

**PANDEMIC INFLUENZA
INFORMATION**
including
infection prevention & control guidance

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AIMS & OBJECTIVES

- Definitions and virology
- Potential impacts of a pandemic
- Signs and Symptoms
- Transmission
- Infection Control Precautions
- Other Considerations:
 - Special Settings
 - Countywide Management
 - Information Sources
- Conclusion



DEFINITIONS

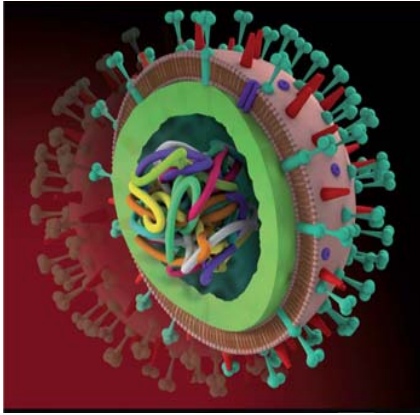
- **Swine Flu** is a respiratory disease normally found in pigs but human cases can and do happen. Human cases of swine influenza have now been confirmed in many countries.
- **Seasonal flu** is a contagious respiratory illness caused by influenza viruses.
- **Pandemic Flu** is flu that causes a global outbreak, or pandemic, of serious illness that spreads easily from person to person.

PANDEMIC ALERT LEVELS

Preparedness	Inter Pandemic Phase	Low Risk of Human Cases	1
	New Virus in animals, no human cases	Higher Risk of Human Cases	2
	Pandemic Alert	No or very limited human to human transmission	3
Response and Action	New Virus Causing Human Cases	Evidence of increased human to human transmission	4
		Evidence of significant human to human transmission	5
	Pandemic	Efficient and sustained human to human transmission	6

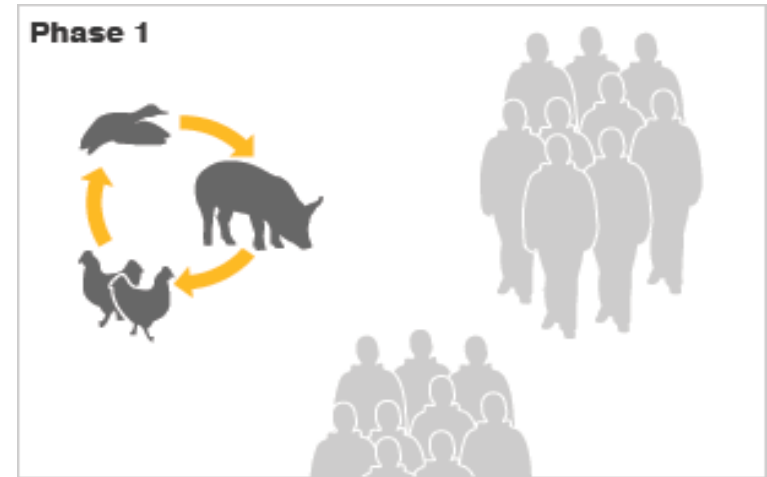
IMPACTS OF A PANDEMIC IN THE UK

- Potential for rapid spread due to travel
- Disruption to health/social/essential services.
- Clinical attack rates unknown and severity unknown.
- Pandemic flu tends to affect different groups of the population compared to seasonal flu.
- If attack rate 25% 1 in 4 staff will be of sick.
- Additional absence possible due to:
 - Need for child care
 - Non flu related medical problems



INFLUENZA VIRUS

- Several different types
- Continually mutates
- Respiratory illness
- Spreads by respiratory route
- Winter in northern hemisphere
- Varying severity
 - 3000 deaths annually UK



