

تم تحميل هذا الملف من موقع المناهج الإماراتية



الملف كتاب النشاط الوحدة الخامسة prevention Disease

[موقع المناهج](#) ← [المناهج الإماراتية](#) ← [الصف الثاني عشر](#) ← [علوم صحية](#) ← [الفصل الثاني](#)

روابط مواقع التواصل الاجتماعي بحسب الصف الثاني عشر



روابط مواد الصف الثاني عشر على تلغرام

[الرياضيات](#)

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المزيد من الملفات بحسب الصف الثاني عشر والمادة علوم صحية في الفصل الثاني

علوم صحية مشروع علوم صحية 1	1
علوم صحية مشروع علوم صحية 2	2
علوم صحية diseases communicable	3
علوم صحية حلول الكتاب علوم صحية	4
شرح الوحدة الثامنة -8-Unit: change Behaviour	5

UNIT 5

Disease prevention

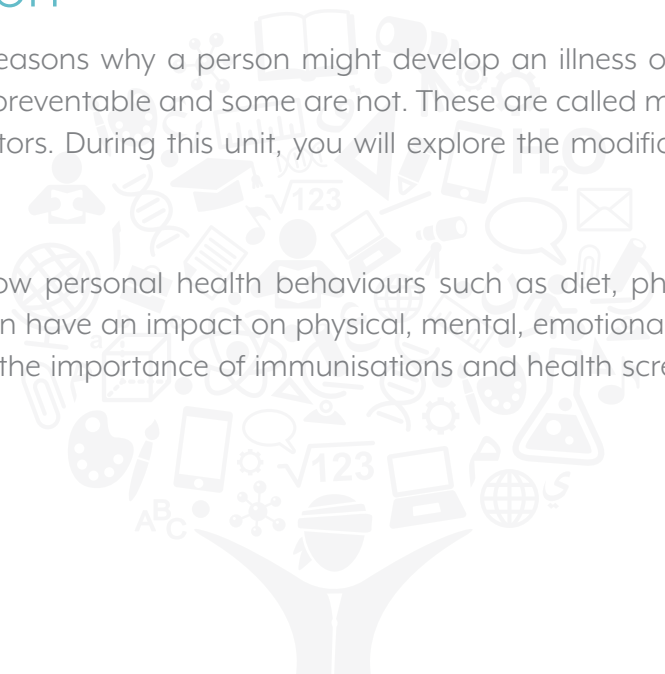
- 5.1 The causes of disease and illness
- 5.2 Modifiable and non-modifiable risk factors
- 5.3 Personal health behaviours for disease prevention
- 5.4 Physical activity and disease prevention
- 5.5 Medical care for disease prevention
- 5.6 Infection control for disease prevention

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Introduction

There are lots of reasons why a person might develop an illness or disease. Some of these reasons are preventable and some are not. These are called modifiable and non-modifiable risk factors. During this unit, you will explore the modifiable risk factors for disease.

You will identify how personal health behaviours such as diet, physical activity, and adequate sleep can have an impact on physical, mental, emotional and social health. You will also learn the importance of immunisations and health screenings for disease prevention.



Learning outcomes

Standard HSC.5.2.01: Demonstrate how an individual can take control of their health to reduce the risk of developing a disease.

Learning outcomes:

- HSC.5.2.01.006 Identify the causes of diseases and illnesses.
- HSC.5.2.01.001 Explain modifiable and non-modifiable risk factors for disease.
- HSC.5.2.01.002 Connect the importance of personal health behaviours such as a healthy diet, adequate sleep and personal hygiene with the prevention of illness and disease.
- HSC.5.2.01.003 Explore the role of physical activity in the prevention of illness and disease.
- HSC.5.2.01.004 Explore the role of immunisation in reducing the risk of developing disease.
- HSC.5.2.01.005 Identify the importance of health screening for early detection of certain illnesses and diseases.
- HSC.5.2.01.007 Explain the importance of infection control in relation to disease prevention.

