



Living in fear of the pale faced messenger : the private and public responses to yellow fever in Philadelphia, 1793-1799
by Anita Marie DeClue

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Art in History
Montana State University
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Abstract:

When yellow fever struck Philadelphia—the premier city of the New Republic— it was the political, cultural, economic, social, and medical capital of America. When the pale faced messenger unleashed itself, with unbelievable ferocity in 1793, this charming and prosperous nerve center of the nation almost crumpled under the weight. This thesis analyses how private citizens, physicians, and governments dealt with the overwhelming problems caused by the almost annual visitation of yellow jack to the Quaker City between 1793 and 1799.

While society practically disintegrated under that first ferocious onslaught, the great tradition of citizen involvement saved the city. While thousands fled, often leaving behind sick loved ones, a volunteer committee took over the administration of the city and a group of black Americans assisted, playing a key role in the recovery of the city. In subsequent epidemics, citizens continued to volunteer their services, but only in ancillary capacities.

Although the real source of yellow fever—the *Aedes aegypti* mosquito—remained unknown for another one hundred years, physicians argued vociferously over every aspect of the disease. The medical community split into two camps. One group believed in local generation, its noncontagious nature, and a direct-heroic intervention treatment approach. The other group believed it was imported, contagious, and supported gentle-natural healing methods.

Without a medical consensus, all levels of government responded to the crises by trying to address all possibilities, ultimately strengthening each one. The city councils decided to pipe in running water, while the state created a Board of Health, allocating greater powers to it after each epidemic. At the end of the decade, the national government passed Quarantine and Health Laws.

Philadelphians survived the epidemics and lived with its consequences. Both the state and federal administrations moved away. The epidemics also exacerbated antiurbanism sentiment. Seen as centers of corruption, filth, disease, and strange immigrants, many saw the epidemics as divinely inspired—cities were evil places. The epidemics also highlighted the problems of race in Philadelphia, as African Methodists risked their lives to nurse whites, though accused of depraved behavior.

The future of medicine became more specialized and hierarchical because of the epidemics, while the heroic depleting treatments of one group remained popular. They spread westward where patients were bled and purged for another half-century. Although yellow fever remained mysterious, by 1800, many physicians thought it was imported and quasi-contagious in nature. However, the infecting agent remained unknown.

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ABSTRACT

When yellow fever struck Philadelphia—the premier city of the New Republic—it was the political, cultural, economic, social, and medical capital of America. When the pale faced messenger unleashed itself, with unbelievable ferocity in 1793, this charming and prosperous nerve center of the nation almost crumpled under the weight. This thesis analyses how private citizens, physicians, and governments dealt with the overwhelming problems caused by the almost annual visitation of *yellow jack* to the Quaker City between 1793 and 1799.

While society practically disintegrated under that first ferocious onslaught, the great tradition of citizen involvement saved the city. While thousands fled, often leaving behind sick loved ones, a volunteer committee took over the administration of the city and a group of black Americans assisted, playing a key role in the recovery of the city. In subsequent epidemics, citizens continued to volunteer their services, but only in ancillary capacities.

Although the real source of yellow fever—the *Aedes aegypti* mosquito—remained unknown for another one hundred years, physicians argued vociferously over every aspect of the disease. The medical community split into two camps. One group believed in local generation, its noncontagious nature, and a direct-heroic intervention treatment approach. The other group believed it was imported, contagious, and supported gentle-natural healing methods.

Without a medical consensus, all levels of government responded to the crises by trying to address all possibilities, ultimately strengthening each one. The city councils decided to pipe in running water, while the state created a Board of Health, allocating greater powers to it after each epidemic. At the end of the decade, the national government passed Quarantine and Health Laws.

Philadelphians survived the epidemics and lived with its consequences. Both the state and federal administrations moved away. The epidemics also exacerbated anti-urbanism sentiment. Seen as centers of corruption, filth, disease, and strange immigrants, many saw the epidemics as divinely inspired—cities were evil places. The epidemics also highlighted the problems of race in Philadelphia, as African Methodists risked their lives to nurse whites, though accused of depraved behavior.

The future of medicine became more specialized and hierarchical because of the epidemics, while the heroic depleting treatments of one group remained popular. They spread westward where patients were bled and purged for another half-century. Although yellow fever remained mysterious, by 1800, many physicians thought it was imported and quasi-contagious in nature. However, the infecting agent remained unknown.

INTRODUCTION: TO MEET THIS "AWFUL SUMMONS"

*When last I view'd thy tow'ring spires
Fair Philadelphia thou wert gay,
Health's bloom which ev'ry swain admires,
Did all thy beauties well display.¹*

When yellow fever attacked Philadelphia in the 1790s, the suffering caused by this disease struck terror in both patient and family. When seized, patients complained of "violent pains in the head, loins, stomach, and abdomen, [along with] great oppression upon the præcordia, nausea and vomiting [of] porraceous matter." Many complained of being cold in their limbs, but suffered "a burning heat in the intestinal canal, followed with loss of strength." The tongue in advanced stages of the disease, as observed by Dr. Charles Coffin, "became thick, dusky, and often black in the middle." Although some patients kept the original color of their skin, Coffin found that most "generally became sallow and yellowish," while a few patients turned "an orange colour." He noticed dull eyes with a "yellowish and sometimes red" cast to them. Adding to the horror was the change in the appearance of both stools and urine. Stools turned more yellowish as the disease progressed. It then "generally changed to a bottle green, and sometimes to the colour and consistence of coffee grounds." Normally pale yellow urine was now "reddish and turbid, and sometimes, of a greasy frothy appearance." The pulse also changed as the disease progressed. At the onset, it was often "hard and full," but changed

¹ A Citizen, *Feyer; An Elegiac Poem* (Philadelphia: John Ormrod, 1799), p. 5.

to "small and weak, especially in the advance of the disease." Even more puzzling for the doctors, "the crassamentum of the blood taken away was loose, and the serum very yellow." Generally by the fourth day, "vomiting of black bilious matter, like coffee grounds, together with great soreness of stomach, restlessness, dejection, and delirium," resulted in a painful and hideous death. Philadelphians never imagined that their city, the foremost metropolis in America, could suffer so much by the bite of *Aedes aegypti* mosquitoes.²

The colony of Pennsylvania with its port and chief urban center, Philadelphia, prospered almost from the beginning due to the grand plans of its founder, William Penn. While Quakers found a safe haven there, Penn opened the colony to all religions, to all ethnic groups, and encouraged economic development and allowed for more democratic government than other colonies along the Atlantic seaboard. As the center for colony-wide revolutionary activities, Philadelphia became the temporary political capital during the revolution and then from 1790 to 1800. The city also functioned as the cultural, economic and social capital of the New Republic. When yellow fever unleashed itself on the city in 1793, this charming and prosperous nerve center of the nation almost crumpled under the weight.

² Charles Coffin, M.D., "An Account of the Pestilential Fever which prevailed in Newbury Port, State of Massachusetts, in 1796; in a Letter to Mr. [Elihu] Smith," *The Medical Repository*, 1:4 (1798), pp. 505. The ghastly appearance and horrible pain experienced by sufferers made yellow fever one of the most feared diseases of the time. Unfortunately, no one knew the source of this disease until the turn of the 20th century. They discovered, as with malaria, yellow fever needed an insect vector. In this case, it was the *Aedes aegypti* mosquito.

Unlike a crowded Britain with its large, unhealthy, and densely populated cities, the United States owned huge tracts of land barely populated while her major cities, including Philadelphia, were only large towns in comparison. Thomas Jefferson wanted to keep it that way. He believed in minimizing urbanization by encouraging citizens to shun cities and become good republican yeoman farmers. Consequently, comparatively few people lived in even moderately sized urban centers. Philadelphian Ebenezer Hazard concurred after surviving yellow fever during the 1793 epidemic. In its early disorganized, terror-stricken phase, Hazard, secretary of the Insurance Company of North America and author of *Historical Collections* agreed with many who doubted the future of all large towns, including the Quaker City. According to Shryock, Hazard "wrote that the experience ought to check the 'prevailing taste for enlarging Philadelphia, and crowding so many human beings together on so small a part of the earth.' America, he added, should reject the 'fashions of the Old World in building great cities.'"³ Other Philadelphians agreed with him, at least temporarily.

The ferocity of that yellow fever epidemic caught Philadelphians, as well as most other Americans, completely off guard. The last outbreak experienced over 30 years before, meant very few Philadelphians remembered or were immune to its ravages. Therefore, the magnitude of the 1793 epidemic surpassed anything ever experienced by

³ Richard Harrison Shryock. *Medicine and Society in America: 1660-1860*. (Ithaca: Cornell University Press, 1960) p. 95. Shryock quoting Hazard; J. H. Powell, *Bring Out Your Dead: The Great Plague of Yellow Fever in Philadelphia in 1793* (Philadelphia: University of Pennsylvania Press, 1949) pp. 51-52 and Powell quoting Hazard 295-296.

the newly independent nation. Philadelphians, whether private citizens, physicians, or governmental officials, responded to this crisis with a range of behaviors. Everyone reacted differently when confronted by the "pale faced messenger" of death. Some individuals fled the city; others stayed to aid the sick and dying; some quietly resigned themselves to its embrace; others valiantly but feebly fought his advances.

This series of epidemics occurred at a time when an emerging French Republic clashed against the monarchies of Europe, sorely testing American loyalties, their notions of republicanism, and their optimism. While not as extreme as their European counterparts, the gulf between Federalism and Republicanism widened. Philadelphia, a Federalist city, was also the capital of Federalist presidents Washington and Adams. Their foreign policies neither supported France nor denounced England, despite the clamor of ardent republicans to declare war on George III again. They appeared to support the growing power of a few wealthy elite over the rest of society, a laissez-faire approach to business, and a nation where urban areas dominated their rural counterparts.

The growing power of the Democratic-Republicans, led by Jefferson, often linked Philadelphia and the other heavily Federalist cities along the eastern seaboard with disease and corruption. Their idea of a strong and worthy Republic meant leaving those tainted cities for the interior lands where they could become independent farmers. In 1800, removing the capital from a sickly Federalist stronghold like Philadelphia to a new governmental center on federal lands as planned ten years before, took place. However, after Napoleon overthrew the Directory and turned a defensive Republican France into an oppressive Imperial France, support and optimism waned, seriously dampening

republican zeal. Other than the Republic of Haiti, a Caribbean island inhabited by ex-slaves, America remained the only Republic on the planet.

This thesis analyzes how private citizens, physicians, and governments dealt with the overwhelming problems caused by the almost annual visitation of "yellow jack" to Philadelphia between 1793 and 1799. Since this thesis involves how Philadelphians responded to these epidemics, it would helpful to use a behavioral pattern model to check their progress. In his recent dissertation on the 1793 epidemic, Arthur Thomas Robinson adopted one developed by Dr. Daniel Fox. This seven-stage model can evaluate how individuals and the different levels of government responded to each yellow fever epidemic. Briefly, the seven stages included 1) underestimation or outright denial; 2) acceptance and public hysteria; 3) flight of citizens from infected areas; 4) victim isolation and quarantine; 5) voluntary coalitions and associations emerge to deal with the overwhelming problems created by the epidemic; 6) a general shortage of medical personnel coupled with the inability of the recognized medical interests to break free from the past and create innovative ways to fight the disease; and 7) in the aftermath of death and destruction, the community initiates changes to help them cope with any future epidemics.⁴ By using the 1793 epidemic as a baseline, we can compare the responses of latter years.

The first chapter examines the history of Pennsylvania and its principal city, Philadelphia. Unlike some other colonies to the north and south, Pennsylvania

⁴ Arthur Thomas Robinson, "The Third Horseman of the Apocalypse: a Multi-Disciplinary Social History of the 1793 Yellow Fever Epidemic in Philadelphia" (Diss., Washington State University 1993. pp. 3-4).

blossomed and prospered almost immediately because of religious toleration, a relatively democratic tradition, acceptance of a diverse ethnic mix, availability of rich farmland, and its strategic economic position. William Penn's unusual belief of giving people the freedom of their conscience allowed inhabitants to see themselves as individuals. Non-Quakers flocked to the colony and, taking his lesson to heart, set up a government that slowly evolved into the most democratic colony in America. By accepting such a diverse group of people and their cultures, Philadelphia teemed with diversity. Farming the rich lands of the interior brought prosperity to hinterland farmers who grew the crops, and to the Philadelphia merchants who shipped them overseas. The Port of Philadelphia on the Delaware River became a major exchange point for goods moving inland, along the eastern seaboard, and over the Atlantic Ocean. Unlike Puritan New England or Anglican Virginia, Penn's Wood continued to prosper throughout the colonial and new nation eras, becoming the template for the newly emerging American society. Philadelphia, in turn, became the Principle City of America: a great intellectual, cultural, and political center.

Chapter two analyzes the responses of citizens, officials, and physicians to the overwhelming problems associated with that deadly 1793 epidemic. Being the first in the series, it produced some of the most bizarre behavior; notably described in Mathew Carey's *Account*. The social order in Philadelphia almost crumbled under the stress, as thousands fled, abandoning the sick, and leaving the poor to fend for themselves. With all levels of government dissolved due to both abandonment and death, the Mayor of Philadelphia, a Church group of free blacks, and a small group of mostly nonprofessional citizens prevented total dissolution. They steadily and resolutely brought the city back

from the brink of extinction. Even as the committee of volunteer citizens united themselves through their problem solving, the highly regarded physicians of the city angrily denounced each other, splitting themselves on three basic questions. One faction, led by Dr. Benjamin Rush, believed that yellow fever was highly contagious, locally generated, and cured only with depleting measures. The other group, championed by Dr. William Currie, insisted that "yellow jack" was contagious, but imported from the West Indies, and only cured with a supportive regimen. To a panicking populace, already driven by fear, these strident relationships among medical professionals proved detrimental in both the short and long term.

In the aftermath of so much death and destruction, the Committee resolutely wrapped up their business, and Philadelphians slowly picked up the broken pieces of their lives. The state legislature created a Board of Health and gave them far-reaching quarantine powers to stop the pestilence from entering the city in the future.

The third chapter explores the four-year period between the deadly 1793 epidemic and the equally lethal one that occurred in 1798. Philadelphia experienced sporadic cases of yellow fever in the first three years, and a less severe epidemic occurred in the last year. During these four years, citizens and the government went on the offensive, while physicians continued their arguments unabated.

Citizens monitored the progress of yellow fever through their extensive business correspondence, notifying officials and newspapers of any new outbreaks. When the scourge came too close to their city, citizen committees worked to keep it out. They also reminded each other of the poor sanitary conditions of their neighborhoods, and when

“yellow jack” reentered their city in 1797, individuals immediately offered assistance. Learning from that first frightful visitation, fewer citizens abandoned the sick or the poor. Instead, residents immediately formed committees to solicit and distribute money and supplies to those in need.

With the creation and constant expansion of the duties of the Board of Health, the government created an organization capable of dealing with yellow fever. In these early years, the Board concentrated on preventing the importation of the contagion through quarantine procedures. They did not abandon their responsibilities when the grim reaper appeared in 1797. Instead, their preparation and organization successfully prevented disaster. They operated two hospitals, opened a tent encampment, oversaw purification of ships and houses, continued communicating with other cities, and kept their office open and records in order.

Unlike the teamwork exhibited by volunteer citizen groups and the Health Office, Philadelphia’s physicians constantly argued among themselves, damaging their professional image and frustrating both the populace and the government. Rush and his followers clamored for better sanitation and continued touting their miracle cure. In opposition, the College worked within the system to effect change by strengthening the quarantine laws, encouraging immediate isolation of patients or neighborhoods where contagion existed, and campaigning for more physician involvement on the Board.

Providence provided Philadelphia with this four-year grace period. Although no one had the knowledge or the means to prevent another onslaught, when it came the following year, the Mayor did not have to resort to another citizen committee. Their

successes during the 1797 epidemic bolstered confidence in the ability of the Health Board and civic-minded residents to manage any emergency. The bridegroom of death soon challenged that confidence.

Chapter four probes Philadelphia's response to another massive onslaught by the legions of death. As in 1793, the summer of 1798 began with the arrival of large numbers of Santo Domingan refugees. Unknown to the inhabitants of the city, these refugees also brought yellow fever with them. Slowly, over the next month, cases of yellow fever increased, as did the rumors. When officially recognized by the Health Office, inhabitants of the city and suburbs had to choose whether to flee or stay and help their neighbors through the crisis. Thankfully, many tens of thousands immediately fled, not waiting for the contagion to invade their neighborhoods, thus eliminating vast numbers of potential victims. Fortunately, enough citizens remained willing to aid the sick and relieve those in need.

Initially, the organization surrounding the Board of Health managed to keep the situation from dissolving into chaos and terror. However, as the number of cases skyrocketed and the area of infection rapidly spread out in all directions from the neighborhoods bordering the wharves, they were soon overwhelmed. When the President of the Health Board requested assistance, Philadelphia's residents enthusiastically responded. Their responses ranged from donating money, clothing, and food, to managing tent encampments outside the city for the poor, from collecting and distributing aid, to managing the city jail. In this epidemic, the Board of Health members became the officers directing their citizen volunteer army of foot soldiers.

The physicians of Philadelphia, still helplessly split over the same three aspects of yellow fever, continued their wrangling even as they treated thousands suffering from yellow fever. With the recent creation of a rival medical society, the Academy of Medicine, Philadelphia's medical community seemed unable to resolve their differences or prevent that most dreadful of all diseases. Their inability to build consensus not only angered and frustrated both the inhabitants and elected officials, it seriously undermined the profession as a whole.

After this particularly deadly visitation of the grim reaper, the legislature reevaluated the existing health laws, replaced the defective sections, and passed a much more complicated and comprehensive law in their next session. To help prevent another disaster, citizens followed the lead of the legislators. They too went on the offensive by addressing, and then correcting, some of the poor sanitary conditions within the city. Later, their efforts came under the jurisdiction of an expanded Board of Health. The opinions of the College of Physicians continued to parallel closely those of the Health Board, though sanitation began drawing more attention and action. Despite the support of many in the community, one important group of residents began to question the necessity of such strict measures. In a city economically dominated by merchants and their interests, the new health laws substantially increased their costs and threatened to bring the port to a standstill when yellow fever appeared. Health officers might be reminded—gently or forcefully—to consider that before declaring an emergency in the future.

The fifth chapter focuses on the last and least deadly epidemic of the decade. In many ways, the horrible experiences of 1798 heavily influenced how everyone acted the following year. Citizens formed committees and tackled the long neglected work of cleaning up the city. The Legislature passed a comprehensive health law featuring strict quarantine procedures and rigid fines and punishments for offenders. While still feuding with each other, both medical organizations—College and Academy—worked diligently to turn their opinions concerning yellow fever into the one officially sanctioned by government. Both groups also continued lobbying for more representation on the Health Board itself. However, it was the ambiguous responses to yellow fever during the summer of 1799 that surprised and disheartened many residents.

Despite good leadership, the Board of Health appeared to put the economic interests of the city above the health and safety of the city's inhabitants. Without official Board responses to yellow fever rumors, residents relied on their networks of friends and family to determine the seriousness of this attack. When deemed too dangerous to remain, inhabitants fled in growing numbers throughout July and early August. The Health Office remained silent for as long as possible, even denying the presence of the angel of death to their counterparts in other cities, because quite unintentionally, the legislature created a crisis within the Board of Health and the Judiciary by making the newly revised health laws too rigid. Their mandatory quarantine, increased fees and fines, compulsory criminal prosecutions, and the threat of shutting down all mercantile business if a health emergency occurred, placed too much pressure on the Health Board. Consequently, they postponed action for weeks despite receiving reliable information

confirming the presence of yellow fever within their city. Withholding official recognition postponed any actions that might mitigate the suffering of victims, relieve those in need, or institute measures to prevent its spread.

By late August, concealment was impossible. The Board declared an emergency, instituted a strict quarantine, and ordered the isolation of infected neighborhoods, while still reminding their fellow residents that the death rates remained very low. Philadelphia shifted into disaster mode despite these assurances. Businesses closed, government offices moved, and thousands more citizens panicked and fled. The Board even refused to open the tent encampments, though they did operate the city hospital. Without some providential assistance, Philadelphia seemed destined to suffer another calamity.

The city received that aid in the form of a rainy and cold month of September. Although no one understood the true significance, everyone noticed that the epidemic did not explode and spread as in previous years. Mortality rates remained low because temperatures slowed mosquito reproduction and feeding, just as the rain helped shorten their lives. An abnormally early frost put an end to the real culprit allowing the city to rebound sooner than usual.

Chapter six explores the medical responses to the yellow fever epidemics. Without knowledge of the insect vector, the great medical debates created by the 1793 epidemic, and then fueled by each subsequent epidemic, damaged the reputation of Philadelphia's medical community while proving impossible to win. By presenting details about the true culprit, the *Aedes aegypti* mosquito, the medical arguments on both sides make more sense. In the cases of origin and contagious nature, both factions were

partially correct. However, in the case of their opposing treatments, the insect vector information helped neither side. Without knowledge of viruses, the physicians who relied on the historical successes of their predecessors in the tropics chose the correct healing regimen. Those who ignored it sent countless patients to the next world.

The end of this chapter evaluates how well Philadelphians responded to the yellow fever crises using the Fox model. Besides assessing how Philadelphians responded to each catastrophe, it also addresses some of the political, cultural, and medical effects produced as a result of the epidemics.

CHAPTER ONE

“GREENE COUNTRY TOWNE” TO “ATHENS OF AMERICA”:
A HISTORICAL OVERVIEW

*Our streets, the scene where bustling care
With greedy hand did grasp for gain,
And shunn'd with fear, and putrid air
Now rules, where folly held her reign.⁵*

The Founding of Pennsylvania and Philadelphia

On March 4, 1681, King Charles II gave William Penn a large tract of land in North America to organize a colony, which became the basis for the “American” model of future settlement. Pennsylvania, with its port and chief urban center, Philadelphia, was a relative newcomer compared to much older colonies to the north and south. As a leader of “The Society of Friends,” also known pejoratively as Quakers by the Anglicans, Penn established a safe haven for *all* religious dissenters. His “Holy Experiment” did not force a religiously homogenous society upon residents as had the Puritans in New England or the Anglicans in the tidewater South. Along with religious toleration, Penn encouraged a much broader basis for political participation by any religious or ethnic group. According to historians Craig W. Horle and Marianne S. Wokeck, “with this

⁵ A Citizen, *Fever; An Elegiac Poem*, p. 6.

tradition of toleration and its advantageous geographical position, Pennsylvania rapidly became the prototype of the fabled American melting pot—a society of great religious, ethnic, and economic diversity.”⁶ From England, Scotland, Wales, Ireland, and Western Europe, farmers, shopkeepers, and artisans—many with their families—began the long trek to Pennsylvania.

The resulting heterogeneous mix of religions, cultures, and occupations combined with a rich hinterland and protected port for Philadelphia, made the colony prosperous almost from the beginning. Unlike Massachusetts and Virginia, there was no “starving time” to slow economic growth in Pennsylvania. Generally peaceful relations with Native Americans permitted farmers rapidly to clear and till the rich soils to produce abundant foodstuffs; meanwhile, their urban counterparts settled into a variety of trades. Colonists used the many streams of Pennsylvania to generate power for mills; they began harvesting the products of the land. It also made Philadelphia, where trade drove the economy, a “mercantile capital, a strong regional market, [that developed] exceptionally diverse and sophisticated forms of production and of trade.”⁷ While Philadelphia took many years to become an important center of commerce, it did, according to Richard S. Dunn, “rapidly establish itself as the chief port of the Delaware River, serving as the commercial entrepôt for Pennsylvania, West New Jersey, and the three Lower Counties on the Delaware. The older [ports of] New Castle, Chester, and Burlington, became

⁶ Craig W. Horle, and Marianne S. Wokeck, Editors, *Lawmaking and Legislators in Pennsylvania: A Biographical Dictionary, Volume One – 1682-1709* (Philadelphia: University of Pennsylvania Press, 1991), p. 3.

⁷ *Ibid.*, p. 3.

commercial satellites of Philadelphia.”⁸ Both the rural and urban population changed the environmental landscape. In the hinterlands, logging, plowing, raising domestic animals and establishing various types of mills all adversely affected the previous ecological balance. In Philadelphia, as in other urban sites, the waste products of humans, their animals, trades, manufacturing processes and ships generated pollution. The slow process of environmental decay could not dampen Penn as he encouraged Philadelphia’s commercial potential. He wanted his capital city to serve as the New World center for Quakers and, following the traditions of the “Friends,” the proprietor wished to make the political process less exclusive.

The Political Development of Pennsylvania and Philadelphia

Whether in Church or State, Quakers distrusted hierarchical structures. Their religious and political persecution in Britain resulted in a very anti-authoritarian colonial government. To protect Pennsylvanians from similar persecutions suffered by Quakers in England, Penn presented them with several constitutions. Markham’s Frame in 1696, and Charter of Privileges in 1701, gave the unicameral legislature and the council unprecedented freedom of action that eased the minds of many. However, it took very little time for the Legislature, dominated by wealthy Philadelphians, to take advantage of their granted freedoms. While Quakers were egalitarian within their religious

⁸ Mary Maples Dunn and Richard S. Dunn, “The Founding: 1681-1701,” In *Philadelphia: A 300-Year History*. Ed. Russell F. Weigley (New York: W. W. Norton & Company, 1982), p.18.

framework—women preached—that liberality did not extend to complete political democracy. They still believed it was a gentleman's obligation, not the common man's duty, to serve in various capacities of government. In their initial disagreements with Penn, according to Horle and Wokeck, "their opposition to the short-sighted policies of the proprietors led them to espouse popular rights and interests" far more liberal than anything in Europe or America.⁹ However, once in power, this anti-proprietary party quickly moved to consolidate their hold on the government. From above, they curbed the influence of the proprietor through guaranteed rights. From below, they reduced the authority of the residents by placing new, more difficult voter qualifications.¹⁰

With the incorporation of Philadelphia in 1701 Penn gave Philadelphia very limited government. It consisted of three principal offices—mayor, recorder, sheriff—and a small group of aldermen and councilmen. This latter body, according to Sam Bass Warner, became "a club of wealthy merchants, without much purse, power, or popularity."¹¹ The result was a very weak, decentralized city government. The city practically had to run itself. When the corporation ignored serious problems like crime, street paving, or street lighting, either citizens worked together or the legislature acted to

⁹ Horle and Wokeck, p. 3. Wayland F. Dunaway, *A History of Pennsylvania*, 2nd ed. (New York: Prentice Hall, Inc. 1948), pp. 46-7. Markham's Frame gave the Assembly and the Council the right to initiate legislation, and granted the assembly the right to adjourn its own sessions. It limited the power of the governor by because he could not perform any public acts without the consent of the majority of the council. The Constitution of 1701 incorporated its more important features and satisfied the needs of Pennsylvanians so well, that it stayed intact until the end of the proprietorship in 1776 and the creation of a very liberal constitution.

¹⁰ Dunn and Dunn, p. 27. These tougher qualifications included a two years' residency requirement and a new £50 means test as a way to eliminate new immigrants and poorer men.

¹¹ Sam Bass Warner, *The Private City: Philadelphia in Three Periods of Its Growth* (Philadelphia: University of Pennsylvania Press, 1968), p. 9.

solve problems. The Assembly, having wrestled power away from the Penn family, often resorted to appointing commissions giving them authority to solve municipal problems. Eventually, Philadelphians learned to by-pass their city government and form citizen committees, to resolve many of their pressing problems. This system easily adapted to the needs for military preparedness when threatened by war and for grass roots political action needed during the Revolutionary War period.¹²

Despite these problems, rural and urban Pennsylvanians managed to secure unprecedented religious and political rights, as their society moved toward secularization and democratization. One German schoolteacher and organist who resided in Pennsylvania in the early 1750s reflected the dismay of many Europeans when confronted with the unprecedented freedoms accorded colonists. In his *Journey to Pennsylvania*, Gottlieb Mittleberger expressed shock over the extent of individual freedom that led to a leveling of the social order, primarily due to the available economic opportunities. "Everyone may engage in any commercial or speculative ventures, according to choice and ability. ... A lad learns his skill or craft ... [and then] he can pass for a master and may marry whenever he chooses." Moreover, farmers in the countryside expect to be treated as gentlemen, and everywhere, people shook hands as indication of their equality. Mittleberger also feared the dangerous trend toward religious tolerance and the growing numbers of nonbelievers. "There are several hundred unbaptized people who don't even wish to be baptized ... In the homes of such people are

¹² Both Warner and Dunn discuss how this helped Philadelphians prepare for revolution and other large projects like supplying their city with water from the Schuylkill River.

not to be found any devotional books, much less a Bible.”¹³ Trapped in the Age of Faith, this traditionally minded European could not make the transition, as Benjamin Franklin had, to the Age of Enlightenment that advocated new individual liberties.

To an already relatively free society King George’s War (1744-1748) followed by the Seven Years’ War (1755-1762), brought waves of change to Pennsylvania. While the French and Spanish did not attack Philadelphia during the King George’s War, it clearly showed the citizens that the pacifist Quaker dominated political system would do little to protect them. As Franklin recollected, when “our Governor Thomas [tried] to prevail with our Quaker Assembly to pass a Militia Law, and make other Provisions for the Security of the Province [proved] ... abortive, I determined to try what might be done by a voluntary Association.”¹⁴ While respecting the pacifist nature of Quakers, Franklin still reprimanded them for their obstinacy in protecting the city. He also scorned the wealthy non-Quakers for doing nothing about the threat. Franklin appealed to the middling sorts of the city to join the association for the protection of all. The lesson learned, according to Gary B. Nash, was when “the threat of cannonading by privateers had unified laboring people and given rise to a belief that when difficult work needed to be done, it was the tradesmen and mechanics who could best do it.”¹⁵ They would need their newfound

¹³ Gottlieb Mittleberger, *Journey to Pennsylvania*, Ed. and Trans. by Oscar Handlin and John Clive (Cambridge: Harvard University Press, 1960), pp. 41, 42, 48.

¹⁴ Benjamin Franklin, *The Autobiography of Benjamin Franklin*, Eds. Leonard W. Labaree, Ralph L. Ketcham, Helen C. Boatfield, and Helene H. Fineman (New Haven: Yale University Press, 1964), p. 182. French and Spanish privateers lurked off the Delaware cape, threatening the commercial life of Philadelphia. Franklin successfully appealed to the ordinary people of Philadelphia to protect the city by forming a voluntary militia.

¹⁵ Gary B. Nash, *The Urban Crucible: The Northern Seaports and the Origins of the American Revolution* (Cambridge: Harvard University Press, 1986), p. 146.

collective strength when the colonies battled with France and England and with Native Americans over the future of North America less than a decade later.

The Seven Years' War created more problems for Quakers involved in public life, especially as non-Quaker populations soared and democratically minded interior colonists wanted more political power. Franklin, a member of the Quaker-dominated Assembly, frequently saw them struggle with their anti-war principles when voting for Crown requested appropriations.

Their gradual removal allowed others to become They were unwilling to offend Government on the one hand, by a direct Refusal, and their Friends ... on the other, by a Compliance contrary to their Principles. ... To avoid this kind of embarrassment the Quakers have of late Years been gradually declining the public Service in the Assembly and in the Magistracy. Chusing rather to quit their Power than their Principle.¹⁶

Their gradual removal allowed others to become involved in political life. Growing animosities between the Philadelphia oligarchy and the rest of the colony also created additional problems. The frontier colonists faced the threat of hostile Indian attacks while their under-representation in the Assembly prevented political action to protect them. This east/west divide pitted wealthy established Philadelphia Quakers who supported the status quo against struggling, less-established immigrant farmers who distrusted the existing political hierarchy.

The threat of a French attack from the Atlantic and an Indian invasion from the interior created a crisis for Philadelphians who wanted to protect their city. There were

¹⁶ Franklin, *Autobiography*. pp. 188-9, 191.

three factors, according to Theodore Thayer, which made the urban center vulnerable to any enemy. "First, her geographical location away from the sea gave her a false sense of security; second, Quaker principles impeded military preparedness; and third, money bills for defense were blocked in the legislature by a chronic deadlock between the Assembly and the proprietors over the power of the purse."¹⁷ Therefore, as they had done before so many times, Franklin and others simply went around the law – using lotteries to create funds, creating civilian soldiers, and making military preparations. Philadelphia survived the war years despite the inability of the city government to protect them *again*. These additional successes further encouraged citizens to form committees to address their problems. Among several important lessons learned, besides military preparedness and raising money, as Thayer argued was that this series of "crises solved by citizen initiative ultimately led to a more responsive governmental structure."¹⁸ The result: Quaker power declined while mechanic power rose. Philadelphians emerged from the war years with real leadership potential. They were measuring themselves in order, eventually, to wear the mantle of Premier City in North America.

When the interests of King George III and those of his American colonies collided after the war, Philadelphia was in the right place at the right time. Because of the war, colonists realized their collective strength and maturity along with a growing frustration with their inferior position within England's mercantile system. The

¹⁷ Theodore Thayer, "Town into City: 1746-1765," In *Philadelphia: A 300-Year History*. ed. Russell F. Weigley (New York: W.W. Norton & Company, 1982), p. 103.

¹⁸ *Ibid.* p. 108.

unwelcome imposition of a series of revenue raising laws coming on the heels of the postwar economic depression encouraged more colonists to think of severing ties with England.¹⁹ Philadelphia, according to historian Harry M. Tinkcom, with "its strategic location, wealth, industrial and commercial importance, large and cosmopolitan population, and professional and business classes combine[d] to make it after 1774 the hub of America's revolutionary activity."²⁰ Philadelphians, with Franklin's help and previous examples, also had a long history of organizing effectively and working together toward a common goal. The rising star of Philadelphia's mechanics soared as talk of treason caused the flight of many upper-class citizens from the political arena. The resulting democratization of government made it seem natural also for Penn's capital to become the unofficial political center for a people in rebellion.

Long before the Continental Congress met to deal with differences with King George III and his Parliament, Philadelphians had actively protested against English tyranny. However, as the political climate changed, the early leadership by the "upper sorts" stopped short of the goals demanded by the "middling" and "lower sorts." The wealthy merchants, professionals, and prosperous artisans ultimately had much to fear from radical political change and independence. "When the colony's leaders

¹⁹ Gary B. Nash, *The Urban Crucible*. Nash discusses the dual crisis which occurred after the French and Indian War. As so often happens in wartime, a few at the top benefited from the miseries of the rest by amassing fortunes. Those underneath them, the middling and lower sorts, perceived the injustices and suffered acutely. Their increasing annoyance with colonial leaders fused with their equally mounting aggravation with England and her attempts to thwart economic development. That growing frustration erupted to the surface with the implementation of the Stamp Act in 1765.

²⁰ Harry M. Tinkcom, "The Revolutionary City: 1765-1783," In *Philadelphia: A 300-Year History*. ed. Russell F. Weigley (New York: W.W. Norton & Company, 1982), p. 109.

demonstrated either that they were incapable of effectively directing the resistance movement or that they actually preferred British rule to the danger of political change orchestrated by poorer citizens," as indicated by historian Steve Rosswurm, "the middling sort broke with the better sort in 1769 and 1770."²¹ The growing numbers of politicized citizens among the 'lower sorts' caused the resistance movement in Pennsylvania to radicalize and polarize until even moderate leaders from among the middle sorts lost support. By the time Congress initiated the successful tactics of the past – non-importation, non-exportation, and non-consumption of English goods – forming and working with committees ruled the day in Pennsylvania. When Congress formally declared independence, the radical committees began to challenge the authority of the Assembly. Indeed, demands for change from below resulted in the Pennsylvania Constitution of 1776 being the most democratic state government in the newly formed United States of America. With war declared on England, the new government received a baptism by fire.

Their immediate task was to solve the perennial problems of no militia and no substantial fortifications; Philadelphia was as vulnerable now to British attack by land and water as it had been to previous French and Spanish attacks. The use of committees to run government and solve problems continued until a new Assembly met. Well before the invasion, Loyalists and others who disagreed with the new political attitudes fled the

²¹ Steve Rosswurm, "Equality and Justice – Philadelphia's Popular Revolution: 1775-1780," In *Life in Early Philadelphia: Documents from the Revolutionary and Early National Periods*. ed. Billy G. Smith (University Park: The Pennsylvania State University Press, 1995), p. 247.

city. Immediately before the British invasion, Congress and many radicals also fled, taking with them everything that might aid the enemy. Once occupied by British troops, Loyalists returned to their city, celebrating the return of normalcy and the silencing of those newly empowered radicals. Because of over ten years of politicization, the divisions among Philadelphia's citizens went deep with seemingly no middle ground available.

Upon the reoccupation of Philadelphia in the summer of 1778, radicals and conservatives renewed their quarrels despite having a common enemy, the Tories. When one unofficial group of radicals sought to punish Philadelphians who sided with the British, some of the prominent conservative leaders of the city refused to join them. Even without their help, this extralegal group helped bring Tories to trial. "During the autumn the grand jury drew up forty-five bills charging treason, of which twenty-three cases came to trial. Only two persons received the death penalty ... for openly aiding the British [and] were executed on November 4."²² It seemed that for the time being, Philadelphia's radicals still ruled the day and many in the returning Congress supported the Tory prosecutions.

Over the next decade political power slowly shifted back toward the center. Without a war or revolution, "there set in a political reaction which overthrew the [radicals] and placed moderate[s] in power."²³ Moderates, under the leadership of John

²² Tinkcom, "The Revolutionary City," p. 145.

²³ Dunaway, p. 186.

Dickinson, Benjamin Franklin, and Thomas Mifflin, as Presidents of Pennsylvania tightened voter requirements, supported the Federal Constitution, and eventually orchestrated the rewriting of the Pennsylvania State Constitution in 1790. The move towards conservatism in Philadelphia did not happen in a vacuum. It swept across the new Republic displacing the radicals and their revolutionary ideals. In less than a decade, the very ideals and tactics used to create a new nation, became unacceptable and unpopular to a majority of its citizens. By slowly gaining power, those supporters of the United States Constitution, or "Federalists," got control of the Assembly and voted to call a constitutional convention. "The convention completed its work on February 6, 1790, and took a recess of several months to give people time to consider the new constitution. ... On September 2, [it became] the organic law of the commonwealth." Thomas Mifflin, the president under the old constitution, won election as the first Governor of the State of Pennsylvania.²⁴

Philadelphia, a Federalist city, now campaigned to bring the national capital back from New York, to their city, where they believed it belonged. Many Philadelphians, including Benjamin Rush, tried to use their influence with old friends to get the capital moved back. Rush, both a staunch Republican and abolitionist, wrote to John Adams and discussed his fears. Richard G. Miller explained one side of his rational. Rush "wanted to see it returned at once to prevent 'the seat of government [moving] to a more southern ... and less republican state' in the future." Although Philadelphia failed to become the permanent capital of the new nation, it did receive the honor of acting as temporary host

²⁴ Dunaway, pp. 186-193. Quote p. 192.

until the construction of a permanent capital along the Potomac River, in Virginia took place. For the last decade of the eighteenth century, Philadelphia was, "the largest, wealthiest, and most centrally located city in the Union."²⁵

When yellow fever first struck Philadelphia during the summer of 1793, Washington was in his second term as president and the French Revolution resulted in the creation of another Republic. Many Philadelphia republicans clamored for pro-French policies, with some ready for another war with George III. Although Washington wanted to maintain a neutral position, two members of his cabinet felt differently. Thomas Jefferson was decidedly supportive of the early, less radical aspects of the French Revolution, while Alexander Hamilton, had very strong aristocratic leanings. In 1793, when the French government sent an impetuous young man as their ambassador, trouble brewed in a hot and drought-stricken Philadelphia. As Miller observed, "Citizen Edmond Genêt tried to push American sympathies for fellow republicans farther than they would go." He enlisted American seamen to crew French privateers, and established "French maritime prize courts within the United States." He was finally recalled when "his patent contempt for American sovereignty drew a rebuke from the president."²⁶ In the midst of a diplomatic battle over foreign policy, yellow fever broke out and replaced a political crisis with a health-related one.

²⁵ Richard G. Miller, "The Federal City: 1783-1800," In *Philadelphia: A 300-Year History*. ed. Russell F. Weigley (New York: W.W. Norton & Company, 1982), p. 169.

²⁶ *Ibid.*, p. 190.

The Economic Development of Pennsylvania and Philadelphia

As one wag observed, the Quakers came to America to do good, but instead they did well. Just as the Puritans in New England, subsequent generations of Quakers in Penn's Wood—free from religious persecution—became very interested in gathering earthly riches. As Sam Bass Warner observed, “the Quakers of Pennsylvania [also] proved unable to sustain the primacy of religion against the solvents of cheap land and private opportunity.” Their very goal of separation of church and state led almost immediately into what Warner coined privatism.²⁷ While modest opportunities for wealth existed in the countryside through farming, land speculation, and small enterprises like milling, Philadelphia was the place to be to build a family empire. Philadelphia's mostly Quaker business elite took advantage of the economic climate and became, through their worldwide connections with other Quakers, merchant princes.

Taking advantage of a rich hinterland and Philadelphia's geographic location, merchants developed import and export businesses. They typically exported mostly raw

²⁷ Warner, pp. 3-5. Warner believed he could trace the uniqueness of American cities to this concept of privatism. He broke it down into three areas. He believed that psychological privatism meant that individuals seek happiness in personal independence and their search for wealth. Warner's social privatism consisted of being loyal to your family first and this will be the basic unit of society. Groups of individual moneymaking families then make up a community. Finally, in political privatism the community would keep the peace between families and try to create a setting conducive to moneymaking opportunities. While it was possible to make money on the huge tracts of available land in Pennsylvania, the While there was money to be made on the vast stretches of open land in Pennsylvania, the potential for substantial riches could only be obtained in urban centers like Philadelphia. In the absence of industrial profits, revenue could only be produced from the total work of a town – wages, rents, real estate markets, produced goods, and trade coming and going through the city.

materials from the interior—timber, furs, and especially wheat. Later, they added flour and products from newly developing local manufacturers like iron and barrel staves. They generally imported wine, sugar, rum, and British manufactured items. Like other specie-poor colonies, Philadelphians could not afford to deal solely with England. Instead, they fulfilled the needs of West Indian plantations in exchange for bills of credit that English merchants accepted. Ironically, the slave trade helped finance—whether directly or indirectly—all three major hearths in British North America: New England, Mid-Atlantic (including Pennsylvania), and the tidewater South.

As the economic backbone of the city, this import-export business created jobs for thousands of workers. Historian Billy G. Smith recently explained the system: “Producing, transporting, and selling commodities created a complex economy involving thousands of individuals.”²⁸ In a study by Susan Klepp, “nearly one-fourth of the workers [in pre-industrialized Philadelphia] were directly involved in the transportation industry through shipping or ship construction” alone.²⁹ Shipping involved several layers of employment. One level included mariners to sail the ships, laborers to load and unload the goods, and farmers or their representatives who produced raw materials and exchanged them for finished goods. The next level comprised the people who maintained

²⁸ Billy G. Smith, “Philadelphia: The Athens of America,” in *Life in Early Philadelphia: Documents from The Revolutionary and Early National Periods*. ed. Billy G. Smith (University Park: University of Pennsylvania Press, 1995), pp. 5-7.

²⁹ Susan Klepp, *Philadelphia in Transition: A Demographic History of the City and Its Occupational Groups, 1720-1830* (New York: Garland Publishing Inc, 1989), p. 36. The eighteenth-century classifications included Shipping and Transportation, Construction (including Ship Construction), Unspecified Wholesale and Retail, Clothing and Shoes, Household Furnishing, Food and Liquor, Service (including Government Service), Health, Finance and Real Estate, Printing, Education, and Religion. Clearly, the early economy revolved around providing the necessities of life.

the ships, those who furnished the ship with necessities, and those who sold the goods in their shops. The final layer included a diverse group of people who indirectly profited from the trade. They included such "service" providers as tavern, inn, and boardinghouse owners. Also profiting in an indirect way were providers of labor. These consisted of persons who made their living by maintaining various modes of transportation and a large array of artisans who provided the inhabitants with a wide variety of handcrafted goods. Lastly, individuals involved in building houses and ships also benefited.

