

# Sharp and to the Point

Quarterly newsletter produced by the Immunisation Section, SA Health

## In this issue

- Focus on - expansion of Seasonal Influenza Program
- Food allergy and immunisation - Dr Mike Gold
- Measles and MMR, UK perspective - Victoria Lack, Lecturer in Public Health, NHS
- MMR does not cause Autism - expert agrees
- HPV Register update
- Preterm baby reminder

This newsletter is produced quarterly by the Immunisation Section. If you have any feedback or comments on what you would like to see in future editions; or would like to receive further copies or have your name removed from our mailing list, please contact Sara Almond on phone (08) 8226 7177, fax (08) 8226 7197 or email [sara.almond@health.sa.gov.au](mailto:sara.almond@health.sa.gov.au).

## Food allergy and immunisation

Dr Mike Gold, Head Allergy and Immunology CYWHS

Parents frequently report adverse reactions to foods and up to 3% of pre-school children may have food allergies most commonly to egg, cow's milk and nuts. There remains confusion as to which vaccines are contra-indicated in children with food allergies.

### Vaccines contra-indicated in food allergies

**Influenza and yellow fever vaccines** are contra-indicated in children with egg allergy because they are produced in egg yolk culture and may contain measurable quantities of egg protein. Both of these vaccines are not currently recommended for routine childhood vaccination but may be recommended in special circumstances depending on an individual's medical at risk category (Influenza) or indicated because of travel to an endemic area (Yellow fever).

If these vaccines are indicated in children who are egg allergic, referral to the Special Immunisation Service (SIS) at CYWHS or a qualified allergist should occur. Following a clinical review, and consideration of the risks and benefits, vaccination under medical supervision may be considered in selected individuals.

**Hepatitis B and Human Papillomavirus vaccines** should not be given to children or adolescents with anaphylaxis to bakers yeast (*Saccharomyces cerevisiae*). However, no cases of childhood anaphylaxis, following hepatitis B, have been described where bakers yeast allergens have been identified as the cause. The vaccines can be given to individuals with an allergy to inhaled yeast (for example *Aspergillus*).

**Any of the recommended childhood vaccines (including MMR) can be given to any child who has a food allergy including those children who have experienced food anaphylaxis.**

The following are commonly held misconceptions which are **incorrect**;

- **MMR vaccine should not be given to children with egg allergy**
  - MMR vaccine is made in egg fibroblast culture and does not contain significant amounts of egg
  - Numerous studies performed over a decade ago, in children with egg anaphylaxis, show that the MMR vaccine is safe.
  - Immunisation can occur with the standard precautions
- **The Varicella vaccine contains egg albumin**
  - There is no egg albumin in the Varicella vaccine
  - The albumin source is human and not egg albumin
  - The vaccine is safe in egg allergic children
- **Anaphylaxis following immunisation is common**
  - For childhood vaccines the rate of anaphylaxis is between 1 - 4 cases per million vaccines.

# Measles and MMR - UK perspective

Victoria Lack, Lecturer in Practice Nursing, Public Health, Primary Care and Food Policy Unit, City University, London NHS

The incidence of measles in the UK has decreased dramatically since the introduction of the measles vaccine in 1970, and the MMR vaccine in 1988. Vaccination with MMR was popular very soon after its introduction, and vaccination rates for MMR quickly reached 90% coverage<sup>1</sup> (Figure 1). However, in 1998, Andrew Wakefield published a paper in *The Lancet*<sup>2</sup>, which postulated a link between MMR vaccine and the autistic spectrum of disorders. Interestingly, media interest in this hypothesis was limited during the late 1990's but by 2001 over 850 articles mentioned the MMR vaccine, and by 2002, this was doubled<sup>1</sup>. Public confidence in the vaccine dropped, reaching an all time low in 2003/4 of around 80% of children in England and Wales being vaccinated with the first dose of MMR. Rates have risen subsequent to this, to 85% in 2007/8, but remain below the coverage needed to provide herd immunity. Particularly affected is London, where MMR rates remained at 74% in 2007/8, and rates for all vaccines are lower than in the remainder of the country.<sup>3</sup>

