

Child Care Resource and Training Kit

HIV/AIDS

Lesson Plan

HIV/AIDS LESSON PLAN

Submitted by: Ann R. Marzano, BS-Ed., Grays Harbor County, Public Health Department

Course Length: 1 hour

Objectives: Participants will:

- Know the difference between HIV and Aids.
- Understand the infection and how it affects the body.
- Know how it is transmitted.
- Understand what the standard test looks at.
- List the risky behaviors associated with the infection.
- Know how to protect themselves.
- Know how to work with children with HIV.

Public health staff in Washington State has provided all of the materials in the Child Care Training and Resource Kit. The only materials included are those where copyright could be located and permission to use was received. In all cases the copyright owner has requested to receive credit for the use of their materials. Please do not use these materials in any other way without getting your own copyright release.

How to use the Child Care Training and Resource Kits: Each lesson contains:

- **Lesson Plan** file, with the general directions for the lesson.
- **Overhead file** with the overhead materials. Those files on the CD are in color.
- **Teacher Notes** file which outlines the points of discussion for each overhead.
- **Handouts file** includes pages related to the overhead for those learners who like to take notes as well as other materials for the learner to take with them. Occasionally, some materials you must request yourself from the vendor. Instructions on how to get these materials are included in the lesson plan file. Some materials you must download from the Internet and the web address is included in the lesson plan file.
- **Teacher Enrichment** - In some cases the lesson developer may have included materials for teacher enrichment. Where possible, those materials are included here. If permission to print could not be obtained then the citation is included below for you to obtain.

Overheads: See Overhead Files

Teacher Notes: There are no Teacher Notes for this lesson. All lecture materials are only lesson plan outline in this document.

Handouts:

- Cleaning blood and/or body fluid spills: See Handout file.

Materials Needed:

- Overheads+(except for “Stage of HIV Infection” which is *)
- Chalk board, white board or flip chart and tripod with markers
- Condom and banana

