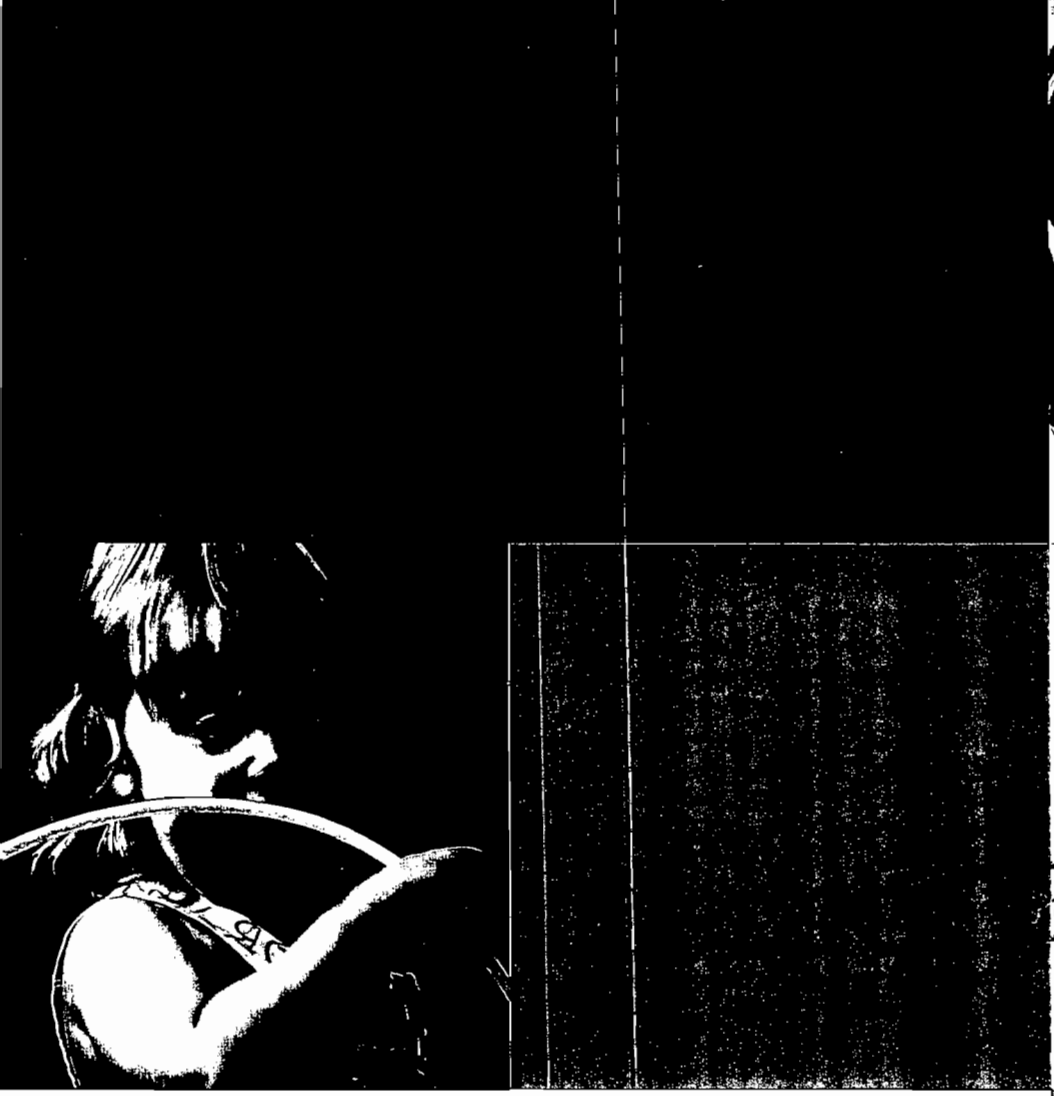

NEW Childhood Immunisation Schedule 2008

Information Pack

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

PROTECT HEALTH IMMUNISE

Pneumococcal Vaccine Catch up Campaign

(Children born between Sept 2nd 2006 and June 30th 2008)

PCV Catch Up Schedule

Date of Birth	Number of Doses Required	When to Vaccinate
2/9/06 – 31/7/07	1	Before 31st January 2009
1/8/07 – 29/2/08	1	13 months of age
1/3/08 – 30/6/08	2	6 months and 13 months of age

Date of Birth	2008 Sept	Oct	Nov	Dec	2009 Jan	Feb	Mar	April	May	June	July	Child's age at vaccination
Sept 06	■											<24
Oct 06	■											23
Nov 06	■											22
Dec 06		■										22
Jan 07		■										21
Feb 07			■									21
Mar 07			■									20
Apr 07				■								20
May 07				■								19
Jun 07					■							19
July 07					■							18
Aug 07	■											13
Sept 07		■										13
Oct 07			■									13
Nov 07				■								13
Dec 07					■							13
Jan 08						■						13
Feb 08							■					13
Mar 08	■							■				6, 13
Apr 08		■							■			6, 13
May 08			■							■		6, 13
Jun 08				■							■	6, 13

■ denotes month each child should receive vaccination by date of birth.

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www.immunisation.ie

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Health Service Executive

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1/3/08 – 30/6/08	2	6 months and 13 months of age

Your child should also receive the following immunisations

Age	Where	Vaccine
Birth	Hospital/Clinic	BCG
2 months	GP	5 in 1 + Men C
4 months	GP	5 in 1 + Men C
6 months	GP	5 in 1 + Men C
12 to 15 months	GP	MMR + Hib
4 to 5 years	GP/School	4 in 1 + MMR

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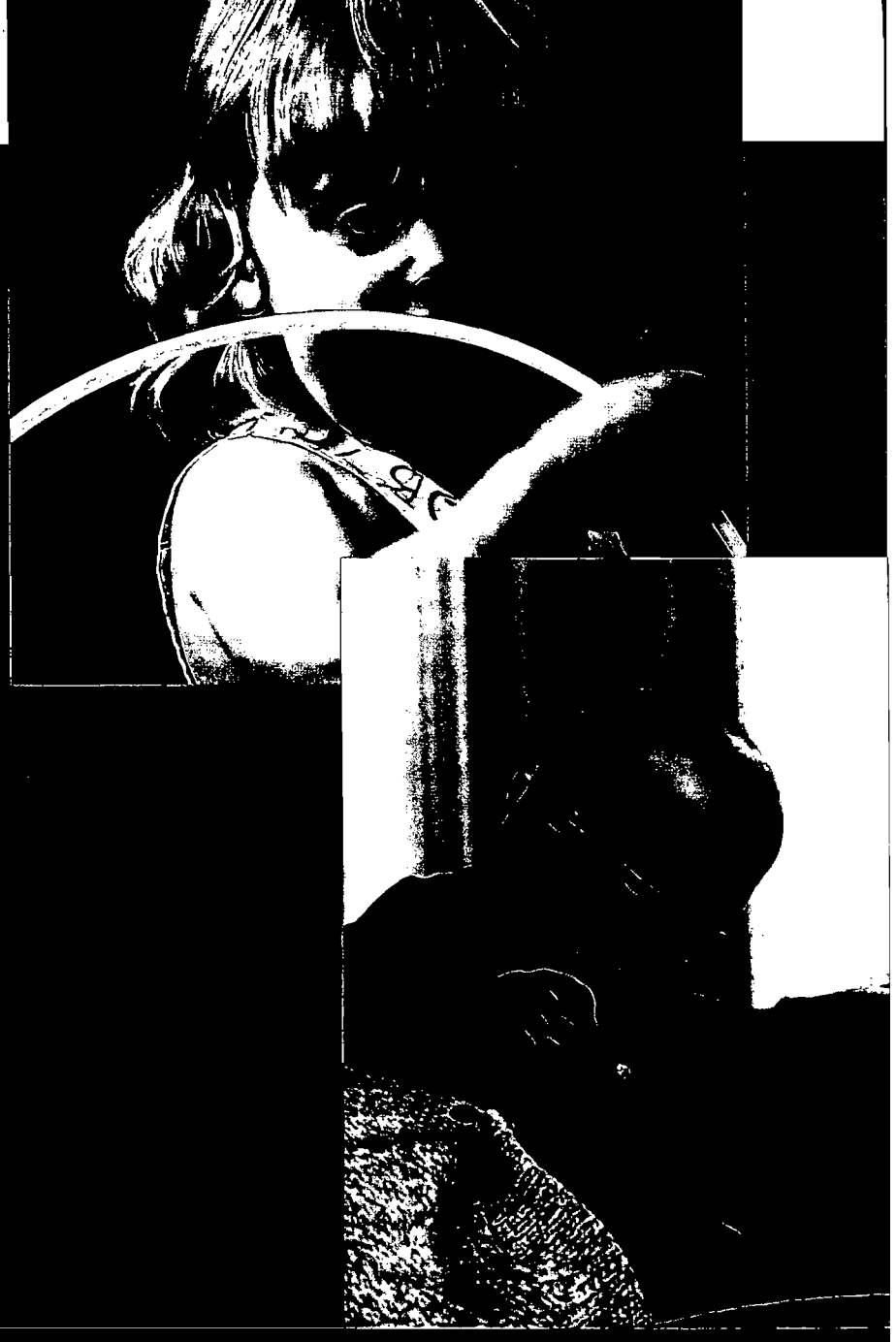
HSE
Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

New Schedule, More Protection



Vaccination Schedule for Children born on or after 1st July 2008

Age	Where	Vaccination
At Birth	Hospital/Clinic	BCG (TB)
2 Months	GP	6 in 1 + PCV
4 Months	GP	6 in 1 + Men C
6 Months	GP	6 in 1 + Men C + PCV
12 Months	GP	MMR + PCV
13 Months	GP	Men C + Hib
4-5 Years	GP/School	4 in 1 + MMR
11-14 Years	School	Td

BCG = Bacille Calmette-Guérin
6 in 1 = Diphtheria, Tetanus, Pertussis, Polio, Haemophilus influenzae b, Hepatitis B
PCV = Pneumococcal Conjugate Vaccine
Men C = Meningococcal C
MMR = Measles, Mumps, Rubella
Hib = Haemophilus influenzae b
4 in 1 = Diphtheria, Pertussis, Polio, Tetanus
Td = Tetanus, Diphtheria

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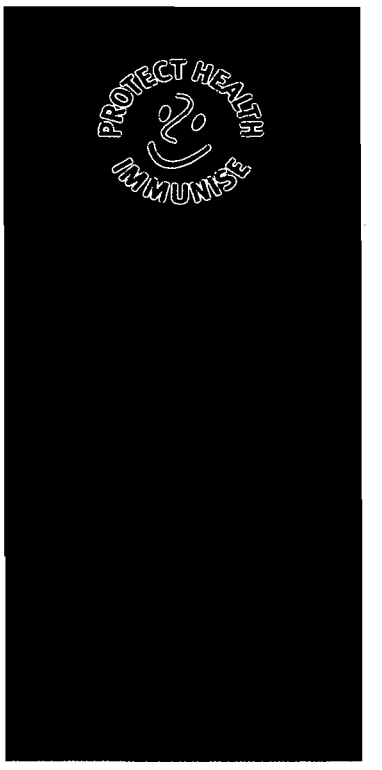


New programme, more protection

Frequently Asked Questions for Health Professionals

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

What are the changes to Primary Childhood Immunisation schedule?

The changes to the primary childhood immunisation schedule as recommended by the National Immunisation Advisory Committee (NIAC) in 2007 are

- replacing the 5 in 1 vaccine with a 6 in 1 vaccine to include Hepatitis B vaccine
- the addition of Pneumococcal conjugate vaccine (PCV)
- changes in the timing of Meningococcal C vaccine (Men C)
- changes in the timing of Haemophilus influenza vaccine (Hib)

When does the new schedule start?

All children born on or after July 1st 2008 will receive the new schedule.

The new schedule will start on September 1st 2008.

Change in Primary Childhood Immunisation schedule		
	By Age	
	Children born before 1/7/08	Children born on or after 1/7/08
Birth	BCG	BCG (1 injection)
2 months	5 in 1 + Men C	6 in 1 + PCV (2 injections)
4 months	5 in 1 + Men C	6 in 1 + Men C (2 injections)
6 months	5 in 1 + Men C	6 in 1 + PCV + Men C (3 injections)
12 months	MMR + Hib	MMR + PCV (2 injections)
13 months	-	Men C + Hib* (1/2 injections)
	By vaccine	
	Children born before 1/7/08	Children born on or after 1/7/08
Birth	BCG	BCG
5 in 1	2, 4, 6 months	-
6 in 1	-	2, 4, 6 months
Men C	2, 4, 6 months	4, 6, 13 months
MMR	12 months	12 months
Hib	12 months	13 months
PCV	-	2, 6, 12 months

5 in 1
Diphtheria
Tetanus
Pertussis (whooping cough)
Polio
Haemophilus influenza B (Hib)

6 in 1
Diphtheria
Tetanus
Pertussis (whooping cough)
Polio
Haemophilus influenza B (Hib)
Hepatitis B

* Men C + Hib combination may be available as a single vaccine

6 in 1 vaccine (includes Hepatitis B vaccine)

What vaccines are included in the 6 in 1 vaccine?

