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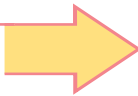
Mapping Death



The Cholera Story

Picture yourself in London in 1832. What do you think life would be like? How would you dress? What kind of food would you eat? What would the air be like? What kind of house would you live in?

CHALLENGE



Cholera (CALL-er-ah) is a disease that is spread by a bacterium in water or through person-to-person contact. Place yourself in London in 1832 and imagine what it would be like if a member of your family were struck with cholera.



A tavern in London, named for John Snow.

Dr. William Brooke O'Shaughnessy was one of the first doctors to investigate the causes of cholera. He wrote the following observations in 1832:

Wanting to acquaint myself with the celebrated cholera, I traveled down to (London) from Edinburgh, prepared yet unprepared, dear sirs. I saw a face, a girl I never can forget, even were I to live beyond man's natural age.

The girl lay . . . in a low-ceilinged room. I bent to examine her. The color of her skin—a silver blue, lead colored, ghastly tint; eyes sunk deep into deep sockets as though driven back or counter-sunk like nails, her eyelids black, mouth squared as if to bracket death; fingers bent, inky in their hue. Pulse all but gone at the wrist.

This is another description of cholera:

It (is) not easy for survivors to forget a cholera epidemic. . . . The onset of cholera is marked by diarrhea, acute spasmodic vomiting, and painful cramps. Consequent dehydration (the victim can lose up to 5 gallons of liquid in 24 hours), often accompanied by cyanosis [the body turns blue], gives the sufferer a characteristic and disquieting appearance: his face blue and pinched, his extremities cold and darkened, the skin of his hands and feet drawn and puckered. . . . Death may intervene within a day, sometimes within a few hours of the appearance of the first symptoms. And these symptoms appear with little or no warning.

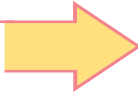
(From Charles E. Rosenberg, *The Cholera Years: The United States in 1832, 1849, and 1866*. Chicago: University of Chicago Press, 1962)



Cholera Deaths

In 1849, another outbreak of cholera killed over 500 people—rich and poor, young and old—in South London. John Snow, a medical doctor in England, had an idea. He thought that if he checked the city’s death records and mapped exactly where people were living when they died, he might find some clues about what was causing the disease.

CHALLENGE



Examine the list of deaths from cholera in London in 1849 and plot their location on the map. See if there is a pattern that could explain how the disease spreads.

