Reference Material on HIV, AIDS & STI
For High School Students
Reference Material on HIV, AIDS & STI for High School Students
First edition

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After each lesson, you should be able to demonstrate a deeper understanding of the Human Immunodeficiency Virus (HIV), Acquired Immunodeficiency Syndrome (AIDS), and other Sexually Transmitted Infections (STI) by:

**Lesson 1. Introduction to HIV and AIDS** (30-40 minutes)

1. Explaining what HIV is and how HIV infection affects the body
2. Discussing the symptoms of HIV infection
3. Differentiating HIV from AIDS
4. Explaining Antiretroviral Therapy (ART)

**Lesson 2. Transmission and prevention of HIV infection** (30-40 minutes)

5. Explaining how HIV is transmitted
6. Enumerating the steps in the prevention and control of HIV transmission
7. Discussing the importance of abstinence as the most effective way of preventing HIV infection

**Lesson 3. Sexually Transmitted Infections** (30-40 minutes)

8. Describing common symptoms of sexually transmitted infections (STI)
9. Explaining the relationship between STI and HIV infection
10. Discussing STI prevention and treatment concepts
11. Making decisions on what to do to prevent or address STI and HIV infection

**Lesson 4. Available HIV & STI services and assessment of risk** (30-40 minutes)

12. Identifying the different HIV and STI services available
13. Assessing one’s risk for HIV and STI
14. Applying decision-making skills in managing sexual health-related issues

**Lesson 5. HIV law and the Philippine HIV situation** (30-40 minutes)

15. Describing government policies for the prevention and control of HIV and AIDS (RA 8504 or Philippine AIDS Prevention and Control Act)
   a. Voluntary HIV Counseling & Testing with written informed consent
   b. Confidentiality
   c. Discrimination
16. Interpreting data on the current status of HIV in the Philippines
17. Reflecting on the trend of the HIV situation in the country

**Optional Activities**

**Glossary**

**References**

**Acknowledgements**
Lesson 1. Introduction to HIV and AIDS

Importance of understanding HIV and AIDS concepts

There is an increasing number of people with HIV in the Philippines. 2016 estimates from the Department of Health (DOH) show that **62% of new HIV infections come from young people, 15 to 24 years old.** This is why it is important for you to understand concepts on HIV and AIDS which will be discussed throughout the five lessons in this reference material.

Additional information about the current situation of HIV in the country will be discussed in Lesson 5.

What is HIV?

The **immune system** is a collection of cells and substances that defends the body against foreign substances (virus, bacteria, or other germs) called **antigens**, and helps keep the body healthy. When antigens enter the human body, the immune system produces **antibodies** in the blood to fight the antigens.

The immune system can be compared to an army guarding the country and protecting it from foreign invasion. It is composed of white blood cells, called T-lymphocytes and B-lymphocytes, which perform the role of an army. Among the T-lymphocytes are cells called **Cluster of Differentiation 4 (CD4).**

The **Human Immunodeficiency Virus or HIV** is a virus that attacks these CD4 cells and weakens the immune system. Once HIV enters the cell, it uses this cell to make copies of itself - a process known as **replication**. Over time, the copies of the virus increases in the body which cause more CD4 cells to be destroyed. When this happens, the immune system can no longer defend the body from antigens. This condition is called **Acquired Immunodeficiency Syndrome or AIDS.**

**Figure 1. How HIV attacks the antibodies of an infected individual**

Illustrating the effects of HIV on our body

I am CD4 and I will defend you!

Yay!

Attack! I will make the Body sick!

Don’t worry Body, I will defend you!

Go, CD4!

Another one? No, you won’t!

What would I do without you, CD4?

I’m HIV! I’m going to attack you, CD4!

You have to win this!

Attack!

Why can’t I defend myself?

Oh noooo!

I win!

This isn’t happening!

No! Where are you, CD4?

Time to attack the body again!

I can’t protect myself without CD4. You win!

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**Symptoms of HIV**

A person infected with HIV may look physically healthy and well even if the virus is already inside his or her body.

Symptoms often begin to appear in the latter stage of HIV infection. These symptoms are not because of HIV itself but are due to certain infections caused by the different bacteria, viruses, and other germs that may attack the body. These infections do not normally make a healthy person with a strong immune system sick. But the immune system of a person with HIV eventually becomes weak and his or her body cannot fight these infections.

These infections that attack people with HIV are often **curable when immediately treated with proper medications** but HIV infection itself cannot be cured. People with HIV should see their doctors regularly to receive appropriate diagnosis and treatment of these infections.
A person with HIV whose immune system is already weak and is attacked by infections may have symptoms ranging from frequent or chronic diarrhea, severe weight loss, on-and-off fever, cough, night sweats to a severe life-threatening illness.

Consult a doctor immediately for further diagnosis if you experience any of the symptoms described below.

- Daily fever of more than two weeks/night sweats
- Thrush: a thick whitish coating of the tongue or mouth that is caused by yeast infection and sometimes accompanied by sore throat
- Tuberculosis/Pneumonia: cough present for more than 2 weeks
- Long periods of frequent diarrhea of more than 2 weeks
- Quick weight loss of more than 10 pounds that is not due to increased physical exercise or dieting

Remember, HIV infection itself has **NO specific symptoms**. Therefore, a person may already be infected with HIV even if he or she looks physically healthy and well. The only way to know if a person has HIV is to get an HIV test.

*Key Concept*
Differentiating HIV from AIDS

Acquired Immunodeficiency Syndrome (AIDS) is a condition of a person infected with HIV when the immune system is already weak or destroyed and the body can no longer fight common infections.

HIV infection MAY LEAD to AIDS but a person with HIV DOES NOT NECESSARILY have AIDS.

H – Human: because this virus can infect human beings ONLY. Animals and mosquitoes cannot have HIV.

I – Immunodeficiency: because the virus causes a deficiency or a failure to work properly in the body's immune system. The body becomes weak and not able to fight infections.

V – Virus: because this organism is a virus, it is not able to reproduce by itself. It reproduces by taking over the machinery of the human cell.

As HIV increases in the body, the immune system becomes even weaker. This makes it difficult for the body to fight infections. When there are many infections present at the same time, the condition is called AIDS.

A – Acquired: because it is a condition transmitted from person to person. It cannot be inherited or passed through genes.

I – Immuno: because it affects the body's immune system, which functions to fight germs such as bacteria and viruses.

D – Deficiency: because it makes the immune system not able to work properly, making the body unable to fight infections.

S – Syndrome: because a person with AIDS may experience a wide range of symptoms due to different diseases and infections.

Guide Questions

1. Do all people with HIV also have AIDS?
2. Can a person without HIV have AIDS?
**Treatment for HIV: Antiretroviral Therapy**

At present, there is **NO VACCINE** available to prevent HIV infection.

There is also currently **NO CURE** for HIV that would eliminate the presence of the virus within the human body. A person who gets infected with HIV will have HIV for life. However, there is **treatment** available that slows down the spread of HIV.

The treatment is called **Antiretroviral (anti • retro • viral) Therapy (ART)** which uses medicines called **antiretrovirals (ARV)**. These medicines are needed to slow down the replication of the virus, preventing the CD4 cells to be destroyed. Having enough CD4 cells allows the immune system to fight infections.

