

**06/004**

**Request**

Under the Freedom of Information Act I would like to ask you to send me all the research material you hold concerning hep b Vax II.

In particular I need to know how many people in the UK have complained of side effects and what they are.

**Reply**

FOI 06/04

13 February 2006

Dear [name redacted under s40(2) FOIA]

Thank you for your letters of 6<sup>th</sup> and 13<sup>th</sup> January 2006 requesting information about the safety of the hepatitis B vaccine (H-B VAX II).

In particular you requested information that was provided to the MHRA prior to a licence being issued. Unfortunately, we are unable to supply this information - we have checked our records and do not hold these documents.

In your initial request, dated 6<sup>th</sup> January 2006, you stated that you particularly needed to know how many people in the UK have complained of possible side effects and what they are. I have therefore enclosed a copy of a Drug Analysis Print that provides this information, together with an information sheet on how to interpret the print.

Your second request asks for "any information relating to the vaccine's safety..." . I have interpreted this as meaning that you would like to receive information on the key safety issues that have attracted much public attention since a vaccine for hepatitis B has been available in the UK. This includes the suspected causal association between immunisation and rheumatoid arthritis, multiple sclerosis and chronic fatigue syndrome (CFS). All three issues have been reviewed by the Medicines and Healthcare products Regulatory Agency (MHRA) and the available evidence carefully considered by the then Committee on Safety of Medicines (CSM, now the Commission for Human Medicine, CHM) and/or its expert working group on vaccines. I enclose copies of these reviews together with the conclusions of the advisory bodies, as minutes from the meetings, where available. In line with the exemptions contained within the Freedom of Information Act, I have redacted any information that may enable persons to be identified<sup>1</sup> In addition, I have removed from the papers any annexes that contain patient-specific Yellow Card details. In this respect the only Yellow Card information that we are able to provide is as outlined below and this is available in the body of the text:

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<sup>1</sup> Section 38 and 40 – Personal information – unwarranted disclosure to a third party of personal information (including a deceased person or any other disclosure which would constitute or could facilitate an unwarranted invasion of privacy or may result in a breach of their health and/or safety.

Patient age categories  
Cumulative genders of patients  
Suspect drug(s)  
Dose of suspect drug  
Route of administration  
Duration of treatment  
Suspected adverse drug reaction(s)

Please also note that I have been unable to find a copy of annexes 2, 3 and 5 for the CSM EWG paper on hepatitis B vaccine and rheumatoid arthritis. However, two of these refer to papers that are published and therefore available through scientific libraries.

**Drug Analysis Print**

The CHM and the MHRA collect information about *suspected* adverse reactions (ADRs) to all marketed medicines and vaccines via the Yellow Card Reporting Scheme. Through this scheme, doctors, dentists, pharmacists, coroners, nurses, patients and pharmaceutical companies notify the CSM/MHRA of *suspected* side effects. Detailed information on the Yellow Card Scheme can be found on the MHRA website at [www.mhra.gov.uk](http://www.mhra.gov.uk) or [www.yellowcard.gov.uk](http://www.yellowcard.gov.uk). If you have not already done so, we would encourage you to report your suspected side effect via the Scheme.

I have enclosed a Drug Analysis Print (DAP) which lists all ADRs reported to CHM/MHRA *suspected* to have been associated with hepatitis B vaccine. This includes all suspected ADRs that have been reported in association with the hepatitis vaccine brands H-B-Vax II, H-B-Vax, Engerix B and HBVaxPro. You will note that a total of 3,633 reports of 9,183 *suspected* adverse reactions have been reported to the MHRA in association with these vaccines, of which 12 describe the development of CFS. However, it is very important to note that the occurrence of a medical condition after administration of hepatitis B vaccine, and inclusion of a suspected side effect in the DAP, does not necessarily mean that the vaccine caused the problem and factors such as a newly occurring or previously undiagnosed underlying illness, concomitant medication, or external environmental factors, may be alternative causes. Please read the information sheet provided to assist in interpretation of the DAP.

