



Teacher Resource

Malaria Vaccine

Focus Questions

Discuss the BTN story as a class and record the main points of the discussion. Students will then respond to the following:

1. How is malaria transmitted?
2. What type of disease is malaria?
 - a. Viral
 - b. Bacterial
 - c. Parasitic
3. What areas in the world are most affected by malaria?
4. What are some ways that malaria is prevented or treated?
5. How many doses of the new malaria vaccine need to be taken?

Activity: Class discussion

Discuss the information raised in the BTN Malaria Vaccine story. Ask students to record what they learnt about malaria and the vaccine on a mind map. What questions do students have? Use the following to guide the discussion:

- What did you learn about malaria?
- What does this story make you wonder?
- How did this story make you feel?
- It was interesting to learn that...
- Why do you think it is important to hear about this topic?
- What questions do you have about this story?



EPISODE 29

19th October 2021

KEY LEARNING

Students will learn more about vaccines and how they have helped prevent disease in the community.

CURRICULUM

Science – Years 5 & 6

Scientific knowledge is used to solve problems and inform personal and community decisions.

Communicate ideas, explanations and processes using scientific representations in a variety of ways, including multi-modal texts.

Science – Year 7

Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations.

Activity: Glossary

Students will brainstorm a list of key words that relate to the BTN Malaria Vaccine story. Students may want to use pictures and diagrams to illustrate the meaning and create their own glossary. Students will use the words to write their own sentences about malaria and vaccines. Here are some words to get them started.

MOSQUITO	VACCINE	IMMUNITY
DISEASE	INFECTION	PARASITE
INFECTIOUS	IMMUNISATION	MALARIA ENDEMIC

Further investigation: Tricky words

Students will choose additional keywords and terms to add to their class glossary that are tricky. For example, anopheles, antigen or epidemiology. Students will find a definition and explain to their classmates what the keywords mean.

Activity: Research

After watching and discussing the BTN Malaria Vaccine story, what questions do students have? The following KWLH organiser provides students with a framework to explore their knowledge on this topic and consider what they would like to know and learn.

<i>What do I <u>k</u>now?</i>	<i>What do I <u>w</u>ant to know?</i>	<i>What have I <u>l</u>earnt?</i>	<i><u>H</u>ow will I find out?</i>

Students will develop their own question/s to research or select one or more of the questions below.

- When was malaria first discovered and by whom?
- Why is malaria called malaria? Investigate the origin of the word.
- How does a person become infected with malaria?
- Where geographically is malaria found? On a world map highlight where malaria is most prevalent.
- Before a vaccine was created, what was the main way of fighting malaria? Give 2 examples.
- Why was it important to find a vaccine for malaria?
- How do vaccines work? Choose one to explore in more detail and explain how it works.
- What is the history of vaccination? Research the history of vaccination and present your findings in a timeline which highlights significant events.
- What impact have vaccines had on controlling disease? Choose one vaccine to explore in more detail and share your findings with the class.

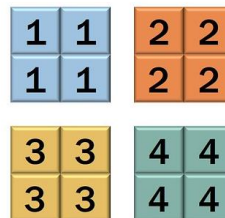
- What's the difference between a virus, bacteria, and a parasite? Find meanings for each and then compare and contrast.
- What's the difference between vaccination and immunisation?

Activity: Jigsaw learning

In this activity students will work cooperatively to learn more about vaccines and how they have helped prevent disease in the community. Each group will become experts and then share what they have learnt with other students.

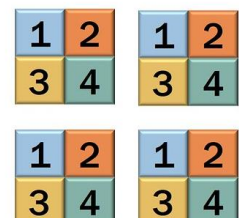
Round 1 – Focus Groups

Divide students into groups and give each group a different text to read and discuss.



Round 2 – Task Groups

Mix the groups so that students can bring their specific focus to a common task or problem.



Form groups

Divide the class into groups. Each group will be assigned a different vaccine which has been developed to prevent one of these diseases (rotavirus, hepatitis a, chicken pox, influenza, Covid-19, polio and mumps) and become an expert. Each group will need to decide how they will collect and communicate the information they find during their research.

Research

Each group will respond to the following questions to become experts:

- What disease is the vaccine for? Describe the disease.
- When was the vaccine developed? Who developed the vaccine?
- How does the vaccine work?
- How often should a person be vaccinated?
- What impact has the vaccine had on controlling the disease worldwide?
- What are some interesting facts about the vaccine?

Share

One student from each of the expert groups will form a new group to share the information they have collected. Students will make sure there is one expert from each group at their table. Students will share the information they have collected and learn from one another.

