

The National Immunisation Schedule

Update and Current issues

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National Immunisation Office



www.immunisation.ie

Objectives

- To outline immunisation schedules in Ireland
 - Primary childhood schedule
 - Vaccine uptake rates
 - School immunisation programme
 - Flu vaccination programme
- To highlight development of new vaccines



: Dates vaccines introduced into the Irish immunisation schedule

1937 - 1999

Vaccine	Date introduced
1. BCG	1937
2. DT	1930s
3. DTP	1952
4. Oral Polio Vaccine (OPV)	1957
5. Rubella	1971
6. Measles	1985
7. MMR	1988
8. MMR2	1992
9. Hib	1992

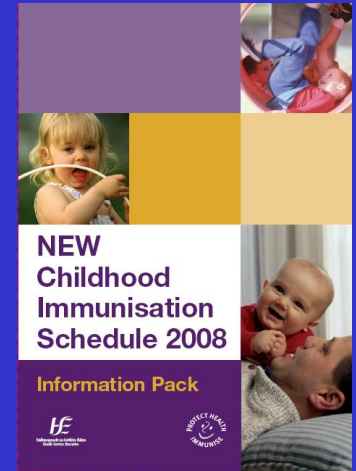
2000 - 2016

Vaccine	Date introduced
1. Men C	2000
2. DTaP-Hib-IPV (5 in1)	2001
3. Inactivated Polio (IPV)	2001
4. Hib Booster	2006
5. Hepatitis B (as part of 6 in 1)	2008
6. PCV7	2008
7. HPV	2010
8. PCV13	2010
9. Tdap	2012
10. Men C (adolescent booster)	2014



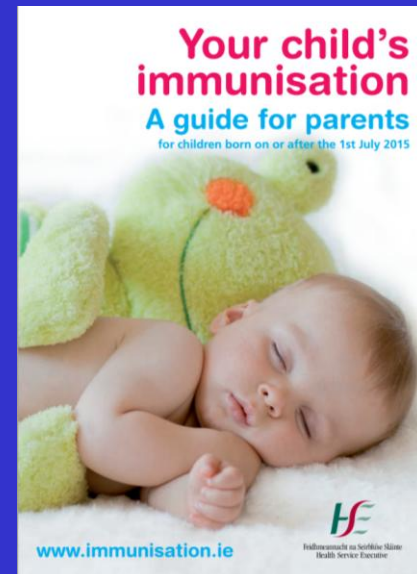
Primary Childhood Immunisation (PCI) Schedule

2 months 6 in 1 + PCV
4 months 6 in 1 + Men C
6 months 6 in 1 + PCV (+MenC*)



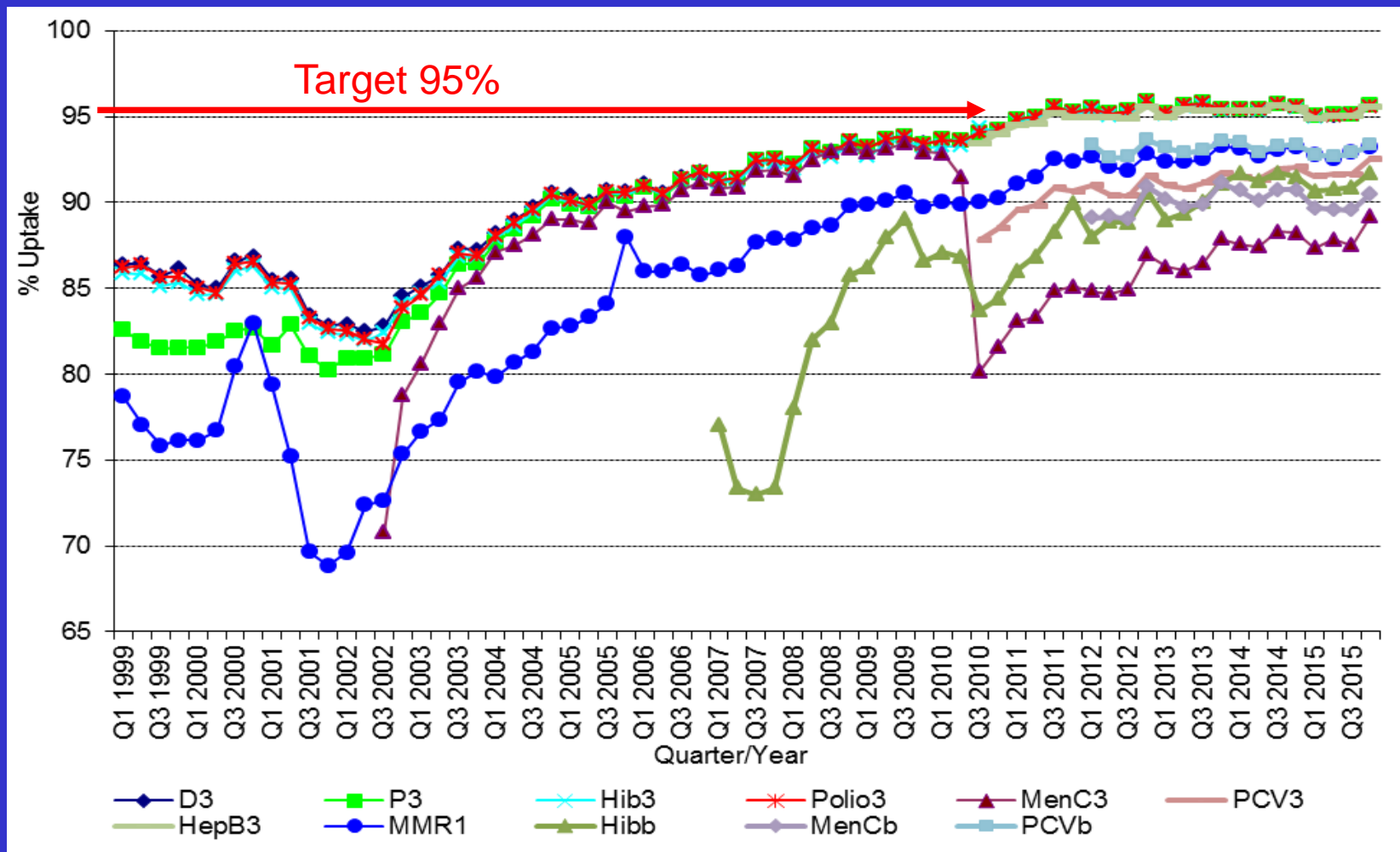
12 months MMR + PCV
13 months Men C + Hib

