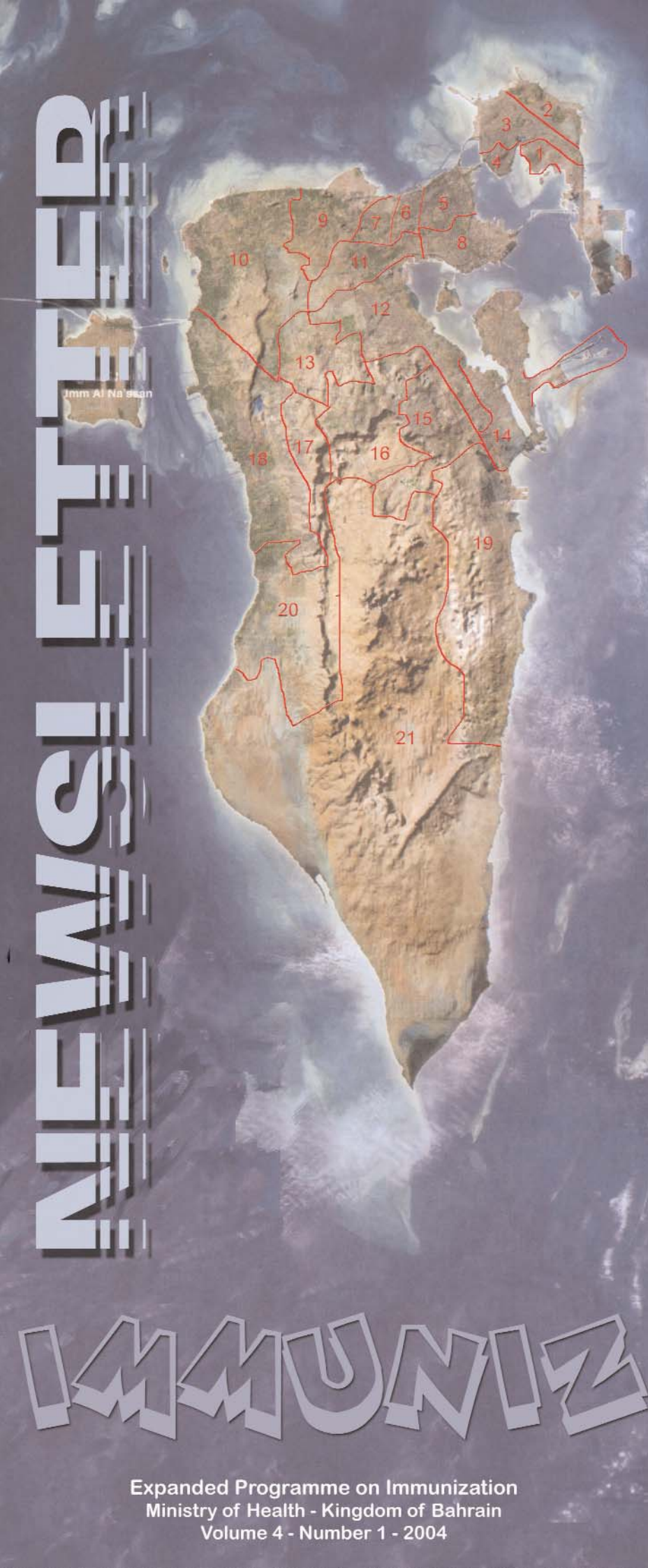


REPORT

IMMUNIZ

Expanded Programme on Immunization
Ministry of Health - Kingdom of Bahrain
Volume 4 - Number 1 - 2004



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

AGE	VACCINE	DOSE
At birth	BCG for non Bahraini newborns	Single Dose
2 months	DPT + HB + Hib + OPV	1st Dose
4 months	DPT + HB + Hib + OPV	2nd Dose
6 months	DPT + HB + Hib + OPV	3rd Dose
12 months	MMR Hepatitis A	1st Dose 1st Dose
18 months	DPT + OPV Hepatitis B + Hib	1st Booster Booster
2 years	Meningococcal Hepatitis A	Single Dose 2nd Dose
5-6 years	DPT OPV MMR	2nd Booster 2nd Booster 2nd Dose

ADOLESCENTS

12 years	MMR	2nd Dose
13 years	Td	Booster
14 years	Hepatitis B	3 Doses

FOR PREVIOUSLY UNIMMUNISED WOMEN

	at first contact	TT1
	at least 4 weeks after TT1	TT2
Tetanus toxoid	at least 6 months after TT2	TT3
	at least 1 year after TT3	TT4
	at least 1 year after TT4	TT5

