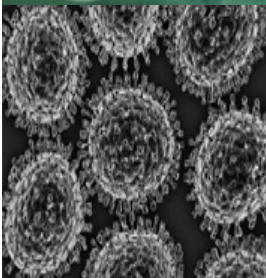
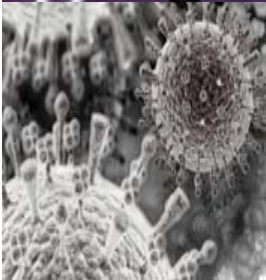
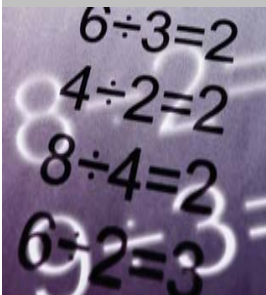




International Actuarial Association Health Section
2007 Colloquium

13th - 16th May 2007 Cape Town, South Africa



Assessing the Impact of a Pandemic on the Insurance Industry in South Africa

André Dreyer
Grete Kritzinger

14 May 2007

www.iaahs2007.com

AGENDA

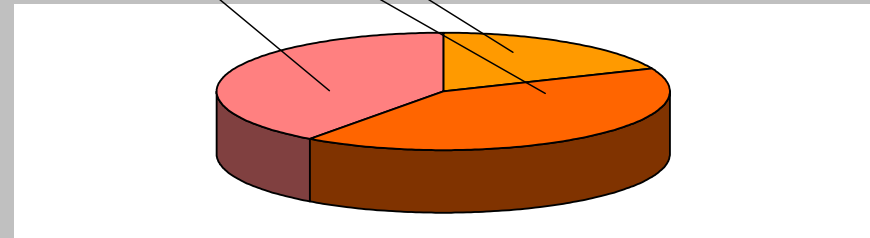
- Pandemics: real threat or another Y2K?
- Why insurers?
 - Why disability insurance? What about medical schemes and other health insurance?
- What are South African life insurance companies doing about it?
- Possible solutions and actions

REAL THREAT?

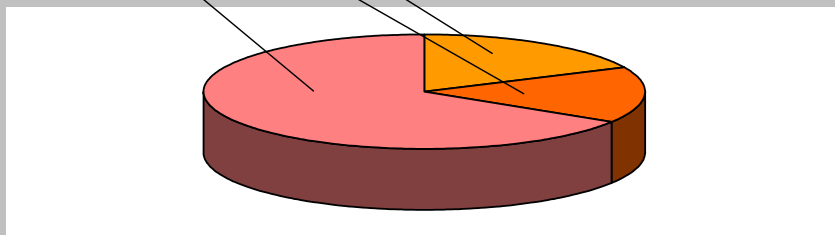


Do you believe that bird flu will become a pandemic?

Choice	Count	% of Answering
Yes	52	18.7%
Maybe	115	41.4%
No	111	39.9%



Choice	Count	% of Answering
Yes	50	18.1%
Maybe	44	15.9%
No	183	66.1%



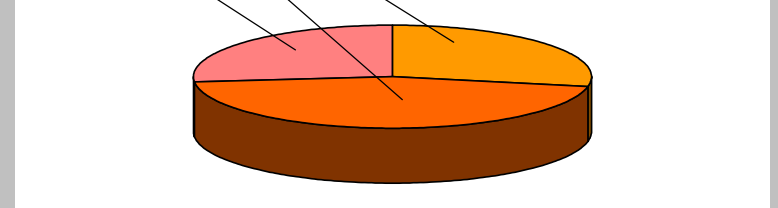
Should it break out, will you stay at home?

REAL THREAT?

Do you think we are prepared for bird flu?

Source: Actuary Australia, April 2006

Choice	Count	% of Answering
Yes	77	28.1%
Maybe	124	45.3%
No	73	26.6%



ALTHOUGH A PANDEMIC IS LIKELY TO HAPPEN, IT IS NOT A REAL CONCERN!



