

Hartman's

In-Service Education SourceBook Series



# Protecting Yourself: HIV and AIDS in Health Care

Charles A. Illian, RN, BSN

SECOND EDITION



## **Protecting Yourself**

# **HIV and AIDS**

## **in Health Care**

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## NOTICE TO THE READER

Though the guidelines contained in this text are based on consultations with healthcare professionals, they should not be considered absolute recommendations. The instructor and readers should follow employer, local, state, and federal guidelines concerning healthcare practices. These guidelines change, and it is the reader's responsibility to be aware of these changes and of the policies and procedures of her or his healthcare facility/agency.

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**M**any healthcare providers are not adequately trained or have never cared for a person with AIDS. They will be concerned and frightened, and this is natural for them to feel this way without preparation.

Many people with AIDS keep well informed about HIV and AIDS as well as the most current HIV and AIDS statistics and research. These people have probably read multiple sources of information and have listened to multiple sources of media that focus on AIDS. They will expect a high level of interest and knowledge regarding the disease from their healthcare providers.

However, there are others who are poorly informed and have limited access to accurate information. They will expect answers to their questions. For all these reasons, healthcare providers must be well informed regarding the disease and its processes and be prepared to answer and explain all procedures dealing with the delivery of care. A current information base must be maintained. The quality of this information can affect and influence the emotional and physical well being of the person with AIDS.

This SourceBook addresses these concerns in order to alleviate fears, debunk myths, and provide a fundamental understanding of the disease process of AIDS. It provides valuable information that will help your aides and assistants give better, more compassionate care.

Please note that limited permission is granted to photocopy the handouts for use at the site originally purchasing this in-service. Photocopying other parts of this in-service, including the lesson plan, is expressly prohibited.

To use the handouts, photocopy the number needed for your group. Consider using different colors of paper to organize the different handouts or to make some stand out.

Convert transparency masters to acetates for use with an overhead projector. You can do this by purchasing transparency film at an office supply store and photocopying the transparency masters onto the acetates, or you can have a copy company do it for you. If overhead projection is not convenient for your presentation area, you may wish to copy the information from the transparency masters onto a chalkboard or flip chart.

We hope you find this in-service helpful. And, as always, we welcome your comments and suggestions.

**Happy Teaching!**

# Introduction and Assessment

**Estimated Time:** 10-15 minutes

**Tools:** Handout Intro-1 Assessment A  
Handout Intro-2 Assessment A Answer Key  
Handout Intro-3 Note-Taking Worksheet

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**Learning Activity:** **Introduction**

The purpose of this in-service is to educate healthcare workers about human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). Participants will learn about the disease process of HIV, ways in which HIV is spread, and how to protect themselves from getting the disease. Participants will also look at some common myths about HIV and AIDS and learn the real facts in an attempt to alleviate their own fears about caring for someone with AIDS.

**Learning Activity:** **Assessment**

**Distribute  
Handout Intro-1  
Assessment A**

Allow participants enough time to finish the test. This assessment will measure participants' grasp of the facts vs. the myths about AIDS.

**Learning Activity:** **Discussion**

Discuss the correct answers to the assessment with the class. Ask the following questions:

- Has anyone here taken care of someone with AIDS?
- Does anyone know someone who has HIV or AIDS?
- How do you feel about the disease? Does it scare you?

Tell the class that this in-service should address their questions and concerns about HIV and AIDS, as well as debunk some of the myths surrounding the disease.

**Distribute  
Handout Intro-3  
Note Taking  
Worksheet**

Tell the class that taking notes during the lectures and discussion will help them to remember the information and provide a resource to refer to later.

# Assessment A

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

**True or False.** For each of the following statements, write “T” for true or “F” for false.

- |          |  |          |  |
|----------|--|----------|--|
| 1. _____ | As a healthcare worker, if I care for someone with HIV or AIDS, it is very likely that I will become infected. | 4. _____ | Mosquitos can spread HIV to humans.  |
| 2. _____ | If I am HIV positive, that means that I have AIDS.   | 5. _____ | If I have been exposed to HIV within the last four weeks but my test comes back negative, then I will not get HIV. |
| 3. _____ | I can get HIV from giving an infected person a bath or from sharing the same dishes or utensils.               |          |  |

## Assessment A Answer Key

**1. False.** It is highly unlikely that you will become infected, especially if you follow Standard Precautions and treat every body fluid as though it were infected with HIV.

