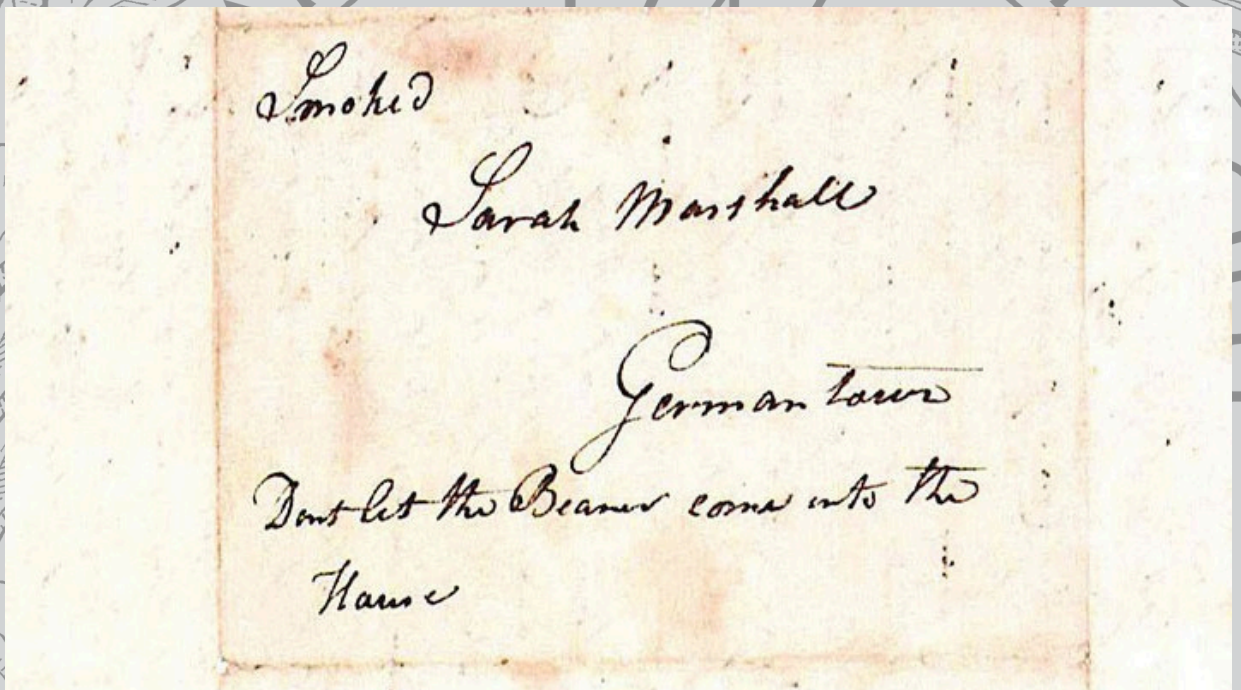


LEARNING ACTIVITY

A Malignant Tale: Yellow Fever, 1793 Epidemic



AMERICAN
PHILOSOPHICAL
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A MALIGNANT TALE: YELLOW FEVER, 1793 EPIDEMIC

Introduction

In 1793 an epidemic of yellow fever struck Philadelphia. Through the personal letters of Philadelphians we can explore their experiences of this outbreak.

In this activity, learn how one Philadelphian and his family endured the yellow fever epidemic. Discover the role of the Free African Society in caring for Philadelphians affected by yellow fever. Understand the sacrifices they made.

Consider, **what happens in a diverse community like Philadelphia during an epidemic? To whom do we look for help and answers?**

The Malignant Tale is an interactive lesson about early U.S. History and the history of Philadelphia. It was written for learners in grades 5 through 8. It contains content that deals with death, race, and medicine.

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LEARNING OBJECTIVES



- Investigate the yellow fever epidemic that took place in Philadelphia.
- Learn how Philadelphia's scientific community responded to the yellow fever epidemic.
- Examine how race impacted Philadelphians' experience of the yellow fever epidemic.
- Reflect on one's own perceptions of scientific and medical practices.

- Critically analyze primary source documents.
- Practice critical thinking skills and reflect on source bias.
- Practice reading cursive handwriting.