Just as a political hierarchy evolved in Philadelphia, so did an economic one. The merchant princes and other top businesspersons succeeded by reinvesting their additional capital into other areas, especially before a viable central banking system existed. Many purchased city plots and tracts of land in the interior or expanded their businesses to include manufactories and lent money.³⁰ By 1800, a few cotton mills appeared just outside the city to augment the early craft manufacturing. They generated their own wealth by attracting larger cotton imports and later, machine-makers. "Thus," according to historical geographer James T. Lemon, "the ability of its merchants to organize the Atlantic trade of the area spurred the development of a large city with a wide range of

³⁰ Edwin B. Bronner, "Village into Town: 1701-1746," In *Philadelphia: A 300-Year History*. ed. Russell F. Weigley (New York: W.W. Norton & Company, 1982), p. 163. Elizabeth Drinker, *The Diary of Elizabeth Drinker*. 3 vols. Ed. Elaine Foreman Crane (Boston: Northeastern University Press, 1991), 2:1315 footnote. William Allen, a very wealthy Presbyterian political figure from the 1730s, 40s, 50s, inherited a fortune from his father. However, he expanded that fortune through huge land investments, iron furnaces, a copper mine, a rum distillery, and stocks and loans at interest. A generation later, Henry Drinker, a wealthy Quaker merchant did the same thing. In the diary of Elizabeth Sandwith Drinker, there are numerous references to the many tracts of land owned by her husband, as well as his involvement in ironworks in the Pennsylvania-New Jersey area.

activities.”³¹ Over time, prompted by the exertions of its merchants, the city built a complex web of business connections that promoted economic expansion.

Lemon also observed that only members of the top economic class routinely purchased the large quantities of luxury items brought to Philadelphia from around the world. By 1760, they enjoyed “spices and pepper from the East Indies, brass household ornaments from India, silks from China, [and] wine from Madeira.”³² Persons of the middling class, while not having luxuries at their tables or in their houses, usually enjoyed steady employment as skilled craftspeople and shopkeepers. A much larger lower class of semi-skilled or unskilled workers often experienced insecurity. Too poor to own their own homes, they spent much of their earnings on the necessities, including rent, firewood, clothing, and food. Crowded into tiny alley huts close to the wharves, they were the first to suffer from epidemics, personal injury, or under-employment. When any of these misfortunes occurred, whole families would seek aid from the more fortunate.³³ With its Quaker tradition of helping those in need, many successful entrepreneurs remained committed to civic and religious obligations.

³¹ James T. Lemon, *The Best Poor Man's Country: A Geographical Study of Early Southeastern Pennsylvania* (Baltimore: Johns Hopkins Press, 1972), p. 129.

³² James T. Lemon, *Liberal Dreams and Nature's Limits: Great Cities of North America Since 1600* (New York: Oxford University Press, 1996), p. 81.

³³ Billy G. Smith, *Life in Early Philadelphia*, pp. 9-10.

The Cultural Development of Pennsylvania and Philadelphia

While not a Quaker, Benjamin Franklin, the most famous rags-to-riches entrepreneur in early America, exemplified both the early economic potential of Philadelphia and the serious Quaker commitment to self and community improvement. Arriving penniless as a runaway apprentice from Boston in 1723, Franklin, as he explained in his *Autobiography*, used his sharp wits, insatiable quest for knowledge, and hard work ethic to establish a very successful newspaper.³⁴ In the process of becoming famous and wealthy, Franklin and the Society of Friends believed that in Philadelphia, individuals had to join together in common causes to get anything done. The city government, whether unable or loath to change, offered little to its citizens. Therefore, just as the legislature appointed committees to solve problems, Franklin encouraged citizens to follow their example. That process yielded a variety of institutions Philadelphians proudly supported for generations. This legacy of voluntary citizen committees helped Philadelphians weather the epidemics in the 1790s.

The descriptive sections of the city directories reflected the pride of Philadelphians and provide snapshots (if overly enthusiastic ones) of their city. The author of the 1791 Directory, appearing before the first onslaught of Yellow Fever, wrote glowingly about the urban center and its many benevolent and enlightened institutions.

³⁴ Benjamin Franklin, *Autobiography*. Indeed, Franklin understood the importance of individual efforts, but also knew that when used collectively, those efforts multiplied. He showed that in such diverse areas as self-improvement societies, library companies, fire insurance companies, the American Philosophical Society, Pennsylvania Hospital, and the Philadelphia Academy, among others.

The detailed and wordy narrative of the 1796 Directory, written after the carnage of the 1793 epidemic, remained very positive about the city. Surprisingly, the author of the 1804 Directory copied most of his descriptions from previous authors, keeping them to just ten pages. Despite the serious yellow fever epidemics in 1793, 1797, 1798, and 1802, which he largely ignored, the author dwelt on recent improvements. This may reflect the willingness of everyone to keep well closed, the book of the last century with its cloud of yellow fever.

Clement Biddle, author of the 1791 Directory, reflected the pride of a city that had survived the vagaries of war and occupation to become the capital of a newly established republic. While idealized, these descriptions reflect the optimism of the day. After the typical short history and geographical description, he informed his readers that the Assembly had just recently passed a new city charter. Biddle boasted of the new egalitarian atmosphere: "There is not perhaps in the world a more liberal plan of city government, every class of citizens have an opportunity of representing and being represented."³⁵ Apparently, the republican-spirited citizens of Philadelphia, following Franklin's early example, continued to support many worthwhile organizations and institutions. This spirit began with the first Quaker Alms House in 1713, continued through the Library Company in 1731, the American Philosophical Society in 1744, the Pennsylvania Hospital in 1752, the Philadelphia Academy in 1753, the Medical School in 1765, the Alms House and House of Employment in 1766, the Humane Society in 1780,

³⁵ Clement Biddle, "Information Concerning the City of Philadelphia," In *The Philadelphia Directory* 1791. (Philadelphia: James & Johnson, 1791), p. 2.

and included the most recent Sunday Schools in 1791. With all that Philadelphia had to offer its citizens, no one should suffer or fall through the cracks even during hard times. In this helping atmosphere, Penn's capital grew from village to town and from town to city, until it indeed became the premier city of the United States: The Athens of America.

Biddle wrote about the wide range of churches and their societies reflecting the religious diversity of Philadelphia, and praised public and private charitable institutions, medical facilities, and places of learning. "Almost every religious society has a fund ... for the relief of the widows and children of their clergy and other distressed members of their communion." Most also operated schools for rich and poor alike including one "for the Africans of every shade or colour, kept under the care and at the expence of the Quakers." The principal public charitable institution in Philadelphia was the house of employment. Here, the poor were "employed in coarse manufactures to aid in defraying their expences, under the care of the overseers and guardians of the poor." Privately, the Quakers supported an almshouse for "families of single persons who have fallen into decay" and were unable to provide for themselves. As the medical center of both colonial and early America, Philadelphia operated a hospital and a dispensary. Original funding for the hospital came from both the legislature and private donations. Private subscriptions continued to fund the operations, supervised by elected managers. Hospital staff included local physicians volunteering their time to treat "insane persons and the friendless sick and wounded." Funded by voluntary annual subscriptions, the dispensary treated paying subscribers and two poor patients nominated by each of them. Managers oversaw operations with physicians attending to "the sick and wounded at their own

houses.” Without the dispensary, Biddle believed that many persons would have suffered or died “for want of medical assistance and by the quackery of pretenders to the healing art.” Philadelphia also boasted of its places of learning. In addition to the church-operated schools, the University of Pennsylvania provided higher education in both liberal arts and sciences, including a medical school. The recently instituted Sunday schools “for the instruction of children who would otherwise spend that day in idleness or mischief” should have helped “to amend the morals and conduct of the rising generation.”³⁶

Despite the horrors of the 1793 epidemic, Thomas Stephens, author of the 1796 City Directory couched his account of the city in equally glowing terms. After opening with the usual short history and geographic description, Stephens discussed the weaknesses of city government under Penn’s Charter from 1701 to 1776 and the one created by the Assembly, dominated by revolutionaries and radicals, from 1777-1789. The new act of incorporation, passed by the Assembly in 1789 and 1790, presumably corrected the weakness and injustices of both its predecessors since Stephens offered no criticisms. Describing the city’s churches, Stephens noted the two new churches built by black worshippers. While barely mentioning the existence of the African Methodist Episcopal Church, he wrote the following concerning the African Protestant Episcopal Church. “The ministers of the Episcopal churches occasionally officiate ... [otherwise] the usual prayer’s & Liturgy are read by one of their elders. A young black man of very

³⁶ Ibid., pp. 3-5.

considerable abilities ... now studying ... will be soon ordained ... an appointed to the care of that congregation."³⁷

Stephens praised the work of public and private charitable institutions, and indicated other factors that made Philadelphia a great city. He mentioned the vast assortment of associations aimed at improving the condition of its members or others in society, the medically related facilities, educational institutions, scientific societies, and Charles Willson Peale's museum. Stephens wrote in sentimental terms about the public Alms House: "Here the helpless stranger finds a comfortable residence, in the hour of sickness and distress ... the blind ... the old & emaciated ... the unhappy woman, who, either from poverty or misconduct, may be destitute ... [all are] amply provided [for]."³⁸ As if to allay fears, Stephens even published the Stewart's account for a week's worth of provisions. Also applauded, were the Friend's Alms House and Christ Church Hospital, a small endowed nursing home for aged women. Reflecting Philadelphia's long tradition of citizen participation, Stephens noted a wide assortment of societies. Lauded are the Society for Aleviating the Miseries of Public Prisons, the Humane Society, the Society

³⁷ Thomas Stephens, "A Short Account of the City of Philadelphia &c.," In *Stephen's Directory for 1796* (Philadelphia: W. Woodward, 1796), pp. 196-232. Quote is from page 201. Stephens may have been reluctant to praise the other church because of the behavior of its founders, Richard Allen and Absalom Jones; Richard G. Miller, in *The Federal City*, wrote that the Methodist hierarchy drove away both black clergymen because their role as black church leaders was undesirable. Therefore, they founded a church of black Methodism with Allen eventually becoming the first bishop of the African Methodist Church of North America. Jones also established St. Thomas's, the first Episcopal church for blacks in America and subsequently ordained as the first black Episcopal priest in America. Besides breaking away from white-dominated churches, both Jones and Allen founded the Free African Society in 1787. This society responded to pleas for help from Mayor Clarkson during the 1793 yellow fever epidemic, serving as nurses, carters, and in the cemeteries. In the process of their relief work, the Society incurred large debts not repaid by the city. Despite all their efforts to help, the Society received very little praise. Instead, whites accused them of stealing and other transgressions. (p.187.)

³⁸ Stephens, p. 205.

for the institution and support of First-day or Sunday Schools, the Abolition Society, the Society for the Information and Assistance of Emigrants, the National Societies – St. Andrews, the German incorporated, St. George's, the Hibernian, and a wide variety of Mutual Benefit societies.

Like Biddle, this city booster honored the selfless work of those affiliated with the Pennsylvania Hospital, including the overseers and physicians with their medical students. Planned for the near future was a separate wing for "lunatics," and a separate building to serve as "a lying-in and foundling hospital." The University of Pennsylvania with its added medical school and the Episcopal Academy provided students with a variety of subjects for advanced study. As would be expected of such an active population, several groups joined to provide a private education for children of "the unfortunate Africans." In conjunction with education, Philadelphia's public libraries – another Franklin legacy – provide the "spirit of literary improvement ... among all classes of people."³⁹

Stephens pointed with special pride at the city's scientific societies, especially the American Philosophical Society and the College of Physicians of Philadelphia. The former group organized themselves for advancing useful knowledge. Accordingly, this society offered prizes "to the author of the best discovery, or most useful invention relating to navigation, astronomy, or natural philosophy." The later group, incorporated by the legislature, associated themselves "for the purpose of extending medical

³⁹ Stephens, pp. 202, 225, 226.

knowledge, and of promoting harmony and uniformity in the practice of physic." In both cases, these societies established laudable reputations in America and Europe for their work. Stephens likewise stressed the importance of Peale's Museum, when he wrote, "Of the different institutions in this city calculated to promote science, this may certainly be considered as one of the most important."⁴⁰ Enamored with the large numbers of preserved animals, fossils, and other creatures, Stephens noted the need for public support to protect and expand the collection.

With the negative attention heaped on Philadelphia during the 1793 yellow fever epidemic, Stephens could hardly omit a discussion about yellow fever, about the health of the city, and the precautions taken to limit a recurrence of the disease. His short recap of the 1793 epidemic covered the hotly contested origin of the disease, the large loss of life, and the citizen heroes like Girard and Helm who kept society from completely disintegrating. He reiterated several of the physician-advised measures Biddle included for general healthiness, but concentrated on the newest preventive measure. The most important precaution involved renovating the public hospital for sick immigrants on State Island, situated on the Delaware River below the city. A resident physician and the health officer resided there full time while a consulting physician helped out as needed. To prevent the spread of disease, all ships, crews, and passengers submitted to a mandatory examination in order to obtain a bill of health and permission to land in the port. The detention of ships with unhealthy crewmembers, passengers, or infected cargo would, it was hoped, prevent the introduction of disease into the city. Unhealthy persons

⁴⁰ Stephens pp. 229, 231.

received treatment at the hospital while the infected cargo was smoked and purified, rendering it harmless. Twenty-four health inspectors, citizens of Philadelphia and its suburbs, assisted the health officer. Stephens applauded these measures by indirectly linking their successful implementation with the absence of new epidemics. "The law took place the beginning of last May and it is now in an active state of operation; and it is, no doubt, owing to it, that the city enjoys its present uncommon healthiness."⁴¹

The 1804 City Directory contained a brief sketch of the city, including many sections plagiarized from earlier directories. Many of the descriptions in this ten page sketch of the city were lifted verbatim from previous editions. Author James Robinson spent a considerable amount of space on the early founding and pre-Revolutionary war era, boasting about how quickly the town grew into an impressive city. One short paragraph covered the Revolution with his only comments concerning yellow fever attached at the end. "Philadelphia has increased with astonishing rapidity," he wrote notwithstanding the repeated ravages of a mortal fever, introduced from the pestilential atmosphere of the western Archipelago, where it has been excited to unusual virulence by the civil wars of St. Domingo. In the year 1793 it swept away 5,000 people."⁴² In the remaining three and one-half pages, Robinson discussed architecture, streets, the house building boom, city government, the different trades, the market, the usual institutions and benevolent associations, and a busy shipping center. The author seemed especially

⁴¹ Stephens, p. 217.

⁴² James Robinson, "A Brief Sketch of the Origin and the Present State of the City of Philadelphia," In *The Philadelphia Directory for 1804* (Philadelphia: John H. Oswald, n.d.), p. 7.

enamored with architecture and building. His description of the Bank of the United States praised its "superb edifice of the Corinthian order, with a majestic portico of six fluted columns of white marble." Referring again to Greek architecture he described the Bank of Pennsylvania as "an elegant structure, executed in white marble, from the design of an Ionick Temple," while also praising the marble Rotunda of the Schuylkill water reception and distribution building. While the private buildings lacked Greek style, "they are built of a clear red brick, and generally ornamented in the new streets, with facings, key stones, and flights of steps, in white marble."⁴³ He also boasted of the cleanliness of Philadelphia streets, observing that except for Holland, "they are kept cleaner than those of any city in Europe."⁴⁴ His closing comments boasted of the wealth of the city, especially that generated by a global trading network, but he offered a slight rebuke to the city concerning the prevention of the introduction of yellow fever. Summertime temperatures in the city could get as hot as the West Indies he claimed, thus creating that same dangerous atmosphere. Robinson believed the "perpetual intercourse" between the two areas introduced yellow fever almost every year since it was "feebly restrained by the inadequate operations of local and temporary health laws."⁴⁵ Therefore, while bolstering the image of Greek revival architectural and a prosperous shipping center, his rebuke of inadequate health laws and precautions probably reflected the frustration of many citizens

⁴³ Ibid., pp. 7-8.

⁴⁴ Ibid., p. 8.

⁴⁵ Ibid., p. 10.

trying to polish the yellow fever-based tarnish off their fair city. In the end, all of these quixotic images neglected the reality of the city's growing environmental hazards.

The Environmental Development of Pennsylvania and Philadelphia

The organization of city and surrounding countryside envisioned by William Penn was supposed to parallel the experiences of landed gentry in England but with their manor houses located within his spacious capital. His instructions were to lay out a town between the Delaware and the Schuylkill Rivers with large lots and open green spaces. Unforeseen by Penn, many early residents rejected this scheme, replacing it with a more familiar layout dominated by the Delaware River. Had the city developed along Penn's designs, population densities would have remained low and probably more healthy since most of the polluting crafts and trades would have operated well outside the city center. While Philadelphia may not have become the same thriving metropolis under these circumstances, it almost certainly would have been cleaner and healthier. Penn's vision lost, the city developed along the same lines as so many European cities: high population densities, polluted water supplies, cemeteries interspersed with housing, highly polluting crafts, trades, and manufacturers, and very poor drainage in general. From the beginning, Philadelphians were ignorant of the latent dangers.

Surrounded by water, the first settlers of Philadelphia, against all odds, still hoped to find a healthy environment in the lower Delaware River valley. Roslyn Stone Wolman noted that by "lying between the confluence of the Schuylkill and the Delaware,

honeycombed with many small streams, [along] with a moderate to heavy rainfall, [Philadelphia] also had the perennial health problem of the regulation of drainage.”⁴⁶ Moreover, Susan Klepp pointed out another water-related problem. “The high water-table under the city meant that the waste in the privies constantly seeped into the hundreds of private wells which supplied the population with water [making] intestinal complaints endemic.”⁴⁷ Medical historian Richard H. Shryock argued that this condition was already recognized as dangerous. “Experience had shown the dangers of low and marshy locations, but men were often misled by the good health of the first years or even of the first decades.” It took time for them to contaminate the water and “create certain social conditions conducive to malaria,” typhoid, dysentery, and other fevers.⁴⁸ By the time the first settlers moved out of their caves along the Delaware River and into more permanent structures, their animals created additional sanitation problems. As early as 1686, Roslyn Stone Wolman observed that an official complained about these animals to William Penn. “Just by your door one keeps so many hoggs in a cave that they have undermined your pales and Destroyed the Grass plott.”⁴⁹ While live animals created problems with habitat destruction and the dilemma of what to do with their waste, dead animals created another environmental dilemma.

⁴⁶ Roslyn Stone Wolman, “Some Aspects of Community Health in Colonial Philadelphia” (Diss. University of Pennsylvania 1974, p. 258).

⁴⁷ Susan Klepp, *Philadelphia in Transition*, p. 226.

⁴⁸ Richard Harrison Shryock, *Medicine and Society in America*, p. 84.

⁴⁹ Wolman, p. 249.

Farmers in the surrounding countryside raised cattle for use by city dwellers. It did not take long, as Wolman pointed out, for the municipality to forbid "the establishment of slaughter houses within the city because of the public nuisance occasioned by them." Instead, they slaughtered cattle "over the River Delaware, where the Tide may carry off all their Garbage, gore, etc." Notwithstanding the law, butchers continued "killing their meat in the streets," often leaving the waste products behind.⁵⁰ Coupled with the carcasses of dogs, cats, horses, and other animals, Philadelphia's streets were both foul smelling and a breeding ground for disease.

As previously noted, the city government ignored many problems, including street sanitation and paving. Not until 1712 when the Assembly intervened through a board of assessors, with power to tax, did any kind of "public" street construction or repair begin. The slow progress of civic improvements meant that many homeowners chose to make self-improvements to the street in front of their residences rather than wait several years. Incredibly, even into the 1720s and 1730s, butchers still slaughtered animals in their roadside stalls, artisans threw waste products into the streets, while citizens endured "great quantities of Dung Excrement and dirt ... which emitted a noisome and unwholesome smell and stink."⁵¹ Some citizens unsuccessfully petitioned the Assembly to remove some of the worst offenders – slaughter houses, tan yards, and lime pits – from the public docks and the surrounding neighborhood. The problem of filthy streets

⁵⁰ Ibid., p. 249.

⁵¹ Ibid., p. 253.

continued until the 1760s when an epidemic of yellow fever provided the first impetus for change.

While the 1741 yellow fever epidemic resulted in the establishment of an isolated quarantine station south of Philadelphia, the consequence of the 1762 epidemic was the renewed public outcry for a cleaner and healthier human habitat. This led to a series of laws whose purpose was, as A. Michal McMahon suggested, "a first step to gain fuller control of the city's environmental problems." This ambitious multi-year undertaking "designated means and priorities for cleaning and paving streets, alleys, and sidewalks, ...[expanded] the storm-water drainage system, ... established a system of scavengers and requirements for removing [waste] ... from the city, and instituted a tax and fee schedule ... [to fund] the attempt."⁵² Simultaneously, certain occupations – butchers, skimmers, tanners, and others – came under the scrutiny of city officials because of their particularly offensive and dangerous pollution. Unfortunately, these new regulations barely affected Dock Creek which, as Wolman indicated, was a "Receptacle for the carcasses of dead Dogs, and other carrion, and filth of various kinds," and the most offensive open sewer in the city.⁵³ Regrettably, this clean up of the city barely began when trouble with England first brewed and then exploded into warfare and military occupation. Therefore, despite a war victory and independence, the city of Philadelphia in 1783 was still filthy and polluted.

⁵² A. Michal McMahon, "Small Matters: Benjamin Franklin, Philadelphia, and the *Progress of Cities*," *The Pennsylvania Magazine of History & Biography*, 116:2 (April 1992), p. 174.

⁵³ Wolman, p. 261.

Just a few short years after the war, and after decades of complaints, Philadelphians finally convinced their city and state government to address some long-standing environmental problems. The most important issue was Dock Creek. This small stream began west of the city in the low-lying water of swamps and marshes. It then meandered through the heart of the city before emptying into the Delaware River. William Penn gave the land surrounding it to the city to house ships. As Stephens explained, "it was intended as a place to dig a bason and docks to shelter the shipping."⁵⁴ Since piers in the Delaware River served just as well and the cost to keep it clean seemed excessive, the city abandoned the plan. Instead, it became as Dr. James Mease described, a "the receptacle of an immense mass of animal and vegetable offal matters, which poisoned the air by the exhalations arising from them, and the muddy bed, by the action of the sun on them when the tide was out."⁵⁵ The Assembly finally ordered it "to be arched over and covered with earth whereby the city ... acquired a beautiful street."⁵⁶ While the state provided funds for Dock Creek, the city government, according to Smith, "allocated funds to enhance the center city blocks, paving many streets, and hiring scavengers to clean the main thoroughfares." Unfortunately, while these more affluent neighborhoods received sanitary attention, "the impoverished, outlying neighborhoods [where] pigs, dogs, and rats roamed freely to feed on the garbage in the streets, [and] residents commonly disposed of their refuse and excrement in the alleys and gutters in

⁵⁴ Stephens, p. 197.

⁵⁵ James Mease, M.D., *The Picture of Philadelphia* (1811; rpt. New York: Arno Press & New York Times, 1970), p. 39.

⁵⁶ Stephens, p. 197.

front of their homes," remained unimproved.⁵⁷ Even with these improvements, Philadelphia remained an unclean city.

Spurred on to improve the sanitation and health of the city after each yellow fever epidemic, Philadelphia still needed to do much more. Thomas Bond, a long-time medical practitioner and early medical educator, constantly sought further improvements until his death in 1784. As noted by Shryock, "Bond was confident that further sanitary efforts would promote health and pay for themselves in the process through savings in medical bills."⁵⁸ It is not surprising that other physicians, especially Dr. Benjamin Rush, echoed these same sentiments when yellow fever struck again in 1793. Therefore, despite all the previous praiseworthy advancements, Philadelphia remained polluted. Tanners, butchers, hatters, shoemakers, and other artisans still threw their garbage in streets, alleys, and vacant lots. Rush believed this "filth and corruption about the city, allowed the disease to be "carried by putrid miasmata in the air. The spectacle of garbage, paper, and filth blowing about the narrow, dusty streets ... was an abomination to Philadelphians," and should be removed.⁵⁹ Eleven decades after Penn's dream, Philadelphians could no longer pretend ignorance of their unhealthy situation. They did little to reverse the excessive population densities or further remove their highly polluting trades, crafts, and manufacturers from their midst. The dead still rested among the living, while the age old problem of poor drainage still plagued those living in low-lying areas. Finally, the water

⁵⁷ Billy G. Smith, *"The Lower Sort:" Philadelphia's Laboring People, 1750-1800* (Ithaca: Cornell University Press, 1990), p. 51.

⁵⁸ Shryock, *Medicine and Society*, p. 102.

⁵⁹ Powell, pp. 20-21.

supply remained polluted as the ground water absorbed animal, human, and industrial waste. Only after the deadly yellow fever epidemics of the 1790s would Philadelphians consider sweeping environmental changes, including a water works system to bring water to the city from the Schuylkill River.

CHAPTER TWO

THE NIGHTMARE OF 1793: PHILADELPHIANS
BARELY VANQUISH "THE AWFUL JUDGE OF QUICK AND DEAD"

*The stranger, orphan, poor, ye bring
And kindly tend, and fix their head;
Nor fear infection's pois'nous sting,
Whilst hov'ring o'er the sick man's bed.⁶⁰*

Introduction

When Dr. Benjamin Rush declared in August of 1793 that yellow fever was in the city after an absence of over thirty years, citizens immediately reacted in a variety of ways. Since most people feared "yellow jack" above almost all other diseases, skepticism by some translated into outright denial – they rejected the doctor's diagnosis. Others simply underestimated how much far-reaching havoc a yellow fever epidemic could wreak. However, the constant tolling of death bells eventually led citizens to reconsider. Once a significant portion of the population acknowledged yellow fever in their midst, a kind of hysteria followed as many recalled horror stories of previous epidemics. At that point, a series of choices lay before each individual, as they came to accept that dreadful reality.

⁶⁰ A Citizen, *Fever; An Elegiac Poem*, p. 9.

Upon acknowledgement, citizens responded in a variety of ways. Some followed the advice of Rush, selecting the straightest escape route; they fled Philadelphia, fearing for their lives. Regrettably, too many of them abandoned friends and family who succumbed to any ailment resembling a fever, and there were many such infirmities during this time of "autumnal fevers." Like those forsaken, another portion of the populace unwillingly remained in the city. The lack of funds for the necessities of life effectively blocked any escape route for poorer Philadelphians. The horrors and sufferings of those abandoned and trapped were almost unimaginable.

A different group of citizens, remained in the city despite fearing for their lives. This compassionate group stayed behind to nurse the sick, bury the dead, and provide aid to those in need. Another segment of the population stayed, not fearful of the consequences. Some of them remained home as much as possible, believing in the efficacy of recommended yellow fever preventives. Still others, especially yellow fever survivors, believed they could escape the clutches of the "pale faced messenger." Finally, some individuals, including many physicians, simply accepted whatever fate God ordained. From these last two groups came people who also helped others during the crisis.

This yellow fever epidemic, as with any disaster, threatened the very fabric of civilization. As people fled or fell ill, society began breaking down. The federal, state, and city governments disintegrated, while business abruptly halted. Terror and confusion reigned until some unlikely groups of citizens emerged to bring order and assistance to

their suffering neighbors. As these voluntary associations slowly replaced chaos with order, physicians fought both the disease and each other.

Regardless of their behavior, Philadelphians hotly debated what caused the epidemic and then how to remedy the situation. Besides the traditional religious cause coupled with divine intervention, two other cause / solution links appeared. The first associated environmental hazards with cleaning up the city. The second connected its importation from the West Indies with stricter quarantine and health laws. Both physicians and the public split over these last two, sometimes vociferously.

Whatever their role and however they explained the cause and solution, Philadelphians readily communicated their opinions and beliefs in a variety of ways. Practically from the moment Rush announced the presence of yellow fever in the city, Philadelphians filled private letters and diaries with their experiences. They also "went public" with their opinions by submitting articles to newspapers or publishing detailed lay accounts. When prose failed them, some found solace in poetry.

Physicians also wrote privately and publicly on several aspects of the disease. Without the knowledge of an insect vector, no one had the complete picture. Therefore, they stridently disagreed with each other over the origins, the contagious nature, and the most effective treatment of yellow fever. Coping with such widely divergent medical opinions and advice, both the city and state governments tried to make improvements in order to help prevent another disastrous occurrence.

The Horrible Visitation of Yellow Fever

The yellow fever epidemic of 1793, the first in a series of outbreaks, transformed a revitalized and vibrant Philadelphia into a city of death, isolation, and horror as citizens struggled to survive. In July, hundreds of refugees arrived penniless in Philadelphia as a slave insurrection escalated on the French West Indian Island of Santo Domingo. As J. H. Powell noted, the refugees brought "news of a great revolution in the sugar island, of a horrible carnage and slaughter, of the destruction of towns and the ruin of merchant houses; ... they told of a pestilential fever which had ravaged the islands ... [and] of an agonizing voyage on fever-ridden ships."⁶¹ Philadelphians with their long history of absorbing immigrants responded to the needs of this new group almost immediately. A thriving French enclave existed near the waterfront that provided them with immediate help. "Meanwhile," continued Powell, "native Philadelphians, proud of their century-old tradition of benevolence, would raise money" through subscriptions and benefit performances by John Bill Ricketts, and the theatre company.⁶²

The committee formed to help the destitute refugees turned to the newspapers as they requested help. They solicited a variety of citizens from all wards of the city to act as subscription collectors. Both *Dunlap's American Daily Advertiser* and *The Gazette of*

⁶¹ Powell, p. 4.

⁶² *Ibid.*, p. 5. Stephen Girard, a French merchant with business connections in St. Domingo also helped organize a benefit society with Peter Duponceau and Peter Lemaigre. Ricketts, a famous equestrian, performed at his Twelfth and High Street Circus.

the United States published their names, accompanied by descriptions of the refugees' suffering, on July 15th and July 17th respectively. On July 18, chairperson of the relief committee, John Wilcocks, wrote a letter to John Fenno, editor of the *Gazette of the United States*. He requested the printing of extracts of a letter received from his counterparts in Baltimore updating their relief efforts. Wilcocks then encouraged donations from Philadelphians.

It is believed with confidence that [as at Baltimore] a common impulse will on the present occasion be experienced throughout the country, to relieve in the most effectual manner the distressed who take refuge in it, and that the citizens of Philadelphia in particular, will not be wanting in their utmost exertions for the cause which the committee hope to promote the good of by receiving contributions.⁶³

The same day Fenno printed this correspondence between relief committees in Philadelphia and Baltimore; he also printed a collective letter of thanks from the refugees to their benefactors—the generous citizens of Baltimore. This letter, filled with the horrors of their misfortunes, mirrored the emotions of future written accounts by Philadelphians trying to come to grips with the tragedy of yellow fever, unintentionally introduced into their city by other French refugees.

As the newspapers continued to update readers concerning the progress of relief efforts, news that Philadelphia might be experiencing some health problems, and proposed countermeasures, crept into their pages. Rumors began spreading after Dr. Rush reported on August 19 that Catherine LeMaigre suffered from yellow fever. Her

⁶³ *Dunlap's American Daily Advertiser* (Philadelphia), July 24, 1793.

death notice appeared in Dunlap's paper on Saturday August 24. As wife of the merchant Peter LeMaigre, one of the leaders in French relief efforts, Catherine certainly encountered many of the sick refugees. That same edition also offered some important advice from an almost prophetic writer: "At this unhealthy season, it becomes the duty and interest of every citizen to contribute all in his power to prevent the spreading of disorders." The unidentified author strongly suggested that until the drought ended, "the Fire Companies [should] cause their engines to be exercised daily, ... in wetting the streets." The following Monday, W.F. presented directions to make a concoction "to prevent infection." On August 27, A.B. reminded readers of Dunlap's paper "that fear creates a susceptibility in the body to disease." Although caution must be observed "against the prevailing disorder of the season, ... unnecessary terrors may do much injury." The writer strongly suggested "the practice of tolling the bells for deceased persons ... for the present, be discontinued." The College of Physicians confirmed these premonitions of unhealthy circumstances after Mayor Matthew Clarkson requested their advice, that same week. Their report, printed in several newspapers, confirmed the presence of a "malignant and contagious fever." They also "agreed to recommend to

their fellow-citizens, the ... means of preventing its progress.”⁶⁴ While rumors remained unconfirmed, many Philadelphians denied the existence of any disease that could potentially bring disaster to the New Republic’s capital city.

As Philadelphians reflected upon the physician’s report and the bells suddenly fell silent, “A Friend to the People” tried unsuccessfully to produce calm by playing down the danger in a newspaper article. He implored people not to worry so much. It was a shame to see people so terrified that they wanted to flee the city and neglect their businesses. “Refrain, then, from foolish fears and anxieties, by which you subject yourselves to more danger, without any cause.” He then referred to the report: “I approve of precautions; but do not, my fellow-citizens, alarm yourselves: Trust in Providence, who is alone able to preserve and protect you.”⁶⁵ Concurring with the above author, ARÆTEUS, JUNR optimistically wrote that with just a few precautions, people could stop the disease from spreading. To protect everyone in the city, he suggested punishing those who, by their dangerous actions, jeopardize the wellbeing of others.

⁶⁴ *Dunlap’s Daily American Advertiser*, August 24, 26, 27. *Gazette of the United States* (Philadelphia), August 28, *Philadelphia National Gazette* (Philadelphia), August 28, and *The Independent Gazetteer and Agricultural Repository* (Philadelphia), August 31. Powell briefly listed the eleven measures of prevention and protection on p. 45: 1) avoid infected persons, 2) avoid fatigue of body and mind; don’t stand or sit in a draft, or in the sun, or in the evening air, 3) dress according to the weather; avoid intemperance; drink sparingly of wine, beer, or cider, 4) when visiting the sick, use vinegar or camphor on your handkerchief, carry it in smelling bottles, use it frequently, 5) mark every house with sickness in it – on door or window, 6) place patients in large and airy room without curtains; chair their clothes and bed linen often; remove all offensive matter quickly, 7) stop tolling the bells at once, 8) bury the dead in closed carriages and privately, 9) clean the streets, and keep them clean, 10) stop burning fires in houses or on the streets because it is ineffective; burn gunpowder to clear the air; use vinegar and camphor generally, and 11) establish a hospital near the city to treat the stricken poor.

⁶⁵ *Dunlap’s Daily American Advertiser*, August 30, 1793.

Those persons who, actuated by an idle and (at the present period) criminal curiosity, run from street to street, collect information from every idle stroller in the way, enter places of infection to put questions to servants and attendants, and then industriously propagate their exaggerated, and generally false reports, to the great consternation of the inhabitants, ought to be treated with the utmost indignity and contempt, if not subjected to a severe penalty.⁶⁶

However noble and sincere, these attempts to downplay the seriousness of the situation did not stem the tide of concern—citizens panicked.

By September 1, as the physician's report sank in and silence prevailed, alarmed Philadelphians packed their belongings and fled for their lives in record numbers. "Between a third and a half of the residents beat a hasty retreat," according to the estimates of one historian.⁶⁷ Matthew Carey, printer, bookseller, and stationer (according to the 1793 City Directory), described the resulting exodus in the first of his "instant histories" – the hastily written first edition: "The terror now became universal. The migrations to the country were very great—and about the middle of September, it is supposed that 12 or 15,000 of the inhabitants of Philadelphia had deserted the city." By mid-October, Carey's updated figures reported "about 23,000 people have left the city."⁶⁸ Included in the throngs were government employees and officials – including President George Washington on September 10. With the symbol of the national government departed, most departments dissolved into confusion. When Washington fled to Mount

⁶⁶ Dunlap's *Daily American Advertiser*, August 30, 1793. Dr. Charles Caldwell, according to Powell, authored this article.

⁶⁷ Billy G. Smith, "Disease and Community," In *A Melancholy Scene of Devastation – the Public Response to the 1793 Philadelphia Yellow Fever Epidemic*. Eds. J. Worth Estes and Billy G. Smith (Science History Publications/USA, 1997), p. 150.

⁶⁸ Mathew Carey, *A Desultory Account of the Yellow Fever, Prevalent in Philadelphia, and of the Present State of the City* (Philadelphia: Carey, October 16, 1793), pp. 2, 5.

Vernon and Governor Mifflin fell sick at the Falls of Schuylkill, the only major elected official left was Mayor Matthew Clarkson. Powell praised his example of voluntarily remaining in the city and visibly at his office each day, because he "served as the symbol of calm [and] orderly procedures" for those who remained behind.⁶⁹ With Federal, State, and local governments crumbling around him, Mayor Clarkson decided to appeal directly to the citizens of Philadelphia for help in this increasingly urgent situation.

A seemingly unlikely group of citizens responded to his pleas and bravely contributed to the welfare of the city. These included members of the African Methodist Episcopal Church, led by Absalom Jones, Richard Allen, and William Gray. Poignantly, just days before, they had "staged a [church] roof-raising banquet," after prolonged financial difficulty. Now, "even as glasses were raised in toast, ill fortune struck again."⁷⁰ Jones and Allen met with Mayor Clarkson, and despite a long history of racist practices against them, volunteered their labor. They announced in several newspapers their willingness to nurse the sick and bury the dead. "As it is a time of great distress in this city, many people of the black colour, under a grateful remembrance of the favours received from the white inhabitants, have agreed to assist them."⁷¹ As Philip Lapsansky observed, "they recruited nurses to visit homes and work at the Bush Hill hospital,

⁶⁹ Powell, pp. 72-73, 113-119, quote p. 119.

⁷⁰ Gary B. Nash, *Forging Freedom: The Formation of Philadelphia's Black Community, 1720-1840* (Cambridge: Harvard University Press, 1988), p. 121. Finally, on July 17, 1794, the first worship service took place in their new African Church. Announcement in the *Philadelphia Gazette and Universal Daily Advertiser*, July 19, 1794.

⁷¹ *Philadelphia National Gazette and Dunlap's American Daily Advertiser*, September 11, 1793. Richard G. Miller discussed how Jones and Allen were driven away by their fellow white Methodists ultimately leading them to found separate African branches. "The Federal City: 1783-1800," p. 187.

mobilized carters to transport patients and remove dead, enlisted laborers to dig the graves, and – for good or ill – administered Benjamin Rush’s bleeding and purging treatment to hundreds of sufferers.”⁷² Dr. Rush, a strong supporter and attendee of the banquet, praised their offer of help and their ultimate usefulness. In letters to his wife he wrote, “You will see by this day’s paper what my African brethren have done for the city. ... [They] are extremely useful in attending the sick. Billy Gray and Ab[salom] Jones have been very active in procuring nurses.”⁷³ These “foot soldiers in the war against the epidemic,” as Lapsansky penned them, also “patrolled the streets, checked abandoned properties, and tried to maintain a semblance of social order.”⁷⁴

In these roles, blacks witnessed some horrifying scenes, according to Jones and Allen. In their *Narrative* they wrote about finding corpses in abandoned houses. At the height of the epidemic when citizens fled in fear of the contagion, “many whose friends and relations had left them, died unseen, and unassisted.” They found the deserted dead in different circumstances: “some laying on the floor ... without any appearance of their having had, even a drink of water for their relief; others a lying on a bed with their clothes on, as if they had come in fatigued, and lain down to rest; some appeared, as if

⁷² Philip Lapsansky, “‘Abigail, a Negress’: The Role and the Legacy of African Americans in the Yellow Fever Epidemic,” In *A Melancholy Scene of Devastation – the Public Response to the 1793 Philadelphia Yellow Fever Epidemic*. Eds. J. Worth Estes and Billy G. Smith (USA/Science History Publications for the College of Physicians of Philadelphia and the Library Company of Philadelphia, 1997), p. 63

⁷³ Benjamin Rush, *Letters of Benjamin Rush*, 2 Vols. Ed. L.H. Butterfield (Princeton: Princeton University Press, 1951) 2:654, 658.

⁷⁴ Lapsansky, p. 63.

they had fallen dead on the floor, from the positions we found them in.”⁷⁵ They also mentioned heartbreaking scenes of children deprived of parents by the illness when they came to collect bodies for burial. “We found a parent dead, and none but little innocent babes to be seen, whose ignorance led them to think their parent was asleep; on account of their situation, and their little prattle, we have been so wounded and our feelings so hurt, that we almost concluded to withdraw from our undertaking.” Very few neighbors willingly cared for these small orphans; the fear of contagion kept doors shut against them. “This extreme [fear,]” they observed, “seemed in some instances to have the appearance of barbarity.” Therefore, while carrying out their other duties, these soldiers also “picked up little children that were wandering they knew not where, whose (parents were cut off) and taken them to the orphan house.” Another case involved a woman pushed out of a house and into the gutter by a man. Luckily, a black man witnessed the event and fearing suffocation, came to her rescue. Instead of finding her intoxicated, he found her “so far gone with the disorder that she was not able to help herself” out of the gutter. “The hard hearted man that threw her down, shut the door and left her.” They transported her to the hospital at Bush Hill.⁷⁶

Tragically, while assisting the Mayor in these critical areas, many African Americans sickened and died of yellow fever. This occurred, despite the belief by many, including Dr. Benjamin Rush, of black immunity. Only when they began burying their

⁷⁵ Absalom Jones and Richard Allen, *A Narrative of the Proceedings of the Black People, During the Late Awful Calamity in Philadelphia in the year 1793* (Philadelphia: William W. Woodward, 1794), p. 18.

⁷⁶ Jones and Allen, pp. 19, 20.

own, could others begin to appreciate the compassion and bravery of the African Episcopal Methodist Church members. Unfortunately, even this meritorious service to the city failed to temper the prejudices of Philadelphia's white population. In his *Short Account*, Mathew Carey praised "the services of Jones, Allen, and Gray, and others of their colour," and "demand[ed] public gratitude." However, he also undermined their sacrifice when accusing many of extortion and theft, while understating their physical risks. "They did not escape the disorder; however, there were scarcely any of them seized at first, and the number that were finally affected, was not great."⁷⁷ Benjamin Johnson echoed these sentiments in his *Account of the Malignant Fever*. In a strange manner of compliment, he remarked, "Had it not been for the exertions and attentions of some of these despised people, the calamity and distress of the city would have been much aggravated." After mentioning the low death toll of French West Indians living in Philadelphia, Johnson wrote, "the black people, likewise, were exempted in a peculiar manner from the contagion. Very few of them were taken, and still fewer died."⁷⁸ To counter these erroneous notions about lower death rates, Jones and Allen noted the increased burials: "In 1792, there were 67 of our colour buried, and in 1793 it amounted

⁷⁷ Mathew Carey, *A Short Account of the Malignant Fever, lately Prevalent in Philadelphia*, 4th ed., (1794; rpt. New York: Arno Press, 1970), p. 63. Carey explained that only the vilest of the blacks, along with some rapacious whites extorted as much as five dollars a night for their nursing services.

⁷⁸ Benjamin Johnson, *An Account of the Rise, Progress, and Termination of the Malignant Fever, Lately Prevalent in Philadelphia Briefly Stated from Authentic Documents* (Philadelphia: Benjamin Johnson, 1793), p. 28.

to 305; thus the burials among us have increased more than fourfold." Therefore, just "as many coloured people died in proportion as others."⁷⁹

Mayor Clarkson gained the foot soldiers needed to combat the grim reaper. However, he needed other volunteers, the officers, to direct and manage the altercation. For his officer corps, Clarkson authored a short newspaper article entitled "To the Benevolent Citizens." In it, he explained how overwhelmed the Overseers of the Poor were during the calamity and pleaded for assistance. He hoped citizens would come forward and "offer themselves as volunteers to support the active overseers in the discharge of what they have undertaken." He closed his appeal by asking them "to apply to the Mayor, who will point out to them how they may be useful."⁸⁰ When a group of citizens appeared at City Hall and heard the plight of the city, they employed that tried-and-true method of getting things done: they formed a committee. As secretary of this committee, Caleb Lownes, an iron merchant, immediately set a date for a public meeting and then announced it in the newspapers. Since it was beyond the power of the Overseers of the Poor "to afford the necessary aid ... that the poor and afflicted require, that the citizens be again convened, that some effectual means may be adopted for to mitigate, and, if possible, to afford relief to the afflicted."⁸¹ Even before the meeting on September 14 at City Hall, Lownes, along with Israel Israel and merchant Thomas Wistar

⁷⁹ Jones and Allen, p. 16.; Susan E. Klepp, "Zachariah Poulson's Bills of Mortality 1788-1801," *In Life in Early Philadelphia: Documents from the Revolutionary and Early National Periods*, Ed. Billy G. Smith (University Park: Pennsylvania State University Press, 1995), p. 236. Zachariah Poulson's Bills of Mortality show black burials for 1793 at 116 rather than the 305 claimed.

⁸⁰ Powell, p. 151. *Dunlap's American Daily Advertiser*, September 10, 1793.

⁸¹ *Dunlap's American Daily Advertiser*, September 12, 1793.

volunteered to visit the hospital at Bush-Hill to evaluate needs and report on conditions there. They placed an advertisement on the 14th entitled "Nurses Wanted." In it, they offered "generous wages ... to persons capable and willing to perform the services of nurses, at the Hospital at Bush-Hill."⁸² As Powell observed, this was a turning point in the epidemic. "A community cannot maintain panic long. Its people, in the ordinary course of surviving, develop such mechanisms of resistance as will first meet, then conquer, the operation of fear."⁸³ This committee of benevolent citizens was prepared to wrestle the "pale faced messenger" for control of their city.

