

Catch up vaccination

Dr Brenda Corcoran
National Immunisation Office



Summary

If in doubt, give them all



General Issues

- Accelerated Primary Schedule recommended for children not immunised in 1st year of life
- 6in1, Men C, MMR can be given at the same visit – minimum 2.5cms apart
- Always give completed parent record
- If serious local AEFI, assess before additional doses of that vaccine are given
- Adverse reactions should be notified to HPRA



Generation of immune response

- 4-7 days to generate immune response
- 7 days get **primary immune response**
- After ~3/52 primary immune response turned off
- Antibody producing cells - memory B cells - formed
- Memory B cells secrete antibody when same agent encountered again
- This is **secondary immune response**
- **Memory** lasts weeks / years

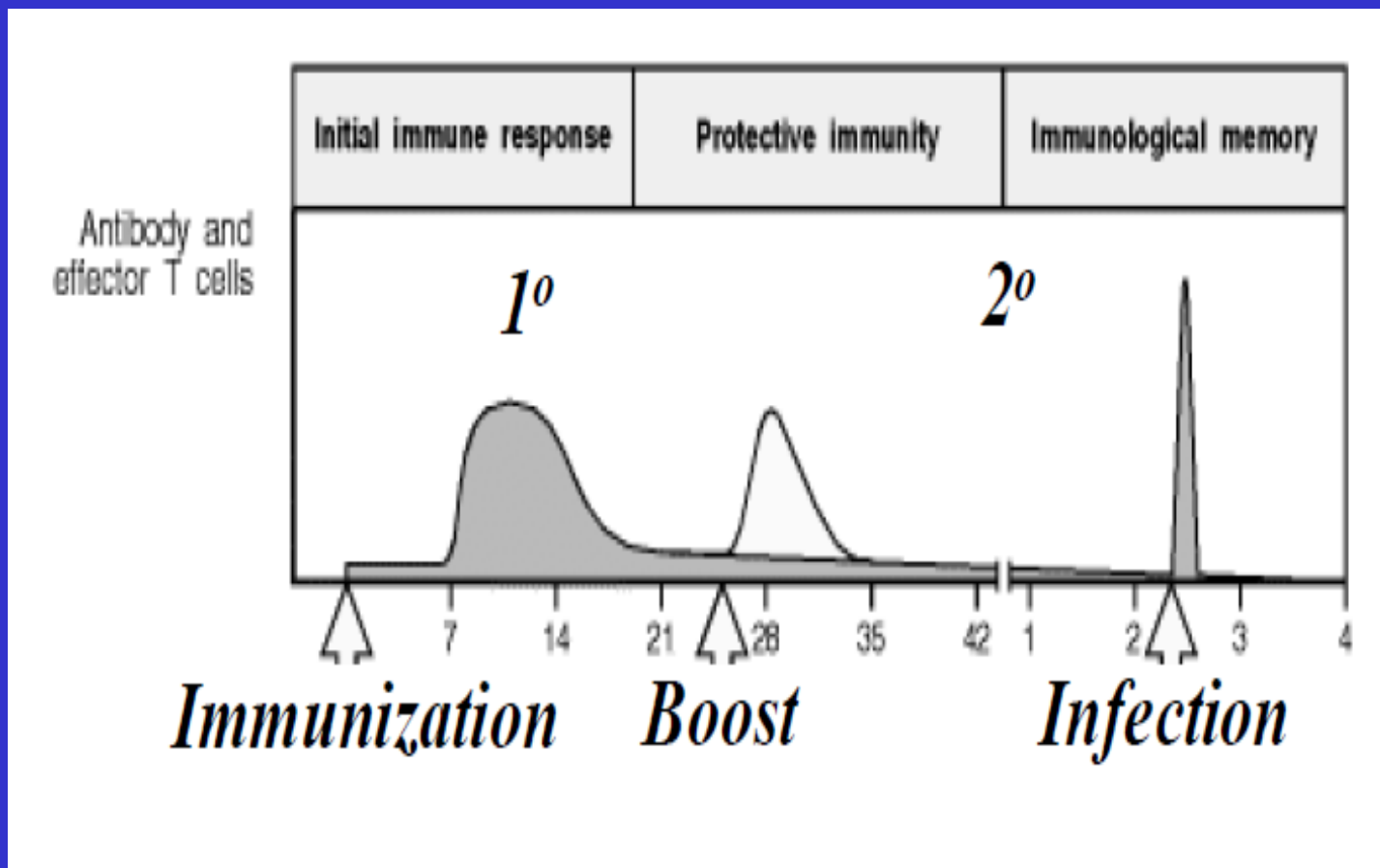


Why intervals between vaccines?

- *To allow immune response to develop*
e.g. primary immunisation (1 month)
 - This allows next response to be a true secondary response (faster, bigger and with higher affinity IgG)
- *To avoid immune interference*
 - If another live vaccine is given while immune system is making primary response, activation of innate immune system may neutralise the second live vaccine.
 - Wait at least 4 weeks to allow the immune system to recover.



