

Teaching Guide: Polio Epidemic:

The Miracle in Hickory

Note for Teachers:

This is the Teaching Guide for the Polio Epidemic: The Miracle in Hickory Case Study: museumofthenewsouth.org/schools/polio-epidemic-the-miracle-in-hickory/

Sections:

Background Information

Activity Instructions and Rubrics

Student Objectives

Relevant NC 8th Grade Social Studies Standards



Background Information

The first case of polio, or infantile paralysis, in the United States was discovered in Vermont in 1894. By 1916, New York would have the country's first polio epidemic and by 1952, 57,628 cases of polio were recorded in the United States. The disease most often affected children although teens and adults could also contract the disease. Various places across the U.S. would not allow children into public areas including swimming pools, churches, and movie theaters, especially during the summer months when the disease would spread quickly. Quarantine signs could be seen on house doors where a family member was diagnosed with polio. When a child was sent to the hospital, they would not be able to see their family members for over 14 days. Polio attacked the central nervous system and could leave people paralyzed. People were frightened by a disease that had no prevention or cure. Many theories on the cause of the disease were well known but there were no definitive answers. One idea was the fly theory, which associated the cause to "flies, dirt and poverty". People could be carriers of the disease and spread without knowing they had it. Polio was difficult to diagnose because symptoms varied widely from headache to fever to paralysis.

Polio spread in 1935 through central North Carolina, one of the first southern states to experience the disease. The second wave in the 1940s hit the western portion of North Carolina. Fear spread quickly, with townspeople rolling up their car windows when passing through a town where the disease was spreading.

During the summer of 1944, a polio scare came to Catawba County, North Carolina. Hospitals in Charlotte and Gastonia had to turn away patients. Three men, Dr. Whims, Dr. Hahn, and Dr. Crabtree traveled from Yale, Harvard, and Johns Hopkins to help. The doctors chose the campus of the Lake Hickory Health Camp for the hospital. The campers were sent home and the 62 acre site was transformed into the Hickory Emergency Infantile Paralysis Hospital. These doctors held a town meeting in Hickory and within 54 hours after the plans were drawn, the Infantile Emergency Hospital started taking their first patients. The hospital was built on donations and labor from the townspeople. The United States Army donated cots. Donations were received from the National Foundation for Infantile Paralysis, now known as the March of Dimes. The organization was created by President Franklin D. Roosevelt, who was also paralyzed from polio during his young adult years. Even the governor sent prisoners called, "Angels of Mercy" to work at the hospital. It was a true community effort to help save the lives of the patients, mostly children.

Many advancements were used at the camp including the iron lung, which was a body sized metal tank. This ventilator mimicked the job of the lungs and helped patients breathe. Another



advancement was the Sister Kenny Method which used heat packs on the affected area of the body and gentle exercises as a form of rehabilitation.

The hospital accepted anyone suffering from polio no matter their race or socio-economic level. In the time of Jim Crow laws, the hospital placed races together during the quarantine phase making it one of the first non-segregated hospitals in North Carolina. The hospital received payment from the families that could pay but did not force other families who could not afford care to pay.

The hospital was in existence for 9 months and treated approximately 454 people. Patients came from 74 counties and even some came from out of state. Twelve patients died which was fewer than at any other hospital in the area.

By 1955, Jonas Salk created a vaccine for polio and by 1959, North Carolina ordered that all children must receive the vaccine. Due to the vaccine no cases of polio have originated in the United States since 1979.



Activity Instructions and Rubrics

To start off the study of the "Miracle in Hickory," you can choose to read aloud from Joyce Moyer Hostetter's historical fiction book titled *Blue*. The prologue is a great springboard. Teachers may want to continue reading chapters as students continue to research and learn about this time and comparing what actually happened to the book. View the book prologue on You Tube by doing a search for "throughthewaters", visiting their channel and Videos section, and then scrolling down to *Blue Book Trailer*. Students can begin completing the case study by reading the Student Background and sources and answering the source questions. After finishing source questions, students can complete the Activity section of the case study.

