

Lesson Plan

Grade levels: 3 –5

Subject: Malaria

Purpose:

To provide teachers and students with a classroom activity that educates students about malaria, its harmful effects, and the history of the disease. This lesson plan can easily be incorporated into the students' history class. Teachers can find additional information regarding malaria on the Sweat for Nets website.

Objective(s):

1. Participants will learn about the origins of malaria.
2. Participants will learn about the history of malaria.
3. Participants will learn what organizations have done in the past and are doing now to fight the spread of malaria.
4. Participants will learn what they can do to help fight the spread of malaria.

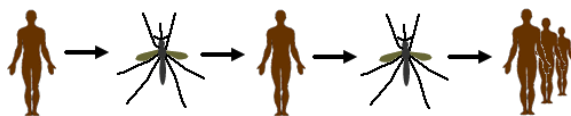
Materials needed:

- *The Panama Canal (Wonders of the World)* by Elizabeth Mann
- Informational packet on the history of malaria
- Large pieces of poster board
- Index cards
- Pens, pencils, and markers

Lesson:

- Begin by reading *The Panama Canal (Wonders of the World)* by Elizabeth Mann.
- Use the website <http://www.cdc.gov/malaria/index.htm> to introduce students to malaria and its harmful effects on children in numerous countries around the world.
- Ask students if they know what causes malaria and how it is spread.

Mosquitoes and the spread of malaria:



(www.schoolscience.co.uk/content/4/biology/abpi/diseases/disease9.html)

- Distribute an informational packet on the history of Malaria. This packet can be found on the web at: <http://www.cdc.gov/malaria/history/index.htm>.
- Provide the students with a brief overview of the history of malaria.
- Explain to the students that the symptoms of malaria were first described in Chinese writings in 2700 BC.
- Tell the students that in the 4th century BCE, the Greeks noted that mosquitoes were responsible for spreading malaria.
- Ask the students if they know what a parasite is. If they do not, explain that a parasite is a small organism that lives in people's bodies and transmits diseases. A complete definition about what a parasite is can be found at: <http://en.wikipedia.org/wiki/Parasite>.
- Explain to the students that the parasite that causes malaria was first discovered in 1880 by Charles Louis Alphonse Laveran, a French army surgeon stationed in Algeria.
- Tell the students that Ronald Ross, a British officer in the Indian Medical Service, demonstrated that mosquitoes transmit the disease from one human being to another.
- Explain to the students that construction of the Panama Canal was halted due to the spread of malaria. In 1906, 21,000 individuals working to construct the canal were hospitalized for malaria.
- Tell the students that, following the outbreak of malaria during the construction of the Panama Canal, Congress provided the United States Public Health Service with funds to combat the spread of the disease. As a result, the number of malaria cases in the United States was drastically reduced.
- Inform the students that the Centers for Disease Control and Prevention (CDC) continues to combat the spread of malaria, and strives to eliminate the disease from countries around the world.
- Conclude the lesson by telling the students that the World Health Organization and a number of groups around the world continue to investigate methods of preventing the spread of the disease, creating medicines to fight the disease, and providing affected individuals with insecticide treated bed nets, one of the few preventative measures available today.

Project

- Divide the students into six groups. Each group will research a specific topic related to malaria and make a short presentation about what they discovered. The students will use poster board to illustrate their findings and use note cards with the information needed for their presentation. Following the presentations, classmates can ask the presenters questions. The purpose of this project is to provide the students with detailed information about specific topics related to the history of malaria.
 - **Group One:** Ask the group to research what causes malaria and how it is spread.

- **Group Two:** This group should research the details on how malaria was discovered.
- **Group Three:** Ask this group to investigate the history of the Panama Canal. Why was it important? What about the location of the canal made the worker especially susceptible to malaria?
- **Group Four:** This group should find information on the US Public Health Service. What is its function? How does it help combat diseases?
- **Group Five:** Have the fifth group examine the history and the goals of the CDC and what the organization has done to combat malaria.
- **Group Six:** The sixth group should investigate the purpose and the history of the World Health Organization and its goals in regards to the fight against malaria.

Conclusion:

After all of the groups have made their presentations, explain that they can help prevent the spread of malaria. Inform the students that insecticide treated bed nets are the best way to protect children from the disease. Explain that the students can help by raising money to purchase bed nets. Have the students brainstorm fundraising activities that they could do as a class.