The 6 in 1, indicated for primary and booster immunisation of infants, contains vaccines against 6 diseases; diphtheria, tetanus, pertussis, Hepatitis B, poliomyelitis and disease caused by *Haemophilus influenzae* type b.

Why is Hepatitis B vaccine being introduced into the childhood schedule?

Hepatitis B is potentially a very serious disease (see below). In 2007, the National Immunisation Advisory Committee (NIAC) recommended the addition of the Hepatitis B vaccine to the primary childhood schedule because of the increasing incidence of Hepatitis B disease.

The introduction of Hepatitis B vaccine to the childhood programme in 2008 will provide protection for Irish children immediately and in the future. Introducing the vaccine at an early age has been found to be the most effective way to prevent Hepatitis B infection in populations.

When should the 6 in 1 vaccine be given?

At 2, 4 and 6 months of age.

6 in 1 is not licensed for use in children over 36 months of age. However, in accordance with NIAC guidelines 6 in 1 vaccine may be given to any late entrant under 5 years of age.

How long does the protection last after having the 6 in 1 vaccine?

Data from pre-licensure, post licensure and field studies indicates that this vaccine provides long-lasting protection against the six diseases.

Will a Hepatitis B booster be required?

No. Booster vaccination is not recommended. Current data show that vaccine-induced Hepatitis B surface antibody (anti-HBs) levels may decline over time; however, immune memory (anamnestic anti-HBs response) remains intact indefinitely following immunisation. Persons with declining antibody levels are still protected against clinical illness and chronic disease.

Are there side effects from the 6 in 1 vaccine?

Minor side effects are common and occur in approximately 1 in 10 recipients and include irritability, drowsiness, loss of appetite, fever ≥ 38°C, and pain, redness, and swelling at the injection site.

Any adverse vaccine reactions (ADRs) should be reported to the Irish Medicines Board via the yellow report card (available on www.imb.ie).

Are there any reasons why the 6 in 1 vaccine should not be given?

Contraindications:

- Previous anaphylactic reaction to any component of the vaccine.

Precautions

- Immunisation should be deferred in any child with acute severe febrile illness until the illness has resolved.

Does the 6 in 1 vaccine contain thiomersal (mercury)?

No. Thiomersal is not used in the 6 in 1 vaccine.

What about an at risk child who received Hepatitis B vaccine at birth?

This child should still have their routine 6 in 1 vaccines at 2, 4 and 6 months. This will provide a full course of Hepatitis B vaccine.

Is there a catch up programme for Hepatitis B vaccine?

No. NIAC did not recommend a catch up campaign for Hepatitis B vaccine. Other countries have introduced an universal adolescent Hepatitis B vaccination programme in addition to an universal infant programme but this is difficult to implement successfully. In view of this, in addition to universal infant vaccination, NIAC has recommended continued targeted vaccination of all those at risk.

What is Hepatitis B disease?

Hepatitis B is a vaccine preventable disease transmitted through contact with the blood or body fluids of an infected person. Hepatitis B virus can cause either acute hepatitis or chronic inflammation of the liver that can lead to serious liver disease such as cirrhosis and liver cancer. The World Health Organisation estimates that more than 350 million people worldwide are chronically infected with Hepatitis B virus. It is thought to be the second most common human carcinogen after tobacco smoke.

What are the symptoms of Hepatitis B?

The course and clinical symptoms of Hepatitis B infection depend on the patient's age and immune status.

Acute Hepatitis B is often asymptomatic. Only 10% of children and 30-50% of adults develop symptoms during the acute phase of Hepatitis B infection. The most common symptoms are: loss of appetite, nausea, vomiting, abdominal discomfort, and joint pain, often followed by jaundice.

Chronic Hepatitis B infection is more likely to develop in those infected early in life. About 70-90% of infected infants and young children and 1-10% of infected adults develop chronic (long term) Hepatitis B infection.

Chronic infection is associated with an increased risk of developing cirrhosis, liver failure and hepatocellular carcinoma. Premature death from chronic liver disease occurs in approximately 15-25% of chronically infected people.

How is Hepatitis B disease transmitted?

Hepatitis B virus (HBV) has been found in virtually all body secretions and excretions. However, only blood (and serum-derived fluids), saliva, semen and vaginal fluids have been shown to be infectious. People with chronic HBV infection are the primary reservoirs of infection.

Transmission mainly occurs by:

- Sexual intercourse
- Blood–to-blood contact
- Transmission from infected mother to child
- Transmission has rarely followed bites from infected individuals

Transmission by transfusion of contaminated blood or blood products is now rare because of routine screening of blood donors and viral inactivation of certain blood products.

Who are most at risk of Hepatitis B infection?

The following groups are at increased risk of HBV infection and should receive HBV vaccine if non-immune:

- Persons with occupational risk of exposure to blood or blood-contaminated environments
- Family and household contacts of individuals with Hepatitis B
- Injecting drug users (IDUs) and their contacts
- Individuals at high risk due to medical conditions
- Sexual contact risk groups
- Inmates of custodial institutions
- Tattoo and body piercing artists
- Immigrants from areas with a high or intermediate prevalence of HBV
- Travellers to areas with a high or intermediate prevalence of HBV
- Homeless people
- Children born to parents from high or intermediate endemicity countries

Does a child born before July 1st 2008 need Hepatitis B vaccine?

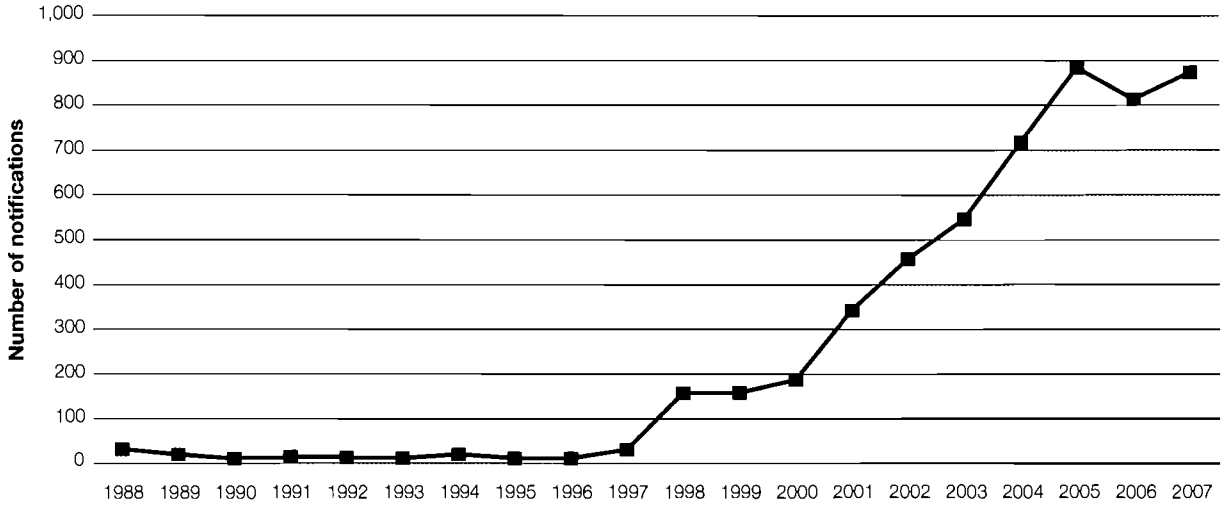
If a child is in an at risk group a full course of Hepatitis B vaccine should be given.

How many cases of Hepatitis B disease occur each year?

Ireland is generally considered to be a low prevalence country (<1% prevalence) but Hepatitis B is more common in certain high-risk populations such as injection drug users, prisoners and immigrants from high endemicity countries (see HPSC reports for more information at www.hpsc.ie).

In Ireland, notifications of Hepatitis B increased every year between 1996 and 2005. In recent years more than 800 cases have been reported annually (Figure 1).

Figure 1. Number of notifications of Hepatitis B by acute/chronic status, 1988-2007

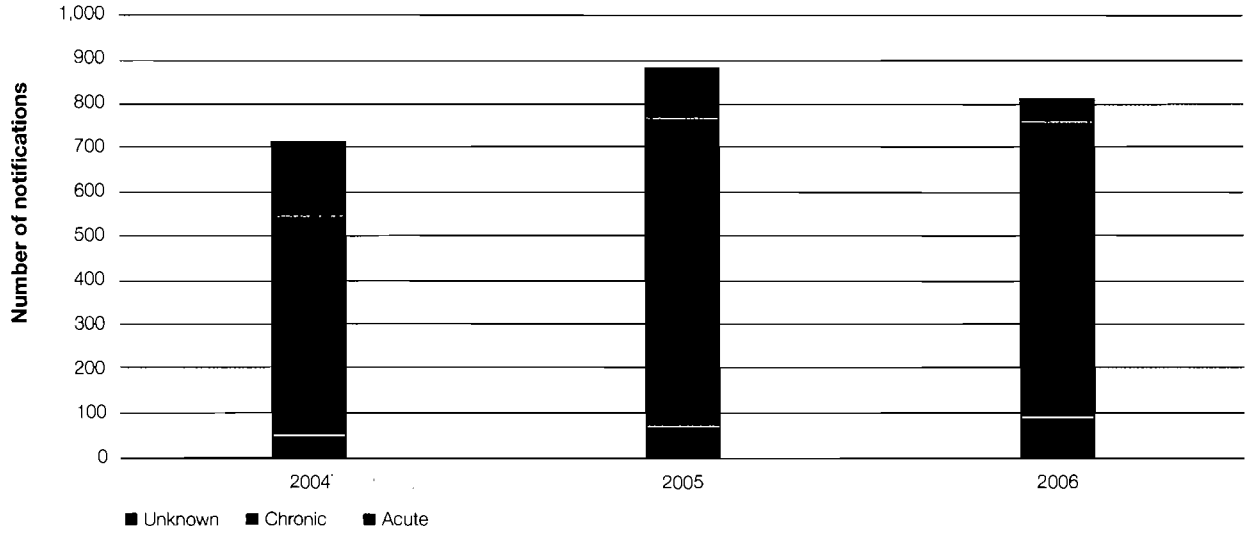


(2007 data is provisional) (Source: NVRL and CIDR, HPSC)

Note: In 2004, case definitions were introduced for Hepatitis B so that acute and chronic cases could be differentiated and it also became mandatory for laboratories to report all notifiable infectious diseases.

Data on type of Hepatitis B infection (acute or chronic) is only routinely available in recent years, since which time the majority of cases reported are chronic infections (Figure 2).

Figure 2. Number of Hepatitis B notifications by status, 2004-2006.



Source: CIDR. HPSC

Pneumococcal conjugate vaccine

What is pneumococcal conjugate vaccine?

Pneumococcal conjugate vaccine (7 Valent) PCV contains polysaccharide from seven of the most common capsular types. The polysaccharide is conjugated (bound) to a protein.

Approximately 90% of pneumococcal serotypes in circulation in Ireland are covered by PCV.

This vaccine has been recommended for high risk children under 5 years of age since 2002 and is now being included in the routine childhood immunisation schedule.

Is this the same as pneumococcal polysaccharide vaccine?

No. Pneumococcal polysaccharide vaccine (PPV23) contains purified polysaccharide from 23 of the most common capsular types of *S. pneumoniae*. This vaccine is recommended for elderly persons, and for at risk adults and children over 2 years of age.

PPV 23 is not recommended for children under 2 years of age due to an inadequate antibody response in young children.

Why is PCV being introduced into the childhood schedule?

Immunisation is the only available tool to prevent pneumococcal disease. PCV is being introduced into the childhood schedule due to the high incidence of the disease in young children.

A PCV catch-up programme is also being introduced for all children under 2 years of age as the incidence is highest in these children.

When should PCV vaccine be given?

At 2 and 6 months of age with a booster at 12 months of age.

How safe and effective is PCV?

PCV has demonstrated good safety records in both pre-licensure trials and post-licensure monitoring.

Clinical trials show that the vaccine is highly effective at preventing invasive disease due to serotypes included in the vaccine. The vaccine also has some efficacy against non-invasive disease and has led to a reduction in antibiotic resistant pneumococcal disease.

PCV is safe, effective and well tolerated when administered with other recommended childhood vaccines.

Studies from the US have shown that the introduction of PCV to the childhood schedule protects both vaccinated children (direct effect) and also unvaccinated groups especially those most at risk (the young and those over 65 years) (indirect effect) from pneumococcal disease. Protection of the unvaccinated groups occurs through decreased transmission of disease or herd immunity. In the US this has led to a significant decrease in pneumococcal disease morbidity and mortality in unvaccinated people.

How long does the protection last after having the PCV?

Studies from the United States where PCV has been used since 2000 show the vaccine provides long term protection against pneumococcal disease.

Are there side effects from PCV?

The most commonly reported adverse reactions are injection site tenderness (10-20%) and fever >38°C which is more common in children receiving the 6 in 1 vaccine at the same time. No severe adverse events attributable to PCV have been reported.

Any adverse vaccine reactions (ADRs) should be reported to the Irish Medicines Board via the yellow report card (available on www.imb.ie).

