UK Strategy

• **Containment Phase (case based surveillance)**
  • Meeting aircraft from Mexico, information for travellers
  • Identification of cases - treatment
  • Identification of close contacts - prophylaxis
  • Closing of affected schools for 7 days

• **Outbreak management (case based surveillance)**
  • No case finding at ports of entry
  • Flexible approach to schools - local risk assessment
  • Clinical diagnosis for contacts of confirmed cases
  • Widespread community transmission areas

• **Treatment Phase (routine winter surveillance)**
  • Clinical diagnosis
  • Treatment available for all (especially risk groups)
  • No contact tracing
  • No prophylaxis except for risk groups
Command and Control in Health

Civil Contingencies Committee

Government Departments

Department of Health

Communications

National Health Service Operations

Health protection Agency

Emergency Response Coordination

Regional Health Protection Teams

Strategic Health Authorities

Local HPTs

Primary Care Trusts

Emergency Planning

Acute Trusts

GPs

Ambulance Trusts

Flu Response Centres
Surveillance Systems

Generic surveillance systems
- National laboratory reporting scheme
- RCGP Weekly Returns Service
- NHS Direct syndromic surveillance
- Mortality monitoring
- Hospital admissions

Seasonal influenza surveillance systems
- QFLU (as a component of Q-Surveillance)
- HPA spotter practice scheme
- HPA Antiviral Resistance Monitoring and Viral Sequencing of Influenza
- Medical Officers of Schools Association

Pandemic Preparedness Systems
- Enhanced Surveillance of H1N1v
- First Few Hundred (FF100) Cases Surveillance System
- Flu Clinical Information Network
ORIGINAL AIM: To provide a comprehensive assessment of the emerging epidemiology, clinical features and virology of new pandemic virus.

System closed 11 June:

370 confirmed cases and
~2000 close contacts entered on-line
## FF100 Outcomes

Preliminary household secondary laboratory confirmed attack rates (226 households)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Contact (excl co- &amp; primary)</th>
<th>Secondary cases</th>
<th>Attack rate</th>
<th>RR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>299</td>
<td>16</td>
<td>5.4%</td>
<td>1.0</td>
<td>baseline</td>
</tr>
<tr>
<td>Male</td>
<td>287</td>
<td>25</td>
<td>8.7%</td>
<td>1.6</td>
<td>(0.86, 2.90)</td>
</tr>
<tr>
<td>Age group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults</td>
<td>521</td>
<td>11</td>
<td>2.1%</td>
<td>1.0</td>
<td>baseline</td>
</tr>
<tr>
<td>Children</td>
<td>179</td>
<td>30</td>
<td>16.8%</td>
<td>6.9</td>
<td>(3.54, 13.59)</td>
</tr>
<tr>
<td>Prophylaxis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>21</td>
<td>12</td>
<td>57.1%</td>
<td>1.0</td>
<td>baseline</td>
</tr>
<tr>
<td>Yes</td>
<td>281</td>
<td>4</td>
<td>1.4%</td>
<td>0.04</td>
<td>(0.01, 0.11)</td>
</tr>
<tr>
<td>Total</td>
<td>700</td>
<td>41</td>
<td>5.9%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Next steps:
- Complete follow-up of cases and contacts;
- Complete collection and testing of serology from cases and contacts;
- Complete analysis including comparative analysis
UK Epidemic Curve

Number of cases

Date of report

Cases by Age and Sex

The chart shows the number of cases by age group and sex. The x-axis represents age groups, ranging from 0-9 to 80+ years, with an unknown age category. The y-axis represents the number of cases. The chart includes data for Female, Male, and Unknown sex. The highest number of cases is in the 10-19 age group for both Male and Female, with a significant drop in cases as age increases.
Actual and projected new cases per day

Data as at 12.00 on 29 June

New confirmed cases per day

- Scenario based on data from the last 7 days
- R = 1.1 from 30th May
- R = 1.5 from 30th May
- Historic
- Estimated
- Background Influenza like illness

Situation Report Day
Community Based Surveillance

Three community-based virological schemes for detecting sporadic cases of H1N1v are now operating in England.

HPA/RMN scheme – 45 general practices that participate in the HPA/RMN enhanced virological surveillance scheme each winter have agreed to continue swabbing patients with flu-like symptoms from 01/06/2009 onwards. Results to date 2 positive samples out of at total of 64 tested for H1H1v

RCGP/HPA scheme includes 45-50 general practices in England that participate in the Royal College of General Practitioner’s Weekly Reruns Service run by the Birmingham Research Unit. Samples are tested at Cfl. Results to date 36 positive samples out of at total of 566 tested for H1H1v

NHS Direct/HPA scheme - Self-sampling of persons aged 16 or over calling NHS Direct with cold/flu symptoms began on 29 May in six SHAs (London, South East, East and West Midlands, Eastern and North East). Consenting callers are sent packs on Mondays – Thursdays. Results to date 20 positive samples out of at total of 781 tested for H1H1v

Across all three schemes a total of 58 cases have tested positive out of a total of 1,611 tested.
Challenges for Delivery

• Increasing numbers of cases per day
  • Flu Response Centres - 100 staff + telephony systems
  • Data handling system

• Large numbers of contacts
  • Flexible approach in areas with widespread community transmission

• First few hundred cases project
  • Required 40 staff + telephony system
  • Data handling system
Assumptions for the next few months

To 31 August 2009

- Clinical attack rate 5 - 15%
- Complication rate 15% of clinical cases
- Hospitalisation rate 3% of clinical cases
- Case fatality rate 0.1% of clinical cases
- Peak absence rate 8 - 9% of workforce

To end 2009

- Clinical attack rate 30%
- Case fatality rate 0.1 - 0.35%
- Peak absence rate 10 - 12% of workforce
Severity and Hospitalisations

• The illness is generally mild but has been severe in a few cases usually those with underlying co-morbidities
• Similar to seasonal flu but all are susceptible
• Total of 105 hospitalisations and 3 deaths
• Currently 14 hospitalisations in England
• 4 without underlying co-morbidities
Surveillance for the next few months

• Continue syndromic surveillance
• Sampling of some cases
• Virus monitoring
• New surveillance activities
  - Calls to National Influenza Service/Fluline
  - Antiviral doses issued
  - Hospital admissions
  - Vaccine uptake (and effectiveness)
• Monitoring of bacterial pneumonia and antimicrobial resistance
Issues

• Sharing of data and information
• Sharing views on policy decisions
• Will there be one wave or two?
• Is there a seasonality effect?
• Southern hemisphere experience
• Antiviral resistance
• Risk groups
• Vaccine prioritisation and efficacy