As the Mayor, the African Society, and the citizen committee began their grim work, terror still stalked the city. The psychological need to describe their distress meant yellow fever dominated the lives of Philadelphians and others associated with the city. Everywhere people hungered for news as other Americans closely followed the epidemic. Citizens spread both truth and rumors – ignoring the difference in such stressful times – through gossip, extensive letter and diary writing, newspaper submissions, and published accounts. As in all disasters, stories of inhumane treatment and suffering spread quickly. Wealthy Elizabeth Drinker, from the safety of her summer retreat in Germantown, recorded in her diary some of the events early on in the epidemic. Her entries after October 4 are curiously silent here, perhaps because she now discounted them. On

⁸² *Dunlap's American Daily Advertiser*, September 14, 1793. James Hardie, *The Philadelphia Directory and Register for 1793* (Philadelphia: T. Dobson, 1793).

⁸³ Powell, p. 119.

September 3, she wrote about some very disturbing news. It seemed "a vessel in the river below, coming up with 2 or 3 hundred passengers from Ireland," where some suffered from an infectious fever. During her evening walk, a man told her he "had heard the bad news that several hundred french soldiers Arm'd were coming to Philada. From New York -- and that 5 Negroes were taken up for poisoning the pumps." Drinker discounted them both. The following day, she wrote about a sad story involving a young woman who, after nursing others in her neighborhood, became ill herself. "The Neighbours advis'd her to go somewhere else as none of them chose to take her in. ... [Eventually] a magistrate had her sent in a cart to the Hospital, where she was refused admittance, and was near that place found dead in the cart next morning." A week later she followed the fate of a man "who lay ill in a field near the 8 Mile Stone, that the Overseers would not go near him." Drinker understood their fear; they did not know if he was sick or intoxicated. Two days later this same man "was found by the 7 mile stone vomitting." Inhabitants in the area raised 4 dollars, "for which sum a man took him away in a Cart." Fear of contagion indeed drove people to abandon the sick. On October 4, she wrote: "We were inform'd that dead Bodies have been found in some houses, in the City, who have been forsaken in their illness, and not discover'd for some days after death."⁸⁴

⁸⁴ Elizabeth Drinker, 1: 500, 503-504, 514. Molly Drinker, her daughter, staying with friends delayed her departure because of the man. This incident happened September 9-11. Elizabeth received much of her information from John Drinker who stayed in the city. He and Henry, her husband, exchanged letters frequently during the epidemic.

Philadelphians who remained in the city also recorded their experiences.

Surrounded by death in his Philadelphia neighborhood, a fearful Isaac Heston wrote about the ill treatment of the wife of Dr. Morris. "Widdow Morris," he wrote, "was lead from the grave of her husband, to her fathers Door when he shut it, and would not admit her. ... Of what service is religion I would ask, When a Father is so forgetfull of his Duty to a child. My blood is made to run cold."⁸⁵ Quaker Joshua Cresson penned his meditations and, like Isaac Heston, fell victim to the disease. He firmly believed his fate was in the hands of God. His first entry, on September 16, included this affirmation: "In times like these, to have a trust, a firm unshaken trust, that whatever is our lot, it is appointed by Him." Each entry painted the picture of an individual unafraid of death yet not resigned to it either. "This great plain dealer visits alike the humble cottage and the splendid dome, and executes his commission according to the divine will. Whether it come to my turn soon ... they will be done, and not mine!" In his last reflection on October 11, members of his family appeared to be afflicted, yet he kept faith with God. He reverently asked "that with the affliction he will make a way to escape, or that we may be enabled to bear it. ... [Therefore,] I willingly submit myself to thy care and protection."⁸⁶ His writings reflected someone so focused on submission to God's will

⁸⁵ Edward B. Bronner, "Letter From a Yellow Fever victim: Philadelphia, 1793," *Pennsylvania Magazine of History and Biography*, 86 (Spring, 1962), p. 205-206. Richard Wells, a bank cashier welcomed the widow into his own home where she later died of yellow fever. At the time he wrote the letter, Heston believed Wells had also fallen ill. Carey does not list Richard Wells as a victim of the epidemic.

⁸⁶ Joshua Cresson, *Meditations Written During the Prevalence of the yellow Fever, in the City of Philadelphia, in the year 1793; which proved fatal to upwards of 4000 of its Inhabitants* (London: W. Phillips, 1803), pp. 1, 4, 20. Cresson succumbed to yellow fever and died on October 21. His meditations were found afterwards and published by his widow.

that he never mentioned the rumors and horror stories told by so many others throughout the epidemic.

Another Philadelphian who voluntarily stayed to help was the transplanted Frenchman Stephen Girard. In a series of letters to various business associates and friends, he provided a window of observation. In a letter to Mr. Bacon of New York, dated September 2, Girard denied the existence of plague in the Quaker City: "I beg you will not believe this [rumor]. It is only a malignant fever which—by the pernicious treatment of our doctors—has sent many of our citizens to another world." A week later, Girard was still in denial. He wrote to Mr. Cabeuil in Princetown that all the bizarre reports about an epidemic were groundless. "I must ask you to disabuse your mind of everything you may have been told about this matter and to believe me what I say that by leading a regular life it is quite possible to live here in good health." However, by September 11, Girard acknowledged a sickness in the city to some business associates in Baltimore, Messrs. Les fils de pre Changeur & Co. "The epidemic prevailing in our city is increasing rather than diminishing." The death toll increased, a great many citizens fled to the country, rendering "the condition of those who remain truly deplorable." He then quipped: "If the disease continues two weeks longer, there will be nobody left here but Frenchmen; for they do not die so easily."⁸⁷

While these Philadelphians recorded their thoughts privately, Mathew Carey fueled the rumor-mill by writing "a slight sketch" about the epidemic on October 16 and

⁸⁷ Stephen Girard, *The Stephen Girard Papers*, Reel 122: Translations of Letters Sent, September 2, 9, 11, 1793, pp. 484, 492, 499.

publishing it in the *Independent Gazetteer & Agricultural Repository* ten days later. He named the first person who contracted the disease and gave his opinion about its origins. While acknowledging the domestic origin espoused by Dr. Rush, Carey agreed with "several other gentlemen of the faculty [who] believe that it was brought from the West-Indies."⁸⁸ Apparently Carey thought yellow fever crept into a sleeping Philadelphia like a thief in the night; it took everyone unaware until awaking in the morning to realize the increasingly mounting death notices meant something significant. "Had the public attention been early awakened, and decisive measures adopted to prevent the spreading of the disorder, and to separate the infected from the sound, it is probable that before now we should have been freed from this calamity."⁸⁹

Carey painted a very gloomy picture and condemned "the magnifying tongue of rumour" that so many resorted to when describing the current situation; the truth of the situation he believed was bad enough. "The horrors of the visitation and the inevitable death attending all who took it, or approached the infected," wrote Carey, "were painted in the most frightful colours – and, as usual, the greater the distance from the scene of action, the more terrific were the accounts."⁹⁰ These types of stories prevented farmers from bringing food into the markets; thus, famine became a danger for those inhabitants remaining in the city. To make matters worse, Philadelphians wrote letters full of exaggerations about the devastation of the city, which were then printed in the papers of

⁸⁸ Carey, *A Desultory Account*, p. 1.

⁸⁹ Carey, *A Desultory Account*, p. 1-2.

⁹⁰ Carey, *A Desultory Account*, p. 3.

other cities. Carey included two examples – one printed in a Norfolk paper on September 9, the other in a New York paper on September 14. In the Norfolk letter, the writer claimed that the remaining few citizens die “so fast that they drag them away, like dead beasts, and put ten or fifteen or more in a hole together.” New York readers learned from the other gentleman that burials for one day recently reached one hundred. “He rode from one end of the city to the other, in order to view the situation of the place. While riding a square and a half, he saw 10 or 12 corpses carried by negroes! They bury them all in the evening, or early in the morning – and then by Negroes.”⁹¹ No wonder other communities, fearing the spread of the deadly contagion by fleeing citizens, quickly passed ordinances to protect themselves.

Once word spread about the deadly contagion, fleeing Philadelphians, whether healthy or ill, received rough handling when they tried to enter other towns and cities in the immediate vicinity or farther away. After suffering an epidemic in 1791, the mayor of New York City alerted the city’s physicians concerning the potential introduction of the disease, the provision of a public hospital for such persons, and then requiring them to notify his office of any newly arrived individuals under their care.

Notwithstanding every prudent and legal precaution, the contagion [in Philadelphia] may be brought into this city. The Corporation have taken measures to provide a public place as a hospital for such persons. I do also request the names of all such persons as have arrived, or shall arrive from Philadelphia ... [so] that such as may be deemed to be subjects of infectious disease, may be removed out of the city.⁹²

⁹¹ Carey, *A Desultory Account*, p. 4. In the second week of September, deaths ranged from 42 to 56 according to Carey’s later account.

⁹² *Dunlap’s American Daily Advertiser*, September 14, 1793.

Three days later, the Corporation passed a resolution “to prevent all intercourse [with] Philadelphia.” Enforcement fell to guards stationed “at the different landings, to send back every person coming from Philadelphia.”⁹³ Passengers on the New York land stages did not get far enough to test the new law. “They were refused a passage through the Jersies,” and returned exhausted and humiliated. Guards at Trenton – successfully blocking their passage – fired on one of the drivers whom “had a very narrow escape with his life [with] the ball passing within a few inches of one of his ears.”⁹⁴ As the disorder worsened, inhabitants in Maryland, Virginia, New Jersey, Delaware, Pennsylvania, and Massachusetts joined New Yorkers in an effort to protect themselves by prohibiting or quarantining suspected individuals.

Even as the grim reaper busily gathered steadily larger numbers of victims, the Committee—directed by the Mayor and helped by the African Society—slowly brought a semblance of order to a city in turmoil. “Amidst the general terror and distress,” as Carey recounted, “a number of patriotic citizens associated to furnish every aid in their power to the afflicted.”⁹⁵ While twenty-six volunteers attended the September 14 meeting, as Powell observed, “only half of them proved actually effective.”⁹⁶ Mayor Clarkson may have been surprised at the composition of the committee, but Benjamin Franklin would have been proud. Mechanics, artisans, and lesser tradesmen, rather than professionals dominated the committee that managed the affairs of the city. Their occupations included

⁹³ *The Independent Gazetteer and Agricultural Repository*, September 21, 1793.

⁹⁴ *Philadelphia National Gazette*, September 25, 1793.

⁹⁵ Carey, *A Desultory Account*, p. 6.

⁹⁶ Powell, p. 185.

card-maker, upholsterer and umbrella maker, printer, joiner, grocer, iron merchant, cooper, coach maker, Windsor chair maker, and carpenter. Amazingly, people with no experience in running city affairs, now took control of a metropolis in crisis.⁹⁷

Crisis management of this type meant members volunteered their services wherever needed. With government in shambles, three members immediately signed personal notes in exchange for \$1,500 from the Bank of North America: Caleb Lownes, secretary of the committee, Thomas Wistar, treasurer of the committee, and Thomas Harrison, cobbler and currier. Stephen Girard, listed only as a grocer in the 1793 city directory (although he was already a wealthy merchant and soon to become the richest man in America), and cooper Peter Helm volunteered immediately to manage the hospital at Bush Hill. Carey wrote about their bravery, forty years later in his *Autobiography*. As all the members were deciding on what to do about Bush Hill,

they were inexpressibly delighted by the offer of Girard. ... Stimulated by this noble offering of himself, as a sort of forlorn hope in the cause of humanity, in a situation which was generally regarded as dooming the party to destruction, Peter Helm, a plain German, came forward, and offered his services in the same perilous office.⁹⁸

Both money and management helped solve the problems there. Already seized by the Overseers of the Poor, the mansion and surrounding buildings owned by an absent William Hamilton served as a hospital to nurse the afflicted poor. Upholsterer and umbrella maker Samuel Benge volunteered for the worst task of all – transporting the

⁹⁷ James Hardie, *1793 City Directory*.

⁹⁸ Mathew Carey, *Autobiography*, Research Classics No. 1, 1942 [© by Eugene L. Schwaab, NY] (First appeared in the *New-England Magazine* July, 1833 – December 1834.] p. 25.

sick and burying the dead. At first, cabinetmaker Henry Deforest procured coffins and secured the property of deceased persons. Later, he became food administrator. James Kerr, a coach maker offered "to provide a horse and chair for the use, and to be at the command of Doctor [DeVeze at Bush Hill]." ⁹⁹

With order restored at Bush Hill and limited funds available, the committee tackled other serious problems. In the early stages of the epidemic, the welfare of suddenly orphaned children slipped notice. Only when citizens noticed growing numbers of them wandering the streets hungry and in rags, did the committee realize it had another problem to address. The task of finding a building, transporting children, and securing nurses fell to James Kerr and Israel Israel, an innkeeper and livery stabler. Israel was a Revolutionary War hero, "a man of wealth, though pro-French and anti-Federalist. He went about the city every day [and] poked his nose in everything." ¹⁰⁰ As the fever continued to take parents, the orphan population correspondingly increased. James Sharswood and John Letchwood, carpenter and chair maker respectively, shared the growing responsibilities. In one case though, the Mayor dealt directly with a potential international difficulty. Previously incarcerated at the behest of the Minister of France, "a number of French sailors and soldiers in the Prison [must be] removed as early as possible" in case the disorder should attack there. Personally visiting the jail, a relieved

⁹⁹ *Minutes of the proceedings of the committee appointed on the 14th of September, 1793, by the citizens of Philadelphia, the Northern Liberties, and the District of Southwark, to attend to and alleviate the sufferings of the afflicted with the malignant fever prevalent in the city and its vicinity* (Philadelphia: R. Aiken & Sons, 1794), pp. 7-15. quote p. 15. Powell, pp. 186-187.

¹⁰⁰ Powell, pp. 189-190.

Clarkson "found health, industry, quietness and cleanliness prevailing there in a pleasing degree." As these and other problems constantly arose, members found solutions. They also mourned the death of fellow member, Andrew Adgate, card-maker, and musician on September 30.¹⁰¹

By October 8, with no signs of abatement, very little business, and empty markets, another crisis loomed for the committee. Idled by the flight of business employers over five weeks earlier, previously employed workers sunk into poverty in significant numbers. They needed food, firewood, and clothing. Realizing the magnitude of this problem, they resolved to form "a committee of eight members to receive applications and recommendations, and to afford relief, where it may be proper."¹⁰²

Adding to their other responsibilities, Israel Israel, John Letchworth, James Kerr, and James Sharswood volunteered for this distribution assignment. Joining them were printer Matthew Carey, grocer James Swaine, mustard and chocolate manufacturer John Haworth, and Jacob Witman. Realizing the impossibility of their assignment, they turned to other citizens still residing in town to help at a neighborhood level. Although everyone prided himself for the work so far accomplished, the deaths of two more members of their group (Jonathan D. Sargeant, attorney and Daniel Offley, Quaker preacher and anchor smith turned merchant) in the second week of October reminded everyone that the "pale faced messenger" would not give up the city so easily.¹⁰³

¹⁰¹ *Minutes*, pp. 23-42. quotes, p. 23.

¹⁰² *Minutes*, p. 47.

¹⁰³ *Minutes*, pp. 47-49, 56. Sargeant died on October 8 and Offley died on October 12. Occupations from 1791 and 1793 City Directories.

Even as other communities forcefully kept Philadelphians out of their midst, it did not preclude them from donating cash, food, clothing, firewood, and others items to help relieve the suffering in the city. Committee minutes noted donations from all over the country. Therefore, in addition to the distribution group already noted, another committee prepared the plan for its administration. Inefficient management of the growing amount of donated goods could lead to serious waste, especially of food, before it reached the hands of a growing list of needy beneficiaries. Among the many cash donations sent to the Mayor in mid-October, was one from Philadelphians now waiting out the epidemic in Germantown. They raised over eleven hundred dollars. A welcome cash donation of five thousand dollars arrived on October 17 from the City of New York. While the city celebrated such a noble gift, members of the committee mourned the loss of another member. Unfortunately, Joseph Inskeep, schoolmaster, died the day before, precluding any celebration. No one realized it at the time, but the worst was over—death slowly loosened its grip on a beleaguered city.¹⁰⁴

Although it took time for people living outside of Philadelphia to realize the true scale of suffering in the city, the generous gift from New York opened the floodgates. Thankfully, donations increasingly found their way into the community. Within a week, Darby sent one hundred and twenty dollars; Elizabeth Town added one hundred and fifty dollars, while Cheltenham remitted eighty-four pounds fifteen shillings. The committee also heard from Bridge-Town where citizens raised forty-seven pounds ten shillings,

¹⁰⁴ *Minutes*, pp. 57, 58, 62, 65. Joseph Inskeep died on October 16.

while Franklin Country residents collected one hundred and seventy-seven pounds nineteen shillings and eight-pence. The same day, Lancaster citizens forwarded one hundred ninety-four pounds six shillings and five-pence plus fifty-five pounds two shillings and two-pence raised by the German Reformed congregation in their city. Finally, "Evesham township Burlington County [conveyed to City Hall], two hundred and seventy dollars and ninety cents, twenty seven cheese, twelve hams and sundry other articles of provisions."¹⁰⁵ The Committee presented their minutes and accounts to the public on March 8, 1794. Thomas Wistar, treasurer, broke down cash contributions by state: Pennsylvania \$16,336.39, New York \$6,171.40, Massachusetts \$2,651.36, New Jersey \$2,596.92, Delaware \$641.85, Virginia \$350.81, and Maryland \$220.00. The grand total for cash donations: \$28,968.73.¹⁰⁶

The money obviously helped a great deal, but since provisions were harder to find within the city, the Committee also gratefully accepted non-cash donations. During mid-October, they received two and a half barrels of limes from a gentleman in Wilmington. That same day, a Captain Barry sent "two quarters of veal and a quantity of vegetables for the use of the poor." On October 19, Jonathan Williams, Esquire presented them with ten sheep, while on the 22nd, the "benevolent ladies of the Borough of Lancaster" added thirty-eight packages of clothing for the orphans to the cash donations noted above. That same day a gentleman from Burlington informed the committee that he had sent twenty cords of wood. Finally, on October 24, Lownes received "a letter from Joseph Potts of

¹⁰⁵ *Minutes*, pp. 69-77. quote from p. 77.

¹⁰⁶ *Minutes*, pp. 217-221. They reported receiving \$29,085.77 in their closing essay.

Potts-Grove, informing of his having forwarded two hundred and twelve fowls from the inhabitants of Douglass township, to Peter Robinson's Mill for the use of the poor."

Combined with the cash donations, these provisions enabled the committee to relieve the distress of an ever-growing needy population. In the minutes for October 31, as mortality lessened, "the committee on distribution Report[ed], that they have relieved two hundred and four families; distributed 158 23/100 dollars, twenty five cords of wood, twenty two dozen of bread and some fowls."¹⁰⁷

Just as the Committee replaced panic and confusion with order in dealing with all the municipal problems, Philadelphia's physicians struggled to do the same with the medical ones. As with their civil counterparts, there was some initial confusion about the disease itself quickly followed by difference of opinions about origin, contagiousness, and best mode of treatment. Carey commented on the initial confusion by physicians. "This disorder having been new to nearly all our physicians, it is not surprising, although it has been exceedingly fatal, that there arose such a discordance of sentiment on the proper mode of treatment, and even with respect to its name."¹⁰⁸ Once the medical community agreed that it was yellow fever haunting their streets, with few exceptions, they all agreed on its contagious nature. At the onset of the epidemic, the College of Physicians included victim isolation in their recommendations: "All unnecessary intercourse should be avoided with such persons as are infected by it, [and] place a mark

¹⁰⁷ *Minutes*, pp. 58-98. Quotes from pp. 59, 76, 80, and 98. That number grew to 223 families on November 9 as they distributed \$168.68, 16 ½ cords of wood, and 540 loaves of bread.

¹⁰⁸ Mathew Carey, *A Short Account*, 4th ed., p. 14.

upon the door or window of such houses as have any infected persons in them.”¹⁰⁹ Since the same procedures occurred during the horror days of plague in Europe, these recommendations may have terrified even the more stalwart inhabitants. To make matters worse, physicians began arguing over the best mode of treatment.

After more than thirty years since its last appearance, physicians had little first hand knowledge of how to treat yellow fever. Some physicians, having practiced in the West Indies at some point in their careers, chose mild remedies of bark, wine, and cool water baths, with little or no bleeding or purging. When that regimen failed, other physicians searched for the elusive cure. Dr. Joseph Goss found an unusual restorative method according to Powell. He successfully treated more than sixty patients “by inducing a heavy sweat for twelve hours, giving ditiny tea with molasses and a decoction of twelve turnips, one endive, and eight carrots ... [as] a clyster every four or five hours, balsam or camphor for coughing, and ipecacaunha for nausea.”¹¹⁰ While some viewed his cure as quackery, based on no known scientific principles, others viewed the miraculous cure developed by Dr. Rush with astonishment.

When yellow fever struck Philadelphia in the summer of 1793, Dr. Benjamin Rush was undoubtedly the most famous and respected physician in America. Unlike many of his predecessors in the colonial period, Rush was not from the aristocracy. As historian James Thomas Flexner explained, “he was born on Christmas Eve 1745, to a

¹⁰⁹ College of Physicians, *Proceedings of the College of Physicians of Philadelphia, Relative to the Prevention of the Introduction and Spreading of Contagious Diseases* (Philadelphia: Thomas Dobson, 1798), p. 2

¹¹⁰ Powell, pp. 85-6. See Chapter Six for details on both the supportive and depletive methods of treatment.

pious farmer and gunsmith near Philadelphia.” At the age of six, his father died, forcing his mother to move into town. There, she followed “the conventional expedient of impoverished widows: she opened a grocery shop.”¹¹¹ Fortunately, these circumstances did not hinder his education. “The principal of the Nottingham School was his uncle, so [Rush] naturally went there.” Upon completion there, Rush attended the College of New Jersey, “graduated after one year,” and decided to study medicine.¹¹² Without a medical school in the colonies, Rush apprenticed himself to Dr. John Redman, “a distinguished physician in Philadelphia” for five years, beginning in 1761.¹¹³ When Philadelphia became the home of the first medical school in 1765, Rush attended some lectures. After his apprenticeship, in 1766, “he set out on the traditional finishing touch to a colonial medical education—a trip to the learned centers of Europe.”¹¹⁴ There, Rush studied at the University of Edinburgh in Scotland for two years, earning a doctor of medicine degree in June 1768. Before returning home, he also went to both London and Paris for a more informal medical education. One year later, arriving in Philadelphia with his diploma, Rush opened a practice, became Professor of Chemistry at the medical school in Philadelphia, and quickly became involved in the colonial struggle against King George III and Parliament.

¹¹¹ James Tomas Flexner, *Doctors on Horseback: Pioneers of American Medicine* (New York: The Viking Press, 1937), p. 58.

¹¹² *Ibid.*, p. 59.

¹¹³ Edward Edelson, *Healers in Uniform* (New York: Doubleday & Company, Inc., 1971), p. 5. He experienced the yellow fever epidemic of 1762 in the second year of his apprenticeship.

¹¹⁴ *Ibid.*, p. 6.

Rush contributed to the cause of independence in a variety of ways. He was a member of the First Continental Congress in 1774, and with the help of several others, "printed a pamphlet telling patriots how to make their own gunpowder," since the British banned such shipments. Later, "he took part in a Provincial Conference that outlined a more democratic constitution for Pennsylvania."¹¹⁵ Then, in July 1776, Rush signed the Declaration of Independence. With the war finally official, he then used his medical knowledge, becoming Surgeon General for the American Army. In this capacity, Rush met the real enemy for an army: disease. It was here, according to Edward Edelson, that Rush played an important role in the evolution of military medicine. He authored "a broadside, [entitled] *Directions for Preserving the Health of Soldiers*, addressed to the Army's officers." In the process, he "laid the foundation for the medical practices that the American Army would follow for nearly a century."¹¹⁶ After the war, Rush returned to Philadelphia, resuming his medical practice, and his teaching responsibilities.

Like Franklin, Benjamin Rush was also interested in many subjects and contributed to the welfare of his fellow citizens in diverse ways. Historian Dagobert D. Runes explained that his writings showed "a wide range of interest and knowledge, embracing agriculture and the mechanical arts, chemistry and medicine, political science and theology." As an ardent republican, Rush constantly attempted "to dispel prejudice, to fight oppression, [and] to elevate the lot of the lowly." He supported the abolition of slavery, promoted the "establishment of free public schools in order to create unified

¹¹⁵ Ibid., p. 8.

¹¹⁶ Ibid., p. 11.

systems of state education,” and “was the founder of the Philadelphia Dispensary.”¹¹⁷

Rush also pressed to reform the penal code and the treatment of the insane at the Pennsylvania Hospital where he volunteered his time. Therefore, when yellow fever invaded Philadelphia in the summer of 1793, Benjamin Rush was at the pinnacle of his medical career.

Unfortunately, his initial treatments failed to save many of his patients—he even tried using the French remedies without success. In a frantic search for an effective treatment, Rush remembered reading an account of yellow fever written by Dr. John Mitchell. Here he found inspiration and revelation. Flexner described the moment as Rush read of the importance of depleting the body—no matter how weak or slow the pulse—since over-excitement, according to Mitchell, caused yellow fever. “In the silence of his room, he understood everything now. Under all circumstances depletion was necessary. Away then with cowardice; he would purge and bleed to an extent never dared in Philadelphia before!”¹¹⁸ Moreover, he dared. Although many physicians rejected this treatment as far too harsh, Rush found support throughout the epidemic, including some of the stricken physicians. Doctors Wistar, Mease, Physick, and Griffitts, all treated by Rush, recovered after being copiously bled and evacuated.¹¹⁹ Such diverse healing methods, along with their touted successes, confused, angered, and frustrated many Philadelphians even as the daily death toll steadily increased. Everyone endured,

¹¹⁷ Benjamin Rush, *The Selected Writings of Benjamin Rush*, ed. Dagobert D. Runes (New York: Philosophical Library, Inc., 1947), p. viii.

¹¹⁸ Flexner, pp. 97-98.

¹¹⁹ Powell, pp. 84, 132.

waiting for cooler autumnal weather to dissipate the unhealthy heat of this deadly summer.

Finally, cooler temperatures slowed mosquito activity in mid-October, the death rate slowly declined, and people decided to return home. On the morning of October 29, David Rittenhouse recorded an early morning temperature of 28 degrees.¹²⁰ Frost, at last. On November 4, to keep the refugees from returning home too soon, the committee sent for publication a letter to their "Fellow Citizens." They observed "the unsettled state of the weather, changing suddenly from cold to heat, and from heat to cold, renders it unsafe for our fellow citizens, to crowd, with too much precipitation into the city."¹²¹ They acknowledged the dwindling death rate, but warned the destruction of yellow fever may not yet be complete. On November 14, in an announcement printed in the *Pennsylvania Gazette*, they finally believed it was safe to return. "The committee are of opinion, that our fugitive brethren, as well as others, who have business to transact, may safely come to the city, without danger from the late prevailing disorder."¹²² Even as citizens joyously returned and picked up the threads of their lives, the work of the committee was far from finished.

The Committee's minutes indicated the enormity of their work. By November 14, despite wrestling successfully with the pale faced messenger and welcoming home thousands of their fellow citizens, the committee still met at City Hall. In the second half

¹²⁰ Mathew Carey, *A Short Account*, 4th ed., p. 17.

¹²¹ *Minutes*, pp. 104-105.

¹²² *Minutes*, p. 121. *Pennsylvania Gazette* (Philadelphia), November 20 and December 4, 1793.

of November, they received money and other donations; they also began settling accounts with carters and attendants, coffin makers, nurses, physicians, food, and firewood providers, among others. The distribution committee continued relieving about two hundred families, while the orphan committee managed the care of one hundred and twenty four children. Girard and Helm still administered Bush Hill, though grateful that patient numbers fell enough to move almost everyone into the mansion house. They transported the imprisoned French soldiers to Bush Hill, requesting payment for their upkeep and care. With the "Citizen Marseilles" arriving from Cape-François, where yellow fever still prevailed, the committee placed all the sick and wounded at Bush Hill, preventing the introduction of any malignant diseases.¹²³ They persuaded the French Legation of the propriety of their decision.

On November 19, Governor Mifflin and the Legislature assigned an additional task. Like all bureaucrats, Mifflin wanted an accounting of expenditures and donations. He requested statistics concerning deaths, recoveries, orphans, and a geographic sketch of the epidemic: "At what time and place did the disorder makes it appearance; and to what quarters of the city did its ravages extend?" In addition, he asked for suggestions for purifying the city against any lingering infection and any precautions for the future. The Governor initially apologized for adding to their duties, then, alluded to the promised financial help. "I am confident," he wrote, "that we may all securely trust to the sympathy and liberality of the Legislature, for aid and support, as well to defray the

¹²³ *Minutes*, pp. 122, 125, 138, 141. Apparently, the *Marseilles* carried more refugees fleeing the slave rebellion and the resulting civil war.

recent expences as to provide against the return of so great a calamity.”¹²⁴ Mayor Clarkson’s reply, as President of the committee, answered the governor’s questions as fully as possible. As far as the Committee could tell, the disorder began in Water Street around the end of July and claimed the lives of at least four thousand and thirty one persons. The other requested figures, except for the number of orphans remaining at one hundred and twenty-five, were possible to derive. He specifically requested special attention for them. “The committee are so much affected by the situation of the orphans under their care that they beg leave to recommend them in a particular manner to the governor’s notice.”¹²⁵ He addressed future precautions, noting two specific areas – expanded authority for the health officer and a hospital. The committee agreed “that a health officer, upon a more extensive plan, is of the greatest importance, [with] the residence of the officer and physicians at a suitable distance below the city.” Learning from the mistakes of August and September, the committee also suggested finding a “healthful spot for the site of an hospital, nearly contiguous to the city, easily accessible by land and water, together with requisite buildings for the accommodation of those who may be attacked by malignant disorders in future.”¹²⁶

¹²⁴ *Minutes*, pp. 126-7. Quote from p. 126. *The Philadelphia Gazette* published the letter on November 27.

¹²⁵ *Minutes*, p. 128-9. Quote from p. 129. There were ten physicians among the 4,031 victims. Mathew Carey, *A Short Account of the Malignant Fever Lately Prevalent in Philadelphia*, 5th ed. (Philadelphia: Clark & Raser, 1830), p. 65. Carey commented on this loss. “Rarely has it happened, that so large a proportion of the gentlemen of the faculty have sunk beneath the labours of their very dangerous profession, as on this occasion. In five or sex weeks, exclusive of medical students, no less than ten physicians have been swept off, Doctors Hutchinson, Morris, Linn, Pennington, Dodds, Johnson, Glentworth, Phile, Graham and green. Scarcely one of the practising doctors who remained in the city, escaped sickness. Some were three, four, and five times confined.”

¹²⁶ *Minutes*, pp. 131-132.

By December 1, recovery seemed possible. Stores reopened as merchants settled back into business; vessels crowded the harbor bringing in needed goods; market stalls were full and their business brisk; the unemployed began working again, earning enough to feed their families. The committee finally relaxed, meeting only ten times that month. They now concentrated on concluding their affairs, using "the committee chamber" within City Hall to keep their work separate from other city business. They settled accounts with Bush Hill owner William Hamilton, reserving use for another sixteen months, with Doctor Devèze for his professional services at the hospital, and with Doctor Duffield for his work at the orphanage. They also continued receiving and documenting contributions and expenditures, trying to reimburse everyone and close out their accounts.¹²⁷ They resolved the matter concerning the French soldiers and citizens. Stephen Girard and James Kerr "wait[ed] upon the Minister of the French Republic, and present[ed] the bill for the support, attendance and accommodation of the sick and wounded, amounting to nine hundred and thirty five pounds and twelve shillings." The orphan committee, with John Connelly and Thomas Wistar, resolved to devise "a plan for the future support of the orphans." Bush Hill managers Girard and Helm, with Henry Deforest formed another committee "to examine and report what property is now under the care of Henry Deforest, the member who was appointed to receive the property of the sick and those who died at the hospital."¹²⁸ The committee also completed an inventory of items at Bush Hill and with the Guardians of the Poor in full strength again, transferred

¹²⁷ *Minutes*, pp. 146-153.

¹²⁸ *Minutes*, pp. 152-3.

those destitute patients well enough to go. With so much left to do, the neighborhood sub-committees helped with distribution of food and wood, and closely monitored the purifying and cleansing procedures of individual homes and businesses. Since negligence of these duties placed the health of everyone in jeopardy, they published their order. Non-compliant citizens would be noted, "in order that each of them may be presented to the grand jury of the city or country, as supporting a nuisance dangerous to the public welfare."¹²⁹ When they met on the last day of 1793, Girard, wanting to close the hospital and end the committee's work there, presented items requiring resolution. He suggested discharging or transferring all patients healthy enough to leave and to qualify any new admissions, notifying the French Minister that he must find another place for his remaining citizens, discharging all debts immediately, and transferring any property from deceased patients to the committee for disposal.¹³⁰

Despite the end of the epidemic six weeks earlier, the enormity and complexity of the committee's business meant some aspects of their work could not abruptly end as some citizens expected. In January, accounts needed final updating, the fate of orphans remained unknown, and the hospital continued operations. Incredibly, in a January 8 editorial, "Howard" severely criticized the committee for still meeting. He complained of secrecy and asked why Bush Hill still had patients. He rebuked the members for wasting money by paying "a stranger who volunteered his services gratuitously" and with their retention of the hospital for the next sixteen months. After all, he wrote, "Does the

¹²⁹ *Dunlap's American Daily Advertiser*, December 2, 1793.

¹³⁰ *Minutes*, pp. 162-165.

yellow fever still continue its ravages in the city?" He even accused them of threatening the elected officials simply by their continued existence. He ended his vitriolic spewing by declaring, "If the public defray the expence of the City Hall, it cannot be expected they will support every wanton expence, which the committee, in their wisdom, may think proper to impose. It is time that some satisfactory information should be given ... silence of assumed dignity and self importance will no longer satisfy the public mind."¹³¹ Notwithstanding the criticism, they completed their dealings with the French Minister and closed the hospital on January 18. The treasurer paid additional debts as he kept track of new donations. Unfortunately, the orphan situation remained unresolved, as did a final accounting.¹³²

Mayor Clarkson and his "benevolent citizens" committee met for the last time on March 7, 1794. By then, the treasurer discharged all financial obligations with the Bank of North America; they completed all inventories and liquidated all property from deceased patients. They updated their burial information, discharged all other debts, and prepared for publication their minutes for perusal by interested citizens. When they met the following evening at a general meeting of the citizens of Philadelphia at City Hall, the only unfinished business concerned the fate of the orphans.¹³³ Praise and thanks for their efforts came on March 15 when they received official honors from their city. According to a published account, the Mayor and sixteen surviving members received Philadelphia's

¹³¹ *Aurora General Advertiser* (Philadelphia), January 8, 1794.

¹³² *Minutes*, pp. 165-174.

¹³³ *Minutes*, pp. 174-190.

most cordial, grateful and fraternal thanks, for their benevolent & patriotic exertions in relieving the miseries of suffering humanity on the late mournful occasion, [while four members] unfortunately fell victims to their generous exertions for the preservation of the inhabitants, it is hoped, that their great services will be held in everlasting remembrance by the citizens, to whose welfare they so nobly devoted themselves even unto death.¹³⁴

The Committee had met for almost six months. At the height of the epidemic, they spent most of each day successfully tackling unprecedented problems while running the affairs of the city. With their mayor and the African Episcopal Methodist Church members, they deserved gratitude and respect from their fellow citizens. Finally, they could expend their energies on personal matters knowing they succeeded in averting a catastrophe and saved their city from ruination.

With the city now saved, Governor Mifflin and the state legislature turned their attention to prevention. Besides recommendations from Mayor Clarkson and the Committee, Mifflin requested the same from the College of Physicians. Part of that reply indicated that a majority of the physicians believed yellow fever was imported. "No instance has ever occurred," they reported, "of the disease called the yellow Fever, being generated in this city ... but there have been frequent instances of its having been imported ... by some of the vessels which arrived in the port after the middle of July." Confirming their beliefs concerning contagion, they outlined a course of action to remove any dormant infection. They recommended "that every house, particularly those in which there have been any sick, should be thoroughly cleansed and kept open so as to admit fresh air through every aperture." They also favored white washing walls, burning

¹³⁴ *Dunlap and Claypoole's American Daily Advertiser* (Philadelphia), March 18, 1794.

gunpowder, adding lime to privies, and keeping the streets clean. Finally, the physicians hoped the Legislature would immediately respond to improved port regulations. "We trust the early attention of the Legislature will be directed to the safety of the port, with respect to the officers and other arrangements which may be found necessary." The College pledged to help "them in their endeavours to prevent, avert, or, remove these dangerous calamities."¹³⁵ Governor Mifflin sent both sets of recommendations to the lawmakers, asking for new or improved laws.

The legislators responded with new acts related to health. The first, passed on March 24, 1794, sought to monitor physicians, surgeons, apothecaries, and druggists. Entitled "An Act to regulate the Practice of Physic and Surgery within this Commonwealth and for other purposes therein mentioned," it placed strict limits on whom could "practice as a Physician or surgeon, [or] prepare and sell Drugs or Medicines." The standards were now uniform. To practice in Pennsylvania, one needed a degree—Doctor or Bachelor of Medicine—or to pass an examination given by appointed physicians. Apothecaries and Druggists also needed to show their competency through examination. The law included fines for those who chose to practice without authorization. However, these regulations excluded some aspects of medicine. They did not "prohibit any persons from drawing Teeth Bleeding or Cuping or from giving assistance in cases of sudden emergency."¹³⁶ This professional licensing could only

¹³⁵ College of Physicians, *Proceedings*, pp. 5-6.

¹³⁶ State of Pennsylvania, *An Act to regulate the Practice of Physic and Surgery within this commonwealth and for other purposes therein mentioned* (March 24, 1794), (Philadelphia: T. Bradford, 1794)

please the College of Physicians members who were considered the established medical community, especially after the chaos, confusion, and cantankerous behavior exhibited during the yellow fever epidemic. After standardizing the medical profession, the legislators turned to reorganizing and strengthening the health laws in an effort to prevent the importation of any future deadly diseases.

The legislators readily admitted that the old measures for preventing the introduction of deadly diseases into the port proved to be flawed and wholly inadequate. To remedy that situation and protect the health of Philadelphians, they created a health office. Officially noted as "An Act for establishing an Health-office, for otherwise securing the city and port of Philadelphia from the introduction of pestilential and contagious diseases, and for regulating the importation of German and other passengers," it became law on April 22, 1794. This law instituted a Health office situated below the city of Philadelphia on State Island, located in the Delaware River. The staff of the health office consisted of a Residing Physician, Consulting Physician, Health Officer, twenty-four Health Inspectors, Steward, Matron, assistants, and nurses. The Governor appointed some of these positions. "For accomodating the several officers, according to their respective stations, and that the business of the said Health Office may be well and certainly conducted, there shall be appointed by the Governor a Resident Physician, a Consulting Physician, and an Health Officer."¹³⁷ The city government chose their Health

¹³⁷ State of Pennsylvania, *An Act for establishing an Health-office, for otherwise securing the city and port of Philadelphia from the introduction of pestilential and contagious diseases, and for regulating the importation of German and other passengers*, (April 22, 1794) Early American Imprints 1668-1820, reel 72, #1481, p. 2.

Inspectors with input from judges. "The Mayor or Recorder and Aldermen, together with three Justices of the Peace of the Northern Liberties, and district of Southwark, [appointed] twenty-four persons."¹³⁸ The selection of the rest of the staff fell to the Health Officer and his Inspectors. The law also required residing physicians to live permanently on the island during their tenure.

This act placed an enormous amount of power in the hands of the resident physician. He visited every vessel, inspecting both passengers and cargoes for any source of infection. If uninfected, the master received a certificate of health and could dock within the city. If the physician found everyone healthy and saw "no cause to suspect that the cargo [was] infected, he shall forthwith deliver to the captain or master a certificate reporting the wholesome state of the persons and cargo on board thereof to the Health-officer residing in the city of Philadelphia." However, if infected, the Doctor stopped the ship from entering Philadelphia until the master removed that source of infection—passengers or goods—to the Health Office. "If it shall appear that any persons are afflicted with any pestilential or contagious disease, or if there shall be any cause to suspect that the cargo is infected, he shall detain such ship at anchor opposite the Health-office."¹³⁹ Here, passengers received treatment and cargoes underwent cleansing and purification. When necessary, the consulting physician assisted, having the same powers of inspection and removal. The health officer oversaw operations on State Island, kept an office in Philadelphia to receive certificates of health from ship captains.

¹³⁸ State of Pennsylvania, *Health Office Act* (April 22, 1794), p. 8.

¹³⁹ State of Pennsylvania, *Health Office Act* (April 22, 1794), pp. 2-3.

He also kept accurate records concerning each vessel. "The said Health Officer shall file and preserve all the certificates or bills of health, and shall keep a register of the ships. [This] register shall describe the names of the masters, the names and places of abode of the owners and consignees, the ports from which the ships respectively sailed, [and where] they touched during their respective voyages." The Health Officer also aided the resident physician when required to enforce all health laws. He also worked closely with the inspectors during their scheduled times. They investigated and regulated the management of the Health Office and the conduct of all employees. They also "established a table of rates, therein specifying the charges for boarding, lodging, nursing, medicinal attendance, and funeral expences." At the end of their monthly shift, the inspectors reported their findings directly to the Governor. That report included "the condition of the health-office and the number and diseases of the patients therein from time to time accommodated."¹⁴⁰

In addition, the Governor by law proclaimed a mandatory quarantine on all vessels coming from any port where a pestilential and contagious disease existed. "Whenever the Governor received [said] information, he shall forthwith, by proclamation, give public notice thereof, and direct [that] every vessel be stopped and detained."¹⁴¹ Notification of port pilots fell to the health officer. These vessels anchored off State Island, received inspections and whether healthy or infected, performed the obligatory quarantine. The law also imposed severe penalties against ship captains,

¹⁴⁰ State of Pennsylvania, *Health Office Act* (April 22, 1794), pp. 5-9. quotes pp. 6, 9, 9 respectively.

¹⁴¹ State of Pennsylvania, *Health Office Act* (April 22, 1794), pp. 13-14.

pilots, passengers, and visitors for breaking the law and risking the health of the city.

While the first sections of the law dealt with importation, later sections addressed prevention of the spread of deadly diseases once they broke out in Philadelphia.

Should a pestilential or infectious disease break out in Philadelphia, the legislators authorized city officials to create a City Hospital. They "shall have authority to bargain for and purchase some convenient lot of ground in the neighborhood of the city for the purpose of erecting and establishing thereon a public hospital." They placed the Health Officer and Inspectors as managers of this institution. The act placed the consulting physician from State Island as head medical doctor with other physicians appointed when necessary. With the experiences of the recent yellow fever epidemic fresh in their minds, the act included powers to compel sick residents to enter this newly erected public facility. Any Philadelphian "who shall be afflicted with any pestilential or contagious disease may, and shall upon the advice and order of the Consulting Physician, and any two Inspectors, be removed by the health Officer to the said public hospital." Whether patients entered the hospital by choice or not, they were expected to pay for any services received, unless officially waived. "Each and every patient shall be liable to pay, satisfy and reimburse, all the charges and expense on his or her account incurred in the said public hospital unless exonerated and exempted therefrom."¹⁴² Mayor Clarkson and other Committee members, having made that suggestion to Governor Mifflin, must have been pleased with this section of the act.

¹⁴² State of Pennsylvania, *Health Office Act* (April 22, 1794), pp. 29-31. Quotes pp. 30, 30, 31 respectively.

So strongly held were importation beliefs, that the only accommodation to local origin believers was the empowerment of the Corporation to ban future burials within the city limits. “[They] shall have power, by their ordinance for that purpose, to prohibit any future interments within such parts of the city of Philadelphia wherein they shall judge such prohibition necessary.”¹⁴³ For Dr. Benjamin Rush and those who believed in the domestic origin of yellow fever, this piece of legislation addressed the wrong concerns and probably frustrated them greatly. However, in case of another catastrophic epidemic, this act provided for two hospitals—marine and city—and a health organization to manage such an event.

Conclusion

On that fateful day in August when Rush declared that yellow fever was in their midst, no one could have foreseen how close society came to dissolution. Thousands fled, often deserting friends, loved ones, or business associates. Thousands involuntarily remained due to economic circumstances, while others stayed of their own volition. As panic and chaos spread, several groups of unlikely citizens united to help bring order to the city and help those suffering from the disease as well as those crippled by the cessation of business and employment. The physicians who remained strove to cure

¹⁴³ State of Pennsylvania, *Health Office Act* (April 22, 1794), p. 32.

patients with a variety of opposing treatments. Despite all efforts to stop the onslaught of the grim reaper, only the frosts of late October ended the nightmare.

