**Shawn Holland Moore. A MARITIME CITY IN CRISIS: NORFOLK AND THE YELLOW FEVER OF 1855. (Under the direction of Donald H. Parkerson) Department of History, July 1998.**

This thesis is a study of the 1855 yellow fever epidemic on Norfolk, Virginia. It focuses on Norfolk as a developing city, yellow fever as a disease, the events and consequences of the epidemic, and the public health reform movement it helped create. It is essentially a case study of a yellow fever epidemic and its effect on a port city and to some extent the nation.

Norfolk's economic beginnings were turbulent. The town grew quickly into a city and enjoyed some success, but it did not sufficiently diversify its economic base of commerce. This made Norfolk vulnerable to the whims of both foreign countries and the Federal Government. Norfolk's involvement with ongoing international trade wars as well as heavy competition from the interior cities of Virginia left the city economically weak. Moreover, Norfolk as a port city was susceptible to diseases, like yellow fever, imported by foreign vessels.

Norfolk's struggles with yellow fever was typical of many southern port cities. The 1855 epidemic began with the

arrival of the Benjamin Franklin from St. Thomas and ended with 2,000 people dead. In the interim the city was besieged by sickness and famine with few people to care for or bury the victims. Once the epidemic ended citizens not only returned to restart the government and economy, but also to question the course of events during the previous three months. As a result many became involved in the public health reform to safeguard against another consuming epidemic.

The 1855 yellow fever epidemic in Norfolk was the catalyst for a renewed interest in the public health reform. National meetings on the subject of disease brought a variety of groups together to fight a common foe. A later epidemic in the Mississippi River Valley refueled the public health reform movement in terms of organizations and creating national policies.

# A MARITIME CITY IN CRISIS: NORFOLK AND THE YELLOW FEVER OF 1855

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I would also like to thank my husband, Will, for living every single moment of this thesis with me, taking care of everything from the pets to the dishes, and never complaining. I appreciate all the support from my family and friends, especially that of my parents. This thesis is dedicated to my parents, Johnnie and Julia Holland, for nurturing my love of history and my need to learn.

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## Introduction

Historians have only recently become interested in the study of disease. Traditionally the subject was examined in the clinical sense with physicians and scientists focusing on disease in terms of genetic composition, symptoms, cause, and cure. In the past thirty years, however, disease and plagues have attracted the historian as a part of an interdisciplinary analysis of social, urban, and economic history. Interest in disease has also brought new attention to the area of public health, especially that of the Southern United States. Analyzing a particular epidemic or tracking a specific disease through time, for example, affords historians insights into society and culture caught in a traumatic and stressful situation. It also enables them to observe the effects of public policy, both positive and negative.

For port cities in the Old World disease was a significant problem. Cholera, influenza, and yellow fever were notorious visitors. Trading with tropical ports substantially increased these cities' risk of an epidemic. This study will examine, as a case study, the yellow fever

epidemic in the port city of Norfolk, Virginia in 1855. Other geographical areas infected at the same time were Portsmouth and Gosport, Virginia.

The broad objective of the study is to provide a fundamental understanding of Norfolk's 1855 yellow fever epidemic, the surrounding circumstances, and its affects. To do so one must have some base knowledge of Norfolk and its beginnings as well as its commercial history. This look into the city's past lays a baseline for its economic pulse and provides insight into the social climate. Yellow fever will be examined in general medical terms along with the debate on its origin. Norfolk's epidemic will be followed from first contact to last death. There will also be an analysis of the events and course of action taken by the government as well as the long term affects on the city.

The scope of this study will not detail the full range of all yellow fever epidemics in Norfolk, but will concentrate on the epidemic in 1855. Previous appearances of yellow fever will be briefly mentioned as will yellow fever epidemics in other areas of the South. The work will be limited to Norfolk, Virginia and to a lesser extent

Portsmouth and Gosport, Virginia and will focus on how it impacted businesses, population, and government.

This study was assembled through a variety of primary sources. The Kirn Library, a division of the Norfolk Public Library System, provided numerous resources. The Sargent Room at Kirn holds newspapers, articles, and first hand accounts of the epidemic. The Special Collections at the College of William and Mary also provided valuable diaries and letters. Finally, the State of Virginia Library and the Virginia Historical Society in Richmond, Virginia provided census information and important secondary sources on Virginia's economy and social history.

# Chapter I: The Development and Turbulent Progress of Norfolk

## Early History

The voyage across the Atlantic had been harsh, but uneventful. Now, the weary explorers found themselves following a large bay, looking for a safe haven to lay anchor. They discovered a well protected and deep harbor. From their ship the men marveled at the surrounding wilderness and wondered what riches laid within. As they approached the shore of a nearby island, their imaginations ran wild with possibilities. The blue-green waters and its abundant bounty did not escape the men nor did the variety of plants, in various hues of green, that dotted the shoreline passed the sandy beaches. For these sailors, this was the first step to wealth and a new life. Their appearance also meant a new life for the native inhabitants. The ancient fishing grounds and trade routes of the Chesapeian Indians would eventually give way to a British town and port. Neither group, however, could have envisioned the turbulent future of this small island; its

successes, failures, and the terrible disease which threatened to end it all.

Native American tribes had long inhabited the area and found it bountiful. The Chesapeians fished the waters, netted crabs, and harvested clams and oysters from the shallows. They successfully lived off the land; growing crops and gathering indigenous plants. The rivers and streams of the area were their mode of transportation which enabled trade with other tribes in the vicinity. The location's potential was not lost on the European who first explored the lush land, large harbor, and other waterways. It was a perfect foothold for trading and shipping in the New World. The Spanish attempted to claim and colonize the area for their country in the late sixteenth century, but were not successful. The English, after one failed attempt, settled Jamestown located on the James River in the colony of Virginia. More and more colonists arrived and began developing a steadily growing economic base. One of the more promising and prospering settlements was in Norfolk County. This village, southeast and down river from Jamestown, was not a formally named town until 1680. An Act

of Assembly enabled two trustees of the crown to purchase fifty acres of land from Nicholas Wise, a Lower Norfolk County carpenter, for the purpose of a town.[1] The new town, the namesake of Colonel Adam Thorogood's native county in England, would be known as Norfolk. This area was flat and low, only ten to twelve feet above the river, and literally surrounded by water - two fingers of the Elizabeth River, Newton's Creek, and Smith's Creek. The two branches of the Elizabeth River, together formed the deep harbor which opened to Hampton Roads, leading to the Chesapeake Bay and the Atlantic Ocean. The English saw this as a geographical coup as well as an opportunity for commercial development. The combination the of harbor and the fifteen mile proximity to the open ocean provided an ideal place for a trading and shipping center.[2]

There was no doubt that Norfolk would play a role in the New World. The English monarchy understood all too well

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[1]H.W. Burton, The History of Norfolk, Virginia. A Review of Important Events and Incidents which occurred from 1736 to 1877: Also a Record of Personal Reminiscences and Political, Commercial, and Curious Facts, (Norfolk, VA: Norfolk Virginian Job Print, 1877), 3.

[2]Thomas Whitehead, Virginia: A Hand-Book, (Richmond: Evertt Waddey, Co. 1893), 164 - 165.

the significance of the town and its deep harbor to the world's trading scene. The Virginia colony brought them wealth and much needed raw materials, and for a time all was well. The royal colonies were neglected by England's war with France, but faired well in governing and managing themselves. Later England's renewed, suffocating interest in her American colonies and unfair and heavy taxation policies led to eventual unrest and revolt. The colonists opposed to continued English rule began to organize and called themselves patriots. When word reached England that American revolutionaries began causing problems and promoting independence, the monarchy took action. Lord Dunmore, the royal governor, was dispatched to protect King George III's, interests in the Norfolk area. As the patriots made advances on the town, Lord Dunmore retreated to the safety of his fleet in the harbor. He began bombarding the shore with cannon fire and sent men ashore to set the waterfront properties a blaze.[3] In his attempt to destroy Norfolk, Lord Dunmore drove scores of people to the patriot cause. Thomas Jefferson even used this act of arson

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[3]Burton, 1 & 5.

by the redcoats as his main argument for breaking with the mother country. Though in actuality the patriots and redcoats both had a hand in torching the town, it was a compelling reason for the separation and to fight for freedom. The patriots successfully drove Lord Dunmore away in this first encounter, but Norfolk would be held by the English twice more before the end of what was now an all out war.[4]

The town of Norfolk had been burned and plundered almost beyond recognition by the end of the war. This left residents and observers to wonder about the future of the area. In its pre-Revolutionary War days, the port of Norfolk had established itself, growing steadily and boasting imports valued at 851,000 pounds sterling. Merchants still saw potential in the port and town settled there.[5] By the spring of 1777, signs of physical and spiritual healing were evident within the community. But

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[4]Thomas Parramore with Peter C. Stewart and Tommy Bogger, Norfolk: The First Four Centuries, (Charlottesville: University Press of Virginia, 1994), 94, 95 & 99.

[5]Thomas M. Costa, "Economic Development and Political Authority: Norfolk, Virginia, Merchant - Magistrates, 1736-1800," (Ph.D. diss. College of William and Mary, 1991), 330 - 331.

the golden era of trade came fifteen years after the signing of the Constitution.

Many ships loaded with cargo from Norfolk made their way to exotic ports such as Barbados, Bermuda, Antigua, and Jamaica. Norfolk merchants were heavily involved and invested in trade with these areas. Goods coming into Norfolk were either sold at auction which was common place during this period or were delivered to one or more ordering customers. There was always a demand for variety goods as well as quality. The success of the early Norfolk merchants lay in taking advantage of opportunities which presented themselves. They had wanted to increase their trade with the West Indies as well as other ports which were strong holds of English and French trade.[6]

For example, Norfolk merchants waited until 1792 when the two countries were entangled, once again, in battle to make a move. While the mother countries were distracted and intent on killing one another, their colonies were suffering and in need of goods. This scenario allowed merchants to offer their services to the colonies. By increasing trade

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[6]Ibid., 332.

with these neglected colonies, they further ensconced themselves into foreign ports. Extracting them after the war, England and France would find to be difficult. As with any covert venture, there was an element of risk involved. The vessels under the command of France and England were well armed, powerful, and many in number. The French and English, though fighting each other, were not adverse to attacking ships sailing under foreign flags. Therefore, vessels heading to Norfolk loaded with expensive West Indian cargo were sometimes captured as prizes by both sides. The potential wealth, however, far outweighed any of the negative connected with this manner of trade.[7] The gamble paid off by the turn of the eighteenth century for Norfolk merchants. They were exporting large quantities of goods valued between $5,000,000 and $7,000,000. Ships from port all around the globe flocked to the port and the city was gaining population and wealth.[8]

Throughout the eighteenth century, Norfolk continued to increase in physical size, economic value, and especially in

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[7]Ibid., 333.

[8]Robert W. Lamb, Our Twin Cities of the Nineteenth Century: (Norfolk and Portsmouth) Their Past, Present, and Future, (Norfolk, VA: Barcroft, publisher, 1887-8), 11.

large borough for the period. Citizens wanted to show the world that the Borough of Norfolk had overcome past hardships and progressed. By 1845 Norfolk received a new charter to revive the area's image and usher in a new era of good times and within five years, it was Virginia's second largest city and was still growing.[9] This economic boom was greeted with a federal reward. A branch of the Bank of the United States was established and the Chamber of Commerce was formed by Norfolk citizens.[10] While both of these institutions were heavily supported by the business community; they were a reflection of the city's up and coming position in the world of trade and of the confidence felt by its citizens for a bright future. Citizens, in public print and their personal writings, seemed to be focused solely on the city's future. They took any possibility of or small step towards prosperity and created a successful future for Norfolk.

But as soon as Norfolk started to enjoy its success and caught a glimpse of its potential, it began to lose control.

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[9]David R. Goldfield, Urban Growth in the Age of Sectionalism. Virginia, 1847-1861, (Baton Rouge: Louisiana State University Press, 1977), 17 - 18.

[10]Burton, 15.

According to Norfolk historian William Burton, the city started relinquishing its autonomous grip on its commerce with the passing of the Navigation Laws. The United States "threw the coastwise and carrying trade into the hands of the Maritime States to the North of us."[11] Moreover, the Embargo of 1807 and the Non-Intercourse Act acerbated Norfolk's trading situation.

The young United States had succeeded in establishing itself as an independent nation and a viable participant in trade. Yet during the renewed war between France and Great Britain, U.S. vessels were continually harassed by ships flying foreign flags. They were stopped, boarded, and seized. The British felt they had a right to take these vessel under law because they carried cargoes for or from the enemy. In 1803 and 1804, the first years of this particular Anglo-Franco war, American merchant men again took over trading in the French and Spanish West Indies. Prize courts in Great Britain ruled that "the practice of shipping French and Spanish goods through American ports while on their way elsewhere did not neutralize enemy

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[11]Burton, 199.

goods," and this violated the British law enacted in 1756.[12] The British in 1806 and 1807 required vessels to have licenses and to be inspected. If a vessel was found in violation of the rules, it was seized. On the high seas, American cargoes were considered trophies and their men were impressed into the service of the Royal Navy. In essence, the British were trying to keep Americans from supplying Napoleon's war effort. They, however, did not seem concerned with guilt or innocence. At the same time, Napoleon enacted a blockade of the British Isles. Any ship found in complete compliance with the regulations of Great Britain was in total violation of French regulations and was taken. It seemed like a no win situation for American shippers.[13]

In an effort to end the war between France and Great Britain and the problems both countries were creating in the commercial arena, President Thomas Jefferson applied some peaceful pressure. He enacted the Embargo of 1807 which banned the export of American goods and prohibited American

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[12]George B. Tindall, America: A Narrative History, vol. 1 (New York: W. W. Norton & Company, Inc., 1984), 339.
[13]Ibid., 340.

ships from trading in foreign ports. Though designed to stop the harassment of U.S. ships, end the confiscation of American goods, and to hurt France and Great Britain economically, it failed for three reasons. First, the profits made from successful voyages far outweighed the risks of being captured by privateers or caught in a port. Second, the violation of the embargo was so frequent and there was little or no enforcement of the regulations involved. Finally, there were many loopholes in the embargo that merchants could find. In the end, the embargo was see as totally ineffective. It was repealed in 1809, but replaced with the Non-Intercourse Act which allowed for trade with all foreign flags except France and England. In the meantime, Southerners lost their English destinations for cotton and tobacco, and well established American trade routes were destroyed.[14]

Areas like the West Indies discovered they were not solely dependent on one source, Norfolk, for their needed goods and means of exportation. The Embargo had opened up trading to eagerly awaiting British shippers. As a

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[14]Ibid., 340 - 342.

consequence, dependable West Indian trade was nearly halted in Norfolk. As this was the first lull in commerce since the Revolutionary War, Norfolk was not prepared for the fallout. Merchants, unaccustomed to the downward trend, were in a state of personal and economic shock. They soon realized that the small number of vessels doing business in Norfolk could not support the working population. Unemployed dock workers, sailors, and traders aimlessly roamed the street causing trouble and despair.[15]

The ending of the embargo did little to alleviate Norfolk's economic suffering. Great Britain closed all her ports to American ships and shippers in an attempt to squeeze the United States out to the commercial scene. The Navigation Act of 1817 issued by the United States allowed importation of West Indies cargoes but only if they come from American vessels or vessels owned by West Indians. To further hurt international trade, all American ports were closed to British vessels coming from ports that were off limits to the United States.[16] The British having won

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[15]Burton, 142.
[16]Tindall, 366.

control of West Indian trade, saturated the market with their goods and left competitors like Norfolk merchants little chance to make a profit.[17] The full impact of the lost West Indies trade was not felt until after 1825. Norfolk's sole dependency on commerce made the town vulnerable. The trade with the West Indies made Norfolk's growth and development possible and without it, the town needed to pursue other avenues of shipping and business.

