

WebQuest: The Malaria Challenge





Introduction

You are a Peace Corps Volunteer serving in a village where many people are suffering from malaria, a preventable disease caused by a parasite and spread by certain types of mosquitoes. Looking at the disease locally and globally, you will investigate where and how malaria occurs.



Task

Once you have learned more about malaria, you will propose a strategy for preventing the spread of the disease in your community. You will [collect information](#) and collaborate with community members in order to come up with the best possible solution.

Process

1. View malaria data from the [World Health Organization](#).
 - *How many cases of malaria are identified each year?*
 - *What percentage of annual malaria cases occur in Africa? Asia? The Middle East? The Americas? Other regions of the world?*



Process

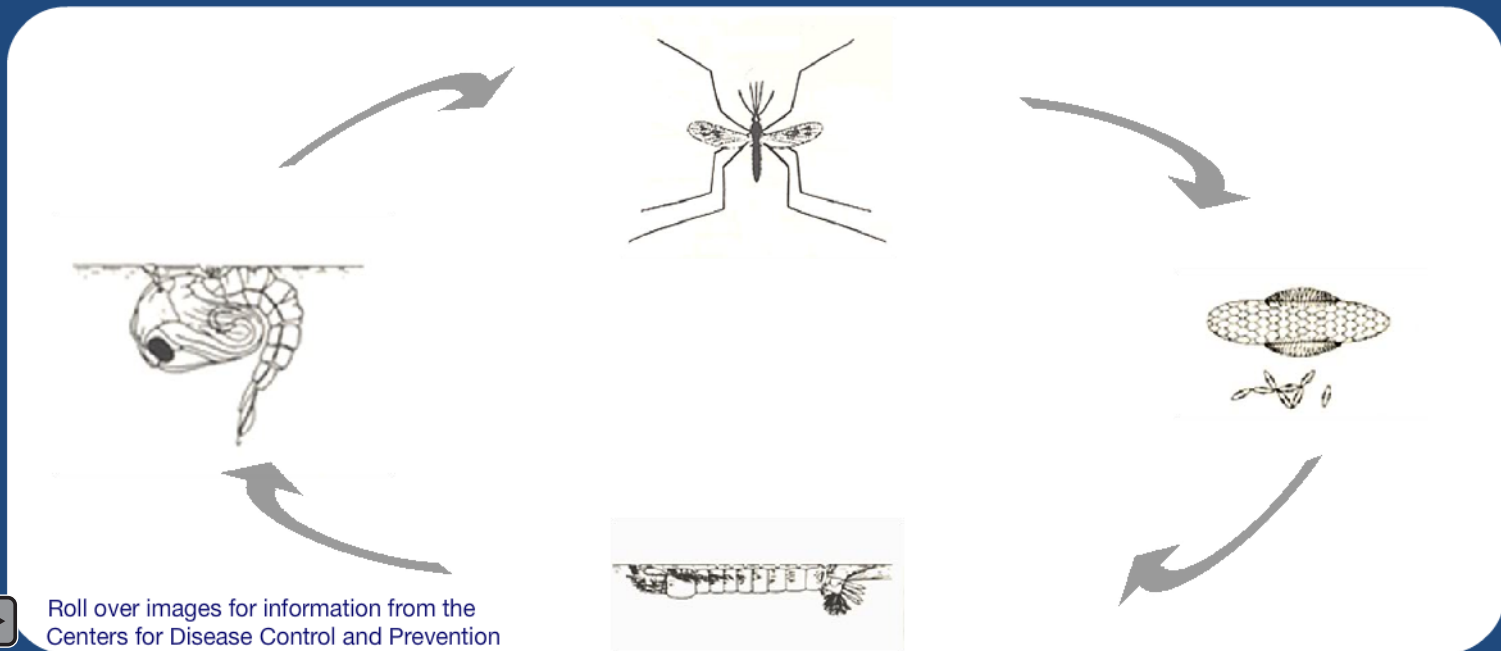
2. Click on the [map from the Centers for Disease Prevention and Control](#). You can use the zoom feature of the map to view regions more closely. Looking at the areas that have malaria everywhere (in red):

