

United Kingdom Advisory Panel

for Healthcare Workers Infected with Bloodborne Viruses

Annual Report

1st April 2003 to 31st March 2004

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Abbreviations used

A&E	Accident and Emergency
AGH	Advisory Group on Hepatitis
BBV	Blood borne virus
CMO	Chief Medical Officer
DH	Department of Health
DNA	Deoxyribonucleic acid
DPH/DsPH	Director(s) of Public Health
EAGA	Expert Advisory Group on AIDS
EPP/EPPs	Exposure prone procedure(s)
HBV	Hepatitis B virus
HBeAg	Hepatitis B virus 'e' antigen
HBsAg	Hepatitis B virus surface antigen
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus
HCW/HCWs	Health care worker(s)
IgA	Immunoglobulin A
HPA	Health Protection Agency
NHS	National Health Service
NK	Not known
O&G	Obstetrics and gynaecology
RNA	Ribonucleic acid
UK	United Kingdom
UKAP	United Kingdom Advisory Panel for Healthcare Workers Infected with Bloodborne Viruses
USA	United States of America

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Executive summary

This is the first annual report of the UK Advisory Panel for Healthcare Workers Infected with Bloodborne Viruses (UKAP). UKAP's remit is to provide operational advice to Directors of Public Health Medicine on whether health care workers (HCWs) found to be infected with bloodborne viruses (BBVs) should have their practice restricted or whether patient notification exercises (PNEs) should be undertaken.

UKAP advises enquirers on a case-by-case basis within the framework of the NHS guidance and aims to follow the principles of consistency, timeliness and a focus on significant issues. The approach to recommending PNE has evolved as knowledge about the risk of transmission of BBVs has increased. Thus patients are notified only if exposure to an infected HCW poses a significant risk of BBV transmission, where there is a high risk of the HCW bleeding back in the open tissues of a patient during an exposure prone procedure (EPP).

During 2003/2004, 33 cases involved infected HCWs referred to UKAP for advice. In ten of these, the Panel had not previously set a precedent. In six cases, three HIV infected HCWs and three HCV infected HCWs, PNEs were recommended. In all these, no HCW to patient transmissions were detected.

Precedents set by UKAP during the year were as follows:

- Following a review of four PNEs where the index event was not the transmission of HCV from an infected HCW to a patient, UKAP decided not to recommend PNEs for future similar incidents, subject to new evidence emerging.
- In response to an enquiry from the General Optical Council, UKAP advised that individuals wishing to train or be registered as optometrists do not need to be screened for BBVs because optometry does not involve EPPs.
- The Panel advised the Tripartite Medical Committee to the Voluntary Aid Societies that the guidance for HCWs infected with BBVs applies to all infected HCWs undertaking EPPs, whether or not they are paid for their work.

UKAP considered an enquiry concerning the need to test trainee nephrologists for HCV and advised that this was not necessary, since current techniques for obtaining venous access render this procedure non-exposure prone. In response to an enquiry about testing locum anaesthetists for HBV, UKAP advised that anaesthetists are unlikely to perform EPPs.

Other work during the year included a literature review on the risk of transmission of BBVs in specialties where there is 'regular and predictable risk' of being bitten, which concluded that the risk of transmitting a BBV from a HCW to patient by biting is negligible and that individuals infected with BBVs can therefore train and work as health professionals in environments where they might be bitten.

Introduction

1. In 2004, the Panel made a decision to produce an annual report detailing the achievements of UKAP during the first year following the date when it was devolved to the HPA.

What is the UKAP?

2. In December 1991 the UKAP was set up under the aegis of the Expert Advisory Group on AIDS (EAGA) to consider individual cases of HIV-infected health care workers (HCWs). Although the Panel was originally set up to advise on action regarding HCWs with HIV infection, its remit was extended in 1993 to include other blood borne viruses (BBVs), in particular hepatitis B virus (HBV) and more recently hepatitis C virus (HCV). The Panel is now known as the UK Advisory Panel for Health Care Workers Infected with BBVs.

UKAP's accountability

3. In the past, UKAP was accountable to the Chief Medical Officer through the Department of Health (DH). With effect from 1st April 2003, the UKAP secretariat was transferred from the DH to the Health Protection Agency (HPA), Communicable Disease Surveillance Centre, now known as the HPA Centre for Infections. Policy responsibility remains with the DH and the health departments of Scotland, Wales and Northern Ireland, taking account of expert advice from EAGA and the Advisory Group on Hepatitis (AGH). The HPA is an arms length non-governmental independent body accountable to the Secretary of State for Health.
4. The UKAP, liaising closely with EAGA and AGH, continues to provide operational advice for dealing with HCWs infected with BBVs. UKAP provides advice to Directors of Public Health (DsPH) in all four UK countries. Observers from the DH and the devolved administrations attend Panel meetings.
5. The Panel comprises independent experts in the field of BBVs, a range of clinical specialities, legal and ethics advisers and lay members. Following transfer to the HPA, in July 2003, the Panel agreed a protocol setting out the responsibilities of members (Appendix A). The protocol requires members to draw appropriate boundaries between their work as UKAP members and their professional roles outside the Panel.