The trade wars the United States engaged in with foreign powers, especially those with Great Britain, nearly destroyed Norfolk and surely stunted its growth. The increases in import duties, closing of ports, and other restrictions forced the town and its people into a defensive posture. If they were to survive, then it would be at their own risk and by their own rules. Norfolk's only hope during these trying times was neutrality. The city's merchants and officials were not interested in playing hard and fast with the foreign merchants entering their port. They bought and sold goods to ships in the harbor no matter what flag was

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[17]Costa, 358 - 359.

flown. It was not until after 1830 that foreign trade became less of an immediate problem for Norfolk.[18]

Economic Growth

Commerce was still the life blood of Norfolk. The city between Main Street and the river was a thriving center of trade and shipping. The business and commercial district before 1826 was a residential area, but the desperate need for office space had forced people to move to new homes north of Main Street. Wharves and docks, for half a mile, lined the commercial area awaiting ships and their cargoes. Norfolk's harbor was a favorite among captains and seamen because of its deep anchorage and inland shelter. During the nineteenth century, the harbor's capacity was in excess of one hundred vessels, and ships of every flag and class came to Norfolk.[19]

Despite this growth, however, the city soon faced a series of domestic and economic crises. Small, but not insignificant events, were mounting. The first was the

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[18]Wertenbaker, Thomas J. Norfolk: Historic Southern Port, (Durham: Duke University Press, 1962), 150 - 152.

[19]Peter C. Stewart, "The Commercial History of Hampton Roads, Virginia, 1815-1860," (Ph.D. diss. University of Virginia, 1967), 4.

invention of the steam engine. By mid-century ships could now be masters of the seas not pawns of the wind. They could travel faster and venture into narrower waterways. But in all the excitement of this revolution was the quiet end of the sailing era. As a result coastal areas with deep harbors like Norfolk lost some of their importance in the world of commerce because captains were no longer forced into certain ports. Steam enabled vessels to travel up rivers to inland cities where they could pick up cargoes usually sent to a coastal port for shipment, leaving this mode of transportation only rivaled by the railroad.[20]

Though Norfolk had one of the best harbors in the South, it primarily dealt in coastal trade. Much of Norfolk's business had been that of the middle man in trade, with interior Virginia cities using Norfolk as an exporting point to New York. Most of the cargoes bound for New York eventually ended up in European ports at a latter date. The developing use of steam threatened and eventually destroyed this system. Norfolk was completely cut out as a stop on the trade route because by the 1820s vessels using steam

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[20]Wertenbaker, 158.

could travel directly from New York to Richmond and Petersburg.[21] This allowed Richmond and Petersburg, the fall line cities, to continue to grow economically while Norfolk fell hopelessly behind. The people of Norfolk, therefore, were always looking for something to save them from economic despair - a new business, a new mode of transportation, a new shipping partner, or a new trade route.

With the long awaited completion of the Dismal Swamp Canal, Norfolk's economic base was once again on the verge of greatness. During the 1830's the port handled up to twenty-five percent of the Commonwealth's total exports, valued at over $1,000,000.[22] The Dismal Swamp Canal opened in 1828, with a steady stream of cargo flowing up from the South. North Carolina, and southern Virginia cities now had an easily accessible and fast outlet for their goods. Lumber, shingles, tobacco, naval stores, cotton, flour and corn made their way up the Canal for trade and export in Norfolk. As traffic on the Canal increased, so did the

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[21]Stewart, "The Commercial History of Hampton Roads, Virginia, 1815-1860, 149.
[22]Ibid., 59.

tolls for its use. North and south bound vessels carried goods worth $2,493,884 in 1833 and still the traffic flow increased. Norfolk received ninety-five percent of the Dismal Swamp Canal's business and its citizens enjoyed an economic boom, an increase in jobs, and an influx of fresh goods into their own market place. The Canal also kept the city thriving by pouring produce and cargo into the wharves. In 1840 approximately half of the goods coming from the Canal went to Norfolk, while only ten percent traveled to Hampton Roads.[23]

During this period, there was also an increase of manufacturing in the city. Between 1829 and 1835 two cotton mills, an iron foundry, a tobacco stemmery, carriage makers, cobblers, hatters and furniture makers came to Norfolk. Their appearance was a signal that the city was again growing and beginning to diversify. Not only was business attracted, but it was supported via consumerism. To fuel the fire of growth, the navy opened a dry dock at Gosport near Portsmouth in 1833. As the largest dry dock in the western hemisphere, its construction required a large work

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[23]Ibid., 140 & 159.

force as well as great deal of supplies. After completion, there was an increased need for naval stores.[24]

But despite these signs of renewed hope and possibility, Norfolk was experiencing some difficulties. The Dismal Swamp Canal had not produced as expected and the fall line cities had increased trade activity, sending one hundred twenty-nine packets to New York, Boston, and Baltimore a week.[25] Norfolk's leaders felt they needed direct trade with Europe in order to surpass these ports, and they were constantly frustrated that the port was locked into being a middle man/domestic trader. Therefore, they were disappointed that the Canal was not the key to internal commerce. As historian Thomas Wertenbaker noted, "had the Carolina products been reshipped directly to Europe or the West Indies, as in former days, the canal would have made Norfolk once more an important commercial center."[26] With deep harbors no longer needed, the port of Norfolk was losing its commercial significance.

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[24]Parramore, 160.
[25]Wertenbaker, 58.
[26]Ibid., 162 - 163.

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At the same time, Norfolk and Portsmouth were in a heated battle with fall line cities of Richmond and Petersburg. The two areas were competing for the commerce from the Roanoke River Valley. As the battle progressed, power shifted from Petersburg and Richmond to Norfolk and Portsmouth because of the Dismal Swamp Canal route of trade. It was faster than anything Richmond and Petersburg could offer at the time and had already proven itself successful. The tide, however, turned back to Petersburg and Richmond when they secured a railroad system. Now the fall line cites had a faster mode of transportation that could carry a greater quantity of goods and products to any stop along the line. Norfolk and Portsmouth desperately tried to fight back. They attempted to raise capital for their own railroad, but were blocked at every turn for much needed state funding by the proponents of the fall line cities. To make matters worse, a cholera epidemic came to Portsmouth in 1832 and slowed efforts to obtain the railroad even more. The two cities finally raised enough money and completed

their railroad only to learn that Petersburg had already established regular trade with the Roanoke River Valley.[27] This cut out Norfolk and Portsmouth from a large portion of northern trade, and they were constantly playing catch up to the fall line railroad system. To make things worse the federal bank had close its doors again in Norfolk in 1836 and recalled its loans, including those of the railroad.

On the defensive, Norfolk tried to entice business interests in its railroad by slashing prices and arranged its schedule so that it coincided with those of the Chesapeake steamers and the Wilmington Railroad. In response Petersburg and Richmond, which were in a better position, lowered their shipping prices. This started a price war that cost all those involved most of their profits.[28]

The combination of the railway and the Dismal Swamp Canal had increased the amount of goods going to Norfolk. But the key to a more substantial portion of commercial trade still hinged on getting into the commonwealth's

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[27]Parramore, 162.
[28]Ibid., 163.

interior commerce, but Richmond and Petersburg were determined not to allow that to happen. For Norfolk it was really a losing battle. Petersburg and Richmond had industrial strength and diversity in businesses and leadership, while Norfolk had little of either. They had no access to main crops and raw materials for business and shipping. This was also the main reasons for Norfolk's inability to attract and develop large scale industry, with the exception of maritime supplies which were readily available. With no raw materials or goods that needed finishing, there was no end product to be made. Finally, the fall line cities had location. Richmond was the capital of the Commonwealth and where the House of Burgess convened; Petersburg was not far away. This afforded them access to the Commonwealth's political arena where they could influence and direct power. As a result, Norfolk would not establish an interior trade route from the coast until after 1865.[29]

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[29]William H. Stewart, History of Norfolk County, Virginia and Representative Citizens, (Chicago: 1902), 89; Goldfield, 50.

The businessmen and merchants, so wrapped up in finding ways to become an international trading powerhouse, nearly missed the commercial opportunity of a lifetime. It was right under their noses - truck farming. Some merchants had a small interest in importing spices, sugar, and fruits to the inland areas. In the 1840s, however, farmers from the surrounding areas slowly began selling their produce to out-of-state markets. Fruits, berries, and vegetables from Tidewater were ready for harvest four to six weeks earlier than in the North. The idea of truck farming caught on as a serious business after the arrival of Richard Cox in 1844. This New Jersey native partnered himself with other immigrants from that state and led them and farming in a new direction. He organized the farmers and showed them the hot house method of growing as well as other agricultural techniques that would customize their produce to the tastes of northern markets. Along with the demand for peas, cucumbers, tomatoes, beets, and strawberries, there was a need for Irish and sweet potatoes. Under the leadership of Cox, the truck farming trade doubled its revenue in just ten years. Truck farming's success was aided by steamboats

running continuously from Baltimore and New York. This coastal commerce revived Tidewater's agriculture and the Atlantic seaboard thought of Tidewater as its personal garden. For Norfolk, it was a means of bankrolling the possibility of the ever elusive European trade.[30]

With the plight of the Irish during the potato famine came a commercial triumph for Norfolk. The port's business quickly rose to supply grain, corn and other food stuffs demanded in the absence of potatoes. Though business was booming for Norfolk; the price of bread soared within the city costing the citizens dearly. Norfolk was climbing steady towards future greatness, and in 1847 the cornerstone to the new City Hall was laid. The rise to the top,however, was impeded by an outbreak of Asiatic cholera in the summer of 1849.[31] But by the 1850s, more than half of Norfolk's outgoing trade was destined for the Caribbean, where yellow fever often raged. Norfolk was also a regular stop on the routes of steamers, railroads, and stage coaches from Philadelphia, Baltimore, Richmond, and Washington. Though

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[30]Parramore, 171 - 172 & 192; Stewart, History of Norfolk County, Virginia and Representative Citizens, 94.
[31]Lamb, 22; Stewart, History of Norfolk County, Virginia and Representative Citizens, 345.

business was good, it was not the European trade the business community sought. The Internal Improvements Convention of 1854 was held in Norfolk and was much in favor of it. Over the course of meetings, it was decided that pressure should be placed on European traders to use the port of Norfolk as the exporting facility for their ocean steamers.[32]

By 1853, the city had seven banks, five hotels, five daily newspapers, three shipbuilding companies, and an insurance company. Manufacturers invested $570,000 in Norfolk and opened an iron foundry and plants producing carriages, furniture, and cotton goods. The city also enjoyed a gas company. The streets and homes of Norfolk were illuminated for the first time in the fall of 1849 by gas lamps. This added security to the once dark and dangerous streets. Business establishments by 1854 had doubled within the last seven years and the Merchants' and Mechanics' Savings Bank had reopened. Norfolk possessed seventy wholesale and retail grocers as well as a number of

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[32]Stewart, "The Commercial History of Hampton Roads, Virginia, 1815-1860," 161, & 189; Burton, 19.

small shops carrying a variety of goods. This growth had renewed confidence among businessmen.[33] Internal improvements followed. New streets were opened, heightened, and paved. Many of Norfolk's already established streets were in need of being drained and repaired. The city employed hundreds of workers to make improvements to boost the city's image as healthy and clean. In the February 25, 1853 edition of Norfolk Herald, the editor warned about the effect of rumors about disease could do to a city. "Let sickness prevail within the limits of the city to a degree to excite alarm abroad, and our store-keepers may almost as well close their doors."[34]

By the mid-1800s, Norfolk had been transformed into a different place. The soggy lanes of 1853 had become beautiful and elevated streets now framed with rows of new elegant homes and new buildings on Freemason Street. There were majestic churches, wide lanes, and luscious gardens. In the most fashionable section of the city, elaborate houses and private gardens became attractions to citizens

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[33]Lamb, 22; Wertenbaker, 130; Burton 15.
[34]Norfolk Herald, 25 February 1853; Stewart, "The Commercial History of Hampton Roads, Virginia, 1815-1860," 115 & 189.

and visitors. By February, 1854, the Norfolk Herald was proclaiming Norfolk had been reborn. The editor stated that "a newly energized people have pressure on the City Council to make improvements to the city. As a result, land once swampy in nature were drained, existing streets were cleaned, built-up, and paved."[35]

Epidemic

But no measure of cleanliness and hope could have prevented what happened next: epidemic. Sickness, especially that of yellow fever, had always been a fixture in the life of Norfolk. It first appeared in the town in 1795 and returned every year until 1805. The only year of exception was 1804 when a single case was reported. Outbreaks ranged from very mild to severe, as in 1805 when hundreds were killed. Then, as mysteriously as it had appeared, the yellow fever would vanish with the onset of the frost and not return for a span of years. This was the case after 1805. Between 1806 and 1820 there was no cases of yellow fever reported in Norfolk. The disease, however,

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[35]Wertenbaker, 130; Norfolk Herald, 18 February 1854.

reappeared in 1821 and in 1826. In both instances, the plague began in the same area - between Main Street and the river. The origin in 1826 was traced back to a coffee cargo ship moored in the vicinity. Though there was no official account of events, it was estimated that fifty to a hundred people died during the outbreak. The next year, Norfolk was free of yellow fever and was not bothered with it until 1848. There were three cases, but all had contracted the disease before coming to the city and the fever did not spread. Other than this one outbreak, the pestilence did not visit again for twenty-six years. The years of 1852 and 1854, however, saw the disease return to the city.[36]

As a port city, Norfolk residents had to be aware of the epidemic dangers that lurked in the future. There were plans to be put into motion when an emergency arose, and a quarantine in the harbor for protection. Nonetheless, Norfolk could not expect to be spared a serious epidemic or survive it unscathed. The city's own history had proven otherwise. Residents had been prepared before and still the

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[36]Committee of Physicians, Report of the Origin of the Yellow Fever in Norfolk During the Summer of 1855, (Richmond: Ritchie and Dunmavant, 1857), 97-99. (This will be cited hereafter as Report of the Origin of the Yellow Fever in Norfolk During the Summer of 1855.)

fever came. The yellow fever-free twenty-six year interval had caused people to become unafraid, doctors to become uninformed, and officials to become lax in their duties. In 1855, yellow fever came with a vengeance. From June to October, pestilence, famine, and death ruled the city and its inhabitants. The event itself was a tragic comedy of errors. As a result, the hopes and dreams of its unsuspecting victims were shattered and for some, it was the last time.

## Chapter II: Yellow Fever and the Norfolk Origin Debate

Disease in the form of plagues and epidemics has peppered the history of mankind. The early fourteenth century saw one of history's worst epidemics, the Black Death, that spread from Mongolia to present day Middle East, to North Africa, and finally to Europe. It seemed no one could escape this terrible sickness nor could anyone cure it. As with most epidemics, the Black Death swept through an area quickly, leaving quickly rose to supply to grain, corn and other food death and despair, in its wake.

Long before the Black Death covered half of Asia and Europe, another disease, yellow fever, was making a name for itself. Texts from the Mayan civilization tell of outbreaks of disease known as the "black vomit" in epidemic proportion. Records from 1495 also tell of widespread yellow fever in the Spanish New World.[37] These first bouts with the scourge of yellow fever were not to be the last. The growth of the New World and its establishment of trade

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[37]Geoffrey Marks and William K. Beatty, Epidemics, (New York: Charles Scribner's Sons, 1976), 149.

with tropical ports increased substantially the likelihood of importing this disease. By the nineteenth century outbreaks of yellow fever played havoc in the tropics and southern United States.

The threat of disease was an ever present part of living in a port city and to some extent, an accepted fate in the South. In the early 1850s, for example, a number of epidemics coincided with one another and yellow fever made its rounds in Norfolk, New Orleans, Memphis, Charleston, and Savannah. In the year of Norfolk's great epidemic, 1855, New Orleans also suffered with yellow fever as did Memphis. The medical profession could not comprehend how seemingly clean and healthy cities could produce such epidemic yellow fever.[38]

Yellow fever is an infectious arbovirus that involves a blood-sucking insect and a human host. The virus begins when a vector, the female *Aedes aegypti* mosquito, takes a blood meal from an infected host. The disease then part of its body. After an incubation period of three to duplicate itself inside the vector, or mosquito, becoming a six days,

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[38]Ibid., 157 - 159.

the infection reaches the vector's salivary glands. The virus does not harm the mosquito, but remains present and active in its body throughout its lifetime. Each time the vector takes a blood meal, it infects the healthy vertebrate host. The transferred virus enters the host's tissues through the vector's saliva. Once inside the host's body, the virus begins its cycle of replication.[39] Within three to six days of the transfer or the mosquito bite, the infection has spread and caused the human host to become ill (See Appendix B).

There are three stages that characterize yellow fever: fever, calm, and hemorrhaging. In the first stage, the victims complain of flu-like symptoms. They have a high fever accompanied by chills, nausea, and severe headaches. At the same time, sufferers experience terrible pain in their backs as well as in their appendages.[40] Because this stage emulates the flu, many victims do not realize they

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[39]A. J. Zuckerman, J.E. Banatvala and J.R. Pattison, eds., Principles and Practice of Clinical Virology, 2nd ed., (West Sussex: John Wiley & Sons, Ltd., 1990), 435.