* if born before July 1st 2015



www.immunisation.ie

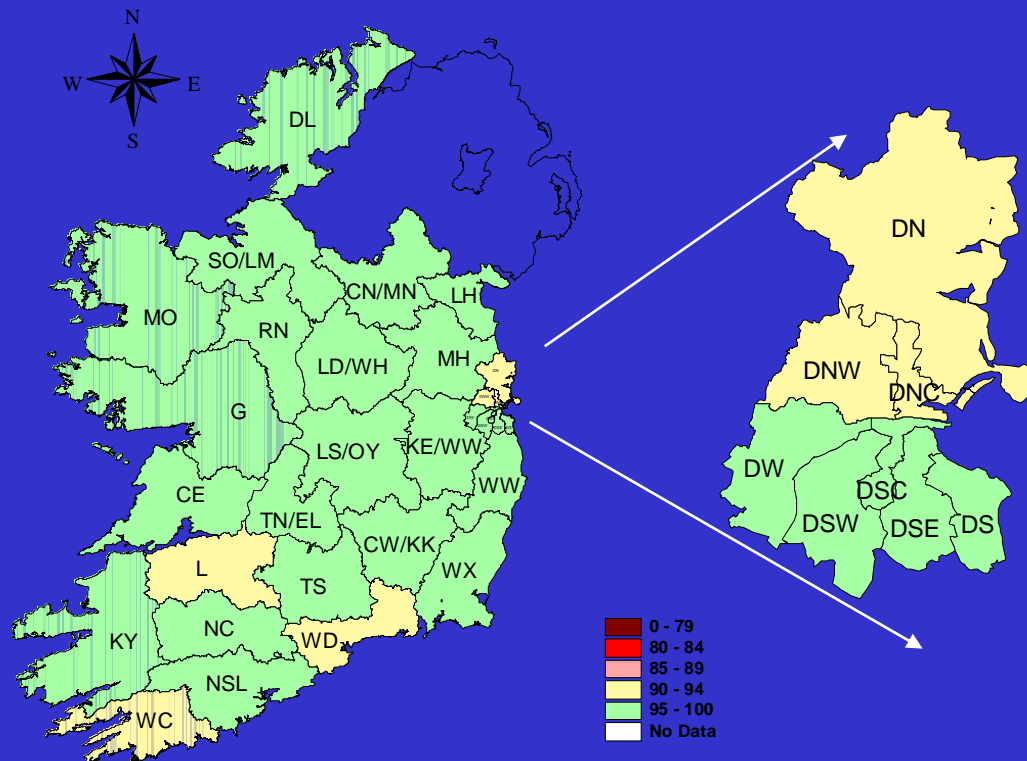
Vaccine uptake rate at 24 months 1999-2015



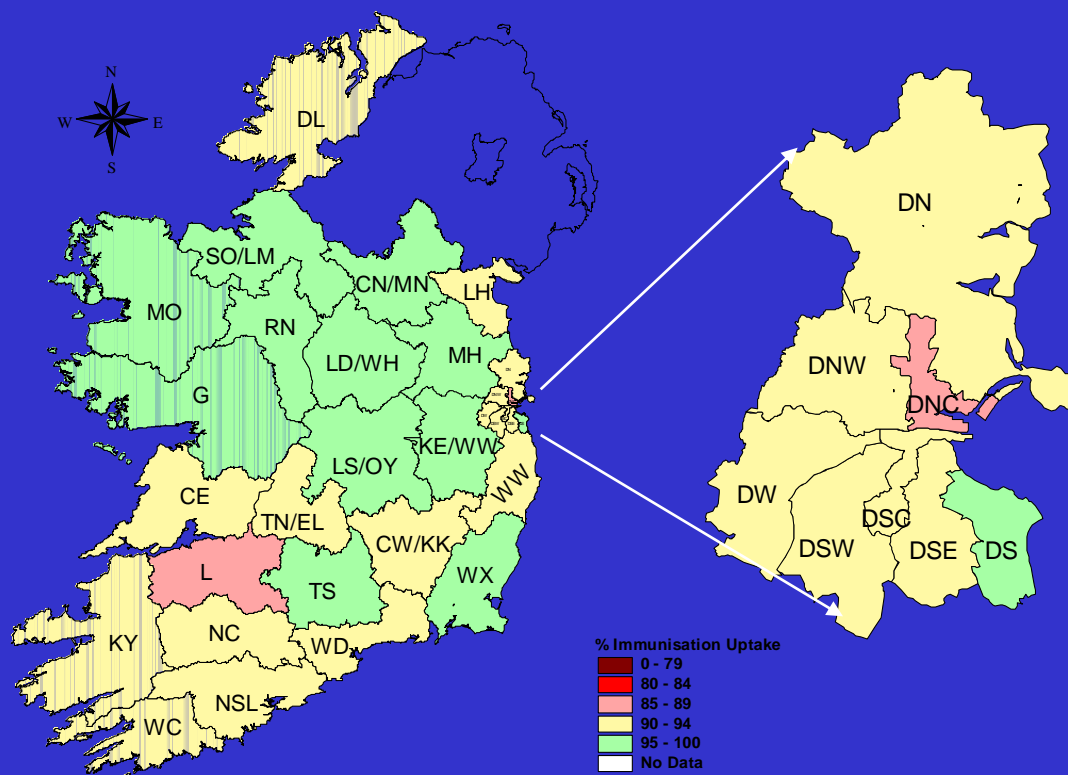
Source: HPSC



Quarter 4 2015 D3 immunisation uptake rates (%) by LHO, in those 24 months of age in Ireland and Dublin (source HPSC)



