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# LEARNING OBJECTIVES

# After learning this unit, you will be able to:

- use reliable sources
- listen for explanations
- develop criteria for evaluating solutions
- value your own cultural traditions
- give a presentation on an epidemic in human history
- use signpost language



Compare your answers with your partner. Then choose three elements and share them in class.

- A: Well, public health makes me think of health and safety rules, like wearing masks when you are sick, or washing your hands.
- B: For me, public health is about the choices we make as a society to be healthier, like more people choosing to go to the gym.

# **Quotation notes**

The topic of this unit is public health, which is about how society protects its citizens from illness. The quotes address the topic of this unit from different perspectives.

The first quote is from Sun Simiao (AD 581–682), known as the "King of Medicine" due to the significant contributions to Chinese medicine and standards of care that he made during the Tang Dynasty. The quote stresses the importance of anticipating and preventing disease in doctors' work. Preventative treatment is a core belief of traditional Chinese medicine, which gives special attention to preventing disease before any arises.

The second quote is from C. Everett Koop (1916–2013) who was the 13th Surgeon General of the United States in the 1980s under President Ronald Reagan. He became a household name during that time for his support of the rights of children with disabilities and for turning the office into an authoritative platform from which to educate the nation on major public health concerns. The quote makes an important distinction between health care and public health. Koop makes the point that public health affects everybody all the time and thus is everybody's responsibility, whereas health care only comes into play when a person gets sick.

# Get on board

#### Reference answers

- Key words for the mind map:
  - 1) medical staff
  - 2) epidemic

- 3) Li Shizhen / Henry Norman Bethune / Louis Pasteur
- 4) educational programs
- Public health makes me think of medical staff first because they are the people who help the public fight against diseases and epidemics on the front lines. And there are doctors and scientists from all around the world who have made a difference, such as Li Shizhen, Henry Norman Bethune, and Louis Pasteur. They discovered vaccines and other cures; without these discoveries, there would be more public health problems. Public health is also about informing the public, through educational programs, about health issues. For example, tell people who smoke that there are risks both to themselves and others, and that they should smoke less or quit.

### **Teaching tips**

- Ask Ss to work in pairs to complete the mind map with any words that they can think of. Prompt them to think of figures, ideas, or events. For example, a doctor well known for their contribution to public health (e.g. Zhong Nanshan), a public health emergency (e.g. COVID-19), or a more abstract idea (e.g. to maintain public health, the general public needs to be responsible and follow certain rules). Explain that there are no absolute answers.
- Ask two or three pairs of Ss to share their thoughts with the whole class. Suggest some ideas of your own if you feel there are any gaps.
- Ask Ss to work in pairs to choose three elements in their mind map and explain them in more detail to each other. Tell Ss to focus on the sample answers so that they know what is expected of them here.
- Select two or three pairs to share their explanations with the whole class.

# **Listening 1**

#### **New words**

vaccination /ˌvæksɪˈneɪ∫n/ n. 疫苗 接种

welfare /'welfeə/ n. 福利 societal /səˈsaɪətl/ a. 社会的 food poisoning /'pɔɪznɪŋ/ n. 食物 中毒

clinical /ˈklɪnɪkl/ a. 临床的

# Before you listen

What do you think public health is? Check (√) the statements that you think are true. Work in pairs and share your reasons with your partner.



- is health care provided by volunteers.
   is a type of free health care provided to those with no income.
   is concerned with preventing illness in society.
   is the opposite of private health.
   includes educational programs about healthy behavior.
   includes educational programs about healthy behavior.
   is maintain physical and mental health.
   is maintain physical and mental health.
- While you listen
- **②** Listen to a conversation between Amy and Alex about public health and choose the best answer to each of the questions you hear.
  - 1. A. It is about finding the causes of illness.
    - B. It is about protecting people from illness.
    - C. It is about providing information about illness.
    - D. It is about preventing illness and encouraging healthy behavior.
  - 2. A. It focuses on the leading causes of illness.
    - B. It is about predicting people's potential health problems.
    - C. It is about monitoring the kind of treatment patients receive.
    - D. It focuses on mental and social well-being besides physical health.
  - 3. A. It mainly depends on the government.
    - B. It needs all sectors of society to contribute.
    - C. It mainly depends on international cooperation.
    - D. It relies on us increasing our public health awareness.

# Experience the world

# **Listening 1**

### **Scripts**

Amy: Morning, Alex.

**Alex:** Hi, Amy. Are those your textbooks on public health? They look thick!

**Amy:** Yes, they are a bit! But they're very interesting. Do you know much about the subject?

**Alex:** Hm, to my mind, public health is all about protecting citizens from illness, right?

Amy: Well, actually, it's more than that. Public health can be about preventing illness through things like vaccination programs ... but it's also about encouraging healthy behavior via educational programs like antismoking campaigns.

Alex: Hm, this reminds me of a public welfare poster about depression treatment that I saw recently. Is depression also considered a public health concern?

Amy: Yes, it is. Apart from physical health, public health attempts to maintain mental and social well-being as well. It also focuses on these problems at a societal level.

Alex: What do you mean?

Amy: Well, if somebody suffers from food poisoning, the treatment they receive belongs to clinical medicine rather than public health.

**Alex:** Oh, I see, but then public health will look at what caused the food poisoning and how to prevent it, right?

Amy: Exactly. If we consider this issue at a societal level, it could be the cleanliness of the kitchen in a restaurant, the rules for how to store the food, or the attitudes toward food preparation in that community. Those kinds of things.

Alex: Yes, I get it. But does that mean that public health is mainly the government's responsibility?

Amy: No, absolutely not. Its role is important, but for public health programs to work, we must all contribute. It's the responsibility of all sectors of society. And it's about making sure that health care is available to everyone.

### **Questions:**

- 1. Which of the following best describes Amy's understanding of public health?
- 2. What does Alex learn about public health from Amy?
- 3. What is Amy's conclusion about the success of public health programs?

#### Reference answers

- 1. Public health is not simply provided by volunteers; it involves the efforts of many professionals, like medical workers and scientists.
- 2. Public health offers many free health care services to all, not only to those with no income.
- 3. ( $\sqrt{\ }$ ) Public health is concerned with disease prevention in society. It aims to maintain or improve the health and safety of the entire population.
- 4. Public health is not the opposite of private health. It looks at the whole society's health from broader perspectives, and also aims to encourage individuals to have a healthy lifestyle.
- 5. (√) There are educational programs encouraging healthy behavior such as ensuring sufficient outdoor activities for students, preventing myopia in children and adolescents, and discouraging smoking.
- 6. (√) Public health focuses on both physical and mental health. It aims to maintain the well-being of the population, including preventing and treating physical diseases and mental illnesses.

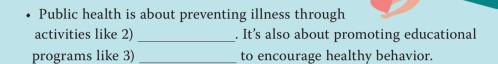
3 Listen to the conversation again and complete the fact sheet with the words and phrases you hear.

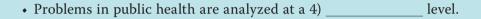




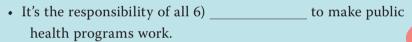


- Public health is not just about protecting
  - 1) \_\_\_\_\_ from illness.



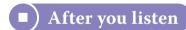


• If somebody suffers from food poisoning, the treatment they receive belongs to 5) \_\_\_\_\_ rather than public health.



• Public health aims to make sure that health care is 7) .





- **1** Work in pairs and have a conversation about a health initiative or action plan launched by local government or your university. Your conversation could cover the following points:
  - What is it about?
  - What kind of people is it aimed at?
  - How has it been carried out?
  - Do you think it is effective? Why?
  - A: Our university has launched an educational campaign about antismoking. It is directed at people who may start the habit at an early age.
  - **B:** I think the campaign is very effective, because ...