Without ARV, a person with HIV may die of infections within 5 to 10 years. Taking ARV every day will prolong the life of a person with HIV. ART will be discussed further in Lesson 4.
To continue our story from page 2, this is what happens to the body when a person with HIV starts taking Antiretroviral (ARV) medicines everyday.

Guide Questions
1. Can a person with HIV get cured?
2. Is HIV a deadly virus?
3. Of the things you learned today, what will you share with your friends about HIV and AIDS?
Lesson 2. Transmission and Prevention of HIV Infection

HIV Transmission

Transmission (noun) is the act or process by which something is spread or passed from one person or thing to another; [transmit (verb)]

Word Discovery

Complete the sentence below using the options from the word pool at the bottom.

HIV is a virus that is transmitted from one person to another _______ through four body fluids.

HIV transmitted prevented monkey diarrhea person

For HIV transmission to occur, there are three FOURs that you must remember:

- 4 BODY FLUIDS that can transmit HIV
- 4 PRINCIPLES of HIV transmission
- 4 WAYS to transmit HIV

HIV transmission requires the exchange of body fluids containing the virus. In the body, there are 4 BODY FLUIDS that carry high concentrations of HIV.

None of the usual daily interactions like talking, coughing, shaking hands, or hugging involve the exchange of blood, semen, vaginal fluids, or breast milk. Thus, you will not get infected with HIV through daily interactions with people with HIV.

4 BODY FLUIDS:

Blood
Semen
Vaginal fluids
Breast milk
For HIV to be successfully transmitted from a person with HIV to another person, it must meet the **4 PRINCIPLES**: E-S-S-E.

*Figure 2. The four principles of HIV Transmission*

![Diagram of the four principles of HIV transmission](image)

**EXIT**
HIV must exit the body of a person with HIV.

**SURVIVE**
HIV must be in the right conditions to survive (factors include time outside the body, temperature, etc.).

**SUFFICIENT**
Enough amount of the virus must be present.

**ENTER**
HIV must enter the bloodstream of another person to infect him or her.

The body fluid containing HIV must first **EXIT** the body of a person with HIV. Once HIV exits the body, it must be in conditions in which it can **SURVIVE**. HIV is a virus. Just like all living things, HIV must be in the right environment to survive. Otherwise, it will not live long outside the human body.

Also, **SUFFICIENT** quantities of HIV must be present to cause infection. Blood, semen, vaginal fluids, and breast milk are the four body fluids that contain high concentration of the virus. Finally, HIV must **ENTER** the bloodstream of another person to infect him or her.

From the term HUMAN immunodeficiency virus (HIV) itself, HIV needs to be transmitted from one person to another person. **It cannot be transmitted through mosquitoes or other animals.** If mosquitoes bite a person with HIV, they cannot spread HIV because the virus is broken down in their stomach and therefore, does not survive in their bodies. Moreover, only the saliva of mosquitoes is involved when drawing blood from a host.

**Key Concept**
The principles of E-S-S-E are fulfilled and the virus is transmitted through **4 WAYS:**

<table>
<thead>
<tr>
<th>EXIT</th>
<th>FOUR WAYS OF HIV TRANSMISSION</th>
<th>ENTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV-positive person</td>
<td>Unprotected (i.e. without a condom) vaginal, anal, or oral sexual intercourse with an HIV-positive person</td>
<td>Sex Partner</td>
</tr>
<tr>
<td>HIV-positive mother</td>
<td>From HIV-positive mother to her child during pregnancy, delivery, or breastfeeding</td>
<td>Child</td>
</tr>
<tr>
<td>HIV-positive person</td>
<td>Sharing of HIV-contaminated needles, syringes, and other injecting equipment</td>
<td>Person who uses HIV-contaminated needles</td>
</tr>
<tr>
<td>who injects drugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIV-positive blood or</td>
<td>Blood transfusion or organ transplant of HIV-contaminated blood and blood products</td>
<td>Blood or organ recipient</td>
</tr>
<tr>
<td>organ donor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HIV is transmitted from an HIV-positive person to another person mainly through: (1) unprotected sexual intercourse; (2) from an HIV-positive mother to her child during pregnancy, labor and delivery or breastfeeding; (3) sharing of HIV-contaminated needles and injecting equipment among people who inject drugs; and (4) transfusion of HIV-contaminated blood or transplant of HIV-infected tissue or organ.

**Most (95%)** of the people diagnosed with HIV in the Philippines were infected through **unprotected sexual intercourse** (DOH, 2006-2016).
Prevention (noun) is the act or practice of stopping or hindering something from happening; [prevent (verb)]

The basic idea behind the prevention of HIV is stopping the body fluids of a person with HIV from entering the body of another (e.g. placing a “barrier” between the body fluids).
Activity 2. Preventing HIV transmission

MATERIALS & PREPARATION:
3 water bottles half-filled with clear water (Bottles A, B, C)
1 water bottle half-filled with colored soda or juice (Bottle D)
1 water bottle cap
1 marker

PROCEDURE:

1. For Scenario 1, place all four bottles on the table (all uncapped); the bottles may touch but the fluids inside each of the bottles should not mix.

2. For Scenario 2, observe what happens to the fluid in Bottles A and C. Pour some fluid from Bottle C to Bottle A. Then pour some fluid from Bottle A to Bottle C. In both instances, make sure that Bottles A and C do not touch Bottles B or D.

3. For Scenario 3, remove Bottles A and C from the table. Cover Bottle D with a cap. Try pouring some fluid from Bottle D to Bottle B, with a cap still on Bottle D. What happened to the fluid inside Bottle B?

4. For Scenario 4, remove the cap from Bottle D. Try to pour some fluid from Bottle D to Bottle B. What happened to the fluid inside Bottle B?
**Sexual Abstinence** *(noun)* is the practice of **not** having sexual intercourse; 
[**abstain** *(verb)*]

Sa Tagalog: “hindi pakikipagtalik”

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**The ABCDE of HIV Prevention**

To easily remember how HIV may be prevented, remember the **A-B-C-D-E.**

<table>
<thead>
<tr>
<th>Abstain from sexual intercourse. Having sexual intercourse means facing the serious consequences of possible pregnancy/parenthood or getting sick. When you decide NOT to have sexual intercourse before you are ready, you allow yourself to fully enjoy your youth. You do not have to worry about unplanned pregnancy, HIV, STI, or complicated emotional issues. You can focus on achieving your goals instead. Since you and your partner both have your future ahead of you, having sexual intercourse is a decision you should make carefully.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstinence is the MOST EFFECTIVE METHOD of preventing HIV. Think about delaying your first sexual activity until you are ready. It is OK to say NO.</td>
</tr>
<tr>
<td>Just like in Scenario 1 of our experiment, since the fluids in the four bottles never mixed at all, we can see that the fluids in Bottles A, B, and C remained clear while Bottle D remained colored. An HIV-negative person will remain uninfected if he or she does not engage in sexual intercourse (and other risky behaviors).</td>
</tr>
<tr>
<td>To help you say NO, remember:</td>
</tr>
<tr>
<td><strong>Stay away</strong> from situations which can lead to risky behaviors.</td>
</tr>
<tr>
<td><strong>Team up with peers</strong> who also want to make the right choices and spend more time with them.</td>
</tr>
<tr>
<td><strong>Occupy your time</strong> with activities that would benefit your future.</td>
</tr>
<tr>
<td><strong>Practice saying “No”</strong> in a convincing manner.</td>
</tr>
</tbody>
</table>
Be faithful to one partner who is also faithful to you. Having sexual intercourse with several people puts you at higher risk of having HIV so avoid having many sexual partners.