SKILL OBJECTIVES



Room nor do I intend it. I have been near the Door & spoke to
her twice & have had Garlic or Sugar constantly in my Mouth
besides using the Vinegar & Salts
So that the fever I am not quite so bad in these respects

is tenderly nursed by 3 black. one of them is an excellent person; the
one here now: she has little or no fever: but cold all over
our mother

manner - fill an iron pot with layers
of Charcoal & Mismstone, light a fire
on the top with a few chips & it will
burn slow by several hours filling the
room with a suffocating smoke -

INSTRUCTIONS

- Review with students the Introduction and Set the Scene sections for this activity.
- Divide students into groups and distribute the letter strips. Have students read the strips and arrange them in response to questions on the Storyboard. See Storyboard Instructions for more details.
- Discuss activity together as a larger group. Contextualize the letter strips using the information in Discussion section.
- For a sensory experience, collect garlic (minced is best), white vinegar, water, and a hard boil egg.
- Additional discussions questions are also provided at the end for deeper analysis.

SETTING THE SCENE

■ Staging Question:

- Many of us have had a cold or flu, or have witnessed family and friends experience these illnesses. What are some ways people experiencing a cold or flu take care of themselves or are cared for by others?
 - Do we take medicine? Do we stay in bed or try to get more sleep? Are there certain foods we eat or avoid? Do we change anything about the room the sick person is in?
 - What are some of the things we do to prevent getting sick in the first place?

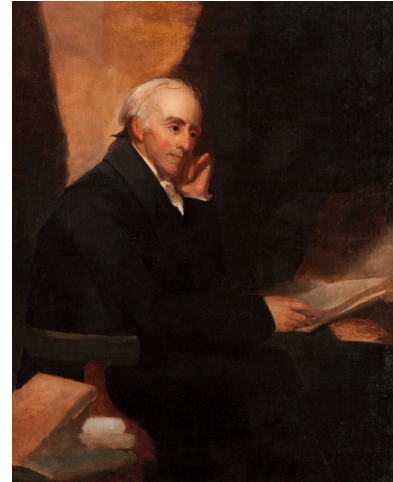
■ What is yellow fever?

- Yellow fever is caused by a virus that people can get through a mosquito's bite.
 - A virus is a germ that can cause people to be sick. The cold and the flu are also caused by viruses.
 - To help stop the spread of viruses we wash our hands often, especially after leaving the bathroom and before eating or touching any food.
- The yellow fever virus is spread by a type of mosquito (*Aedes aegypti*) usually found in tropical areas. It can also survive in places like Philadelphia during the hot weather.
 - This same mosquito spreads the Zika, dengue fever, and chikungunya viruses too.
- Yellow Fever has two stages of symptoms:
 - The acute (or immediate) phase: fever, headache, chills, nausea, vomiting. (Kind of like the flu.)
 - The toxic (harmful) phase:
 - Jaundice, or when one's skin turns yellow because of liver damage.
 - Delirium and confusion.
 - Bleeding from the nose, mouth, and eyes at times.
 - Throwing up black vomit, which is partially digested blood.

SETTING THE SCENE

What's Happening in Philadelphia in 1793?

- Philadelphia is the capital of the United States, as well as a center of trade, government, medicine, and science. It is where the first hospital and medical school in North America were founded.
- It is also important to know about the Gradual Abolition Act of 1780. This act sought to end slavery in Pennsylvania. It also ensured enslaved people who were brought to Philadelphia were legally freed after six months in the city. As a result there was a thriving free Black community in the city.
- The population of Philadelphia was about 50,000, with a Black population of about 2,159. 310 of these 2,159 were enslaved.
- Out of the 50,000, 5,000 people would die from yellow fever- that's 10% of the population!
- Philadelphia's scientists and doctors were unsure if yellow fever was contagious, that is if it could spread from person to person. Philadelphia was the center for medical learning in 1793. A lot of ideas about treating yellow fever were written there and collected by places like the APS.
- In 1793, doctors weren't curing diseases, but treating symptoms. Ideas for treating yellow fever symptoms ranged from getting fresh air to bloodletting.
 - Bloodletting is when a doctor would cut a patient and allow some blood drain out.
 - In the 1700s they believed that when you were sick you had an imbalance of body fluids called humors. Too much of one humor would make you sick. To get rid of excess humors, doctors would bleed a person to restore the balance.
- The hardest thing to understand while looking back, is that they didn't know what caused yellow fever. It took over 100 years to identify the cause.



