



POSITION STATEMENT

HIV AS IT RELATES TO SPORT

(Updated 2007)

Dr. Jeffery M. Robinson, MD, Dip sport Med.

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INTRODUCTION

The Canadian Academy of Sport Medicine (CASM) recognises the importance of clarifying issues related to Human Immunodeficiency Virus (HIV) in sport. CASM feels that it is important to educate the sport community on the implications of HIV infection and transmission. CASM feels that it is also important to include discussion on Hepatitis B and C as these are viruses that have a similar mechanism of transmission to HIV.

DEFINITIONS OF HIV, HBV AND HCV

Human Immunodeficiency Virus (HIV) is the cause of Acquired Immunodeficiency Syndrome (AIDS). HIV infects and seriously damages the body's immune system. Without the protection of the immune system people with AIDS suffer from fatal infections and cancers. People can be infected with HIV for many years before becoming symptomatic. Hepatitis B (HBV) and Hepatitis C (HCV) are also virus infections. The Hepatitis viruses infect the liver causing serious illness. The complications of hepatitis may be fatal. HIV, HBV and HCV are all transmitted in similar ways.

TRANSMISSION

Transmission of HIV occurs in the following ways:

1. Sexual Activity; mainly by penetrating sexual intercourse with exchange of semen and/or vaginal and cervical secretions. This is the major way that HIV is transmitted.
2. Parenteral inoculations; occurs when virus infected body fluids enter another person's blood system in the following ways:



- A. Blood Transfusion; only with blood that has not been screened. (In Canada all blood has been screened for HIV since November 1985);
 - B. Percutaneous Injuries; punctures wounds by contaminated needles and other sharp objects;
 - C. Blood into an open wound; the risk from this route is very small, less than any other type of transmission;
3. Perinatal; from infected mother to fetus/infant.
Most of the knowledge of non-sexual HIV transmission has been studied in the health-care setting. In the study of 2042 percutaneous injuries involving HIV infected blood, 6 health-care workers were infected. Of these six cases, five were related to injuries with sharp objects or needles. One was related to blood exposed in an open wound. All cases involved a large quantity of HIV infected blood.
4. Body fluids implicated in the transmission of HIV include the following: blood, semen, breast milk, vaginal and cervical secretions
5. Body fluids not implicated in the transmission of HIV include the following: tears, saliva, sweat, urine, sputum, respiratory droplets

HIV is not transmitted through handshaking, skin contact, swimming pool water, communal bath water, toilet seats, food or drinking water (World Health Organization, 1989). No known cases of HIV transmission have occurred from contact with contaminated surfaces such as wrestling mats, taping tables, toilet seats, sinks or other surfaces.

Although HIV, HBV and HCV are all transmitted similarly, they are not identical. HBV and HCV are more easily transmitted than HIV.

RISK OF HIV TRANSMISSION IN SPORT

The risk of transmission of HIV in the sport setting is exceedingly low. This statement is based on the evidence in the health-care setting and the type of exposure that occurs in sport. Participants in sport are subject to the same risks of HIV infection as any other individual in the general population. The greatest risk of transmission continues to be through sexual activity.

Athletes travelling should be aware that they may be exposed to a population with a higher prevalence of these viruses. They could be offered medical treatment for example,



unscreened blood transfusion or injections with a contaminated needle, that may put them at increased risk for acquiring these viruses.

PREVENTION

The following recommendations are intended to reduce the risk of transmission of HIV. Although these recommendations are directly applicable to HIV, they are also appropriate to reduce the risk of other viruses and infectious diseases including HBV and HCV.

1. GENERAL PREVENTION

- A. Safe sex and abstinence from sex play the major role in decreasing HIV transmission.
- B. Vaccination for several viruses including HBV is now available and should be considered by athletes, coaches, officials and health-care workers. Vaccinations for the other viruses should be considered if they become available.
- C. Instruments designed for piercing the skin, such as needles and syringes used for injections, ear-piercing, tattooing, acupuncture and suturing should be sterile, used one time and not shared.
- D. Personal items that may pierce the skin or mucous membranes should not be shared. This includes items like razors, toothbrushes, and nail clippers.
- E. Blood and blood products must be screened for HIV before transfusing. Blood and blood products must also be screened for HBV and HCV
- F. Sport participants travelling should confirm the medical precautions required for each destination.

