Top 10 sites of 2016

Welcome to MVEC

The Melbourne Vaccine Education Centre (MVEC) is a new web-based initiative, providing up-to-date immunisation information for healthcare professionals, parents and the public.

It is a collaboration between The Royal Children's Hospital (RCH) and its Melbourne Children’s campus partners (Murdoch Children's Research Institute and The University of Melbourne) and Monash Health.

MVEC aims to address common queries around vaccines and to promote the benefits of immunisation for both children and adults.
<table>
<thead>
<tr>
<th>#</th>
<th>Country</th>
<th>Internet Users (2016)</th>
<th>Penetration (% of Pop)</th>
<th>Population (2016)</th>
<th>Non-Users (internetless)</th>
<th>Users 1 Year Change (%)</th>
<th>Internet Users 1 Year Change</th>
<th>Population 1 Y Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>154</td>
<td>Iceland</td>
<td>331,778</td>
<td>100%</td>
<td>331,778</td>
<td>0</td>
<td>0.9%</td>
<td>2,975</td>
<td>0.71%</td>
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<tr>
<td>191</td>
<td>Faeroe Islands</td>
<td>47,515</td>
<td>98.5%</td>
<td>48,239</td>
<td>724</td>
<td>1.3%</td>
<td>608</td>
<td>0.08%</td>
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<tr>
<td>67</td>
<td>Norway</td>
<td>5,167,573</td>
<td>98%</td>
<td>5,271,958</td>
<td>104,385</td>
<td>1.7%</td>
<td>87,185</td>
<td>1.17%</td>
</tr>
<tr>
<td>181</td>
<td>Bermuda</td>
<td>60,047</td>
<td>97.4%</td>
<td>61,662</td>
<td>1,615</td>
<td>-0.3%</td>
<td>-152</td>
<td>-0.55%</td>
</tr>
<tr>
<td>177</td>
<td>Andorra</td>
<td>66,728</td>
<td>96.5%</td>
<td>69,165</td>
<td>2,437</td>
<td>-1.6%</td>
<td>-1,059</td>
<td>-1.86%</td>
</tr>
<tr>
<td>64</td>
<td>Denmark</td>
<td>5,479,054</td>
<td>96.3%</td>
<td>5,690,750</td>
<td>211,696</td>
<td>0.5%</td>
<td>25,936</td>
<td>0.38%</td>
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<tr>
<td>196</td>
<td>Liechtenstein</td>
<td>36,183</td>
<td>95.8%</td>
<td>37,776</td>
<td>1,593</td>
<td>1%</td>
<td>342</td>
<td>0.65%</td>
</tr>
<tr>
<td>137</td>
<td>Luxembourg</td>
<td>548,807</td>
<td>95.2%</td>
<td>576,243</td>
<td>27,436</td>
<td>1.9%</td>
<td>10,314</td>
<td>1.61%</td>
</tr>
<tr>
<td>36</td>
<td>Netherlands</td>
<td>15,915,076</td>
<td>93.7%</td>
<td>16,979,729</td>
<td>1,064,653</td>
<td>0.6%</td>
<td>98,813</td>
<td>0.32%</td>
</tr>
<tr>
<td>45</td>
<td>Sweden</td>
<td>9,169,705</td>
<td>93.1%</td>
<td>9,851,852</td>
<td>682,147</td>
<td>1%</td>
<td>94,636</td>
<td>0.74%</td>
</tr>
<tr>
<td>197</td>
<td>Monaco</td>
<td>35,196</td>
<td>93%</td>
<td>37,863</td>
<td>2,667</td>
<td>0.7%</td>
<td>228</td>
<td>0.35%</td>
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<tr>
<td>9</td>
<td>U.K.</td>
<td>60,273,385</td>
<td>92.6%</td>
<td>65,111,143</td>
<td>4,837,758</td>
<td>0.9%</td>
<td>555,411</td>
<td>0.61%</td>
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<tr>
<td>69</td>