7. Although the government plays an important role in public health, there are many other stakeholders with responsibility for public health, including charities, hospitals, NGOs, community leaders, and even individuals.

### 2 Answers

1. D 2. D 3. B

### 8 Answers

- 1) citizens
- 2) vaccination programs
- 3) antismoking campaigns
- 4) societal
- 5) clinical medicine
- 6) sectors of society
- 7) available to everyone

### **4** Reference answers

There's been a campaign in our town to raise awareness about dengue fever. Mosquitoes are the main carrier of the disease. If bitten by an infected mosquito, you can get really ill. The campaign is aimed at the general population but especially at young people who often forget about the danger of mosquitoes. There's a video which reminds people to wear longsleeved shirts and long pants and use insect repellent. The video is intended to capture public attention and is widely broadcast online and offline. I would say the campaign is quite effective in raising people's awareness about dengue fever. As a matter of fact, I have heard people discussing the campaign and the disease on more than one occasion.

## **Teaching tips**

- Ask Ss to think about the four questions. A specific health initiative or campaign may not occur to them immediately, so mention a couple of health initiatives or action plans well known in the local context, e.g. a campaign aiming to raise public awareness of breast cancer or advising people to use serving chopsticks.
- Put Ss in pairs to discuss the questions. Have Ss read the sample conversation and draw attention to particular expressions ("has launched", "it is directed at") which they could use.
- Have some Ss volunteer their answers and praise good language use.

# **Listening 2**

#### **New words**

contract /kən<sup>l</sup>trækt/ vt. 感染 (疾病)

fluid /ˈfluːɪd/ n. 液体 bleeding /ˈbliːdɪŋ/ n. 出血; 流血 statistics /stəˈtɪstɪks/ n. (pl.) 统计

cure /kjuə/ n. 药; 疗法 license /'laɪsns/ vt. 批准, 准许 (使用某物)

#### **Proper names**

Guinea / ˈgɪni/ 几内亚(非洲国家) Sierra Leone /siˌerə li ˈəʊn/ 塞拉 利昂(非洲国家)

Liberia /laɪˈbɪəriə/ 利比里亚(非洲国家)

# Culture note

#### The Hot Zone

It is a best-selling book by Richard Preston that describes an outbreak of a mysterious virus from central Africa in Washington D.C.

# Before you listen

① You are going to hear a podcast about the Ebola virus. Work in pairs and match the words in Column A with their meanings in Column B.

Column A	
1. infectious	0
2. originate	0
3. outbreak	0
4. symptom	0
5. virus	0
6. vital	0
7. vomit	0

	Column B
0 /	A. the signs and effects of an illness
0 I	B. extremely important
0	C. to come from or start out from a place or time
0 I	D. the sudden spread of an illness
0	E. to bring food or drink up from your stomach out through your mouth
0	F. a small living thing that can enter your body and make you ill
0 (	G. spreading from one person to another

# While you listen

- 2 Listen to the podcast and decide whether the statements are true (T) or false (F).
  - $\square$  1. We do not know the exact origin of the Ebola virus.
  - $\square$  2. We do not know how the virus is spread from one person to another.
  - $\square$  3. There are only three main symptoms when contracting the Ebola virus.
  - ☐ 4. Major outbreaks of the Ebola virus have taken place in two countries.
  - ☐ 5. Ebola's outbreak has been brought under control but it is still very worrying.



# **Listening 2**

### **Scripts**

A best-selling book called *The Hot Zone* has brought the Ebola virus to the public's attention again. This scary, highly infectious virus appears from nowhere, causes mass outbreaks, and then disappears.

Ebola was first discovered in 1976 in a village near the Ebola River in Africa. No one is certain how it originated. Based on findings published by the World Health Organization, or the WHO, humans can contract the virus through contact with infected animals, such as bats or monkeys. The virus spreads from person to person via bodily fluids.

Symptoms can be serious. They include fever, muscle pain, vomiting, and internal and external bleeding. According to statistics from the WHO, the death rate in past outbreaks of the disease has been as low as 25 percent, but also as high as 90 percent. Major outbreaks of the virus took place between 2014 and 2016 in Guinea, Sierra Leone, and Liberia. The combined efforts of governments and non-governmental organizations have been vital in bringing these outbreaks under control.

There is no cure for Ebola. However, the U.S. Centers for Disease Control and Prevention recommends treatments, including oxygen therapy, to manage symptoms. Though a vaccine has been licensed, its effectiveness has not been fully proven yet. Ebola is still not a fully preventable disease and remains a serious cause for concern to the international community.

#### Culture note

#### The Ebola River

The Ebola River is a tributary of the Congo River in Africa. The Ebola virus was first identified in Yambuku, a village close to the Ebola River, but the disease was named after the river so that the town would not be associated with the deadly disease's stigma.

# The U.S. Centers for Disease Control and Prevention (CDC)

CDC is the national health protection agency of the United States. It prevents and controls disease, injury, and disability, promotes healthy behavior, conducts research, and trains public health workers. In addition, its work protects the U.S. from both foreign and domestic threats to health, safety, and security.

### Language notes

**bring sth. under control** to deal successfully with a situation so that it is unlikely to cause problems

The fire service quickly brought the blaze under control and prevented any loss of life or major property damage.

### • Answers

1. G 2. C 3. D 4. A 5. F 6. B 7. E

# 2 Answers

1. T 2. F 3. F 4. F 5. T

3 🔟 Listen to the podcast again and complete the summary with the words and phrases you hear.



# The Ebola virus

<b>T</b> bola is a highly infectious virus which has caused mass outbreaks in some countries. It was
first discovered in Africa in 1976, but no one is certain how it 1) The virus
spreads from person to person via 2) A patient with Ebola may suffer symptoms
such as fever, muscle pain, vomiting, and bleeding. The death rate in past outbreaks has been as
high as 3) The virus comes and goes, but there is no 4) for it.
Outbreaks can, unfortunately, recur at any time. Although a vaccine has been 5),
its effectiveness has not been fully proven yet. Ebola is still a serious cause for concern to the
6)

# After you listen

### Academic skill



# Using reliable sources

If you are preparing for a debate, conducting research, or writing an essay or an academic paper, you need to use reliable sources to obtain information.

It is important to use reliable sources because your audience or readers will expect your arguments to be supported by the most accurate and reliable information.

Official publications, academic databases and the official websites of governments and educational institutions can be regarded as sources of reliable information. For example, when introducing the death rate of Ebola, the audio uses statistics from the WHO. Also consider looking at public speeches made by authoritative figures in a particular field.

On the other hand, personal websites, blogs and websites of interest groups should be avoided. Also, many online encyclopedias provide information that may not be accurate or reliable.

When citing sources, you can use phrases like according to, based on, as stated by, or reporting verbs like argue, explain, mention, report, remark, etc.

- 4 Choose a major disease and use reliable sources to find information about it. Work in groups and share your findings. You may include the following points in your findings:
  - the disease's origins
- the disease's symptoms
- outbreaks of the disease
- treatments for the disease

A major disease that has affected many people in recent years is the Zika virus. According to information from the WHO, the Zika virus was ...

#### 3 Answers

- 1) originated
- 2) bodily fluids
- 3) 90% / 90 percent / ninety percent
- 4) cure
- 5) licensed
- 6) international community

#### • Reference answers

A major disease that has affected many people in recent years is Zika virus disease. Zika virus is a mosquito-borne flavivirus. According to information from the WHO, Zika virus was first identified in Uganda in 1947 in monkeys. Since then, there have been outbreaks in humans in different parts of the world. The disease's symptoms include fever, rash, joint and muscle pain, and headache. Most significantly, it can cause serious problems for pregnant women, leading to miscarriage or deformity in babies. Unfortunately, there are no specific treatments for Zika virus infection, and no vaccine has been developed. However, it is agreed that protection against mosquito bites is a key measure to prevent Zika virus infection.

