#### **Background Information**

Grade-level: 10-12

Subject Area: Health Science I

**Topic: Infectious Disease: Yellow Fever in New Orleans** 

This will be an activity within the unit of study on infectious diseases taking one to two 90 minute blocks to complete depending on the length of discussions.

#### **Common Core Standards**

**CCSS.ELA-LITERACY.RH.6-8.2:** Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.

**CCSS.ELA-LITERACY.RH.6-8.4:** Determine the meaning of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies.

**CCSS.ELA-LITERACY.RH.9-10.1:** Cite specific textual evidence to support analysis of primary and secondary sources, attending to such features as the date and origin of the information.

**CCSS.ELA-LITERACY.RH.9-10.2:** Determine the central ideas or information of a primary or secondary source; provide an accurate summary of how key events or ideas develop over the course of the text.

#### **Louisiana Social Studies Grade-Level Expectations**

**6.1.1, 7.1.1, 8.1.1, US 1.1:** Produce clear and coherent writing for a range of tasks, purposes, and audiences.

**6.1.3:** Analyze information in primary and secondary sources to address document-based questions.

#### **Essential Questions**

- 1. What can we learn about outbreaks of yellow fever in New Orleans from primary sources?
- 2. How can we verify memories and recollections from oral histories?

### **Learning Objectives**

- 1. Describe yellow fever in New Orleans during the 19<sup>th</sup> century.
- 2. Discuss the impact of yellow fever on residents of New Orleans.
- 3. Discuss the impact of images to relay messages about yellow fever.

#### **Activity Assessment**

- 1. Observation
- 2. Worksheet completion
- 3. Class Discussion

#### Materials

- 1. Rose West Hastings Oral History & Transcript, The Historic New Orleans Collection, MSS 772.6
- 2. Yellow Fever Obituary, The Historic New Orleans Collection, 1974.25.11.160
- 3. <u>First Aid Advice, Rules to be observed in Yellow Fever</u>, The Historic New Orleans Collection, 1974.25.11.158
- 4. <u>Educational Points Concerning Yellow Fever by Edmond Souchon</u>, The Historic New Orleans Collection, 69-185-LP.8
- 5. <u>Howard Association Faithful Service Award</u>, *The Historic New Orleans Collection*, 1978.51.3 a,b
- 6. <u>Member of Howard Society treating a yellow fever victim</u>, *The Historic New Orleans Collection*, 1974.25.11.128
- 7. Elegy for the Old South (No. 2), The Historic New Orleans Collection, 1981.247.2.57
- 8. Yellow Fever, The Historic New Orleans Collection, 1956.21.26 a
- 9. <u>Yellow Fever Fantasia (Vision)</u>. <u>Love Against the Fever. A Tragic Drama of the Fever.</u>, *The Historic New Orleans Collection*, 1981.247.1.599

#### **Procedures**

- 1. Divide the students into four small groups. Distribute Handout #1 (Excerpts from Rose West Hastings Oral History) and Image #1 (Yellow Fever Obituary). Share-read the text within each group. Instruct each group to develop at least two questions and two important facts from their readings of the oral history and/or the obituary and write them on large post-it notes around classroom.
- 2. Distribute Handout #2 (*Educational Points Concerning Yellow Fever*) and the Educational Points Worksheet. Read over the first nine educational points with students and clarify murky points. Have students in their groups read through the rest of the 28 points and complete the worksheet. Each group will write any confusing points or questions for further research on post-it notes.

- 3. Distribute *First Aid Advice* article and worksheet to small groups. Read over the Sanitary Treatment of the Sick Room with students then have students read Sanitary Treatment of Neighborhoods and Treatment of Patient in small groups. Have students complete the "First Aid Advice, Rules to be Observed in Yellow Fever" worksheet individually or in small groups. Write any confusing points or questions for further research on post-it notes.
- 4. Distribute the Yellow Fever Images worksheet and one image (the Howard Society Medal/image will have 2 images) to each group for analysis. Read over the introductory paragraphs with students.
- 5. Have students complete the yellow fever images worksheet individually or in small groups. Share out with other groups what they discovered in the images. Write any confusing points or questions for further research on post-it notes.
- 6. Review each post-it note with students to check for understanding. Have students use Internet to verify/clarify.