A catastrophe of the magnitude of the 1793 yellow fever epidemic produced impressive statistics. Carey counted and listed the names of 4,041 dead in his history.¹⁴⁴ However, since accuracy was impossible, Powell and others believed more than five thousand died in the city, while hundreds more expired after leaving. The hospital at Bush-hill admitted 995 patients, of which only 473 survived.¹⁴⁵ The daily death rate climbed, reaching one hundred and nineteen on October 11. The Orphan Committee cared for 190 children.¹⁴⁶ The mortality rate for those who stayed was close to one in five; sometimes entire families perished. Ten doctors and ten clergymen, men who attended the stricken, died. These were individuals who accepted the dangerous risks involved in serving their patients and congregations. These cold, sterile, numbers represented people: friends, relatives, business associates, customers, fellow church members. Everyone knew at least one victim.¹⁴⁷

The effects of such death and destruction was not easily forgotten as residents began to pick up their lives and try to prevent another such horrible occurrence.

Graveyards were grim reminders of the recent nightmare, looking more like ploughed

¹⁴⁴ Carey, *A Short Account*, 4th edition, pp. 116-163.

¹⁴⁵ Mary Alma Francis Mansfield, "Yellow Fever Epidemics of Philadelphia, 1699-1805," (M.A. Diss., University of Pittsburgh, 1949), p. 59.

¹⁴⁶ Carey, *A Short Account*, 4th edition, p. 37.

¹⁴⁷ Carey, *A Short Account*, 4th edition, p. 60. Powell, p. 255.

fields than peaceful resting places.¹⁴⁸ Newspapers printed legal notices of decedents' estates, while lawyers were busy for months executing wills. The medical profession lost the approbation of many with their public display of enmity and contradicting treatments. A disconcerted and disheartened city wanted cures not arguments.

Governor Mifflin also moved to protect the city from future outbreaks. As noted by Dr. Mease, the 1794 session of the legislature created a "Board of Health, composed of citizens. They were to make all [necessary] rules and regulations."¹⁴⁹ Their main task was to prevent the importation of any deadly diseases into the city by means of strict quarantine measures. The Legislature failed to pass any laws to remove local environmental hazards as requested by those who believed in the local generation of disease. Even if addressed, their preventive measures would have failed just as the quarantine measures did. The *Aedes aegypti* mosquitoes easily flew from ship to ship; they readily reproduced in the abundance of artificial water containers within the city. Without knowledge of the insect vector, the 1793 epidemic was only the first in a series of outbreaks. As we shall see, Philadelphia suffered the presence of the "pale faced messenger" several more time that decade.

¹⁴⁸ Carey, *A Short Account*, 4th edition, p. 71.

¹⁴⁹ Mease, p. 131. The success of the ad hoc citizen committee may have influenced this legislation.

CHAPTER THREE

THE LULL BEFORE THE STORM: PHILADELPHIANS STRUGGLE
TO KEEP THE "BRIDEGROOM OF SOULS" AT BAY—1794 TO 1797

*Along the streets I walk alone,
My friends, ah ! whither are ye fled
Some in the country weep and moan,
And some are number'd with the dead.¹⁵⁰*

Introduction

In the four years following the 1793 yellow fever epidemic, Philadelphians worked diligently, and somewhat successfully, to keep the angel of death out of their city. In the wake of all that death and destruction, citizens needed to look to a brighter future even as they remembered those dreadful months of horror and suffering. Just as in any disaster, life slowly returned to normal for most Philadelphians in the spring and early summer of 1794. The living mourned the deaths of loved ones and friends, even as they thanked God for their own preservation. As may be expected, everyone dreaded the return of hot weather and prayed that Bush Hill would remain deserted despite the lease payment earlier agreed upon by the Mayor. The state legislature passed a new and far-reaching law creating a Board of Health to prevent yellow fever's attempts to invade the city again. The medical debates continued unabated over origin and treatment, and

¹⁵⁰ A Citizen, *Fever; An Elegiac Poem*, p. 11.

newspapers filled their columns with political events, including the continued war in Europe.

Throughout this period, government and citizens alike remained vigilant. Governor Mifflin and the state legislature passed several additional health laws—improvements on their original 1794 Act. As the Health Office gained power and responsibilities, they also networked with their sister cities, exchanging valuable information concerning the general health of their communities, what diseases were present, and whether yellow fever had struck again. When it slipped back into the city in 1797, the steadfastness of members of the Health Office proved invaluable. On their first real test, the health officer and his associates managed both the marine and city hospitals, maintained a strict quarantine, worked with an assortment of physicians; opened a tent encampment, coordinated the cleansing and purification of ships, goods, and houses, corresponded with their counterparts in other cities, and kept their office open and records in order.

Citizens also remained on their guard. With business connections stretching practically around the world, any hint of yellow fever from correspondents found its way into newspapers and on the desks of officials. Residents were also quick to respond to any threats by the messenger of death. Many, whether they supported importation or local generation, still reminded their fellow inhabitants that cleaning up the city was also important. When yellow fever did threaten the city in 1797, citizens again stepped forward and offered assistance. They supervised a tent encampment for the healthy poor and relieved other families. When they spent the funds allocated for relief, other citizens

solicited and distributed general donations. While citizens played a major role in saving the city from destruction in 1793, mercifully, that sacrifice was not needed in 1797.

Physicians continued their arguments unabated. Every year, Dr. Rush maintained he successfully treated yellow fever patients with his heroic methods. He also constantly harangued the Governor, Mayor, and the Health Office to clean up the city. Conversely, the College of Physicians worked closely with local and state authorities, gaining their esteem and confidence. The College supported all efforts to strengthen the Health Office and tried to increase the medical influence within that organization. When asked for their input at the beginning of the 1797 epidemic, these physicians recommended some drastic and very unpopular measures to keep yellow fever from spreading.

These four years allowed Philadelphia to rebound and recover from the visitation of "the awful judge of quick and dead" in 1793. During this relative calm, the state and city initiated changes that helped them cope with yellow fever. Citizens also increased their watchfulness and continued to participate actively when needed during any crisis. After weathering the relatively small storm of 1797, residents felt confident in their ability to handle another epidemic. All too soon, yellow fever burst upon the city again in 1798, testing that confidence.

The Respite Years—1794 through 1796

The city of Philadelphia and its inhabitants were on the road to recovery during the early months of 1794. The legislature had just passed a comprehensive law creating a

Health Office they believed capable of keeping yellow fever out of the city and proficient enough to handle any health-related emergency. In early May, appropriately, Governor Mifflin exhorted the health officer and resident physician for the port to be on their guard against the reintroduction of any diseases—especially yellow fever. He expected vigilance during ship and crew inspections. “In every doubtful case, you will rather err in point of caution ... for it is certainly better that a temporary inconvenience should be suffered by a single vessel, than that the public health should be endangered.” He further supported them by adding, “that it will give me pleasure to facilitate the execution of your duties.” His letter concluded with an important reminder: “You will remember that it falls within your province to ascertain whether any contagious or pestilential disease prevails in the foreign countries with which we trade.”¹⁵¹ The following month, also appropriately, “A Citizen” wrote an open letter to Mayor Clarkson and newly elected city officials about cleaning up the city. “If,” as Dr. Rush ascribed “the late epidemic to coffee rotting on one of the wharves, what will you say gentlemen to the dead horses, the green and putrid waters, the filthy gutters ... that so frequently infect the air ... [and] require your interposition, if you would not again hear the hearse rattling and rumbling along your depopulated streets.”¹⁵² Incredibly, despite the loss of some four thousand citizens just months before, the city remained as polluted as ever.

With their global connections, Philadelphians quickly alerted officials and the newspapers when they discovered pestilential diseases anywhere in the Atlantic World.

¹⁵¹ *The Philadelphia Gazette & Universal Daily Advertiser* (Philadelphia), May 5, 1794.

¹⁵² *The Philadelphia Gazette & Universal Daily Advertiser*, June 23, 1794.

Such a letter came from Kingston warning of yellow fever outbreaks there. "The yellow fever is raging very bad on board the shipping here." The letter writer observed that many crewmembers as well as passengers had died. "I think it would be necessary to make every vessel ride quarantine, that comes from Kingston to Philadelphia."¹⁵³ As more reports circulated of pestilential disease in St. Domingo, Jamaica, West Florida, Yucatan province, and Martinique, fear returned to Philadelphia. While authorities tried to calm frayed nerves, other cities along the eastern seaboard reported increased mortality. The city of New Haven suffered from a malignant scarlet fever or yellow fever, as did the French port of New Orleans. Unfounded rumors spread concerning yellow fever outbreaks in New York City and Charleston, causing anxiety in the city. Then, Dr. Rush communicated to the Philadelphia Committee of Health on August 29, that he "met with a number of cases of the yellow fever in our city." In his letter to them on September 13, he claimed his regimen of bleeding and purging continued to save patients if applied the very first day of the disease. Several other physicians agreed with him so in closing he had a very specific suggestion. "The best thing the Committee can do for the safety of the city is to make the above information public. It will excite the citizens to apply early for medical aid."¹⁵⁴ As officials in Philadelphia continued their

¹⁵³ *Gazette of the United States and Evening Advertiser*, July 2, 1794.

¹⁵⁴ Benjamin Rush, *Letter of Benjamin Rush*, 2:749. As a crusader of bleeding and purging, Rush believed it the only cure for yellow fever. In his zeal to convert people, he wanted the health committee to announce the existence of yellow fever in their fair city. Not wanting to excite the same kinds of passions as the previous year, the health office remained silent until October 1st. After a meeting, they printed a survey from thirteen prominent physicians. Except for Rush, all the others had one or two patients in a dangerous state with only one case of yellow fever named. Rush, who did not attend the meeting, sent in his listings. Of his thirty patients, fully twelve of them had yellow fever. Not surprisingly, on October 3rd, citizens called for a town meeting.

silence, their Baltimore counterparts, after several weeks of vehemently denying its existence, finally admitted yellow fever raged in their city. The legislature reacted quickly to these reports by establishing a mandatory quarantine of ships from New Orleans, the West Indies, and the Spanish American mainland.¹⁵⁵ Water routes appeared well protected from importation of plague, but land routes remained unguarded.

With a long history of citizen involvement, especially the lessons learned from 1793, Philadelphians took matters into their own hands when the government appeared to fail them. In this case, they called a town meeting to find a way to protect their city from yellow fever. They created a committee of twenty persons, including James Swaine, William Sansom, and Samuel Coates. All three played active roles in the 1793 epidemic. The committee resolved to "adopt proper measures to prevent all intercourse with the town of Baltimore and its vicinity; and to provide suitable accommodations for persons coming from hence, until, in the opinion of the committee, such persons may be admitted into this city with safety."¹⁵⁶ The members then met with owners of the land and water stages and received their cooperation. To protect the health of the city, they required all sickly passengers arriving by either land or sea, held in isolation until they recovered. They also warned innkeepers, housekeepers, and boarding houses, of the danger to everyone if they should admit anyone from Baltimore or Fells Point where the fever

¹⁵⁵ *Aurora General Advertiser*, *Dunlap and Claypoole's American Daily Advertiser*, *Gazette of the United States and Evening Advertiser*, *The Independent Gazetteer and Agricultural Repository*, and *The Philadelphia Gazette & Universal Daily Advertiser*. Philadelphia's newspapers reported this information throughout August, September, and October 1794.

¹⁵⁶ *The Philadelphia Gazette and Universal Daily Advertiser*, October 4, 1794.

raged. Finally, two representatives of the committee "confer[red] with the inspectors of the health office, to know whether, in their opinion any other measures than those adopted at this meeting can be taken which may conduce to the preservation of the health of the citizens, and to report any information they may obtain at such conference."¹⁵⁷

After several weeks, cooler weather and improved health in Baltimore, the committee discontinued their course of action and, on October 21, they adjourned.¹⁵⁸ Fortuitously, Philadelphia escaped yellow fever, but the closeness of Baltimore certainly increased the paranoia of many citizens during those hot months.

Governor Mifflin and the legislature passed a supplementary health bill in September.¹⁵⁹ In December, the College of Physicians went on the offensive in regards to the deficiencies found in the current set of health regulations. According to the minutes of December 2, they appointed a committee "to consider the defects of the health laws, and to point out the proper remedies in a report to the College."¹⁶⁰ A meeting shortly followed this with representatives of the Board of Health. They requested comments concerning the proper design for the impending city hospital. Therefore, they presented "several plans of the Hospital intended to be erected for the reception of persons affected with Contagious diseases." After a long and fruitful discussion, members suggested "that the building ought to consist of one continued range, fronting

¹⁵⁷ *The Philadelphia Gazette and Universal Daily Advertiser*, October 6, 1794.

¹⁵⁸ *Gazette of the United States and Evening Advertiser*, October 23, 1794. ¹⁵⁸ State of Pennsylvania, *Compilation of the Health-Laws of the State of Pennsylvania*, (Philadelphia: Zachariah Poulson, Junior, 1798), p. 35. Unfortunately, the text was omitted since it was repealed in 1796.

¹⁵⁹ State of Pennsylvania, *Compilation of the Health-Laws of the State of Pennsylvania*, (Philadelphia: Zachariah Poulson, Junior, 1798), p. 35. Unfortunately, the text was omitted since it was repealed in 1796.

¹⁶⁰ College of Physicians, *Proceedings*, p. 6.

the south, and should be so constructed as to admit of a free passage for the air through every room.”¹⁶¹ Clearly, officials at the state and local level trusted the advice of the College of Physicians.

While the Board of Health continued refining their plans for a city hospital, a College committee reviewed the existing health laws, and on January 6, 1795, reported on their defective elements. This committee believed them “to be inadequate to the purposes intended, particularly as it respects the extension of malignant, contagious Diseases, when they appear in the city.” They assumed that once yellow fever broke out in the West Indies, despite the best efforts of the Health Office, it would invade the city. Accepting that inevitability, the committee believed “that by proper exertions, it [yellow fever] may be prevented from spreading when introduced.”¹⁶² The means of doing so involved giving the consulting physician more specific authority while replacing Committee of health members with associate physicians when emergency measures must be instituted. Therefore, they suggested “lay[ing] down a precise rule of conduct” for the consulting physicians.” They also believed “the consulting Physician will derive firmness and resolution in the performance of his duty, from the support of his professional Brethren.”¹⁶³ For residents already disillusioned with the medical community, these suggestions, if they ever became common knowledge, would certainly appear to grant too much power to doctors. Throughout the early months of 1795, the

¹⁶¹ College of Physicians, *Proceedings*, p. 7.

¹⁶² College of Physicians, *Proceedings*, pp. 7, 8.

¹⁶³ College of Physicians, *Proceedings*, p. 8.

College and the Health Board continued working together on planning the city hospital and strengthening the health laws.

Buoyed by their victorious efforts in keeping the pale faced messenger out of Philadelphia during the warm months of 1794, citizens intended to repeat that success through even greater vigilance in 1795. In early April, the New York Health Committee warned other cities of recently received information concerning the West Indies. "Fevers of a dangerous and malignant kind prevail in St. Kitts, Domingo, Martinique, Tortola, Jamaica, and Curracoa."¹⁶⁴ Governor Mifflin and the Legislature responded with mandatory quarantine two weeks later and strengthened the health laws.

On April 17, they passed another supplementary health law covering the location of a city hospital. There appeared to be some concern from neighboring residents over the lot chosen by the city on which to build the hospital. Located "on the west side of Schuylkill opposite the west end of Market-street, many inhabitants apprehend that the lot so purchased is improper for the purpose and may, from its vicinity, endanger the health of the citizens." In recognition of their anxieties, the legislature delayed actions on the approval of this site "until the first day of July next after passing this act." Another section of the act created a sixteen-member board, selected random from the Board of Health Inspectors, to purchase a different lot. This newly created board had authorization "to purchase some convenient lot in the neighbourhood of the city of Philadelphia, to take

¹⁶⁴ *The Philadelphia Gazette and Universal Daily Advertiser*, April 6, 1795.

and hold [it] in trust for that purpose." The legislators also directed them to sell the previously purchased lot.¹⁶⁵

The College of Physicians continued working with the Health Committee on their hospital plans even as they petitioned the Pennsylvania Senate and House of Representatives for more influence. In their "Memorial of the College of Physicians of Philadelphia," President Dr. John Redman pointed out the inadequacies in the Health-Office Acts. Drawing on the committee report of January 6, Redman stressed the importance of giving physicians the sole power "to direct the removal, not only of [diseased] persons," but also those likely to become infected. Additionally, they also wanted physicians "consulted respecting the quarantine and purification of vessels, and the construction and regulation of the City Hospital, which is about to be erected."¹⁶⁶ Although the College still believed it impossible to prevent the introduction of yellow fever into the city, they strongly alleged that their superior knowledge of contagion made them the logical choice to control the situation thereafter. Their strategy work, for in July, Mifflin requested the names of member physicians in order to appoint four of them to a board to work with Dr. Benjamin Duffield, the port consulting physician.¹⁶⁷ While the College resigned themselves to the inevitable importation of yellow fever into the city, not everyone agreed.

¹⁶⁵State of Pennsylvania, *Compilation of the Health-Laws*, pp. 35-37. Quotes pp. 35, 36, 36, respectively.

¹⁶⁶College of Physicians, *Proceedings*, pp. 9-11. Quotes pp. 10, 11, respectively.

¹⁶⁷State of Pennsylvania, *Compilation of the Health-Laws*, pp. 13-14.

Civic involvement in prevention included a creative Philadelphian who invented a wind machine to prevent holds of ships from generating deadly diseases. Benjamin Wynkoop's device, "moved by the constant motion of the sea in all weathers," and used "for pumping water and foul air out of ships and thereby preventing a great source of calamities to which seamen are exposed."¹⁶⁸ Supporting the theories of Rush, Wynkoop also believed that disease generation took place below deck during long sea voyages. Therefore, as Rush wrote to a friend, "its chief advantage will consist of preventing the generation of those fevers which are produced at sea by the confinement of human and other effluvia in the holds of ships, and which in all countries have destroyed so many thousand lives."¹⁶⁹

As the summer progressed, rumors and speculation of where the malignant fever might strike heightened tensions in the city. The Committees of Health up and down the Atlantic seaboard kept everyone apprised on anything related to the health of their cities. Baltimore worried about imported hides curing on their wharves, while New York admitted the appearance of "a fever precisely like one which has twice in the course of four or five years been observed in the autumnal seasons in this place," but failed to label it yellow fever. Believing their citizens in eminent danger, New Haven quarantined everything and everyone coming for New York.¹⁷⁰ The heightened awareness of

¹⁶⁸ *The Philadelphia Gazette and Universal Daily Advertiser*, July 10, 1795.

¹⁶⁹ Benjamin Rush, *Letters*, 2:761-2

¹⁷⁰ *The Philadelphia Gazette and Universal Daily Advertiser*, August 11, 1795, *Aurora General Advertiser*, August 13, 1795, and *The Philadelphia Gazette and Universal Daily Advertiser*, August 24, 1795, respectively.

possible infection prompted one writer to point out the need, again, to drain stagnant pools of water around Philadelphia. "When stagnated waters are known to generate dangerous fevers," he asked, "will it not be proper to dig wells to the gravel and drain the large ponds which surround the city?"¹⁷¹ Another Philadelphia writer, looking back at the behavior of the city in late August of 1793, warned everyone to remain vigilant and prevent the spread of any malignant fevers. "Let not the good people of New York and the other towns be too sanguine," he warned. "Rather let them be cautious. It is better to fear too far than to trust too far."¹⁷² The horrible memories of 1793 remained firmly imprinted in their minds. Then, as summer passed into fall, rumors that yellow fever raged in Norfolk heightened anxieties everywhere.¹⁷³ Officials reacted promptly; Governor Mifflin halted all intercourse between both New York and Norfolk on September 2.

Despite prompt actions from the state and local officials, citizens met on the evening of September 18 to aid their health officers in the prevention of the introduction of any contagion into their city. They nominated specific citizens from each ward in the city, the Northern Liberties, and the District of Southwark. Again, the names of several 1793 "heroes" appeared as nominees, including Peter Helm, James Swaine, and Israel Israel. Nothing about this citizen action group found its way into the newspapers until October 1. Knowing that persons from infected areas, primarily New York and Norfolk,

¹⁷¹ *Gazette of the United States and Evening Advertiser*, August 7, 1795.

¹⁷² *The Philadelphia Gazette and Universal Daily Advertiser*, August 28, 1795.

¹⁷³ *The Philadelphia Gazette and Universal Daily Advertiser*, August 29, 1795. They printed an extract of a letter from a Norfolk gentleman. He wrote of a violent fever that killed many merchants with others still very ill.

slipped into the city, the health office requested citizens and the committee to report anyone suspected of "transgressing the prohibition established by law for preventing the introduction of infectious diseases."¹⁷⁴ In late October, the Health Office received such favorable reports about the abatement of yellow fever, that they no longer needed the services of the committee. "The merciful escape we have experienced on this awful occasion demands our humble gratitude," wrote Chairman Levi Hollingsworth. "We rejoice with you on this blessed prospect; and, knowing of no further duties required of us, we consider this committee as dissolved."¹⁷⁵ Spared the visitation of yellow fever again in 1795 by aggressive quarantine enforcement, Philadelphians celebrated healthy times and considered themselves very lucky.

In the first months of 1796, some citizens feared for the health of the city; to voice their concerns, several turned to the newspapers with renewed vigor. "A Member of the Humane Society" reflected the frustration of many over the filthy state of the city. Continually ignored by the city government, this serious problem was now under discussion in the Legislature. "No expence," he argued, "should prevent immediate operations, for the removal of nuisances, that teem with noxious vapours, ready to burst forth to the destruction of the citizens, on the approach of the sultry months." He further

¹⁷⁴ *Aurora General Advertiser*, October 1, 1795. Thankfully, the late date of this action, when cooler temperatures prevailed, plus the absence of yellow fever patients from Dr. Rush, kept citizens from panicking; Peter Helm's brave service in 1793 and 1795 did not go unnoticed. Several citizens suggested his running for the office of County Commissioner in the next election. When yellow fever struck again in 1798, Helm was an active City Commissioner.

¹⁷⁵ *Aurora General Advertiser*, October 27, 1795.

noted the enormous costs in human lives and wealth resulting from the 1793 epidemic. Although the city rebounded from the tragedy, "what would it have been, if no such blast had wounded the increase of society at that time?" He dismissed the argument that any legislation to clean up the city might be a violation of rights and freedoms. If offenders were given enough time to rectify the health hazard and refused, then the authorities should "fill up, or drain all such places ... by which the health and lives of the community are in danger," at the expense of the lawbreakers.¹⁷⁶ The following week, "An Inspector of the Health Office" continued on the same theme. "From what has been said, I think, it must appear evident to every reflecting mind, that some exertion is necessary to render this place more secure from the attacks of pestilence." Though human intervention can not prevent all disease-induced catastrophes, combined with "faith, hope, and charity, we industriously set our shoulders to the wheel, [then the] ... Preserver of men [will] likely crown our labours."¹⁷⁷ Not surprisingly, New York had the same debates at this time, some of which ended up in the Philadelphia press.

In April, Governor Mifflin and the state legislature adjusted the health laws again. They decided to correct the defective parts, "reduce the provisions of the said several acts, as far as the same can conveniently be done, into a smaller compass, and into one act." They staggered the terms for Health Inspectors, with half beginning in May and the other half in November. In case of an epidemic, at least half the Inspectors had some experience within their positions. The law empowered them with suspending the

¹⁷⁶ *The Philadelphia Gazette and Universal Daily Advertiser*, February 6, 1796. Unlike today, the Humane Society existed to resuscitate drowning victims.

¹⁷⁷ *Claypoole's American Daily Advertiser* (Philadelphia), February 12, 1796.

mandatory visitation of the port physician to all vessels during the months of December, January, February, and March. However, shipmasters still needed to report to the health office during those times. They were required to report their arrival "within twenty-four hours, and "before they shall have landed any part of their passengers, crew, or cargo." The captain must then "truly describe, to the best of his knowledge, the state of the crew and cargo." Furthermore, in the absence of the governor, "a majority of the board of inspectors shall have full power and authority to prohibit all intercourse with infected places within the United States." Under this law, the governor reserved the right to suspend or remove an inspector from office, while the Inspectors maintained their authority to regulate the activities of the health office.¹⁷⁸ Despite their memorial, the College of Physicians did not receive the authority they requested.

The summer of 1796 repeated the all too familiar rumors, denials, and news of pestilential diseases and corresponding enforcement of quarantine laws, as the city rode a roller coaster of emotions. By the first of July, the West Indies, New Orleans, and the Dutch, French, and Spanish Ports on the mainland all made the governor's list of mandatory quarantine below Philadelphia. The Health Officer requested the aid of citizens during the coming hot season while they focused all their energy on preventing sickly ships from depositing infected people or cargo into the city. "Partial and limited indeed will be the good effects resulting from the operations of the Health-Office," he warned, "if the internal situation of the city and districts is disregarded." He deemed the removal of all filth critical, and not just in "the large streets and public alleys, ... but [also

¹⁷⁸ State of Pennsylvania, *Compilation of the Health-Laws*, pp. 38-40. Quotes, 38, 39, 39, respectively.

in] the lanes, alleys and courts of every description.”¹⁷⁹ The rumors began on July 22 when a New York letter writer admitted yellow fever existed there. Condemnation and denial followed straight away. Charleston received the same treatment on August 10, with a refutation also immediately forthcoming. The governor addressed the growing anxiety by continually printing reports from the Health Office reaffirming the healthy state of the city and expanding the list of ports from which ships coming into Philadelphia must ride quarantine. With a large segment of trade suspended from healthy ports in the West Indies, merchants felt the financial hardships by early August. In a letter addressed to the Board of Health, they requested a relaxation of quarantine. They suggested allowing ships from healthy ports with no reported sickness during their voyage, and with healthy crews and passengers, serve only twenty-four hours in quarantine. They also warned “that the detention of persons arriving in perfect health, confined to the narrow limits of a vessel, and impatient to be with their families and friends, is calculated to produce the very end that is intended to be guarded against – sickness and disease.” Noting the loss of revenue of up to sixty thousand dollars, the merchants requested the Board to reconsider their policy. Stephen Girard, hero of 1793, signed the letter because he believed the fever was not contagious.¹⁸⁰ After considering their request, the Board believed “that they cannot consistently with the duty they owe their fellow citizens, recommend to the governor any alteration in the existing

¹⁷⁹ *The Independent Gazetteer and Agricultural Repository*, July 9, 1796.

¹⁸⁰ Harry Emerson Wildes, *Lonely Midas, The Story of Stephen Girard* (New York: Farrar & Rinehart, Inc. 1943), p.120. He believed this when yellow fever appeared in the city in 1793.

quarantine.”¹⁸¹ The successful implementation of quarantine, the confirmation of health—not fever—in New York and Charleston, plus no cases of yellow fever reported by any physician in Philadelphia, made the summer and fall of 1796 one of the healthiest in years for American cities. In a letter to a friend on September 22, Rush agreed about the health of the city. He also, enthusiastically, though erroneously, stated a falsehood: “The opinion of its [yellow fever] domestic origin has become universal in the United States.”¹⁸² Nevertheless, Philadelphia thankfully, thwarted the entrance of the “pale faced messenger” for a third season.

Organization and Resolve Tested—The 1797 Yellow Fever Epidemic

During the months before June 25, 1797, the fear of yellow fever was curiously absent from newspapers, letters, and diaries. Philadelphians, perhaps lulled into overconfidence, wrote no warnings about filth, carcasses, stagnant water, or plague in other places. In May, they read about how New Yorkers would protect themselves against infectious diseases with a stronger quarantine law. In early June, Dr. Mease, Resident Physician of the Port, praised Wyncoop’s ventilator after visiting ships in port using his invention.¹⁸³ Then, a citizen reminded everyone that the environment in and around the city was still as filthy and unhealthy as it had been in 1793. He pointedly asked why has “so little attention [has been] paid to the removal of the acknowledged

¹⁸¹ *Gazette of the United States & Daily Advertiser*, August 15, 1796.

¹⁸² Rush, *Letters*, 2:780.

¹⁸³ *Finlay’s American Naval and Commercial Register* (Philadelphia), May 5, 1797 and June 6, 1797.

immediate causes of this dreadful calamity?" Carcasses still lie about rotting while "there is scarcely a back yard in the city where the olfactory nerves are not offended by some putrefying substance."¹⁸⁴ Too many Philadelphians had forgotten the scenes of horror from 1793. In July, as a reminder to citizens, the newspapers printed sections of a law concerned with keeping infectious diseases out of the city. In mid-July, "An European" offered oft-repeated advice concerning keeping streets clean, prohibiting the raising of hogs in populated neighborhoods, and fining those who keep "putrid substances in the city." The writer also suggested that "a watchful superintendence should take place over several kinds of manufacturers, particularly breweries, sugar-houses, and others liable to have heaps of fermenting materials."¹⁸⁵ Philadelphia in August of 1797 was as filthy and polluted, as it had been when catastrophe struck four years earlier, in August of 1793.

The month of August began with the customary notice of infectious and contagious diseases in all the usual places accompanied by all the normal quarantine arrangements, but shortly thereafter, fever, panic, and flight shattered the summer routine. Evoking that time in his memoirs, Dr. Charles Caldwell recalled yellow fever's sudden appearance in the city. "About the tenth of August, an open and fierce explosion of yellow fever took place, and scattered the citizens into the country like chaff. All was instantly dismay, hurry, and headlong confusion."¹⁸⁶ Benjamin Rush's biographer,

¹⁸⁴ *Independent Gazetteer*, June 25, 1797.

¹⁸⁵ *Porcupine Gazette and United States Daily Advertiser* (Philadelphia), July 15, 1797.

¹⁸⁶ Charles Caldwell, M.D., *The Autobiography of Charles Caldwell, M.D.* (Philadelphia: Lippincott, Grambo, and Co., 1855), p. 276. Caldwell stayed in town during the epidemic because he did not believe it was contagious.

Nathan Goodman, suggested much of that excitement came during the first week in August when "ten persons who manifested yellow fever symptoms died, and when news of these deaths was gossiped about the city."¹⁸⁷ In late August, Rush wrote to his long time friend Horatio Gates about the overreaction of citizens. "The fever, which has unreasonably alarmed our citizens," he assured Gates, "is confined chiefly to one part of the city, and from appearances this day is evidently upon the decline."¹⁸⁸

Residents, remembering the horrors of 1793, fled into the countryside anyway. Howard M. Jenkins noted that the evacuation took place much earlier this time; people knew to leave Philadelphia. By "September 4," he remarked, "it was estimated that one-sixth of the houses were empty, and one-third of the population away." Like Washington before him, President John Adams departed for home in Massachusetts. The federal offices, rather than abandoning their work, "all removed—to Gray's Ferry, Falls of Schuylkill, and Trenton."¹⁸⁹

Coincidentally with rumors of yellow fever *in* the city, Governor Mifflin imposed quarantine on the West India islands, New Orleans, and the French, Dutch, British, and Spanish ports on the mainland to keep it *out* of the city. He ordered a mandatory five-day

¹⁸⁷ Nathan G. Goodman, *Benjamin Rush: Physician and Citizen, 1746-1813* (Philadelphia: University of Pennsylvania Press, 1934), p. 204.

¹⁸⁸ Rush, *Letters*, 2:788.

¹⁸⁹ Howard M. Jenkins, "Narrative and Critical History 1681-1895," In *Memorial History of the City of Philadelphia: From Its First Settlement to the Year 1895*. ed. John Russell Young (New York: New York History Company, 1895), p. 399.

wait, leaving the imposition of longer stays to the discretion of the Resident Physician, consulting Physician, and Health Inspectors.¹⁹⁰ On August 14, Mifflin also requested advice from Doctor John Redman and his colleagues. The apprehension caused by "the appearance of the Yellow Fever in the neighbourhood of Penn-street induces me to request a statement of the facts that have occurred in the course of their practice, and an early opinion on the best mode of averting the calamity that threatens."¹⁹¹ Three days later, Redman replied by addressing the prevention of both the introduction and the spread of infectious diseases. Many recommendations sounded all too familiar: clean and water the streets; avoid intemperance in drink, clothing, fatigue, and sun or night air exposure. Then, however, the physicians advocated some drastic measures. Firstly, they believed the Health Office should be notified of all infected persons. "Let the physicians of the city be enjoined to give information to the board of health, to whom they should daily report such cases as may occur." They also proposed something many citizens considered too drastic: isolating the diseased parts of town. "Let all unnecessary intercourse be suspended with that part of the city where the disease first appears." Remove the healthy people, businesses, and ships at surrounding wharves. After the removal or recovery of the sick, a proper cleansing must follow. "All suspected wharves and houses, particularly such as have been occupied by the sick, should be purified by order of the board." To prevent the introduction of contagious diseases, the physicians wanted a five-person Board of Health, (with physicians filling two of those positions)

¹⁹⁰ *Claypoole's American Daily Advertiser*, August 14, 1797.

¹⁹¹ *Porcupine Gazette and United States Daily Advertiser*, August 17, 1797.

who would meet daily during the summer months and have more authority than at present. "They shall have full power to do every thing necessary respecting the quarantine to be performed by vessels, as well as to direct the removal of any vessels" already landed and later found unhealthy. They insisted on a blanket quarantine of thirty days for "every vessel which arrives from the West-Indies, from the American Main to the southward of Florida, or from the Mediterranean." Finally, the items on board potentially contagious ships must be purified, including "every article, wrought or unwrought, which is used for cloathing or bedding, or which may be supposed to contain infection, particularly those which are composed of cotton, wool and silk, unladen and purified at the islands."¹⁹² The boldness and far reaching nature of these recommendations—not unlike their previous "Memorial"—put even more citizens to flight, especially after the Board adopted many of them with the governor's endorsement.

On August 26, Governor Mifflin, through his Secretary, A.J. Dallas, wanted a timely statement to present to the legislature on the subject of the sickness now within the city. "As the legislature meets on Monday next," wrote Dallas, "the governor is anxious at that time to lay before [them] a correct statement of the information, which the College may receive, on the subject of the existing malignant and contagious fever."¹⁹³ As it turned out, their reply, to have any effect at all, needed to be practically instantaneous since the legislature abruptly adjourned because of the yellow fever. However, as

¹⁹² Richard Folwell, *A Short History of the Yellow Fever that Broke Out in the City of Philadelphia in July 1797: With a List of the Dead; of the Donations for the Relief of the Poor, and a Variety of Other Interesting Particulars* (Philadelphia: Richard Folwell, 1797), pp. 9-11. Folwell reprinted the letter.

¹⁹³ College of Physicians, *Proceedings*, p. 22.

Representative Jacob Hiltzheimer penned in his diary for August 29, the House passed "an appropriation of \$10,000 to the Committee of Health, for the relief of the poor sick," before they departed.¹⁹⁴

Even as elected officials and physicians filled newspapers with their exertions and opinions, residents also weighed in on a variety of related issues. One knowledgeable writer boldly announced that yellow fever was not contagious and then quoted from a variety of treatises on pestilential diseases. "Philo-galen" agreed with Dr. Rush concerning the efficacy of mercury, going so far as to prescribe its use very specifically. He suggested taking one four-grain mercurial pill twice a day. "When the mouth is sore, when it has a copperish taste," he asserted, "it will be right to put aside the pills, and to dilute plentifully with molasses and vinegar mixed with water." He ended his verbose ramblings by encouraging cleanliness, quick lime for privies, raisins and figs for the stomach, good cider, temperance, and the avoidance of all fear and grief.¹⁹⁵ That same day, Dr. Mease came under attack in a letter addressed to him by "A Citizen." Extremely upset with Mease, who allowed ships from the West Indies to dock with just the captain's responses to his "list of official interrogatories," he blamed the doctor for allowing the pale faced messenger back into their city. If that were the only function required, any "private at the Fort" would do. However, as the writer harangued, "more is required of you; no less than a *strict enquiry* and a *strict examination, aided by your medical skill*."

¹⁹⁴ Jacob Hiltzheimer, *Extracts of the Diary of Jacob Hiltzheimer, of Philadelphia, 1765-1787*, ed. Jacob Cox Parsons (Philadelphia: W.F. Fell & Co., 1893), p. 247. Unfortunately, Hiltzheimer fell victim to yellow fever in September, 1798.

¹⁹⁵ *Porcupine Gazette and United States Daily Advertiser*, August 19, 1797.

The author believed that Mease, as a strong believer in the local origin of yellow fever, was unsuitable to be resident physician of the port. "You are the disciple of a Theory, which, whether true or false, unfits you for being a watchful centinel at your post—You should believe, that *yours* will be the point of attack; a belief that the enemy is in your rear, is not likely to stimulate your vigilance."¹⁹⁶ Whether citizens believed pestilence originated amid their muck or stole in aboard ship, fear, confusion, and frustration resulted.

Elizabeth Drinker expressed fear for herself and family and, after reading the papers and talking with Dr. Redman, President of the College of Physicians, decided to flee the city on August 21. "The Committee of health have concluded," she wrote in her diary, "that if any persons is taken ill, in any house, they shall immeadiately be removed out of town by their friends, or sent to the Hospital. The inhabitants are much alarmed." Henry Drinker, her husband, remained in Philadelphia. His letters to Elizabeth reveal "that the inhabitants are removing in great numbers from the City, 'tho the disorder has not increased, but the orders for taking the Sick to the Hospital is very terrifying, be it whom it may." A letter on August 29 mentioned the flight from the city. "It is supposed that more have already left the City, than did in the Year 93, which was said to be 20,000 fright'ned out, I expect by the decree of the Committee of health and the remembrance of former sufferings—in 93."¹⁹⁷ There also seemed to be some confusion about the

¹⁹⁶ *Porcupine Gazette and United States Daily Advertiser*, August 19, 1797.

¹⁹⁷ Elizabeth Drinker, 2:955, 956, 957. The Committee of Health required physicians to report all cases of yellow fever. They required immediate evacuation of patients and yellow flags marking infected rooms or houses. They ordered residents in the adjoining houses to evacuate. Unfortunately, they did not appear to provide them with an alternative abode. Neither physicians nor residents approved of such drastic actions.

seriousness of this attack. On August 27, Jacob Hiltzheimer commented in his diary about the panic. "I now remember that in the autumn of 1762, a fever which I believe to be like the present one alarmed the citizens very much but it was insignificant compared to the present one or that of four years ago." Three days later, the Congressman remarked on both the current death toll and the flight of inhabitants. "The deaths during the last twenty-four hours numbered only eight adults and six children. It is surprising," he further observed, "that so insignificant a number should create so much excitement in this city as well as in the country."¹⁹⁸ Orders of quarantine against ships and people traveling from Philadelphia appeared, as New York, Baltimore, and New Jersey believed the worst from reports coming out of the city.

Neither fearful nor confused, Stephen Girard wrote a series of letters to business associate Paul Bentalou in Baltimore, venting his anger and frustration over the unnecessary panic caused by both officials and doctors. "Our Board of Health, or College of Physicians or rather jackasses," he angrily wrote, "not to mention our governor's proclamation, which does not even show the common sense of a half civilized nation, have created an unparalleled state of alarm."¹⁹⁹ In another letter, Girard continued his tirade: "I doubt if there is a place in the world where an utter baseless panic has ever been pushed to the point that it has been reached here. I now see myself forced to play a part against the yellow fever and therefore in favor of those in distress." His particular frustration with physicians led to another outburst a few days later. "A number of our

¹⁹⁸ Jacob Hiltzheimer, *Extracts of the Diary*, pp. 246-247.

¹⁹⁹ Stephen Girard, *The Stephen Girard Papers*, Reel 123: Translations of Letters Sent, August 25, 1797 p. 335.

physicians maintain that we have a contagious disease in our city which is catching at a distance of ten feet." From his experiences at Bush Hill, he knew that was false.

Volunteering their services to the health committee, Caleb Lownes and Girard toured Southwark, where they found no one, in their opinion, suffering from yellow fever. One of the physicians, an outraged Girard wrote, "took the liberty to ridicule my opinion through the medium of a newspaper. I answered him in the same manner, as he deserved. I wish you would warn people about it, so as to create a distrust for this kind of executioners of the human species."²⁰⁰ Writing to John Hourquebie in Bordeaux, Girard feared that if this irrational behavior continued, the resulting cessation of business would hurt everyone. "The result has been the barring of our streets," yet, he protested, despite "all this, the contagion that we have been told has been threatening us for a month has not yet put in its appearance; we have not the slightest sign of an epidemic. ... This state of affairs has caused the greatest stagnation in business."²⁰¹ Within a fortnight, Girard was so busy at the City Hospital that his own affairs went unattended.

The epidemic Girard accused the physicians of fabricating, was in full swing by mid-September. As early as September 3, after yellow fever conquered Dr. Way, one of his "most intimate and worthy friends," Dr. Rush believed the situation to be more

²⁰⁰ Stephen Girard, *The Stephen Girard Papers*, Reel 123: Translations of Letters Sent, August 25, 1797, September 4, 1797, pp. 336, 339. Girard and Dr. Currie publicly disagreed about the contagious nature of yellow fever.

²⁰¹ Stephen Girard, *The Stephen Girard Papers*, Reel 123: Translations of Letters Sent, September 1, 1797 p. 344.

serious than he did previously admit.²⁰² In the five weeks since Caldwell recalled it bursting on the scene, physicians clashed among themselves and with other citizens brave enough to enter the fray. The Board of Health appointed twenty-four inspectors to help them manage the epidemic. Governor Mifflin also selected a committee of twelve citizens to distribute the \$10,000. Among the twelve appointed were Israel Israel and Thomas Savery.²⁰³ For the first time, Edward Garrigues involved himself in this public manner. Nervous shopkeepers "removed their stores from Philadelphia to Wilmington" assuring their customers "that they shall there have for sale their usual extensive assortment of goods, during the continuance of the present fever."²⁰⁴ Drinker noted the closing of another business—the Coffee House, because "on[e] of the principle waiters has been seized with the prevailing fever, and conducted to the Hospital."²⁰⁵ The Health Office, like the Committee in 1793, "removed to the City Hall, and is kept open night and day, where persons having business may apply."²⁰⁶ The hospital, managed by former committee members Girard, Lownes, and Connelly, housed fifty-one patients and buried eight.²⁰⁷ Less affluent inhabitants, escaping from the sickly parts of town, lived in a tent city on the Schuylkill provided by the Health Office. Initially managed by the Overseers of the Poor, but on September 21 another group of volunteer citizens took charge. "In consequence of the guardians of the poor having generally left the city," came an

²⁰² Rush, *Letters*, 2:789.

²⁰³ Folwell, *A Short History* (1797), p. 18.

²⁰⁴ *Claypoole's American Daily Advertiser*, September 14, 1797. Eighteen merchants collectively advertised their temporary move to Wilmington.

²⁰⁵ Drinker, 2:963.

²⁰⁶ *Claypoole's American Daily Advertiser*, September 9, 1797.

²⁰⁷ *Porcupine Gazette and United States Daily Advertiser*, September 16, 1797.

announcement in the newspapers, "the subscribers have voluntarily undertaken the superintendence of the poor at the tents, near Schuylkill."²⁰⁸ In those five weeks, as the contagion spread outside the original areas around Penn Street, Philadelphia shifted from business as usual to citizen driven crisis management.

From mid-September until the end of October, civilian volunteers continued addressing problems related to the circumstances surrounding the yellow fever epidemic. The distribution committee, with Garrigues as Secretary, relieved hundreds of families, paid (out of work) laborers who "had been employed on the roads, and to open the courses of water in Southwark, so as to drain the grounds, [and] provision was further made for about two hundred people, who had removed to the tents on the Schuylkill."²⁰⁹ Unlike 1793 when aid went to all applicants, this committee expected the idled workforce to help clean up the city in return for relief. When the allocated funds ran out at the end of September, they borrowed more from the banks. Hilary Baker, "mayor of Philadelphia was authorised, by an ordinance, to borrow on the credit of the Corporation, from either of the banks in the city, ten thousand dollars."²¹⁰ This committee, like its predecessor in 1793, also accepted and then encouraged generous donations of cash and other items for the poor and requested editors to print them. The City Hospital supervised by Girard, Lownes, and Connelly, reported admissions, discharges, and deaths daily. Admissions stayed in the single digits each day except when thirteen joined the facility on September

²⁰⁸ *Porcupine Gazette and United States Daily Advertiser*, September 21, 1797.

²⁰⁹ Folwell, *A Short History* (1797), p. 20.

²¹⁰ *Ibid.*, p. 21.

30. Discharges and deaths both remained in single digits.²¹¹ After November 1, reports vanished from the newspapers. Unlike the staggeringly high mortality rates in 1793—fifty or more people died every day from September 14 until October 24—only on three occasions did daily death rates reach thirty or more.²¹² In his “Short History,” Richard Folwell seemed almost overcome with gratitude for the hard work and compassion exhibited by so many that volunteered to stay during this calamity. The gratitude everyone must feel toward “those gentlemen who stood to their respective posts, at the imminent hazard of their lives.” He wanted his readers to consider why so many citizens volunteered to help. Folwell tried to imagine the feelings and motivations of the Board of Health members, the Commissioners appointed by governor Mifflin, the managers and committeemen of the hospital and tent city, and the few brave Overseers of the Poor, “when they were relieving the needy—easing the sorrows of their fellow-creatures, and drying up the tears of a parent, and of numerous and helpless children. ... Was it interest which actuated them? The heart which can feel for another’s woes, will answer, that it was sympathetic benevolence.”²¹³

On October 30, the *Porcupine Gazette* announced the end of the crisis: “This city is once more itself. The greatest part of the inhabitants are returned, the markets are full, and the usual intercourse has generally taken place.”²¹⁴ Philadelphians came home to

²¹¹ Claypoole’s *American Daily Advertiser*, September 18 to November 1, 1797.