**Hepatitis B vaccine and chronic fatigue syndrome**

Current evidence suggests that CFS, also known as myalgic encephalomyelitis (ME), affects at least 0.2-0.4% of the population, with the most common age of onset in the early 20's to mid 40's years of age. As hepatitis B vaccine is used in the UK in adults at this age range it is inevitable that some vaccine recipients will develop CFS/ME following vaccination purely by chance and such isolated cases may be reported as suspected side effects. Despite extensive research, the exact causes of CFS/ME remain unclear. While a single cause for the syndrome may yet be identified, it is most likely that CFS/ME represents a common endpoint of disease resulting from multiple precipitating causes. There have been suggestions that certain viral infections may trigger chronic fatigue syndrome, however, it should be noted that hepatitis B vaccine does not contain a live virus.

Last year the UK's Vaccine Working Group looked at all the cases of CFS/ME that had been reported to the MHRA as suspected adverse reactions to the hepatitis B vaccine. The Group advised that the available evidence does not support a causal association. This advice is in line with the recent recommendations of the World Health Organisation who have also conducted a comprehensive review of the literature

([http://www.who.int/vaccine\\_safety/topics/hepatitisb/CFS/en/](http://www.who.int/vaccine_safety/topics/hepatitisb/CFS/en/)).

**Hepatitis B vaccine and multiple sclerosis**

On 18 October 2004, the CSM Vaccine Safety Working Group considered the issue of the alleged association between hepatitis B vaccine and MS. It advised that the body of available evidence does not provide convincing support for a causal relationship between the vaccine and MS.

On 28 October 2004, the CSM (main committee) considered the issue and also advised that the body of available evidence does not provide convincing support for a causal relationship. I have enclosed the paper that went to Committee together with the relevant extract of the CSM minutes which details the discussion that took place.

The conclusion of CSM is in line with the advice of the World Health Organisation (WHO) following its own thorough review of the issue:

([http://www.who.int/vaccine\\_safety/topics/hepatitisb/multiple\\_sclerosis/en/](http://www.who.int/vaccine_safety/topics/hepatitisb/multiple_sclerosis/en/)).

**Hepatitis B vaccine and rheumatoid arthritis**

In light of concerns raised by reports of suspected adverse reactions, the MHRA and the Vaccine Safety Working Group of the CSM reviewed all the available evidence relating to the alleged links between hepatitis B vaccine and RA in 2003. This review examined published literature and studies and reports of suspected adverse drug reactions. The Working Group

advised that there is no confirmed scientific evidence linking the vaccine with an increased risk of RA.

The WHO has also conducted a thorough review of this issue and concluded that no convincing data currently exists to support an association between hepatitis B vaccination and rheumatoid arthritis:

([http://www.who.int/vaccine\\_safety/topics/hepatitisb/hep\\_B\\_and\\_rheumatoid\\_arthritis/en/](http://www.who.int/vaccine_safety/topics/hepatitisb/hep_B_and_rheumatoid_arthritis/en/))

As with all licensed medicines the MHRA, in conjunction with the CHM and its expert groups, will continue to carefully examine any new evidence as it emerges, seeking the advice of independent experts, and communicate any new information to health care workers and the public as necessary.

If you have a query about this letter, please contact me. If you are unhappy with our decision, you may ask for it to be reviewed. That review will be undertaken by a senior member of the Agency who has not previously been involved in your request. If you wish to pursue that option please write to the Communications Directorate, 10<sup>th</sup> Floor, Medicines and Healthcare products Regulatory Agency, at the above address quoting reference 06/04. After that, if you remain dissatisfied, you may ask the Information Commissioner at

The Information Commissioner's Office  
Wycliffe House  
Water Lane  
Wilmslow

If you would like any further information please do not hesitate to write to the MHRA again.