

The Pandemic Puzzle

Probability, Planning
Preparation

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100 year History Pandemic Events

1918 "Spanish Flu"- H1N1 - Killed tens of millions worldwide. Over 500,000 in U.S.
1957-"Asian Flu"- H2N2- 70,000 lost in US (about double usual bad flu season)
1968- "Hong Kong Flu" 34,000 deaths
2003- Appearance of H5N1 and first human fatality 424 humans infected, 261 deaths- Highly lethal, small infectious
2009- H1N1-182,166 + infected: 1,799 deaths- (<1%) Not very lethal, highly infectious.

H5N1 Projection

- 50% population infected by virus
- 1/3 to 2/3 of those infected become sick
- Clinical attack rate 15-35% of total population
- Best estimate is that 25% of population will become ill
- 4.7 million Americans require hospitalization (1 million beds currently available)

Gibbs and Soares, Scientific American, Nov. 2005

H1N1 U.S. Hospital impact

- Nationally- Flu tracker confirmed cases 54,000 plus
- Hospitalized- CDC 7,511
- Deaths- CDC 477
- Total US Population- 304,059,724
- If 25% infected- 7,601,493
- Projected Hospitalized 1,064,209
- Need to surge





Planning and Preparation Does It Make A Difference

- Educating-public and professionals time consuming and costly
- Planning- requires significant level of expertise and investment
- Practicing- requires significant commitment of time and people, disruption of
- Difficult maintaining interest in event that may never happen & no one wants to see
- A Tale of Two Cities

How Important to be Prepared

Census 1—disaster death rate per 1,000, by month, under 1890, remainder year 1890, for all causes and diseases only.

DISASTER DEATH RATE
1890

Admiral Benson, CNO, Annual Report to Congress, 1919






