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## **Materials**

The materials used in the *Michigan Model*® are categorized into three types:

- **Health Education Resources**: Materials obtained from your Regional School Health Coordinator, Michigan Model for Health Clearinghouse (MMHC), or ordered from the vendor listed
- Teacher Manual Resources: Materials found in the manual, such as student worksheets, teacher references, and so on
- Supplied by the Teacher: Materials typically found in the classroom or school, such as pencils, writing paper, art supplies, and so on

If you have questions about any of the materials used in the Michigan Model for Health® or how to obtain them, contact MMHC

Phone: 1-888-517-6195

Email: support@

michiganmodelforhealth.org

This list includes all of the materials needed for this HIV lesson.

MATERIALS		
Health Education Materials		
Video: "HIV and AIDS," Human Relations Media (10 minutes)		
Teacher Manual Resources		
Materials to Duplicate		
Family Resource Sheet: "HIV and AIDS"		
Teacher Keys and References		
Teacher Reference: "Guidelines for Answering Students' Questions"		
Teacher Reference: "HIV Infection"		
Teacher Reference: "Glossary of Terms"		
Teacher Reference: "Staying Safe From HIV and Showing Compassion for Others"		
Supplied by the Teacher		
Equipment		
Computer, LCD projector and screen or wall to project onto, or Smartboard or large screen TV to show the video		



## **HIV Infection - What to Do** and What Not to Do

Student Learning Objectives:	National Health Standards:	
1. Define HIV and AIDS.	Core Concepts	
2. Identify how HIV is and is not transmitted.	Core Concepts	
<ol> <li>Identify ways people can protect themselves from infection with HIV and other blood-borne infections, including not touching blood and used hypodermic or tattoo needles.</li> </ol>	Self-Management	
Explain that it is safe to be a friend of someone who is living with HIV or AIDS.	Core Concepts	

## **Lesson Synopsis**

Review what students know about how germs get into the body and how to prevent the spread of disease. Define HIV and AIDS. Watch and discuss a video that describes the function of the immune system and how HIV affects it. Explain how to avoid becoming infected with HIV. Review the difference between HIV and AIDS. Discuss ways to interact with someone who is infected with HIV. Reinforce the knowledge gained from the lesson. Review the lesson's main points.

Activity	Time in Minutes	Materials Needed
Introduction	2	• None
Teacher Input	25	Health Education Materials  • Video: "HIV and AIDS," Human Relations Media, (10 minutes)  Teacher Manual Resources  • Teacher Reference: "Guidelines for Answering Students' Questions"  • Teacher Reference: "HIV Infection"  • Teacher Reference: "Glossary of Terms"  Supplied by the Teacher  • DVD player and monitor
Application or Skill Practice	11	Teacher Manual Resources  • Teacher Reference: "Staying Safe From HIV and Showing Compassion for Others"
Closure	2	Teacher Manual Resources  • Family Resource Sheet: "HIV and AIDS"
TOTAL	40	

### **Preparation**

#### **Legal Requirements**

- Parents must be notified of the content of the lesson, provided an opportunity to preview the materials in the lesson, and be given the opportunity to observe the instruction and to excuse their child from the lesson. This notification must be done in writing. A sample family letter is in the Getting Started section of this unit.
- The lesson must be approved by your local Board of Education. Your school board must hold two public hearings prior to adopting this lesson.
- You must be certified to instruct students about HIV and AIDS by the Michigan Department of Education.

#### Prior to the Lesson:

- Read the teacher references, "Guidelines for Answering Students' Questions," "HIV Infection," and "Glossary of Terms."
- Preview the video.

#### For Application or Skill Practice:

- Decide how you will form small groups with three or four students in each group.
- Read the teacher reference, "Staying Safe From HIV and Showing Compassion for Others."

