



# CDR WEEKLY

Current Issue: Volume 14 Number 40 Published on: 30 September 2004

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-  [Outbreak of hepatitis A in men who have sex with men in south east London](#)
-  [Bat infected with a rabies-like virus identified in the south-east of England](#)
-  [Health Protection Agency \(HPA\) weekly influenza report – winter 2004/05](#)
-  [Possible human-to-human transmission of avian influenza \(H5N1\) in Thailand](#)
-  [Updated \*HIV and Infant Feeding\* guidance published](#)




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## News

Last updated: **30 September 2004**Next update due: **7 October 2004**

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### Outbreak of Hepatitis A in men who have sex with men in south east London.

An outbreak of hepatitis A has been identified in men who have sex with men (MSM) in south east London. Nine cases have been reported with onset dates between mid-August and mid-September 2004. Five of the men affected attended a gay public house in Southwark, in the two months before they became unwell. A sixth is a secondary case with a history of household contact with one of the other cases.

The public house is, in effect, a public sex venue (PSV) where sexual activities occur which carry a high risk of transmission of hepatitis A. The local health protection unit is working with a number of agencies to advise gay men locally of the risk, and how this might be minimised, including advice on immunisation. Increased outreach work at this and other similar PSVs will also be considered, as well as how hygiene at the PSV implicated might be improved.

Of the eight cases where vaccination status was known, none had been vaccinated for hepatitis A. Following a series of outbreaks of Hepatitis A among MSM, including a large outbreak in London in 1997 (1), recommendations of Hepatitis vaccination were extended to include MSM whose sexual behaviour is likely to put them at risk (2,3). The provision of hepatitis A vaccination for MSM at Genitourinary Medicine clinics and outreach services appears to have been successful in curtailing the 1997 outbreak. The recent south east London outbreak may indicate the need to increase hepatitis A vaccination offered to MSM through these services in order to prevent a more wide scale problem.

For further information please contact Donal O'Sullivan, Consultant in Communicable Disease Control, SE London Health Protection Unit 1, Lower Marsh, London SE1 7NT (tel: 020 7716 7030 Fax: 020 7633 9734).

### References

1. Bell A, Hansell A, Davison KL, Young Y, Gilson R, Macdonald N, *et al*. An outbreak of hepatitis A among young men associated with having sex in public venues. *Commun Dis Public Health* 2001; 4(3):163-70.
2. Crowcroft NS, Walsh B, Davison KL, Gungabissoon U. PHLS Advisory Committee on Vaccination and Immunisation. Guidelines for the control of hepatitis A virus infection. *Commun Dis Public Health*. 2001; 4(3): 213-27. Available at: <<http://www.hpa.org.uk/cdph/issues/CDPHV04/no3/HepAguidelines0901.pdf>>.
3. Department of Health. Immunisation Against Infectious Disease. Hepatitis A (chapter 17). London: Department of Health. Available at: <<http://www.dh.gov.uk/assetRoot/04/07/30/09/04073009.pdf>>.

## Bat infected with a rabies-like virus identified in the south-east of England



A Daubenton's bat (*Myotis daubentonii*) infected with European Bat Lyssavirus type-2 (EBLV-2) has been reported in the United Kingdom (UK). The bat was initially noticed by a member of the public on a road in Staines, Surrey, on 17 September 2004. The bat was on the ground and moved off the road to a path where it might be safer. It was observed to remain grounded near the path until 21 September when help was sought from bat conservation group volunteers who took care of the bat until it died on 23 September. The bat was sent to the Veterinary Laboratories Agency (VLA), Weybridge, as part of the routine passive surveillance system of UK bats. The VLA reported on 25 September that it was infected on the basis of confirmatory fluorescent antibody tests and subsequent PCR. The individuals who were in contact with the bats are receiving appropriate medical treatment with rabies immunisation <[http://www.hpa.org.uk/infections/topics\\_az/rabies/menu.htm](http://www.hpa.org.uk/infections/topics_az/rabies/menu.htm)>. A press statement was issued jointly by the Health Protection Agency (HPA) and the Department for Environment Food and Rural Affairs (Defra) on 28 September to raise awareness of the incident in case any unidentified people or animals might have been in contact with the bat. <[http://www.hpa.org.uk/hpa/news/articles/press\\_releases/2004/040928\\_bat\\_rabies.htm](http://www.hpa.org.uk/hpa/news/articles/press_releases/2004/040928_bat_rabies.htm)>.

### Previous incidents

This is the third bat from which EBLV-2 has been isolated in the UK. The previous cases of infected bats were in 1996 in Newhaven (1, 2) and 2002 in Lancashire (3,4). All three of the infected bats have been Daubenton's bats. Further information about the species of bats in the UK is available from the Bat Conservation Trust <<http://www.bats.org.uk/>>.

In addition 2002, a Scottish naturalist and licensed bat handler died from EBLV-2 infection thought to have been acquired from one of the many bats he had handled (5, 6). This case was the second human infection with EBLV-2 to have been identified in the world (5). Two deaths from a related strain, EBLV-1, have also been recorded (5).

Surveys carried out of captured wild bats in Scotland and the North and South of England have found antibodies in Daubenton's bats, but no virus has been isolated (7, 8). This suggests that some species of bat may be adapted to the virus and recover from infection and become non-infectious.