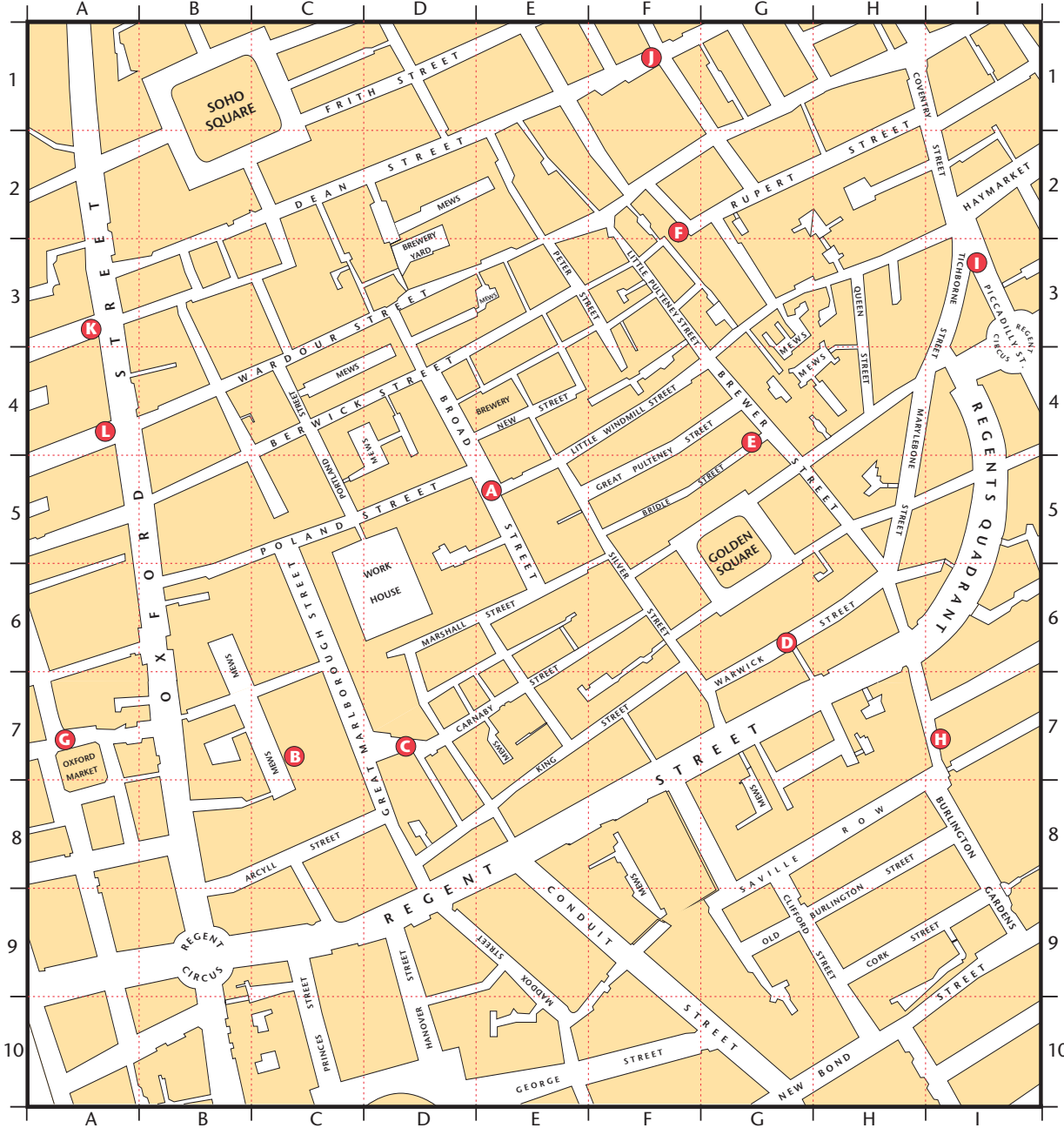
PROCEDURE

1. With your partner, use the following listing of cholera deaths to plot the locations of the victims’ homes on the London street map that your teacher provides. (You’ll need to tape the two pieces together to make one larger map.)
2. Use a colored marker to put a small dot at the approximate address for each death.
3. If there is more than one death at the same location, put the other dots as close as possible to each other. The grid location number will help you find the street addresses.