ELDERLY AND HIGH RISK GROUP

Pneumococcal Polysaccharide	Single dose for ≥ 2 years
Pneumococcal Conjugate	3 doses for infants
Influenza	Annually
Chickenpox	Single dose 1-12 years 2 doses 6 weeks apart ≥ 13 years

ADULTS AND HAJJI

Meningococcal	Single dose every 3 years
Td	3 primary and a booster every 10 years
Influenza (elderly)	Annually

OTHER VACCINES

Travellers	Yellow fever	Single dose every 10 years
Travellers	Typhoid	Single dose every 3 years
Post exposure	Rabies	5 dose plus RIG (Single)
Contacts	Hepatitis B	3 doses
Immunocompromised	Killed Polio	5 doses

TRAVELLERS HEALTH AND VACCINATION - Part 1

The travelers risk key factors are:

- Destination
- Duration of visit
- Purpose of visit
- Accommodation standard
- Water and food hygiene
- Behaviour of the traveler

The plan before travel is:

Medical Consultation before travel

- 4 -6 wks before the Journey
- Check the vaccination need
- Anti-malarial drug need
- Chronic diseases advise and medications
- Dental checkup

The checklist for the traveler are:

1 . Obtain information on local conditions:

- Altitude
- Security problems
- Availability of medical facilities
- Risks related to the area
- Type of accommodation (hotel, camping)
- Length of stay

2 . Prevention:

- Vaccination. 4-6 weeks before departure
- Malaria prophylaxis
- Food hygiene
- Specific local diseases

3 . Accidents related to:

- traffic (obtain a card showing blood group before departure)
- animals (beware of snakes and rabid dogs)
- allergies (use a medical alert bracelet)
- sun (pack sunglasses and sun screen)

4 . A medical Check-up

The medical kit contents:

- Basic medicines
- First aid items
- Special medical items for individual traveler
- Signed certificate of medications needed
- Carried in the hand luggage

The responsibility of the traveler

are:

- The decision to travel
- Recognition and acceptance of any risks involved
- Seeking health advice in good time, preferably 4-6 weeks before travel
- Compliance with vaccinations, medication and health measures
- Careful planning before departure
- Carrying a medical kit
- Obtaining adequate insurance cover
- Health precautions before, during, and after the journey
- Prescription medicines, syringes
- Health of accompanying children
- To avoid infectious disease.
- Reporting any illness on return
- Respect for the host country

Special groups needing vaccination are:

- Infants and young children
- Adolescents and young adults
- Frequent travelers
- Last minute travelers
- Pregnancy
- Elderly
- Travelers with chronic medical problems
- HIV and immunocompromised
- Smokers
- Travelers with disabilities

The Vaccine Recommendations for Immunocompromised traveler:

- Use killed or inactivated vaccines
- The immune response to killed vaccines is suboptimal
- Virus replication of live vaccines - enhanced in travelers with immunodeficiency
- Immunocompromised got severe complications with live vaccines
- Immunocompromised should not be given live vaccines
- Susceptible close contacts of immunosuppressed traveler may be vaccinated

People who should undergo Medical Examination after travel:

- Travelers with:
- Chronic disease
 - Experience illness in the weeks

following their return home

- Exposed to serious infectious disease while traveling
- More than 3 months in developing country

The infectious diseases of potential risk for travelers are:

- Food borne
- Waterborne
- Vector borne
- Zoonoses
- Sexually transmitted
- Blood borne
- Airborne
- Soil borne

The diseases will be prevented by vaccination are:

- Poliomyelitis
- Tetanus
- Diphtheria
- Pertussis
- Haemophilus influenzae type (b)
- Measles, Mumps and Rubella
- Hepatitis A
- Typhoid
- Tick-borne Encephalitis
- Yellow Fever
- Hepatitis B
- Meningitis (A,C, W&Y)
- Japanese Encephalitis
- Rabies

The precautions to be taken together with vaccination:

Be safe out of doors

- Vaccines do not protect 100% of recipients
- Reduce the risk of exposure to infectious agents
- Avoid the visits to destination with high risk of exposure
- Take the prophylactic medications
- Avoid insect and animal bites
- Avoid handling animals
- Avoid transfusion of unsafe blood
- Avoid contact with people in crowded and in closed places
- Avoid direct contact with soil

Eat and drink safely

- Avoid direct contact with polluted water
- Insure personal hygiene
- Eat freshly cooked food