Reflect

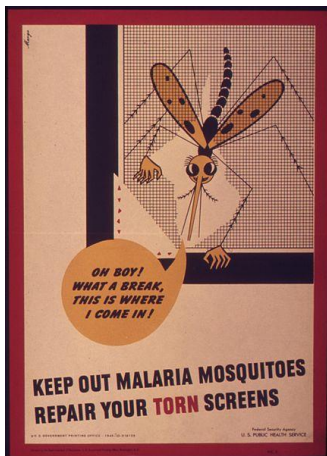
Students will reflect on the activity by responding to one or more of the following questions:

- What did you enjoy about this investigation?
- What did you find surprising?
- What would you do differently next time?

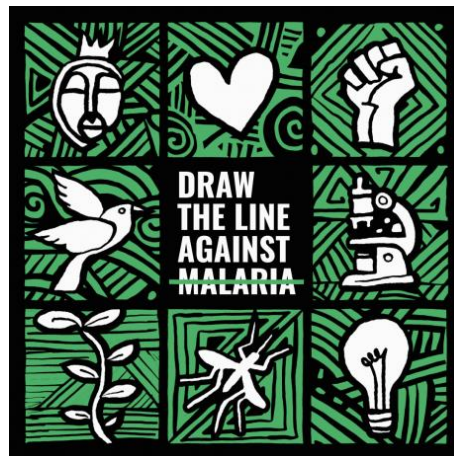
Activity: Visual literacy

In this activity students will examine, analyse and query a range of posters which were designed to educate the public about malaria and its risk to the community. Students will choose one or more of the posters below (alternatively, students can find another campaign poster online) and then respond to the following questions:

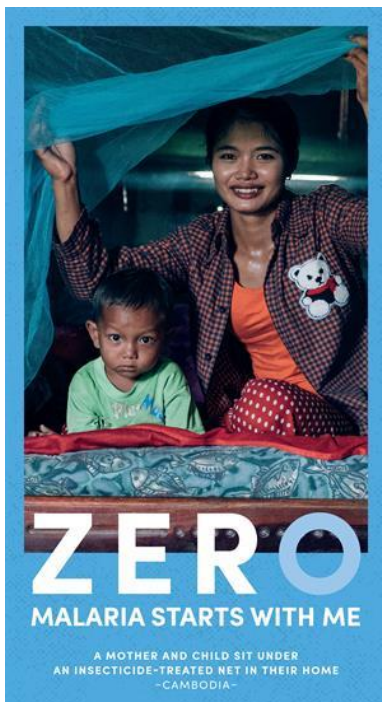
- Write a short paragraph describing what you see in this poster. Think about the colours, shapes, images, font and symbols.
- What year do you think the poster was created?
- Who is the intended audience?
- What is the key message?
- What is the purpose of the poster?
- How does the poster make you feel? Describe your emotions.
- What question/s would you like to ask about the poster?



[Wikipedia](#)



[Zero Malaria Starts with Me](#)



[World Health Organisation](#)



[US National Library of Medicine](#)

Activity: Public education campaign

Students will design a public education campaign to raise awareness of malaria and vaccination against the disease. Students will think about their campaign's aim, target audience, and the value of raising awareness at their school. Visit the World Health Organisation's website to learn more about [raising awareness of malaria](#).

To create a school awareness campaign, students will need to identify the following:

- What is malaria?
- How is it transmitted?
- Where geographically is malaria found? Highlight on a map.
- How can malaria be prevented?
- Why is it important to find a vaccine against malaria?
- How can you teach other kids about the importance of vaccination? Think of creative ways you can teach kids your message about the topic.

Some questions to consider when designing your campaign:

- What is the campaign's main aim?
- Do you have a slogan or message? What is it?
- Who is your target audience?
- What is the best way to communicate the message?
- When is the best time to communicate your message? (e.g., World Malaria Day)

Discuss with students how they will get their message out there to help raise public awareness. Some possibilities include:

- Short film or animation
- Community service announcement (for print, television or radio).
- Press release (create posters to be put up around the school or pamphlets to give to all students).

Useful Websites

- [Immunisation for Children](#) – Department of Health, Australian Government
- [Pioneer Breakthroughs](#) – History of Vaccines
- [Timeline](#) – History of Vaccines
- [Malaria Vaccine Approved](#) – BTN Newsbreak
- [Malaria: Children across Africa to get 'historic' vaccine](#) - Newsround
- [World Health Organization endorses first malaria vaccine, Mosquirix, for children in Africa](#) – ABC News
- [World Malaria Day: What is malaria and why is it such a big problem?](#) – Newsround