

Preparedness for Pandemic Flu in Bolton Report for the Health Overview and Scrutiny Committee, July 2006

Introduction

There has been growing concern in the media regarding the likelihood of Pandemic Flu in the next few years. There is no certainty about when this will happen – some reports suggest that a pandemic is imminent as the longest inter-pandemic period is 39 years and it is now 36 years since the last pandemic. There is no accurate modelling to predict when a pandemic will occur; therefore it would be wise for all agencies to develop their plans now. We have had new-several_new pieces of new-guidance from Department of Health and the Health Protection Agency, with more to follow.

Many of our existing plans relating to major incidents and emergency plans can be updated and modified to take account of the particular issues which would be raised by pandemic flu. However, the different issues that pandemic flu presents, especially the duration of the pandemic, and the resulting business continuity aspects, justify the production of a specific pandemic flu plan. — notably the length of time which the pandemic would last. This would place a particular strain on health services and other essential services and requires us to have comprehensive plans to ensure business continuity

What is pandemic flu?

The word "pandemic", is derived from the Greek word "pandemos" which literally means "all the people".

Pandemic flu may not necessarily be 'bird flu'. The "normal" flu virus mutates all the time, this is why we never have immunity to next years strain. Periodically, the virus mutates more than normal into a hitherto unknown strain, which can be more infectious and pathogenic, against which humans have no protection because this is effectively a new strain. It is possible that the next pandemic could be caused by the mutation of the normal seasonal flu virus, or it could be caused by a version of "bird flu". In essence, we won't know which particular strain is going to cause the pandemic until it actually starts to occur.

There has been rapid growth in the number of cases of avian flu across the world, with parts of Europe affected in recent weeks months, and the increased likelihood of spread into the UK. Measures are being taken to reduce the risk in the UK, including advice from DEFRA regarding poultry keeping, handling of dead birds etc. There is likely to be a vaccination programme for farmed poultry.

It is prudent to emphasise the importance of improving the uptake of seasonal flu vaccine, since being infected with the two strains could potentially be more serious. We have seen an increase in the uptake of seasonal flu vaccine in 05/06 (75%) (final figures not yet available but December's total was 70% we should have the final total now and could update the paper accordingly) with extra demand from people not in the risk categories. We have been advised by the department of health that the seasonal flu vaccine manufacturers are encountering problems in growing one of the strains in this years vaccine. In Bolton, we

have been pro active on this issue and have written to all GPs advising them of the possible delay in supplies reaching surgeries and have reminded them of the prioritisation criteria which essentially recommends vaccine be given to everyone over the age of 65 and anyone in a clinical risk group, e.g. diabetes patients etc.

How would pandemic flu affect Bolton?

Planning assumptions based on previous pandemics, and modelling of the current H5N1 virus has lead to predictions of 35% - 50% - 25% of population being affected (NB this is a cumulative total over the period of each wave of the pandemic. Such large numbers of people being ill would have a severe impact on health and public services services, and could lead to schools being closed, mass gatherings being banned, travel restrictions imposed etc.

<u>The current modelling suggests a case fatality ratios (CFR) of 0.37% - 1.5% 2.5% have been quoted (i.e. the percentage of deaths from the total number of cases).</u>

If CFR = $\frac{0.37\%}{2.5\%}$ and assuming a $\frac{50\%}{2.5\%}$ attack rate then in Bolton the following figures would apply:

- 65130,000 people ill with flu
- 1350,000 additional GP consultations
- 346-1000(minimum) excess admissions to hospital
- 237-3011 excess deaths (Bolton currently has approx. 240 deaths per month)

NB These figures refer to the excess activity over one wave of the pandemic i.e. 12-17 weeks. all of the above will need to be reworked given the current thinking about a 50% attach rate and 2.5% CFR.

The latest modelling suggests that there will probably be one large wave of the pandemic which will sweep through Bolton. It is probable that there will be two or possibly three waves, hence these figures would need multiplying by two or three to give the total excess activity in Bolton over the whole of the pandemic period. Needs correcting – modelling re one steep wave now.

A vaccine is unlikely to be available for 4-6 months after first cases confirmed so access to antiviral drugs will be important. The UK is stockpiling 14.6 million doses of the anti-viral drug oseltamivir, this will cover 25% of population and be allocated on the basis of population size. These will be in central stock by September 2006, and when moved to local areas will require a secure environment ocation. The Department of Health has also placed an order for 3.2 million doses of the generic H5N1 vaccine. Howeverbut even more important are the —general infection control measures (see below).

What action has been taken so far?

Under the terms of the Civil Contingencies Act (November 2004) PCTs and Acute Trusts are defined as category 1 responders and as such were required to have business continuity plans in place by 11 November 2005. PCTs and Trusts have to decide what their 'core functions' are and what is 'non essential'. The development of business continuity plans will ensure that the NHS is able to continue to function, albeit at a reduced level.

In August 2005 we established Bolton's Pandemic Flu Steering Group including membership from the PCT, Acute Trust, Local Authority, Health Protection Agency, Voluntary Organisations, Ambulance Trust, NHS Direct, Coroners and Crematorium – following advice from 3 relevant sources:

- 1. UK Operational Framework for stockpiling, distribution and using antiviral medications Department of Health 2004.
- 2. Department of Health Pandemic Influenza Plan March 2005.
- 3. Health Protection Agency Operational Control Committee September 2005.

