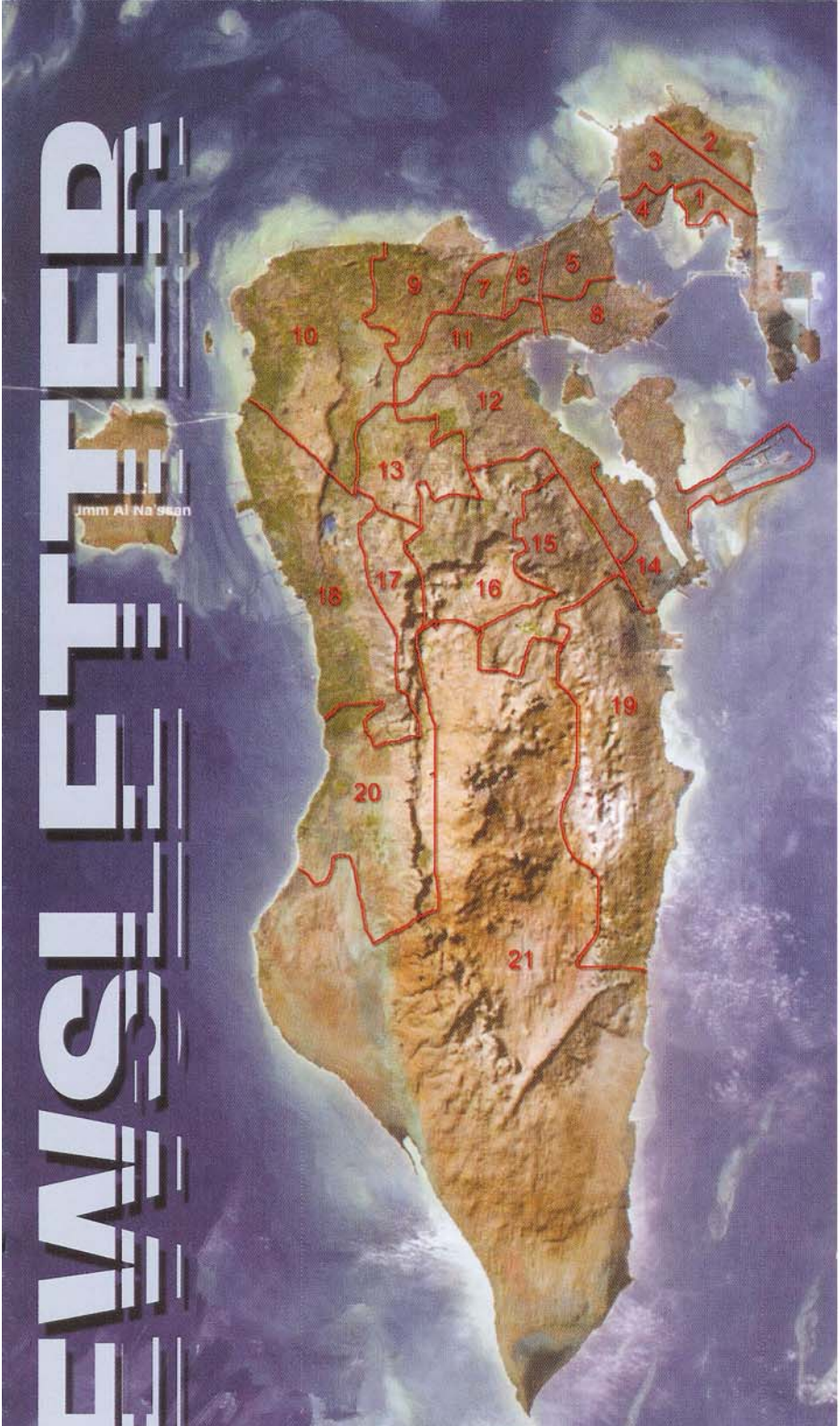
NEWSLETTER



IMMUNIZ

Expanded Programme on Immunization
Ministry of Health - Bahrain
Volume 1 - Number 1 - 2001

