The Spanish Flu was a cataclysmic event of the twentieth century which shaped Europe and the world for decades. During World War One it is estimated as much as five percent (upwards of fifty million people) of the world population died due to the influenza outbreak of nineteen eighteen. The way this contagion began its spread was like many others throughout history, filth and petulance in an area of high human concentrations being carried by those infected to other populations. In the trenches of World War One the gruesome suffering was unimaginable but just as bad as the bullets and bombs were the diseases spread from soldier to soldier in these horrible conditions. During times of War it is well understood that diseases and malnutrition can wreck even more havoc on an army than the enemy, this was especially true during World War One.

In nineteen seventeen French military doctors started to notice soldiers having a very high mortality rate with a flu going through the overcrowded military hospitals. These field hospitals were already overrun with horribly wounded soldiers then the added pressure of the Spanish Flu arrived and the hospitals were completely un-prepared for it. The disease, like any

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1 “1918 Influenza: The Mother of All Pandemics” By Jeffery K. Taubenberger and David M. Morens
other, spread by way of the coughs and sneezes of the already infected but the origins of the Flu is not fully understood. The genesis of the flu germ is known to be the same as the H1N1 “Avian” flu form two-thousand and nine but was the Spanish Flu spawned from infected pork meat fed to American soldiers? Researchers can’t know beyond a shadow of doubt but it has been hypothesized that it was tainted U.S. military food stores which caused the disease.

The reason the Spanish Flu was so devastating was because is caused pneumonia and death in even the youngest and healthiest of patients. This is due to the fact that this particular strain caused the immune system to be overwhelmed and shut down. When the H1N1 Flu reemerged in two-thousand and nine there was a much smaller death toll because in the modern world more people have access to clean water and are more conscientious about germs and cleanliness. In nineteen seventeen these practices weren’t possible due the extenuating circumstances of the battlefields of World War One as well as the lack of sanitation and health care resources around the world. As Larry Shaughnessy explains in his two-thousand and nine article for CNN entitled2 “Soldier’s letters give first-hand look at Spanish flu pandemic”, “It was a crisis for the Army. Military bases, with thousands of men from all over the country in tightly packed barracks, were fertile breeding grounds for the flu, especially one as easily spread as this one.”(2) This isn’t to say that much of the world still lacks the basic health care needs but it isn’t nearly as desperate a situation as it was in nineteen seventeen.

One of the ways the Spanish Flu spread so rapidly in the trenches was because of the rodent infestations pervading the bloody battlefields. Just imagine dead and decaying soldiers

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2 “Soldier’s letters give first-hand look at Spanish flu pandemic” by Larry Shaughnessy CNN Pentagon Producer April 29, 2009
and horses being feasted on by rats which then spread the disease like wild fire to others animals and soldiers. In the McNeill text he uses the example of the eighteen ninety-eight Italian army campaign in Somalia to illustrate the effect animals have on the spread of disease in humans. The Italian army “imported cattle bearing the rinderpest virus.” to feed their soldiers but what ended up happening was that, “South of the Zambeze River, perhaps 90 percent of grazing animals succumbed.” (3) This helps us to understand how the unintended consequences of human interaction with nature can be enormous. He Italians had no intention of causing all the starvation and suffering that followed, especially because their intention was to colonize the area and bring back the resources to Italy. Very similarly, in World War One, the Americans were simply trying to feed their vast army in Europe and unintentionally caused the outbreak which lead to the death of over fifty million people.

The impact of the Spanish Flu on the outcome of World War One as well as the new world order set forth afterward. Urbanization during the beginning of the twentieth century definitely play a huge role in the spread of the flu. This was a time of mass urbanization and population explosion the likes of which have never been seen before in human history. So many people moving from the countryside to big cities for the first time all the while bringing the Spanish flu with them. When the flu arrived in the cities of Europe and America then the flu really took off. Practically every city in the world had to deal with the horrifying nature of this new immune system destroying flu. It seems that the health systems in these cities was about

as prepared to deal with this pandemic as the field hospitals were on the front lines. The mortality rate for the Spanish flu in cities was over twenty-five percent, which was slightly higher than before.

The effects of the Spanish Flu on society at large as well as immunology research in particular cannot be overstated. So much of the research done on the flu virus is studied against the Spanish Flu. What are the similarities between the Spanish flu outbreak and other outbreaks today? Another useful lesson from the Spanish flu that is used today is the over-use of aspirin and other medications when combatting a disease. During the epidemic in nineteen-seventeen people would over-use the new wonder drug known as aspirin to the point of overdosing. Some researchers have even theorized that this over-dosing epidemic contributed to the death toll more than we know. In todays world people over-sanitize and take amoxicillin for every common cold thus building resistant germs that cannot be easily fended off. Once a so-called “super bug” gets into the population it becomes ground zero for a possible outbreak. So many poor choices and practices lead to the catastrophic event known as the Spanish flu but one would hope that humanity has learned its lesson.

The really tragic part of the Spanish Flu outbreak is who was mainly affected by the disease. For instance, over thirteen million Indians died while they were still under British rule. The idea of accessibility to health care is a main reason why so many people suffered and died. The world in nineteen seventeen was less sanitary of course but also nobody was

educated to know any better as well as not having a doctor whenever, through their unhealthy sanitary practices, they inevitably became contagious.

While researching for this paper I came across Richard Gunderman’s article in *The Pittsburgh Post-Gazette* from two-thousand and eighteen which was beyond interesting. Dr. Gunderman goes through some of the most famous misnomers to come from our understanding of the Spanish Flu. The most interesting idea I learned from this article by Dr. Gunderman was “*Perhaps the best hope lies in improving nutrition, sanitation and standards of living, which render patients better able to resist the infection.*”(5) The Flu is a part of life but the way people lived all over the world in nineteen hundred and eighteen made so much of humanity at risk. The healthier the patient the better chance of survival they had, then and now.

The more we learn about contagious diseases the more we can affect positive change but this requires a lot of training and investment. The influenza outbreak of nineteen eighteen was a global challenge that required a global response. The idea that this Flu originated in America then crossed the Atlantic Ocean and infected millions more there before spreading all the way to Asia is astounding. It just goes to show that we all live in a truly global community and there is no escaping that reality.

The Spanish Flu highlighted so many fragilities during this time period about not only health care, infrastructure, government and class. If we as global citizens want to overcome

our history and make sure nothing so cataclysmically awful ever happens again then we have to change so many systems and habits to better interact with nature. Hubris causes more problems for humanity than anything and not learning from our past is the ultimate in hubris.

Getting over a simple flu is one thing but to combat an immune system defying flu like H1N1 takes a team of doctors and years of research.
This sub chapter is all about the relation humans have with pathogens through animals. Some researchers believe that the Spanish Flu was spreads by birds and rats in the trenches of World War 1.


This was a computer model created by researchers at Oxford to show the global spread of the Flu. Some of the most interesting research done on the subject, this model shows how and why the Flu spread.

Richard Gunderman is Chancellor’s Professor of Medicine, Liberal Arts and Philanthropy at Indiana University. In this article he discusses the challenges during the Spanish Flu and what we now know happened. This was written on the 100th anniversary of the Spanish Flu. It was a great starting point for my research paper.