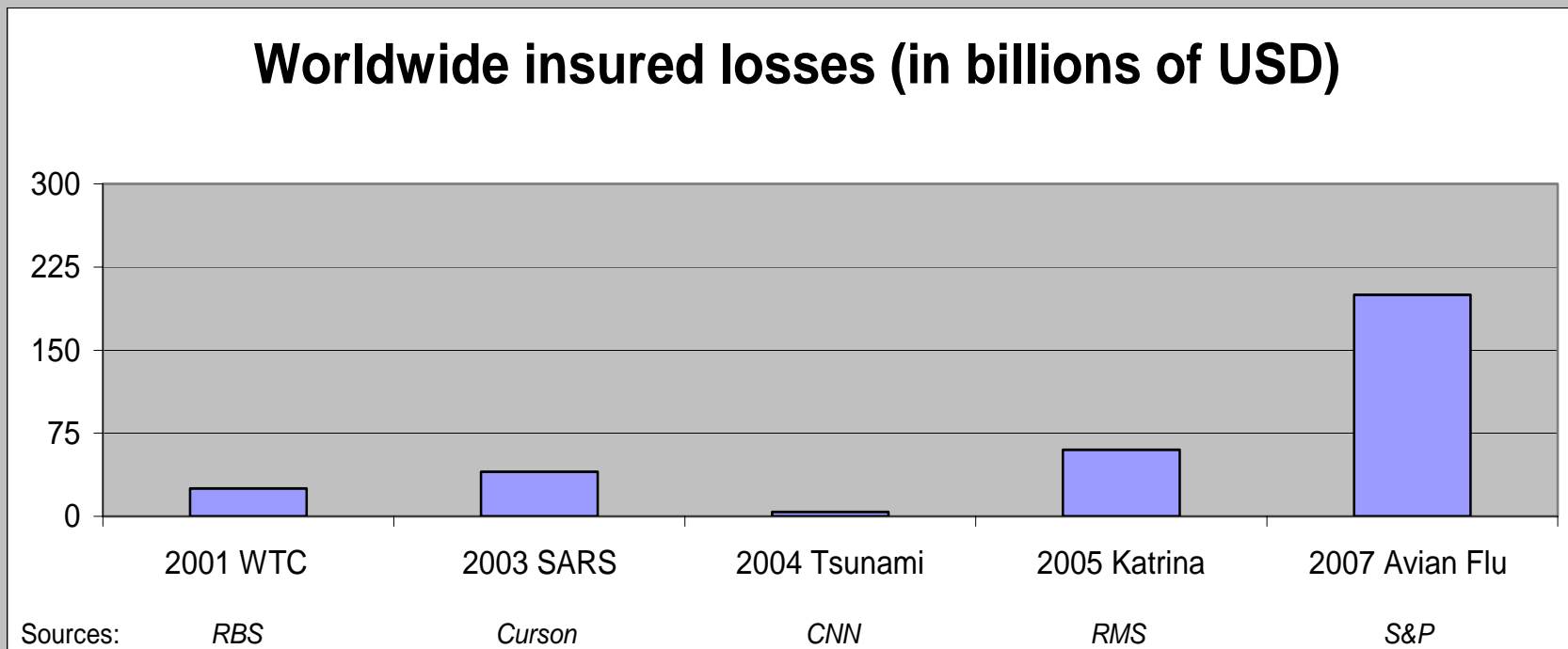
*Retail, travel, entertainment and **life insurance** sectors hit the hardest...*

Source: SOA Pandemic Research, October 2006

WHY INSURERS?



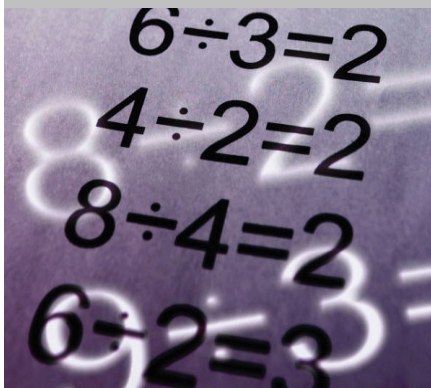
- Why is it so bad for insurers?



