UNIT 4 Growth and Development

Sub-Task #6 Preventing Sexually Transmitted Diseases.

Materials
Photocopy from master sheet of squares to ensure that each student has a square. Distribute all lettered squares. Remaining students receive blank squares (see Appendix Q).
Current STD statistics, if available (these change monthly, contact Public Health Nurse for information). See Notes to Teacher.

Description
Students will be able to identify methods used to prevent pregnancies through active discussion and worksheets.

<table>
<thead>
<tr>
<th>Expectation Code</th>
<th>Learning Expectation</th>
</tr>
</thead>
<tbody>
<tr>
<td>8p10</td>
<td>Identify symptoms, methods of transmission, prevention and high-risk behaviours related to common STDs, HIV and AIDS</td>
</tr>
<tr>
<td>8p11</td>
<td>Identify methods used to prevent pregnancy</td>
</tr>
</tbody>
</table>

Assessment Opportunities: Suggestions for Assessing Expectations

- Summative Assessment: Paper Pencil - The Story of HIV and AIDS and the related worksheets (see Appendices S and T) will determine how well the students will be able to identify the symptoms, methods of transmission, prevention and high risk behaviours related to common STDs, HIV and AIDS. The teacher may prepare a marking scheme to assess the related worksheets.

Teaching/Learning Strategies

1. STD/Activity
- Explain that this lesson is designed to teach participants how to avoid getting sexually transmitted diseases. For a warm-up exercise, students talk with three different partners on topics you suggest.
- Distribute a card to each participant; explain that after each discussion, they should sign their partner’s card (see Appendix Q).
- Ask them to stand, mingle, get to a partner and discuss: “Sex today compared to sex when your parents were young.”
- After two minutes, ask them to sign each other’s cards and find another partner and discuss: “What effect does sex in the media have on people?”
- Now ask the person whose card has a “d” on the back to stand, this person “has an STD”.
- Next, everyone with the infected person’s name on their card must stand - they, too, may be infected.
- Now, everyone who has these people’s names (students standing in last group) on their cards must stand! - they also may be infected.
- Standing people who have a "c" may sit, because if they did have intercourse, they used a condom correctly, with a water-based lubricant, which reduced their risk of getting an STD.
- Cardholder with "c-d" must stand as they contracted an STD that was not preventable by the correct use of a condom.
- Standing people who have an "r" may sit. They are in a relationship but did not have intercourse.
- Finally, standing people with an "s" may sit. They are "single", have no relationship at present and are enjoying it!
- The people standing did not use any protection and were not in any of the other situations. These people might have an infection!

**NOTE:** Emphasize that AIDS and STDs are not spread by talking to someone as imagined in this exercise!

- How did you feel?
  - to be caught with an infection?
  - to find you were not infected after all because you used a condom?
  - because you had a relationship but no sexual intercourse?
  - because you were "single"?

**NOTE:** Only about 20% of participants had used condoms – in spite of the fact that health officials are recommending condom use by everyone not in a long-term monogamous relationship. Less than 16% of unmarried couples currently use them. Why?

**NOTE:** About 50% to 74% of participants did not have intercourse – in fact, by Grade 9, about 26% of Canadian teens have had intercourse.

- Have students work in groups to complete "Sexually Transmitted Diseases" (see Appendix R) worksheet.
- Remind students that it is important to "Get Good Information" and family and public health professionals have expertise in this area.

### 2. The Story of HIV and AIDS

- Review with students the three page handout "The Story of HIV and AIDS" (see Appendix S) and the related worksheet (see Appendix T).
- Assign the Story and Worksheet as Homework.
Sexually Transmitted Diseases

Symptoms of STDs
- Sometimes no symptoms at all
- Discharge
- Burning with urination
- Itching
- Rash
- Sores
- Odour
- Pain in abdomen
- Fever
- Mono-like illness
- Swelling

Bacterial Infections
1. Chlamydia
   - People may have no signs or symptoms
   - 1998 – 12,400 1997 – 10,559
   - New drug one-time dose
2. Gonorrhea
   - Treated with antibiotics
   - Harder and harder to treat
   - 1998 – 2,241 1997 – 1,919
3. Syphilis
   - 1998 – 26
   - Primarily males

Viral Infections
1. Human Papilloma Virus (HPV)
   - Genital warts
   - Increasing at rapid rate
   - Increasing risk of cancer for females
   - Not a reportable STD, therefore incidence is unknown
2. Herpes
   - Lifelong recurring infection
   - Medications to treat, not cure
   - Neo-natal herpes is the only reportable infection
3. Hepatitis B
   - 1998 – 146 1997 – 175
   - Grade 7 immunization program
   - Statistic does not include chronic carrier status
4. Acquired Immunodeficiency Syndrome (HIV / AIDS)
   - 1998 – 161 1997 – 175
   - In excess of 400 cases of HIV
   - Heterosexuals increasingly at risk
5. Hepatitis C
   - Emerging evidence that suggests it is sexually transmitted but at very low rates
   - 1998 – 7,030 1997 – 6,472