- *Where on the globe are these regions located?*
- *Based on their geographic locations, what similarities in climate would you expect in these regions?*
- *Why do you think some countries within or near these regions might be less affected by malaria?*



Process

3. Mosquitoes are vectors for malaria, or organisms that carry the malaria parasite from one host to another. Review what happens in each stage of the mosquito life cycle by clicking on the diagram below.
- *What does a female mosquito need in order to complete her life cycle and lay new eggs? (For example: What food sources does she need? What habitat and climate conditions?)*



Process

4. The malaria parasite, carried by mosquitoes, requires a human or animal *host*. Watch the [mosquito animation](#) to see how a human host gets infected. Watch the [malaria life cycle animation](#) to see what happens inside the body once a person is infected.
 - *Considering what you know about mosquitoes, malaria, and how the disease is spread, can you think of some ways it could be prevented?*



Process

5. People who are infected with malaria often become too sick to go to school, work, or to complete day-to-day chores.

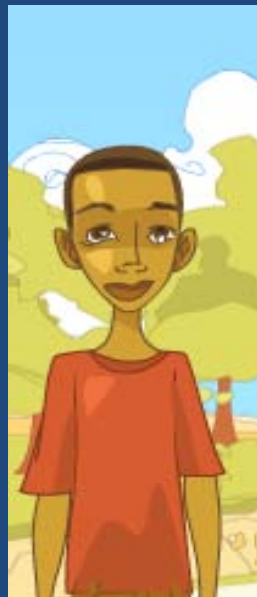
- *How might malaria affect the lives of the people below?*
- *How might their communities be affected by these changes?*



Jelle,
teacher



Chuy,
farm worker



Haja,
student



Felix,
business owner



Inez,
mother

Process

6. Equipped with background information on malaria, how it is transmitted, and its effects, you are ready to take the role of a Peace Corps Volunteer and address the problem in your host community.

Play the [Peace Corps Challenge game](#) and propose a solution to the malaria epidemic in the community of Wanzuzu.



Process

7. Review the possible solutions to the malaria problem in Wanzuzu.
- *How would each possible solution help?*
 - *Which solutions provide immediate relief? Which provide long-term relief?*
 - *Which solution(s) would you recommend?*
 - *Why are immediate and long-term solutions both important?*



What can the village do to minimize and control the malaria outbreak? What can you do to help?

- A** Work with villagers to drain areas of standing water. If the mosquitoes have fewer places to lay eggs, the village will see fewer mosquitoes.
- B** Give some of your money to the families in line to buy medicine and mosquito netting, particularly the young woman with her baby. You can afford it. You have plenty of money in comparison.
- C** Consider a meeting/hall event where you and the clinic doctor can discuss the connection between mosquitoes and water. Maybe if people understood the life cycle of a mosquito they would take more preventive measures.
- D** Talk to your Associate Peace Corps Director Delun about getting a grant for villagers to buy mosquito netting for every family. It's the best preventive measure they can take.



Evaluation

How did you do? Use this [self-evaluation](#) to reflect on your work in finding a solution to the *Malaria Challenge*.