STORYBOARD INSTRUCTIONS

In this activity, organize letter fragments from Caspar and Catherine Wistar Haines to reveal their experiences during the yellow fever epidemic of 1793. In 1793 Caspar sent his family to their other house in Germantown, known as the Wyck House. But, Caspar and Catherine stayed in Philadelphia to take care of their mother who was sick with yellow fever.

- Print out the Storyboard “A Malignant Tale” and the letter fragments. The letter fragments are double sided. Cut the letter fragments out.
- Divide students up into small working groups. Give each group copies of all four letter fragments cut into individual fragments. Each group should also have a copy of the Storyboard.
- Encourage students to work together to read the cursive writing first. If that is too difficult, they can flip the fragments over to read the transcriptions on the back.
- Students work together to arrange the fragments chronologically (before getting sick, during the illness, after being sick). There is one decoy strip of letter so they will not fit one of the strips in the chronology.
 - Before (preventatives): What does Caspar do to prevent himself from getting yellow fever? Does Caspar take or do anything in particular to protect himself from yellow fever?
 - During (Seeking aid): What does Caspar witness when his mother is sick? Who cares for Caspar’s mother?
 - After (response to illness): What does Caspar do after his mother’s death to get rid of any yellow fever left in the room? What does Caspar do to clean the room?
- As a class, now turn to the Discussion section to explore each letter fragment in more detail.

TIPS & TRICKS

- Having trouble figuring where a fragment fits in? Consider the questions.
- Need help figuring out the cursive handwriting? Flip the letter over to see a full text transcription.
- If you're doing this at home with younger kids, take out the decoy letter strip.
- Look for context clues after reading the questions.
- Flip back and forth between the cursive and the printed back and read the cursive together.

DISCUSSION

■ Before and the Prevention of Yellow Fever

Answer: “I have not been in the Room nor do I intend it. I have been near the Door and spoke to her twice and have garlick [garlic] or segar [cigar] constantly in my mouth besides using the vinegar and salts. So that thee sees I am not quite so bad in these respects.”

- No one knew if it was contagious or not. Remember, they didn’t know it at the time that yellow fever is actually spread by mosquitos, meaning yellow fever is not contagious.
 - Contagious means an illness can be spread from one person to another through direct or indirect contact.
 - If one person is infected with a contagious illness and comes into contact with a group they can spread it to everyone in that group. Then, all those people in the group will spread it to more people and the illness will continue to spread to the rest of the population.
 - Individuals can help prevent the spread of a contagious illness in several ways. They can practice social distance, wear a mask, quarantine, seek medical advice, and continue to use proper hygiene or clean practices. Does Caspar do any of these things?
- No one knew what caused it! How would you feel if people were getting sick and you didn’t know what caused it?
 - They did observe that there were more cases of it around the port.
 - Some people thought it was from bad coffee beans stored by the docks and others thought it was a miasma, that is something bad in the air.
 - People also incorrectly blamed refugees from Haiti.
 - In the 1790s refugees arrived in Philadelphia from Haiti. They were fleeing the violence from the Haitian Revolution. This included enslaved or formerly enslaved Africans. Although Philadelphia was a home to a rising abolitionist movement, this sudden increase of Black enslaved and free people to the city created racial fear and anxiety in the city’s white population.

DISCUSSION

■ Before and the Prevention of Yellow Fever (Cont.)

- All this helplessness and death created enormous fear in Philadelphia.
 - Around 17,000 (out of 50,000) people left the city to get away from yellow fever.
 - Do you think you could leave your home, not knowing when or if you could return?
 - What would be involved in leaving? Where would you go? How would you get there? What would you take?
 - Who do you think left? Who do you think stayed in the city?
- Other people were left in the city to take care of themselves and others.
 - How did Caspar treat his mother? Was he in the room with her?
 - No, he was on the other side of the door, keeping his distance.
- What specifically did Caspar do to help prevent himself from getting yellow fever?
 - He always had garlic or a cigar in his mouth. What do those things have in common?
 - They're smelly! If you ever had a really garlicky garlic bread before, you know afterwards people are avoiding you. Caspar was hoping that the garlic or cigar would keep the miasma (or the bad air) away.
- **Sensory experience:** If you have garlic, have someone take a small bite of it and see their reaction. Afterwards let that person have a mint.
 - How does it smell? How does it feel in your mouth? How does it taste?
 - Why do you think Caspar thought this would keep illness away?