Are there any reasons why the PCV should not be given?

Contraindications: Previous anaphylactic reaction to any component of this vaccine.

Precautions: Immunisation should be deferred in any child with an acute severe febrile illness until the illness has resolved.

Does the PCV contain thiomersal (mercury)?

No Thiomersal is not used in PCV.

What is pneumococcal disease?

Pneumococcal disease caused by the streptococcus pneumoniae bacteria leads to significant morbidity and mortality, particularly amongst the very young, the very old, those with impaired immunity and those with anatomic or functional asplenia. It is responsible for 50% of community acquired pneumonia with a case fatality rate between 20-60%

Streptococcus pneumoniae is a leading cause of meningitis in children under 5 years of age and bacteraemia where the overall mortality can be as high as 25%. It also causes a wide variety of other infections including otitis media, sinusitis, osteomyelitis, and bronchitis.

There are over 90 different serotypes of streptococcus pneumoniae but only a few produce serious pneumococcal infections.

Data on pneumococcal serotypes in circulation in Ireland suggests that PCV is likely to protect against approximately 85% of serotypes currently associated with invasive pneumococcal disease in children <2 years of age.

How is pneumococcal disease transmitted?

Transmission is from person to person, usually through respiratory droplet spread, but may be by direct oral contact or indirectly through articles contaminated with respiratory discharges. The incubation period varies by type of infection and can be as short as one to three days.

S. pneumoniae colonises the nasopharynx. On any single occasion between 5%-10% of healthy adults and 20-40% of young children will carry the organism. Carriage rates among toddlers and young children in day care are 40-60% and are higher in mid winter.

The pneumococcal serotypes most often responsible for causing infection are those most frequently found in carriers. The spread of the organism within a family or household is influenced by such factors as crowding, season, and the presence of upper respiratory infections or pneumococcal disease such as pneumonia or otitis media.

Who is most at risk of pneumococcal infection?

Those particularly at risk are young children, the elderly and persons with underlying immunocompromising medical conditions.

People with some chronic medical conditions are particularly vulnerable to infection. This includes those with no spleens or abnormally functioning spleens or other immunodeficiency conditions, chronic renal, lung, heart or liver disease, diabetes mellitus, sickle cell disease, patients with CSF leaks (congenital or acquired) and individuals with cochlear implants

How serious is pneumococcal disease in children?

S. pneumoniae is a common cause of otitis media, sinusitis, pneumonia, meningitis, and bacteraemia. It is a less frequent cause of endocarditis, septic arthritis and peritonitis and an uncommon cause of a variety of other infections.

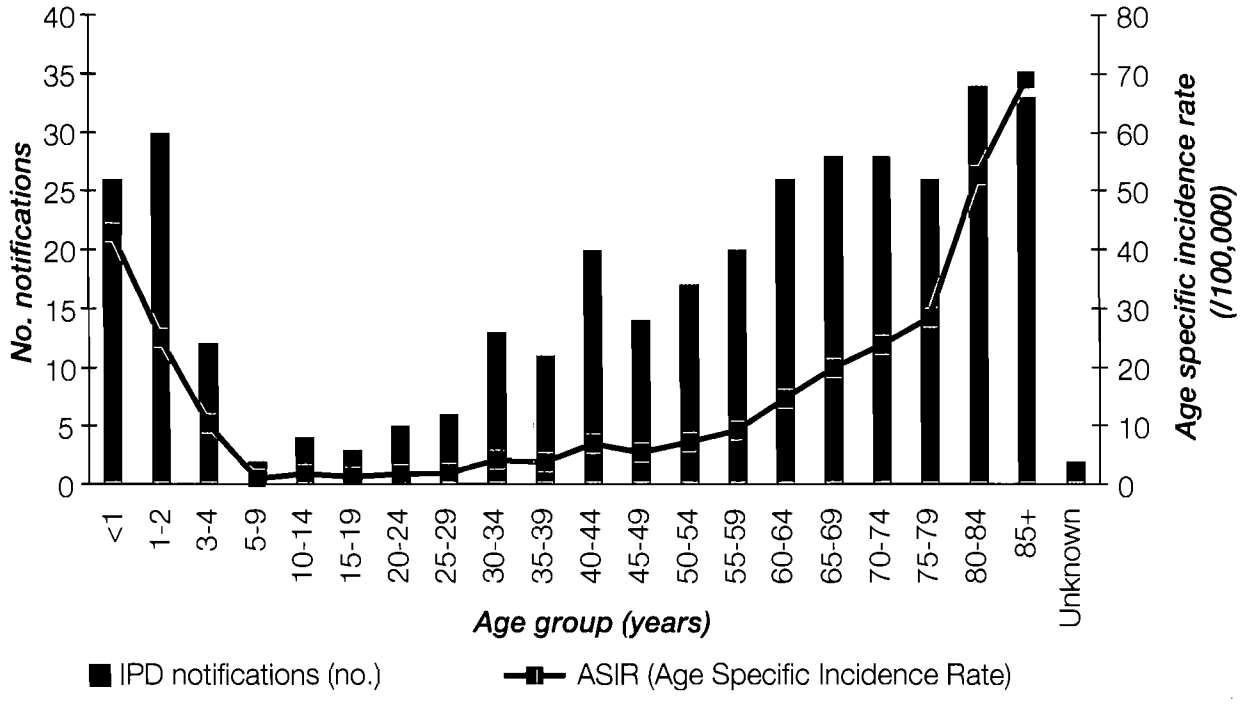
WHO estimates that between 700,000 and 1 million children under five years of age die from pneumococcal diseases each year. In high-income countries, elderly persons carry the major disease burden.

How many cases of childhood invasive pneumococcal disease (IPD) occur each year?

The epidemiology of IPD in Ireland is similar to that in other high-income countries. Invasive disease is relatively common in newborns and in infants up to 2 years of age, less common in teenagers and young adults, but increases in incidence in adults, particularly among those older than 65 years of age.

In 2007 (provisional data), there were 360 cases of IPD reported to the HSPC (crude incidence rate 6.5/100,000 population). This incidence rate is considered to be an underestimate of the true incidence of the disease in Ireland. The highest incidence rates are seen in young children less than five years of age and in older adults (age specific incidence rates 22.5/100,000 and 31.8/100,000 respectively).

Figure 3. Number and age specific incidence rates of IPD by age group, 2006.



Source: HPSC

Detailed analysis of the epidemiology of invasive pneumococcal disease is available on the HPSC website www.hpsc.ie

It is estimated that on average 1 in 5,000 children under 5 years old will be infected with IPD and of these:

1 in 3 will develop meningitis

1 in 3 will develop pneumonia

1 in 10 will die

Should any children over 2 years be given PCV?

If a child is in an "at risk" group they should be given PCV and PPV23 in accordance with NIAC guidelines.

Change in timing of Men C and Hib vaccines

The number of doses of Men C (3) and Hib (4) vaccines remains the same but the timing of these vaccines has changed.

What are the changes and why were they made?

Men C vaccine

A booster dose of Men C vaccine over a year of age is needed to provide further protection during the early childhood years and to maintain herd immunity.

Studies have shown that two doses of Men C vaccine under one year give as much protection as three doses under one year.

Men C vaccine now is recommended at 4, 6 and 13 months.

	Timing of Men C vaccine	
	Children born before 1/7/08	Children born on or after 1/7/08
2 months	Men C	–
4 months	Men C	Men C
6 months	Men C	Men C
13 months	–	Men C

What about children who received 3 doses of Men C under 12 months of age – do they need a Men C booster?

No, these children do not need a Men C booster as, to date, there has been no evidence of vaccine failures in older children in Ireland.

Hib vaccine

- The booster dose of Hib has changed from 12 months to 13 months.
- NIAC has recommended that the PCV booster be given at 12 months.
- The combination vaccine Hib/Men C should not be given at the same time. This is a precautionary measure until more data is available to show these two particular vaccines can be given at the same time without any interference between them.

Hib vaccine is recommended at 2, 4, 6 (as part of the 6 in 1) and 13 months.

	Timing of Hib vaccine	
	Children born before 1/7/08	Children born on or after 1/7/08
2 months	5 in 1	6 in 1
4 months	5 in 1	6 in 1
6 months	5 in 1	6 in1
12 months	Hib	–
13 months	–	Hib

General queries

Can three separate vaccines be given at one time at the 6 month visit?

Yes the 6 in 1, PCV and Men C can be given at the same time with no additional adverse effects. Three injections are given at the same time in the UK and US schedules.

Vaccines for children under one year of age should be given in the anterolateral aspect of the thigh.

The 6 in 1 and Men C should be given in one thigh and the PCV in the other.

Where two injections are given in the same limb they should be administered at least 2.5cm apart.

The site of each vaccination should be recorded accurately

Where do I get stocks of vaccine?

All vaccines for the Primary Childhood Immunisation schedule can be ordered through the National Cold Chain Delivery Service in the normal way.

How should the vaccines be stored?

All vaccines should be stored at 2-8°C but not frozen.

Notes

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Publication date: May 2008

Pneumococcal Catch-Up Campaign

Frequently asked questions for health professionals

Published by: HSE National Immunisation Office
Publication date: May 2008
Order Code: HNI00514

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

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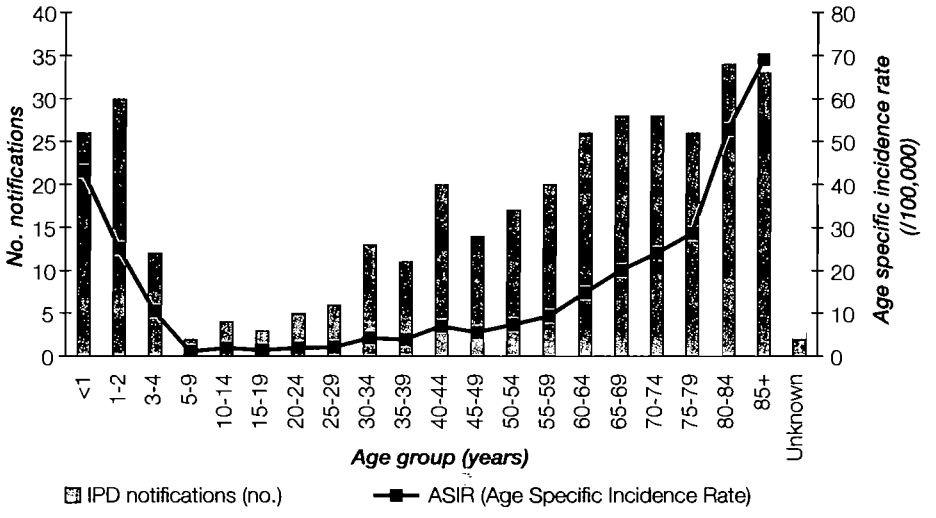
Key Sources

Sources:

1. National Immunisation Advisory Committee, Royal College of Physicians of Ireland. Immunisation Guidelines for Ireland. 2008
2. CDC. Epidemiology and Prevention of Vaccine Preventable Diseases. The Pink Book 10th Edition 2008.
3. Health Protection Surveillance Centre. Annual Report 2006. Available at www.hpsc.ie

Further references available on request

Number and age specific incidence rates of IPD by age group, 2006.



Source: HPSC

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On average 1 in 5000 children under 5 years old will be infected with IPD and of these:

1 in 3 will develop meningitis

1 in 3 will develop pneumonia

1 in 10 will die

What is pneumococcal conjugate vaccine?

Pneumococcal conjugate vaccine (7 Valent) PCV contains polysaccharide from seven of the most common capsular types. The polysaccharide is conjugated (bound) to a protein. Most of the common pneumococcal serotypes in circulation in Ireland are covered by PCV.

This vaccine has been recommended for high risk children under 5 years of age since 2002 and is now being included in the routine childhood immunisation schedule.

Is this the same as pneumococcal polysaccharide vaccine?

No **Pneumococcal polysaccharide vaccine (PPV23)** contains purified polysaccharide from 23 of the most common capsular types of *S. pneumoniae*. This vaccine is recommended for elderly and at risk children (over 2 years) and adults.

PPV 23 is not recommended for children under 2 years of age due to an adequate antibody response.

Why is there a PCV catch up campaign?

NIAC has recommended that all children under 2 years of age should be given PCV as they are most at risk of pneumococcal infection.

When will the PCV catch up start?

1st September 2008.

Who should be given the PCV vaccine?

All children who are over 2 months and not yet 24 months on September 1st 2008 i.e. ***those born between 2nd September 2006 and 30th June 2008.***

How many doses of PCV should be given?

1-2 doses should be given depending on the age of the child.

Children between 13 and 24 months of age (born between 2nd September 2006 and 31st July 2007) require 1 dose of PCV and will be sent appointments as below.

Children between 6 and 13 months of age (born between 1st August 2007 and 29th February 2008) **require 1 dose of PCV** when they reach 13 months of age.

Children under 6 months of age (born between 1st March 2008 and 30th June 2008) require ***2 doses of PCV*** – the first at 6 months and the second at 13 months. This is to give younger children protection against pneumococcal disease as early as possible.

The first dose of PCV can be given with the other vaccines due at 6 months i.e. 3rd dose of 5 in1 and 3rd dose of Men C.

