

# Deviations from Schedule

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# Summary

If in doubt, give them all

# General Issues

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

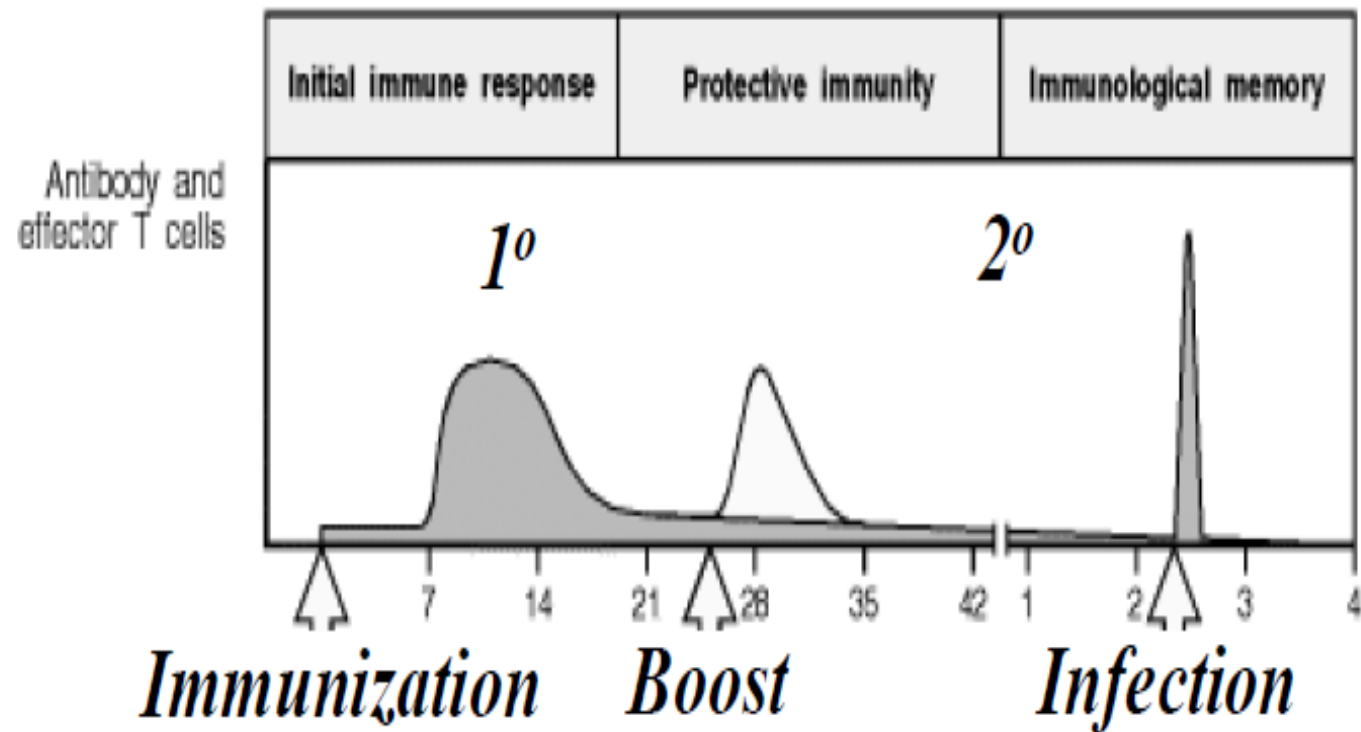
# Generation of immune response

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

# Why Gaps between Vaccines?

1. *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)
  
2. *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. Hence, wait 4 weeks to allow the immune system to recover.

# Immune Response



# Premature Babies

- Should have vaccinations carried out according to chronological age
- May start vaccinations in hospital

# Suggested rules for Catch-up

- Plan on basis of available evidence of previous vaccinations
- Observe minimal intervals and age
- With catch-up, interval between doses may be reduced
- 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
- Check rules on interchangeability of vaccines
- Use optimal intervals when child is back on course



# Useful resources

- **Advisory Committee on Immunization Practices (USA)** [www.cdc.gov/vaccines/recs/acip/](http://www.cdc.gov/vaccines/recs/acip/).
- **American Academy of Paediatrics. 2013 Report of the Committee on Infectious Diseases – The Red Book.** <http://aapredbook.aappublications.org/>
- **Australian Immunisation Handbook, Tenth Edition 2013**  
<http://www.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook-home>
- **Canadian Immunisation Guide 2014.**  
<http://www.phac-aspc.gc.ca/publicat/cig-gci/index-eng.php>
- **Centre for Disease Control Epidemiology and Prevention of Vaccine-Preventable Diseases Pink book 12th edition.** <http://www.cdc.gov/vaccines/pubs/pinkbook/index.html#chapters>
- **Department of Health UK.2014.** Immunisation against infectious disease.  
<https://www.gov.uk/.../immunisation-against-infectious-disease-the-green-book>
- **Health Protection Agency UK.** [www.hpa.org.uk/](http://www.hpa.org.uk/)
- **Health Protection Surveillance Centre, Ireland.** [www.hpsc.ie](http://www.hpsc.ie)
- **Immunisation Action Coalition:** [immunise.org](http://immunise.org)
- **Joint Committee on Vaccination and Immunisation UK.** <http://www.dh.gov.uk/ab/jcvi/index.htm>
- **Immunisation Guidelines for Ireland.** Available at [www.hpsc.ie](http://www.hpsc.ie)

## Immunisation schedules

- **World Health Organisation.** [www.who.int/vaccines/GlobalSummary/Immunization/ScheduleSelect.cfm](http://www.who.int/vaccines/GlobalSummary/Immunization/ScheduleSelect.cfm)
- **Europe- EUVACNET** [/www.euvac.net/graphics/euvac/index.html](http://www.euvac.net/graphics/euvac/index.html)