#### For Closure:

**Duplicate** the family resource sheet, "HIV and AIDS," for students to take home.

## **LESSON PROCEDURE**

**Introduction:** Introduce the topic of HIV and AIDS.

## **Approximately 2 minutes**

Instructional Steps	Script & Detailed Directions	Extensions & Suggestions
Review students' knowledge about how germs get into the body and what can be done to prevent the spread of disease.	What are some ways germs can get into our bodies and cause illness?	
	Answers: through cuts and scrapes in the skin, inhaled into the lungs, swallowed in food and beverages, rubbed in the eyes, grow on the skin, get in the moist membranes of the nose and mouth	
	What can all of us do to keep germs out of our bodies and prevent spreading germs to others?	
	Answers: clean cuts and scrapes; get help from an adult if there is a lot of blood; cover our mouths and noses when we sneeze or cough; wash our hands often, especially before eating and after using the bathroom; stay home when we are sick	
State the focus of the lesson.	We know lots of ways to help prevent the spread of disease. Today we are going to learn about a special type of germ, a virus called HIV. It causes AIDS.	
	Raise your hand if you have heard of HIV or AIDS before today.	

**Teacher Input:** Define HIV and AIDS. Explain that HIV is very hard for the immune system to fight. Watch and discuss a video that explains what happens inside the body when germs get inside it. Explain how HIV is and is not transmitted and how to protect oneself. Describe how to interact with people who are ill, including people infected with HIV.

### **Approximately 25 minutes**

Instructional Steps	Script & Detailed Directions	Extensions & Suggestions
Define HIV and AIDS.	HIV stands for Human Immunodeficiency Virus. It is the virus that causes people to become sick and possibly develop AIDS.	
	Write HIV and what the letters stand for at one end of the board.	
	AIDS stands for Acquired Immune Deficiency Syndrome. This is the name of the disease caused by HIV.	
	Write AIDS and what the letters stand for on the opposite end of the board. Later in the lesson, you will create a continuum on the board.	
Introduce the video, HIV and AIDS.	We are going to watch a video that describes what happens inside our bodies when germs get inside. Our bodies have a special mechanism for fighting germs. It's called the immune system. Our immune system fights and kills most kinds of germs that make us sick. HIV is a kind of germ that is very hard for our immune system to fight. Let's see what happens.	
	Show the video.	
Discuss the video.	Use the following questions to discuss the content of the video.	
	With germs around us all the time, why don't we get sick more often?	
	Answer: The immune system contains white blood cells. The white blood cells can fight most of the germs that make us sick, especially if we keep ourselves healthy by eating nutritious foods, drinking lots of water, and getting plenty of physical activity and rest.	
	Why can't the immune system kill HIV like it kills other germs?	
	Answer: HIV attacks the white blood cells (called T Cells) and kills them. Eventually, HIV kills so many white blood cells that there aren't enough white blood cells left to fight germs, so the person can get sick with AIDS.	
	How does a person go from being infected with the HIV virus, to having AIDS?	

Answer: When the number of T-cells gets too low, the immune system begins to lose the battle against HIV and can't fight off certain infections called Opportunistic Infections. This results in AIDS, Acquired Immune Deficiency Syndrome, and the person gets very sick.

### What are ways you cannot get the HIV virus that you can get other germs by doing?

Answer: You can't get the HIV virus from touching or hugging or kissing someone (basically skin to skin contact of any kind). You can't get HIV from objects such as towels, sinks, toilets, or eating utensils. It also isn't spread by mosquitos nor can you get it by giving blood.

#### How is HIV Transmitted?

Answer: The video states "HIV is present in blood, semen and vaginal fluids. It's transmitted when any of these infected substances comes into contact with blood found in the mucous membrane of another individual. This contact can occur during sexual contact and by sharing needles such as those used by people who abuse drugs. HIV can also be transmitted by a woman infected with HIV to her baby before or during childbirth or after birth through breastfeeding, but medications can usually prevent this from happening." Refer to the teacher reference, Guidelines for Answering Students' Questions for further guidance on student questions related

#### How can someone your age avoid being infected with HIV?

Answer: Since the HIV virus enters the body only through blood, you can avoid becoming infected with HIV by not touching other people's blood or handle needles or syringes that may have blood on them and by not having sex or using drugs.

