

- 6 MAY 2005
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EXPERT ADVISORY GROUP ON AIDS

To: PoliceBill@scotland.gsi.gov.uk



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5 May 2005

Dear Mr Barron

**RE: Blood testing following criminal incidents where there is a risk of infection:
proposals for legislation (<http://www.scotland.gov.uk/consultations/justice/btfc1-00.asp>)**

Thank you for your letter of 25 February 2005 inviting the Expert Advisory Group on AIDS (EAGA) to comment on these proposals as part of the consultation process. As you will know, EAGA is a non-departmental public body comprising experts in a range of medical and scientific fields. EAGA provides advice to the Chief Medical Officers of England, Wales, Scotland and Northern Ireland on matters referred to it relating to HIV/AIDS. The Health Departments of all four administrations are represented (observer status) on EAGA, as are a number of other Government Departments.

The consultation document was discussed at EAGA's meeting on 3 March 2005. The background to the proposals was that the Scottish Police Federation had petitioned the Scottish Parliament to bring in legislation that would compel those who assault police officers or otherwise cause them to be exposed, or potentially exposed, to a blood-borne virus, to submit to a blood test and to amend the Data Protection Act to allow information on infection status to be retained on the Police National Computer. This had led to the Scottish Executive Justice Department bringing forward the current and more wide-reaching proposals which would extend the right to apply for a 'mandatory testing order' to any victim of alleged assault or at risk of infection through another incident (e.g. assisting a bleeding accident victim), not just police officers. The part of the petition relating to retention of test results by the police or any public agency was rejected.

EAGA did not specifically address the 12 consultation questions. Instead, the discussion focused on the underlying principles, risks of HIV transmission and proportionality of the proposed response. (The Advisory Group on Hepatitis will comment separately on the hepatitis transmission risks.)

In summary, having reviewed the evidence presented on the risks faced by police officers, EAGA concluded that the proposed measures are disproportionate to the risk of acquiring HIV and compulsory testing of the perpetrator of an assault will not materially affect the immediate medical management of the victim of the assault. It is long-standing Government policy to encourage those who may have been at risk of infection with a blood-borne virus to undergo voluntary and confidential testing with informed consent. EAGA does not support the introduction of legislation to compel individuals to be tested for blood-borne viruses. Compulsory testing will only serve to reinforce stigma and discrimination against individuals known or thought to be infected.

EAGA made the following comments on specific parts of the consultation document:

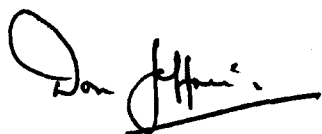
1. Evidence of risk to police officers (paras 1.5-1.6): The most comprehensive and comparable data on the types of exposure faced by police officers come from surveillance of occupational exposures in the healthcare setting. Analysis shows the factors associated with increased risk of HIV transmission following percutaneous injury include: deep injury; visible blood on the device; injury with a needle that had recently been placed in the source's artery or vein; advanced HIV infection/high viral load in the source.
2. EAGA discussed the risks from the types of exposure detailed in para 1.5.
 - Saliva: The risk of transmission of HIV from mucosal exposure (e.g. spit in the eye, nose or mouth) is vanishingly small. There is no evidence from the international literature of HIV transmission associated with saliva, which is not regarded as a risky body fluid (unless contaminated with blood e.g. during dental procedures). Saliva is known to contain several substances that have been shown to inactivate HIV very rapidlyⁱ. [For completeness, it is worth noting that a number of cases have been documented in the world literature of HIV transmission following mucosal (eye, nose, mouth) exposure to blood in the occupational settingⁱⁱ. The average risk of transmission has been estimated at less than 1 in 1000.]
 - Biting: very small numbers of bite-related transmissions have been reported, e.g. a neighbour bitten by a patient with AIDS during a generalised seizure in Sloveniaⁱⁱⁱ, but even in this instance it was thought that blood in the patient's mouth probably caused transmission via the bite.
 - Skin contact: There is potential for HIV transmission following exposure to blood or other potentially infectious body fluids via non-intact skin (cuts, abrasions, open wounds), but there have been very few documented cases of infection attributed to unusual transmission routes (e.g. fights, removal of bloodied bodies from railway tracks)^{iv}. Exposure of intact skin does not pose a risk of infection.
 - Assault with used needle: There is evidence of transmission following assault with a needle and syringe (e.g. prison warder in Australia^v). While superficially similar to the risk of needle sharing among injecting drug users (IDUs), the risk from deliberate or accidental contact with a contaminated needle may be considerably reduced by the wiping effect of the needle passing through clothing and the absence of blood in the bore of the needle.
3. The case studies provided by the Scottish Police Federation in support of their petition (referred to at para 1.5) indicate a potential lack of knowledge about the risks and routes of HIV transmission. Appropriate training about the risks associated with different types of exposure incident should serve both to reassure and empower police officers to seek appropriate medical advice following higher risk incidents.
4. Figures presented on incidents occurring in 2003-04 (para 1.6) further support the argument that the proposals are disproportionate to the risk of HIV transmission. Of 229 reported incidents in which there was a possible risk of infection to an officer, only in 24 (10%) was the risk considered serious enough for the officer to embark on post-exposure prophylaxis against HIV. In one incident an officer is thought to have been actually infected with hepatitis B, but it is not stated whether this officer was offered post-exposure prophylaxis against hepatitis B.
5. Survival of HIV outside the body: No consideration is given in the document to the reduced viability of HIV in dried blood (e.g. in a discarded needle and syringe). The potential for transmission from a needle used as a weapon will depend on the factors listed in 1 above, as well as the time elapsed and storage conditions (temperature, humidity) since contact with infected blood^{vi}.

