Section 2 – HIV Infection in the Athletic Setting

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GENERAL INFORMATION

Because athletes may bleed following trauma, they represent a theoretical risk to others if they are infected with HIV. Two questions have concerned coaches, athletic trainers, and school administrators: should an athlete known to be infected with HIV be allowed to participate in competitive sports, and should the universal precautions recommended for healthcare workers be used when handling athletes' blood and body fluids?

The risk of infection from skin exposure to the blood of a child or adolescent infected with HIV is very low and is much less than the risk of HIV infection by needle sticks from infected patients.[1] Transmission through intact skin has not been documented. Although it is theoretically possible that transmission of HIV could occur in sports such as wrestling and football in which bleeding and skin abrasions are common, no such transmission has been reported in these sports. There is one report of possible transmission of HIV involving a collision between soccer players. However, this report from Italy remains undocumented.[2]

If an HIV-infected athlete would choose to pursue another sport, this possible risk to others would be avoided; however, in the absence of any proven risk, involuntary restriction of an infected athlete is not justified. Informing others of the athlete's status would probably lead to his or her exclusion due to inappropriate fear and prejudice and, therefore, should also be avoided. This advice must be reconsidered if transmission of HIV is found to occur in the sports setting. Athletes should also be made aware of hazards of needle sharing for illicit drug use, including steroids.

Universal precautions adapted for the athletic setting are provided in recommendation 6 of the *American Academy of Pediatrics Recommendations.* Risk of exposure to a variety of infectious diseases is greater for coaches and trainers because of their interaction with many athletes. Competitors have extraordinarily low exposure rates. Coaches and athletic trainers should use these precautions if they are exposed repetitively to athletes' blood, because a rare athlete may have an HIV infection and because the athletic staff may not know this (as a result of the current practice of nondisclosure or because HIV-infected individuals may be asymptomatic and unaware of their infection).

Physicians should avoid reporting the presence of HIV by making it clear on the participation form, for all children, that they support the American Academy of Pediatrics policy that the physician should respect the right to confidentiality of the infected athletes.[3]

AMERICAN ACADEMY OF PEDIATRICS RECOMMENDATIONS

1. Athletes infected with HIV should be allowed to participate in all competitive sports. This advice must be reconsidered if transmission of HIV is found to occur in the sports setting.
2. A physician counseling a known HIV-infected athlete in a sport involving blood exposure, such as wrestling or football, should inform him/her of the theoretical risk of contagion to others and strongly encourage him/her to consider another sport.
3. A physician should respect an HIV-infected athlete's right to confidentiality. This includes not disclosing the patient's status of infection to the participants or the staff of athletic programs.
4. All athletes should be made aware that the athletic program is operating under the policies in recommendations 1 and 3 of the *American Academy of Pediatrics Recommendations.*
5. Routine testing of athletes for HIV infection is not indicated.

6. All persons involved in an athletic program should follow strict precautions against exposure to blood and body fluids. Additional information can be obtained in the references.[4-7] The following precautions should be adopted:
   - Skin exposed to blood or other fluids visibly contaminated with blood should be cleaned as promptly as is practical, preferably with soap and warm water. Skin antiseptics (e.g., alcohol) or moist towelettes may be used if soap and water are not available.
   - Athletes should be instructed to immediately report injuries or wounds during or prior to competition.
   - Even though good hand washing is adequate precaution, water-impervious gloves (latex, vinyl, etc.) should be available for staff to use if desired when handling blood or other body fluids visibly contaminated with blood. Individuals with nonintact skin should wear gloves. Hands should be washed after glove removal.
   - All cuts, abrasions, wounds or broken areas of skin should be covered with occlusive dressing before and during participation.
   - If blood or other body fluids visibly contaminated with blood are present on a surface, the object should be cleaned with fresh household bleach solution made for immediate use as follows: 1 part bleach in 100 parts of water, **or** 1 tablespoon bleach to 1 quart water (hereafter called "fresh bleach solution"). For example, athletic equipment (e.g., wrestling mats) visibly contaminated with blood should be wiped clean with fresh bleach solution and allowed to dry before reusing.
   - Emergency care should not be delayed because gloves or other protective equipment are not available.
   - If the caregiver wishes to wear gloves and none are readily available, a bulky towel may be used to cover the wound until an off the field location is reached where gloves can be used during more definitive treatment.
   - Each coach and athletic trainer should receive training in first aid and emergency care and be provided with the necessary supplies to treat open wounds.
   - For those sports with direct body contact and other sports where bleeding may be expected to occur:
     - If a skin lesion is observed, it should be cleansed immediately with a suitable antiseptic and covered securely.
     - If a bleeding wound occurs, the individual's participation should be interrupted until the bleeding has been stopped and the wound is both cleansed with antiseptic and covered securely or occluded.
   - Saliva does not transmit HIV. However, because of potential fear on the part of those providing cardiopulmonary resuscitation, breathing (Ambu) bags and oral airways for use during cardiopulmonary resuscitation should be available in athletic settings for those who prefer not to give mouth-to-mouth resuscitation.
   - Coaches and athletic trainers should receive training in prevention of HIV transmission in the athletic setting; they should then help implement the recommendations suggested above.

ENDNOTES

1. Gerberding JL. Management of occupational exposures to blood-borne viruses. *NEJM*. 1995; 332:444-451.
2. Torre D, Sampietro C, Ferraro G, Zeroli C, Speranza F. Transmission of HIV-1 infection via sports injury. *Lancet*. 1990; 335:1105.
3. American Academy of Pediatrics. Human immunodeficiency virus and other blood borne viral pathogens in the athletic setting. *Pediatrics*. Dec, 1999; 104:1400-1403.
4. American Medical Society for Sports Medicine and the American Academy of Sports Medicine. Human immunodeficiency virus and other blood borne pathogens in sports. *Clin J Sport Med*. 1995; 5:199-204.
5. CDC. Guidelines for prevention of transmission of human immunodeficiency virus and hepatitis B virus to healthcare and public safety workers. *MMWR*. 1989; 38:1-37.
6. American Academy of Pediatrics. *OSHA Materials to Assist the Pediatric Office in Implementing the Bloodborne Pathogen, Hazard Communication, and Other OSHA Standards.* 2nd Ed. Elk Grove Village, IL: American Academy of Pediatrics, 1994.
7. Mast EE, Goodman RA, Bond WW, Favero MS, Drotman DP. Transmission of blood borne pathogens during sports: risk and prevention. *Ann Intern Med*. 1995; 122:283-285.