Recommened Immunization Schedule for the Expanded Programme on Immunization in Bahrain

AGE	VACCINE	DOSE
Birth	BCG	BCG for non Bahraini newborns
2 months	DTP + HB + Hib	1st Dose
	OPV	1st Dose
4 months	DPT + HB + Hib	2nd Dose
	OPV	2nd Dose
6 months	DPT + HB + Hib	3rd Dose
	OPV	3rd Dose
12 months	MMR	1st Dose
18 months	DPT + OPV	1st Booster
	Hepatitis B + Hib	Booster
2 years	Meningococcal	Single Dose
5 - 6 years	DPT	2nd Booster
	OPV	2nd Booster
	MMR	2nd Dose
12 years	MMR	
13 years	Tetanus Diphtheria	Booster
Pregnant women For previously unimmunized women	Tetanus toxoid	TT1 at first contact TT2 at least 4 weeks after TT1 TT3 at least 6 months after TT2 TT4 at least 1 year after TT3 TT5 at least 1 year after TT4

MMR: Measles, Mumps and Rubella

Other vaccines present in Bahrain

VACCINE CATEGORY	VACCINE	DOSE
For unimmunized adults	Tetanus Diphtheria	3 doses 0-4 weeks - 6 months apart Booster doses at 10 year intervals
For elderly Haj pilgrims	* Influenza	Single Dose
	* Meningo-coccal	Single Dose
Haj pilgrims Umra travelers	* Tetanus Diphtheria	2 doses 4 wks apart
Travellers to endemic areas	* Yellow Fever	Single Dose
	* Typhoid	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 & 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	Single dose

Expanded Programme On Immunization

Millions of children around the world still die every year from disease that can be prevented with existing vaccines. Vaccines in the development pipeline could save the lives of millions of children.

Despite the progress made in many parts of the world in recent years with the use of the basic childhood vaccines, the extra benefits of vaccination that are possible will not happen for many decades unless deliberate actions are taken on many fronts to accelerate their realization.

Worldwide experience indicates an urgent need to focus on preventive actions the family can take care of at the home level. Defining strategies and systems to accelerate preventive programmes to improve the health and well being of mothers and children is the basic objective of the Expanded Programme on Immunization .

Bahrain has advantages over many countries in terms of health coverage, infant mortality, and morbidity statistics are better than other countries. A good start can be made under existing conditions to improve the situation and achieve national scale impact in a short period and it is possible to achieve good health for all in Bahrain.

Even in difficult economic times, it can be seen that a combination of changing knowledge and circumstance has opened up the possibility of providing a minimum safety net of the most basic protection for the growing minds and bodies of the world s most vulnerable children. The techniques are known. The organizational capacity is, broadly speaking, in place. The costs, both politically and financially, are absolutely minimal in relation to the benefits such protection would bring.

The simple interventions cannot produce the desired impact if they are treated in isolation. It is the synergistic effect of the interventions as a package that can prevent disease, sickness and death.

A manual on vaccine is published to put together the policies in Bahrain which is the first and the crucial step towards harmony in immunization.

The challenge is to give this knowledge to mothers, parents and community so that they can help themselves. Modern communication techniques and the support of organizations and individuals that have access to mothers can be used as effective communication channels to pass on the knowledge and information.

The subject of immunization is fundamental in medical practice, especially in infants and children care. The introduction of new vaccines over the past 30 years has been directly responsible for the striking reduction in disease morbidity and mortality of many childhood diseases.

Editorial

THE SUBJECT of immunization is fundamental in medical practice, especially in infants and children care. The introduction of new vaccines over the past 30 years has been directly responsible for the striking reduction in disease morbidity and mortality of many childhood diseases.

The Expanded Programme on Immunization strategic plan lays out a framework of goals and actions needed now to better protect children against infectious diseases. It emphasizes the need for players at all steps in the vaccine continuum research, development, production, quality assurance, supply, utilization and monitoring of impact to act in a more cohesive fashion on priorities, to recognize the value of vaccine and commit the additional resources necessary to protect children from suffering, disability and death.