6. Prevalence of HIV infection in the population: The prevalence of HIV in the UK adult population is estimated to be in the range 0.1-0.2%^{vi}. Among injecting drug users (IDUs), this rises to 3-4% in London^{viii} and <1% elsewhere in England^{ix}. Historically, the prevalence of HIV has been higher among IDUs in Scotland, particularly in Edinburgh and Dundee^x. However, the current HIV prevalence in IDUs in Scotland is 0.4%. Furthermore, it is known that transmission is dependent on viral load. Most HIV-infected IDUs within the UK have been diagnosed and, if their viral load was high they would be started on appropriate therapy to lower it, thus considerably reducing the risk of transmission from treated patients.
7. HIV post-exposure prophylaxis (para 2.4): It was questioned how useful measures to compel individuals to undergo blood tests would be in the context of HIV post-exposure prophylaxis, given the need to start post-exposure prophylaxis promptly (ideally within an hour of exposure)^{xi}. The rate-limiting step in the process of applying for a court order was likely to rest with the Sheriff's court. Even where the process is designed to deliver a decision quickly, post-exposure prophylaxis will need to be initiated before any blood test results are available. Applying for a mandatory testing order has the potential to shorten the duration of post-exposure prophylaxis-related side effects and psychological distress where a negative test result is obtained, but will not eliminate them. The testing of the perpetrator of an assault will not materially affect the immediate medical management of the victim of the assault. In cases where the risk of transmission was considered sufficiently high to initiate post-exposure prophylaxis, the possibility that a negative HIV antibody result is due to recent infection (i.e. in the 'window period', as referred to in para 2.8) would have to be carefully assessed.
8. Protection against malicious use: The proposals offer no protection against malicious use of the legislation, such as an individual alleging assault and exploiting this allegation to compel the alleged assailant to take a blood test.
9. Confidentiality (para 4.20): Major confidentiality issues are not addressed; only the applicant and his/her medical adviser would need to know the outcome of any compulsory test, although deductive disclosure is highly likely. For example, if HIV post-exposure prophylaxis had been initiated pending testing of the assailant, the inference from not discontinuing post-exposure prophylaxis would be that the source tested positive and vice versa.
10. Involvement of a medical adviser: EAGA felt strongly that any application for a mandatory testing order should be made by a medical advisor following a medical judgement of the risk (of both the incident and the source), not by the individual police officer or victim. Experience from the management of exposure incidents in the healthcare setting indicates that consent to HIV testing is rarely withheld by source patients when the approach is made in a sensitive manner. Testing with consent following risk assessment should be the standard procedure.
11. Setting legal precedent: The proposals, if adopted, would bring in legislation in Scotland and would set a precedent for the rest of the UK. Indeed, the consultation document cites mandatory testing legislation adopted in parts of Canada and Australia as precedents (paras 1.11-1.12).

In conclusion, EAGA would not support these proposals, as they seem disproportionate to the risk of blood-borne virus transmission in the situations for which they are intended, and they involve an element of coercion, which is against Government policy on voluntary and confidential HIV testing. This approach will only serve to reinforce stigma and discrimination against individuals known or thought to be infected. The need for post-exposure prophylaxis for HIV to be administered promptly after exposure also calls the proposals into question.

I am happy for this response to be made publicly available and for the Scottish Executive to contact EAGA again in relation to this consultation process. I have copied this to the four UK Chief Medical Officers so that they are aware of EAGA's concerns and can discuss together if appropriate.

Yours sincerely



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ⁱ Shugars DC *et al.* Saliva and inhibition of HIV-1 infection: molecular mechanisms. *Oral Dis* 2002 **8**(suppl 2): 169-75.

ⁱⁱ Health Protection Agency. Occupational Transmission of HIV: Summary of Published Reports (Data to December 2002). March 2005. (Accessed on 04.05.05 from http://www.hpa.org.uk/infections/topics_az/bbv/pdf/intl_HIV_tables_2005.pdf)

ⁱⁱⁱ Vidmar L *et al.* Transmission of HIV-1 by human bite. *Lancet* 1996 **347**: 1762-3.

^{iv} Gilbert VL *et al.* Unusual HIV transmissions through blood contact: analysis of cases reported in the United Kingdom to December 1997. *Commun Dis Public Health* 1998 **1**:108-113.

^v Jones PD. HIV transmission by stabbing despite zidovudine prophylaxis. *Lancet* 1991 **338**: 884.

^{vi} Abdala N *et al.* Survival of HIV-1 in syringes. *J Acquired Immune Defic Syndr Hum Retrovirol* 1999 **20**: 73-80.

^{vii} UNAIDS. 2004 report on the global HIV/AIDS epidemic: 4th global report. June 2004. (Accessed on 04.05.05 from: <http://www.unaids.org/bangkok2004/report.html>)

^{viii} Judd A *et al.* Incidence of hepatitis C virus and HIV among new injecting drug users in London: prospective cohort study. *BMJ* 2005 **330**: 24-5.

^{ix} Health Protection Agency *et al.* *Shooting Up: infections among injecting drug users in the United Kingdom 2003*. London: Health Protection Agency, October 2004. (Accessed on 04.05.05 from: http://www.hpa.org.uk/infections/topics_az/injectingdrugusers/shooting_up.htm)

^x Goldberg D *et al.* Monitoring the spread of HIV and AIDS in Scotland 1983-1994. *Scott Med J* 1996 **41**: 131-8.

^{xi} Department of Health. *HIV post-exposure prophylaxis: guidance from the UK Chief Medical Officers' Expert Advisory Group on AIDS*. London, February 2004. (Accessed on 04.05.05 from: <http://www.advisorybodies.doh.gov.uk/eaga/PDFS/prophylaxisguidancefeb04.pdf>)