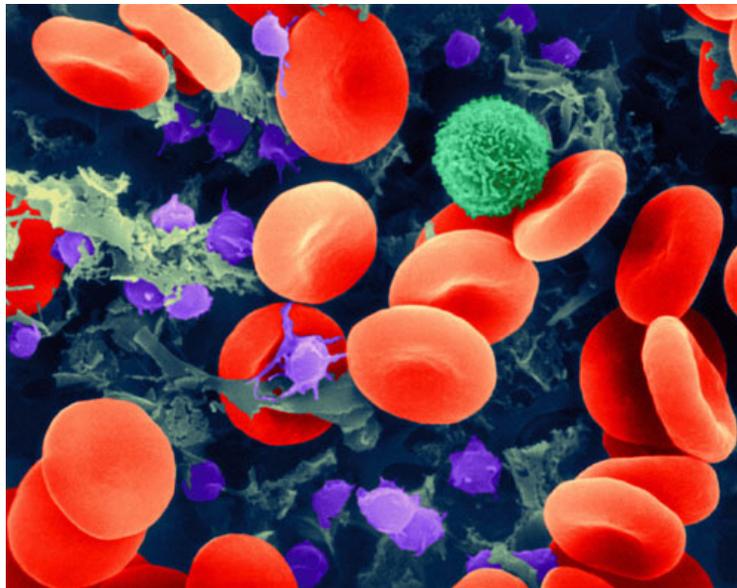


## Unit 3: Sports and Infectious Diseases

### Instructional Activities for Teens



### **PKIDs' Infectious Disease Workshop**

Made possible by grants from the Northwest Health Foundation,  
the Children's Vaccine Program at PATH and PKIDs.

# PKIDs' Infectious Disease Workshop

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## Acknowledgements

Producing this workshop has been a dream of ours since PKIDs' inception in 1996. It has been more than two years since we began work on this project, and many people helped us reach our goal. It's not done, because it is by nature a living document that will evolve as science makes strides in the research of infectious diseases, but it's a great beginning.

There are people who've helped us whose names are not on this printed list. That omission is not deliberate, but rather from our own clumsiness in losing important pieces of paper, and we apologize.

Without the funding and support of the Northwest Health Foundation and the Children's Vaccine Program at PATH (Program for Appropriate Technology in Health), this would have been an impossible task. Dr. Katherine Vaughn, PKIDs' Medical Director and Dr. Karen Steingart, scientific advisor to PKIDs, provided excellent guidance through their editorial oversight and knowledgeable contributions to the Infectious Disease Workshop.

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# Table of Contents

<b>Introduction .....</b>	<b>5</b>
<b>Letter from Teachers to Parents.....</b>	<b>6</b>
<b>1. Staying Safe in Sports: Posters for Prevention.....</b>	<b>7</b>
<b>2. Sports and Infectious Diseases: Points for Discussion .....</b>	<b>9</b>
<b>3. Standard Precautions for Athletes.....</b>	<b>11</b>
Athlete Training Worksheet .....	12
Athlete Training Worksheet (answers included).....	14
<b>4. Stigma Awareness Statement for Athletes .....</b>	<b>16</b>
Handout .....	17
<b>Bibliography .....</b>	<b>18</b>
<b>Additional Activities and Resources .....</b>	<b>19</b>

*To navigate this document, use the bookmarks to the left or select an item on this page.*

*[Click here to go back to the PKIDs' IDW website.](#)*

This publication contains the opinions and ideas of its authors. It is intended to provide helpful and informative material on the subject matter covered. Any information obtained from this workshop is not to be construed as medical or legal advice. If the reader requires personal assistance or advice, a competent professional should be consulted.

The authors specifically disclaim any responsibility for any liability, loss, or risk, personal or otherwise, which is incurred as a consequence, directly or indirectly, of the use and application of any of the contents of this workshop.

# Introduction

PKIDs (Parents of Kids with Infectious Diseases) is a national nonprofit agency whose mission is to educate the public about infectious diseases, the methods of prevention and transmission, and the latest advances in medicine; to eliminate the social stigma borne by the infected; and to assist the families of the children living with hepatitis, HIV/AIDS, or other chronic, viral infectious diseases with emotional, financial and informational support.

Remaining true to our mission, we have designed the *Infectious Disease Workshop (IDW)*, an educational tool for people of all ages and with all levels of understanding about infectious diseases. In this workshop, you will learn about bacteria and viruses, how to prevent infections, and how to eliminate the social stigma that too often accompanies diseases such as HIV or hepatitis C.