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Keywords

Word	Form	Definition
behaviour	noun	the way someone acts or conducts themselves
blood pressure	noun	how hard the blood is pushing against the walls of the arteries
cholesterol	noun	a fat that your body needs to work properly; there is good and bad cholesterol
disease	noun	a medical condition that stops a person's body from working properly
ethnicity	noun	a group of people with the same customs or origin
genetics	noun	the science of heredity; how characteristics are passed from parents to children
hygiene	noun	keeping yourself and your surroundings clean
illness	noun	a disease or period of sickness affecting the body
immunisation	noun	the process whereby a person is made resistant to an infectious disease
infection	noun	a disease caused by germs that enter the body
infectious	adjective	capable of being easily spread to other people
intensity (exercise)	noun	how much energy is used when exercising
modifiable	adjective	can be changed
non-modifiable	adjective	cannot be changed
physical activity	noun	any movement of the body that needs energy
prevention	noun	to stop something from happening
risk factor	noun	something that increases the chance of getting a disease
sedentary	noun	having an inactive lifestyle
screening	noun	a test to identify a disease before a person has any signs or symptoms
vaccine	noun	something that is injected into a person to protect them from a disease

5.1 The causes of disease and illness



Discussion: What causes disease or illness?

Discuss as a class what you know about disease and illness. Think about what causes a disease or illness. Try to answer the questions below.

What is a disease? Think of some examples.

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What could cause someone to develop a disease or an illness?

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Can any of these things be prevented? How?

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Activity 1

What is a disease or illness?



Use the options below to answer the questions about disease and illness.

being physically active	stops a person's body from working properly
lifestyle	having a healthy diet
disease prevention	genetics

1. What does a disease or illness do?

.....

2. What are two reasons why a person might develop a disease or illness?

.....

3. What is preventing or lowering the chance of getting a disease called?

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Activity 2

Disease prevention



Write a short paragraph describing some of the best ways to prevent disease.

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5.1 The causes of disease and illness



Activity 3

Communicable and non-communicable disease



Write a sentence that describes each of the following:

Communicable diseases

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.....

Non-communicable diseases

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.....



Activity 4

Types of non-communicable disease



Using your textbook, name four non-communicable diseases. Then try to think of at least three more examples that are not in the book. Compare your answers with the rest of the class.

Examples from the textbook:

1.
2.
3.
4.

Your own examples:

.....
.....
.....
.....
.....



Activity 5

Communicable diseases

COVID-19 is an example of a communicable disease. It can easily be spread from one person to another.

Create an information poster about COVID-19 using your textbook, and any other information that you have on the virus.

Include advice on what the signs and symptoms are, and some ways to avoid getting it.

Coronavirus

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5.1 The causes of disease and illness



Research: COVID-19 statistics

You already know that COVID-19 is a respiratory virus that can be easily spread between people. Because the virus is highly infectious, it has spread to most countries in the world.

Worldometer is a website that provides up-to-date information about the virus and how it is affecting different countries. Scan the QR code to explore the statistics on coronavirus and answer the questions below.



1. How many COVID-19 cases are there throughout the world? Remember that this figure changes daily, so also write the date that you found this information.

.....

2. Which country currently has the most coronavirus cases?

.....

Can you think of any reasons why this country's cases of coronavirus are so high?

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.....

.....

.....

3. India and China have the two biggest populations in the world. India has a population of approximately 1,383,000,000 people, and China has around 1,440,000,000 people.

Compare the statistics on coronavirus for these two countries. How many cases does each country have?

China:

India:

Do these figures surprise you? Why?

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4. The United Arab Emirates has a very low number of cases of COVID-19 compared to other countries.

What do you think the reason for this is?

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5.2 Modifiable and non-modifiable risk factors

STARTER Word search

Complete the word search to find some keywords from this lesson.

J V X N Y N O L S Y I K L E W
 I I D I G T Q C E S Y M F L Z
 E L B A I F I D O M D A F Y J
 A M U E M T R C T W A S E T I
 R W L N E L X P I G P M D S J
 C H A N G E S O U N Q X A E O
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 M G F Y O Y X Z G Q I T Z I R
 P N S H R X T W Y D G S E L D
 I Z F Z T A G S D I J L K B N
 D M I V B H I R H P V H K O Z
 R S O S W L U Z H N O V P L M
 D M J D E Z P T U V B M L I I
 Q E C V F Q J A T Z O D O H T
 F T X U Y B I L J R A X I C E

RISK	ETHNICITY	LIFESTYLE
CHANGES	MODIFIABLE	GENETICS



Activity 6

Types of risk factors



Fill in the type of risk factor based on the description.

