

# Immunisation against Infectious disease

## Updates

### Chapter 19 Influenza

For information on Pandemic influenza A(H1N1)v 2009 please refer to Chapter 23a.

**p.188**

#### **Delete the second full paragraph:**

Some influenza vaccines currently contain thiomersal. Other influenza vaccines are thiomersal-free. They have equivalent efficacy and safety. If a thiomersal-free influenza vaccine is not available, then a thiomersal-containing vaccine should be given. Influenza vaccines for the 2008-09 season are thiomersal-free.

#### **Replace with:**

Some seasonal influenza vaccines may contain traces of thiomersal that are left over from the manufacturing process. There is no evidence of risk from thiomersal-containing vaccines, including for children and pregnant women. In 2003, the Committee on Safety of Medicines concluded that the balance of benefits and risks of thiomersal-containing vaccines remains overwhelmingly positive (CSM, 2003). In 2004, the European Agency for the Evaluation of Medicinal Products also concluded that studies show no association between vaccination with thiomersal containing vaccines and specific neurodevelopmental disorders (EMA, 2004). A more recent study has also shown no association between neuropsychological functioning at the age of seven to ten years and exposure to mercury during the prenatal period, the neonatal period and the first seven months of life (Thompson *et al.*, 2007).

Based on the current evidence, JCVI does not recommend the preferential use of non-thiomersal containing vaccines in any group (including pregnant women and young infants). Where there are good reasons to offer a particular vaccine, whether it contains thiomersal or not, for example in order to offer more rapid protection, then that vaccine should be offered.

**p.189**

#### **Delete the third paragraph:**

Children and pregnant women should preferably receive a thiomersal-free influenza vaccine. If a thiomersal-free vaccine is not available then a thiomersal-containing vaccine should be given. The benefits of vaccination outweigh the risks, if any, of exposure to thiomersal-containing vaccines.

**p.193**

**Delete the last paragraph:**

Where possible, pregnant women should receive a thiomersal-free influenza vaccine. If a thiomersal-free influenza vaccine is unavailable then a thiomersal-containing vaccine should be given. The benefits of vaccination outweigh the risks, if any, of exposure to thiomersal-containing vaccines.

**p.194**

**Delete the second paragraph:**

Where possible, infants should receive a thiomersal-free influenza vaccine. If a thiomersal-free influenza vaccine is unavailable then a thiomersal-containing vaccine should be given. The benefits of vaccination outweigh the risks, if any, of exposure to thiomersal-containing vaccines.

**p.194**

**Delete the last two paragraphs:**

Neuralgia, paraesthesiae, convulsions and transient thrombocytopenia have been reported rarely.

Guillain-Barré syndrome has been reported very rarely after immunisation with influenza vaccine (one case per million people vaccinated in one US study (Lasky *et al.*, 1998). However, a causal relationship has not been established.

**Replace with:**

The following adverse events have been reported very rarely after seasonal flu vaccination over the past 30 years but no causal association has been established: neuralgia, paraesthesiae, convulsions and transient thrombocytopenia, vasculitis with transient renal involvement and neurological disorders such as encephalomyelitis and neuritis.

A recent study in the UK found that there is no association between Guillain-Barre syndrome (GBS) and seasonal flu vaccines although there is a strong association between GBS and influenza-like illness. The increased risk of GBS after influenza like illness, if specific to infection with influenza virus, together with the absence of a causal association with influenza vaccine suggests that influenza vaccine should protect against GBS (Stowe *et al.*, 2009). GBS has been reported very rarely after immunisation with influenza vaccine, one case per million people vaccinated in one US study (Laskey *et al.*, 1998). However, this has not been found in other studies and a causal relationship has not been established (Hurwitz *et al.*, 1981; Kaplan *et al.*, 1982; Roscelli *et al.*, 1991).

p.195

## Delete the first paragraph:

Vasculitis with transient renal involvement and neurological disorders such as encephalomyelitis and neuritis occur very rarely.

## Management of suspected cases, contacts and outbreaks

### Replace the complete section under this heading with the following:

There are antiviral drugs available which can be used under certain circumstances to either prevent influenza or to treat it.

For guidance on the prevention and treatment of influenza during the 2009/10 season please refer to the Department of Health website for the latest advice (<http://www.dh.gov.uk/en/Publichealth/Flu/Swineflu/InformationandGuidance/index.htm>).

**NB. The rest of the text on antivirals on pp. 195-198 up to the heading Supplies has been printed in grey in the complete chapter to indicate that the information does not apply during the swine flu vaccination programme of the winter of 2009/10. The same applies to the Antiviral drugs text on p.199.**

## P.200 References

### Add in:

Committee on Safety of Medicines (2003). Further data support safety of thiomersal in vaccines. Available from: [http://www.mhra.gov.uk/Safetyinformation/Generalsafetyinformationandadvice/Product-specificinformationandadvice/Vaccinesafety/Thiomersal\(ethylmercury\)containingvaccines/index.htm](http://www.mhra.gov.uk/Safetyinformation/Generalsafetyinformationandadvice/Product-specificinformationandadvice/Vaccinesafety/Thiomersal(ethylmercury)containingvaccines/index.htm)

EMEA/CPMP/VEG/1194/04 (2004). EMEA public statement on thiomersal in vaccines for human use – recent evidence supports safety of thiomersal-containing vaccines. Available from: [www.emea.europa.eu/pdfs/human/press/pus/119404en.pdf](http://www.emea.europa.eu/pdfs/human/press/pus/119404en.pdf)

Hurwitz ES, Schonberger LG, Nelson DB *et al.*, (1981) Guillain-Barré syndrome and the 1978-1979 influenza vaccine. *N Eng J Med.* **304**(26):1557-1561.

Kaplan JE, Katona P, Hurwitz ES *et al.*, (1982) Guillain-Barré syndrome in the United States, 1979-80 and 1980-81. *JAMA* **248**(6):698-700

Roscelli JD, Bass JW, Pang L. (1991) Guillain-Barré syndrome and influenza vaccination in the US Army 1980-1988. *Am J Epidemiol.* **133**(9):952-955.

Stowe J, Andrews N, Wise L and Miller E (2009) Investigation of the temporal association of Guillain-Barré Syndrome with influenza vaccine and influenza-like illness using the United Kingdom General Practice Research Database. *Am J Epidemiol.* **169**(3):382-8.

Thompson WW, Price C, Goodson B *et al.*, (2007) Early thimerosal exposure and neuropsychological outcomes at 7 to 10 years. *N Eng J Med* **357**:1281-1292.