NEWS LESSON

Not Fewer Mosquitoes, but Different Ones



BEFORE YOU READ

1 Warm up

Talk about these questions with a partner.

1. What would you think if someone said they were releasing more mosquitoes near your home?
2. What makes you trust a surprising scientific idea?
3. Who would you want to explain a new local health project?

2 Key words

These words are in the article. Write the letter of the meaning (A to H) in each box.

1	**outbreak**	☐	A	each new group of young born after the one before
2	**residential**	☐	B	a chemical that kills insects
3	**insecticide**	☐	C	small and clever, not obvious
4	**generations**	☐	D	have young and so make more of the same kind
5	**reproduce**	☐	E	a sudden increase in the number of people with a disease
6	**monitoring**	☐	F	on purpose, not by accident
7	**deliberately**	☐	G	to do with places where people live, not work
8	**subtle**	☐	H	watching something carefully over time to see changes

3 Read

Read the article and underline the key words from task 2. The paragraphs are numbered.

Spraying treats a neighbourhood and then wears off. Brazil is trying to change the local insect population itself, and asking residents to trust a much slower answer.

1 Releasing mosquitoes into residential neighbourhoods sounds like the last thing a health department should do during a dengue outbreak. Yet Brazil is doing precisely that. In July 2025, officials opened a major production centre in Curitiba dedicated to breeding mosquitoes that can help interrupt the spread of infectious diseases.

2 The key is Wolbachia, a bacterium found naturally in many insects. When it is present in the Aedes aegypti mosquito, it reduces the insect's ability to transmit several viruses, including dengue, Zika and chikungunya. The aim is not to create a different species, but to build up a local mosquito population in which Wolbachia is common.

3 At the production facility, eggs are raised under controlled conditions before the mosquitoes are distributed through public-health programmes. Once released, they reproduce with wild mosquitoes and pass Wolbachia to later generations. Unlike spraying an area with insecticide, which has to be repeated, the method is designed to have an effect that continues on its own.

4 That distinction explains why the approach appeals to health authorities. Insecticide campaigns can be rolled out quickly, but they treat a neighbourhood rather than change it, and the mosquitoes return as soon as the spraying stops. A population in which Wolbachia has taken hold does not need to be retreated in the same way, although it does need monitoring.

5 Researchers and authorities have tested the approach in Brazilian communities for years. Results from some locations have been encouraging, although the level of protection depends on local conditions and on how successfully the new mosquito population becomes established. The facility in Curitiba was built to expand a programme that already existed rather than to start one from nothing.

6 Reach is not the same as results: how many mosquitoes are released is a different question from how many people avoid infection. Measuring success is not straightforward either. A fall in dengue cases can have more than one cause, so authorities have to track how far Wolbachia has spread among local mosquitoes as well as how infection rates change over several seasons. Encouraging figures from one city do not guarantee the same outcome somewhere with different conditions.

7 Winning over the public is a separate challenge. Residents may reasonably ask why their government is deliberately adding insects that still bite. Clear explanations are essential: Wolbachia mosquitoes are not incapable of biting, and the strategy complements rather than replaces measures such as emptying water containers and protecting homes. Nobody involved is presenting it as a quick fix.

8 What makes the story remarkable is the reversal of an everyday assumption. People associate fewer mosquitoes with better health, but the more important question here is which mosquitoes are present. Brazil's experiment shows how understanding a disease carrier can lead, in the long term, to a far more subtle form of disease control.

Sources: Paraná State Health Department. Picture: AI illustration.

4 True, false or not given

Circle **T** (true), **F** (false) or **NG** (the article does not say).

1. Wolbachia occurs naturally in many insects. T F NG
2. The Curitiba facility started the programme from nothing. T F NG
3. Dengue cases in Curitiba have halved since the factory opened. T F NG
4. Falling dengue figures may have more than one explanation. T F NG
5. The programme aims to create a new species of mosquito. T F NG

5 Vocabulary

Complete the sentences with words from the box. Two words are not needed.

a quick fix	**build up**	**come up with**	**interrupt**	**rolled out**	**taken hold**	**the last thing**
wear off						

1. Releasing mosquitoes sounds like _____ a health department should do.
2. The aim is to _____ a population in which Wolbachia is common.
3. Hand washing can _____ the spread of some infections.
4. Insecticide campaigns can be _____ quickly.
5. A population in which Wolbachia has _____ needs less re-treatment.
6. The method is slow, so nobody is presenting it as _____ .

6 Verb forms

Write the correct form of the verb in brackets.

1. By the time the factory opened, the method _____ in several Brazilian communities. (TEST)
2. Spraying stopped in the street last month, and the mosquitoes _____ since. (RETURN)
3. Right now, nobody _____ the method as a miracle cure. (DESCRIBE)
4. If the programme had started a year earlier, more people _____ protected last season. (BE)
5. The facility _____ to expand a programme that already existed. (BUILD)

7 Language focus: collocations

Complete the sentences with words from the box. Two words are not needed. Verbs are picky about their nouns. You raise awareness, face criticism and measure results, but you do not do them the other way round.

face have heavy long measure pay raise

1. Spraying can _____ an immediate effect, but it wears off.
2. Posters and meetings help to _____ awareness of how the programme works.
3. Officials who release insects may _____ criticism at first.
4. It takes years to _____ the results accurately.
5. In the _____ term, the effect is designed to last.

SPEAK

8 Talk about it

Discuss in pairs or small groups. Give reasons for your answers.

1. What would residents need to know before welcoming these mosquitoes?
2. Would a successful trial elsewhere persuade you to support a local project?
3. How could scientists earn trust before asking people to accept a change?

9 Role-play: a meeting about the mosquito release

Work in pairs. Read your card, then have the conversation. Swap roles and do it again.

Student A · the health officer

Mosquitoes carrying Wolbachia will soon be released in a neighbourhood. Explain the plan to a resident. Answer at least two questions honestly, including the fact that the mosquitoes can still bite.

Student B · the resident

You live in the neighbourhood and you're worried about more mosquitoes near your home. Ask questions and say what would make you feel safer. Decide at the end if you support the plan.

Useful phrases

I'm worried about the mosquitoes near my house.

I'd like to understand how it works.

Let me explain what we're doing.

They can still bite, but they don't pass on dengue as easily.

What if the plan doesn't work?

I'm still not convinced, but I'll come to the meeting.

Afterwards, tell the class: did the resident support the plan, and what changed their mind?

ANSWER KEY

2 Key words

1 E · 2 G · 3 B · 4 A · 5 D · 6 H · 7 F · 8 C

4 True, false or not given

1 T · 2 F · 3 NG · 4 T · 5 F

5 Vocabulary

1 the last thing · 2 build up · 3 interrupt · 4 rolled out · 5 taken hold · 6 a quick fix

6 Verb forms

1 had been tested · 2 have returned · 3 is describing or describes · 4 would have been or could have been or might have been · 5 was built

7 Language focus

1 have · 2 raise · 3 face · 4 measure · 5 long

This lesson is free. If it saved you time, you can support johnplusnews at **ko-fi.com/johnplusenglish**