This new Immunization Newsletter will play as a forum for communication and information materials to all healthcare givers. It is meant to serve as reference material on vaccine usage, types, misconceptions, contraindications, immunization procedures, basic data and vaccination schedule and other information necessary for vaccinators to effectively administer vaccination.

Immunization in the State of Bahrain is a timely and much needed for those involved in the care and well being of children and adults. We would like to express our sincere thanks and appreciation to all who supported us morally, administrative and technically in putting this tool into reality. Special thanks, also, goes to WYETH-AYERST International Inc. for their financial support.

We are, also, looking forward to see the future issues of the newsletter bilingual.

Adverse Events Following Immunization

OBJECTIVES

There are several potential objectives for establishing immunization safety surveillance. Clarifying the most important objective(s) of the system will assist in designing and implementation. The relative importance of the objectives will depend on the state of the immunization programme and local circumstances. The objectives may also change over time.

The major goal of immunization safety surveillance is early detection and appropriate and quick response to adverse events in order to lessen the negative impact on the health of the individuals and on the immunization programme itself. It is an indicator to programme quality. It will, also, enhance programme credibility and can provide actual country data on vaccine risks.

ADVERSE EVENTS	CASE DEFINITION	TIMING	VACCINE
1. Local adverse events a. Injection site abscess	Occurrence of a fluctuant or draining fluid-filled lesion at the site of injection with or without fever.		All
b. Lymphadenitis (includes suppurative lymphadenitis)	Occurrence of either: • At least one lymph node, 1.5 cm in size (one adult finger width) or larger; or • A draining sinus over a lymph node. Almost exclusively caused by BCG.	Within 2-6 months after BCG vaccine, on the same side as inoculation (mostly axillary)	BCG
c. Severe local reaction	Redness and/or swelling centered at the site of injection and one or more of the following: • Swelling beyond the nearest joint; • Pain, redness and swelling of more than 3 days duration; or • Requires hospitalization.		All
2. Central nervous system adverse events a. Acute flaccid paralysis. Vaccine-Associated Paralytic Poliomyelitis:	• Acute onset of flaccid paralysis following receiving oral polio virus vaccine, or after contact with a vaccine recipient, with neurological deficits remaining 60 days after onset, or death. • Gullian-Barre Syndrome: Acute onset of rapidly progressive, ascending, symmetrical flaccid paralysis, without fever at onset of paralysis and with sensory loss. Cases are diagnosed by CSF investigation showing dissociation between cellular count and protein content.	Within 4-30 days. Within 4-75 days. Within 30 days.	OPV
b. Encephalopathy	Is an acute onset of major illness temporally linked with immunization and characterized by any of the two of thefollowing three conditions: • Seizures; • Severe alteration in level of consciousness lasting for one day or more, and • Distinct change in behaviour lasting one day or more.	Within 48 hours of DTPvaccine or from 7 - 12 days after measles or MMR vaccine.	Measles, Pertussis
c. Encephalitis	Characterized by the above mentioned symptoms and signs of cerebral inflammation and, in many cases, CSF pleocytosis and/or virus isolation.	Within 1-4 weeks.	
d. Meningitis	Acute onset of major illness with fever, neck stiffness/ positive meningeal sign (Kernig, Brudzinski). CSF examination is the most important diagnostic measure. CSF pleocytosis and/or detection of microorganism (Gram stain or isolation).		
e. Seizures	Seizures lasting from several minutes to more than 15 minutes and not accompanied by focal neurological signs or symptoms. • Febrile Seizures; or • Afebrile Seizures		All, especially Pertussis Measles.
f. Brachial neuritis	Dysfunction of nerves supplying the arm/shoulder without involvement of nervous system. A deep steady, often severe aching pain in the shoulder and upper arm followed in days or weeks by weakness and wasting in arm/shoulder muscles. Sensory loss may be present,but is less prominent. May present on the same or the opposite side to the injection and sometimes affects both arms.	Within 2 - 28 days	Tetanus

