

Police officers can, and should, be immunised against hepatitis B, and their immunisation should be reimbursed by their employer.

Healthcare workers who cannot be/are not so protected against Hepatitis B may be required to take occupational advice & limit their participation in risk-prone procedures (for patients' and their own protection).

Police officers are occupationally exposed to differential risks of blood-borne viruses, and so their employer should consider their redeployment away from risk-prone duties if an officer cannot be/is not protected against Hepatitis B infection when this immunisation is cost-effectively available - and offered universally to prisoners and prison officers in Scotland.

As for healthcare workers, police officers should expect that their hepatitis B immunisation is afforded by their employer and, if the officer is a HBV carrier (and so infectious to others) or cannot be given adequate immunity (and so is at risk him/herself) then any redeployment of such officers to non-exposure-prone duties should be without adverse financial consequence to them.

Before de novo recruitment into police work, & as prior to medical training, police forces may need to consider whether they would be willing to employ someone who is Hepatitis B carrier or cannot be adequately protected against Hep B.

No vaccine exists against hepatitis C, nor is one likely to be available in the medium term future. Thus, as for healthcare workers, universal precautions are officers' sole defence - together with appreciation of their exposure risks. Unlike healthcare workers, but like prison officers, hepatitis C is more prevalent among clients that police officers deal with. For example, 1 in 5 of adults in Scottish prisons is Hepatitis C carrier. The reason is that half of Scotland's injection drug users are Hepatitis C carriers and IDUs constitute over one third of adult inmates of Scottish prisons.

Hepatitis C transmission rate (via needle-stick from Hepatitis C carrier) is about 3 in 100. This risk to officers who have to undertake searches of persons or places is bound to be worrying, but mandatory HCV testing of the 'suspect' - even if there is an apparently identifiable 'suspect' - does not adequately reduce the officer's consternation:

A. Suppose 'suspect' is HCV RNA positive (ie infectious carrier): chance of transmission is still only 3 in 100, but would officer decline prophylaxis (were it available) or participation in research to identify PEP for HCV on that 'low risk' basis until s/he could be tested for assurance of negativity. Risk averse officers would opt for prophylaxis - if available and at NHS/employer's cost - to minimise their risk or to take part on occupationally-relevant RESEARCH (see below, and to which police officers could contribute) INTO HCV prophylaxis HAD HIGHER PROFILE.

B. 'Suspect' declines voluntary HCV RNA test and declines to provide information [even medical in confidence] about recent HCV-risk-prone exposures: what good does single mandatory HCV RNA test do if suspect was in fact recently HCV infected? Even if 'suspect' tests to be HCV carrier, officer is hardly better off - now in situation A.

C. 'Suspect' agrees to voluntary HCV-RNA test and provides [medical in confidence] the further information that s/he recently shared needles with [unnamed] others whom s/he believed to be hepatitis C carriers - suppose officer becomes HCV infected: whose virus infected the officer ('suspect' or A N Other - and so, who infected the officer: A N Other

(unknowingly) OR the risk-non-averse 'suspect')? In the latter instance, no criminal charge could be brought against 'suspect' because s/he could not be proved to have culpably and recklessly infected the officer.

D. Suppose that 'Suspect' in C is facing criminal charge of culpable and reckless transmission of HCV infection, and Procurator Fiscal demands that Scotland's Hepatitis C register [of nearly 20,000 master indexes, 10% of whom may already be dead] is interrogated to find if there is a match on master index (that is: initial of first name, soundex of surname, gender, date of birth) with 'suspect'. If so, date of hepatitis C diagnosis (say, 3 years ago) and identity of reference laboratory from which diagnostic blood sample can be accessed [by legal powers] is sought; and sample is subjected to molecular epidemiological testing which might be sufficient to establish that 'suspect' had been Hepatitis C carrier for at least 3 years, and that officer's and suspect's virus from three years ago are linked.

By D. Scotland might succeed in bringing a prosecution against 'suspect' who had expeditiously invented the recent-sharing scenario to circumvent such charging BUT Minister for Justice would also wholly undermine Scotland's Hepatitis C diagnosis register at a time when Minister for Health is trying [or should be] to INCREASE voluntary HCV testing - so that injectors are better aware of the high HCV transmission risks that they run by shared injecting (new HCV infections run at 20 to 30 per year per 100 susceptible injectors) and, as importantly for the public purse, so that former injectors can be engaged in cost-effective antiviral treatment to clear their HCV carriage and limit future severe liver disease.

RESEARCH on antiHCV prophylaxis is REQUIRED & POLICE/PRISON OFFICERS have a strong case to champion for it, and contribute to it (as previously re healthcare workers and anti-HIV prophylaxis). Antiretroviral treatment if an officer becomes HCV carrier is, of course, available.