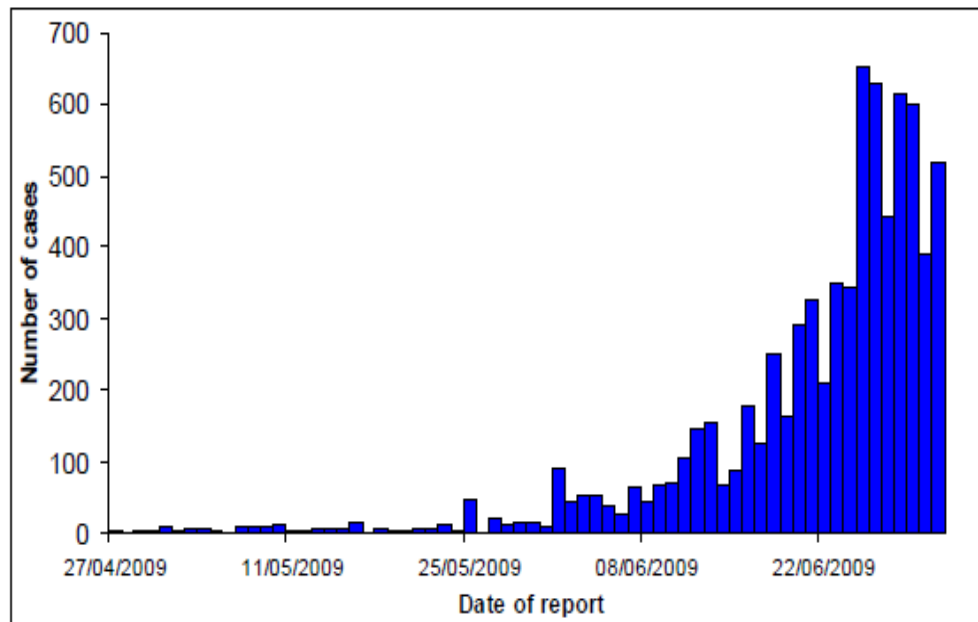
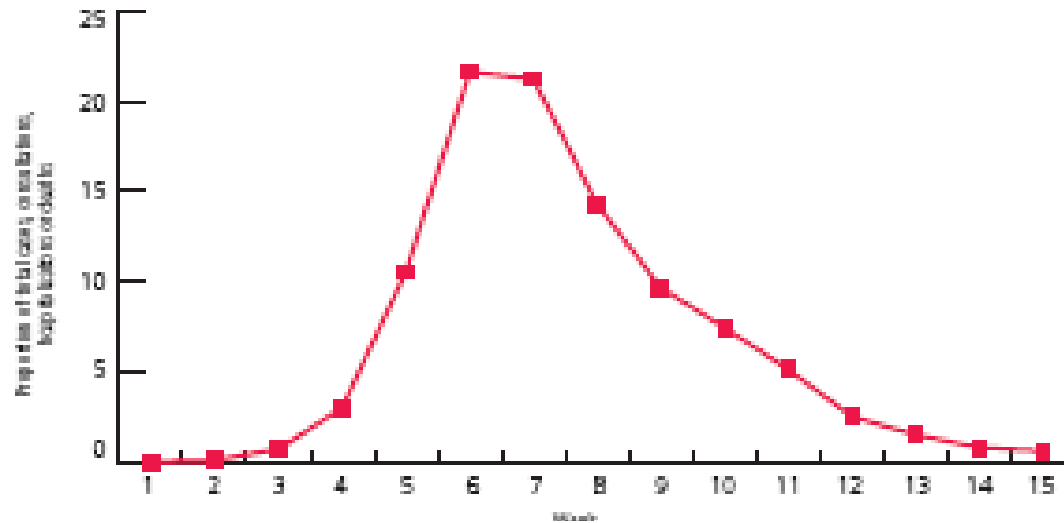
UK & LOCAL...

- Number of cases continually increasing in UK
- Started in returning travellers
- Local clusters
- Increasing community transmission
- Majority involve children or young adults
- Most cases mild
- Concern about potential of virus



PATTERN

New cases of new H1N1 in the UK by day





KEY MESSAGES

- DH have launched Swine Flu Information Line **0800 1513513**.
- Message may end with an outcome to call NHS Direct.
- National media advertising campaign:
 - providing relevant public health information
 - reinforcing key messages.
- Leaflet delivered to households.

