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Spanish Influenza – Looking at a Pandemic From 100 Years ago

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Comment: HARRY W SEVERANCE, MD, FACEP on JUNE 1, 2020, 2:59 PM



1918 H1N1 was first recognized in the US, as your article noted, at Camp Funston in Kansas where troops were being trained for WWI. Patient zero from that outbreak is known; a cook at the camp. He and most other soldiers who were infected that spring

survived. The virus quiesced during the summer, as influenza, coronaviruses and other similar viruses often do.

However, troops were then further packed together as they were transported via ships to Europe and then further congregated in the trenches of WW1 battlefields. These actions created a 'host abundant' situation that allowed H1N1, in the process of producing mutant strains as all such viruses do, to produce more lethal strains that could compete successfully in the host abundant condition, as in such conditions, survivability of the host is not an issue.

Thus, by the time the troops were returned to the US, predominant strains of H1N1 had become lethal with the results that your article notes beginning in the fall of 1918.

What is important to realize is that our actions in determining host-abundant and host-restricted environments will modify the virus genome thus changing the lethality of a virus. If the host environment is host-restricted, such as in social distancing, more lethal viral strains are less successful as if they debilitate and/or kill their host thus reducing effective viral spread, that strain is less successful. In a host-restricted environment, more successful viral strains are those that make the host less ill or asymptomatic, thus allowing for increased viral spread, making that viral strain more competitive and more successful.

The 'take home' is that we can modify the SARS-CoV-2 virus that will return this fall by our social actions this spring and summer.

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