JOINT SUB-COMMITTEE ON ADVERSE REACTIONS TO VACCINATION AND IMMUNISATION

Minutes of the meeting held on Thursday 7th March 1990 at 1.30pm in Room 119 Hannibal House

- <u>Present</u>: Professor A Breckenridge (Chairman) Dr P Fine Professor A Campbell Dr E Miller Professor D Miller Dr D Tyrrell Professor D McDevitt Dr P Minor Professor F Harris Dr D Cavanagh Professor J Banatvala
- DH: Dr D Salisbury (Assessor) Mrs J Alderman (Secretary) Dr S Wood Mrs S Thomas Mr P Whitbourn

Welsh Dr K Richmond Office

1. Announcements and confidentiality

The Chairman reminded members about the confidentiality of the proceeding of the meeting, and asked that members notify him and the Secretary if they proposed to publish papers of relevance to the work of ARVI.

2. Welcome to new members

Professor Harris, Dr Minor and Dr Tyrrell were welcomed to ARVI.

3. Apologies for absence

Apologies had been received from Drs Bowie, McGuiness, Reid and Kennedy.

4. Minutes of the last meeting

These were agreed, 4.2 being amended so as to read (lines 1-2)...there were no known deaths from anaphylaxis.

5. Matters arising

From 4.1- The surveillance of MMR vaccine in Somerset is unlikely to detect issues of concern Problems exist with under-reporting.

6. Adverse reactions to MMR vaccine

Background paper

3 vaccines are in use in the UK, manufactured by SKF and Merieux (using Urabe mumps strain) and MSD/Wellcome (using Jeryl Lynn strain). The SKF

Urabe mumps virus is grown in chick fibroblast culture, the Merieux mumps virus grown in chick amniotic fluid. It was noted that the SKF product ha most of the market share, for the reasons described at the last meeting. In Canada, the MSD vaccine had been used exclusively. Following the introduction of the SKF product, cases of meningoencephalitis had been reported. When distribution of the SKF vaccine was halted, no further cases of meningoencephalitis were reported. The Merieux product is used extensively in France, but the company have stated that there had been no virologically proven cases occurring there, to date.

It was suggested that, due to different reaction criteria and methods of data collection, reporting in different countries should not be compared.

6.1 Measles notifications to week 7 1990

Notifications of measles have decreased since the introduction of MMR vaccine. It had been anticipated that 1990 would be an epidemic year, but to date 1000-2000 fewer notifications had been received each week than in previous epidemic years.

6.2 Supply of MMR vaccine and ADRs to manufacturer

<u>Graph B-</u> Two cohorts of patients in the 12-15 months and 4-5 years age groups were represented, and 100,000 doses had been supplied per month. I was felt that distribution reflected use. There had been a surplus supply over calculated demand, and this may have represented use in age groups between and above those targetted. It was likely that demand would decrease in the next 6 months.

<u>Graph C-</u> Figures had been obtained from SKF. The progressive distribution of vaccine was noted. The smaller increases in June and July 1989 were attributable to a batch failing at NIBSC. Dr Miller asked whether authorities were using MMR vaccine in place of rubella vaccine, but this is not being done, one possible explanation being that MMR is 5 times dearer.

<u>Graph D</u>- The large degree of under-reporting was noted. This graph matche the chart at C.

6.3 Review of MMR ADRs

6.3.1 The following criteria had been applied to the assessments: <u>Definite=Virus isolated from CSF</u>, time course of 14-28 days; <u>Possible/probable=Cells isolated from CSF</u>, no virus in CSF, acceptable time course. Symptomatic reports were defined as those mentioning meningoencephalitis with hospital admission. It was considered that increased local awareness had a bearing on the clustering of origin of th reports. It was agreed that, in future report dates, reference number and age of child would be added to the data tables.

6.3.2 One case of bilateral deafness had been reported, and coded as "possible". This was an atypical reaction, and there was no proof as to the presence of meningoecephalitis. The wild mumps disease may cause unilateral deafness, and 2 reports have been received of unilateral deafness following the MSD vaccine. There have been no reports in the medical literature of bilateral deafness following MMR. 6.3.3 A fatality had been reported from Exeter. The histology had not supported varicella or other encephalitis. This case had been discussed a the previous meeting, and it was decided that it should remain classified as "possible".

6.3.4 The case reported from Maidenhead was uncertain. Lymphocytes were present in the CSF, and there was the possibility of the existence of neurological problems, which may have preceded vaccination.

6.3.5 Since the paper was prepared, two more "possible/probable" reaction had been reported on yellow cards, one virus positive case from Oxford, and one reported via the British Paediatric Surveillance Unit.

6.3.6 It was suggested that this information should be publicised more widely, and agreed that JCVI should be provided with this information fro ARVI, with the additional details as mentioned in 6.3.1. JCVI were to publish details relating to frequency of reactions.

6.4 Report from Japanese National Institute of Health

6.4.1 Following introduction of MMR vaccine in Japan, a close study had been made of adverse events. This study received high publicity, which lead to increased reporting. Promotion of the vaccine was then stopped in Japan, although it remains available. Differences in the measles (this is of higher potency) and rubella strains exist between the products used in Japan and the UK, although the same Urabe mumps strain is used, but at a higher dose.

6.4.2 It was noted that the incidence of meningoencephalitis in Japan had been 1 in 100,000 before the increased publicity, whereas afterwards the incidence had risen to 1 in 8000. Clarification was needed as to why this had occurred, and it was suggested that lumbar punctures might have been carried out on all admitted patients including those who were asymptomatic, which would not have been done in the UK.

6.4.3 The Committee agreed that the problem in Japan seemed to be of an increased order of magnitude to that seen anywhere else. This may be due to different reporting/investigating criteria or some local factors. The Committee felt that present surveillance would detect such problems if they were occurring in this country at levels sufficient to produce significant symptoms. The Committee endorsed the present MMR programme an felt that there were not sufficient indications to make changes at present. The situation will require careful monitoring and review.

6.5 MMR surveillance in the UK- BPSU protocol

This information paper was noted. The project is now running, and two report cards had been returned, recording reactions not reported elsewhere, or on yellow cards. This suggested that the study had raised awareness of adverse reactions. It was felt that, at present, a general study relating to all vaccines would not be helpful. Future meetings will be kept fully updated on progress.

6.6 Report from NIBSC

It was noted that NIBSC are able to distinguish between wild and vaccine virus types, and between Urabe and Jeryl Lynn vaccine types.

6.7 Published reports on MMR ADRs

This paper was noted.

6.8 Letter from Dr C Bowie

This was noted.

7. Article (Dr C Bowie) and letter (Prof D Miller) in Lancet

These were noted.

8. Any other business

The new immunisation schedule was due to start in May, and a new edition of the Green Book was to be published shortly.

9. Date and time of next meeting

Members would be sent a list of dates to select the most suitable for the September meeting.