[40]Margaret Humphreys, Yellow Fever and the South, (New Brunswick, NJ: Rutgers University Press, 1992), 6. Howard Kelly, Walter Reed and Yellow Fever, (Baltimore, MD: The Norman Remington Company, 1923), 80.

have yellow fever. In other cases, the first stage symptoms are so mild that victims do not appear ill. For these patients a positive yellow fever diagnosis comes only when they begin hemorrhaging in the third stage. By that time, it is too late. Death is eminent.

Masquerading as another illness or not showing itself at all was further complicated by the illusion of the calm or the second stage of yellow fever. Physicians and nurses were puzzled when their patients appeared to recover and then died suddenly. This stage begins three or four days after the onset of illness. During this period, the virus goes into a state of jaundice.[41] In the majority of the cases, the victims' eyes and skin become yellow - hence, its name, yellow fever. This stage is also the turning point between life and death. The patients' fevers drop, pain subsides, and recovery seems to be in sight. If victims do recover, during the second stage then they become immune to further bouts of yellow fever. However, if they do not recuperate, death is forthcoming.

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[41]Zuckerman, Banatvala, and Pattison, Principles and Practice of Clinical Virology, 454.

The last stage of yellow fever is a combination of a resurgence of prior symptoms and hemorrhaging. The victims' high fever and pain, more severe than before, returns rapidly. They also begin to bleed from the nose, the gums, and the mouth, and there is massive internal bleeding, especially in the stomach lining. This digested blood is painfully and frequently vomited, appearing to be black in color. The "black vomit" is the most recognizable symptom of yellow fever, and is the source for its name in many cultures. The appearance of the "black vomit" coupled with the halt of urinary output are the main indications of impending death. The virus strikes quickly, and all three stages can occur within a week's time.[42] In the end, few survive yellow fever.

Seaport towns like Norfolk, Virginia were known to be predisposed to outbreaks of diseases such as cholera, influenza, and yellow fever. In an attempt to protect the city, the local government created a Board of Health to establish standards and regulations to better public health. The first Norfolk Board of Health, created in 1818, was

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[42]Humphreys, 6.

comprised of the mayor, recorder, alderman, and two appointed local physicians. In 1821 it added five more members. The Board of Health endeavored to uphold four principles,

> (1) the prevention of disease by sanitation limited to street cleaning, the elimination of unpleasent smells and unsightly marshes, and the supervision of perishable foods; (2) the prevention and control of disease by quarantining both infected ships and local residents with supposedly contagious diseases, limited to smallpox, cholera, and yellow fever; (3) prevention of disease by immunization, limited to smallpox; and (4) care of the indigent sick.[43]

In addition, the Board was responsible for hospital administration, quarantining, and monitoring the community. They were to supply, staff, and determine admission to the local hospitals. For example, people suspected of being contagious or exposed to a contagious disease were quarantined, with or without their consent, at the local pesthouse. During epidemics, the Board was authorized to establish extra hospitals as needed. They were also saddled

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[43]Mariana Bagley, "History of the Public Health of Norfolk, VA up to 1860." (Masters thesis, Duke University, 1939), 124 - 125.

with the task of enforcing all laws and ordinances involving disease enacted by the Commonwealth and the Common Council.[44] Though the Board was placed in charge of the city's general state of health, they had no enforcement power. In order to rectify the situation, they were placed in a supervisory position over the Health Officer and the Inspector of the Borough. But this was a very temporary solution to a permanent problem and Norfolk's Board of Health was reorganized in January, 1827. In an effort to simplify and better organize their epidemic contingency plan, the city was divided into five districts and the Common Council appointed five commissioners annually. Each commissioner was to choose his own officers and take charge of a district. The law stated that the commissioners must confer on health conditions and perform all business in weekly meetings between March and November. All other times of the year the meeting was to be held once every fortnight.[45]

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[44]Ibid., 99 - 100.

[45]Ibid., 99 & 101.

Despite having important duties, being a member of the Board was an honorary position with no monetary compensation or real authority to make changes. This led to ineffective Boards of Health. There were no incentives for members to fulfill their assigned responsibilities, therefore their personal businesses took precedent. The situation in Norfolk was typical. The 1853 New Orleans Board of Health also suffered from this problem as did New York and Memphis. Often there were not enough officials to accomplish the duties assigned to the Board of Health. This was the case of New York City's Board of Health during the cholera epidemics of 1832 and 1849. "The day-to-day business of keeping a city of a quarter of a million healthy was the responsibility of only three men, the health officer of the port, the resident physician, and the city inspector."[46] There was no additional aid from the government or the general public. Typically, Boards of Health only took form during epidemics to enforce quarantines, not in the

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[46]Charles E. Rosenburg, The Cholera Years: The United States in 1832, 1849, and 1866, (Chicago: University of Chicago Press, 1962), 19 - 20.

interim.[47] This left cities unguarded against and unprepared for epidemic diseases.

A number of medical men in Norfolk suspected that filth coupled with effluvia was the cause of the persistent yellow fever. But it was not until after Norfolk's 1855 epidemic that the origin of yellow fever again became a subject of serious speculation. In The Report of the Origin of the Yellow Fever in Norfolk During the Summer of 1855 written by a committee of doctors, as well as two articles written by Dr. J. W. Schoolfield, the origin of yellow fever in Norfolk was examined systematically.

The Report used a twelve point argument to prove that Norfolk was not the primary source of the pestilence noting that yellow fever, in epidemic proportions, had only occurred three times in the past half century. The Report built its case by introducing evidence about a yellow fever outbreak in 1821. It noted that the George Armistead from Point Peter, Guadeloupe, came to Norfolk in July of that year and discharged its bilge water between Southgate's and

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[47]John H. Ellis, Yellow Fever and the Public Health in the New South, (Lexington, KY: The University Press of Kentucky, 1992), 34; Humphreys, 47.

Warren's wharves. The smell was so awful windows in the surrounding area had to be closed and Dr. Archer observed an effluvia coming off the water. Soon afterward, the clerk living at Warren's warehouse got sick and died from yellow fever. This was the start of fourteen illnesses and deaths in the area. Dr. Archer did not subscribe to the theory of importation; he concluded that vegetation, temperature, and water caused the disease. He did admit, however, that the bilge water and consequent effluvia were also directly related to the yellow fever. The Report had an eyewitness that claimed the vessel came into the harbor with the sickness on board. William Douglas, the quarter gunner of the George Armistead, explained how the captain eluded the health officer in port. The captain removed the bodies of the two men who died of yellow fever and lied to the health officer about these deaths and the health of Point Peter, Guadeloupe, at the time of disembarkation. Douglas went on to state that the fever had spread to a boarding house used by the crew of the George Armistead.[48] This led the panel

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[48]Report of the Origin of the Yellow Fever in Norfolk During the Summer of 1855, 98 - 99.

to conclude that the vessel had brought the sickness to Norfolk and it was possible that it could happen again.

The Report indicated that on other occasions vessels had imported yellow fever to the city. In 1848, the Vandalia had two reported cases of yellow fever when coming into port. They also cited cases traced to the Tascio in 1852. The weather had been unseasonably cool and although the area affected was limited, yellow fever was viable from September until the winter frost. The Tascio came from Havana where the fever was surging. As they arrived in Norfolk, two crew members already were sick. They were attended to by a homoepathist, but were misdiagnosed with typhus or typhoid fever. To the misfortune of the city, the quarantine had become lax and no health officer came to inspect the ship or the cargo. The ship sailed into port, emptied its cargo, and pumped out its bilge water. Soon afterward the disease appeared in lower Norfolk by Somers' Row, located 100 feet from where the Tascio was moored, and spread to Portsmouth.[49]

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[49]Ibid., 100.

The members of the Committee concluded that prior outbreaks of yellow fever could be linked directly or indirectly to vessels hailing from a port where the disease was raging. The vessels in question were all moored in close proximity to where victims had fallen ill. This supported their theory that the Benjamin Franklin brought the disease from the West Indies. They further strengthened their argument by examining the atmospheric conditions in the areas in question. In 1855, the weather had been about average -- neither hot nor humid. The temperature for the months between June and September moved from slightly below average at seventy-four degrees Fahrenheit to above average at seventy-six degrees Fahrenheit. According to the records at Fort Monroe, the rainfall had been below average with the exception of June when it had exceeded the average. Precipiation for the months of July and August was down by four inches, indicating a dry summer. The Committee, however, did concede that the accuracy of the rain gauge at Fort Monroe was questionable. Personal observations and the gauge at Old Point Comfort had attested to the increased

amounts of rain during these months.[50] Norfolk also enjoyed a satisfactory state of cleanliness and was in general good health. Sanitation within the city had been greatly improved because of ordinances passed in 1851 and 1854, providing for removal of filth and dirt and for street drainage. In addition, many streets were freshly paved and designed to drain well.[51] If yellow fever had originated in Norfolk, it would have bred in foul, refuse areas. However, the 1855 epidemic plagued clean and open locations as well as filthy, cramped ones. The Committee, therefore, concluded the city's sanitation played no role in creating or preventing yellow fever.[52]

The panel concluded that importation must be the answer. Two facts seemed to validate this conclusion. The first was that the epidemics prior to 1855 started in Norfolk and migrated to Portsmouth and Gosport. Vessels from the West Indies, that were known to be hot beds of yellow fever, docked only at Norfolk and seldom went to

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[50]Ibid., 102.

[51]Blanton, 224 & 226.

[52]Report of the Origin of the Yellow Fever in Norfolk During the Summer of 1855, 110 - 111.

Portsmouth and Gosport. The Report also stated that all outbreaks within the last fifty years could be "traced with great probability if not certainty, to vessels arriving from West Indies ports with fever on board."[53]

In 1855, however, the pestilence began in Gosport, the southern part of Portsmouth. The Committee claimed on June 30th, the first case was observed in a house located next to Page and Allen's shipyard. Eleven days before, the Benjamin Franklin was moored within 100 yards of the infected house. From this information the Committee drew a simple and probable conclusion. Yellow fever was transported by the Benjamin Franklin to Gosport. Otherwise the pestilence's spread would have fit the previous pattern; Norfolk, Portsmouth, Gosport.[54]

The Report stated Norfolk experienced its first case of yellow fever on July 16th, seventeen days after the first case in Gosport.[55] Therefore, Norfolk could not be the disease's origin. To prove this was the case, the Committee produced eyewitness accounts. The engineer, Jno. Bowen,

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[53]Ibid., 110.
[54]Ibid., 111.
[55]Ibid., 110.

from the vessel stated yellow fever was indeed in St. Thomas when they left for New York. He also reported that two firemen became ill during the voyage. Mr. Bowen, having suffered yellow fever himself in 1840, knew they had the sickness although they did not exhibit all the symptoms. In all, three firemen were cured and a boiler maker, an engineer, a second mate and a fireman died. Finally passenger, Saml. M. Travers also came forward and stated that yellow fever was in St. Thomas and on board the vessel.[56]

The Committee also questioned the pattern of the disease. They claimed the spread was neither concurrent nor random, but occurred in a ripple effect. If all parts of Norfolk were not infected at the same time, they argued, the cause could not have been atmospheric or terrestrial. Furthermore, they reasoned if the yellow fever was contagious, it would have been dispersed in an indiscriminate pattern. Contagion also meant that victims needed contact with one another. However, there were a number of cases where victims contracted yellow fever and

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[56]Ibid., 103.

died without having any interaction with another infected person. The Report concluded that yellow fever was a child of seaport towns. Vessels carried the disease to ports and from there it moved inland. Inland areas, themselves, could not give birth to yellow fever.[57]

The importation argument, however, was challenged by Dr. J. W. Schoolfield. In two articles, he refuted each point made by the committee of Norfolk doctors, and made a compelling argument that the city was the origin of the disease and used the words of Norfolk's own physicians to illustrate his point. Schoolfield first invalidated the idea that yellow fever was an imported disease. He cited instances of the pestilence at times when no infected vessels were in port. Such was the case when the fever appeared in 1800. No infected vessel had entered Norfolk's harbor, therefore, Norfolk physician Dr. William Seldon surmised that the fever was created from a mix of earth, water, and heat. Schoolfield's work further explained, "the nature of the soil, the intense heat, the stagnant pools,...

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[57]Ibid., 111 - 112.

are referred to by him [Dr. Seldon] as having exercised much influence in giving birth to the disease."[58]

Later, in 1803, Dr. Seldon was joined by another Norfolk physician, Dr. Alexander Whitehead in declaring that the city produced yellow fever. Their suspicions were put to the test in 1852 when a supposed carrier of yellow fever, the Tascio, arrived. Thirteen days later the outbreak started with Sally Fisher, who lived 100 yards away from where the Tascio laid, but never went aboard. The people constantly aboard the ship, however, did not contract the fever. With this evidence, Drs. Seldon and Whitehead was concluded that Sally Fisher's yellow fever came from some other source.[59]

As further proof, Dr. Schoolfield cited numerous occasions when yellow fever was brought into the area by ships, but did not spread. If the disease was not a local phenomenon, then why were these cases contained? Sick crews were sent to local, marine, and naval hospitals, and their vessels were also quarantined one mile off Norfolk's shore,

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[58]J.W. Schoolfield, "Article I - Origins of the Great Epidemic of 1855," Virginia Medical Journal 9 (1857): 443 - 444.
[59]Ibid., 447.

yet the pestilence did not grow to epidemic proportions.[60] For example, in April of 1845, the USS Vandalia came into port with filthy holds and yellow fever on board. She sent thirty-six crew members to the hospital, but the disease did not spread. The same was the case in July, 1847. The Raritan arrived in Norfolk infected with yellow fever, sending seventy-three of her crewmen to the hospital. However, no other persons in her path were contaminated. During the summer of 1854 the Chimere, out of the West Indies, entered the harbor. Some of her crew were hospitalized with yellow fever, and she was quarantined. At the same time, three cases of the fever developed at Scott's Creek.[61] Schoolfield believed, however, because the Chimere was not its origin. He looked elsewhere for a cause, and wondered if the ferry running between Gosport and Norfolk carried the disease. There was a hole in this theory, however, no work personnel or passengers on the ferry contracted yellow fever.[62]

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[60]Ibid., 448.

[61]Ibid., 448 & 450.

[62]J.W. Schoolfield, "Article II - Origins of the Great Epidemic of 1855," Virginia Medical Journal 10 (1858): 37 & 24.

After the epidemic of 1855, Dr. Schoolfield found it odd that the first case of yellow fever had no direct link to the Benjamin Franklin. The men unloading her cargo, cleaning her holds, and working aboard her daily had eluded the disease. But one mile away, people who had not visited the vessel were getting sick. This, Schoolfield contended, was proof that the yellow fever did not come from the Benjamin Franklin. He explained, if the disease proceded alone from the

> infection contained within the Ben Franklin, the 'epidemic wave' should have extended itself 'in a circle as the ripple from a stone thrown into the water' and should 'day by day have invaded house after house, and street after street.' Had such been the case, the wave would have first washed a point in Portsmouth, two hundred yards nearer to Gosport.[63]

In fact the first case of the pestilence, on June 24th, was Mrs. Fox who lived northwest of Portsmouth on Scott's Creek. She became ill five days before yellow fever was discovered at Gosport. Mrs. Fox had no contact with the

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[63]Schoolfield, "Article I - Origins of the Great Epidemic of 1855," 457 - 458.

Benjamin Franklin, which was moored one mile away. Schoolfield believed she was not accustomed to the area, and that is why she became ill. He also cited her dwelling as a potential source of the disease. Mrs. Fox's residence left much to be desired. The house was set on a man-made island. Two creeks claimed the front and back yards, and the side yards consisted of swampy marsh land. Schoolfield thought that elevated temperatures coupled with the surrounding decomposing foliage possibly had produced yellow fever.[64]

Dr. Schoolfield's theory was furthered with the case of Mrs. Cusack. She was the first case to appear in Norfolk. Like Mrs. Fox, she had no contact with Gosport or the vessel. However, Mrs. Cusack resided in Barry's Row, Norfolk's Irish community. Schoolfield stated, she "lived in the crowded and dirty state so common to persons of their class." He obviously thought the immigrants and their dwellings could be the cause of the disease. The area known as Barry's Row, once underwater, was built up to support homes. Therefore, the dwellings were prone to flooding.

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[64]Ibid., 452 - 453.