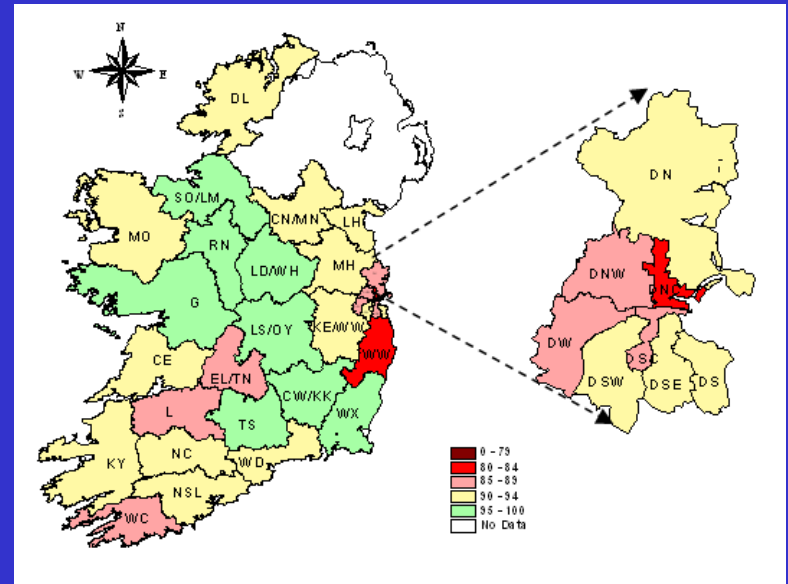
Quarter 4 2015 MMR immunisation uptake rates (%) by LHO, in those 24 months of age in Ireland and Dublin (source HPSC)



Decline in vaccine uptakes

Hib_b booster dose by LHO in those reaching 24 months Q4 2015

	Q1 2010	Q3 2010	Q4 2015
Men C ₃	93%	80%	91%
PCV ₃	-	88%	93%
Hib _b (booster dose)	89%	84%	92%



Source: HPSC

Decline in vaccine uptakes

Actions

- Highlight 5 visits at every opportunity
- Give an appointment for next visit
- Send a text reminder before appointment
- Follow up defaulters as soon as possible
- Send vaccine returns on time
- Defaulters need appropriate vaccines even if they are over the recommended age

Immunisation Schedule

for children born on or after 1st July 2015

AGE	WHERE	VACCINATION
At birth	HSE clinic or maternity hospital	BCG 1 INJECTION
2 months	GP surgery Visit 1	6 in 1 + PCV 2 INJECTIONS
4 months	GP surgery Visit 2	6 in 1 + MenC 2 INJECTIONS
6 months	GP surgery Visit 3	6 in 1 + PCV 2 INJECTIONS
12 months	GP surgery Visit 4	MMR + PCV 2 INJECTIONS
13 months	GP surgery Visit 5	MenC + Hib 2 INJECTIONS

Have you made an appointment for your child's next visit?

REMEMBER
Your child needs 5 GP visits.
Bring your child's immunisation passport to each visit.
www.immunisation.ie

What common reactions can my child get after being vaccinated and what should I do?

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 (over 39.5°C)	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.

→ 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 a 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.
 If your child received the MMR vaccine today they may get a rash 6-10 days later (mini measles). This is not contagious.

Remember, if your child is very unwell after getting a vaccine, they may be sick for some other reason. If you are worried about your child, please contact your GP practice nurse or public health nurse for further advice.

REMEMBER to bring your child's vaccine passport to each GP visit so that your child's vaccines are recorded and you have this information when they are older.

For further information

www.immunisation.ie

Remember, it takes 5 GP visits to fully vaccinate your baby.

2 months 4 months 6 months 12 months 13 months

www.immunisation.ie

Primary Childhood Immunisation (PCI) Schedule

	CURRENT SCHEDULE		NEW SCHEDULE	
Date of birth	Babies born up to 30 th June 2015		Babies born on or after 1st July 2015	
Age	Immunisations	Comment	Immunisations	Comment
2 months	6 in 1 + PCV	2 injections	6 in 1 + PCV	2 injections
4 months	6 in 1 + MenC	2 injections	6 in 1 + MenC	2 injections
6 months	6 in 1 + PCV + MenC	3 injections	6 in 1 + PCV	2 injections
12 months	MMR + PCV	2 injections	MMR + PCV	2 injections
13 months	MenC + Hib	2 injections	MenC + Hib	2 injections

6 in 1 Diphtheria, Tetanus, Pertussis, Polio, Hepatitis B, Haemophilus influenzae B

PCV Pneumococcal conjugate vaccine

MenC Meningococcal C vaccine

MMR Measles, Mumps Rubella

Hib Haemophilus influenzae B



www.immunisation.ie

Primary school immunisation schedule 2015/2016

Age (years)	Vaccine
4 -5	4 in 1 MMR

4 in1	Diphtheria Tetanus Pertussis Polio
MMR	Measles, mumps and rubella




www.immunisation.ie

4 in 1 adverse events

- More reactogenic
 - hot, swollen, red and tender arms from the shoulder to elbow
 - large, localised swelling (diameter > 50 mm) occurring around the injection site
- Begin within 48 hours of vaccination
- Resolve spontaneously
- Antibiotic treatment or anti-inflammatory not indicated
- Not usually associated with significant pain or limitation of movement
- Inform parents in advance

4 in 1 and MMR Booster School Vaccination Programme for Children in Junior Infants

Name: _____
Date: _____
Time of vaccination: _____



Your child was given the following vaccines today

4 in 1 ☐ **MMR** ☐

Common reactions expected after these vaccines may include

- mild fever
- soreness, swelling and redness where the injection was given. Sometimes this swelling can be from the shoulder to the elbow. This usually occurs within 2 days of the vaccination and gets better over 4 – 5 days. Antibiotics are not needed to treat this local reaction.