Risk factors that you can change:
Risk factors that you cannot change:



Activity 7

Modifiable risk factors



Read the two case studies and then think of one lifestyle change you would advise each person to make.

Case study 1

Fatima has a sedentary lifestyle. She does not do any exercise. When Fatima visited her doctor, the doctor said she was at risk of heart disease.

A lifestyle change that you would advise Fatima to make:

.....

.....

Case study 2

Sayed likes to eat fast food every day. He has put on a lot of weight. When Sayed visited his doctor, the doctor said that he is obese and is at risk of developing diabetes.

A lifestyle change that you would advise Sayed to make:

.....

.....

5.2 Modifiable and non-modifiable risk factors



Activity 8

Non-modifiable risk factors



Match the non-modifiable risk factor to the description.

Gender

A large group of people with the same customs or origin.

Family history

Whether a person is male or female.

Age

The medical condition of a person's family members.

Ethnicity

How old a person is.



Activity 9

What is the difference?



Write a paragraph that explains the main difference between a modifiable and non-modifiable risk factor.

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Activity 10

Modifiable or non-modifiable?



Look at the list of risk factors. Decide if they are modifiable (M) or non-modifiable (NM). Put a tick in the correct column.

Risk factor	M	NM
Gender (male or female)		
Sedentary lifestyle (lack of exercise)		
Type 2 diabetes		
Age		
Family history (genetics)		
High blood pressure (hypertension)		
Smoking		
Being overweight or obese		
Ethnicity		

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5.3 Personal health behaviours for disease prevention

STARTER Personal health behaviours

Personal health behaviours are lifestyle habits that can affect a person’s health. They can be positive or negative.

Work in groups. In the boxes below, write some positive or negative health behaviours. An example of each has been done for you.

Compare your groups’ answers with the rest of your class.

Positive health behaviour	Negative health behaviour

Notes:

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Activity 11

Healthy diet



In the spaces below, list some foods that should only be eaten in moderation (in small amounts, or not very often) as eating too much of them is not good for your health.



Activity 12

Healthy diet for disease prevention



Answer the questions below about how a healthy diet can reduce the risk of certain diseases.

Identify two diseases that you have a higher risk of developing if you are overweight.

.....

.....

Which mineral helps in maintaining healthy bones?

.....

Name two foods that are a good source of this mineral.

.....

.....

What can happen if you have too much cholesterol in the body?

.....

.....

5.3 Personal health behaviours for disease prevention



Activity 13

A healthy diet and mental health



A healthy diet not only keeps the body healthy, but it has been shown to benefit mental health too.

Write some of the ways that a healthy diet can benefit mental health.

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Next, think about how you feel when you follow a healthy diet, or how you feel when you eat a lot of unhealthy foods.

Does eating healthy make you feel better or worse? Why?

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Discussion: How much sleep do you get?

In small groups, discuss how much sleep you get each night. Answer the questions below.

In your group, who gets the most sleep each night and how much do they get?

.....

In your group, who gets the least sleep each night and how much do they get?

.....

Now share your answers with the class.

Who in the class gets the most sleep each night and how much?

.....

Who gets the least sleep each night and how much?

.....



Activity 14

Not getting enough sleep



Write some advice that you would give to someone who does not get enough sleep. Try to include information about what diseases they could develop if they don't get enough sleep over a long period of time.

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5.3 Personal health behaviours for disease prevention



Activity 15

The importance of personal hygiene



In the boxes below, write three reasons why personal hygiene is important.

1.

2.

3.



Activity 16

Fill in the blanks



Fill in the blanks about personal hygiene using the words below.

spreading	shower	bacteria
smell	hands	morning

When you wake up in the, you should brush your teeth, take a, wash your body, and put on clean clothes.

If you don't practise good personal hygiene, then dirt and could build up on your body and cause it to bad, or the skin to become infected and sore.

Keeping your body and clean also helps to stop bacteria and viruses from



Activity 17

When to wash your hands



Washing your hands is important. It kills bacteria and stops viruses from spreading. Working in groups, and without using your textbooks, think of times when you should wash your hands.