### Public health implications

This recent finding re-enforces the advice that has been issued since 2002. People are not at risk unless they have very direct exposure to bats. The virus has only been isolated from a species that does not tend to live near or in human habitations. Pipistrelle bats, one of the more common species, often roost in houses, but the virus has never been isolated from this species in the UK. Anyone who finds a grounded bat should not handle the bat but should seek help from a local bat conservation group. Anyone who is bitten, scratched, or has other direct contact such as exposure of breaks in the skin or mucosa to bat neural tissue, is advised to wash the affected area with soap and water immediately and seek urgent medical advice. Post-exposure vaccination is recommended. Further information is available on the HPA website at: <[http://www.hpa.org.uk/infections/topics\\_az/rabies/menu.htm](http://www.hpa.org.uk/infections/topics_az/rabies/menu.htm)>.

The challenge for professionals involved in prevention is to raise awareness in the general public of the small risk to human health from UK bats without creating fear of bats, which are an important part of our natural heritage and protected by law. Awareness also needs to be raised among health professionals.

The risk of infection with EBLV to the general public and to domestic animals, including cats, is thought to be minimal. All bats are protected species by law and should not be disturbed. Anyone who finds a bat should avoid handling it and seek help from the Bat Conservation Trust (helpline number: 0845 130 0228).

### References

1. CDSC. Bat brings rabies to Britain. *Commun Dis Rep CDR Wkly* 1996 [cited 29 September]; **1996** **6**(24): News. Available at <<http://www.hpa.org.uk/cdr/CDR96/cdr2496.pdf>>..
2. Whitby JE, Heaton PR, Black EM, Wooldridge M, McElhinney LM, Johnstone P. First isolation of a rabies-related virus from a Daubenton's bat in the United Kingdom. *The Veterinary Record*; **147**: 385-8.
3. PHLS. A case of bat rabies in Lancashire. *Commun Dis Rep CDR Wkly* [serial online] 2003 [cited 29 September 2004]; **12**(40): News. Available at <<http://www.hpa.org.uk/cdr/PDFfiles/2002/cdr4002.pdf>>.
4. McElhinney LM, Hutson AM, Fooks AR. Isolation of a European bat lyssavirus type 2 from a Daubenton's bat in the United Kingdom. *The Veterinary Record*; **152**: 383-7.
5. Rabies-like infection in Scotland. *Eurosurveillance Weekly* [serial online] 2002 [cited 29 September 2004]; **6**(50). Available at <<http://www.eurosurveillance.org/ew/2002/021212.asp#4>>.
6. Fooks AR, McElhinney LM, Finnegan CJ, Mansfield K, Johnson N, Brookes, *et al*. Case report: Isolation of a European bat lyssavirus type-2a from a Fatal Human case of Rabies Encephalitis. *J Med Virol*; **71**(2), 281-9.
7. Fooks AR, Brookes SM, Healy D, Smith GC, Aegerter J, Harris SL, *et al*. Detection of antibodies to EBLV-2 in Daubenton's bats in the UK. *The Veterinary Record*; **154**: 245-6.
8. EBLV-2 seroprevalence study in bats in the United Kingdom. *Eurosurveillance Weekly* [serial online] 2004 [cited 29 September 2004]; **8**(13). Available at <<http://www.eurosurveillance.org/ew/2004/040325.asp#2>>.



## Health Protection Agency (HPA) weekly influenza report – winter 2004/05

Reporting of influenza surveillance information for the United Kingdom (UK) will begin in week 40 for the 2004/05 season through the weekly influenza report. The report will be published on the HPA website at [http://www.hpa.org.uk/infections/topics\\_az/influenza/flu.htm](http://www.hpa.org.uk/infections/topics_az/influenza/flu.htm).

Initially the report will be produced every two weeks starting Wednesday 29 September, and will become weekly when activity levels begin to increase. The report provides a timely summary, along with comments and interpretation, of clinical and virological indicators of influenza activity in the United Kingdom. Reports of influenza activity in Europe and other parts of the world will also be included. Graphs and maps on the influenza web page will also be updated on a weekly basis to provide more comprehensive information on influenza activity. Graphs for the 2004/05 season are available at [http://www.hpa.org.uk/infections/topics\\_az/influenza/graphmenu0405.htm](http://www.hpa.org.uk/infections/topics_az/influenza/graphmenu0405.htm).