Contents of the Immunization Manual

- o Message to all personnel involved in immunization
- o Preface
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CHAPTER 1

The Role of immunization In Promoting Good Health

- Introduction
- Protection against infection by vaccination
- Immunity
- Vaccine production
- Vaccine efficacy and vaccine-induced immunity

CHAPTER 2

Vaccines

- Characteristics of EPI vaccines
- Epidemiology of the EPI Target diseases
- Types of Vaccine
- Use of vaccines
- Routes of administration
- Vaccines recommended for routine childhood immunization in Bahrain

CHAPTER 3

The Cold Chain

- Vaccine Acquisition
- How does the VVM work?
- Stability of EPI vaccines at vari-

- ous temperatures
- From manufacture to immunization
- The refrigerator
- Cold chain monitoring

CHAPTER 4

Immunization Procedures

- Administration of vaccines
- Vaccination procedures
- Spacing live and killed vaccines

CHAPTER 5

Specific Vaccines

1. Diphtheria vaccine
2. Pertussis vaccine
3. Tetanus vaccine
4. Poliomyelitis vaccine
5. Measles vaccine
6. Mumps vaccine
7. Rubella vaccine
8. Haemophilus influenzae type b vaccine
9. Hepatitis B vaccine
10. BCG vaccine
11. Meningococcal vaccine
12. Influenza vaccine
13. Rabies vaccine
14. Pneumococcal vaccine
15. Typhoid vaccine
16. Yellow Fever vaccine
17. Hepatitis A
18. Chicken pox

CHAPTER 6

Contraindications to, and misconceptions about Immunization

- Contraindications to vaccines
- Circumstances where immunization is necessary
- Misconceptions concerning contraindications to vaccination

CHAPTER 7

Types, Case Definition, And Treatment of the Adverse Events Following Immunization

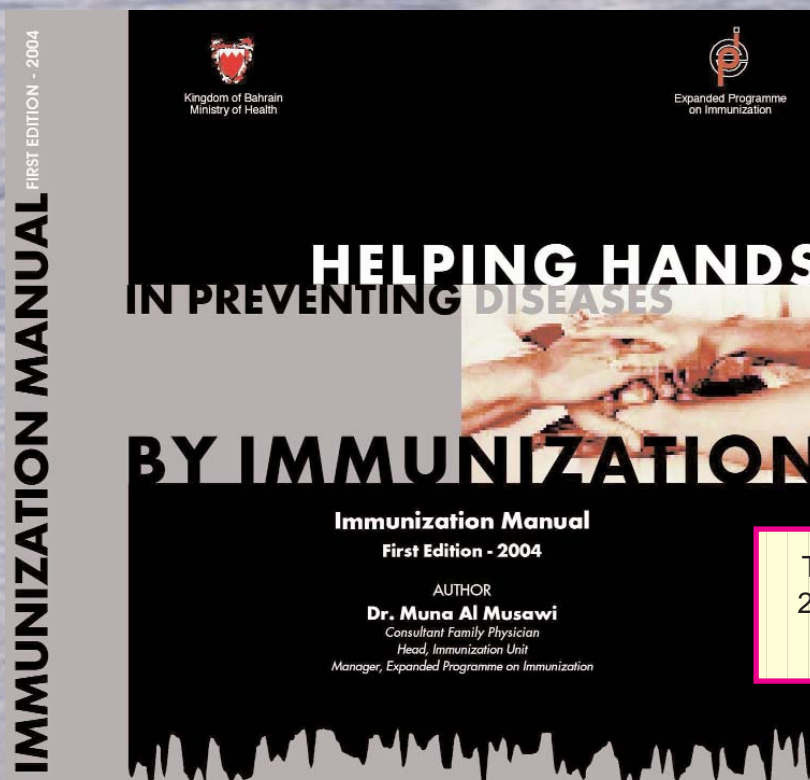
- Age for administration of vaccines
- Hypersensitivity to vaccine components
- Precautions during vaccination
- Types, Case Definition and Treatment of the Adverse Events following immunization

CHAPTER 8

Frequently Asked Questions

- Immunization program
- Injection site, egg allergy and contraindications to vaccinations
- Immunizations in special circumstances

References



The updated immunization manual 2004 will be distributed to all health facilities in quarter two 2004.

Annual Pre-school Screening and Immunization Programme

Successful immunization practice is one of the most important activities in total comprehensive care for children. The ultimate goal of immunization is elimination of communicable diseases, the immediate goal is prevention of diseases. To accomplish these goals, doctors and nurses must monitor timely immunizations in the care of children.