## **Teaching tips**

- Put Ss in groups of three or four. Ask them
  to think of a particular disease and consult
  reliable sources online to find information
  about it. Remind them to take notes of the
  information about the disease.
- Monitor, where possible, to check whether
   Ss are using reliable sources such as official
   websites and authoritative databases, and
   whether they are citing their sources properly.
- Choose a student from each group to share their information without reading directly from their notes.
- If there is more than one group who chose the same disease, let Ss compare their information and discuss in more detail the different sources about the disease.
- Finally ask Ss to discuss the following questions:
  - 1) Did you find any contradictory information or data? If so, what was it?
  - 2) Which sources did you find the most reliable? Why do you think they are reliable?

# Language in focus

# Usage

- 1 Isten to the sentences and repeat after the speaker. Pay attention to the words and expressions in bold.
  - 1. To my mind, public health is all about protecting citizens from illness,
  - 2. This **reminds me of** a public welfare poster about depression treatment that I saw recently.
  - 3. It's about making sure that health care is available to everyone.
  - 4. The **combined efforts** of governments and non-governmental organizations have been **vital** in bringing these outbreaks under control.
  - 5. Ebola remains a serious cause for concern to the international community.
- **2** Complete the sentences by translating the Chinese in brackets into English with the words and expressions in bold from Activity 1.

	Change the form of the words and expressions if necessary.		
1.	I really like this government campaign about keeping fit, and		
	(这让我想起了政府几年前发起的一个活动)		
2.			
	(在政府、医务人员和人民大众的共同努力下), the number of lung cancer patients has dropped.		
3.			
	( 在我看来, 健康是最重要的 ), and there is no point in having money if you are not in good health.		
4.			
	(一个令人担忧的问题是) that so many people continue to smoke.		
5			



(所有医务人员穿上全套防护服是至关重要的) when entering areas of possible infection.

(全世界现在有数百万人可以通过接种疫苗预防多种疾病) thanks to the work of the WHO.









# Language in focus

### **Usage**

### Language notes

to my mind in my opinion

To my mind, the recent antismoking campaigns have been the most effective ones of the last 10 years.

**remind sb. of sth.** to cause someone to remember something

That health campaign reminds me of an activity about dengue fever last year.

**be available to** to be accessible to Flu vaccines are available to anyone who needs one; they just need to get in touch with their local clinic.

**combined efforts** different contributions and actions coming together to achieve something They distributed medicine quickly through the combined efforts of the local government and health authorities.

**vital** *adj.* extremely necessary or important *It is vital that everybody in society has the correct information about the risks of tuberculosis.* 

a cause for concern a source of worry

The recent increase in infections is a serious
cause for concern for the health authorities.

#### 2 Reference answers

- 1. it reminds me of the one the government launched a few years ago
- 2. Thanks to the combined efforts of the government, medical staff, and the general public

- 3. To my mind, health is the most important thing of all
- 4. It is a cause for concern
- 5. It is vital that all medical staff wear full protective clothing
- 6. Vaccines for many diseases are now available to millions of people around the world

### Pronunciation

# **1** ■ Listen to the paragraphs and underline the words emphasized by the speaker. Then read the paragraphs out loud.

- 1. Public health can be about preventing illness through things like vaccination programs ... but it's also about encouraging healthy behavior via educational programs like antismoking campaigns. The government's role is important, but for public health programs to work, we must all contribute. It's the responsibility of all sectors of society. And it's about making sure that health care is available to everyone.
- 2. Ebola was first discovered in 1976 in a village near the Ebola River in Africa. No one is certain how it originated. Symptoms can be serious. They include fever, muscle pain, vomiting, and internal and external bleeding. According to statistics from the WHO, the death rate in past outbreaks of the disease has been as low as 25 percent, but also as high as 90 percent. There is no cure for Ebola. Though a vaccine has been licensed, its effectiveness has not been fully proven yet. Ebola is still not a fully preventable disease and remains a serious cause for concern to the international community.

# **2** Read the paragraph and underline where you would emphasize. Listen to the recording and check your answers. Then read the paragraph out loud.

The International Red Cross and Red Crescent Movement (IRCRC) is one of the world's largest humanitarian assistance organizations. It was first established to provide better care for soldiers wounded in conflict. Over the years, its mission has widened to provide care for civilians affected by conflict and later to include any humanitarian issues, in peacetime or war. Today the IRCRC has thousands of permanent staff and millions of volunteers. It is able to provide relief almost anywhere around the globe.



#### **Pronunciation**

#### • Reference answers

- 1. Public health can <u>be</u> about preventing illness through things like <u>vaccination</u> programs ... but it's <u>also</u> about encouraging <u>healthy</u> <u>behavior</u> via <u>educational</u> programs like <u>antismoking campaigns</u>. The <u>government's role is</u> important, but for public health programs to <u>work</u>, we must <u>all</u> contribute. It's the responsibility of <u>all</u> sectors of society. And it's about making <u>sure</u> that health care is available to everyone.
- 2. Ebola was <u>first</u> discovered in <u>1976</u> in a <u>village</u> near the <u>Ebola River</u> in Africa. <u>No</u> one is <u>certain</u> how it originated. Symptoms can be <u>serious</u>. They include <u>fever</u>, <u>muscle pain</u>, <u>vomiting</u>, and <u>internal</u> and <u>external bleeding</u>. According to statistics from the <u>WHO</u>, the death rate in <u>past</u> outbreaks of the disease has been as <u>low</u> as <u>25 percent</u>, but also as <u>high</u> as <u>90 percent</u>. There is <u>no cure</u> for Ebola. Though a <u>vaccine has</u> been licensed, its <u>effectiveness</u> has <u>not</u> been <u>fully proven</u> yet. Ebola is <u>still not</u> a <u>fully preventable</u> disease and remains a <u>serious cause</u> for <u>concern to the international community</u>.

#### 2 Reference answers

The International Red Cross and Red Crescent Movement (IRCRC) is one of the world's largest humanitarian assistance organizations. It was first established to provide better care for soldiers wounded in conflict. Over the years, its mission has widened to provide care for civilians affected by conflict and later to include any humanitarian issues, in peacetime or war. Today the IRCRC has thousands of permanent staff and millions of volunteers. It is able to provide relief almost anywhere around the globe.

# **Teaching tips**

- When they listen for the first time, Ss will probably just be listening for comprehension. Remind Ss to listen for emphasized words so that they can better understand the content. Tell Ss that they should pay attention to short pauses before or after a word, higher intonation, or greater weight or volume on the emphasized word.
- Each context will be different, but point out to Ss that the following kinds of words are often emphasized.
  - 1) Key words in sentences: There is no **cure** for Ebola. Symptoms can be **serious**.
  - 2) Words such as "all" and "everyone": We must **all** contribute.

    Health care is available to **everyone**.
  - 3) Statistics, especially when they are impressive in some way:

    It has **thousands** of permanent staff and **millions** of volunteers.
  - 4) Negative words:

    Ebola is **still not** a fully preventable disease. **No** one is certain how it originated.
  - 5) Intensifiers, comparatives, and superlatives: *It was established to provide better care.*
- Remind Ss that in real contexts, speakers may stress different words in order to express emotion.

# **Listening 1**

#### **New words**

remote /rɪˈməʊt/ a. 远程的; 偏远的 diagnosis /ˌdaɪəgˈnəʊsɪs/ n. 诊断 consultation /kpnsl'ter[n/n. 咨询 database /'deɪtəˌbeɪs/ n. 数据库 accuracy /ˈækjʊrəsi/n. 准确性; 精确性

#### **Proper names**

Rwanda /rulændə/ 卢旺达 (非洲 国家)

# Before you listen

1 You are going to hear a podcast about artificial intelligence (AI) and its role in the medical field. In what way do you think AI can help doctors?