However, no matter how faithful you are to each other, if one already has HIV, and you have sexual intercourse without using a condom, it still puts the other partner at risk of HIV infection. You should know your HIV status and the HIV status of your partner. Your HIV status can only be determined by getting an HIV test.

Once you make the decision to have sexual intercourse, there are responsibilities that you and your partner must understand. These include the prevention of HIV, STI, and unplanned pregnancy.

In Scenario 2 of our experiment, even if the fluids in Bottles A and C mixed, since both had clear fluid, the fluid in both bottles remained clear. The mixing of fluids only happened between Bottles A and C; they did not interact with Bottles B or D, signifying their faithfulness to each other.

In terms of HIV, this means that if two faithful, uninfected individuals decide to have sexual intercourse with each other only, they will not get infected with HIV.
**Correct and consistent use of condoms** is a reliable method to prevent the spread of HIV, as well as other sexually transmitted infections (STI). It is one of the most widely available and highly effective HIV prevention tools. Condoms also prevent unplanned pregnancy. However, abstinence remains more effective than the use of condoms in preventing pregnancy, HIV infection, and STI.

**Correct.** Condom use is a skill. There is a correct way of using condoms. They also have expiration dates so always check the package. Do not store condoms in your wallet for a prolonged period of time and do not expose them to direct sunlight.

**Consistent.** Condoms must be used in EACH sexual act during ANY type of sexual intercourse (vaginal, anal, and oral) and with ALL sex partners.

Male condoms are used more often in the Philippines but female condoms are also available.

*In Scenario 3, we saw that there was a PHYSICAL barrier that prevented interaction of the fluids from Bottle B & Bottle D. Therefore, Bottle B’s fluid color remained the same. This is similar to the use of condoms. Despite the physical contact between two individuals, their semen, vaginal fluids, or blood will not mix (exit one person and enter the other person) due to the presence of the physical barrier, in the form of a condom.*

*However, condom use has to be correct and consistent in all sexual activities with all partners. In Scenario 4, we see that Bottle D’s cap was removed, therefore allowing the mixing of the fluids when fluid of Bottle D was poured into Bottle B. This caused the fluid in Bottle B to change from clear to colored.*
**Do not use drugs or drink alcohol.** These substances may affect your thinking and decisions. Prohibited drugs and alcoholic drinks may make you do things that you might regret later on. Moreover, injecting drugs using a needle used by an HIV-positive person presents a very high risk for HIV transmission.

**Education and early detection.** There is no better protection than proper knowledge. Get the facts on HIV and do not be embarrassed to share what you have learned with your friends. Sharing your knowledge may allow you to save a friend’s life.

Aside from getting proper knowledge about STI and HIV, it is also important to know if you are infected by getting tested for HIV. There are many public and private facilities which offer HIV testing. **Social Hygiene Clinics (SHC)**, sometimes referred to as City Health Office (CHO) or Reproductive Health and Wellness Center (RHWC), offer free HIV testing and treatment, and can be found in most cities.

**Pregnant mothers are encouraged to get tested for HIV.** Early diagnosis of HIV will allow the mother to get antiretroviral therapy (ART) to prevent transmitting HIV to her unborn child.

Knowing your HIV status early will allow you to protect yourself and others. Do not be shy or scared to get an HIV test.

*Remember these icons!*
Lesson 3. Sexually Transmitted Infections (STI)

Understanding Sexually Transmitted Infections

*Guide Questions*

1. What do you know about STI so far?
2. What would you do if you think you may have an STI?

Different infections can be transmitted through different means. For example, HIV has four ways of transmission which include transmission through unprotected sexual intercourse. Aside from HIV, there are other infections that may be passed from person to person through unprotected sexual intercourse with a person who has the infection. These are called *Sexually Transmitted Infections (STI)*. HIV is a type of STI.

Microorganisms that cause STI can be transmitted from one person to another through *semen, vaginal fluids, and blood*. There are different STI that are caused by bacteria, viruses, and skin parasites. Bacteria and viruses are microscopic (i.e. cannot be seen by the naked eye). The common STI are listed in Table 1.

*Table 1. Common Sexually Transmitted Infections*

<table>
<thead>
<tr>
<th>Bacteria</th>
<th>Virus</th>
<th>Skin parasites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlamydia</td>
<td>HIV</td>
<td>Pubic lice</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>Herpes</td>
<td>Scabies</td>
</tr>
<tr>
<td>Syphilis</td>
<td>Genital and anal warts</td>
<td></td>
</tr>
</tbody>
</table>

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### Common Symptoms of Sexually Transmitted Infections

Different STI have a variety of symptoms.

Table 2 summarizes the most common symptoms of STI and the corresponding STI that cause it. The causative agent and possible complications are also listed in the last two columns.

**Table 2. Common Symptoms of STI**

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>STI</th>
<th>Causative Agent</th>
<th>Possible Complications</th>
</tr>
</thead>
</table>
| Genital or rectal discharge of unusual color, smell, or quantity, sometimes with pus | Chlamydia | Chlamydia trachomatis | • Scrotal and testicular swelling  
• Pelvic inflammation with abdominal pain  
• Ectopic pregnancy  
• Infertility  
• Neonatal conjunctivitis |
| TULO | Gonorrhea | Neisseria gonorrhoea | • Scrotal and testicular swelling  
• Pelvic inflammation with abdominal pain  
• Infertility  
• Neonatal conjunctivitis |
| Genital or rectal sores or blisters; sometimes on the mouth & face | Syphilis | Treponema pallidum | • Blindness  
• Deformities of unborn babies  
• Still birth  
• Neonatal syphilis |
| SUGAT | Herpes | Herpes Simplex Virus (HSV) | • Bladder problems  
• Newborn infections |
| Genital or anal warts that are painless | Genital and anal warts | Human Papilloma Virus (HPV) | • Cervical or anal cancer in women  
• Penile or anal cancer in men  
• Problems during pregnancy |
| KULUGO | Pubic lice | Pthirus pubis (crab lice) | • May spread to other body parts such as legs, chest, armpits, beard, eyelashes |
| | Scabies | Sarcoptes scabiei | • Impetigo (bacterial skin infection) |
| KUTO | HIV | Human Immunodeficiency Virus (HIV) | • TB  
• Pneumonia  
• Candidiasis  
• Death |

Note: Words in red font (all capital letters) are the commonly used Tagalog terms of the symptoms described.
Activity 3. Hunting for the common symptoms of STI

Based on what we discussed previously, fill in the figure with symptoms of STI. Choose the **four most common symptoms of STI from the word pool below** and write your answer in the four boxes on the right.

**WORD POOL:**

a) Tulo - Genital or rectal discharge  
b) Sakit ng ulo - Headache  
c) Kulugo - Genital or anal warts  
d) Sugat - Genital or rectal sores  
e) Sakit ng kasukasuan - Joint pains  
f) Sakit ng dibdib - Chest pain  
g) Kuto - Genital or anal itching

Aside from those you answered above, other symptoms of sexually transmitted infections include:

- *Pain & swelling in the testicles, penis, vagina, or anus*
- *Pain or burning sensation when urinating*  
- *Pain during sexual intercourse*  
- *Sores/blisters in the mouth/throat/face*

Remember, people with an STI can also have no obvious symptoms or are **asymptomatic**, especially females.
Even though we studied the common symptoms of STI, **DO NOT DIAGNOSE YOURSELF** and **DO NOT TREAT YOURSELF** or take non-prescribed medications for suspected STI. You should talk to your teacher, guidance counselor, school nurse, or school physician if you have any concerns regarding your sexual health. Do not be ashamed or afraid. They will help you!

