The National Immunisation Schedule Update and Current issues

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Objectives

- To outline immunisation schedules in Ireland
 - Primary childhood schedule
 - Vaccine uptake rates
 - School immunisation programme
 - Seasonal influenza 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 - 2013		
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	





Primary Childhood Immunisation (PCI) Schedule

• Birth BCG

• 2 months 6 in 1 + PCV*

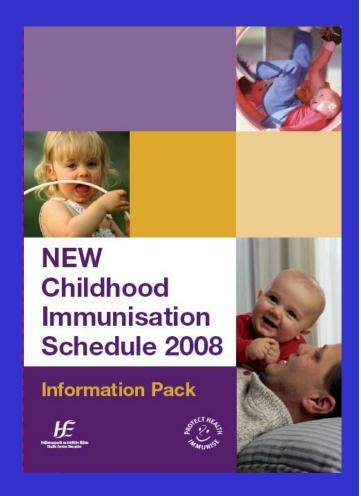
• 4 months 6 in 1 + Men C

• 6 months 6 in 1 + PCV + Men C

• 12 months MMR + PCV

• 13 months Men C + Hib

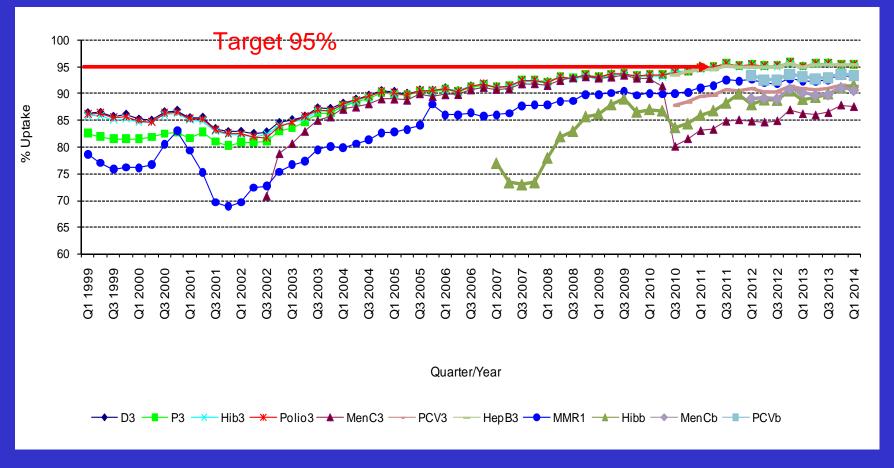
PCV 7 introduced in September 2008
 PCV13 introduced in December 2010







