

- MMR - debate goes on
- MMR and porcine material
- MMR II - error in leaflet
- Food poisoning incidents
- SARS - the latest
- Standard Precautions

GGNHSB PHPU NEWSLETTER

www.show.scot.nhs.uk/ggnhsb (TEL: 0141 201 4917/FAX:0141 201 4950)

Volume 2 Issue 6

July 2003

MMR - 'autism' debate goes on

The PHPU registered its objections to an article published in The Herald on 19th June entitled "Mercury build-up linked to autism"

In a letter to the editor dated 20th June, co-authors Dr Syed Ahmed (CPHM) and Mr Vincent McKeown (Public Health Nurse) expressed their dismay that a single, unpublished study not subjected to critical scientific scrutiny had generated such an alarmist headline.

They state that such articles adorned with quotes from the usual band of crusading commentators who use any study, however flawed, to justify their beliefs, are misleading and irresponsible. Many suppositions made in the article fly in the face of established fact and other scientific evidence.

Much publicity has been given to those who advocate that MMR vaccine is the cause of the rising numbers of children diagnosed with autistic spectrum disorder. This MMR scare began with a study published by Dr Wakefield et al in the Lancet in 1998. The study has since been widely discredited and no valid scientific evidence has ever been produced to support such a claim. On the contrary, a large number of rigorous scientific studies testify to the vaccine's safety and absence of linkage with autism. Furthermore, the MMR vaccine does not contain thiomersal.

The authors note that those opposed to the MMR, having failed to demonstrate the culpability of the vaccine, now cite thiomersal, a preservative present in the Diphtheria/Pertussis/Tetanus vaccine (DTP), as the cause of the perceived rise in autism in recent years. In the meantime, better diagnosis and changes in diagnostic classification are ignored as at least part of the explanation for the rise. The assertion that thiomersal is linked is questionable given that DTP vaccine has been in use for over 60 years while the "epidemic of autism" is a relatively new phenomenon. In addition it is also the case that the amounts of thiomersal received by children from the infant immunisation programme has decreased in recent times.

These facts clearly contradict a causal relationship between thiomersal and recent rises in autism.

Read the full letter on-line at:

<http://www.show.scot.nhs.uk/ggnhsb/>

MMR and porcine material

The use of porcine material in MMR vaccines and its implications for Muslims has resurfaced in recent newspaper articles. It was reported in last month's newsletter that following discussions with local Jewish and Muslim religious leaders, the PHPU guidance for parents from both communities was that because porcine material was not ingested, it was not a religious issue and that both vaccines were acceptable under the respective religious laws. However, Muslim leaders felt that Muslim parents should be given the choice of the two MMR vaccines.

Further clarification on this issue appears in a letter sent to doctors in the Eastern Mediterranean region by Dr Hussein A Gezairy, World Health Organisation, in July 2001. Following a seminar, 'The Judicially Prohibited and Impure Substances in Foodstuff and Drugs' organised by the Islamic Organisation for Medical Sciences in Kuwait in 1995, and in which the WHO Regional Office for the Eastern Mediterranean participated, a number of recommendations were made.

In particular, the following recommendation should be noted:

'Transformation which means the conversion of a substance into another substance, different in characteristics, changes substances that are judicially impure or are found in an impure environment, *into pure substances*, and changes substances that are prohibited into lawful and permissible substances'

Given that porcine material in the MMR vaccines is subjected to a purification process (transformed) and is injected, not ingested, we would hope that this recommendation of the WHO Regional Office serves to reassure Muslim parents of the legitimacy of these vaccines under the rulings of Islamic Shariah.

MMR II - error in user leaflet

Please note that there is a printing error in the user/prescriber leaflet of the MMR II vaccine. It should read 'M-M-R™ II should not be used less than one month before or after immunisation with other **live** vaccines' and not 'other vaccines' as printed. This confirms the guidance in June's newsletter that no time interval is required between the MMR and Hib vaccines.