Activity 4 • Mapping Death

Figure 1: Deaths from Cholera in London in 1849

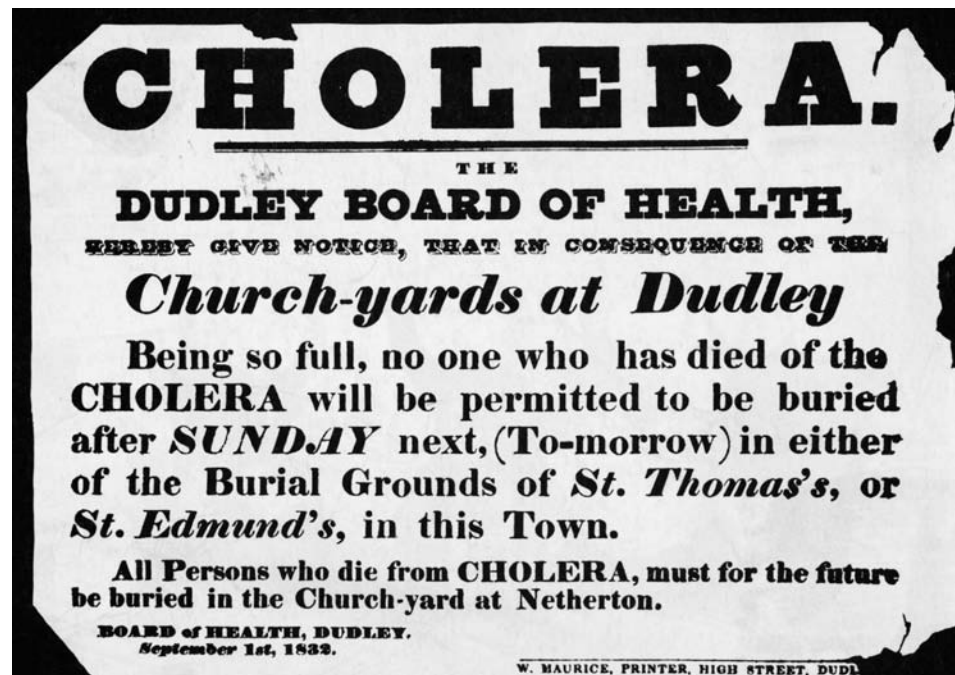
Date	Name	Age	Sex	Occupation	Address	Grid
13 Feb	Anne Kelly	3	F	child	156 Broad St., between Marshall & Little Windmill Streets	E-5
23 Feb	Edwin Drummond	48	M	steeplejack	54 Little Windmill St., between Broad & Silver Sts	E-5
18 Mar	Patty Orford	23	F	seamstress	160 Broad St., near corner of Little Windmill St.	E-5
20 Mar	Sue Burton	22	F	seamstress	16 Queen St., near the corner of Little Windmill St.	H-3
27 Mar	Patrick Kelly	39	M	banker	156 Broad St., between Marshall & Little Windmill Streets	E-5
28 Mar	John Kelly	8	M	child	156 Broad St., between Marshall & Little Windmill Streets	E-5
3 Apr	Mary Thornley	45	F	governess	300 Marshall St., between Broad & Silver Streets	E-6
9 Apr	Thomas Topham, Jr.	19	M	butcher	8 New St., across from the brewery	E-4
9 Apr	William O'Toole	41	M	indigent	Poland Street Work House	D-6
13 Apr	Margaret Kelly	37	F	housewife	156 Broad St., between Marshall & Little Windmill Streets	E-5
21 Apr	Richard Raleigh	13	M	student	173 Broad St., between Poland & Marshall Streets	D-5
24 Apr	Katherine Nelson	1	F	child	426 Wardour St., next to the Brewery Yard	D-3
25 Apr	Russ Rufer	30	M	steeplejack	54 Little Windmill St., between Broad & Silver Sts.	E-5
29 Apr	Sarah Kelly	3	F	child	156 Broad St., between Marshall & Little Windmill Streets	E-5
1 May	Sir John Page	55	M	magistrate	255 Broad St., between Berwick & Poland Streets	D-4
2 May	Ann Nelson	19	F	housewife	426 Wardour St., next to the Brewery Yard	D-3
3 May	Agatha Summerhill	26	F	writer	174 Broad St., between New & Little Windmill Sts.	E-5
11 May	Barney Brownbill	31	M	indigent	Poland Street Work House	C-5
11 May	Rose Thornley	53	F	maid	300 Marshall St., between Broad & Silver Streets	E-6
17 May	Winnifred Topham	17	F	factory worker	2 Peter St., at the end	F-4
21 May	Thomas Topham	38	M	butcher	2 Peter St., at the end	F-4
22 May	Winston Page	49	M	doctor	1000 Regent St., near the corner of Hanover Street	D-9
27 May	Neville West	6	M	child	19 Golden Square	G-6
27 May	Beatrice Braxley	23	F	housewife	253 Broad St., between Berwick & Poland Streets	D-4
27 May	Eleanor Raleigh	12	F	student	173 Broad St., between Poland & Marshall Streets	D-5



Map of London in 1854. Letters indicate major city water pumps.

ANALYSIS

1. Describe what you see on the map you have marked with the locations of the deaths. Are they scattered throughout the city, or are they bunched in a particular area?
2. Do you see any clues about the cause of the disease?
3. Based on the evidence of the cholera death locations shown on the map, state two or three **hypotheses**, or reasons that might explain how the disease is spread. (A hypothesis is an idea or theory about how or why something happens.)



Cholera deaths were often so frequent there were few places to bury the victims.