Immune Response



Premature Babies

- More at risk from vaccine preventable diseases
- Should have vaccinations carried out according to chronological age
- May start vaccinations in hospital



Catch up schedule

- Review documented evidence of previous vaccinations
- Observe minimal intervals and age
- Interval between doses may be reduced
- Give age appropriate schedule
 - The number of doses may reduce with age (e.g. PCV)
 - Recommended vaccines change or may be omitted
- Never restart schedule, regardless of interval (except cholera)
- May give all vaccines at one visit
- Use optimal intervals when child is back on course
- Children living in Ireland require Irish schedule



Immunisation requirements

Number of doses

Age (years)	DTP/IPV/Hib*	MMR	Men C	PCV
1 - <2	3	1	1	1
2- <5	3	1	1	0
5- <10	4	2	1	0
10 and older	Low dose vaccine 4 IPV 5 Tdap	2	1 (up to 23)	0

* Hib required up to 10 years of age



Immunisation requirements

Interval between doses

Vaccine	Interval between doses (months)			
	1/2	2/3	3/4	4/5
DTaP/IPV/Hib	2	2	6	5 years
Tdap/IPV (low dose vaccine)	1	1	6	5 years
MMR	1			



Catch-up schedule for children and adults

Vaccine	4 months to <12 months	12 months to < 4 years	4 to <10 years	10 to <18 years	18 years and older
BCG	1 dose	1 dose	1 dose	1 dose (up to 15 years of age if in low risk group or up to 35 years of age if in specified high risk group)	1 dose (up to 35 years of age if in specified high risk group)
6 in 1	3 doses 2 months apart	3 doses 2 months apart	3 doses 2 months apart		
Men C	2 doses 2 months apart	1 dose	1 dose	1 dose	1 dose (up to 23 years of age)
PCV	2 doses 2 months apart	1 dose (omit if ≥ 2 years of age ²)			
MMR ₃		1 dose	2 doses 1 month apart	2 doses 1 month apart	
Tdap/IPV				3 doses 1 month apart	1 dose ⁴
Td/IPV					1 dose ⁵ 1 month apart (1 month after Tdap/IPV)
NOTE	<i>Continue with routine childhood immunisation schedule from 12 months.</i>	<i>Continue with routine school immunisations [4 in 1 (DTaP/IPV) at least 6 months and preferably 3 years after primary course, MMR at least 1 month after previous dose]</i>	<i>Continue with routine school immunisations [4 in 1 (DTaP/IPV) at least 6 months and preferably 3 years after primary course]</i>	<i>Boosters of Tdap/IPV 5 years after primary course and Tdap 10 years later</i>	

One dose of single Hib vaccine may be given to children over 12 months of age and up to 10 years of age if this is the only vaccine they require unless at increased risk

The second dose of MMR is recommended routinely at 4-5 years but may be administered earlier. Children vaccinated before their first birthday in the case of an outbreak should have a repeat MMR vaccination at 12 months of age, at least one month after the first vaccine with a further dose at 4-5 years of age. If a child is vaccinated before their first birthday, a further dose should be given at 12 months of age. Only one dose of Tdap/IPV is required due to likely previous exposure to pertussis infection



WHO vaccine-preventable diseases: monitoring system. 2014 global summary

Immunization schedule selection centre:

*The Regions, Countries, Vaccines lists are multiselect-enabled;
You are free to select any amount of any combination of items.*

Regions list;

- AFR ▲
- AMR
- EMR
- EUR
- SEAR
- WPR ▼

Countries list

- Afghanistan ▲
- Albania
- Algeria
- Andorra
- Angola
- Antigua and Barbuda ▼

Vaccines list

- BCG.....Bacille Calmette-Guérin vaccine
- CHOLERA.....Cholera
- Dip.....Diphtheria vaccine
- DT.....Tetanus and diphtheria toxoid childrens' dose
- DTaP.....Diphtheria and tetanus toxoid with acellular pertussis vaccine
- DTaPHepBIPV.....Diphtheria and Tetanus and Pertussis and Hepatitis B and Polio
- DTaPHepIPV.....Diphtheria and tetanus toxoid with acellular pertussis, HepB and IPV vaccine
- DTaPHib.....Diphtheria and tetanus toxoid with acellular pertussis and Hib vaccine
- DTaPHibHep.....Diphtheria and tetanus toxoid with acellular pertussis, Hib and HepB vaccine
- DTaPHibHepB.....Diphtheria and tetanus toxoid with acellular pertussis, Hib and HepB vaccine
- DTaPHibHepIPV.....Hexavalent diphtheria, tetanus toxoid with acellular pertussis, Hib, hepatitis B and IPV vaccine
- DTaPHibIPV.....Diphtheria and tetanus toxoid with acellular pertussis, Hib and IPV vaccine

↑Select all vaccines

Unselect all vaccines↑

OK

http://apps.who.int/immunization_monitoring/globalsummary/schedules



More information

<http://www.hse.ie/eng/health/immunisation/hcpinfo/frequentlyaskedquestions/catchupvacc/catchupvacc.html>

- Chapter 2 of the Immunisation Guidelines

<http://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/chapter2.pdf>

