

Deviations from the Immunisation Schedule

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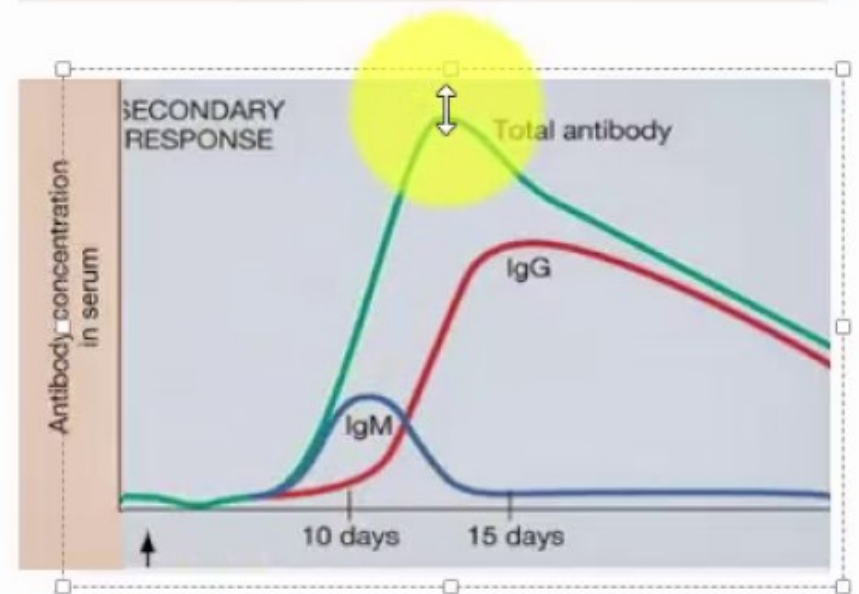
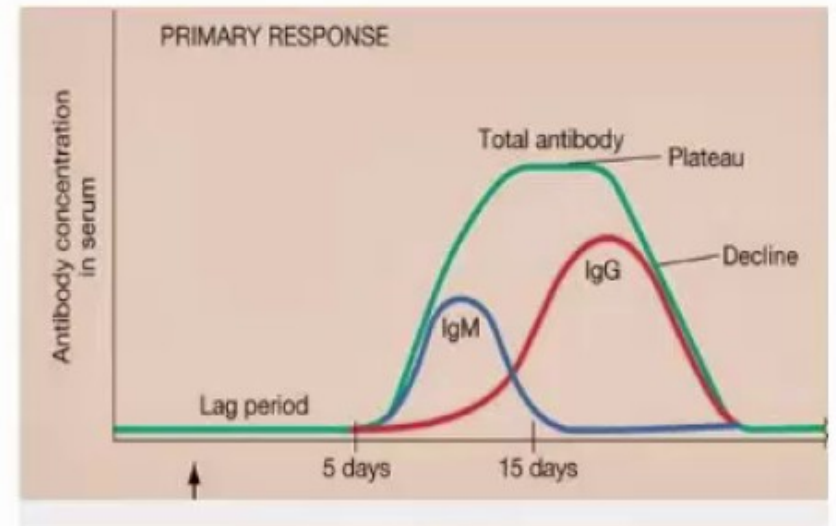
Ballinasloe

Sept. 18th, 2017

PRIMARY AND SECONDARY IMMUNE RESPONSE

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Primary	Secondary	Characteristics
Exposure to a specific antigen	1. After second exposure to the same antigen	Exposure to antigen
1-2 week delay	2. Within hours	Time of onset
Low affinity antibodies are made	3. High affinity antibodies are made.	Affinity of antibodies
Response is generally weaker	4. Usually larger	Strength
Activated by all antigens	5. Mostly by peptide antigens.	Activation agent
Short life, for only few weeks.	6. Forms antibodies for many months. 7. IgG	Duration