# While you listen

- 2 🔃 Listen to the podcast and choose the best summary of it.
  - ☐ 1. A new platform in Rwanda is using artificial intelligence to help connect doctors and nurses. The platform's AI chatbot can give medical advice, replacing medical workers and taking pressure off hospitals.
  - ☐ 2. A new medical artificial intelligence platform in Rwanda is helping connect patients in remote or rural areas with medical staff. This helps take the pressure off medical workers by using a chatbot to give advice directly to patients.
  - ☐ 3. Artificial intelligence is improving health care in Rwanda. A new medical platform helps connect patients and doctors worldwide, taking pressure off hospitals and assisting medical workers by giving advice to patients via a chatbot.

# Listening skill ①



# Listening for explanations

When discussing a specialist subject like AI, it is likely that a number of difficult concepts or unfamiliar terms will come up. In this situation, having the ability to listen out for and recognize explanations is very useful.

Paying attention to the language used to give explanations will give you clues that unfamiliar or difficult concepts will be explained in detail with simpler words. For example, the speaker may use a clause starting with "which is / means" to provide a more detailed explanation of a complex term.

Expressions which signal that a speaker is clarifying a point may include:

- Let me explain ...
- This means that ...
- *I mean* ...
- In other words ...
- That is to say ...
- Simply put ...
- So what I'm saying is ...
- To put it another way ...
- Actually / In fact / In reality ...
- · Here is how it works ...

# Understand the world

# Listening 1

### **Scripts**

Today on "Future Trends" we are looking at artificial intelligence, or AI. We will be focusing on the role it plays in the medical field, particularly in the area of remote diagnosis, which is about determining a patient's condition without meeting face to face.

One recent application is in Rwanda, where an online diagnosis platform has been launched. This platform allows patients, particularly in remote or rural areas, to access consultations with doctors and nurses over smartphones.

Whilst remote services are not new, one of the most exciting aspects of the new platform is the use of an AI-powered chatbot. In other words, a software application used to conduct an online chat with human users.

The chatbot has been "trained" to offer medical advice using diagnostic data from Rwanda's hospitals. Here is how it works: When a patient enters their symptoms into the chatbot, it then compares this information with its diagnostic database. This then allows the chatbot to offer medical advice, suggest courses of treatment or, if necessary, refer the patient to a human doctor. Importantly, this chatbot is regularly updated with real medical data and case studies, thus improving the chatbot's accuracy.

In this way, an AI system like this can relieve the burden on hospitals and medical staff while delivering greater medical access to Rwanda's people. This is a great example of technology complementing the work of humans, rather than technology competing with humans.

### Language notes

in other words used for explaining something in a different and often simpler way He was admitted to an intensive care unit. In other words, his case was very serious.

refer sb. to sb. to direct someone to a different person for information, help, or action My doctor referred me to a specialist who could best deal with my condition.

be updated with to be made more modern or suitable for use by adding new information and / or an improved design

The website has been updated with the latest information about symptoms of Zika virus disease.

relieve the burden on to make a problem easier to manage for a person or organization Digital technology has been relieving the burden on overworked doctors and other medical staff.

complement vt. to go well with something else and make a good combination Multiple treatments for sports injuries, such as painkillers, physiotherapy, and rest, can be used at the same time as they complement one another.

#### • Reference answers

I think AI could cooperate with doctors. It may be able to help diagnose certain illnesses. I've also heard that it can even be used in operations through the use of robots. Better still, AI could support doctors by freeing them up through performing administrative functions or conducting experiments and analyzing test results.

#### 2 Answers

2

② Listen to the podcast again and complete the notes with the words and phrases you hear. Pay attention to the phrases in italics which indicate that the speaker is going to give explanations.



# THE ROLE OF AI IN THE MEDICAL FIELD

# Remote diagnosis

AI can play a role in the area of remote diagnosis, *which is* about determining a patient's condition without 1) \_\_\_\_\_.

#### One recent application

- An online diagnosis platform has been launched in Rwanda. It allows patients in
   areas to use their smartphones to contact doctors and nurses.
- The platform features an AI-powered chatbot. *In other words*, a software application used to conduct an 3) with human users.
- The chatbot has been "trained" to offer medical advice. *Here is how it works*: A patient enters their 4) \_\_\_\_\_\_ into the chatbot, which then compares this information with its diagnostic database. This allows the chatbot to 5) \_\_\_\_\_, suggest courses of treatment or refer the patient to 6)
- An AI system like this can relieve the 7) \_\_\_\_\_ on medical workers and hospitals.







# After you listen

# **4** Work in groups and discuss the questions.

- 1. Would you trust a chatbot like the one used in Rwanda to diagnose an illness that you suffer from? Why or why not?
- 2. In what ways do you think AI could help in the field of public health?
- A: I would trust the chatbot if I had an illness. I mean computers are very precise, and they rarely make mistakes.
- **B:** I agree with you ...

#### 3 Answers

- 1) meeting face to face
- 2) remote or rural
- 3) online chat
- 4) symptoms
- 5) offer medical advice
- 6) a human doctor
- 7) burden

#### **4** Reference answers

- 1. I would trust a chatbot like this to diagnose an uncomplicated condition because it would be able to quickly assess my symptoms and offer a solution. And I wouldn't need to wait for an appointment with a human doctor.
  - I wouldn't trust a chatbot to diagnose an illness because a chatbot would rely on me giving it information to make a diagnosis. If I miss some information or am unclear about how to explain something, then that could lead to an incorrect diagnosis. A human doctor has much more experience and would know what symptoms to look for, and what detailed questions to ask.
- 2. I think AI can play a very important role in public health. For example, a well-programmed AI system fed with data from hospital records could quickly analyze the health data of large numbers of people and keep real-time data about the overall health of an entire community, or even an entire country. Then, governments and communities would have data to help them decide what aspects of public health to invest in.

### **Teaching tips**

- Ask Ss to brainstorm some diseases that they know of and then write these on the board.
- Ask Ss to focus on two or three diseases in small groups and discuss whether they would trust a chatbot to diagnose the diseases and provide treatments.
- Remind Ss that whether they trust Al or not, they still need to list ways in which Al might help in the field of public health.

# **Viewing**

# New words microorganism

/ˌmaɪkrəʊ'ɔ:gənɪz(ə)m/ n. 微生物 fermented /fə'mentɪd/ a. 发酵的 foul /faʊl/ a. 难闻的 repulsive /rɪ'pʌlsɪv/ a. 令人厌恶的 rotting /'rɒtɪŋ/ a. 正在腐烂的 pathogenic /ˌpæθə'dʒenɪk/ a. 致病的; 病原的

diarrhea /ˌdaɪə'riːə/ n. 腹泻 deceitful /dɪ'siːtfl/ a. 欺骗的 invisible /ɪn'vɪzəbl/ a. 看不见的 prolific /prə'lɪfik/ a. 多产的 multiply /ˈmʌltɪˌplaɪ/ vi. 繁殖 vulnerable /ˈvʌln(ə)rəbl/ a. 脆弱 的; 易受伤的

contamination /kənˌtæmɪˈneɪ∫n/ n. 污染

raw /rɔː/ a. 生的; 未煮过的 thoroughly /ˈθʌrəli/ ad. 彻底地 bacterial /bækˈtɪəriəl/ a. 细菌的

# **II**) Before you watch

- ① Work in groups and list some dos and don'ts for storing food according to your experience. Then share your answers.
- While you watch



**②** Watch a video clip about safer food and complete the table with the words and phrases you hear.

The good microorganisms	They help to produce 1) such as cheese and yogurt.
The bad microorganisms	They cause food to taste, smell or look bad, but they normally do not 2)
The dangerous microorganisms	They do not cause food to smell bad or look different, but they can cause severe illnesses. They are deceitful, 3) and dangerous. They are prolific and can 4) very quickly.  Five simple rules to reduce risk:  Rule 1: Keep clean to 5) contamination.  Rule 2: Separate raw and cooked foods.  Rule 3: 6) to kill microorganisms.  Rule 4: Keep food at 7)  Rule 5: Use safe water and safe raw materials.