We hope that both instructors and participants come away from this workshop feeling comfortable with their new level of education on infectious diseases.

The IDW is designed to “train-the-trainer,” providing instructors not only with background materials but also with age-appropriate activities for the participants. Instructors do not need to be professional educators to use these materials. They were designed with both educators and laypersons in mind.

The IDW is comprised of a master Instructor’s Background Text, which is divided into six units: Introduction to Infectious Diseases, Disease Prevention, Sports and Infectious Disease, Stigma and Infectious Disease, Civil Rights and Infectious Disease, and Bioterrorism and Infectious Disease.

For each unit, instructors will find fun and helpful activities for participants in five age groups: 2 to 6 years of age, 6 to 9 years of age, 9 to 12 years of age, 13 to 18 years of age and adults.

We welcome any questions, comments, or feedback you may have about the IDW or any other issue relating to infectious diseases in children.

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**Vancouver, WA 98668**  
**VOICE: (360) 695-0293 or toll-free 877-557-5437**  
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**EMAIL: [pkids@pkids.org](mailto:pkids@pkids.org)**  
**WEBSITE: [www.pkids.org](http://www.pkids.org)**

Dear Parents,

Our class will soon be studying infectious diseases. We will learn about what germs are and ways we can keep from spreading germs. We will also learn that people who have infectious diseases don't have to be treated differently or singled out just because they have a disease.

The workshop we will use has been created by PKIDs (Parents of Kids with Infectious Diseases), a national nonprofit organization dedicated to supporting families touched by infectious diseases.

Your child may have questions about germs or may come home with new ideas about preventing the spread of germs. Here are a few ways you can stay informed:

***View PKIDs' website.*** PKIDs' website can be found at [www.pkids.org](http://www.pkids.org). You may also request information by calling PKIDs at 1-877-55-PKIDS.

***View the instructor's background text for the Infectious Disease Workshop (IDW).*** The primary purpose of this text is to provide teachers with background information on infectious diseases. It is a good text for anyone seeking general information on infectious diseases. The text provides information about specific diseases, methods of disease prevention, and civil rights for those affected by infectious disease. Visit [www.pkids.org](http://www.pkids.org) for a link to the IDW background texts in PDF format.

***View descriptions of the activities we will be doing in class.*** Visit [www.pkids.org](http://www.pkids.org) for a link to the activities and handouts in PDF format.

The world becomes smaller every day and germs from near and far continue to threaten our health. It is extremely important to educate our young people, equipping them with prevention methods to protect their health and stop the spread of disease.

As always, please feel free to contact me with any questions!

Sincerely,

# STAYING SAFE IN SPORTS

## Posters for Prevention of Transmission of Bloodborne Pathogens

### LEVEL

Teens

### OBJECTIVE

Students will summarize safe behaviors to observe when playing sports or participating in recreational activities.

### MATERIALS

- Posterboard or butcher paper.
- Scissors.
- Glue.
- Variety of pens.
- Magazines or any other sources of pictures.

### PREP

Determine working dyads/groups, if desired.

### INSTRUCTIONAL COMPONENTS

1. Introduce the project: students will be making safety posters for various sports/activities.
2. Students should select an audience—their own peers, their family, or even younger students. The activity selected should contain age-appropriate material for the audience.
3. Posters should not be too “wordy.” They should pictorially demonstrate safety concepts, i. e., “showing” more than “telling.”
4. ***Posters should emphasize activities/precautions to follow that will minimize the potential for blood spills and transmission of bloodborne pathogens.***
5. Form dyads/groups.
6. Assign topics, which may include:
  - Wrestling
  - Soccer
  - Football
  - Gymnastics
  - Hockey
  - Softball
  - Baseball
  - Basketball
  - Biking
  - Skating, skateboarding, scooters
  - Trampolines
  - P.E. activities

If you will have a younger audience:



- Waiting in line/taking your turn/no pushing
- Don't walk behind swings/under seesaw
- Playing at safe heights/not climbing too high
- Don't touch other people's blood
- If someone gets hurt, get an adult to help
- Wash your hands after you play
- Cover wounds and cuts with bandages

Let students know that the content of the poster may address:

- Gear maintenance issues (e.g., cleaning off the mat in wrestling).
- Safety concerns for that sport (e.g., playground—falling off jungle gym; wrestling—potential for spread of skin diseases).
- What to do in case of blood spill or minor bleeding.
- Resources in the school (school nurse, coaches).

For in-class completion of the project, students will need at least one period for planning and research and one period for assembly of the presentation.