#### How do medicines affect HIV infection?

Answer: Some medicines can stop the HIV virus from copying itself in the body. Other medicines block HIV from infecting new T-cells.

#### How do you know if someone has HIV?

Answer: You can't tell by just looking at them. One has to be tested to know if they have HIV infection.

#### How should you treat someone with HIV infection?

Answer: Treat them like any other person, with respect and kindness. There is no reason to be afraid of someone with HIV or AIDS. You are not at any risk of getting the disease from them.



If students raise questions about sexual intercourse or concerns about blood transfusions. refer to the teacher reference, "Guidelines for Answering Students' Questions" for suggested ways to respond.



	Who can you talk to if you have questions about HIV or AIDS?	
	Answer: You can talk with any trusted adult such as a parent, teacher, school nurse, or counselor.	
Explain the difference between HIV and AIDS. Use the teacher	Create a continuum on the board similar to the teacher reference which explains the difference between HIV and AIDS and how a person might physically feel.	
reference, "HIV Infection," as a guide.	When HIV first enters the blood of a person, he or she appears to be healthy for awhile. Then, HIV begins to kill white blood cells, and the person begins to get sick more often. After HIV has killed many white blood cells, the person is very sick from time to time and may develop AIDS.	
	There is a medical test that can tell if someone has HIV even if he or she looks and feels healthy.	
Describe how to treat someone who is ill.	Think of a time when you were sick. What did other people do that made you feel cared for and more comfortable?	
is III.	Answers: talked to me, helped me with work I missed at school, told me they missed me when I wasn't at school, told me they were sorry I didn't feel well, etc.	
	What can you do to show someone with HIV that you care about them?	
	Answers: If the person feels well, play with the person, hug the person, share food during lunch, share books and toys, and help the person with school work. If the person doesn't feel well, send cards or notes to the person, talk with them on the phone or visit them, and help them with school work he or she misses.	

**Application or Skill Practice:** Reinforce what students have learned about HIV and how to treat others who are infected.

### **Approximately 11 minutes**

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Instructional Steps	Script & Detailed Directions	Extensions & Suggestions
Form groups with three or four students in each group.  Explain the activity.	In each small group, assign one student to be the group's spokesperson.  Each of you are a member of a team. I will ask you a question. Discuss the answer with your team. When you have an answer you all agree on, the spokesperson should raise his or her hand.	Have teams create a team name and keep team scores on the board.
Ask the questions and discuss the answers using the teacher reference, "Staying Safe From HIV and Showing Compassion for Others."	Ask the questions on the teacher reference. Clarify the information as needed.	

## **Approximately 2 minutes**

Instructional Steps	Script & Detailed Directions	Extensions & Suggestions
Review the main points of the lesson.	If you think you know what HIV is, make the letter "V" with your fingers.	
	Answer: HIV is the virus that damages the white blood cells and can cause AIDS.	
	If you think you know how a person can and cannot get HIV infection, shake hands with your neighbor.	
	Have students share how a person can and cannot get HIV.	
	Answers: People get HIV infection from contact with the blood of someone who has the virus. People cannot get HIV infection by hugging, kissing, playing together, sharing food and toys, and so on.	
	If you can think of one way you can show caring for someone who is infected with HIV, make a "C" with your fingers.	
	Answers: send cards or notes, talk to them, and so on	
Distribute copies of the family resource sheet, "HIV and AIDS."	Here is some information for you to take home to your family. Please share with your family what you have learned today about HIV and how to treat others who are infected.	



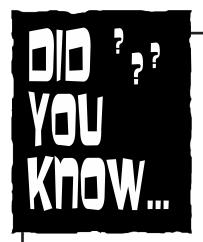
You may be wondering, "What should my fourth grader know about HIV and AIDS?" Your child may have heard something about HIV and AIDS in a news report or on television. He or she may have questions and perhaps some wrong information.