Vaccine uptake rate at 24 months 1999-2014

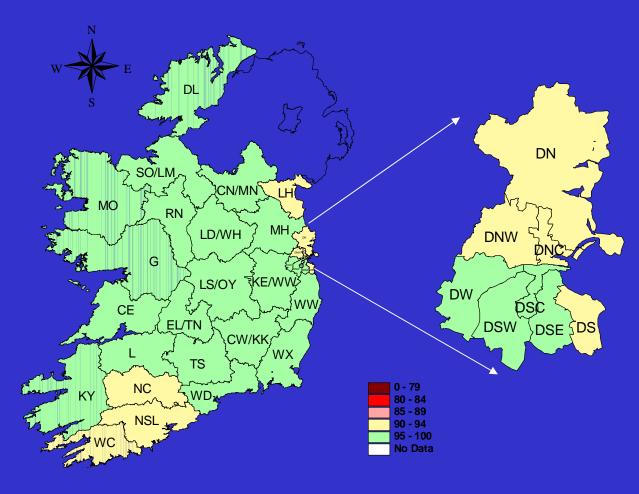








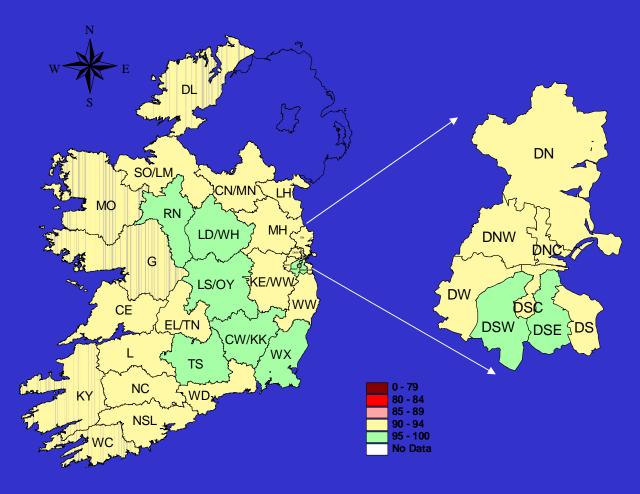
Quarter 1 2014 D3 immunisation uptake rates (%) by LHO, in those 24 months of age in Ireland and Dublin (source HPSC)







Quarter 1 2014 MMR immunisation uptake rates (%) by LHO, in those 24 months of age in Ireland and Dublin (source HPSC)



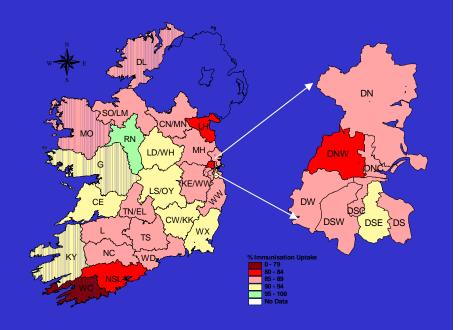




Decline in vaccine uptakes

Quarter 1 2014 Men C₃ immunisation uptake rates (%) by LHO, in those 24 months of age in Ireland and Dublin (source HPSC)

	Q1 2010	Q3 2010	Q1 2014
Men C ₃	93%	80%	88%
PCV ₃	-	88%	91%
Hib _b (booster dose)	89%	84%	92%







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 Guidelines

- Once a child is back on schedule, the optimal recommended ages and intervals should be followed for the remainder of the routine scheduled vaccines
- Children resident in Ireland should be given vaccines according to the recommended Irish schedule with the number of doses and type of vaccine dependent on the child's age





Routine physical examination & procedures

(e.g. measuring temperatures)

- Not prerequisites for vaccinating persons who appear to be healthy
- Ask if the proposed recipient is ill
- Postpone vaccination if there is an acute severe illness.





NIAC changes

	Change	Implementation
MenC* (August 2014)	Schedule changed from 4,6 and 13 months to 4,13 months and 12-13 years	
2011)	2 nd dose in infancy stopped	2015
	Adolescent dose introduced	2014/2015
Rotavirus (2013)	Oral vaccine recommended 2 -3 doses at 2, 4 and 6 months	??

* MenC

- •Peak rates in under 5 years and 15-19 years
- •Evidence 1 dose is sufficient in infants
- •Concerns about waning immunity in adolescents





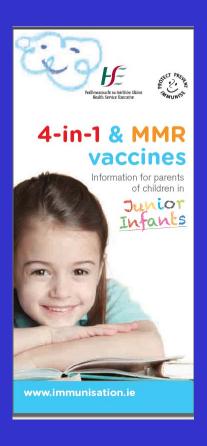
Primary school immunisation schedule 2014/2015

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

4 in1 Diphtheria

Tetanus Pertussis Polio

MMR Measles, mumps and rubella







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 initid 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.	
if you require medical advice after these flours please contact your family doctor.	
For more information see www.immunisation.ie	



Second level school immunisation schedule 2014/2015

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





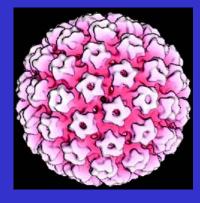




HPV vaccination programme

Gardasil (Sanofi Pasteur)

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



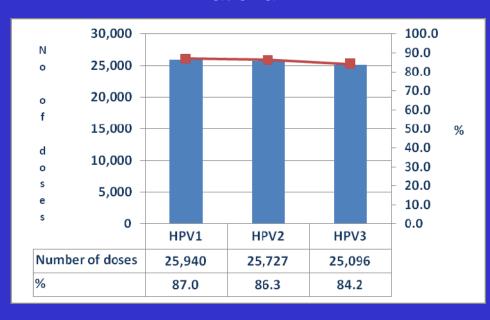
Computerised image of the human papillomavirus Courtesy of Dept of Pathology, University of Cambridge





