

HEALTH PROTECTION AGENCY

BOARD MEETING 24 June 2009



Chief Executive's Report

Presented by: Justin McCracken

MATTER FOR CONSIDERATION

1. The purpose of the Chief Executive's report is to provide the Board with a summary of activities and key developments in the period since the previous meeting.

RECOMMENDATION

2. The Board is asked to NOTE the report.

FORMAT OF THE REPORT

3. The report is presented in two broad sections; topics relating to health protection, and other matters concerning the management and operation of the organisation.

4. Many of the Agency's activities during May were directed towards the outbreak of swine flu. Detailed reports appear elsewhere on the agenda, so this is not addressed further in this report.

HEALTH PROTECTION

Measles

5. We recently issued the figures for confirmed cases of measles in England to the end of April. The total number of cases this year so far is 602 compared with 354 cases in the same period in 2008. The number of confirmed cases has risen for four consecutive months in 2009. In April, cases were reported from all but one of the regions of England. Most cases are in children and young adults, and are linked to schools and nurseries, with some linked to traveller communities. For example, there has been a large outbreak in the North East, where the majority of cases are in Hartlepool. Cases are increasing daily at a rate of 5-10 notifications a day. The majority of cases have no history of MMR immunisation. The HPA team is working closely with PCT staff to follow up individual cases and is supporting the local PCTs on initiatives to improve MMR immunisation at a local level.

Invasive Group A streptococcal (iGAS) infection

6. As previously reported, the Health Protection Agency declared a level 3 incident with respect to incidence of iGAS infection, following a significant increase in the number of referred cases compared to the same period a year ago from November and December 2008 and in the first 20 weeks of 2009. The figures have

subsequently declined as is usual at this time of year and in weeks 21 and 22 the number of referred cases were similar to those reported in 2008. The decline is encouraging but a few more weeks' figures will be required before the decision can be taken as to whether to reduce the alert level. The Agency continues to monitor weekly notifications of scarlet fever which can provide an early warning of increases in iGAS.

Radon exposure

7. As discussed at the meeting of the Board last month, the Health Protection Agency is considering revising the recommended action levels of radon exposure at which remedial action should be taken in existing dwellings and other buildings, and on 2 June we issued a consultation on how this might be achieved. The consultation closes on 3 September 2009. The Agency has already advised that it is desirable to install basic radon preventative measures in all new buildings in the UK.

Novel UK antibiotic resistance linked to India

8. A National Resistance Alert was issued in January 2009 highlighting the emergence of carbapenemases (enzymes inactivating the most powerful penicillin-related antibiotics) in enterobacteriaceae.

9. The Antibiotic Resistance Monitoring and Reference Laboratory at the HPA's Centre for Infections has now detected a newly-recognized carbapenemase, NDM-1, in 16 isolates of 4 genera of enterobacteriaceae from widely scattered UK hospitals. NDM-1 is unpublished, but was discovered in 2008 by Professor Tim Walsh, University of Cardiff, with whom we are liaising. At least four source patients were previously hospitalised in Pakistan or India and Professor Walsh's work suggests NDM-1 is widespread in New Delhi. We believe that it has been repeatedly imported to the UK from India.

10. The Alert in January emphasised vigilance about transfers to the UK of patients hospitalised patients from Greece, Cyprus and Israel. Given the greater population fluxes between India and the UK, the new form of resistance is potentially even more significant.

Heparin contamination

11. The heparin team at NIBSC has continued to support the Medicines and Healthcare products Regulatory Agency by screening heparin drug products in connection with an incident of contamination. Data from our joint investigation was presented in May at the annual meeting of the European Official Medicine Control Laboratories, and we have provided advice and expertise to the European and United States Pharmacopoeias in order to minimise the risk of incidents of contamination in the future by revising the products' monographs.

Healthcare associated infections

12. At our Centre for Emergency Preparedness and Response, the first passive immunisation experiment to assess protection from *clostridium difficile* infection has been completed with encouraging results. We are investigating immunotherapy as an approach to both prevent and treat *clostridium difficile* infection. In this approach, the protective efficacy of antibodies administered by injection is being assessed using an established animal model. An initial study showed that animals administered with antibodies against the toxins of *clostridium difficile* were protected

against a normally lethal challenge of *clostridium difficile* spores while animals in a control group, which were not given antibody, quickly succumbed to infection.