The mixture of daily filth and human waste, he argued, made Barry's Row a perfect breeding ground for disease.[65]

Dr. Schoolfield also had other ideas pertaining to the origin of yellow fever in Norfolk. He discovered the atmospheric, terrestrial, and aquatic conditions in the city in 1855 were the same as in previous epidemics. The temperature was extremely high (ninety degrees from June to August), the prevailing winds were from the same direction, and the tidal change had exposed previously submerged land. Schoolfield concluded the combination of these factors generated the cause of the yellow fever, a suspect effluvia.[66] To further substantiate his argument, he demonstrated that there also were deaths at prior yellow fever locations. A man identified as Master Williams died in June, 1855 at a house visited by the disease in 1852. The same was the case for Mrs. Cusack and another named Montgomery. Their residence, located in Barry's Row, was infected in 1854, and yet these factors could not have

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[65]Schoolfield, "Article II - Origins of the Great Epidemic of 1855," 22 - 23.

[66]Ibid., 27 - 33.

caused a full blown epidemic.[67] Dr. Schoolfield believed the pestilence was intensified by something else. The answer was three ships from the West Indies. They came into Norfolk in late July carrying a cargo of fruit.

> A large portion of the oranges and limes of which they [the cargoes] consisted were in a state of putrefaction, and were, in that state, landed at Commerce street wharf,... The casks were opened and picked on the quay, and the rotten fruit, and the materials with which they were picked, left on the same spot for many days. The smell arising from this filthy mass of vegetable matter was highly offensive.[68]

The addition of this cargo to the already existing conditions in Norfolk would, Dr. Schoolfield thought, create yellow fever on an epidemic scale.

Dr. Schoolfield and the Norfolk Committee were not the only physicians to theorize about the origin of yellow fever. Physicians and scientists all over the world debated the cause of infections, disease, and epidemics. Through experimentation and communication, these nineteenth century

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[67]Ibid., 22.

[68]Ibid., 33 - 34.

scientists were witnessing the evolution of modern medicine. They had begun to explore life in the microscopic world, that eventually would lead to germ theory and cures for diseases. With this newly found world and information, two factions emerged in the realm of disease and epidemic origins; contagionist and anticontagionists. Contagionists believed the cause of a sickness was an unidentifiable and unseen substance. They also believed that a disease was spread by communication. Contagionists contended that a disease was passed between victims by some sort of contact. This contact could be human, from food or clothing, or from animals. They believed illness was caused by outside forces brought into an area, not domestic in origin.[69] Therefore, this group favored marine quarantines and disease importation theories.

On the other side of the argument were the anticontagionists. They opposed the communicable disease idea in favor of the miasma theory. A miasma, according to John Ellis, was tainted air that caused disease and infected

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[69]Ellis, Yellow Fever and the Public Health in the New South, 3 - 4.

humans by way of their respiratory system. This miasma was caused by putrid, decomposing organic material and some aspect of the atmosphere. Anticontagionists were the sanitarians of the nineteenth century. They wanted clean, open cities with wide streets, sewer systems, and garbage pickup.[70] The anticontagionists wanted a complete overhaul of urban policies on public health.[71] These men, however, did not favor a maritime quarantine, since they believed disease was born of the earth and not imported.

The debate continued as did the search for the source of yellow fever. In looking at insects as a possible source, the *Aedes aegypti* mosquito was discovered. It is indigenous to regions that spawn yellow fever and was identified as the carrier of the disease. This mosquito is a poor flier and remains close to its breeding ground - fresh water. This explained why outbreaks were concentrated into one area, but not how they came to be in a temperate climate such as coastal Virginia.[72] Gordon Harrison

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[70]Ibid., 4.

[71]John Blake, "Yellow fever in Eighteenth Century America," Bulletin of the New York Academy of Medicine, 44 (1968): 678.

[72]Gordon Harrison, Mosquitoes, Malaria, and Man: A History of the Hostilities Since 1880, (New York: E.P. Dutton, 1978), 28.

provided a simple explanation. He believed that mosquitoes were carried to unsuspecting populations by people who had visited infected areas.[73] The *A. aegypti* was transported to Norfolk via a ship. Infected mosquitoes found their way on board in pockets, folds of clothing, or by other means. Once trapped on board, mosquitoes survived by feeding on the crew who then contracted the yellow fever virus, making them ill. The cycle of sickness continued as more mosquitoes were hatched. They found a perfect breeding ground in the casks that carried fresh water for drinking and cooking. Though the insects bred in the casks, they mainly inhabited the closed cargo areas as well as any standing fresh water.[74] Therefore, when these areas were opened while in port, the virus carrying mosquitoes could escape and terrorize citizens and their businesses.

Once the disease was discovered and acknowledged by the governing powers, emergency plans were put into action. One method used to insure the safety and well being of citizens

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[73]Ibid., 158.

[74]Khaled J. Bloom, The Mississippi Valley's Great Yellow Fever Epidemic of 1878, (Baton Rouge: Louisiana State University Press, 1993), 30 - 32.

was the maritime quarantine. Though it was not a procedure supported by anticontagionists, the quarantine was commonly used in port towns. Incoming vessels, especially those coming from ports where yellow fever was reported, were stopped and inspected miles off shore. Vessels were moored at this location for days, weeks, and months at a time to prevent the spread of the virus. But while a community's health was being protected, its coffers were being emptied. Most port cities were comprised of merchants, sailors, and others dependent on frequent, free flowing trade. Some ships avoided infected ports because their captains did not want to be stuck at the quarantine. These vessels, their cargoes, and their money went to rival ports, causing a significant decline in the port's economy. The quarantine also kept vessels that did enter the port away from the unloading docks and the delivery of goods. This caused a harmful, sometimes destructive chain reaction. When trains could not pick up their cargoes, mills and factories were deprived of raw materials to make their products, leaving shopkeepers without merchandise to sell.[75] Yellow fever

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[75]Bloom 121 & 126; Humphreys, 86.

also halted the passenger trade. There was no incoming tourists or visitors because of the quarantine and rumors of the disease. Without patrons, restaurateurs and hotel owners were forced to close their businesses. This scenario also affected the employees of these businesses. If no work was done, no profit was made and companies could not support their workers. When yellow fever came to town everyone lost.

Merchant companies found dealing with disease extremely frustrating. It was difficult to stay in business while waiting to receive their captive cargoes. They owed creditors and depended on the resale or further transportation of goods to make a profit. Ships involved in the triangular trade were particularly vulnerable. The quarantine caused perishable goods to rot, leaving the merchant with no product to sell. As a result, they had nothing to trade and vessels could not continue on the next leg of their voyage. These situations would not have affected the local economy if only one merchant was involved. However, when every merchant in the city had the same problem, it could lead to financial disaster. Yellow

fever ruined more than one port city and with its prevalence for semitropical climates, the South's economic growth was stunted more than once.

The presence of yellow fever was often publicly suppressed when it first appeared in a port city. This gave physicians time to confirm the initial diagnosis, confer with city officials, and choose a plan of action. The goals was to minimize the damage consistent with an outbreak of the disease. This sometimes meant not informing the public at large of yellow fever's presence. Unfortunately, physicians and government officials felt they needed to protect the public from itself and had a right to make life threatening decisions for them. Once they discovered that the virus was in the city, typically panic ensued. Not only did people leave in droves, but they left their business and the poor to die. Business owners, shopkeepers, merchants, and grocers promptly closed and escaped the city though there were people who still wanting to make purchases. The remaining citizens went without food and other daily essentials.[76] Those living in unaffected areas,

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[76]Humphreys, 2, 8 - 9.

such as the countryside, blockaded themselves against the threat. They would not allow any one or any thing from the infected area into their community. This made any attempt at alternate commerce routes for inland traders nearly impossible. The months between June and November were at the most agonizing for residents of port cities. They held their collective breaths hoping that yellow fever would just stay away.

Yellow jack (as residents referred to it) and his ruinous wake knocked at Norfolk's door many times. During the earliest recorded yellow fever outbreaks from 1798-1801, residents reportedly carried on as usual. Daily life was not interrupted. "There was not a store closed on account of the fever in either of those years."[77] These bouts of the disease had little impact on the people, the economy, or the growth of Norfolk. A branch of the Bank of the United States was opened in the city and the Chamber of Commerce was founded in 1800. It was that year when yellow fever was supposed to have its grip around Norfolk's throat. But the city's economic problems were more based in foreign policy

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[77]Richmond Dispatch, 22 August 1855.

than a by-product of several epidemics. The Embargo Act of 1807 had nearly destroyed Norfolk's commerce because merchants were unable to continue their lucrative trading with West Indies ports. This situation was only complicated by the War of 1812 and a continued decline in the West Indies trade. The combination of these economic hardships was more detrimental to Norfolk's commercial community than all yellow fever outbreaks prior to 1855.[78]

In the decade before 1855, Norfolk's economy was again on the upswing. The city was enjoying financial prosperity and there was once again talk of a railroad. Residents were in general good health and enjoying life. They were excited about the beautification effort that was underway. Parks and gardens were constructed to make the city more attractive. All seemed well with the growing seaport until June, 1855 when a ship arrived with yellow fever. The disease swept through the city and its surrounding neighbors quickly, leaving little time for the unprepared Board of Health to meet, organize, and decide on a plan. It was clear that this epidemic could not and would not be ignored.

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[78]Costa, 358 - 359.

Everyone on the East Coast was aware of the yellow fever's existence and the devastating power it held over Norfolk. They could only offer support in the form of volunteers, supplies, and funds. Ultimately, they were powerless to stop the epidemic and were forced to watch the situation unfold from afar.

## Chapter III: An Epidemic Captures the City

In the beginning, 1855 was like any other year in Norfolk, Virginia. Business was brisk, the harbor was full of ships and the wharves, the city streets, and the market place were alive with activity. Residents were making a life for themselves and their families. They were oblivious, however, to the tragedy heading their way. Although they knew that living in a seaport town meant an increased potential for disease, they had no idea that this year would be any different than others. The summer was extremely hot and humid, and yet Norfolk had been free of yellow fever until the arrival of the Benjamin Franklin.[79]

The Benjamin Franklin, an ocean going steam ship, began its fateful voyage in St. Thomas and was bound for New York. At the time of her departure, the West Indies, specifically the island of St. Thomas, was besieged by yellow fever. The vessel encountered two major problems soon after leaving

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[79]William S. Forrest, The Great Pestilence in Virginia: Being An Historical Account of the Origin, General Character, and Ravages of the Yellow Fever in Norfolk and Portsmouth in 1855; Together with Sketches of Some of the Victims, Incidents of the Scourge, Etc., (New York: Derby and Jackson, 1856), 25.

port. First, the ship's hold began to leak and had to be pumped out continuously.[80] While there was no real danger of sinking, the situation became more dire as the voyage progressed. Also while in route, a second problem presented itself. Shortly after leaving St. Thomas, several members of the crew became ill and two died. With a sick crew and technical difficulties, it was evident they could not make it to New York and changed their heading to Norfolk. As with all vessels entering the area and hailing from tropical ports, the Benjamin Franklin was placed into quarantine when it arrived on June 7. The ship was then inspected by Dr. R. H. Gordon, Norfolk's City Health Officer. He found the vessel free of yellow fever. Dr. Gordon's conclusion was based on a visual inspection as well as the word of Captain Byrum who was in command of the Benjamin Franklin. Since the captain was desperate to keep the outbreak of yellow fever on board a secret, he falsely reported that the two deaths at sea were from natural causes. He also neglected

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[80]George D. Armstrong, The Summer of the Pestilence, A History of the Ravage of the Yellow Fever in Norfolk, Virginia, A.D. 1855, (Philadelphia: J.B. Lippincott and Co., 1856), 17.

to report the still viable cases on board and did not report the fourth case that appeared while the vessel was in quarantine.[81]

Although the captain was able to mislead Dr. Gordon, he was incapable of keeping the fever's presence concealed. British Consul G. P. R. James quickly and very easily discovered that the disease was on board. The captain requested that James take possession of the effects belonging to a sailor from the Benjamin Franklin who had died at the hospital. While investigating his nationality, the British Consul found the sailor's demise was caused by yellow fever, not typhus as the captain had earlier indicated.[82] But Consul James was not the only person with this knowledge. According to Norfolk historian William Forrest, both Mr. William Harper, work supervisor at Fort Norfolk, and Mr. Henry Neavill knew the captain's secret. The two men had seen rotten fruit floating in the river away

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[81]Report of the Origin of the Yellow Fever in Norfolk During the Summer of 1855, 26.

[82]S. M. Ellis, The Solitary Horseman or The Life & Adventures of G. P. R. James. Kensington: The Cayne Press, 1927), 192.

from the vessel. And when they went out to her, they discovered yellow fever was on board.[83] Because of the potential dangers the disease posed, Harper and his friend were understandably surprised and disturbed when they learned that on June 19, the Benjamin Franklin was allowed to move from the quarantine to Page and Allen's shipyard in Gosport. British Consul James was especially upset by these events. He felt the port authorities' quarantine was less than adequate to contain the yellow fever on board, and now they had agreed to let the vessel come closer to the population. James knew disaster and an epidemic were imminent, but his protests were ignored.[84]

The Benjamin Franklin's release from quarantine was permitted by Dr. Gordon, who was acting under the authority of Norfolk's Board of Health and Portsmouth's Common Council. They allowed her removal for three reasons. First, the captain implored the officials to let the ship to go in for repairs because she was leaking badly. Second,

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[83]Forrest, 12 - 13.

[84]Ellis, The Solitary Horseman, 192.

Dr. Gordon had previously concluded that there was no yellow fever on board. Finally, the captain had given his word that the ship's hold would not be opened. Once at the Page and Allen's shipyard, however, the captain broke his promise to Dr. Gordon, and broke out the hold. This one act proved to be catastrophic to the people of Norfolk and Portsmouth. Within days of the Benjamin Franklin's move to the shipyard, residents began taking ill with yellow fever. And it spread.[85]

The yellow fever outbreak began long before the boiler maker on the Benjamin Franklin was announced as the first official death. Two bodies from the ship had already been buried, one in the middle of the night, and the other on the shore opposite Fort Norfolk. An additional corpse was found wrapped in canvas, bound with cord, and floating by the Fort. All were from the Benjamin Franklin where the disease was still raging. Two crewmen claiming they would rather drown in the river than stay aboard ship and await an

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[85]Forrest, 16 - 17.

agonizing death tried to escape the infected ship.[86] But there was nowhere to run. The virus continued to infect people on and around the vessel before spreading to the adjacent wharves. Soon Gosport, the southern part of Portsmouth, was completely contaminated, and the Benjamin Franklin was quickly sent back to the quarantine. While in the quarantine two men, Elvy Trotter and Noah Wilkins, spent the night aboard ship. They both came down with yellow fever two days after leaving and died.[87]

By July 30, the disease had made its way into Norfolk. Barry's Row was the first area in Norfolk to become infected. This Irish neighborhood, comprised primarily of shanties was located on Church Street between Wide Water and Union Streets.[88] Pastor George D. Armstrong described the buildings as "small, sadly out of repair, overcrowded with

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[86]Ibid., 15.

[87]Report of the Origin of the Yellow Fever in Norfolk During the Summer of 1855, 106.

[88]Forrest, 25.

inhabitants, and filthy in the extreme."[89] William Lamb, a Norfolk citizen, echoed Armstrong's sentiment. Barry's Row, Lamb thought, was "a perfect cess pool of pestilence."[90] The first victims in Barry's Row were cared for by Dr. George Upshur, a prominent Norfolk physician. These early cases were wrongly diagnosed as some type of fever. Although their symptoms were those of yellow fever, Dr. Upshur was either unable or unwilling to publicly state that the disease was in the city. Therefore, he claimed the people of Barry's Row were suffering from what became known as "Upshur's fever." Dr. Upshur, however, had already seen a case of yellow fever at the marine hospital on June 21. The second officer, James Palmer, of the Benjamin Franklin was brought there. In his notes, Dr. Upshur described his patients symptoms, but did not record a diagnosis. It was clear that Palmer had the disease. A resident student, Robert Bernard, had made the same observations about the patient as Dr. Upshur. In the notes for the patient Francis

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[89]Armstrong, 19.

[90]William Lamb Diaries and Letters, 1855-1909, Swen Library, College of William and Mary, Williamsburg, Virginia, 30 July 1855.