<p>Activity Welcome</p> <p>Lecture</p>	<p>Process: Welcome. Brief instructor introductions. Have participants do the same. Provide room and bathroom logistics. Provide forum for questions and answers.</p> <p>Lecture: HIV is the virus that causes AIDS and is spread from person-to-person through blood-to-blood and sexual contact. It was first identified in 1983. Since then it has been learned that there are two strains of HIV (HIV-1 and HIV-2) that are very closely related.</p> <p>During this training, you will learn;</p> <ul style="list-style-type: none"> ➤ the difference between HIV and AIDs, ➤ about the infection and how it affects the body, ➤ how it is transmitted, ➤ testing information, ➤ treatment options, ➤ risky behaviors associated with the infection, ➤ how to protect yourself, ➤ and dealing with children with HIV. <p>I. The difference between HIV and AIDS</p> <p>A. HIV</p> <p>H – human – not animal</p> <p>I - immunodeficiency – damages the immune system</p> <p>V – virus</p> <ol style="list-style-type: none"> 1. HIV is the infection. The Human Immunodeficiency Virus, or HIV, is an infection that eventually causes the disease AIDS. 2. A virus is one of the smallest “germs” that can cause disease <p>B. AIDS</p> <p>A – Acquired – you get it from someone, it does not just appear</p> <p>I – Immuno - immune</p>	<p>Time 10 minutes</p>	<p>Materials</p> <p>Overhead: Title Page</p> <p>Overhead: Objectives</p> <p>Write: Bolded information on chalkboard, white board or flip-chart paper.</p> <p>Write: Bolded information on chalkboard, white board or flip-chart paper.</p>
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	<p style="text-align: center;">D – Deficiency – weakened S – Syndrome - a set of symptoms</p> <p>About the infection:</p> <p>A. HIV attacks the body’s defenses. After entering the virus starts to damage cells (T-cells and other white blood cells) that defend against infection.</p> <ol style="list-style-type: none"> 1. The immune system is a collection of cells and substances that act as the body’s defense against germs and other things that make people sick. 2. Antibodies are the substances that form in the blood when germs enter the body. 3. Antibodies usually defend against illnesses and infections, although this is not the case with HIV antibodies. <p>B. A few weeks after infection, people with HIV often develop symptoms similar to those of flu or mono. This period of discomfort may last a week or so. Thereafter, they may be free of symptoms. They may also have severe or prolonged fevers, lymph glands that stay swollen, lingering fatigue, and persistent night sweats.</p> <p>C. About half of those with HIV develop AIDS within 10 years of becoming infected. After 12 years, 65% develop AIDS.</p> <p>D. Once people with HIV develop AIDS, they may get illnesses that healthy people usually resist and may experience motor and memory difficulties, wasting syndrome (unintended weight loss and diarrhea), and general weakening of body functions.</p>		<p>Overheads for this section: T4 cell HIV Attacking the T4 cell Conversion HIV Reproduces Rebirth</p>
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	<p>E. AIDS is diagnosed by doctors who do a count of t-helper cells (a type of white blood cells) in the blood. A t-cell count of less than 200 indicates AIDS.</p> <p>F. Stages of HIV infection</p> <ol style="list-style-type: none">1. Stage 1 – 2 to 6 weeks after exposure to HIV<ul style="list-style-type: none">• Acute infection• May have brief flu-like illness• Person becomes HIV positive• Unlikely to be aware that HIV infection has occurred.➤ 2. Stage 2 – 2 to 10 years or more<ul style="list-style-type: none">➤ Asymptomatic infection➤ No signs or symptoms of being ill.➤ Unless person is tested, they will not know of HIV infection.3. Stage 3 – Several months to years<ul style="list-style-type: none">➤ Persistent generalized lymphadenopathy (swollen lymph glands) lasting for months.➤ Weight loss.➤ Fatigue4. Stage 4 - Months to several years<ul style="list-style-type: none">➤ Other opportunistic diseases➤ Neurological disease➤ Secondary infections/cancer		<p>Overhead: Stages of HIV Infection</p>
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	<p>II. Transmission</p> <ol style="list-style-type: none"> 1. HIV, the virus that causes AIDS, is spread through sex, with infected people, blood-to-blood contact with infected people, and mother-to-child at birth or through breast-feeding. <ol style="list-style-type: none"> A. HIV can be spread through sexual contact with an infected person through semen and vaginal fluids B. It can be spread through blood-to-blood contact with an infected person by sharing needles and syringes. C. A baby can acquire HIV from its mother at birth through blood exposure or during breast-feeding. <p>III. Testing</p> <ol style="list-style-type: none"> 1. The standard test for HIV today analyzes samples of blood or fluid from the mouth and detects antibodies to HIV, not the virus itself. Antibodies are substances the body makes to defend itself when it is invaded by germs such as HIV. People who have antibodies to HIV have been infected with HIV. The standard tests are very good. 2. The first antibody test was licensed in 1985. 3. People who think they are at risk of HIV infection are encouraged to seek counseling and testing. People are risk of HIV infection if they— 	<p>Overhead: Transmission Write: On chalkboard, white board or flip chart, generate a list from participants of ways you cannot get HIV (hugging, kissing, etc.)</p>
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- Share needles and syringes,
- Have sex with anyone who injects drugs,
- Have sex with men who has sex with other men,
- Have sex with multiple sex partners (including men and women who exchange sex for money or drugs),
- Received transfusions or blood components before 1985, when testing of the blood supply began,
- received blood-clotting factors before 1985.
- Males or females with promiscuous sexual history and other sexually transmitted diseases.

4. The Window Period

When a person get HIV, their immune system responds by making antibodies. The HIV test does not look directly for HIV, instead it looks for the antibodies that your body makes to try to fight the virus. For example, if you have unprotected sex today with an HIV infected partner, it can take your body 2 weeks up to 1 year to actually respond to the HIV by developing antibodies. Most people develop antibodies between 3 and 6 months. It is extremely rare for people to take longer than 6 months to test positive for HIV.

5. Antibody Response

If you were tested today, the sample of blood gotten from you is actually testing for 3 months ago and back. So, anything that might have put you at risk in the last three months might not show up on today’s test. There is always the possibility that an individual may be infected and have a negative test due to this “window period”, so if you recently have been involved in risky behaviors you may want to abstain from those risky behaviors and be re-tested in another 3 months.

IV. Treatment Options

1. Advances in treatment of HIV infection have helped to lengthen the healthy life span of people living with HIV.

Illustration: Draw the window period on chalk board, white board or flip-chart paper.

