The "Spanish Flu" of 1918 versus COVID-19: Similar but Different

By Vic Bary

How It Began

As most of you are now probably aware, the COVID-19 pandemic emerged just over 100 years after the infamous "Spanish Flu" pandemic of 1918. How did that pandemic begin? How did it impact Cranford? How similar to COVID-19 was it?

The first U.S. case of the 1918 (H1N1) flu pandemic was identified January, 1918 by Dr. Loring Minor, a Kansas doctor who reported it to the US Public Health Service. (The flu would be misnamed "Spanish Flu" only because neutral Spain freely disclosed its incidence of the disease, while Germany, England, France and the U.S. withheld information to prevent it aiding their wartime enemies.) The US Public Health Services appears to have done nothing in response to this report. On March 4, two months after Dr. Minor's report of the first flu case, a cook at Fort Riley, Kansas was confirmed to have the virus. Within days, 522 men at this WW I training facility had reported sick. A week later the flu had made its way east to Queens, New York (perhaps carried by a soldier on leave). Before the pandemic had run its course in December, 1920, it had infected 27% of the world's population of 1.9 billion, and had killed an estimated 17-50 million people worldwide, 675,000 of them in the U.S.

A More Virulent Strain Emerges

Government and public health authorities were slow to respond to the initial influenza outbreak, perhaps in part because the initial strain of the influenza virus attacked mainly younger people and was not particularly fatal. That lack of response would allow a more fatal mutation of the virus to develop in August, 1918 simultaneously in Brest, France; Freetown, Sierra Leone; and Boston, Massachusetts. This version, rather than staying in the upper respiratory tract, went to the lungs and caused cyanosis. (Some authorities attribute the high mortality rate among younger adults as due to a "cytokine storm" in which the body's own strong immune system attacked it.) The virus usually killed within one day.

Wartime conditions provided an ideal environment for this deadlier version of the virus to spread rapidly. In Europe, much of the civilian population was undernourished and stressed. Warring armies, living in close quarters, were similarly undernourished and stressed, and were moved within and across continents by crowded trains and ships.



Crowded Troop Ship

In normal civilian life, natural selection favored the spread of mild strains of a virus when those with the worst infections stayed home, and those with the milder forms moved about and spread it. In the trenches, those with milder infections stayed in place while the more severely ill were sent on crowded troop trains to field hospitals where they spread the virus to the general hospital population. Hospitals, both in war-torn areas and in the U.S., would become breeding grounds for the Spanish Flu. Military training and marshalling facilities were significant breeding grounds as well. (Camp Merritt on the Dumont/Cresskill, New Jersey border, a shipping point for Europebound soldiers, would suffer 578 flu deaths; Fort Dix would suffer 863 flu deaths between September and October, 1918.) Of those who died of the flu, most died of secondary bacterial or viral infections of the lungs. (Respirators, anti-bacterial agents and flu vaccines were things of the future.) By late 1918, the virus seems to have mutated once again into a less virulent version and the pandemic would slowly fade away through 1919-1920.

Meanwhile in Cranford

Surprisingly, the first mentions of the influenza pandemic in Cranford newspapers (as either "influenza" or "Spanish Flu") didn't appear until October, 1918. An October 10 issue of *The Cranford Citizen* announced Cranford's first Spanish Flu fatality, 27 year-old Mrs. Lucy DeGreizea. The same issue said

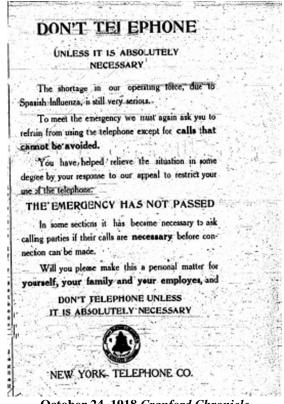
"The almost epidemic conditions in the whole State from Grip and so-called Spanish Influenza have caused drastic action by the State and local Boards of Health all over. All places of public gathering, from churches to saloons, schools and movies are closed until danger of further spread is passed. On the other hand, a very large proportion of supposed cases have been found to be ordinary colds, more or less."

Note this was ten months after the first U.S. case of the Spanish Flu had been identified in Kansas and several months after the more virulent version of the flu had begun to decimate Europe and troop concentrations here and there. Even then, the restrictions on public gatherings were at the State and local levels, not by a Federal directive.

On October 24, *The Cranford Citizen* announced Cranford's second influenza death, Private George Haskins, whose sister lived on Beech Street. He died at Fort Johnson in Jacksonville, Florida. In all, Cranford would lose only six residents to the Spanish Flu. The concentration of Cranford flu

deaths in the month of October followed the state-wide experience. New Jersey reported 222 flu deaths in September, followed by 8,477 in October.

The flu was having an impact on some mission critical services in wartime Cranford. The same issue of *The Cranford Citizen* contained the following notice from the New York Telephone Company (repeated again November 14, 1918) asking that residents restrict telephone calls to only the most urgent.



