



Chapter 2

National Immunisation Schedule

2.1 Objectives

- To identify when vaccines were introduced into the Primary Childhood Immunisation programme
- To outline the current Irish National Immunisation Schedule
- To outline changes to the Irish National Immunisation Schedule in 2008
- To outline immunisation for asylum seekers and late entrants to the immunisation programme
- To outline immunisation for premature babies
- To outline why vaccine schedules vary between countries.

2.2 Introduction of vaccines to Primary Childhood Immunisation Programme

The National Immunisation Advisory Committee (NIAC) is responsible for producing National Immunisation Guidelines for Ireland based on best evidence regarding the safety and efficacy of vaccines and the disease burden (frequency, severity, etc.) in Ireland. More recently, introductions of new vaccines to the Irish schedule have included pharmacoeconomic analyses. NIAC then advises the DoHC on immunisation policies and they, in turn, charge the Health Service Executive with the implementation of changes to the vaccine schedule. The following table outlines when some vaccines were added to the Irish Immunisation Schedule (Table 2.1).

Table 2.1: Dates vaccines introduced into Irish immunisation schedule

Vaccine	Date introduced into Ireland
BCG	First began 1937 Introduced nationally 1949
DT	1930s
DTP	1952-1953
Oral Polio Vaccine (OPV)	1957
Rubella	October 1971-1972
Measles	October 1985
MMR	October 1988
MMR2	1992
Hib	October 1992
Men C	October 2000
DTaP-Hib-IPV (5 in 1)	July 2001
Inactivated Polio (IPV)	2001
Hib Booster	September 2006

Source: Department of Health and Children

2.3 Current Primary Childhood Immunisation Programme

The National Immunisation Guidelines were produced by the NIAC and are available on the NIO website www.immunisation.ie and the HPSC website www.hpsc.ie. In September 2006, a Haemophilus influenza booster was added to the National Immunisation Schedule. The recommended childhood immunisation schedule up to August 2008 is outlined in Table 2.2.

Table 2.2: Recommended Childhood Immunisation Schedule up to August 2008

Age	Immunisation
Birth-1 month	BCG vaccine, tuberculosis vaccine (given in maternity hospitals or at a HSE clinic)
2 months, 4 months and 6 months	5 in 1 and MenC Diphtheria/Tetanus/Whooping cough (Pertussis)/ Haemophilus Influenzae B (Hib), Inactivated poliomyelitis (IVP) Meningococcal C
12 months	MMR and Hib Measles/Mumps/Rubella Haemophilus Influenzae B
4-5 years	4 in 1 and MMR Diphtheria/Tetanus/Whooping cough (Pertussis) Measles/Mumps/Rubella
11-12 years	MMR Measles/Mumps/Rubella (Omit if two previous doses)
10-14 years	BCG (Only if shown to be tuberculin negative and no previous history of BCG)
11-14 years	Tetanus/Diphtheria booster (Td)

2.4 Changes to the Primary Childhood Immunisation Programme in 2008

The changes to the National Immunisation Schedule recently recommended by NIAC are;

- The addition of pneumococcal vaccine at 2, 6 and 12 months
- The addition of Hepatitis B vaccine (as part of a 6 in 1 vaccine) at 2, 4 and 6 months
- The change in the age for administration of Haemophilus influenza type B booster vaccine from 12 to 13 months
- The change of the age for administration of Meningococcal C vaccine from 2, 4 and 6 months to 4, 6 and 13 months.

The recommended childhood immunisation schedule from September 2008 is outlined in Table 2.3.

Table 2.3: Recommended childhood immunisation schedule from September 2008

Age	Immunisations	Number of injections
Birth – 1 month	BCG vaccine tuberculosis vaccine (given in maternity hospitals or at a HSE clinic.)	1 injection
2 months	6 in 1 and PCV Diphtheria/Tetanus/Whooping Cough (Pertussis) Hib/IPV/Hepatitis B Pneumococcal Conjugate	2 injections
4 months	6 in 1 and Men C Diphtheria/Tetanus/Whooping Cough (Pertussis)/ Hib/IPV/Hepatitis B Meningococcal C	2 injections
6 months	6 in 1 and PCV and Men C Diphtheria/Tetanus/Whooping Cough (Pertussis)/ Hib/IPV/Hepatitis B Pneumococcal Conjugate Meningococcal C	3 injections
12 months	MMR and PCV Measles/Mumps/Rubella Pneumococcal Conjugate	2 injections
13 months	Men C and Hib Meningococcal C Haemophilus Influenzae B	1- 2 injections
4-5 years	4 in 1 and MMR Diphtheria/Tetanus/Whooping cough (Pertussis)/ IPV Measles/Mumps/Rubella	2 injections
11-14 years	Tdap Tetanus/low dose Diphtheria/low dose pertussis	1 injection

2.5 Pneumococcal catch-up campaign

A catch-up campaign for pneumococcal conjugate vaccine has been recommended for all those under 24 months of age (Table 2.4). Children over 2 months of age will continue on the old schedule for all other vaccines.