DISCUSSION

■ During and If Infected...

Answer: “Our mother is tenderly nursed by 3 blacks, one of them is an excellent person; The doctors are here now: she has little to no fever; but cold all over.”

- Caspar’s mother had reached the final stages where she seemed to have lost the fever. But if you remember the symptoms listed on page 6, the fever would come back and later she would die.
- What was the survival rate?
 - 11,000 people are recorded as contracting yellow fever in 1793. Of those 11,000, 5,000 recorded to have died. That means, if you contracted yellow fever, you had a 45% chance of dying.
 - Out of the 5,000 recorded deaths, at least 240 were Black people. However, records were not as reliable when documenting Black Philadelphians deaths.
- How were the sick treated? Who took care of them?
 - There were many treatments tried, including blood letting, vinegar, and fresh air.
 - The sick were also isolated from the healthy.
 - Dr. Benjamin Rush called on the Black community and the Free African Society for help.
 - Rush incorrectly thought that Black Philadelphians were immune to (could not get) yellow fever. Rush told the public that Black people from areas where yellow fever occurred, like Haiti, were immune. He then believed that Black people in America were thus immune. He published this idea in a Philadelphia newspaper.
 - The Black community did get yellow fever, but continued to provide help for the city.

DISCUSSION

■ During and If Infected... (Cont.)

- Absalom Jones, Richard Allen, and William Gray were leaders in the Free Black community. From their community they recruited nurses to care for the sick and gather people to take care of the dead bodies.
 - Absalom Jones was a minister in the Methodist Episcopal Church and a co-founder of the Free African Society.
 - Richard Allen was minister, educator, founder of the first African Methodist Episcopal church, and co-founder of the Free African Society.
 - William Gray was a fruit seller and was a part of the Free African Society.
- The Free African Society was founded to provide help to the African American community in Philadelphia. They also developed leaders among its community.
- At one point Jones and Allen could not recruit any more volunteers. So they hired men to help carry the dead yellow fever victims.
- After all their efforts, some accused the African American community of wrongdoing and taking advantage of the sick and dying. Mathew Carey published such ideas in his pamphlet, *A Short Account of the Malignant Fever*.
 - The rates paid to white nurses and Black nurses during this period were roughly equal. But there was public outcry about the supposedly extortionate wages demanded by Black nurses.
- Jones and Allen responded to his claims and defended African Americans in their pamphlet, *A Narrative of the Proceedings of the Black People During the Late Awful Calamity in Philadelphia in the Year 1793; And a Refutation of Some Censures Thrown upon Them in Some Late Publications*.
- How were Absalom Jones and Richard Allen's experiences of the yellow fever epidemic different from the experience of Caspar Wistar Haines?

DISCUSSION

■ During and If Infected... (Cont.)

- **Sensory experience:** People would use vinegar as a way to treat the symptoms of yellow fever. They would drink it and soak their clothes in it. Mix 1 tablespoon of white vinegar with $\frac{1}{4}$ cup of water.
 - What does the mixture smell like? Imagine wearing clothes that smell like this all day.
 - What does the vinegar taste like? Does it sting?
 - Think about cherry cold medicine. Your doctor says it won't taste like medicine, but once you drink it, it has that medicinal taste. Same thing with the vinegar, when you drink it it has a sting to it so people thought it was working to keep them healthy. Though vinegar has some healthful properties, it is not a cure for yellow fever.

DISCUSSION

■ After illness and responses

Answer: “Fill an iron pot with layers of charcoal and brimstone, light a fire or the top with a few chips and it will burn slow by several hours filling the room with a suffocating smoke.”

