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IWRF Hygiene Guidelines

Practicing good personal hygiene is one of the simplest and most effective ways to protect yourself and others from illness and disease. The World Health Organization (WHO) refers hygiene to conditions and practices that help to maintain health and prevent the spread of diseases.

Educate, Vaccinate, Evaluate

Infectious diseases are spread directly or indirectly from an infected individual. Athletes interact closely with teammates, opponents, and team staff. In addition, they frequently share training and gym equipment, facilities-training rooms/grounds, accommodation, housing, towels, water bottles and supplies and commonly undertake both domestic and international travel

Furthermore, international travel exposes athletes to indigenous diseases for which they may have little or no natural immunity. Finally, there is some information to suggest that athletes tend to be risk takers which may increase their risk for acquiring infections.

The categories of potential risk factors for spreading infection are:

- Sharing of equipment, training facilities
- Skin injury
- Close contact – on field of play, accommodations
- Off the field of play – travel, personal activities
- Diverse populations

Infections can be transmitted by person to person contact, by common source exposure or by vector-borne transmission.

The primary focus of attention should be on primary prevention by use of hygiene measures, use of immunization (vaccinations) and use of interventions to prevent secondary spread of infection. Secondary prevention measures include prevention of recurrence and prevention of onward spread of infection from a source patient.

Education of players and staff in key aspects of infection is a key element of prevention.

1. Hygiene Measures

Refer to *IWRF Medical Guideline-Bodily Fluid* for specifics in this subject.

Standard Precautions

Standard precautions combine the major features of Universal Precautions and Body Substance Isolation. They are based on the principle that all blood, body fluids, secretions except sweat, non-intact skin, and mucous membranes may contain transmissible infectious agents. Standard precautions include a group of infection prevention practices that apply to all individuals regardless of suspected or confirmed infection status. Key features of standard precautions include:

- Wearing gloves when touching biohazardous material such as open skin, body fluids of mucus membrane

- Washing hands with soap and hot water after contact with above even if gloves are used
- Cleaning surfaces thoroughly with diluted bleach (10% solution)
- Placing sharps in a biohazard puncture proof container
- Covering any wound before going to field of play

Disinfection of equipment

Equipment must be handled in a manner to prevent transmission of infectious agents including proper cleaning and sterilization of reusable equipment.

Guidelines for the proper disinfection and maintenance of whirlpools, saunas, ice machines and swimming pools are provided by the Occupational Safety and Health Administration (OSHA), USA. Use diluted bleach 10% solution (one part bleach in 9 parts water) to cleanse training areas and equipment.

Routine cleaning schedules for shared equipment should be established and recommended. Equipment that has had contact with blood and body fluids should be washed with diluted bleach as above. Any towel or other material that is contaminated with blood should be laundered appropriately. It is always a good practice to know and follow the guidelines of the manufacturer's recommendations.

Personal Hygiene

Good personal hygiene helps reduce colonization of bacteria. Regular handwashing is key in preventing spread of infection. Handwashing with soap for 15-30 seconds, 30 seconds rinse with water followed by complete drying with a towel is necessary. The use of rinses and gels with concentrations of 50-95% alcohol take 15 seconds to use and are effective at killing organisms. Chlorhexidine soap has been useful for reducing transmission of MRSA infections. Educate players and staff on handwashing.

For prevention of transmission of other infections transmitted by droplet/aerosol, oral-fecal route, see individual infections section.

2. COMMON INFECTIONS

(a) Skin and Soft Tissue Injury

Any athlete with a skin injury (abrasion, laceration etc.) should be removed from the field of play until the area of injury can be securely covered with occlusive dressings or bandages to prevent leakage of body fluid and to protect the lesion becoming infected. Careful attention should be paid to the wound care after play to avoid skin infection.

