Recalling the 1918 flu pandemic

by Mark Steil, Minnesota Public Radio

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While researchers work to understand the current H1N1 flu outbreak, they have one eye on the deadly flu of 1918. That's still the influenza pandemic against which all others are measured. The virus killed tens of millions of people worldwide and tens of thousands in our region.

St. Paul, Minn. — At the beginning of September 1918, the newspapers of the day were speculating about when World War I would end. While the battles raged in Europe, the home front seemed quiet. There had been a flu outbreak the previous spring, but the sickness had faded away during the summer.

It was about to return.



Spanish flu

In the last weeks of September, while the nation cheered war heroes, the virus resurfaced and spread with breath-taking speed.

"These patients had a very precipitous downhill illness," said Dr. Frank Rhame, an infectious disease specialist at Abbott Northwestern Hospital in the Twin Cities.

"They did have bleeding in their mucous membranes and under their skin, which is unusual for influenza. They did tend to have pulmonary deaths, lungs full of fluid," said Rhame.

"Oh, it was scary," said 100-year-old Hardy Rickbeil.

Rickbeil lives in Worthington, in southwest Minnesota.



VapoRub out of stock

"There was usually a death in most every family or more than one," he said.

Rickbeil was living in Cando, North Dakota at the time. His family was one of the lucky ones; no one died. He remembers hard-hit homes had quarantine signs tacked on the front. Most schools and public places shut down for several weeks. Rickbeil said the medical system couldn't keep up.

"There was a shortage of doctors, it was an epidemic," said Rickbeil. "Many people didn't get any help to speak of at all, they just died."

That sense of futility is captured in some oral history recordings at Southwest Minnesota State University in Marshall. Helen Quandall is on one of the recordings. During the flu epidemic this teacher was working temporarily as a nurse in North Dakota. She described the life of the doctor she was working for.

"He was just going night and day and just wornout," said Quandall.

She also remembers the doctor's frustration.

"He said 'oh this damnable flu. I don't know what it is, you don't know what it is, no one knows he said what it is," recalled Quandall.

The death toll was staggering. About 50 million people died worldwide, more than half a million in the U.S. and as many as 12,000 in

Minnesota. The pain of the epidemic was made worse by what seemed like an unexplainable twist. Young people died in especially large numbers.



Headstone

One of those young victims was buried in 1918 at a small cemetery near Worthington. Surrounded by a lush green lawn, the red granite tombstone bears the name Emerald Critchfield, 1901-1918. The newspaper headline about his death that long-ago October said "Bright young life is ended." Dr. Frank Rhame said that type of headline was all too common.

"Fatality rates tended to be higher in the healthiest populations," said Rhame.

The reason traces back to the flu virus itself. Rhame said the 1918 version was a brand new virus. He said the body's immune system often overreacted to the new threat with devastating consequences.

He said most reseachers today believe only something called a "cytokine storm" could do the sort of damage seen in 1918. Cytokines stimulate other parts of the immune system to act against an invader, like a flu virus. But when it spots a new type of germ, it sometimes overestimates the strength of the virus and goes too far for too long.

"With all these systems, the body needs both to figure out how to turn them on and turn them off," said Rhame. "And sometimes it doesn't turn them off effectively if the pathogen is new and virulent."



Good for the theater

In a final cruel twist, people with the strongest immune system suffered the strongest over-reaction. That included many young adults, like 17-year-old Emerald Critchfield.

Doctors now feel they could fight a 1918-type virus much more effectively. They all have several options, including steroids, to slow down the immune reaction.

But in 1918, doctors had few options besides bed rest and fluids. The epidemic peaked in the late fall of 1918, just as World War I was ending.

The shooting war was over, but the battle against influenza would linger on for a couple more years.

http://minnesota.publicradio.org/display/web/2009/05/07/1918flu/