- Unfortunately Caspar’s mother does not survive yellow fever. But they worry the miasma, or bad air, is still in the room and will make them sick. So, first they need to clean the air in the room.
 - What does Caspar put into the pot to clean the room? How does Caspar describe the smoke?
 - What is brimstone? It’s an old name for sulfur, a yellow mineral with a rotten egg smell.
 - Think about being in the room with the windows and doors shut and the smell of sulfur and smoke filling the room. How would you feel in that room?
 - People would use smoke and sulfur to cleanse objects and rooms of the miasma or bad air.
- Burial: Only those who could afford a burial would be buried.
 - However, places like Washington Square became a potter’s field.
 - Potter’s fields, were for strangers or for people who had no money for a graveyard burial. People were buried in these places without coffins, markers, or headstones.
 - Many of the victims of the 1793 yellow fever were buried there.
- **Sensory experience:** Cut open a hard boiled egg.
 - Smell the hard boiled egg(s). What does it smell like?
 - The cooked egg yolk smells like sulfur. Imagine a room filled with that smell.
 - Why do you think this smell was used to clean the air?

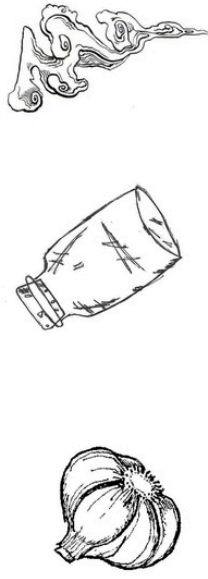
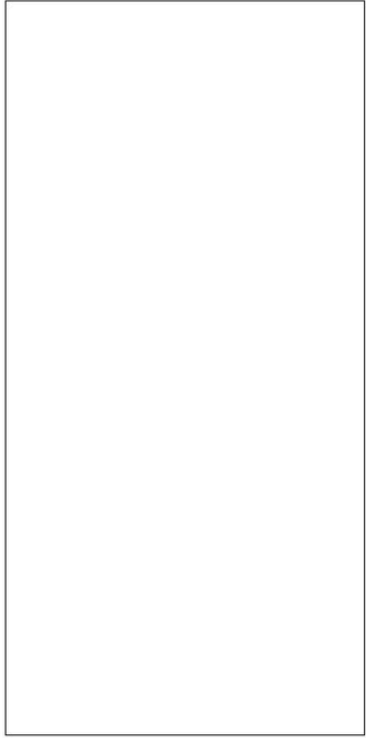
DISCUSSION

■ After illness and responses (Cont.)

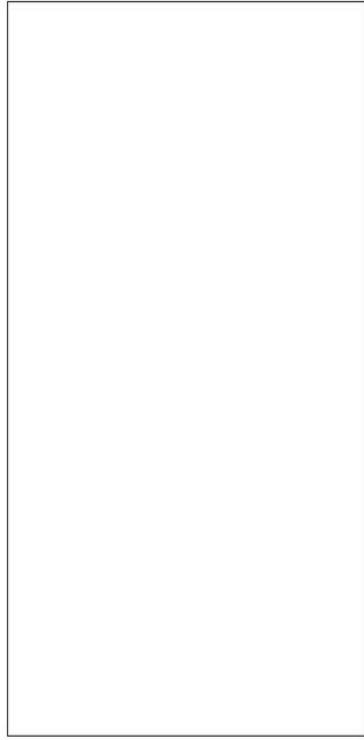
- When does the epidemic end?
 - When the fall and winter arrive, the cold kills off the mosquitoes which stops yellow fever.
 - Philadelphia slowly comes back as a functioning city with government, trade, and commerce.
- Who did the epidemic affect?
 - Everyone.
 - It took heaviest tolls in neighborhoods with a lot of stagnant water, especially around Dock Creek. Mosquitos breeding in stagnant water.
 - Many wealthy Philadelphians were able to leave the city for their second homes. They were less affected than people of the middle and lower classes who were unable to leave Philadelphia.

A Malignant Tale

B E F O R E



D U R I N G



WHAT TO DO



"I have garlic or a scigar constantly in my mouth..."

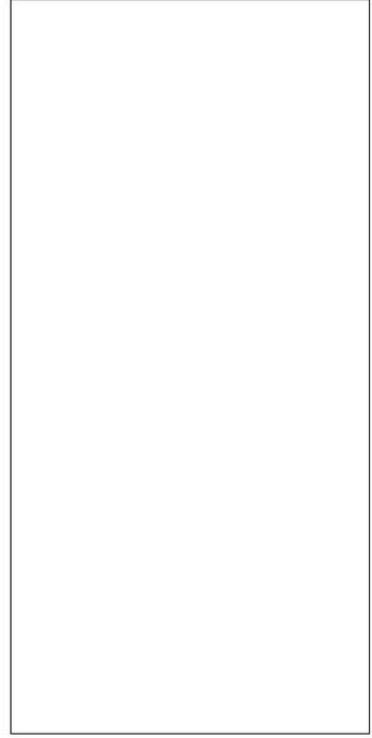


"They say vinegar is the best to keep the body open"



"Fill an iron pot with a layer of ehareool and brimstong."

