A World of Mortality Issues and Insights Seminar
May 23, 2012

Session 6 – What Have We Learned from Pandemics and What Does the Future Hold?

Presenter
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Pandemic Mortality

• Definition (...one of those):
  – Caused by earlier unknown source (virus)
  – Cause serious illness
  – Spread easily
• Worldwide
History of Pandemics…

- 41 B.C. – earliest description by Titus Livius of Rome
- 1379 ‘mysterious influence of the heavens’
- 1510, 1580, 1732, 1761, 1781, 1830, 1847
- 1889-1891 Russian Fever
- 1918-1919 Spanish Flu
- 1957 Asian flu
- 1968 Hong Kong flu
- 2009 ‘Swine flu’ A(H1N1)2009

Pandemic - World has changed during decades

- Population growth
  – Population density
  – Social inequality
- Spread speed
- Capability to make medicines
Pandemic – effects to insurance companies

- Insurance risks
  - Mortality rates
  - Reinsurance, risk transfer
  - Short-term effect
- Investment risks
- Operative risks
- Long-term effects

Current situation of pandemics

- Who’s Influenza Pandemic metric
  - Spring 2009 Pandemic Period started
  - 10.8.2010 Post-Pandemic period started
- Can there be time when there is no risk of any outbreak?
What we have learned from A(H1N1)2009?

• Spread very fast
• Milder than first news expected
• Medicines took about 6 months to made mass use

Experience from use of vaccines

• Before AH1N1(2009) common belief was that medicines mass production will take half year after viruses dna is known
• Everything went like planned, it took about half year to get vaccine to mass production but...
Experience from use of vaccines

• ...time to make vaccine was short and there was not so much to test vaccine.
• Pandemrix vaccine has caused some problems in some countries
  – Narcolepsy

Potential future pandemics...

When, Where to start, What kind of...

...No answers...
Potential future pandemics…

...BUT it is very probable that

- Next pandemic will be caused by animal virus
- It will start from the areas, where population density is high and where people live near home animals
- It will hit harder to those areas where standard of living is lower