

# Pandemic Flu Impact in U.S.

## **Potential Impact of an Influenza Pandemic in the U.S.: Two Scenarios\***

<b>Characteristic</b>	<b>Moderate (1958/68-like)</b>	<b>Severe (1918-like)</b>
<b>Illness</b>	<b>90 million (30%)</b>	<b>90 million (30%)</b>
<b>Outpatient medical care</b>	<b>45 million (50%)</b>	<b>45 million (50%)</b>
<b>Hospitalization</b>	<b>865,000</b>	<b>9,900,000</b>
<b>ICU care</b>	<b>128,750</b>	<b>1,485,000</b>
<b>Mechanical ventilation</b>	<b>64,875</b>	<b>742,500</b>
<b>Deaths</b>	<b>209,000</b>	<b>1,903,000</b>

\* Estimates based on extrapolation from past pandemics in the United States. Note that these estimates do not include the potential impact of interventions not available during the 20th century pandemics.

Source: HHS Pandemic Influenza Plan

# Pandemic Flu and the Potential for U.S. Economic Recession

- Second worst recession since World War II -- about 5.25% decline in Gross Domestic Product (GDP); \$683 billion loss
- Differential impact on sectors of the economy
  - 80% loss in arts and entertainment; accommodation and food service
  - 67% decline in transportation
  - 15% increase in health care and social services
- Regional differences based on state economic
  - Nevada – loss of 8%; Washington, DC – loss of 4.6%

## Context: What is government's role?

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- ❑ There is not universal agreement within the U.S. about whether preparedness is primarily a government role or a shared responsibility – among levels of government, the private sector, and individuals
- ❑ Bush Administration focus is on research and development
- ❑ Diffuse authority for public health in the U.S.
- ❑ Variation in capacity of local health departments

# State Preparedness Inadequate & All Over the Map

“Any community that fails to prepare and expects the federal government will come to the rescue is tragically wrong. It’s not because we don’t care, don’t want to, or don’t have the money, but because it’s impossible.”

Secretary of Health and Human Services Mike  
Leavitt, February, 2006

**READY OR NOT? Half of States Score 6 or Less Out of 10 Key Indicators for Health Emergency Preparedness, Including Pandemic Flu**

# Vaccine Production Capacity

- Unprecedented U.S. investment in research and development
  - R&D package almost \$6 billion
  - \$1.7 billion for production alone
  - Domestic vs. global needs as priority?
- Pre-Pandemic Issues
  - What should our goal be: Universal seasonal vaccination?
  - Pre-Pandemic vaccine: How much should be stockpiled; when should it be used? Who should be prioritized?

## Anti-viral stockpiles

- Goal: 25% of population. Fed Goal 50 mil for first responders, health care workers; States – a fed/state match purchasing program
  - Goal: 31 mil, currently 12.6 mil purchased
- How should antivirals be used?
  - Treatment? Prophylaxis? Encourage health care and other critical workers?
- Concerns about distribution capabilities.

# Respirators and Masks

- U.S. Centers for Disease Control and Prevention recommends use of masks for the public
  - Very limited government stockpile (104 mil N95 respirators; 52 mil masks/gloves/gowns; commitment for \$100 mil for ventilators)
  - No “surge” capacity on the part of manufacturers in the U.S.
  - What will be available for children?

## Fed Guidelines/Recommendations: Non-pharmaceutical interventions

- Recommendations for quarantine of household members poses financial and care-giving challenges
- Most decisions made at local or state levels, recommendations made by severity of pandemic
- School closure is a central part of U.S. policy for social distancing
  - Practical issues for parents include high level of dependence on schools to provide meals for poor children
    - Example: Over 50% of California students depend on free or reduced price school meals



## Social Policy Questions for U.S. (1)

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- Lost wages
  - No policy for recovering wages if business closed for public health reasons (social distancing) or economic reasons (no supplies, no customers)
  - No policy for assisting large or small businesses for economic impact of a pandemic

## Social Policy Questions (2)

- Sick leave
  - 50% of all Americans have NO sick leave
  - Most of those who have sick leave have less than one week of sick leave
    - This creates obstacle to compliance with quarantine and isolation recommendations
  - Among white collar workers, culture of “presenteeism” – workers are expected to come to the office even if sick – could encourage spread of disease

# Health care

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- Rapid diagnosis, treatment, and compliance with isolation recommendations is critical
  - 43 million Americans have no health insurance
  - Individuals could be personally liable for any health care costs
  - Hospitals and other providers may face high levels of “uncompensated care”
  - Need for universal health insurance coverage during a public health emergency

## Medical surge

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- ❑ No centralized financing, planning or regulation of U.S. healthcare
- ❑ Most hospitals regulated at the state level but are privately owned
- ❑ No national guidance regarding how the system of delivery would need to be altered in a pandemic
- ❑ No centralized policy regarding assuring availability of healthcare workers

# Leadership & Risk Communication

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- How do we prepare society – individuals and businesses (and political leaders) to:
  - Support preparedness in a time of scientific uncertainty
  - Recognize and adjust for the societal disruption that will be inevitable
  - Accept the potential inability of our institutions to deliver at the level normally expected