

PREVENTION OF BLOOD BORNE INFECTIONS

All workers have an obligation towards themselves to ensure that they do not put themselves at additional risk of injury during the course of their work. In hospital setting, this obligation takes even greater perspective because in addition to other common hazards which are shared with many different occupations, health care workers in hospital are exposed to a variety of infectious diseases which they can acquire during the normal course of their work. This risk, however, can be significantly reduced if proper precautions are taken. There are a number of infections which are known to have been transmitted to health care workers occupationally, of which hepatitis B, hepatitis C and HIV rank amongst the most serious. All these three infections are acquired by means of significant exposure to blood and certain body fluids. Significant exposure requires actual contact with blood and some body fluids which are either introduced into the skin or else splashed onto the body. Not all the splashes however are equally risky. By definition, significant exposure requires either as being one in which there is penetration of the skin as would occur with a sharp contaminated object contaminated or alternatively when there is splashing onto the mucosae of the body, in particular the conjunctivae. Splashes on skin are highly unlikely to cause repercussions unless breaks of the skin are present.

It is therefore essential that prevention is kept at a premium and that all health care workers keep an open eye to ensure that they do not put themselves at risk of acquiring these infections in the course of their work. The vast majority of incidents occur either from sharps injury (most often involving a used needle) or else by splashing of blood into the eye. Therefore preventative measures are fairly straight forward. Whenever sharp objects (such as needles, scalpels and similar items) are used, it is vital that proper sharps management is undertaken, particularly by consistent and proper use of sharps boxes. Similarly whenever a procedure which may result in splashing of blood or body fluids is to be undertaken, visors or similar protective eye-wear must be worn even if the patient is not known to be carrying any of the infectious diseases.

Despite numerous educational initiatives, it is regrettable to state that the number of incidents in St. Luke's Hospital remains high, especially when compared to similar hospitals in Europe. It is also common knowledge that not all these injuries are reported or reported until several hours after the event. It is in the individuals' best interest that these injuries are notified immediately. This will allow proper management of the incident, including (if applicable) the use of any indicated prophylactic measures for hepatitis B and HIV. Additionally, in the highly unfortunate scenario that the individual would have acquired such an infection from a patient, any claim for compensation would be difficult to submit unless the incident was recorded at the time of the event.

The Infection Control Unit at St. Luke's Hospital offers a 24 hour service to evaluate and manage exposure incidents to blood and body fluids, even after office hours. This service has now been extended to other Government Hospitals and Health Centres. Management depends upon the injury and of course upon the risk of the donor individual as well as to the hepatitis B serological status of the health care worker. To this end it is important that health care workers have been fully immunised against hepatitis B and also have had a blood test taken to determine sero-conversion. Individuals who show significant titres of anti-HBs will be protected from the infection for life and in normal circumstances do not need further boosters. The risk of acquiring HIV from a positive source is low, less than 0.5%, and additionally is prophylaxis available as long as this incident is reported within two hours of its occurrence. Unfortunately there is no management as yet available for incidents involving hepatitis C; this intensifies the importance of prevention.

Slightly different is the management when members of the public are injured from syringes found lying around in gardens or beaches. These cases are managed on a primary care basis at the Free Immunisation Service of Floriana Health Centre. The risk attached to these injuries is very much lower than it is in hospital settings. The prevalence of blood-borne infections on overall

community basis is still, thankfully, very low. Additionally, syringes which have been exposed to the heat and ultra-violet radiation of sunlight would ave been, to an extent, disinfected and the viability of potential pathogenic organisms very much reduced. It is also usually impossible to establish the source. As a result, in pursuance with protocols used in other countries, management would be limited to accelerated vaccination for hepatitis B.