²¹² James Robinson, *The Philadelphia Directory, City and County Register, for 1803* (Philadelphia: William Woodward, [n.d.]) p. 15. In his Comparative Statement of the Number of Deaths for 1793, 1797, 1798, 1799, and 1802, Robinson listed 30 deaths September 11, 32 deaths on September 9, and 33 deaths on September 25.

²¹³ Folwell, *A Short History* (1797), p. 29.

²¹⁴ *Porcupine Gazette and United States Daily Advertiser*, October 30, 1797

pick up the pieces of their lives. Unlike 1793, people fled quickly and in larger numbers this time, thus escaping the clutches of the grim reaper. Dr. Mease, Port Physician during this epidemic calculated the death toll at 1292 persons.²¹⁵ That loss was, however, only the tip of the iceberg: a sluggish business environment remained as prices rose. Folwell

explained yellow fever's real price. "Wood is dear, and trade is almost stagnant. The necessities of life are, generally speaking, at a higher rate than in 1793." A sluggish economy with business failures caused more than just a few bankruptcies. "Thousand suffer," as he observed, "by the failure of hundreds."²¹⁶

One writer suggested a way to employ the poor while bringing water into the city which, he thought would prevent the spreading of contagion. The city had an opportunity to "unite charity and usefulness together" by employing "the great number of persons who must be thrown out of their usual employments by the dreadful calamity through which we have just passed." This "Friend to the Poor" suggested hiring such people to complete "the canal from Delaware to Schuylkill, and thereby water the city." Since the unemployed lived on charity during the winter, they might as well work on the canal. His plan provided jobs "to many hundreds who must be maintained the ensuing winter, either by finding them employ or by your charity without it."²¹⁷

On October 24, Mifflin turned again to the College of Physicians for what information they could provide to the legislature. Besides a general statement, the

²¹⁵ Mease, p. 37.

²¹⁶ Folwell, *A Short History* (1797), p. 37.

²¹⁷ *Claypoole's American Daily Advertiser*, November 1, 1797.

governor wanted answers to two specific questions. The first concerned decontaminating the city. "What measures ought to be pursued to purify the city from any latent infections?" The second related to preventive measures. "What precautions are best calculated to guard against the future occurrence of a similar calamity?"²¹⁸ Realizing the importance of sending their suggestions in time for the Governor to include them in his annual address to the legislature, the College sent their reply on November 7. Their recommendations for removing any dormant contagion included the often-repeated purification process practiced in 1793, although they suggested fumigating "bedding and cloathing with charcoal and sulphur." They also believed that freezing temperatures helped. "The frost," they believed, "will be found sufficient entirely to destroy any latent contagion."²¹⁹ Unlike their brief proposals for ridding the city of leftover infection, the College offered a comprehensive plan to prevent another calamity.

After acknowledging the recent "Memorial" that explained their opinions concerning prevention, the College "decided to recapitulate those advices with some additions." The Board of Health should number only five persons, two of who were physicians. They pointed out the importance of the medical members. "The professional knowledge of the medical characters will be necessary to assist in directing the measures of the Board." They wisely pointed out a potential conflict of interest concerning board membership. "Let no person whose private interest may be affected by quarantine laws,

²¹⁸ College of Physicians, *Proceedings*, p. 23.

²¹⁹ *Ibid.*, p. 24-25.

be a member of this Board.”²²⁰ During the most dangerous months, the physicians suggested two extra exertions and precautions. “Let this Board sit daily during the months of July, August, September, and October; and let every vessel from the Mediterranean, coast of Africa, West-Indies, and Continent of America, to the southward of Florida, perform effectual quarantine” at State Island. They also proposed a ban on all warships coming into the port, while they suggested a new form of punishment for infractions. “Let the punishment of a master of a vessel, who evades the law, by landing cargo, crew or passengers, contrary to the intent and meaning of it, be the same as for murder in the second degree.” In a moment of astuteness, the College realized Philadelphia by herself could not prevent the scourge from returning. “Let co-operative laws be procured from the neighbouring legislatures or from Congress.”²²¹ In closing his letter to Mifflin, Redman returned to the importance of cleanliness while promising to forward any others future suggestions. Surprisingly, the College omitted the procurement of wholesome water to make that cleanliness possible.

In his address to the Legislature, Governor Mifflin agreed with both pro-water citizens and with the physicians. “The interposition of the Legislature will be indispensable,” he presumed, “in order to ensure such a supply of water [to clean the city and suburbs], through the medium of Canals, as appears to have become essential to the general convenience, as well as to the health of the Community.”²²² Mifflin also

²²⁰ Ibid., p. 25.

²²¹ Ibid., p. 26.

²²² *Claypoole's American Daily Advertiser*, December 11, 1797. Mifflin also wanted a stronger Board of Health, more public buildings on State Island, a permanent public hospital nearby, and mandatory quarantines. He supported, then, most of the College of Physician's recommendations.

highlighted the suggestions made by the College of Physicians. By incorporating these precautions, Philadelphians hoped to satisfy both medical theories: clean up the city to prevent the generation of contagion *and* pass strict quarantine laws to prevent the introduction of contagion. As winter set in and the Delaware froze, people believed the implementation of Mifflin's suggested legislation should stop further calamities. Unhappily, the fever season of 1798 proved them wrong.

Conclusion

After recovering from the disastrous yellow fever epidemic of 1793, Philadelphians vowed to do everything in their power to prevent its reoccurrence. They began with a comprehensive act that created a Health Office, with an internal organization ready to act in an emergency, to protect the city from the importation of yellow fever. During the four years covered in this chapter, the legislature made many revisions and supplements, always in an attempt to make them more effective. Additionally, when fever struck in 1797, the legislature, remembering the sufferings of the poor four years earlier, allocated funds specifically for their relief.

Residents also remained vigilant and active. Unlike the 1793 citizen committee who only got involved when society was on the brink of dissolution, their counterparts during these four years went on the offensive whenever they believed the city was in danger. Besides alerting officials when yellow fever broke out in other places, they worked with the health office when needed to keep infected people out of their city,

supervised the tent city, received and dispersed aid to the poor, and shared their views with everyone in the newspapers.

The College of Physicians took advantage of these four years by working closely with the Governor and the Board of Health. It was their conviction that yellow fever was both imported and contagious. That belief formed the basis of the quarantine regulations of the port. Whether for additional power or humanitarian principles, the College persisted in recommending more member participation in the policies and makeup of the health board. In their efforts at aggressive isolation of yellow fever sufferers and their neighborhoods, the College drew the ire of their fellow residents. The ongoing feud between Dr. Rush and his advocates and the College remained in the background until August 1797. Fortunately, the renewal of these antagonisms proved much less abusive. Philadelphians looked back, at least with some pleasure, over their success at limiting the number of victims sacrificed to the bridegroom of death, especially since his deadly visitation four years earlier. They worked diligently to prevent his entrance by sea and by land. However, they almost ignored the possibility of his spontaneous materialization amid the filth of the city. Although Mifflin, the College, and Rush all called for a cleaner environment, that was impossible until someone found a way to bring large amounts of water into the city. As Philadelphians celebrated the New Year, the pale faced messenger inexorably gathered strength in the West Indies for another assault on the city.

CHAPTER FOUR

1798—A HORRIBLE DÉJÀ VU:
PHILADELPHIANS WRESTLE THE “ANGEL OF DEATH”

*Religion, lovely maid appear,
Pour in thy balm, assuage each grief;
'Tis thine the pensive heart to cheer,
And give the sinner true relief.*²²³

Introduction

Philadelphians approached the fever season of 1798 with some trepidation. For three years after the calamity of 1793, inhabitants successfully kept the “Bridegroom of Souls” out of their city as it slowly recovered. Then, in 1797, they had to temper those successes since yellow fever struck again in epidemic proportions, despite a powerful Health Office and strict quarantine policies. That spring, Philadelphians contended with a split medical community, higher costs involved with another version of the health laws, and a slowly recovering business environment. Then, quite unexpectedly, another group of Frenchmen from Santo Domingo, fleeing the British occupation of their island, arrived at the port as refugees. Unseen and unsuspected, death’s ambassador, as he did five years earlier, crept into Philadelphia like a thief in the night.

²²³ A Citizen; *An Elegiac Poem*, p. 8.

It took about a month for the grim reaper to turn the healthy state of the city into one of death, despair, and dread. As word got around of an increasing number of deaths by something resembling yellow fever, inhabitants grew uneasy. However, not until one of the newspapers finally printed the facts did people panic and flee in record numbers. Fortunately, the inhabitants in nearby communities no longer feared the spread of yellow fever; they welcomed the fleeing Philadelphians and their pocket books with open arms. Unfortunately for Philadelphia, it was now too late to quarantine the refugees or clean up the city; the damage was irreversible. The only thing left for officials and citizens, who chose to stay, was to survive and mitigate the impending suffering as much as possible.

During the early part of the epidemic, the Board of Health ably handled their duties. However, as September arrived with skyrocketing new case numbers, increased hospital admissions, ever spiraling death rates, housing the healthy poor, and the impossible task of isolating stricken neighborhoods, they could no longer work effectively without outside help. As an overwhelmed Mayor Clarkson requested citizen aid in 1793, the Health Office also turned to their fellow citizens for help.

When residents learned that the Board needed additional funds and supplies, they immediately opened subscriptions and brought a variety of supplies, including food. When the Board needed volunteers, citizens already accustomed to helping in past crises, stepped forward and both built and managed a new tent encampment. Others took the initiative, formed their own private committees, solicited funds and supplies, and then distributed them to those in need. One citizen even took over the superintendence of the

city jail. With the additional help of citizens, Philadelphia slowly drained the strength of death's ambassador and his ability to harvest souls.

The physicians of Philadelphia, after beginning the year with recommendations to prevent yellow fever from entering the city or suddenly forming out of the ethers, worked diligently throughout the epidemic. Although divided into their two professional organizations by opposing beliefs in the origin and contagious nature of yellow fever, the severity of this epidemic left them with little time to publicly abuse each other. Whatever their mode of treatment, it failed to cure thousands.

Fewer new cases of yellow fever, and an ending of the epidemic, paralleled the cooler weather of late September and early October. After a late October frost, the Board invited back into their city, the thousands of residents whom earlier scattered into the countryside. As residents reflected upon what happened, trying to find words that expressed their emotions, some turned to poetry. Others, especially officials involved in the business of the epidemic submitted reports and balanced their accounting sheets. Physicians from both sides investigated, argued, and forwarded recommendations to the governor. Finally, another group of citizens formed a post-epidemic committee. They agreed to pursue other avenues of action, including a serious attempt to bring running water into the city, in order to prevent, yet again, another deadly visitation by the pale faced messenger.

A Nightmare Repeated—The 1798 Yellow Fever Epidemic

As winter turned into spring, Philadelphians continued reading about yellow fever as physicians and governmental officials evaluated the last epidemic and prepared to prevent the next one. One supporter of bringing water into the city by canal requested an editor to reprint the exchange between Governor Mifflin and Dr. Rush at the end of last year. As leader of the domestic origin of yellow fever medical faction, Rush continued stressing the importance of keeping the city clean while promoting his "one fever" theory. Along with several colleagues, Rush included four recommendations for prevention. The initial suggestion made was in support of the current health law. "First, A continuance of the present law for preventing the importation of the disease from the West Indies, and other parts of the world where it usually prevails." Philadelphians were all too aware of the second proposal since it dealt with cleaning up the city. "Secondly, Removing all those matters from our streets, gutters, cellars, gardens, yards, stores, vaults, ponds, &c. which by putrefaction in warm weather afford the most frequent remote cause of the disease, in all countries." Similar to the College, Rush wanted more physician participation. He wanted doctors appointed as inspectors. "The appointment of a certain number of physicians whose business it shall be to inspect all such places [in the county], ascertain any matters capable by putrefaction of producing the disease and to have them removed." Once all the potentially unhealthy matter was removed, the next suggestion dealt with keeping the city unpolluted through regularly scheduled cleanings. "Thirdly, We earnestly recommend the frequent washing of all impure parts of the city in

warm and dry weather, by means of the pumps, until the water of the Schuylkill can be made to wash all the streets of the city." Their last submission addressed a chronic problem of cargo putrefaction on board ship. Rush, who had already admired Wynkoop's ventilator, believed in its ability to prevent the generation of disease below deck. "Every vessel should be obliged by law to carry a ventilator," and he suggested the Wynkoop.²²⁴ A few days later, a similar request appeared, probably from an importation supporter, for a similar exchange between Mifflin and Dr. John Redman, President of the College of Physicians. For the inhabitants who had not yet seen those recommendations—already noted in the previous chapter—the amount of power requested for physicians in both cases must have been frightening.²²⁵ At least one writer vehemently opposed the increased authority requested by these medical practitioners. In an editorial entitled "Medical Legislators," the author believed these were strange times. "This is the age of preposterousness: every thing is out of place: the Doctors make us laws, and the legislators feel our pulse." He recalled their unpopular suggestions during the last epidemic: "how sacred its members hold the civil rights of the community, we have already had a sufficient proof in the yellow flag and transportation proclamation, issued at their request." He also warned that the severe quarantine law they proposed "if adopted, must and will drive the commerce of this port into other channels."²²⁶

Apparently, Philadelphians grew tired of the arguments concerning importation versus

²²⁴ *Aurora General Advertiser*, January 4, 1798.

²²⁵ *Claypoole's American Daily Advertiser*, January 9, 1798.

²²⁶ *Porcupine Gazette and United States Daily Advertiser*, January 10, 1798.

local origin that constantly assaulted them, especially the in the past six months. They wanted results: keep yellow fever out of the city or prevent its generation within the city.

In spring, citizens discovered part of the cost of the previous epidemic as they pondered the potential price of any future outbreak. In March, they read the "Statement of the Account of the Inspector of the health-Office for the City and Port of Philadelphia, for the year 1797" in the newspapers. According to that report, the Marine Hospital Expenditures amounted to \$3,721.71 and the City Hospital an additional \$11,342.68. Not included in those totals was \$9,000 in loans and expenses.²²⁷ The previous yellow fever epidemic was expensive: unemployment soared, mercantile trade floundered, and now large expenditures of public funds occurred. All of these circumstances seriously hampered Philadelphia's economy and prestige.

In April, citizens perused all fifteen sections of the newly passed health laws realizing the new provisions would cost additional monies to implement. They included the expansion of the Marine Hospital on State Island, "to receive sick and infected persons and goods arriving in the port, until the same shall be restored to health and purified." There was also the administration of the existing city hospital. It "shall be under the management of a Board, who are hereby erected into a body corporate, in deed and in law, by the name, stile and title of the Managers of the Marine and City Hospitals of the Port and City of Philadelphia."²²⁸ Manager appointments paralleled those of health inspectors previously. Both hospitals also needed a workforce. "One Steward and one

²²⁷ Claypoole's *American Daily Advertiser*, March 19, 1798.

²²⁸ State of Pennsylvania, *Compilation of the Health-Laws*, p. 44.

Matron to reside at [each] Hospital, and such Assistant Clerks, Nurses and Servants as shall be found necessary to perform the several duties required by this act." The legislators also conferred authority upon the Managers as a Board. They "shall have full power to make general rules, orders and regulations for the government and management of the Health-Office and [the] Marine Hospital."²²⁹ Interestingly, despite the requests from both Rush and the College, the new law kept the duties of the resident and consulting physicians unaltered and did not require a minimum number of physicians as Managers. This larger organization required funds and those unfortunately, usually came from the purses of Philadelphia's merchants. They had no alternative but to pay for the additional expenses involved when their ships stopped for inspections, purification, and mandatory quarantines. When that failed, residents within the county paid an additional tax.

The "civil rights" costs, as an earlier writer coined them, included fines against Philadelphians for boarding or lodging any recently arrived individuals "who shall be taken sick of any disease whatsoever, between the first day of May and first day of November in any year." Any illness must be reported within twenty-four hours on pain of arrest, conviction, and fine. Additionally, Board of Health members now had the authority to remove anyone suffering from a contagious disease or isolate them where they resided. Both of these measures proved unpopular in 1797, but the physicians considered them vital provisions in preventing the spread of disease.²³⁰ Philadelphians

²²⁹ State of Pennsylvania, *Compilation of the Health-Laws*, p. 45.

²³⁰ *Claypoole's American Daily Advertiser*, April 14, 1798.

fervently prayed that the price was sufficient to protect them from the devastation of yellow fever.

The test for measuring the success of the new laws, and the resolve of citizens and officials alike with enforcement, came towards the end of June. As indicated by nineteenth-century historians J. Thomas Scharf and Thompson Westcott, "considerable excitement was created by the arrival of several vessels having on board a number of frenchmen and negroes." When British troops occupied Port-au-Prince, many residents and their slaves fled to the United States, landing at several ports, including Philadelphia. Initially, Governor Mifflin and the Board of Health feared the influx enough to request help from President Adams, especially since pro-French enthusiasm languished among Federalists.²³¹ This fear gained credence when David Pinkerton, a passenger on board one of those same ships undergoing quarantine, warned authorities that penniless armed passengers and their slaves might mutiny and force their way into the city.²³² In the midst of worrying about this threat, and despite the repercussions of a similar influx in 1793, the seemingly obvious health-related reasons for denying them admittance slipped notice.

²³¹ J. Thomas Scharf and Thompson Westcott, *History of Philadelphia, 1609-1885*, 3 Vols. (Philadelphia, L.H. Everts & Co., 1884), 1:494.

²³² *Calypool's American Daily Advertiser*, June 28, 1798. The French responded to Pinkerton's charges in *Porcupine's Gazette* on June 30, 1798. In an effort to defuse the situation, they assured Philadelphians that they are all peaceable people and of good character, and that we all have fortunes more or less considerable, already lodged in the United States of America. ... All the slaves have followed their owners from choice, but not one of them is armed, nor is there one of them that ever bore arms. Among the list of passengers refuting the unfounded rumors was the Marquis De Rouvray.

Philadelphia began July in a healthy state, but by the end of the month, panic began to set in once more, as the pale faced messenger started collecting its inhabitants. "The month commenced with uncommonly hot weather," as readers of the *Philadelphia Monthly Magazine* read, "the city being pretty free from sickness." In their July edition, Thomas Condie and Richard Folwell noted the death of General Rouvray, just arrived with other French citizens from Port-au-Prince. They also mentioned "that a gentleman by the name of Mark Millar died of what was thought to be a distinct Yellow Fever."²³³ Although cholera and dysentery also appeared at this time, word of yellow fever in town spread quickly and alarmed the citizens. Elizabeth Drinker, having decided not to remove to the country this year, mentioned the unfortunate young man in her diary. On July 2, she wrote, "S. Sañsom says that the board of health meets this evening in consequence of this Young Mans death, who had all the Symptoms of Yallow fever." On July 9, Claypoole's paper contained a short note stating "the Ship Deborah, Capt. Yard, has arrived at the Fort from Jeremie."²³⁴ At the time, it seemed an insignificant entry, amid all the other ship arrivals. Just two weeks after Millar's death, yellow fever claimed the life of a physician who treated him. Drinker recorded on July 16, "we were invited this Afternoon to the funeral of Dr. Hugh Hodge tomorrow morning at 8 o'clock, he died this Morning some say of a billious fever—Thoms. Forests Son dead at Germantown, said of a billious fever—John Allen MC. called Congress broke up."²³⁵ On July 18, the Health Office warned the citizens of Philadelphia not to undermine their quarantine

²³³ Thomas Condie and Richard Folwell, *Philadelphia Monthly Magazine* 2:7 (1798), p. 54.

²³⁴ *Claypoole's American Daily Advertiser*, July 9, 1798.

²³⁵ Drinker, 2: 1049, 1054.

efforts. The "frequent communications between citizens of Philadelphia and elsewhere, and persons on board of vessels under quarantine, by means of boats going along side," presented a great health hazard. In order to deter such behavior, the Board "resolved that every vessel with which such communication has been permitted, shall perform an additional quarantine of five days."²³⁶ In the event, that the yellow fever was not imported the Select and Common Councils on July 19 ordered City Commissioners to clean up the city. They must employ enough people "to cleanse and wash the gutters of the streets, lanes and alleys, within the paved parts of the city and be strictly enjoined to a most vigilant and scrupulous attention in keeping the streets, lanes, alleys and gutter of the city constantly free and clear of all noxious matter and filth of every kind."²³⁷ Due to these extraordinary exertions, according to Condie and Folwell, "the streets, lanes and alleys, within the city, were never known, in any former period, to be kept cleaner, or in better order."²³⁸ Still, with growing concern, Drinker recorded a man's death close to her residence on the last day of July. "It is said that a man, between this and arch street died last night, and was buried very early this morning—we have heard several accounts within these few days of deaths, said to be the billious fever."²³⁹ Among an excitable populous, these rumors of yellow fever deaths could easily trigger a stampede out of the city, shutting down businesses and abandoning the lower sort to suffering and death

²³⁶ Claypoole's *American Daily Advertiser*, July 18, 1798.

²³⁷ Claypoole's *American Daily Advertiser*, July 31, 1798.

²³⁸ Thomas Condie and Richard Folwell, *History of the Pestilence Commonly Called Yellow Fever, which Almost Desolated Philadelphia, in the Months of August, September & October 1798* (Philadelphia: Folwell, 1799), p. 34.

²³⁹ Drinker, *Diary*, 2:1059-1060. Henry and Elizabeth Drinker lived at 110 N. Front Street, just one block west of Water Street and all the docks and warehouses along the Delaware River.

unless benevolent citizens again voluntarily came to their aid.

On August 7, the *Porcupine Gazette* triggered that stampede when it announced the presence of yellow fever in the city along with the several resulting deaths.

"According to all the accounts I have heard of the matter, it spreads with greater rapidity than it did last year." The author hoped everyone would put aside beliefs about its origin and instead help protect the city's inhabitants. They needed to prepare "as quick as possible, to make provision for removing those who have not the means of removing themselves, to situations more healthy." The College of Physicians promptly recommended isolating the disease, just as they had the year before. "Procure the removal of all the families that are situated between Walnut and spruce streets, and the east side of Front and the river," they told the Board of health. "And, have all the shipping lying between Walnut and Spruce streets removed to a proper distance from the city." Upon investigation, the board traced many of the deaths already reported from yellow fever to several ships in port, including the *Deborah* and the *Nestor*.²⁴⁰ The Academy of Medicine also met that week and sent their recommendations to the Board of Health. Before giving their recommendations, they asserted that yellow fever was not contagious. "Many respectable modern authorities assert that the yellow fever is *not contagious* in the West-Indies, and repeated observations satisfy us, that it is rarely so

²⁴⁰ Condie and Folwell, *History*, pp. 46-49. A day laborer that worked on board the *Deborah* died after a short illness, and a passenger from the *Nester*, lately taken to the Marine Hospital died. Besides the *Deborah* and *Nester*, the surrounding neighborhood where the brig *Mary* unloaded her cargo suffered several sudden deaths.

during the *warm weather* in the United States.” Notwithstanding their assertions, the Academy also suggested “the removal of all the families from those parts of the city where the disease appears chiefly to exist, and the preventing those parts being visited by the citizens.”²⁴¹ Deaths for the first eight days of August totaled fifty-three. By the eighth, the infection spread to the debtors prison, the City Hospital opened, and, wrote one editor, “people are moving out of the city in every direction, and, if the hot weather continues, there is no doubt that two-thirds of the inhabitants will leave their houses.”²⁴² As deaths mounted, Philadelphians fled, shut themselves up in their houses, or faced the grim reaper as they helped their less fortunate brethren.

Throughout the remainder of August, inhabitants left the city in huge numbers, remembering the dreadful scenes of 1793 and 1797. Families loaded their belongings in carts and sought shelter in neighboring towns and villages. Condie and Folwell observed streets full of departing people with their belongings. “Streets were crouded with waggons and carts, loaded with goods and furniture. Forty or fifty waggons, besides carts, have been seen in their route to the country, in one direction.” The exodus only slowed after September arrived. Those same chroniclers believed that out of the estimated population of fifty-five to sixty thousand persons, “about forty thousand may have removed from the city.”²⁴³ Luckily for the refugees, most country folks no longer feared the spread of the fever into their areas, so they willingly rented out parts of their

²⁴¹ Ibid., pp. 50, 51.

²⁴² *Porcupine Gazette and United States Daily Advertiser and Claypoole's American Daily Advertiser*, August 8-10, 1798. Quote from *Porcupine Gazette*, August 9, 1798.

²⁴³ Ibid., pp. 54, 55.

homes to the fleeing refugees. Once the alarm of yellow fever sounded, it took very little time for Elizabeth Drinker and her married daughters to decide on flight. Eldest daughter Sally and husband Jacob Downing moved to Downingtown with their children early in the season. Nancy and her husband John Skyrin, and their girls left to join the Downings on August 19. Her pregnant youngest daughter Molly and her husband Sammy Rhoads quickly fled to Germantown on August 8. Elizabeth, along with her husband Henry, son William, and sister Mary, finally left for Germantown, to be near Molly, on August 22. Unlike their spacious accommodations at home, the Drinkers shared one half of a house with some Frenchmen who irritated Elizabeth. "They were jabbering last night, but I could not understand them," she wrote in her diary. "They are nearer than I like, I stoped the keyhole this morning with paper—had but a poor night."²⁴⁴ Besides her noisy neighbors within the house, Richardett moved his Coffee House from Philadelphia to the house next door. "If it would be right to let triffels incommode us," Drinker stoically observed, "the noise late at night in the yard, the lodgers in next room, as they have part of this house, singing &c. would be very disagreeable."²⁴⁵ Although scattered throughout the countryside, at least Drinker believed her family was safe from the yellow fever that now haunted Philadelphia.

As Drinker and her family decided to flee, Edward Garrigues, a wealthy Quaker carpenter and master builder, chose to remain. He returned from New York just before

²⁴⁴ Drinker, *Diary*, 2:1062-1072. Quote p. 1072. Elizabeth was very concerned for her daughter Molly since her first child was stillborn the previous June. Dr. Shippen successfully delivered Molly's overdue girl around October 8 while still in Germantown.

²⁴⁵ *Ibid.*, 2:1072-1073.

official recognition of yellow fever within the city. When the Board of Health requested certain parts of the city and wharves vacated, Garrigues debated whether he should stay and help or flee to safety. On August 8, his diary reflected this inner struggle:

May this, O my Soul, lead thee to examine on what ground thou stands, and however it may be the lot of any to either stay here and suffer with the sufferers, or remove with those who may be indulged with that liberty, remember that no man is thy pattern; but that thou may be preserved attentive to that still small voice which will preserve in resignation, if not departed from, is the anxious desire at present.²⁴⁶

Just as he did the year before, this devout Quaker remained, despite the growing numbers of sick and dying. This private resolution to trust God and stay was sorely tested when Margaret Price Garrigues, his wife, became ill on August 16. He greatly feared her death after reading the papers during the first few days of that illness. "The last evening and this morning appear awfully alarming to the mind," Edward wrote on August 19. "It appears to corroborate the sentiment of none who have received this putred fever recovering again, which in many instances appear like that of 1793, seizing on those who are in the prime of life and health." Although her short-lived indisposition was not yellow fever, his personal trust in God involved the possibility of losing his beloved wife or even his own life. Thus, while the Drinkers packed their belongings, shut down their house, moved to Germantown, and spent some sleepless nights next door to a pub, Garrigues nursed his wife, relieved several Quaker widows, went to North and Pine

²⁴⁶ Anita DeClue and Billy G. Smith, "Wrestling the 'Pale Faced Messenger' The Diary of Edward Garrigues During the 1798 Philadelphia Yellow Fever Epidemic," *Explorations in Early American Culture Pennsylvania History* 65 (1998), p. 249.

Street Meetings, attended to some business in Frankfort, and prepared "to meet the Awful Judge of Quick and dead."²⁴⁷

By the end of August, Philadelphians realized that this epidemic was going to be deadlier than previously envisaged. On August 25, the daily death rate reached forty. A staggering six hundred and twenty six people died that first month—one hundred and sixty five more than in 1793.²⁴⁸ Some citizens questioned the non-contagious nature of the disease when early refugees succumbed to the fever. As one writer explained, "many persons who had gone into the country for safety, were afterwards seized with the fever." He believed it was "more than probable that they had imbibed the contagion before they left the city."²⁴⁹ Consequently, the Board admitted these sufferers into the City Hospital, where numbers swelled to fifty-four on August 25. That same day, physicians announced forty-nine new cases. While trying to isolate the sickly parts of the city, officials needed a place to house and provide for the healthy that were too poor to escape the city. Condie and Folwell described their plight: "deprived, as they were, of all employment, and unable to procure money from those who owed them, rendered them incapable of removing their families to the country; and many of them almost, literally, starving."²⁵⁰ To help ease their troubles, the Guardians of the Poor and the Board of Health formed a

²⁴⁷ Ibid., pp. 250-253. Quotes, pp. 251 and 252 respectively. Drs. Philip Syng Physick and Samuel Cooper of the City Hospital wrote to Dr. Rush for suggestions in treatment since they seemed unable to cure any of their patients.

²⁴⁸ James Robinson, *The Philadelphia Directory, City and County Register, for 1803* (Philadelphia: William Woodward, [n.d.]), p. 15.

²⁴⁹ Condie and Folwell, *History*, p. 62.

²⁵⁰ Ibid., p. 62. Another tent encampment opened at Masters' Place.

committee to construct two tent encampments. Their notice in the newspapers informed the public "that Tents are now erected near the Banks of Schuylkill and that it will be necessary for any person or family, who wish to remove there, to produce a recommendation from some respectable Citizens."²⁵¹ One committee member, Isaac Price, (the brother of Margaret Garrigues), bravely aided the poor at the tent encampments. The city barely survived the epidemics' first month with its unexpectedly high death toll. Historian Mary A.F. Mansfield pointed out the difficulty of trying to bury the dead. "Towards the end of August," she observed, "so many died that the dead were buried in trenches and dirt taken from one was used to fill in the other trench."²⁵² Lamentably, there was no end in sight. Everyone realized that this crisis was still building. Only cold weather stopped the slaughter, and that was months away.

Fearing the complete ruin of Philadelphia, an overwhelmed Health Office requested help from their fellow citizens on September 1. "Impelled by the awful progress and unparalleled malignity of the prevailing fever, we are constrained to address your feelings, as well as your reason, in order to avert the fatal destruction, which, with rapid strides, is pervading our ill-fated city and suburbs." For the past month, they admitted, citizens continued to sicken and die at alarmingly high rates while every treatment used by physicians failed to save their patients. The Board used their power to alleviate the suffering of those under their care as they tried to stop the spread of this deadly disease, but their efforts seemed dwarfed compared to the magnitude of the crisis.

²⁵¹ *Claypoole's American Daily Advertiser*, August 25, 1798.

²⁵² Mansfield, p. 90.

Therefore, they pleaded, "it remains for our fellow-citizens to attain, by their energy, the ends, which, alone, can stop its progress and diminish its horrors."²⁵³ The tent encampment on the east bank of the Schuylkill River already housed twelve hundred poor from the city, with many more in need. Maintaining the ever-increasing numbers of poor by using the funds allocated to the Overseers of the Poor was impossible. The Board needed money, supplies, and volunteers to create, supply, and manage another tent encampment on the west bank of the Schuylkill River. Just as they had done in past crises, Philadelphians immediately responded with donations of money and supplies. City dwellers waiting out the fever in Germantown immediately responded to the call for help. Meeting together in a schoolhouse, they formed a committee to raise thirty thousand dollars by subscription, "for the assistance and relief of our suffering fellow-citizens."²⁵⁴ Other generous people dropped off goods and money at the tent encampment. As if to soften the grim reports from the City Hospital, the Board also noted donations received alongside them. In the first ten days of September, they received cartloads of straw, bushels of vegetables including potatoes, onions, and cabbages, loaves of bread, rice, fish, pork, apples, and bank notes. Even as money and donations arrived, the requested tent encampment at Master's Place opened on September 10. Although the daily death rate climbed into the seventies and new cases still numbered over ninety, inhabitants began to take back their city.²⁵⁵

²⁵³ Condie and Folwell, *History*, p. 63, 64.

²⁵⁴ Claypoole's *American Daily Advertiser*, September 6, 1798.

²⁵⁵ Claypoole's *American Daily Advertiser*, September 1 - 12, 1798.

In late August, as inhabitants continued their flight from the city, and government offices removed to safer havens, Garrigues and his family remained in town giving comfort and aid to others, while thanking the Lord for their continued good health.²⁵⁶ On Saturday, August 25, he helped some friends move into the country to escape the fever. Late that evening, upon meeting a dear friend and being concerned for his health, tried but failed to convince him to spend the night with his family. His sense of foreboding proved correct as his friend contracted the fever. The following day he wrote: "Soon after I arose a physician called on me to inform that our dear Stephen Grellet was taken with this dire disorder, which now seems as if it was giving the pale faced messenger full employ in our devoted City." Later that morning, while attending an almost empty Meeting, Garrigues disappointedly noted the nonappearance of Quaker leaders there. "May this absense of many of the forefront excite some of us to industry lest we should be found inadequate to hold our Religious Assemblies."²⁵⁷ Garrigues quietly continued aiding the needy and visiting the sick and their families, while worrying about Grellet's chances of recovery. The grief he daily witnessed as he made his rounds upset him so much as to haunt him at night. "The night past," he wrote on the morning of September 2, "being much disturbed in my sleep under an apprehension of the distress of my fellow creatures of this neighbourhood, Being several times raised up in the night under this

²⁵⁶ *Porcupine Gazette and United States Daily Advertiser*, August 21, 1798. Included in their long list of the removals of public offices were the federal offices of the Departments of War, Treasury, Navy, and State, all moved to Trenton. The Post Office moved to the north side of Market Street, somewhere near Eleventh, well away from the stricken parts of the city.

²⁵⁷ DeClue and Smith, p. 253.

idea.”²⁵⁸ The next day brought improvement in Grellet, but brother-in-law Isaac Price took the fever. During the next week, Garrigues helped another friend to move to Darby, moved both Grellet and Price into his home, and helped bury many Friends, including Dr. J. Cooper, the attending physician at the City Hospital. He also continued visiting the sick and comforting their families. “Went my usual visits to the sick and to one other where I found such a fixedness to this world and the things there that my feelings were much wounded.” However, Garrigues also witnessed faith and resignation later that day when visiting another family. “This day the solemn scene was closed with the head of the house,” previously visited by Garrigues and another Friend. His “tender and affectionate wife and daughter nursed him without the least fear and with the most tender assiduity possible.”²⁵⁹

On September 11, just as the city crawled back from the precipice of ruin, Garrigues contributed to that recovery first in his usual quiet and private way, and later as a citizen volunteer. At the time, he worried about his brother Isaac. As a member of the Board of Health, Isaac conscientiously served his fellow citizens, especially at the Schuylkill tent encampment, until struck down. Now, surrounded by family and nursed by his sister, Isaac’s case still looked grim. The increasing death toll and new cases of fever kept Garrigues busy at all hours of the day and night. “Near midnight was called in an uncouth manner to assist the family of a deceased member.” He frequently helped newly made widows inter their loved ones because other family members were out of the

²⁵⁸ DeClue and Smith, p. 255.

²⁵⁹ *Ibid.*, p. 257. Garrigues reflected on both cases. When his time came, he wanted to be able to trust God and let go of life here in order to live eternally in Heaven.

city. It became clear over the next several days that Isaac would not recover. He died September 15 and the next few days found the families grieving together. Upon his return to town, Garrigues determined to help even more. "Met in the afternoon with some others to devise means of relieving the sick poor publicly, with a good degree of satisfaction."²⁶⁰ They formed a committee with Garrigues as president, and volunteered their services to the authorities. Entitled "Relief of the Poor," Claypoole carried the information in the September 20 edition of his newspaper. "The undermentioned persons are appointed," the notice began, "for the purpose of relieving such of their fellow citizens, whose situation renders it improper for them to remove to the encampments."²⁶¹ On September 22, Garrigues spent his waking hours attending to both his private and public duties to the sick and poor. At that same moment, his beloved Margaret fell ill to the yellow fever—one of the eighty-six new cases that day. In less than a week, Garrigues too, contracted the disease.²⁶²

It was the combined efforts of the boards, managers, guardians, and volunteers, in addition to the generous donations forwarded for the sick and poor, that finally brought order and relief. Order was particularly important at the city prison, especially when the jailer fled. After a serious disturbance there on September 17, Peter Helm volunteered his services. Condie and Folwell recalled his past service to the city and praised him again for his zealous work at the jail. "After Mr. Helm took charge of the jail, he resided

²⁶⁰ Ibid., p. 260.

²⁶¹ Claypoole's *American Daily Advertiser*, September 20, 1798. Thomas Savery of the 1793 Committee also joined this group.

²⁶² DeClue and Smith, p. 260-261. Claypoole's *American Daily Advertiser*, September 24, 1798. Burials during the same period were 68 and the hospital housed 164 patients.

there day and night—watched the convicts, and attended the sick, alternately.”²⁶³ As in 1793, not all those who contributed to saving the city survived. While mourning the loss of Dr. Cooper and Isaac Price, members continued at their various posts, trying to keep the pale faced messenger at bay until colder weather would end the siege. Temperatures finally fell into the low fifties and forties at the end of September, thus slowing mosquito activity.²⁶⁴ Deaths gradually dropped after reaching one hundred and six on September 28. New cases peaked at ninety-six on September 26 and the maximum number of patients in the hospital began to decline after September 21 when one hundred and sixty-four received medical attention.²⁶⁵ The two tent encampments on the Schuylkill and at Master’s Place provided relief for eight hundred and seventy-nine, and two thousand twenty-four poor, respectively. Donations helped alleviate part of the suffering of those who fled their homes as the fever advanced. Sympathetic and generous individuals sent money, along with a variety of meats, vegetables, fruits, herbs, cheese, and flour. They also sent straw, clothing, blankets, linens, and such articles as newborn babies and their mothers require.²⁶⁶ By the time Edward Garrigues recovered enough to write in his diary, the worst was over.

On October 12, with his wife Margaret well enough to visit family and friends outside the city, Garrigues resumed his efforts to bring aid and comfort to the

²⁶³ Condie and Folwell, *History*, p. 93.

²⁶⁴ *Ibid.*, *History*, p.25. September 25, 26, 28, 29, and 30, temperatures dropped at least ten degrees over the previous week. It ranged from a low of 39 to a high of 65. Winds on those same days were out of the north or west.

²⁶⁵ *Claypoole’s American Daily Advertiser*, September 24–29, 1798.

²⁶⁶ Condie and Folwell, *History*, pp. 87, 89. *Claypoole’s American Daily Advertiser*, September 25, 1798 to October 4, 1798.

unfortunates still residing in the city. "This afternoon spent with my Colleagues in striving to mitigate the suffering of some of the distressed of those now labouring under poverty and disease." Garrigues preferred the private work he performed, because both the helper and the helped remained unknown to others. Unfortunately, citizens who were usually employed and self-sufficient found themselves in the humiliating and "painful circumstances of making a public application for relief."²⁶⁷ But, the end was in sight for on that same day, only forty-one people died, physicians report just forty-seven new cases, and the hospital housed only eighty-two of which half were recovering. Even with this much cooler weather, however, the Health Office warned against coming back in town too soon. "The apprehension of the Board has been awakened by the too hasty return of many individuals who have inconsiderately hazarded their own health and the public welfare' several of whom the Board are sorry to add, have been seized with the fever shortly after their return." They also strongly advised everyone to properly cleanse and purify their homes and belongings before moving back into the city.²⁶⁸ The Health Office repeated those same warnings on October 23 because the temperatures remained mild—with no frost in sight.

The much-anticipated frost finally arrived on October 29; the city and her inhabitants could now gradually get back to normal. Rejoicing in the cold weather, Garrigues wrote, "there being frost this morning so severe as to cause ice, it appears to enliven the minds of many persons with hope that this dreadful Pestilence will subside."

²⁶⁷ DeClue and Smith, p. 262.

²⁶⁸ *Claypoole's American Daily Advertiser*, October 12, 1798.

On the morning of October 31, he happily observed that because of "the Continuance of the frost, many of our fellow citizens are returning to their homes in hopes that the Cold has destroyed the force of the Pestilence."²⁶⁹ The Board of Health agreed. On November 1, they invited citizens to return home, but again strongly warned them to send someone first to purify everything before moving back into their houses. It was also time for the encampments to close, returning their temporary dwellers to their homes and daily work routines. Elizabeth Drinker finally returned to her home on November 5, after many unpleasant experiences in the countryside.²⁷⁰ Philadelphia came back to life: government offices moved back and opened for business, the Post Office returned to its usual location downtown, Mr. Richardett reopened the City Tavern, mandatory quarantine of ships ceased, and the City Hospital closed. Still, newspapers printed far too many estate notices requesting the settlement of accounts of the deceased. These were lingering reminders of how many people fell victim to the fever.²⁷¹

The experiences of yellow fever for some inhabitants proved so emotionally charged that only poetry could convey their feelings, as when COLUMBIA penned these moving lines in a verse entitled "Philadelphia – An Elegy." The author remembered

²⁶⁹ DeClue and Smith, p. 265.

²⁷⁰ Drinker, 2: 1074-1105. Elizabeth hated the place they rented in Germantown. She wanted to leave there and go live with her son at North Bank, but had to find someone to stay near Molly since she was due very soon and had lost her first child. Eventually, her sister remained while Elizabeth left on September 10. On October 2, she learned that daughter Sally was thrown off a horse and probably broke her arm, at Downingtown. Elizabeth left North Bank for Downingtown to be with her daughter. Throughout the entire fever season, Elizabeth complained of an assortment of ailments, even resorting to the thing she hated most, being bled.

²⁷¹ *Claypoole's American Daily Advertiser*, November 1-26, 1798 and *Aurora General Advertiser*, November 29, 1798.

better days, mourned for the deserted city, but believed the metropolis could be great once more.

Imperial daughter of the West,
Why thus in widowed weeds recline !
With every gift of nature blest,
The empire of a world was thine.

What foe with more than Gallic ire
Has thin'd thy city's thronging way !
Bid the sweet breath of youth expire,
And manhood's powerful pulse decay !

No Gallic foe's ferocious band,
Fearful as fate, as death severe;
But the destroying Angel's hand,
With hotter rage, with fiercer fear.

I saw thee in thy prime of days
In glory rich, in beauty fair;
When Morris, partner of thy praise,
Sustain'd thee with a patron's care.

Columbia's Genius veil thy brow,
Guardian of Freedom, hither bend—
The prayer of mercy meets thee now—
With healing energy descend.

Chase the hot fiend whose tepid tread,
Consumes the fairest flower that blows;
Bends the sweet lilly's bashful head,
And fades the blushes of the rose.

Even now his omened birds of prey
Through the unpeopling mansions rove;
Drench'd is that eye's inspiring ray
And lost that breezy lip of love.

Yet guard the Friend, who wandering near
Haunts which the loitering Schuylkill laves,
Bestows the tributary tear,
Or fans with sighs the drowzy waves.

And while his mercy-dealing hand
Feeds many a famish'd child of care;
Wave round his brow thy saving wand,
And breathe thy sweetness through the air.

'Till borne on Health's elastic wings,
Aloft the rapid whirlwind flies;
The coldest gale of Zembla bring
And brace with frost the dripping skies. —

Imperial daughter of the West
No rival wins thy wreath away;
In all the wealth of nature drest
Again thy sovereign charms display.

See all thy setting glories rise,
Again thy thronging streets appear;
Thy mart a hundred ports supplies,
Thy harvests feed the circling year.

COLUMBIA²⁷²

²⁷² Claypoole's *American Daily Advertiser*, October 23, 1798. Other parts of the poem focused on the original plans for the waterfront. Penn wanted the area that became Water Street, to be lined with great poplar, oak, elm, and pine trees; this was consistent with the green town he envisioned. The poet pointed out that if those trees had been there, the pestilence would not have manifested there and caused so much death, sorrow, and destruction.

John Cox, an evangelical shoemaker, also turned to verse. The opening of his "Rewards and Punishments" summed up the city's miserable state in a more effective manner than prose. Each line evoked a mental image not easily forgotten.

Remember, lately Philadelphia mourn'd,
Her joyful place, was to sadness turn'd.
Her commerce ceased, her trade was at a stand,
And unemploy'd was her laboring hand,
Her citizens their houses fast forsook,
One at another gaz'd with fearful look;
Kinsmen lost their affection for each other,
And in great haste brother fled from brother
So careful were to preserve their lives,
They left their children and even their wives.²⁷³

After a close brush with death, John Purdon also turned to poetry as the only way to convey his feelings. In his poem entitled "Reflections on the Dispensations of Providence in afflicting the City, and the Writer in particular, with the Fever in the year 1798," this poet relied on his faith in God for deliverance of himself. Returned from the brink of death, he also brought back a message of hope for his fellow inhabitants.