Late entrants

Unless reliable documentation



Assume to be unimmunised



Catch-up programme

Global Child Mortality

2000 - deaths <5 years
~ 9.6 million

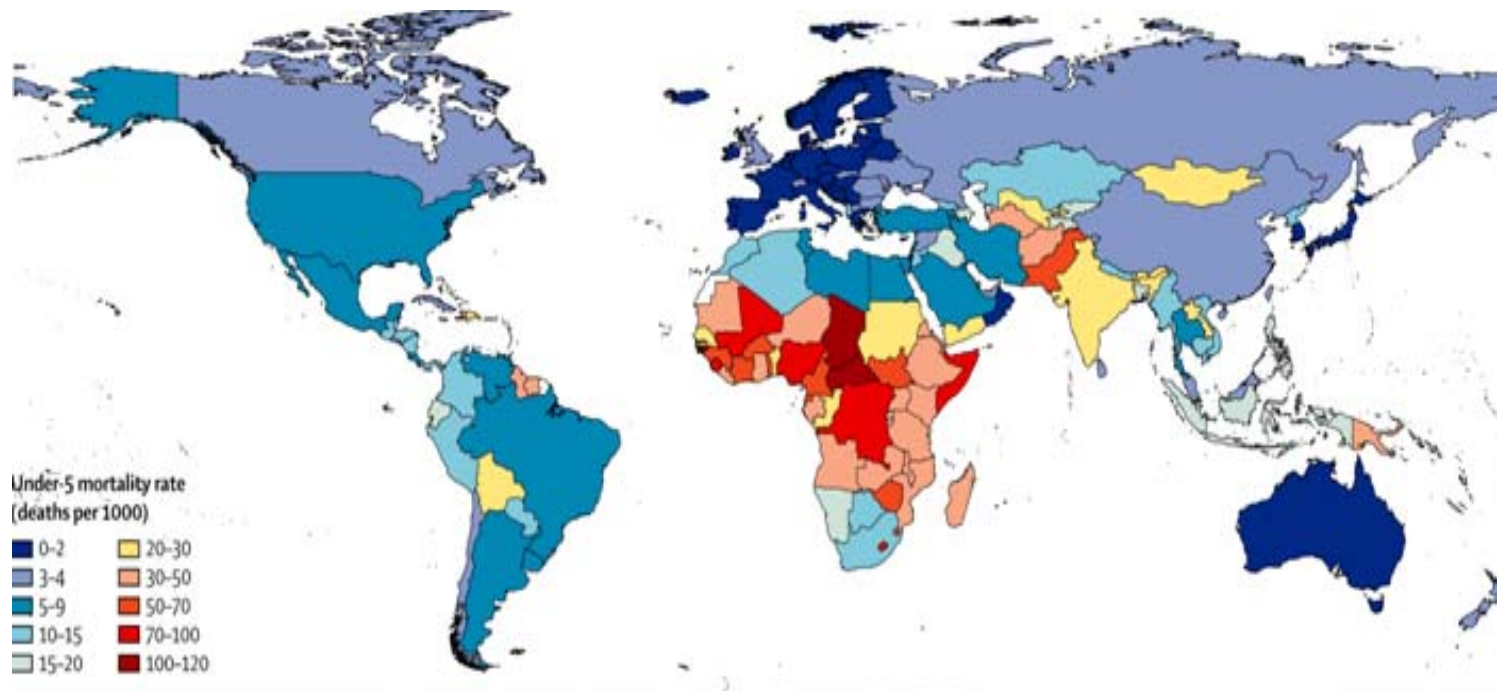


Immunisation
WASH
Education



2015 - deaths <5 years
~ 5.9 million
(despite increase in number of children
born)

Under 5's Deaths per 1,000 2013



Defaulters

Interrupted immunisation courses:

- No need to restart the course (regardless of the time interval)
- Complete the course if age appropriate (with same brand of vaccine if possible)

Late entrants

- Unimmunised children older than recommended age should be immunised as soon as possible
- Vaccines and number of doses depend on the child's age
- Guideline updates posted online

Gaps between vaccine doses – Why?

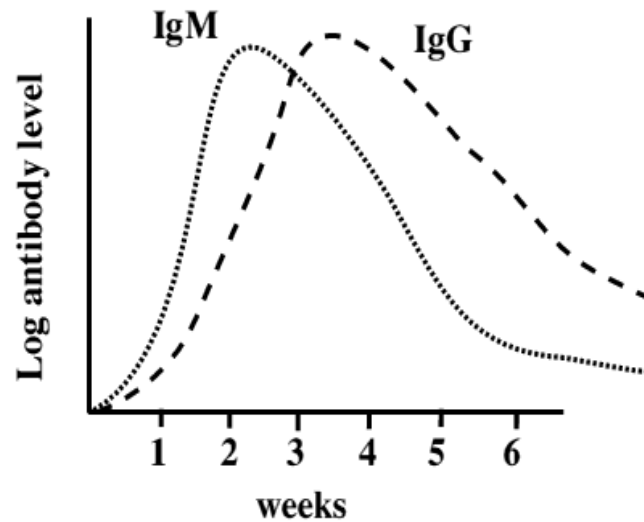
- To allow each immune response to develop – e.g. primary immunisation (1 month)