See which group can think of the most!

You should wash your hands:

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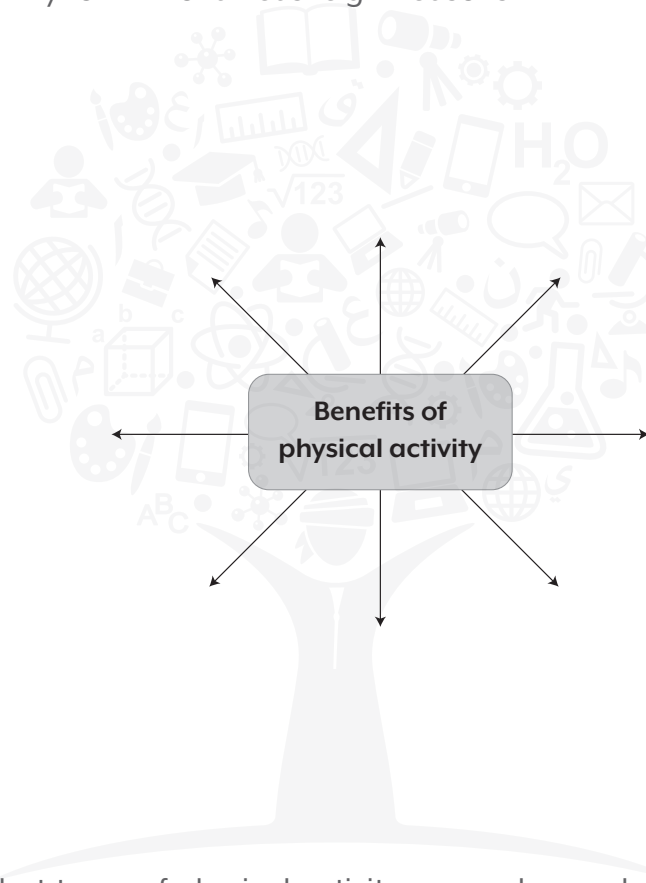
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5.4 Physical activity and disease prevention



Discussion: Why do physical activity?

As a class, discuss why physical activity is important and some of the benefits of doing it. Try to think of at least eight reasons.



Discuss what types of physical activity you and your classmates do. Write them below.

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Activity 18

The benefits of physical activity for physical health



From the list below, choose one benefit of physical activity for physical health and write a short sentence about it.

- ⊙ Controls body weight
- ⊙ Reduces the risk of certain diseases
- ⊙ Improves bone and muscular strength
- ⊙ Improves lung function

Chosen benefit:

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Activity 19

Mental, emotional and social health



Below is a list of benefits of doing physical activity. Decide if they are related to mental and emotional health or social health. Draw a line from the description to the correct answer.

increased confidence	make new friends	improve your mood	improved energy levels
raised brain function	increased motivation to exercise	learn leadership skills	improved wellbeing



5.4 Physical activity and disease prevention



Activity 20

Recommendations for exercise



Complete the tables below with the recommended amount and type of exercise.

Children and teenagers aged 5-17 years old

Should do moderate to high-intensity activity each day for at least:
Should do activities that strengthen muscles and bones at least:

Adults aged 18-64 years old

Should do moderate-intensity activity each week for at least:
Should do activities such as running for at least how long at a time:
Activities such as weight training should be done at least:

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Activity 21

Exercise intensity



Write a sentence to describe moderate and high-intensity activity.

Moderate-intensity activity:

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.....

High-intensity activity:

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.....

.....



Activity 22

Moderate or high-intensity?



Decide if you think these activities are moderate-intensity (M) or high-intensity (H).

	M or H?
Cycling over 16km per hour	
Gardening	
Walking at about 5km per hour	
Running	
Doing housework	

5.5 Medical care for disease prevention

STARTER Unscramble the words

Using the clues, unscramble the words to learn some of the keywords about medical care for disease prevention.

To test people to see if they have the early signs of a disease or illness:

eeingnracs

Something that is injected into a person to protect them from a disease:

ecacvin

When people are made immune or resistant to an infectious disease:

noitasinuimm

To identify a disease or illness in someone:

nosedgai



Discussion: Immunisation and screening

In groups, discuss any diseases that you can think of that aim to be prevented by immunisation or screening. List them below and compare your answers with the class.