In straits of great difficulties,
When dangers did me press,
The Lord was pleas'd to shew to me
Relief in my distress.

His rod he on me laid,
To let me know I'm in his school,
For in his sovereign way to rule,
A trial here was made.

He made me taste the cup, to try
My faith; but he was kind
Enough, to put the bitter by,
And kept the dregs behind.

To scourge a guilty land for sin,
How quick his arrows fly;
At noon-day and at midnight hour,
They cry out, groan, and die.

Of all our ills, therefore
Let's come, and get the antidote
That monster, Sin, the cause
Sprinkled on heart and door.

That sov'reign remedy, the blood
Of Christ, shed for all those,
That will by faith apply the same
Tho' formerly his foes.

²⁷³ John Cox, "Rewards and Punishments" In *Poetry About Philadelphia's Yellow Fever Epidemics*, p. 1.

He rais'd me up, that I may yet,
 Praise him within the land
 Of living men; for such do get
 Instruction from his hand.
 O may our nation hear the voice,
 Of this his present rod,
 That speakers i[] awful pestilence
 The anger of our god.

O ! for to see the people throng
 To this Dispensary,
 Where, without money it is bought,
 Yet to all sinners free.²⁷⁴

Just as poetry was the best form for some to express extreme emotions, balance sheets and business prose were the appropriate modes when stating facts—and Governor Mifflin wanted all the particulars. As in the equally destructive epidemic of 1793, Mifflin requested specific information from the Board of Health. “The Governor,” as his secretary A. J. Dallas wrote, “is desirous of submitting to the legislature, a comprehensive view of the mortality and expenditure produced by the calamity,” just concluded in Philadelphia. The Legislature wanted answers to the when, where, and how questions relative to the yellow fever, including mortality rates. Mifflin also requested information concerning how the Board and their associates dealt with the calamity. “What was the general polic[y] pursued by the Board, the overseers of the poor, and their agents, to subdue, or mitigate the disease, to aid the sick, to inter the dead, and to maintain the poor?” Also included were questions concerning expenditures, loans, contributions, and the like. With keen perception, the Governor asked about relief funds

²⁷⁴ John Purdon, *A Leisure Hour; or a Series of Poetical Letters* (Philadelphia: Stewart, 1804), pp. 18-19. Purdon found himself helping the College of Physicians prove that yellow fever was imported into the city from the West Indies by ship. While visiting an Alexander Philips on the 1st or 2nd of August, he learned that Philips broke the quarantine laws by going down to the fort, boarding one of the ships, and bringing back to his house one of his old lodgers. That lodger was already ill. In shock, Purdon immediately left. Mr. Philips died of the yellow fever on August 5. Whether Purdon contracted yellow fever during this particular visit is unknown. The Academy of Medicine published letters from Mrs. Phillips and other lodgers to the contrary in order to prove local generation.

for the poor. "What is the number and condition of the citizens who have been relieved, and will any extraordinary aid be necessary, on the part of the legislature, for the support of the poor during the ensuing winter?" He closed by asking for their participation concerning preventive measures for the future.²⁷⁵

William Jones, President of the Board of Managers, replied by sending a detailed report to the Governor on December 1. They resisted choosing between imported or local origin for the pestilence, because they could not trace it back to anything specific. Jones also calculated that the epidemic lasted three months, claiming the lives of three thousand six hundred and forty five persons within the city. The crisis management team in 1798 tackled problems as they occurred, just as their brethren had in 1793. They opened the hospital, procured physicians, nurses, gravediggers, and transportation personnel. This team enforced the quarantine laws as thoroughly as possible, removed ships from wharves in an effort to isolate the disease, and created two tent encampments in an effort to remove as many needy people from the infected parts of the city as possible. The balance sheets reflected the enormity of the disaster. They raised \$56,944.96 by taxes and loans and received \$35,998.51 in contributions. Expenditures included \$37,015.25 by the hospitals, \$37,359.69 for both tent encampments, and \$11,598.68 for the relief of the poor throughout the city and suburbs. At the time of this report, the treasurer held \$6,969.76. However, as Jones pointed out, "this sum will be inadequate to the discharge of the debts now due by the said

²⁷⁵ Thomas Mifflin, Esq. Governor, *Letter from the Secretary of the Commonwealth of Pennsylvania, by direction of the governor, relative to the late Malignant Fever, to the Board of Health* (Philadelphia: Thomas and Samuel Bradford, 1798), p. 3.

institutions.”²⁷⁶ Jones calculated the number of persons relieved at 11,353, and explained to Mifflin that this would be a very difficult winter for the poor if the legislature did nothing to relieve their misery after this recent catastrophe.

On the final question of prevention, Jones and his associates put aside their mixed feelings about the origin of yellow fever. They all appeared “to agree in the general system of police necessary to guard against its introduction in future.”²⁷⁷ Their solution of choice—a federal system of quarantine that would supercede or make uniformly strict all state quarantine laws. Until Congress passed one, they suggested a prison-type establishment downstream on the Delaware River. It “should be secured by a high and strong enclosure—wharves, ware houses, and other suitable buildings should be erected for the reception and purification of cargoes and accommodation of persons.”²⁷⁸ This would require a huge outlay of public monies and cost shippers and merchants as well because the Board also requested a mandatory twenty-day quarantine for ships from specific ports. With water routes covered, Jones also suggested laws prohibiting land travel or any other kind of communication with infected areas. In case the disease originated locally, they strongly suggested bringing running water into the city. Besides household use, the water would help keep the city clean. Besides washing down the streets and the sewers, they suggested using water for “the cleansing of all the docks to a depth below the level of low water mark, a strict attention to the removal of all filth and

²⁷⁶ Ibid., pp. 5-16. Figures from pp. 9-12. Quote from p. 12.

²⁷⁷ Ibid., p. 13.

²⁷⁸ Ibid., p. 14.

putrifying substances, and correcting the noxious effluvia from the privies.”²⁷⁹ Their last request was for the establishment of a large and permanent city hospital. This would help legitimize the hospital and staff in the eyes of inhabitants who would then not delay seeking aid during the next health emergency.

Dr. John Redman, President of the College of Physicians, and Dr. Philip Syng Physick, President of the newly formed Academy of Medicine, sent letters to Governor Mifflin with their opinions and counsel. The College argued for importation of the fever giving two reasons for their decision. “It differs essentially from any other disease which is common to the country,” they explained, “and agrees in its most essential symptoms, with what is called the yellow Fever in the West Indies.” Moreover, “it has been regularly traced to the vicinity of some vessel or vessels, from the West Indies; or to persons or cloathing connected with them.”²⁸⁰ Conversely, The Academy argued for local generation. They traced the contagion to several sources within the city and on board vessels docked in port. “We believe it was derived from the exhalations of the alleys, gutters, docks, and common sewers of the city; and from stagnating water in its neighbourhood.” They also blamed “the foul air discharged with the ballast of the ship *Deborah*, and the cargo of the brig *Mary*.”²⁸¹

On the matter of the communicability of yellow fever, the College refused to speak to the matter. “To endeavour to prove the contagious nature of this disease would,

²⁷⁹ Ibid., p. 15.

²⁸⁰ College of Physicians of Philadelphia, *Facts and Observations Relative to the Nature and Origin of the Pestilential Fever, which Prevailed in this City in 1793, 1797, and 1798* (Philadelphia: T. Dobson, 1798), p. 16.

²⁸¹ Claypoole's *American Daily Advertiser*, December 11, 1798.

in our opinion, be equally useless as to prove the contagion of the plague."²⁸² Very clearly in disagreement, the Academy believed the very nature of the various sources of the disease allowed it to spread, unseen, outward from its points of local origin. "The disease was in no instance propagated by those persons who were supposed to have derived it from human contagion adhering to the timbers or contents of the *Deborah* and *Mary*, and who died with it in parts of the city remote from the influence of the foul air of those vessels."²⁸³ While these divergent opinions probably frustrated the governor and legislators, it was probably not surprising to them that both groups used the same information to support completely different points of view.

When it came to preventive measures, the College had nothing specific to recommend, while the Academy repeated many of the items Rush spelled out in 1797. Redman mentioned the inadequacy of the present health laws and suggested modeling Philadelphia's health laws on those so successful in European cities for keeping out the plague. Physick added a few new preventive measures centered on the avoidance of any type of putrefaction. He suggested constructing the docks in such a manner that the sun cannot shine underneath them and at low tide when all sorts of substances are exposed to the air and begin decaying. Where the common sewers of the city traditionally became the dumping ground for many foul things, the Academy wanted them fitted with covers that only allowed water to pass through them. As non-contagionists, Physick and his colleagues also wanted to change the existing health laws. They asserted that the

²⁸² College of Physicians, *Facts*, p. 17.

²⁸³ *Claypoole's American Daily Advertiser*, December 11, 1798.

“detaining [of] vessels with perishable cargoes for ten days at the hospital, in hot weather, [was] calculated to increase the foul air in their holds.” They also wanted a law that required all ships owned by city residents, to install and use ventilators.²⁸⁴

Even as the College and the Academy investigated and reported their findings to Governor Mifflin, and the collective Boards worked on wrapping up their epidemic-related business, Philadelphia’s citizens were not idle. A group met on November 16 to evaluate the current condition of their city. They formed a committee and met with the same group of people from which the Governor had requested his information. On November 23, Levi Hollingsworth, Thomas Parker, Jared Ingersoll, Robert Waln, James C. Fisher, Henry Drinker, Jr., and John Miller Jr. reported their findings at an open meeting. They strongly endorsed a federal quarantine law and volunteered to communicate those desires to members of Congress. Until the passage of such laws, the committee also suggested forming an association with other cities. We “further recommend the appointment of a committee to open a correspondence with all of the maritime cities or ports in the Union, stating the proceedings adopted in this city, advocating the necessity of effectual provision to prevent a return of the destructive calamity, and requesting their aid,” in the passage of the federal law. The committee, chaired by Levi Hollingsworth, also supported the introduction of running water into the city. He believed the City Corporation actively supported this suggestion also. They then added a list of health hazards that needed immediate attention. They believed “that the removing of the burial grounds out of the city, appointing some one place of deposit

²⁸⁴ *Claypoole’s American Daily Advertiser*, December 12, 1798.

from the putrid matter now scattered over our Commons, [to] be removed out of the city, further regulating and cleansing the common sewers, privies, docks, and wharves, and inspecting stores" are of secondary importance. After approving these suggestions, the attendees appointed a committee of nineteen representatives of the city and suburbs to assist officials in keeping yellow fever out of their city evermore.²⁸⁵

Conclusion

When another group of West Indian refugees arrived in Philadelphia in the early summer of 1798, apparently no one made any connections between this event and a similar one, just five years earlier, that produced the worst calamity in the history of the city. After the previous summer's epidemic, Philadelphians worried about the upcoming fever season despite all the improvements made in the health laws. They tired of the medical disputes, worried about the sluggish business environment, and grudgingly accepted the increased costs of a Health Office that failed them last year.

When a newspaper confirmed all the rumors floating around about yellow fever in the city again, they quickly fled by the tens of thousands. Without knowing it at the time, the removal of so many potential cases of yellow fever prevented the death rate in 1798 from greatly exceeding the incredible numbers posted in 1793. Luckily, most of the horrors Carey described in 1793 did not repeat themselves during this deadly season.

²⁸⁵ *Claypoole's American Daily Advertiser*, November 27, 1798. The College of Physicians recommended federal quarantine laws and regional cooperation following the 1797 epidemic.

The health office worked diligently, and when overwhelmed, requested and received help from their fellow residents. Thankfully, neither the sick nor the poor suffered in this newest epidemic as they had just five years before. Better-organized relief efforts, two well-staffed hospitals, and two tent encampments, all helped mitigate their sufferings.

Cooler weather in late September and early October slowed the feeding and breeding activities of the true culprit, the *Aedes aegypti* mosquito. Frost ended their lives and the epidemic in late October. Only then, did the health office invite their fellow residents back into the city. While officials wrapped up their work and the physicians on both sides backed up their opposing arguments with the same facts, another citizen group formed. They intended to pursue new and different avenues of opportunity to prevent the return of yellow fever, including the plans by an English engineer to bring water from the Schuylkill River right into their homes.

CHAPTER FIVE

THE BENEFITS OF A COLD AND RAINY SUMMER:
PHILADELPHIANS OVERCOME THE DREADFUL SUMMONER IN 1799

*Parents posses'd with haggard fear,
Their children leave; no ties can bind;
Thou break'st the bands of kindred dear,
And tear'st fine feelings from the mind.*²⁸⁶

Introduction

After the carnage recently inflicted on the city by the grim reaper, Philadelphians finally attended to sanitation. Again, citizens stepped forward to form a variety of committees. One such committee spent the winter months systemically eliminating any possible traces of leftover contagion. With purification well on its way, they turned their attention to the emptying of neglected privies. Considered a public nuisance, the committee aggressively notified owners and threatened legal action if ignored. Another group of citizens concentrated on bringing Schuylkill River water into the city. Having given up on the canal company, this committee heartily approved of the plans submitted by an English engineer and architect. After surviving three serious epidemics, residents equated their polluted well water with mortality and disease while they equated pumped in river water with vitality and good fortune. Unfortunately, the canal company had legal

²⁸⁶ A Citizen, *Fever; An Elegiac Poem*, p. 22.

rights that precluded financial help from the state legislature. Not the least bit deterred, a water committee began accepting subscriptions—if the state would not fund the project, its inhabitants would.

After such a deadly outbreak of yellow fever, the legislators, during their spring, session passed more health laws. The lawmakers gave the Board of Health additional powers, raised fees, required harsh criminal punishments, and expanded their jurisdiction to include the city and suburbs. Not only was this most recent set of health laws the strictest and most costly for Philadelphia's commercial interests, it compromised long held individual rights. The incoming members of the board experienced difficulties trying to balance the health and safety aspects of their responsibilities with the economic devastation that came with a declaration of yellow fever. After an incident involving a Delaware River pilot, both the board and the judiciary probably believed, as did Gilbert and Sullivan's Mikado: let the punishment fit the crime.

As the fever season approached, rumors of yellow fever again spread throughout the city. Beginning at the riverfront at the southern boundary of the city and suburb of Southwark, it slowly spread. When a group of physicians notified the Board of an increasing number of yellow fever cases in their jurisdiction, they disagreed and kept silent. For more than a month, the Board denied the existence of yellow fever in Philadelphia to both its inhabitants and their counterparts along the eastern seaboard.

Eventually, physicians confirmed the rumors with their friends and neighbors, but, amazingly, the first written notices appeared in out of state newspapers. The Board steadfastly minimized the risks, thus demoralizing an already nervous population. When

the board finally admitted, in late August, that a much weaker grim reaper was back to collect souls, citizens immediately fled. Unfortunately, for the poor who remained, the Board saw no reason to provide safe housing or other amenities even after their employers removed from the city and business activity ceased.

Many residents prayed to God that this epidemic would take fewer of their loved ones, especially compared to 1793 and 1798. Perhaps their prayers were answered in the form of a cold and wet September. The cooler temperatures prevented the *Aedes aegypti* mosquito from breeding and laying her eggs. Without new generations of this, yellow fever infections remained low, finally ceasing with the first frost. Residents began their homeward journeys in the first week of October. The Board officially declared their victory on October 19 as their vanquished enemy disappeared.

The Epidemic of 1799—Business Interests Conflict with Health Precautions

For Philadelphians, the New Year began just as it had ended, with an unprecedented amount of attention concentrated on things related to yellow fever. Inhabitants were more serious and involved than ever about making sure no contagion left from the previous epidemic survived to wreak its havoc. Many citizens feared that traces of corruption from the 1797 epidemic contributed greatly to the increased ferocity of their latest attack. They intended to eradicate every bit of contamination before warmer temperatures returned in the spring. On January 3, the citizen Committee of Wards appointed to study the problem and recommend a plan for the purification of all

yellow fever tainted articles published their proposal. There were five parts to their recommendation. The first involved choosing the city hospital as the best place for decontamination. "That the city Hospital being a suitable place to receive infected bedding, cloathing, &c. for the purpose of being cleansed, by process of fumigation, washing or other equally efficacious means be appropriated to this use." The Managers of the Marine and City Hospitals would oversee that operation. They next addressed finding of contaminated articles. A group of citizens within each ward would administer this part of the plan. They would "search out such places where the late fever had prevailed, and [send to the Hospital] such infected articles as they may be able to discover, and return them as expeditiously as possible to their proper owners." In cases of the burial or destruction of articles, the committee would compensate owners. To prevent chaos at the hospital, the committee's plan included a ward schedule. "That the wards be purified in rotation, commencing at upper Delaware and ending at New-Market, the acting Representative of a Ward to give notice to the Representative of the adjoining ward, at least 24 hours previous to the completion of his Ward." They next appointed four committee members to prepare the Hospital for the implementation of their plan. They would "procure a sufficient number of hands and provide materials suitable for fumigation, &c., [and then] notify the Committee of upper Delaware ward, the time when they will be prepared to received infected beds, &c." Since the purification process involved several expenses, a representative from each ward of the city would raise funds. Each person would "apply to the inhabitants in their respective Wards for their contributions, to create a fund to defray the necessary expences, in cleansing and purifmg

infected bedding, cloathing, &c.”²⁸⁷ With their plan presented and approved by the Board of Managers, the committee then appointed over one hundred citizens to implement it, as ward subcommittees. Among that long list of citizen volunteers was Samuel Bengé, the 1793 Committee member in charge of transporting the sick and burying the dead.

In these short winter months, vigilant citizens continued pushing for more sanitation measures. The Committee of Wards now turned their attention to another source of potential unhealthiness—the “necessaries” within the city limits. Many outhouses “have been long neglected,” they ruled, “and for want of being emptied and cleansed have become extremely offensive,” and a health hazard. They requested guilty parties to empty them before warm weather, hinting that sterner measures would follow. Going on the offensive, the committee printed and distributed copies of a strongly worded notice to the ward subcommittees for distribution: “You are hereby notified, that the Necessary on the estate you occupy is a public nuisance, and you are therefore requested to have the same emptied within fifteen days from this date, otherwise you will be proceeded against as the law direct[s].”²⁸⁸ Elizabeth Drinker noted the results of such zealous application of sanitation in her diary. “We were regaled last night by the emptying of a temple, somewhere in this Neighbourhood. There has been more work of that sort done this Winter than in any winter. The orders to clense the City from all filth

²⁸⁷ *Claypoole's American Daily Advertiser*, January 3, 1799. All quotes are from the minutes of the Committee meeting of December 31, 1798, chaired by Thomas Harrison.

²⁸⁸ *Claypoole's American Daily Advertiser*, January 10, 1799.

has set many to work in that way who would otherwise have neglected it.”²⁸⁹ Following the lead of the city ward committee, the citizens in the Northern Liberties decided to cooperate with the health board. Chaired by William Coats, inhabitants would also work to prevent another visitation by the grim reaper. They divided their township into six districts and appointed subcommittees “to carefully inquire into the situation of those houses where the late pestilential fever prevailed, and under Providence to take efficient measures for the prevention of the return of so great a calamity.”²⁹⁰

As part of the plans to purify the city, citizens seriously considered how best to bring in wholesome water for drinking, cooking, cleaning, and fire fighting. In 1789, Benjamin Franklin had suggested piping water into the city from a nearby creek. When his initial idea (and that of a Connecticut artisan) failed to capture the imagination, “the directors of the Delaware and Schuylkill Canal Company, which formed to build a canal around the Falls of the Schuylkill and bring water to Broad Street” became the likeliest candidate to carry out the project. In 1792, the Pennsylvania Legislature had incorporated the canal company, hoping it would be part of a network connecting Philadelphia with the interior. More importantly for the city, as Nelson Manfred Blake pointed out, “by its charter the new company received the additional right to supply the city of Philadelphia, and the neighbourhood thereof, with water, by means of pipes and other conductors, under public roads, streets and alleys” to citizens willing to pay for the

²⁸⁹ Drinker, 2:1149. The March 28 entry indicated that an unusually high level of sanitation activity occurred that winter.

²⁹⁰ *Claypoole's American Daily Advertiser*, January 12, 1799. The published notice did not mention any specifics as removing contaminated articles to the hospital for purification.

water.²⁹¹ Unfortunately, the company ran out of money and for several years, nothing else happened. Because of the disastrous yellow fever season in 1798, renewed cries for wholesome water circulated around the city. However, as Maas pointed out, the Canal Company "had a vested interest in seeing that the money being raised for watering the city go into canal building." The entire project seemed destined to languish again, until Benjamin Henry Latrobe offered another way in December 1798.²⁹² Therefore, in a very carefully worded memorial addressed to the Legislature, city officials praised everyone associated with the Delaware and Schuylkill Canal Company for their wonderful work, but stressed the incredibly important need to supply Philadelphia with water immediately, for another epidemic like the one just suffered could ruin the city.

Considering the distresses the citizens of Philadelphia have sustained from the prevalence of pestilential disease; the impending ruin threatened by its annual return, and that the introduction of pure and wholesome water, in the general belief promises to be one of the most effectual remedies, this object alone hath become paramount to every other inferior consideration, and therefore the Select and Common Councils at this time, confining their views to the health and safety of the city only, are desirous that this object of primary importance, shall not by any act of the legislature be made in any degree dependant on the completion of a navigable canal, as it may totally defeat the desired object or procrastinate its attainment for a length of time, ruinous to the welfare of the city.²⁹³

²⁹¹ Nelson Manfred Blake, *Water for the Cities: A History of the Urban Water Supply Problem in the United States* (Syracuse: Syracuse University Press, 1956), p. 18. Only six of the 16 miles necessary to bring water from Norristown to Philadelphia were dug by 1798. As with so many other stock companies, investors lost faith in the project and refused to continue providing the much-needed capital. However, until 1802, they held the exclusive right to water the city and suburbs.

²⁹² Eleanor A. Maas, "A Public Watchdog: Thomas Pym Cope and the Philadelphia Waterworks," *Proceedings of the American Philosophical Society* 125 (1981), pp. 134-154. Quotes p. 135.

²⁹³ *Claypoole's American Daily Advertiser*, January 11, 1799. City officials were extremely cautious in their wording of this memorial for the reasons stated above. They obviously believed Latrobe's plan would get them water much sooner than the canal company's plan could.

Philadelphians believed their wells contained impure water and they wanted an alternate supply away from the graveyards, polluting industries, docks, and privies. Having barely survived another deadly visit of yellow fever, citizens equated death and suffering with their existing water system and they linked health and prosperity with any plan that brought them fresh water from outside the city. Whether one believed yellow fever was imported or produced locally, most citizens agreed that a new water supply would improve the health of all inhabitants.

Despite losing their case with the Legislature, most of Philadelphia's inhabitants decided to support the Latrobe plan. In the spring, as the medical debates continued unabated in the newspapers, a group of leading citizens began soliciting their neighbors to provide the necessary funds. A notice entitled "Water Loan" appeared in several newspapers during the spring months. "The Commissioners for receiving subscriptions to a loan for supplying the city of Philadelphia with wholesome water," they declared, "give notice that they will call on the citizens for their subscriptions." Among the commissioners were people who had helped the city weather several yellow fever epidemics: William Jones, Levi Hollingsworth, John Inskeep, Jonathan Robeson, and Stephen Girard.²⁹⁴ By March 5, the commissioners received nearly seven hundred subscriptions, despite inclement weather that kept them from visiting more houses in their assigned neighborhoods.²⁹⁵ However, not everyone thought the project a good idea, notwithstanding the health benefits. In a long address to his fellow citizens, "J.W."

²⁹⁴ Claypoole's *American Daily Advertiser*, March 4, 1799.

²⁹⁵ *The Philadelphia Gazette and Universal Daily Advertiser*, March 5, 1799. Robeson died on September 6, after a severe illness of seven days, of a bilious cholic, according to Claypoole's.

presented several reasons not to support a project bringing Schuylkill River water into the city by use of fire engines. The first was water quality. "Surely no man unprejudiced, would ever think of taking water from a river whose bottom is muddy, and constantly stirred up by the ebbing and flowing of the tide, when clear and pure water can be procured at so short a distance as the Falls or Wissahicon Creek." As a canal supporter, the author believed that cutting the canal to the Falls "certainly cannot cost a great sum," and once completed, "the company would allow the city to make use of it, to bring the water to the city." Since the Falls were at a higher elevation, "J.W." believed the steam engines and their heavy consumption of fuels could be reduced "by cutting a race through the rocks, and fixing a water wheel, to do the business as effectually as the fire engine." He closed by arguing that all the monies needed for this grand scheme would ultimately be wasted. "It surely cannot be expected, that people will make use of the engine water at all, when the pure water is brought by the Canal, and at a much cheaper rate, too."²⁹⁶ Although opposition like this grew, enough citizens believed the need for a purer water source, and its accompanying health improvements, outweighed the expense. Therefore, as Nelson noted, "construction of the water works began on March 12, 1799, with the breaking of ground in Chestnut Street."²⁹⁷

With summer fast approaching, yellow fever precautions and reminders found their way into the newspapers. The Committee of Wards, after fumigating and purifying beds, clothing, and other contaminated items, now turned their attention to cleaning the

²⁹⁶ *The Philadelphia Gazette and Universal Daily Advertiser*, March 13, 1799.

²⁹⁷ Blake, p. 32.

houses where yellow fever struck. Included in their recommendations were "white washing, removing things offensive to the smell, and cleansing the houses throughout." They also admitted to the public their fear of failure. "We are not without apprehensions," declared the chairman, "that with all our exertions, we have not found out all the beds and cloathing which need the salutary effects of cleansing." He asked his fellow citizens to notify the committee if anything suspected of contamination came to their attention. His closing remark put their work into perspective. The committee had diligently attempted to rid the city of any leftover contagion. However, "we think it right to acknowledge our dependance is on the great first cause, who only can apply an effectual remedy, for the affliction which He in wisdom hath permitted to fall on our city."²⁹⁸ With the wellbeing of the city in mind, the Health Office also published a reminder to pilots on the Delaware River. Beginning on April 15, "the visits of the Resident Physician to foreign vessels will commence opposite State island as usual."²⁹⁹ At the state level, the Pennsylvania Legislators, after considering all the weaknesses of their previous health laws diligently wrote new legislation. On April 19, they published all twenty-eight sections of "An Act for establishing an Health Office, for securing the city and port of Philadelphia, from the Introduction of pestilential and contagious diseases."³⁰⁰

This constantly revised act continued to expand the power and duties of the Health Office. This edition added another governor appointed official, a Quarantine

²⁹⁸ *Aurora General Advertiser*, March 6, 1799.

²⁹⁹ *Claypoole's American Daily Advertiser*, April 15, 1799.

³⁰⁰ *Claypoole's American Daily Advertiser*, April 19, 1799.

Master. Instead of the health officer, whose responsibilities became increasingly administrative, this individual now “direct[ed] and cause[d] [detained] vessels to be properly moored near the Lazaretto.” He oversaw the cleansing and purifying of all suspected “cargo, bedding, and clothing.” It was also his “particular duty to prevent any personal intercourse between the persons on board different vessels under quarantine” by the removal of their boats.³⁰¹ The act also expanded the number of ports from which ships served mandatory quarantines during the fever season. Additions included all ports in Africa (Cape of Good Hope excluded), anywhere in the Indian Ocean, “Batavia in the island of Java,” and the tropical ports of South America. As an added precaution, these same ships had to “discharge the whole of their cargoes and ballast, which, together with the vessels, bedding, cloathing, and every other [suspicious] article on board, shall be perfectly cleansed and purified,” at the expense of the captain or ship owner.³⁰² Added to their already burgeoning duties associated with quarantine, the legislators expanded their responsibilities to include sanitation within the city. The work done by the Committee of Wards now fell under their direction. For everyone involved in this process, keeping the angel of death out of Philadelphia, became their ultimate goal.

On May 1, a new set of citizens began their stint on the Board of Health for the city and suburbs. The group appointed member Edward Garrigues as President.³⁰³ Experienced in both private and public aspects of crisis management, this devoutly

³⁰¹ State of Pennsylvania, *An Act for Establishing an Health Office, for Securing the City and Port of Philadelphia, from the Introduction of Pestilential and Contagious Diseases* (April 11, 1799) (Philadelphia: printed at the office of the *True American*, 1799), p. 15.

³⁰² *Ibid.*, p. 10.

³⁰³ *Claypoole's American Daily Advertiser*, May 1, 1799.

religious Quaker and yellow fever survivor seemed the perfect individual for the position. Not wanting a repeat of the yellow fever horrors of 1798, the new Health Board went on the offensive in early June. The Board printed several sections of the new health law "for general information, and at the same time, declare that any persons violating the same shall be prosecuted with its utmost rigour." They also asked for citizen participation. "The board request the assistance of their fellow Citizens, particularly those who keep Taverns, Stage Offices, and Boarding Houses in detecting and exposing a conduct which may involve the most important interests of the City." After the blatant infractions of last year's laws, they also issued a warning concerning those who unlawfully board ships performing quarantine. "If any [unauthorized] persons shall go on board or along side of any ship or vessels whilst under quarantine ... or shall go within the limits of the Lazaretto ... shall perform such quarantine as the Board of Health may direct." As a final warning, the Board explained the consequences of those convicted. Anyone being "convicted upon indictment shall be sentenced to, and suffer confinement at hard labour in the jail of the county of Philadelphia for any space not less than one or more than three years."³⁰⁴ As news of yellow fever in the West Indies caused Norfolk, Wilmington, and Baltimore to begin quarantine and purification of ships from such ports, a test of the Philadelphia Health Board's resolve followed within a fortnight³⁰⁵

³⁰⁴ *Aurora General Advertiser*, June 3, 1799.

³⁰⁵ *Claypoole's American Daily Advertiser*, June 8 and 14, 1799. Norfolk stopped ships from Jamaica and Havana for health examinations. Wilmington stopped ships from the same destinations, forbid any interaction of persons or goods until quarantine finished. Baltimore stopped ships from Havana where they required all cargo to be aired and cleansed of all contagion.

On June 15, a letter concerning a health law infraction appeared in the papers. Some angry "CITIZENS" opened their letter by complementing the city on its exertions to date. "We have hitherto congratulated our fellow-citizens on the beneficial operation of the health and quarantine laws; the vigilance of the Board of health, and attention of the officers, have been observed with heart-felt satisfaction." They followed with the facts, as they knew them. A pilot broke the law, pled guilty to those charges, and received a sentence. Unfortunately, according to the authors, the pilot then received a pardon. "Strange to tell ! that the Court [of Quarter Sessions] were anxious for his release, that the Chief Magistrate was solicited, a pardon granted, and the offender against the law set at liberty." At just the beginning of the quarantine season, these writers feared the repercussions of what was supposed to be an act of clemency. "With such a precedent before them, persons without principle, whose interest it is to transgress the law, will, in expectation of a pardon, introduce their own measures, in opposition of public authority, and the safety of the community." With rising frustration, they saw no reason for the Board of Health to prosecute anyone, though offenders put the whole populace at risk, when violators may knowingly act with impunity. They believed punishments here were purposefully harsh. "It is granted that the penalty and punishment of the law are heavy upon transgressors; but they are warned ... [the] guilty persons should suffer for his or their temerity, than that 70,000 innocent citizens, and millions of property should be exposed to yellow fever." Society needs laws to prevent chaos; when those laws are broken, the punishment of violators preserves order and the interests of the whole. As these citizens pointed out, the port was the focal point of business and needed

protection. "The commercial interests of the city have been deeply injured through the introduction of the yellow fever. The law is intended to protect against [contagion], and it is the incumbent duty of every officer and citizens to exert himself, that the law may have a fair trial, otherwise it will become highly injurious to the commerce of the city."³⁰⁶ This kind of news damaged the credibility of every person connected with upholding the health laws while it also shocked and angered a stressed readership.

Just as Elizabeth Drinker mentioned in her diary that there was "talk of a Vessel below with Sickness on board," the above inflammatory story required an explanation from authorities or panic might ensue.³⁰⁷ Five days later, three small pieces relating to the incident appeared. In the first part, "J.R." attempted to explain that many jurors and judges believed the pilot was ignorant of the newly passed laws having been away from Philadelphia on a voyage. "All the judges were convinced that the facts alledged were true, that the pilot was at the Capes when the law was published, and had no opportunity whatever, of knowing the late regulations." Believing his ignorance and knowing the harshness of the punishment, "the Jury and all the Gentlemen of the Bar present, interested themselves in his behalf." The result of a unanimous plea on their part resulted in the pardon. The second section contained the petition of the pilot, Joseph Brissel. He admitted not stopping at the Lazaretto, as the new law required, but explained the extenuating circumstances involved. He "most expressly and solemnly aver[ed], that his conduct originated in an utter and entire ignorance of those laws, that he had not the most

³⁰⁶ Claypoole's *American Daily Advertiser*, June 15, 1799. All quotes from this article.

³⁰⁷ Drinker, 2:1179.

remote intention of violating any law." Brissel also was illiterate: "Your petitioner begs leave to state in his own vindication, that he can neither read nor write, and therefore has not the usual means of acquiring knowledge on this subject." He entreated his judges to ask the Governor for a pardon. The last part of the article contained the pardon request, signed by the four Justices of the Court. Although these judges promised the Governor their intentions to uphold the health laws, they believed Brissel, who fully cooperated, should not be punished. Besides his illiteracy, "there seemed a general disposition on the part of the different public offices concerned in the prosecution, not to urge the law to a complete execution against him." They asked for the pardon, "but at the same time, we by no means intend to relax in our endeavours to give the late law its full effect in all proper cases." Unlike the CITIZENS, these justices appeared to underestimate the potential tragedy. An illiterate pilot could have unleashed yellow fever into the city again, with deadly results.

The Health Office also investigated the matter and its President sent their findings to Governor Mifflin. Garrigues expressed how dutifully the health officers performed their duties. "The responsibility attached to their public situation and a consciousness, of their duty to their fellow citizens, induce the measure." He then explained the prosecution of Joseph Brissel. He hoped to "prove the danger of lenity, where the interests of the community are so much at hazard." Dr. Hall, Resident Physician at the lazaretto reported what happened after Captain Carson came ashore to arrange for a health examination for his Sloop Dependence. Carson "got out of his vessel at the Fort, & ordered his pilot to anchor opposite the hospital. Capt. Eggar and myself started

immediately, but the pilot had proceeded on to the City.” Carson’s version corroborated Dr. Hall. “I and two of my people came ashore for the Doctor and he came off with me in his boat, and rowed almost up to the Point House, but could not see the sloop.” Hall wanted the ship brought back down and the pilot arrested. “In my opinion an example should be made of the pilot for having so grossly infringed upon the Health Law.” But Garrigues argued a different version of the events. “The plea of ignorance,” he wrote to the governor, “fails, as he not only had orders from the capt. to bring the vessel to an anchor; but the Health officer gave notice to the Pilots of the necessity of stopping every vessel arriving subsequent to the 15th April for examination, which information was also diffused by the Wardens of the port.” Therefore, the information on which the Justices based their recommendations of a pardon was false, as the Board just proved with the above accounts. “The contradiction between the express and solemn asservation of the pilot, and the evidence of the resident physician and Captain Carson, who had, on leaving the vessel, ordered him not to proceed with her, are too obvious” to ignore. Like the CITIZENS, Garrigues believed the health of the city too precious to allow any transgression against the health laws to go unpunished. In closing, the President of the Board of Health reiterated the seriousness of the crime while not trying to appear officious. “To interfere with constitutional privileges is not our wish; but believing that indiscriminate clemency, particularly as it regard infractions of the Health Law, deviates far from humanity, we cannot consider ourselves responsible for the consequences.”³⁰⁸

³⁰⁸ Claypoole’s *American Daily Advertiser*, June 22, 1799.

Two days later, "JUSTICE" struck back at the Board, challenging their credibility and ultimately undermining public confidence. According to this author, the Board was completely incorrect in stating that Bissel received a pardon. "On the subject of Joseph Bressell's discharge, which I understand have proceeded from your body, this prudent and necessary caution and enquiry have been totally omitted or disregarded—in your letter to the Governor." He wondered where they got their information, because the pilot "has never been pardoned. It is true he has been discharged from prosecution, but not by the knowledge, consent or connivance of the Governor." As he chastised the Board for being "deceived by mis-information," he also doubted they would appreciate his correction of their error.³⁰⁹ On the heels of this destructive bickering, rumors of yellow fever in the city began circulating.

In his first-hand "Sketch" of the 1799 epidemic, Dr. William Currie recalled that the disease struck initially near the riverfront beginning around mid-June. "The first cases were in the neighbourhood of Messrs. Willing and Francis's wharf, between Pine and Lombard-streets, near the southern boundary of the city; and in southwark, in the neighbourhood of the still-house wharf, within a few paces of the Swedes church."³¹⁰ One patient, a passenger on a ship from Curracoa, arrived healthy from quarantine only to sicken of yellow fever two days later. A patient from Southwark, moved to Arch Street near Seventh, also died of the disease. Two other lethal cases occurred near the previously mentioned wharf: one in a lodging house, the other on board the *Hamburgh*.

³⁰⁹ Claypoole's *American Daily Advertiser*, June 24, 1799.

³¹⁰ William Currie, M.D., *A Sketch of the Rise and Progress of the Yellow Fever, and the Proceedings of the Board of Health in Philadelphia, In the year 1799* (Philadelphia: Budd and Bartram, 1800), p. 5.

The cases brought to his attention increased during the last week in June. "The next cases that occurred in the neighbourhood of that wharf, [included] a young woman at Mr. Samuel Rhoads's, on the 25th, who died on the 30th."³¹¹ Elizabeth Drinker, the very worried mother of Molly Rhoads, feared the illness was yellow fever. "I wrote a note to Molly—desiring if she had any suspicion of the kind to send me word, and Jacob should go there with the Carriage for her and the Child." Her daughter replied that Dr. Kuhn told her there was no danger. He "said it was not the Yallow fever she died of, but a billious fever—that there was no danger of any persons taking it from her."³¹² However, the following day, Samuel Rhoads was not so sure. He "told Jacob Downing that the young woman had the black vommitt a little time before she died—...and her skin was very Yallow."³¹³ Currie listed an equivalent series of cases in Southwark, near the still house wharf, believing that from both these locations, it spread to other sections of the city.

Despite the increasing numbers of suspicious cases of fever and letters from physicians to the Board of Health concerning the presence of yellow fever, no warnings or preventive measures resulted. As members of the College of Physicians saw increasingly more cases of yellow fever, they "held a special meeting on the 28th of June, and agreed to inform the Board of Health [that yellow fever] had appeared in Penn-street and its vicinity."³¹⁴ As in previous years, the physicians suggested evacuating healthy

³¹¹ Currie, *A Sketch*, p. 6.

³¹² Drinker, 2:1182. This June 25 entry of the maid's death differs from Dr. Currie's date of June 30.

³¹³ *Ibid.*, 2: 1183. Jacob Downing was his brother-in-law.

³¹⁴ Currie, *A Sketch* p. 9.

inhabitants, removing all vessels, and isolating the sick. The Board replied on July 2, disagreed with the College as to the seriousness of the fever, and would not make any official proclamation. "A public notification would, perhaps, excite a terror that might add to the predisposing cause of the sickness. ... They also dread to give an alarm, which must injuriously affect the welfare of the city and may eventually be unnecessary."³¹⁵ They politely thanked the physicians for their concern, but ignored their recommendations. Even though they failed collectively, one member of the College wrote to the Board again on July 11, trying to make them aware of a potential disaster in the making. "I expect you all recollect," he pointed out to them, "that every time the pestilential or yellow fever has occurred in this city, it has made its first appearance near some one of the wharves of the city."³¹⁶ Moreover, in each year of its visitation, it began in a small way—with a few cases within a small area of a neighborhood. Unfortunately, after it ran its course with the first set of victims, the fever spread. "After the death or recovery of those first attacked [by the fever], it has made a remarkable though a partial pause, after which it has gradually spread or been conveyed into more distant parts, and has rapidly advanced with the advancing season."³¹⁷ The physicians then asked the Board members a pointed question: "This having been the state of the rise and progress of the fever in former years, what reason have we to expect a different event this year?"³¹⁸ The physician believed that if the Board did not intervene now, while the

³¹⁵ *Claypoole's American Daily Advertiser*, August 24, 1799. It was not until this date, when death rates inexorably increased, was this correspondence of seven weeks ago published.

³¹⁶ Currie, *Sketch*, p. 11.

³¹⁷ *Ibid.*, p. 11.

³¹⁸ *Ibid.*, p. 11.

disease had yet to reach full strength, the City was at risk. If left unchecked, the only foreseeable result will be disaster. Inaction "will compel the citizens to consult their safety in flight, an event so ruinous to the interest and prosperity of the city, that it requires no great sagacity to foresee its final depopulation." He closed with a reminder concerning the protection of fellow citizens from such a scourge. "On your management and exertions, therefore, we rely, under Providence, for our preservation from so deplorable an event; and I trust we shall not be disappointed."³¹⁹

July found the newspapers full of water works information, official denials of yellow fever in Philadelphia, and intelligence of other places suffering under the disease. Citizens applauded the work of the Corporation, pointing out the advantages of having almost unlimited water at their disposal. In turn the Watering committee and engineer Latrobe did everything possible to spark interest and sell subscriptions. Interspersed with these reports came several yellow fever related items. Virginia decided to begin quarantine on vessels arriving from the West Indies.³²⁰ The New Jersey Legislature finally enacted a law to prevent people from circumventing the health laws of nearby states. "All persons who are subject to the operation of the health laws and port regulations of either New York or Pennsylvania, are hereby strictly prohibited from landing [in] New-Jersey or with a view to elude the form and effect of the said laws and regulations."³²¹ Someone also reported that yellow fever was wreaking havoc in

³¹⁹ Ibid., p. 16.

³²⁰ Claypoole's *American Daily Advertiser*, July 5, 1799.

³²¹ Claypoole's *American Daily Advertiser*, July 4, 1799.

Barbados, and closer to home, in Newburyport.³²² Incredibly, the Board of Health informed Baltimore and Boston to ignore unfounded rumors concerning the health of Philadelphia. "We are happy in having an opportunity," Garrigues wrote to Baltimore authorities, "of contradicting the injurious reports regarding the health of this city." As usual, gossip magnified the seriousness of the threat. "They originated from several persons in one square of the city having become sick. Persons who had no acquaintance," according to the Board President, "or connection with each other [and] whose indisposition can be attributed to distinct and different causes sufficient to have produced that effect." With no reported new cases lately, Garrigues considered the matter closed, but promised to keep Baltimore updated on any changes in the health of the city.³²³ A week later Garrigues wrote to Paul Revere, his Boston counterpart, concerning his decision to quarantine ships from Philadelphia. This action was "done on no other foundation than reports," as Garrigues pointed out, "which credulity has diffused, and to which fear has given a gigantic stature." He then requested the order rescinded and repeated a similar promise to Boston as he had to Baltimore. "We pledge ourselves to you and to the world, that we will, in case of the existence of a contagious disorder among us, publicly avow it, in order that every place, with which we may have

³²² *Aurora General Advertiser*, July 9, 1799 and *Claypoole's American Daily Advertiser*, July 25, 1799, respectively.

³²³ *Claypoole's American Daily Advertiser*, July 16, 1799. The letter to Baltimore was dated July 10. Considering the religious and civic integrity of Garrigues, he may have believed that the few cases of yellow fever existing at this time were not a serious threat.

connexion by commerce, may adopt [appropriate] precautions.”³²⁴ Philadelphia’s papers remained curiously silent about the existence of yellow fever in their own city. Currie attributed this to “the influence of local and commercial interest[s] over official duty,” but that did not stop citizens with first hand knowledge from spreading the news.³²⁵

Elizabeth Drinker responded to the death of her daughter’s maid on June 25 with growing uneasiness and then by taking flight, as yellow fever again attacked Philadelphia. In the days following the death, Drinker was especially fearful that any leftover contagion might endanger the health of her daughter’s family. “I sent her a note, advising caution with respect to the room where the young woman died—she said there was no danger—their going go soon there is in my oppinion very imprudent!”³²⁶ In the days that followed, Elizabeth heard third-hand news about another victim, “a young man dead of the Yallow fever in Penn Street.” Her sister Mary heard the same thing independently and Doctor Griffiths confirmed the rumor on June 30.³²⁷ By the first of July, the neighborhood in which Sammy Rhoads lived was in an uproar as several other people succumbed to the fever. “Neighbours are, some of them moving away. Dr. Griffiths told my husband; that it was high time to remove from that square—he lays it all to a vessel from Hamburgh.”³²⁸ Overwhelmed with fear, Elizabeth urged her daughter to vacate the infected vicinity where they lived as quickly as possible. The rest of July was

³²⁴ *Claypoole’s American Daily Advertiser*, August 2, 1799. The letter to Boston was dated July 18.. On July 25, Revere replied stating that the source of their information was an official letter from the Secretary of the Navy of the United States at Philadelphia. However, for the moment, they lifted the quarantine order.

