



May 1, 2012

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Dear Member of the Legislative Assembly:

Re: Proposed Emergency Intervention Disclosure Act

I am writing to you in my role as Provincial Health Officer, acting under section 66 (1)(b) of the Public Health Act, which mandates that I must advise, in an independent manner, on the need for legislation, policies and practices on public health issues. I would like to bring to your attention concerns that I have with the proposed Emergency Intervention Disclosure Act (EID).

I fully recognize that elected officials have the final authority over what they choose to enact legislatively, but I respectfully submit that there are some substantive public health and policy issues that may not have been fully appreciated in discussions so far. I am setting out my concerns in order to ensure that your decisions may be fully informed.

First I would like to state that I have nothing but respect for first responders in British Columbia, and I fully recognize both their occupational risk from exposures to blood and bodily fluids that may contain pathogens, and the anxiety that can subsequently attend such exposures. However I believe that substantively the concerns are limited to three blood borne disease, and that there is an alternative resolution to these concerns that obviates the need to seek a court order overturning an individual's right to refuse to submit to diagnostic testing, an alternative that has a lower likelihood of unwanted adverse consequences.

Ascertaining the nature and burden of disease or disability resulting from occupational exposures is a necessary pre-requisite to determining how best to prevent or mitigate the sequelae. In reviewing all possible exposures it is obvious that concerns that generated the proposed EID Act are related to exposures to a limited number of blood borne pathogens - namely HIV, Hepatitis B and Hepatitis C. These concerns relate to likelihood of subsequent disease transmission, the anxiety associated with this, the need to take prophylactic medication, concerns over side effects from such medication and the behavioural constraints that might be recommended following such exposure. All other communicable diseases are already dealt with by public health measures currently well in place and thus there is no need for any inclusion of respiratory, enteric, or other illnesses.

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We lack data for victims of crime, and obviously cannot tally anxiety, but for first responders, WorkSafe BC has kept records of occupational exposures to blood since 1987. WorkSafe BC files have been examined and occupational exposures among Fire Fighters, Police, and Ambulance and First Aid Attendants tabulated. Between 1987 and 2011 some 47 blood exposure cases have been followed. There is one documented HIV seroconversions (without a defined exposure) in this period, ten hepatitis C seroconversions and three hepatitis B seroconversion. There were no documented exposures between 1991 and 1999.

There is thus a statistically small, but very real risk, and one that must be taken seriously. I suggest that addressing this risk can better be done by ensuring that first responders are educated about, have access to, and utilize, universal precautions, pre-exposure prophylaxis where applicable, the most up-to-date diagnostic testing technologies and evidence-based post-exposure follow up.

The following reflect my main concerns:

As noted previously, there are only three infectious disease of concern (hepatitis B and C and HIV), to which an individual might be exposed and for which notification protocols through public health might not be applicable in that the disease status of the source person might not be known in time to initiate prophylaxis.

All First Responders should have received hepatitis B vaccine as a protective measure and any blood exposure should be followed by administration of immune globulin and vaccine if indicated - which virtually guarantees 100 percent protection from recent and future exposures.

Significant HIV exposures carry a one in 300 risk of infection without appropriate intervention. Post-exposure prophylaxis is highly effective and with newer medications, well-tolerated, should be started within two hours, and is recommended to continue for 28 days. Waiting for test results from a source person could result in a preventable HIV infection occurring, and even a negative test result of a high risk source does not guarantee that the source is not infected due to the possibility of false negative tests.

Significant hepatitis C exposures carry a one in 30 to one in 50 risk of infection. At present there is no available vaccine, nor any recommended prophylaxis. Post-exposure management recommends follow up to ascertain whether infection has occurred and to institute antiviral therapy if so confirmed. Early appropriate treatment can eliminate infection in greater than 85 percent of cases at this point in time.

Clearly, no exposed individual should be waiting to initiate appropriate post-exposure prophylaxis where that is available and indicated i.e. for HIV and HBV exposures. Waiting to know the infectious status of the blood to which one was exposed before initiating prophylaxis is contraindicated for HIV and HBV in that it would significantly increase risk.

From the above it should be apparent that the actions available under this proposed Act will in no way reduce the risk of infection or result in any fewer episodes of occupational disease transmission.

Indeed a case could be made that passage of the Act could result in increasing such risk if an exposed First Responder relied upon knowing the infection status of the source prior to initiating post-exposure prophylaxis.

It would seem therefore that the main intentions of this Act are to a) relieve anxiety attendant upon an exposure to a source of unknown infectious status and, b) with a negative test from a source, possibly shorten the length of time an exposed individual takes prophylaxis, maintains behavior changes and requires follow up testing.

This Act obviously only applies in situations where the source individual either refuses to disclose their status and/or refuses to take testing to ascertain their status. (As an aside I am informed by the BC Centre for Excellence in HIV/AIDS, that this occurs in fewer than one percent of health care worker exposures). In order to get the said information the Act proposes legal remedies to overturn this lack of consent. This process therefore will entail a lag time. An order must be sought, an individual located, possible objections dealt with, the blood submitted and laboratory investigation undertaken. It is hard to imagine how this could be accomplished in less than a two to three week timeframe. In addition, under certain circumstances in a high risk exposure one might be legitimately concerned about the “window period”- (the time during which an individual is potentially infectious, but laboratory testing of the source will not demonstrate infection) and repeat testing may be sought.

With respect to follow up testing of the exposed person, it should be noted that the new generation of laboratory testing does not rely upon the detection of antibodies but the detection of the viruses themselves. Polymerase Chain Reaction (PCR) testing techniques allow the detection of minute quantities of viral DNA or RNA and thus can detect the presence of viruses in the blood of an exposed individual much earlier and with greater precision than the more commonly used anti-body detection kits.

In fact I am informed by Dr. Julio Montaner of the BC Centre for Excellence in HIV AIDS and Dr. Mel Krajden, Head of Virology at BC Centre for Disease Control, that these techniques can, with a very high degree of reliability, indicate whether infection of the exposed person by either HIV or hepatitis C has or has not occurred by two weeks after exposure. This period may be extended for HIV if the individual is taking anti-retroviral therapy as viral replication is suppressed.

I would therefore submit that the purposes of this proposed Act can be better fulfilled by ensuring that exposed individuals have access to universal pre-exposure precautions, timely and appropriate post-exposure assessment and prophylaxis and counseling, and most importantly have access to timely PCR testing of their own blood to assess the outcome of any exposure.

In summary, exposure outcome through PCR testing can be ascertained with a high degree of confidence in at least as timely a fashion (and possibly more rapidly) than by the mechanism proposed in the Act, has none of the possible adverse implications noted above, ensures that the exposed individual is receiving care and counseling and would avoid all the issues that the previous Privacy Commissioner laid out regarding invasion of privacy and possible Charter challenges that the proposed Act will face.

We have now had over 25 years experience in managing both the epidemics of HIV and Hepatitis C and the fear and stigma associated with them. In addition to the concerns expressed above my public health colleagues and I are greatly concerned that bringing in this Act also carries with it the spectre of possible re-exacerbation of AIDS phobia, and the further stigmatization of certain classes of individuals.

We believe that the alternative measures proposed, coupled with the blood borne exposures education package being developed by BC Centre for Disease Control and the Justice Institute for First Responders, offer a more evidence based approach to effectively address First Responder concerns.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'P.R.W. Kendall', with a horizontal line underneath it.

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