

The Zika Virus Outbreak

The Zika virus is a disease spread by **mosquito** bites. Its name comes from the Zika Forest in Uganda where the virus was first **isolated**. It is related to dengue and yellow fever. For most people it is a mild disease, however, it can be harmful to pregnant women and is suspected of having led to thousands of babies being born with **abnormally** small heads and underdeveloped brains. Since being reported in Brazil in May 2015, the disease has spread rapidly across the Pacific region into South and Central America and the Caribbean. The World Health Organisation (WHO) has declared it as a “public health emergency of international concern” as it has reached **pandemic** levels.

Transmission of the Zika Virus

Most cases of the Zika virus are spread by bites from infected **Aedes species** of mosquito. The females feed on blood in order to lay eggs. Unlike the malaria-spreading mosquito, the **Aedes** mosquito is most active during the day, making human **exposure** more likely. Mosquitoes become infected when they feed on a person already infected with the virus. Infected mosquitoes can then spread the virus to other people through bites. The Zika virus can also be passed on from human to human through blood contact, for example, during a blood transfusion.

Symptoms and Treatment

Surprisingly, most people who contract the Zika virus do not present any symptoms and, therefore, many people do not realise they have been infected. Only one in five of those infected will **exhibit** symptoms. There are some common symptoms in those who do present with them: a fever, rash and itching, joint pain and conjunctivitis (red eyes). Other symptoms can include headaches, muscle pain and vomiting. Symptoms usually start 2 to 12 days after the bite of an infected mosquito and last for 4 to 7 days. There is currently no drug treatment for the virus and most infected people will get better without specific treatment. Although rare, the virus has been linked to a form of temporary **paralysis**, called Guillain-Barre Syndrome.

Pregnancy and Birth Defects

For most people, the Zika virus is a mild, harmless disease. For pregnant women, however, it is suspected of leading to various birth defects and therefore is a great concern. The WHO strongly suspect this as they've detected the virus in the brains and the **placenta** of the babies who died from the disease. In Brazil, one of the affected countries, there has been a significant increase in the number of babies being born with microcephaly. Microcephaly is a condition where a baby's head has not developed properly during pregnancy leading to the baby having an abnormally small head and **cognitive** complications. In addition to microcephaly, other problems have been detected among **foetuses** and infants infected with Zika virus before birth: blindness, hearing loss, seizures and impaired growth. In severe cases, it can be deadly.

Prevention

Unfortunately, there is currently no **vaccine** to prevent contracting the Zika Virus and so the main method of prevention is to avoid being bitten by mosquitoes. If you are in an affected area, you are advised to: apply insect repellent that contains the chemical DEET, wear loose clothing that covers the arms and legs, sleep under a mosquito net, keep doors and windows closed and avoid overcrowded areas in cities where there is no piped water and poor **sanitation** (an ideal breeding ground for mosquitoes). It is recommended that pregnant women avoid or postpone travel to affected areas if possible.

The Olympics

Rio de Janeiro in Brazil is set to host the 2016 Olympic Games. Understandably, there is great concern about the transmission of the Zika Virus as Brazil is one of the heavily affected areas. The Olympics are going ahead and the Brazilian **authorities** will be taking extra precautions to prevent rapid spread of the Zika virus. Fortunately, the games will take place during Brazil's wintertime when there are fewer active mosquitos, so the risk of being bitten is lower. Some athletes have declared that they will not be participating in the Olympics in Rio as a result of the Zika outbreak.

Timeline of the Zika Virus

- 1947: The virus was first isolated from a rhesus monkey in the Zika Forest of Uganda by the scientists researching yellow fever.
- 1952: The first human cases of the Zika virus were detected in Uganda and Tanzania.
- 1954 – 2007: The Virus was considered mild and only reported in humans in Africa and Asia.
- 2007: The virus was found on Yap Island in the South Pacific, in the first large outbreak.
- 2013: The virus spread to French Polynesia, the Cook Islands and Easter Island.
- 2015: The virus became **endemic** in Brazil and spread to other parts of South America and Central America.
- 2016: The World Health Organisation declared the virus a public health emergency and acknowledged the suspected link to birth **defects**.

The Zika Virus Outbreak – Follow-Up Work

In your own words, describe what the Zika virus is.

Where and when was the virus first discovered?

Why has the author used a hyphen in '1954 – 2007'?

How is the Aedes mosquito different to the mosquito that spreads malaria?

To whom is the Zika virus a major threat?

Why do experts suspect the Zika virus causes birth defects? Give 2 reasons.

Give three ways in which you can prevent being bitten by mosquitoes?

Why is there concern about the 2016 Olympic Games?

What kind of text type is this and how do you know?

Find three fronted adverbials in the text.

What organisational feature has the author used? Why do you think they used this?

How would you feel if you lived in an area affected by the Zika virus?

What do you think would happen if the Zika virus wasn't controlled in countries already affected?

The Zika Virus Outbreak – Vocab 1

Write down the meanings of these words which are highlighted in the text. Use a dictionary or Thesaurus to help you.

mosquito _____

isolated _____

abnormally _____

pandemic _____

species _____

exposure _____

exhibit _____

paralysis _____

placenta _____

cognitive _____

foetus _____

vaccine _____

sanitation _____

authorities _____

endemic _____

defects _____

The Zika Virus Outbreak – Vocab 2

Complete the following sentences using some of the new words from Vocab 1.

