BUSINESS CONTINUITY PLANNING

PANDEMIC FLU

Table of Contents

Aim

The purpose of this document is to provide VSG with a professional and coordinated business continuity plan in preparedness for any Pandemic influenza outbreak within the UK.

Introduction

Pandemic Flu is a global disease outbreak that occurs when a new influenza virus appears that causes a serious illness. People have little or no immunity to a new virus and it can spread easily from person to person.

Unlike ordinary seasonal influenza that occurs every winter in the UK, pandemic flu can occur at any time of the year. Pandemics arise when a new virus emerges which is capable of spreading in the worldwide population.

This was the situation during the influenza pandemic of 1918-19, when a completely new influenza virus subtype (influenza A/H1N1) emerged and spread around the globe in around four to six months. Several waves of infection occurred over two years, killing an estimated 40-50 million people. Since then there have been two subsequent influenza pandemics, in 1957 and 1968.

Recently the Health Protection Agency has focused on improving UK preparedness for a future influenza pandemic and support to the Government, the NHS and the public in responding in the most effective way. The Agency has formed a Pandemic Influenza office to oversee work in this area, which has included the development of information and guidance, emergency planning, exercises, training, laboratory work, and regional, national and international liaison.

There are three requirements needed to create an influenza pandemic virus – **(1)** a new human influenza A subtype that **(2)** causes serious illness and **(3)** spreads rapidly from human to human.

How does Influenza develop into a Pandemic Influenza?

Pandemic influenza has historically originated as a mutation of normally circulating influenza virus' into ones which are readily passed from human to human by close contact, often as a result of sneezes / coughs releasing airborne droplets containing the active virus. These mutated virus' spread widely and rapidly due to the lack of any natural immunity within the general population, which leaves that population being highly susceptible.

Outbreaks of Pandemic Influenza tend to occur in two distinct waves, with typically three to six months between them, independent of the normal seasonal influenza outbreaks.

Why is an outbreak of Pandemic Influenza expected?

- The longest interval between **Pandemic Influenza** outbreaks is the current period since the 1968 outbreak of **'Hong Kong flu'.**
- The Health Protection Agency's **(HPA)** 'Pandemic Influenza Contingency Plan' was revised in October 2005.
- The UK government is currently stockpiling prophylactic influenza anti viral drugs.
- The UK government's Department for Health's immunization guideline document '**The Green Book'** had its influenza section revised in August 2005.
- The Department for Health's, suing the WHO's range of Pandemic Influenza warning phases has categorized that we are currently at **Phase 5** (a new influenza virus subtype is causing disease in humans, but is not yet spreading efficiently and consistently among humans) on a 6-phase scale (6 being an active pandemic). This is as of April 2009.

Inter-Pandemic Period

Phase 1 No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.

Phase 2 No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.

Pandemic Alert Period

Phase 3 Human infection(s) with a new subtype, but no new human to- human spread, or at most rare instances of spread to a close contact.

Phase 4 Small cluster(s) with limited human-to-human transmission but spread is highly localised, suggesting that the virus is not well adapted to humans

Phase 5 Large cluster(s) but human-to-human spread still localised, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).

Pandemic period

Phase 6 Pandemic phase: increased and sustained transmission in the general population. Past experience suggests that second and possibly further waves of illness caused by the new virus are likely 3-9 months after the first wave has subsided. The second wave may be as, or more intense than the first.

Transition between phases

Transition between phases may be rapid and the distinction blurred. The crucial interval is between World Health Organisation Phases 5 and 6, which will determine to a large extent whether vaccine can be developed in time for the first wave of illness in the UK.

Implications of Pandemic Influenza on the UK

The World Health Organisation Plan recognises additional national subdivisions for Phase 2 onwards according to whether a country is affected itself, has extensive travel/trade links with an affected country, or is not affected.

Should the UK have cases during the pre-pandemic period, the international phases apply. Once a pandemic has been declared (Phase 6), a four point UK-specific alert mechanism has been developed (see below) which is consistent with the alert levels used in other UK infectious disease response plans:

Alert level 1 Cases only outside the UK (in a country or countries with or without extensive UK travel/trade links)

Alert level 2 New virus isolated in the UK

Alert level 3 Outbreak(s) in the UK

Alert level 4 Widespread activity across the UK

A move to a higher alert level may be triggered, after assessing the risk, if influenza due to a pandemic strain is affecting another country geographically close to the UK, although technically it is still 'outside the UK'

The scale of Pandemic illness

1. Pandemic influenza generally exceeds those of even the most severe winter epidemics.

2. Mortality in the UK is likely to exceed 50,000 deaths, possibly appreciably higher.

3. Besides the elderly, excess mortality is also likely in younger adults and children.

4. Once cases begin to occur in the UK it will take only a few weeks before activity is widespread

5. It is possible that there will be more than one epidemic wave (with an interval of several weeks or months) and, if a second wave occurs, it may be more severe than the first.