Remit of UKAP

6. The remit of UKAP, which extends to all four UK countries, is as follows:
 - i. To establish, and update as necessary, criteria on which local advice on modifying working practices may be based.

- ii. To provide supplementary specialist occupational advice to physicians of health care workers infected with blood-borne viruses, occupational physicians and professional bodies.
- iii. To advise individual health care workers or their advocates on how to obtain guidance on working practices.
- iv. To advise Directors of Public Health (DsPH) on lookback exercises in respect of patients treated by HIV infected or HBeAg positive health care workers. In addition, on the rare occasions when a HCW who is HBsAg positive but e antigen negative; or HCV RNA positive, has been associated with transmission of infection to a patient, the other patients who may have been placed at risk may need to be notified, according to what procedure the infected HCW performed. The UKAP assists DsPH in assessing all situations on an individual basis, and it is recommended that lookbacks do not proceed without the UKAP's agreement.
- v. To keep under review the literature on occupational transmission of blood-borne viruses and revise guidelines as necessary.

Role of UKAP in managing infected health care workers

Method of case reporting, including remodelling of reporting procedure

7. The Panel provides advice as a committee on a case-by-case basis to enquirers. Enquiries, which usually originate from consultants in communicable disease control, consultants in public health medicine, occupational health physicians and Trust medical directors, are made to the Panel through the HPA Secretariat. Rarely, virologists, microbiologists and consultants providing care to the infected HCW may contact the secretariat.
8. Maintaining the confidentiality of infected HCWs is of paramount importance. Those seeking Panel advice are asked not to use personal identifying information. The UKAP Secretariat assigns a case number to each enquiry involving an individual HCW and removes all other information from which their identity could be deduced from Panel papers. The Panel does not give advice to individual HCWs.
9. The transfer of the UKAP Secretariat to the HPA afforded an opportunity to review the way in which the work of the Panel was undertaken. The principles underlying the proposed changes were to enable the Panel to:
 - Provide consistent advice both to protect the public and to deal equitably with local health services and infected HCW

- Provide timely advice with minimal delay at local level
- Be more efficient in dealing with requests for advice, by focussing on significant issues.

10. The process summarised in Appendix C is designed to make transparent the procedures followed by the Panel in reaching its recommendations and helps explain the unavoidable hiatus whilst consultations with the Panel are undertaken.

Method of arriving at a decision

11. The Panel meets on a regular basis to discuss cases where there is no precedent for advice and to endorse advice sent out on its behalf where cases are similar to those referred to UKAP in the past.

12. Where UKAP has advised on a similar case or cases in the past, this is regarded to be a precedent for advice and allows the Secretariat to prepare a response for approval by the Chairman and Deputy Chairman without needing to go through a formal consultation with all the members of the Panel.

13. Where there is no precedent which corresponds with the facts of a newly referred case, the Secretariat consults the Panel for advice either at a Panel meeting or by group e-mail correspondence. Through the group e-mail, Panel members are able to see responses from others, allowing them to debate issues before reaching consensus. If there is a consensus of Panel members' views, the Secretariat drafts an advice letter for the approval of the Chairman and Deputy Chairman. This method of working provides enquirers with definitive timely advice and has also allowed the panel to respond swiftly to urgent enquires. If there is no consensus, or the view is expressed among Panel members that the particular facts of a case merit face-to-face discussion, the case will be discussed at either a regular Panel meeting or one specifically arranged. Additional advice from outside experts is obtained by the Secretariat as necessary either by inviting specialists to address the Panel at a regular meeting, or by correspondence. In addition, where advice is sought on a specific issue, Panel members with the appropriate expertise for the enquiry are consulted between meetings. The Chairman and Deputy Chairman approve all letters of advice before they are sent to enquirers.

14. Once advice has been issued by UKAP, it is the responsibility of the DPH at local level to implement UKAP's recommendations. Even though UKAP has no powers to enforce its recommendations, there is an inherent understanding that enquirers are strongly advised to pay attention to the recommendations and implement them. Local constraints and variances do influence the implementation of the advice.