Team doctors should strongly encourage and educate team members about good overall and hand hygiene, the importance of covering of wounds, and the benefits in terms of infection transmission of limiting sharing of equipment. An ample supply of soap and alcohol based gels or hand rinses should be freely available. Athletes should be educated in recognizing wounds that are potentially infected and in seeking medical attention for same.

(b) Urinary Tract Infection (UTI)

UTI is a common infection usually caused by bacteria but can occur with fungal source. It is common in person who utilizes catheters to empty out their bladder such as indwelling catheters or those performing intermittent catheterization. Symptoms include, but not limited to, fever, burning sensation, increase in frequency of urination, unexpected leakage, bladder spasming, cloudy or foul odor urine, or blood in urine. Those with complete spinal cord injury may not exhibit any symptoms.

The infection is usually treated with simple antibiotics.

(c) Respiratory Infection

Most common infection is the “flu” which is caused by various viruses. Symptoms can include runny nose, congestion, fever, and malaise. Allergies, such as seasonal or dust, can have similar symptoms.

Treatment is generally supportive. Your medical provider can also provide anti-flu (viral) medications as well. Yearly flu vaccination is recommended.

Many athletes in IWRF have higher risk or compromised respiratory function compared to their able body counterparts. This puts them at higher risk to get pulmonary infection. Symptoms can include shortness of breath, difficulty breathing, and fever. It is recommended that you seek medical attention as soon as possible to have your symptoms worked up and diagnosed for appropriate treatment.

(d) Fungal Infection

Fungal infections, usually skin related, are commonly transmitted in crowded settings such as public shower, locker rooms, and dormitories. It is also transmitted through skin to skin contact as well as through shared equipment. You may see a small skin lesion, usually flat but can be raised, that grow in size and also spread over time. Sometimes the initial sign is a simple discoloration of the skin.

(e) Blood Borne Infections

Blood borne infections are transmitted by exposure to blood from bleeding gums, substance misuse, unprotected sexual contact, and travel to endemic areas.

Based on risk it is now recommended that individual water containers be available for each player in contact sports. Athletes should use squeeze water bottles which they do not put in their mouth.

(f) Meningitis

In cases of meningococcal meningitis, chemoprophylaxis should be considered in household contacts and anyone directly exposed to the patient’s oral secretions and should be administered within the first few days of the patient’s illness. Prevention measures include use of meningococcal vaccination per international immunization guidelines.

3. IMMUNIZATIONS

Immunization is an important aspect of prevention of infection for all individuals. The following are important issues to consider in assessing disease prevention in athletes:

- routine health maintenance
- catch up immunization for missed or failed primary immunization
- travel related immunization (geographical variation for requirements)
- recent exposure to infectious agents
- immunization of high risk groups (eg splenectomy, immunocompromised etc)

Travel-related immunization requirements will be determined by the destination of travel. Players and staff should also be opportunistically advised of standard travel-related issues such as sun exposure, driving, jet-lag prevention, sexual health. Reputable travel sites which will provide up-to-date infection outbreak information should be used to guide immunization recommendations.

- www.cdc.gov/travel
- www.who.int/ith/en

4. CONCLUSION

Team doctors and managers should strongly encourage and educate team members about good overall hygiene measures and specifically hand hygiene, the importance of covering of wounds, and the benefits in terms of infection transmission of limiting sharing of equipment.

An ample supply of soap and alcohol based gels or hand rinses should be freely available. Athletes should be educated in recognizing wounds that are potentially infected and in seeking medical attention for same.

Acknowledgement of commonly encountered infections is paramount to the recognition, management and development of prevention strategies. As described primary prevention of infection can be promoted through accurate immunizations, appropriate planned health maintenance, good hygiene practices and behavioral modification to minimize high risk activities. Secondary prevention is achieved through vigilant surveillance for reportable diseases, proper education and containment for reducing infection if an illness has occurred and timely prophylaxis with medications and immunizations where indicated.

Hence - Educate, vaccinate, evaluate

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