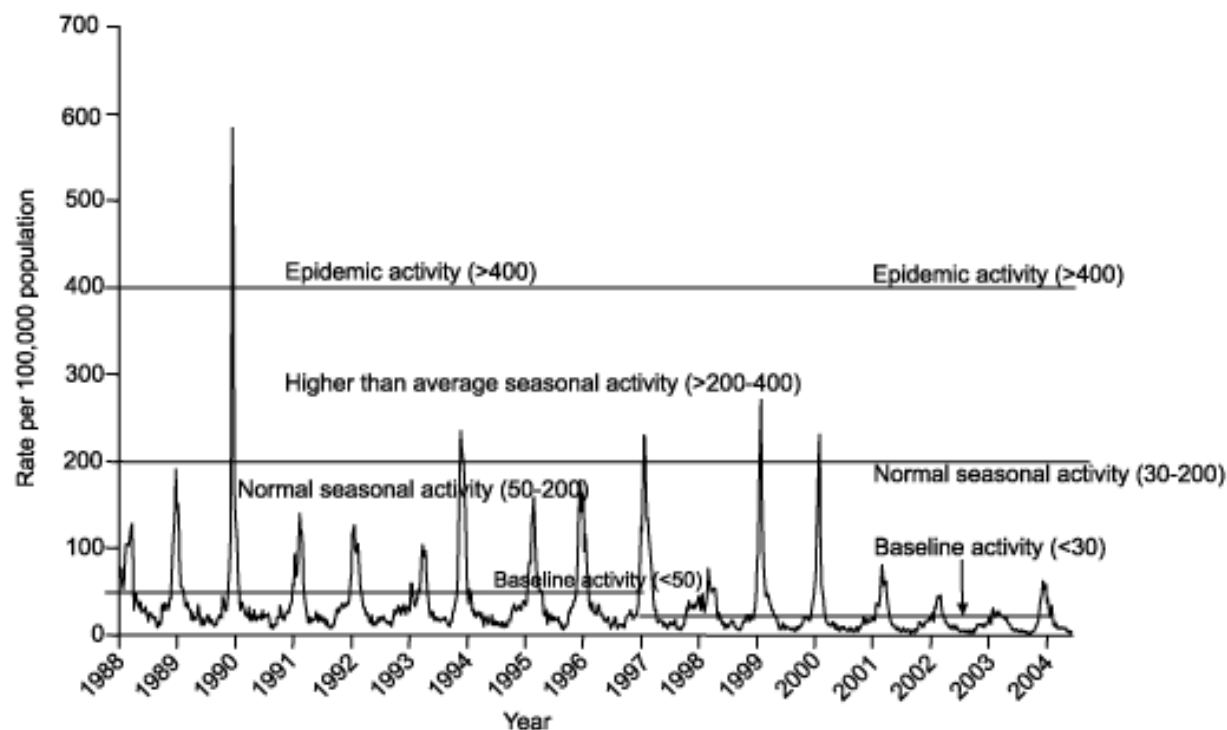
### Change in thresholds used to describe levels of influenza activity

Thresholds, and a standard set of definitions, are used to provide a clear and consistent message to the general public and media about the level of influenza virus circulation, and provide an indication to general practitioners (GPs) when sufficient virus is circulating in the community to warrant the use of antiviral drugs.

In light of data analysis undertaken by the HPA (1), the numerical thresholds and their descriptions have been revised for the forthcoming 2004/05 influenza season. The previous thresholds were no longer considered appropriate for the levels of influenza activity recently observed in England, given a secular decline in GP consultation rates for influenza like illness (ILI) over recent years.

The new threshold values are shown for recent influenza seasons (figure). Using the new criteria, levels of activity in three years (1996/97, 1998/99 and 1999/2000) would have been classified as 'epidemic'. Data analysis for these years demonstrated that there was a similar impact with respect to mortality and laboratory reports of influenza virus infection as the 'epidemic' season of 1989/90. The table below shows the new and old threshold values for comparison.

**Figure RCGP weekly consultation rate for influenza-like illness (ILI), England, showing revised thresholds for describing levels of influenza activity\***



\*Revised thresholds for forthcoming influenza season (2004/05) shown for previous seasons for illustrative purposes. There has been a secular decline in GP consultation rates for influenza-like illness over recent years (1).

**Table New and old threshold values for comparison**

Threshold description	GP consultation rate (per 100, 000)	
	New thresholds	Old thresholds
Baseline activity	0-30	0-50
Normal seasonal activity	30-200	50-200
Higher than average seasonal activity	–	200-400
Epidemic activity	>200	>400

**Influenza vaccination uptake monitoring**

As in previous years, the HPA will be monitoring uptake of influenza vaccination on behalf of the Department of Health (DH). For the first time, reporting will be through the web-based vaccine tracking programme sponsored by the DH. Further information on the influenza immunisation campaign for 2004/05 was published in CDR Weekly, volume 14 number 34, available at: <http://www.hpa.org.uk/cdr/PDFfiles/2004/cdr3404.pdf>.

**Influenza activity in the southern hemisphere**

There has been an increase in levels of influenza activity reported in the southern hemisphere during August and September. Australia reported high levels of influenza like illness (ILI) with localised outbreaks in New South Wales during August, which have subsequently declined. New Zealand continues to report higher than expected levels of activity in the northern and southern islands. Virological testing of samples in New Zealand indicate that influenza A/Fujian/411/02 (H3N2)-like virus is circulating throughout the country; this was the predominant circulating strain in the United Kingdom last winter (2003/04). Fiji has also reported an increased incidence of ILI since August; preliminary analysis suggests influenza A as the causative agent.

Samples received by the World Health Organization (WHO) Melbourne Influenza Reference Laboratory from south east Asia and Oceania indicate that influenza A (H3), influenza A (H1), and influenza B are all currently circulating in this region.

**References**

1. Goddard NL, Kyncl J, Watson JM. 2003. Appropriateness of thresholds currently used to describe influenza activity in England. *Commun Dis Public Health*; 6(3): 238-45.