The above ruination of public health surveillance would not be for the greater good

- if injectors no longer trust to seek HCV diagnosis, for it is mostly they who are HCV infected. It is vastly too high a price to pay for the anyway inadequate reassurance that mandatory HCV testing would give officers - because even HCV RNA negative does not mean that 'suspect' or his/her needle was assuredly HCV-uninfected at the time that officer's exposure occurred.

SUBSTANTIALLY BETTER quantitation is needed of officers' exposure-prone risks and outcome thereof. Occupational procedures for police officers should be as for healthcare workers; describe incident, immediate blood sample to be taken for back-reference, immediate prophylaxis if researched and risk assessment, cease prophylaxis when officer's own viral RNA status can be established. Re HCV, if 'suspect' has history of injection drug use, then proceed in risk-averse manner - until above documentation gives better empirical guidance to officers about actual outcomes (frequencies re how and when risk was resolved, description of exposure-prone incident).

Scotland's police officers should also consider requesting Willing Anonymous Salivary HIV/Hepatitis C [WASH-C] surveillance linked to occupational questionnaire to document their hepatitis C carriage rate [the same methodology as first demonstrated 50% HCV carriage for adult prisoners with history of injection drug use but 3% carriage rate by prisoners who self-reported that they had never injected drugs].

Pregnant women in Scotland have about 0.5% HCV carriage rate - police officers' HCV carriage rate could be established, if WASH-C surveillance were offered to all/random sample of at least 5000 officers on a no-names basis.

Surveillance would not identify infectees but could estimate % HCV infected and would identify officers' major occupational risks. WASH-C surveillance of 5000 officers might be expected to give 50 HCV positive saliva samples [95% CI: 35 to 65] if HCV prevalence was 1% [double that for pregnant women but one third only of HCV carriage by adult prisoners who had never injected].

The current proposal puts in jeopardy Scotland's public health infrastructure which, in terms of blood-borne viruses such as HIV and Hepatitis C, is second to NONE. Acute hepatitis B infection, if it occurs, is a public health indictment - because wholly preventable by cost-efficient immunisation. It is **THUS ASTONISHING** that consultation maintains that a police officer was acutely HBV infected when his force should have insured his occupational health, see above. Certainly any 'suspect' who has ever been in prison, and there offered HBV immunisation, would surely expect that police officers had been offered equal protection as prisoners rightly are!

Unlike hepatitis B, transmission of hepatitis C or of HIV by saliva is extremely unlikely. Sexual transmission (to officer's partner) is a concern re HIV; and maternal transmission of HCV (6% transmission rate from carrier mothers) is a concern for female officers.

Let me now turn to HIV, and officers' recourse to post-exposure prophylaxis if they have been potentially occupationally exposed - such as by needlestick or if 'suspect' bloodily resists arrest. Scotland's HIV prevalence is

LOW, and HIV test uptake by injectors has been high. The majority of Scotland's current HIV diagnoses are heterosexuals who were infected outside UK. Police officers need to be regularly updated on Scotland's epidemiology of blood-borne viruses, which differs substantially between HIV and HCV.

In the event of potential HIV exposure, officer would need to embark on HIV prophylaxis much sooner than any sheriff could be expected to hear arguments for/against mandatory testing of 'suspect' - thus proposal is impractical. Moreover, rapid HIV RNA testing of officer will give a more reliable ultimate and relatively speedy indication of when to stop both PEP and the precaution of condom-protected intercourse which interferes with officer's family life.

Since the early 1980s doctors, including infectious disease specialists, genito-urinary medicine specialists and immunologists whose patients may have relatively high HIV prevalence have relied on universal precautions for self-protection against HIV; and surgeons have not required the HIV testing of patients on whom they undertake exposure prone operations.

Professional responsibilities have weighed in the other direction - for healthcare workers who believe that they may have been at HIV risk to seek an HIV test and take occupational advice in order to protect future patients (and be themselves safeguarded financially and in terms of how they practice). But, healthcare workers have led on essaying PEP for HIV.

Police/prison officers need to consider their proactive role in essaying PEP for HCV exposure to which they may indeed be more majorly occupationally exposed than are healthcare workers - NEEDS RESEARCH TO ESTABLISH THEIR PREVALENCE & OCCUPATIONAL EXPOSURE RISKS, see above WASH-C for police officers.