Teacher Information about Source 1:

This is a good overview of what happened in Hickory, NC. It allows the reader to learn about the three main doctors at the hospital. Due to the division of tasks, they were able to quickly create the hospital with community support and cooperation. Students will be able to understand how important their leadership was for the town to come together. This source also encourages the reader to question the phrase "The Miracle in Hickory".

Teacher Information about Sources 2-4:

These sources were chosen to demonstrate the importance the media played during the "Miracle in Hickory". From the local paper to national magazines, word spread about what was happening. The rapid response of the community can be attributed to the Hickory Record and other news organizations all the way up to the national level.

As the author of the article "The 'Miracle' of Hickory: Mass Media and the 'Miracle' Marvin Elliott states, "...In particular, the news reports and, especially, the editorials of the local newspaper, the Hickory Daily Record, served to galvanize public support for the construction and continuing operation of the Hickory Emergency Infantile Paralysis Hospital. It was the action of the newspaper that, in large part, spurred the people of Hickory to action...

...In 1944, on the shores of Lake Hickory in one small town in western North Carolina, the best of the media spurred the best in people--and the result was 'The Miracle of Hickory.' " (https://www.ndsu.edu/pubweb/~rcollins/elliott.htm)

Black Out Poem

 Students will create their own black out poems using the full article from Source
 You can easily research black out poem examples online and share them with students or have them look up examples.



- Give a copy of the full article from Source 2 to each student and give them a few minutes to reread it.
- Then read the excerpt below from Harlan Boyles, former North Carolina State Treasurer, who spent nearly a year in the Hickory hospital recovering from polio.

"The days were long and the nights were long. ... At night, they had those who were in the iron lungs in the same ward, except at the end of the ward. And you could hear the iron lung working, but you couldn't see it. ... It was a weird sound, especially in the wee hours of the night -- that thing pumping in and out, in and out."

(https://www.goupstate.com/story/news/2000/10/01/fight-against-polio-shared-by-many/29625649007/)

- Ask students how his description was different from Helen Ross's description of
 the hospital in the Source 2 article. Possible responses: Boyles was a patient,
 Ross was a parent, Boyles shared experiences that media may not want to
 portray, Ross shared what she wanted the community to know about, Boyles
 shared exactly what happened, Ross added language to motivate the reader.
 Ross's article demonstrates how the use of language persuades readers in the
 community to help in whatever way they could at the Hickory Emergency Infantile
 Paralysis Hospital.
- One way for students to work with language use is to have them examine connotations in the Ross article. Have them circle any words or phrases in the article that have a positive meaning or message about the community working together. Having student's circle the words that create a positive connotation will help them see how convincing the author's voice was.
- Students will then black out any unwanted words they did not circle that they do
 not want others to see. Then they will use the "blacked out" space to create an
 image or design relating to "The Miracle in Hickory." This can be completed in
 just black or they may use color.
- A rubric for black out poems is included.

Modification: Teachers can hand out a shorter version of the Ross article or pick a different shorter article about the "The Miracle in Hickory" for students to create black out poems from. If you would like to find more articles on the polio epidemic, the Hickory Record newspaper is a good source.

Extension: Have students find an article about a community coming together to help each other during the COVID pandemic and create a Black Out Poem with it. When they are done with the second poem, ask them to show connections between the two articles/poems.



Polio Epidemic: The Miracle in Hickory - Article for Black Out Poem

Near-Miracles at Polio Hospital, Where Everyone Works in Sacrificial Way

By Helen Ross

Editor's Note- The writer, who is the Newton correspondent of The Record, is the mother of a child that is being treated in the Emergency hospital.

Newton, July 19- There are no words that can adequately express the near miracles that have been performed at the Lake Hickory Emergency hospital for treatment and care of those suffering from infantile paralysis. Neither are there words that will give due credit to the personnel of the hospital for their untiring work and cheerful and loving attendance to their patients.

