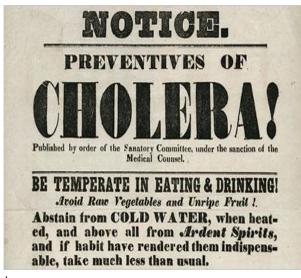
Potable Poison: Cholera Epidemic in NYC

Teaching the LifeStraw®: Student Activities

STUDENT INSTRUCTIONS

Imagine it is again 1832 and an outbreak of cholera has occurred in the Five Points neighborhood of New York City. Large numbers of people are exhibiting gastrointestinal symptoms. The New York Board of Health is desperate for solutions. It has appointed your group as investigators to determine both the source and cause of the disease by performing an epidemiological investigation. As epidemiologists, you will need to examine as many details you can find about the lives and habits of the cholera victims, and see if you can determine patterns and perhaps even a common source of the disease. The biographies are not of actual victims but are based on historical facts known about the neighborhood and the cholera outbreak.



Student Materials:

1 Map per group member1 Set of Victim Clue Cards per group (12 cards)1 Victim Clue Cards Summary Sheet per student1 Picture Card (for reference only)

Part 1: Information Gathering

- 1. Make sure all group members have a map and Victim Clue Cards Summary Sheet
- 2. Review the Five Points map, identify landmarks using map key.
- 3. As a group create a **hypothesis** for the origin of the Cholera outbreak and how it spread. **Write this on the back of your map**.
- 4. Deal out the victim clue cards equally to group members. If you have any leftover cards, put them in the middle.
- 5. Taking turns, each group member will orally read the description of one victim clue card while all group members record the information on their Victim Clue Cards Summary Sheet.
- 6. After everyone in your group has finished step 5, group members agree on which color to use for each victim. Fill in the key on the bottom of the map with these colors.
- 7. Using your agreed upon map color key and the victim clue cards, put a dot or circle on the residence and work place (or other visited locations) on the map for each victim, then draw lines to connect their movements. Be sure that you all use the same color for each victim.
- 8. To complete your map, mark an "X" through the dots/circles for the victims that did not survive.

POTABLE POISON - Part 2: Analysis

As a group use your summary charts, maps, and your expert thinking skills to zero in on the Cholera outbreak. Remember that you are looking for common links amongst the victims that help <u>explain how they got sick</u>. Below are some guide questions for your group member to consider in your investigation.

1) Which streets or landmarks seemed to be areas where more victims died from or got cholera?

2) Identify common links amongst the victims. Was the disease confined to one gender or another? If so, which?

3) Did the victims visit any of the same businesses? If so which?

4) What common foods did the victims eat or handle?

5) Identify similar professions among the victims have. What traits did these professions have in common?

6) What was the common source of their water?

7) What are your other ideas not covered by the answers to these questions?

As a group, discuss your earlier hypothesis for the source of the Cholera epidemic in Five Points and the cause of the disease. Does it need revision? Remember that the evidence you have analyzed should support your theory. Write your revised hypothesis below:

POTABLE POISON - Part 2: Analysis

(Alternative Student Handout)

As a group use your summary charts, maps, and your expert thinking skills to develop investigative questions that you could answer to discover the common links amongst the victims that help <u>explain how they got sick</u>. List your <u>questions</u> and <u>answers</u> in the space below.

As a group, list your recommendations to the NYC Health Department for disease prevention.

Note how you would get the word out about these recommendations to both government officials and the general public.

Cholera Victim Clue Cards Summary Sheet

STUDENT HANDOUT

Victim's Name	Age	Job	Family	Who got Cholera? Outcome*	Residence Other Factors
Callagham McCarthy					
Paddy McMartin					
William Morgan					
Honora Moriarty					
John Moses					
Baxter Pease					
Thomas Shea					
Edward Whalen					

Cholera Victim Clue Cards Summary Sheet (continued)

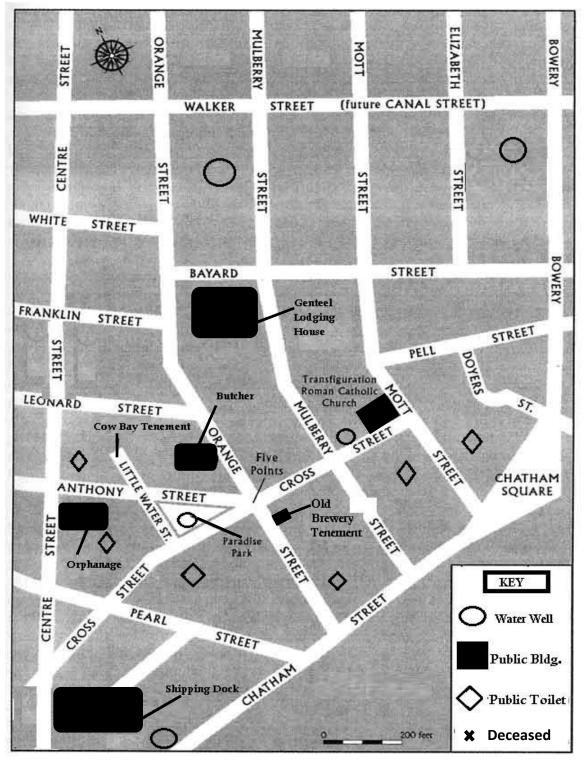
STUDENT HANDOUT

Victim's Name	Age	Job	Family	Who got Cholera? Outcome*	Residence Other Factors
James Gall					
Sonny Pflagher					
Barbara Sullivan					
Euphemia Williams					

* "Survived" or "Recovered" = the person got Cholera but survived. If the disease is not mentioned on card, the person never got sick.

FIVE POINTS MAP: ANSWER KEY

POTABLE POISON



Callagham McCarthy	Thomas Shea		
Paddy McMartin	Edward Whalen		
William Morgan	James Gall		
Honora Moriarty	Sonny Pflagher		
John Moses	Barbara Sullivan		
Baxter Pease	Euphemia Williams		

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