Jones, who was also a crew member of the Benjamin Franklin and suffering from the disease, Dr. Upshur wrote that Palmer had indeed died of yellow fever.[91]

As more cases came to light, it became more difficult to deny the truth. The horrible news, on July 30, was publicly announced; "yellow jack" had invaded Norfolk.[92] The Norfolk Board of Health reacted to the news of this outbreak by fencing in the infected area as well as a neighboring building. They also established a temporary hospital outside the city at Oak Grove to accommodate the growing number of sick. They decided a permanent hospital would be situated either at the Fair grounds or Juleppi Racecourse. After some consideration, the Board of Health chose the buildings of the Juleppi Racecourse at Lambert's Point, located three miles outside Norfolk on the Elizabeth River. Patients from Oak Grove were transferred to this new hospital and there they were cared for along with other sick, indigent people from Norfolk. Each morning, victims

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[91]Report of the Origin of the Yellow Fever in Norfolk During the Summer of 1855, 104 - 105.

[92]Ibid.; Armstrong, 13 & 20.

were transported by barge from inside the city to the hospital.[93]

In the midst of the outbreak in Barry's Row, a great debate over its origin ensued, not to mention panic. T. G. Broughton, secretary of the Board of Health and senior editor of the Norfolk Herald, was convinced he knew what caused the yellow fever. In an editorial, he pointed the finger directly at the culprit by boldly stating "that the cases [of yellow fever] were all traceable to the steamer Benjamin Franklin."[94] Others believed the Irish immigrants were to blame, while still others found fault in the city itself. Once the sick and other residents were evacuated, Barry's Row was burned to the ground in a feeble attempt to eradicate the yellow fever.[95] Though the tenant house had been reduced to a pile of ash and rubble, the disease still lived. The assault had failed, but the people thought otherwise until the yellow fever made it to their doorstep.

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[93]Louisville Daily Journal, 20 August 1855; The Richmond Dispatch, 10, 15, 21 August 1855.

[94]Forrest, 25.

[95]Blanton, 228.

The yellow fever was blind to the economic or social standing of its victims and quickly reached into the wealthier neighborhoods. Now the disease was no longer associated with the poor or the immigrant population and panic and terror abounded.[96] As soon as the news was officially announced, residents began leaving. Many men sent their families away to safety, while they remained to aid the victims. Homes once filled with warm, cheerful voices were silenced practically overnight. By August 11, half of the population had fled in a total state of fear. The hysteria was worsened as more and more were seen abandoning the city, until only one-third of the white population remained. Historian William Burton believed that this mass exodus came only after the Board of Health failed to contain and control the disease.[97]

Very few blacks, however, left the city. Lack of funds was their primary reason for staying in Norfolk. In this time of forced confinement, they helped nurse the sick and

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[96]The Richmond Dispatch, 24 August 1855.
[97]Burton, 20.

bury the dead. Blacks had one advantage over the white population, their genes. Their African and West Indian ancestors' prolonged exposure to the virus had made them less susceptible to the yellow fever.[98] Some blacks became ill, but a significantly smaller number died compared to their white counterparts.

As some people fled to friends and relatives in Richmond and Petersburg; others found refuge in neighboring communities with strangers. The countryside provided Norfolk residents a much needed escape to a healthier atmosphere. Homes, hunting cabins, churches, and barns were quickly occupied.[99] The Eastern Shore of Virginia proved to be a particularly inviting place for weary escapees. The people of this region invited Norfolk citizens into their homes and cared for them until the yellow fever left the city.[100]

But many citizens were not so lucky. They ran blindly from Norfolk to points unknown searching for some place to

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[98]Armstrong, 37, 54, - 55.

[99]Parramore, 178.

[100]Burton, 20.

hide. Others with or without the knowledge of the yellow fever wanted to get into the city. For those entering and exiting Norfolk, the journey was riddled with road blocks. When vessels carrying passengers bound for Norfolk were not permitted to dock, they went to Hampton. Once there, however, they discovered Hampton had established a quarantine against the city and its citizens. Hampton residents made it perfectly clear, passengers going to or fleeing from Norfolk were not welcome. Hampton residents were serious about protecting themselves from the pestilence. If pushed, they would resort to violence.[101]

At Old Point Comfort, for instance, passengers were threatened at bayonet point, and were not allowed to step foot on land. Those refugees who were able to get ashore were outcast from the city and "tented upon the beach."[102] To further tighten their security, every person traveling to Hampton was required to produce a certificate stating they were neither coming from nor were they a resident of the

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[101]Ellis, The Solitary Horseman, 193.

[102]Williams Lamb Diaries and Letters, 5 August 1855; Ellis, The Solitary Horseman, 193.

infected city. The people of Hampton also felt the need to enhance the protection of their aquatic entrance. They "eventually obtained a cannon, planted it on the pier, and would not let the boats from Norfolk approach."[103] These precautions were common throughout the state, and all modes of outgoing transportation were subject to unfriendly receptions. Towns with railway depots asked that trains from Norfolk not stop, while others removed the train tracks to insure against unwanted travelers. The entrances of nearby towns were guarded, and passengers hailing from Norfolk were not allowed in for fear of spreading the yellow fever.

This fear severely isolated Norfolk from the rest of the world. By the end of July, rumor of the epidemic had reached far and wide. The city soon found that several ports and inland cities had issued a ban on trade with them. Richmond and New York, for example, had also established quarantines against any ships coming from Norfolk. At the

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[103]The Richmond Dispatch, 9 August 1885; Ellis, The Solitary Horseman, 193.

same time, captains already in Norfolk's quarantines refused to enter the inner harbor to deliver their cargoes.[104] This left remaining residents without provisions. Fortunately, two small steamers, the J. E. Coffee and the Princess Anne, were willing to meet ships outside the port and transport goods into the harbor. Norfolk was then able to communicate with the outside world, and more importantly, to receive small cargoes consisting primarily of bread, candles, lemons, and coffins. Often stacked high on the decks of cargo ships, coffins were the most demanded items on the market in Norfolk. George Armstrong commented, "I looked over the day-book of one of our principal furniture-dealers yesterday; and all down the page, there was no charge but the oft-repeated one of 'A coffin;' - 'a coffin.'"[105] The death toll was beginning to climb and there were difficult times ahead, but citizens took comfort in knowing they were home.

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[104]The Richmond Dispatch, 1 & 2 August 1855.

[105]Armstrong, 103.

Escaping citizens, however, did not have that luxury. By the time they left Norfolk, some were already infected with the virus. As these poor souls ran for their lives, they developed symptoms and became hopelessly sick with yellow fever. These refugees had to depend on the kindness of strangers to care for them. Many died during their flight to freedom and were buried alone, far away from their home. As citizens in and outside the city struggled with their decisions to leave their homes hastily in search of a safe haven, they were being publicly chastised in the newspapers. Some of Norfolk's prominent people, especially women, were accused of being cowards and deserters, leaving those in need, and circulating wild rumors about the state of yellow fever in the city. As The Richmond Dispatch noted:

> many of them [women], we are sorry to say, abandoning their husbands, brothers, and children, and in their headlong flight inoculation (if we may call it,) every place through which they passed with the same fearful yet puerile panic. Under these circumstances, what more could we expect from strangers, when our own people deserted their homes, carrying with them such exaggerated and

dreadful storied.[106]

Similarly, the editor of the Norfolk-based Argus criticized and condemned all who left the city. He urged residents to remain calm, to stay and care for the sick, and not to talk about the yellow fever. He did all this with the full knowledge of how serious the situation had become.[107]

As yellow fever progressed through Norfolk, the city took on an eerie quality. The streets were deserted and silent. S. M. Ellis likened Norfolk to London during the Great Plague.[108] Even the busiest place in the city, the post office, had become sad and gloomy. Crowds no longer converged on its massive porch to discuss the day's events, nor did children play. People simply collected their mail and packages and left quickly without speaking to each other. However, once the post office was moved to Catherine Street, away from the sickest part of town, people

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[106]The Richmond Dispatch, 24 August 1855.

[107]G.W. Jones, "The Year Virginia Mourned: The Sources of a Catastrophe," Bulletin of the History of Medicine 35 (1961): 259.

[108]Ellis, The Solitary Horseman, 194.

again gathered.[109] Yellow fever became the topic of conversation for those remaining. A letter written on August 2, 1855, by Ann Herron of Norfolk illustrates the seriousness of the situation. "Our only salutation is how is the disease today? how many new cases? how many deaths, and parting is as if we may never meet again."[110] Each family lost at least one member and some families were entirely destroyed. The surviving members of one family described their loss by stating "only the old and worthy father and mother remain of a once large circle of relatives. The branches are withered, but the trunk remains in Norfolk."[111] By mid-August, all hopes of a quick recovery were gone and the death count rose higher and higher every day. Norfolk's advocates were ebbing away with each passing tide. The city could ill afford to part with its best and brightest residents, but this was exactly what happened. The people who cared the most for the well-being and continued existence of Norfolk would not leave it in its

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[109]Armstrong, 113 - 114 and The Richmond Dispatch, 25 August 1855.
[110]Conway Whittle Family Papers, Swen Library, College of William and Mary, Williamsburg, Virginia, 2 August 1855.

time of need. For this act, selfless or not, they paid the highest price.

William D. Roberts was one such person. He had just been elected to the Virginia House of Delegates and was one of the city's wealthiest residents. Unfortunately, before Roberts was able to take his seat, he took to his bed with yellow fever and died.[112] His political potential would never be realized. Ann Herron was another citizen who never reached her potential. She was known as the benefactor of St. Mary's Asylum, a Norfolk orphanage, and a charitable woman who cared deeply about those in need. When yellow fever came to Norfolk she refused to flee and took action. She opened her enormous home on Wood Street to the city's sick and dying. A religious order, the Sisters of Charity, volunteered as nurses in the hospital she created. While caring for the ill, however, Ann Herron became infected and died. But her legacy did not end with her death. The home

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[111]Forrest, 265.

[112]Williams S. Forrest, Historical and Descriptive Sketches of Norfolk and Vicinity including Portsmouth and the Adjacent Counties, During a Period of Two Hundred Years. (Philadelphia: Lindsay and Blankiston, 1853), 125 - 126.

she loved was later willed to St. Vincent de Paul Hospital by her brother, James Herron Behan.[113] The sacrifices made by people like Ann Herron were repeated over and over again. As she set up her hospital, men in another part of town were organizing to help their fellow citizens.

## The Howard Association

William B. Ferguson, J. J. Bloodgood, J. B. Whitehead, R. W. Bowden, and James A. Saunders knew the situation in Norfolk was becoming more and more serious every day. The victims outnumbered the caregivers by at least ten to one. Physicians and nurses within the city were few in number and worked beyond the point of exhaustion. Much needed supplies were either locked up or unavailable, and hospital space was nonexistent. It soon became clear to these men that banding together was their only hope of survival. On August 10, 1855, they formed the Howard Association which was based upon a New Orleans organization providing and caring for the

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[113]Ibid., 226.

people of that city during yellow fever epidemics.[114] At first the Norfolk Howard Association's goals were basically giving "relief to...the sick poor who have friends willing to nurse them at home, and daily sending to the hospital those who have neither friends nor money."[115] They accomplished the latter by keeping a book in their office to register people wanting to go to the hospital at Lambert's Point. By pooling their resources these men had early success in accomplishing some of their goals. As a result, the seventeen day old Howard Association and what was left of the Board of Health and the city government met to discuss their situation. They were joined by Drs. Fenner and Beard from New Orleans who volunteered their services. This meeting mostly dealt with the general public health and developing an effective plan to aid the sick as well as

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[114]Howard Association of Norfolk, VA. Report of the Howard Association of Norfolk, Va., To All Contributors Who Gave Their Valuable Aid in Behalf of the Sufferers From Epidemic Yellow Fever During the Summer of 1855. (Philadelphia: Inquirer Print Office, 1857), 3. (This will be cited hereafter as Report of the Howard Association of Norfolk, Va.)

[115]The Richmond Dispatch, 18 & 21 August 1855.

provide for those still healthy.[116] Their first priority was to the ailing and dying.

With satellite hospitals full and so many people ill in their homes, Drs. Fenner and Beard recommended a large hospital, centrally located in the city where everyone could be admitted and treated without the detrimental journey to Lambert's Point. With an appointed committee, Drs. Fenner and Beard selected the Old City Hotel on Main Street as the site of the new hospital. The two physicians were also asked to supervise the hospital's organization and to be responsible for its "medical management." The vacant hotel in three days was stripped of its furnishing and cleaned in order to receive its first patients.[117] However, the supplies needed to refurbish the new hospital, though in stock, were not readily accessible. To the dismay of the Howards, the furniture stores in town containing the needed cots, beds, and tables were tightly locked. They would have to go elsewhere for these materials and other items. As a

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[116]E.D. Fenner, "Dr. Fenner on Yellow Fever of Norfolk," The Stethoscope 5 (1855): 696.

[117]Ibid.

last resort, an urgent request was sent to Baltimore. The response was a shipment of supplies that enabled the new hospital to open.[118] Physicians and nurses could now better care for the sick within the city.

By early fall most Norfolk physicians were either severely overworked or ill. They had labored tirelessly to save their friends and strangers from the horrible death associated with yellow fever. It was obvious to the Howards that medical reinforcements were desperately needed. Therefore, they turned their attention to finding physicians and nurses to take charge of patients in the hospital as well as in their homes. As the requests for help were circulated, volunteers left their homes bound for Norfolk. Miss Annie M. Andrews of Syracuse, NY, for example had already come to the city on August 16 and presented herself to Mayor Woodis.[119] She was the first to volunteer to nurse the sick until the epidemic had passed. Similarly, physicians such as Drs. Fenner and Beard were arriving daily

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[118]Report of the Howard Association of Norfolk, Va., 12.

[119]Forrest, The Great Pestilence in Virginia, 53.

to offer their expertise. The number of victims, however, was growing at a faster pace.

The Howards, seeing the need to attract more professionals, offered volunteers free board and all expenses paid.[120] Much to their relief, over one hundred and fifty doctors, nurses, and druggists, hailing from New York to Louisiana, came to Norfolk's aid. Many were not prepared for what they found; the intelligent and well-educated local doctors lacked experience in dealing with yellow fever. Compared to most incoming physicians, they lacked experience in understanding the disease itself, its treatment, and its epidemic scale. Visiting medical men shared their knowledge by accompanying and instructing the local doctors as they called upon their patients.[121] At times Norfolk resembled a medical conference with physicians from different regions sharing information and teaching one another. At other times the city seemed like a laboratory. Some physicians specifically came to study the yellow fever

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[120]Burton, 21.

[121]Fenner, 695.

looking for a way to ease the pain of their patients and a cure.

Though treatment varied and was at the discretion of the physician in charge, two schools emerged: the New Orleans and the Charleston. The methodology of the physicians from New Orleans was to first use hot mustard foot baths and castor oil to clear the patients' intestines. They then recommended that patients remain completely covered with blankets as cold compresses were applied to their heads. Those from Charleston, on the other hand, suggested the "free application of cold water over the head and body, and the use of very light covering," as well as drinking cold liquids.[122] The debate over treatments raged as doctors attended scores of patients. With the medical staff situation well in hand, the Howards moved on to other tasks.

They noticed there was only one apothecary shop still open in town and found it necessary to install their own in the new hospital. Everyone could now easily obtain drugs as

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[122]Ibid., 701.

well as other supplies such as fruit and bread, from one location. The Howards stocked the hospital with goods from their storehouse, the Warehouse of the Baltimore Steam Packet Company, which was the only source of provisions in Norfolk.[123] The Company was supplied by the chartered Princess Anne which met "the Baltimore boats [to] receive the regular supply of goods, medicines, &c., destined for this community."[124] The Howard Association not only rationed and provided residents with food, clothing, and care, but they founded the Howard Orphan Asylum, recorded deaths, and buried the dead. Though they gave time and effort, their projects were financially backed by money sent by neighboring states. The nation, especially the East Coast states, looked for a way to ease the suffering of the city. Baltimore, Philadelphia, and New York, although rivals in trade, were Norfolk's most significant supporters and freely gave supplies and funds. They sympathized with Norfolk's plight because they knew first hand how

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[123]The Richmond Dispatch, 21 August 1855.