#### Handout #1

# Excerpts from Rose West Hastings Oral History, *The Historic New Orleans Collection*, MS772.6

RWH: Now, continuing our little conversation about things of family interest. They're really trivial to anybody else, but I think within the family they have some interest. There were two conditions down in New Orleans that caused the greatest fear, and they were real and well grounded, those fears. One was high water and the other was yellow fever. And of course the volume of waters was apt to go over its banks anytime in the spring, and it did. But New Orleans's great concern was that the banks would not be broken near or within the city limits, because that would be too disastrous to even contemplate. And besides you know, if the river was allowed to go on a rampage and break over its levees wherever it wanted to, it would cut a fresh channel for itself and New Orleans would have been left high and dry, no longer a seaport. All of that has come under control now, and there's no real fear connected with the river. They have spillways and those are used in times of very great danger.

RWH: Now that other dread that we lived with in the summertime was the outbreak of yellow fever, and that was horrible. The Journal of the Plague Year gives us a written account of how things might be in an epidemic of any kind. I was, I don't know how old I was, it was in 1897, I came down with yellow fever. And what happened when a household was stricken in that way, it was put under quarantine with the guards at our front door, our front gate because of the high six foot fence around the square of ground in which the house was situated, and on the side street where the driveway came out, there was also a guard stationed so that there was no way for anyone to get in or out. They just sat there all day and all night. And a yellow flag was tacked up on the gate post so that everybody was warned.

AHM: [asks a question off-mic]

RWH: What kind of a guard? Well that was a city function. The Board of Health saw to it, you see, that the contagion should not be carried, and here were the darling little mosquitoes flitting back and forth, guards notwithstanding, but then they didn't know, you see? Who was it? Walter Reed, of course, was starting not too much later than that, and maybe had been doing his experiments at that time, but he hadn't absolutely demonstrated. He used himself as a test for it, and absolutely proved that there was this one type, I think they called it the Stegomyia Fasciaia or something at the time [Note: It is now known as the Aedes aegypti mosquito] that carried the germ of yellow fever having bitten someone who had the germ in his blood. So I came down with it and then later my brother came down with it, and here were the guards at the front door, and the back door. And only the doctor could come in and go out. There were not telephones in those days. At least we didn't have one. They were a rarity. But if one had to get drugs,

I think one of the guards would go to the drugstore for it, and for provisions, one of the guards would have to go. Grandfather was a guard that summer, and Caroline our German housekeeper was in the house, and she was quarantined. Joel our yard man was also quarantined, and Sam Bell the driver couldn't get loose either. I sometimes wonder if, in the dead of night they didn't scale the fence on the opposite side of the square and get their freedom. What little difference it made. Well, anyway, I don't know how sick I was, or how sick my brother was. Yellow fever was nothing to play with. It was a very dangerous and a very quick killer. Seems that Grandmother Brice had had a great deal of experience nursing yellow fever, and I was told, not by her because she admitted very little, talked about herself very little, but her friend said to me, "Do you know how I met your grandmother?" She said, "It was during one of the yellow fever epidemics and your grandmother came to our house to give us nursing care and administer our medicines, and she had organized a nursing service among the ladies who were experienced, who had escaped the disease and were experienced in nursing it." Well, anyway, here were Willie and I down with the yellow fever and nothing very much to do, apparently not aware of too much because I think we were [inaudible interruption from off mic] Yes a very high fever goes with it. The guards would entertain us by sending in carved vegetables [laughs]. I remember the beautiful white turnips that were carved to look like camellias. It was delightful. I don't remember much about it except that I came out successfully. I don't even know how long I was sick. But anyway, Grandmother did her usual good job of bringing us through what was a very deadly peril, but the death rate in the city was high. And I think the epidemic of '97 was the last of the great epidemics. But there would be meetings in our houses in the summertime whenever there was a yellow fever scare, because people immediately clogged the railways. They ran away like frightened birds from this thing. And I remember one meeting that was held at our house, and our uncle Dudley Coleman was there. They were planning strategy and so on. And I remember Uncle Dudley saying, "I don't think this is yellow fever at all. I don't think we have anything to dread." He said, "If you'd like my opinion, I think it's the white feather fever." I remember the term, but at the moment I didn't understand what he was talking about. It was just another scare. So that's about all the account I can give you of yellow fever.