There's a spirit about the place that is not found in ordinary hospitals. Every person, the doctors, nurses, the office and the kitchen forces, and the volunteer workers all seem to be driven by an inner force that compels them to go as long as 12 and 14 hours at a stretch in an effort to give the polio victims everything that is humanly possible for them to have in the way of even the smallest comfort. Not only are those directly associated with the hospital giving invaluable aid, but also citizens of the area are sending toys, comic books, picture and color books, and food of every description for use there.

Awe-Inspiring Sight

It is an awe-inspiring sight to watch the efficiency of the place; to see the whole-hearted cooperation among the members of the medical staff and the business end of the hospital. All are concerned with the one primary goal of getting those one hundred or more patients well, or as near well as possible - and getting them once more back to their homes. It is enough to soften the heart of the most hardened and unconcerned person in this world to see the cheerfulness of the doctors and nurses in dealing with their patients, and the grateful response those patients show. It is enough to make the complainer and unbeliever in humanity experience a complete right-about-face, to watch the patience and good spirits of those afflicted with the disease.

There are women, volunteer workers, and men, too, who do not wash their dishes or sweep their floors at home, working at those same menial tasks as if there were a God-given privilege as indeed it is. One such worker was heard to say, "that once you go out there, you've got to go again and again or never be able to face yourself in the mirror with a clear conscience."



Double Compensation

If there were no other compensation for the doctors and nurses than the awed gratitude of parents of those who are receiving treatment at the hospital, that would likely be enough. As long as they live, these men and women of the medical world will be remembered and loved by the families and the patients for the things that they have accomplished in the way of lives saved and the comforts they have given to the victims of this disease. No anxious parents are brushed aside with only a brusque word or two as to their child's condition for no matter how busy they might be, some doctor or nurse is always willing to stop and talk to mothers and fathers, telling them as much as they know themselves about any particular patient.

Starting with only one stone building that has been magically enlarged, the Emergency hospital has grown until there are now four additional wards in hospital tents and a long ward building which was erected and furnished almost overnight. All of these things have been accomplished in a little over three weeks. A new admittance tent has been erected, many tents for doctors and nurses have been put up, an office building is going up, water mains and telephone lines have been installed, roads built, and kitchens and dining rooms equipped to meet the demands of the organization.

Nothing is being left undone that needs to be done and work is accomplished in record-breaking time. And the whole project seems to be motivated by the same force that makes the inside work run as smoothly as a well oiled machine.

On top of what has been achieved, it has been decided to start immediately the construction of a third, large ward building which will accommodate sixty or more convalescent patients, and be thoroughly modern in design and conveniences.



Polio Epidemic: The Miracle in Hickory - Black Out Poem Rubric

Components	Exceptional	Accomplished	Developing	Beginning
Language	Positive connotation/ message words were used from the article	Most words that were used from the article have a positive connotation/message	Some of the words that were used from the article have a positive connotation/ message	A few of the words that were used from the article have a positive connotation/ message
Organization	Well organized and presents a clear, thought-provoking message about the Miracle of Hickory when read from top to bottom, left to right	Generally organized and presents a message about the Miracle of Hickory when read from top to bottom, left to right	Organization of text does not relate to the message about the Miracle of Hickory and lacks structure	Organization of text is unclear and unorganized. Message about the Miracle of Hickory unclear.
Presentation	 Images and/or design significantly enhance poem Words are clearly marked and easy to read 	 □ Images and/or design are included and add to the poem □ Words are easy to read 	 Images and/or design are included in the poem Words are somewhat difficult to read due to color overlap 	 Images and/or design are messy or not related to poem Words are difficult to read



Advertisement

Background information: "The fundraising efforts in North Carolina started the idea of poster children as donation motivators; and the first North Carolina poster child was this boy who was photographed at the Hickory hospital.