Adverse Events Following Immunization

Potential objectives of immunization safety programme errors

OBJECTIVES

- ¥ Detecting, correcting, and preventing programme errors
- ¥ Identifying unusually high rates of AEFI with specific vaccine lots or brand
- ¥ Ensuring that coincidental events are not falsely blamed on immunization
- ¥ Maintaining confidence in the immunization program and properly responding to parent/community concerns about immunization safety while increasing awareness (public and professional) about vaccine risks
- ¥ Generating new hypotheses about vaccine reaction that are specific to the population
- ¥ Estimating AEFI rates in the population compared with trial and international data.

ADVERSE EVENTS	CASE DEFINITION	TIMING	VACCINE
3. Other adverse events			
g. Anaphylactoid Reaction (acute hypersensitivity reaction)	Exaggerated acute allergic reaction, characterized by one or more of the following: 1. Wheezing and shortness of breath due to bronchospasm. 2. Laryngospasm/laryngeal oedema. 3. One or more skin manifestations e.g. hives, facial oedema, or generalized oedema.	Within 2 hours	All
h. Anaphylactic Shock	Circulatory failure (e.g. alteration of the level of consciousness, low arterial blood pressure, weakness or absence of peripheral pulses, cold extremities secondary to reduced peripheral circulation, flushed face and increasedperspiration) with or without bronchospasm and/or laryngospasm/laryngeal oedema leading to respiratory distress.	Occur immediately after immunization	All
i. Arthralagia	Joint pain usually including the small peripheral joints • Persistent: Joint pain lasting longer than 10 days • Transient: Joint pain lasting up to approximately 10 days.		Rubella, MMR
j. Disseminated BCG-itis	Disseminated infection and confirmed by isolation of Mycobacterium bovis BCG strain.	Within 1 - 12 months	BCG
k. Fever	Fever, mild: Temperature 38°C to 39°C (rectal) Fever, high: Temperature 39°C to 40.4°C (rectal) Fever, extreme (hyperpyrexia): Temperature higher than or equal to 40.5°C (rectal). Only high and extreme fever should be reported		ALL
l. Hypotensive-Hyporesponsive Episode (shock collapse)	Sudden onset of paleness, decreased level or loss of responsiveness decreases level or loss of muscle tone the episode is transient and self-limiting.	Within 48 hours of vaccination	Mainly DTP, rarely others
m. Osteitis / Osteomyelitis	Inflammation of the bone either due to BCG or caused by other bacterial infection.	Occur within 8-16 months	BCG
n. Persistent Screaming Pertussis	Inconsolable continuous crying lasting at least 3 hours accompanied by high pitched screaming.		DTP,
i. Sepsis	Acute onset of severe generalized illness and confirmed by positive blood culture.		All
j. Toxic-Shock Syndrome	Abrupt onset of fever, vomiting and watery diarrhea, often leading to death within 24-48 hours.	Within few hours	All
k. Thrombocytopenia	Serum platelet count of less than 50,000 / ML leading to bruising and/or bleeding.	Within 15 - 35 days	MMR
4. Other severe and unusual events	Events not covered under no. 1, 2, or 3.	Within 4 weeks	
5. Death	Any death of vaccine recipient temporally linked to immunization, where no other clear cause of death can be established, should be reported.		

Note: All the previous adverse events should be reported if temporally related to immunization. Unless otherwise specified this includes all such events occurring within four weeks of a vaccine administration.

