

## **The Spanish Influenza**

Michael W. Vogt, Curator

In the summer and fall of 1918 a deadly and contagious form of influenza spread across the globe infecting millions.

Through random genetic mutation, the virus originated in rural Haskell County, Kansas, and was unknowingly brought to the U.S. Army training facility at Camp Funston, near Fort Riley, by selective service draftees. In its original, milder form the virus infected recruits there and was later introduced to other Army camps by personnel transferred for training. As part of America's crusade to support the Allies during World War I thousands of U.S. troops were leaving ports in the United States by troopship every week. Among them were infected personnel arriving by troopships to France and Great Britain in April 1918.

In August, a more deadly mutated strain of the virus infected soldiers and civilians worldwide. The neutral Spanish government was the first to report hundreds of deaths caused by the flu. Thus, the illness was nicknamed the "Spanish Influenza." Unlike other forms of flu viruses, Spanish influenza proved lethal for 5-10 percent of those infected. Furthermore, the majority of deaths resulted from rapid, acute pneumonia killing victims primarily between the ages of 15 and 40 with the highest mortality rate among those aged 21-29.

Spanish Influenza was reintroduced to the United States by troops returning home from Europe in late August and also aboard civilian passenger and merchant ships arriving at U.S. Ports. As historian Alfred Crosby describes in his book *American's Forgotten Pandemic*, "The pandemic struck the two armed services earlier and more severely than the civilian population: and, to a considerable extent, the armed services were the foci from which the civilian population received the disease." Following the initial outbreaks at port cities and military bases along the Atlantic coast, killing thousands, the flu virus was carried west and south by infected soldiers

and civilians across the United States along the main transportation routes. The highest mortality rates in the United States at both military and civilian locations occurred during late September and October 1918. Navy losses per day peaked at 880 dead on September 28. Army losses per day peaked at 6,170 dead on October 11. Philadelphia lost 700 citizens in one day during October 1918. San Francisco totaled 8,682 dead through October 26.

Medical science in 1918 was not yet aware of viruses nor would one be viewed by microscope until 1933. (The Spanish influenza virus, preserved in a sample of lung tissue from a U.S. soldier that died in 1918 and kept at the former Armed Forces Institute of Pathology in Maryland, was not viewed by microscope until July 1996.) Military and civilian physicians presumed the deadly Spanish influenza to be caused by a bacterial infection.

In response to the appalling death toll schools, churches, civic and sporting events, and other public gatherings were discouraged or cancelled. Mandated and voluntary quarantines were the only defense against an unknown and unseen viral killer. In some areas the effective and preventive practices began too late. In some cases isolation and quarantines were abandoned too early leading to a resurgence of the flu in early 1919. Regardless, these measures significantly reduced the numbers infected. The influenza pandemic ended in the spring of 1919 after killing an estimated 25-30 million persons worldwide. Twenty-five million Americans were infected and 670,000 died from influenza including 7,762 Iowans.

### **Camp Dodge**

Military bases were exceptionally hard hit by the influenza pandemic. The flu virus was eventually introduced to Camp Dodge by transferred military personnel and civilian draftees beginning in late August 1918. Even as the flu virus invaded communities large and small

across the U.S., the mission of training and supplying troops for the war against Germany continued at Camp Dodge and other Army posts. During September, October, and November, the peak months of influenza infection, 13,713 inductees entered Camp Dodge and were exposed to or brought the virus with them. In addition, close formations of drilling soldiers and dense concentrations of 150 men in barracks and mess halls facilitated rapid transmission of the flu virus.

As the number of influenza cases grew the hospital and camp were quarantined in late September. Most suffered the aches and symptoms the virus caused and later recovered. Others died within 24 hours of the first symptoms appearing. Camp Dodge reported the first three flu deaths on October 1 and by mid-month soldiers were dying at a rate of 50 per day. Private Andrew E. Boyd of Stanhope and Private Leo P. Koster of Cascade were inducted on September 5 and died of "Pneumonia" on October 10. Irene Robb, a nurse at the Camp Dodge Base Hospital wrote home on October 15: "Day before yesterday I had five patients die on my ward; three yesterday and one today. There is a terrible strain all the time of being so short of help." The growing numbers of sick and dying soldiers quickly filled the 2,196 beds available at the base hospital. Adjacent barracks buildings were hastily converted to hospital wards for treating the mounting numbers of ill in addition to patients suffering from non-flu related maladies.

First Lieutenant Theodore Willis, Ward Surgeon, Camp Dodge Base Hospital, remembered: "Hospital beds overflowed, and nearby barracks were commandeered. Beds vacated by death were taken out to be sterilized; their replacements promptly filled, sometimes more than once a day. Throughout the nightmare, morale of the hospital personnel remained high. Doctors, nurses, corps men, and maintenance staff stayed on their jobs working night and day without complaint." The hospital and adjacent buildings peaked at 11,626 patients in

October cared for by 1,048 hospital staff -- many of whom also fell victim to the flu.

The growing numbers of sick and dying military personnel was adjudged to be of strategic and propaganda value to Germany. Consequently, the Army (and Navy) implemented security measures to safeguard information regarding diminished American troop strength. Daily reports of flu deaths at Camp Dodge were terminated. This lack of information led to fabricated newspaper reports of vaccine experiments, medical staff executions and mass graves at Camp Dodge. All were fiction.

In nearby Des Moines, the city's undertaking establishments worked round the clock to embalm the civilian and Camp Dodge dead for burial. Merle Gall, a 13 year old milk delivery boy to Camp Dodge, later recalled, "I saw them take soldiers out of there by the truckload. Every day there were bodies. Every day the trucks." Decades later, Omar N. Bradley, serving as a Major with the 19th Division, wrote: "Many of my close friends were lost. I vividly remember the sad sight of dozens of corpses being taken to undertaking establishments in Des Moines." By the end of November the Army accounted for 10,008 cases of the flu, 1,923 cases of pneumonia, and 702 deaths at Camp Dodge.

Overall, the Spanish influenza killed 55,322 U.S. military personnel. More soldiers died fighting a virus than from German shells, gas, or bullets during World War I. Following the pandemic U.S. Army Surgeon General Dr. Victor Vaughan summarized the events of 1918 and prophesized: "There can be no armistice between medicine and disease. The conflict will continue as long as man walks the earth."

#### SOURCES:

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