# **Viewing**

# Scripts

Amongst us, in our homes and close to the food we eat, live some mysterious, tiny, yet extremely energetic creatures. Much smaller ... These are microorganisms, extremely small living beings.

There are three different types of microorganisms.

- The good ones help to produce foods and drinks such as cheese and yogurt, fermented meat, and fermented vegetables.
- Some other microorganisms are annoying. These are the bad ones; they are responsible for the foul smell, bad taste, and repulsive look of rotting food, but they normally don't cause diseases.
- But it's the other kinds of microorganisms that we really need to be afraid of. They don't cause food to smell bad, and they don't change the way it looks; they are the dangerous ones, and it's necessary to be very careful with them. These are known as pathogenic microorganisms, and they can cause severe illnesses such as stomach pains, vomiting, diarrhea, fever, and even death! They are deceitful, invisible, and dangerous. These tiny beings are very, very prolific. To increase in number, they need food, water, time, and warmth. They can multiply very quickly.

Fortunately, no matter how strong and frightening these microorganisms are, they are preventable and vulnerable. It takes as little as five simple rules, five behavior keys, to get rid of them. Protect yourself and your family from diseases in the home. The rules are easy to apply. These are your five keys to safer food:

- Keep clean to prevent contamination.
- Separate raw and cooked foods to avoid crosscontamination.
- Cook thoroughly to kill microorganisms.
- Keep food at safe temperatures, either hot or cold, to prevent bacterial growth.
- Use safe water and safe raw materials to avoid contamination.

Food producers are the ones primarily responsible for the safety of the food you buy. But you can protect yourself and your family from diseases in the home by applying the five keys to safer food. Use them! You also have a role to play!

### Language notes

#### be responsible for

- 1) to be the cause of something

  Bacteria are responsible for serious diseases
  like tuberculosis.
- 2) having a duty to be in charge of or to look after someone or something *Parking lot attendants should be responsible for protecting cars.*

#### Reference answers

#### Dos:

- Store fruit and vegetables separately from meat products.
- Store processed and raw food separately.
- · Store cooked food above raw meat.

#### Don'ts:

- Store food in opened tin cans.
- Store food in warm or humid areas or in direct sunlight.
- · Overstock the fridge.

#### 2 Answers

- 1) foods and drinks
- 2) cause diseases
- 3) invisible
- 4) multiply
- 5) prevent
- 6) Cook thoroughly
- 7) safe temperatures

# **3** Watch the video clip again and decide whether the statements are true (T) or false (F).

- ☐ 1. Microorganisms are unenergetic small living beings.
- □ 2. Fermented meat is produced with the help of good microorganisms.
- □ 3. Rotting food is caused by pathogenic microorganisms.
- ☐ 4. Good microorganisms multiply more slowly than the bad and dangerous ones.
- ☐ 5. Keeping food at safe temperatures could help prevent bacterial growth.
- ☐ 6. Food producers are primarily responsible for the safety of food.

# After you watch

# Critical thinking skill (1)



### Developing criteria for evaluating solutions

Whenever we see solutions being offered to a problem, such as the five keys to safer food given in the video clip, we should consider whether they really are ideal. Think about the following: Are the solutions based on the real cause of the problem? Are they effective and practical? Do they need to be improved? Are there alternative solutions to be considered?

In order for a solution to address a problem, it must tackle the causes of the problem. For example, dangerous microorganisms can make us sick, so the solution of cooking food thoroughly to kill them is a good one because it destroys the source of the problem. However, we should remember that there

can be multiple causes of one problem.

Once we have solutions to a problem, we can consider how effective and feasible they are. Solutions should be easy to carry out, without too much additional need for time, resource, money, etc. Also, solutions should not create other risks which are greater than the original problem. For example, the five rules in the video clip are simple, safe and easy to apply in our daily lives. In comparison, the alternative solution of laboratory testing all of our food and then killing dangerous microorganisms would be impractical, and might even create other risks.

# **4** Work in pairs and evaluate the solutions in each of the situations.

#### **Situation A**

Alex is studying 15 hours a day for five weeks in order to prepare for an important exam. He has become anxious and sleepless, so he decides to take some sleeping pills.

- A: As far as I'm concerned, Alex is too nervous about the exam to sleep well. However, taking sleeping pills seems a bit dangerous if it is not the advice of a doctor. What do you think?
- B: I totally agree with you. If I'm anxious and sleepless, I think a practical solution is ...

#### Situation B

Amy is suffering shortness of breath, sneezing and extreme tiredness in the spring. She thinks she has caught the flu, so she decides to take medicine for colds.

#### 3 Answers

1. F 2. T 3. F 4. F 5. T 6. T

### **4** Reference answers

#### Situation A

I think that the solution is not the right one here. Although taking sleeping pills can help Alex sleep, he should only take them if they are prescribed by a doctor. If Alex wants to take something to help him sleep, he should visit the doctor and get a prescribed medicine, otherwise it could cause more harm than good. Also, taking sleeping pills is not the only way to solve the problem of sleeplessness. Since sleeplessness may be a result of anxiety, Alex could also try exercising regularly to help him feel less stressed and then the sleeplessness may go away.

#### Situation B

From my point of view, although taking medicine for colds is a common way to deal with the flu, Amy's shortness of breath, sneezing, and tiredness don't necessarily mean she has the flu. Since it's springtime, it is also probable that Amy is suffering from allergies, in which case cold and flu medicine might not work and could even cause side effects. Therefore, she should go to the doctor for a check-up.

# **Teaching tips**

- Put Ss in pairs. Ask them to think about every possible cause for Alex's and Amy's problems and discuss the pros and cons of the solutions to the situations. Tell them to take notes on the reasons for their opinions.
- Rearrange Ss into small groups so that they can exchange their opinions.
- Ask each group to report their ideas in a class discussion. Then have Ss vote for the best evaluation for each situation.

# **Listening 2**

#### **New words**

artemisinin /ˌɑːtɪˈmiːsɪnɪn/ n. 青蒿素

malaria /məˈleəriə/ *n.* 疟疾 tuberculosis /tjuːˌbɜːkjʊˈləʊsɪs/ *n.* 肺结核

antimalarial /ˌæntɪməˈleərɪəl/ a. 抗疟的

#### **❖** Culture note

# China's Medal of the Republic

This is the country's highest award for individuals who have made great contributions to the People's Republic of China.

# **Voice of China**

# **Before you listen**

• Work in pairs and check the meanings of the words. Complete the sentences with the words from the box. Change the form of the words if necessary.

pharmacy effective resistant herbalism

- 1. The study of \_\_\_\_\_ covers topics related to preparing and dispensing medicines.
- 2. Some viruses have become \_\_\_\_\_\_ to treatment, so we have to use increasingly powerful medicines to fight them.
- 3. Traditionally illnesses were treated using \_\_\_\_\_ based on the plants and flowers in nature.
- 4. We should develop new drugs that are safe and . .

# While you listen



- **②** Listen to a news report about Tu Youyou and check (✓) the statements made by the speaker.
  - ☐ 1. Tu Youyou received China's Medal of the Republic because of her discovery of artemisinin.
  - ☐ 2. Tu Youyou's illness as a child prevented her from going to school.
  - $\hfill\Box$  3. After graduating, Tu Youyou began working as a doctor.
  - $\square$  4. Tu Youyou was chosen to head a research project in 1969.
  - $\square$  5. Tu Youyou's hard work is a shining example to all scientists.



