

The logo for the University of Bordeaux features a blue diagonal stripe in the top-left corner. The text 'université de BORDEAUX' is centered. 'université' is in a dark brown sans-serif font with blue highlights on the 'u', 's', and 'é'. 'de' is smaller and positioned below 'université'. 'BORDEAUX' is in a larger, bold, dark brown sans-serif font.

université
de **BORDEAUX**

M1 Isped
Epidemics and pandemics

Warming up: discuss the following with a partner – what do you prefer?

- Walking or jogging
- The plane or the train
- Cars or bikes
- Cinema or netflix
- Online work or face to face teaching
- Living in the city or the countryside
- Going to the beach or walking in the mountains
- Cooking or eating out

The terms endemic, outbreak, epidemic and pandemic relate to the occurrence of a health condition compared to its predicted rate as well as to its spread in geographic areas (Piret & Boivin 2020).

Match the terms to the appropriate definitions.

endemic	an unpredicted increase in the number of people presenting a health condition
outbreak	an epidemic that spreads globally
epidemic	occurs at a predictable rate among a population
pandemic	is an outbreak that spreads to larger geographic areas

Before we begin....

An **endemic** condition occurs at a predictable rate among a population.

An **outbreak** corresponds to an unpredicted increase in the number of people presenting a health condition or in the occurrence of cases in a new area.

An **epidemic** is an outbreak that spreads to larger geographic areas.

A **pandemic** is an epidemic that spreads globally.

Ebola: What did you learn from the video?

Check with your partner.

- Which outbreak was being referred to? When? Where?
- How is Ebola transmitted?
- What are the symptoms?
- How did it begin to spread in this outbreak?
- What can you say about the international response?

Ebola: What did you learn from the video?

→ Which outbreak was being referred to?

Guinea, West Africa, 2014-16

→ How is Ebola transmitted?

It is a zoonosis, bats...

→ What are the symptoms?

Fever, diarrhoea, vomiting, internal bleeding

→ How did it spread in this outbreak?

Index patient to immediate family, to nurses, to mourners at funeral, next village, rural areas to more densely populated cities, healthcare workers, flights...

→ What can you say about the international response?

Too slow, indifference.

In groups of 4....

- Look at the statements on the papers and place them into two columns « True » and False »
- Now read the text you have been given and share your information with the group to check your original ideas.
- Now read the text about the 2014-16 outbreak.

List the factors which explain why this outbreak was difficult to contain.

How has response improved in the subsequent outbreaks?

T/F Key

TRUE	FALSE
Ebola can spread through sexual contact (2).	The Ebola virus can be airborne (2 zoonosis, bats, direct contact with blood and body fluids).
Ebola can affect both humans and nonhuman primates. (1)	Two vaccines have now been approved for use by the FDA (3 first FDA-approved vaccine).
The virus can persist in survivors (2).	Ebola is named after a village in the Democratic Republic of Congo (2 river).
Ebola virus can have long-lasting health effects (2).	No further outbreaks have occurred in Guinea since the 2014-16 outbreak (4 2021).
A single dose of vaccine protects against Ebola virus. (3)	Little progress has been made in controlling Ebola outbreaks (4, only 23 cases in 2021).
Ebolavirus outbreaks often originate in rural areas (4).	The vaccine is effective against all species of Ebolavirus. (1, only Zaire ebolavirus)

Factors which explain.....

- Weak surveillance systems
- Poor public health infrastructure
- Spread from rural to densely populated urban areas and neighbouring countries
- Delay in declaring a public health emergency of international concern
- Spread to other countries
- Cultural and traditional practices v infection control practices

Improvements

- Greater coordination – engaging local leaders for prevention & messaging
- Policy implementation – national and global level

Coronavirus around the world: difficulties faced / lessons to be learnt?

→ Think, pair, share....

Past pandemics (influenza)

- In your groups, work on your text, making notes just of the key elements and checking your understanding together.
- You will now form new groups.
- Share your information on each pandemic to produce a timeline with the key points/figures.

Language work - tenses

- The West African epidemic (2014-16) (to begin) in a small border village in Guinea.
- The disease quickly (to reach) urban centres.
- There(to be) 24 recorded outbreaks in recent years.
- It(to be) not possible to eradicate all the animals who might be a host for Ebola.
- There(to be) always a possibility that Ebola could return.

Ask the right question – student A

→ Ask your partner a question or give a definition/explanation so that they say the words given below. You have 5 minutes to get them to say as many words as possible.

- Screening
- Diagnosis
- Income
- Floods
- Inequality
- Deprived
- An earthquake
- Life expectancy
- Bats
- To bleed

Ask the right question – student B

→ Ask your partner a question or give a definition/explanation so that they say the words given below. You have 5 minutes to get them to say as many words as possible.

- Measles
- Antibiotics
- A rural setting
- A vaccine
- Malaria
- A bias
- An occupational hazard
- Childhood
- Antibodies
- housing

Homework