³²⁵ Currie, *Sketch*, p. 18.

³²⁶ Drinker, 2:1184.

³²⁷ *Ibid.*, 2:1184.

³²⁸ *Ibid.*, 2:1185.

an emotional roller coaster for the Drinkers. Dr. Physick thought the situation was dangerous enough that he wanted all of his relations to evacuate the city. A few days later, Drinker heard nothing new about the fever. Then, on July 8 she read what seemed to be a blatant lie in the *Porcupine Gazette*. "Cobbett says that no Yallow fever has been in the City this year—I don't believe him, the Yallow fever, or something very like it has been in Penn Street—it is true that very few burials have been for some weeks past—may we be truly thankful for favours received."³²⁹ Elizabeth continued hearing of new cases almost daily but without any official confirmation in the papers. However, people were not waiting for the Board of Health. Drinker noted the many friends and acquaintances who began arranging for lodgings away from the city. On July 13, the exodus was undeniable: "a great number of the inhabitants are gone out of the City."³³⁰ Elizabeth wrote of additional deaths in the Penn Street vicinity for the next several weeks. Then, on July 29, with growing frustration and unease, she noted another funeral. "The bell is tolling for some one going to their grave—It has been remarked that this month has hitherto been unusually healthy, the same remark, I remember, last year in this Month."³³¹ One important fact eased her mind considerably during this anxious time: all her daughters and the their families were safely in the country before the end of the month.

Lulled into the false security of few reported cases and even fewer deaths, the Board of Health continued their silence until they published a report on August 23. Dr. Currie admitted it was difficult to sound an alarm with so few cases. "The number of

³²⁹ Ibid., 2:1187.

³³⁰ Ibid., 2:1189.

³³¹ Ibid., 2:1194, 1199.

cases had so greatly diminished by the beginning of August, that at a meeting of the College of Physicians on the 6th, only four confirmed cases were known to exist in the city and liberties."³³² At this same time, Elizabeth Drinker's growing exasperation with the conflicting rumors ceased for a moment when yet another rumor came to her attention. "Edd. Garragus, who is president of the committee of health" she recorded, "told Henry Widdowfield that there was not a single case of the disorder that he knew of in the City." However, just days later, she learned of another "10 cases of Yallow below Penn street. [It] has also been reported that the Yallow fever is in Elfriths alley: but is contridected."³³³ Consequently, Philadelphians read about the contagion in New York instead of in their own neighborhoods. In an extract from a letter, a resident of New York admitted there were a few cases of the disease in the city but warned his correspondent against believing it was serious. "It is but too true," that yellow fever was in their midst; "but lest some of the frightful tales should gain credit with you, I candidly inform you that only seven persons have died with it, and five or six are now sick."³³⁴ The New York Health Office concurred, but added that overall, the city was as healthy as usual for this time of the season. "Knowing that much alarm has been excited by the death of six or eight persons; and knowing from various citizens that our condition is believed by our neighbors to be infinitely worse than in reality it is, have judged it adviseable" to report no new cases of the disease in the last forty-eight hours.³³⁵

³³² Currie, *Sketch*, p. 22.

³³³ Drinker, 2:1196.

³³⁴ Claypoole's *American Daily Advertiser*, August 3, 1799.

³³⁵ Claypoole's *American Daily Advertiser*, August 5, 1799

Perhaps few of the remaining inhabitants expressed surprise when the Savannah Advertiser announced yellow fever in Philadelphia. "Having received information from undoubted authority that some cases of the Yellow Fever have appeared in Philadelphia," they said, "and that the inhabitants are daily removing from that city," pilots must not bring any vessel from said port into the city.³³⁶ Right before the ill-fated announcement landed in the newspapers, the College of Physicians met and warned the Board of Health again of the presence of a malignant fever. That same day, "CIVIS" penned a warning to his "Fellow-Citizens." "You are earnestly called upon to promote the cleanliness of the town, by every means in your power." He further told them that the most dangerous period for the city's health was only a few weeks away and to date, it had been a relatively healthy season. He scolded citizens whose gossip had caused alarm. "But I wish to stop the mouths of some idle or designing alarmists, who listening to the suggestions of fear, or some less excusable motive, endeavour to fill your minds with the most terrifying apprehensions." He closed by promising to inform everyone should the situation become dangerous.³³⁷ Also that same day, Drinker read the *Porcupine Gazette* where "Cobbett [announced] that the Yallow fever rages in Southwark."³³⁸ The following day, whether to prepare citizens for the worst or to bolster their argument for waiting so long to sound the alarm, a "List of Interments" for the past five days found their way into print. The burials, from August 17 to 21, ranged from seven to fifteen—a

³³⁶ Claypoole's *American Daily Advertiser*, August 15, 1799.

³³⁷ Claypoole's *American Daily Advertiser*, August 21, 1799.

³³⁸ Drinker, 2:1201.

higher rate than in 1793 and 1797, but a lower rate than in 1798.³³⁹ The Board of Health, who, for fear of hurting commerce, refused to sound an early alarm when the contagion might have been successfully contained, now had no choice but to proclaim its existence in Philadelphia.

In their attempt to minimize the gravity of the situation, the Health Office undermined their credibility as inhabitants responded by taking flight for the third year in a row. Their proclamation admitted that a disease in the city resulted in some deaths. Without naming that disease, they stated "that during the last six days there have been a number of persons taken ill, principally in the lower part of the city and Southwark, many of whom have died after a few days sickness." Happily, they informed their fellow citizens, of the "still considerable number sick, a great part of them are apparently on the recovery." The board also referred to the low mortality rates in an attempt to prevent panic. "At present there is not sufficient ground for the great alarm which pervades the city." They closed with a promise to warn citizens if the disease increased enough to warrant moving. "If the disease progresses further, they will, without hesitation, state whatever comes to their knowledge, for the information of their fellow citizens, so as to enable them to judge on the propriety of removing."³⁴⁰ Printed below this proclamation were extracts from minutes of a special meeting of the Board on August 22. If their admission of "the prevailing disease" was not enough to cause panic and anger over the

³³⁹ *Claypoole's American Daily Advertiser*, August 22, 1799. The total interments for those five days were 51, of which 26 were children. Robinson, *The 1803 Philadelphia Directory*, p. 15. Deaths during those same days in 1793, 1797, and 1798 were 42, 48, and 95 respectively.

³⁴⁰ *Claypoole's American Daily Advertiser*, August 23, 1799

delay, one of their resolutions certainly did. In a futile attempt to prevent the spread of the disease and upon threat of prosecution, "no person or family [may] remove from a sickly into a more healthy part of the city."³⁴¹ It was a paradox: Those inhabitants, who believed the rumors and fled early, openly disagreed with the Board and their policy of denying the existence of contagion. Those inhabitants who disregarded the rumors and believed the Board now could not evacuate by order of that same entity. "The Citizens convinced of their danger, from the frequent appearance of the herse and the sick coach," as Dr. Currie recorded, "put no confidence in the declaration of the Board, but fled to the country in every direction and from every quarter."³⁴² Given that the board failed to see the importance of shifting into crisis management mode, the tent encampments remained unstaffed and empty. Therefore, as Currie continued, "many who had no places provided to retreat to, were forced to remain. Many fell victims to the disease, who might have escaped if the signal of danger had been given earlier," especially if the infected parts of the city were quickly isolated.³⁴³ Currie, as a member of the College of Physicians, could not resist making that point, especially after the Board ignored their recommendations for seven weeks.

In the remaining days of August, Elizabeth Drinker made preparations for another move out of the city while the newspapers took on the familiar appearance of a city suffering from pestilential disease. With the rumors of yellow fever finally confirmed by the Health Board, Drinker wanted to join her daughters in the country. As might be

³⁴¹ *Claypoole's American Daily Advertiser*, August 23, 1799.

³⁴² Currie, *Sketch*, p. 24.

³⁴³ *Ibid.*, p. 25.

expected, especially from past experiences, she was not alone. "Dr. Kuhn called," she wrote on August 24, "I do not expect to see him again at this time—he has taken a house in Germantown, where I expect he will soon go ... great and many are the number that are moving out of the City."³⁴⁴ A few days later, she heard that Edward Garrigues, Board of Health President, after repeated exposure to the yellow fever, fell ill. On August 28, as the malignant fever spread, it came too close to their house to ignore. "We have heard just now that 2 or 3 of Philip Cares family are taken down; they live nearly opposite to us, in Water street." As a result, Elizabeth's "husband concluded to go with Sister and self to the Valley—WD intends going to his Brothers."³⁴⁵ As they made their preparations to leave, Drinker noted how quiet things were in the city. "It looks like first Day, in the Street the houses shut up, most of our acquaintance, and great numbers of our Society are gone." On August 31, William left with his brother, Elizabeth left the following morning and both her husband, and sister would follow shortly.³⁴⁶ From her countryside retreat, Elizabeth gleaned information about the epidemic from the daily newspapers—her link to the city.

For the third consecutive summer, yellow fever related information dominated the newspapers in Philadelphia. Although the *Pennsylvania Gazette* suspended their operations until November 13, both the *Aurora General Advertiser* (after moving to Bristol) and *Claypoole's American Daily Advertiser* continued operations.³⁴⁷ As Drinker

³⁴⁴ Drinker, 2:1202.

³⁴⁵ *Ibid.*, 2:1204. William Drinker, born in 1767, suffered from tuberculosis. Elizabeth, treating him as a semi-invalid, felt very uncomfortable about his being in another part of the countryside without her.

³⁴⁶ *Ibid.*, 2:1205.

³⁴⁷ Mansfield, p. 97.

prepared to move, those papers kept her informed with daily interment and city hospital reports, along with other disease related facts. She learned during that last week in August that deaths remained low, as did admissions to the City Hospital where the Steward was Peter Helm—County Commissioner and a manager of Bush Hill during the 1793 calamity. Drinker also read that Wilmington moved immediately to prevent Philadelphia refugees from entering their city. As of August 24, “no person or persons who have been in the city of Philadelphia, within the space of ten days, shall come within the limits of this Borough.”³⁴⁸ Along with the increasing numbers of people leaving the city, she discovered that some governmental offices also moved. “The Public Offices of the government of the United States are removing to Trenton, in New Jersey,” while the post office relocated on the outskirts of the city.³⁴⁹ However, the major banks in the city have postponed making any decision about removal. On August 28, the mayor, Robert Wharton, made several requests of fleeing citizens. First, he asked citizens “to have their Fire Buckets deposited either at the City-Hall, the Old Court House, or in the New Building,” in case that additional tragedy struck. Second, he wanted to prevent “domestic animals or putrifying substances of any kind [to] be locked up in the houses or yards of those who have or are about to remove.”³⁵⁰ Finally, Drinker saw an official notification concerning the tent encampments. “The Board of Health have determined,” on August

³⁴⁸ Claypoole's *American Daily Advertiser*, August 24, 1799.

³⁴⁹ Claypoole's *American Daily Advertiser*, August 27, 1799.

³⁵⁰ Claypoole's *American Daily Advertiser*, August 28, 1799.

30, "that the present state of the city as to disease, does not render the opening of the encampment at Masters's necessary."³⁵¹ Indeed, this was a strange epidemic season.

Throughout the month of September, mortality rates remained low despite the spread of the disease westward from the riverfront, its point of origin. Unlike the year before when the disease invaded every part of the city and suburbs, Currie believed that it "gradually extended to almost every part of the city east of Seventh-street, but very few cases occurred westward, and not one either on Schuylkill or in Kensington."³⁵²

Thankfully, the daily interments remained relatively low. Although the death rate spiked at 31 and 30 on September 7th and 9th, respectively, it only climbed into the low twenties five times the rest of the month. Compared to the two thousand deaths experienced in 1798, the city averaged just over fifteen deaths per day in 1799.³⁵³ With the advent of yellow fever, both the Alms House and the Pennsylvania Hospital closed their doors to new admissions. Consequently, as Currie reported, "the poor with diseases of different kinds were received for some time into the City hospital."³⁵⁴ Besides the sick, the hospital also housed orphaned children and some of the most impoverished citizens. Yet, even with non-yellow fever patients included, the highest occupancy rate for the month was eighty-one, on September 22. The patient rate jumped above seventy on September

³⁵¹ *Claypoole's American Daily Advertiser*, August 30, 1799. In their refusal to open the tent encampments, the Board doomed many of the poorest residents, already living in the sickliest parts of the city to suffering and death. Not until late in September did the Guardians of the Poor offer any relief to hundreds of families now in destitute circumstances.

³⁵² Currie, *Sketch*, p. 25.

³⁵³ Robinson, *The Philadelphia 1803 Directory*, p. 15. Total deaths for September were 465. The death rate was 24 on September 26th, 23 on September 3rd, 21 on September 25th, and 20 on September 5th and 23rd.

³⁵⁴ Currie, *Sketch*, p. 27.

19 and remained there until the September 29 report when only fifty-nine persons remained (eleven of them children in good health).³⁵⁵

The weather helped minimize the death rate in 1799. September was a cool and wet month. On September 6, Elizabeth Drinker noticed the change in weather. "Rain'd when we retired and in the night and this morning The dog days end—I have an hope that the Yallow fever will not arrived to its former hight this fall."³⁵⁶ According to Currie's observations on the weather, only three days in the first half of September were warm and dry. The third week was more pleasant, but with several days of rain. Remarkably, he noted frost 3 mornings in a row—September 23, 24, and 25. The last five days of the month were fair and mild again.³⁵⁷ The Board of Health, satisfied with the continued low death rate, decided to halt mandatory quarantine procedures. On September 19, a now healthy Garrigues announced the Boards resolve "to permit all vessels that are healthy after stopping at the Lazaretto to receive a visit from the resident physician, immediately to proceed to the city after the last of this month."³⁵⁸ From her countryside retreat, Drinker hoped that the prognosis given by the Philadelphia Gazette editor, Brown, was right. "We have the best authority to report," he proclaimed, "that the health of the city is greatly improved."³⁵⁹ With cold weather, low death rates, fewer fever-related sicknesses in the hospital, the Board also believed the worst was over.

³⁵⁵ Claypoole's *American Daily Advertiser*, September 1-30, 1799. The higher numbers from the 19th to the 29th probably do not reflect any great rise in yellow fever cases since death rates for the same period are fairly constant. It probably reflects, as Currie mentioned, that the sick and destitute poor, along with orphan children had no where else to go.

³⁵⁶ Drinker, 2:1208.

³⁵⁷ Currie, *Sketch*, p. 30.

³⁵⁸ *Aurora General Advertiser*, September 21, 1799.

³⁵⁹ Drinker, 2:1217.

Such reports of improved health tempted refugee Philadelphians into beginning their homeward trek at least a fortnight earlier than usual. Elizabeth Drinker knew of several friends that went back to the city at the end of September, just as the weather improved. She was quite surprised when many returned. They "thought it best to return—this is a little staggering—if it was not on our dear Sallys account I should not think of going home till the beginning of next month, but I believe my husband inclines citywards."³⁶⁰ While the Board had yet made the official recall, John Skyrin urged his wife to come home. Drinker recorded his request on October 7. "In a letter to Nancy, [he] expresses his thoughts, that there is no danger incoming into the City—many others think so, but there are some who think it too soon." The following day, Elizabeth received a letter from her husband who also believed it was safe enough to come home. Therefore, she wrote, "we were up 'till after midnight busy preparing to go homeward tomorrow if the weather will allow of it."³⁶¹ Both men may have based their opinions on the steadily declining death rate and hospital admissions. Only 70 people died in the first week of October while hospital admissions averaged less than five per day. William Young, president pro tem. of the Board of Health, issued a warning to returning residents on October 11. The board "have with concern observed the precipitate return of some of their fellow citizens into their houses, without having them sufficiently aired and cleansed, by which some have become the victims of disease. The citizens are therefore

³⁶⁰ Ibid., 2:1217. Sally Downing was over eight months pregnant and wanted to have this child at home.

³⁶¹ Ibid., 2:1220.

requested to have their houses well aired and cleansed before they return.”³⁶² With health returning to the city, October 19 was the last day for both internment and city hospital reports. Two days later, the Board of Health with Garrigues again as President, informed the Collectors of the Port “that in the opinion of this board, no pestilential later, the official or contagious fever prevails in the city or Liberties at present.”³⁶³ Though it left the friends and families of 835 victims in mourning, the crisis was finally over.

The Board of Health issued their report to the Governor, as requested by the Legislature. Their report recollected the first cases that came to their notice in mid-June. “The first cases were in Artillery Lane, Northern Liberties. The fever had been in the same house last year, the family it was said had been remiss in their attention to clean the bedding and cloathing.” Apparently, they saw no possibility of importation in these early cases. In all cases, they believed no one else received the contagion from the ailing persons. A growing number of other cases, involving people with marine related jobs, followed—two victims were seamen aboard the *Hamburg* docked near Penn Street. At the end of June, the prize sloop *Mary* became a target of suspicion. “A committee of the board visited [the] *Mary*, who lay at willing and Francis’s wharf. An offensive smell arose from her Cabin and hatchways, which was supposed to proceed from bilg-water and damaged coffee under her timbers.” Declared a nuisance, the board “directed that she should be removed from the wharf.” While some people then believed the contagion came from the *Mary*, the Board had cause to disagree. “Upon minute examination, it

³⁶² Claypoole’s *American Daily Advertiser*, October 12, 1799. No mention of Garrigues since his September 19 quarantine relaxation notice.

³⁶³ Claypoole’s *Daily American Advertiser*, October 22 and 23, 1799.

appeared, that the crew were landed well and continued in good health; and also those persons who had occasionally visited her." They continued their report with reasons why they rejected the early advice of the College of Physicians and waited until late August to declare an emergency. The Board "invite[d] some medical characters to visit those families where a fever existed, some of them pronounced the cases yellow-fever, others were of opinion they were the highly bilious fever of the season." They also noted that the fever raged in some areas more than in others. It especially "prevailed where a want of cleanliness was too evident. [Some inhabitants] were surrounded with every species of filth, which fermented by the warmth of the season. The vapours arising from this corrupt mass are evidently injurious to health." The Board also noted that many victims were newly arrived persons from northern Europe who were not used to the heat and supposedly led very unhealthy lifestyles during the hot months.

Besides submitting their financial statements, the Board also presented other statistics. "The number of sick admitted into the hospital were 324, of whom 193 died." According to the attending physicians, the large number of fatalities occurred because too many sufferers waited until the last stages of the disease to seek help. The Lazaretto had a better record: 95 admissions and only 21 deaths. In both medical facilities, some of the nursing staff contracted the disease, but all recovered. Finally, they asked the Legislature to consider some means to prevent the sick from mingling with the healthy. "At different periods, several persons labouring under the fever, were removed into the healthy parts of the city, the board publickly forewarned all persons against this conduct, which appeared

calculated to spread the disease.”³⁶⁴ Like their predecessors, this Board did not officially venture to declare opinions concerning the origins of the disease. Their report, however, appeared to agree with the contingent of physicians who believed the fever originated locally but was not contagious.

Together, city and citizens alike quickly reverted to their normal routines after this epidemic. Both the Alms House and Pennsylvania Hospital reopened, allowing the city hospital to close their doors on November 2. Housekeepers cleaned away any possible leftover contagion and prepared for the colder months. Like thousands of other refugees, Elizabeth Drinker and her daughters remained healthy after moving back into town. Sally Downing, her pregnant daughter, safely delivered a baby boy with Dr. Kuhn’s help. The water works construction crews, slowed by the epidemic, now quickly began working again in earnest. In December, Governor Mifflin gave his farewell address to the Legislature, who in turn almost immediately praised the work done by the Managers and the Board of Health during the recent calamity. Then, just as everyone looked forward to the coming of a New Year, an even bigger woe fell upon Philadelphia and the entire nation—General Washington, first President of the United States died. It was a sorrowful way to end a year, a decade, and a century.

³⁶⁴ *Claypoole’s American Daily Advertiser*, December 24, 1799. “Report of the Board of Health to the Governor, of the cases of Fever, which prevailed in the City and suburbs, in 1799, inclosing general statement of the accounts of the board and dated 23d Nov.” All quotes are from this long article.

Conclusion

The last yellow fever epidemic of the 1790s was, perhaps providentially, the least mortal of the four experienced by Philadelphia's inhabitants. In the aftermath of the horrors of 1798, citizens again went on the offensive, pressuring, and sometimes threatening, their fellow residents to clean up their properties and eliminate any vestiges of contagion. They also supported and began construction on a waterworks project to bring Schuylkill River water into the city. If Dr. Benjamin Rush had been correct all along about the local origins of yellow fever, citizens were fervently determined to eliminate any substances that might putrefy, thus sowing the seeds for another wave of deadly exhalations. During their spring session, the legislature agreed with them.

The 1799 version of the health act expanded the scope and bestowed even more power into the hands of the Health Office and its managers. In an effort to cover both medical theories of origin, lawmakers strengthen the quarantine laws, increased fines, added criminal punishments, and raised fees. They also placed the responsibility of improved sanitation within the city and suburbs under their authority. In the process of trying to protect the port and its inhabitants from contagion, some residents alleged that the new act threatened many of their traditional property rights. Those inhabitants involved in the commercial sector of the economy fully agreed. Obviously, the newly appointed members of the Board of Health were in for rough times this fever season.

Without meaning to, the legislature in their disaster prevention mode, placed the Board of Health in an unenviable position: declaring an epidemic meant mandatory

quarantines, required harsh fines and sentences for transgressors—no matter how innocent they might be, and the forced removal or isolation of inhabitants stricken with yellow fever. Conversely, withholding that declaration potentially jeopardized the health and safety of tens of thousands of fellow citizens. It also prevented them from providing for the poor and unemployed—the tent encampments remained closed to those suffering and in need. To complicate matters further, board members must have had their own personal opinions about whether this dreaded disease was imported or of local origin. Considering all these variables, it was incredibly difficult for the members of the 1799 Board of Health to please everyone.

Along with the board of health, the weather conditions turned out to be the other important factor in 1799. The cold and rain significantly slowed both the feeding and breeding activities of the true, but not suspected killers. Far from ideal conditions produced far fewer generations of mosquitoes. Those same conditions slowed the metabolisms of the existing adults and shortened their life expectancies. However, the board knew nothing of this insect vector or that September would be cold and wet. The story of 1799 would have been more tragic had weather conditions favored the rapid reproduction of the winged harvester of souls—the *Aedes aegypti* mosquito.

CHAPTER SIX

A WINGED HARVESTER OF SOULS:
THE CONUNDRUM OF YELLOW FEVER

*In vain Physicians try their skill,
Death mocks, they have no pow'r to save'
Disease drinks up life's feeble rill,
And child and parents find one grave.³⁶⁵*

Introduction

It was no wonder yellow fever terrorized Philadelphians and residents of other port cities. It struck without warning, arriving in summer, when temperatures remained high and only departed after the first frost. Victims often suffered horribly before their release from the torment by death. Unlike so many other diseases that swept away the weakest, poorest, or most irreverent residents, yellow fever often passed over these usual victims and struck down instead, the hardiest of adults without respect for rank, wealth, or morality. As Martin S. Pernick described it, yellow fever, "spread ... by infected mosquitoes which could and did bite high and low with complete republican egalitarianism."³⁶⁶ It was no surprise then, that citizens streamed out of Philadelphia when the "pale faced messenger" entered their midst.

³⁶⁵ A Citizen, *Fever; An Elegiac Poem*, p. 7.

³⁶⁶ Martin S. Pernick, "Politics, Parties, and Pestilence: Epidemic Yellow Fever in Philadelphia and the Rise of the First Party System," *William & Mary Quarterly* 20:4 (1972), p. 571.

Since the first terrifying visitation in 1793, citizens and doctors alike wrangled over every aspect of yellow fever and its implications for Philadelphia. They weighed in on the controversies concerning yellow fevers' origins, contagious nature, as well as the best treatment, but completely missed the winged third party required to spread the disease. Although never implicated as the guilty culprit in viral distribution, people constantly complained about the swarms of mosquitoes, seeing their abundance as a sign of unhealthiness. Also unknown was their penchant for moving in with their human hosts and laying eggs in artificial containers provided by them. Therefore, without knowledge of the insect vector—the *Aedes aegypti* mosquito—all observations and arguments were open to conflicting interpretations. Luckily, the nineteenth century brought new technology to cities, which helped limit outbreaks of yellow fever. The introduction of running water, with its potential for improving sanitary conditions, unintentionally removed from use rain barrels and other water storage containers, prime breeding places for the *Aedes aegypti*. Hence, beginning with the horrific epidemic of 1793, their differing opinions concerning three main aspects of this dreaded disease pitted one group of physicians against another. It also placed frustrated citizens and officials in an unenviable situation of trying to figure out which side was correct.

The first point of contention, the origins of yellow fever, immediately set Dr. Benjamin Rush against most other members of the College of Physicians. Rush believed the source of the contagion was in the filth of the city—especially putrid vegetable exhalations. His colleagues alleged that the pestilence came from the West Indies. Therefore, Rush wanted sanitation measures taken to prevent its generation within the

city, while Currie and others wanted quarantine measures to thwart its importation.

Today, we know that it took either an imported infected person or mosquito *and* locally bred mosquitoes to keep yellow fever active.

The second dispute involved the contagious nature of yellow fever. When the first epidemic occurred in 1793, Jean Devèze probably stood alone in proclaiming that yellow fever was not contagious. He based that on his observations at Bush Hill. Rush and his followers finally agreed with him in 1798, but only under specific conditions. The College of Physicians, however, certainly continued to believe strongly in its contagiousness. The experiences at Bush Hill seemed like an isolated anomaly compared to the thousands of people who "caught" yellow fever from someone or something.

The last area of disagreement concerned the most effective treatment of yellow fever. Again, physicians split between a gentle, natural, and supportive regimen and a heroic, intervening, and depletive course of therapy. Through an ignorance of germ theory and lack of modern equipment, one group of physicians turned to the proven treatments used for yellow fever in the West Indies. However, the other faction ignored these historical successes and created a new course of therapy. Believing yellow fever to be a more intense form of the common "bilious fever," this faction greatly increased the amount of bleeding and purging they usually administered. The unfortunate patients who received the depleting treatment may have survived the ordeal and the virus despite the damage done to their systems.

Dispute Over Origins, Contagious Nature, and Treatment of Yellow Fever

The yellow fever epidemics of the 1790s caused physicians and lay persons alike to grapple with very difficult dilemmas concerning the origins, contagious nature, and treatment of this dreadful disease—all vital questions since answering them could save thousands of lives. Not surprisingly, given the rudimentary state of medical knowledge, physicians puzzled over the origins of yellow fever throughout the 1790s. Most physicians who encountered yellow fever before 1790 attributed its origin to the West Indies or further east in Asia (the “Siam Fever”). The prominent Dr. William Currie ascribed the 1740 yellow fever epidemic in Philadelphia to the introduction “of a quantity of wearing apparel brought in a trunk from Barbadoes, belonging to a gentleman who died of it in that Island.” The 1762 outbreak he also attributed to another Caribbean Island. It was “introduced by a mariner, who arrived sick with it from the Havanna, and communicated it to the family where he lodged.”³⁶⁷ From there, it spread throughout the neighborhood. Dr. Isaac Cathrall agreed with the West Indian connection, but pushed its origin even further east, to Africa. The fever that struck Philadelphia in 1793, appeared to be of tropical origin “nearly resembling, in its most leading features, the yellow-fever of the West India Islands, and of the coast of Africa; of which places I believe it to be a native.”³⁶⁸ Another Philadelphia physician, Felix Pascalis [Ouviere], also recounted an

³⁶⁷ William Currie, M.D. *A Description of the Malignant, Infectious Fever Prevailing at Present in Philadelphia with an Account of the Means to Prevent Infection, and the Remedies and Method of Treatment, Which Have Been found Most Successful* (Philadelphia: T. Dobson, 1793), p. 31.

³⁶⁸ Isaac Cathrall, M.D. *A Medical Sketch of the Synochus Maligna or Malignant Contagious fever as it Lately Appeared in the City of Philadelphia* (Philadelphia: T. Dobson, 1794), p. 1.

established story by French physicians of the introduction of yellow fever into the West Indies from Asia. "It was imported from the empire of Siam," they asserted, "into the West-India Islands by a French squadron, returning from thence, in the year 1689."³⁶⁹

Despite numerous historical writings that pointed to the importation of yellow fever into America's port cities, Dr. Benjamin Rush and his followers claimed that the 1793 epidemic originated in the filthy and unsanitary conditions of Philadelphia.

Benjamin Rush—physician, patriot, and professor—vociferously disagreed with the importation historical record. He unequivocally declared that conditions within the city itself generated yellow fever. In a letter to Dr. John Redman, President of the College of Physicians, Rush boldly stated his opinion: "The Yellow Fever in the West Indies, and in all other countries where it is endemic, is the offspring of vegetable putrefaction."³⁷⁰

Rush identified the source of the 1793 epidemic as a shipment of damaged coffee that putrefied in the heat of a Philadelphia summer. "It should not surprize us," he wrote, "that this seed, so inoffensive in its natural state, should produce, after its putrefaction, a violent fever."³⁷¹

Dr. Jean Devèze, French refugee from Santo Domingo and Bush Hill physician during the 1793 epidemic agreed with Dr. Rush concerning the local origin of yellow fever. According to his observations, "it can no longer be doubted the epidemic took its

³⁶⁹ Felix Pascalis [Ouvrière], M.D. *An Account of the Contagious Epidemic Yellow Fever, which Prevailed in Philadelphia in the Summer and Autumn of 1797* (Philadelphia: Snowden & McCorkle, 1798), pp. 3-4.

³⁷⁰ Benjamin Rush, M.D. *An Enquiry into the Origin of the Late Epidemic Fever in Philadelphia: in a Letter to Dr. John Redman* (Philadelphia: Carey, December 11, 1793), p. 3.

³⁷¹ *Ibid.*, p. 6.

rise in this country.”³⁷² (His opinion may have been shaped by his personal experience, since those who believed in the importation theory blamed the recent refugees, of whom he was one.) Although Devèze did not attribute the rotten coffee as the source of the 1793 epidemic, he did include a list of potential hazards for the future. He strongly recommended the removal of “tan-yards and starch manufactories” from the center of the city. He also called for a general cleansing of the city, especially the quays and streets. Devèze was especially adamant about the dangers of cemeteries interspersed with residences throughout the city. “The vapours continually attracted from these places of corruption by the sun, infect the city, whilst the rain penetrating, washes in the graves the putrid remains of the bodies, and carries with it into the wells detached, infected particles, from which it could not be disengaged by filtration, in the short space it has to travel.”³⁷³ For those who agreed with Rush, the putrid exhalations of rotting organic matter, combined with a recently unhealthy alteration in the atmosphere, changed the usual bilious fever into the malignant yellow fever.³⁷⁴

Although Rush found it difficult to win over Philadelphia’s physicians and inhabitants to the local origin theory, New Yorkers tended to believe his assertions. Elihu H. Smith, New York physician and *Medical Repository* editor, agreed with Dr. Rush. In

³⁷² Jean Devèze, M.D. *An Enquiry into and Observation Upon the Causes and Effects of the Epidemic Disease which Raged in Philadelphia from the Month of August till Towards the Middle of December, 1793* (Philadelphia: Parent, 1794), p.134.

³⁷³ *Ibid.*, pp. 136, 138.

³⁷⁴ Rush, *Letters*, 2:816. In a letter to Timothy Pickering on September 30, 1799, Rush stated that Mr. Daniel Webster believed the current malignant fevers could be attributed to a harmful change in the atmosphere. Rush concurred but wrote further: “I cannot believe it would produce a yellow fever without the cooperation of noxious air or putrid exhalations. It acts by rendering diseases formerly mild, malignant and mortal.”

a letter dated December 1, 1797, Smith wrote: "I think that I have it in my power to satisfy the dispassionate inquirer that Dr. Chrisholm's history of the origin of the Grenada fever of 1793, 94, is altogether incorrect: & not only that it did not arise from african contagion, but that it did originate in local causes & was destroyed by them."³⁷⁵ In a series of letters to Dr. Currie, another New Yorker, Noah Webster, also sided with Rush and those who believed in the local origin of yellow fever. Although many Americans believed that the healthiness of their land prevented them from experiencing such Old World catastrophes as plague, Webster disagreed. "It does not appear that *our climate* or *our country* can lay claim to any exemption from the calamities incident to other climates and other regions of the earth." Instead of believing, as the ancients did, that the gods brought such disasters upon the earth, Webster believed in casting aside superstition and ignorance and accept the reality of local generation. "Instead of trying to shift off the origin of the plague upon the West Indies, as the ancients did upon their gods, why should we not admit that those causes may be so modified in their action in different seasons as to produce various degrees, and the *highest degree*, of malignity?" Physicians already accepted, as Webster continued in his letters, that two very malignant fevers are products of the New World environment. "If we admit the malignant sore throat and the dysentery," both almost as deadly as yellow fever, "how can we refuse to admit that some accidental aggravation of the causes may generate the next grade of disease, the yellow fever?" He concluded that while he firmly believed in a higher being, he did not think

³⁷⁵ Elihu Hubbard Smith, *The Diary of Elihu Hubbard Smith (1771-1798)*, ed. James E. Cronin, Vol. 75 (Philadelphia: American Philosophical Society, 1793), p. 400.

God would alter the laws of nature. "I do not believe that almighty power will be exerted in a special way to cleanse dirty streets and cellars, or to save men who wallow in filth, intemperance, and debauchery from falling victims to fever."³⁷⁶

Rush had more success with converts after the 1798 attack. In the winter of 1798, Rush gathered his local origin medical supporters and formed the Academy of Medicine. In the aftermath of the horrors of the 1798 epidemic, the Academy replied to an inquiry from Governor Mifflin concerning that tragedy. They blamed the yellow fever on two sets sources. The first set included "the exhalations of the alleys, gutters, docks, and common sewers of the city; and from stagnating water in its neighbourhood." The second set involved two ships that arrived in port in mid-July. "The foul air discharged with the ballast of the ship *Deborah*, and the cargo of the brig *Mary*." To support their contentions, the Academy listed the names of several persons who contracted yellow fever before these ships arrived. Further, they noted people not near the docks also contracted yellow fever. "We observed, moreover, and heard of a considerable number of persons who had the disease in the western parts of the city, who had not been exposed to contagion, nor breathed the air in the neighbourhood of Water-street for many weeks, before they were attacked by that fever." To bolster their arguments against importation, the Academy mentioned non-coastal areas that also suffered from yellow fever yet had no apparent link to port cities. "The disease prevailed in many inland towns. Those towns were, in every instance we have heard of, situated near to putrid substances, or stagnating

³⁷⁶ Noah Webster, *The Letters of Noah Webster*, ed. Harry R. Warfel (New York: Library Publishers, 1953), pp. 162-165. Quotes from pp. 164, 165, 162 respectively. The series of letters to Currie ran from October through December of 1797.

water.”³⁷⁷ Six months later, Rush had also convinced the Board of Health. In a letter to a friend, on September 30, 1799, Rush wrote: “The Board of Health are unanimous in their opinion that our present fever is of domestic origin. The opinion they intend to communicate to the corporation of the city and to the Legislature of the State.”³⁷⁸ One Philadelphia physician—a local origin enthusiast—went so far as to try to correlate the weather and the strength of yellow fever after the 1799 epidemic. Writing to Dr. Mitchill, editor of *The Medical Repository*, Dr. Felix Pascalis noticed more support for the local origin of yellow fever “owing chiefly to the visible influence of the state of the weather on the late epidemic, which was, accordingly, often extinguished, and often revived again.” Pascalis identified four specific “causes” that produced unhealthy gases and allowed them to be trapped in the atmosphere. His causes were “*heat, moisture, winds, and decrease* of the days.” If it were possible to get accurate enough observations on the epidemic and then compare them to his causes, Pascalis believed it was possible to “draw up tables for exhalations as we do for the common meteorological observations.”³⁷⁹ Though physicians on both sides of the origin argument used the same observations and written material to formulate their opposing theories and opinions, almost everyone initially agreed that yellow fever was overwhelmingly contagious.

³⁷⁷ Philip Syng Physick, M.D., “To Thomas Mifflin, Esq. Governor of the Commonwealth of Pennsylvania, from the Academy of Medicine of Philadelphia, on the origin and means of preventing the return of the Yellow Fever” *The Medical Repository*, 2:3 (1799), pp. 354-355.

³⁷⁸ Rush, *Letters*, 2:816. See also *Observations Upon the Origin of the Malignant Bilious, or Yellow Fever in Philadelphia, and Upon the Means of Preventing it: Addressed to the Citizens of Philadelphia* (Philadelphia: Thomas Dobson, 1799). Written in laymen terms, this may have convinced others, also.

³⁷⁹ Felix Pascalis, M.D., “Observations on the Yellow Fever: Communicated in a Letter from Dr. Felix Pascalis to Dr. Mitchill, dated Philadelphia, Nov. 11, 1799” *The Medical Repository* 3:4 (1800), p. 344.

This early uniformity of opinion about the contagious nature of yellow fever included many College of Physicians members. When Mayor Clarkson asked for their opinions on how to prevent the spread of yellow fever in August of 1793, their first recommendations reflected that belief. They warned, "that all unnecessary intercourse should be avoided with such persons as are infected by it." They also wanted a way to identify homes that contained the sick; physicians requested that authorities "place a mark upon the door or window of such houses as have any infected persons in them."³⁸⁰ Writing in 1796, Dr. Joseph Mackrill, lately from the West Indies, also believed that a newly introduced African source of yellow fever was highly contagious. In 1793, "the contagion had remained inert during the passage of the ship from Africa; but no sooner did she arrive than it burst forth with all its horrors." It quickly spread from Grenada to other Caribbean Islands and then to the seaport towns of the United States. Mackrill suggested sanitation measures to prevent the contagion from gaining a foothold within cities since, he believed patients secreted the contagion in their clothing and bedding. Thus, "their bedding and such cloaths as cannot be washed, should be burned."³⁸¹ Even

³⁸⁰ College of Physicians, *Proceedings*, p. 2.

³⁸¹ Joseph Mackrill, M.D. *The History of the Yellow Fever with the Most Successful Method of Treatment* (Baltimore: John Hayes, 1796) pp. 8, 14. Although Mackrill did not seem to understand immunity to the disease when he constantly commented on how new European and American arrivals always came down with yellow fever almost as soon as they landed in the West Indies. However, he made a very remarkable observation concerning blacks and their immunity. He wrote: "It certainly is a great error to suppose, that negroes are not so liable to catch this disease as whites. This observation, so far as it relates to negroes living in Africa, may hold good. A disease which makes so much havock in this variable climate, probably does not affect the inhabitants of its own climate, in a more severe degree, than our own bilious autumnal fevers affect our inhabitants; but negroes born in America, and breathing the same atmosphere as the whites, their organization being allows on all sides to be the same as that of the whites, must of necessity, be equally liable to receive contagious diseases."

during the 1799 yellow fever epidemic, the College of Physicians still presumed the disease contagious. In a letter sent to the Health Office dated July 1, the College advocated "taking early and proper precautions, such as separating the diseased from the healthy, removing the shipping, and evacuating and carefully inspecting the dwelling houses, stores and counting houses, and the wharves [as] the most effectual means of checking the further progress of the disease."³⁸²

Jean Devèze was among the first to declare that yellow fever was not contagious. He based his opinion on his experiences at Bush Hill Hospital where none of the staff caught yellow fever from their patients. Caregivers "live[d] in the midst of them, and breathe[d] the same air, [but] these people were not infected."³⁸³ In 1798, the Academy of Medicine, with Rush in the lead, no longer argued that yellow fever was contagious. In their letter to the Board of Managers, they asserted "that the yellow fever is *not contagious* in the West-Indies, and repeated observations satisfy us that it is rarely so, during the *warm* weather in the United States." They continued, "none of the cases we have as yet seen have propagated it, and we conceive it to be an error as absurd in its nature as it has been fatal in its operation upon the city of Philadelphia." However, they still recommended removing people, ships, and all putrid matter from the stricken neighborhoods due to "the contamination of the atmosphere."³⁸⁴ The Academy continued

³⁸² Claypoole's *American Daily Advertiser*, August 24, 1799.

³⁸³ Devèze, p. 24.

³⁸⁴ William Currie M.D. *Memoirs of the Yellow Fever Which Prevailed in Philadelphia, and other parts of the United States of America, in the Summer and Autumn of the Present Year, 1798*. (Philadelphia: John Bioren) pp. 12-13. This is a recent development since the Academy of Medicine told Governor Mifflin after the 1797 epidemic, that yellow fever was contagious. See *Proofs of the Origin of the Yellow fever in Philadelphia & Kensington in the Year 1797 from Domestic Exhalation ... in Two Letters Addressed to the Governor of the Commonwealth of Pennsylvania* (Philadelphia: Thomas & Samuel Bradford, 1798).

their non-contagious campaign in the 1799 yellow fever epidemic. In a letter to the Board of Health, dated August 22, they reported "that they have, in no instance, observed it to be communicated by sick persons to their attendants, or to others."³⁸⁵ By the end of the 1790s, while more Philadelphians believed yellow fever could not spread directly from person to person without some predisposing factors, they were clearly in the minority, notwithstanding the crusade by Rush and his followers.

Despite the growing differences between the two medical camps over the origin and contagious nature of the disease, the city government had to grapple with prevention measures. Confused by conflicting medical opinions, they adopted a dual approach. As mentioned previously, the College continued to warn the Health Office of the dangers of importation and contagion, advocating better quarantine measures and the isolation of patients. Conversely, the Academy argued that quarantine would not help since yellow fever sprang from the filth of the city and isolating patients was therefore not the proper solution. Something in the atmosphere, they argued, made yellow fever only selectively contagious. Unfortunately, there seemed no way to guarantee individual health in such unknown conditions. Although the state continued their quarantine and isolation procedures as recommended by the College of Physicians, they also attempted to clean the urban environment and to introduce a better water supply as recommended by the Academy of Physicians. With all the contradictory opinions, fleeing to the countryside seemed the best alternative—citizens removed themselves from both the tainted atmosphere and any disease imported from the West Indies. Regrettably, for those who

³⁸⁵ *Claypoole's American Daily Advertiser*, August 24, 1799.

stayed behind and were unlucky enough to contract the disease, treatments varied so widely from one physician to another as to raise serious questions about their efficacy.

As with issues of origin and contagious nature of the disease, physicians divided into two opposing groups about the most effective treatment of yellow fever. Historian Arthur T. Robinson characterized them as the gentle-natural approach and the direct-heroic intervention approach.³⁸⁶ The natural approach used restorative methods—drinking fluids, eating fruit, and taking cool baths. (Fluid consumption and rest are the recommended treatments by modern medical authorities.) Not surprising, three of the leading proponents of this method were foreigners with experience in treating tropical diseases: Doctors Edward Stevens, Jean Devèze, and David Nassy. In agreement with their methods were Doctors William Currie, Adam Kuhn, and other members of the College of Physicians. According to Stevens, “every thing that can tend to debilitate should be carefully guarded against. [The patient] should remain at perfect rest ... [given] small doses of cordial mixture[s] ... [while] all emetics and cathartics should be avoided.”³⁸⁷ Although varied his treatments according to the needs of each patient, he often gave “diluting drinks, such as lemonade, chicken water, barley water, gruel, and cold water. [He also] allowed the sick to suck slices of sweet oranges, and during the first period they rarely took any other food than creamed rice or barley.”³⁸⁸ Similar to his

³⁸⁶ Robinson, pp. 289-295, 301-338. The author contrasts the treatments of Doctors Kuhn, Devèze, Nassy, Currie, Stevens, and Rush. See also Harry Bloch, M.D. “Narration: Dr. David d’Issac Nassy,” *Journal of the American Medical Association* (JAMA), 207:21 (1973), pp. 1228-1229.

³⁸⁷ *Gazette of the United States and Evening Advertiser*, September 18, 1793. A letter from Dr. Stevens to Dr. Redman, President of the College of Physicians.

³⁸⁸ Devèze, pp. 56-60.

fellow immigrant counterparts, Nassy's approach to treating yellow fever meant "letting nature gently heal, paying close attention to diet, providing constant bedside nursing, and administering gentle herbs and frequent liquids."³⁸⁹ For all three physicians, these treatments proved successful both in the tropics and in Philadelphia.