### **ASSESSMENT**

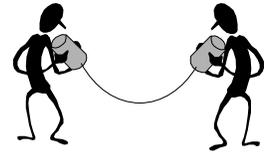
Posters should emphasize activities/precautions to follow that will minimize the potential for blood spills and transmission of bloodborne pathogens. Posters should be age-appropriate for the intended audience.

## SPORTS AND INFECTIOUS DISEASES

### Points for Discussion

#### LEVEL

Teens



#### OBJECTIVE

Students will discuss issues surrounding infectious diseases in sports.

#### MATERIALS

Topics for discussion (included).

#### PREP

None

#### INSTRUCTIONAL COMPONENTS/ASSESSMENT:

1. Magic Johnson, a famous basketball player, retired from the LA Lakers in 1991, but he still plays basketball with his team, the Magic Johnson All Stars Team. Also in 1991, Magic Johnson announced that he had become HIV-positive.
  - *Do you think the other players on Magic Johnson's team are worried that they could get HIV from Magic? Why or why not?*
  - *Are there ways HIV could be transmitted in the sports setting?*
  - *HIV is more limited than other infectious diseases in ways it can be transmitted. Other infectious diseases can be transmitted by sharing water bottles, for example. What are some ways we can prevent diseases from being transmitted during, before, and after sport activities?*
2. A few retired NBA players that are HIV-positive have chosen to remain anonymous.
  - *Why do you think that is?*
  - *If you were a famous athlete with an infectious disease, would you tell people about it? Why or why not?*
3. Greg Louganis is a famous Olympic gold medal-winning diver. He chose not to tell the 1988 Olympic committee that he was HIV-positive.
  - *Why do you think he chose not to tell the committee he had an infectious disease?*
  - *What if he had not known he was HIV-positive? Do you think there could be other athletes that have infectious diseases and don't know it?*
  - *Was it acceptable for him not to inform the committee?*
4. At the 1988 Olympic competition, Greg Louganis hit his head on the diving board and bled into the swimming pool. The doctor who stitched him up was not wearing gloves.
  - *Do you think Louganis was worried about whether or not other athletes could get HIV from him?*
  - *Do you think the doctor would have worn gloves if he had known Greg Louganis*

*was HIV-positive?*

- *What if Greg Louganis had not known he was HIV-positive? Can infectious diseases still be transmitted, regardless of whether or not the people involved know they have a disease?*

5. In 2001, certain areas in Canada experienced elevated rates of meningococcal disease occurrences. (Meningococcal disease is an infectious disease that affects the nervous system.) Due to the upcoming Canada Summer Games (August 2001), some concerns were raised about whether or not visiting athletes could contract meningococcal disease while at the games. A statement was issued that explained the low risk of contracting the disease, ways to prevent contracting the disease (e.g., not sharing drinking bottles), and information about the meningococcal vaccine (which was not required due to the low risk).

- *Why do you think the Canadian government issued this infectious disease news brief?*
- *Do you think it was a good idea to issue this news brief? Why or why not?*
- *If you were an athlete planning to attend the Canadian Summer Games that year, would you have been concerned? Why or why not?*

# STANDARD PRECAUTIONS For Athletes

## LEVEL

Teens

## OBJECTIVE

Students will familiarize themselves with Standard Precautions and the application of these precautions to their particular sport.

## MATERIALS

- One copy of the Training Worksheet—1 per student (included with lesson plan).
- Handout on Standard Precautions (from IDW Instructor Background text)—1 per student.
- Handout on Disease Transmission Modes (from IDW Instructor Background text)—1 per student.

## PREP

Determine when students will receive the worksheet and when they will submit the completed portion. (For example, students receive worksheet at orientation and turn it in by the first practice to be eligible for the team.)

## INSTRUCTIONAL COMPONENTS

1. Discuss standard precaution concepts with students.
2. Have them fill out the worksheet during the lecture, or take it home to fill out and discuss with a parent.

## ASSESSMENT

Students will submit completed worksheet along with signed parent/guardian acknowledgement (if desired).

*The Standard Precaution Athlete Training Worksheet could accompany any medical release forms that need to be signed by a parent/guardian.*



## STANDARD PRECAUTIONS Athlete Training Worksheet

NAME: \_\_\_\_\_ SPORT: \_\_\_\_\_

COACH: \_\_\_\_\_ SCHOOL NURSE: \_\_\_\_\_

This worksheet is to be completed after reading the handouts on Standard Precautions and Disease Transmission Methods.

### General Information

1. What are Standard Precautions designed to do?
2. Since many people do not know they have an infectious disease and others may choose not to disclose their infectious disease status, what should we assume about everyone, including ourselves?
3. List 4 body fluids in which infectious diseases may be found:
4. Is it possible for blood to be present in various body fluids if it is not visually apparent?

