

Table of Contents

	Page
EDITORIAL TEAM	I
ACKNOWLEDGEMENTS	I
FOREWORD	II
INTRODUCTION	1
DEFINITIONS	3
GLOSSARY	5
CHAPTER 1: HISTORY AND AIMS OF IMMUNISATION	
1.1 Objectives	8
1.2 Aim of immunisation	8
1.3 History of immunisation	8
1.4 Role of agencies involved in the immunisation programme	9
1.4.1 The National Immunisation Advisory Committee	9
1.4.2 The Department of Health and Children	9
1.4.3 The Health Service Executive	10
1.4.4 The National Immunisation Office	10
1.4.5 The Health Protection Surveillance Centre	10
1.5 Infectious disease surveillance	10
1.6 Monitoring immunisation uptake	11
1.7 Useful resources	11
CHAPTER 2: NATIONAL IMMUNISATION SCHEDULE	
2.1 Objectives	14
2.2 Introduction of vaccines to the Primary Childhood Immunisation Programme	14
2.3 Current Primary Childhood Immunisation Programme	14
2.4 Changes to Primary Childhood Immunisation Programme in 2008	15
2.5 Pneumococcal catch-up campaign	16
2.6 Immunisation for asylum seekers/late entrants to the immunisation programme	16
2.7 Immunisation for premature babies	17
2.8 Vaccine policies in different countries	17
2.9 Useful resources	19
CHAPTER 3: IMMUNITY AND HOW VACCINES WORK	
3.1 Objectives	22
3.2 The immune system	22
3.3 Active and passive immunity	22
3.4 What do antibodies contribute to the immune system?	22
3.4.1 Antibody-mediated immunity	23
3.4.2 Cell mediated immunity	23
3.5 How do vaccines work?	23
3.6 Vaccine components	24
3.6.1 Conjugating agents	24
3.6.2 Suspension fluid	24
3.6.3 Preservative, stabilisers and antimicrobial agents	24
3.6.4 Thiomersal	24
3.6.5 Adjuvants	25
3.7 Live attenuated vaccines	25
3.8 Inactivated vaccines and toxoids	25
3.9 What is "vaccine failure"?	25

3.10 Why is it necessary to leave time intervals between vaccines?	26
3.11 Useful resources	26
CHAPTER 4: VACCINE PREVENTABLE DISEASES	
4.1 Objectives	28
4.2 Disease included in the primary childhood immunisation programme	28
4.2.1 Diphtheria	28
4.2.2 Haemophilus influenzae	29
4.2.3 Hepatitis B	30
4.2.4 Measles	32
4.2.5 Meningococcal disease	34
4.2.6 Mumps	36
4.2.7 Pertussis	37
4.2.8 Pneumococcal infection	39
4.2.9 Polio	40
4.2.10 Rubella	41
4.2.11 Tetanus	43
4.2.12 Tuberculosis	44
4.3 Disease where vaccination is recommended for specific "at-risk" groups	45
4.3.1 Hepatitis A	45
4.3.2 Influenza	47
4.3.3 Varicella	48
4.4 Disease where vaccination might be recommended in the future	49
4.4.1 Human papilloma virus infection	49
4.4.2 Rotavirus	49
4.5 Useful resources	49
CHAPTER 5: STORAGE AND HANDLING OF VACCINES	
5.1 Objectives	52
5.2 The Cold Chain and its importance to vaccine safety	52
5.2.1 The HSE National Cold Chain Delivery service	52
5.2.2 Vaccine available through the National Cold Chain Delivery service	52
5.2.3 Vaccine ordering	52
5.2.4 Vaccine delivery to the surgery or HSE health centre	53
5.3 Vaccine storage	53
5.4 Transport of vaccines to outlying clinics	54
5.5 Procedures following breakdown in the "Cold Chain"	54
5.6 Disposal of vaccines	55
5.7 Useful resources	55
CHAPTER 6: LEGAL ASPECTS OF IMMUNISATION	
1.1 Objectives	58
1.2 Consent	58
6.2.1 Why is consent required?	58
6.2.2 What constitutes informed consent?	58
6.2.3 Responsibility of medical professional in consent process	59
6.2.4 Responsibility of the client giving consent	59
6.2.5 What is the age of consent?	59
6.2.6 How should consent be recorded?	59
6.2.7 How should consent be recorded when the client is illiterate?	60
6.2.8 How should consent be recorded when the client's first language isn't English?	60
6.2.9 Who can give consent for children?	60

6.2.10	What is the position in regard to children of legally separated parents in relation to consent?	60
6.2.11	What is the position in regard to consent for medical treatment for foster children?	60
6.2.12	What is the role of parents in giving consent for medical treatment for children in the care of the HSE?	61
6.3	Sources of information to help in decision making	61
6.4	Data Protection	61
6.5	Useful resources	62

CHAPTER 7: COMMUNICATING WITH PARENTS

7.1	Objectives	64
7.2	Where do parents get information in relation to immunisation?	64
7.3	Communicating effectively with parents	64
7.4	Dealing with defaulters	65
7.5	Useful resources	65

CHAPTER 8: VACCINE ADMINISTRATION

8.1	Objectives	68
8.2	Vaccine preparation	68
8.3	Vaccine administration	68
8.4	Conditions that are contraindications to immunisation	68
8.5	Conditions that are NOT contraindications to immunisation	69
8.6	Route of injection	69
8.7	Injection site preparation and injection	69
8.8	Recording of information following vaccination	71
8.9	How to hold a child during immunisation	71
8.10	Post vaccination observation and reactions	71
8.11	Disposal of vaccines and other injecting equipment	72
8.12	Useful resources	72

CHAPTER 9: ADVERSE EVENTS FOLLOWING IMMUNISATION AND ANAPHYLAXIS

9.1	Objectives	74
9.2	Adverse events following immunisation	74
9.3	Summary of minor events following immunisation	75
9.4	Management of common reactions following immunisation	76
9.5	Rare and serious adverse events following immunisation	76
9.6	Anaphylaxis	76
9.6.1	Signs and symptoms of an anaphylactic reaction	77
9.6.2	Management of anaphylaxis	78
9.7	Reporting of adverse events following immunisation	79
9.7	Useful resources	80

APPENDICES

1.	Multidisciplinary components of an immunisation system	82
2.	Notification process and notifiable diseases	84
3.	GP vaccine order form	86
4.	HSE vaccine order form	88
5.	Checklist for vaccine storage	90
6.	Vaccine fridge Temperature recording chart	92
7.	Average USA annual morbidity due to vaccine preventable diseases in the 20 th century compared with morbidity in 2004 (for pre 1990 vaccines)	94
8.	Adverse Reactions report form (Yellow card)	96