Healthcare workers, like police officers, have suffered agonising risk-prone exposure to clients who have refused permission for HIV testing - perhaps because the patient/client could not face the knowledge of HIV test outcome. Sympathetic encouragement of such individuals/'suspects' (although it does not always succeed) to help alleviate worry for doctor's/officer's family if not for the person who received needlestick is more likely to resolve the information gap than any mandatory approach which "may" access the client's blood but does not access their recent behavioural knowledge which is uniquely theirs, not in medical notes and remains firmly sealed in silence.

Punitive approaches seldom succeed in healthcare because they risk the concealment, rather than management, of communicable diseases - one of the reasons that AIDS is not a notifiable disease in UK.

Moreover, it is against professional codes of conduct, and tantamount to assault, for healthcare workers to obtain a blood sample against the patient's wishes. The current proposal jeopardises not only Scotland HCV Register but trust in the professionalism of its healthcare workers.

Even the Prison Service in England and Wales - when random mandatory drugs testing of prisoners' urine was introduced as part of Michael Howard's unsuccessful 'war on drugs' - accepted that no healthcare staff could take any part in such testing. This was on the insistence of the then head of profession, Dr Rosemary Wool, who was internationally congratulated for the firm and ethical stance that she took. No even the then Home Secretary attempted to subvert her.

Criminal Justice system in Scotland should not forget that even Drug Treatment and Testing Orders can be applied ONLY by the drug-dependent offender's compact in acceptance thereof - else the testing element would need to be taken out of the realm of healthcare workers who engage in drug treatment; and be undertaken solely by officers of the criminal justice system.

It is VITAL that the Justice Ministry remembers that compulsion is NOT the basis on which healthcare is delivered - rather by alliance of doctor and patient. But patients have responsibilities to the public health as well as rights, as vCJD is emphasising.

Mandatory testing for blood-borne viruses risks, as consultation rightly acknowledges, that new, unsuspected diagnoses will be made in a climate of compulsion that has not enabled pre-test counselling and will also hinder post-test counselling, which may thereby do less to inhibit onward transmission than it should do.

Bizarrely, 3.13 seeks to draw a distinction between 'accidental' or 'innocent' exposure incidents [eg officer stabs finger on concealed needle] and others [say, injector evades arrest and carelessly disposes of needle which injures police officer in pursuit?] which ? police officer or ? sheriff judges to be culpable - this judgement being made BEFORE the decision to effect mandatory blood testing. Does this mean that sheriff's judgement is tantamount to finding the escaping injector guilty of 'assault' on the officer because dropped/throw-away needle pierced

officer? In 'innocent' exposures, officer - like healthcare worker
- has no right of access to 'suspect's' blood or medical records. However, the risk of blood-borne transmission of HCV is, perchance, the same whether the incident was innocent or otherwise [UNLESS RESEARCH SHOWS THIS NOT TO BE SO]. Thus, the distinction is illogical, and consultation gives no data on the number of innocent versus other exposures that officers were liable to in 2003 (say) and the HCV transmission rate to officers in the alternative circumstances.

Strikingly, consultation lacks evident input from the Ministry of Health. No consideration is given to the wider issue of non-current HIV Partner Notification. Scotland/its HIV-infected patients do well insofar as HIV notification of current partner is concerned but there is no systematic effort by healthcare providers to elicit identifiers for, and make patient or provider-contact with, non-current partners (injecting or sexual) even if newly diagnosed individuals who are known to have been recently HIV-infected (say in the last 12 or 24 months). Does the Justice Ministry propose compulsion here too? Better would be additional resources to assist with proactive provider referral?

Does Scotland intend to protect its healthcare staff and patients by seeking assurance of HIV negativity for healthcare staff recruited from/or returning from having worked in areas of high HIV prevalence (that is: 5% or more . . . and much higher than HIV prevalence that police officers encounter, on average, in their clients . . . but NOT HIGHER than officer may encounter as prevalence of HCV carriage)?

4.3 ii and iii read as though I could be subject to mandatory testing in the following circumstances: my committal of crime A (say, stole a bike) if it transpires that officer suffers needlestick because I, an injector say, had a used needle on my person and it pierced officer in the course of my being searched.

Q1: Universal application & universally NO APPLICATION

Q2: Mandatory blood testing should NOT BE ORDERED, but IF ORDERED, then ONLY BY SHERIFF+PROPERLY AUTHORISED MEDICAL ADVISER (eg INFECTIOUS DISEASE SPECIALIST or VIROLOGIST or CLINICAL IMMUNOLOGIST) since sheriffs have too little current medical knowledge

Q3: MANDATORY BLOOD TESTING should not be applied to the living, but may be to the deceased whom it can no longer harm, and who have no voice. Innocence or guilt of exposure is irrelevant to transmission risk unless there is empirical evidence to the contrary.