After MMR vaccine


- some children may get "mini measles" with a rash and fever 6 to 10 days after the injection
- on rare occasions, children may get "mini-mumps" with swelling in the jaw in the third week after vaccination

These are not contagious.

You can give your child paracetamol or ibuprofen to relieve aches and pains or to lower the fever.

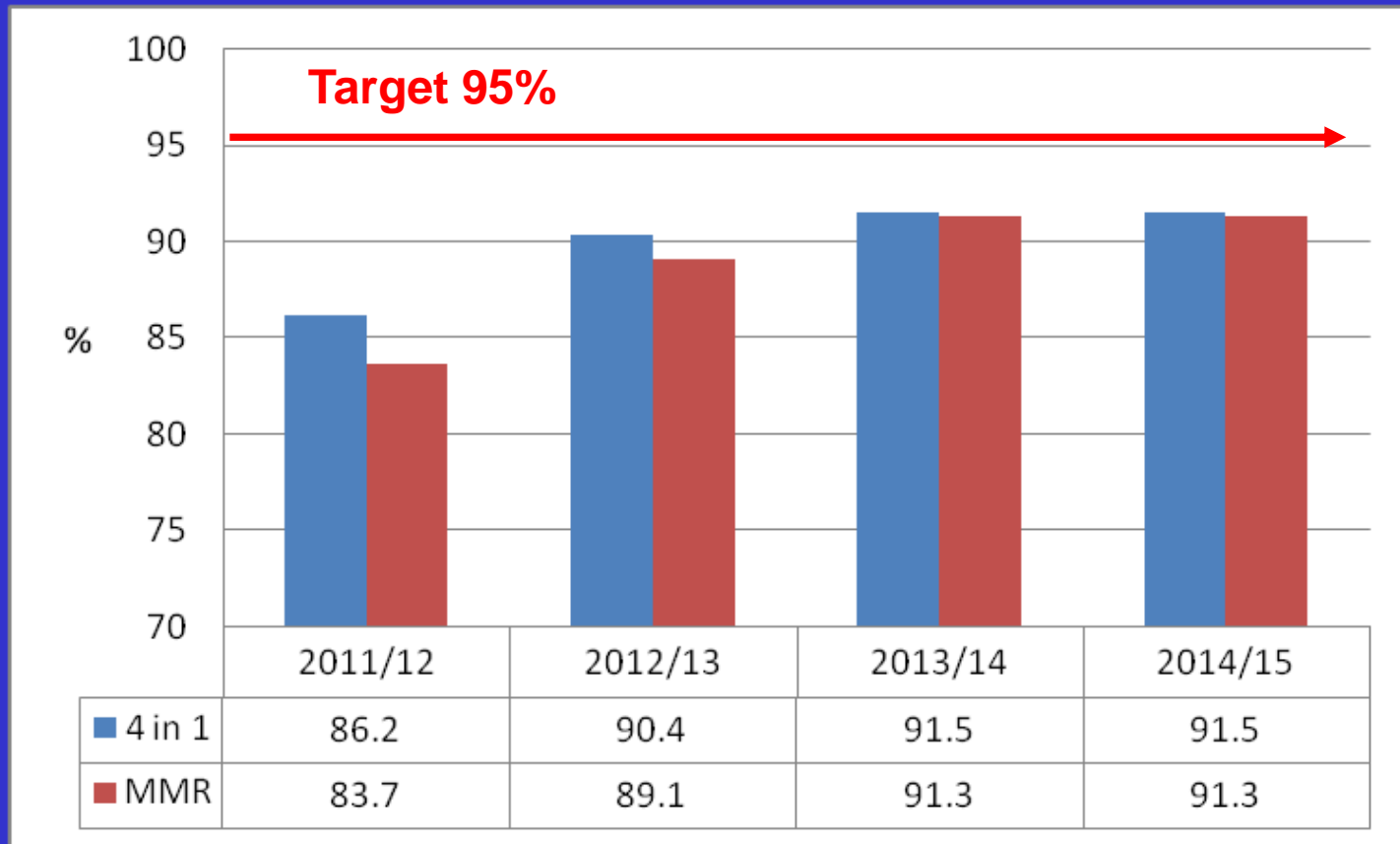
If you are concerned about your child the school vaccination team can be contacted during office hours from Monday to Friday at

If you require medical advice after these hours please contact your family doctor.

 For more information see www.immunisation.ie

09/14

Primary school immunisation uptake 2011/12 - 2014/15 (Target 95%)



Second level school immunisation schedule 2015/2016

Age (years)	Vaccine
12-13	Tdap MenC*
12 – 13 (girls only)	HPV (2 dose schedule)

Tdap Tetanus, low dose diphtheria & pertussis
MenC Meningococcal C vaccine
HPV Human papillomavirus

**Tdap and MenC
booster vaccines**

Information for parents of children
in First Year of second level school



 
Hollandsrao na Seirbhíse Sláinte
Health Service Executive

**Second level school
vaccination programme**

Name: _____
Date: _____
Time of vaccination: _____

Your child was given the following vaccines today

☐ HPV ☐ Tdap ☐ MenC

Common reactions expected after these vaccines may include

- soreness, swelling and redness where the injection was given (this usually passes after a day or two)
- dizziness
- headache

Occasionally your child may feel sick or have a mild fever. On rare occasions some children may have an itchy rash or hives.

You can give your child paracetamol or ibuprofen to relieve aches and pains or to lower the fever. If you are concerned about your child please seek medical advice.

The school vaccination team can be contacted during office hours from Monday to Friday at


If you require medical advice after these hours please contact your family doctor.