Tu Youyou receives the Nobel Prize in Physiology or Medicine, 2015

# Listening 2 – Voice of China

### **Scripts**

In 2019, Chinese scientist Tu Youyou was awarded China's Medal of the Republic, the country's highest honor for figures who have made contributions to the development of the People's Republic of China. She received this award mainly because of her discovery of artemisinin, a treatment for malaria.

Tu Youyou was born in 1930. After contracting tuberculosis at the age of 16, she knew that she wanted to study medicine and find cures for illnesses like the one she had suffered herself.

While studying pharmacy at university, she learned how to get active ingredients from plants to carry out chemical experiments. After graduation, she began conducting medical research.

In 1969, she was chosen to head a research project to find a new treatment for malaria, as the disease had become resistant to other treatments. Drawing on her knowledge of herbalism and traditional Chinese medicine, Tu Youyou studied a large number of ancient texts on traditional Chinese medicine. She then conducted hundreds of experiments and eventually developed an effective treatment. She even volunteered to test the drug on herself first. In 1972, she traveled to Hainan to use her treatment to fight a malaria outbreak.

In 2004, the World Health Organization listed artemisinin as an important antimalarial drug. In 2015, Tu Youyou was awarded the Nobel Prize in Physiology or Medicine for her discoveries. Her courage and hard work are a shining example to all scientists in China and throughout the world.

### Language notes

head vt. to be in charge of something He headed the research team that was searching for new treatments for the disease.

**become resistant to** to be not affected by something

Some viruses can become resistant to treatments because they evolve in different ways in order to survive.

**draw on** to use something available to help you do something

Drawing on her years of experience, the author wrote a fascinating book about being a doctor.

**volunteer** *vi.* to offer to do something without being forced to do it, usually without payment *Many young people have volunteered to help out at their local elderly care facilities.* 

### • Answers

- 1. pharmacy
- 2. resistant
- 3. herbalism
- 4. effective

### 2 Answers

1, 4, 5

# 3 Listen to the news report again and complete the summary with the words and phrases you hear.

# Tu Youyou

u Youyou was awarded China's Medal of the Repul	
when she was 16, and her illness contributed to her desi	ire to study 2) She
studied pharmacy at university and learned how to get 3	3) from plants to do
chemical experiments. In 1969, she led a project to find	a new treatment for malaria. She even
4) the drug on herself first. The drug wa	as used successfully in 1972 in Hainan
where there was a serious 5) of malaria.	. In 2004, the World Health Organization
listed artemisinin as an important 6)	

# ) After you listen

### Intercultural skill



### Valuing one's own cultural traditions

In today's globalized world, many people are interested in learning about cultures from other countries, while they lack the knowledge of their own cultural traditions, or even neglect them. Our cultural traditions have a great deal of importance in the modern world, and should be valued for a number of reasons.

Firstly, they help build our identity and a sense of belonging. Many of our values, beliefs, behavior, how we interact with the world, and what matters to us are shaped by, and best represented by, our traditions and culture.

Secondly, cultural traditions can often be the source of valuable know-how and practical ways to solve modern problems. For example, when Tu Youyou

was conducting research to find an alternative treatment for malaria, she referred to the vast cultural knowledge of traditional Chinese medicine. Knowing that there were a great many ancient remedies, she experimented and tested until she found an effective medicine to fight against malaria.

It is therefore necessary that we take every opportunity to explore and learn about our own cultural traditions. There are many ways to do this, from talking to family to learning about the origins of our culture through libraries, museums and cultural events. We could also take the role of an "intercultural ambassador" and communicate the meaning of a particular cultural tradition to people who are interested, which could help us appreciate the benefits of these traditions even more.

- **4** Think of an example of solving modern problems via traditional Chinese wisdom. Then work in pairs and share your examples.
  - A: I think Baduanjin from our traditional culture is a good example. For those who sit in their office a lot of time, Baduanjin would be an ideal exercise for keeping healthy.
  - B: Yes. And this reminds me of tai chi ...

#### 3 Answers

- 1) treatment
- 2) medicine
- 3) active ingredients
- 4) volunteered to test
- 5) outbreak
- 6) antimalarial drug

#### • Reference answers

Tai chi is an example of ancient Chinese wisdom that is used by many people these days to solve modern problems. Due to a more sedentary lifestyle, many people have problems with body flexibility. Tai chi is a slow exercise with movements that don't put too much pressure on our body, and never fully overextend any joint. With regular practice, people can gently improve the flexibility of their connective tissue and exercise the core muscles. It's an ideal activity for people nowadays, particularly as we spend so much time hunched up looking at a phone or behind a desk.

# **Teaching tips**

To make the activity more accessible, show Ss some pictures of traditional Chinese wisdom, such as tai chi, acupuncture, and massage. The wisdom doesn't need to be limited to the field of health; it could also be from other fields, like architecture, or even a school of thought.

## Additional activity

Ask Ss to discuss traditional wisdom from other cultures that have helped solve modern problems. This could be done as a follow-up discussion after Activity 4 or as homework. Then Ss share their findings in class.

#### Reference answers

Yoga is a group of physical, mental, and spiritual practices dating back to approximately 3000 BC. Originating in ancient India, it is now a universal discipline. Yoga can be used to help relieve stress, improve flexibility, and regulate our sleeping patterns.



# **Project**

# Giving a presentation on an epidemic in human history

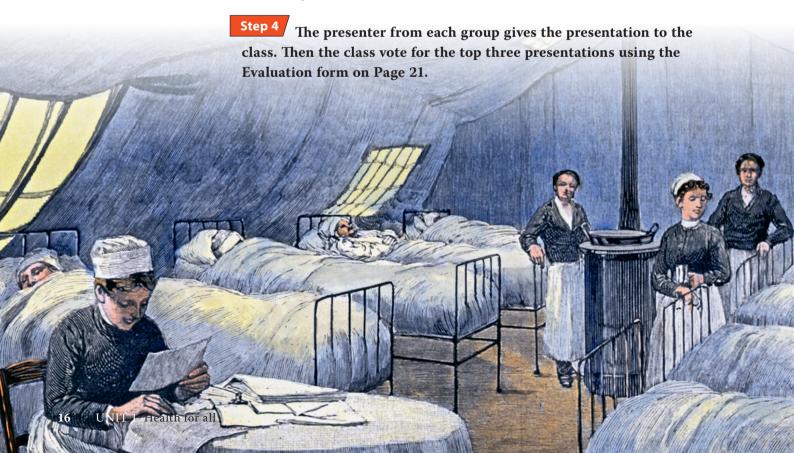
Your university is organizing an activity to raise awareness of epidemic preparedness. Your group has been asked to give a presentation on an epidemic in human history and how it was defeated.

Step 1 Think of an epidemic and pick one person in the group to be the presenter.

Step 2 Search for reliable information about the epidemic based on the following questions:

- When did the epidemic take place?
- Where did the epidemic originate?
- What were the symptoms?
- · Who was affected?
- What were the responses to the epidemic?
- How did the epidemic end?
- What were the consequences of the epidemic?

**Step 3** Organize the materials and make a PowerPoint together. The presenter practices giving the presentation to the group and revises it according to the feedback.



# Project: Giving a presentation on an epidemic in human history

## **Teaching tips**

- Put Ss in groups of three or four and ask them to pick a presenter. As a class, ask Ss to brainstorm some examples of epidemics in human history, and write them on the board.
- Assign an epidemic to each group, or ask each group to choose their own. Either way, make sure that each group presents a different epidemic.
- Go through the instructions and stages in the Project builder on Page 17 with Ss, then ask them to start their research. Remind Ss to use reliable sources.
- Explain the Presentation skill "Using signpost language" on Page 17. Tell Ss that using this language skill will help guide the audience through the presentation and allow the speaker to have a clearer, more fluent delivery.
- Ask Ss to prepare their PowerPoint and rehearse their presentation in groups after class. Remind Ss to consider their presentation's structure and make sure they have noted down points where they can include signpost language to guide the audience through the presentation.