Your school board has approved the teaching of HIV and AIDS lessons in the fourth grade. Your child has learned the following concepts:

- How to prevent the spread of germs.
- How the body's immune system fights germs.
- AIDS is a disease caused by a virus called Human Immunodeficiency Virus (HIV).
- HIV is different from most germs, because it only gets into the body through blood-to-blood contact.
- How HIV damages the immune system when it gets into the body.
- HIV cannot be caught by:
  - touching someone infected,
  - sharing pencils or toys with someone infected,
  - hugging someone infected,
  - playing with someone infected,
  - talking to someone infected, or
  - coughing and sneezing without covering your mouth.
- To treat people who are HIV infected or have AIDS in a caring way. Play with them when they feel like it and show caring when they don't feel well.
- Scientists and doctors are working to find a cure for AIDS.

We believe this information will help your child understand the facts about HIV and AIDS and reduce any fears your child may have. Your child will know what a fourth grader can do to protect him or herself from infection: don't touch the blood of other people and don't touch needles or syringes. He or she will also know ways to show kindness to people who are HIV infected or have AIDS.



HIV is a virus that can lead to acquired immunodeficiency syndrome or AIDS if not treated. Unlike some other viruses, the human body can't get rid of HIV completely, even with treatment. So once you get HIV, you have it for life.

HIV attacks the body's immune system, specifically the CD4 cells (T cells), which help the immune system fight off infections. Untreated, HIV reduces the number of CD4 cells (T cells) in the body, making the person more likely to get other infections or infection-related cancers. Over time, HIV can destroy so many of these cells that the body can't fight off infections and disease. These opportunistic infections or cancers take advantage of a very weak immune system and signal that the person has

AIDS, the last stage of HIV infection.

No effective cure currently exists, but with proper medical care, HIV can be controlled. Today, someone diagnosed with HIV and treated before the disease is far advanced can live nearly as long as someone who does not have HIV.

Centers for Disease Control, What is HIV? https://www.cdc.gov/hiv/basics/whatishiv.html



### Children With HIV or AIDS

We have discussed the fact that not many children are infected or have AIDS. but some are. You may want to tell your child the following information to help him/her understand.

When children are infected with HIV, it is usually from their infected mothers when they are born. The other way children have been infected is from blood that was contaminated with the virus. Currently, the blood supply in this country is very safe, so the chance of being infected with HIV from blood transfusions or clotting factor (in the case of hemophilia) is very, very low.

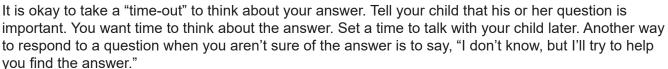


## **Answering Questions About HIV and AIDS**

We have encouraged your child to ask you questions about HIV infection and AIDS. You can provide your child with information and reassurance about this disease. Take this chance to share your beliefs and values regarding the behaviors that spread HIV.

When your child comes to you with a question, you might find it helpful to keep the following points in mind.

- Listen carefully to the question.
- Repeat the question back to be sure you have understood what is being asked.
- Give a simple, short answer that is appropriate for your child's age.
- Check to make sure your child has understood the answer.
- Give your child a chance to ask more questions.



## You can get more information from these resources:

- CDC INFO: 1-800-232-4636 (English) and Spanish; available 24/7)
- Hearing impaired hotline: 1-888-232-6348
- Michigan AIDS Hotline: 1-800-872-2437
- Family physician
- Local Public Health Department
- Local AIDS Hotline
- Your school

## These websites will also provide accurate information:

- Centers for Disease Control and Prevention (CDC): https://www.cdc.gov/std/hiv/default.htm
- KidsHealth from Nemours: "HIV and AIDS." https:// kidshealth.org/en/kids/hiv.html?ref=search
- Michigan Department of Health and Human Service: "HIV and STD's 101" https://www.michigan.gov/ mdhhs/0,5885,7-339-71550 2955 298 2-428701--,00.html
- U.S. Department of Health and Human Services, HIV and STDs: https://aidsinfo .nih.gov/understanding-hiv-aids/factsheets/26/98/hiv-and-sexuallytransmitted-diseases--stds-

