



**TYNE AND WEAR FIRE AND RESCUE AUTHORITY
EMERGENCY PLANNING UNIT**

Committee Report

Meeting : CIVIL CONTINGENCIES COMMITTEE : 12 October 2009

Subject : PANDEMIC INFLUENZA UPDATE

Report of the Chief Emergency Planning Officer

1. INTRODUCTION

- 1.1 The purpose of this report is to provide an update to Members on recently released planning assumptions in relation to pandemic influenza.

2. BACKGROUND

- 2.1 Further to the last report to this Committee on 6 July 2009, the Department of Health and the Cabinet Office jointly released a new set of planning assumptions on 3rd September in relation to Influenza A (H1N1), commonly referred to as Swine Flu.

3 CLINICAL ANALYSIS OF CURRENT SITUATION

- 3.1 The number of cases over the summer have been relatively small as compared with the numbers that could occur during the course of a full pandemic. It remains possible that case numbers could rise to many hundreds of thousands of cases per week.
- 3.2 Since the last week of July the rate of new cases has slowed considerably. Nevertheless, the exponential growth seen previously may resume, for example, as schools and higher education establishments reopen in September. Transmission may also increase as we enter our normal 'flu season'.
- 3.3 It is unclear whether the pandemic would thereafter unfold as a single extended 'wave' or multiple waves separated by periods of reduced case numbers. However, early, sustained exponential growth could lead to a substantial growth in the number of cases. A substantial peak could not, however, happen until October. Such a peak could be much higher than that seen in July. By the end of the planning period (May 2010), up to 30% of the population could have experienced symptoms of pandemic Swine Flu. These are potentially in addition to those experiencing the effects of seasonal flu.

- 3.4 As has already been seen, variations in how the pandemic unfolds from one local area to another is possible, therefore, where appropriate, planning assumptions are shown both across the UK and for local areas where different. These are shown in table 1 below.

Table 1

Planning assumptions to mid May 2010: Potential effects of A(H1N1) infection for the general population	
Assumption	
Clinical attack rate	Up to 30% of population
Peak clinical attack rate	Nationally, up to 6.5% of population per week
	Locally, 4.5%-8% of population per week
Case Complication ratio	Up to 15% of clinical cases
Case Hospitalisation ratio	Up to 1% of clinical cases, of whom up to 25% could require intensive care at any given time
Case fatality ratio	Up to 0.1% of clinical cases
Peak absence rate	Up to 12% of workforce

- 3.5 Table 2 shows the what the impact of the above planning assumptions may have on the Tyne and Wear area.

Table 2

Planning assumptions to mid May 2010: Potential effects of A(H1N1) infection for the Tyne and Wear population (Population at 1,075,938 – taken from 2001 Census)		
Assumption	Calculation	Tyne and Wear Impact
Clinical attack rate	Up to 30% of population	322,781
Local Peak Clinical Attack Rate	Locally, 4.5%-8% of population per week	48,417 – 86,075
Case Complication ratio	Up to 15% of clinical cases	48,417
Case Hospitalisation ratio	a) Up to 1% of clinical cases, of whom:	a) 484

	b) Up to 25% could require intensive care at any given time	b) 121
Case fatality ratio	Up to 0.1% of clinical cases	322
Peak absence rate	Up to 12% of workforce (Labour Force Statistic, 506,900, taken from Tyne and Wear Fact Card, TWRI)	60,828

- 3.6 These planning assumptions are based on analysis and modelling of data from both inside and outside the UK. As further UK and international surveillance data emerge, the Department of Health will be looking to develop and extend these planning assumptions.
- 3.7 Although it is deemed unlikely by many health agencies, it is still possible that the virus may mutate, becoming more virulent, and it is important to remain prepared for the full range of possibilities.

4. LRF PLANNING UPDATE

- 4.1 The LRF Pandemic Influenza Working Group (PIWG) has been working to incorporate these new planning assumptions into the LRF Multi Agency Pandemic Plan.
- 4.2 Version 3 of the Northumbria Multi Agency Pandemic Influenza Plan (LRF MAPIP) has been recently consulted upon with LRF members and is due to be signed off by the Chair and Vice Chair of the LRF week commencing 28th September 2009.
- 4.3 However, while we may be currently facing a pandemic which involves Swine Flu, it is important to remember that there are many different strains of influenza, any of which could be the source of the next pandemic. The plan is a generic framework which describes the arrangements in place to deal with a pandemic – no matter what the source or strain of influenza. The original planning assumptions for a pandemic still form the basis of the plan and are more closely aligned to a virus similar in character to H5N1, commonly known as Avian Flu.
- 4.4 Avian flu is known to be clinically more aggressive than Swine Flu and other variations of influenza. It is prudent that these original planning assumptions which were of a 50% clinical attack rate and a 2.5% case fatality rate remain as a potential 'worst case scenario'.
- 4.5 In order to address the specific impacts of Swine Flu, an Annex has been added to the plan. Lessons learned as the first wave has unfolded have also been incorporated into many aspects of the plan.

5 CONCLUSION

- 5.1 While we need to learn lessons from the unfolding pandemic waves from the H1N1 virus, we also need to continue to plan for many different strains of the influenza virus. The threat of new emerging strains of influenza on a global basis will remain. Version 3 of the LRF MAPIP still focuses on the original planning assumptions issued by the Department of Health. These assumptions were based on a strain similar to H5N1 (known as Avian Flu), which is a more aggressive form of the virus than we are currently experiencing with Swine Flu.
- 5.2 In order to address the specific characteristics of Swine Flu, an annex specifically about the H1N1 strain of flu has been added to the LRF Multi Agency Pandemic Influenza Plan.

6. Recommendations

- 6.1 Members are asked to:
 - i) note this report
 - ii) receive further reports on this important issue as the situation develops.
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BACKGROUND PAPERS

- Civil Contingencies Committee – ‘Pandemic Influenza Update’ – 6th July 2009