*Key Concept*

**Relationship of STI and HIV**

The presence of STI makes a person at higher risk of having HIV by around 15% to 20%. Sexually Transmitted Infections enable HIV to more easily enter and infect the body.

A person with an STI, particularly if the STI causes sores or ulcers, has a **higher risk of getting infected with HIV**.

*Key Concept*

To reduce the risk of HIV infection, **avoid getting infected with STI** by abstaining from sexual intercourse or using a condom correctly and consistently.

**Prevention of STI**

HIV is a type of Sexually Transmitted Infection. In fact, the ways to prevent STI are similar to the ways of HIV prevention discussed in Lesson 2. Let’s have a quick review of our **ABCDE of HIV and STI Prevention**! Can you remember what each icon means?
Treatment of STI

If you had sexual intercourse, and notice symptoms of an STI or feel like you might have an STI, you need to see a doctor immediately. Your sexual partner must also consult a doctor. If you or your partner have STI, abstain from having sexual intercourse until you are cleared by your doctor.

STI like HIV, warts, and herpes have no cure while other STI can be cured with the proper treatment. Therefore, if you are already having sexual intercourse, it is recommended that you regularly see a doctor to get checked for STI. Social Hygiene Clinics, City Health Clinics, and other public and private hospitals and clinics offer STI diagnosis. It is better to seek help than to keep things to yourself!

Medicines should be taken exactly as how the doctor prescribed them – including how often and for how many days the medicines should be taken. It is important to finish the full course of medication to guarantee complete treatment. So even if you start feeling better or the symptoms disappear, finish the medication as prescribed.

If you get an STI, get diagnosed, and complete treatment – it is still possible to get the same STI again or other STI in the future. So to keep yourself healthy, remember to practice the ABCDE of HIV and STI prevention.

Activity 4. All about STI: True or False

Read each item carefully and identify if the statement is true or false by shading the corresponding smiley.

<table>
<thead>
<tr>
<th>Statement</th>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Everybody with an STI has a symptom.</td>
<td>☺</td>
<td>☻</td>
</tr>
<tr>
<td>2 STI can be treated by using Tide/detergent to clean the genitals.</td>
<td>☺</td>
<td>☻</td>
</tr>
<tr>
<td>3 Both males and females can get gonorrhea or “tulo”.</td>
<td>☺</td>
<td>☻</td>
</tr>
<tr>
<td>4 A person who is good looking and clean cannot have STI.</td>
<td>☺</td>
<td>☻</td>
</tr>
<tr>
<td>5 You can diagnose an STI by pressing the stomach of a person and waiting for his reaction.</td>
<td>☺</td>
<td>☻</td>
</tr>
<tr>
<td>6 You should always have a condom in your wallet for good luck – “pampa-swerte”.</td>
<td>☺</td>
<td>☻</td>
</tr>
<tr>
<td>7 STI can be treated by drinking buko juice.</td>
<td>☺</td>
<td>☻</td>
</tr>
</tbody>
</table>
1. Each sexual activity puts you at risk of getting different Sexually Transmitted Infections. One can have several STI at the same time.
2. There are four common symptoms of STI that you have to remember: discharge, sores, warts, and itching.
3. HIV is a Sexually Transmitted Infection (STI).
4. Go to a doctor if you think you may have STI.
5. Do not take medicines not prescribed by your doctor.
6. Getting treated for STI in the past does not make you immune to that STI or other STI in the future.
7. STI may have long-term complications.

**Key Concepts about STI**

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**Guide Questions**

A situation is described below. Raise your hand if you wish to answer the questions that follow:

*Sam is a 14 year-old, Grade 8 student who is in a relationship. Sam’s partner wants to engage in sexual intercourse. Sam does not know what to do and tells you the situation.*

- **Scenario 1.** If Sam is not ready to have sex, what will you tell Sam?
- **Scenario 2.** If Sam decides to have sex, what will you advise Sam?
- **Scenario 3.** Sam decides to have sex and one week later has unusual genital discharge or “tulo”. Sam panics and tells you about it. What advice would you give Sam?
- Aside from a trusted friend like you, who else do you think can Sam talk to?
Lesson 4. Available HIV & STI Services and Assessment of Risk

Activity 5. HIV services we can avail

Encircle the HIV-related services you think are currently available in our country.

- free HIV testing
- free medicines (ART) for people with HIV
- government clinics for HIV & STI services
- free consultation for STI diagnosis
- reliable websites providing HIV information
- free condoms for people at risk

Available Services for You and Me

Although HIV and STI are serious conditions, there are several services that are available for all Filipinos.

A. Do you want to learn more about HIV and STI?

All the lessons included in this chapter are aimed to help you understand HIV and STI better. However, there are many other opportunities for you or for your friends to learn more.

There are several adults or older peers you may talk to about STI, HIV, and other related concerns. These include:
- Parents
- MAPEH teacher
- Guidance counselor
- School physician or nurse
- Peer facilitators

You may research more about HIV and STI through the following websites:
- http://www.aidsphil.org/
- https://www.facebook.com/HIVepicenter/
- http://www.loveyourself.ph/
There are clinics throughout the country called Social Hygiene Clinics (SHC), sometimes referred to as City Health Office (CHO) or Reproductive Health and Wellness Center (RHWC). These government clinics are similar to health centers but specialize in the provision of services related to STI and HIV, including testing and treatment, which are mostly free.

Do not be afraid or embarrassed to go to an SHC if you want to obtain additional information on STI and HIV.

In addition to information on STI and HIV, you may also get free condoms from the SHC.

B. Do you want to know if you have HIV?

HIV Testing Services (HTS) is the only way to know for sure if you have HIV. You may get a free HIV test from any Social Hygiene Clinic (SHC). Several hospitals and private clinics also offer HIV testing for a corresponding fee. Pregnant women, people with STI, and people with tuberculosis are highly encouraged to get tested for HIV.

Your HIV-negative status may change. A person who tested negative for HIV today may still become HIV-positive in the future, depending on his or her behavior (e.g. unprotected sexual intercourse, sharing of needles during injecting drug use). It is recommended to get tested for HIV every 3 to 6 months, especially if you engage in these risky behaviors.

The four main steps in HTS are described below.

Step 1: Pre-test Counseling

A DOH-trained HIV counselor will privately:
- Assess your risks for HIV
- Provide information on HIV transmission and prevention
- Explain the process and benefits of an HIV test
- Discuss possible test results

Step 2: Informed Consent

An informed consent is needed before you undergo an HIV test – signifying that you understand the process and the benefits of the HIV test, and that you voluntary want to undergo HIV testing services. HIV testing clinics may require parental consent from minors.
Step 3: Blood Draw

A trained medical technologist will draw some blood from your arm or prick your finger tip, and will test the blood for HIV. You have to wait or go back for the results.

Step 4: Post-test Counseling

A DOH-trained HIV counselor will privately:
- Give you your HIV test result
- Explain the meaning of the result
- Discuss next steps in your care, depending on your test result

C. If you already have HIV, what should you do?

While there is currently no cure or vaccine for HIV, there is treatment for people with HIV that can stop the replication of the virus in the body. The treatment is called Antiretroviral Therapy (ART) which is composed of different antiretroviral (ARV) medicines. ARV is given by the government for free.