2. SPORT SPECIFIC PREVENTION

- A. Primary prevention for bloody injuries includes the use of appropriate protective equipment. Protective equipment should be designed and maintained to prevent bloody injuries. Equipment designed to prevent open wounds such as mouth pieces to prevent penetration of another participant's skin should be considered for all contact sports.
- B. Dealing with a bloody wound;
 - i) If bleeding occurs where other participants may be exposed to blood, the individual's participation must be interrupted until the bleeding has been stopped. The wound must both be cleansed with antiseptic and securely covered.



- ii) All clothing soiled with blood must be replaced prior to the athlete resuming training or competition. Clothing soiled with blood and other body fluids must be washed in hot, soapy water.
 - iii) All equipment and surfaces contaminated with blood and other body fluids should be cleaned with a solution of one part household bleach to nine parts water. This solution should be prepared fresh daily.
 - iv) While cleaning blood or other body fluid spills, the following must be done:
 - wear waterproof gloves;
 - wipe up fluids with paper towel or disposable cloths;
 - disinfect the area as described in 2. iii).
 - place all soiled waste in a plastic bag for disposal;
 - remove gloves and wash hands with soap and water.
- C. Other wounds including abrasions and all skin lesions and rashes on athletes, coaches and officials must be reviewed by medical personnel. All wounds skin lesions, rashes must be confirmed as non-infectious and be securely covered prior to the athlete starting or continuing participation.

3. PREVENTION FOR MEDICAL STAFF AND FIRST AID ADMINISTRATORS

These recommendations are directed at physicians, therapists and other medical personnel involved in sport. Coaches and officials should also follow these recommendations where applicable.

- A. Wear waterproof gloves for direct contact with another individual's blood or body fluids. Change gloves after treating each individual.
- B. Wash hands with soap and water after removing gloves.
- C. When a blood or body fluid spill occurs as a result of medical treatment on an injury, wash the blood or body fluids from the skin or wound as soon as possible with antiseptic or soapy water.
- D. Sharps and syringes should be considered as potentially infectious and handled with extraordinary care in order to prevent accidental injuries. After they are used, syringes, needles and other sharp items should be placed in a puncture-resistant container for disposal in the approved manner for medical waste. Needles and blades should not be purposefully bent, broken, removed or otherwise manipulated by hand.
- E. Care providers with weeping skin lesions, open wounds or dermatitis must routinely wear waterproof gloves when treating people.



- F. Treatment for life threatening injury including control of bleeding and mouth-to-mouth resuscitation can proceed without gloves or mouth pieces, although they should be used if available.

4. INCIDENT FOLLOW-UP

If an event occurs where an athlete is at risk of virus infection a physician should be contacted immediately to assess the situation and institute appropriate action.

TESTING

Accurate laboratory blood tests are available for HIV, HBV and HCV. Mandatory testing of athletes is unwarranted. Individuals may consider voluntary testing. This testing should include informed consent, pre and post test counselling and be confidential.

HIV+ INDIVIDUALS IN SPORT

1. An HIV+ individual should not be excluded from participating in sport exclusively on the basis of his/her HIV infection.
2. An HIV+ individual should seek medical care primarily to assess his/her own health and benefit from possible treatment to discuss and further participation in sport.

EDUCATION

Sport organizations, clubs and groups must be made aware of the above recommendations and ensure that all participants, officials and ancillary personnel are aware of them. In addition, this may provide the opportunity for reviewing general hygienic practices related to sport. (WHO, 1989).

For further information on this issue contact:

Dr. Jeffery Robinson, jrobinso@caritas.ab.ca

Chairman, CASM Task Force on Infectious Disease in Sport

Canadian Academy of Sport Medicine

For further information on HIV and AIDS contact the following:

- Your doctor
- Your Public Health Unit or Community Health Centre
- Your local Community AIDS Organization



- The National AIDS Secretariat
17th Floor
Jeanne Mance Building
Tunney's Pasture
Ottawa, Ontario
K1A 0K9
Tel. (613) 957-7580
- AIDS Education and Awareness Program
Canadian Public Health Association
400 - 1565 Carling Avenue
Ottawa, Ontario K1Z 8R1
Tel. (613) 725-3769
Fax (613) 725-9826



180 rue Elgin Street, Suite 1400
Ottawa ON K2P 2K3
T. 613-748-5851 – 1-877-585-2394
F. 613-231-3739
www.casem-acmse.org