Geographical spread within the UK

- In the event of a novel influenza virus causing significant outbreaks of human illness elsewhere in the world, it is unlikely that the UK could prevent importation (except by closing all borders); even a 99.9% restriction of travel into the country would only be expected to delay importation of the virus by up to two months

- Spread from an origin in Mexico is likely to follow the main routes of travel and trade.

- Spread from the source country to the UK, through the movement of people, is likely to take around a month and experience of the dissemination of **SARS** from Hong Kong suggests modern travel may result in wide international spread even more rapidly than this.

- Following arrival in the UK it will take a further 2-3 weeks until cases are occurring across the whole country.

Infectivity and mode of spread

Influenza is mainly spread by the respiratory route, through droplets of infected respiratory secretions produced when an infected person talks, coughs or sneezes; it may also be spread by hand/face contact after touching a person or surface contaminated with infectious respiratory droplets.

People are highly infectious from the onset of symptoms for 4-5 days (longer in children and people who are immunocompromised). People are likely to be infectious just before the onset of symptoms. Children have been shown to shed virus for longer (and at higher levels) than adults.

People with asymptomatic infection shed virus and are therefore also likely to be infectious to some extent and pass the infection on. The incubation period is 1-3 days

Without intervention, and with no significant immunity in the population, the historical evidence suggests one person infects on average about 1.4 to 1.8 people This number is likely to be higher in closed communities.

The extent and severity of illness

Important differences in the extent, age distribution and severity of illness are likely compared with annual seasonal influenza, but will not be known until human-to-human transmission is under way. Most people will be susceptible, although not all will necessarily develop clinical illness. Previous experience suggests that roughly equal numbers will have asymptomatic as have symptomatic infection.

For planning purposes the base scenario, based on previous pandemics in the 20th century, is a cumulative clinical attack rate of 25% of the population over one or more waves of around 15 weeks, each which can be weeks or months apart. This compares with a usual seasonal influenza attack rate of 5-10%. The second wave may be the more severe.

All ages will be affected, but children and otherwise fit adults could be at relatively greater risk, particularly should elderly people have some residual immunity from exposure to a similar virus earlier in their lifetime. For illustrative purposes, a uniform attack rate has been used across all age groups.

The age-specific differential attack rate will affect the overall impact: if working age adults are predominantly affected this will impact more seriously on provision of services and business continuity, while illness in the very young and the elderly is likely to present a greater burden on health services, especially, for the former, paediatric intensive care.

More severe illness than the usual seasonal influenza is likely in all population groups rather than predominantly in high risk groups, with a higher number of people than usual developing severe prostration and rapidly fatal overwhelming viraemia, viral pneumonia or secondary complications. It is not possible to give numbers for these in advance.

Deaths

Total deaths in the UK are normally around 12,000 per week. Total deaths are likely to gradually rise to at least twice this at the peak of a pandemic wave, and then gradually decline. However, there is the potential, in the more severe scenario, for as many deaths to occur over 15 weeks of a pandemic as normally occur in one year.

Mortality rates are likely to vary considerably between different age groups. At least a third of the total excess deaths may be in people under 65 years compared with less than 5% in inter-pandemic years.

Treatment with antiviral drugs should reduce both the extent and severity of the illness and possibly flatten the peak incidence.

Effect on the VSG Business

Absence from work

Absence from work will depend on the age-specific attack rate, although even if working age people are relatively spared, additional absenteeism may result from staff needing to take time off to care for **family members**, or **difficulties with transport.**
Accelerated transmission may occur in the workplace, resulting in staff being ill during a narrower time frame than in the general population.

It is suggested that business continuity plans are based on a cumulative total of **25%** of workers taking some time off. If it is further assumed that an individual may be incapacitated for up to three weeks by the virus. Consequently, during the three worst weeks of the outbreak (weeks 6-8) from 800 - 1200 staff may be off work at any one time.

Modelling suggests absenteeism due to the pandemic will rise to a peak of between 5-7%, the higher number including those who would need to look after those who are ill. This equates to about three times the normal average absenteeism in Advance.

Issues facing VSG

Support Services

The following support functions have been identified critical to the business operation: schedulers, control room staff, accounts and payroll staff.

The above named Support Services staff has been multi skilled to perform additional duties together with their normal day-to-day activities. However, should an outbreak occur it is likely that the whole staff, normally based in close confine, would be affected.

> *All VSG systems are fully networked throughout the UK, as well as accessible on broadband and dial-up. If a Pandemic Influenza outbreak occurred all key* ***Support Service*** *staff would be asked to invoke the Business Continuity Plan and stay at home, and as far as practicable to stay indoors, and to continue to work from their home addresses during the height of the Pandemic.*

Front Line

The security business is such that being flexible and changing plans day to day, and quite often hour to hour, is common place. The affect on VSG business will be as much dictated by the continuity plans of VSG's customers, as will be the short-term reduction in available labour.