Editor's Genealogical Notes: Mary Bella Prague (1829-1923) married Henry Theodore Sherman. They had 2 children, Rosina (1855-1885) and James Sherman. Rosina Sherman married James William West (1884-1943) and had William (Willie) and Rosina West (1888-1970 - the subject of this interview). Henry Theodore Sherman died in Nicaragua, and Mary Bella Prague Sherman married A. G. Brice (1830-1912). Rosina Sherman died when her daughter was 6, and her two children, Rosina and William West went to live with their grandmother, Mary Bella Prague Brice (in this interview, referred to as "Grandmother") and A. G. Brice, who was their step grandfather.

**Image #1**Yellow Fever – Obituary, *The Historic New Orleans Collection*, 1974.25.11.160

**DIED....**In this city, of yellow fever, after a painful and protracted illness, on Saturday, the 5th inst., Mr. C. A. ZEISEMAN, formerly of St. Louis.

The decease was a young man of great promise, respected and beloved by all who knew him. Though residing here but a few years, he had identified himself as one of our citizens, and his loss is deeply felt by a large circle of sorrowing friends. He was one of the first who was prostrated by the pestilence, but possessing a remarkably strong constitution, he bore up manfully under his sufferings, and the hope was cherished that he might recover. But exhausted nature gave way at last, and his spirit has flown, we trust, to a better world. It may be some solace to his afflicted relatives to know that during his illness he was surrounded by every comfort, and received every attention.

#### Handout #2

Educational Points Concerning Yellow Fever by Edmond Souchon, The Historic New Orleans Collection, 69-185-LP.8

# Educational Points Concerning Yellow Fever, to be Spread Broadcast by the Press, Pulpit, School-Teachers and Others, and by all Men of Good Will.

- 1. Land Quarantine is a question of education by demonstration and not one of coercive legislation.
- 2. It is the pen and the cross that have educated and civilized the world, not the sword and the gun.
- 3. It is by practical actions that the people will be reassured and not by agreements and persuasions based on words, assurances or legislation.
- 4. To demonstrate practically to the people that all possible care is effectually taken to prevent infection from reaching them, is the best and only argument they should yield to.
- Hundreds of men have been turned out of the Detention Camps,
  "Hutton and Fontainebleau," into clean localities without infecting them.
- 6. Car loads of freight have been carried under the Atlanta Regulations from infected localities to non-infected ones without infecting them.
- 7. Parishes adjoining New Orleans have voluntarily petitioned the State Board to hold communication with that City at the cost of being quarantined themselves by the balance of the State, and they have no cause to regret it.
  - The City and the Parishes have been free from panic, and exodus took place nowhere.
- 8. Rayne, La. is a most beautiful example of the result of education. Whereas last year she would suffer no train to go through, even with windows down and at full speed, going to the extreme of tearing up tracks and burning bridges; this year she has laid down the gun and the torch for the Atlanta Regulations and is peaceably and cheerfully doing her share in the noble work of education.
- Isolation and Detention, i. e., quarantine, are only adjuncts.
  They have never done any evident good until antisepsis was added.