[124]Armstrong, 102 - 103; Report of the Howard Association of Norfolk, VA., 8 & 11.

devastating an epidemic was to a port town. The citizens of these cities created relief funds and associations to collect supplies and raise money to send to the desolate city. By September 10, Norfolk had received a total of $86,418.[125]

The Beginnings of a Ghost Town

As soon as officials had announced yellow fever was in the city, shopkeepers hastily closed their establishments and left. Every day, fewer and fewer stores were open for business, and by the end of August, only four or five remained accessible. The almost deserted market place offered only a small quantity of fruits and vegetables, and all the bakeries were empty.[126] Butchers and fishermen sold their wares for a high price, and meal and butter were the rarest of commodities. The people of Norfolk had a difficult time believing that their markets could be so bare. All summer the countryside farms were teaming with

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[125]Burton, 21; William Lamb Diaries and Letters, 10 September 1855.
[126]The Richmond Dispatch, 30 August 1855.

produce. Now there was no fruits or vegetables, nor could any poultry be found. Those in the city felt the country folk had deserted them, leaving them without food.[127] Soon, however, there was no reason to point the finger of blame; there was nothing to buy. With the exception of the Howard Association's store house and fishermen and rural blacks providing small amounts of fish and vegetables, Norfolk found itself gripped not only by disease, but also by famine.[128] It was difficult for residents to comprehend and accept that the city's balance was so delicate and easily disturbed.

But Norfolk's prosperity has been based on a combination of people and trade. Though the population at large provided some funds to sustain the city, most money had come from a small group of citizens and their businesses and industries.[129] This group, however, provided more than mere financial support. They had gone to great lengths to promote the port town, and lent their good names on behalf

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[127]William Lamb Diaries and Letters, 16 August 1855; Forrest, 59 - 60.
[128]Armstrong, 72; Parramore, 178.
[129]Forrest, The Great Pestilence in Virginia, 88.

of Norfolk in order to lure people and new businesses. The city was their home, and they had wanted it to be elegant, fashionable, and cultured; their ultimate dream was to establish Norfolk as the jewel of the East Coast. The presence of yellow fever shattered that dream. Presidents, accountants, tellers, and clerks from every bank and financial institution were taken by the virus.[130] With the death of these men went the promise of Norfolk's future. The city also lost her lawyers, hotel owners, builders, and druggists. The Argus, the American Beacon, the Beacon, as well as the Daily News found themselves without editors and staff. All newspapers in Norfolk stopped publication because there was no one left to write articles or run the presses.[131]

To make matters worse, all activity at the Gosport Navy Yard ended prior to President's official closing on September 6, 1855. After the initial outbreak of yellow fever, the workers put down their tools and ran, leaving a

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[130]Burton, 22 - 23.

[131]The Virginia Gazette, 6 September 1855.

large class merchant ship in the dry dock. They too feared the pestilence would soon infect them and their families. No one remained to work the long summer hours, and the area was as empty as the wharves and warehouses lining the harbor.[132]

The wharf district, comprised of forty warehouses, occupied one mile of waterfront property. In the days before the first outbreak of yellow fever, ships filled the harbor and the wharves were stacked high with cargo. Pastor George Armstrong observed that no matter what the season, vessels were often lined up five to six deep in the wharves, awaiting cargo or unloading. But as the disease spread, he did not see even one ship in the wharf district, from the drawbridge to Town Point. The wharves and warehouses were closed and locked. Norfolk had fundamentally changed, yet the buildings remained the same with their owner's names emblazed across their fronts in large letters. "The names painted there will, many of them, if they are to give true directions, soon [will] have to be blotted out, instead,

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[132]William Lamb Diaries and Letters, 6 September 1855; Forrest, 18.

[written] upon the sign-stones [will be] the 'city of the dead.'"[133]

The virus spread quickly through Norfolk's business area which extended from West Main Street to the river. Though businessmen abandoned their offices for safer areas, they tried to maintain the appearance of business as usual. As long as the local newspapers published, they ran advertisements to report the present locations of their establishments. Rental spaces on North Main Street or their homes became temporary offices.[134] But they too could not outrun the virus. Men like John Tunis, the wealthiest citizen in Norfolk, and Josh Willis, a prominent merchant, died, creating an economic vacuum. The Seaboard and Roanoke Railroad lost its president, Dr. Collins, while the Custom House mourned the passing of its officers. The business community slowly lost its cohesive integrity until all business was suspended September 21, 1855. Seven days

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[133]Armstrong, 101 - 102.

[134]Ibid., 55.

later, the Customs House and all its commerce was removed to Hampton.[135]

Between the missing, the sick, and the dead, Norfolk could not function as a governmental entity. Government workers died literally at their posts: the postmaster, Alexander Galt, US Deputy Marshal of the District, Wilson B. Sorey, jailers, and constables. Deaths on the Board of Health and desertions by Select and Common Councils' officials left the city without a governing body.[136] The mayor, Hunter Woodis, alone took responsibility for making sure Norfolk survived. As long as Woodis remained alive, the city and its remaining citizens had a leader to guide them. He was a young, dynamic mayor who took great pride in improving the city. However, he died early in the epidemic on August 25, 1855. The highest ranking official left was the senior magistrate, Dr. N. C. Whitehead. He became mayor soon after Woodis' passing. Dr. Whitehead was not, in Pastor George Armstrong's estimation, equal to the former

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[135]Forrest, The Great Pestilence in Virginia, 162 - 163; Armstrong, 55 - 56; William Lamb Diaries, 28 August 1855.

[136]William Lamb Diaries, 30 August 1855.

mayor. Whitehead, an older and more settled man, was burdened with the duties as president of the Farmer's Bank and as mayor of a dying city.[137]

As the epidemic grew and the population declined, the remaining powers took drastic measures. They felt it was in the best interest of the city to suspend revenue collections and have the treasury locked. It was also decided that the Board of Health would take on a double role. A Committee of Safety was established within the Board of Health to ensure against utter chaos and anarchy in the city. This committee assumed "the powers necessary to meet the extra-ordinary exigencies of the time being."[138] They were supported and recognized by those remaining in authority. As an additional precaution, the street lamps were lit every night to discourage thieves from pillaging the vacant homes and businesses. Unfortunately by September 6, things were getting more and more out hand in Norfolk. The remaining officials decide to place the city under martial law to

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[137]Armstrong, 69.

[138]Forrest, The Great Pestilence in Virginia, 91.

protect private property and commandeer needed vehicles to transport doctors, nurses, and the dead.[139] William Lamb later lamented, "a fearful scourge...fell like a deadly blast upon our communities, prostrating our people and sweeping away health, wealth, energy - aye life itself."[140] Though Pastor George Armstrong wanted more people to stay and help during this time of need, he conceded "had all remained, and from among them a proportional number been taken sick, as undoubtedly would have been the case, I know not what we could have done."[141] It was estimated that within ninety days, the whole remaining population of 6,000 people, had taken ill with the virus. Whole households were wiped out, and at the height of the epidemic, as many as eighty people died a day. In the end, one out of four died from yellow fever.[142] The number of living, functioning souls was at a bare minimum. Bodies awaiting removal to the cemetery and burial began to pile up on the streets due to lack of vehicles and manpower. At the cemetery, the story

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[139]William Lamb Diaries, 6 September 1855.

[140]Lamb, Our Twin cities of the Nineteenth Century, 27.

[141]Armstrong, 71.

was much the same. There were only a few people available to dig graves and they could not keep up with the incoming bodies. While some victims got formal burials with coffins and markers, others remained unidentified and buried in blankets. During the worst part of the epidemic, mass graves were dug to handle all the victims and, at times, entire families were being buried together. Pastor Armstrong stated that there were so many people being buried that a local cemetery, which he called "God's acre," that it had "the appearance of a ploughed field."[143] There seemed little hope that Norfolk would now wake from its nightmare.

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[142]Burton, 21.

[143]Armstrong, 100.

## Chapter IV: Recuperating and Rebuilding

In the cemetery surrounded by fresh graves one can imagine the lone figure of Pastor George Armstrong. As he rubbed his exhausted eyes, he wondered how many funeral services he had performed since July. The answer called out from the back of his mind -- too many. So many people had died. There was no longer time for individual burials, let alone funeral services. People were quickly buried in large pits. Looking up into the cloudy, gray sky, he thought of the family and friends he had watched die a violent, agonizing death. He could not think of a more horrible way to die -- drowning in your own blood. The heroism and courage as well as suffering and despair he witnessed would never be forgotten. Surely Norfolk would not end as a ghost town created by an epidemic. With these thoughts in mind, he walked into the church, knelt at the alter and prayed for one hard freeze.

Thirty-two degrees was the only thing standing between Norfolk and freedom. The frost would eradicate the yellow fever still viable in the city, and would allow it to emerge from the hellish nightmare of the previous three months.

Newspapers reported fewer and fewer cases as October progressed. Despite this good news, people were cautioned not to reenter the city until the onslaught of the first coat of ice. Unfortunately, the first frost did not halt the fever. Some anxious citizens, however, returned anyway and were stricken. As early as the second week of October, homes and businesses closed by the epidemic were opened and the contents aired out.[144] The second frost to hit Norfolk was also ineffective. But when news of the two freezes were made public, citizens came back as quickly as they had fled. They wanted to return home, survey the damage, and continue with their normal lives.[145] Few, however, were not affected by the epidemic. Most would be forever changed by enormous personal and financial loss. Learning to adapt and to redefine goals would be important keys to their own survival. It had only taken the yellow fever six weeks to engulf the city and sicken the remaining residents.[146] Achieving pre-epidemic economic and population levels might take a year or a decade if at all.

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[144]William Lamb Diaries, 11 October 1855.

[145]Burton, 24.

[146]Forrest, 115; Armstrong, 156.

Starting over would be a challenge and a number of citizens chose not to return after the city was free of yellow fever. They were no longer willing to take the risks involved in living in a port city. Norfolk, they felt, could not succeed without its fallen leaders and there were no prospects to take their places. According to the 1850 United States Population Census, Norfolk consisted of 10,025 white persons with 1,907 families living in 1,715 dwellings.[147] Now, in 1855, the city had lost a significant portion of its residents to the epidemic in one way or another. Norfolk not only lost its population, economic and labor bases, but was further burdened with orphaned children, homeless poor, and basic loss of subsistence. Despite all that they were facing, returning Norfolk citizens maintained positive attitudes and were publicly optimistic. Residents who had remained in the city and survived, however, were suffering emotionally. Those with the means to escape, but chose to stay were coming to terms with their decisions. The most difficult was coping with

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[147]Bureau of the Census, Seventh Population Census, 1850 (Washington, D.C. 1855). (This will be cited hereafter as Seventh Population Census, 1850).

the knowledge that family and friends, refusing to leave a loved one in Norfolk, had died. They also had time to reflect on the anguish and horror they had witnessed and question to sequence of events.[148]

When yellow fever appeared in Norfolk, city officials tried to preserve the city's reputation by taking control of the media. The journalists and officials suppressed the seriousness of the yellow fever outbreak. All Norfolk newspapers made an attempt, however unsuccessful, to quiet wild rumors. According to historian Thomas Parramore, the Argus, whose editor was on the Board of Health, intentionally covered up the presence of the disease in Norfolk for six weeks. Reports maintained that there was no reason to fear yellow fever because the victims could be tracked to South Main Street and all infected were alien to Norfolk or not acclimated persons.[149] This gave credence to its readers that Norfolk citizens were not susceptible to the fever and there was no need to leave the city or be alarmed. Cities like Memphis and New Orleans had similar

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[148]Forrest, 119.

[149]Parramore, 183.

experiences with the media. For example, newspapers and city officials in 1873 tried to cover up an outbreak of yellow fever in Memphis.[150] The media used their influence to persuade their readers that no problem existed, and to remain in the city and maintain the illusion of health.

The typical person did not need help conjuring up visions of disease like yellow fever and cholera. To them, it was based in moral issues and evangelical wrath. They believed the only people stricken with these diseases were poor, dirty, drank excessively, and prostituted themselves. They were viewed as a godless class and deserved God's punishment.[151] The average person had no knowledge of the newly discovered microscopic world of microbes, germ theory, or even basic sanitation. Citizens of Norfolk touted that their good morals, high social standing, and miles between them and the filthy tenement housing of the immigrant poor rendered them immune to such diseases. This attitude gave them a false sense of security that city officials did not dispel.

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[150]Parramore, 181; Ellis, Yellow Fever and the Public Health in the New South, 33.

[151]Rosenburg, 41 & 51.

Norfolk's politicians, by being ill prepared and unwillingness of act had perpetuated the seriousness of the situation. The Know-Nothings had taken control of the Norfolk city government in the 1854 election and in the 1855 election kept most offices with one exception, that of the mayor. The party's platform was anti-Roman Catholic and they opposed what were perceived as lenient immigration laws. Though Norfolk historically had been tolerant of all religions and immigrants, the Know-Nothings had found an inroad with the Whigs and shipyard workers. In these and other groups they discovered an aversion to Irish Catholics and Germans.[152] The Beacon in Norfolk supported the Know-Nothing party and called immigrants "the scum of other countries who would rather beg than work, and rather steal than beg."[153]

Therefore, when yellow fever came to Norfolk, city officials easily laid the blame a group. Their attitude was that yellow fever, cholera, and smallpox were diseases of immigrants and those of low moral standing. Hence, they were

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[152]Parramore, 180.

[153]American Beacon, 1 February 1855.

neither surprised nor concerned when the fever came to Barry's Row, an Irish Catholic tenement in Norfolk. They wrongly assumed, however, that the disease would end there.[154]

When yellow fever was first discovered in Gosport, neighboring Portsmouth went into action. City authorities set their sanitary measures in motion on July 20, 1855. The city was strictly regulated and divided into seven districts and each assigned physicians. City officials placed lime barrels in the streets and lit tar fires, desperately trying to kill the yellow fever. The Louisville Daily Journal reported that Portsmouth was doing more for patients than Norfolk.[155] Though they had acted quickly the Philadelphia Relief Committee Report found Portsmouth unequipped physically or mentally to handle an epidemic. The city lacked funds, staff, facilities, and supplies.[156]

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[154]Parramore, 177.

[155]Louisville Daily Journal, 1 September 1855.

[156]Philadelphia Relief Committee Report to Collect Funds for the Sufferers by Yellow Fever, Report of the Philadelphia Relief Committee Appointed to Collect Funds for the Sufferers by Yellow Fever, (Philadelphia: Inquirer Print Office, 1856), 4 - 5.

The Committee had the same opinion of Norfolk. Officials there were unprepared for an epidemic and continued to reject reality. In the meantime, the city authorities waited until August to act. They did not heed the warnings of other cities that had similar epidemics. New York City in 1832 was originally setup much like Norfolk for dealing with cholera. Its Board of Health, established from temporary committees, consisted of the alderman, recorder, and the mayor. Though they had solid evidence of the presence of cholera, they were not willing to make it public.[157] This caused wild rumors to abound, the disease to spread, and the population to evacuate.

The Philadelphia Relief Committee reported that during the elapsed time between the discovery of yellow fever in Gosport and its arrival in Norfolk, very little was done. No sanitary measures covered the entire city and officials gave the disease little notice.[158] The Board of Health, even after neighboring cities began quarantines against Norfolk and the formation of the Howard Association,

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[157]Rosenburg, 19 & 26.

[158]The Philadelphia Relief Report, 4, 5, & 11.

persisted in publicly denying there was a problem. As late as August the Board of Health, though releasing the names of the dead and giving daily reports in the newspapers, was still denying there was a serious problem.[159] Either they were fearful their mistakes would be known or they would ruin their futures if the true nature of the situation was publicized.

The Norfolk Board of Health tried to ignore the mistake made by the health inspector, Dr. Gordon. He knew the Benjamin Franklin had come from an area where yellow fever was raging, but made a case for the ship to be allowed into port. In doing so, Dr. Gordon contradicted one of the four principles instituted by the Board of Health; he broke the quarantine. The quarantine system of the time may not have been very strict or thought of as effective, but it was the best first line of defense for Norfolk. Without it the city was an easy target.

Along the same line, the quarantining of people suspected of having yellow fever was not accomplished in a timely manner. Those infected early on were either allowed

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[159]Jones, 259.

to stay at home or put into the Marine Hospital, and there was no adequate facility to house the sick once the epidemic was raging. No room was to be found at the present pesthouse and there was no hospital in town. The Board eventually established a new pesthouse at the Julippi Racecourse and began transporting patients there daily.[160]

But its inability to maintain quarantines and care for victims was only part of the dilemma. The people left inside the city were starving, supplies were extremely low, and medical personnel was desperately needed.[161] The formation of the Howard Association, however, took a heavy load off the Board of Health. Though the Howards were not responsible in any official capacity for sanitation and the public health, they did care for the victims as well as obtained supplies, and procured physicians and caregivers.

Though it would be wrong to fault the Board of Health members for causing this epidemic, they precipitated it. In the years prior to 1855, the Board of Health upheld, in theory, the four principles they had established to ensure

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[160]21 The Richmond Dispatch 1855.

