

Grade 8 Natural Science Worksheet

Sexually Transmitted Diseases

Answer the following questions in full:

1. How do people get STDs? [5]
2. State two methods of protecting oneself against contracting a sexually transmitted infection. [4]
3. Write down the names of the five STDs you have learned about. [5]
4. Name some of the dangers of not seeking early medical help. (Give specific examples.) [2]
5. Name a common STD infection (other than HIV AIDS) that can remain undetected for a long time – even years. How does this STD affect your body? [4]
6. What are the implications of infection by a STD remaining undetected for a long period of time? [3]
7. Give an example of each of the following: STDs that are caused by:
 - a virus;
 - a bacterium;
 - a single-celled parasite; and
 - a parasitic insect. [4]
8. Design a poster warning your peers about the dangers of STDs.

[40 marks]

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Rubric to assess poster

Content: /20				
Accuracy and interest level of information	Factually correct and extremely interesting. [10 marks]	Generally correct and interesting. [7 marks]	Some errors, rather ordinary. [5 marks]	Many errors, boring. [2 marks]
Communication of ideas	Very logically organised, meaningful flow of ideas. [10 marks]	Mostly well organised, can follow progression of ideas. [7 marks]	Fairly well organised, flow of ideas not always meaningful. [5 marks]	Very little meaningful organisation of ideas. [2 marks]
Presentation: /15				
Title	Attractive and meaningful. [3 marks]	Present, but only fairly attractive and meaningful. [2 marks]	Vague and unattractive. [1 mark]	None. [0 marks]
Overall appearance	Very neat and attractively presented. [7 marks]	Neat and well presented. [5 marks]	Neat in places, not much thought given to presentation. [3 marks]	Untidy, little/no attention paid to presentation. [1 mark]
Use of colour, lettering, diagrams, etc.	Excellent. [5 marks]	Good. [4 marks]	Mediocre. [2 marks]	Poor. [1 mark]
Overall impression: /5				
Comment	[5 marks]	[4 marks]	[3 marks]	[2 marks]

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Suggested Solutions

Question number	Possible marks	Solution
1	5 marks	<p>It is a common misconception, or incorrect idea, that one must have sexual intercourse in order to become infected with STDs like herpes or genital warts. In fact, you will get these infections through simple contact with the infected area on the skin of someone that suffers from the disease.</p> <p>Another misconception is that you cannot be infected through anal or oral sex. The bacteria or viruses that cause these infections can enter one's body through tiny cuts or tears in the skin. In the case of HIV, the virus can enter through the soft linings of the body's various orifices. An orifice is a place that is open to the outside, such as the mouth, ear, eye, vagina, etc. Many people carry these infections without being aware of the fact themselves. This is dangerous because they are infectious to others people with whom they may have intimate contact.</p> <p>Behaviours that increase one's chances of getting sexually transmitted infections are:</p> <ul style="list-style-type: none"> ○ Becoming sexually active at a young age. The earlier one starts having sex, the greater the chances of becoming infected. ○ Having multiple sexual partners. People who have sexual or even intimate contact (i.e. not necessarily sexual intercourse) with many people are more at risk of infection than people with only one partner. ○ Having sex without proper protection. Condoms are the only form of protection that reduce the risk of acquiring an STD. Spermicides and birth control mechanisms (e.g. diaphragms) may reduce the risk of pregnancy but they will not prevent STDs. ○ Sharing needles when using drugs. ○ Pregnant and lactating mothers can transmit STDs to their offspring.
2	4	<p>By not engaging in the behaviours that place one at risk to catch STDs: Wearing a condom, having sex with only one partner whom one is (medically) sure is carrying no STD infection, not using needles someone else has used, etc.</p>
3	5	<p>Information has been included here for the teacher's benefit:</p> <ol style="list-style-type: none"> 1. Chlamydia is caused by a bacterium called <i>Chlamydia trachomatis</i>. It usually passes from one person to another through sexual intercourse or oral-genital contact. However, even if bodily fluids containing the bacterium enter the eye, infection is possible. Chlamydia can be