Health care worker to patient transmissions in the published literature

15. Transmissions of BBVs from HCWs to patients have occurred both in the United Kingdom (UK) and internationally.

Hepatitis B virus transmissions

16. Forty-eight HBV-infected HCWs have been involved in 50 reported outbreaks since 1972 to 2000.¹ These incidents have resulted in the transmission of HBV to ~500 patients.¹ The majority of incidents reported have occurred in the UK and the USA, accounting for 25 and 16 of these outbreaks, respectively.¹ Not all of the HCWs necessarily performed exposure prone procedures (EPPs), for example cases have been reported concerning a respiratory therapist and an acupuncturist. Surgeons were involved in 35 of the incidents, with cardiac and general surgeons each accounting for nine outbreaks.¹ Eight incidents related to obstetric and gynaecologic surgeons, and five involved oral surgeons.¹

HIV transmissions

17. To date, there have been no reported cases of HIV transmission from a HCW to a patient in the UK, despite a number of lookbacks that have taken place. Internationally, eight patients have been documented with HIV acquisition following procedures performed by three infected HCWs. The first documented case occurred in Florida, USA, where an HIV-infected dentist transmitted the virus to six patients. The exact route of transmission in these cases has not been determined.² In France, a patient was found to have acquired HIV following orthopaedic surgery performed by an infected orthopaedic surgeon.³ The surgeon was believed to have become HIV positive following a needlestick injury 12 years earlier. In Spain, an HIV-infected gynaecologist transmitted the virus to a patient during a caesarean section.⁴
18. An unusual case occurred in France, where an HIV-infected nurse transmitted the virus to a patient. The nurse had monitored the patient and performed two subcutaneous injections; however no defined route of transmission has been determined.⁵

Hepatitis C virus transmissions

19. In the period between 1994 and 2003, there have been five incidents of HCV-infected HCWs transmitting the virus to 15 patients in the UK.⁶ All five HCWs were surgeons.
20. Five documented international cases have been described in the literature, resulting in the acquisition of HCV in 13 patients. Between 1988 and 1993, a cardiac surgeon is thought to

have transmitted HCV to five patients in Spain.⁷ A patient acquired HCV following a caesarean section performed by an infected gynaecologist, and an orthopaedic surgeon transmitted HCV to a patient during surgery; both cases occurred in Germany.^{8,9} In the USA, an anaesthesiologist acquired HCV from a patient and subsequently transmitted the virus to another patient.¹⁰ A similar case in Germany describes an anaesthesiology assistant who acquired HCV from a patient, and then went on to transmit HCV to five patients.¹¹

21. Two cases in Spain and Israel have highlighted the issue of substance misuse by HCWs, resulting in transmission of HCV to large numbers of patients. In both instances, the anaesthesiologists were addicted to morphine and would partly inject themselves with the opioid before injecting the patients, resulting in subsequent transmission of the virus.^{12,13}

Risk of transmission of blood borne viruses

22. The overall risk of any of the blood borne viruses being transmitted by an infected health care worker to a patient is very small and has been estimated to be as shown in Table 1 below^{14,15}. The corresponding risk of transmission from patient to health care worker for each virus is also given for the sake of comparison. The UK rates of transmission may appear to be higher than in other countries as a result of the more active approach undertaken to surveillance and the identification of cases.

TABLE 1: Risk of transmission of blood borne viruses, patient to health care worker and health care worker to patient

Infection	Route of transmission	
	Patient to health care worker	Health care worker to patient
Hepatitis B	1 in 3	1 in 420 to 1 in 4,200*
Hepatitis C	1 in 30	1 in 1,750 to 16,000**
HIV	1 in 300	1 in 42,000 to 1 in 420,000*

* Based on risk of transmission from HCW to patient in a single procedure following a single injury incident to the HCW, in a model exercise

** Based on risk to single injury incident in a single EPP with risk of transmission based on the risk of transmitting HCV to a HCW following a needlestick injury, ranging from 2.2% to 9.2%

Historical perspective: evolution of policy on HIV, hepatitis B and hepatitis C in infected health care workers

23. The notification of patients exposed to an infected HCW in the United Kingdom was introduced to meet three very distinct purposes. Firstly, notification exercises are intended to meet the current national policy which requires patients operated on by an infected health care worker to be notified of the risk they may have been exposed to, as far as is practicable. Secondly, they are intended to detect any patients who may have been infected in order to offer them the necessary care and to prevent onward viral transmission. Finally, they are intended to collect data useful in refining current understanding on risk estimates.
24. The policy on the management of HCWs infected with BBVs has evolved over time, guided by emerging evidence on the risk of HCWs transmitting BBVs to their patients. When cases of HIV-infected HCWs were first considered in 1991¹⁶ and again in 1993¹⁷, the Expert Advisory Group on AIDS (EAGA), produced guidance on the management of infected HCWs, initially recommending that patients who have undergone an exposure prone 'invasive' procedure should as far as is practicable be notified. Exposure prone invasive procedures were defined as the surgical entry into tissues, cavities or organs or repair of major traumatic injuries, cardiac catheterisation and angiography, vaginal or caesarean deliveries or other obstetric procedures during which sharp instruments are used; the manipulation, cutting or removal of any oral or perioral tissues including tooth structures, during which bleeding may occur. The term 'exposure prone invasive procedures' was changed to 'exposure prone procedures (EPPs)' and their definition refined to 'those invasive procedures where there is a risk that injury to the worker may result in the exposure of the patient's open tissues to the blood of the worker. These include procedures where the worker's gloved hands may be in contact with sharp instruments, needle tips or sharp tissues (e.g. spicules of bone or teeth) inside a patient's open body cavity, wound or confined anatomical space where the hands or fingertips may not be completely visible at all times'¹⁸. Following a DH commissioned independent review of the risk of transmission from an infected HCW to patients, which concluded that there existed a real but small risk, a subgroup of EPPs was identified. This subgroup was based on information derived from HBV transmission to patients. In this group, the 'higher risk EPPs', the transmission of HIV was more likely to occur, though the risk was still low¹⁹. This higher risk subgroup was relevant only to the pre-test discussion offered to patients in notification exercises about their individual risk. These patients, as well as being told of their exposure, should be encouraged to have an HIV test, whilst all other patients who have had EPPs need to be offered a test. This guidance, following evidence from lookback exercises performed in the UK, has since been revised. The definition of EPPs, though the same, has been further refined into three categories of risk²⁰, lookbacks being recommended only for category 3 EPPs, which are seen to carry the highest risk. As a result of this rationalisation, those specialties that would have been included in lookbacks

