

# 6 The pandemic period

## 6.1 Declaring a pandemic

The World Health Organization (WHO) will inform the Department of Health of any change in alert levels, usually after international consultation. The Department of Health will communicate this information, together with an assessment of risk to the UK, to the devolved administrations, other government departments, the NHS, healthcare professionals, the public and relevant organisations. The Department of Health will also notify responders of the relevant UK alert level, informed by surveillance information from the Health Protection Agency (HPA).

## 6.2 UK alert levels 1–4 (WHO Phase 6)

The UK response during an influenza pandemic has the following major elements:

- monitoring its emergence, spread and the impact/effectiveness of interventions
- slowing and limiting the spread of disease
- the targeted use of available pre-pandemic vaccine stocks
- ensuring that those who are vulnerable or affected receive appropriate treatment and care
- maintaining business/service continuity and social order
- dealing with additional deaths
- ensuring that all involved in the response, including the public, are consistently well informed
- wider vaccination as pandemic-specific vaccine supplies become available.

## 6.3 UK alert level 1 (no cases in the UK)

### 6.3.1 Planning

At this heightened alert phase all organisations need to review and test their response plans and operational arrangements again, paying particular attention to staffing, logistics and supply issues.

### 6.3.2 Health and social care response

The health and social care response at this stage will be an extension of activity at Phase 5, but with the certainty that the UK will be affected. This stage could

last between two and four weeks or longer, during which time heightened public concern, suspected cases and false alarms can be anticipated before the virus actually reaches the UK. All organisations therefore need to be prepared for that demand and ensure that it does not detract from steps to maintain core services and finalise preparations for the arrival of the pandemic.

### **6.3.3 Public information**

Public information messages will acknowledge concerns whilst preparing the public for the imminent arrival of the pandemic, provide advice on the response measures and encourage those who are well to adopt sensible precautions and preparations, but continue to attend work and undertake other essential activities.

## **6.4 UK alert level 2 (virus isolated in the UK)**

This level is anticipated to last about two weeks, until cases are occurring in all major centres of population in the UK.

### **6.4.1 Planning**

Public and private sector organisations need to focus on essential activities, implementing pre-planned measures to maintain core service/business continuity and adjusting activity levels to cope with additional demand and allow for potential disruption.

### **6.4.2 Health and social care response**

As suspected cases occur in the UK, public health priorities will be to:

- investigate cases and contacts promptly to confirm or refute the diagnosis at the earliest possible time
- provide appropriate care
- apply measures to control/slow the spread of infection
- collect sufficient epidemiological and virological information to refine projections and inform public health and clinical management policies. (The HPA will maintain a central database on the first few hundred cases for this purpose.)

### **6.4.3 Public information**

Anyone who is ill and suspects they may have influenza-like symptoms will be advised to stay at home, contact the National Flu Line service, inform a relative

or friend and if necessary ask them to collect their antiviral medicines. Otherwise, the overall aim will be to maintain normal services and continue social and economic activities for as long and as far as that is possible. Personal and respiratory hygiene messages will be reinforced ahead of an escalation to UK alert level 3.

## 6.5 UK alert level 3 (outbreak(s) in the UK)

### 6.5.1 Planning

By the time outbreaks are occurring in centres of population, preparatory steps should have been completed. National and local response measures should be implemented proportionately as the pandemic spreads. National priorities will include:

- reviewing/revising the response strategy
- coordinating the implementation of response measures
- monitoring the initial adequacy and effectiveness of response measures
- maintaining antiviral, antibiotic and other essential pharmaceutical and clinical supplies
- maintaining public communications.

### 6.5.2 Health and social care response

As the pandemic becomes established, health priorities will include:

- ensuring that patients have access to appropriate assessment, treatment and care, including rapid access to antiviral medicines for those with symptoms compatible with pandemic influenza
- adapting health and social care services to ensure that the maximum amount of surge capacity is available in primary and secondary care in anticipation of additional demand
- implementing and maintaining staffing contingency plans
- ensuring that infection control measures are strengthened in all health and social care settings.

### 6.5.3 Public information

In addition to reinforcing previous public messages and providing advice and general information, local information and advice on service provision, any school closures, and restrictions or other countermeasures should be available.

## 6.6 UK alert level 4 (widespread activity across the UK)

It is anticipated that activity will rise to a peak across the UK about seven weeks from the first recognition of cases, following the pattern described. Initially, all organisations should monitor the impact on their service or business against planned expectations in order to modify responses appropriately, if necessary.