A _____ is an insect which spreads diseases.

It is estimated that there are about 8.7 million different _____ of plants and animals in the world.

Damage to the spinal cord can cause _____ of the body.

Doctors use ultrasound scanners to check _____ before birth.

In 1935, a _____ for yellow fever was created.

The Zika virus has reached _____ levels.

Match the words to their synonyms.

sanitation

flaws

defects

display

exhibit

mental

cognitive

openness

exposure

hygiene

Choose 2 of the words above and put them into complex sentences.

Colons are sometimes used to introduce a list.

“There are some common symptoms in those who do present with them: a fever, rash and itching, joint pain and conjunctivitis.”

Add the colons to the following sentences.

- These are my favourite colours purple, red and pink.
- I bought a lot of things at the shop ham, carrots, apples, milk and bread.
- She has three favourite subjects art, music and PE.
- We can see many things in the sky at night the moon, stars, planets and even satellites.
- To make the perfect cake you need four ingredients flour, sugar, butter and eggs.

Now write some of your own sentences using a colon to introduce a list.

1. _____

2. _____

3. _____

4. _____

Oral Teacher Questions – The Zika Virus Outbreak

In your own words, describe what the Zika virus is. **A disease that can be harmful to unborn babies which is spread by mosquito bites.**

Where and when was the virus first discovered? **In the Zika Forest of Uganda in 1947.**

Why has the author used a hyphen in '1954 – 2007'? **To show the passage of time.**

How is the Aedes mosquito different to the mosquito that spreads malaria? **It is most active during the daytime.**

To whom is the Zika virus a major threat? **Pregnant women/unborn babies**

Why do experts suspect the Zika virus causes birth defects? Give 2 reasons. **They have found the virus in the brains of babies who have died from the disease and there has been a significant increase in the number of babies born with microcephaly in countries that have the Aedes mosquito.**

Give three ways in which you can prevent being bitten by mosquitoes? **Using insect repellent/DEET, wearing loose clothes/covering up, sleeping under mosquito nets, closing windows and doors and avoid crowded places.**

Why is there concern about the 2016 Olympic Games? **They are going to be held in Brazil which is one of the heavily affected areas.**

What kind of text type is this and how do you know? **A non-chronological report because it gives information/facts, organised into subheadings, present tense and uses technical vocabulary.**

Find three fronted adverbials in the text. **Surprisingly, unfortunately, fortunately, although rare**

What organisational feature has the author used? Why? **Subheadings to make it clear where to find certain information.**

How would you feel if you lived in an area affected by the Zika virus? **Personal response.**

What do you think would happen if the Zika virus wasn't controlled in countries already affected? **The Zika virus would continue to spread, possibly creating world crisis pandemic.**

The Zika Virus Outbreak – Vocab 1

Write down the meanings of these words which are highlighted in the text. Use a dictionary or Thesaurus to help you.

mosquito – a flying insect that bites the skin of people and animals and sucks their blood

isolated – set apart for research purposes, discovered

abnormally – not normal or unusual

pandemic – an outbreak of a disease throughout a whole country or the world

species – a specific group of living things

exposure – being open to, having no protection from something harmful

exhibit – show, display

paralysis – being unable to move/feel part or all of the body

placenta – an organ inside pregnant women providing unborn babies with nutrients and oxygen

cognitive – related to thinking, remembering or reasoning

foetuses – unborn babies

vaccine – a substance which is injected to prevent getting a certain disease

sanitation – a state of being clean and healthy, hygiene

authorities – people in positions of power e.g. government

endemic – (a disease) regularly found in a certain area

defects – flaws, weaknesses

The Zika Virus Outbreak – Vocab 2

Complete the following sentences using some of the new words from Vocab 1.

A **mosquito** is an insect which spreads diseases.

It is estimated that there are about 8.7 million different **species** of plants and animals in the world.

Damage to the spinal cord can cause **paralysis** of the body.

Doctors use ultrasound scanners to check **foetuses** before birth.

In 1935, a **vaccine** for yellow fever was created.

The Zika virus has reached **pandemic** levels.

Match the words to their synonyms.

sanitation	flaws
defects	display
exhibit	mental
cognitive	openness
exposure	hygiene

Choose 2 of the words above and put them into complex sentences.

Accept complex sentences that use words from above, such as 'I did not visit the public toilets in the train station because the sanitation was poor.'

Colons are sometimes used to introduce a list.

“There are some common symptoms in those who do present with them: a fever, rash and itching, joint pain and conjunctivitis.”

Add the colons to the following sentences.

- These are my favourite colours: purple, red and pink.
- I bought a lot of things at the shop: ham, carrots, apples, milk and bread.
- She has three favourite subjects: art, music and PE.
- We can see many things in the sky at night: the moon, stars, planets and even satellites.
- To make the perfect cake you need four ingredients flour, sugar, butter and eggs.

Now write some of your own sentences using a colon to introduce a list.

Accept sentences that use a colon to introduce a list. Ensure commas are used to separate the items in the list.