Without treatment, most people with HIV will eventually develop AIDS and die due to different infections that a healthy body can normally fight. Thanks to ART, a person with HIV can live a normal, relatively healthy life.

However, it is important to remember these three things:

1) You have to get tested for HIV first! The first step to taking care of yourself is knowing your HIV status. People who have been properly diagnosed with HIV now have the opportunity to access free treatment that can save their lives! HIV clinics may request minors for parental consent before HIV testing.

2) ARV should be taken exactly as how the doctors prescribe it. Usually, ART involves several medicines that need to be taken regularly. In order for the treatment to be effective, there should be a constant amount of medicine in the blood. Moreover, missing or forgetting to take the medicines can lead to harmful effects in the body.

3) Live a healthy lifestyle. Aside from taking ARV regularly, a person with HIV should avoid smoking, drinking alcohol, and taking illegal drugs. Having regular exercise, a healthy diet, and a positive outlook can help maintain a healthy life!
Guide Questions

1. How can you share information on HIV and STI?
2. What will you do if you want to get tested for HIV?
3. What is the first thing you will do if you find out that you are HIV-positive?

Understanding Risk

Risk (noun) is the possibility something bad will happen.

In terms of HIV and STI: possibility of a person getting infected with HIV or STI

Word Discovery

The main consequences of untreated HIV are life-threatening infections and unnecessary death, while the consequences of untreated STI are painful, uncomfortable, or disfiguring symptoms, and long-term complications.

It is the sexual or injecting drug use behavior of a person that increases or decreases the risk or possibility of getting infected with HIV or STI. Listed below are different sexual acts. Rank from 1-4 based on level of risk, 1 being the highest risk and 4 being the lowest risk of getting HIV or STI.

- Correctly and consistently using condoms during all sexual intercourse
- Not having sexual intercourse (abstinence)
- Sexual intercourse with one partner, without a condom
- Sexual intercourse with many partners, without a condom
Assessing My Risk: “Safe ba Ako?”

The questions in this tool were made to help you decide on the type of help or services that you need regarding HIV and STI. It is important for you to be honest with yourself as you answer. Your teacher will not ask you to write your name or submit this paper. No one should force you to share your answers. However, you may choose to discuss your answers with your parents, teachers or other trusted adults.

After each question, check ☑ the box that is appropriate for you. There are no right or wrong answers, and this will not be included in your grades. If there are questions that make you uncomfortable, you can decide not to answer the question. However, please read the italicized text after the choices.

1. It is important to understand what can happen if you have sex and to decide when you are ready. Do you think you are ready to have sex?

☐ Yes To protect yourself from HIV and STI: (1) Be faithful to your partner and, (2) practice Correct and Consistent Condom Use.

☐ No It’s okay to say no. Even if other people tell you to do so, you do not need to start engaging in sexual intercourse. Wait until you are ready to have sex.

2. It is important to protect yourself from HIV and other STI during sex. Have you had sex (oral, vaginal, or anal sex)? If yes, did you or your partner use a condom?

☐ I haven’t had sex with anyone.
☐ I have experienced having sex; and my partner/s and I always use condoms.
☐ I have experienced having sex; and my partner/s and I sometimes use condoms.
☐ I have experienced having sex; and my partner/s and I have never used a condom.

If you answered that you have not had sex with anyone (“Abstinence”) or that you always use condoms (“Correct and Consistent Condom Use”), these can protect you from HIV or STI. Remember the A-B-C-D-E.

3. Have you experienced using prohibited drugs or getting drunk / tipsy because of alcoholic drinks? If yes, have you had sex while high or drunk?

☐ I have never used drugs or gotten drunk.
☐ I have used drugs or have gotten drunk but I have never had sex while high or drunk.
☐ I have used drugs or have gotten drunk and I have had sex while high or drunk.

Using prohibited drugs or being drunk affects your ability to make decisions. This may cause you to make decisions that you may regret in the future. Avoid using prohibited drugs or drinking alcoholic drinks. Be responsible.
4. Having sex is a personal decision. However, there are certain instances when a person is forced to have sex against his or her will. Examples include:

- someone forced by their partner (boyfriend / girlfriend) to have sex with them;
- someone threatened physically or verbally if they don’t agree to have sex;
- someone who was given drugs or alcohol, and then forced to have sex.

Do you know anyone who was forced to have sex against his or her will?

☐ No
☐ Yes

Remember that it is okay to say no if you do not want to have sex or if you are not ready. Your partner, friend, and anyone else should respect your decision. Do not be afraid to tell them that you do not want to have sex.

If you have experienced being forced to have sex or if it happens in the future, you do not have to keep it to yourself. You can ask help from your parents, teacher, guidance counselor, or any trusted adult.

In the same way, it is important for you to respect the decision of your partner about having sex. Only your partner can say if he or she is ready or wants to have sex. Do not force anyone to engage in sexual activities or sexual intercourse. No means no.

5. Have you experienced any of the following symptoms?

☐ “Tulo” or unusual discharges from my genitals or rectum
☐ “Sugat” or sores in my genitals or anus
☐ “Kulugo” or warts in my genitals or anus
☐ I have not experienced any of the symptoms above.

5.1. If you have experienced one or more symptoms above, what did you do?

☐ I did not do anything about the symptoms I experienced.
☐ I told my friend/s.
☐ I told my parents or other trusted adults.
☐ I consulted a doctor.
☐ Others: ____________________________________________________________

The symptoms listed above are symptoms of possible STI. As discussed in Lesson 3, only a doctor can diagnose if a person has STI and determine the appropriate treatment. Tell your parents or a trusted adult if you experience any of the symptoms listed above and consult a doctor.
How do you feel about your answers? Regardless of what your past or present experiences may be, you have the power to decide what to do next.

To help you make these big and little choices every day, remember:

- You were created for a **PURPOSE**. You are up for an exciting ride to discover what your purpose is.
- You are **VALUABLE**. Regardless of what other people say, you are worthy and valuable.
- You have a **FUTURE** ahead of you. Do not lose hope for a bright future even if you may have had bad experiences in the past.

When you think about your future and make wise decisions, **A-C-T** now.

- **A**cknowledge your **PURPOSE** and your **VALUE**.
- **C**hoose the right thing to do for your **FUTURE**.
- **T**alk to trusted adults and seek guidance or help.

The next activity will allow you to imagine your future and the things you have to say yes to or say no to, in order to achieve your dreams.

---

6. In Lesson 2, we discussed that HIV may be transmitted through 1) unprotected vaginal, anal, or oral sexual intercourse; 2) sharing of HIV-contaminated needles; 3) transfusion of HIV-contaminated blood; and 4) HIV-positive mother-to-child transmission during pregnancy, childbirth, or breastfeeding.

With these in mind, do you think you are at risk of HIV infection?

- [ ] No
- [ ] Yes

*If you feel that you are at risk of having an HIV infection, you need to get an HIV test. You can also avail of the services we discussed in Lesson 4 (example: HIV testing services, free HIV and STI consultations at the Social Hygiene Clinic).*
**Activity 6. The future I see for myself!**

Write your biggest dream for each stage of your life. Complete the timeline below by drawing or describing what milestones you want to achieve by the time you are age: 20, 25, and 30 years old.