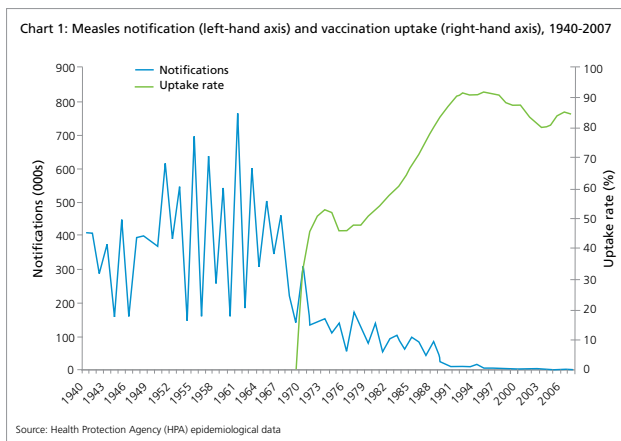


Figure 1 Numbers of measles notifications in England and Wales since 1940 and vaccination rates since 1970.

The incidence of measles infection remained low until the end of 2006, when the number of cases increased significantly (Figure 2). There have been 2 deaths in England from measles during this current outbreak, the first deaths from measles since 1992.<sup>4</sup> It is not clear yet whether the increase in measles is as a result of isolated outbreaks or the result of a more sustained spread of the virus. It is accepted that there are certain populations where the uptake has been traditionally lower: for example, the travelling community and orthodox Jewish community, and outbreaks in these groups have spilled over into other communities with lower vaccination rates. What is clear is that the increase in measles is associated with a decrease in the number of children being vaccinated with the MMR vaccine, subsequent to the release of the Wakefield paper.

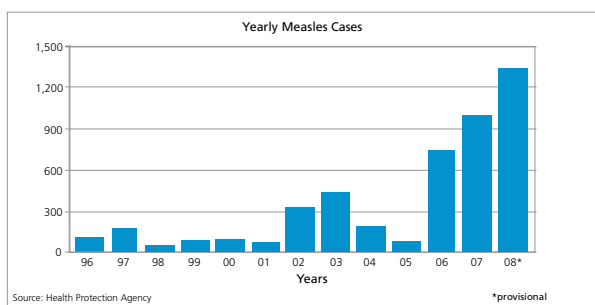


Figure 2: Yearly measles cases in England and Wales 1996-2008  
Source: Health Protection Agency Epidemiological Data 2008.

Nationally, the Health Protection Agency have led campaigns to increase public awareness of the danger of measles and highlight

the safety of the MMR vaccine. Locally, campaigns may focus on issues relevant to the population within a community with a higher rate of measles and/or a lower rate of MMR uptake. For example, in the London Borough of Hackney, where there were 84 cases of measles in 2006 and 330 cases of measles during 2007<sup>5</sup>, the Orthodox Jewish community had a particularly low rate of MMR vaccination and higher rate of measles. Community workers from within the community worked with local leaders to increase awareness of the vaccine. Other interventions were not targeted to a certain population: a bus, complete with red spots, travelled around the borough offering opportunistic immunisations. Contact tracing of index cases were carried out, and immunisation advised for all non-immune contacts. Immunisation was started at 9 months of age for infants at higher risk of measles. The usual programme for MMR vaccination in the UK is 12- 13 months, with a second dose given around 3 ½ years of age. In addition, community nurses who do not traditionally carry out immunisations were trained to give the MMR (and other) vaccinations. These measures had positive results as significantly more children were vaccinated in community clinics against MMR in the summer of 2007 (over 1 000 doses given) compared with just over 700 doses in the summer of 2006.<sup>6</sup> In addition, measles rates fell from a peak of just under 30 new cases per week in summer 2007 to 2-4 new cases per week in January of 2008.<sup>7</sup> However, as can be seen from figure 3, measles cases continue to rise nationally, with areas of the country outside of London now being more affected.<sup>8</sup>

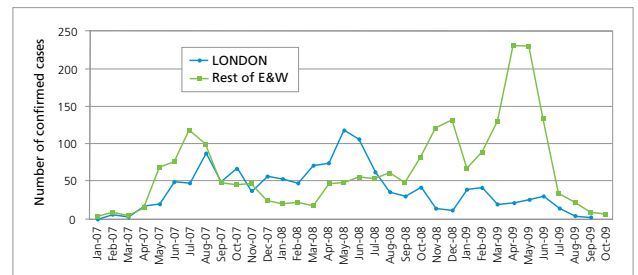


Figure 3: Number of laboratory confirmed cases in England and Wales by month of onset: January 2007 – October 2009

Source: Health Protection Agency Epidemiological Data 2009.