**Possible human-to-human transmission of avian influenza (H5N1) in Thailand**

On 28 September 2004, the World Health Organization (WHO) issued a statement confirming two new human cases of H5N1 infection in Thailand. The two cases, a woman aged 26 years who has died, and her sister, aged 32 years who is hospitalised, are part of a family cluster that is being investigated to determine whether human-to-human transmission has occurred. The current assessment from the WHO is that non-sustained, inefficient, dead-end human-to-human transmission might have occurred, but that this is not unexpected from an avian influenza virus.

Further information is available from WHO website at: [http://www.who.int/csr/disease/avian\\_influenza/en/](http://www.who.int/csr/disease/avian_influenza/en/).

Viruses isolated from the cases will undergo further genetic and antigenic testing to determine whether the virus has acquired genes to allow improved transmissibility among humans. There is no evidence so far of wider transmission within the community, but surveillance for additional cases has been intensified in the northern Province of Kamphaeng Phet, and within hospitals nationwide.

Outbreaks of avian influenza (H5N1) in poultry continue to be reported in Cambodia, China, Malaysia, Thailand, and Viet Nam. On the 27 September, the United Nations Food and Agriculture Organisation (FAO) and the World Organisation for Animal Health (OIE) issued a statement describing the avian influenza epidemic as a 'crisis of global importance'. The two organisations warned that it is unlikely that the virus will be eradicated in the near future, and that major investment is required to strengthen veterinary services, in particular surveillance, early warning, detection, reporting, and response. Further information is available the FAO website at: [http://www.fao.org/ag/againfo/subjects/en/health/diseases-cards/special\\_avian.html](http://www.fao.org/ag/againfo/subjects/en/health/diseases-cards/special_avian.html).



### **Updated *HIV and Infant Feeding* guidance published**

The Department of Health (DH) has recently published an updated version of *HIV and infant feeding*, guidance from the UK Chief Medical Officers'

Expert Advisory Group on AIDS (EAGA). This updated guidance reaffirms existing advice, following a review of the research evidence. Directed to health professionals who advise HIV-infected pregnant women and new mothers, it recommends avoidance of breastfeeding as part of a programme of interventions to reduce the risk of mother to child HIV transmission.

The guidance aims to help health care professionals provide the necessary information, advice, and support to women who are infected with human immunodeficiency virus (HIV) to help them make personal, well-informed decisions about infant feeding. It is not intended to apply to the situation in less developed countries, where the risks associated with infant formula milk feeding are much higher.

The updated guidance document is available on the DH website at:  
<<http://www.dh.gov.uk/assetRoot/04/08/98/93/04089893.pdf>>.

## HIV / Sexually Transmitted Infections (STIs)

Last updated: **30 September 2004**  
Next update due: **25 November 2004**

### [The Hepatitis B3 study: Hepatitis B vaccine uptake in men who have sex with men \(MSM\) attending a GUM clinic in England as first time attendees](#)

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#### **The hep B3 study: hepatitis B vaccine uptake in men who have sex with men (MSM) attending a GUM clinic in England as first time attendees**

Chronic hepatitis B infection has serious long-term sequelae such as fulminant liver failure, liver disease, and hepatocellular carcinoma, but has been a vaccine preventable disease since 1982. There are three vaccine schedules: normal (0, 1, 6 months), rapid (0, 1, 2 months), and super-accelerated (0, 7, 21 days). The shorter schedules are useful for those who need to receive a quick vaccination such as travellers to high endemic countries and some high risk, low compliant groups such as injecting drug users.

The Department of Health (DH) recommends that in England where hepatitis B prevalence is low, high-risk groups such as commercial sex workers, intravenous drug users, and men who have sex with men (MSM) should receive hepatitis B vaccination. Laboratory data for 2003 reports that 17% of new infections (with an identified risk) were in MSM (1), and research conducted in genitourinary medicine clinic attendees has found infection prevalence to be much higher for MSM (38.7%) than for heterosexual men and women, 5.9% and 3.5% respectively (2).

As part of the DH's National Strategy for Sexual Health and HIV, hepatitis B vaccine should be offered to all MSM on first attendance at a genitourinary medicine (GUM) clinic in England from 2003 (3). An investment of £1m was made by the DH with which to buy and distribute extra vaccine. The Infectious Disease Strategy (4) specified the following standards:

- Expected uptake of the first dose vaccine in those not previously immunised should reach 80% by the end of 2003;
- Expected uptake of the three doses of vaccine in those not previously immunised, within one of the recommended regimes, to reach 50% by the end of 2004 and 70% by the end of 2006

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#### References

1. HPA. Laboratory reports of acute hepatitis B infection In England and Wales: 2003. Commun Dis CDR Wkly [serial online] 2004 [cited 21 September 2004]; 14(35): Immunisation. Available at <<http://www.hpa.org.uk/cdr/PDFfiles/2004/cdr3504.pdf>>.
2. Gilson RJC, de Ruiter A, Waite J, Ross E, Loveday C, Howell D, et al. Hepatitis B virus infection in patients attending a genitourinary medicine clinic: risk factors and vaccine coverage. Sex Transm Inf. 1998; 74:110-115.
3. Department of Health. *The National strategy for sexual health and HIV implementation action plan*. London: Department of Health, 2002.
4. Department of Health. *Infectious Disease Strategy – Getting ahead of the curve: Action Plan*. London: Department of Health, 2002