Q4: I do not agree. The real reason for testing assailant is to add to his/her list of crimes, not to resolve the position for victim, for whom the only true resolution comes from self-testing for assurance of negativity. All victims of crime need proper counselling re risks of blood-borne viruses, expedited testing by fastest, most assured methods and rapid PEP prophylaxis OR rapidly available enrolment in research protocol re PEP until an assured recommendation about PEP can be made. Q5; I do not agree. Reason as above. Q6 Abuse of suspect's human rights and bodily autonomy is abuse regardless of age of 'suspect'. Likewise, access to suspect's confidential medical records (by whom) is equally fraught and consultation such as this could engender huge opt-out from the universal patient record - safeguards about which are already not at all trusted.

Q7: I do not agree. Notice that 4.10 seems to entail breach of suspect's medical confidentiality.

Q8: I strongly disagree with the proposed criteria for mandatory testing orders. What prior consultation, if any, was there with Expert Advisory Group on AIDS or with Royal Colleges?

Q9: proposed civil application process will take so long that 'victim' will have resolved their blood-borne status long before these unwieldy procedures grind through. Consultation lacks documentation about expected relative frequency of each contingency in any given year - how many applications by PF, how many civil applications and in respect of which blood-borne viruses?

Q10: No criminal charges govern the breaches of the confidentiality of the information provided by mandatory testing. This is inequitable. Neither applicant nor third parties have a right to know suspect's diagnoses re blood-borne viruses and it is disingenuous to claim in 4.20 that test results would not be admissible in evidence if a charge of reckless and culpable HIV or HCV transmission were added to suspect's extant charges. Q11 if testing is for the health of applicant, NHS should support its cost. Since testing is NOT for that purpose, criminal justice system should support its COST & CONDUCT since it is unlikely that doctors will agree to assault their patients or divulge confidential medical information other than by EXTREME FORCE OF LAW. Scotland should consider whether, as a civilised, enlightened society, she wants to be EXTREME in this manner.

Please see references as follows:

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BIRD SM. Recipients of blood or blood products "at vCJD risk". We need to define their rights and responsibilities and those of others (Editorial). *British Medical Journal* 2004; 328: 118 - 119.

BIRD SM. Attributable testing for abnormal prion protein, database linkage, and blood-borne vCJD risks. *Lancet* 2004; 364: 1362 - 1364.

BIRD SM. Prescribing sentence: time for evidence-based justice. *Lancet* 2004; 364: 1457 - 1459.

Powers of Procurator Fiscal (PF), as described at 4.11, need to be better spelled out. Essentially, crime of assault may have added to it the crime of reckless and culpable transmission of blood-borne virus IF PF can obtain information that suspect was previously diagnosed with blood-borne infection, and this second crime may stand whether officer was in fact infected or not. Ergo, don't seek diagnosis! What sort of public health message is that - by being ignorant of blood-borne virus status, one may infect with impunity? Only those responsible enough to seek diagnosis, and to try to limit transmission by acting on this knowledge are - in extremis - punishable in law. And so what is the logical consequence? That drug-dependent offenders may choose to insist that their master indexes are removed from HIV and HCV registers and that all extant blood samples pertaining to them be destroyed, and likewise any medical or prescribing record of their treatment for HIV or HCV is destroyed. HIV patients considered making some of the above requests after Mr Stephen Kelly's conviction for culpable and reckless HIV transmission.

{answer to Q4 also requires clarification of Scotland's law re reckless and culpable transmission of HIV - is it an offence for HIV-infected individual to have unprotected intercourse even with the consent of consort; if it an offence ONLY IF consort becomes HIV-infected; is it an offence if HIV infected individual A has condom-protected sexual intercourse with consort B who does not know that A is HIV-infected and condom breaks but B is not HIV infected; is it an offence if HIV infected individual A has condom-protected sexual intercourse with consort B who does not know that A is HIV-infected and condom breaks and B is HIV infected?}

{re Q5, Consider vCJD as a prescribed blood-borne infection. We have no test in blood for vCJD, but there are

testable tissues (tonsil, appendix) and thus far the transmission rate via blood transfusion from donor who goes on to develop vCJD is MUCH HIGHER at 10% to 20% than for needlestick from HIV or HCV carrier 'suspect'. Yet, we don't even test at post-mortem to quantify UNCERTAIN prevalence of subclinical carriage of vCJD; or insist that any one who wants to donate blood but NEITHER agree to attributable testing of that tonsil for vCJD OR abstain from blood donation (lest, for want of testing, we transit avoidable blood-borne vCJD and there is no blood test by which we can otherwise rule out this donor??)

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