This group is overseeing the development of multi-agency plans to ensure we are appropriately prepared for pandemic flu. On October 27th 2005 the Acute Trust and PCT held a joint pandemic flu training exercise, in conjunction with Local Authority. This helped us to assess the current level of preparedness in Bolton and identified where we need to take further action.

We held a joint pandemic flu exercise last October, and a live mass vaccination exercise in March 2006 (where we demonstrated that we could immunise 800 people in 1.5 hours), with additional exercises planned for this autumn.

As part of this multi agency group, the Acute Trust has taken the lead in the development of a mass casualty plan aimed at maximising the use of available resources in the event of a situation such as pandemic flu, where response by all agencies will need to be sustained over a period of up to eighteen months a considerably longer time than has been the case with previous major incidents.

We <u>are establishing have</u> also <u>established</u> a Pandemic Flu Steering Group within the PCT to ensure our own planning processes are robust.

Within the PCT we have sought to raise awareness of pandemic flu via presentations to the Management Team and Professional Executive Committee and professional issues groups e.g. Post Graduate Medical Education sessions, the practice nurses forum, practice managers group, senior managers event, etcand will shortly be presenting to the Clinical Governance groups i each locality.

Antivirals

At the request of the Health Protection Agency, the PCT is hosting a mass vaccination exercise at Bolton Arena on March 29^{th.} The event is designed to asses our level of preparedness and ability to immunise a fixed number of people within a given time period (1,000 people every 6 hrs). Delegates are attending from all over the UK.

Patient Group Directives for oseltamivir are already in place to allow prescribing of antivirals by various health professionals e.g. nurse prescribers/pharmacists as well as doctors. GPs and hospital clinicians have been sent diagnostic algorithms to help in making a diagnosis and recommending appropriate treatment. This will allow telephone diagnoSee comments above

The guidance from the Department of Health and the Health Protection Agency now favours the initial assessment of people who believe they have pandemic flu by telephone. To this end the PCT is developing plans to have a" flu response centre", whereby Bolton residents, having previously rung the" national flu line", will be triaged by telephone to asses their suitability for treatment with anti viral drugs. They will be placed in one of four categories that will be developed nationally, to determine how and when they receive the medication. It is likely this will involve them attending a nominated collection point or having the medication delivered.

Vaccines

In light of the expected modelling and the view that there will probably be only one wave of the pandemic, it is expected that the value of vaccination maybe somewhat limited as it is likely to take between 4 – 6 months before a specific pandemic vaccine is available, this is considerably longer than it will take for the pandemic to sweep through the UK, therefore the pandemic will probably have been and gone before a vaccine is available. We are waiting for further guidance re this.

Infection control measures

In view of the limitations of both the anti viral drugs and the vaccine, the role of infection control assumes a greater importance. In Greater Manchester we have developed infection control guidance for primary care health settings, e.g. GPS, dentists, nursing /residential homes etc. National guidance is also expected for Universities/Colleges, Schools, Prisons, Local Authority domicillary services, Military, Fire Service, and Police Service. A national and local publicity campaign has been prepared reminding people of the "coughs and sneezes spread diseases" message. Essentially, following normal infection control advice, e.g. using handkerchiefs, hand washing and staying at home if you re ill, are likely to be the most effective preventative measures.

Needs a paragraph on infection control advice, also PPE.

Winter planning

Each winter, the PCT in conjunction with the Acute trust, produces a winter plan. This is designed to address the expected surges in demand that the winter places on the health economy. Within the PCT for example, we make sure we have robust on call arrangements for our core services, we ensure that GP practices have sufficient opening hours and app ointment slots to see their patients, especially over the Christmas/New Year period. Annual leave is co ordinated across all the PCT services to ensure services remain operational. Pharmacies and dentists are also expected to ensure the provision of adequate services. The walk in centre at Lever Chambers has the ability to absorb surge demand through the co ordination of staff availability etc. A significant amount of routine work can be put on hold to allow more urgent work to take precedence etc. The PCT's intermediate care facilities can be escalated on demand whereby a higher number of referrals can be accepted e.g. from hospital, thereby freeing up bed availability in the acute trust. Similarly the PCT's rapid response team can escalate to providing more input to those patients who remain at home but are dependent on home visits to maintain their independence, thereby further reducing pressure on hospital beds. The PCT also has the option of "purchasing" additional bed capacity in the private sector via nursing/residential homes, and of providing staff input to maintain people in this setting. As we did last year, the PCT will send a document to all nursing /residential homes and to our own intermediate care service, advising of the appropriate infection control measures to combat diarrhoea and vomiting. Last year, the hospital also used this document to send to all the wards. As in previous years, the PCT will actively promote the uptake of the flu and pneumococcal injections in the appropriate population groups. Last year we immunised 75% of our over 65s, thereby further contributing to reduced demand on hospital beds. Whilst our winter plans are updated and improved annually, during a time when a flu pandemic may occur, these plans are even more important and support our ongoing work regarding preparedness for flu pandemic.

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