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	

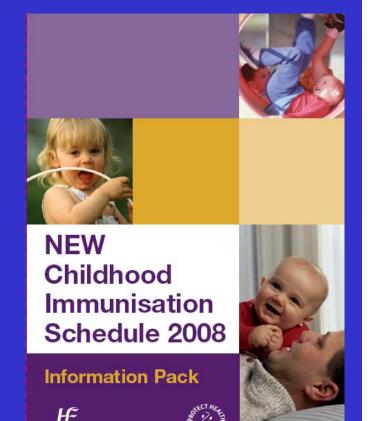
2000 - 2013			
Vaccine	Date introduced		
1. Men C	2000		
2. DTaP-Hib-IPV (5 in1)	2001		
3. Inactivated Polio (IPV)	2001		
4. Hib Booster	2006		
5. Hepatitis B (as part of 6 in 1)	2008		
6. PCV7	2008		
7. HPV	2010		
8. PCV13	2010		
9. Tdap	2012		





Primary Childhood Immunisation (PCI) Schedule

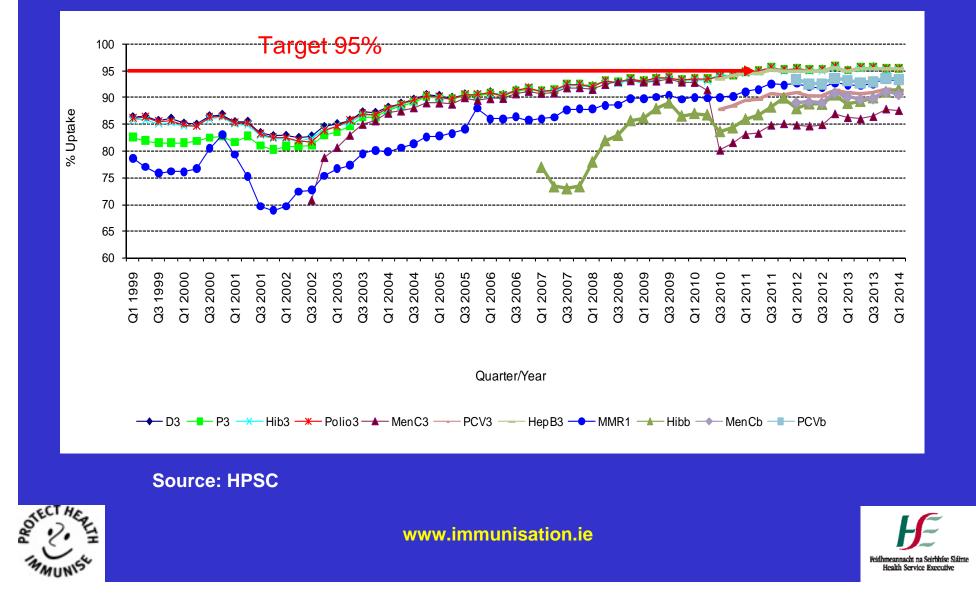
- Birth BCG
- 2 months 6 in 1 + PCV*
- 4 months 6 in 1 + Men C
- 6 months 6 in 1 + PCV + Men C
- 12 months MMR + PCV
- 13 months Men C + Hib
- * PCV 7 introduced in September 2008 PCV13 introduced in December 2010