### Handwashing

Generally speaking, list 3 instances before or after which you should wash your hands.

- 1.
- 2.
- 3.

Effective handwashing:

1. How long do you scrub?
2. What parts of hands should be scrubbed?
3. Is soap necessary?
4. Does it matter if water is warm or cold?

### Non-permeable barriers

1. Non-permeable gloves are necessary to act as a \_\_\_\_\_ between you and any body fluids.
2. If non-permeable gloves are not available, a plastic/paper (choose one) bag can act as an appropriate barrier.
3. A person using non-permeable gloves to assist in the treatment of an injured person should wash their hands after removing the gloves. TRUE or FALSE?

**Injuries**

If one of your teammates is injured, you should (choose any that are appropriate):

1. Tell a supervisor/coach as soon as possible.
2. Not worry about keeping a barrier between you and your teammate’s injury.
3. Leave bloody towels and clothing on the floor, out of the way.
4. Place any bloody towels and clothing (including your own) in plastic bags to be cleaned later.
5. See that contaminated surfaces are properly disinfected.
6. Wash your hands.

Thinking of your particular sport, list situations in which someone could sustain an injury that might break the skin and release blood and other body fluids.

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**Preventative Maintenance**

Thinking of your particular sport, list any equipment you use (e.g., drinking bottles, mats, balls) and how that equipment should be used and maintained in order to prevent the transmission of infectious diseases.

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**PARENT/GUARDIAN ACKNOWLEDGEMENT OF STUDENT COMPLETION**

I, \_\_\_\_\_ (print name) acknowledge that my student has satisfactorily completed this Standard Precautions Athlete Training Worksheet. I have reviewed his/her answers and discussed them with him/her.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## STANDARD PRECAUTIONS

### Athlete Training Worksheet (*answers included*)

NAME: \_\_\_\_\_ SPORT: \_\_\_\_\_

COACH: \_\_\_\_\_ SCHOOL NURSE: \_\_\_\_\_

This worksheet is to be completed after reading the handouts on Standard Precautions and Disease Transmission Methods.

#### General Information

1. What are Standard Precautions designed to do?  
*Prevent the transmission of pathogens (disease causing organisms) borne by blood or other body fluids.*
2. Since many people do not know they have an infectious disease and others may choose not to disclose their infectious disease status, what should we assume about everyone, including ourselves?  
*Assume that everyone, ourselves included, has an infectious disease, and act accordingly.*
3. List 4 body fluids in which infectious diseases may be found: *Blood, saliva, nasal mucous, semen, vaginal fluids, urine and excrement*
4. Is it possible for blood to be present in various body fluids if it is not visually apparent? *Yes*

#### Handwashing

Generally speaking, list 3 instances before or after which you should wash your hands.

**After going to the bathroom; before eating; after dealing with an incident in which blood may have been present; after working or playing outside; after petting animals; after changing diapers; before preparing food; after touching uncooked food; after sneezing or coughing**

Describe effective handwashing:

1. How long do you scrub? *15-20 seconds*
2. What parts of hands should be scrubbed? *Palms, tops, fingernails, in between fingers*
3. Is soap necessary? *Yes*
4. Does it matter if water is warm or cold? *Yes, it should be warm*

#### Non-permeable barriers

1. Non-permeable gloves are necessary to act as a \_\_\_\_\_ (*barrier*) between you and any body fluids.
2. If non-permeable gloves are not available, a plastic/paper (choose one) (*plastic*) bag can act as an appropriate barrier.
3. A person using non-permeable gloves to assist in the treatment of an injured person should wash their hands after removing the gloves. TRUE or FALSE? (*true*)

## **Injuries**

If one of your teammates is injured, you should (choose any that are appropriate):

1. Tell a supervisor/coach as soon as possible. (*correct*)
2. Not worry about keeping a barrier between you and your teammate's injury. (*incorrect*)
3. Leave bloody towels and clothing on the floor, out of the way. (*incorrect*)
4. Place any bloody towels and clothing (including your own) in plastic bags to be cleaned later. (*correct*)
5. See that contaminated surfaces are properly disinfected. (*correct*)
6. Wash your hands. (*correct*)

Thinking of your particular sport, list situations in which someone could sustain an injury that might break the skin and release bodily fluids.

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## **Preventative Maintenance**

Thinking of your particular sport, list any equipment you use (e.g., drinking bottles, mats, balls) and how that equipment should be used and maintained in order to prevent transmission of infectious diseases.

