protect against meningitis, pneumonia and bacteraemia caused by

streptococcus pneumonia serotypes 4, 6B, 9V, 14, 18C, 19F, & 23F. This recent conjugate vaccine does not replace the use of 23-valent pneumococcal poly-saccharide vaccine in children above 2 years of age with sickle cell disease, asplenia, HIV infection, and those who are immunocompromised.

The EPI has targeted school children aged 14 years for receiving the 3 dose series of hepatitis B vaccine. The objective is that by the year

A school health coordinating committee was established from higher officials of Ministry of Health and Ministry of Education. The committee was following these objectives to reach their goals

1. To document all the activities that are conducted to achieve the recommendations of W.H.O to provide health for children and adolescents and prevent diseases.
2. To upgrade the current activities in order to achieve the goals.

The members of the committee from Ministry of Health

Dr. A. Aziz Hamza
- H.E. the undersecretary
Dr. Muna Al Musawi
- EPI Manager
Dr. Khayria Mossa
- Head, Nutrition
Dr. Mariam Mulla Harmis
- School Health Organizer
Dr. Ali Baqara
- Chairman, Adolescent Committee
Dr. Amal Al Samak
- Head Dental Health
Dr. Amal Al Jowder
- Head, Health Education
Dr. Ahmed Malalla
- Head, Psychiatric Hospital

The members from Ministry of Education are:

Mr. Moh'd Hussain Al Jowder
- Asst. Undersecretary for Educational Services and Private Education
Mr. Moh'd A. Al Emadi
- Director of Activities and Student Services
Mrs. Lulwa Al Khalifa
- Director of Curriculum
Mr. Sabri Abdulhadi
- Director of Personnel Affairs
Mr. Ali Bahzad
- Director of Services
Miss. Noora Al Manai
- Chief of Student Services
Mr. Saeed Al Mass
- School Health Organiser

2005 all children and adolescents up to 18 years of age group will be protected against hepatitis B.

The WHO strategy for the elimination of congenital rubella syndrome (CRS) by immunizing susceptible women who were non immune for Rubella during antenatal screening with MMR vaccine during the post-partum period was implemented.

Through the efforts of the EPI, immunization safety surveillance has been established and a manual for health workers developed to enable them to deal with AEFI's was prepared, the major goal being the early detection and response to the adverse events in order to lessen the negative impact.

The Public Health Directorate and the Health Center Directorate are coordinating their efforts and have established a Task Force Group chaired by the EPI manager. The Group comprises of the following members: The deputy MCH supervisors from each of the 19 health centers, the nursing quality management specialist and the community health nurses from the 4 regions. Through their concerted efforts the Group will strengthen the delivery of immunizations and other related health activities in the health centers. The group will also provide support to achieve their objectives and to formulate strategies for planning, monitoring and evaluating the immunization activities in the health centers, to plan and develop health education and public information activities concerning immunization, its adverse events and contraindications.

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