October 24, 1918 Cranford Chronicle

Only three weeks after New Jersey prevented all public gatherings, the State Board of Health lifted those restrictions. Said the October 31, 1918 *Cranford Citizen:*

"INFLUENZA BAN LIFTED. The influenza ban was lifted Tuesday morning, permission having been granted by the State Board of Health. The saloons opened first, followed soon after by other places. The Schools opened on Wednesday. This place has had 500 cases of influenza, of which 60 per cent were between the ages of 20 and 40 years. There were six deaths. There are still some cases here and the officials have warned everyone to take precautions, as the present weather, is conducive to renewed activity of the disease."

While the impact of the pandemic would continue to be felt for a while (the December 26, 1918 *Cranford Citizen* warned that anthracite coal would be in short supply due to the impact of the pandemic on the mining industry), life resumed pretty much as usual, buoyed by heightened spirits due to the Great War's Armistice signed November 11, 1918.

So how were the Spanish Flu and COVID-19 similar and how were they different?

Reaction by Authorities

A similarity between the Spanish Flu and COVID-19 can be seen in the slow initial response by authorities, and when the response came, it was largely at the State rather than Federal level. Social distancing was recognized as desirable by public health officials, but again was emphasized at the local, not Federal, level. Some cities emphasized social distancing early and suffered relatively fewer deaths. San Francisco, Oakland, Pasadena, Sacramento, Seattle, Denver and Indianapolis passed mandatory face mask laws. Philadelphia did neither, even holding a massive public parade September 28, 1918 for the fourth Liberty Bond drive which was attended by 200,000 people.



September 28 Philadelphia Bond Drive Parade

The city reported nearly 4,600 Spanish Flu deaths the week ending October 16, 1918 (ten times the number who died the prior week).

The Death Tolls

Worldwide and in the US, the Spanish Flu caused far more deaths than COVID-19 has so far. The worldwide death toll for the Spanish Flu is estimated to have been 17-50 million, while that from COVID-19 appears to be several million. In the US, 675,000 died from the Spanish Flu while the COVID-19 death toll is currently less than a third that number.

The COVID-19 death toll for New Jersey, however, has been about 200% of the number who died from the Spanish Flu (about 9,000.) The impact on Cranford has been dramatically different during the two pandemics. Only 6 Cranford residents were known to have died during the 1918 pandemic (5 of those while away in military service). The COVID-19 pandemic has taken just shy of 100 Cranford residents (for the same number of cases as during the 1918 pandemic. – 500).

Those Most at Risk

In both pandemics, those most at risk were those living in group living arrangements where transmission was rapid. For the US in 1918, those group living conditions were most frequently military installations. The result was that a disproportionate percentage of deaths occurred among

young males serving their country in wartime. Large hospitals and cities with large numbers of people living close together were also hotspots.

Europe was ravaged by the pandemic, as were U.S. military camps in Europe and the United States. Large hospitals were also scenes of mass patient deaths, followed by deaths among attending staff. The virus led to viral or bacterial pneumonia, with patients literally turning blue as their lungs filled with fluid and they suffocated to death. The death was also often accompanied by bleeding from the nose, ears and mouth. The death tolls in large city hospitals and military camps were staggering.

But Cranford had no military camps, city living conditions, nor large hospitals in 1918. In many ways the pandemic was not here, it was "over there". Cranford lost only six lives to the Spanish Flu Pandemic, and five of those were in crowded military service conditions (four in camps and one on a troop ship bound for Europe) away from Cranford.

During the COVID-19 pandemic, Cranford has had four significant group living sites – its nursing homes. Nearly 85% of Cranford's deaths from COVID-19 occurred in these nursing homes

Nursing homes are typified by elderly residents, often with various co-morbidities, living in close proximity to one another (as soldiers did in 1918). So the large majority of Cranford COVID-19 deaths were among the elderly.

Finally, the Spanish Flu epidemic saw the virus mutate twice from its initial form, with only the second version highly fatal, and fortunately that version lasted only about six months. At this stage, we still do not know how the full course of the COVID-19 pandemic will play out and whether mutations, when they come, will be more or less deadly than the initial virus.

Economic Impact

The "Spanish Flu" broke out in the U.S. when the country was at war. With nearly five million men in uniform, the U.S. was a full employment economy. That economy offered women neverbefore granted opportunities, as evidenced by this Public Service Corporation advertisement in the October 18, 1918 *Cranford Citizen:*

Patriotic Positions for Patriotic Women Permanent Positions as Conductors on Public Service Cars At the same high wages as paid men (italics added for emphasis)

The state-wide shut down of places for public gatherings (schools, saloons, movie theaters, churches) in New Jersey lasted only three weeks in 1918 (October 10 -31). There were no reports of vast layoffs. Post war America would quickly transition from wartime shortages to the "Roaring Twenties".

As in 1918, the U.S. enjoyed a full employment economy *prior to when* the outbreak of COVID-19 was first recognized. The COVID-19 "Stay at Home" State dictates for all but essential workers in New Jersey and New York had a vastly different economic impact on Cranford, and the country as a whole. Unemployment rates surged to nearly 15% nationally (36 million people). Most small businesses were forced to close their doors for an extended period of time. The COVID-19 period of disruption has lasted much longer than the three-week period in 1918 when New Jersey banned public gatherings. As we went to press, the long term economic impacts on the U.S. (and Cranford) were yet to be fully determined, nor was the completeness of any recovery in sight. The pandemic, due to unfortunate State and personal choices made, continues to rage.

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