Department
of Health

Departmental Board: Risk Deep Dive

Major Infectious Diseases

28 September 2016

High Level Risk Register Deep Dive

In keeping with the departmental risk guidance, each quarter a risk from the Departmental High Level Risk Register is to be selected for a more in depth discussion at the Departmental Board. The aim of the discussion is for the Board to consider in more detail the mitigations for a particular risk which might not otherwise be discussed. This quarter the risk of an outbreak of a major infectious disease has been selected for the first of these risk deep dives. This risk is similar to one of the two risks the department holds on the cross government risk register.

Risk Deep Dive Item

The Deep Dive discussion will include:

- An introduction to the risk, mitigation and background led by the supporting Director; and

- Will be followed by a Board discussion focusing on the key questions outlined - set out in the slide 10 (see the last slide).

The key question for the DB is how much money, time and effort do we want to invest in our insurance against these risks?

- The NRA sets out a very severe reasonable worst case scenario for pandemic flu. This drives substantial expenditure on countermeasures and extensive preparedness activity. Is our level of preparedness proportionate given the relative risk or should we scale back to a lower level, as adopted by other countries?

- In the event of a major disease outbreak the DH EPHPP Directorate would very rapidly be overwhelmed. Should we do more to raise awareness of the risk and to plan for immediate mobilisation of a large number of staff (up to 40 or more) to support a major and sustained response or are existing arrangements sufficient?

- The lack of a national forum to support and oversee planning and response in the social care sector poses challenges. Is there more that can be done to provide direction and strengthen co-ordination across the sector and with the NHS?

The NHS, economic and societal impact would be severe.

Impact on NHS and PHE

Severe pandemic - over a 15 week period

30m people symptomatic. 9m requiring face to face assessment by health services.

300k – 1.2m requiring hospital care. 75k – 300k requiring critical care.

Peak illness rate (new cases per week): 10 – 12% of population = 6m – 7.2m

Ebola: entry screening cost PHE >£29m

Impact on economy

Modelling undertaken by HMT suggests that the total economic impact to the UK of a future influenza pandemic (based on the Reasonable Worst Case Scenario), could be in the order of £2,000 billion[see note 1].

SARS Hong Kong: Decline in air travel to HK of 50-60 percent over four month outbreak with peak decline of 75 percent. Retail sales declined by 15 percent at the peak, and by about 9 percent over the four month period (Siu and Wong, 2004) or about 5 percent on an annualized basis. (Burns et al, 2008). 40,000 jobs lost in Hong Kong tourism and travel industries.

Lost Working Hours

Staff absence (typically 7-10 days) may reach 20% during the peak 2 – 3 weeks of a pandemic, in addition to those arising from caring responsibilities. Higher in small organisations.

Modelling suggests that during a severe flu pandemic the lost working hours from symptomatic patients (who do not require hospital admission or subsequently die) would cost the UK economy £10 billion.

Societal disruption

School closure may be recommended but depends on the nature and stage of the pandemic. Secondary impact on workforce and risk of social gatherings outside school. Limited evidence on merits of banning mass gatherings.

Essential services, including energy and fuel providers; water and sewerage companies; mortuary services; the food supply chain; transport system and local authority services would be affected by staff absence during an influenza pandemic.

Potential for unrest and panic in severe pandemic eg for access to antivirals and other healthcare,

During SARS, Toronto health authorities placed ca 25,000 people in quarantine.

Note 1: the £2,000 billion economic impact is the short term impact of the pandemic, it includes "social value impacts" and relates to the period during which the pandemic occurs. It does not include the longer term economic effects that may follow the pandemic.