# The hepB3 study: hepatitis B vaccine uptake in men who have sex with men (MSM) attending a GUM clinic in England as first time attendees

## Introduction

Chronic hepatitis B infection has serious long-term sequelae such as fulminant liver failure, liver disease, and hepatocellular carcinoma, but has been a vaccine preventable disease since 1982. There are three vaccine schedules: normal (0, 1, 6 months), rapid (0, 1, 2 months), and super-accelerated (0, 7, 21 days). The shorter schedules are useful for those who need to receive a quick vaccination such as travellers to countries with high endemicity and some high risk, low compliant groups such as injecting drug users.

The Department of Health (DH) recommends that in England, where hepatitis B prevalence is low, high-risk groups such as commercial sex workers, intravenous drug users, and men who have sex with men (MSM) should receive hepatitis B vaccination. Laboratory data for 2003 shows that 17% of new infections (with an identified risk) were in MSM (1), and research conducted in genitourinary medicine clinic attendees has found infection prevalence to be much higher for MSM (38.7%) than for heterosexual men and women, 5.9% and 3.5% respectively (2).

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## Methods

Although the KC60\* statistical return collects data specifically for the administration of the first dose, all

**\*Genitourinary Medicine (STI) Clinic Returns - KC60 surveillance:** the mainstay of routine sexually transmitted infections (STI) surveillance, the KC60 returns are statutory quarterly statistical returns from all GUM clinics in England, Wales, and Northern Ireland made to the Health Protection Agency's Communicable Disease Surveillance Centre (CDSC), which is undertaken for the Department of Health. The data include all conditions seen in these settings. Data on gender, age-group, and sexuality (for some conditions) are collected.

$$\text{Coverage rate at dose 1} = \frac{\text{Patients vaccinated with dose 1}}{\text{Susceptible patients}}$$

subsequent and booster doses are coded using a general code (D2B) for other conditions requiring treatment. In addition, reasons for non-vaccination are not collected. The HepB3 study was implemented at the end of 2002 to monitor the uptake of hepatitis B vaccine among MSM attending GUM clinics as first time attendees. The HB1 form collects data on doses given and allows the differentiation of susceptible and non-susceptible patients. From these data a coverage rate at dose one and three, and an adherence rate to vaccination at dose three are derived<sup>†</sup>.

## Results

In 2003, 183 (89%) of GUM clinics in England participated in the study. The London region had the highest proportion of non-returning clinics, approximately one third (11/34). In both the North East (10 clinics) and Yorkshire and Humberside (20 clinics) regions, all clinics participated. Of those clinics participating, 77% returned data for each quarter of 2003 (140/183). A statistical comparison of the proportion of susceptible patients and coverage rates across regions relies on a continuation of high levels of clinic participation.

Participating clinics reported 8786 MSM first-time attendees during 2003, with 2604 attending in quarter one and 1880 in quarter four (figure 1). This apparent reduction was more pronounced in some regions and could reflect data return fatigue or a true decline in first time attendances. It may be possible to further verify this by comparison of the HepB study figures with those reported through the KC60 aggregate returns, which, since the beginning of 2003, show total numbers of first time attendances by sex and sexual orientation.

The study recorded that in 2003, 5598 first doses of hepatitis B vaccine were administered to MSM in a GUM clinic setting. The coverage rate for susceptible patients was 85% with a range from 78% in the South West region, to 88% in the South East and Yorkshire and Humberside (figure 2). Overall coverage increased

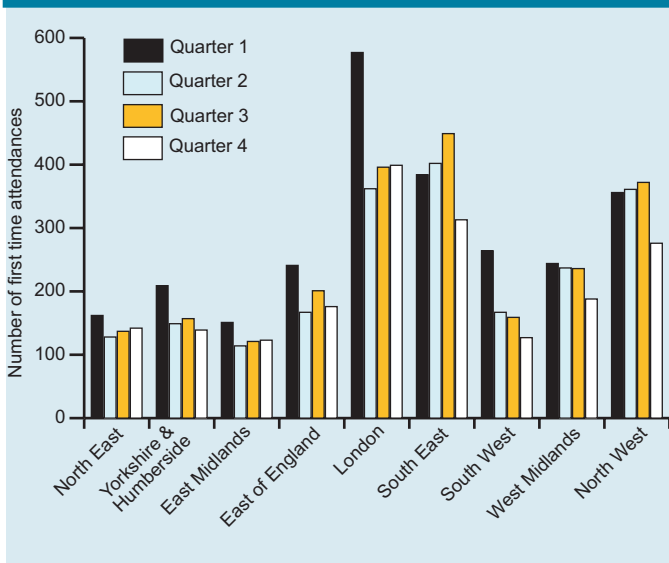
$$\text{Coverage rate at dose 3} = \frac{\text{Patients vaccinated with dose 3}}{\text{Susceptible patients} - \text{patients who tested positive for immunity}}$$

$$\text{Adherence at dose 3} = \frac{\text{Patients vaccinated with dose 3}}{(\text{Patients vaccinated with dose 1} + \text{patients partially vaccinated}) - \text{positive for immunity}}$$