- This was demonstrated for ships by the advent and splendid achievements of Holt's System of Maritime Sanitation.
- 11. Present quarantine, as rigid as all the powers and extreme energy of the Mississippi State Board of Health applied it, did not prevent the disease from spreading around and away from the original points. It looked as though it was attempting to quarantine the Grippe.
- 12. The results of Antisepsis were proven in the Isolation Hospital in New Orleans in 1897, when the citizens threatened to burn, and actually began to burn, the Beauregard School, which it had been decided to turn into a Yellow Fever Hospital. They said, that it would be a pest house that would infect all the neighborhood, and yet the final results proved, to the amazement of all, that not only not a single case in the neighborhood had come from it, but that within its own walls no case developed among any of the Sisters, nurses and attendants, although several were non-immune.
- 13. This was also the case in the Touro Infirmary and the Hotel Dieu.
- 14. The disease can also be kept confined to the patient alone in a room and the room preserved from infection, and therefore free from danger to the non-immune attendants, if the patient is taken hold of in time and Antisepsis thoroughly practiced. Any exception to this assertion is due to some oversight in the application of the regulations of Antisepsis.
- 15. The virulence of the disease is much diminished. The yellow fever of to-day is not the yellow fever of old times. It is now so comparatively mild that it stands to yellow fever almost like Varioloid stands to Variola, i. e. small-pox.
- 16. It should be called Yellowoid.
- 17. The compiling of the localities from which complete records are obtainable show that the mortality is about 4 or 5 per cent.
- 18. The following figures prove conclusively the truth of this assertion. The State of Louisiana has a fairly complete record up to October 15th, for the following localities:

Franklin	340 c	cases	and	10	deaths.
Wilson	_ 303 c	cases	and	7	deaths.
Baton Rouge	176 0	cases	and	4	deaths.
Houma	40 c	cases	and	2	deaths.
Clinton	40 c	ases	and	0	deaths.
Jackson, La	15 c	ases	and	0	deaths.
Cinclare	11 c	cases	and	1	death.

Total, - 925 24

- 19. The figures from other localities are not here taken into account because believed to be incomplete, owing very likely to the fact that many mild cases are overlooked.
- From an official telegram dated October 15th, 9:52 P. M., the total cases in Mississippi, including McHenry, are 736 and 48 deaths, (this includes Jackson's 129 cases and 6 deaths.)
- 21. The total number of cases in the two States is 1661, and the total number of deaths, 72.
- 22. The mortality therefore is 4.33 per cent. This, most surely, is not a Quarantinable Disease, and much less so than Grippe, Influenza, Typhoid Fever or Scarlet Fever.
- 23. The Treatment of the disease is more thoroughly understood, and this decreases the fatalities materially, especially if applied at the beginning of each case.
- 24. Antisepsis is the sheet anchor, that is, the destruction of the germs as fast as they leave the body of the patient through the pores of the skin and the other orifices of the body, and before they turn into dust and infect the room, then the house, and then the neighborhood.
- 25 The mortality of the City of New Orleans in 1897 was 298, or about one to one thousand inhabitants. It is less than Grippe, Influenza, Typhoid Fever, Scarlet Fever.
- 26. Quarantine is worse than the disease with such a mortality. It should be abolished and replaced by the care of our sick by the most approved modern methods. Quarantine should be applied only to diseases with high mortalities.
- 27. Towns and Parishes must organize their Boards of Health and be prepared at a moment's notice to repair to any locality where even a slightly suspicious case exists, and care for it according to the most approved methods as set forth in the printed pamphlets of the Louisiana State Board of Health entitled "Instructions to Medical Inspectors and to Health Officers for the management of Yellow Fever."
- The Atlanta Regulations are the gospel of the new crusade and its missionaries should all be men of peace and good will.

#### EDMOND SOUCHON, M. D.

President Louisiana State Board of Health.

New Orleans, October 20th, 1898.

## Educational Points Concerning Yellow Fever Worksheet

1. What key information is the author trying to convey in his 28 points?
2. What feeling or emotion do you believe the author is conveying as he writes this information?
3. What does the author say causes yellow fever? In the past, what was believed to cause <i>the fever</i> ?
4. Think of something you learned or were told that was later proven to be incorrect. Give a brief description.
5. What are some of the methods used today to make determinations about the causes of diseases?
6. How do these differ from the past? When did this change?