### **Project builder**

In academic contexts, giving a presentation requires you to research and organize the information by choosing what is the most relevant and what can be discarded, and then structure it carefully. You can organize your presentation in the following way.

#### Explain when and where the epidemic originated

Introduce the place and time that the epidemic first occurred.

- It was first discovered in 1947 in Uganda.
- The outbreak was first identified in ...

#### Describe the symptoms and who was affected

Give a brief description of the common symptoms of the disease. Also, explain which groups or areas were most affected.

- Symptoms included vomiting and fever.
- Older people are more vulnerable to this infectious disease.

#### Discuss the responses to the epidemic and how it ended

Talk about public health responses in different areas, any campaigns and treatments, and how the disease was overcome or controlled.

- The epidemic evoked a coordinated global response ...
- A vaccine was eventually developed ...

#### Discuss the consequences

Outline both the social and economic consequences of the epidemic. Also, discuss any resulting actions that have taken place since.

- The epidemic has had a lasting effect on ...
- Major changes to the way livestock were transported were introduced ...

## Presentation skill 😭

### Using signpost language

Using signpost language is a good way to make your presentation more effective, engaging and easier to follow. Signpost language basically consists of the words and expressions that a speaker uses to guide the audience through the presentation.

#### Introducing a topic

- The subject / topic of my talk is ...
- My talk is concerned with ...

#### Giving an overview of the talk

• I'm going to divide the talk into ... parts. First of all, I'll talk about ... Then, I'll go on to describe ... And finally, I'll explain ...

#### Starting a new section

- Now let's turn to ...
- I'd like now to discuss ...

#### Analyzing a point

- What does this mean exactly? Let's take a look ...
- As you can see here ...

#### Highlighting a point

- It is noteworthy / significant / crucial because ...
- We can see that this point is distinctive because ...

#### Summarizing

- To conclude / To sum up,...
- Let's summarize briefly what we've looked at ...

#### Reference answers

#### The 1918 influenza pandemic

Today, my talk is concerned with one of the most devastating pandemics in human history, the 1918 influenza pandemic. It was a fatal infectious disease that infected about 500 million people worldwide.

First, let's look at its origin. There is no universal consensus about its origin. The earliest recorded case of the disease was in Kansas, in the U.S., after which it spread to Europe. However, due to WWI, many countries were unwilling to report that they were suffering from an epidemic as it could have damaged their people's morale. Spain, however, did not play a part in WWI and so became one of the first countries to report on the illness. For this reason, the virus and the epidemic became known as "Spanish flu", but it did not, in fact, originate in Spain.

Now let's turn to the symptoms. The symptoms were typically sore throat, headache, and fever, especially at the beginning. But during the second wave, many people who were affected developed a secondary illness: an infection of the lungs called bacterial pneumonia. This led to people fearing the virus and reacting in panic to the rising casualties. The disease was especially serious for 20- to 40-year-olds.

So, what were the public responses to this severe epidemic? The public responses included strong measures, such as quarantine, social distancing measures, and the wearing of face masks. It is noteworthy that there were no antibiotics to treat the secondary bacterial infections, so aspirin, iodine, and traditional techniques were used instead. In 1920, the pandemic came to an end as those who were infected either died or developed immunity.

The pandemic had lasting consequences. As it affected mostly young people of working age, researchers estimate that it lowered GDP per capita by around six percent in a typical country. It also led to unrest in many countries. However, the lessons learned for public health, such as social distancing, are still applied to this day.

#### **New words**

vaccinate / væksɪˌneɪt/ vt. 给…接种疫苗

eradicate /ɪˈrædɪkeɪt/ vt. 根除 measles /ˈmiːzlz/ n. 麻疹 recommendation

/ˌrekəmen'deɪʃn/ n. 建议
suspicious /səˈspɪʃəs/ a. 怀疑的
pharmaceutical /ˌfɑ:məˈsju:tɪkl/
a. 制药的

#### **New words**

obesity /əʊˈbiːsəti/ n. 过度肥胖; 肥胖症

diabetes /ˌdaɪə'biːtiːz/ n. 糖尿病 cardiovascular

/ˌkɑːdiəʊˈvæskjʊlə/ *a*. 心血管的 caffeine /ˈkæfiːn/ *n*. 咖啡因 sweetener /ˈswiːtnə/ *n*. 甜味剂

### **Conversation**

- 1 Listen to two medical students discussing the anti-vaccination movement and choose the best answer to each of the questions you hear.
  - 1. A. They think vaccines are too expensive.
    - B. They doubt whether vaccines are effective.
    - C. There are too many vaccines to choose from.
    - D. People have little knowledge of the danger of some diseases.
  - 2. A. A lot of the information is false.
    - B. People have no access to the information.
    - C. Much of the information is not up to date.
    - D. The information is slow in reaching people.
  - 3. A. They believe the industry's vaccines do not work.
    - B. They think the industry runs too many advertisements.
    - C. They have solid proof for the side effects of the vaccines.
    - D. They think the industry makes people rely on the drugs on purpose.
  - 4. A. Neutral.
    - B. Positive.
    - C. Negative.
    - D. Indifferent.

# Passage 1

- **②** Listen to a news report on child obesity in Mexico and choose the best answer to each of the questions you hear.
  - 1. A. It is faced with the problem of an aging population.
    - B. Children are the country's largest sugar consumers.
    - C. It has established a fund to cope with the increase in obesity.
    - D. About one-third of its children and adolescents are overweight.
  - 2. A. People rarely take any exercise.
    - B. People sit at their desks all day.
    - C. People lead an unhealthy lifestyle.
    - D. People seldom see doctors for advice.
  - 3. A. Children are more likely to become obese.
    - B. Obesity is easier to control during childhood.
    - C. It affects a child's growth and the country's economy.
    - D. It is making one-third of Mexican children seriously ill.
  - 4. A. It has introduced a sugar tax.
    - B. It has run a campaign against it.
    - C. It has asked for parents' cooperation.
    - D. It has improved health care facilities.

# **Further listening**

# **Conversation**

### **Scripts**

**Nick:** Hi, Nancy. I've just read an article about the anti-vaccination movement. Did you know that some people actually choose not to vaccinate their kids?

**Nancy:** Really? Don't they know the benefits of vaccinations?

Nick: Well, I've read some research papers, and it seems that the use of vaccines has virtually eradicated many diseases; so people have no idea how terrible they once were. Now some people fear the vaccines more than the actual diseases!

Nancy: Hm, this reminds me of the outbreaks of measles in Europe in recent years. Is this related to people's attitude toward vaccinations?

**Nick:** Yes, I think so. I read that many parents chose not to vaccinate their kids against measles.

Nancy: Don't these people have access to information about the importance of vaccines?

Nick: They do, but unfortunately there's a lot of false information. For example, on social media, there are people who argue that because vaccines have dangerous side effects, people shouldn't be made to have them.

Nancy: This seems like a dangerous situation to me. I think that people should trust the recommendations of medical experts.

**Nick:** I agree. But there's another argument that some people who are against vaccination are suspicious of the whole pharmaceutical industry.

Nancy: What are they suspicious about?

Nick: They believe that the pharmaceutical industry keeps real cures for illnesses secret in order to keep us dependent on their drugs, for profit.

Nancy: Wow! Is there any evidence for that?

Nick: Not as far as I've found.