It is perhaps a timely reminder, that many of the vaccine preventable diseases are rare in our western societies because of vaccination, not because they cannot exist in our societies. If vaccination rates are allowed to fall, then the disease may well return.

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## Immunisation does not increase Autism risk

Internationally renowned epidemiologist, Dr Eric Fombonne from Canada's McGill University and Montreal Children's Hospital, was in Australia recently to speak at the regional summit on Autism.

Dr Fombonne claims that the causes of Autism are still unknown, even though links with genetic factors have emerged. He warns that parents put their children at unnecessary risk if they refuse to immunise and claims that vaccinating children will not increase their risk of autism (a fact that has been substantiated by a great many studies).

Epidemics can, and still do occur, when immunisation rates fall. This has been evident in the United Kingdom in recent years. In Ireland in 2000, 110 children were infected with measles: resulting in 3 deaths.

(Reference: *Medical Search Australia & New Zealand August 2009*)

## Higher anaphylactic reaction in single Measles and Rubella vaccines

Information from the United Kingdom has indicated the use of single Measles and Rubella vaccines may result in higher incidences of anaphylactic reaction, than occurs with the use of the combination MMR vaccine.

Researchers in the UK are concerned about four cases of anaphylaxis reported in children in the southwest of England after receiving single Measles and Rubella vaccines between 2003 and 2007.

Anaphylaxis is considered a rare occurrence following immunisation and the rate following combination MMR vaccine is 1.4 per 100 000 doses given.

The rate of single measles vaccine is 18.9 per 100 000 doses given and single Rubella vaccine 22.4 per 100 000 doses given.

Dr Mich Lajeunesse, Paediatric Allergy Consultant based in Southampton says "The issue is that people go for these single vaccines because they are uncertain about how safe the MMR is but we know how safe the MMR is because we have lots of data"

The research findings can be found in the Archives of Disease Childhood.

(Ref: *NCIRS Newsbrief October 2008*)

(*BBC News <http://news.bbc.co.uk/1/hi/health/7689901.stm>*)

## Infanrix hexa: Clarification of Product Expiry Dates and Batch Numbers

Infanrix hexa® is supplied as a combination vaccine consisting of two components:

- freeze-dried powder (HIB vaccine) in a vial; and
- DTPa-HepB-IPV suspension in a pre-filled syringe.

### Expiry Date

Vaccine expiry dates are found in three places: the barrel of the pre-filled syringe, the label of the HIB vial and the outer packaging. GSK treats the earliest expiry date of the vaccine components as the expiry date for the whole product **and this expiry date is printed on the outer packaging.**

### Batch Number

The batch numbers printed on the pre-filled syringe, the vial and the outer packaging are very closely related, differing by only by a single letter: **L** for liquid; **F** for Freeze dried; **C** for Combination. The **'vial' batch number should be used**, which is printed on a sticker on the vial that can be transferred directly to the immunisation record.

Further information is available on the GSK Australia website at [www.gsk.com.au](http://www.gsk.com.au) or by phoning the Medical Information Line on **1800 033 109**.

## Preterm babies: reminder

Preterm babies should commence the NIP at the standard recommended age **without correction for prematurity**. Extra immunisations are recommended for preterm babies who fit the description below as they may be at increased risk of vaccine-preventable diseases (eg: invasive pneumococcal disease) and may not mount an optimal immune response to certain vaccines.