Food poisoning incidents

Two separate outbreaks of food poisoning involving *Bacillus cereus* and *Clostridium perfringens* were reported to the PHPU in June. Such incidents highlight the importance of food preparation and food storage especially when catering on a large scale.

The first outbreak occurred in 7 schoolchildren who had eaten fried rice as part of a Chinese take-away lunch. Within a few hours of ingestion they developed vomiting but no diarrhoea. Investigation by the environmental health department concluded that the cause of the outbreak was most probably the fried rice which, when samples were tested, was found to be contaminated with *Bacillus cereus*.

Bacillus cereus is an aerobic spore-former from which two enterotoxins have been identified; one (heat-stable) causes vomiting and the other (heat-labile) causes diarrhoea. The source is food that has been cooked and then stored at ambient room temperatures allowing spores to germinate and multiply. Most commonly, outbreaks have been associated with cooked rice left to cool slowly before re-heating.

To prevent contamination by *B.cereus*, food should be well cooked, **refrigerated promptly** and re-heated thoroughly.

The second outbreak involved 4 people who ate steak pie in a local restaurant. Onset of symptoms occurred a few hours after ingestion and resulted in the hospitalisation of one elderly case. Samples of food tested by the environmental health department identified *Clostridium perfringens* in the meat (and gravy) which had been cooked and left to cool slowly before refrigeration. *Clostridium* spores had germinated and multiplied during cooling and survived in the food despite re-heating.

These two outbreaks are a salutary reminder that food, which is to be reheated, should be refrigerated promptly after initial cooking and should not be left at room temperature to cool slowly, especially in the summer months.

Anyone wishing further information about food safety matters should contact their Local Authority Environmental Health Department.

SARS - the latest

On the 23rd June, the WHO removed Hong Kong from its list of areas with recent local transmission of SARS. Twenty days, which is twice the maximum incubation period, have passed since the last case was isolated on 2nd June 2003.

When 20 days have passed since removal of the last case from the community at large, the chain of human-to-human transmission is considered broken, thus eliminating the risk of infection for both local residents and travellers.

"This is a very significant achievement," said Dr David Heymann, Executive Director of Communicable Diseases at WHO. "Hong Kong, with its dense population and fluid

border with China, had one of the hardest outbreaks to control. This success means that the whole world can now feel safer from the SARS threat."

'Standard Precautions'

Standard precautions are the precautions necessary to reduce the risk of transmission of microorganisms from both recognised and unrecognised sources of infection. They expand the coverage of *Universal Precautions* in that these precautions acknowledge that *any* body fluid is potentially infectious.

Universal Precautions were introduced in the mid 1980s following recognition of the risk of transmission of HIV and other bloodborne viruses. In 1996, the Centres for Disease Control introduced two new terms: *Standard Precautions* (replacing Universal) and *Transmission-based Precautions* (precautions for specific pathogens).

Standard Precautions are the minimum level of infection control measures applicable in all situations to prevent the transfer of bloodborne viruses and other organisms. They will **not** prevent the spread of microorganisms transmitted by airborne, droplet or combination droplet/airborne/contact routes e.g., vCJD, TB, SARS - CoV etc.

All health care workers (HCW) in all situations involving the care of patients or contact with the environment must use Standard Precautions.

These precautions cover:

- hand hygiene
- gloves
- aprons/gowns/footwear
- masks/eye protection/face shields
- occupational exposure prevention
- patient placement
- patient-care equipment
- environment
- linen
- blood and body fluid spillage
- clinical waste

The NHS Greater Glasgow Control of Infection Committee has produced a Standard Precautions document which is also available on-line. To accompany the document there is a self-directed learning unit (SDLU) and questionnaire.

The policy document and SDLU are available on-line at the address below. Use the bookmark tab at the side of the on-line document to view the contents.

www.show.scot.nhs.uk/ggghsb/Depts/public_health/phpu/pubs+reps/coic_policies/standard_precautions/standard_precautions_policy.pdf

If you would like to comment on any aspect of this newsletter please contact Dr Marie Laurie on 201 4933 or by e-mail at: marie.laurie@gghb.scot.nhs.uk