[161]William Lamb Diaries, 8 September 1855.

the city's health: keeping the streets clean, maintaining a quarantine, immunizations, and caring for the poor. A cholera epidemic in 1832 allowed them to implement the sanitary measures they had learned. They called for the disinfection of homes and streets, and the inspection and regulation of food sold in the marketplace. They also studied new ways to give aid to the poor in the form of medicines and basic health care. An amendment to an ordinance regulating street cleaning and trash extraction, for example, was passed by city officials, as was an ordinance on the prevention of nuisances.[162] But little else was done until bouts with cholera (1849) and yellow fever (1852) and the closing of the Marine Hospital to contagious sailors from non-naval vessels. Only then did the Board begin its search for an alternative hospital.[163] The only other sanitary measures established by the city during this time period were the grading, paving, and draining of some streets.

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[162]Bagley, 101 & 111; Records of Common Council, 12 August 1851.
[163]Bagley, 108; Records of Common Council, 3 October 1854.

Although the origin of yellow fever was still unknown, the importance of removing standing water was understood. English physicians and social reformers already knew the solution that their American counterparts had sought. In 1849, they had already convinced their country that standing or stagnate water and overpopulated living quarters were adverse to their health and well-being. They knew clean and sanitary measures were the keys to health. Prevention, not a cure was the answer to controlling disease.[164] By successfully eliminating puddles and the like, Norfolk officials would have unwittingly destroyed the disease's breeding ground and their epidemic. However, the Board of Health failed at this task. There are numerous accounts that Norfolk was constantly dirty and wet. Although there were laws against such things water puddled everywhere and cows and dogs freely roamed the streets. Enforcement of these laws, responsibility of the Board of Health, was spotty at best. Finally, the Board had five different commissioners with multiples of officials under them appointed every year. This created inefficiency. The

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[164]Rosenburg, 143.

constantly changing membership left little time for instituting and maintaining sanitary reforms.[165] Unless there was a specific plan that all districts could follow, the population would remain at risk for future epidemics. This was an unthinkable to the returning Norfolk citizens; the task ahead seemed difficult enough.

Many residents believed that their city would overcome its hardships and be better than before. Citizens were encouraged by other communities that had been visited by yellow fever. New Orleans was regularly plagued by the disease and had lost population and resources, but still had managed to attract investors and people. Surely Norfolk could also fill its vacuum left by the 2,000 dead.[166] But dreaming of the future and its greatness would have to wait, more important issues needed the attention of the survivors.

The Joint Council met on November 11, to choose a new mayor and on November 26 special elections were held to fill the vacancy of William D. Roberts, deceased delegate-elect to the Virginia State House. All other city official

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[165]Ellis, The Solitary Horseman; Bagley, 99 - 100.
[166]Rosenburg, 210.

vacancies were addressed at the Joint Council meeting on November 19.[167] As the government slowly began to rebuild itself, the Common Council reported the resignation of F. F. Ferguson, Commissioner of the Revenue on December 17, 1855, and appointed a committee to fill his position. Then in early 1856 the Common Council faced the resignations of the superintendent of the city ferry and the city surveyor.[168] These were positions that needed to be filled along with all the others left vacant by the epidemic, and the applicant pool was almost non-existent.

At the November 16 meeting of the Joint Council, the immediate concern of officials was finding a contractor to clean the streets. The waste built up over the past months needed removal in order to cleanse the city of remnants of the yellow fever. Next on the agenda was a tax levied for the construction of culverts to drain property. The Common Council determined that more streets needed grading and paving, sunken lots needed to be filled to meet the street,

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[167]Virginia. Records of Joint Council, Norfolk, 11, 16 & 19 November 1855 (This will be cited hereafter as Records of Joint Council); William Lamb Diaries and Letters, 26 November 1855.

[168]Virginia. Records of Common Council, Norfolk, 17 December 1855, 5 February 1855, and 4 March 1855. This will be cited hereafter as Records of Common Council).

and oyster shucking houses needed inspection. Also, officials decided the Committee of Streets should attend the Board of Health meetings in an effort to promote cooperation and sanitary conditions.[169] All these actions were to ensure the removal of a possible threat of disease in the city again. For example, the following year doctors were ordered to vaccinate everyone for smallpox. Authorities, aware that neighboring cities were infected, wanted to protect the population. In addition, they prepared a temporary hospital in the event of an outbreak. As early as September of that same year there were intense discussions about a city water works. However, the system was not in place and regularly serving Norfolk until 1878. The idea had been placed aside as the city continued to recover, but interest was renewed as a severe yellow fever epidemic raged in Memphis. The people of Norfolk feared another epidemic and were willing to jump into the new public health movement to prevent it.[170]

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[169]Records of Common Council, 28 January 1856 and 5, 6, & 13 February 1856.

[170]Burton, 26; Bagley, 111, 112, & 125.

Although the people returning to Norfolk faced hardships, there were points of light on the long road to recovery. A new opera house opened in June, 1856 to crowds of spectators enjoying some of the best voices and plays of the time. Five months later, residents celebrated fall with an Agricultural Fair. But in January 1857, the festivities ended as the city was besieged by a fierce winter storm. Subzero temperatures, icy conditions, and twenty foot snow drifts covered the Tidewater area and stopped all shipping. Business was non-existent and the extreme weather once again made the city an unattractive place to invest. All of this occurred at a time when Norfolk needed a good image and normalcy. The harbor, frozen eight inches thick, halted the ferry and people to cross between Norfolk and Portsmouth by sled or on foot. Steam passengers also traveled by sled over the ice from Old Point Comfort to Norfolk. This storm, which lasted until Valentine's Day, was another blow to the still reeling city.[171]

Survival and creating a positive image were once again the objectives. Norfolk needed population and investors to

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[171]Burton, 27 - 28.

defeat the fall line cities and expand trade to Europe. An increase in population meant several things: a larger labor base, a greater desire for a diversity of businesses, and an influx of new ideas and money. Work could be done cheaper and quicker, undercutting the fall line cities. Norfolk needed a profitable railroad system to expand its domestic trade deeper into the interior of Virginia and North Carolina, all the while financing its European ventures. Merchants no longer wanted to depend on other ports to ship their goods abroad; they wanted their own ships to transport cargo to Europe. After assembling this successful trading conglomerate Norfolk would be a hub of culture, a city with high society, and an expanded port engaging in world commerce. Goods and products inside the city would drop in price and new shops and stores could offer a wider variety of items. The city could build and support grand hotels, theaters, and opera houses.

But after the epidemic these would not be easily obtained goals. The reality of the situation was not good. The city was recovering at a mediocre pace and the chances of financing and constructing a railroad system was slim and

developing foreign trade was almost non-existent. If there were not a drastic change in population and the economy, Norfolk be unable to become a center of high volume manufacturing and industry. The best avenue seemed to be to expand Norfolk's profitable coastal trade and truck farming to the North. Any goals set, however, could not be obtained without a clean bill of health and solid reputation.

Norfolk residents found the printed word to be a perfect tool in obtaining and maintaining that seal of approval. Newspapers were used as a vehicle for public relation. By printing stories that focused on their good health, clean streets, and visiting notables, they would be able to create a positive image for themselves. These reports could be circulated in other newspapers, furthering the reach of their reputation. Norfolk newspapers often ran editorials on the well-being and optimism of citizens as well as improvements and growth in their city.

In addition, merchants banned together to form an exchange in 1857. This was a think tank of sorts designed to rebuild the city's image as a healthy, thriving community. They concentrated on keeping commerce alive, the

port functional, and branching out into new aspects of trade. The exchange also encouraged the construction of hotels as well as other buildings. By 1859, the group felt some measure of success with the opening of the Atlantic Hotel.[172] Norfolk also continued fighting with what citizens thought was a biased state legislature over funding for railroad lines and it finally paid off. In 1858 the Norfolk and Petersburg Railroad had become a reality and began transporting goods. The city was trying to spread its commercial shipping interests west and deeper into the southern region. Norfolk was still domestic/middle man trader, not the European shipping giant envisioned in early days, but progress was being made.

Norfolk, while still recovering, received national attention when visited by ex-presidents Pierce in 1857 and Tyler in 1859.[173] They were met with grand style and large numbers of people turned out to greet them. Politics in Norfolk had become a topic of great interest once again. Residents, though still primarily occupied with domestic

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[172]David R. Goldfield, "Disease and Urban Image, Yellow Fever in Norfolk 1855." Virginia Cavalcade 23 (1973) 29; Burton, 36.

[173]Burton, 29 & 31.

issues, were well aware of the national unrest. With Gosport and the Navy Yard located nearby, they were concerned about the implications the situation might have on Norfolk. The firing on Fort Sumter in South Carolina in 1861 ended the likelihood that Norfolk would make a speedy recovery from the yellow fever epidemic. Norfolk and the surrounding cities played a significant role in the Civil War and was occupied and burned by both Confederate and Union forces. During this trying period, daily survival came first. All else, including sanitation, health reform, and working toward European trade was pushed to the back burner.

## Chapter V: Public Health, Norfolk, and the Nation

According to public health historian Margaret Humphreys, disease changed the faces of southern cities. They typically suffered from image problems, and were characterized as filthy and unhealthy areas and the onslaught of epidemics only supported these claims. For example, in 1841, an epidemic almost postponed Florida's statehood admission due to loss of population. Similarly, New Orleans was wracked by the disease in 1853, resulting in 40,000 people sick and 9,000 dead. The cities of Memphis, Charleston, Mobile, Savannah, and Norfolk also were affected.[173] It was these yellow fever epidemics, not cholera that forced the South into the reform movement. Humphreys further illustrated her statement by showing between 1840 and 1860 there was at least one major epidemic of yellow fever every year in a southern maritime city.[174] In order to survive, these cities had to represent themselves as a healthy places to live, work, and invest.

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[173]Humphreys, 86; Ellis, Yellow Fever and the Public Health in the New South, 32.

[174]Ibid., 47 - 50.

The Norfolk epidemic as well as other outbreaks of yellow fever in 1855 had a profound impact on the national level. Philadelphia, Norfolk's largest supporter during the crisis, hosted the first national convention on public health in 1856. Its Board of Health had become concerned with the yellow fever epidemics in the country's southern region. Representatives from cities that had experienced a yellow fever epidemic as well as physicians and scientists gathered to discuss the disease and ways to prevent it. Between 1857 and 1860 numerous conferences were held to deal with the issue of public health, including the National Quarantine and Sanitary Convention in 1859. Some of the people attending these meetings would later form the United States Sanitary Commission.[175] Despite the number of conventions and conferences on the issue, however, the public health reform movement developed slowly. If not for the Norfolk epidemic and the 1878 yellow fever epidemic in the Mississippi River Valley, the sanitation reform movement would have stagnated.

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[175]Humphreys, 181 - 182.

New York was one of the first states to make progress. The New York Sanitary Association was organized in 1859 because of an increase in immigrant population and deteriorating health conditions in the city. Five years later, physicians formed the Council of Hygiene and Public Health and studied sickness in the slums. In their formal report, they concluded that there was a direct link between disease and poor sanitation. The New York legislature moved forward and created a permanent Board of Health with the Metropolitan Health Act of 1866. Massachusetts followed suit by forming a State Board of Health in 1869.[176]

Yellow fever epidemics in 1855 and 1878 also encouraged businessmen to get involved local politics. Prior to the epidemics, played a minor role in public policy. The extent their of involvement, political or otherwise, was in relief organizations like the Howard Association. After a series of devastating epidemics, however, many businessmen became tired of seeing their profits evaporate as yellow fever came to town again and again. They had become disillusioned with their local governments and inept attempts to stop disease

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[176]Ellis, Yellow Fever and Public Health in the New South, 11 - 12.

from infiltrating their cities. In the minds of many businessmen the solution was simple: they needed to take control of the city's sanitation and public health.[177]

In Memphis and New Orleans, for example, entrepreneurs organized themselves for the good of their respective cities. Memphis saw the formation of relief and reform groups to deal with possible epidemics as well as their aftermath. The Auxiliary Sanitary Association of New Orleans was created in 1879. This group as well as those like it had one priority - to clean the city themselves. But complaining to their government officials about the filthy conditions did little to remedy the situation. They knew that increasing the revenue of their cities meant expanding their own wealth. As a result, they made it their business to promote healthier cities. Vital statistics - births, marriages, and deaths were now recorded in an attempt to prove Southern cities as healthy. Their motto was "public health is public wealth."[178] By taking public offices, these men turned the economic tide in their favor.

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[177]Humphreys, 81, 181 - 182; Ellis, Yellow Fever and Public Health in the New South, 12.

[178]Ibid., 89, 91, & 103.

There was a resurgence in the use of organized Boards of Trade and Chambers of Commerce to promote trade in cities.

These unpredictable, rampant epidemics caused the Boards of Health in many cities to take more responsibility for the public's health and better organize themselves. Early Boards were only active during epidemics and were only concerned with policing the existing quarantine areas. The dilemma for cities prone to epidemics was either impose a quarantine which slowed and hurt business or risk a devastating epidemic and the loss of millions of dollars in trade. For example, in 1878 New Orleans's incoming trade was marred at ever turn. Regular trade routes were either closed because of yellow fever or quarantines. As a result, commerce in the city and inland was stopped causing New Orleans to lose a significant profit estimated at $1,250,000. In general, quarantines drove traders to seek safer ports of call, while those maintaining their normal routes watched as their cargoes rotted before unloading. On the other hand, having no quarantine invited an epidemic to destroy the population and economic base. The 1855 Louisiana State Board of Health, tried to reestablish itself

as effective and active, but was harassed continuously and blocked at every turn by the community and the legislature.[179]

Epidemics often led to a call for better quarantines, though federal and local government fought over their control. The Federal Government felt the quarantines instituted by their local counterparts were not accomplishing their goal. But the controversy was muddled by the question of states rights. The South felt federal regulation and enforcement of quarantines were violations of their states' rights to control their own ports. The Federal Government, on the other hand, thought the government was only attempting to end disease from entering their cities.[180] The situation was intensified by the conflict between the American Public Health Association (APHA) and the United States Marine Hospital. The APHA favored the creation and management of public health (i.e. Board of Health) at a local level. On the other hand, the

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[179]Humphreys, 86; Bloom, 121 & 126

[180]Ellis, Yellow Fever and the Public Health in the New South, 34 - 35.

United States Marine Hospital public health was regulated by the Federal Government.[181]

In 1878 Senator Isham Harris of Tennessee and Senator James Eustis of Louisiana, under the guidance of the APHA, proposed that Congress form a joint committee to study the origin of yellow fever and the recent epidemic. Instead, the Senate appointed its own Select Committee on Epidemic Diseases to meet with the House Select Committee on Epidemic Diseases, assisted by a board of experts. Although their investigation and final report was inconclusive as to the question of yellow fever's origin (importation or domestic), the issue of state versus federal rights and resolution to the quarantine problem was finally settled by the Quarantine Act of 1878.[182] The public health movement in 1879 received additional national attention with the creation of the National Board of Health by Congress. Though its policies and those of the Quarantine Act were still vague and ineffective these were a major steps forward toward

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[181]Ibid.

[182]Ibid., 65 - 75.

controlling epidemics. By the 1880s the South was forced to accept this anticontagionist doctrine.[183]

[183]Ibid., 79.

## Conclusion

This case study of Norfolk's 1855 yellow fever epidemic has shown that the city was fundamentally changed. In the matter of three months the city lost its wealth, reputation, and influential citizens. Previous economic problems had not left the city in the strongest of positions. Norfolk had taken an economic beating in the arduous competition with the fall line cities and the epidemic worsened the situation. Ships coming into port just prior to the outbreak had been quarantined and there had been little to no trading in the past three months.

The effect of the epidemic on Norfolk's economy is evident when comparing the Census of 1850 and 1860. The 1850 United States Census in manufacturing reported the city of Norfolk as having 132 businesses valued at $500 or more annually. There were thirty-one different types of businesses ranging from tailors to confectioners, though most were artisans (See Appendix C). However, the 1860 United States Census in manufacturing reported only forty-four businesses in the city of Norfolk valued at $500 or more annually, broken into twenty categories (See Appendix

D).[184] Of the 132 businesses in 1850, only nine survived to 1860 with the same owners. These businesses consisted of a boot and shoe maker, two shook makers, a soap maker, a blacksmith, two tin, copper, and sheet iron men, and a cigar manufacturer. Four of the nine businesses were more valuable in 1860 than in 1850. On the other hand, five were valued at the same or less in 1860 than in 1850 (Appendix E). The decreased number of businesses suggests that Norfolk's economy was not growing, there was less of a demand for goods, and there was no influx of new investors.