Table 2.4: Catch-up campaign for Pneumococcal conjugate vaccine

Age in Months	Number of doses	Age for vaccine (months)
> 2-6	2	6,13
>6-13	1	13
>13-<24	1	Called in monthly cohorts

2.6 Immunisation for asylum seekers/late entrants to the immunisation programme

Asylum seekers may not have documentation or knowledge of past immunisations. In the absence of information/documentation to the contrary children should be assumed to be unvaccinated and start on a catch-up programme. The schedule of immunisations that should be carried out

for various age groups who have not been previously vaccinated or have incomplete vaccination schedules is laid out on the NIO website www.immunisation.ie.

Children who are not immunised and are older than the recommended age range should be immunised as soon as possible. The number of Hib and Men C doses required depends on the child's age. Hib vaccine is not recommended for those over 4 years of age. Men C is not routinely recommended over 22 years. Tdap is recommended for those aged 10 years and older.

2.7 Immunisation for premature babies

Vaccine-preventable diseases may be serious and even life threatening in premature infants. The premature baby needs protection against diseases. For the majority of preterm infants vaccines provide protection against severe disease except for those extremely premature (less than 1,500 grammes) in whom the immune response may be less. The baby should have vaccinations carried out according to its birth date (chronological age). Some babies may even start their vaccinations in hospital.

Children with specific medical conditions such as immunological complications may require specific vaccinations. Please consult the National Immunisation Guidelines for further advice.

2.8 Vaccine policies in different countries

Vaccination policies vary by country and are dependent on local epidemiology, new developments and available resources. Vaccine policies are guided by multidisciplinary national expert advisory committees who produce guidelines and other materials in relation to immunisation.

The World Health Organisation also provides information on vaccine schedules <http://www.who.int/vaccines/GlobalSummary/Immunization/ScheduleSelect.cfm>

Information on vaccination schedules in Europe is available on the EUVACNET website. EUVACNET was created for the purposes of epidemiological surveillance and control of vaccine-preventable diseases in the European Region. <http://www.euvac.net/graphics/euvac/index.html>

Useful links to these national committees and their current guidelines and immunisation handbooks are outlined in Table 2.5.

Table 2.5 National Immunisation Committees and Guidance/ Handbooks

	Committee	Guidance/Handbook
United Kingdom	Joint Committee on Vaccination and Immunisation (JCVI), http://www.advisorybodies.doh.gov.uk/jcvi/	"Immunisation against infectious diseases" – "The Green Book", 3rd Edition 2006, available at http://www.dh.gov.uk/en/Policyandguidance/Healthandsocialcaretopics/Greenbook/DH_4097254
United States	Advisory Committee on Immunization Practices (ACIP), http://www.cdc.gov/vaccines/recs/acip/ . American Academy of Paediatrics, http://www.aap.org/ .	"Epidemiology and Prevention of Vaccine-Preventable Diseases"- The Pink Book 10th Edition, (February 2007), available at http://www.cdc.gov/vaccines/pubs/pinkbook/default.htm . "The Red Book" available at http://aapredbook.aappublications.org/ .
Canada	National Advisory Committee on Immunisation, http://www.phac-aspc.gc.ca/naci-ccni/index-eng.php .	Canadian Immunization Guide 7th Edition (2006) available at http://www.phac-aspc.gc.ca/publicat/cig-gci/index.html
Australia	Australian Technical Advisory Group on Immunisation, http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/atagi	Australian Immunisation Handbook 8th Edition 2003 available at http://www.health.gov.au/internet/immunise/publishing.nsf/Content/handbook03
New Zealand	Ministry of Health New Zealand, http://www.moh.govt.nz/immunisation.html .	Immunisation Handbook available at http://www.moh.govt.nz/immunisation.html .

2.9 Useful resources

Advisory Committee on Immunization Practices (USA) <http://www.cdc.gov/vaccines/recs/acip/>.

American Academy of Paediatrics. 2006 Report of the Committee on Infectious Diseases – The Red Book. <http://aapredbook.aappublications.org/>

Australian Immunisation Handbook, Eighth Edition. <http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/handbook03>

Canadian Immunisation Guide Seventh Edition 2006. <http://www.phac-aspc.gc.ca/publicat/cig-gci/index.html>

Centre for Disease Control Epidemiology and Prevention of Vaccine-Preventable Diseases Pink book 10th edition <http://www.cdc.gov/nip/publications/pink/default.htm>.

Department of Health UK. November 2006. Immunisation against infectious disease. http://www.dh.gov.uk/en/Policyandguidance/Healthandsocialcaretopics/Greenbook/DH_4097254

EUVACNET <http://www.euvac.net/graphics/euvac/index.html>

Health Protection Agency UK. <http://www.hpa.org.uk/>

Health Protection Surveillance Centre, Ireland. www.hpsc.ie

Joint Committee on Vaccination and Immunisation UK. <http://www.advisorybodies.doh.gov.uk/jcvi/>

Minister for Health New Zealand: Immunisation Handbook 2006. www.moh.govt.nz/immunisation

Royal College of Physicians of Ireland. Immunisation Guidelines for Ireland. Available at www.hpsc.ie

World Health Organisation. <http://www.who.int/en/>