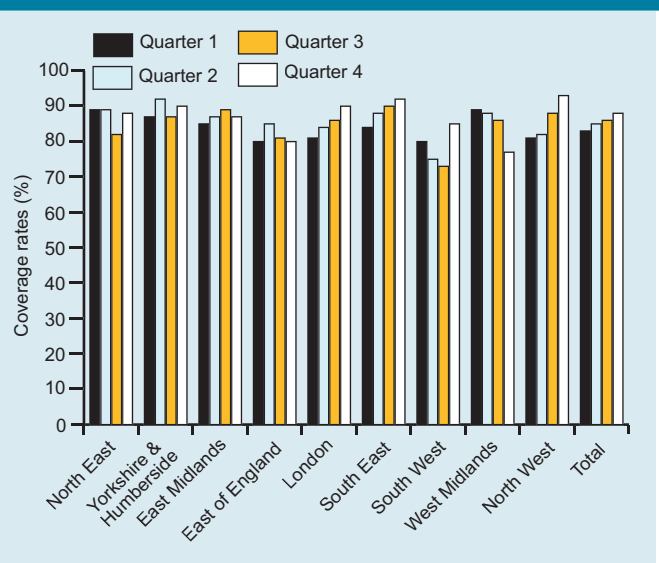
<sup>†</sup>Susceptible at dose one refers to all patients who were not already immune, fully or partially vaccinated elsewhere. At dose three, any patients deemed susceptible at dose one, but who went on to show immunity via blood are removed from the susceptible pool. Partially vaccinated patients are included as susceptible at dose three. It is assumed that partial vaccination refers to two or less doses.

**The hepB3 study: hepatitis B vaccine uptake in men who have sex with men (MSM) attending a GUM clinic in England as first time attendees**

**Figure 1** Number of first attendances by MSM by region and quarter: 2003



**Figure 2** Hepatitis B dose one coverage rates by region and quarter: 2003



steadily for each quarter of 2003.

Among attending MSM who were not vaccinated, 1939 (61%) had already been fully vaccinated elsewhere or were immune to hepatitis B infection, (likely due in some cases to past infection). The London region had the highest proportion of fully vaccinated/immune patients (34%) and North East and North West regions had the lowest proportion (16%). A higher proportion of patients in London already previously fully vaccinated/immune could reflect initiatives to vaccinate MSM prior to the introduction of the hepB3 study.

Only 7% of susceptible patients refused the first dose of vaccine, which suggests that if offered, most patients within this group will accept vaccination. Indeed 41 (8%) patients who were not vaccinated stated a preference to access primary care or another GUM clinic for vaccination.

Of the remaining 486 patients, not offered (21%), failing to re-attend (16%), and waiting for blood serology (15%) were the most common reasons for non-vaccination\* (table 1).

The coverage rate at dose three was 39% with a range from 31% in the North West and South East regions to 62% in the North East (figure 3). Forty-six per cent of patients who received dose one or who were partially vaccinated at first clinic attendance, went on to complete the full three dose course (2588/5669). Adherence rates range substantially from 35% in the South East to 71% in the North East (figure 4).

It is possible that recall methods and the volume of first time attendees may impact on rates of adherence at the clinic level. Regions in which fewer first time attendees were reported appear to have slightly higher adherence rates.

**Discussion**

A high coverage rate at dose one indicates that most susceptible patients are being offered and are receiving hepatitis B vaccine at their first visit. In a survey

carried out among participating clinics in 2003, 84% of clinics stated that they vaccinated patients prior to receiving blood test results for immunity<sup>†</sup>. This eliminates the potential for non-return. Only 84 patients did not receive dose one due to failure to re-attend, less than 2% of all susceptible patients.

Delays in patients returning for their third dose and/or in clinics reporting data are likely to contribute to, and may account for, in part, the apparent decrease in coverage for the last two quarters of 2003. Lower coverage at dose three may also be due to loss to follow-up, and completion of the course at a different clinic from the one where it began. Movement of patients between clinics cannot be monitored with the HepB3 data system, as patient identifiers are not collected, although the proportion of new attending patients who had already been partially vaccinated elsewhere was only 3%.

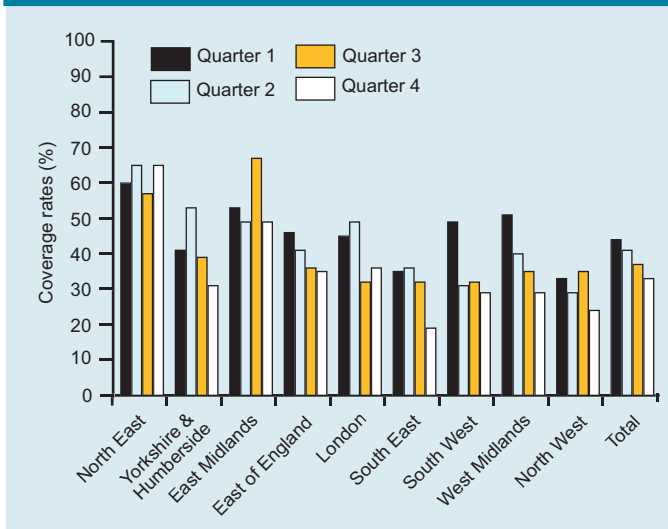
**Table 1** Reasons for non-vaccination with dose one: a subset of the "other" category

Categories	n (%)
Not offered	104 (21)
Did not return	79 (16)
Serology tested first	71 (15)
Deferred	56 (12)
Booster	45 (9)
Would rather access GP/other healthcare site	41 (8)
Unwell	31 (6)
Past/current hepatitis B infection	29 (6)
Leaving the country	12 (2)
Perceives self at low risk	8 (2)
HIV positive/testing	6 (1)
Non-responder	4 (1)
<b>Total</b>	<b>486</b>

\*The overall response rate for the survey was 51% of all clinics returning data.