#### Image #2

First Aid Advice, Rules to be observed in Yellow Fever, *The Historic New Orleans Collection*, 1974.25.11.158

#### FIRST AID ADVICE.

#### Rules to Be Observed in Yellow Fever and Suggestions as to Treatment of Patient.

#### Sanitary Treatment of the Sick Room.

1.—Place under mosquito bar and keep patient so protected from mosquitoes during the day and night for three full days, so as to prevent infection of mosquitoes.

2.—Screen openings of the room, doors, windows, transoms, etc.

3.—Fumigate room with sulphur to destroy possibly infected mosquitoes as early as possible after fourth day of fever.

# Sanitary Treatment of Neighborhoods to Prevent Spread of Fever from Cases Introduced.

Destroy the only vehicles of infection—the stegomyia mosquitoes.

Pour into each cistern a cupful of kerosene or insurance oil, and if the cistern be not screened repeat this every week. Pour oil from several points so as to spread it.

Pour oil to cover surface of every collection of water not stocked with fish or removable by drainage.

After thus cutting off the source of supply, fumigate all rooms to kill

Sulphur burned in an iron pot is the surest way, and if used in proper quantity will not injure fabrics or colors. One pound to an average room is sufficient if room be closed, and one hour is long enough in ordinary cases. The fumes of sulphur will not remain long, and household ammonia sprinkled about the room will hasten their departure. Sulphur candles for fumigation are sold by druggists.

The fumigation may be done in the morning and the room will be free of odor by night, and it should be done preferably in dry weather. Do not neglect the downstairs rooms in two-story houses.

Other methods of fumigation may be adopted, such as burning of pyrethrum or insect powder, which is not unpleasant, or the volatilizing of liquid chemical preparations, or the spraying of liquids prepared for the purpose, but sulphur is the most certain in results.

Yellow fever is not a filth disease, and ordinary sanitary cleanliness is not effective against it. The removal of filth is commendable at all times, but for the prevention of yellow fever is energy misdirected. The removal of mosquitoes for this purpose is energy scientifically applied.

#### Treatment of the Patient.

Medical treatment should, whenever possible, be directed by a physician, but when a physician is not immediately available the following points in treatment should be kept in mind:

To relieve headache and fever cold applications to the head may be employed.

To promote action of skin, cover with blanket and give hot foot bath, with or without mustard. To encourage action of kidneys, give water to drink at frequent intervals and in small quantities. Use alkalin waters, vichy, seltzer water, etc. Give watermelon juice. To allay nausea, give small pieces of ice to dissolve in mouth.

Do not give solid food of any kind during several days, and feed on milk, principally. An empty stomach is better than a disturbed one, and food will not nourish unless digested. The patient will not starve.

Keep in bed and do not allow patient to sit up. The main part of the treatment of yellow fever is to avoid doing harm.

Get a doctor as soon as possible, and expect from him much advice and little medicine.

QUITMAN KOHNKE, Health Officer.

"Compliments of THE PICAYUNE."

### First Aid Advice Worksheet

1. Give examples of first aid advice in this article that might be harmful and explain what harm it might cause.
2. Give examples of first aid advice in this article that might be helpful and explain why it might help.
3. Might this still be done today? Why or why not?
4. What clues let you know that this is not current first aid advice? List at least 3 and explain.
5. What year do you think this advice was given? Why do you think this?

### **Yellow Fever Images Worksheet**

1. Analyze the image. What do you notice about the people (person), clothing, actions, expressions, or any other details (use objective data)?
2. What do you think those details are supposed to make the reader feel or think (subjective data)?
3. If you have the medal image, what can you say about it? Why might it have been given? Who would be eligible to receive it?
4. How would you describe yellow fever based on the image(s) you analyzed?