before, where only low risk EPPs were done, are now excluded from patient notification exercises. The current guidance is undergoing further review to reflect current understanding.

25. The policy on the management of HBV infected health care workers has also evolved in the light of developments in better laboratory tests and epidemiological findings. Following documented outbreaks of HBV in patients who had been operated on by HBeAg HCWs, in 1993²¹ the DH issued guidelines restricting all HBeAg positive HCWs from performing EPPs. Despite these guidelines, further cases of HBV transmission were reported in HCWs shown to be HBeAg negative. These HCWs were, however, found to have high HBV DNA levels. In June 2000²², further guidelines were issued. Restrictions did not only apply to HBeAg positive HCWs, but also to those who were HBeAg negative but had HBV DNA levels above 10^3 genome equivalents/ml. The practice of HCWs with levels below 10^3 , was not restricted. HCWs whose HBV DNA level was above 10^3 genome equivalents/ml, had to stop performing EPPs. The AGH is currently reviewing the position of HBeAg negative patients who are on medication and whose viral DNA levels are suppressed to below 10^3 following the DH consultation on draft guidance²³. They propose that these HCWs should be allowed to return to EPPs whilst continuing with treatment, with regular monitoring at three monthly intervals.
26. Policy on the management of HCV infected HCWs is contained in the Health Service Circular (HSC) 2002/010: Hepatitis C infected Health Care Workers²⁴. This circular builds on the AGH recommendations published in 1995²⁵, that HCV-infected HCWs associated with transmission of infection to patients should no longer perform EPPs. Following this recommendation, five incidents of transmission to 15 patients were reported. The current guidance is an endeavour to protect patients further. Under these extended guidelines:
- HCWs performing EPPS who are infected with HCV, should have their HCV RNA checked and, if found to be RNA positive, which indicates continued viral replication and thus infectivity, should not be allowed to perform EPPs.
 - HCWs intending to undertake professional training that relies on performing EPPS should be screened for HCV antibodies and, if positive, tested for HCV RNA and restricted from embarking on such training if found to be RNA positive.
 - HCWs following suspected exposure to HCV should seek confidential testing and, if RNA positive, cease performing EPPs.
 - HCWs who following treatment have a sustained virological response maintained for six months after cessation of treatment should be allowed to resume performing EPPS

or training. They should have a further test six months later (one year after treatment) and should be shown still to be HCV RNA negative before resuming EPPs.

- Staff should be provided with information and training on measures to reduce the risk of occupational exposure to HCV.

27. The definition and categorisation of EPPs used in HCV-infected HCW management are adopted from those used in guidance for HIV-infected HCWs. The situation where an infected HCW has been found but there has been no documented case of transmission has not been completely resolved. This has formed part of UKAP's work during 2003/04.

28. The UKAP is pivotal in ensuring the implementation of national policy, continued analysis of information derived from lookbacks and the review of BBV literature in the health care setting. The panel is also vital in influencing national policy, through EAGA and AGH. This report details the activities of the Panel for 2003/04 and underlines the precedents that the Panel have set.

UKAP case load - 2003/2004

29. During the year 1st April 2003 to 31st March 2004, there were three full meetings of the Panel. Members were consulted for their advice by correspondence in connection with 10 cases where the Panel had not previously set a precedent.

30. During the year a total of 33 cases involving infected HCWs were referred to UKAP for advice. One other case involved a HCW infected with hepatitis C, who was subsequently shown by confirmatory testing not to have been HCV positive. Detailed analysis of the cases, including the advice given, appears in Table 2 and Appendix D. UKAP considers referred cases within the framework of EAGA and AGH guidance detailed above.