Preterm infants:

**<28 weeks' gestation and /or with chronic lung disease:**

- require extra pneumococcal vaccinations  
4th dose of Prevenar at 12 months and Pneumovax 23 at 4-5 years

**<32 weeks' gestation or <2000g birth weight**

- require an extra dose of hepatitis B vaccine at 12 months of age with other scheduled NIP immunisations (Primary course received within combination Infanrix hexa<sup>®</sup> vaccine at 2, 4 and 6 months of age)

(Refer to pages 89-90 of the *Australian Immunisation Handbook*)

The pre-vaccination assessment should include information to determine if an infant/child fits into the preterm criteria listed above. It is important these details are recorded and can be recalled at the appropriate age immunisations:

To help record and recall this information, it may be advantageous to:

- Record the details on ImPS or Medical Director (or similar data bases) in the comments or alerts section.
- Record this information directly in the Blue Book in the age appropriate part of the Immunisation Section
- Make a note on the cover of the Blue Book (eg sticky label)
- Make a note in the any other patient records held by your practice.

NB: Before acting on the information recorded it is also important to re-check with the parent/caregiver that the information is correct.

## Acronyms

NHS - National Health Service

CYWHS - Child, Youth and Women's Health Service

ACIR - Australian Childhood Immunisation Register

HPV - Human papillomavirus

NIP - National Immunisation Program

ATAGI - Australian Technical Advisory Group on Immunisation

TGA - Therapeutic Goods Administration

Focus on...

# expansion of funded Seasonal Influenza Program

## New vaccine schedule due March 2010

From **March 2010** the NIP recommendations for those who have access to funded influenza vaccine will be expanding to include medical at risk groups who are susceptible to the complications of influenza infection. Currently influenza vaccine is funded for people 65 years of age and over, Aboriginal people 50 years and older and Aboriginal people aged 15 - 49 years with underlying chronic health conditions.

The expanded funded influenza program will also include:

- pregnant women (including those in the first trimester at the time of vaccination)
- medical at risk children (aged 6 months or older)
- medical at risk adults
- Aboriginal people aged 15 years and older.

Medical at Risk groups include:

- cardiac disease
- chronic respiratory conditions
- chronic neurological conditions
- people with impaired immunity
- children on long term aspirin therapy
- other chronic illnesses.

*(See page 190-191 Australian Immunisation Handbook 9th Edition)*

Providers need to prepare for an increase in the number of people accessing funded seasonal influenza vaccine for the 2010 season. When preparing for the 2010 influenza vaccination program ensure:

- your vaccine fridges can accommodate an increase in vaccine stock
- when ordering the funded influenza vaccine allow for the number of patients in your surgery who are eligible to receive a funded vaccine under the new recommendations
- if your service sends reminders to patients to have their seasonal influenza vaccine, include the new eligible groups.

The Immunisation Section has produced a new Influenza Vaccination Program Schedule effective from March 2010. This schedule is to compliment the National Immunisation Program Schedule that has also been updated from March 2010.

If you have any questions please contact the Immunisation Section on (08) 8226 7177

## Recommendations for Seasonal Influenza following receipt of H1N1 vaccine

**Adults** who have received the monovalent Panvax H1N1 in 2009 or early in 2010 are advised to have a seasonal influenza vaccination to benefit from the other 2 virus strains included in the trivalent seasonal influenza vaccine. There is no specific time interval required between receiving a Panvax vaccine and a 2010 seasonal influenza vaccine.

Protecting HCWs from contracting influenza will in turn protect vulnerable patients in their care. Vaccination is the most effective way of preventing influenza disease and disease transmission in a health facility.

### **ATAGI recommendations on use of pandemic and seasonal influenza vaccines in children <10 years of age**

Where children present for seasonal influenza vaccine and have previously received H1N1 vaccine, the number of doses of seasonal vaccine required depends on their age and their prior influenza vaccination history.

Guidelines and Recommendations for the use of the pandemic and seasonal influenza vaccines in children <10 years have been developed by ATAGI and can be located at the following website:

[www.healthemergency.gov.au](http://www.healthemergency.gov.au)

(Click on 'Health and Aged Care Professionals', then 'Information on the National Vaccination Program', then 'ATAGI Vaccine Advice')

Additionally, information for children's doses for Panvax has been sent to all Immunisation Providers and can be downloaded from the following web site:

[www.flu.sa.gov.au](http://www.flu.sa.gov.au)

Please note

- Panvax is a funded vaccine for all individuals >6months of age
- Seasonal influenza vaccine is funded for specific groups only
- Individuals may receive both the pandemic vaccine and the 2010 seasonal flu vaccine (which will contain the pandemic H1N1 virus strain and 2 other flu strains).