A F T E R



Letter Strips Front

Room nor do I intend it. I have been near the Door & spoke to
her twice & have Garlick or Segar constantly in my Mouth
besides using the Vinegar & Salts
So that the fever I am not quite so bad in: these respects

our mother
is tenderly nursed by 3 black. one of them is an excellent person: the
D^{rs} are here now: she has little or no fever: but cold all over: ~~breath~~

Letter Strips Back

I have not been in the Room nor do I intend it. I have been near the Door and spoke to her twice and have garlick or segar constantly in my mouth besides using the vinegar and salts. So that thee sees I am not quite so bad in these respects.

Our mother is tenderly nursed by 3 blacks, one of them is an excellent person; The doctors are here now: she has little to no fever; but cold all over.

Letter Strips Front

Manner - fill an iron pot with layers
of Charcoal & Murrstone, light a fire
on the top with a few chips & it will
burn slow by Leucase horns filling the
room with a suffocating smoke -

We are as yet blest with health thro
great mercy - tho my small family grow very
anxious -

Letter Strips Back

We are as yet blessed with health thro
great mercy — tho my small family
grows very anxious.

Fill an iron pot with layers of
charcoal and brimstone, light a
fire or the top with a few chips
and it will burn slow by several
hours filling the room with a suff-
ocating smoke.

ORIGINAL DOCUMENT

Casper Wistar Haines to Hannah Marshall Haines, October 1793, APS.

My Dear ^{Oct 1793}
I have the satisfaction of informing thee that our
Dear Mother continues rather a little Better. her Fever came on
about an hour ago. but was not high or severe by any means. She
now goes of a little she has taken some nourishment in the Morning
& just now has had a Dish of Tea - I have not been in the
Room nor do I intend it. I have been near the Door & spoke to
her twice & have had her or Sugar constantly in my Mouth
^{besides using the Vinegar & Salt}
So that the fees I am not quite so bad in these respects as the made
me out this Morning and as to my being here all I can say is
that it feels more like my home & Place than I have felt
for some time - they have two very clever Black Women to
attend her & Sister Katy goes into the Room to attend her
as affectionate & good a creature as ever was stay down stairs
with me & dont let me stir out of Doors without her - these
Circumstances in endeavoring to assist my poor Deser'd
Sister this my Desire to stay with her. If she can be pre-
vail'd upon to consent to it - If however nothing will
reconcile it - I must & will come out - as Mother says it
will distress her too much to have the come in - I have
felt more still & quiet than any Day this long time lay
down after Dinner & got a refreshing Nap - I can find a letter
to the Works Monday Evening, by which you will hear how the
The Person that goes from Town has Directions not to enter
but leave the letter in sight of some of them - Coz Tommy Wistar
& Diner's say it wont do at all for thee to come in - there has
been several Removals this Morn. but have not heard who
they are as we are very still & few come here - Coz So^r Mat
lack & Samuel Powell (late Mayor) & Duplessis Wife are gone
& it is said Mr Leddon also. - I hope Mr Janery & Wife will
stay with you as long as they can, Mother desires her Love
to them & desires Mr. will try the Willow Bark - I beg my
Dear the will not attempt to come in as I will come to
the Works to see of the Desires - Sister & Daul Off you in
near Love to you all
Thy's CWH -

Mother's Fever is now off & which leaves her exceeding
Weak & languid

ORIGINAL DOCUMENT

Catherine Haines to Hannah Marshall Haines, October 1793, APS.