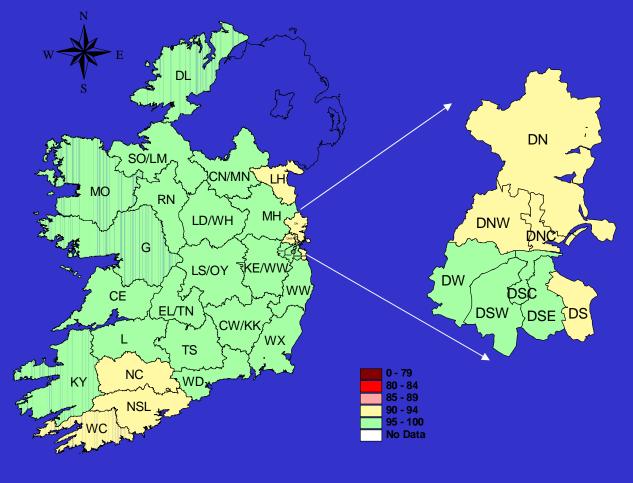




Vaccine uptake rate at 24 months 1999-2014



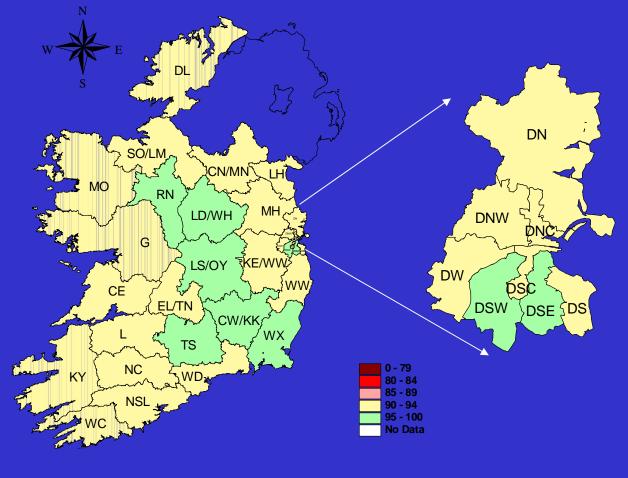
Quarter 1 2014 D3 immunisation uptake rates (%) by LHO, in those 24 months of age in Ireland and Dublin (source HPSC)







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

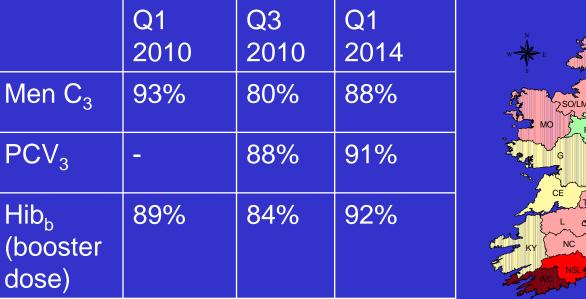


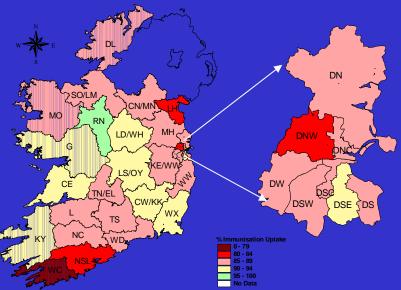




Decline in vaccine uptakes

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







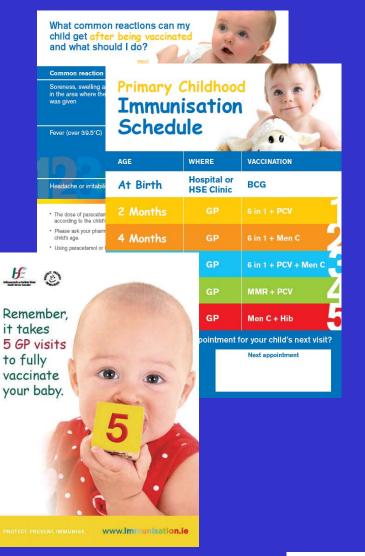
Hib_b

Health Service Executiv

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







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







Second level school immunisation schedule 2014/2015

Age (years)	Vaccine	Tdap and MenC booster vaccines Information for parents of children in First Year of second level school	Second level school vaccination programme
12-13	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 feves. On rare occasions some children may have an itchy rash or hives. Tou can give your child parasetamol or bioprofen to relieve aches and pains or to lower the fever. If you are concerned about your child pasas seek medical advice.
12 – 13 (girls only)	HPV (2 dose schedule)		If you require medical advice after these hours please contact your family doctor. Befores the next vaccine, you should write to the vaccination team if there has been • a series areadion to these vaccines • any change to your child's medical history or your consent
MenC Men	nus, low dose diphtheria & pertussis ngococcal C vaccine an papillomavirus		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

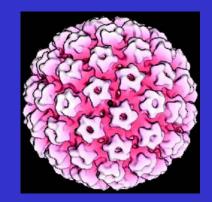




HPV vaccination programme

Gardasil (Sanofi Pasteur)