	<p>2. Combinations drug therapies seem to be decreasing death rates among AIDS patients in the United State.</p> <p>3. New therapies are helping delay the progression from HIV infection to AIDS diagnosis.</p> <p>4. Drugs have a number of limitations</p> <ul style="list-style-type: none"> ➤ They are expensive, ➤ Require that infected persons take dozens of pills every day at multiple intervals, all with the necessity of not missing doses to avoid the risk of HIV developing a tolerance to the medications, ➤ Side effects that make it impossible to continue use, ➤ Simply do no work for some, ➤ Deaths from AIDS may be fewer, large numbers of HIV infections continue to occur. <p>V. Prevention</p> <p>A. Don't have unprotected sex</p> <ol style="list-style-type: none"> 1. Use a latex condom correctly and consistently <p>B. Don't share needles or syringes</p> <p>C. Universal Precautions</p> <p>Universal Precautions are guidelines to protect health care workers, as well as patients, from exposure to HIV, hep B, and other bloodborne germs. Health care workers treat blood, certain body fluids (including semen, vaginal fluid, and tissue from all patients as if they were</p>		<p>Demonstration:The correct way to put on a condom demonstration. Use Banana.</p>
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	<p>infectious. The guidelines do not apply to body fluids such as sweat, tears, saliva, urine, and feces unless they contain visible blood. Protective equipment such as gloves, gowns, goggles are worn to avoid exposing skin or mucous membranes to infected fluids. Other precautions include washing hands and other procedures.</p>		
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	<p>VI. Children with HIV</p> <p>A. Nearly all new cases of children with HIV in the United States are born to mothers with HIV.</p> <p>B. Most babies are infected before, during, and just after the birth.</p> <ol style="list-style-type: none">1. During pregnancy, the mother's blood nourishes the baby. If this blood contains HIV, the virus could infect the baby. The fetus is particularly at risk if the mother becomes positive while in her first or third trimester.2. During regular (vaginal) delivery, the baby must pass through the mother's vagina. The baby comes into contact with the mother vaginal fluid as well as blood. If these fluids are HIV-infected, they could infect the baby. Because the baby, naturally, isn't using universal precautions and therefore, is exposed via the eyes, the mouth, or any abrasions or cuts that they might get during the birthing process.3. During breast-feeding, the baby could HIV in the milk. In the U.S., experts recommend that women with HIV use a milk substitute (formula) to feed their babies. In foreign countries, however, the risk of the infant dying from diarrhea due to unclean water is so great, that these mothers are encouraged to nurse. <p>C. Early treatment of HIV infected mothers with AZT during their pregnancy reduces the rate of transmission of HIV from mother to child from 25% to 3%.</p>		
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	<p>D. Young women are more easily infected with HIV than older women because;</p> <ol style="list-style-type: none"> 1. Vaginal lining is thinner and is be more easily injured, and therefore, is a less effective barrier against HIV and STD's. 2. Less vaginal mucus which acts as lubricant to protect the vagina from injury and as a barrier to germs. Immune factors in the mucus also help protect against infection. 3. In 13-19 year olds, cells on the cervix are more sensitive to germs that cause certain STD's. 4. Young women are the most frequent victims of incest, rape, and adultery. Sex that is forced, hurried, or frequent can injure the vagina and surrounding tissues. Injury that causes bleeding or tearing of these tissues increases the chances of infection. 5. Because of the power imbalance between men and women, young women may find it harder to practice risk reduction behaviors, such as using latex condoms, with male partners. This is especially true for young women age 13-19 whose first sex partners are older men. <p>D. Child Care and School Attendance</p> <ol style="list-style-type: none"> 1. HIV is not spread by everyday casual contact or by school activities. 2. Child Care and/or school attendance should be decided on a case-by-case basis. 3. In childcare, a child with HIV is more at risk from infections from other children, than the other children are at risk for contracting HIV. 		
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	<ol style="list-style-type: none">4. In general children with HIV can get the same vaccinations that children usually get.5. Since 1991, HIV infection has been the sixth leading cause of death among young people ages 15 to 24 in the United States.6. You probably won't know if you have a child with HIV in your care because many of these families choose not to disclose their status. They do this because of the societal stigma that is placed on HIV. That is why Universal Precautions is so very important. <p>E. Blood Supply and related issues</p> <ol style="list-style-type: none">1. Since 1985, all donated blood has been tested for signs of HIV.2. Testing methods have greatly improved.3. Donated blood is destroyed if tests detect signs of HIV.4. Very few infected blood donations go undetected.5. Risk of receiving an infected transfusion is minimal, estimated to be 1 in 676,000.6. People are told about the results of tests done on their blood donations if the tests show signs of HIV or if the tests are unconfirmed.7. The FDA recommends that even ones own blood donated for oneself be tested for signs of HIV and certain other germs.		
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	<p>VII. Wrap-up</p> <ul style="list-style-type: none">➤ HIV is the infection➤ AIDS is the disease➤ Transmission is through four fluids: blood, semen, vaginal fluid, breast milk➤ Spread of HIV can be prevented➤ Blood supply in the U.S. is very safe.➤ Drug treatments are available that can prolong life. <p>There is no cure.</p>		<p>Overhead: What have you learned.</p>
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