* Note: the 2007 losses are an estimated amount

DISABILITY AND HEALTH

- Modelling of disability and health costs
 - INCREASE in incidence rate; and / or
 - INCREASE or DECREASE in costs as recovery rates from temporary and permanent disability are affected (e.g. unavailability of necessary treatment where medical care is inundated with sick people); and / or
 - DECREASE in costs with any increased deaths to existing disability claimants and chronically ill patients
- Increased fraud and claims costs
 - In 1917-1918, sick funds and benefit societies encountered difficulty when confronted with the flood of influenza claims and several were depleted



Source: Phillips, H 1990

PREPAREDNESS

SA ACTUARY RESPONSES



- Assets are sufficient to protect insurers.
- Limited modelling to date, but monitoring events “closely”.
 - No reinsurance protection evident.
- The numbers:
 - 12 additional deaths per mille eliminate 2005 profits
(R12bn in claims)
 - 28 will eliminate free assets
(R33bn in claims)
- A severe pandemic is projected to cost R38bn!

PREPAREDNESS

SA ACTUARY RESPONSES



- Companies and wider economy will be impacted.
- Balance sheets will have to absorb “shock”.
- New product design is not allowing for this risk.
- Annuity business will have an offsetting effect.
 - But not significantly so...
- Reinsurers have not been questioned on their level of preparedness and ability to withstand “shock” pandemics.
- No investment hedging is taking place.
- Embedded values will be materially affected.

XDR-TB

Dilemma over extreme drug-resistant TB

The government has no policy to detain patients infected with extreme drug-resistant tuberculosis, according to Acting Health Minister Jeff Radebe.

The Health Department had sought advice from legal experts and the Medical Research Council in this regard, he said in a written reply tabled yesterday to a parliamentary question:

This had highlighted that detaining patients infected with XDR-TB would violate several of their human rights.

On the other hand, Radebe said XDR-TB was a public health issue and it was his department's responsibility to "uphold the constitutional rights of the people of South Africa to an environment that is not harmful to their health or wellbeing".

There was an "ethical and legal obligation to ensure that communities are protected from acquiring the infection and suffering the consequences" of the disease.

Radebe said the approach was to isolate patients with infectious XDR-TB until they were non-infectious, after which they were released back into the community.

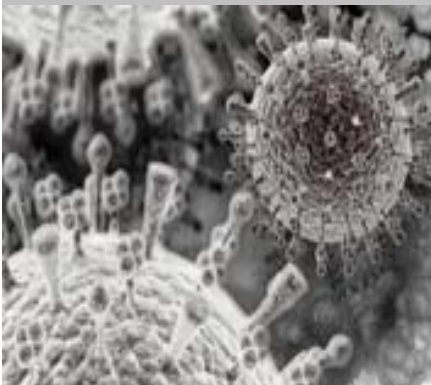
"This is done following education and counselling of the patient and the immediate family about the disease and the treatment with written consent obtained, which makes this a voluntary process.

"It is only with patients who refuse voluntary hospitalisation where legal recourse is sought to enforce hospitalisation," Radebe said.

That, however, did not guarantee the patient would take their medication, and authorities could not enforce treatment, considering the toxicity of the drugs used and the uncertainty around treatment success, as it would severely violate the individual's right to freedom and security.

"The dilemma lies with patients who have failed treatment and still remain infectious, as there are no third-line drugs for use as an option. This group of patients would have to be hospitalised indefinitely or until they die, violating several constitutional rights."

The department was busy developing a policy on isolation of patients with XDR-TB that would take all these medico-legal issues into consideration, Radebe said. - Sapa



Newspaper clipping:
The Star, 3 May 2007

PREPAREDNESS

THREATS IN LACK OF PLANNING

- SARS (2003):
 - east and south-east Asia US\$60 billion
 - US\$100 billion in direct medical costs in the US alone
- WHO: 1 billion infected; between 2 and 7 million deaths
- Africa: inadequate diagnosis and surveillance measures
- Lack of realisation of urgency to plan ahead
- Absenteeism – temporary staff
- Increased work volumes for health insurers
- Consumer confidence



PREPAREDNESS

SOLUTIONS AND ACTIONS

- Review current preparedness level
- Vaccine development
- Coordinated effort required
- Procedures to dispatch aid effectively
- Creative thinking
- Preparedness project should be politically and economically stable

PREPAREDNESS

SOLUTIONS AND ACTIONS

Pessimist: “Every day the world is closer to a pandemic.”

Optimist: “Every day without a pandemic means more time to plan and prepare.”

IN CONCLUSION

- Are we any closer today to a pandemic than 6 months ago?
- Pandemics expected once in 30-40 years
- Previous pandemic occurred in 1967...