## Did you know?

In the United States in March 2009, 35 children died as a result of complications from influenza infection. (Reference NCIRS Newsbrief, March 2009)

The influenza virus strains included in the 2010 seasonal influenza vaccine are:

A: (H1N1): A/California/7/2009 – like strain

A: (H3N2): A/Perth/16/2009 – like strain

B: B/Brisbane/60/2008 – like strain

## HPV Register update

The HPV Register now has over 3 million HPV vaccination doses recorded from both general practice and the schools program across Australia. Over 230,000 of these are from South Australian general practices and councils.

On-line access to the register has been given to all those GPs who requested it at the time of registration and enables a GP to:

- search the live national HPV Register data base to view a patient's HPV vaccination history
- access and view their notification payment statements and summaries
- access and view Overdue Dose reports

GPs who have not received details for on line access should contact the HPV Register on 1800 478 734 (1800 HPV REG).

General Practitioners who would like to request on line access should complete an Update General Practitioner Registration Details form, from <http://www.hpvregister.org.au/health-professionals.aspx>

Please do not submit another GP Registration form if you have already registered.

### Reminder to GPs re HPV Catch Up Notifications:

GPs have until the end of March 2010 to submit notifications for doses given within this time, in order to attract a notification payment.

### Did you know?

Medicare Australia has extended ACIR history statements for children from 7 years of age up to 14 years of age. Parents can obtain this information from Medicare Offices, via the Medicare Australia website if they have registered to view details on line, or they can be ordered over the phone (1800 653 809) and can be posted out.

ACIR will still only record immunisations administered up to the 7<sup>th</sup> birthday.

## Questions and Answers

**Q** If a child is born overseas to parents who are Australian citizens, are they automatically entitled to funded vaccines on the NIP?

**A** *Australian citizens who have been absent from Australia for less than 5 years retain their Medicare eligibility and the baby will be entitled to Medicare. If the parents have been out of Australia for more than 5 years then they need to be returning to Australia to reside permanently to be eligible for Medicare.  
The parents would need to visit a Medicare Office with their passports to clarify their entitlement to Medicare.*

**Q** When should you check your cold chain monitor (CCM) cards?

**A** *CCM cards should be checked at the same time the fridge temperature is checked. Look for release of dye on the white backing paper as a sign that the bulb has blown. It is recommended that you remove the CCM cards and tap them on the bench or table to see if dye leaks onto the backing paper, as sometimes there is a fine crack in the bulb from freezing and it does not always shatter. Record that the CCM card has been checked on the line below current temp on the vaccine fridge temperature chart twice daily.*

## Immunisation the Basics 2010

The Immunisation Section will continue to offer the Immunisation the Basics workshops in 2010. Workshops for the first half of 2010 in the metropolitan area will be offered on:

**Friday, February 26<sup>th</sup>** - Somerton Beach Function Centre - Cnr Repton Rd and the Esplanade, Somerton Park

**Wednesday, April 28<sup>th</sup>** - Hindmarsh Education Centre, Milner St, Hindmarsh

**Monday, June 28<sup>th</sup>** - The Mawson Centre, 2 - Main St, Mawson Lakes

To attend one of these workshops, please contact Chelsea Phillips on (08) 8226 7177 or [chelsea.phillips@health.sa.gov.au](mailto:chelsea.phillips@health.sa.gov.au)

Rural providers interested in attending an 'Immunisation the Basics' workshop should contact their Local Immunisation Coordinator at their local Division of General Practice.

**For more information** please contact Immunisation Section on (08) 8226 7177 or by emailing [Sara.Almond@health.sa.gov.au](mailto:Sara.Almond@health.sa.gov.au) [www.health.sa.gov.au/pehs/immunisation-index.htm](http://www.health.sa.gov.au/pehs/immunisation-index.htm)

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