† These categories are defined after the data collection process.

**Figure 3 Hepatitis B dose three coverage rates by quarter and region: 2003**

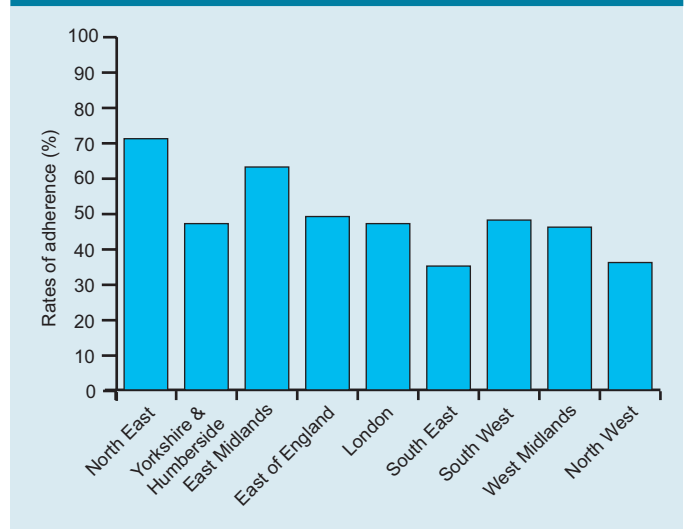


The normal vaccination schedule is widely used and is the longest (0, 1, 6 months). Sixty-two per cent of participating clinics have reported using this vaccine schedule. Currently, 18% of patients who completed a course in the same clinic received the third dose after six months following dose one (460/2494). Six months is the recommended minimum time between dose one and three, therefore time delay is likely to impact on coverage rates.

Research studies have demonstrated that the decline in re-attendance is a barrier to full vaccination, (5,6) with some research suggesting the multi-dose regimes of up to six months as the key reason for the decline at dose three (7). There is evidence that by reducing the length of the course, coverage levels can be improved (8). By using the super-accelerated course (0, 7, 21 days) coverage can be improved and a satisfactory level of antibody response can still be achieved (9). A future development of the hepB3 study will be to identify clinics that use a single vaccine schedule and compare coverage rates by schedule. The results of the 2003 survey show that 38 clinics use two or more schedules (40% of the sample surveyed)\*. In addition, of those who use one schedule, only 13 (14%) use the super-accelerated course, which (depending also on clinic size) may not be sufficient to make the study powerful enough for statistical analysis. Recruitment for a more comprehensive data collection round may be an alternative option.

Variations in methods of recall, patients using a mix of health service providers, and the length of time required to complete a course of vaccine are all factors, which are likely to contribute to a low dose-three coverage. Evidence suggests that protective levels of antibodies can be found in patients who begin a course of hepatitis vaccination, but receive less than three doses. It is estimated that a protective antibody response can occur in up to 55% of recipients of only one dose of the vaccine course. This rises to 85% with two doses (10). High coverage at dose one indicates

**Figure 4 Rates of adherence (%) to vaccine course of those patients vaccinated with dose one or already partially vaccinated at first attendance: 2003**



MSM are being offered and are accessing hepatitis B vaccine. Starting a course has public health benefits and may be as equally good a measure of increased uptake as course completion rates or measuring blood antibody levels post-vaccination.

The overall proportion of susceptible first time attendees in 2003 was 75%, with the lowest level being in London (63%) and the highest in the South West (82%). If MSM are accessing multiple GUM sites, it is likely that where this group are routinely offered vaccine, the pool having already been captured will increase. Newly self-determined MSM will also impact on the level of susceptible patients, but in which direction, will depend on their demographic profile.

Further research should investigate the impact of long-term surveillance of hepatitis B vaccine uptake on the declining pool of susceptible patients and continued reductions in laboratory reported acute infections, as a result of increased vaccination efforts.

## References

1. HPA. Laboratory reports of acute hepatitis B infection in England and Wales: 2003. *Commun Dis CDR Wkly* [serial online] 2004 [cited 21 September 2004]; 14(35): Immunisation. Available at <<http://www.hpa.org.uk/cdr/PDFfiles/2004/cdr3504.pdf>>.
2. Gilson RJC, de Ruiter A, Waite J, Ross E, Loveday C, Howell D, *et al*. Hepatitis B virus infection in patients attending a genitourinary medicine clinic: risk factors and vaccine coverage. *Sex Transm Inf*. 1998; 74:110-115
3. Department of Health. *The National strategy for sexual health and HIV implementation action plan*. London: Department of Health, 2002.
4. Department of Health. *Infectious Disease Strategy – Getting ahead of the curve: Action Plan*. London: Department of Health, 2002.
5. Sansom S, Rudy E, Strine T, Douglas W. Hepatitis A and B vaccination in a sexually transmitted disease clinic

\*All clinics that returned the questionnaire completed this question.