MODE OF SPREAD



- Primarily by large respiratory droplets.
- Expelled from the respiratory tract during coughing/sneezing.
- Close contact, usually within 3 feet/1 metre.
- Theoretically could occur when:
 - hands or objects become contaminated with respiratory droplets or secretions and then come into contact with the mucous membranes.
- Environmental transmission.

CLINICAL FEATURES OF INFLUENZA

- Fever and dry cough with abrupt onset
- Headache, sore throat, runny or stuffy nose
- Muscle ache
- Shivering
- Fatigue and Weakness



REVIEW CASE DEFINITIONS

- Incubation Period estimated at 1 to 7 days
- Infectious Period not conclusive

KEY POINTS - UPDATE

- Health Secretary announced that the whole country is moving into treatment phase.
- GPs will make a clinical diagnosis of flu based on symptoms rather than laboratory tests.
- GPs will make a decision about individual patient benefit from antiviral drugs and refer to antiviral collection point if needed.
- Treatment phase will also see an end to routine contact tracing and prophylaxis for contacts.

ACTIONS TO CONSIDER

- Health Protection Agency guidance and algorithms for assessment: www.hpa.org.uk
- People who meet criteria should be reported immediately to either:
 - the NHS Worcestershire Flu Triage and Co-ordination cell in hours: 01562 513000
 - public health consultant on call: 01384 215666 out of hours.
- Staff who are asymptomatic can continue to work as normal.

INVESTIGATION



- Swabbing will only be recommended in limited circumstances.
- Wear appropriate PPE.
- Nose and Throat swabs. Investigations require taking of swabs into viral transport media:
 - One Remel transport media tubes should be used for each patient, from whom a nose and a throat swabs should be taken and placed into the media.
 - Ordinary cotton swabs may be used in addition to those in the transport media packs.



ONGOING TREATMENT

- **Treatment of Priority Groups** Give priority to early treatment with antivirals of people in higher risk groups
- **Treatment of other age groups** In considering treatment of people aged 5-64 years with no underlying illness, advised to take a precautionary approach and offer antivirals to patients with symptoms strongly suggestive of H1N1v.
- **Prophylaxis** Not usually offer prophylaxis to contacts of cases unless eg, a household member has serious underlying health problems or there are other special circumstances.
- **Vaccination plans...**



MANAGING COUGHING & SNEEZING

- Cover nose and mouth with disposable single-use tissues when sneezing, coughing, wiping and blowing noses:
 - dispose of used tissues promptly and appropriately
 - hand hygiene
 - be mindful of how flu spreads
 - consider those who require assistance
- Patients/Service Users wearing masks?



ADVICE FOR CARE IN THE HOME



- Consider ways to protect others who are not sick:
- keep the sick person away from other people as much as possible
- remind them to practice good cough hygiene, including hand hygiene
- Promote hand hygiene to all in the house
- Consider environmental cleaning
- Ascertain if contacts in house have chronic medical conditions

RISKS OF COMPLICATIONS

- Some people at greater risk of becoming more seriously ill from swine flu than others. High risk groups include people with:
 - Chronic lung, heart, kidney, liver or neurological diseases
 - Immunosuppression (by disease/treatment)
 - Diabetes mellitus
 - Patients who have had drug treatment for their asthma within the past three years
 - Pregnant women
 - People 65 years and older, children under 5 years



HAND HYGIENE

- Strict adherence to guidance must occur.
 - Five Moments of Hand Hygiene
 - Consider the environment!
- If hands are visibly soiled/contaminated with respiratory secretions, they must be washed.
- Remember technique and standard practices.
- Community staff should consider skin cleansing wipes.
- Before using alcohol rub, hands should appear visibly clean.