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## **PARENT/GUARDIAN ACKNOWLEDGEMENT OF STUDENT COMPLETION**

I, \_\_\_\_\_ (print name) acknowledge that my student has satisfactorily completed this Standard Precautions Athlete Training Worksheet. I have reviewed his/her answers and discussed them with him/her.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

# **STIGMA AWARENESS STATEMENT**

## **For Athletes**

### **LEVEL**

Teens

### **OBJECTIVE**

- Students will understand the impact of stigma on stigmatized people.
- Students will commit to preventing stigma in the sports setting.

### **MATERIALS**

One copy per student of the Stigma Awareness Statement (included with lesson plan).

### **PREP**

Determine when students will receive the Stigma Awareness Statement and when they will submit the signed portion. (For example, students will receive the statement at orientation and turn it in by the first practice.)

### **INSTRUCTIONAL COMPONENTS**

1. Discuss concepts with students.
2. Encourage them to discuss issues with their parents.
3. Remind students when the signed statement should be returned.

### **ASSESSMENT**

Students will submit signed statement.



**STIGMA AWARENESS STATEMENT  
For Athletes**

*Stigma* is defined by Webster’s dictionary as “something that detracts from the character or reputation of a person, group, etc.; mark of disgrace or reproach... a mark, sign, etc. indicating that something is not considered normal or standard.”

Sometimes we act differently toward people who are “different” than us. In the United States, we are very familiar with racial discrimination, but less familiar with other types of discrimination, such as disease-related discrimination. Instead of educating ourselves about infectious diseases, we sometimes avoid people with infectious diseases, or we put them down with derogatory comments.

In doing these things, we stigmatize those infected—burdening them beyond reason.

By signing this statement, you and your teammates commit to the following:

- I am aware of the fact that many people do not know they have an infectious disease.
- I am aware of the fact that many people have no idea when, where or how they contracted the disease.
- I am aware of the fact that I myself may have an infectious disease.
- I am committed to educating myself about infectious diseases and their modes of transmission so that I may work to prevent the spread of disease, thereby protecting myself from others and others from myself, in case I do have an infectious disease.
- In the event that I am informed of a person’s infectious disease status, whether by that person or someone else, I will maintain confidentiality regarding that person’s infectious disease status.
- I commit myself to treating others with dignity and respect at all times and under all circumstances.

-----

I, \_\_\_\_\_ (print your name) acknowledge that I have received and read the Stigma Awareness Statement. By signing below, I acknowledge that I understand the statement and that I will commit myself to adhering to the principles outlined in this statement.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

# Bibliography

American Academy of Dermatology  
[www.aad.org](http://www.aad.org)

American Academy of Pediatrics: *HIV and Other Blood-Borne Pathogens in the Athletic Setting; Policy on Organized Sports for Children.*  
[www.aap.org](http://www.aap.org)

Centers for Disease Control and Prevention: *Safe USA Guidelines to Safety in the Home, at School and in Sports*  
[www.cdc.gov](http://www.cdc.gov)

National Athletic Trainers Association: *Policy on Bloodborne Pathogens*  
[www.nata.org](http://www.nata.org)

The National Collegiate Athletic Association (NCAA): *Skin Infections in Wrestling; Guidelines on Blood-Borne Pathogens; 2001-2002 NCAA Sports Medicines Handbook.*  
[www.ncaa.org](http://www.ncaa.org)

National Library of Medicine  
[www.nlm.nih.gov](http://www.nlm.nih.gov)

U.S. Consumer Product Safety Commission: *Handbook for Public Playground Safety; Skateboards*  
[www.cpsc.gov](http://www.cpsc.gov)

## **Additional Activities and Resources for Teachers, Students, and Parents**

Girl Power: There are No Limits. Information for girls and grownups on a variety of topics, including sports and fitness.

[www.girlpower.gov](http://www.girlpower.gov)

Johnson, Earvin ‘Magic’ and Novack, William. *My Life*. New York: Crest, 1993.  
Discusses Magic Johnson’s battle with HIV.

KidsHealth: Health topics and games for kids and adolescents.

[www.kidshealth.org](http://www.kidshealth.org)

Red Cross: relevant information on sports safety, including water safety, first aid, and CPR.

[www.redcross.org](http://www.redcross.org)

Small, Eric, Spear, Linda and Swoopes, Sheryl. *Kids & Sports*. 1<sup>st</sup> ed. New York: Newmarket Press, 2002.

Addresses children, the appropriate participation of sports at different age levels, and the problems of children with various disabilities, such as asthma, diabetes, etc.