There are many children who have not received vaccines according to the recommended schedule leading to unnecessary infectious diseases outbreaks.

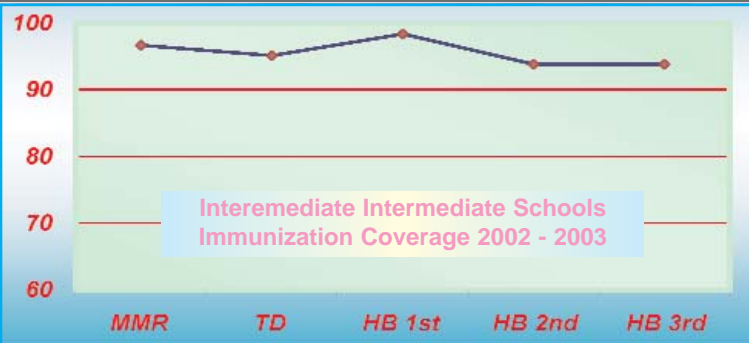
The school setting with children grouped together in classes provides opportunities for the spread of infection. During an outbreak, children may need to be immunized at schools, through the collaboration between the schools officials, parents and the Ministry of Health staff.

According to the recommended immunization schedule children aged 5-6 years should receive the 2nd booster of DPT (Diphtheria, Pertussus, Tetanus) and OPV (Oral Polio Vaccine) and the 2nd dose of MMR (Mumps, Measles, Rubella) vaccine and all other immunizations that were missed during infancy and childhood. These immunizations should be completed prior to class (1) entry to government or private schools. Children are also required to undergo a medical examination in the health centre or private clinics and are given a copy of the 'Health Report Form' and the immunization report, which are signed by the examining doctor and dentist. These forms are submitted to the school authorities to be kept in the child health record and is a requirement for enrollment for both government and private primary schools.

These immunizations are available in all health centres and private clinics. The "Health Report Form" should be collected from the schools.

Intermediate Annual Intermediate Schools Vaccination Programme

Vaccine	Class	No of dose	No of visit
MMR (Mumps Measles Rubella)	1st Intermediate	Single	One
Tetanus diphtheria	2nd Intermediate	Single	One
Hepatitis B	3rd Intermediate	Three	Three



The immunization unit team vaccinating class 7 & 8 at Shaikha Hessa School



Editorial

Millions of children around the world still die every year from diseases that can be prevented with existing vaccines. Moreover, vaccines in the development pipeline could save the lives of millions more if they were put to widespread use. 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 be observed for many decades unless deliberate action is taken on many fronts to accelerate the realization of these aims.

The Expanded Programme on immunization (EPI) strategic plan lays out a framework of goals and actions needed at this time to improve the protection of children against infectious diseases. The plan emphasizes the need for workers at all stages of vaccine research, development, production, quality assurance, supply, utilization and monitoring of impact to act in a more cohesive fashion, to emphasize and prioritize the value of vaccination, while committing additional resources necessary to protect children from suffering, disability and death.

The program strategy will use a range of communication and information techniques including the use of television, radio, print media, newsletters, bulletins, training material and special booklets.





قامت شركة جلاكسو سميث كلاين العالمية للأدوية واللقاحات (House of Vaccine) والتي مصنعها الرئيس موجود في بلجيكا وتضم أكثر من ١٠٠٠ باحث علمي في مجال اكتشاف وتطوير اللقاحات، بإهداء مملكة البحرين ممثلة بوزارة الصحة وعلى رأسها سعادة وزير الصحة الدكتور خليل بن إبراهيم حسن شهادة للتقدير وذلك باعتبار مملكة البحرين أول دولة بالوطن العربي وفي أوائل الدول عالميا تبادر بإدخال اللقاح الخماسي بعام ١٩٩٨م للأطفال للرضع، كما أهدت شهادة أخرى لوزارة الصحة باعتبار مملكة البحرين أول دولة بالوطن العربي ومن أوائل دول العالم التي بادرت بإدخال لقاح التهاب السحائي الرباعي (ACYW) منذ عام ٢٠٠٠م لجميع الأطفال عن سن عامين والحجاج والمسافرين.



The yellow booklet for vaccination started to be used for Hajj pilgrim.



An educational booklet for parents will be given to pregnant mothers during antenatal visits or after delivery or at the time of first vaccination for the baby.

Chickenpox vaccine is introduced into the childhood immunization program and will be available within 6 months for high risk groups.

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