Vaccines for children under two years of age should be given in the anterolateral aspect of the thigh.

Who is most at risk of pneumococcal infection?

Those particularly at risk are young children, the elderly and persons with underlying immunocompromising medical conditions.

People with some chronic medical conditions are particularly vulnerable to infection. This includes those with no spleens or abnormally functioning spleens or other immunodeficiency conditions, chronic renal, lung, heart or liver disease, diabetes mellitus, sickle cell disease, patients with CSF leaks (congenital or acquired) and individuals with cochlear implants.

How serious is pneumococcal disease in children?

S. pneumoniae is a common cause of otitis media, sinusitis, pneumonia, meningitis, and bacteraemia. It is a less frequent cause of endocarditis, septic arthritis and peritonitis and an uncommon cause of a variety of other infections.

WHO estimates that between 700,000 and 1 million children under five years of age die from pneumococcal diseases each year. In high-income countries, elderly persons carry the major disease burden.

How many cases of childhood invasive pneumococcal disease (IPD) occur each year?

The epidemiology of IPD in Ireland is similar to that in other high-income countries. Invasive disease is relatively common in newborns and in infants up to 2 years of age, less common in teenagers and young adults, but increases in incidence in adults older than 65 years of age.

In 2007 (provisional data), there were 360 cases of IPD reported to the HSPC (crude incidence rate 8.5/100,000 population). This incidence rate is considered to be an underestimate of the true incidence of the disease in Ireland. The highest incidence rates are seen in young children less than five years of age and in older adults (age standardised incidence rates 22.5/100,000 and 31.8/100,000 respectively).

What is pneumococcal disease?

Pneumococcal disease caused by the streptococcus pneumoniae bacteria leads to significant morbidity and mortality, particularly amongst the very young, the very old, those with impaired immunity and those with anatomic or functional asplenia. It is responsible for 50% of community acquired pneumonia with a case fatality rate between 20-60%.

Streptococcus pneumoniae is a leading cause of meningitis in children under 5 years of age and bacteraemia where the overall mortality can be as high as 25%. It also causes a wide variety of other infections including otitis media, sinusitis, osteomyelitis, and bronchitis.

There are over 90 different serotypes of streptococcus pneumoniae but only a few produce serious pneumococcal infections.

Data on pneumococcal serotypes in circulation in Ireland suggests that PCV is likely to protect against at least 90% of serotypes currently associated with invasive pneumococcal disease in children <2 years of age.

How is pneumococcal disease transmitted?

Transmission is from person to person, usually through respiratory droplet spread, but may be by direct oral contact or indirectly through articles contaminated with respiratory discharges. The incubation period varies by type of infection and can be as short as one to three days.

S. pneumoniae colonises the nasopharynx. On any single occasion between 5%-10% of healthy adults and 20-40% of young children will carry the organism. Carriage rates among toddlers and young children in day care are 40-60% and are higher in mid winter.

The pneumococcal serotypes most often responsible for causing infection are those most frequently found in carriers. The spread of the organism within a family or household is influenced by such factors as crowding, season, and the presence of upper respiratory infections or pneumococcal disease such as pneumonia or otitis media.

Schedule for PCV catch up programme commencing 1st September 2008

Date of Birth	2008 Sept	Oct	Nov	Dec	2009 Jan	Feb	Mar	April	May	June	July	Child's age at vaccination
Sept 06	■											<24
Oct 06	■											23
Nov 06	■											22
Dec 06		■										22
Jan 07		■										21
Feb 07			■									21
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Apr 07				■								20
May 07				■								19
Jun 07					■							19
July 07					■							18
Aug 07	■											13
Sept 07		■										13
Oct 07			■									13
Nov 07				■								13
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Jan 08						■						13
Feb 08							■					13
Mar 08	■							■				6, 13
Apr 08		■							■			6, 13
May 08			■							■		6, 13
Jun 08				■							■	6, 13

■ denotes month each child should receive vaccination by date of birth.

Can three separate vaccines be given at one time at the 6 month visit?

Yes the **5 in 1, PCV and Men C** can be given at the same time with no additional adverse effects. Three injections are given at the same time in the UK and US schedules.

The 5 in 1 and Men C should be given in one thigh and the PCV in the other.

Where two injections are given in the same limb they should be administered at least 2.5cm apart.

The site of each vaccination should be recorded accurately.

Does a child under 2 years who has previously had pneumococcal disease need PCV?

Yes. This child will only be immune to that serotype of pneumococcus and should still be given the appropriate doses of PCV.

How safe and effective is PCV?

PCV has demonstrated good safety records in both pre-licensure trials and post-licensure monitoring.

Clinical trials show that the vaccine is highly effective at preventing invasive disease due to serotypes included in the vaccine. The vaccine also has some efficacy against non-invasive disease and has led to a reduction in antibiotic resistant pneumococcal disease.

PCV is safe, effective and well tolerated when administered with other recommended childhood vaccines.

Studies from the US have shown that the introduction of PCV to the childhood schedule protects both vaccinated children (direct effect) and also unvaccinated groups especially those most at risk (the young and those over 65 years) (indirect effect) from pneumococcal disease.

Protection of the unvaccinated groups occurs through decreased transmission of disease or herd immunity. In the US this has led to a significant decrease in pneumococcal disease morbidity and mortality in unvaccinated people.

How long does the protection last after having the PCV?

Studies from the United States where PCV has been used since 2000 show the vaccine provides long term protection against pneumococcal disease.

Are there side effects from the PCV?

PCV is a safe and effective vaccine.

The most commonly reported adverse reactions are injection site tenderness and fever >38°C (10-20%).

No severe adverse events attributable to PCV have been reported.

Any adverse vaccine reactions (ADRs) should be reported to the Irish Medicines Board via the yellow report card (available on www.imb.ie).

Are there any reasons why the PCV should not be given?

Contraindications: Previous anaphylactic reaction to any component of this vaccine.

Precautions: Immunisation should be deferred in any child with an acute severe febrile illness, until the illness has resolved.

Does the PCV contain thiomersal (mercury)?

No PCV does not contain thiomersal as a preservative.

MMR fact: Every year 1 – 2 million children die from measles worldwide.

Should my child get the vaccine if they have an egg allergy?
Yes. Children with an egg allergy can get the MMR vaccine. If you are concerned about a serious egg allergy, talk to your family doctor.

Is there a link between the MMR vaccine and autism or bowel disease?
No. There has been a lot of research to show there is no link between the MMR vaccine and autism, bowel disease or hyperactivity.

If you are concerned about your baby please contact your family doctor immediately.

PROTECT HEALTH IMMUNISE

For more information:

- Contact your family doctor or public health nurse.
- Get a copy of 'Your child's immunisations – a guide for parents', which is available from your public health nurse.

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For further info visit www.immunisation.ie

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PROTECT HEALTH IMMUNISE

MMR vaccine

parent information leaflet

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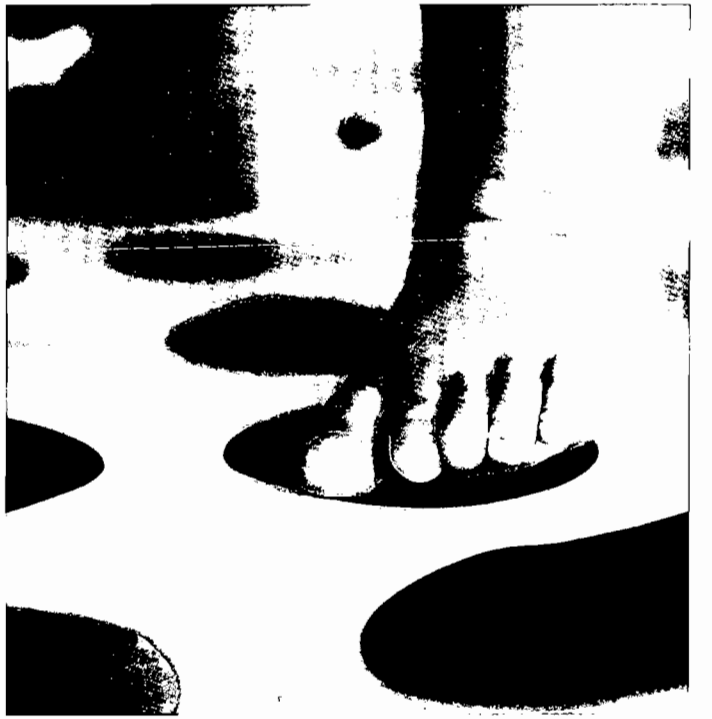

MMR vaccine
Information for parents

What is the MMR vaccine?

The MMR vaccine protects your child against measles, mumps and rubella (also called German measles). The vaccine works by stimulating the immune system to build up protection against these diseases.

GP **This vaccine is available free from your GP.**

What are measles, mumps and rubella?

Measles, mumps and rubella are viral diseases and are highly infectious. They are spread when the virus is passed from somebody who has the disease to somebody who has no protection against it.

Measles

Common symptoms: Fever, rash, red and painful eyes.

Possible complications: Ear infections affect one in 20 people with measles. One in 25 can get pneumonia or bronchitis.

Mumps

Common symptoms: Painful swollen glands under the jaw and fever.

Possible complications: One in five adult men can get swollen, painful testicles. Mumps during pregnancy can cause problems for the developing baby. Mumps is the single biggest cause of viral meningitis in children.

Rubella

Common symptoms: Fever and a rash.

Possible complications: If a pregnant woman gets rubella, her baby may suffer from major birth defects including blindness, brain damage, deafness, heart problems and other serious complications.

MMR fact: Measles, mumps and rubella have become less common since the vaccine was introduced. However, outbreaks can still occur if not enough children are vaccinated.

Who should get the MMR vaccine?

Babies over 12 months should get the MMR vaccine. You should bring them to your family doctor to get the vaccine free of charge. Children should get a second dose at 4-5 years. This is usually given at school. Two doses of MMR will give your child the best protection.

What to expect after the vaccine?

After getting the vaccine, your child may be sore, swollen or red around the area where the injection was given. They may be irritable and have a fever. If this happens you can give them paracetamol or ibuprofen. You should also give them plenty to drink. Make sure they are not too warm and that their clothes are not rubbing against the injection area.

Are there people who should not get the MMR vaccine?

The MMR vaccine is safe for most people. However, your child should not get it if they have had a true allergic reaction (anaphylaxis) to a previous vaccine or any part of a vaccine.

You should delay getting the vaccine if your child:

- is ill with a fever higher than 38°C (100°F),
- is on high dose cortico-steroids,
- is having treatment such as chemotherapy or radiotherapy, or
- has any illness or disease that affects their immune system.

If you have any concerns, talk to your family doctor or public health nurse.

What to expect after the vaccine

Some children may have discomfort, redness or swelling where the injection was given.

They may be irritable and have a raised temperature. If this happens you can give them infant paracetamol or ibuprofen. You should also give them plenty to drink.

Make sure they are not too warm and that their clothes are not rubbing against the injection area.

Who should not receive the Men C vaccine?

The Men C vaccine is safe for most people. However, your child should not get it if they have had a true allergic reaction (anaphylaxis) to a previous dose or to any part of the vaccine.

Remember

Men C vaccine only protects against Men C meningitis and septicaemia caused by meningococcal C infection.

There are other causes of meningitis and septicaemia so you need to know the symptoms to look out for. These may include:

- **fever,**
- **refusing food,**
- **pale or blotchy skin, spots or a rash, or**
- **drowsiness or difficulty in waking.**

If you are worried about your baby, call your family doctor immediately.

PROTECT HEALTH IMMUNISE

For more information:

- Contact your family doctor or public health nurse.
- Get a copy of 'Your child's immunisations – a guide for parents', which is available from your public health nurse.