Table 2: Cases referred to UKAP, 2003/04 regarding the need for patient notification (lookbacks) by virus status, profession and specialty

Virus	Profession	Specialty	Lookbacks (n)¹	
HIV	Nurse	Theatre	2 (6)	
		OBS/GYN	0 (3)	
		Nurse home	0 (1)	
		Radiology	0 (1)	
		Intensive care	0 (1)	
		Renal	0 (1)	
	Dentist	Dentistry	1 (2)	
Total ²	Paramedic	Paramedic	0 (1)	
			3 (16)	
HBV	Surgeon	O&G	0 (1)	
Total ²			0 (1)	
HCV	Nurse	Theatre	0 (2)	
		Surgeon	O&G	2 (4)
		General	0 (2)	
		Urology	1 (1)	
		Specialty NK	0 (1)	
	Dentist	Dentistry	0 (1)	
Total ²			3 (10)	
Overall total			6 (27)	

¹ (N) is the number of cases referred to UKAP by profession and specialty.

² Total number of cases by virus referred to UKAP in 2003/04 that needed a lookback.

24. In the six lookbacks recommended by UKAP during the reporting year, no transmissions from HCW to patient were detected. UKAP received referrals of four more cases on HBV-infected HCWs. Advice was requested on whether the HCW could return to work or whether they should have their practice restricted.

Precedents set by UKAP in 2003/2004

Hepatitis C

25. Immediately preceding this reporting year, the Panel had received enquiries concerning the need for lookbacks in three cases involving HCWs infected with HCV where there was no index case of transmission from the health care worker to a patient. As there was scant available information about the risk of transmission to patients in such a situation, the Panel had advised that in each case, the last 500 patients on whom the HCW had performed category 3 EPPs should be notified of the risk of transmission. Two further similar cases were notified to the Panel during this year and the same advice was given. An analysis of the preliminary results of the five lookbacks indicated that no transmission had occurred from the HCWs to the 1,562 patients for whom there were test results. On the basis of these results, the Panel advised in subsequent cases involving HCV-infected HCWs where there was no index case of transmission that, subject to new information becoming available, there was no need to carry out a patient notification exercise.
26. UKAP received a request for advice on a case involving a health care worker with a documented seroconversion history following a needlestick injury during a procedure on a patient infected with HCV. The Panel advised that patients on whom the HCW had carried out category 3 EPPs should be notified. The Panel based their advice on the evidence that, during the seroconversion phase in HCV infection, the viral load is very high and the risk of transmission is highly likely. The Panel felt that this increased risk of transmission merited patient notification. Further, there is evidence that treatment in the early stages of infection leads to improved viral clearance and prevents progression to chronic disease. The Panel felt that patients should be given the opportunity to seek treatment, should they be found to have been infected by the HCW.

Optometry

27. In response to an enquiry from the General Optical Council concerning the fitting and management of contact lenses, the Panel advised that, as the training and practice of optometry does not require the performance of EPPs, individuals wishing to train or be registered as optometrists do not need to be screened for BBVs.

Volunteer health care workers

28. The Panel received an enquiry from the Chairman of the Tripartite Medical Committee to the Voluntary Aid Societies concerning the applicability of guidance concerning HCWs infected with BBVs to volunteer HCWs infected with HIV. The Panel advised that the important issue was whether or not an infected HCW undertook EPP. If this were to be the case, the guidance in relation to infected HCWs would apply, whether or not they were paid for their work.

Trainee nephrologists

29. The Panel considered an enquiry concerning the need to test trainee doctors specialising in nephrology for HCV. Taking into account expert advice that current techniques for obtaining venous access now enabled the operator's fingers to be visible at all times, the Panel advised that testing was not necessary.

Locum anaesthetists

30. The Panel's advice was sought on the need to test locum anaesthetists for HBV. Expert advice was given that the only procedures currently performed by anaesthetists which would constitute EPPs are the placement of portacaths (very rarely done) and the insertion of chest drains in accident and emergency trauma cases such as in patients with multiple rib fractures (again, very infrequent unless the anaesthetist regularly works as a member of the trauma team). Therefore an anaesthetist is unlikely to perform EPPs and need not be tested for BBVs. However, the onus is on the employer to observe the guidance at all times.

Influence of UKAP work on policy

31. The role of the Panel is mainly operational, in that the main focus of its remit is to advise the health service on individual cases involving HCWs infected with BBVs. However, UKAP is also required "to keep under review the literature on occupational transmission of BBVs and revise guidelines as necessary".
32. In January 2003, the draft guidance, *Health Clearance for Serious Communicable Disease: New Health Care Workers*, was published for consultation. The Panel, in its formal response to the consultation, emphasised the importance of synthesising or integrating all relevant guidance in a way which leaves all HCWs undertaking EPPs in no doubt about their professional duty of care to patients.

33. In the forthcoming year, the Panel will contribute updated examples of its advice for the revised guidance, *HIV Infected Health Care Workers. A Consultation Paper on Management and Notification* (Department of Health, July 2002). UKAP will also have the opportunity to comment on *Hepatitis B Infected Health Care Workers and Oral Antiviral Therapy. Consultation paper on implementing expert advice about a limited relaxation of restrictions on hepatitis B infected health care workers* (Department of Health, July 2004).