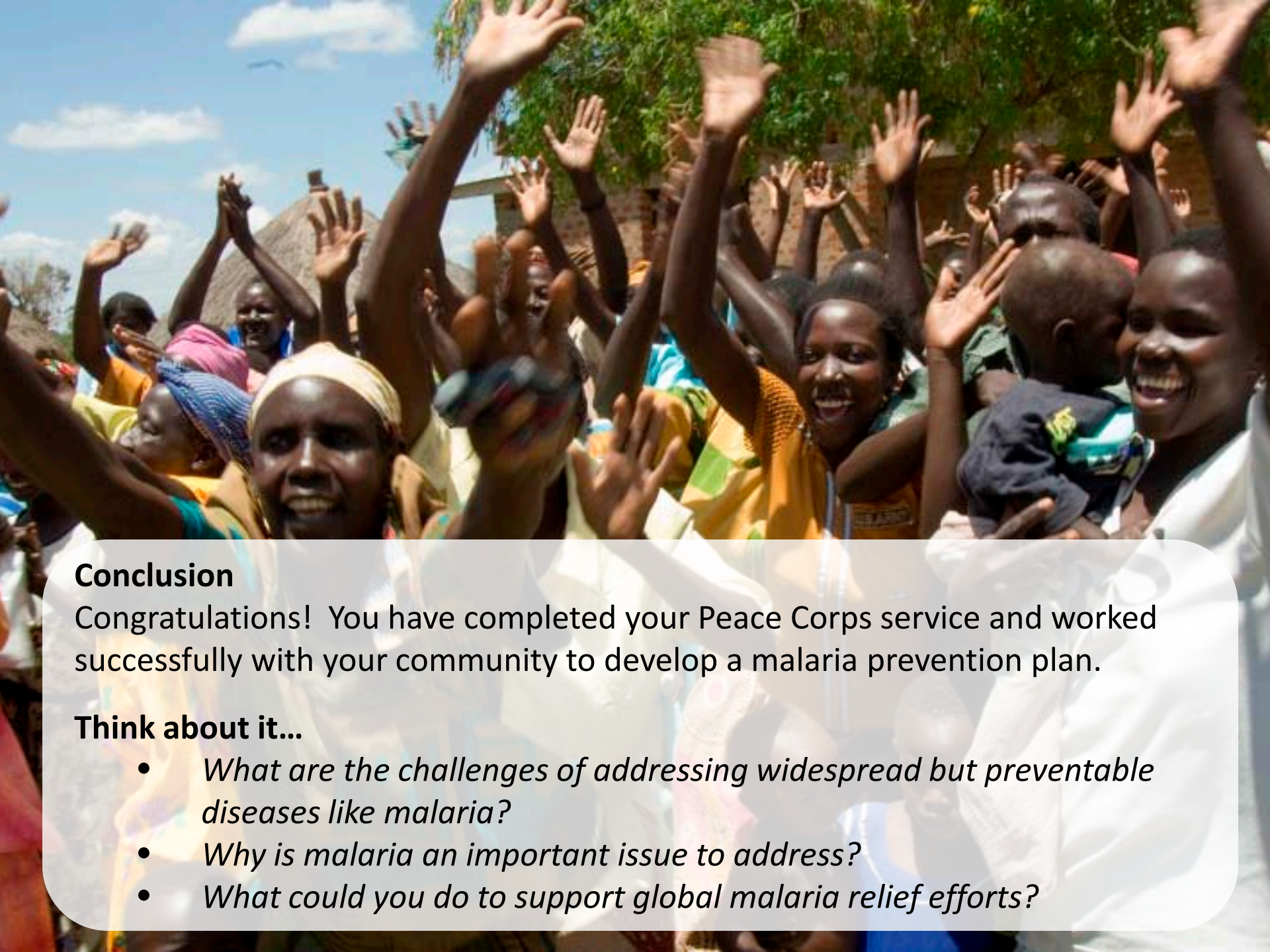


Real World Example

View the video [Fighting Malaria One Net at a Time](#) to learn how April Williamson, a Peace Corps Volunteer in Senegal, worked with her community and other Peace Corps Volunteers to address the issue of malaria.

Questions to discuss:

- *How do mosquito nets work to help prevent the spread of malaria?*
- *Why do you think some communities had never received mosquito nets before this net distribution effort?*
- *How was this project successful in addressing malaria?*



Conclusion

Congratulations! You have completed your Peace Corps service and worked successfully with your community to develop a malaria prevention plan.

Think about it...

- *What are the challenges of addressing widespread but preventable diseases like malaria?*
- *Why is malaria an important issue to address?*
- *What could you do to support global malaria relief efforts?*