

# The Inclusion of Primary Care Physicians in Pandemic Flu Planning

An Analysis of Historical Lessons and Current Issues

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April 2007

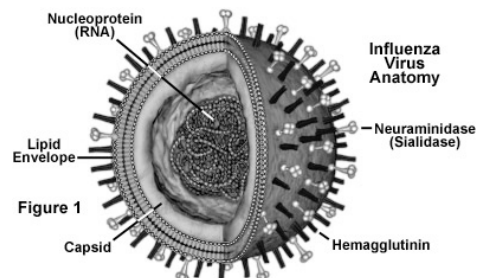


Food Safety & Security at Kansas State University | <http://fss.k-state.edu>

## Background, Rationale, and Research Question

### Influenza Virus

- Three types: A, B, & C
- Type A is most threatening
- Two glycoproteins: H & N
- Ability to undergo major genetic re-assortment
- Commonly transmitted between hosts through air

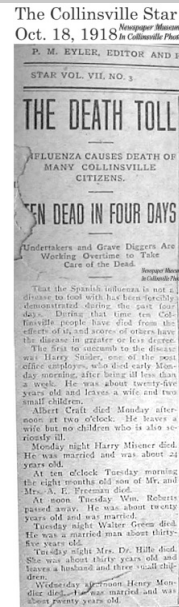


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## Background, Rationale, and Research Question

### History of flu pandemics

- Three major pandemics: 1918, 1957, & 1968
- 1918 virus: H1N1 strain
- Death toll estimates have settled at around 50 million
- Deaths in the U.S. alone: 675,000



## Background, Rationale, and Research Question

### The 1918 Pandemic

- The healthcare system was overwhelmed
- No known cause - maybe *Pfeiffer's bacillus*?
- Various attempts at treatment: cupping, bleeding, opiates
- H1N1 was especially virulent: 2.5% mortality

“It was impossible to remove the dead quickly enough to make way for the dying.”

- An Indian physician in 1918

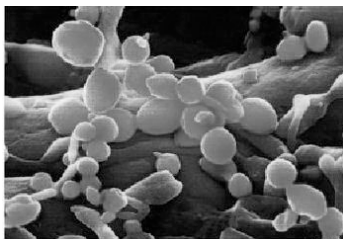


## Background, Rationale, and Research Question

### Renewed fear - H5N1

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- Outbreaks of avian influenza in Asian countries
- Early 2004 - H5N1 killed with 68% mortality rate
- Confirmed cases on the rise since 2004
- Next pandemic virtually inevitable



## Background, Rationale, and Research Question

### The American College of Physicians (ACP)

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- 120,000 physician members
  - Largest medical specialty society in the nation
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- 2006 position paper regarding the HHS flu plan
    - Does not describe how medical care will be rationed
    - Fails to incorporate role of physicians



## Background, Rationale, and Research Question

“Failure to integrate physicians in the local and state health care response plans will result in underutilization of a key community resource and may contribute to an unnecessary bottleneck in the provision of patient care that will only serve to further strain the capacity of the nation’s hospitals for treating the most severely ill.”

- The American College of Physicians



## Methodology

### Reasoning for methodology

- Health care system is complex and multifaceted
- Methods of research: interviews, databases searches, literature reviews
- Historical examples: 1918 used as model
- Multiple perspectives: physicians, officials, administrators



## Methodology

### Historical research

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- Journal Storage (JSTOR)
- Sue Zschoche, PhD - Department of History
- *The Great Influenza* by John Barry
- *America's Forgotten Pandemic: The influenza of 1918* by Alfred Crosby
- *Public Health: Past, Present, and Future* edited by Raj Bhopal and John Last



## Methodology

### Literature based research on current planning

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- PUBMED
- Google Scholar
- Kansas State University Library Catalog

### Interview based research on current planning

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- Howard Rodenberg, MD, MPH - KDHE
- Dane Ditto, MD, & Deborah Doubek, MD - Physicians
- Joe Phillip, MD - Mercy Regional Health Center
- Mindee Reece - Center for Public Health Preparedness



## Results - Historical Research

### Historical circumstances

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- WWI involved massive troop movement and concentration
- The war created a shortage of medical personnel
- Allowed for precise data and records



## Results - Historical Research

### The public health system

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- Health departments began to appear shortly after the civil war
- Began to develop as a legitimate field of science and assume broader role
- Disagreement between physicians and public health departments
- The system was ineffective in gathering data and coordinating efforts



## Results - Historical Research

### Coordination of efforts

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- Healthcare system struggled for solutions, direction, & leadership
  - American Medical Association
  - American Red Cross
  - United States Public Health Service
  - Local Health Departments



## Results - Historical Research

### Problems for physicians

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- Inability to treat the disease
- Not enough physicians
  - War created shortage of qualified doctors
- Increased exposure for medical personnel
- Creation of Volunteer Medical Service Corps (VMSC)
  - 72,000 enrolled but only 1,045 served



## Results - Literature and Interview Research of Current Planning

### Planning Assumptions



The World Health Organization believes:

1. A pandemic is inevitable;
2. Infection rates will be high (probably at least 30%);
3. Health care will have to be rationed;
4. There will be high mortality; and
5. It will cause economic and social disruption



## Results - Literature and Interview Research of Current Planning



U.S. Department of Health  
and Human Services



Kansas Department of  
Health and Environment



Physicians





## Results - Literature and Interview Research of Current Planning

### Interviews

“In many ways, the ACP has it right.”

“As scientists, the physician’s are fully capable and have the public’s best interest in mind.”

“Physicians are busy people ...”

-Rodenberg

“It has been a challenge to get physicians involved.”

-Reece



## Results - Literature and Interview Research of Current Planning

### The American College of Physicians

# ACP

AMERICAN COLLEGE OF PHYSICIANS  
INTERNAL MEDICINE | *Doctors for Adults*



## Results - Literature and Interview Research of Current Planning

### Literature Review

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#### Australian General Practitioners - 2006

- 55/60 would cease to work without PPE
- Many saw their own patients as primary responsibility

#### U.S. Primary Care and Emergency Physicians - 2006

- 77% see influenza as greater threat to public health than bioterrorism
- 51% said they would volunteer in a medical service corps
- 50% would put their lives at risk for others



## Discussion and conclusions

### Conclusion #1

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*Physicians are willing to serve during a pandemic. However, government support and the availability of resources will affect their level of involvement.*



## Discussion and conclusions

### Conclusion #2

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*Primary care physicians do not have the time to be fully engaged in pandemic planning activities.*



## Discussion and conclusions

### Conclusion #3

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*Communities should develop plans for coordinating local physicians that will allow alternative care sites to be functionally staffed.*



## Discussion and conclusions

### Conclusion #4

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*Full coordination of physicians is not possible under the modern U.S. healthcare system.*



## Acknowledgements

### With special thanks to:

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- Justin Kastner, PhD
- Dane Ditto, MD
- James Kallail, PhD
- K-State College of Agriculture Honors Program
- KU School of Medicine Scholars in Primary Care Program