Future work for development

Categorisation of exposure prone procedures

34. The local Trust is responsible for assessing the risk of transmission of infection from the HCW to the patient. This information is used by UKAP to advise the DPH, through the incident team, on whether a patient notification is necessary or not. In this exercise, local teams need guidance on how to categorise the procedures performed by the infected HCW. Preliminary work on the categorisation of procedures by UKAP in some specialties has been completed. It is intended to undertake detailed work on the following specialties: emergency and A&E work in trauma situations; neurosurgery; transplantation and tissue retrieval for therapeutic grafts; and midwifery. This work will then be compared with the categorisation of specialties already available to ensure consistency. It is intended to finalise and issue the categorisation during the course of the next year. In addition to the expertise of Panel members, outside specialists are being invited to contribute to this work.

Review of Panel membership

35. Following the crystallisation of UKAP's comprehensive body of work through the updating of Annex A of the HIV guidance and the categorisation of EPPs, it is anticipated that a review of the Panel's membership will be conducted by the HPA in consultation with the EAGA and the AGH.

Summary of outputs

Toolkit

36. Soon after taking over the secretariat of UKAP, the HPA identified the need to disseminate practical information among professionals involved in undertaking patient notification exercises following a HCW infected with a BBV. The Secretariat are developing a 'UKAP lookback toolkit' bringing together examples of good practice and supporting documentation collated from reports of lookbacks undertaken previously. In November 2003, 16 people with

expertise in the field attended a workshop to discuss and inform an early draft of the toolkit. It is hoped that the toolkit will be available on the HPA website during 2005.

Databases

37. The Secretariat has started work on developing a database of cases reported to UKAP since 1st April 2003. This will be confidential for the use of the Secretariat/HPA.

Review of biting literature

38. UKAP was approached for advice from two sources regarding the screening of HCWs in specialties where there is a 'regular and predictable risk' of being bitten. Advice was sought for those working in mental health, speech therapy and with clients with learning disabilities. UKAP had previously advised that mental health nursing and speech therapy should not be classified as occupations that required the performance of EPPs, but that decisions about specific posts should be made on the basis of a local risk assessment. The report of the *ad hoc* expert committee on Health Clearance for Serious Communicable Diseases had categorised psychiatric/ learning difficulty nursing as 'expected to perform EPPs' if biting and scratching were predicted to occur frequently. There was also an enquiry from an occupational health department concerning the eligibility of an HIV infected student nurse for a diploma course in mental health learning disabilities.
39. On review of published literature on the risk of onward transmission from HCWs infected with BBVs to patients, it was found that there was a paucity of information. In follow up studies of incidents involving infected HCWs working with patients known to be 'regular and predictable' biters, there had been no documented cases of transmission from the HCW to the biter. However, where biters were infected, there were documented cases of seroconversion in their victims and the risk of infection may be increased in the presence of:
- Blood in the oral cavity; risk proportionate to the volume of blood
 - Broken skin due to the bite
 - Bite associated with previous injury i.e. non-intact skin
 - Biter deficient in anti-HIV salivary elements (IgA deficient).
40. Based on the available information, it could only be tentatively concluded that even though there is a theoretical risk of transmission of a BBV from an infected HCW to a biting patient, the risk remains negligible. The lack of information may suggest that this has not been perceived to be a problem to date, rather than that there is an absence of risk.

41. The Panel therefore advised in these three cases that, despite the theoretical risk, since there was no documented case of transmission from an infected HCW to a biting patient, they would not recommend screening for HCWs working in environments where there is a 'regular and predictable risk' of being bitten. Student nurses working in environments in which biting may occur should not be prevented from undertaking their training because they are HIV positive. The area will be kept under review and updated in the light of any new evidence that subsequently emerges suggesting there is a risk. However, UKAP again stressed the importance of biting incidents being reported and risk assessments conducted in accordance with NHS procedures. Biting poses a much greater risk to HCWs than to patients; therefore employers should take measures to prevent injury to staff, and HCWs bitten by patients should seek advice and treatment, in the same way as after a needlestick injury.

Appendix A – Protocol for Panel members

Collective responsibility

Panel sessions are based on a consensus of different views from Panel members. Once a consensus has been reached, this becomes a recommendation and constitutes the Panel's advice. Members may clearly express their individual views at Panel meetings and endeavour to achieve a particular decision or course of action. However, once a decision has been formally reached by the Panel, members accept that this decision becomes Panel advice.

It is the responsibility of every Panel member to seek to uphold Panel decisions and to endeavour to rectify any errors that come to their knowledge as a result of further advances in research, revealing new evidence contrary to the standing decision.

Where the involvement of an individual member in a case referred to the Panel for advice could give rise to a conflict of interest, the member should declare that involvement and, if the Chairman considers it appropriate, leave the meeting during the discussion of that item.