"In 1946 the [National Foundation's fundraising] March of Dimes introduced its first 'official' polio poster child. The idea was controversial... How did one portray a polio victim? As cheerful and optimistic or frightened and sad?... Guided by the 'Miracle of Hickory' campaign, the foundation chose option No.1..." (From David Oshinsky's 2005 Polio: An American Story)

- The March of Dimes is now in the fight for the health of mothers and babies.
 Using the March of Dimes <u>website</u>, students should read the About Us section to
 learn how the organization pivoted from its infantile paralysis focus to helping
 support premature babies and more.
- Students will then create a new advertisement, either on paper or virtually, for the organization to use for fundraising in local communities. Advertisements should include all of the following:
 - o Title
 - Explanation of the cause: what the March of Dimes focuses on today
 - Slogan (catchy phrase)
 - Where the donations will go or what it will fund
 - Image about the fundraiser
- A handout is included that has a checklist for students and an image of an old March of Dimes advertisement in support of North Carolina's fight against polio.

Modification: Teachers can start by having students identify the parts of the old March of Dimes advertisement provided on the handout. Then have students find current March of Dimes advertisements online. Students can create their own ad with fewer requirements or they can compare and contrast a modern ad with an ad from the past.

Extension: Have students write a letter from the perspective of someone who was treated at the Hickory Emergency Infantile Paralysis Hospital and survived to the March of Dimes. The letter should describe their experiences as a patient and what the work of the March of Dimes means to them given the circumstances of their past illness.



Polio Epidemic: The Miracle in Hickory - Historic March of Dimes Ad





Polio Epidemic: The Miracle in Hickory - Advertisement Checklist

Requirement	Included in Advertisement
Title	
Image	
Slogan	
What's being funded	
March of Dimes' causes today	



Research

There are many parallels between polio and COVID. Students can use research and, since they experienced the COVID pandemic, their own experience to make connections about how the diseases changed the United States

- Students can use this <u>Smithsonian article</u> to read about how polio changed the American people. They should choose 4 categories of change from their research and be able to describe in more detail *how* each of those 4 areas changed the United States.
- Next they will research how COVID changed and is still changing the American people
 using the same criteria of choosing 4 categories of change and being able to describe
 how they changed the United States.
- They should research using reliable websites, interviews, and other sources. They can then compare polio with COVID by filling out the included organizational handout.
- As a class, you can complete the technology category together first to show an example of a comparison. Possible responses are below.

POLIO: Category of Change	How did it change the United States?	
Technology	-Iron Lung, a tank respirator, helped patients breathe when their lungs were failingAssistive Devices were created to help patients with their disabilities such as crutches, wheelchairs, etc.	
COVID: Category of Change	How did it change the United States?	
Technology	-Respiratory Assisted Devices such as ventilators helped pump air into COVID patients' airways when they could not breathe on their ownRemote learning, socializing, work: People used video conferencing to meet with each other online.	

Modification: Choose the 4 categories of change for students to focus on and also possibly already have the handout filled in with some examples in the How column.

Extension: When students are finished with the handout, hold a class discussion comparing the changes in the United States after polio and COVID.



Polio Epidemic: The Miracle in Hickory - Comparing Polio and COVID

Polio

Category of Change	How did it change the United States?



COVID

Category of Change	How did it change the United States?



Student Objectives

- 1. Students will be able to identify the actions the people of Hickory took to create the Emergency Infantile Paralysis Hospital.
- 2. Students will be able to generate conclusions on what impact the media played during this time.
- 3. Students will be able to compare and contrast polio and COVID-19 and how the epidemics changed the United States.

Relevant NC 8th Grade Social Studies Standards

- **8.H.1.2** Summarize how debate, negotiation, compromise, and cooperation have been used in the history of North Carolina and the nation.
- **8.H.2.2** Explain the influences of individuals and groups during times of innovation and change in North Carolina and the nation.
- **8.H.2.1** Explain how innovation and technology have contributed to change in North Carolina and the nation.