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Activity 23

Fill in the blanks



Using the words below, fill in the blanks about how vaccines work.

immune	antibodies	injecting	virus
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Vaccinations work by a very small amount of the or bacteria that causes a certain disease into the body. It is a small enough amount so that it does not make you ill.

This makes the body's system create antibodies to fight off the injected disease. Then, if the disease enters your body again in the future, your immune system knows what it is and already has the to fight it. This is called immunity.



Activity 24

True or false?



Look at the statements about vaccinations. Decide if they are true or false by writing true or false in the spaces provided.

	True / False
Vaccinations do not help to control infectious disease outbreaks.	
Vaccinations help the body to build protection against diseases.	
Vaccinations save around 2.5 million lives every year.	
Vaccines do not work with the body's natural defences.	
Vaccines can prevent more than 20 life-threatening diseases.	
Vaccinations reduce the risk of getting a disease.	

5.5 Medical care for disease prevention



Activity 25

Having a vaccination



Answer the questions about vaccinations below. Then discuss your answers with the rest of the class.

Can you remember having any vaccinations?

.....

.....

How old were you?

.....

.....

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Can you remember what the vaccinations were for?

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Why do you think countries such as the UAE have vaccination programmes?

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Activity 26

UAE National Immunisation Programme

Work in groups. Using the 'protect your health with vaccinations' chart in the textbook, write the age that children should have each of the following vaccinations. Remember that some vaccinations might have more than one answer.

Vaccination	Age
Polio (OPV/IPV)	
Hepatitis B (Heb B)	
Varicella (chickenpox)	
Measles, mumps, rubella (MMR)	
Tuberculosis (BCG)	
Influenza (Hib)	

5.5 Medical care for disease prevention



Activity 27

World Immunisation Week



Each year, the World Health Organization (WHO) has a 'World Immunization Week' to promote the use of vaccines for people of all ages to protect them against disease.

In 2020, the focus of the immunisation week was to try to raise global awareness of the importance of vaccinations.

The WHO aimed to do this by:

- ⦿ showing the value of vaccines for the health of children, communities, and the world.
- ⦿ showing how routine immunisation can build strong health systems.
- ⦿ trying to increase investment in vaccines and immunisation.

Scan the QR code below to find out more information on the WHO World Immunization Week.



Using the information found on the WHO website, create a poster to help raise awareness about the importance of vaccinations.

Notes:



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5.5 Medical care for disease prevention



Activity 28

Screening tests at different ages

For each of the different ages, write two recommended screening tests.

20s and 30s

.....

40s

.....

50s and 60s

.....



Activity 29

General screening

Fill in the missing parts of the table about screening tests for adults.

For	To screen for	Type of test	Screening frequency
People over 20 years old		Body mass index (BMI) and waist circumference	
People over 20 years old	Hypertension (high blood pressure)		Every 2 years (more if high risk)
	Diabetes High cholesterol	Fasting blood glucose/lipids test	Every 3 years (more if high risk)
People over 50 years old		Test to find blood in stools OR colonoscopy	
	Cervical cancer	Pap smear test	
Women 50-69 years old	Breast cancer		Every 2 years
	Prostate cancer	Blood test or physical examination	



Activity 30

Screening results



Answer the questions about screening results.

1. If someone gets a 'negative' result from a screening test does it mean that they are at high or low risk for the condition they were screened for?

.....

2. If a person has a negative result from a screening test, does it mean they will never develop the condition they were tested for?

.....

3. If a person gets a 'positive' result from a screening, does it mean that they might have, or that they do not have, the condition they were screened for?

.....

4. What further tests does a person need if they have a positive screening result?

.....



Activity 31

Screening or diagnostic tests?



Read the description and then name the type of test.

This is done when a person has signs or symptoms of a disease or has had a positive screening test.