Advice on emissions of ultraviolet radiation

13. The HPA's Radiation Protection Division, in conjunction with the Department of Health, provided advice to the Department for Environment, Food and Rural Affairs (DEFRA) on the maximum emissions of ultraviolet radiation from non-directional lighting as a point to negotiate into the implementing measure on non-directional household lighting under the European Union's Energy-using Products Directive. These regulations came into force in April 2009. It subsequently emerged, however, that there is a conflict between the requirements of these regulations and European Standards for tungsten halogen lamps. The HPA advised DEFRA that it is acceptable to remove the agreed ultraviolet radiation emission limits for tungsten halogen lamps from the regulations provided the European Commission mandates the relevant Standards body to revise the product standard. This advice was accepted by the (then) Minister for Sustainable Development and Energy Innovation as the official UK position in negotiations on 8 June 2009 and which has been accepted by member states. There is to be no change to the ultraviolet radiation emission limits, introduced as the result of HPA research, in the regulations for compact fluorescent lamps.

Consultation on pre-application planning submissions

14. The Planning Act 2008 and other legislation require consultation at various stages during the process of deciding on an application for a nationally significant infrastructure project. These consultations include both public and within Government consultations on strategic environmental assessment, sustainability appraisals and national policy statements. Recently it has come to light that there will also be consultation on pre-application submissions by industry. Health impacts should feature prominently in these documents but are often poorly addressed, leading to a substantial amount of work for the Department of Health and the HPA. We recently discussed the resource issues briefly with the Department, and a more senior level meeting will now be convened to establish an agreed way forward for dealing with this issue.

Advice on prolonged usage of mobile phones

15. During May, the Chief Medical Officer asked the HPA for advice following the publication of a paper by Khurana *et al* (Surgical Neurology, 2009) which suggested a link between prolonged usage of mobile phones and the development of brain tumours. The HPA concluded that advice regarding mobile phone usage should not be changed at present, but that a precautionary approach should continue to be adopted, in particular regarding the use of handsets by very young children.

16. A substantial amount of research has been conducted in recent years into mobile phone usage and health, but as yet there is little information on the health of long-term users. Epidemiological studies of brain tumours have given mixed findings, but these differences are not taken fully into account in the meta-analysis of Khurana *et al*. If allowance is made for the heterogeneity of the findings, there is little evidence for an association. The HPA concluded that differences in findings may be due to methodological problems, related at least partly to the retrospective nature of these studies. The UK Mobile Telecommunications and Health Research programme has commissioned a long-term prospective study of mobile phone users,

which should avoid the biases that may arise in retrospective studies. The HPA's independent Advisory Group on Non-Ionising Radiation will shortly begin a review of exposure to radiofrequency radiation and human health, which is expected to take 2-3 years to complete.

Erwinase Production

17. The programme to prepare an application for approval of Erwinase by the US Food and Drug Administration (FDA) is making good progress on the analytical and process validation fronts, with analytical methods well advanced in development, process validation plans taking shape and profiling activities well under way. Two more batches of Erwinase have been successfully filled and freeze dried with record numbers of vials achieved.

18. A meeting was recently held with our sales and marketing partner EUSA Pharma to discuss progress. All parties concluded excellent progress was being achieved and issues for clarification with the FDA were identified.

Development of Tuberculosis Drugs

19. Professor Gillespie, Regional Microbiologist for London, has combined with academics active in tuberculosis research across the country to form the UK tuberculosis drug development consortium. This group have been awarded a "collaboration" grant from the Medical Research Council. The new award, which will be administered by UCL, will provide a synergistic environment for academic and commercial organisations researching new drugs. It is hoped that the consortium will bring together others engaged in drug development, increase the funding available to tuberculosis drug discovery and develop a system that will support the identification of new candidates, early testing and drug improvement. Even in its early days the consortium has been awarded a new research grant to develop drugs that attack the tuberculosis bacterial cell wall. If successful, the consortium will reverse the decline in UK antibiotic development research and help to create the new drugs to defeat this worldwide scourge.

