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## Researcher Says Flu Responders Can Learn From 1918 Epidemic

If health officials and media prognosticators are accurate, this coming winter may bring with it one of the most sweeping, deadly outbreaks of killer flu that the world has ever seen.

While that prospect would terrify the average person, it also intrigues Jim Higgins, a doctoral candidate at Lehigh University, who has been researching the 1918 flu pandemic that killed an estimated 50 million worldwide.

Higgins, who came to Lehigh after earning his B.A. in history and sociology at St. Vincent's College and his M.A. in history at Duquesne University, has spent the last several years combing through old coroner's reports, newspaper accounts, historical archives, hospital record and military files to piece together an accurate historical portrayal of the outbreak and spread of the 1918 flu. Higgins also cold-called nursing homes in the state to locate individuals with recollections on the 1918 flu outbreak.

What he's found, he says, should concern anyone.

"Most communities were woefully unprepared for the health crisis they faced," said Higgins, who is focusing his research efforts on the ability of Pennsylvania cities to respond. "Those cities that passed muster, relatively speaking, had been building a strong medical infrastructure for decades, and had sound public health policies based more upon science than politics. I'm not sure that's the case today."

Higgins' research has been done under the guidance of three Lehigh history professors: Roger Simon, John Pettegrew and John Smith, as well Dan Wilson, professor of history at Muhlenberg College. In each case, Higgins said, the professors have helped him focus on a component of the flu epidemic to gain a clear perspective on its causes, scope, legacy and lessons.

As a result, Higgins has found himself growing increasingly concerned with what he describes as a "bifurcated health care system where the best, state-of-the-art care is available to some, but not to others at the lower end of the socio-economic spectrum."

"What happens," he asks, "when people in South Side Chicago or Compton or the Bronx see people dying of this, while others get the care they need? What happens if the hospitals which traditionally serve the needs of the inner city begin to run out of beds? Do we think that people will sit pat in the projects and poor neighborhoods of our country and watch as their family and friends, their very communities, die? I don't see why there wouldn't be civil unrest."

What is certainly likely to repeat itself is the swiftness with which the flu raced through communities. In many cases, he said, those who are most vulnerable are the very young, the very old, and the immuno-suppressed, such as those fighting cancer, AIDS, or other devastating illnesses, to say nothing of people suffering from drug addictions and malnourishment. All of those high-risk factors are found in combination in the nation's inner cities, he said.

"With the 1918 flu, though, the exact opposite happened," he said. "Those who tended to be very vulnerable

were those between the ages of 20 and 40, which really points up the folly of assuming the military might be able to help in such a crisis. What's to say members of the military wouldn't be impacted?"

In reading through coroner's records, Higgins found that account after account repeated the same pattern.

"Someone might have gone to work on Monday, developed a headache Monday night, was in bed Tuesday and Wednesday, and was dead by Thursday," he said. "Some went peacefully, through pneumonia, which they called the 'old man's friend' because it provided an easy passage. Others weren't so lucky." Many others -- ironically, the typically healthy younger patients -- fell victim to acute respiratory distress syndrome, which replicated the sense of a chemical burn searing the lungs.

"It wasn't always that quick, either," Higgins said. "And along the way, you had symptoms like fingers and genitals turning black, and people reporting being able to literally smell the body decaying before the patient died."

At the time, limited scientific and medical knowledge led some -- including prominent governmental health officials -- to identify the cause of the disease to arcane notions such as the wrath of an angry God, swamp gas or electricity in the air.

"This notion of swamp gas, or miasma, is like something out of the Middle Ages," said Higgins. "To have that put out in 1918, by public officials, no less, is really spooky. And remember, prominent, influential members of America's religious community have recently invoked the theory of an angry God to explain both 9-11 and Katrina's assault on a sinful city."

Medical knowledge, research findings and pharmaceutical developments provide some hope that 21st century Americans might not suffer the fate of their forebears, but Higgins said that survival might depend on the simple concept of community planning.

In studying the metropolitan areas around the state of Pennsylvania, Higgins found that the areas that suffered the lowest mortality rates included Bethlehem, which benefited from the resources provided by the then-prosperous Bethlehem Steel.

"At the time, Bethlehem Steel produced more munitions than Great Britain and France combined, and the plant could not afford to shut down for illness," Higgins said. "At the height of the epidemic, the federal, state, and local governments came together with the company to invest in a makeshift emergency hospital right on the premises to care for their workers as well as a strict quarantine. As a result, there were only about 100 deaths from the flu, which struck thousands in Bethlehem."

By contrast, Philadelphia found itself much less prepared for an epidemic, and the strapped with a corrupt head the Board of Health, saw roughly 13,000 residents die as the flu swept through the inner city neighborhoods. It represented, Higgins said, the worst case scenario, with dead bodies piling up outside of police stations and others dumped into trench graves.

"Obviously, not every city had the same experience," Higgins said. "There were really no successes. You could only talk about degrees of failure and success."

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*This story has been adapted from a news release issued by Lehigh University.*