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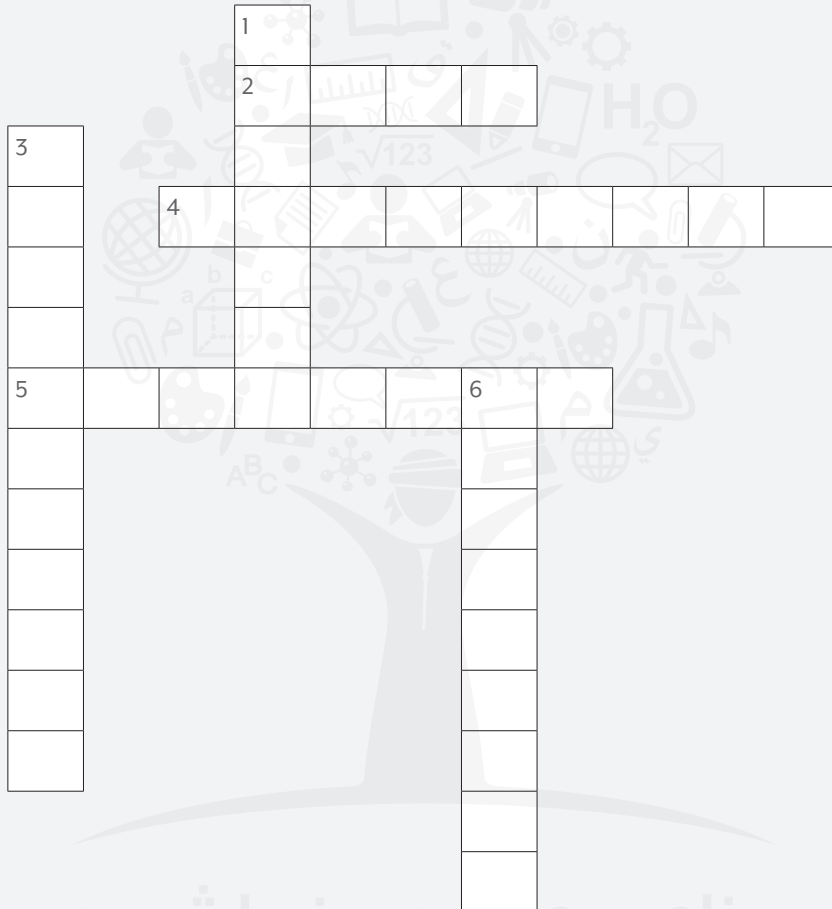
This is done when people who do not have any signs or symptoms of a disease.

.....

5.6 Infection control for disease prevention

STARTER Crossword

Use the clues and words provided to complete the crossword with some keywords related to this lesson.



Across

- 2. the chance that something bad might happen
- 4. something that can be prevented
- 5. very small living things that can cause disease

Down

- 1. to stop something from happening
- 3. a drug that is used to kill harmful bacterial infections
- 6. a disease caused by germs that enter the body

infection	prevent	bacteria
antibiotic	avoidable	risk



Activity 32

Causes of healthcare infections



Identify the causes of healthcare infections.

<p>What can cause healthcare infections?</p>	<p>.....</p> <p>.....</p>
<p>Healthcare infections are usually spread by:</p>	<p>.....</p> <p>.....</p>
<p>People are more at risk of healthcare infections if they are:</p>	<p>.....</p> <p>.....</p>



Activity 33

Antibiotic resistance



Write a paragraph to answer the questions below.

What can happen if antibiotics are used too much? How is this a risk to patients?

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5.6 Infection control for disease prevention



Activity 34

Types of healthcare infections

Look at the description of common healthcare infections and identify the type of infection it's describing.

An infection in one or both lungs
An infection in the area of an operation
An infection in the kidneys and bladder
An infection of the brain and spinal cord
An infection in the blood

Notes:

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Research: Transmission-based precautions

Find out more about the different transmission-based precautions; airborne, contact and droplet.

Airborne

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Contact

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Droplet

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5.6 Infection control for disease prevention



Activity 35

Create a poster



In the space below, create a poster that could be displayed in a healthcare setting to help prevent infections.



Your poster should be about one of the following:

- ⦿ Infection control programmes
- ⦿ Screening
- ⦿ Hand washing
- ⦿ Hygiene
- ⦿ Quarantine
- ⦿ Decontamination of people and the environment
- ⦿ Personal Protective equipment (PPE)

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Discussion: Precautions in the UAE

Discuss the hygiene and infection control precautions (steps taken to prevent something) that were introduced in the UAE during the COVID-19 pandemic. How many measures can you think of?

