I originally published this post over at The Zen Pundit as part of The Thucydides Round Table, an eight week deep dive into an exceptional work of history. If you haven’t read Landmark Thucydides yet, I encourage you to pick up a copy, read along, and join in on the discussion here.

By Joe Byerly

Pericles had the perfect plan! The Athenians moved behind the walls of the city, letting the Spartans attack across land. They would wait them out in a Fabian Strategy. Food would not be an issue because Athens could rely on their maritime imports to keep them fed. Money wasn’t a problem, because they had plenty in the bank. Meanwhile, their fleet projected combat power into Spartan territory, raiding coastal cities and shaming the Spartans. Not only would Pericles avoid fighting the Spartans on their terms, he would also sew doubt of Spartan superiority among the Peloponnesian League by attacking the “home front.” As Athens and Sparta finished the campaigning season in the first year of the war, Athens
believed their strategy was working as evidenced by Pericles’ Funeral Oration.

As the second year of the war began, disease struck in Athens. The plague caught everyone by surprise, and as Thucydides points out, “there was no ostensible cause; but people in good health were all of a sudden attacked by violent heats in the head...” The plague swept through Athens killing men, women, and children, and with it came devastating effects on society. Thucydides wrote that lawlessness broke out as men watched others die and private property became up for grabs. The unforeseen disease affected Athenian will, and they questioned the value of Pericles’ strategy, the war with Sparta, and ultimately sent envoys to Sparta to seek peace.

The Athenian experience with the plague should remind us of the power of the unseen. Disease can reshape society. It can influence the outcome of war. And although we have not experienced the devastating effects of contagion on a mass scale in modern times, we may only be standing in the proverbial eye of the storm. Therefore, we must take steps to defend ourselves against bacteria, just as we protect ourselves against bayonets.

One can argue that microscopic parasites could be placed on equal footing with geography, war, and migration in shaping the world that we know today. In *Plagues and Peoples* by William H. McNeill, the author traces the history of mankind, pointing out how disease proved a major factor in the trajectory of our species. First, he points out that disease served to break down communities of people, enabling them to be absorbed by larger groups. He writes that,

“Such human material could then be incorporated into the tissues of the enlarged civilization itself, either as individuals or families and small village groupings... The way in which digestion regularly breaks down the larger chemical structures of our food in order to permit molecules and atoms to enter into our own bodily structures
He observes that the plague led to changes in European society in the 14th and 15th centuries. In England, the Black Death of 1348-1350 led to changes in the social fabric of society, increasing wages and quality of life for serfs. McNeil even suggests that diseases in Europe created enough social upheaval that it successfully set the conditions for Martin Luther’s Reformation.

He further argues that disease set the conditions for European expansion into the New World. For example, Hernando Cortez, who had less than 600 soldiers, was able to conquer an Aztec empire of millions in the early 1500s with the help of contagion. Within fifty years of his landing, the population of central Mexico shrank to a tenth of its size. This catastrophic drop in population levels had significant impacts on religion, defense, and their society in general, paving the way for European growth in the region.

McNeill is not alone in his argument. In Bacteria and Bayonets: The Impact of Disease in the American Military History, David R. Petriello argues that contagion played a major factor in the successful colonization of North America and the American experience with war. Small pox and other illnesses depopulated the regions surrounding the colonies, giving the settlers the space to grow. For instance, most Americans have heard the story of how an Indian named Squanto helped save the Plymouth settlers by teaching them planting techniques and guiding them through the peace process with surrounding tribes. However, it was disease more so than goodwill that saved the Pilgrims. The author writes, “When Squanto wandered into the Pilgrim’s’ world he did so as an exile. Had it not been for the epidemic visited his tribe...Squanto himself would not have been seeking out kindred human company.”

Disease also played a substantial role in war. The U.S. military became intimate with diseases such as small pox, influenza, dysentery, and venereal disease, as it affected 30% of armies up through World War I, which more than likely had an impact on the outcome on
key campaigns. Disease took important leaders out of important battles the night before engagements began in the Revolutionary and Civil Wars. And it caused commanders to hold off on taking advantage of fleeting opportunities in both conflicts, as they had to wait for replacements to arrive. It has only been in recent history, that we have brought disease’s impact on war under control. It wasn’t until World War II that vaccinations became common practice. As Petriello observes, “Whereas there were 102,000 cases of measles in World War I with 2,370 deaths, there were only 60,809 cases in World War II with only 33 deaths reported.”

Thanks to technological advances in medicine, it has been almost hundred years since disease sat in the front row of a national security conversation. However, things are changing. Recently at the Future of War Conference in Washington D.C., Dr. George Poste, the Chief Scientist of the Complex Adaptive Systems Initiative at Arizona State University, spoke on the risks of emerging infectious diseases. He argued that the future looks bleak and that disease may once again play a central role in world affairs. For instance, The H5N1 virus, which is currently only transmitted by prolonged contact with infected birds and has a 60% death rate, and could mutate to human-to-human transmission, resulting in deaths of over 150 million people worldwide. He believes that the current bio threats include pandemic flu, antibiotic resistant infections, bioterrorism, and new technologies that threaten to alter the disease landscape as we know it.

His warnings are echoed by other academics such as Professors Ian Goldin and Chris Kutarna, who in their book Age of Discovery: Navigating the Risks and Rewards of our New Renaissance point out that as biotechnologies continue to advance, so do the dangers and risks of weaponization by rogue governments or non-state actors. For example, the DNA equipment required to synthesize a number of deadly contagions is less expensive and easier to purchase than other weapons of mass destruction.

So how can we protect ourselves against bacteria, and avoid an Athenian-like setback in our
own national defense policies? For starters, those of us in the national security business can undertake efforts to raise our own awareness of the biological threats in the current operating environment, through studying the abundant literature available on the topic. Finally, our governments can take the steps outlined in the recent blue ribbon study on biodefense. A National Blueprint for Biodefense: Leadership and Reform Needed to Optimize Efforts recommends coordinated efforts in bio detection, hospital preparedness, intelligence gathering, and bio defense planning.

In the end, Pericles succumbed to the plague, and Athens lost an important leader. Those who came after him chose a different strategic path for the city, which ultimately proved costly for the Delian League. This incident during the Peloponnesian War is worth making us pause and think about the role of contagions and disease in human history. It has wiped out cultures and set the conditions for the successful expansion of others. It has served as a significant factor in wars of the past. Finally, it may yet play a major role in world affairs again, and we must take measures now to ensure we are prepared.