activities of the Expanded Programme on Immunization

Activities Achieved in 2000

1. Data management to update EPI immunization coverage data for the period from 1975 - 1999.
2. Mopping activities for high risk population (Expatriates 0-5 years of age) with 2 doses of polio vaccine and the coverage was 92% for the first dose and 95% for the second dose.
3. Monitoring Hepatitis B Program for pregnant ladies, which started in 1998.
4. BCG data review and stopping BCG at school entry (4-6 year of age).
5. Updating a cold chain monitoring system.
6. Poster for the adverse events following immunization is done.
7. Active surveillance for acute flaccid paralysis and other diseases covered by EPI vaccines was established.
8. A surveillance system for (rash and fever) for Rubella and congenital Rubella syndrome established.
9. Out break prediction system for measles is established.
10. Influenza vaccine is provided for elderly Haji and high risk groups going to Haj.
11. ACYW meningococcal vaccine that covers the 4 antigens replaced the previous AC meningococcal vaccine that covers only 2 antigens.
12. Open vial policy established which states that opened vials should not be used in subsequent visits to avoid contamination.
13. A system for estimation immuniz-ation converge by districts is updated.
14. Out break response for Mumps outbreak in Asian schools was done by conducting a mopping up activities for all affected Indian schools.
15. Review of the computerized data at the M.C.H. and updating the data and new data added.
16. In July 2000, open meetings with the nurses and MCH supervisors to discuss all issues related to immunization and problems in statistics.
17. November 2000, a TT stamp was done with updated data on TT, it contains T1, T2, T3, T4, T5 and completed in order not to miss those who does not receive TT. in the current pregnancy, because their immunization is completed.

Expanded Programme on Immunization

The main responsibilities of the Expanded Programme on Immunization (EPI) to coordinate the different activities available in the Ministry of Health. These activities are:

1) School Immunization.
2) Travelers Immunization:
   a. Haj
   b. Others
3) Immunization given to children at:
   a. Health Centers.
   b. Private Clinics.
   c. Hospitals.
4) Adolescent Immunizations at the schools and institutions.
5) Elderly and high risk group Immunizations.
6) Immunizations to pregnant women.
7) Adverse events following immunization
8) Cold Chain monitoring programme.
9) Safe injection practices programme.
10) Supplementary Immunization activities.
    a. Immunization Campaigns.
    b. Mopps up activities.
11) Antenatal hepatitis B screening programme.
12) Out breaks investigation for diseases covered by EPI vaccine
13) Conducting surveys and researches.
14) Education to doctors, nurses and public in general.

Activities Plan for 2001

1. Measles sero survey for ages 1-34 years to estimate the level of immunity to measles among the population in Bahrain, (contin-uation of 2000).
2. System for rubella and congeni-tal rubella syndrome surveill-ance (January 2001).
3. Data management for EPI coverage by vaccination for best estimation of vaccine coverage using routine reported data and surveys from 1975 - 1999 (February 2001).
4. Rubella, mumps, and measles coverage survey for the popula-tion in Bahrain (Feb 2001).
5. Auto distinct syringes to be used in EPI (Feb 2001).
6. Workshop for doctors and nurses for adverse events following immunization (March 2001).
7. EPI data started to be registered on the Internet.
8. Updating vaccination card and designing a card to be used for different antigens at different age groups (April 2001).
9. Adverse events following immunization surveillance system to be started (April 2001).
10. A newsletter for EPI to be done, (December 2001).
11. Adverse events following immunization manual (April 2001).
12. Updating immunization manual. (May 2001).
13. Post-partum MMR vaccination (June 2001).
14. Establishing safe injection practices system (October 2001).
15. A quality control on measles and Rubella laboratory (September 2001).
16. Hepatitis B vaccination for 13 years old school students (October 2001).
17. Review of antenatal Rubella screening system (October 2001).
18. Establishes an importation policy (November 2001).
19. High risk areas vaccination (areas with coverage 80%) (November and December 2001).
20. Educational books for immuniza-tion and EPI targeted diseases (December 2001).
21. A national vaccination committee to be established.

Author: Dr. Muna Al Musawi
Consultant Family Physician
Head of Communicable Disease Section
Manager, Expanded Programme on Immunization
Email: drmonaepi@hotmail.com

Editor: Dr. Farouq Al-Zurba
Family Physician
Email: Farouq@zurba.com

PO Box 42 - Bahrain
Fax: (+973) 279268

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