This allows the next response to be a true secondary response – faster, greater, higher affinity IgG

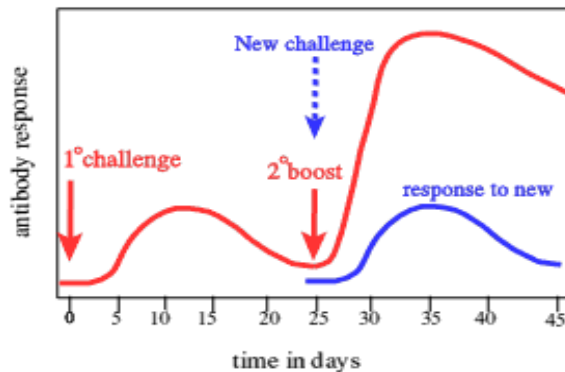
- To avoid immune interference wait 4 weeks

If a 2nd dose is given during the 1° immune response, the 1° response may reduce effectiveness of 2nd response

Primary and Secondary Immune Responses



Specific memory is the hallmark of the adaptive immune response



- Primary immune response develops in the weeks following first exposure to an antigen
 - Mainly IgM antibody
- Secondary immune response faster and greater
 - Mainly IgG antibody

Suggested Rules for Catch-up

- Plan on available evidence of prior vaccinations
- Observe minimal intervals and age
- Interval between doses may be less than optimal
- Number of doses may reduce with age (e.g. PCV)
- Don't restart schedule
- May give all vaccines at one visit
- Schedule next visit for => minimal interval
- Use optimal intervals when child is back on course

Country Schedules-Europe

The screenshot shows a web browser window with the address bar displaying `vaccine-schedule.ecdc.europa.eu/Pages/Scheduler.aspx`. The browser's address bar includes a search engine (Google) and a list of bookmarks such as Google.ie, Irish Times, Bank of Ireland, Met Eireann, Gmail, CDC, National Immunisation, and ClinicalKey. A banner at the top of the page identifies the site as part of the ECDC (European Centre for Disease Prevention and Control) network. The main header features the ECDC logo and the text "European Centre for Disease Prevention and Control". Below the header is a green bar with the text "Vaccine Schedule". The "QUICK SEARCH" section includes a "Country" dropdown menu, an "Age group" section with checkboxes for "Child" and "Adult", and a "View the schedule" button. The "ADVANCED SEARCH" section is divided into two panels. The left panel, "Compare national immunisation schedules", has fields for "Compare" and "with" (both dropdown menus for "Select a country"), an "Age group" section with checkboxes for "Child" and "Adult", and a "View the schedule" button. The right panel, "Immunisation schedules by target disease", has a "Select a disease" dropdown menu, an "in" dropdown menu set to "All EU countries", and a "View the schedule" button. To the right of the advanced search panels is a photograph of a male doctor with a stethoscope around his neck examining a young child.

Comparisons can be made for vaccination policies between two countries or by disease for all or a selection of countries. Despite this platform being continuously monitored, it is suggested the national competent bodies are also consulted for the most up to date policies.



Further Information

www.hse.ie/eng/health/Immunisation/hcpinfo/guidelines/



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Immunisation Guidelines

Share:



Immunisation Guidelines for Ireland

National Immunisation Advisory Committee - for more information including committee members see <https://www.rcpi.ie/policy-and-advocacy/national-immunisation-advisory-committee/>

Please check this page regularly to ensure you have the most up to date guidance.

The Immunisation Guidelines for Ireland are only available online.

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
MMCG	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 high risk group)	
4 in 1 ¹ (DTaP/IPV/Hib/Hep B)	3 doses 2 months apart	3 doses 2 months apart	3 doses 2 months apart		
Men C	1 dose	1 dose	1 dose	1 dose (if given after 10 years of age, adolescent MenC booster not required)	1 dose (up to 23 years of age)
CV	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	2 doses 1 month apart ⁴
Tdap/IPV				3 doses 1 month apart	1 dose ⁵
Td/IPV					2 doses 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>Booster 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 aged <18 months receives a second MMR vaccine within 3 months of the first MMR a third MMR should be given at 4-5 yrs of age.

or health care workers born in Ireland since 1978 or born outside Ireland; for contacts in outbreaks born in Ireland since 1978 or born outside Ireland and for adults from low

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Late Entrants

Records may not be accurate – accept with caution

Inefficacy of vaccines may be due to :

- Improper storage or handling
- Immune defects (e.g. severe malnutrition)

Late entrants

Unless reliable documentation



Assume to be unimmunised



Catch-up programme