Before the next vaccine, you should write to the vaccination team if there has been

- a serious reaction to these vaccines
- any change to your child's medical history or your consent

You will get a record of your child's vaccinations when they have all been completed. **Please keep this safe.**

For more information see
www.immunisation.ie



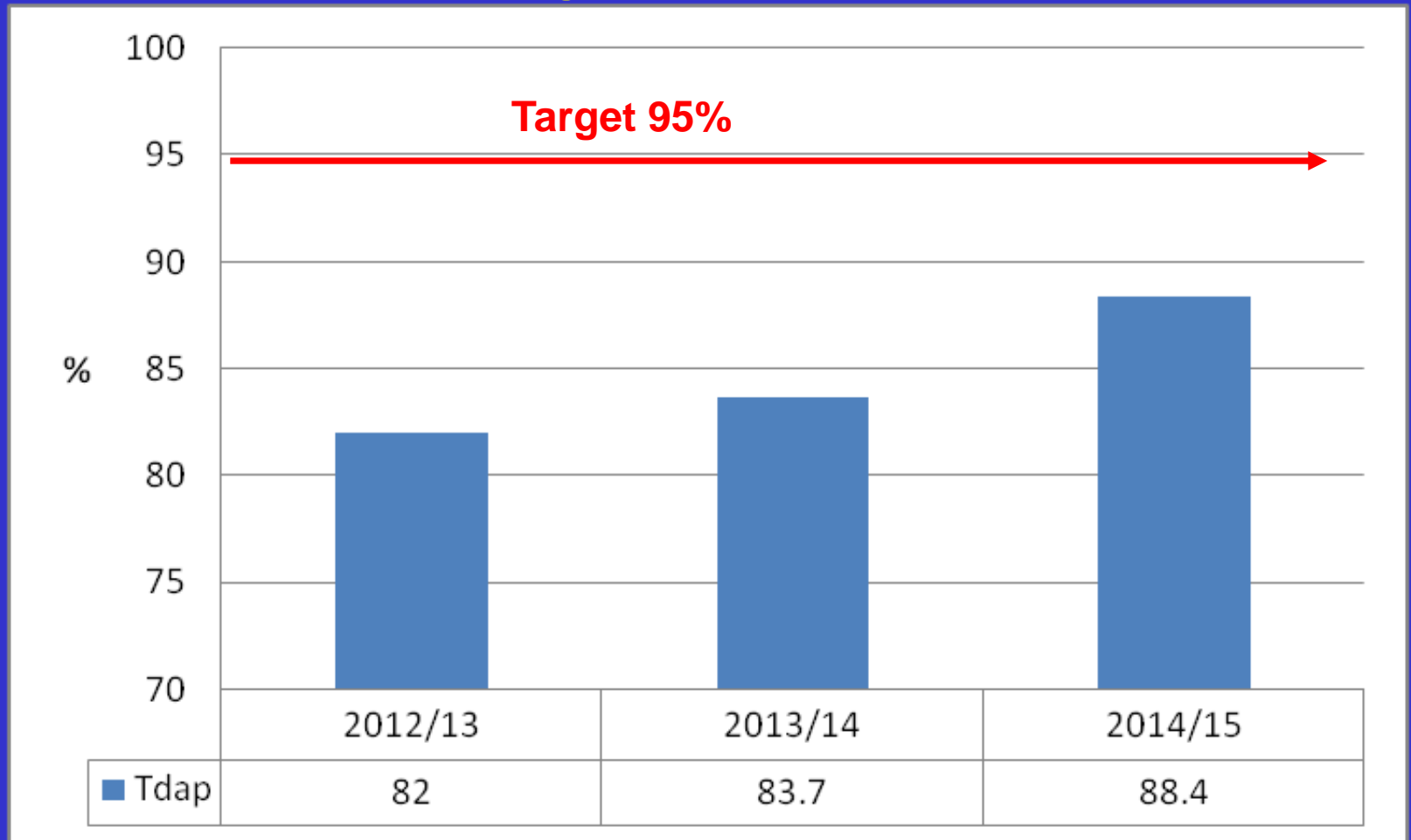

www.immunisation.ie

Adolescent MenC booster vaccine

- Peak rates in under 5 years and 15-19 years
- Concerns about waning immunity in adolescents
- Recent study
 - those vaccinated at <1 year, vaccine effectiveness decreased by 50% after 10 years
 - those vaccinated with one dose at 12–19 years showed no changes
 - vaccination at ≥ 12 years related to a low number of vaccine failures and a higher and longer protection over time
- MenACWY in UK since 2015/2016



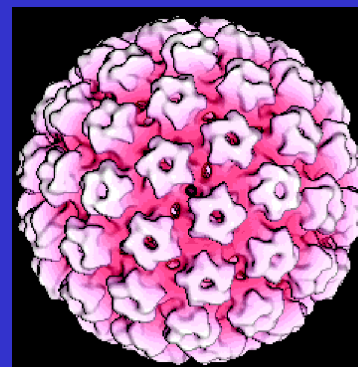
Second level school immunisation uptake (Target 95%)



HPV vaccination programme

Gardasil (Sanofi Pasteur)