<td>Finland</td>
<td>5,107,402</td>
<td>92.5%</td>
<td>5,523,904</td>
<td>416,502</td>
<td>0.4%</td>
<td>20,264</td>
<td>0.37%</td>
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<tr>
<td>104</td>
<td>Qatar</td>
<td>2,108,970</td>
<td>92%</td>
<td>2,291,368</td>
<td>182,398</td>
<td>2.8%</td>
<td>57,708</td>
<td>2.51%</td>
</tr>
<tr>
<td>46</td>
<td>United Arab Emirates</td>
<td>8,515,420</td>
<td>91.9%</td>
<td>9,266,971</td>
<td>751,551</td>
<td>1.7%</td>
<td>143,340</td>
<td>1.2%</td>
</tr>
<tr>
<td>123</td>
<td>Bahrain</td>
<td>1,278,752</td>
<td>91.5%</td>
<td>1,396,829</td>
<td>118,077</td>
<td>1.7%</td>
<td>21,707</td>
<td>1.42%</td>
</tr>
<tr>
<td>125</td>
<td>Estonia</td>
<td>1,196,521</td>
<td>91.4%</td>
<td>1,309,104</td>
<td>112,583</td>
<td>2.2%</td>
<td>25,795</td>
<td>-0.26%</td>
</tr>
<tr>
<td>5</td>
<td>Japan</td>
<td>115,111,595</td>
<td>91.1%</td>
<td>126,323,715</td>
<td>11,212,120</td>
<td>0.1%</td>
<td>117,385</td>
<td>-0.2%</td>
</tr>
<tr>
<td>81</td>
<td>New Zealand</td>
<td>4,078,993</td>
<td>89.4%</td>
<td>4,565,185</td>
<td>486,192</td>
<td>2.2%</td>
<td>86,515</td>
<td>0.81%</td>
</tr>
<tr>
<td>3</td>
<td>U.S.</td>
<td>286,942,362</td>
<td>88.5%</td>
<td>324,118,787</td>
<td>37,176,425</td>
<td>1.1%</td>
<td>3,229,955</td>
<td>0.73%</td>
</tr>
<tr>
<td>21</td>
<td>Canada</td>
<td>32,120,519</td>
<td>88.5%</td>
<td>36,286,378</td>
<td>4,165,859</td>
<td>1.8%</td>
<td>559,167</td>
<td>0.96%</td>
</tr>
<tr>
<td>42</td>
<td>Belgium</td>
<td>10,060,745</td>
<td>88.5%</td>
<td>11,371,928</td>
<td>1,311,183</td>
<td>1.9%</td>
<td>184,645</td>
<td>0.64%</td>
</tr>
<tr>
<td>44</td>
<td>Czech Republic</td>
<td>9,323,428</td>
<td>88.4%</td>
<td>10,548,058</td>
<td>1,224,630</td>
<td>3.2%</td>
<td>285,731</td>
<td>0.05%</td>
</tr>
<tr>
<td>8</td>
<td>Germany</td>
<td>71,016,605</td>
<td>88%</td>
<td>80,682,351</td>
<td>9,665,746</td>
<td>0.6%</td>
<td>447,557</td>
<td>-0.01%</td>
</tr>
<tr>
<td>175</td>
<td>Aruba</td>
<td>91,532</td>
<td>87.8%</td>
<td>104,263</td>
<td>12,731</td>
<td>1.8%</td>
<td>1,609</td>
<td>0.36%</td>
</tr>
<tr>
<td>51</td>
<td>Switzerland</td>
<td>7,302,714</td>
<td>87.2%</td>
<td>8,379,477</td>
<td>1,076,763</td>
<td>1%</td>
<td>74,342</td>
<td>0.97%</td>
</tr>
<tr>
<td>11</td>
<td>France</td>
<td>55,860,330</td>
<td>86.4%</td>
<td>64,661,129</td>
<td>8,807,799</td>
<td>1.4%</td>
<td>758,852</td>
<td>0.42%</td>
</tr>
<tr>
<td>16</td>
<td>South Korea</td>
<td>43,274,132</td>
<td>85.7%</td>
<td>50,503,933</td>
<td>7,229,801</td>
<td>1.2%</td>
<td>522,375</td>
<td>0.42%</td>
</tr>
<tr>
<td>32</td>
<td>Australia</td>
<td>20,679,490</td>
<td>85.1%</td>
<td>24,309,330</td>
<td>3,629,840</td>
<td>1.7%</td>
<td>350,522</td>
<td>1.42%</td>
</tr>
</tbody>
</table>
Year of the App
Victorian Apps

DHHS

MVEC- VicVax

Welcome to VaxOnTime

Let's get started! Simply add your child’s name and birth date to create immunisation reminders.

