From the President's Office Dr Danielle McMullen MBBS (Hons), FRACGP, DCH



21 December 2020

Standing Committee on Law and Justice Parliament of NSW Legislative Council

Submitted via website: www.parliament.nsw.gov.au/lawandjustice

Re: Standing Committee on Law and Justice in the NSW Legislative Council's Inquiry into the Mandatory Disease Testing Bill 2020

Thank you for the opportunity to make a submission regarding the Mandatory Disease Testing Bill 2020, which proposes to 'establish a scheme under which a person can be ordered to provide a blood sample for testing if, as a result of deliberate action, the person's blood has come into contact with a health, emergency and public sector worker, and the worker is at risk of contracting blood-borne disease as a result.'

AMA (NSW) acknowledges that the impact of potentially serious blood borne viruses (BBVs) such as Hepatitis B, Hepatitis C and HIV continues to be an issue of public health significance. We also recognise that because such infections can be serious, emergency services personnel are deeply concerned about the risk to themselves. AMA (NSW) acknowledges the depth of this concern.

With this in mind, AMA (NSW) aims to provide a clinical perspective based on the current medical and scientific evidence on the transmission of BBVs.

AMA (NSW) notes that other jurisdictions, including Western Australia, South Australia, Queensland and Victoria have schemes permitting mandatory disease testing, which differ in application and operation. In SA and WA, mandatory testing legislation faced criticism from the health sector on the basis that the rationale for mandatory testing of people whose body fluids may come into contact with emergency services is not evidence-based.

Furthermore, we acknowledge mandatory testing laws are not supported by global health bodies such as UNAIDS and the World Health Organisation.

The risks of exposure and infection are low

Australian Medical Association (NSW) Ltd

The risk of infection from an incident depends on many factors, including the amount and type of bodily fluid (eg. blood, saliva, vomit), the mechanism of exposure, if the exposure occurred on broken skin, if the person was known to be infectious, and the exposed person's immunity.

The risk of exposure of a blood borne virus can be calculated by multiplying the risk of transmission with the likelihood of a source having a BBV. Both these probabilities are low in the scenarios police and emergency services personnel face. Clinical evidence shows that the risk of Hepatitis B, Hepatitis C and HIV transmission from a known positive source through blood and saliva to unbroken skin and skin-to-skin contact is zero.(1). There have been no published cases of spitting causing HIV transmission (2). There have been no published cases of HIV transmission in Australia through spitting or biting(2, 3). The community prevalence of HIV, 0.14% of Australia adults, is low by international standards. Additionally, 80% of those with HIV in Australia have a supressed viral load, and hence pose a virtually 0% risk of transmission (4). Hepatitis B can be transmitted only through percutaneous, mucosal or nonintact skin exposure (5). The prevalence of Hepatitis B, at 0.9%, is low by international standards, with Australia implementing a universal infant vaccination in 2000 (6). Furthermore, police officers and paramedics are required to have a Hepatitis B vaccine upon recruitment. Hepatitis C generally requires a large exposure to blood for transmission, with no infections reported with mucous membrane or intake skin exposure (7). A UK review found that only 2.2% of healthcare workers who received a percutaneous exposure proceeded to develop Hepatitis C seroconversion (8). With the advent of direct acting antiviral treatments for Hepatitis C, the prevalence of Hepatitis C in Australia has been decreasing significantly, from 188,951 in 2016 to 130,089 in 2018 (9).

We also highlight that the standard workplace procedure is to treat all blood and bodily fluids as potentially infectious (10). In circumstances where a risk assessment has determined there is a risk of transmission of BBVs, emergency services personnel would be advised to follow potential bloodborne virus exposure management protocols, such as the National Guidelines, published by ASHM (11).

AMA (NSW) strongly supports emergency services workers have access to immediate assessment, counselling and management by a health care professional after exposure to potentially infectious bodily fluids.

Protocol following exposure should not change

Testing of the source person (whether that be mandatory or voluntary) does not alter the initial management of a potential blood-borne virus exposure. In HIV, testing of the source is only useful in reducing the length of treatment, as Post Exposure Prophylaxis (PEP) is immediately initiated in high risk situations regardless of test results (12). In Hepatitis B, PEP is not required if there is evidence of immunity(12) and given the requirement of vaccination to serve as a police officer or paramedic the utility of testing the source patient is relatively minor in situations regarding front line workers. Furthermore, if the exposed patient is unimmunized, guidelines state that Hepatitis B PEP should be initiated immediately if the source infective status is unknown(13). Hence, if significant exposure such as a needle stick injury or blood splash to broken skin, mouth or eyes has occurred, it is critical that Post Exposure Prophylaxis (PEP) treatment is commenced no later than 72 hours following

Australian Medical Association (NSW) Ltd

exposure regardless of test results at that time (13). Guidelines explicitly state to not delay treatment pending the results of diagnostic tests (13).