HPV vaccine uptake 2012/2013 Routine programme First years

National



South East

Carlow/Kilkenny 88.6%

Tipperary South 90.9%

Waterford 95.6% (2nd)

Wexford 82.2%



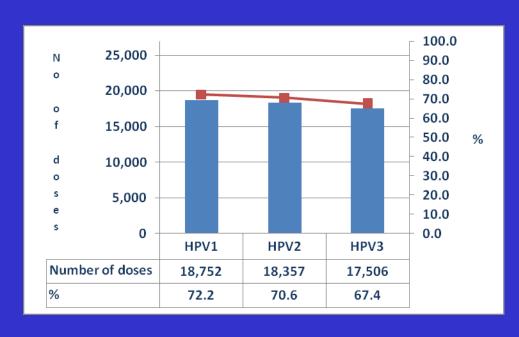
- Over 80% (84.2%) uptake achieved for 3 dose schedule
- Excellent cohort retention
- >96% girls who started dose 1 completed dose 3





HPV vaccine uptake 2012/2013 Catch up programme Sixth years

National



South East

Carlow/Kilkenny 73.5%

Tipperary South 62%

Waterford 76.7% (4th)

Wexford 66.2%

- Over 60% (67.4%) uptake achieved for 3 dose schedule
- Excellent cohort retention
- 93% girls who started dose 1 completed dose 3





Vaccine Impact in Australia High Grade Cervical Lesions <18 years

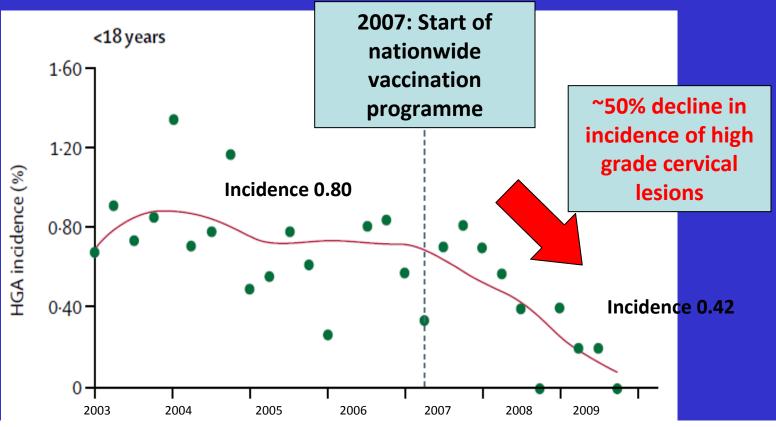


Figure 2: Incidence of high-grade cervical abnormalities, by age group

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 guarter in 2007, signify the introduction of human papillomavirus vaccination.





HPV vaccine schedule

Immunogenicity of 2 Doses of HPV Vaccine in Younger Adolescents vs 3 Doses in Young Women Dobson et al

A Randomized Clinical Trial

JAMA 2013

NIAC recommendation (different from SmPC)

- Girls under 15 at first dose
 - 2 dose schedule at 0 and 6 months
- Girls 15 and older at first dose
 - 3 dose schedule at 0 and 6 months with 3rd dose at least 3 months after 2nd dose
 - No evidence yet to support 2 dose in older girls