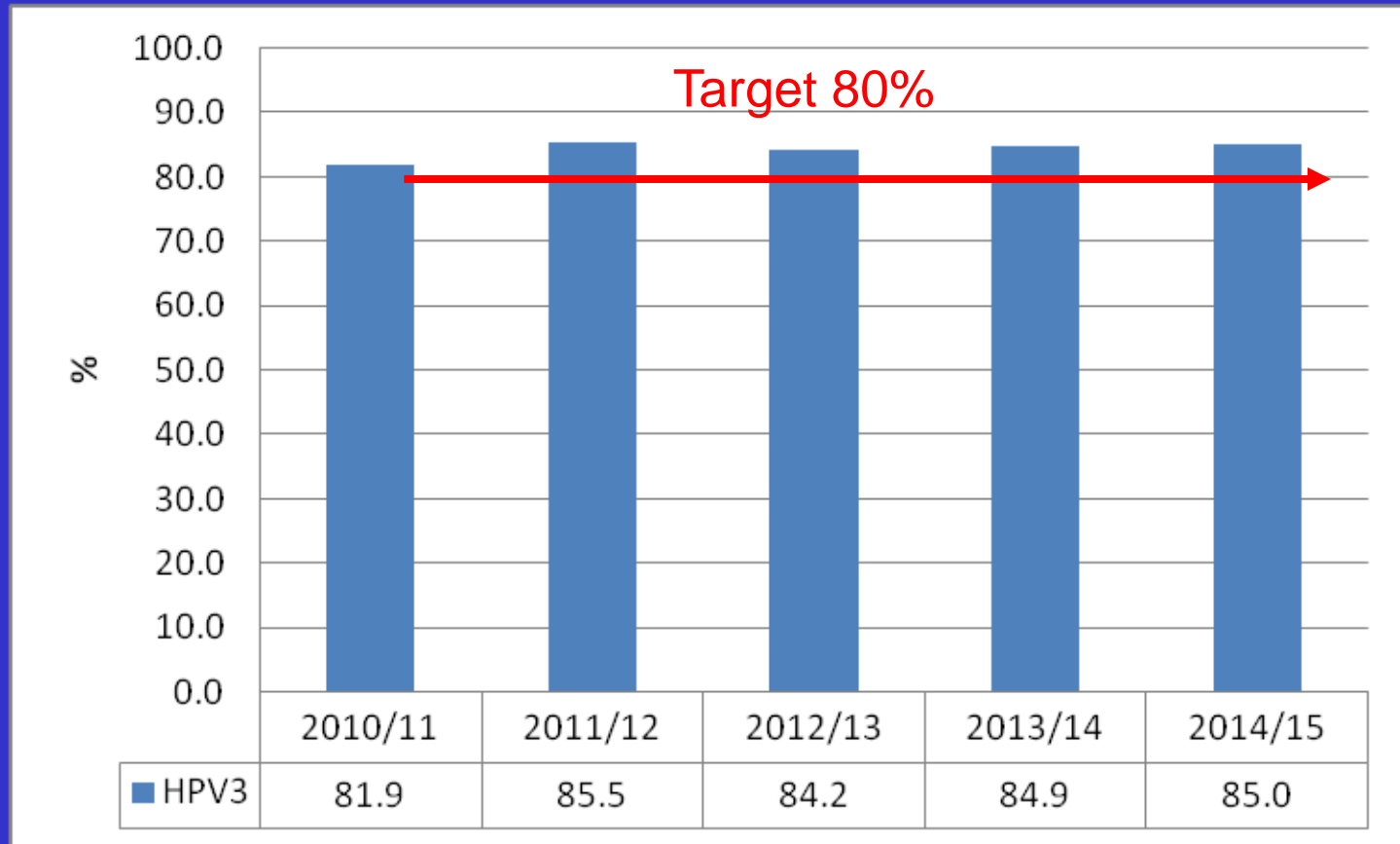
- protects against
 - HPV 16 and 18
(causes 70% cervical cancers)
- and
 - HPV 6 and 11
(causes 90% anogenital warts)



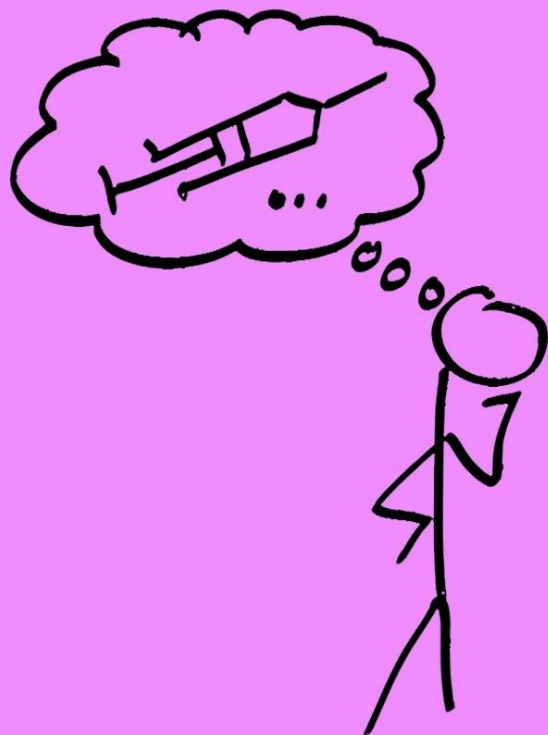
Computerised image of
the human papillomavirus
Courtesy of Dept of
Pathology, University of
Cambridge

HPV vaccine uptake 2010/2011 - 2014/2015

Routine programme First years



Over 80% (84.4%) uptake achieved for 3 dose schedule
Excellent cohort retention
>95% girls who started dose 1 completed dose 3



ARE HPV VACCINES SAFE?

Gardasil vaccine safety

- Over 200 million doses distributed worldwide
- Used in over 25 European countries, the US, Canada, Australia and New Zealand
- WHO, EMA, CDC repeatedly review safety data – no serious adverse events

Nov 2015 EMA review found no evidence the vaccine was linked to chronic fatigue like conditions

Dec 2015 WHO concluded that Gardasil continues to have an excellent safety profile.

Jan 2016 European Commission endorsed the conclusion of the EMA, no need to change the licensed documentation



