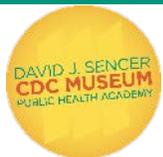


Trapping Mosquitoes



DAVID J. SENCER
CDC MUSEUM
PUBLIC HEALTH ACADEMY



Word Bank

infectious disease

public health

vector

outbreak

parasite

citizen scientist

virus

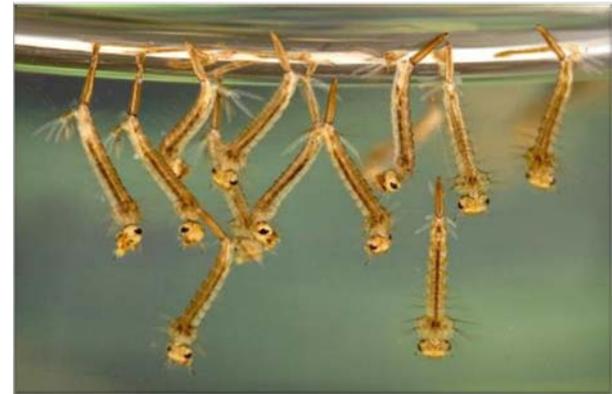
epidemiologist

	people who help collect data for research projects conducted by professional scientists
	an insect that transmits disease
	a tiny, infectious particle that lives inside living organisms
	any disease caused by a pathogen (germ) such as a virus, bacteria, parasite, or fungus
	a sudden occurrence or increase of something
	a small organism that gets its food and shelter from others
	a scientist who studies how disease spreads and can be controlled
	the science of protecting and improving the health of people and their communities



Understanding Mosquitoes

- Bite: day and night
- Live: indoors and outdoors
- Prefer warm temperatures
- In case of cold: hibernate in enclosed spaces
 - Sheds
 - Garages
 - Inside or under homes





Think About It

1. What attracts mosquitoes?
2. At what times of day have you seen mosquitoes?
3. Where do you see mosquitoes most in your community?

Mosquitoes and malaria



- Malaria:
 - Infectious disease
 - Caused by *Plasmodium* (parasite)
- Mosquitoes = **vectors**
 - Mosquitoes transfer parasite to humans through mosquito bites

Malaria and CDC

- 1940s: WWII
 - Outbreak of malaria in southern U.S.
- Malaria Control in War Areas (MCWA) unit created
 - Dr. Joseph Mountin
 - Rid southern United States of disease-causing mosquitoes
 - Beginnings of CDC





Think About It

1. What is the goal of the United States Public Health Service?
2. Why was it important that the MCWA be located in the southern United States?
3. How did controlling malaria change the way we handled public health issues?

From the Expert



<https://youtu.be/xabl2Oxl6-k>



Think About It

1. What location will you use for your trap?
2. How often will you need to check your trap?
3. How will you record the data from your trap?

Call to Action!

1. Create + implement mosquito management plan
2. Build mosquito trap
3. Share your findings

Why do you think participation is important?

Give it a
Try

Create a Mosquito Management Plan



Ask

Ask a question



Research

Do background research



Hypothesis

Construct hypothesis



Test

Test with an experiment



Analyze

Analyze data



Conclusions

Draw conclusions

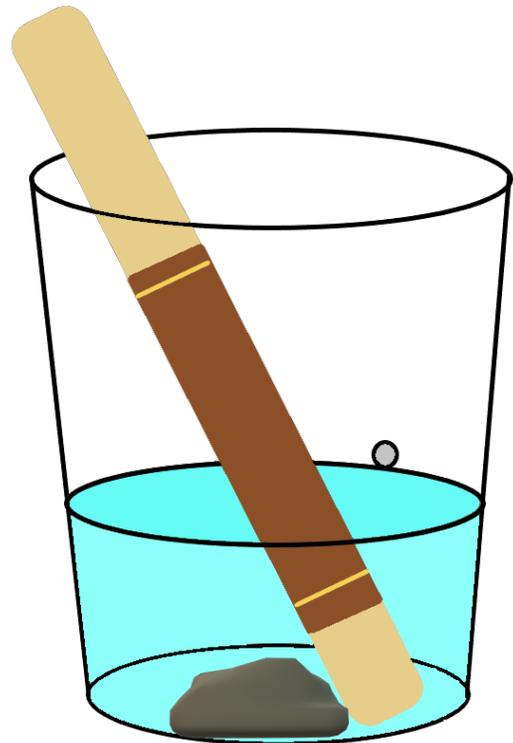


Share

Communicate results

1. Build a Mosquito Trap

- Prepare the Oviposition Cup
- Prepare the Ovipaddle
- Place the Trap



Give it a
Try

2. Implement a Mosquito Management Plan

- Week 1 Data Collection
- Mosquito Control Measures
- Week 2 Data Collection

DATA TABLE

Container	Location	Dates	# of Eggs
<input type="checkbox"/> Black Cup	<input type="checkbox"/> Full Sun	Week 1: ___/___/___ - ___/___/___	
<input type="checkbox"/> Dark Cup	<input type="checkbox"/> Full Shade		
<input type="checkbox"/> Light Cup	<input type="checkbox"/> Partial Shade	Week 2: ___/___/___ - ___/___/___	
<input type="checkbox"/> Other (describe)			

Give it a
Try

3. Share Your Findings

- The Citizen Science Invasive Mosquito Project
- The GLOBE Observer: Mosquito Habitat Mapper
- David J. Sencer CDC Museum (@CDCmuseum on Instagram)

Give it a
Try



Questions? 