Public statements

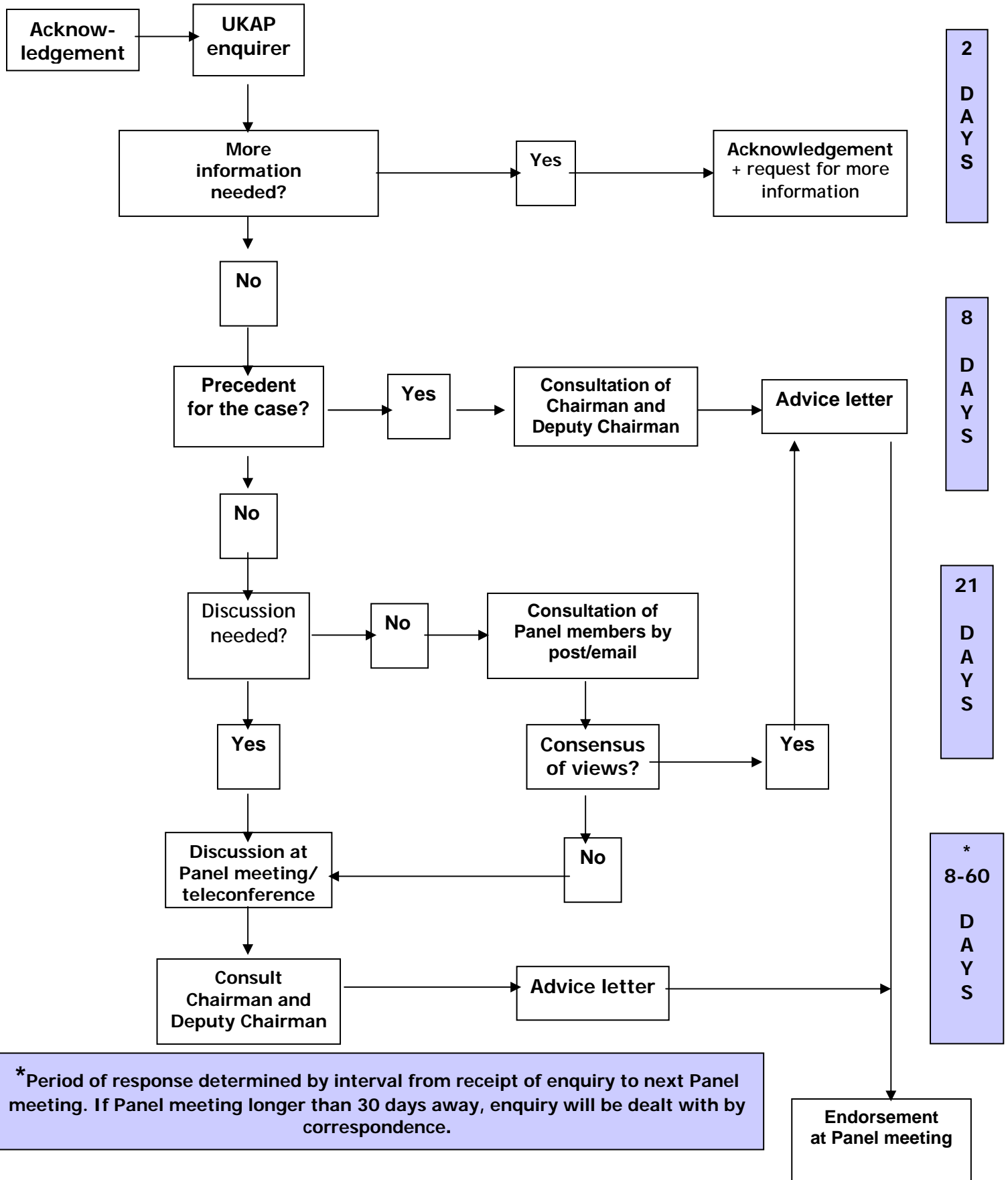
All statements on behalf of the Panel should be made by the Chairman or, in his/her absence, the Deputy Chairman. Where this is not possible, members should seek Panel ratification of their statement through the Secretariat.

On occasion, Panel members may be asked their opinion on matters related to Panel business. In these circumstances Panel members should:

- Make clear the capacity in which they are speaking
- Refer the enquirer to relevant guidance, if available
- In the case of media enquiries, always refer these to the Secretariat or the Health Protection Agency press office.

Where a member is probed to give an opinion on Panel issues, members are advised to make it clear that this constitutes their opinion and is not a Panel recommendation and should not be taken to be Panel advice. Ideally this caveat should be put in writing.