Furthermore, testing for HIV and other BBVs has a window period during which an infection may not be detected in the acute stage of the disease. For Hepatitis B, the window period ranges for 1-3 months from initial exposure(1). For HIV and Hepatitis C, this window period stretches out to 3 to 6 months(1). Hence, a negative result of the source is not conclusive in ruling out the possibility of infection.

Given that testing and results do not dramatically change the initial protocol that should be followed in cases where significant exposure has occurred, and that testing of the source person should not be considered definitive, AMA (NSW) does not support mandatory testing as an effective, reliable and necessary legislative reform.

Counselling

AMA (NSW) acknowledges the stress emergency services personnel experience following exposure to blood and bodily fluids and potential for transmission of BBVs. It is vital that emergency services personnel are given prompt assessment, counselling and management by a health care professional.

However, given the process outlined in the bill, it is unlikely that this legislation will aid in prompt, evidence-based management for an exposed worker. The current bill requires a worker who wishes to gain mandatory testing to see a medical practitioner within 72 hours. Then this worker must compile an application for a mandatory testing order within five business days after the contact. This application is then sent to a senior officer who must determine the application within five business days. Following the decision by a senior officer to make a mandatory testing order, this order must be served to the third party within five business days. Only after this occurs, transport and pathology arrangements may be made to collect blood. Hence, this process can take up to three weeks, without considering time required for pathology collecting or processing, or the additional legal steps if the third party is determined to be 'vulnerable'. Given that HIV PEP is a 28-day course since exposure, the worker would have almost completed the course before a testing result is known (11). Hence, the testing result, and the associated legal, bureaucratic, and time costs would only have a marginal effect on treatment length. For Hepatitis B PEP, in the situation where the exposed worker is unvaccinated, the Hepatitis B vaccine series will be initiated regardless of the positivity of the source. Hepatitis B Immunoglobulin, used in the unknown or positive source, needs to be given as soon as possible (within 7 days), much quicker than the legislation allows for a positive source to be identified (13). In Hepatitis C, there is no PEP, hence the only difference between a positive and negative source is a single Hepatitis C test at 3 weeks post exposure (13). In summary, the legislation provides negligible, if any, health benefits due to the significant bureaucratic and time hindrances.

The effort and expense in enforcing mandatory testing would be better placed in ensuring those exposed workers were well informed and properly engaged with the health care system in incidents where they are exposed to hazardous bodily fluids. International evidence suggests that only 39.2% of law enforcement personnel sought medical attention at time of their needlestick injury (14), despite over 80% of those interviewed stating that have 'very' or 'extreme' concern regarding

Australian Medical Association (NSW) Ltd

needlestick injuries (14). Hence, the real gap is not the lack of mandatory testing, it is the lack of counselling and health resources for those exposed. Appropriate testing and PEP, in combination with greater awareness and support for those exposed, would provide a significantly greater health benefit than mandatory testing.

Consent is a pillar of health ethics

Mandatory testing also removes the source person's autonomy over their health information, which is contrary to current NSW Health Guidelines which states that "informed consent for testing must be obtained from the source patient" (12). Medical professionals are very protective and vigilant about the privacy of health information of patients, as autonomy is one of the four principles of modern bioethics (15).

Furthermore, mandatory testing contributes to the stigma and discrimination of people living with HIV, Hepatitis B and C (16). This has the downstream effect of limiting the ability of health services to engage people at risk or living with these blood borne viruses. Hence, it is not a surprise that UNAIDS/WHO do not support mandatory HIV testing on 'public health grounds' (17).

The current legislation allows mandatory testing of children 14 years old and older. The prevalence of blood borne viruses in this group is extremely low, and the ethical ramifications of coercing a child into a blood test which has no therapeutic benefit for them is severe. Only four people under the age of 19 were diagnosed with HIV in 2019 (18). Similarly, very low prevalence of Hepatitis B and C is noted in this age group. To forcibly engage a child in venepuncture, without any health benefit for the child, when the utility of such a result is negligible, is contrary to the basics of medical ethics, such as beneficence and non-maleficence (15).

There are other practical issues; should the source person not be in a medical setting that facilitates testing, detaining a source person in a hospital or medical facility presents another set of challenges for attending health professionals. AMA (NSW) is concerned by the use of force by police and correction officers in carrying out mandatory testing orders and the potential safety risks this could present to attending medical officers.