Other Infections
1. Candidiasis
   - Yeast infections
2. Trichomoniasis
3. Gardnerella
4. Molluscum Contagiosum

Parasitic Infections
1. Scabies
2. Pubic Lice
   - Crabs

Treatment
- *depends on the STD
- Sometimes only symptoms may be treated
- Antibiotics
- Laser Surgery
- Immunization (prevention)
- Antirheumatic medications
- Antifungal preparations
- Insecticides

*Statistics taken from Summary of Reportable Diseases in Ontario - December, 1999 PHERO (Public Health and Epidemiology Report Ontario) 02-125100
Statistics for 1997 - Ontario from Canada Communicable Disease Report 1997, Annual Summary VI2558
**Summary of Sexually Transmitted Diseases**

<table>
<thead>
<tr>
<th>Disease</th>
<th>Cause</th>
<th>Usual Signs and Symptoms</th>
<th>Transmission</th>
<th>Treatment</th>
<th>Complications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquired Immuno Deficiency Syndrome (AIDS)</td>
<td>Human Immunodeficiency Virus (HIV)</td>
<td>There may be no outward signs of HIV infection for 8 to 11 years. Symptoms of later HIV infection or AIDS depend on which infection(s) is present, e.g., common cold-like illness or persistent (lasting more than two weeks) and unexplained diarrhea, shortness of breath, fever, swollen glands, night sweats, yeast infections, red/purple skin spots and hazy vision (slurred speech). Most infected people develop antibodies to HIV within 12 weeks of infection. A blood test can detect HIV antibodies at 12-14 weeks.</td>
<td>Once infected with HIV, the virus is always present. HIV can spread from one person to another during: – exchange of semen or vaginal fluids (unprotected sexual intercourse) or blood. – sharing of IV drug “works,” toothbrushes and razors, or; – ear piercing and tattooing, or; – pregnancy, delivery and breastfeeding. The level of virus circulating in the blood may no longer be detectable but HIV can still be found in the lymph glands. The drugs can delay the progression of AIDS by several years and enable someone with AIDS to live many years longer. Pregnant women are advised to be tested for HIV. If HIV-positive, and HIV medication taken during pregnancy, delivery and given to the baby also, the rate of transmission to the baby is reduced from 30% to 6-8%. Treatment is most effective if started in early HIV stages, and taken as prescribed.</td>
<td>Drug toxicity or failure to follow recommended therapy. If immune system weakens, major opportunistic infections (viral, bacterial, or fungal) or rare cancers develop and eventually leads to death.</td>
<td>Drug toxicity or failure to follow recommended therapy. If immune system weakens, major opportunistic infections (viral, bacterial, or fungal) or rare cancers develop and eventually leads to death.</td>
</tr>
<tr>
<td>Chlamydia</td>
<td>Bacteria</td>
<td>– usually appear 2-6 weeks after sex with an infected person; – often people may have chlamydia but have no signs or symptoms (up to 50% of men and up to 70% of women)</td>
<td>– spread through vaginal, anal and oral intercourse with an infected person</td>
<td>Infection is usually treated with antibiotics prescribed by a doctor. However, if symptoms go away before medication is finished, the infection may recur.</td>
<td>Untreated chlamydia can permanently damage the reproductive organs. Women can pass the germ to the baby on delivery and can cause infections in their eyes and lungs. Most females have no symptoms, males usually do not.</td>
</tr>
</tbody>
</table>