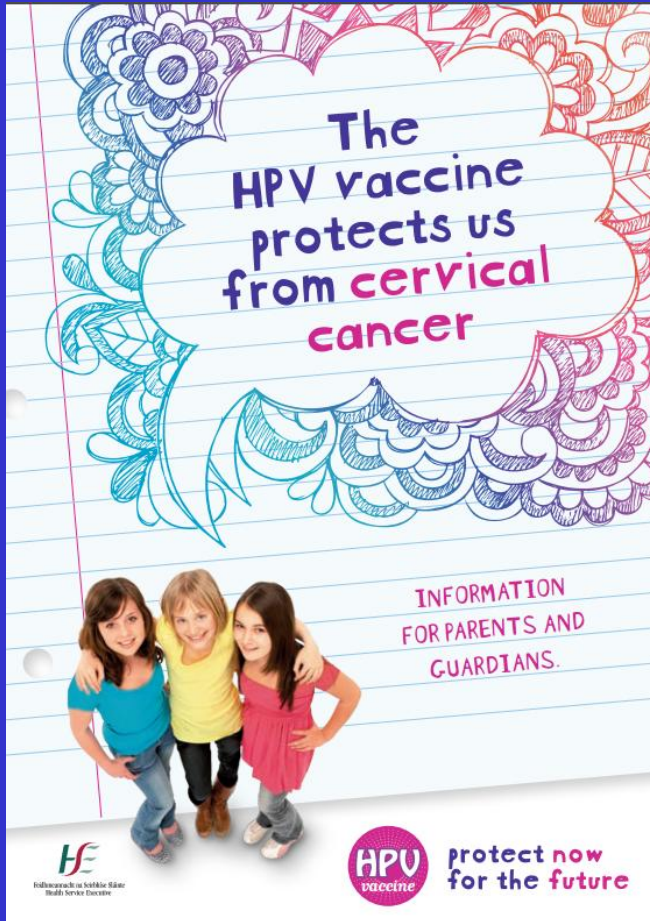
HPV vaccine safety

May 2016

- 1015 reports to HPRA
 - consistent with the expected pattern of adverse effects for the vaccines
 - syncope (faints), gastrointestinal symptoms, malaise, headache
 - 2 reports of POTS (medically confirmed)
 - 2 reports of CRPS
 - 13 reports of chronic fatigue syndrome
- 580,000 doses administered
- over 200,000 girls fully vaccinated



Known side effects of Gardasil



Very commonly (more than 1 in 10 patients):

- Pain, swelling and redness at injection site. Headache

Commonly (more than 1 in 100 patients):

- Bruising, itching at injection site, pain in extremity. Fever and nausea

Rarely (less than 1 in 1000 patients):

- Hives (urticaria)

Very rarely (less than 1 in 10,000 patients):

Syncope (vasovagal reaction), or fainting, Allergic reactions that may include difficulty breathing, wheezing (bronchospasm), hives and rash have been reported.

Patient Information Leaflet (PIL) at <http://www.medicines.ie/medicine/11535/PIL/GARDASIL>

HPV vaccine safety

“We have no evidence of a safety signal with the vaccine.

But what we do have is very clear evidence that this year 900 women, who have not received the vaccine, will die of cervical cancer, and the vaccine has the potential to prevent such deaths in future generations.

So the place of this vaccine in defending women’s health is probably the most important thing we have ever done.”

Professor Andrew Pollard Chair, JCVI, September 2015



CDC

CDC has carefully studied the risks of HPV vaccination. HPV vaccination is recommended because the benefits, such as prevention of cancer, far outweigh the risks of possible side effects.

Benefits

Cancer Prevention

Cervical, vaginal, and vulvar cancer in women

Anal cancer in men and women

Likely penile cancer in men

Likely oropharyngeal cancer in women and men

Potential Risks

Chance of fainting

Pain, redness, or swelling in the arm where the shot was given

<http://www.cdc.gov/vaccinesafety/pdf/data-summary-hpv-gardasil-vaccine-is-safe.pdf>