.....

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Activity 36

Reduce your risk

List the things that you should do in day-to-day life to reduce your risk of getting an infection. Then select one of these things to explain in more detail why this will reduced your change of getting or spreading infections.

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End of unit quiz

1. Write what each of the risk factors below means.

Modifiable risk factor:

.....
.....

Non-modifiable risk factor:

.....
.....

2. Write three ways that you can help to prevent a communicable disease:

.....
.....
.....

3. From the list below, write yes if they are positive health behaviours or no if not.

	Yes or no?
Being physically active	
Having good personal hygiene	
Being overweight	
Getting regular medical check-ups	
Smoking	
Having a healthy diet	
Not exercising	
Getting enough sleep	

4. Write a short paragraph about the benefits of physical activity.

.....

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.....

5. Choose which sentence describes immunisation, and which describes screening.

Write immunisation or screening in the spaces provided.

When people are made resistant to an infectious disease, usually by the injection of a vaccine

.....

Testing people to see if they have any signs of a disease or illness

.....

6. Answer the questions about screening or diagnostic tests.

Which type of test checks for early signs of disease?

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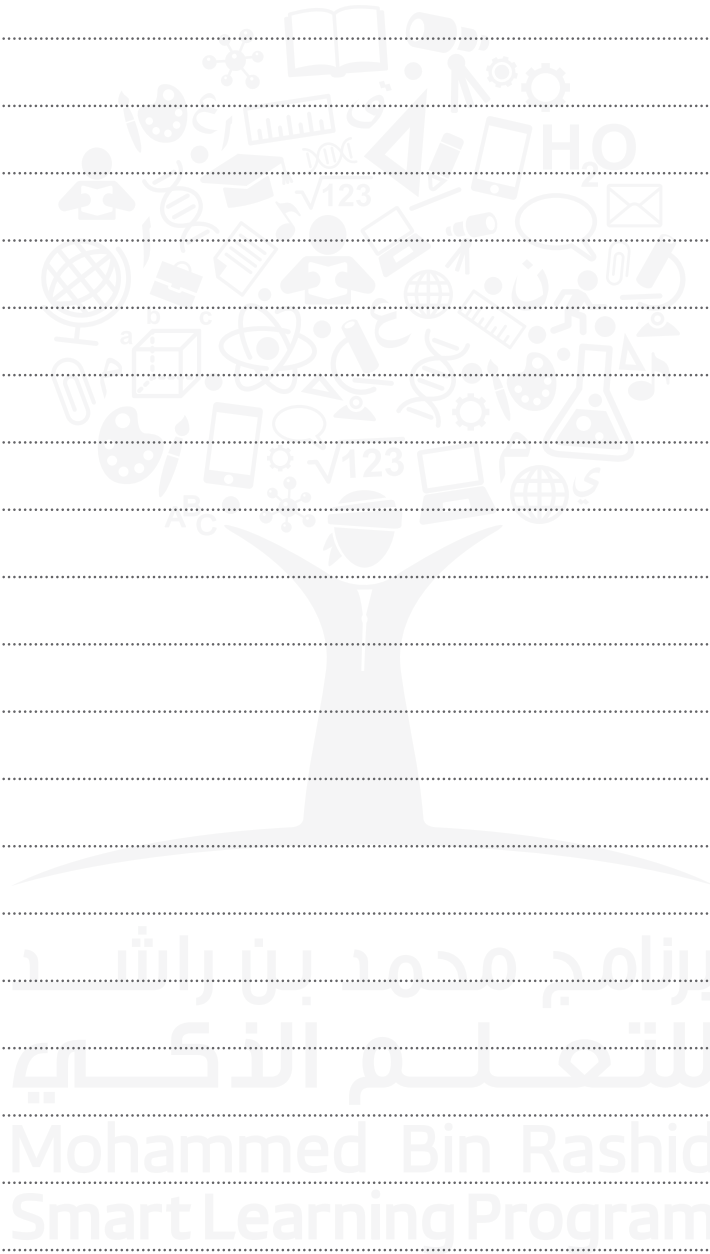
Which type of test is done when signs of a disease have been identified?

.....

Which type of test is low cost?

.....

Notes:



Notes:

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