In conclusion

The baseline level of risk to emergency personnel and other front-line workers are low. Both the prevalence of blood borne viruses within Australia, as well as the likelihood of a positive source inoculating a worker is minor. The proposed mandatory testing will not necessarily reduce stress for emergency services personnel who are exposed to a person's blood or other bodily fluids. As previously stated, a negative result from the source person is not conclusive and should be considered as a preliminary test only. As well, a positive result does not definitively mean transmission has occurred. Should exposure occur, emergency services personnel should follow procedures for management of a potential blood-borne virus exposure. In cases where significant exposure has occurred and the need for PEP has been determined, this treatment should commence within 72 hours of exposure. PEP should be administered regardless of whether testing of the source person has occurred, as BBVs have a window period which an infection cannot be detected.

Australian Medical Association (NSW) Ltd

The proposed mandatory testing legislation has a negligible impact on the health management of these patients and shifts financial and logistic resources away from appropriate counselling and treatment of these workers. Additionally, there are a variety of ethical implications of coercive testing which are not justified with the token health benefit for those exposed.

Based on this, AMA (NSW) does not conclude that the benefits of mandatory disease testing to emergency services personnel outweighs the extreme impact on the rights of the source person to consent to medical tests and disclosure of their health information.

Yours sincerely,

Dr Danielle McMullen, AMA (NSW) President

Australian Medical Association (NSW) Ltd

References

1. ASHM. Emergency Service Providers and Blood-Borne Viruses: ASHM; 2012 [Available from: https://ashm.org.au/resources/sexual-health-resources-list/emergency-service-providers-and-blood-borne-viruses/.

2. Cresswell FV, Ellis J, Hartley J, Sabin CA, Orkin C, Churchill DR. A systematic review of risk of HIV transmission through biting or spitting: implications for policy. HIV Med. 2018.

3. Boyd M, Cooper D, Crock EA, Crooks L, Giles ML, Grulich A, et al. Sexual transmission of HIV and the law: an Australian medical consensus statement. Medical Journal of Australia. 2016;205(9):409-12.

4. Kirby Institute. HIV Data 2020 [updated 2020. Available from: https://data.kirby.unsw.edu.au/hiv.5. Centres for Disease Control and Prevention. Prevention of Hepatitis B Virus Infection in the United

States: Recommendations of the Advisory Committee on Immunization Practices. 2018.

6. ASHM. Prevalence and epidemiology of hepatitis B 2020 [Available from:

https://www.hepatitisb.org.au/prevalence-and-epidemiology-of-hepatitis-b/.

7. Beltrami EM, Williams IT, Shapiro CN, Chamberland ME. Risk and management of blood-borne infections in health care workers. Clin Microbiol Rev. 2000;13(3):385-407.

8. Tomkins SE, Elford J, Nichols T, Aston J, Cliffe SJ, Roy K, et al. Occupational transmission of hepatitis C in healthcare workers and factors associated with seroconversion: UK surveillance data. J Viral Hepat. 2012;19(3):199-204.

9. Hepatitis Australia. Hepatitis Statistics 2020 [Available from:

https://www.hepatitisaustralia.com/hepatitis-statistics.

10. NSW Health. Infection Prevention and Control Policy [Policy Directive]. 2017 [Available from:

https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2017_013.pdf.

11. ASHM. Post-Exposure Prophylaxis after Non-Occupational and Occupational exposure to HIV: ASHM; 2016

12. NSW Health. HIV, Hepatitis B and Hepatitis C – Management of Health Care Workers Potentially Exposed [Policy Directive]. 2017 [Available from:

https://www1.health.nsw.gov.au/pds/activepdsdocuments/pd2017_010.pdf.

13. Aberg J, Daskalakis D. Management of nonoccupational exposures to HIV and hepatitis B and C in adults: UpToDate; 2020 [Available from: https://www.uptodate.com/contents/management-of-nonoccupational-exposures-to-hiv-and-hepatitis-b-and-c-in-adults.

14. Lorentz J, Hill L, Samimi B. Occupational needlestick injuries in a metropolitan police force. American Journal of Preventive Medicine. 2000;18(2):146-50.

15. Gillon R. Medical ethics: four principles plus attention to scope. BMJ. 1994;309(6948):184.

16. Bambridge C, Stardust Z. Mandatory testing of people whose bodily fluids come into contact with police and/or emergency service personnel. Sydney: ACON; 2018.

17. UNAIDS/WHO. UNAIDS/WHO Policy Statement on HIV Testing. Joint United Nations Programme on HIV/AIDS & World Health Organization (UNAIDS/WHO); Geneva2004.

18. NSW Health. NSW HIV Strategy 2016 – 2020 Quarter 4 & Annual 2019 Data Report. Sydney2019.

Australian Medical Association (NSW) Ltd