**2. False.** AIDS is a group of symptoms that develop much later in the disease process. Not everyone who is HIV positive has developed AIDS yet.

**3. False.** HIV is not spread through casual contact.

**4. False.** Mosquitos cannot carry the human immunodeficiency virus because HIV is a human virus and cannot survive outside of the human body.

**5. False.** HIV tests look for antibodies to HIV in the blood. It can take anywhere from 6-8 weeks up to 6 months for the immune system to start producing antibodies to HIV. This means that you should get retested in 6 months.



# Note-Taking Worksheet

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

## 1-1 Four stages of HIV infection:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

## 1-2 Briefly define each of the following in your own words:

1. Window period: \_\_\_\_\_
2. CD-4+ cells: \_\_\_\_\_
3. p-24: \_\_\_\_\_
4. Asymptomatic: \_\_\_\_\_
5. AIDS: \_\_\_\_\_
6. Incubation period: \_\_\_\_\_

## 1-3 The two most infectious periods of HIV are:

1. \_\_\_\_\_
2. \_\_\_\_\_

## 2-1 How is HIV spread?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

2-2 What is the most common cause of HIV transmission? \_\_\_\_\_  
\_\_\_\_\_

## 3-1 List three common myths about HIV and AIDS and briefly describe why they are not true.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

## 4-1 Body substances covered under Standard Precautions are:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

**4-2 What infection control practices will help protect you against disease transmission (including HIV)? When must these practices be used?**

- |          |          |
|----------|----------|
| 1. _____ | 5. _____ |
| 2. _____ | 6. _____ |
| 3. _____ | 7. _____ |
| 4. _____ |          |

**5-1 What is the best way to stop the spread of HIV?** \_\_\_\_\_

**5-2 What are high risk behaviors?**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

**5-3 Briefly define each of the following in your own words:**

1. Multiple partners: \_\_\_\_\_
2. Monogamous: \_\_\_\_\_

**6-1 What does HIV testing detect?** \_\_\_\_\_

**6-2 What is seroconversion? How long does it take for the body to seroconvert?**

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**6-3 List two types of HIV testing:**

1. \_\_\_\_\_
2. \_\_\_\_\_

**7-1 List some statistics about HIV and AIDS in the U.S.**

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**7-2 Which states or provinces in the U.S. currently have the highest number of HIV and AIDS cases?**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

# Define the stages of HIV-1 infection

**Estimated Time:** 1 hour

**Tools:** Transparency 1-1 Overview of the Stages of HIV Infection  
Transparency 1-2 Stages of HIV Infection (Part 1)  
Transparency 1-3 Stages of HIV Infection (Part 2)  
Transparency 1-4 The Lymph System  
Transparency 1-5 Incubation and Infectious Periods  
Handout 1-1 The Stages of HIV-1 Infection

**Learning Activity:** Lecture

**Display**  
Transparency 1-1  
Overview of the  
Stages of HIV  
Infection

HIV infection can be divided into four distinct stages:

**Stage 1:** The Early Acute Stage (18 months average)

**Stage 2:** Latent-Asymptomatic (7 ½ years average)

**Stage 3:** LAS or Lymphadenopathy syndrome (1-2 years average)

**Stage 4:** AIDS (2-3 years average, but may increase due to new drugs)

**Definition:** The **window period** is the time from exposure to HIV to when the HIV antibodies appear in the blood. The common test for this is called ELISA.

**Display**  
Transparency 1-2  
Stages of HIV  
Infection (Part 1)

## The Early Acute Stage

- Normal CD-4+ cell count
- Very high level of HIV-1 virus in the blood
- Very high level of p-24 in the blood
- Infected person very communicable to others at this stage
- No outward signs or symptoms of infection

**Definition:** **CD-4+** cells are specialized cells that stimulate the immune system and tell it to fight disease. The CD-4+'s themselves do not fight the disease. CD-4+'s are also known as T-4 cells, T-helpers, T-4 helpers, and T-4 lymphocytes.

**Question:** How do the CD-4+ cells know when to stimulate the immune system to fight?

**Answer:** Cells have "self" markers that identify them as belonging to your body. Invading organisms lack this special marker. CD-4+ cells recognize these "non-self" agents and release special substances into the blood stream which signal your immune system to destroy the invaders.