Add a child

This is the Victorian Schedule. Other states are very similar but please check here. See also check here for special risk groups.
VicVax

Immunisation Schedule

Special Risk Groups
Watch a short video of Dr. Offit describing the features of the vaccine mobile app.
Australian Technical Advisory Group on Immunisation (ATAGI) 61st meeting 13 and 14 October 2016 ATAGI Bulletin

The Australian Technical Advisory Group on Immunisation (ATAGI) 60th face-to-face meeting was held on 13 and 14 October 2016.

Page last updated: 23 November 2016
Vaccine schedule by country

The WHO has a summary website of immunisation schedules by region and country. This is a very helpful resource when trying to calculate what the routine vaccine recommendations have been and may help in devising a catch-up vaccine schedule in Australia.

To identify the routine vaccines in a specific country select it from the Drop down list, select all vaccines and press ok.

Resources

WHO immunisation schedule by region
The Regions, Countries, Vaccines lists are multiselect-enabled; You are free to select any amount of any combination of items.
Year of the ‘Catch-up’

Australian Immunisation Register

A register of vaccinations given to people of all ages in Australia.

From 30 September, the **Australian Childhood Immunisation Register (ACIR)** became the **Australian Immunisation Register (AIR)**, a national register that records vaccinations given to people of all ages in Australia.
‘Catch-up’ resources

Catch up immunisations

The below links are helpful tools to assist in working out immunisation catch up schedules for individuals who may not be up to date with their routine immunisations.

For Individuals <10 years of age
SA Health immunisation calculator

For individuals aged 10 years to 19 years
Immunise Australia catch up table

Please be aware that some individuals may meet the criteria and qualify for extra immunisations due to predisposing conditions or at risk circumstances. For any additional queries please contact: info@mvec.vic.edu.au

Frequently asked questions (FAQ’s)

We have recently developed some FAQ’s related to general vaccine enquiries including information on catch up immunisations. FAQ’s Immunisation 2016

Reviewed by: Nigel Crawford (Paediatrician, The Royal Children’s Hospital, Melbourne), Rachael McGuirie (MVEC Nurse Educator) and Georgina Lewis (Clinical manager- SAEFVIC)
Table 1: Standard vaccination catch-up recommendations for children aged 10 to 19 years
[adapted from the Australian Immunisation Handbook 10th edition (updated 2015 online)]

<table>
<thead>
<tr>
<th>Vaccine (10-19 yr olds)</th>
<th>Clinically recommended (Funded)</th>
<th>Linked to family payments (10-19 yr olds)</th>
<th>Doses required</th>
<th>Min interval between dose 1 and 2</th>
<th>Min interval between dose 2 and 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>dT (dTpa*)</td>
<td>✓</td>
<td>✓</td>
<td>3 doses</td>
<td>4 weeks</td>
<td>4 weeks</td>
</tr>
<tr>
<td>Poliomyelitis (IPV)</td>
<td>✓</td>
<td>✓</td>
<td>3 doses</td>
<td>4 weeks</td>
<td>4 weeks</td>
</tr>
<tr>
<td>MMR</td>
<td>✓</td>
<td>✓</td>
<td>2 doses</td>
<td>4 weeks</td>
<td>Not required</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>✓</td>
<td>✓ but only those born on or after 1 May 2000</td>
<td>3 paediatric doses</td>
<td>1 month</td>
<td>2 months¹</td>
</tr>
<tr>
<td>Aged 10–19 years ^</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aged 11–15 years only ^</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MenCCV</td>
<td>✓</td>
<td>×</td>
<td>1 dose</td>
<td>Not required</td>
<td>Not required</td>
</tr>
<tr>
<td>Varicella vaccine⁴</td>
<td>✓</td>
<td>×</td>
<td>At least 1 dose if aged &lt;14 years</td>
<td>If 2nd dose given, a 4-week interval is required¹</td>
<td>Not required</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 doses if aged ≥14 years</td>
<td>4 weeks</td>
<td>Not required</td>
</tr>
<tr>
<td>Pneumococcal</td>
<td>×</td>
<td>×</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hib</td>
<td>×</td>
<td>×</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rotavirus</td>
<td>×</td>
<td>×</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* One of the doses should be given as dTpa (or dTpa-IPV if poliomyelitis vaccination is also needed) and the course completed with dT. In the...
Gene of the year
Proposed Associations

Conditions Affected by a Lack of Methylation

Want to know the exact steps you need for a thriving pregnancy? Join Carolyn's FREE email course:

'10 Days to a Healthy Pregnancy with MTHFR'
by clicking here!