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

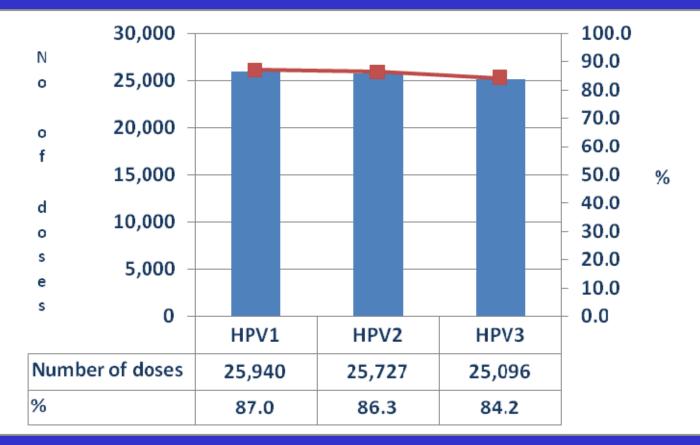


Computerised image of the human papillomavirus Courtesy of Dept of Pathology, University of Cambridge





HPV vaccine uptake 2012/2013 Routine programme First years



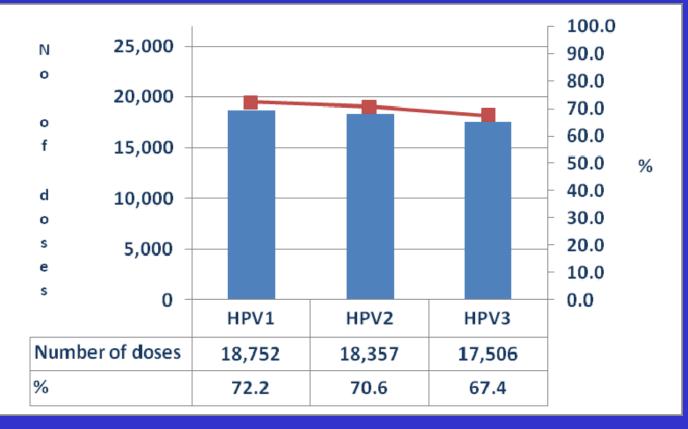
• Over 80% (84.2%) uptake achieved for 3 dose schedule

- Excellent cohort retention
- >96% girls who started dose 1 completed dose 3





HPV vaccine uptake 2012/2013 Catch up programme Sixth years



- 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

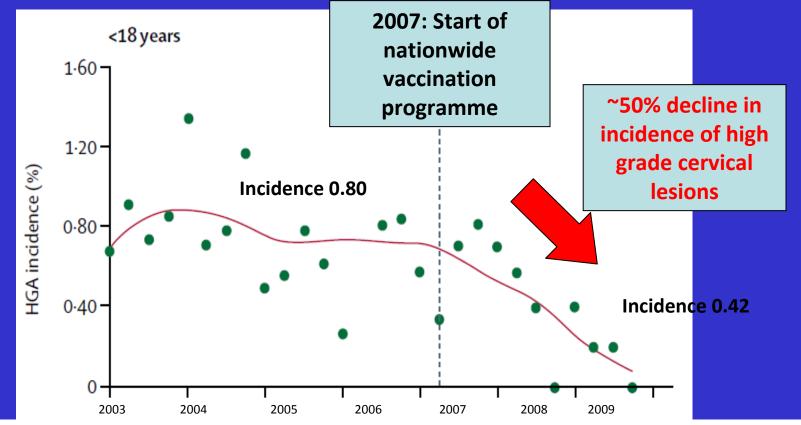


Figure 2: Incidence of high-grade cervical abnormalities, by age group

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



Brotherton et al Lancet 2011; 377: 2085–92

Feidhmeannacht na Seirbhíse Sláimte Health Service Executive

HPV vaccine schedule

Immunogenicity of 2 Doses of HPV Vaccine in Younger Adolescents vs 3 Doses in Young Women A Randomized Clinical Trial

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





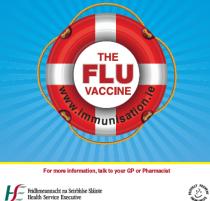


Seasonal influenza vaccination programme



GET YOUR FLU VACCINE NOW.

IT'S A LIFESAVER



PM VACCINATING FOR TWO NOW.

Pregnant women and their babies are at risk from flu. Protect you and your baby get your flu vaccine.