Many of the VSG multi-site customers may decide that certain functions are transferred to other locations, or even in some instances the short term closure of some sites, as to continue with a large staff shortage would not be practicable. This could affect, in the short term, the numbers of officers deployed on a contract overall. Such actions would increase the staff pool for deployment elsewhere.

There are other actions that would be taken should VSG experience an outbreak.

VSG currently have an officer workforce of circa 4,500. As previously stated, 27% to 54% of the company's working population could be affected. Taking a mid range 40% the actual number would be 1800 over a 15-week period. The period of incapacitation is estimated to be around three weeks.

Education and Internal Communications

In preparation for any potential outbreak VSG will ensure there is updated information about the potential of a pandemic. All staff will be briefed and updated as to the Business Continuity Plan. VSG will strive to inform staff as to the precautions to take to reduce the spread of infection with their work environments. The general advice given will be as follows:

Personal and respiratory hygiene

People can reduce, but not eliminate, the risk of catching or spreading influenza during a pandemic by:

- Covering their nose and mouth when coughing or sneezing, using a tissue when possible
- Disposing of dirty tissues promptly and carefully – bagging and binning them
- Avoiding non-essential travel and large crowds whenever possible
- Maintaining good basic hygiene, for example washing their hands frequently with soap and water to reduce the spread of the virus from their hands to their face, or to other people.
- Cleaning hard surfaces (e.g. kitchen worktops, door handles) frequently, using a normal cleaning product
- Making sure their children follow this advice
- **If someone catches flu, they should:**
- Stay at home and rest
- Take medicines such as aspirin, ibuprofen or paracetemol to relieve the symptoms (following the instructions that care must be taken to ensure personnel are not allergic to the medication).
- Drink plenty of fluids.

Legal Responsibilities

- All cases of Pandemic Flu identified at the workplace must be reported to the HSE under the RIDDOR Regulations.
- The HSE would investigate all reported cases and take appropriate action to protect life, which would include the closure and quarantine of part of, or the whole of a premise. Under these circumstances VSG would be unable to provide a service until restrictions are removed.

Options during a Pandemic Period

- All Area Managers to determine through early negotiation with clients minimal staffing levels site by site.
- The agreed minimal staffing levels to be introduced during the Pandemic Period (Phase 6) only.

- Written agreement to allow minimal staffing levels to be agreed at an early stage with each client. (Site by site basis).

- A skills staffing matrix containing sites minimal resource levels should be maintained and copies issued to Directors, Account Managers, Schedulers, Control Room Management and Area Managers for information during the Pandemic period.

- VSG would ensure that minimal staff levels were maintained using Relief Teams and any available supervisory staff who were available for re-deployment.

- The Area Manager should carry out in conjunction with the client, a review of the essential security staff deployments at each site. Where possible the reduction of access control points should be considered and the re-deployment of security staff to key positions only.

- In line with the current VSG Business Continuity Plan, members of the VSG **Crisis Management Team** will manage the day-to-day response to changing absence levels and to monitor the following.

    - Gross absence levels – maintenance of minimal staffing levels

    - Local clusters of absence

    - Number of affected staff and absence rates.

- All unexpected requests from existing customers will be considered and an appropriate solution sought. Crime prevention and target hardening advice will be offered by VSG to clients seeking a security solution where staffing shortages is unavoidable

- Annual leave, recruitment and all training would be suspended during the Pandemic Period.

- All requests for officers from new customers would be refused

- VSG can also expect other staff to become available due to temporary site closures. These officers would become available for temporary re-deployment to sites experiencing staff shortages below minimal staffing levels.

- VSG Directorate would, on a daily basis oversee the management of resources and would ensure the agreed minimal staffing levels are maintained.

- VSG Directorate would also enter into discussions at an early stage of the Pandemic Period with clients to determine priorities, prior to arriving at the expected peak.

Consequential Affects

Obviously, if VSG were affected to the levels shown above, so would the rest of industry and commerce. One key aspect that could affect VSG staff would be the reduction in the transportation system, numbers of trains, buses and etc.

To overcome these problems VSG would utilize a fleet of company vehicles, supplemented by the hire of minibuses to transport staff to sites.

Summary

With the above methodology VSG will be able, in most instances, to agree reduced staffing levels during the 5-week peak, and be able to maintain the commitments during the remainder of any outbreak.

Associated Documents – Available from HR Department

Pandemic Flu BCP Policy

Pandemic Flu Contingency Plan, Contract Assessment

Links and Numbers

www.dh.gov.uk	Department of Health
www.who.int	World Health Organisation
www.nhs.uk	National Health Service
0800 1513 513	Department of Health Infoline