Oct 1793

my dear Sister
as Brother is writing to Nathan, I write to thee; my
son our dearest Parent, has laid pretty easy, & slept during the night
sensible at times, & lost at others: she appears in little or no pain, some
time writhes, painfully as to us. He has little fever: & is every low indeed
but my dear, if thou saw how helpless & writhing she is, thou wouldst be sorry
to see her released: as a glorious Sabbath of rest is no doubt prepared
I've kept a pretty full acct. for your satisfaction: when we consider how
many, many weaknesses she has to trudge thro: & how anxious to be released.
I may truly say, with humble thankfulness, that I feel resigned: & willing to
give her up: tho: none but us, my dear, knows the Lp, the great Lp
we shall sustain: but a happy change to us: tis cause of great thankfulness
that my dear Cash, is perfectly cleave, & great comfort to me: he is quite
brave. does not, nor not once been in mother's room, but walk in Luke room
which is much wet with vinegar: he has wrote Uncle White; & now is writ-
ing to Nathan Mathack, at Jeru Grefson desire. Joseph Mathack wife is
quite ill: Philip is going: we hear very little, scarce any thing: god's children
still living, Ables, Drinkers brave: Jack says, there was not one buried in
our ground this morn. D. Coffey, & D. Wister comes to see us, & offer thine ser-
vice: I am comendably supported: & slept some last night: our mother
is tenderly nursed by 3 black, one of them is an excellent person: the
Gos are here now: she has little or no fever: but cold all over: I've
thru myself for our sakes: & content ~~that~~ to stay were there is: -

Sister Cathy wrote so far have only to add that
I am brave & have slept unusually well & find con-
pliments in writing to divers Persons - the more I
consider thy proposal of coming to our House the
more uneasy I feel - Doctor Park is present & says
it would be the height of impudence for any body
to go into a House that has been so long shut up, that
thou the wife Content thyself to stay where thou is
for the present. the wife tells Frederick what I mentio-
ned that there's no prospect of doing any thing here
at - thine embrace.

CWH

We hear they are pretty well at Brandon's

ORIGINAL DOCUMENT

Casper Wistar Haines to Hannah Marshall Haines, undated. APS.

Let all the clothes, of every description, which were used during the indisposition, be collected in one room, together with the Beds, & all the articles of Bedding, of every description - Then close the windows & make a fire in the following manner - fill an iron pot with layers of Charcoal & Mianstone, light a fire on the top with a few chips & it will burn slow for several hours filling the room with a suffocating smoke - all the wooden utensils, such as tables, Chair bedstead &c, ought to be placed in the room & the smoke should continue forty eight hours - The articles which are made of Metal should be previously ^{or whitewashed} covered with chalk dust to prevent their rusting - After being thus smoked, the Beds, Pillows & woollen clothes should be placed in the

ORIGINAL DOCUMENT

Josiah Matlack to Catherine Wistar Haines, October 1, 1793. APS.

Catherine Haines

October 10. m. 1793

Dear cousin

I sincerely sympathize with you upon this trying occasion - I was up at your feet of the late this morning for the purpose of clearing your sister's ear - was informed that she was better - but did not flatter myself too much upon it -

I will save the trouble of sending to cousin Abby or Beulah - by informing them myself & if you wante for any thing be sure to let me know -

We are as yet happy with health thro' great mercy - tho' my small family grow very anxious

Give ~~my~~ love to cousin Catharine & draw possibly thro' her - and accept the same yourselves

Thy affectionate Nephew
Josiah Matlack

Catherine Haines



DISCUSSION QUESTIONS

- Are all communities/people in a city affected equally in an epidemic (or a pandemic)? Why or why not?
- Who do we look to for help in an epidemic? Who do we look to for answers? Why?
- Who do we consider essential in a crisis like an epidemic? Why? Are they essential when there isn't a crisis?
- How can an individual help or hurt the effort to stop the spread of a contagious illness?

AMERICAN PHILOSOPHICAL SOCIETY

The American Philosophical Society, the oldest learned society in the United States, was founded in 1743 by Benjamin Franklin for the purpose of “promoting useful knowledge.” In the 21st century we sustain this mission in three principal ways. We honor and engage leading scholars, scientists, and professionals through elected membership and opportunities for interdisciplinary, intellectual fellowship, particularly in our semi-annual Meetings. We support research and discovery through grants and fellowships, lectures, publications, prizes, exhibitions, and public education. We serve scholars through a research library of manuscripts and other collections internationally recognized for their enduring historic value. The American Philosophical Society’s current activities reflect the founder’s spirit of inquiry, provide a forum for the free exchange of ideas, and convey our conviction that intellectual inquiry and critical thought are inherently in the best interest of the public.

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