Now, write down your present age inside the blank circle. You have to remember that the decisions that you make **today** will affect the future you want to achieve.

You were created by God for a purpose. Do not let anyone or anything steal or destroy your dreams and the life you were destined to have. What are the things or events that will **prevent you from achieving your dreams**? With these in mind, list 3 things you shouldn’t do or should say NO to.

**3 things I will say NO to:**
1. 
2. 
3. 

What are the things or events that will **help you achieve your dreams**? With these in mind, write down 3 things you should do or should say YES to:

**3 things I will say YES to:**
1. 
2. 
3. 

Think about all your answers and decide on what your next steps would be. You are encouraged to share your concerns or questions with a trusted adult or health professional but the decision is still up to you. **You may select more than one answer from the list below.**

- [ ] I will research about HIV and STI.
- [ ] I will talk to my parents or other trusted adults.
- [ ] I will visit the school clinic.
- [ ] I will visit a Social Hygiene Clinic (SHC) or consult a doctor.
- [ ] Other answer: ________________________________
Lesson 5. HIV Law and the Philippine HIV Situation

Republic Act 8504 (RA 8504) or Philippine AIDS Prevention and Control Act of 1998

Get a copy of the RA 8504 from this website:


Read the law. Focus on Articles III, VI, and VII. Take note of any other articles in the law that interest you.

Reading Assignment

The Republic Act (RA) 8504 or the Philippine AIDS Prevention and Control Act of 1998 was signed into law on **February 13, 1998**. The contents of the law are summarized in your Grade 8 MAPEH book (pages 242-244).

**Activity 7. Word factory**

Based on the dictionary meaning and the application to HIV concepts, guess which word is being described. Choose your answer from the word pool below this table.

<table>
<thead>
<tr>
<th>Word</th>
<th>Dictionary Meaning</th>
<th>Application to HIV Concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Doing, giving or acting based on one’s own free will</td>
<td>A person who will undergo an HIV test must do it out of his/her own free will, not because he or she was forced or required by others.</td>
</tr>
<tr>
<td>2.</td>
<td>Provision of assistance and guidance in resolving personal, social, or psychological problems and difficulties, especially by a professional</td>
<td>Provision of HIV information prior to getting an HIV test (pre-test) and explanation of HIV results (post-test). All people who will get an HIV test need to undergo this before and after the test.</td>
</tr>
<tr>
<td>3.</td>
<td>Permission for something to happen or agreement to do something</td>
<td>A legal document signed by the person or a legal guardian, if a minor, indicating that he or she is voluntarily giving permission to be tested for HIV.</td>
</tr>
<tr>
<td>4.</td>
<td>Intended to be kept secret or private</td>
<td>All identifying information and the results of the HIV test are kept private and will not be shared.</td>
</tr>
<tr>
<td>5.</td>
<td>The practice of unfairly treating a person or group of people differently from other people or groups of people</td>
<td>The law prohibits unfairly treating a person who is diagnosed with HIV. Examples of unfair treatment of people with HIV: Expulsion from school. Being asked to resign. Not allowing access to services.</td>
</tr>
<tr>
<td>6.</td>
<td>A set of negative and often unfair beliefs that a society or group of people have about something</td>
<td>A negative, unfair belief regarding HIV. Example: Not wanting to be friends with someone because he has HIV.</td>
</tr>
</tbody>
</table>

**Word Pool**

- voluntary
- stigma
- consent
- discrimination
- counseling
- confidential
Do not worry; you do not have to memorize the entire RA 8504! What is more important is for you to keep in mind these three major sections of the law. Remembering these can help you understand your rights and the rights of others concerning HIV.

1. Voluntary HIV Counseling & Testing with written informed consent or more recently called, HIV Testing Services (HTS) (Article III)

   Our law states in Article III that no compulsory HIV testing shall be allowed. Nobody can force you or require you to get an HIV test because that is against our law. However, the government encourages individuals at high risk for getting infected with HIV to get tested regularly.

   Remember that a written informed consent is needed before you undergo HIV testing services. An informed consent means that you understand the implications of getting an HIV test. If you are interested to get tested, you are encouraged to tell your parents or guardian about it. However, if you are not comfortable to do so, you may consider discussing this with a trusted adult or visiting a Social Hygiene Clinic so further assistance may be provided to you.

2. Confidentiality (Article VI)

   “All health professionals, medical instructors, workers, employers, recruitment agencies, insurance companies, data encoders, and other custodians of any medical record, file, data, or test results are directed to strictly observe confidentiality in the handling of all medical information, particularly the identity and status of persons with HIV.”

   Article VI of the RA 8504 as quoted above emphasizes that the names, addresses and other identifying information of people living with HIV should be kept confidential. We cannot tell other people about a person’s HIV status.

   If you want to know your HIV status or you wish to ask a health professional regarding HIV, do not be afraid or embarrassed. Information about you, your practices, or your HIV status will not be known by other people. All these will be kept confidential.

   However, a person living with HIV also has a responsibility to disclose or tell his/her HIV status and health condition to his/her spouse or sexual partner as soon as possible and encourage his/her partner to get tested.
3. Discrimination (Article VII)

Article VII of the RA 8504 mandates that discrimination in any form towards a person because of his or her HIV status is prohibited. He or she cannot be denied:

- admission in schools (expulsion and segregation are also against the law);
- employment (plus, denying promotion and terminating employment);
- housing;
- freedom to travel;
- health services they require, including health and life insurance;
- decent burial services when they die.

It is important to know these rights and ensure that we do not take part in discriminating people based on their actual or perceived HIV status. They are humans too, just like you and me! Now let us see how well you understand the law…

Activity 8. Law abiding or law breaker?

Based on what you have learned about RA 8504, determine whether the person in bold letters is law abiding (follows the law) or law breaking (does not follow the law).

<table>
<thead>
<tr>
<th>Situation</th>
<th>Law Abiding</th>
<th>Law Breaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 James’ neighbor told him that he had HIV. James did not waste any time and told all his friends in his barangay about it.</td>
<td>😊</td>
<td>😕</td>
</tr>
<tr>
<td>2 Agnes told his teacher that she had HIV. Her teacher told the principal. The principal called Agnes to her office and immediately expelled her from the school.</td>
<td>😊</td>
<td>😕</td>
</tr>
<tr>
<td>3 Jerome told his boss that he had HIV. His boss asked him how the office could be of support to him.</td>
<td>😊</td>
<td>😕</td>
</tr>
<tr>
<td>4 Despite having many clients in the clinic, the HIV counselor took the time to provide post-test counseling to Anthony – explaining the meaning of his HIV test results to him and discussing possible next steps he can take.</td>
<td>😊</td>
<td>😕</td>
</tr>
<tr>
<td>5 On the first day of Emily at work, she was told by her manager that HIV testing was required or else she will lose her job.</td>
<td>😊</td>
<td>😕</td>
</tr>
<tr>
<td>6 Brad’s brother passed away because of HIV. The owner of the funeral parlor refused to provide burial services to Brad’s brother.</td>
<td>😊</td>
<td>😕</td>
</tr>
<tr>
<td>7 The nurse at a clinic saw her college friend getting tested for HIV. She immediately logged on to Facebook and shared stolen pictures of him while getting his blood drawn for the HIV test.</td>
<td>😊</td>
<td>😕</td>
</tr>
</tbody>
</table>
Understanding the Current Situation of HIV in the Philippines

The Department of Health is mandated by the Republic Act 8504 (AIDS Prevention and Control Act) to collect data on HIV and monitor the status of the HIV epidemic in the Philippines. An epidemic is defined as an abnormal increase in the number of cases of a disease or illness in a specific population or area.