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PROTECT HEALTH IMMUNISE

Men C vaccine

parent information leaflet

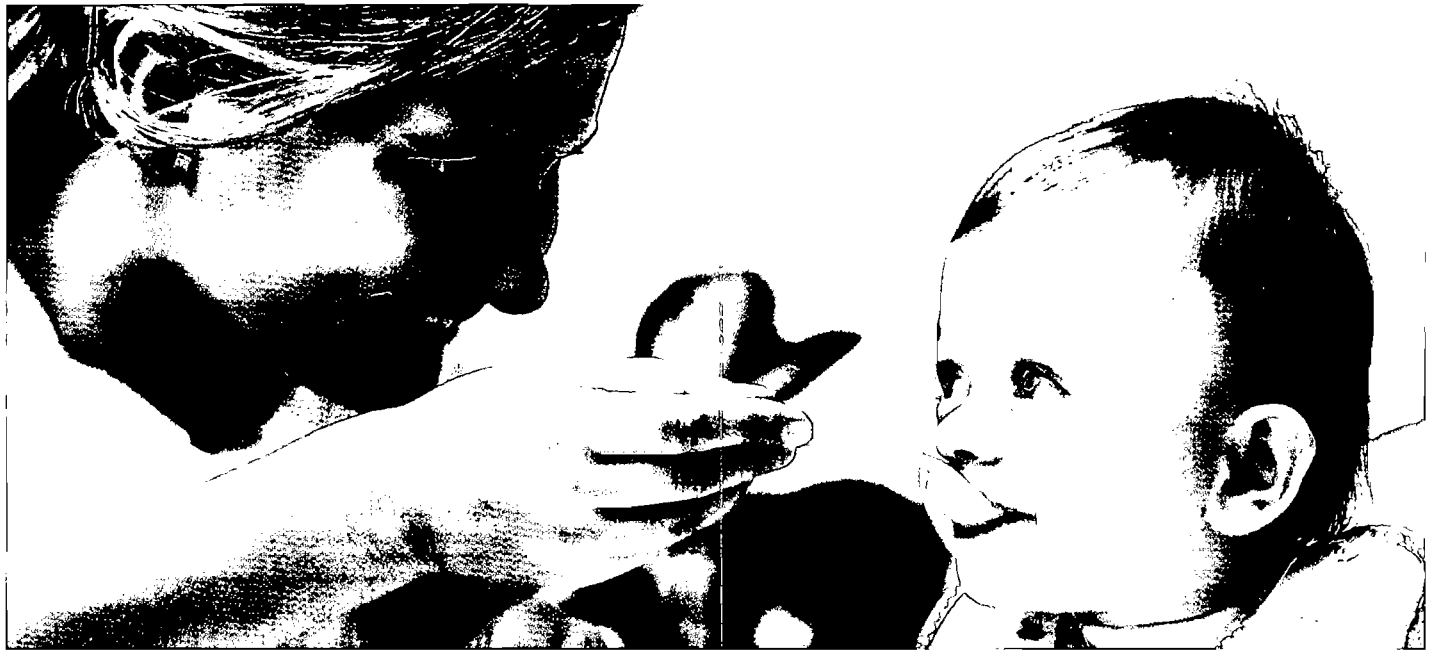
Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

Meningococcal C vaccine Information for parents

What is meningococcal C?

Meningococcal C (Men C) is a serious disease caused by bacteria called neisseria meningitidis serogroup C. The symptoms of Men C disease include fever, stiff neck, headache, joint pains and rash.

GP **This vaccine is available free from your GP.**



How is Men C disease spread?

The bacteria that cause Men C live in the nose and throat. A person who carries the bacteria can spread the disease by coughing, sneezing or even breathing.

What illnesses does it cause?

Men C can cause serious illness including:

- meningitis (inflammation of the lining around the brain), and
- septicaemia (blood poisoning).

Who is most at risk?

Men C disease is most common in children under five. Babies under one year of age are especially at risk. It is also common in teenagers aged 15-19 years.

Is there a vaccine against Men C?

Since 2000, Men C vaccine has been included in the childhood immunisation programme.

Babies born on or after 1 July 2008 should get the Men C vaccine at 4, 6 and 13 months, at the same time as their other vaccines.

Is it safe to get more than one vaccine at the same time?

Yes, it is safe. The vaccines are timed to give your baby the best protection.

Does my child need a Men C booster?

To have extra protection against Men C infection, your child should get a Men C booster at 13 months, at the same time as their Hib vaccine.

What to expect after the vaccine

Some children may have discomfort, redness or swelling where the injection was given.

They may be irritable and have a raised temperature. If this happens you can give them infant paracetamol or ibuprofen.

You should also give them plenty to drink. Make sure they are not too warm and that their clothes are not rubbing against the injection area.

Who should not receive PCV?

PCV is safe for most people. However, your child should not get it if they have had a true allergic reaction (anaphylaxis) to a previous dose or any part of a vaccine.

Remember

PCV only protects against the most common strains of streptococcus pneumoniae that cause pneumococcal meningitis and septicaemia.

There are other causes of meningitis and septicaemia so you need to know the symptoms to look out for. These may include:

- **fever,**
- **refusing food,**
- **pale or blotchy skin, spots or a rash, or**
- **drowsiness or difficulty in waking.**

If you are worried about your baby, call your family doctor immediately.

PROTECT HEALTH IMMUNISE

For more information:

- Contact your family doctor or public health nurse.
- Get a copy of 'Your child's immunisations – a guide for parents', which is available from your public health nurse.

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PROTECT HEALTH IMMUNISE

Pneumococcal vaccine

parent information leaflet

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Health Service Executive

Pneumococcal vaccine Information for parents

What is pneumococcal disease?

Pneumococcal disease is an infection caused by the bacteria streptococcus pneumoniae.

GP **This vaccine is available free from your GP.**

How is pneumococcal disease spread?

The bacteria that cause pneumococcal disease live in the nose and throat. A person who carries the bacteria can spread the disease by coughing, sneezing or even breathing.

What illnesses does it cause?

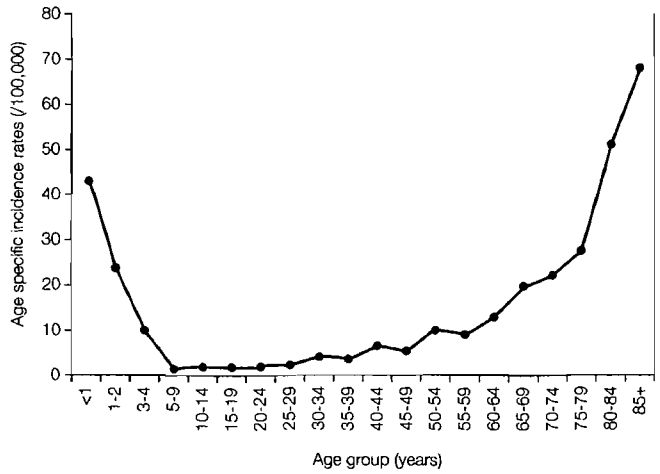
Pneumococcal disease can cause serious illnesses including:

- meningitis (inflammation of the lining around the brain),
- septicaemia (blood poisoning),
- pneumonia.

Who is most at risk?

Pneumococcal disease is most common in children under two and people over 65 years of age (see diagram).

Age specific incidence rates of IPD by age group, 2007 (provisional data) Source: HPSC



Is there a vaccine against pneumococcal disease?

Pneumococcal vaccine (PCV) has been given to children with special medical conditions in Ireland since 2002. Babies born on or after 1 July 2008 will get PCV at 2 and 6 months, at the same time as their other vaccines.

Is it safe to get more than one vaccine at the same time?

Yes, it is safe. The vaccines are timed to give your baby the best protection.

Does my child need a PCV booster?

To have extra protection against pneumococcal infection, your child should get a PCV booster at 12 months, at the same time as their MMR vaccine.

What to expect after the vaccine

Some children may have discomfort, redness or swelling where the injection was given. They may be irritable and have a raised temperature. If this happens you can give them infant paracetamol or ibuprofen. You should also give them plenty to drink. Make sure they are not too warm and that their clothes are not rubbing against the injection area.

Who should not receive the 6-in-1 vaccine?

The 6-in-1 vaccine is safe for most people. However, your child should not get it if they have had a true allergic reaction (anaphylaxis) to a previous dose or to any part of the vaccine.

If you are worried about your baby, call your family doctor immediately.

PROTECT HEALTH IMMUNISE

For more information:

- Contact your family doctor or public health nurse.
- Get a copy of 'Your child's immunisations – a guide for parents', which is available from your public health nurse.

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6-in-1 vaccine

parent information leaflet

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Health Service Executive

6-in-1 vaccine
Information for parents

What is the 6-in-1 vaccine?

The 6-in-1 vaccine protects your baby against six diseases: diphtheria, hepatitis B, haemophilus influenzae type B (Hib), polio, tetanus and whooping cough.

GP **This vaccine is available free from your GP.**

What are these diseases?

Diphtheria is a bacterial infection that can cause a thick coating in the nose, throat or airway. *Symptoms:* sore throat, fever, headache and fast heart rate. *Possible complications:* heart failure, paralysis, severe breathing problems or difficulty in swallowing.

Hepatitis B is a viral infection that affects the liver and can cause lifelong infection. *Possible complications:* cirrhosis, cancer or liver failure.

Hib is a bacterial infection that can cause meningitis (inflammation of the lining around the brain), septicaemia (blood poisoning), bronchitis and ear infections. *Symptoms:* fever, vomiting, headache and a stiff neck.

Polio is a viral infection that affects the nervous system and can cause paralysis.

Tetanus ('lock-jaw') is a disease that causes painful muscle spasm, convulsions and difficulty in breathing. It is often fatal.

Whooping cough is a bacterial infection that causes an irritating cough that gradually gets worse. There may be a characteristic 'whoop' sound. *Possible complications:* severe breathing difficulties, pneumonia, heart and lung failure and brain damage.

All of the above are serious illnesses that can lead to death.

Who should be vaccinated with 6-in-1?

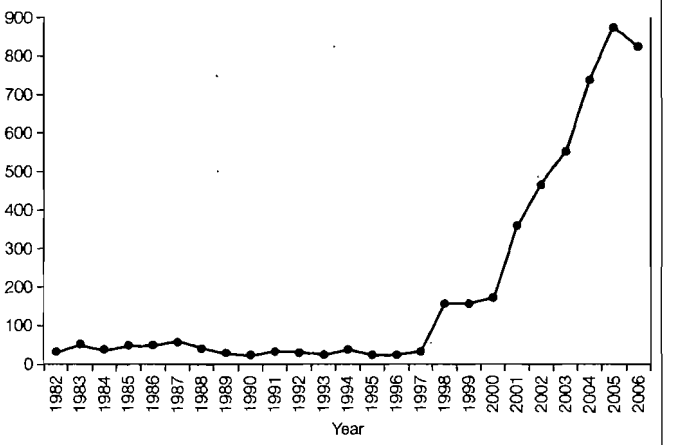
The 6-in-1 vaccination is given to babies at 2, 4 and 6 months. You should bring your child to your family doctor (GP) to get the vaccine free of charge.

Why is there a 6-in-1 instead of a 5-in-1?

The 6-in-1 includes all the vaccines in the 5-in-1 as well as the hepatitis B vaccine.

In Ireland, the number of hepatitis B cases has increased every year between 1996 and 2005. In recent years, more than 800 cases a year have been reported (see diagram).

Number of notifications of viral hepatitis B, 1982 - 2006 Source: HPSC



Including hepatitis B vaccine in the childhood programme will protect Irish children now and when they are older. Giving the vaccine at an early age is the most effective way to prevent hepatitis B infection in the general population.

What to expect after the vaccine

Some children may have discomfort, redness or swelling where the injection was given. They may be irritable and have a raised temperature.

If this happens you can give them infant paracetamol or ibuprofen. You should also give them plenty to drink. Make sure they are not too warm and that their clothes are not rubbing against the injection area.

Who should not receive the Hib vaccine?

The Hib vaccine is safe for most people. However, your child should not get it if they have had a true allergic reaction (anaphylaxis) to a previous Hib vaccine or any part of a vaccine.

You should delay getting the vaccine for your child if they have a fever higher than 38°C.

Remember

Hib vaccine only protects against Hib meningitis and septicaemia caused by Hib disease.

There are other causes of meningitis and septicaemia so you need to know the symptoms to look out for. These may include:

- **fever,**
- **refusing food,**
- **pale or blotchy skin, spots or a rash, or**
- **drowsiness or difficulty in waking.**

If you are worried about your baby, call your family doctor immediately.

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For more information:

- Contact your family doctor or public health nurse.
- Get a copy of 'Your child's immunisations – a guide for parents', which is available from your public health nurse.

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Hib vaccine

parent information leaflet

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Health Service Executive

Hib vaccine
Information for parents

What is Hib?

Hib stands for haemophilus influenzae type B. These are bacteria that can cause serious infection in children and in people with a weak immune system.

GP **This vaccine is available free from your GP.**

How is Hib spread?

The bacteria that cause Hib live in the nose and throat. A person who carries the bacteria can spread Hib by coughing, sneezing or even breathing.

What illnesses does it cause?

Hib can cause serious illness including:

- meningitis (inflammation of the lining around the brain),
- septicaemia (blood poisoning),
- epiglottitis (swelling in the throat that causes choking),
- osteomyelitis (infection of the bone).

Who is most at risk?

Hib disease is most common in children under four. Babies under one year of age are especially at risk.

Is there a vaccine against Hib?

Since 1992, Hib vaccine has been offered to all children as part of the childhood immunisation programme. Babies born on or after 1 July 2008 should receive the 6-in-1 vaccine – which contains the Hib vaccine as well as diphtheria, tetanus, whooping cough, polio and hepatitis B – at 2, 4 and 6 months.

Does my child need a Hib booster?

After the Hib vaccine was introduced, the number of cases of Hib disease went down dramatically. However, in 2004 there were a small number of cases of Hib disease in children who were fully vaccinated. A booster is now included in the immunisation programme.

To have extra protection against Hib infection, your child should get the booster at 13 months, at the same time as their Men C vaccine.