HPV vaccine impact in Australia

High Grade Cervical Lesions <18 years

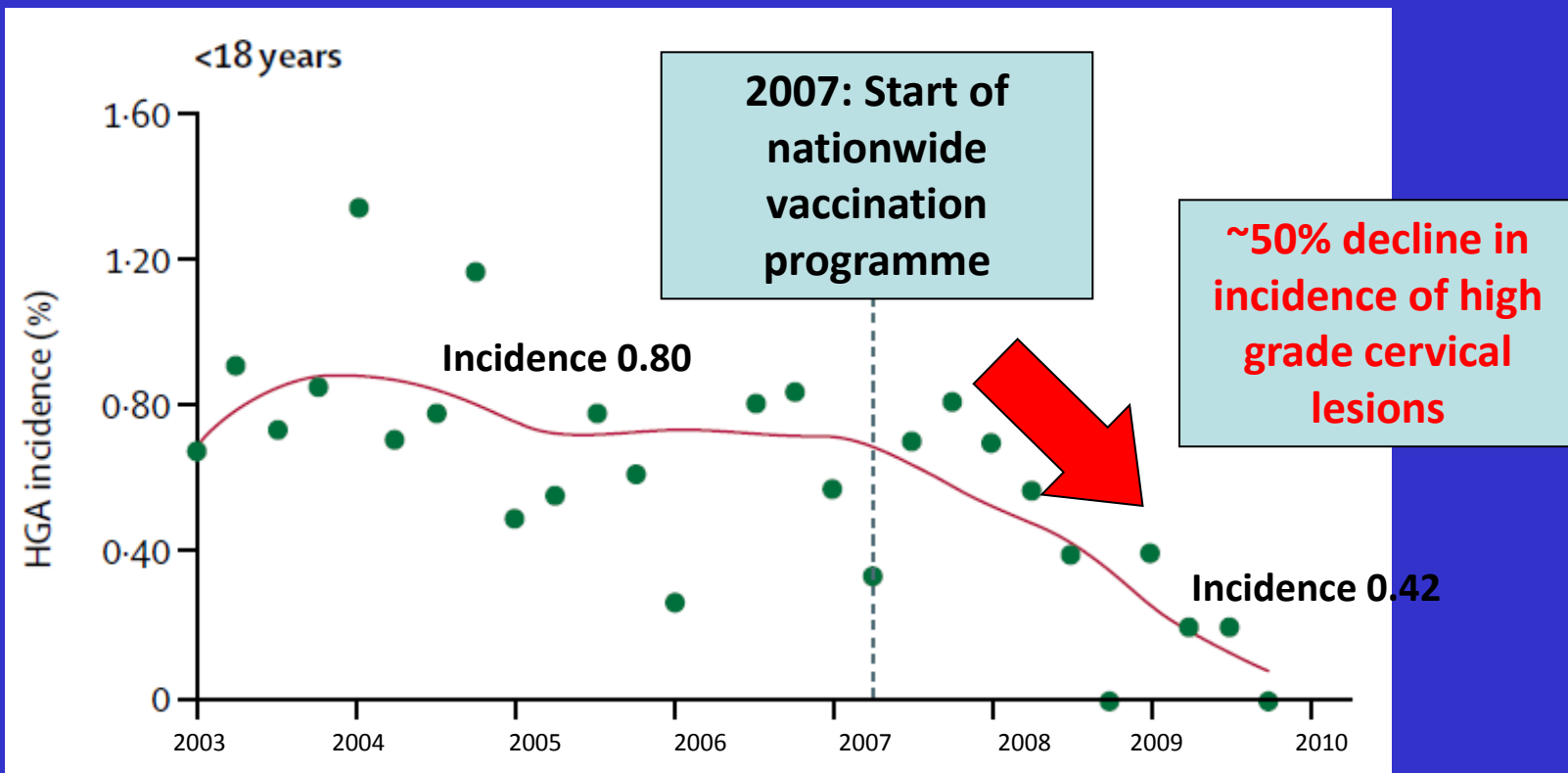


Figure 2: Incidence of high-grade cervical abnormalities, by age group

Incidence of high-grade cervical abnormalities (HGA; green dots) is the number of new diagnoses within a 3-month period per 100 women tested. Lowess smoothing trends are shown with red lines. The vertical lines, at the start of the second quarter in 2007, signify the introduction of human papillomavirus vaccination.

By 2013 reductions also seen in 20-24 year age group

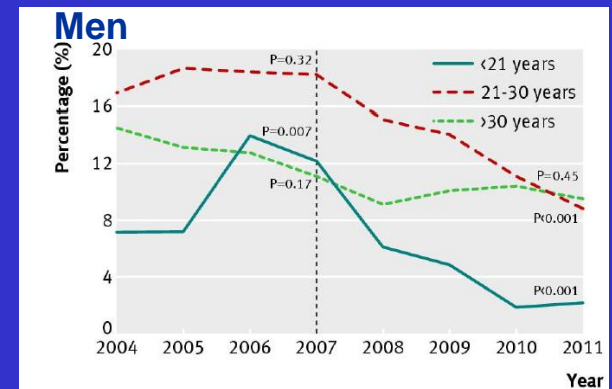
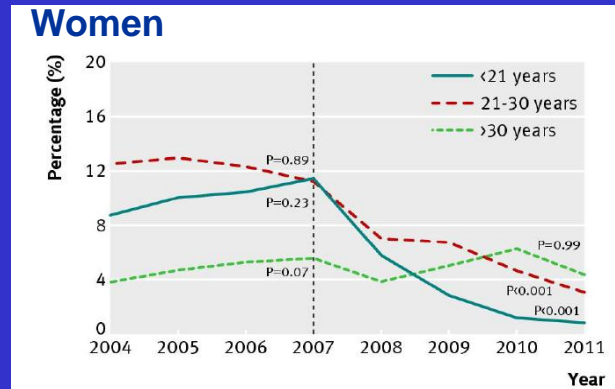
Brotherton et al Lancet 2011; 377: 2085–92

HPV vaccine effectiveness - Australia

Genital warts

- Women <21 years
 - HPV vaccine 83% 1st dose uptake
 - 2011
 - 93% decline in genital warts
 - no genital warts in vaccinated women
- Men
 - 82% decline in genital warts in heterosexual men
 - attributable to herd immunity

% Australian born diagnosed with genital warts by age group 2004 - 2011



Ali H et al BMJ 2013;346:f2032 doi: 10.1136/bmj.f2032 (Published 19 April 2013)



More information

National Immunisation News


The newsletter of the HSE National Immunisation Office

January 2016

Best wishes for 2016
Thank you for all your support in promoting and providing immunisation and for all your feedback, comments and queries in 2015. We look forward to working with you all in 2016.

Contents

- Online Ordering
- Science and Technology in Action
- Flu campaign 2015/2016
- Safety of HPV vaccines
- Change to the Primary Childhood Immunisation Programme
- New preparation of MenC vaccine
- BCG vaccine
- Fridge temperature monitoring
- Shortage of 4in1 vaccine
- Common queries
- Order your vaccines online
- Order information materials
- Visit our website
- National Immunisation Office staff
- Current Vaccines List



Foirdheanacht na Seirbhíse Sláinte
Health Service Executive
www.immunisation.ie

Online ordering system wins award!
The Online Vaccine Ordering System won the Best Use of IT and received a commendation in the Best Public Health Initiative categories at the recent Irish Healthcare Awards. This has been a great success with over 90% of GP sites and 95% of HSE sites now ordering vaccines online.



online only

NATIONAL IMMUNISATION ADVISORY COMMITTEE

Immunisation Guidelines for Ireland

2013 Edition

Who we are | Public Information | Healthcare Worker Information | Information Materials | Glossary | Useful Websites



Welcome to the National Immunisation Office Website
We provide trusted, up-to-date information about HSE immunisation programmes for children, adults and healthcare professionals in Ireland.

HSE National Immunisation Office
Contact us using our Online Form | Phone: 01 867 6108 | Fax: 01 868 2943

Important News
MenB and Rotavirus Vaccines, BCG vaccine, HPV Safety and Flu

Check Vaccine Records
How to request a copy of your records

Patient Information Leaflets and Vaccine Consents
Detailed information about Vaccines

Baby and Childhood Immunisations
Immunisation is a simple, safe, effective way of protecting babies and children

School Programme
Information about the 4 in 1 and MMR, HPV, 10 day and 10 year school vaccination programme

Vaccines and Pregnancy
Information about the vaccines recommended during and after pregnancy

How do I:

- > Check vaccine records
- > Make an appointment
- > Order information materials
- > Contact the local office
- > Ask a question
- > Order HSE vaccines

Further Information

- > Your Child's Immunisation - A Guide for Parents
- > Translation of Immunisation Material
- > Current Vaccination Schedule
- > Previous Vaccination Schedule

Useful Links

- > Immunisation Guidelines for Ireland
- > Vaccination in General Practice
- > Vaccine Preparation
- > What is in Vaccines?
- > Catchup Vaccines

<http://www.immunisation.ie/en/HealthcareProfessionals/ImmunisationGuidelines/>

www.immunisation.ie

