

# Swine flu: the worst case scenario

How will pharmacy services cope if the swine flu crisis escalates?

**Chris Chapman** draws on official worst case projections to imagine how the UK will fare in the grip of a full blown pandemic

Winter 2009. After a summer lull, swine flu returns. The outbreak quickly spreads across the northern hemisphere, engulfing Europe and North America as people travel home after Christmas. The World Health Organization declares a level six pandemic and the UK plan kicks in to gear.

## Week one

The government puts the country at pandemic alert level three, indicating there are flu outbreaks. Pharmacies begin to be inundated with calls from patients worried by rumours, hearsay and media speculation.

The EU regulator-approved vaccine, hastily developed after the May 2009 outbreak, is distributed to targeted groups but stocks are limited. Tamiflu is supplied to PCTs from the national stockpile, based on population size. The antiviral is only available for treatment and is no longer used for containment.

Meanwhile, the 24-hour National Flu Line is activated. Around 14,000 non-clinical staff are trained to give a rough diagnosis and authorise the distribution of antivirals from collection points. These are generally away from health centres, but pharmacies are designated as collection points in several areas.

Lessons learned in the May 2009 outbreak mean that communication with pharmacy is improved this time

around. Most pharmacists are kept up to speed with events, including the number of cases at a local level, although co-ordination remains poor in some areas.

Initial reports suggest the outbreak has affected around 50 per cent of the population, with a fatality rate of 2.5 per cent. Around 750,000 patients will die during the outbreak.

## Weeks two and three

The outbreak spreads to all major population areas. Deprivation, dense living areas and overcrowded public transport aid the spread of infection, placing city-based pharmacies on the front line.

Gradually, the outbreak reaches more rural areas. The UK flu alert rises to level four, its highest possible status, indicating widespread infection. The government does not restrict internal travel, but the Foreign Office advises against travel to other countries with outbreaks.

As swine flu is confirmed in local areas, panic-buying of OTC medicines becomes rife. Schools with a confirmed outbreak are closed, forcing some pharmacy staff to stay at home to look after their children.

Some pharmacies begin to ration drugs in fear of supply shortages, while others stockpile medicines.

However, medicines supply remains steady throughout the crisis thanks to resilience planning from wholesalers.

Doctors are inundated with suspected cases, seeing around one in three influenza patients. Around 4 per cent of those affected require hospitalisation, with an average stay of around a week.

Elective surgeries are cancelled to free up an additional 40,000 hospital beds nationally to deal with the crisis.

To ease the burden on primary care, pharmacists take on greater responsibility through 30-day emergency supply legislation. Workload increases exponentially as the number of influenza patients rises.

## Week four

Day-to-day pharmacy services become difficult to provide because of an increased number of staff absences. Smaller pharmacies with teams of four or five are hit worst as staff take time off due to illness, childcare or bereavement. The absences last an average of seven to 10 days.

The RPSGB temporarily re-registers experienced persons as practising pharmacists to ease these staffing shortages. However, some pharmacists are deployed to support GPs, and locum support is reduced



as hospital pharmacists are unavailable.

Pharmacy closures become a reality. Clusters of stores support each other according to local plans, closing and assigning staff where needed. Strange bedfellows are created as independent contractors work in multiples and vice versa.

Services suffer some disruption as loaned staff adapt to new workflows and computer systems. Many non-essential services are withdrawn to utilise resources.

## Week five

The reduction in open pharmacies, coupled with staffing difficulties and increased demand, results in queues of angry and frustrated patients.

This leads to attacks on pharmacy premises, often by patients desperate to obtain supplies of Tamiflu or the vaccine. The police provide protection, but this is limited due to the reduced number of officers on duty.

Some patients continue to go to work despite their illness, threatening to infect others. Local authorities seek orders from justices of the peace to require

## WHO GETS THE VACCINE?



Any vaccine will be prioritised. If a pandemic occurs, priority groups will be decided by the UK National Influenza Pandemic Committee (UKNIPC). Currently the highest priority is assigned to healthcare workers "directly engaged in examination and clinical care of symptomatic flu patients". It is unclear if this includes pharmacists.



## Flu views

What challenges will you face when a flu pandemic hits?



"Part of the challenge across the piece is finding out what's happening... who's doing what and getting those internal communications to our staff."

**Andy Murdock, Lloydspharmacy pharmacy director**



"The main thing is the staffing element. People will still want their prescriptions. We need to think about how we're going to share staff, maybe by having one pharmacy with all the staff in the local area."

**Raj Patel, Mount Elgon Pharmacy, Wimbledon**

the patients to be medically examined. Emergency laws make it a criminal offence for people to expose others to the risk of infection.

As recommended in the UK plan, the armed forces play no part in maintaining order.

### Week six

The outbreak hits its peak. Around one in 10 people are affected, with 185 patients per surgery requiring a doctor. Nationally, hospitals can only cope with 25 per cent of the demand for beds. By the end of the week, 168,000 people have died. In Dorset, 80,000 people fall ill, with 2,000 fatalities.

In Worcestershire, pharmacies close according to a plan, collapsing into sustainable clusters.

Meanwhile, some parts of London are hard-pressed. In Wimbledon, only essential pharmacies remain open, selected by location, security arrangements and ability to meet customer demand (such as having multiple IT systems). These pharmacies are put under intense strain by patient demand and increased prescription volume to treat exacerbations.

### After math

The number of cases begins to fall, although there are occasional spikes in some areas. Pharmacies reopen as soon as possible and services return to normal. However, some patients' conditions have been exacerbated by influenza, and a backlog of non-essential work remains.

The pandemic ends 15 weeks after it began. Pharmacy has come through with flying colours, holding out and maintaining services in the face of its greatest challenge. Many

of the arguments against pharmacists having a greater clinical role have been dismissed, and several of the emergency powers are retained indefinitely.

**This is a fictional account of a worst-case swine flu pandemic. However, it is based on actual pandemic flu plans by the government, CCA, PSNC, RPSGB and NPA, and information from BAPW, Lloydspharmacy, Dorset PCT, WorcestershireLPC and grassroots pharmacists.**

## POSSIBLE UK DEATHS IN PERSPECTIVE

**750,000** – maximum expected deaths in a pandemic flu outbreak

**504,052** – registered deaths in England and Wales in 2007

**449,800** – British fatalities in second world war

**55,000** – minimum expected deaths in a pandemic flu outbreak

**12,000** – deaths per year from seasonal flu

**179** – UK soldiers killed in the Iraq war