Listed below are some of the conditions that MTHFR can affect.

There are 10 pages of possible associations- across all ages.................
Vaccinations and MTHFR

December 14, 2016 - 7:30 pm

Go-To-Webinar

Vaccinations and MTHFR – how do we ensure that we identify at risk children and what should we do about it? Can you please change?
MTHFR Gene

- A number of families and consumers and healthcare professionals have been asking MVEC staff about the MTHFR gene and possible adverse events following immunisation [AEFI]
- MTHFR stands for methylenetetrahydrofolate reductase, which is the name of an enzyme involved in folate metabolism

MTHFR gene polymorphisms, or harmless changes in the gene, are very common. MTHFR gene mutations are different to gene polymorphisms and are very rare and present differently. [see Resources]
An information sheet about the MTHFR Test

What is MTHFR?
MTHFR stands for methylenetetrahydrofolate reductase, which is the name of an enzyme. The MTHFR enzyme helps our bodies to process two chemicals called folate and homocysteine. Like all other enzymes, the MTHFR enzyme is made by a gene, in this case the MTHFR gene. We all have two copies of the MTHFR gene; one inherited from our mother and one inherited from our father.

Everyone’s genes are different
Although we all usually have the same number of genes, and the same types of genes, each person’s genes are slightly different. So, the MTHFR gene in one person may be slightly different to the MTHFR gene in another person. There are two types of gene changes.

Gene Mutations
Gene mutations are changes that severely disrupt the way a gene works. For example, an MTHFR gene that has a mutation in it, either makes no MTHFR enzyme at all, or makes a faulty version of the MTHFR enzyme that does not work. Gene mutations can have very serious health consequences. Mutations in the MTHFR gene which cause severe MTHFR deficiency are extremely rare (<200 reported cases worldwide). Babies born with two severe MTHFR mutations suffer from major birth abnormalities and have a very poor outlook.

Gene polymorphisms

Acknowledge Sue White, VCGS
Vaccine safety

National Shingles Vaccination Program (ZOSTAVAX)

14 October 2016

The National Shingles Vaccination Program will commence from 1 November 2016

Key Messages for the Program

People eligible to receive the free shingles vaccine include:

- People aged 70 years of age as an ongoing program.
- People aged 71-79 years of age as a catch-up program until 31 October 2021.

Providers should refer to the handbook for recommendations, particularly regarding patients who are immunocompromised.
Vaccine Safety in 2016

Smartvax

Vaxtracker

AusVaxSafety

Breaking news: AusVaxSafety expands

2 November 2016

The Minister for Health and Aged Care, the Honourable Sussan Ley, announced a major expansion of the AusVaxSafety system in Canberra today, alongside the launch of the new National Shingles Vaccination Program. AusVaxSafety, a collaborative initiative led by NCIRS and funded by the Australian Government Department of Health, actively monitors the safety of vaccines using SMS-feedback from recently vaccinated children and adults. From November 2016, AusVaxSafety will expand to support the National Shingles Vaccination Program as well as monitor influenza vaccine safety in all age groups. While vaccines are an incredibly safe way to protect against disease, this system helps provide continuous safety monitoring.
AEFI Reporting

AUSVAXSAFETY ZOSTER VACCINE

Report of Australia’s active surveillance for AEFI following Zoster vaccine in persons aged 70–79 years

2016 Report No. 2
14 November– 27 November 2016

Prepared by: Alexis Pillsbury, Dr Helen Quinn, A/Prof Kristine Macartney, Dr Tom Snelling, A/Prof Peter Jacoby and Dr Parveen Fathima, on behalf of the AusVaxSafety team†

Data provided by SmartVax, Vaxtracker* and STARSS*. (*Data from Vaxtracker and STARSS are not yet available for reporting.)
Short Report

Adverse events following HPV immunization in Australia: Establishment of a clinical network

Nigel W. Crawford, Kate Hodgson, Mike Gold, Jim Buttery, Nicholas Wood & on behalf of the AEFI-CAN network

Pages 2662-2665 | Received 16 Feb 2016, Accepted 18 May 2016, Accepted author version posted online: 13 Jun 2016, Published online: 13 Jun 2016

Download citation  http://dx.doi.org/10.1080/21645515.2016.1192737  Crossmark

Full Article  Figures & data  References  Citations  Metrics  Reprints & Permissions  Get access

ABSTRACT

Objective: To formalise a collaborative national Adverse Events Following Immunisation Clinical Assessment Network (AEFI-CAN) following the expansion of the Australian Human Papillomavirus (HPV) immunisation program to boys in 2013. Methods: AEFI-CAN linked state-based vaccine safety clinics and the Department of Health including the Therapeutic
Year of ‘Ask the Expert’
Who is calling?