I'VE BEEN IMMUNISED

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Vaccination Schedule for Children born on or after July 1st 2008

Age	Where	Vaccination
At Birth	Hospital/ Clinic	B.C.G. (TB)
2 months	GP	6 in 1 + PCV
4 months	GP	6 in 1 + Men C
6 months	GP	6 in 1 + PCV + Men C
12 months	GP	MMR + PCV
13 months	GP	Men C + Hib
4 - 5 Years	GP/School	4 in 1 + MMR

6 In 1 Diphtheria, Tetanus, Pertussis, Polio, Hib and Hepatitis B vaccine
PCV Pneumococcal vaccine
Men C Meningococcal C vaccine
MMR Measles, Mumps, Rubella vaccine
4 In 1 Diphtheria, Tetanus, Pertussis and Polio vaccine

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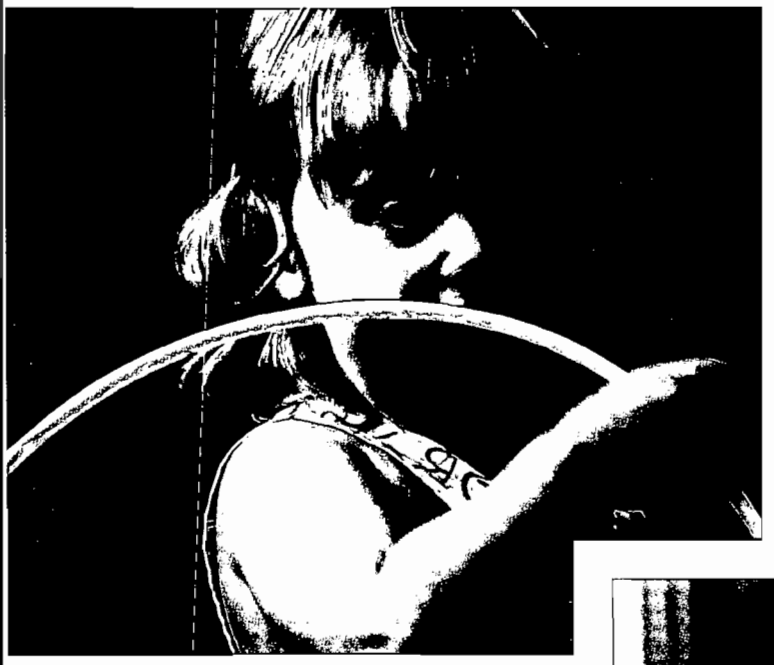
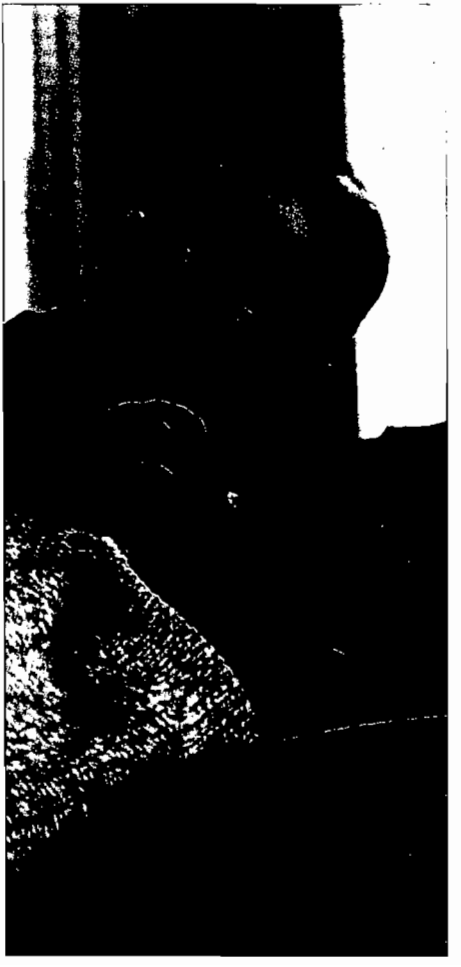


Your Child's Immunisation

A guide for parents



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Children's immunisation timetable

The table below shows what immunisations are given, at what age, and where. All the immunisations listed are free.

At Birth **1 injection**	BCG (given in maternity hospital or at Health Service Executive clinics)	
2 months **2 injections**	Diphtheria Tetanus Whooping cough Hib (haemophilus influenzae B) Polio (inactivated poliomyelitis)	6-in-1
Free from your GP	Hepatitis B	
	PCV (pneumococcal vaccine) 	
4 months **2 injections**	Diphtheria Tetanus Whooping cough Hib (haemophilus influenzae B) Polio (inactivated poliomyelitis)	6-in-1
Free from your GP	Hepatitis B	
	Meningococcal C	
6 months **3 injections**	Diphtheria Tetanus Whooping cough Hib (haemophilus influenzae B) Polio (inactivated poliomyelitis)	6-in-1
Free from your GP	Hepatitis B	
	Meningococcal C	
	PCV (pneumococcal vaccine)	

12 months **2 injections** **Free from your GP**	Measles Mumps Rubella	MMR
	PCV (pneumococcal vaccine)	
13 months **2 injections** **Free from your GP**	Meningococcal C Hib	
4 to 5 years **2 injections** **Free in school**	Diphtheria Tetanus Whooping cough Polio	4-in-1
In counties Donegal, Sligo, Leitrim, Cavan, Monaghan, Louth, Meath and parts of north Dublin this vaccine may be given by your GP.	Measles Mumps Rubella	MMR
11 to 14 years **1 injection** **Free in school**	Tetanus, Diphtheria (low dose)	Td

Contents

What if someone else in the family had a reaction to an immunisation?

What if my child has recently had, or is due to have, surgery?

What if my child has already had whooping cough, measles, rubella, mumps, hib, pneumococcal or men C?

Can my child be immunised while they are in close contact with someone who is pregnant?

What if my child has a serious disease?

Do some children also need other vaccines?

What should I do if my child has any side effects after getting the vaccine?

What if my child has an allergic reaction to vaccines?

What if my child suffers any side effects from vaccines?

Comparison of the effects of diseases and the side effects of vaccines for

Diphtheria

Hepatitis B

Hib (haemophilus influenza B)

Measles

Men C (meningococcal C disease)

Mumps

Polio (Poliomyelitis)

Pneumococcal

Rubella (German measles)

Tetanus

TB (Tuberculosis)

Whooping cough (Pertussis)

Introduction

Immunisation is a simple, safe and effective way of protecting your child against certain diseases. The risks from having these diseases are far greater than the risk of any minor side effects from immunisation.

What causes infection?

Infections are caused by germs entering the body through cuts or by being breathed in or swallowed. The germs then cause diseases such as meningitis (infection of the lining around the brain), pneumonia (a lung infection) or septicaemia (blood poisoning).

What is a contagious disease?

A contagious disease is one that spreads from one person (someone who is infected or is a 'carrier') to another, often through coughs and sneezes. Carriers are people who 'carry' germs in their body but are not sick themselves. For example, 1 in 10 people carries meningococcal germs in their nose but only 1 in 10,000 gets sick with meningitis or septicaemia from those germs.

How does my child's body fight infection?

When germs infect your child's body, their immune system makes 'antibodies'. Antibodies do the following two things:

- Their first job is to attack and destroy the germs. However, because it takes the body time to make enough antibodies, the germs may damage your child's body before the antibodies can destroy them.
- Their second job is to stay in your child's body to protect them against future infections. If the same germs try to infect your child again, the antibodies will destroy the germs before they have a chance to make your child sick. This way of dealing with germs is called 'immunity'. It is why most people get diseases like measles or

chickenpox only once, even though they might be exposed to them many times.

The problem with getting natural immunity from germs is that your child has to get sick before they develop immunity. In fact, some germs could make your child very sick or even kill them before their body could produce enough antibodies to destroy the germs.

How do vaccines work?

When your child is given a vaccine, their body responds by making antibodies, the same as if they had caught the disease but without getting sick. Their body then produces antibodies to destroy the vaccine and these stay in your child's body and protect them against the actual disease.

What is in vaccines?

Vaccines contain active ingredients (the vaccine itself) and additives such as preservatives and stabilisers.

Active ingredients

Vaccines are made from the same germs that cause infections, but the germs in vaccines are either killed or weakened so that they won't make your child sick and are safe to use.

Additives

Vaccines may contain:

- a small amount of preservative to protect the vaccine from contamination
- other additives to make sure that the active vaccine ingredient is evenly mixed throughout the injection mixture and
- a small amount of aluminium salt, which helps the body to respond better to the vaccine.

The level of additives in vaccines is very low and within internationally recommended levels. These additives do not cause any serious health problems in babies and young children.

How long do vaccines take to work?

It usually takes a few weeks for vaccines to work, so your child will not be protected immediately. Also, most vaccines need to be given several times to build up long-lasting protection. For example, a child who gets only one or two doses of the whooping cough vaccine is only partly protected against that disease and may still catch whooping cough.

Are vaccines safe?

The vaccines used in Ireland are safe. All medicines can cause side effects, but with vaccines these are usually mild, like a sore arm or leg or a slight fever. Serious side effects to vaccines are extremely rare.

Research from around the world shows that immunisation is the safest way to protect your child's health. Your doctor or nurse can discuss the risks with you before giving your child their vaccines.

All the recommended vaccines used to protect children in Ireland are licensed by the Irish Medicines Board or the European Medicines Evaluation Agency. They are allowed to be used only after they have been **shown** to be both effective and safe.

What about all the scare stories?

We know that vaccines don't cause autism, diabetes, multiple sclerosis, allergies, asthma or attention deficit disorder (commonly known as hyperactivity). However, when things happen to our children around the same time as they are immunised we can wrongly presume that there is a link. For example, the signs of autism usually become noticeable at about the age when children are given the MMR vaccine, but one does not cause the other. Because most children get immunised, those who

have conditions such as autism, asthma or attention deficit disorder will probably have been immunised as well. Studies to see if children who have been immunised are more likely to have these conditions have shown that there is no link between the conditions and vaccines.

Extensive research into the MMR vaccine, involving thousands of children, was carried out in the UK, the USA, Sweden, and Finland. This research showed that there is no link between MMR and autism. A recent study looked at every child born in Denmark from 1991 to 1998. During that time, 82% of children born in Denmark received the MMR vaccine. The researchers looked at the records of over half a million children and found the risk of autism was the same in immunised children as in children who had not been immunised. Experts from around the world, including the World Health Organisation, agree that there is no link between MMR and autism.

Experts from around the world, including the World Health Organisation, also agree that there is no link between the MMR vaccine and inflammatory bowel disease.

Over the past 30 years, more than 500 million doses of MMR vaccine have been given in over 90 countries.

What immunisations are recommended in Ireland?

The BCG vaccine is recommended at birth or as soon as possible. It protects against TB (tuberculosis).

Vaccines are recommended when your child is 2, 4 and 6 months to protect against eight different diseases – diphtheria, hepatitis B, haemophilus influenzae B (hib), meningococcal C disease (Men C), polio, pneumococcal disease, tetanus and whooping cough (pertussis). These diseases are explained in the table on pages 27 to 32. From September 2008, it is possible to give six of the vaccines in one injection and the pneumococcal (PCV) or Men C vaccine is given in another limb at the same time. At the six-month visit the 6-in-1, PCV and Men C are given at the same time.

The MMR vaccine, which protects against measles, mumps and rubella, is recommended at 12 months. A PCV booster is also recommended at 12 months.

Hib and Men C boosters are recommended at 13 months.

When children are aged 4 or 5 years, they need booster vaccines to stay protected against diphtheria, polio, tetanus and whooping cough. A second dose of the MMR vaccine is also recommended at this time as some children do not respond to the first dose.

When children are aged 11 to 14 years, another booster is recommended to provide long-lasting protection against tetanus and diphtheria.

Are too many vaccines given?

Some parents worry that giving several vaccines at once will overload their child's immune system, or that the vaccines may not work properly. However, there is nothing to worry about as your child's immune system can easily cope with vaccines. Studies have shown that vaccines are just as safe and just as effective when they are given together as when they are given separately. For example, if your child received single injections instead of the combined MMR vaccine, they would be exposed to the diseases of measles, mumps or rubella for a longer period and would have to have six injections instead of two.

A number of injections are needed to give your child the fullest possible protection, so it is important to complete the course.

Why are vaccines given at such an early age?

Vaccines are given at an early age because young babies are most vulnerable to these diseases and need to be protected as early as possible. For example, babies younger than 6 months are at the highest risk for serious complications of whooping cough (6 out of 10 need to go into hospital, and 9 out of 10 deaths from whooping cough are in this age group). The MMR vaccine is not usually recommended for children under 12 months because it may not work as well.

The ages at which vaccines are recommended are chosen to give your child the earliest and best protection against disease.

How serious are these diseases?

Any of them can kill a child. It's easy to forget how serious they are

because – thanks largely to vaccines – we don't see them nearly as much as we used to.

Measles used to kill thousands of people in Europe and the United States every year. In the 1940s and 1950s, tens of thousands of children were crippled or killed by polio. As recently as the mid-1980s, 100 children a year in Ireland suffered from meningitis and other serious complications as a result of hib infection.

These diseases have not changed. They can still cause pneumonia, choking, brain damage and heart problems in children who are not protected. These diseases still kill children in many parts of the world, even in Ireland.

What will happen if my child doesn't get these vaccines?

Basically, one of two things could happen.

- get mildly ill and have to stay inside for a few days; or
- get very sick and have to go into hospital or, at worst, die.