### 6.6.1 Planning

National priorities are to:

- monitor the spread and impact (including deaths), refine projections, review response effectiveness, and adapt strategies and tactics accordingly
- maintain essential services and supplies and critical infrastructure
- minimise social disruption
- identify unexpected impacts or problems.

Many services are likely to be under increased pressure, particularly from staff absences and possibly from disruption of supplies. Some, including health and social care organisations and funeral directors/burial services, will experience rapidly escalating demand as the pandemic evolves.

### 6.6.2 Health and social care response

Priorities include:

- surveillance – the HPA will have moved from detailed to aggregate reporting of cases by geographic region together with assessment of the efficacy of antiviral medicines (and, if relevant, vaccine), monitoring of the cause and antimicrobial susceptibility of bacterial complications, and reviewing the clinical effectiveness of the response
- providing health and social care advice and information.
- monitoring antiviral consumption against expected use and adapting policies accordingly
- monitoring and responding to pressures on health and social care services, maximising the effective use of the capacity available, supplementing staffing, maintaining essential care for those who are suffering from other emergencies or illness, conserving essential supplies and maintaining services
- developing a specific vaccine and securing UK supply.

## 6.7 End of the first wave: preparing for subsequent waves

A single-wave pandemic profile with a sharp peak provides the most prudent basis for planning, as that would put a greater strain on services than a lower-level but more sustained wave or the first wave of a multi-wave pandemic. However, second and subsequent waves have occurred in some previous pandemics, weeks or months after the first. Whilst the priority at the end of the first wave will be to further develop recovery plans and gradually restore supplies, services and activities depleted or curtailed during the pandemic, plans must assume that some regrouping may be necessary in anticipation of a future wave. In this respect, national priorities should be to:

- assess the overall attack rate during the first wave, in order to assess the susceptible population and construct models of a second wave
- continue to monitor the virus for genetic variations that might affect the degree of protection afforded by previous infection or vaccination, and thus vaccine formulation
- continue to monitor antiviral susceptibility of the virus
- review the efficacy of all interventions to inform future policies
- review antiviral and other pharmaceutical needs/supplies.

Health plans should assume that heightened monitoring and surveillance will be required for some time beyond the first wave and that all plans require review and revision in the light of lessons learnt. In particular, the likelihood of ongoing constraints on supplies and services and continuing pressures on health and social services, combined with the loss of key staff, should be taken into account. Updated information on the epidemiology of the virus, effectiveness of treatment, availability of countermeasures and lessons learnt from the first wave will help inform and shape the response measures that may need to be maintained or implemented for second and subsequent waves. In addition, health plans may be required for targeted or mass vaccination programmes during this period.

## 6.8 Second and subsequent waves

Second and subsequent waves may be more or less severe than the first: UK alert levels 3 and 4 will come into play again, informed by epidemiological and mathematical modelling following the first wave. The Department of Health will issue guidance to inform health response plans following a review of the first wave and the availability of countermeasures.

## 6.9 The recovery phase: returning to normality

As the impact of the pandemic wave subsides and it is considered that there is no threat of further waves occurring, the UK will move into the recovery phase. Although the objective is to return to inter-pandemic levels of functioning as soon as possible, the pace of recovery will depend on the residual impact of the pandemic, ongoing demands, backlogs, staff and organisational fatigue, and continuing supply difficulties in most organisations. Therefore, a gradual return to normality should be anticipated and expectations shaped accordingly. Plans at all levels should recognise the potential need to prioritise the restoration of services and to phase the return to normality in a managed and sustainable way.

Health and social services are likely to experience persistent secondary effects for some time, with increased demand for continuing care from:

- patients whose existing illnesses have been exacerbated by influenza
- those who may continue to suffer potential medium- or long-term health complications (eg the encephalitis lethargica that may have been linked to the 1918 pandemic)
- a backlog of work resulting from the postponement of treatment for less urgent conditions.

The reintroduction of performance targets and normal care standards also needs to recognise the loss of skilled staff and their experience. Most others will have been working under acute pressure for prolonged periods and are likely to require rest and continuing support. Facilities and essential supplies may also be depleted, resupply difficulties might persist and critical physical assets are likely to be in need of backlog maintenance, refurbishment or replacement. Impact assessments will therefore be required.

Other sectors and services are likely to face similar problems and may also experience difficulties associated with income loss, changes in competitive position, loss of customer base, lack of raw materials, the potential need for plant start-up and so on. This should be acknowledged and addressed in recovery plans.