Nancy: I really think we need to fight against this mindset and help people understand the real benefits of vaccinations. Otherwise, this anti-vaccination trend can do a lot of harm.

Nick: I agree!

## **Ouestions:**

- 1. Why do some people choose not to vaccinate their kids?
- 2. What is the problem with the information about vaccines?
- 3. Why are some people suspicious of the pharmaceutical industry?
- 4. What are the speakers' attitudes toward the anti-vaccination movement?

#### Answers

1. D 2. A 3. D 4. C

# Passage 1

# **Scripts**

Recent reports suggest that child obesity is becoming a huge problem in Mexico. According to statistics from the United Nations Children's Fund, about one-third of Mexican children and adolescents are now overweight.

One of the causes of the rise in obesity is unhealthy lifestyles, where people often eat more low-cost, energy-dense foods that are high in sugar. Statistics show that Mexico is one of the largest consumers of ultra-processed products, such as popcorn, ice cream, and candy, in Latin America.

# Passage 2

- 3 Listen to a talk by a volunteer who helps with the Clean Water Project and choose the best answer to each of the questions you hear.
  - 1. A. Fish farming suffered the most.
    - B. One in seven of the population were affected.
    - C. The government did not take effective measures.
    - D. The problem was more serious than he had expected.
  - 2. A. The project brings a sense of fulfillment.
    - B. The project benefits the coming generations.
    - C. The project can boost the country's economy.
    - D. The project needs more people's contribution.
  - 3. A. The lack of safe water is not an issue for developed countries.
    - B. Access to clean water is the most important issue in the world.
    - C. The safe water problem is most serious in developing countries.
    - D. About 2.1 billion people worldwide are without access to safe water at home.

#### **New words**

crop /krɒp/ n. 庄稼 filter /'filtə/ n. 过滤器 container /kən'teɪnə/ n. 容器 breeding /'briːdɪŋ/ n. 繁殖 boost /buːst/ vt. 促进

#### **Proper names**

Cambodia /kæm'bəudiə/ 柬埔寨 (亚洲国家)



Being overweight in childhood can affect a child's growth and development. It may also increase the danger in adulthood of getting diseases such as type 2 diabetes and cardiovascular disease. This, in turn, could place a serious burden on the country's economy, for example, the medical costs of treating obesity-related diseases. That is why it is important to fight against obesity in children in Mexico.

The Mexican government has introduced a sugar tax of about 10 percent on non-dairy and non-alcoholic drinks with added sugar. It has also adopted a new front-of-package labeling that warns consumers of the risks of having too much high-calorie food, as well as things like sugar, caffeine, and artificial sweeteners. With these measures in place, it is hoped that people will choose healthier food.

### **Questions:**

- 1. What do we learn from the news report about Mexico?
- 2. Which of the following is a cause of obesity in Mexico?
- 3. Why is it so important to fight obesity in children in Mexico?
- 4. What has the Mexican government done about the problem?

### 2 Answers

1. D 2. C 3. C 4. A

# Passage 2

# **Scripts**

Thank you very much for inviting me to share my experience of being a volunteer in Cambodia as part of the Clean Water Project.

When I read about the poor water situation in Cambodia years ago, it really shocked me. I hadn't realized how important clean water really was. One in seven children in Cambodia under five died, directly or indirectly, from drinking unsafe water. Crop and fish farming were just not possible without clean water, meaning that people couldn't earn a living without it.

Clean water isn't difficult to provide. Our work there was to provide water filters, in both domestic and work contexts. We also put covers onto water storage containers to reduce insect breeding in the water. It was a simple job, but we were amazed at its impact. As well as preventing illnesses, improved water supply and better management of water resources can create more jobs and boost a country's economy. That's why I recommend this project so strongly!

Although it seems to many like a distant problem, a lack of access to safe water is a problem that doesn't just affect the developing world; it's actually an issue in many developed countries too. In fact, there are around 2.1 billion people in the world without access to safe water at home. We need to be more aware of this problem; it may be closer to home than we think.

### **Questions:**

- 1. What does the speaker say about the safe water problem in Cambodia?
- 2. Why does the speaker recommend the project so strongly?
- 3. Which of the following is true about the safe water issue around the world?

#### 3 Answers

1. D 2. C 3. D

#### New words

delegate /ˈdeləgət/ n. 代表 initiate /ɪˈnɪʃiˌeɪt/ vt. 发起 smallpox /ˈsmɔːlˌpɒks/ n. 天花 refugee /ˌrefjʊˈdʒiː/ n. 难民

# Passage 3

4 Listen to a WHO official talking about the work of the organization and complete the summary with information from the talk. Use no more than three words for each gap. You will hear the recording twice.

# The WHO

hina played an important role in creating the WHO. In 1945, Shi Siming, a 1) \_\_\_\_\_\_ from China, initiated the creation of an 2) \_\_\_\_\_ with some others. The WHO develops international health policy, which means that it 3) \_\_\_\_\_\_, establishes norms, and monitors health trends around the world. Its role is particularly important in the case of 4) \_\_\_\_\_\_, and introducing vaccination programs. The WHO also deals with 5) \_\_\_\_\_\_ such as climate emergencies and promoting the health of high-risk groups. Today, China continues to contribute to the 6) \_\_\_\_\_\_ of the WHO, providing financial and research support.



# Passage 3

### **Scripts**

Hello, everybody. I work for the World Health Organization. You may have heard of us, but not everyone knows what the WHO actually does, why it is important, and what it has achieved.

China played an important role in creating the WHO. In 1945, at a conference on international organization, Shi Siming, a delegate from China, initiated the creation of an international health organization together with some others. It was this that led to the forming of the World Health Organization in 1948.

Today, the WHO develops what we call "international health policy". This means that we conduct research, establish norms, and keep our eyes on health trends around the world. Our role is particularly important in the case of epidemics, as we advise countries around the world how best to tackle such emergencies. For example, we successfully introduced child vaccination programs which led to the eradication of smallpox and brought diseases, such as yellow fever, under control.

In addition to dealing with diseases, the WHO also deals with health-related issues, such as climate emergencies, GM foods, road safety, and promoting the health of high-risk groups such as refugees.

Today, China continues to contribute to the successful operation of the WHO, providing financial and research support. We look forward to further strengthening this relationship and ensuring that the WHO can continue doing its fantastic work long into the future.

#### **4** Answers

- 1) delegate
- 2) international health organization
- 3) conducts research
- 4) epidemics
- 5) health-related issues
- 6) successful operation

#### What have you learned in this unit? Rate your performance.

Experience the world		very poor	poor	average	good	very good
Academic skill	Using reliable sources		•••	••		
Understand the world						
Listening skill	Listening for explanations		•••	••	·	C
Critical thinking skill	Developing criteria for evaluating solutions			••	·	<u></u>
Intercultural skill	Valuing one's own cultural traditions					
Over to you						
Project	Giving a presentation on an epidemic in human history			••	·	0
Presentation skill	Using signpost language			••	•••	

#### Answer the following reflection questions.

- 1. What are the three most useful things you have learned in this unit?
- 2. What do you still need to improve? How do you think you can improve it?

### **OTY Evaluation form**

- Read the criteria below. Keep them in mind when you present and watch your classmates' presentations.
- Note down your comments in the "Written feedback" row when watching your classmates' presentations. Then grade the presentations in the "Points" column on a scale of 1–5.

Rating scale: very poor = 1 poor = 2 average = 3 good = 4 very good = 5

	Criteria	Points
Content	<ul><li>provided key information about the epidemic</li><li>used information from reliable sources</li></ul>	
Organization	<ul><li>presented with a clear structure</li><li>connected the main points logically</li></ul>	
Language	spoke clearly, fluently and appropriately     used some expressions learned	
Delivery	<ul><li>used signpost language</li><li>managed time effectively</li></ul>	
Written feedback		