IT'S A LIFESAVER



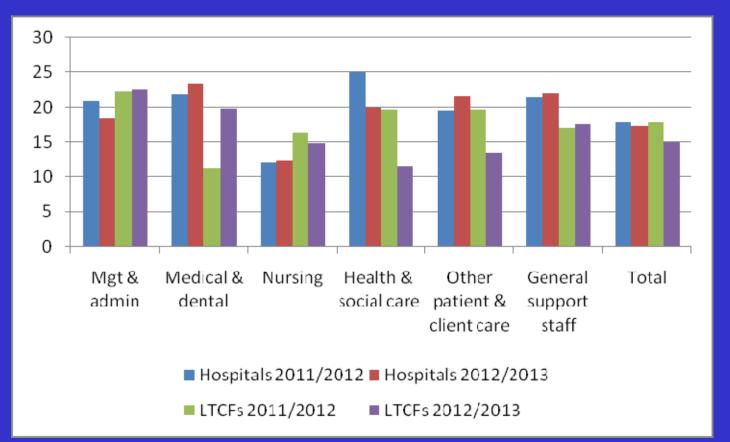
2014/2015 Annual campaign

- 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."

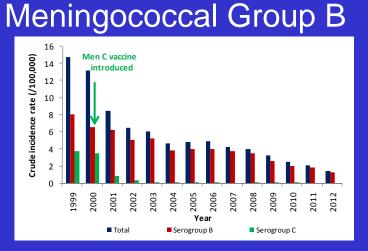
- >20% HCWs get flu every year
- may only have mild symptoms and continue to work
- highly transmissible 1 day before & 5-7 days after symptoms
- healthy people can get seriously ill from flu
- vaccine contains killed viruses so cannot cause flu

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





New vaccines

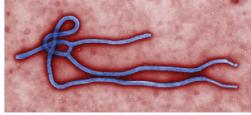


 ~ 30 new or improved vaccines anticipated in next 10 years



Canada's Immunovaccine Inc says test of Ebola vaccine promising





Some of the ultrastructural morphology displayed by an Ebola virus virion is revealed in this undated had due to be a set of the set

theguardian

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Rare flu strains could be key to supervaccine

Research suggests that unfamiliar flu strains cause immune system to release broadly effective antibodies

Press Association The Guardian Monday 25 August 2014 20.00 BST





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Protect - Prevent - Immunise



Welcome to the Health Service Executive Immunisation Website

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



Childhood Immunisation Adult Imm

Hot Topic

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



February 2014

National Immunisation News

CONTENTS

Adverse Local Reactions following 4

2013 Immunisation Guidelines for

· Websites for vaccine schedules in

Minimum and optimal age and

Vaccines for Pregnant Women

Feidhmeannacht na Seirbhíse Sláinte

Health Service Executive

intervals between vaccines

Current Vaccine List

 Check out our Website www.immunisation.ie

in 1 booster

Ireland

Visits

other countries Delayed Immunisation / Late Entrants

Common Queries

 Flu Seasor Vaccine Ordering · Remind Parents to Complete All 5

The newsletter of the HSE National Immunisation Office

	Adverse Local Reactions following				
	4 in I Booster				
	Local reactions are more common following booster doses of DTaP/IPV				
4	vaccines.	9 <u>r</u> 0			
	These reactions	4-in-1 & MMR			
	begin within 48 hours of vaccination	Aleratic Ir seets			
	consist of swelling around the injection site	Internet in			
	may sometimes be greater than 50mm in diameter				
	 resolve spontaneously over ~ 4 days without long 	-			
	term effects	en le recelution à			
	are not usually associated with significant pain or limitation	n 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 follow	ing 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/Corres	pondence/			
	2013 Immunisation Guidelines for Ireland				
	The National Immunisation Advisory Committee (NIAC) ha	as published			
	the 2013 Immunisation Guidelines for Ireland. All the Chap	oters have			
	been rewritten following a standard format and a new Cha	pter on			
	Immunisation of Immunocompromised persons has been	added.			
	The Guidelines are only available online at	I to the second			
	http://www.immunisation.ie/en/HealthcareProfessionals/				
	ImmunisationGuidelines/				
	Diesse email wonne morrissev@hee ie, if you would like				

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





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