Telephone advice - caller type

- Parents: 59%
- GP / Practice nurse: 19%
- RCH paed: 6%
- RCH RN: 8%
- MCHN: 2%
- Other internal: 3%
- Other external: 3%

Acknowledge Sonja Elia, NUM RCH
How many?
Immunize.org

- United States website
- Immunization Action Coalition
- “Ask the expert” centralised resource
  - Respected source- CDC

http://www.immunize.org/askexperts/
Ask the Experts: Diseases & Vaccines

Zoster (shingles)

Combination Vaccines
Diphtheria
Hib

Zoster (shingles)
  Disease Issues  Contraindications and Precautions
  Vaccine Recommendations  Administering Vaccines
  Vaccine Safety  Storage and Handling
Ask the Experts

Experts from the CDC Answer Questions About Vaccines

Vaccine Index

Find answers to thousands of challenging and timely questions about vaccines and their administration.

What's New!

- Hepatitis B
- Hepatitis A
- Chickenpox
- MMR
- Combination Vaccines
- Pertussis
- Diphtheria
- Influenza
- Hib
- Meningococcal
- Polio
- Rabies
- Rotavirus
- Tetanus
- Zoster
A 60-year-old patient was inadvertently given varicella vaccine instead of zoster vaccine. Should the patient still be given the zoster vaccine? If so, how long an interval should occur between the 2 doses?

ACIP recommends that if a provider mistakenly administers varicella vaccine to a person for whom zoster vaccine is indicated, no specific safety concerns exist, but the dose should not be considered valid and the patient should be administered a dose of zoster vaccine during that same visit. If the error is not immediately detected, a dose of zoster vaccine should be administered 4 weeks after the varicella vaccine dose to prevent potential interference of 2 doses of live attenuated virus. Avoid such errors by checking the vial label 3 times to make sure you're administering the product you intended.
Frequently asked questions (FAQ’s)

Please find below some commonly asked questions regarding general immunisation enquiries including information on catch up immunisations.

1. Q. My patient had 2 doses of Gardasil (HPV) but missed the scheduled dose 3. Do I need to start the course again?

A: No, you should build on the previous documented doses. In almost every circumstance, it is advisable **not** to start the schedule again, regardless of the interval since the last dose. The recommended 3-dose schedule for the 4vHPV vaccine is at 0, 2 and 6 month intervals.

It is important to complete the full course of three doses for the best protection. The missed dose should be given as soon as is practicable. The **minimum** interval between dose 2 and 3 is 12 weeks.


Acknowledge Georgie Lewis & Rachael McGuire, SAEFVIC
Australian Immunisation Professionals Network

Who is NCIRS-AIP for?

NCIRS-AIP is a private group for professionals working in the area of immunisation, for example, immunisation providers, program managers, public health staff, immunisation educators, researchers, policy makers, students.

NCIRS-AIP provides:

- A forum for questions and feedback
- Regular updates on immunisation and vaccine news
- Notifications of news items, publications and meetings of interest

Over 600 Australian immunisation professionals currently subscribe to NCIRS-AIP.
Variations in policy

No Jab No Play, No Jab No Pay Policies

Table for parents to identify what different national and state legislation in relation to immunisation requirements for child care means for them.

<table>
<thead>
<tr>
<th>Legislation</th>
<th>Where it applies</th>
<th>What is it?</th>
<th>What to do</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘No Jab No Pay’</td>
<td>National</td>
<td>As a requirement for parents to be eligible to receive the Family Tax Benefit Part A end of year supplement, Child Care Benefit and Child Care Rebate, children under the age of 20 years need to be assessed as fully immunised for their age.</td>
<td>To check whether your child is fully immunised, visit the Australian Childhood Immunisation Register (ACIR). If your child is not fully immunised and you wish to receive family assistance payments, contact your health care provider to organise a vaccination catch-up program.</td>
</tr>
</tbody>
</table>

For more information, visit [NCIRS Position Statement on HPV Vaccination](http://www.ncirs.edu.au/consumer-resources/no-jab-no-play-no-jab-no-pay-policies/)