**The hepB3 study: hepatitis B vaccine uptake in men who have sex with men (MSM) attending a GUM clinic in England as first time attendees**

- for men who have sex with men. *Sex Transm Dis.* 2003; **30**(9): 685-8.
6. Bhatti N, Gilson RJC, Beecham M, Williams P, Matthews MP, Tedder, RS, *et al.* Failure to deliver hepatitis B vaccine: confessions from a genitourinary medicine clinic. *BMJ.* 1991; **303**: 97-101.
  7. Rich JD, Ching CG, Lally MA, Gaitanis MM, Schwartzapfel B, Charuvastra A, *et al.* A review of the case for Hepatitis B vaccination of high-risk adults. *The American Journal of Medicine.* 2003; **114**: 316-318.
  8. Asboe D, Rice P, de Ruiter A, Bingham J S. Hepatitis B vaccination schedules in genitourinary medicine clinics. *Genitourin Med.* 1996; **72**: 210-212.
  9. Zuckerman J. The place of accelerated schedules for hepatitis A and B vaccinations. *Drugs.* 2003; **63**(17): 1779-84.
  10. Centres for Disease Control and Prevention. 1998 guidelines for the treatment of sexually transmitted diseases. *MMWR Morb Mortal Wkly Rep.* 1998;**47**:101-3.

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## Diary

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For information about other conferences, courses, and events visit  
[http://www.hpa.org.uk/hpa/about\\_us/events.htm](http://www.hpa.org.uk/hpa/about_us/events.htm)

-  [Health Protection Agency chlamydia diagnosis forum educational meeting](#)
-  [National meeting: laboratory managers \(or deputies\) in microbiology](#)
-  [Seafood is good for you – isn't it?](#)



### Health Protection Agency chlamydia diagnosis forum educational meeting

#### Moving towards a national chlamydia programme

Following the success of the chlamydia diagnosis forum half-day educational meetings earlier in the year we are pleased to confirm that arrangements have been made to hold another event. The meeting on 25 November 2004 at the Health Protection Agency HPA, Colindale, is for those involved in diagnosis, screening, laboratory testing, and management of genital chlamydia infection.

The meeting is funded by a grant from the Department of Health.

There is no cost for this event. To obtain a course outline and receive a nomination form please contact Sabrina Senior, Learning Education and Development, Health Protection Agency, 61 Colindale Avenue, London NW9 5DF, tel: 020 8327 6622. Deadline for the forms is **20 October 2004**.

If you have any further queries please contact Joanna Edwards (tel: 020 8327 7946, email: [joanna.edwards@hpa.org.uk](mailto:joanna.edwards@hpa.org.uk)) or Sue Skidmore 01952 641 222 / [sue.skidmore@rsh.nhs.uk](mailto:sue.skidmore@rsh.nhs.uk).

**National meeting: laboratory managers (or deputies) in microbiology**

The Health Protection Agency are organising and hosting an event, *National meeting: laboratory managers (or deputies) in microbiology*, Health Protection Agency, Colindale, London 28 and 29 October 2004.

**Programme:**

- Thursday 28 October
- (afternoon) Keynote speaker: David Bailey - "The Budget Holder's Survival Guide"
  
- Friday 29 October
- Keynote speaker: Professor Brian Duerden "Inspecting Microbiology – An Opportunity to Develop the Service"

**Presentation topics:**

- How to Cope with Corporate Governance
- Modernising Pathology (Pathlinks; Teespath; Nottingham)
- Developing the Profession & Extending Roles
- Portfolios, Co-terminus Degrees & Professional Doctorates

**Cost £70 per person includes:**

- Wine Reception & Evening Meal (Thursday) & Lunch & Refreshments (Friday)
- Optional Tour of CPHL (Thursday morning)
- Trade Show (Thursday & Friday)

For further details of the programme and an application form please contact: Janet Norcup, Evaluations & Standards Lab, SRMD, Health Protection Agency, 61 Colindale Avenue, London NW9 5DF (tel: 020 8200 1295 ext 7920, Email: <[Janet.Norcup@HPA.org.uk](mailto:Janet.Norcup@HPA.org.uk)>.

**Seafood is good for you – isn't it?**

A half-day scientific meeting organised by the Comparative Medicine Section of the Royal Society of Medicine will be held at the Royal Society of Medicine in London on the afternoon of Wednesday 27 October 2004. The meeting will address the public health issues associated with fish consumption, *ie*, nutritional benefits versus potential hazards such as food poisoning and toxic residues. This meeting is relevant to scientists and medical practitioners with an interest in public health, microbiology, or nutrition. Registration fee (Fellows) £15, (Non-Fellows) £20. CME/CPD credits available.

For more details or to register, contact Clare Bergin, Academic Dept, Royal Society of Medicine, 1 Wimpole Street, London W1G 0AE (tel: 020 7290 2986)