Your child could also spread those diseases to other children and adults who are not protected. Many people could get very sick and some could die if not enough people in your community are protected.

What are my child's chances of bring exposed to these diseases?

Some of these diseases are very rare in Ireland today, so the chances of exposure are small, but others are still fairly common. Some of the diseases are rare in Ireland but common elsewhere in the world, so your child could get those diseases while travelling abroad.

You shouldn't assume your child is completely safe from diseases, even the rare ones. For example, while diphtheria is rare in Ireland, there has been a recent epidemic in Eastern Europe and it is still common in Asia.

With increased travel to and from these countries, it is possible that these diseases will become more common. If enough people don't get immunised, epidemics will definitely follow.

If your child is not immunised, they are at a greater risk of getting these infections when they are older. Some infections are more serious in teenagers or adults than in children. For example, mumps in teenage boys or young men may cause swelling of the testicles and if a woman catches rubella during the early stages of pregnancy, this may cause major birth defects in the baby. The serious complications from measles are also increased in adults.

Do vaccines always work?

Vaccines work most of the time, but not always. Most childhood immunisations protect 90% to 99% of the children who get them, but sometimes a child will not respond to certain vaccines. This is another reason why it's important for all children to be immunised. A child who has not responded to immunisation depends on the immunity of others around them for protection. Your child could be infected by a child who hasn't been immunised, but not by one who is immune.

Effectiveness of vaccines

Vaccine	Percentage of children immune after getting the vaccine
BCG vaccine	up to 80%
Diphtheria vaccine	95%
Hepatitis B	98%
Hib vaccine	95 to 100%
MMR vaccine	95%
Men C vaccine	90% (after three doses)

Vaccine	Percentage of children immune after getting the vaccine
Pneumococcal vaccine (PCV)	90%
Polio vaccine (inactivated polio vaccine)	99% (after three doses)
Tetanus vaccine	almost 100%
Whooping cough vaccine	80 to 85%

Will immunisations still work if my child doesn't get them at the right time?

Yes. Most of these vaccines can be given at any age, and a child who misses one injection in a course of injections does not have to start again. The vaccines already given will still work and your child will still develop protection. Just ask your GP (general practitioner).

If none of the children in a school of 500 pupils had been immunised, and there was an outbreak of measles, nearly every student would come down with measles and 20 children would get pneumonia. There is a 50% chance that one child in the school would develop encephalitis (inflammation of the brain) as a result of measles. If every child was immunised correctly with the MMR vaccine, on average there would be one case of encephalitis every 2000 years caused by the immunisation.

How do I get my child immunised?

In Ireland, all the recommended childhood immunisations listed in the timetable are free of charge.

- **When a baby is born,** a Health Service Executive (HSE) doctor will give your baby the BCG vaccine at the maternity hospital or later at a HSE clinic.
- **When your child is 2, 4 and 6 months old,** your child will receive the 6-in-1 (to protect against diphtheria, hib, hepatitis B, polio, tetanus and whooping cough) and either PCV to protect against pneumococcal disease or Men C to protect against meningococcal C (or both). The HSE will let you know about the first visit. You should arrange to visit your GP for the immunisations. If you do not hear from the HSE, perhaps because you have moved house, you should arrange to visit your GP at the appropriate time.
- **When your child is 12 months,** they receive an MMR (measles, mumps and rubella) vaccination and a PCV booster. The HSE will tell you about this and ask you to go to your GP.
- **When your child is 13 months** they receive men C and hib boosters. The HSE will tell you about this and ask you to go to your GP
- **When your child is aged 4 to 5 years,** a HSE doctor or nurse will give the 4-in-1 booster (to protect against diphtheria, whooping cough, tetanus and polio) and a second dose of the MMR vaccine in your child's primary school. The HSE will let you know the date of immunisations. If your child misses that immunisation in school, the HSE may arrange for your child to be immunised at a clinic or ask you to visit your GP.
- **In counties Donegal, Sligo, Leitrim, Cavan, Monaghan, Louth, Meath and parts of North Dublin when your child is 4 to 5 years,** the 4-in-1 booster and a second dose of the MMR is available for free from your GP. The HSE will let you know about this when your child is due for immunisation.

- **When your child is in the 5th or 6th class of primary school,** a HSE doctor may give the BCG vaccine and a second dose of MMR to children who have not already got these vaccines. The HSE will let you know the date of the immunisations. If your child misses that immunisation in school, the HSE may arrange for your child to be immunised at a clinic or ask you to visit your GP. (However, the BCG vaccine is not given by GPs.)
- **When your child is aged 11 to 14 years,** it is recommended that a HSE doctor or nurse gives them a tetanus and low-dose diphtheria vaccine in school. The HSE is in the process of introducing this new programme.

Before your child is immunised, the doctor or nurse will check with you that your child is well and able to get the vaccines. If you have any worries or questions about your child's immunisations, ask the doctor or nurse before your child is immunised. You can also ask for further information from your Public Health Nurse at your local HSE clinic.

There are 12 diseases that can be prevented by routine childhood immunisation – tuberculosis, diphtheria, haemophilus influenzae type b (hib), hepatitis B, polio, tetanus, whooping cough, meningococcal C (men C) disease, pneumococcal disease, measles, mumps, and rubella. All of these diseases can cause serious complications and sometimes death. These immunisations are all given as injections. Immunisation helps children stay healthy by preventing serious infection.

Your questions answered

There are very few reasons why your child should not get a vaccine. If you are not sure about something talk to the doctor or nurse before your child is immunised.

What if my child has a high temperature or a fever?

If your child has a high temperature, the immunisation should be put off until your child is better. However, babies with minor coughs and colds, or those on antibiotics, can be immunised safely and effectively.

What if my child has epilepsy or has had convulsions (fits)?

These children should still be immunised if their condition is stable.

Some children get fits (febrile convulsions) if they have a high temperature or a fever. You may give these children paracetamol or ibuprofen. (See page 22 for details.)

Children with a family history of fits or epilepsy should be immunised as normal.

What if my child was premature, had a low birth weight or had jaundice?

It is important that premature babies are protected because they are more vulnerable to certain infections. In general, premature babies should be immunised as normal. If your child had a very low birth weight, you should discuss their immunisation needs with your paediatrician. Babies who had jaundice after being born and those who are being breast-fed should be immunised as normal.

What if my child has asthma, eczema, hay fever or is allergic to eggs?

Children with asthma, eczema, hay fever and allergies should be immunised, even if they have a severe allergy to eggs (for example, hives (red itchy bumps), swelling of the mouth or throat, difficulty breathing, wheezing, low blood pressure and shock). The only exception is the flu vaccine, which should not be given to those who have a severe allergy to eggs.

The MMR vaccine can be given to children with a severe egg allergy, as severe allergy to the MMR vaccine is extremely rare even in these children. Your child simply disliking eggs or having diarrhoea or stomach pains after eating eggs is not a reason to avoid the MMR immunisation, and you do not need to take any special precautions. If you have any doubts, talk to the doctor or nurse giving the immunisation.

Children taking steroids by inhaler or in a low-dose steroid cream should be immunised as normal. If you have any doubts, talk to the doctor or nurse giving the immunisation.

My child was unwell after the last dose of vaccine. Should they get the next dose?

Some children may be unwell after their immunisation. Usually there is no reason not to finish the course of vaccine. However, if your child had a severe allergic reaction (that is, shock or difficulty breathing), they should not get that vaccine again until you know why this happened. In this situation, talk to the doctor about the reaction.

What if someone else in the family had a reaction to the immunisation?

Immunisations should not be missed if a family member had any reaction to a vaccine, as this type of reaction does not run in families.

What if my child has recently had, or is due to have, surgery?

Do not put the immunisation off if your child is due to have, an operation or has recently had one. Having surgery is not a reason to put off immunisation, and a recent immunisation is not a reason to put off surgery.

What if my child has already had whooping cough, measles, rubella, mumps, hib, pneumococcal or men c?

You should still immunise your child against these diseases, even if they have had them. It is important to be protected against all the diseases the vaccine covers, even if the child has caught one of the diseases before. This is very important as children under 2 years do not get enough natural immunity following illness with hib, Men C or pneumococcal disease and so should still be immunised.

Can my child be immunised while they are in close contact with someone who is pregnant?

There is no problem with giving routine immunisations to a child who is in close contact with someone who is pregnant. In fact, immunising the child will protect the mother from being exposed to diseases like rubella.

What if my child has a serious disease?

It is very important that children with serious diseases are immunised because they are often more at risk from complications of infections.

However, care is needed if the child's illness, or its treatment, may lower their immunity. Immunisation should be carefully considered for children with cancer or an immune deficiency disorder, or who are taking medicines which may reduce their ability to fight infection. Discuss this with your doctor.

Children who have had a blood transfusion or received blood products should not get their MMR vaccine until three months after the transfusion. Children with stable neurological conditions such as cerebral palsy or Down syndrome should be immunised as normal.

Do some children also need other vaccines?

Yes. Children who have had their spleens removed or have cystic fibrosis, an immune deficiency, chronic heart, lung, liver or kidney disease, sickle cell disease or diseases such as diabetes are more vulnerable to some infections. If your child has any long-term illness, ask your doctor if they need to be immunised against diseases like flu or hepatitis A.

If you are travelling to another country, remember to find out if your child needs any special vaccine.

If you are worried about whether your child is fit to be immunised, talk to the doctor or nurse before putting off the immunisation.

Immunisation against infectious disease has saved more lives than any other public health intervention apart from providing clean water.

What should I do if my child has any side effects after getting the vaccine?

Common reactions	What to do
Soreness, swelling and redness in the area where the injection was given	■ Give paracetamol or ibuprofen to relieve aches and pains. ■ Make sure clothes are not too tight or rubbing against the area where the injection was given.
Fever	■ Do not overdress your baby. ■ Make sure their room isn't too hot. ■ Give extra fluids to drink. ■ Give paracetamol or ibuprofen to lower the fever.
Headache or irritability	■ Give paracetamol or ibuprofen to relieve aches and pains.

Remember, if your child is very unwell after getting a vaccine, they may be sick for some other reason talk to your GP about this.

Children do not usually need to take any medicine when they are given a vaccine. However, if your child gets a fever or is sore where the injection was given, you may give them paracetamol or ibuprofen.

If your child has fits when they have a high temperature, give them **paracetamol** or **ibuprofen** before the immunisation and for 48 hours afterwards to reduce the chance of a fever. Remember, after having the MMR vaccine a fever may happen about 6 to 12 days later, so give paracetamol or ibuprofen then.

The dose of paracetamol or ibuprofen recommended for your child is written on the bottle according to the child's age.

Please ask your pharmacist for sugar-free mixture of paracetamol or ibuprofen suitable for your child's age.

Using paracetamol or ibuprofen over a long period without advice from a doctor may be harmful.

What if my child has an allergic reaction to vaccines?

Serious allergic reactions to vaccines are extremely rare. About one person out of one million may have a serious allergic reaction. Signs of a serious allergic reaction include difficulty breathing, hoarseness, wheezing, hives, paleness, weakness, a fast heartbeat, dizziness, and swelling of the throat. If the reaction is treated quickly, the child will recover fully. Doctors and nurses who give immunisations are trained to deal with allergic reactions.

What if my child suffers any side effects from vaccines?

Most side effects from vaccines are limited to tenderness and swelling or pain where the injection was given or a fever. Children usually recover from these minor side effects within a day or two. Most of these minor side effects happen in the first day or two after immunisation. However, after the MMR vaccine, some children may get a fever or a rash six to 12 days later. This is not contagious.

The Irish Medicines Board monitors all reported side effects of vaccines. This also happens in other countries so that new and rare side effects can be detected quickly and any necessary action taken.

If your child has any side effects after immunisation, let your GP know so that he or she can report it to the Irish Medicines Board.

Comparison of the effects of diseases and the side effects of vaccines

The table on the next few pages set out:

- the disease immunisation is recommended for
- the possible side effects of the disease and
- the possible side effects of the vaccine.

Disease	Effects of disease	Side effects of vaccine
Diphtheria – contagious bacteria that spread by close contact with an infected person or carrier and cause a sore throat and severe breathing difficulties.	Of the people who get diphtheria: ■ 1 in 15 will die. ■ The bacteria release a toxin (poison) which can lead to paralysis and heart failure.	Of the people who are immunised: ■ 1 in 10 have redness and swelling where the injection was given or have a fever. Serious side effects are very rare.
Hib *(haemophilus influenzae B)* – contagious bacteria that spread by close contact with an infected person and cause meningitis (inflammation of the lining around the brain), epiglottitis (swelling in the throat that causes choking), septicaemia (blood poisoning) and osteomyeltitis (infection of the bone).	Of the people who get hib disease: ■ 1 in 20 people who have hib meningitis will die; ■ 1 in 4 people who recover from hib meningitis will have permanent brain damage or deafness; and ■ 1 in 100 people who have epiglottitis (swelling in the throat that causes choking) will die.	Of the people who are immunised: ■ 1 in 5 have discomfort, redness or swelling where the injection was given; and ■ 1 in 50 will have a fever.