Appendix B - Procedure for dealing with an enquiry to UKAP



Appendix C – UKAP enquiry *pro forma*

Diagnosis		
1	Infection diagnosed	HIV/hepatitis B/hepatitis C
2	How did the infection come to be known about? eg screening, illness	
Transmission		
3	Is there an index case of transmission from health care worker to patient? If yes, please give details, including genotype	Yes/no
Test results		
4	When did the health care worker acquire the infection?	
5	Dates and results, including numerical levels and genotype (if known), of all relevant tests undertaken	
6	Date of last negative test for HIV/hepatitis B/hepatitis C?	
7	Is stored serum available from that test? Has it been re-tested? If yes, please give results, including numerical levels	Yes/no
Occupational information		
8	In what specialty/ies has the health care worker been employed?	
9	Has the health care worker undertaken exposure prone procedures? If yes, please list them on a separate sheet, giving details of the health care worker's role	Yes/no
10	Has the health care worker ceased undertaking exposure prone procedures? If yes, on which date? If no, please give reasons	Yes/no
11	Have any needlestick injuries been reported? If yes, please give details	Yes/no

12	Has the health care worker complied with universal infection control procedures? If no, please give details	Yes/no
13	Has the health care worker undertaken appropriate continuous professional development?	
Health care worker's health status		
14	Is there any evidence of infection with other blood borne viruses? If yes, please give details	Yes/no
15	Is there evidence of any physical, neurological or psychological impairment? If yes, please give details	Yes/no
16	Is there evidence of any relevant medical condition eg eczema? If yes, please give details	Yes/no
17	Is the health care worker receiving treatment for the infection?	Yes/no
18	Date form completed	
	Signature	
	Job Title	

Please enclose this *pro forma* together with a covering letter stating your enquiry to UKAP and send to:

Dr Fortune Ncube, Medical Secretary
 United Kingdom Advisory Panel
 Health Protection Agency, Communicable Disease Surveillance Centre
 61 Colindale Avenue, London NW9 5EQ

Tel: 020 8327 6074
 Fax: 020 8200 7868
 E-mail: helen.janecek@hpa.org.uk

Appendix D - Analysis of UKAP cases 1 April 2003 to 31 March 2004

Case	Specialty	Advice given	Response time in working days
HIV			
03/10	Nurse - nursing home	No patient notification exercise necessary	51
03/13	Nurse – radiology	Patient notification exercise necessary only if nurse involved in exposure prone procedures	17
03/18	Dentist	Patient notification exercise going back 10 years in first instance recommended because of AIDS defining illness	22
03/20	Theatre nurse	Patient notification exercise recommended in respect of one category 3 exposure prone procedure – hemicolectomy - where nurse acted as first assistant	32
03/21	Theatre nurse	No patient notification exercise necessary	50
03/22	Theatre nurse	No patient notification exercise necessary	50
03/23	Paramedic	No patient notification exercise necessary	43
03/25	Midwife	No patient notification exercise necessary	24
03/29	Theatre nurse	No patient notification exercise necessary	9
03/30	Theatre nurse	Patient notification exercise recommended in relation to category 3 exposure prone procedures where nurse acted as first assistant	60
03/31	Midwife	No patient notification exercise necessary	60
03/32	Dentist	No patient notification exercise necessary because dentist did not perform category 3 exposure prone procedures	32
04/03	Intensive care nurse	No patient notification exercise necessary	6
04/04	Theatre nurse	No patient notification exercise necessary	23
04/05	Midwife	No patient notification exercise necessary	13
04/07	Renal nurse	No patient notification exercise necessary	6
Hepatitis B			
03/14	A&E doctor	Response that the Panel can give advice about aspects of cases in principle, but cannot endorse local risk assessments	40
03/15	Paediatrician - SCBU	No need for the HCW's practice to be restricted	26
03/26	O&G	No patient notification exercise necessary	79
03/28	GP	The GP could undertake a range of minor surgical procedures because they did were not constitute exposure prone procedures	31

04/06	Student midwife	The student could continue their course, including the clinical aspects, without having their practice restricted since the course did not require the performance of exposure prone procedures	14
Hepatitis C			
03/08	Retired O&G	Patient notification exercise recommended	33
03/09	O&G	Patient notification exercise recommended	30
03/11	Retired general surgeon	No patient notification exercise necessary on basis of five lookbacks undertaken on Panel advice	67
03/12	O&G – false positive	No advice necessary	
03/16	Surgeon – speciality not stated	No patient notification exercise necessary on basis of five lookbacks undertaken on Panel Advice	7
03/17	Dentist	No patient notification exercise necessary on basis of five lookbacks undertaken on Panel advice	29
03/19	Theatre scrub nurse	No patient notification exercise necessary on basis of five lookbacks undertaken on Panel advice	36
03/24	O&G	No patient notification exercise necessary on basis of five lookbacks undertaken on Panel advice	22
03/27	Trainee surgeon ²⁶	Patient notification exercise recommended in respect of category 3 procedures because UKAP had been consulted during early stages of infection when patients could benefit from knowing their diagnosis early treatment if found to be infected	70
03/33	General surgeon	No patient notification exercise necessary	16
03/34	O&G	Advice concerning the timing of the health care worker's return to work within the framework of the guidance	11
04/01	Theatre nurse	No patient notification exercise necessary and advice concerning	37
04/02	Specialist registrar	Advice concerning the timing of the health care worker's return to work within the framework of the guidance	37

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