Among the American physicians who agreed with and practiced this gentle-natural approach to treating yellow fever were Doctors Currie and Kuhn. Currie began his treatments by opening the system with tartar emetic mixed "in barley water or camomile tea." He followed with "a mild purgative occasionally repeated, [and] a sudorific anodyne at night, with copious dilution, for the purpose of promoting a free perspiration." Currie also encouraged and increased the consumption of different kinds of fluids to prevent dehydration. Patients should drink copiously of lime juice, or tamarind beverage." When the afflicted were out of danger, Currie prescribed wine, "bark mixed with a strong peppermint julep," and laudanum.³⁹⁰ Kuhn, Professor of Physics, published his gentle treatment regimen in a Philadelphia newspaper. "I recommend cream of tartar or castor oil ... [and] in case of nausea, I order a few bowls of camomile tea." When vomiting prohibited the actions of any medicines or sustenance, Kuhn made a concoction of bark with "two to four drachms of finely powdered bark and fifty drops of laudanum" to be injected as glysters. "Wine is to be given from the beginning, ... [and] I place the greatest dependence for the cure of the disease on throwing cool water twice a day over the naked body ... [which] is always attended with

³⁸⁹ Robinson, pp. 315-316.

³⁹⁰ Currie, *Description*, pp. 17, 18, 19, 22.

great refreshment to the patient.” He also gave his patients “ripe fruits, sago with wine, and rich wine whey.”³⁹¹ All the physicians who adhered to this natural treatment fundamentally supported the body as it tried to heal itself through bed rest and the active use of fluids to prevent dehydration and balance electrolytes.

Diametrically opposed to the gentle supportive healing regimen was that of the direct-heroic intervention approach championed by Dr. Benjamin Rush and his coterie. Their depletive healing regimen consisted of massive bloodletting, purgatives, emetics, and salivation. Inspired by the writings of Dr. John Mitchell and his recommendations of bleeding, emetic ipecac, and mild cathartics, Rush formulated a similar treatment. According to medical historian Dr. J. Worth Estes, “the linchpins of Rush’s yellow fever therapy were bleeding and large doses of jalap, which causes catharsis, and calomel (mercurous chloride), which induces emesis and diuresis as well as catharsis.” All these actions on the body would rid the system of all foulness, something all physicians routinely did for their patients. However, Rush further perfected the Mitchell regimen by acknowledging that the author “had not prescribed *sufficient* amounts of bleeding, calomel, or jalap.”³⁹²

Rush believed that he had discovered a miraculous cure. In his excitement to spread the word, he turned to the newspapers on September 12, 1793. In an address to his fellow citizens, Rush recommended anyone “indisposed with the prevailing fever ... to

³⁹¹ Dunlap’s *American Daily Advertiser*, September 13, 1793.

³⁹² J. Worth Estes, “Introduction: the Yellow Fever Syndrome and Its Treatment in Philadelphia, 1793,” In *A Melancholy Scene of Devastation – the Public Response to the 1793 Philadelphia Yellow Fever Epidemic*. Eds. J. Worth Estes and Billy G. Smith (Science History Publications/USA, 1997), p. 12.

take the mercurial purges, which may now be had with suitable directions at most of the apothecaries." He also strongly urged them "to lose ten or twelve ounces of blood."³⁹³

That same day, in a letter to the College of Physicians, Rush stressed the importance of venesection. "I have found bleeding to be useful," he explained, "not only in cases where the pulse was full and quick, but where it was *slow* and *tense*." Rush bemoaned the lack of enthusiasm by other members for his mode of treatment. "I lament the contrariety of opinion among the members of our College [which] seems to arise from the yellow fever being confounded" with other fevers. Therefore, he continued, "I consider intrepidity in the use of the lancet at present to be as necessary as it is in the use of mercury and jalap in this insidious and ferocious disease."³⁹⁴ Rush was indeed intrepid in bloodletting, at times advocating relieving the patient of more blood than is in the human body.

According to medical historian Dr. William S. Middleton, "one-hundred and sixty-two ounces" of blood was taken from James Mease, and, miraculously, he still recovered.³⁹⁵

On one hand then, throughout the 1793 epidemic, Rush and his followers, bled and purged hundreds of patients while slowly gaining adherents to his methods. On the other hand, he vilified anyone who cast doubts about the efficacy of his miracle cure—especially the harmful effects perpetrated on the body from such large quantities of

³⁹³ Rush, *Letters*, 2:660. This address appeared in the *Federal Gazette* on September 12, 1793. Butterfield also noted that chemists and druggists began advertising the purges as "Doctor Rush's Mercurial Sweating Powder for the Yellow Fever."

³⁹⁴ *Ibid.*, 2:661-662. This letter also appeared in the *Federal Gazette* on September 12, 1793. According to Powell, a fellow physician during the Revolutionary War prescribed a strong purge called the "Ten-and-Ten." It contained 10 grains each of jalap and calomel (mercury) and used on strong military men. Rush changed the formula to 10 grains calomel and 15 grains jalap, which several other physicians alternately dubbed: "a murderous dose, a devil of a dose, and a dose for a horse."

³⁹⁵ William S. Middleton, M.D. "The Yellow Fever Epidemic of 1793 in Philadelphia," *Annals of Medical History* 10 (1928), p. 442.

mercury. Dr. Currie warned against it, Dr. Nassy saw its internal damage on victims, and Dr. Charles Caldwell experienced first hand the loss of his teeth and jaw bone.³⁹⁶

Despite the trail of dead bodies he must have left in his wake, and the increasingly rancorous criticisms of his cure, Rush continued using his depletive therapies throughout the 1790s for treating yellow fever. During the 1797 epidemic, Rush proceeded with his heroic treatments by adding another form of mercury to his arsenal of weapons. Rush boasted: "I have as yet not lost a single patient in whom I have been able to excite a salivation. For this purpose I apply mercurial ointment to the body as well as give calomel internally." He also lamented that as in 1793, his valuable methods "have been limited in many cases by a revival of the old clamours and prejudices against them."³⁹⁷ In 1798, Doctors Physick and Cooper, two members of Rush's coterie, were resident physicians at the city hospital. Due to their lack of success during the early stages of the yellow fever epidemic, they wrote requesting help from their mentor—Dr. Rush. In his reply, Rush stated the need to bleed and purge, but he also attended to the gall bladder

³⁹⁶ Currie, *A Sketch*, pp. 79-80. Currie believed that "mercury protracted the fever and retarded the cure in every case where inflammatory systems dominated." Powell, pp. 172-174. Devèze and Nassy performed autopsies on several patients. They found serious internal damage from the medicines praised by Rush and his followers. Powell wrote, "they wrought great havoc in the stomach and intestines, increasing the corrosive damage of the disease; they were proved wrong, not by theory, but by observed fact." Charles Caldwell, *Autobiography*, p 282. Dr. Rush used mercury on Caldwell in 1797. "It produced an intractable effect on my gums and maxillary bones, which never ceased to annoy me until it gradually deprived me of all my teeth, and compelled me to resort to a full set of artificial ones. The process by which the removal of my teeth was effected was the absorption of those parts of the maxillary bones which formed their sockets and held them in their places. It set at defiance every effort to arrest it and like an irresistible burning, it ceased to consume only with the destruction of the last monad of consumable matter." This may have been poetic justice since Caldwell also subjected his own patients to mercury.

³⁹⁷ Rush, *Letters*, 2: 791. Letter to John R.B. Rodgers on September 25, 1797. In one paragraph, Rush stated that all of his fellow physicians now use mercury and most bleed—but, in more modest proportions than his Ten-and-Fifteen purge. Rush also mistakenly believed a healthy adult male's body contained some 400 ounces of blood. Therefore, relieving a patient suffering from yellow fever of even 50 ounces should be quite safe.

and upper bowels as well. "The medicines I use for *shaking* the gall-bladder and bowels and *discharging* the contents are, tartar emetic, gamboge, jalap, and calomel. ... [In one case] it operated freely upwards and downwards, and brought away a large quantity of green and black bile, but without exciting the least cramp or pain in the stomach or bowels."³⁹⁸ Both physicians and patients must have questioned the veracity of this observation, considering the caustic nature of his medicines.

The increasingly higher doses of mercury Rush prescribed to combat yellow fever in 1798 drew the ire of other physicians and the public, making their use the following year by Rush and his fellow Academy of Medicine members less acceptable. In a letter dated September 24, 1799, Rush partially bowed to that pressure while treating patients at the City Hospital. "We have yielded to public prejudice and importunity by prescribing yeast, limewater and milk, and several other simples." With six years of successfully treating yellow fever, he continued, "I am satisfied the disease can be cured only by *depleting* remedies. ... The operation of them all, whether they act immediately upon the stomach, bowels, pores, salivary glands, or blood vessels, is—to evacuate, and thereby to weaken and reduce the system by the stimulus of a poison acting upon it."³⁹⁹ Despite the opposition of many physicians, the crusading Rush continued praising and employing his "cure" of yellow fever.

In his memoir, compiled some time after attending four courses of lectures by Rush, Samuel Jackson wrote about the years immediately after the 1799 yellow fever

³⁹⁸ Currie, *Memoirs*, p. 21.

³⁹⁹ Rush, *Letters*, 2: 815.

epidemic and the damage caused by the rift. "Rush lectured and wrote, and turned his opponents into ridicule in the exercise of his professorial office; he published histories of the fever of every year to 1805, wherein he set forth his opinions and the success of his practice, denouncing, at the same time, that of his enemies."⁴⁰⁰ Jackson believed Rush triumphed over his enemies in medicine, but at a cost, because the medical division hurt both sides—perceived winners and losers alike. The College of Physicians remained steadfast in their importation and contagious nature of the disease, while the equally obstinate Academy of Physicians would not compromise on their beliefs of the local generation and non-contagious nature of yellow fever. Yet, perhaps worst of all, their treatments fell into two almost mutually exclusive regimens. In the process of proving their position as the correct one, each side submitted articles to newspapers and published treatises as support. Their increasingly vitriolic exchanges and the resulting polarization created frustration and doubt among citizens and government officials trying to deal with the inevitable chaos erupting around them each time yellow fever reached epidemic proportions. After all, yellow fever could not be both imported *and* of local origin, nor could it be both non-contagious *and* contagious.

⁴⁰⁰ Samuel Jackson, "Benjamin Rush. 1745-1813," In *Lives of Eminent American Physicians and Surgeons of the Nineteenth Century*, ed. Samuel D. Gross, M.D. (Philadelphia: Lindsay & Blakiston, 1861), p. 40.

The Insect Vector

Since the identification of the *Aedes aegypti* mosquito as the carrier of yellow fever was more than a century away, neither side had the complete picture. Still, physicians on both sides of the argument concerning the origin of the disease were partially correct. Those who believed that yellow fever came to Philadelphia on board ships were accurate in that infected humans and/or mosquitoes first introduced it into the city. However, those who believed in local generation were correct in that a locally bred population of mosquitoes—not putrid miasmata—must exist to continue the process until a full-blown epidemic occurred. Martin S. Pernick explained the irony of their discord during the 1793 epidemic: “Doctors who saw the roots of the disease in domestic causes—the poor sanitation, unhealthy location, or climatic conditions of Philadelphia itself—disputed those who placed the blame on the unhealthy state of the still disembarking refugees and their ships. In fact, both sides were right.”⁴⁰¹ That was also the case in their arguments over the contagious nature of yellow fever.

Without knowledge of the insect vector, Devèze and others who believed yellow fever could not be contagious were as partially correct as Currie and the College of Physicians who believed it was. Both sides had good evidence to support their position. Devèze based his opinion on his experiences at Bush-Hill: people working among the sick did not contract yellow fever. If it had been contagious, Devèze, Dr. Benjamin Duffield, the apothecaries, nurses, and managers Girard and Helm should all have gotten

⁴⁰¹ Pernick, p. 562.

sick. "If the disease had been contagious," Devèze wrote in his *Enquiry*, "certainly some of them would have been attacked, but not one experienced the slightest indisposition."⁴⁰²

What Devèze could not explain, to the satisfaction of Currie and others that believed it contagious, was how thousands of Philadelphians did contract yellow fever—especially when it obviously started and spread from the wharves along the Delaware River.

The College of Physicians, believed yellow fever spread in several ways. First, they observed its introduction from the West Indies. "Whenever this complaint is very prevalent in the West-Indies (which is generally the case in time of war) it will find its way to this city."⁴⁰³ According to their observations, the contagion resided in any number of articles that once handled, could infect people. In one case, it was in the sails and rigging of a French privateer. In many cases, the contagion resided in the cargo itself or infused in the personal articles of yellow fever sufferers and victims.⁴⁰⁴ Dr. Currie presented specific warnings and sources in his 1793 study. In his opinion, "confinement for any length of time in the bed-chamber of the sick, coming in immediate contact with the patient, his body, or bedclothes, or those of the nurse or other attendants before they have been for some time exposed to the action of the open air, or by receiving the breathe, or the scent of the several excretions of the sick," placed a person in danger of contracting the disease.⁴⁰⁵ Again, both sides were partially correct. Devèze demonstrated that being around patients suffering from yellow fever did not

⁴⁰² Devèze, pp. 28, 30.

⁴⁰³ College of Physicians, *Proceedings*, p. 7.

⁴⁰⁴ College of Physicians, *Facts*, Appendix – Notes F and M.

⁴⁰⁵ Currie, *Description*, p. 9.

automatically spread the disease. However, the College and Currie proved it spread to people who boarded or worked on ships and then to the families and nurses of those stricken. While we know the *Aedes aegypti* mosquito turned out to be the culprit, no one in the 1790s considered that a common insect could be the missing link in the transference of yellow fever.

What thousands of residents along the eastern seaboard did not know about the *Aedes aegypti* literally cost them their lives. In his groundbreaking study of the epidemiological and historical origin of yellow fever, written in the early 1920s, Dr. Henry Rose Carter explained the breeding places of this mosquito, their role as a vector, immunity, and the critical timetable of virus transfer between humans and mosquitoes. Carter found that rather than choosing open water or puddles to lay eggs, "*aegypti* breed in collections of water in artificial—man-made—containers, close to, or in, the habitations of men." They prefer smaller containers with "collections of clear water, especially for wooden vessels." Carter observed their preference for wood over earthenware and that over metal. They also favored water with an alkaline pH rather than an acid pH. Other than a single instance, Carter "has never seen breeding at a distance from human habitations."⁴⁰⁶ This helps explain why rural residents and those who fled to the country did not develop yellow fever. Since Bush-Hill hospital was in the country, the chances of *aegypti* living there were remote. Hence, for Devèze it was not contagious.

⁴⁰⁶ Henry Rose Carter, M.D. *Yellow Fever: An Epidemiological and Historical Study of Its Place of Origin*, Ed. Laura Armistead Carter and Wade Hampton Frost, (Baltimore: Williams & Wilkins Company, 1931), pp. 5-11.

Carter also explained the *aegypti*'s role as the only vector, other than humans, in spreading yellow fever. He found that the timely bite of a human suffering from yellow fever by a female *Aedes aegypti* would carry the virus into her body. Once infected, "the insect remains so [for] probably all her life." Providentially, she does not pass on the virus to her progeny. Interestingly, the infection did not change her feeding patterns. "The mosquito, both before and after becoming infective," he observed, "feeds by day and by night."⁴⁰⁷ This explained why yellow fever always began on ships coming from the West Indies and within their immediate environs—the Philadelphia wharves and Water Street. Already infected mosquitoes living in or near the onboard water barrels would easily infect anyone who boarded the ship. The newly infected humans would then transfer the virus to their locally bred and uninfected *aegypti* cousins. For the College of Physicians, these were all indications that yellow fever was highly contagious.

Immunity was another unknown and therefore confusing aspect in the seemingly hit and miss aspect of the yellow fever epidemics. We know today, and Carter believed it at the time of his research, that like small pox, "after the attack, [a survivor] is, in general, immune to yellow fever, to the infection as well as to the disease."⁴⁰⁸ Therefore, survivors of yellow fever could not infect mosquitoes to start a change reaction. Ironically, Devèze contracted yellow fever, according to Dr. John E. Lane, "in 1775, [when] he went to Santo Domingo to practice medicine." Part of his non-contagious argument centered on his failure to contract it despite touching contaminated matter while

⁴⁰⁷ Ibid., p. 4.

⁴⁰⁸ Ibid., p. 5.

doing autopsies. "I opened a great number of bodies, and consequently was under the necessity of dipping my hands in the black and corrupted blood that proceeded from their mortified entrails, and breathed the infected vapours."⁴⁰⁹ If anyone should contract yellow fever, Devèze believed that under these particular circumstances, he should have succumbed. Immunity could also explain why some vessels, after losing passengers or crew to yellow fever en route, successfully rode extended quarantine without signs of illness. Infected mosquitoes evidently ran out of humans susceptible to yellow fever until the ship docked when workers without immunity boarded her.⁴¹⁰ In those cases, it appeared to many that the contagion came from contaminated cargoes, unhealthy air below deck, bilge water, or the clothing and personal belongings of any victims.

Throughout the entire process of spreading yellow fever, Carter found that timing was a critical factor. According to his evidence, humans were "infective to the insect in the first few days of the disease, [while] none have been shown to be so after the third day." In the case of the mosquito, he realized that they were not immediately able to transfer the disease to others. "A certain time elapses," Carter noted, "from the date the mosquito feeds on the sick [human] before she can communicate the infection." At present, it appeared that the interval was "not less than twelve days." In cases where infected mosquitoes bite susceptible humans, Carter discerned "the period of incubation

⁴⁰⁹ John E. Lane, M.D. "Jean Devèze: Notes on the Yellow Fever Epidemic at Philadelphia in 1793," *Annals of Medical History* N.S. 8 (1936), p. 211.

⁴¹⁰ Carter explained the necessary conditions for the continued existence of yellow fever. There must be infective humans to transfer the virus to *Aedes aegypti* mosquitoes. In turn, a supply of non-infective humans must be available for these infective mosquitoes to bite and subsequently transfer the disease. Finally, the appropriate artificial containers must be available so the next generations' vector is successfully bred.

for yellow fever, that is, the time from the date of infection to the beginning of the attack, is, in nature, roughly from three to six days.”⁴¹¹ This explained why it took some time for the first wave of people to develop yellow fever. The subsequent or secondary waves of infection depended upon how quickly new generations of *Aedes aegypti* could multiply, become infected, and further spread the infection.

The *Aedes aegypti* has four separate phases in their life history: the egg, larva, pupa, and adult. In a training guide published by the Public Health Service, Harry D. Pratt and his associates described the maturation process. “The eggs [were] laid singly on the water just at the margin or on the sides of the containers above the water line.” With warm weather conditions, “hatching [took] place in less than two days.” As larvae, they remained in the water and “complete[d] their development in about 6 to 10 days.”⁴¹² The third and last aquatic phase—the pupal stage—usually lasted only two days before the adult mosquito emerged and flew away. The scientists believed that under optimal temperature conditions, “the life cycle may be completed in ten days.”⁴¹³

Temperatures during the summer months in Philadelphia helped dictate how severe a yellow fever epidemic might be. André Siegfried believed “that the conditions of survival of the insect form[ed] an important element in the spread of the disease.” Similar to Carter’s optimum temperature of 80° to 87° F., Siegfried wrote that the

⁴¹¹ Carter, pp. 3-4.

⁴¹² Harry D. Pratt, Ralph C. Barnes, and Kent S. Littig, *Mosquitoes of Public Health Importance and Their Control: Training Guide*, U.S. Department of Health, Education, and Welfare, Public Health Service Publication No. 772, Insect Control Series, Part VI (Washington D.C.: U.S. Government Printing Office, 1963), p. VI-18.

⁴¹³ *Ibid.*, p. VI-18.

“optimum conditions for survival of the *Aëdes* takes place between 27 and 32 degrees [80.6-89.6°F.] centigrade.” He also noted some lower end temperatures of importance for these mosquitoes. “Below 25 degrees [77°F.] its activity is reduced, [while] below 17 degrees [62.6°F.] it disappears, and frost is certain to destroy it.”⁴¹⁴ In the years when Philadelphia experienced hot summer months, the *aegypti* bred quickly enough to produce more than a sufficient supply of offspring to transmit yellow fever to thousands of citizens once they were themselves infected. Conversely, those years with cooler night temperatures slowed their critical activities—feeding on humans and breeding the next generation of destroyers. Temperature, then, also explained the large variations in the lapse of time between the first minor wave of infection and the absolute explosion of cases occurring from three to eight weeks later. This also confused physicians trying to find a direct link between the sick and the immediately stricken. Nevertheless, those stricken with yellow fever cared little about origin or contagiousness, they wanted the medical community to find a cure before it was too late.

Like their Philadelphia brethren in the 1790s, medical researchers today have also failed to find the yellow fever cure. Still, we now understand the pathology of the virus, making current treatments more effective. With our microscopic abilities, we know that the yellow fever virus is incredibly small, attacks humans on the cellular level, and targets two particular organs of the body. In an article warning of the resurgence of yellow fever, John Maurice explained how the virus worked:

⁴¹⁴ André Siegfried, *Routes of Contagion*, Trans. Jean Henderson and Mercedes Clarasó (New York: Harcourt, Brace & World, Inc., 1960), pp. 70-71. The author was extremely concerned over how quickly deadly diseases can now spread all over the world in a matter of hours or days with air travel.

It consists of a single strand of the genetic material RNA packed into a particle encased in a protein-sugar envelope. It can infect just about any type of cell in the body but has a particular liking for liver and brain tissue. Having invaded a cell, the virus copies its genetic information into DNA and then it begins to replicate, making more and more particles. These eventually destroy the cell and spread to infect others.⁴¹⁵

Almost immediately, as Carroll L. Birch, M.D. explained, "patients exhibit the symptoms of an acute infection—fever, headache, backache, congestion, pain in the legs, vomiting and severe prostration."⁴¹⁶ As the disease spread, it attacked organ after organ, wreaking havoc with the defenses of the body, until patients unable to withstand the onslaught of the virus expired. In the process, they developed the "classic signs of yellow fever," explained J. Worth Estes, "including jaundice, black vomit, and renal failure." These were "followed by coma and death from liver or kidney failure, or from overwhelming infection as a result of bone marrow failure."⁴¹⁷ Maurice concurred: "The virus eats its way into internal organs and causes widespread internal bleeding. Finally, organs fail and the patient goes into coma and dies."⁴¹⁸ Whatever the clinical description, yellow fever patients usually suffered horribly, especially when treated incorrectly, as Benjamin Rush encouraged.

Today, recommended treatment for yellow fever victims parallels those of the gentle-natural approach used by Stevens, Devèze, Nassy, Currie, Kuhn, and other College of Physician members. Lacking an effective antibiotic, modern physicians have relied on

⁴¹⁵ John Maurice, "Fever in the Urban Jungle," *New Scientist*, 140:1895 (1993), p. 27.

⁴¹⁶ Carroll L. Birch, M.D., "Jungle Yellow Fever," In *Diseases Transmitted from Animals to Man*, 5th Edition, ed. Thomas G. Hull, (Springfield, Illinois: Charles C. Thomas, 1963), p. 802-803.

⁴¹⁷ Estes, p. 5.

⁴¹⁸ Maurice, p. 27.

many of the supportive methods of the past. As Estes pointed out, "only bed rest and supportive nursing care, along with symptomatic treatment of fever, pain, and vomiting, and perhaps correction of electrolyte imbalances, can alleviate the illness."⁴¹⁹ Maurice agreed with these methods, while Birch further recommended "glucose to combat hypoglycemia, calcium salts to neutralize the guanidine-like toxins common to the destruction of liver parenchyma, and large doses of vitamin K [for] controlling hemorrhage."⁴²⁰ The heroic intervention approach practiced by Rush and his adherents further exacerbated the destruction caused by the virus on the body. They dehydrated and exhausted their patients through purges, vomits, and salivations using poisonous mercurous chloride. Simultaneously, they copiously bled patients who were already bleeding internally from the ravages of the virus on internal organs. It was a wonder that anyone survived the ravages of both virus and physician.⁴²¹

⁴¹⁹ Estes, p. 7.

⁴²⁰ Birch, p. 806.

⁴²¹ Taking into consideration that Rush implored citizens to get purged and bled at the very onset of any yellow fever symptoms, many of his "first day" patients may not have been suffering from yellow fever at all and hence were easily cured. Otherwise, it seems almost impossible for very many of his "advanced" cases to survive his cure. If the patient was already internally bleeding and jaundiced, their liver and kidneys were not functioning, their electrolytes were critically out of balance, and their blood volume was dangerously low. Everything "heroic" done to these patients only exacerbated their physiological debility.

Conclusion

The Conundrum of Yellow Fever

The physicians and citizens of Philadelphia puzzled over the mysteries of yellow fever throughout the 1790s and beyond. Although Dr. Rush convinced himself that first day bleedings and purges “cured” yellow fever, many other contemporary medical authorities were not so sure. Many other physicians, especially those using gentle and natural therapies, simply supported the body as it healed itself. More than two hundred years since those outbreaks, and despite recent advances in medicine and a successful preventive vaccine, the cure for yellow fever has remained elusive. However, modern treatment does correspond to that used by Devèze and the other physicians who supported the body system.

Knowledge of the insect vector, not particularly useful in developing healing regimens, was critical in establishing preventive measures. Because of this ignorance, the all-important origins and contagious nature of yellow fever were completely open to conflicting theories during the 1790s. Both the College of Physicians and the Academy of Medicine investigated the epidemics. Using the same facts, each group of medical professionals produced and supported their opposing opinions. Through direct observation at Bush Hill, Devèze unequivocally stated yellow fever was not contagious. Currie, also through inquiries, traced a series of early cases and found a common link—the riverfront wharves. He also explicitly declared the fever highly contagious. Until

the discovery of the insect vector, citizens, physicians, and government officials had to make tough individual choices about how they would respond in an epidemic.

Just as insect vector information would have led Devèze and Currie to the same conclusions about the contagious nature of yellow fever, it would have also helped them solve the origin problem. Devèze, whether he supported the local origin argument for political reasons or by medical observation, with vector data, would have realized that it took a specific tropical mosquito to begin the yellow fever chain reaction. Without the ability to survive the cold winter months in Philadelphia, it must come from elsewhere. However, Currie, given the same data, would have realized that a locally bred and infected population of those same mosquitoes had to be present to continue that yellow fever chain reaction. Again, without this critical knowledge, both quarantine and cleaning up the filth turned out to be relatively ineffective.

The Fox Hypothetical Model

In evaluating the responses of Philadelphia's inhabitants to this series of calamities, patterns emerged which closely followed the seven-stage model developed by Fox and referred to in the introduction. Of the first stage of the model, the underestimation or outright denial phase, Philadelphia offered many examples. As rumors of a malignant fever swept through the city in 1793, several newspaper articles tried to calm the residents down. W.F. submitted a folk remedy, A.B. said fear could cause disease, and "A Friend to the People" minimized the danger, advising everyone to

stay put and attend to their businesses. Even physicians proved reluctant to sound the alarm. Many foreign and young physicians treated cases of yellow fever well before Rush announced its presence in the city. In the summer of 1797, early cases went unreported until as Dr. Caldwell remembered, it burst on the scene in mid-August. Physicians, nurses, and family members simply kept quiet. The fever season of 1798 began with arrival of French refugees, some of whom died shortly thereafter. Contrasted with their counterparts five years earlier, although these gentlemen arrived with their fortunes intact, they may still have visited foreign physicians practicing in the French neighborhoods. Elizabeth Drinker also noted the suspicious death of a young man on July 2. Through her considerable network of sources, Drinker learned that the Board of Health just learned of his death and were investigating. Unfortunately, shortly thereafter, the physician who treated the victim and who should have sounded the alarm was also dead. At the end of July, Drinker noted increasing numbers of suspicious deaths, but no one appeared ready to announce the arrival of yellow fever. For Drinker, yellow fever struck far too close in 1799. A servant of her daughter Molly Rhoads, sickened and died of what her mother feared was yellow fever. Dr. Kuhn, the attending physician, pronounced it a bilious fever and not yellow fever, despite many obvious symptoms. Although physicians seemed reluctant to inform the Health Office, when they treated yellow fever, in 1799, it was the Board of Health members that first refused to believe and then persistently maintained there were not enough cases to alarm the public. In every epidemic year, some Philadelphians feared the consequences of an injudicious declaration.

In all four epidemic years, public hysteria developed once the inhabitants accepted as fact that yellow fever was in their midst (second stage), and thousands immediately fled the infected areas, but often, they fled the city itself (third stage). Carey, Jones and Allen, and Drinker all chronicled some of the horrors resulting from these two stages in the 1793 epidemic. Husbands deserted wives, children deserted parents, orphans left to wander the streets when neighbors refused them admittance. Although residents fled every year, by 1797, the Health Office helped maintain calm and managed the city hospital. The panic also spread to outlying areas and cities as refugees from Philadelphia tried to outrun the epidemic. Until time proved that the yellow fever contagion was rarely carried into the countryside, small towns and villages refused admittance and often patrolled the incoming routes in order to stop all intercourse. As cities took turns suffering from yellow fever, their healthy counterparts refused admittance until the satisfactory completion of quarantine.

While Philadelphians believed in the contagious nature of yellow fever, those suffering from the disease would be isolated or quarantined to varying degrees (stage four). The most dreadful isolation—a death sentence—came at the very beginning of the 1793 epidemic when Rickett's Circus became the dumping ground for patients. Conditions eventually improved after Bush Hill opened and the Girard / Helm superintendence team restored order. Throughout the other epidemics, the quality of care improved drastically at both hospitals under the direction of the Board of Health.

In a city heavily influenced by Benjamin Franklin, the inhabitants of the City of Friends often resorted to committees and associations to accomplish their goals. With

that background, it was not surprising that they approached the threat of yellow fever in the same manner (stage five). In 1793, free blacks emerged to help save the city just as the citizen Committee formed to direct and coordinate relief efforts. In succeeding years, residents went on the offensive, keeping yellow fever out of their city. When fever struck again, they volunteered their services to the Board of Health, supplementing that organization. By 1799, citizens were so active and prevention-focused, that they actually forced their fellow inhabitants to clean up their private property. They also began the long and arduous task of bringing fresh water into their city. As in times past, the inhabitants of the Quaker City continued their offensive strategies, especially honed during the years before the Revolutionary War.

Physician behavior and medical care fall under the sixth stage of the Fox model. All epidemics immediately created a shortage of medical personnel as hundreds or thousands of people got sick simultaneously. During yellow fever epidemics physicians fled or succumbed to the disease also. This meant that physicians on the fringe—foreign, less trained, or newly graduated—treated more patients and became more accepted by inhabitants of the city than under normal circumstances. For the medical elite, these epidemics tarnished their reputations as they continually fought each other over whose theory about the origin and contagious nature of the disease was correct. With hindsight, we know that Dr. Rush apparently broke free of the constraints of the past, developed his miracle cure, and then bled and purged many of his patients right into their graves. Rush, in his enthusiasm to save the city, also taught free blacks how to bleed so they could carry out all the requests for help that he could not attend to personally. In the latter epidemics,

the tempering of the heroic approach probably helped. Since there is still no cure today, modern physicians have also been unable to find innovative ways to fight yellow fever, just as their counterparts failed to in the 1790s.

Philadelphians excelled at making change after each epidemic—stage seven. The legislature created a Health Board, increasing their powers after each bout of yellow fever. Stricter quarantine, better purification and cleansing procedures, and the establishment of new hospitals were all ways residents hoped to keep yellow fever out of their city. In 1799, they also seriously turned to sanitation as a means to prevent the creation of yellow fever from the filth within the city. At the end of the decade, the city embarked on the immense task of bringing running water into the city. While all of these measures might improve the health of the citizenry, only piped water would eventually replace the domestic water containers that the *Aedes aegypti* used to lay their eggs.

The Political Impact of Yellow Fever

The yellow fever epidemics strengthened all levels of government: local, state, and federal. Within the city of Philadelphia, the decision to fund a water works project cost citizens enormous amounts of money in special taxes to build, maintain, and improve the system. Although this turned out to be a very expensive proposition, all that water promoted cleanliness, sanitary programs (as we saw in 1799), and eventually, a public health division within city governments. The state legislature, by enacting stronger health laws, also greatly enhanced the powers of the Board of Health. At first,

their duty consisted of examining incoming vessels in order to prevent the importation of sick passengers or crew, or contaminated cargoes. However, by the end of the decade, the health laws became so comprehensive that the Board of Health also added to their growing jurisdiction, the responsibility of enforcing citywide sanitation measures. Their power to stop all commerce with a declaration, or compel citizens to clean up their private property caused many inhabitants to wonder what had happened to their individual rights. The first attempt at the federal level to pass a national quarantine law, in June 1796, failed. The arguments against such a law centered on states' rights as one Congressman explained. "It proposed to take the power from individual states to regulate what respected the health of their citizens, and to place it in the President of the United States."⁴²² Additionally, considering how such a proclamation would adversely effect commerce, it was not surprising that it failed. However, after the horrors of 1798, President Adams believed it was now a national consideration. In his speech to Congress on December 8, 1798, he requested National Quarantine and Health Laws.

When we consider the magnitude of the evils arising from the interruption of public and private business, whereby the national interests are deeply affected—I think it my duty to invite the Legislature of the Union to examine the expediency of establishing suitable regulations in aid of the health laws of the respective states; for these being formed on the idea that contagious sickness may be communicated through the channels of commerce, there seems to be a necessity that Congress, who alone can regulate trade, should frame a system, which, while it may tend to preserve the general health, may be compatible with the interests of commerce, and the safety of the revenue.⁴²³

⁴²² Claypoole's *American Daily Advertiser*, June 4, 1796.

⁴²³ Claypoole's *American Daily Advertiser*, December 8, 1798.

While some citizens construed this as federal interference in matters of restricting trade, something they fought as colonists against Great Britain, others applauded loudly. Dr. Samuel L. Mitchill, co-editor of *The Medical Repository*, was among those who had actively supported such legislation. When it became law on February 25, 1799, he printed it in the second volume. The federal government would now have the unenviable task of balancing economic interests against the public health of all citizens.

Yellow fever's 1798 visitation in Philadelphia, accompanied by such high mortality rates, sealed the political fate of the city as both a state and federal capital. It brought to a climax the struggle to remove the Pennsylvania State capital from Philadelphia. The December 1799 session of the legislature opened in Lancaster, never to return to the Quaker City.⁴²⁴ When the federal capital had moved to Philadelphia in 1790, many citizens believed it would stay in a city filled with cultural and economic amenities. However, as historian Edward M. Riley pointed out, "the periodic return of the plague, can scarcely have encouraged Philadelphia's hope to be the permanent capital."⁴²⁵ Each succeeding epidemic further convinced federal officials to continue construction of Washington, D.C. and to move there in 1800 as scheduled. With so much death and anxiety, as historian John K. Alexander noted, many Philadelphians rightly "feared that economic and political dominance would move, with the capital, to the banks

⁴²⁴ Leonard Sneddon, "From Philadelphia to Lancaster: The First Move of Pennsylvania's Capital," *Pennsylvania History* 38 (1971), p. 349. Philadelphia, over time, became an enclave of Federalists dominating but also isolated from the rest of the Democratic-Republican citizens of the state. For decades, the newly established western counties were purposely underrepresented in the legislature, but the series of deadly epidemics were enough to force the move away from an obviously unhealthy location.

⁴²⁵ Edward M. Riley, "Philadelphia, The Nation's Capital, 1790-1800," *Pennsylvania History* 20:4 (1953) p. 375.

of the Potomac.”⁴²⁶ Many perceived that Philadelphia, along with other urban centers, were no longer wholesome places, but places of corruption.

The Cultural Effect of Yellow Fever

Some Americans saw the yellow fever epidemics in Philadelphia as a warning against following the Old World example of large urban centers. In part of his 1797 letters to Dr. Currie, Webster reflected what many believed to be the dangers of densely populated cities. “Close compact cities in any quarter of the globe are the graves of men.” He wondered if American cities must make the same mistakes with the availability of vast stretches of land. “All great cities of Europe require annually some thousands of strangers to supply their waste of population. Yet, there is no necessity for men to crowd together in such a compact form [since] there is land enough.”⁴²⁷ Both Dr. Rush and Thomas Jefferson agreed. In an exchange of letters in the fall of 1800, Jefferson hoped that something good would come out of the visitation of yellow fever to the cities of America. “One good effect of the yellow fever epidemics would be curing the growth of cities, which are ‘pestilential to the morals, the health and the liberties of man.’” Rush echoed his sentiments: “I agree with you in your opinion of cities. Cowper the poet very happily expresses our ideas of them compared with the country. ‘God made

⁴²⁶ John K. Alexander, “Poverty, Fear, and Continuity: An Analysis of the Poor in Late Eighteenth-Century Philadelphia,” *In The Peoples of Philadelphia: A History of Ethnic Groups and Lower-Class Life, 1790-1940*. eds. Allen F. Davis and Mark H. Haller (Philadelphia: E. Claxton and Company, 1973), p. 15.

⁴²⁷ Webster, p. 168.

the country—man made cities.’ I consider them in the same light that I do abscesses on the human body viz., as reservoirs of all the impurities of a community.”⁴²⁸ Clearly, many believed cities were the centers of corruption, disease, and continually invaded by strange immigrants to fill the void.

Other Americans coupled the epidemics with moral decay. At the beginning of his Account, Carey articulated what many believed—Philadelphia deserved this punishment as the wealthy lived in luxury while their poorer counterparts barely subsided. “Luxury, the usual, and perhaps inevitable concomitant of prosperity, was gaining ground in a manner very alarming to those who considered how far the virtue, the liberty, and the happiness of a nation depend on its temperance and sober manners.” The grand mansions and coaches of the rich stood in stark contrast with the alley hovels and begging children of the poor. These extravagances “gradually eradicated the plain and wholesome habits of the city. Few pretend[ed] to deny that something was wanting to humble the pride of a city, which was running on in full career, to the goal of prodigality and dissipation.”⁴²⁹ Webster also noted the moral decay of citizens who refused to make the necessary changes in their urban environment, dooming thousands by willful neglect and disreputable ethics. Man “heaves a sigh of relief in August and September as he views the sable hearse conveying his friends in scores to their graves.” If he remained healthy throughout the epidemics, come “November, he shrugs his shoulders and says it is all over; runs to the circus, the theater, and the card room; laughs away the winter’s evening with jovial companions, some of whom are destined” to be next years’

⁴²⁸ Rush, *Letters*, 2:824.

victims.⁴³⁰ As citizens saw the moral implications of the epidemics, church leaders tried to use the series of events to change the behavior of their flocks.

Not surprisingly, as historian Eve Kornfeld pointed out, Philadelphia's ministers also saw the epidemic in moral terms. Reverend Justus Henry Christian Helmuth, the German Lutheran minister in Philadelphia, saw the righteousness of God's judgment on Philadelphia. In his account, Helmuth wrote: "There are few cities upon which the Lord had poured forth richer blessings, than on this; and there are but few indeed, that have been plunged by just judgment into a deeper abyss of distress, than our now weeping Philadelphia." Kornfeld noted the irony of Rickett's circus in relationship to the 1793 epidemic. During the early part of the summer, many residents attended the Circus "which resounded with the noisy acclamations and clappings of levity." However, before the citizen committee brought order out of chaos, this same building "was designated the first pesthouse." It was "whither the very first sick were brought, in a most deplorable situation," as Helmuth wrote, "who on account of poverty, and want of friends, could find shelter no where else!" What began as a "merry, sinful summer" ended in "a most mournful autumn."⁴³¹

The yellow fever epidemics also highlighted the problems of race in Philadelphia. "In the American past," as Billy G. Smith revealed, "whites have expected blacks to 'prove' themselves worthy of citizenship by making sacrifices during wars, natural

⁴²⁹ Carey, *A Short Account*, 4th ed., p. 10.

⁴³⁰ Webster, p. 167.

⁴³¹ Eve Kornfeld, "Crisis in the Capital: The Cultural Significance of Philadelphia's Great Yellow Fever Epidemic," *Pennsylvania History*, 51:3 (1984), p. 194. Kornfeld quotes Helmuth' from his *Short Account of the Yellow Fever in Philadelphia, for the Reflecting Christian*.

disasters, and other crisis events.” Richard Allen, Absalom Jones, William Gray, and other members of the African Methodist Episcopal Church rose to the occasion, especially during the horrendous outbreak of yellow fever in 1793. They believed it their moral duty to help their white neighbors even while jeopardizing their own lives, if it would help them gain a wider acceptance as citizens. They were, therefore, angered “when Mathew Carey publicly derided the actions of African Americans” in his *Account*. The resulting *Refutation*, authored by Jones and Allen, “sought to articulate black community anger and directly confront an accuser.”⁴³² While subsequent editions of Carey’s *Account* were less critical, it appeared that the State Legislature tacitly agreed with the majority and underestimated the help given by the African Methodists. When they wrote their first comprehensive Health Law legislation in the spring of 1794, section twenty ordered the reimbursement of funds spent by individual members of the citizen committee. They wrote: “*And whereas* it appears that there is a balance of three thousand two hundred and forty five dollars and twelve cent, due to the benevolent and meritorious committee of citizens, for monies by them expended in relieving the sick and poor ... justice and gratitude equally require” this debt discharged immediately.⁴³³ However, the legislators ignored the balance of one hundred seventy-seven pounds, nine shillings, and eight pence owed to the African Society for out of pocket expenses during the same period. Unfortunately, the sacrifices of black Americans during the 1793 epidemic did nothing to help the prevailing attitudes of their white neighbors.

⁴³² Smith, “Disease and Community,” p. 154.

⁴³³ State of Pennsylvania, *Health Office Act* (April 22, 1794), p. 32.

Black African Americans were again vilified in a popular account of the next yellow fever epidemic. The only reference to blacks Americans in *Folwell's Short History* of the 1797 epidemic was a negative one. Although Folwell seemed overcome with gratitude for the 'white' volunteers who helped during the emergency, his sole reference to blacks as looters must have outraged Allen and his neighbors who again helped during that calamity. A Mr. James Smith, merchant, volunteered "to superintend the cleansing of infectious houses" during the epidemic. Accordingly, "he recruited a black company, consisting of twenty or thirty," and set to work. In the process of purifying some houses, Smith "left some of these people in one house, to see how others came on elsewhere." While absent, "they broke open and robbed the store belonging to it, of a quantity of goods," the property of another merchant and victim of the fever. Upon his return, "Mr. Smith had new trouble on his hands, in pursuing, with constables, this sable, light-fingered groupe, and in arraigning them before Hilary Baker, our Mayor."⁴³⁴ Despite the excellent examples of citizen responsibility exhibited by many African Methodists, white Philadelphians overwhelmingly continued to treat them as an inferior people, not worthy to be citizens or equals.

The Medical Consequences of Yellow Fever

During the ongoing feuds between the College of Physicians and Dr. Rush, his idea for the decentralization of medicine failed to find support. He then tried to form a

⁴³⁴ Folwell, *A Short History*, p. 34.

more inclusive medical society—The Academy of Medicine—which “sought to unite the many young doctors who were ineligible for admittance to the College due to a lack of connections.” Nevertheless, as Arthur Robinson explained, Rush “was unable to make any headway against the hierarchical and consolidating forces of the Kuhn/Currie/Shippen faction. However, as an individual physician, Rush showed his strong belief in ‘republican’ medicine. In 1793, he published his treatment procedures in the newspapers and instructed members of the African Methodist Episcopal Church how to bleed and administer purges. Unfortunately, with the adoption of the March 24, 1794 Act to Regulate the practice of Physic and Surgery, the road was opened for “the increasing specialization of medicine and [the] imposition of ever more elaborate medical hierarchies.”⁴³⁵

While Rush failed to “republicanize” medicine in Philadelphia, his heroic depletive regimen gained acceptance while his unitary notions of disease faded immediately. Shryock explained the matter in a unique way when he wrote: “Briefly stated, this amounted to saying that there is but one disease, and Benjamin Rush is its prophet! All illnesses, it appeared, were but ‘states’ of one underlying condition; namely, of ‘excessive action’ in the arterial walls.” While this was not sound medical theory, Rush was so popular with his students, that, when combined with a “courageous personality,” he consequently influenced many students and future professors of medicine. This, Shryock believed, “guaranteed that his views, far from being peculiar, were spread over the greater part of the country by hundreds of admiring students ...

⁴³⁵ Arthur Robinson, pp. 348-349.

particularly in the West."⁴³⁶ Inexplicably though, these same physicians rejected Rush's unitary notions of diseases from which the treatment derived.

In 1800, physicians in Philadelphia were no closer to solving the mysteries of yellow fever than they had been when it first struck the city in 1793. As Shryock also observed, "Physicians in America bickered among themselves and at time engaged in open controversies. In consequence, they became known as a quarrelsome lot and this did not help the reputation of the profession."⁴³⁷ Robinson further argued that by the turn of the century, "many American physicians believed that yellow fever was probably an imported and quasi-contagious disease, caused by an uncertain agent."⁴³⁸ Though they thought the agent was putrid exhalations, infected clothing, contaminated water, among others, a century later, other physicians discovered that uncertain agent: the *Aedes aegypti* mosquito.

⁴³⁶ Richard Harrison Shryock, *Medicine in America—Historical Essays* (Baltimore: John Hopkins Press, 1966), pp. 205-207.

⁴³⁷ Shryock, *Medicine and Society*, p. 31.

⁴³⁸ Arthur Robinson, p. 351.

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