**Notes to Teacher continued**
### Summary of Sexually Transmitted Diseases

<table>
<thead>
<tr>
<th>Disease</th>
<th>Cause</th>
<th>Usual Signs and Symptoms</th>
<th>Transmission</th>
<th>Treatment</th>
<th>Complications</th>
</tr>
</thead>
</table>
| Genital Herpes   | virus (HSV) (Herpes Simplex Virus) | - tingling and itching in genital area  
- initial infection frequently have no symptoms and may not appear for years  
- cluster of tiny blisters that may last and leave painful sores that may last 2-4 weeks  
- fever and headaches with first attack | spread by direct contact with the open sores, usually during sex (vaginal, anal)  
- may transmit virus when symptoms are not present  
- oral sex may transmit virus | - see a doctor  
- medications may shorten attacks and make them less painful | - may be passed from infected mother to baby during childbirth  
- members of same virus family may cause fever blisters or cold sores on males |
| Genital Warts    | virus (HPV) (Human Papilloma Virus) | - fleshy, grouped warts on or around penis, anus or vagina, not painful, appear two weeks - eight months after contact with infected person. Visible warts may not appear at all, or may appear years after infection. Extremely contagious - most commonly diagnosed viral disease | spread from infected person to someone else during vaginal, anal and oral intercourse. | - see a doctor or go to a clinic to be checked  
- doctor applies medicine or may need surgery to remove internal warts | - can be dangerous if not treated  
- link between genital warts growing in mouth of vagina and cervical cancer  
- people with warts have a greater chance of getting anal cancer |
| Gonorrhea        | bacteria                     | - white or yellow discharge from genitals or anus appear 3-5 days after having sex. Discharge varies depending on presence of symptoms or infection. Women may have pelvic pain, especially after period. Men and women can be without symptoms which may appear 2-10 (up to 30) days after exposure. | spread from infected person to someone else during vaginal, anal and oral intercourse. | - be tested for and treated with antibiotics  
- infection may not be cured until all pills are taken  
- doctor may do a follow-up test three to seven days after medicine is finished to make sure you are cured. | - may be fatal if not treated  
- can cause PID leading to infertility, tubal pregnancies, and pelvic pain if untreated. (See chlamydia)  
- can cause sterile tubal pregnancy |
| Hepatitis B      | virus (HBV)                  | - usually appear within 2-6 months after contact.  
- poor appetite, nausea, vomiting  
- headaches  
- a general aching feeling  
- jaundice (yellowing of eyes and skin)  
- dark tea-coloured urine  
- light-colored stools | spread through infected blood and body fluids.  
- during sexual intercourse  
- sharing needles  
- from infected mother to her baby during childbirth  
- sharing body piercing and tattooing instruments  
- sharing personal items such as toothbrushes, razors, and lip balm, etc. | - avoid alcohol  
- eat healthy diet  
- rest  
- hepatitis B vaccine is available as a preventative measure, is not a treatment. | - many recover, some have serious problems - liver disease. Up to 10% of people become chronic carriers. |
## Summary of Sexually Transmitted Diseases

<table>
<thead>
<tr>
<th>Disease</th>
<th>Cause</th>
<th>Usual Signs and Symptoms</th>
<th>Transmission</th>
<th>Treatment</th>
<th>Complications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis C</td>
<td>mydia virus (HCV)</td>
<td>Only 25% of those infected have symptoms. Usually appear within 6-4 weeks after contact: - fatigue - loss of appetite - nausea - abnormally pale - jaundice (yellowing of eyes and skin)</td>
<td>HCV is spread by direct contact with infected body fluids. Sharing needles and drug-related equipment. Sharing body piercing and tattooing instruments. Sexual transmission is rare but is increased with prolonged exposure to a Hepatitis C positive partner or multiple partners or unprotected sex while menstruating.</td>
<td>- reduce or eliminate alcohol, tobacco and illicit drugs - antibiotics may help some individuals</td>
<td>- 98% become chronic carriers even without symptoms - cirrhosis of liver - liver cancer</td>
</tr>
<tr>
<td>Pubic Lice/Scabies</td>
<td>tiny insects (crabs)</td>
<td>- may not have symptoms, but may still occur around genitals - may itch especially at night, rash on skin folds, between fingers or on vents, elbows, abdomen, and around genitals</td>
<td>- transmit contact to person - may transmit by using shared linen, clothes or towels of an infected person. (Not always sexually transmitted)</td>
<td>- treated with antibiotics</td>
<td>- scratching may cause an infection requiring medical treatment. - avoid close body contact if you/partner has lice or pubic lice. Tell sex partner and have them get treated.</td>
</tr>
<tr>
<td>Syphilis</td>
<td>bacteria</td>
<td>1st stage: painless, shallow sore (chancre) at site of exposure (genital, anus, lips) 10-90 days after exposure. May disappear but germs remain. 2nd stage: rash or macro patches on mouth are highly infectious, rapidly heal, lose sore, spread to lymph nodes. Appearance 6-10 weeks after 1st stage, may recur up to two years or disappear entirely. 3rd stage: years later, if untreated, may cause serious problems: heart disease, blindness, paralysis, brain damage, death.</td>
<td>Bacteria found in blood - spread from infected person during sexual intercourse (anal, vaginal and oral), and from infected mother to her baby. Sharing needles and personal hygiene items (see Hepatitis B)</td>
<td>treated with antibiotics</td>
<td>- serious disease that can affect the entire body - you can have it without knowing it - babies born to infected mothers may have birth defects/leukemia</td>
</tr>
<tr>
<td>Vaginitis</td>
<td>fungus parasite</td>
<td>vary depending on cause - abnormal, often, feel slimy discharge - itching or pain inside or outside the vagina - redness or swelling on the outside of the vagina - pain during sex or when urinating</td>
<td>transmitted during sexual contact or wet objects (towels, washcloths)</td>
<td>- if sexually transmitted, then partner must be treated</td>
<td>- men may often have no symptoms and can spread it without knowing it. Men may have slight discharge from penis or pain on urination.</td>
</tr>
</tbody>
</table>