Norfolk discovered that attracting these investors was extremely difficult. Its reputation and image had been badly damaged by the epidemic and some outside sources. Petersburg correspondents, in hopes of gaining Norfolk's business interests, exaggerated conditions during the epidemic. A visiting doctor was appalled at the vicious nature of these reports and stated,

> Dame rumors seems to have reveled in the calamities that overwhelmed this ill-fated city - multiplying

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[184]Bureau of the Census, Seventh Manufacturers Census, 1850, (Washington, D.C., 1850); Bureau of the Census, Eighth Manufacturers Census, 1860, (Washington, D.C., 1860).

> the horrors of the epidemic, thus farrowing up the feelings of distant relations and friends. The naked truth and sad realities were bad enough, without being heightened by fancy or falsehood.[185]

Theses rumors and printed half-truths had also discouraged people from settling in Norfolk. According to the United States Population Census Norfolk showed only a slight increase between 1850 and 1860. One thousand three hundred and one more people inhabited Norfolk in 1860 than in 1850. Though the numbers of families and dwellings had also expanded, the rate of growth was below normal even for a decade marred with an epidemic.[186] Norfolk could not fully recover without an increase in its population or new leadership.

The men who took up the task of running the Norfolk government in the 1850s were all but gone. There were few men left in the city with the distinctive profile of an activist. They were longtime residents of the city (at least ten years) and a mix of religious and ethnic

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[185]Fenner, 697 - 698.

[186]Bureau of the Census, Eighth Population Census 1860, (Washington, D.C., 1860).

backgrounds. Characterized as stable and mature, the majority of these men were thirty to forty-nine years of age and married with children. On average they owned one to eight slaves and $12,000 of real property. Their occupations were proprietors, clerical and sales, and gentlemen.[187] According to the 1850 United States Census of manufacturing, however, only four men from this group owned businesses valued at $500 or more annually. The others found wealth in land and inheritance, but there were no industrialists among them. This was significant because Norfolk could not grow as a city without industry. These men were few in number and controlled most of the city's wealth, and after the 1855 epidemic they were almost non-existent. The 1860 United States Census of manufacturing listed four activists and a mother of an activist as owning four businesses valued at $500 or more.[188] However, these names were not the same as those listed in 1850. Their former owners, as well as most of the activists, apparently did not survive to 1860.

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[187]Goldfield, Urban Growth in the Age of Sectionalism, 43 - 54.

[188]Seventh Manufacturers Census, 1850; Eighth Manufacturers Census, 1860).

The epidemic had also killed a significant number of physicians and clergy in Norfolk. By October 10, ten of the twenty resident doctors had died. They too were men of position and influence, and their absence from the city caused a two-fold problem. First, the health and spiritual well-being of citizens was again placed in a precarious situation with their leaders gone. People significantly outnumbered doctors and clergy just as in the epidemic. There was no one to turn to for guidance, comfort, and answers as the refugees returned. The second problem was a lack of momentum for public health reform. Medical men and clergymen were usually instrumental in pushing health reforms after devastating epidemics. The doctrine of "cleanliness is next to Godliness" was a successful motivator to a God-fearing people, but the death of these professionals significantly retarded the reform movement. Those with little knowledge of the disease were left to decide on a course of action.[189] However, a prolonged interest in public health by residents, though slow moving, had been created. The remaining population wanted to

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[189]Bagley, 52 & 94.

guarantee that history would not repeat itself, and Norfolk would grow. Therefore, legislation after October 1855 was based on the principles of public health and reform.

After 1855, yellow fever returned to Norfolk only a few times. The discover of its source by Walter Reed in 1900 and the national interest in public health reform afforded southern cities like Norfolk the opportunity to control the disease that once held them captive.

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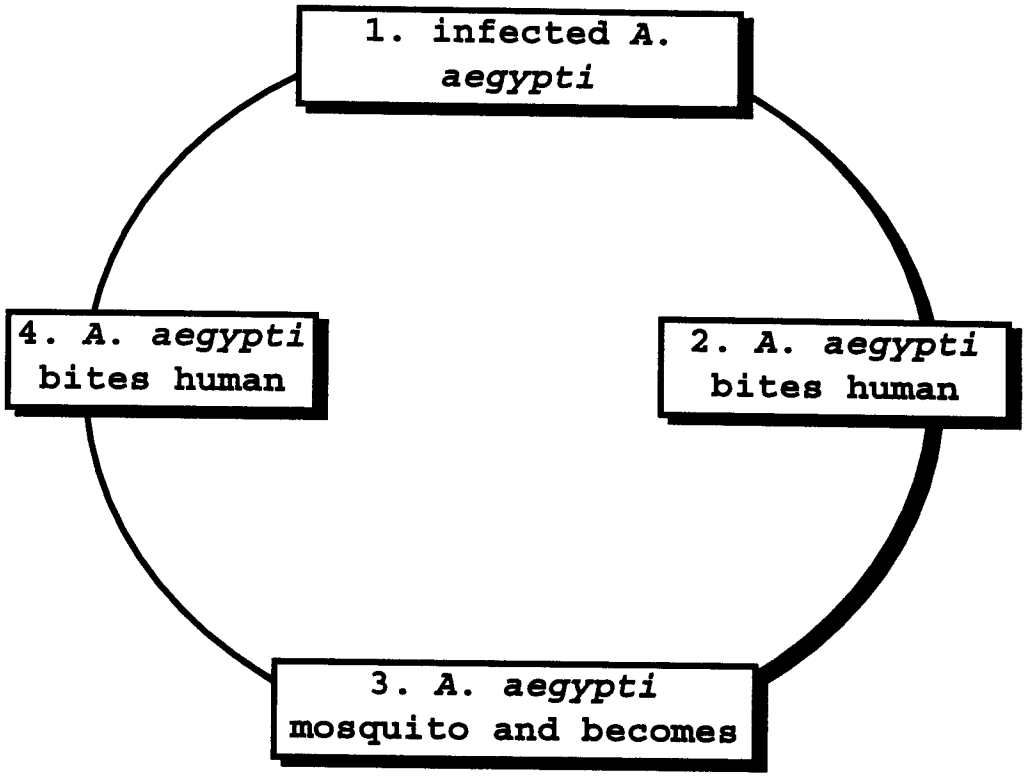
## Appendix A: Population Table of Norfolk

| Year | Population | Location |
|---|---|---|
| 1790 | 3,000 | Borough of Norfolk |
| 1800 | 7,000 | Borough of Norfolk |
| 1804 | 9,000 | Borough of Norfolk |
| 1838 | 10,000 | Borough of Norfolk |
| 1840 | 11,000+ | Borough of Norfolk |
| 1850 | 14,300 | City of Norfolk |
| 1855 | 16,000 | City of Norfolk |
| 1860 | 15,601 | City of Norfolk |

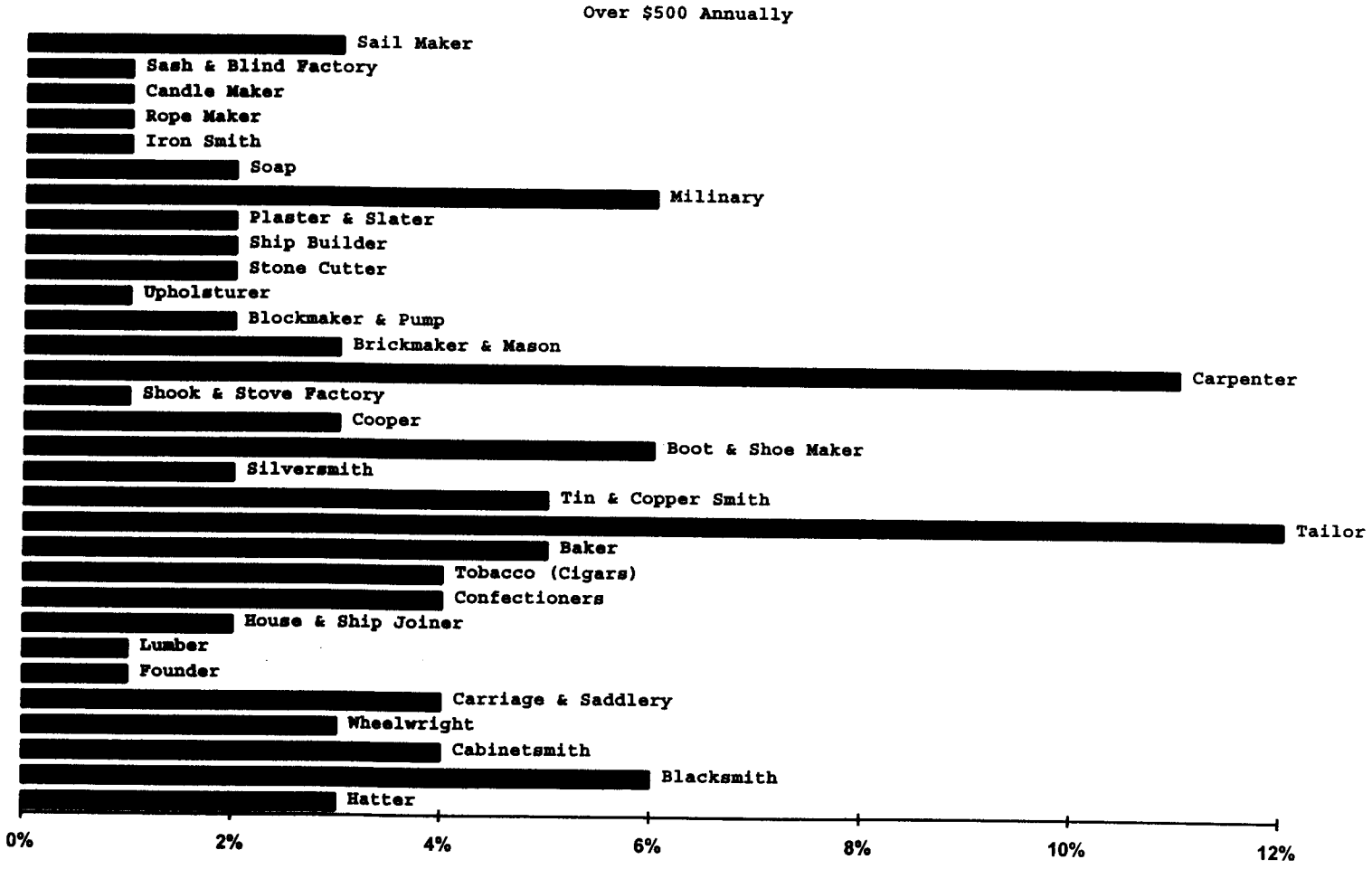
**Sources:** Costa, 331; Lamb, 10 & 21; Seventh Population Census, 1850; Eighth Population Census, 1860.

## Appendix B: Cycle of Yellow Fever

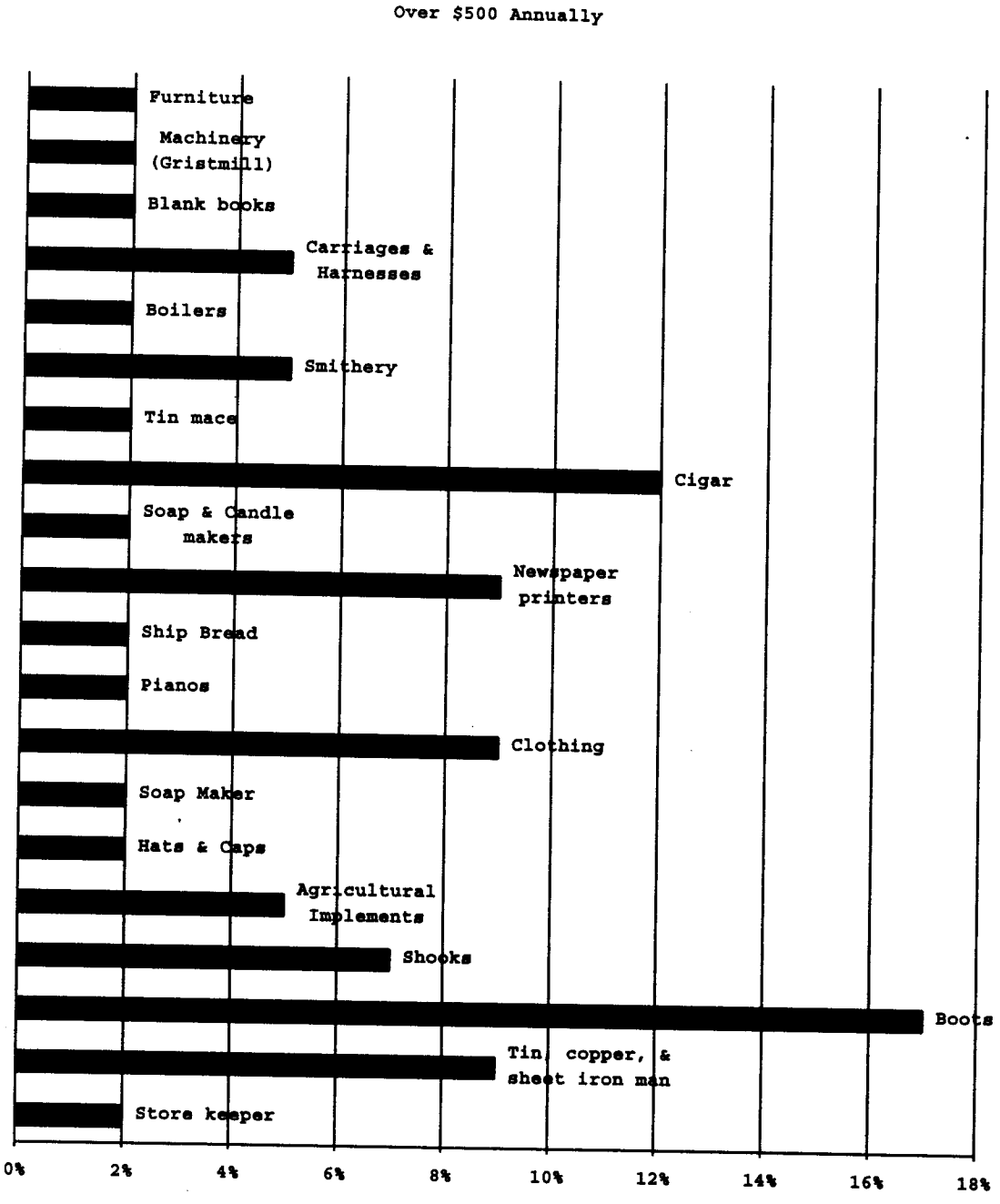



**Source:** Allen Alberti, The 1855 Yellow Fever Epidemic in Norfolk and Portsmouth. Master's thesis, Old Dominion University, Norfolk, 1971.

# Appendix C: Businesses in 1850



# Appendix D: Businesses in 1860



## Appendix E: Businesses Listed in 1850 and 1860

| Name | Type of Business | Year | Number of Workers | Value of Business |
|---|---|---|---|---|
| Ed Delaney | Tin, Cooper, & Sheet Iron | 1850<br>1860 | 6 men<br>4 men | $4,500.00<br>$4,500.00 |
| W.C. Diggs | Shooks (formerly cooper) | 1850<br>1860 | 20 men<br>5 men | $14,800.00<br>$6,175.00 |
| Martin Greenwood | Soap maker (formerly soap factory) | 1850<br>1860 | 7 men<br>3 men | $8,800.00<br>$1,200.00 |
| Morrisett & Simmons | Shooks (formerly cooper) | 1850<br>1860 | 6 men<br>6 men | $4,212.00<br>$4,000.00 |
| Wm. D. Roberts Jr. & Co. | Tin, Copper, & Sheet Iron | 1850<br>1860 | 10 men<br>10 men | $25,000.00<br>$18,000.00 |
| Jas. Bayto | Cigar maker | 1850<br>1860 | 2 men<br>1 man | $2,350.00<br>$10,000.00 |
| Wm. Godfrey | Boots and Shoes | 1850<br>1860 | 2 men<br>2 men | $1,591.00<br>$1,940.00 |
| Sam Hodges | Smithery (Blacksmith) | 1850<br>1860 | 11 men<br>13 men | $8,000.00<br>$20,000.00 |
| Pullen & Peige (formerly J.M. Pullen) | Carriages and Harnesses | 1850<br>1860 | 27 men<br>35 men | $15,000.00<br>$18,000.00 |