Disease	Effects of disease	Side effects of vaccine
Men C *(meningococcal C disease)* – contagious bacteria that spread by saliva or close contact with an infected person or carrier and causes meningitis or septicaemia, or both. (The men C vaccine does not protect against other types of meningitis including that due to meningococcal B disease.)	Of the people who get men C disease: ■ 1 in 15 will die ■ 1 in 10 people who recover from meningococcal disease will have a major disability such as deafness, brain damage or loss of fingers, toes, hands, feet, arms or legs.	Of the babies who are immunised: ■ 1 in 20 babies will get redness or swelling where the injection was given; ■ 1 in 20 babies will get a fever; ■ 1 in 2 babies will become irritable; and ■ 1 in 100 may get a tummy upset or vomit.
Mumps – a contagious virus that is spread by close contact with an infected person and causes swollen neck glands and a fever.	Of the people who get mumps: ■ 1 in 20 will get viral meningitis; ■ 1 in 1000 will get encephalitis (brain inflammation); ■ 4 in 10 men who have mumps will get swollen testicles; ■ 1 in 3 will get a fever, a headache, and swollen salivary glands under the jaw; and ■ 1 in 20,000 may become deaf. Mumps can also rarely cause infertility in men.	Of the people who are immunised: ■ 1 in 100 may develop swelling of the salivary glands under the jaw; and ■ 1 in 3 million may develop mild encephalitis (inflammation of the brain).

Disease	Effects of disease	Side effects of vaccine
Hepatitis B – a viral disease that is spread through contact with the blood or other body fluid of an infected person and causes liver disease.	Children have a higher risk of having hepatitis B infection for life. Of those who have hepatitis B infection for life ■ 1 in 4 will die from scarring of the liver (cirrhosis) or liver cancer.	Of the people who are immunised: ■ 1 in 10 have discomfort, redness or swelling where the injection was given, or will have a fever Serious side effects are very rare.
Measles – a highly contagious virus that is spread by close contact with an infected person and causes fever, a cough and a rash.	Of the people who get measles: ■ 1 or 2 in 1000 will die; ■ 1 in 20 will get an ear infection; ■ 1 in 25 will get pneumonia or bronchitis; ■ 1 in 200 will have convulsions (fits); and ■ 1 in 6 will get diarrhoea. ■ 1 in 1000 will develop encephalitis (inflammation of the brain). For every 10 children who develop encephalitis: ● 1 will die; and ● up to 4 will have brain damage. ■ 1 in 8000 children under two years get SSPE (brain degeneration), which may be many years after measles and is always fatal. ■ 1 in 6000 will get a blood-clotting problem	Of the people who are immunised: ■ 1 in 10 will have discomfort, redness or swelling where the injection was given, or will have a fever; ■ 1 in 20 will get a rash six to 12 days later (this is not contagious); ■ 1 in 1000 will have a convulsion (fit); ■ 1 in a million may develop encephalitis (inflammation of the brain); ■ 1 in 22,000 will get a temporary blood-clotting problem.

Disease	Effects of disease	Side effects of vaccine
TB *(tuberculosis)* – contagious bacteria that infect the lungs and spread by close contact with an infected person. It causes coughing, sweating, weight loss and tiredness. TB may also infect the brain or other parts of the body, but this type of TB is not contagious.	People who get TB will need many months of treatment to cure it. In the past, many people in Ireland died of TB.	Of the people who are immunised: ■ most people will get a blister and scarring on the arm where the BCG injection was given; ■ 1 in 100 may get small swollen glands under the arm; and ■ up to 1 in 1000 may get an infection, which responds to treatment.
Whooping cough *(pertussis)* – contagious bacteria that spread by close contact with an infected person and causes a 'whooping' cough and vomiting. The disease can last up to three months.	Of the people who get whooping cough: ■ 1 in 500 will die from pneumonia or brain damage (90% of deaths are in children under the age of 6 months); ■ 1 in 125 will have fits (1 in 70 if less than 6 months old); ■ 1 in 1000 will get encephalitis (1 in 500 if less than 6 months old); ■ 1 in 20 will get pneumonia (1 in 10 if less than 6 months old); and ■ 1 in 5 will need to go into hospital.	Of the people who are immunised: ■ 1 in 10 have redness and swelling where the injection was given or have a fever; ■ about 1 in 2500 may cry for more than three hours after the immunisation; and ■ 1 in 12,500 may have a convulsion (fit). Serious side effects are very rare.

Disease	Effects of disease	Side effects of vaccine
Rubella – a contagious virus that is spread by close contact with an infected person and causes a rash, fever and swollen glands. It may cause major birth defects in the baby if the mother gets rubella it in early pregnancy.	Of the people who get rubella: ■ 9 in 10 babies will have a major birth defect (such as deafness, blindness, brain damage or heart defects) if the mother got rubella in early pregnancy; ■ 1 in 3000 get thrombocytopenia (bruising or bleeding of the skin); ■ 1 in 6000 get encephalitis (inflammation of the brain); ■ about 1 in 2 will get a rash and painful swollen glands; and ■ more than half of women with rubella get painful joints.	Of the people who are immunised: ■ 1 in 10 will have discomfort, redness or swelling where the injection was given or will have a fever; ■ 1 in 20 get swollen glands, a stiff neck, or joint pains; ■ 1 in 20 get a rash (which is not infectious); ■ 1 in 22,000 get bruising or bleeding; and ■ 1 in 1 million may get encephalitis (inflammation of the brain).
Tetanus – bacteria from soil which release a toxin and causes painful muscle spasms, convulsions and lockjaw.	Of the people who get tetanus: ■ 1 in 10 people will die The risk is greatest for the very young or old.	Of the people who are immunised: ■ 1 in 10 will have redness and swelling where the injection was given or have a fever. Serious side effects are very rare.

Disease	Effects of disease	Side effects of vaccine
Pneumococcal disease – a bacterial disease spread by close contact with an infected person or carrier. and causes pneumonia, meningitis and septicaemia	Of those who are infected: ■ 1 in 3 will develop pneumonia; ■ 1 in 3 will develop meningitis; and ■ 1 in 10 will die.	Of the people who are immunised: ■ 1 in 10 will have discomfort or swelling where the injection was given or have a fever Serious side effects are very rare.
Polio – a contagious virus that is spread by close contact with an infected person or their faeces (poo). It causes fever, headache and vomiting and may progress to paralysis.	Of the people who get polio: ■ Up to 1 in 100 will become paralysed; ■ 1 in 20 patients who become paralysed will die; and ■ 1 in 2 of those with paralysis whom survive will be permanently paralysed.	■ No serious side effects have been recorded for inactivated polio vaccine, which has been used for over 40 years. ■ There may be a little redness or soreness where the injection was given.

Further information

The information given in this booklet is the most up-to-date information available at this time. It comes from the following sources.

Immunisation Guidelines for Ireland, 2008 Edition.
Available from (www.ndsc.ie/hpsc/A-Z/VaccinePreventable/Vaccination/Publications/ImmunisationGuidelines/)

MMR Discussion Pack – Ireland, 2002.
Available from (www.immunisation.ie/en/Publications/PDFFile_10446_en.pdf)

Epidemiology and Prevention of Vaccine – Preventable Diseases. The Pink Book 10th Edition. January 2008
Available from (www.cdc.gov/vaccines/pubs/pinkbook/default.htm)

Parents Guide to Childhood Immunization – American Academy of Paediatrics, 2002
Available from (www.cdc.gov/vaccines/pubs/parents-guide/default.htm)

Understanding Childhood Immunisation. Immunise Australia Programme. July 2000
Available from (www.health.gov.au/internet/immunise/publishing.nsf/content/uci)

You can get further information about immunisations from:

HSE National Immunisation Office
Unit 8/9 Manor St Business Park
Manor St
Dublin 7
Phone: 01 867 6108
Website: www.immunisation.ie

Health Protection Surveillance Centre
25-27 Middle Gardiner Street
Dublin 1.
Phone: 01 876 5300
Website: www.hpsc.ie

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hpsc

PROTECT HEALTH
IMMUNISE

What to expect after the vaccine

Some children may have discomfort, redness or swelling where the injection was given.

They may be irritable and have a raised temperature. If this happens you can give them infant paracetamol or ibuprofen.

You should also give them plenty to drink.

Make sure they are not too warm and that their clothes are not rubbing against the injection area.

Remember

PCV only protects against the most common strains of streptococcus pneumoniae that cause pneumococcal meningitis and septicaemia.

There are other causes of meningitis and septicaemia so you need to know the symptoms to look out for

These may include

- **fever**
- **refusing food**
- **pale or blotchy skin, spots or a rash, or**
- **drowsiness or difficulty in waking.**

For more information

- Contact your family doctor or public health nurse
- Get a copy of **Your child's immunisations – A guide for parents** from your public health nurse
- Visit www.immunisation.ie or www.hpsc.ie

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Pneumococcal vaccine catch-up programme

Information for parents

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

PROTECT HEALTH IMMUNISE

What is pneumococcal disease?

Pneumococcal disease is an infection caused by the bacteria streptococcus pneumoniae.

How is pneumococcal disease spread?

Pneumococcal disease is contagious. The bacteria live in the nose and throat of humans. The disease is spread through the air by a person who carries the bacteria coughing, sneezing or even breathing.

What illnesses does it cause?

Pneumococcal disease can cause serious illnesses including:

- Meningitis (inflammation of the lining around the brain)
- Septicaemia (blood poisoning)
- Pneumonia

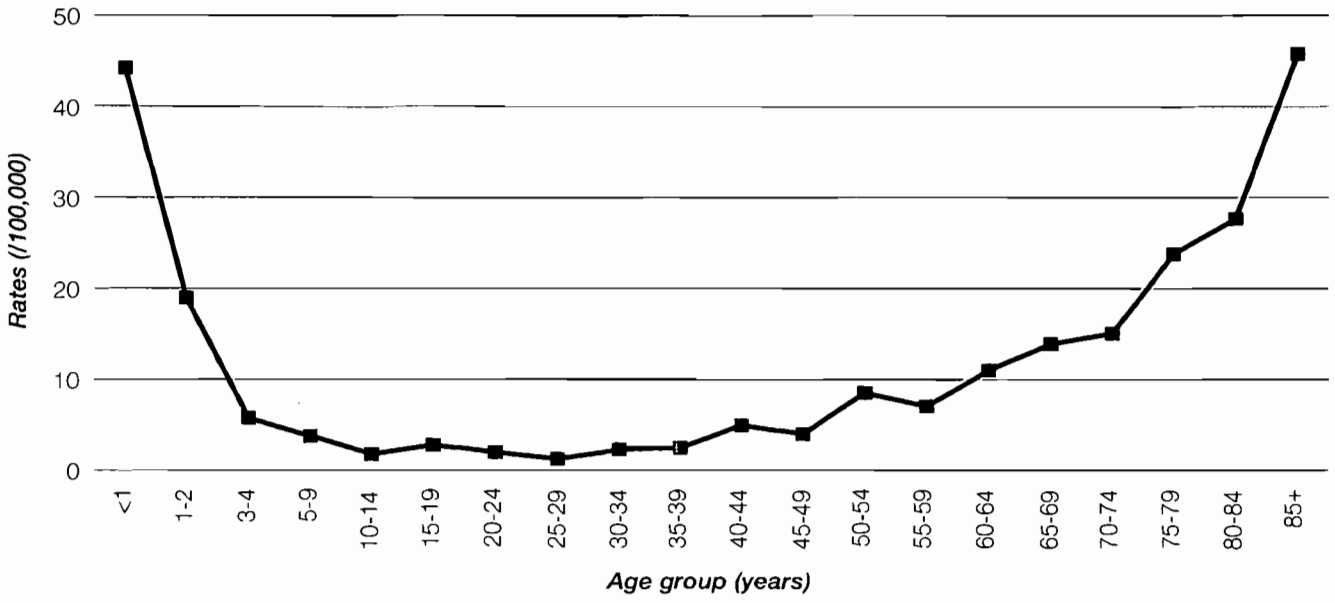
Who is most at risk?

Pneumococcal disease is most common in children under two and people over 65 years of age (see diagram).

Is there a vaccine against pneumococcal disease?

From September 2008 the pneumococcal vaccine (PCV) will be included in the childhood immunisation programme at 2, 6 and 12 months of age. There is a PCV catch-up programme for all children under two because pneumococcal disease is most common in this age group.

Rates of pneumococcal disease by age group (Source: HPSC)



When will my child get PCV?

All children born between **2nd September 2006 and 30th June 2008** will be offered PCV.

Children under 6 months at the start of the campaign will get one dose of PCV (with their last dose of 5 in 1 and Men C) and another dose of PCV at 13 months.

Children aged 6-13 months at the start of the campaign will get one dose of PCV at 13 months of age.

Children aged 13-24 months at the start of the campaign will get one dose of PCV.

What if my child has missed some of their other vaccines?

Your child can get the other vaccines at the same time as PCV. Talk to your doctor about this.

What do I need to do?

During the catch-up programme your local HSE immunisation office will send you a letter inviting you to bring your child to your family doctor (GP) for PCV. This visit is free of charge.

If you do not receive a letter from the HSE or if you have changed GP since your child's last vaccination, please let your local immunisation office know.

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