There is an increasing problem of HIV in the Philippines. From January 1984 to December 2016, there were a total of 39,622 people newly diagnosed with HIV. The number of people being diagnosed with HIV every year has been greatly increasing over the past ten years (Figure 3).

Activity 9. What is the status of HIV in the Philippines?

Study the graph below and answer the corresponding questions that follow.

Figure 3. Number of newly diagnosed HIV cases in the Philippines, 2006-2016

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>219</td>
<td>90</td>
</tr>
<tr>
<td>2007</td>
<td>279</td>
<td>63</td>
</tr>
<tr>
<td>2008</td>
<td>473</td>
<td>55</td>
</tr>
<tr>
<td>2009</td>
<td>731</td>
<td>104</td>
</tr>
<tr>
<td>2010</td>
<td>1,466</td>
<td>125</td>
</tr>
<tr>
<td>2011</td>
<td>2,193</td>
<td>156</td>
</tr>
<tr>
<td>2012</td>
<td>3,186</td>
<td>152</td>
</tr>
<tr>
<td>2013</td>
<td>4,584</td>
<td>230</td>
</tr>
<tr>
<td>2014</td>
<td>5,758</td>
<td>253</td>
</tr>
<tr>
<td>2015</td>
<td>7,509</td>
<td>322</td>
</tr>
<tr>
<td>2016</td>
<td>8,874</td>
<td>390</td>
</tr>
</tbody>
</table>

Data Source: HIV/AIDS & ART Registry of the Philippines (HARP), Department of Health

1. How many males and how many females were diagnosed with HIV in 2008?
2. How many males and how many females were diagnosed with HIV in 2016?
3. Based on the graph, is the number of HIV cases higher among males or females in the country?
4. When did the number of HIV cases start reaching more than 1,000 per year?
5. In three sentences, reflect on the trend of HIV epidemic in the country within the past ten years.
Most of the people diagnosed with HIV from 2006 to 2016 were males. The pie chart shows that males comprised 95% of HIV cases (Figure 4).

Figure 4. Percentage of newly diagnosed male and female HIV cases in the Philippines, 2006-2016

![Pie chart showing 95% male and 5% female HIV cases.]

Data Source: HIV/AIDS & ART Registry of the Philippines (HARP), Department of Health

The three regions with the highest number of people diagnosed with HIV were: National Capital Region (NCR), CALABARZON, and Central Visayas (Figure 5).

Figure 5. Number of people with HIV in NCR, CALABARZON, & Central Visayas, 2006-2016

![Map showing HIV cases in NCR, CALABARZON, and Central Visayas.]

Data Source: HIV/AIDS & ART Registry of the Philippines (HARP), Department of Health


Data from the Department of Health also show that 95% of diagnosed HIV infections from 2006 to 2016 were sexually transmitted.
**Guide Questions**

As a class, let us reflect on the implications of RA 8504 and the current situation of HIV in the Philippines.

1. What will you do if your cousin with HIV wants to share his or her snack (cake or cookies) with you?

2. What will you do if a friend tells you he or she is HIV-positive?

3. Based on what you learned about the law, what will you do to be more law-abiding to RA 8504?

4. Since HIV is increasing among young people in the Philippines, what can you do to help prevent the spread of HIV?

5. What was the most interesting thing you learned about HIV throughout all our lessons?
**Optional Activities**

**For Lesson 2**

*Optional Activity. Human activities and body fluids*

Read each item carefully and identify (check) which body fluids are involved in the following activities.

<table>
<thead>
<tr>
<th>Activities (English)</th>
<th>(Tagalog)</th>
<th>Blood</th>
<th>Vaginal Fluid</th>
<th>Semen</th>
<th>Breast milk</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Sexual intercourse</td>
<td>Pagtatalik</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Pregnancy</td>
<td>Pagbubuntis</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Labor &amp; Delivery</td>
<td>Panganganak</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Breastfeeding</td>
<td>Pagsasuso</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Sharing of injecting needles among drug users</td>
<td>Paggamit ng needle na ginamit ng iba</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Blood Transfusion</td>
<td>Pagsasalin ng dugo</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Optional Activity. Reducing the risk of HIV infection

Form small groups. You and your groupmates will list ways to reduce one’s risk of HIV infection per way of transmission. Look at the example provided.

<table>
<thead>
<tr>
<th>Ways of HIV transmission</th>
<th>Ways to prevent and control HIV infection</th>
</tr>
</thead>
</table>
| 1                        | [2 ways] Transfusion of HIV-contaminated blood and other blood products; and transplant of organs from a person with HIV | **DO NOT donate blood if you have HIV or if you practice risky sexual behaviors.**  
**If you do not know your HIV status, get tested for HIV first before donating blood.** |
| 2                        | [3 ways] Sexual contact through HIV-contaminated body fluids like blood, semen, vaginal fluids |
| 3                        | [2 ways] Sharing HIV-contaminated needles while injecting drugs |
| 4                        | [1 way] Transmission from HIV-positive mother to her baby during pregnancy, delivery or breastfeeding |
For Lesson 5

Optional Activity. HIV by the numbers

To understand how rapidly HIV infections are spreading, you can compute the number of new people diagnosed each day. As an example, let us look at the 2008 data in Figure 3:

**Figure 3. Number of newly diagnosed HIV cases in the Philippines, 2006-2016**

Data Source: HIV/AIDS & ART Registry of the Philippines (HARP), Department of Health

473 males + 55 females = 528 people newly diagnosed with HIV in 2008

\[
\frac{528 \text{ people}}{365 \text{ days}} = 1.4 \text{ or 1 person diagnosed with HIV per day in 2008}
\]
Based on the data from Figure 3, how many people were diagnosed with HIV per day in 2010 and in 2016? Complete the picture below.

**Average number of newly diagnosed people with HIV daily, 2008-2016:**

- 2008: 1
- 2010: _
- 2012: 9
- 2014: 16
- 2016: _

*Data Source: HIV/AIDS & ART Registry of the Philippines (HARP), Department of Health*
For Lesson 5

Optional Activity. News report

Based on the information you learned about the status of the HIV epidemic in the Philippines, prepare a 5 to 7 minute news report to convince young viewers (Grade 7 to Grade 12) how important it is to respond to the growing HIV epidemic in the Philippines.

Group Project

Group Project. Poster-making contest

We have learned a lot about HIV and STI in the lessons we discussed. Now it is time for us to express how we feel and what we know through art!