Seasonal influenza vaccination programme

Vaccine uptake for 65+ years with GMS card Source:HPSC







Seasonal influenza vaccination programme





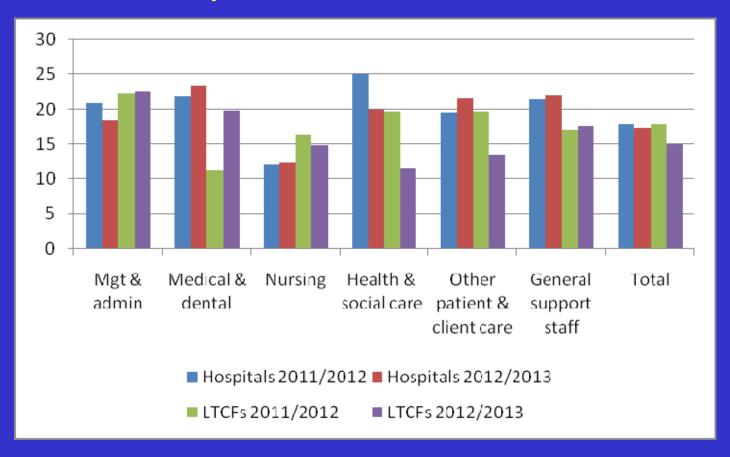
2014/2015 Annual campaign

- No change in at risk groups
- Pregnant women
- Health care workers
- Season continues until end of April





Seasonal influenza vaccination programme % vaccine uptake in health care workers



http://www.hpsc.ie/hpsc/A-Z/Respiratory/Influenza/SeasonalInfluenza/InfluenzaandHealthcareWorkers/





Why should health care workers be vaccinated?

"I'm very healthy so my immune system will protect me from flu."

"I know the symptoms and would stay at home if I got sick so I wouldn't infect my colleagues or patients."

"I got the vaccine and it gave me the flu."

- >20% HCWs get flu every year
- may only have mild symptoms and continue to work
- highly transmissible 1 day before & 5-7 days after symptoms
- healthy people can get seriously ill from flu
- vaccine contains killed viruses so cannot cause flu

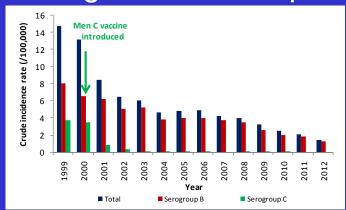
http://www.immunisation.ie/en/HealthcareProfessionals/Influenza





New vaccines

Meningococcal Group B



 ~ 30 new or improved vaccines anticipated in next 10 years









More information



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Welcome to the Health Service Executive Immunisation Website

This site provides information on immunisation for the General Public and Healthcare Professionals







Hot Topic

Polio Alert

Going to college - are you fully vaccinated? Rubella outbreak in Poland Mumps



ords and Questions

ation Guidelines for Ire

our local health office

the link to view

Check out our Website



National Immunisation News

The newsletter of the HSE National Immunisation Office

CONTENTS

- Adverse Local Reactions following 4 in 1 booster
- 2013 Immunisation Guidelines for
- Flu Season

- · Websites for vaccine schedules in other countries
- Delayed Immunisation / Late Entrants
- Common Queries
- · Minimum and optimal age and intervals between vaccines
- Current Vaccine List
- Vaccines for Pregnant Women
- www.immunisation.ie

Adverse Local Reactions following 4 in I Booster

4-in-1 & MI

Local reactions are more common following booster doses of DTaP/IPV

- begin within 48 hours of vaccination
- · consist of swelling around the injection site
- may sometimes be greater than 50mm in diameter resolve spontaneously over ~ 4 days without long
- are not usually associated with significant pain or limitation of movement
- do not need antibiotics or anti inflammatory medication
- . do not contraindicate further doses of vaccine

If a child presents with signs of extensive limb swelling following booster vaccination, parents should be reassured that this is a non-infective injection. site reaction, unless there is fever or the situation worsens

For more details see recent NIAC statement at

http://www.immunisation.ie/en/HealthcareProfessionals/Corresponder

2013 Immunisation Guidelines for Ireland

The National Immunisation Advisory Committee (NIAC) has published the 2013 Immunisation Guidelines for Ireland. All the Chapters have been rewritten following a standard format and a new Chapter on Immunisation of Immunocompromised persons has been added

The Guidelines are only available online at

http://www.immunisation.ie/en/HealthcareProfessiona

Please email yvonne.morrissey@hse.ie if you would like to be sent a PDF version of the full Guidelines document



2013 Edition



www.immunisation.ie



Why Immunise?

- Immunisation has saved more lives than any other public health intervention apart from the provision of clean water
- Immunisation is one of the most cost effective and safest of all health interventions