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		<p>passed from a mother to her baby during birth, causing pneumonia and conjunctivitis (inflammation of the white of the eye), either of which can cause permanent damage to the baby or, if untreated, even death.</p> <ol style="list-style-type: none"> 2. Genital warts are caused by a group of viruses called HPV (the human papilloma virus). It is passed from person to person through vaginal, oral or anal sexual contact. Warts appear as bumps or growths and can be flat or raised, single or clustered, large or small. 3. Genital herpes is an STD caused by the herpes simplex virus. The symptom is one or more blisters on or around the genitals or rectum. These may break and leave painful, ulcerated sores that can take up to a month to heal. This virus remains in the blood indefinitely and outbreaks of the sores can occur from time to time. 4. Gonorrhoea is caused by the <i>Neisseria gonorrhoea</i> bacterium that grows and multiplies in the mucous membranes of the body and is spread through sexual contact. Symptoms include a burning sensation when urinating and a yellowish-white discharge from the penis. In men, symptoms usually appear between two to five days after infection, but it may take as long as 30 days to appear. 5. Hepatitis B virus (HBV) can be transmitted through sexual contact or via injection with used and infected needles. The disease attacks the liver and can cause jaundice, a yellowing of the skin and the whites of the eyes while the urine may become brownish. Those infected become ill between one and four months after infection. Symptoms include nausea, loss of appetite and mild fevers. Hepatitis B can cause permanent liver damage and an increased risk of liver cancer. 6. AIDS is a “syndrome” which can be either one or a collection of diseases with many symptoms. The human immune-deficiency virus. (HIV) leads to the acquired immune-deficiency syndrome. This means that the body’s ability to defend against attack by other infections and diseases is weakened. Infection is mainly through intimate sexual contact, but it can happen through other ways. AIDS has quickly become one of the leading causes of death in the world and is particularly prevalent in sub-Saharan Africa. 7. Pelvic inflammatory disease (PID) is a general term that refers to infection of the uterus (womb), fallopian tubes (tubes that carry eggs from ovaries to the uterus) and other reproductive organs. It is a common symptom of STDs like gonorrhoea and Chlamydia. 8. Pubic lice or “crabs” are small, parasitic insects that may invade the pubic region, and infest it with the eggs they lay, mainly in the pubic area. A louse gives off a substance that causes itching. The skin may be broken by scratching the infected area and the raw patches of skin then become susceptible to other infections. 9. Syphilis is caused by the bacterium <i>Treponema pallidum</i>. The
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		<p>symptoms are similar to other infections and accurate diagnosis may be very slow, by which time severe damage may already have occurred. Symptoms of the disease are sores, mainly on the external genitals, the anus or in the rectum. It is spread by sexual contact with an infected person. Pregnant women can transmit syphilis to their unborn babies. In its advanced stages syphilis can damage organs such as the brain, heart, liver and eyes and cause death. It also affects nerve cells, blood vessels, bone and joints leading to paralysis, blindness and mental derangement (or “dementia”).</p> <p>10. Trichomonas is the most commonly curable STD. The disease affects both males and females and is caused by a single-celled parasite called <i>Trichomonas vaginalis</i> which commonly infects the vagina in women and the urinary tract in men. Like most other STDs, it is spread through sexual intercourse with infected individuals. Symptoms include a strong-smelling, vaginal discharge or a burning sensation in the penis.</p>
4	2	Some STDs can be cured if caught early ✓ (e.g. chlamydia, syphilis and gonorrhoea) and if they cannot (HIV) then early detection can prevent the disease from being passed on to sexual partners. ✓
5	4	After the early symptoms of syphilis ✓ have disappeared the bacterium can remain dormant (“sleeping”) in the body for many years, ✓ slowly damaging the body, ✓ especially the eyes, nerves and brain. Syphilis can lead to blindness, dementia and eventually death. ✓
6.	3	Sexual partners of the infected person remain at risk. ✓ For the implications of an infection like syphilis, see the previous answer. Long term damage by even an easily-cured STD like gonorrhoea includes infertility. ✓ Syphilis can be passed to an unborn child by the mother through the placenta. ✓
7.	4	(a) Virus – HIV/AIDS, hepatitis B, genital warts; (b) Bacterium – Chlamydia, gonorrhoea, syphilis; (c) Single-celled parasite – trichomonas; (d) parasitic insect – pubic lice or “crabs”.
8.	40	See rubric in Appendix of Assessment Tools.

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