Divide the class into smaller groups. Your teacher will provide you with the guidelines for this activity. Using the standardized type of materials your teacher will set, create an artwork focusing on this theme:

As a Grade 8 student, what can I do to prevent the spread of HIV?
<table>
<thead>
<tr>
<th><strong>Glossary of Terms</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acquired Immunodeficiency Syndrome (AIDS)</strong></td>
</tr>
<tr>
<td><strong>Antibody</strong></td>
</tr>
<tr>
<td><strong>Antigen</strong></td>
</tr>
<tr>
<td><strong>Antiretroviral (ARV)</strong></td>
</tr>
<tr>
<td><strong>Antiretroviral Therapy (ART)</strong></td>
</tr>
<tr>
<td><strong>Asymptomatic</strong></td>
</tr>
<tr>
<td><strong>CD4 cell</strong></td>
</tr>
<tr>
<td><strong>Chlamydia</strong></td>
</tr>
<tr>
<td><strong>Condom</strong></td>
</tr>
<tr>
<td><strong>Confidential</strong></td>
</tr>
<tr>
<td>RA 8504 dictates that the results of an HIV test must remain confidential. This means only the person who was tested can know the result. If the person shares with another person his or her HIV status, that information must not be shared with others.</td>
</tr>
<tr>
<td><strong>Consent</strong></td>
</tr>
<tr>
<td><em>Informed Consent in HIV Testing</em> is a legal document signed by the person or a legal guardian, if a minor, indicating that he or she is voluntarily giving permission to be tested for HIV.</td>
</tr>
<tr>
<td><strong>Counseling</strong></td>
</tr>
<tr>
<td>In the context of HIV, counseling aims to encourage the client to engage in behaviors that prevent STI and HIV transmission; help the client understand the benefits and implications of an HIV test; and explain what to do if the client is HIV-positive and needs to take ARV.</td>
</tr>
<tr>
<td><strong>Pre-test Counseling</strong> in HIV is confidential counseling done by a DOH-trained counselor before making an informed choice about being tested for HIV. The DOH-trained HIV counselor will privately assess the person’s risks for HIV, provide information on HIV transmission and prevention, explain the benefits of an HIV test &amp; discuss the meaning of possible test results.</td>
</tr>
</tbody>
</table>
Post-test Counseling in HIV is done to explain the result of the HIV test, how to access ARV, and what to do next.

**Discrimination**
A human rights violation which refers to any form of random distinction, exclusion or restriction affecting a person, usually (but not only) because of an inherent personal characteristic or perceived membership of a particular group. When stigma is acted upon, the result is discrimination.

**Epidemic**
Refers to a disease condition affecting a disproportionately large number of individuals within a population, community or region at the same time. HIV is an example of an epidemic.

**Genital and Anal Warts**
An STI caused by Human Papilloma Virus (HPV). Genital or anal warts usually appear as a small bump or group of bumps in the genital area or anus. They can be small or large, raised or flat, or shaped like a cauliflower. HPV can cause cervical cancer as well as cancer of the vulva, vagina, penis, or anus.

**Gonorrhea**
An STI caused by *Neisseria gonorrhea* which infects the mucous membranes of the rectum and reproductive tract (including the urethra in males and females, and the cervix, uterus, and fallopian tubes in females). Its most common symptom is genital discharge with pus, commonly known as “tulo”.

**Herpes**
Genital herpes is an STI caused by the Herpes Simplex Virus (HSV). It is transmitted through contact with lesions, mucosal surfaces, genital secretions, or oral secretions. Most individuals with genital herpes are asymptomatic but when symptoms do occur, they typically appear as one or more vesicles on or around the genitals or rectum. HSV can also cause oral herpes or cold sores around the mouth.

**Human Immunodeficiency Virus (HIV)**
A virus that weakens the immune system by destroying or impairing the function of the cells of the immune system, particularly CD4 cells.

**HIV Testing Services (HTS)**
The process of getting an HIV test which includes a counseling session before getting a blood draw, and another after the release of the test result.

**Immune System**
Refers to the organs and processes of the body that protect your body from diseases and infections.

**PLHIV**
Acronym for People Living with HIV. The correct term for individuals who have HIV infection.

**Pneumonia**
An infection of the lungs caused by viruses, bacteria and fungi characterized by cough, fever and difficulty breathing. Pneumonia caused by *Pneumocystis jirovecii*, formerly called, *Pneumocystis carinii*, is a common opportunistic infection in people diagnosed with AIDS.

**Prevention**
The act or practice of stopping or hindering something (like an infection or sickness) from happening.

**Public Lice**
Parasitic insects called *Pthirus pubis* or crab lice found primarily in the pubic or genital area of humans.
**Republic Act 8504 / RA 8504**


**Replication**

A process wherein the virus copies itself inside the body. HIV uses the machinery of CD4 cells to replicate itself inside the body.

**Risk**

The possibility something bad will happen.

In terms of HIV and STI, risk of infection is the possibility of a person getting infected with HIV or STI.

**Scabies**

An infection caused by bites from parasitic mites called *Sarcoptes scabiei*. The common symptoms of scabies are intense itching and a pimple-like skin rash. The scabies mite usually is spread by direct, prolonged, skin-to-skin contact with a person who has scabies.

**Sexual Abstinence**

The practice of not having sexual intercourse.

**Sexually Transmitted Infection (STI)**

Infections that are spread by the transfer of organisms from person-to-person during sexual contact.

**Social Hygiene Clinic (SHC)**

Government clinics, sometimes referred to as City Health Office (CHO) or Reproductive Health and Wellness Center (RHWC), which are similar to health centers but specializes in the provision of free services related to STI and HIV, including testing and treatment.

**Stigma**

A set of negative and often unfair beliefs which degrades a person or a group of people in the eyes of others.

**Syphilis**

An STI caused by *Treponema pallidum* which is transmitted by direct contact with a sore, known as a chancre. Chancres occur mainly on the genitals, vagina, anus, or in the rectum. It can also occur on the lips and in the mouth.

**Thrush**

A yeast infection from a fungus, *Candida albicans*, causing whitish patches in the mouth and throat.

**Transmission**

The act or process by which something is spread or passed from one person or thing to another.

**Tuberculosis (TB)**

An infection caused by *Mycobacterium tuberculosis* which affects the lungs and is spread through person-to-person through microscopic droplets released into the air by coughing.

TB is the leading cause of death among people living with HIV.

**Voluntary**

Doing, giving or acting of one’s own free will.

According to RA 8504, HIV testing should be voluntary, not because he or she was forced or required by others.
References (Lessons 1-5)

Creating Connections (UNICEF, 2011)
iLearn, iProtect, iLink (UNICEF, DOH, Save the Children, 2016)
Looking after Ourselves, Looking Out for Each Other (UNICEF, 2010)
Here’s What Happens To You When A Mosquito Bites (National Geographic Phenomena, 2013)
Physical Education and Health-Grade 8: Learner’s Module, 1st Ed. (DepEd, 2013).
Target-Specific Training Manual on HIV Counseling and Testing (DOH, 2013)
Terminology Guidelines (UNAIDS, 2015)

References (Glossary)

CDC - STD Fact Sheet (Centers for Disease Control and Prevention, 2016), from http://www.cdc.gov
Dictionary and Thesaurus | Merriam-Webster (Merriam-Webster, 2016), from http://www.merriam-webster.com
GlossaryHIVrelatedTerms_English (AIDSinfo, 2015), from https://aidsinfo.nih.gov
Terminology Guidelines (UNAIDS, 2015)
WHO | HIV/AIDS (World Health Organization, 2016) fromhttp://www.who.int/

Web links to images found in this Reference Material

http://image.flaticon.com/icons/png/512/30/30473.png
http://manvsearth.wikispaces.com/file/view/bottle.jpg
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nQAhUDXLwKhGyA6cQ_AUICB&biw=1280&bih=635#tbm=isch&q=clock&imgrc=IrSoGpSAWy_wAM%3A
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http://clipart-finder.com/clipart/permanent-marker-gray.html
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