MANAGEMENT AND OPERATIONS

Health and Safety

20. The Health and Safety Executive have confirmed that a case relating to an incident involving a centrifuge in June 2005 has been closed. All of the specific corrective actions were completed some time ago. Broader learning from the incident will be incorporated into the Agency's future planning for Health and Safety.

21. Inspectors from the Health and Safety Executive visited the HPA's site at Porton Down at the end of April in connection with the renewal of the licence under the Specified Animal Pathogens Order (SAPO). A report will be issued next month.

22. There has been one RIDDOR incident reported during May; a potential laboratory exposure incident where a specimen was handled at CL2 rather than CL3. Initial investigations indicate that the local Trust did not supply known clinical information about the suspected tuberculosis sample, which resulted in handling at the incorrect containment level.

23. Two serious incidents were also reported, which are being fully investigated:
a) an inappropriately packaged PCR positive Flu A sample

- b) failure of a class 1 safety cabinet while checking the documentation within the outer packaging of a swine flu specimen.

24. The HPA has submitted written evidence in response to the Health and Safety Executive's request for attendance at PACE interview regarding their investigation into an incident in which a CL3 bin was spilled.

The HPA's office in Gloucester

25. A report has been sent to the Health and Safety Executive outlining the results of the survey of radon exposure at the HPA's workplaces. The report flags up one HPA workplace, at Stonehouse in Gloucester, where readings are well above the legal threshold. The landlord has offered two alternative offices on the site which our expert staff are currently monitoring in order to assess their suitability. We are monitoring throughout the site for the benefit of other tenants. Vacant space has also been identified elsewhere in Gloucester should the HPA have to relocate. Senior managers have visited the office, and staff have been briefed and are being kept fully informed.

Staff appointments

26. Victor Knight has been appointed Secretary to the HPA Board and will take up his post from 1 July.

27. Dr John Cooper has been appointed Director of the Centre for Radiation, Chemical and Environmental Hazards succeeding Dr Roger Cox.

28. Professor Eric Bolton has been appointed to the post of Regional Microbiologist in the North West and will take up his post in September 2009.

Staff achievements

29. The infection control team of the HPA Regional Laboratory team in Birmingham and The Heart of England NHS Trust have won first prize in the Oxoid Infections Control Team of the year award for their work in 2008.

Research and Development

30. There were no new research grants reported to the R&D Office for May 2009, in a pattern similar to previous years. The total value of funds awarded to the HPA in 2009/10 remains at £960,625, compared to £1,484,315 awarded in the same period in 2008/09.

Facilities at NIBSC

31. Good progress has been maintained on the new Influenza Resource Centre/UK Stem Cell Bank building which remains on track for completion by the end of the year. The total cost will be in excess of £16 million. A number of other large capital projects have been completed, including provision of suite of new BSL3 containment labs and refurbishment of the dining area.

Royal Visit to the HPA Regional Laboratory in Cambridge

32. His Royal Highness the Duke of Kent visited the HPA Regional Laboratory and Addenbrookes Hospital in Cambridge on 13 May 2009. He inaugurated the

ribotyping service for *clostridium difficile*. The Duke took the opportunity to thank to all of the staff in the laboratory for their sterling work for testing on swine flu. The Visit was hosted by Dr Mary Archer, Chair of the Addenbrookes Hospital NHS Foundation Trust and Dr David Heymann, Chairman of the HPA.

Other Communications activities

33. The Conference “Infection Prevention and Control in Care Homes” was held on 21 May in London, organised by the HPA in partnership with the Infection Prevention Society. It was attended by 260 delegates from care homes and infection control staff from PCTs and proved very successful.

Redevelopment of the site at Porton Down: Project Chrysalis

34. Since the Board approved in April that a case could be taken to the Department of Health’s Capital Group, the design brief for the programme has been completed. Procurement for a framework for consultancy has been completed; there were 9 OJEU advertisements, 846 expressions of interest, 49 companies interviewed and 28 framework contracts awarded. A major event was held on 2 and 3 June to brief potential suppliers. Diversion of staff to work on the swine flu epidemic is making it increasingly difficult to maintain the critical path; organisational development has been put on hold and users are struggling to provide sufficient input to define user requirements, for example.