SEGREGATION

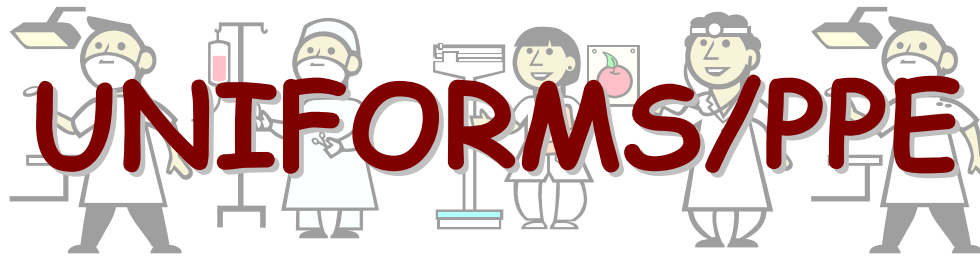
- A signed designated self-contained area within each property should be used for the treatment and care of patients with pandemic influenza.
 - be fully self-contained
 - include reception and waiting areas separated from non-influenza patients
 - have a separate entrance/exit door
 - not be used as a thoroughfare
- Segregation of staff...



OCCUPATIONAL HEALTH



- Prompt recognition of healthcare workers with influenza is essential.
- Consider latest guidance within organisation.
- Those with pandemic influenza should be excluded from work.
- Consider segregation of staff but exceptions may be necessary.
- Consider exclusion of staff at high-risk of complications from direct patient care activities.
- Records should be kept of who has been affected and areas they work.



- The appropriate use of PPE will protect uniforms/clothing from contamination in most circumstances.
- Personal Protective Clothing includes:
 - Disposable plastic aprons
 - **Gowns** are not required for the routine care of patients with influenza.
 - Eye Protection
 - Gloves
- Changing and disposal.

PERSONAL PROTECTIVE EQUIPMENT

PUTTING ON...

1. APRON
2. MASK
3. EYE/FACE PROTECTION (in aerosol-generating procedures)
4. GLOVES



REMOVING...

1. GLOVES
2. APRON
3. EYE/FACE PROTECTION
4. MASK

FFP2 MASKS FOR STAFF

- If available should be worn by staff to provide protection when performing procedures which have the potential to generate aerosols or when caring for infected patients (within 1metre).
- On each use, the fit of the mask should be checked by breathing in and ensuring that the mask sucks in.
- These masks can last for up to 8 hours.

Procedure to be Adopted for Donning FFP 2 Particulate Filter Respirators



1. Separate mask to open fully



2. Hold mask upside down to expose the 2 head bands



3. Gently pre bend nosepiece to conform mask to face



4. Separate head bands with index fingers



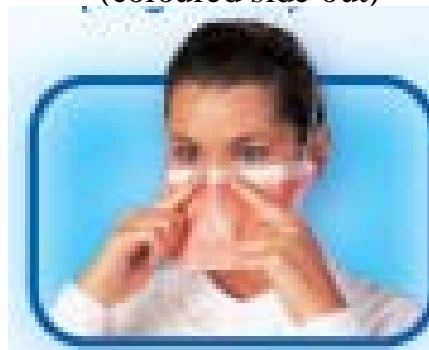
5. Cup mask under chin (coloured side out)



6. Bring head bands over head



7. Place 1st head band at neck & remaining band to crown



8. Mould nosepiece tightly across bridge of nose & face

**Adjust to achieve seal.
Do not proceed with activities until you have successfully checked your respirator and are happy that fit is good.**

SURGICAL MASKS WITH FLUID SHIELD

- Can be used as an alternative to FFP2 masks (wherever possible for aerosol generating procedures FFP2/FFP3 should be worn)
- Surgical Masks with Fluid Shield are recommended for healthcare workers having any close contact with patients (ie within one metre).
- Provide a physical barrier - minimise contamination of nose and mouth by droplets.
- Ensure fitted properly, they can last for up to 8 hours.

Procedure to be Adopted for Donning Surgical Masks



1. Hold mask as shown on edges, with thumb and forefinger



2. Loop ties over the back of your ears and pull down to fit snugly



3. Bring ties forward under your chin



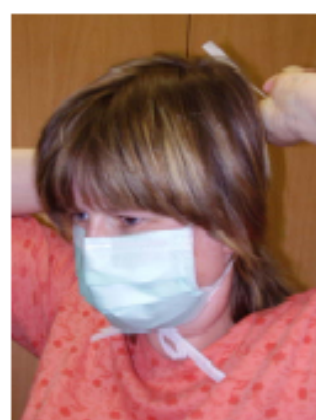
4. Tie securely



5. With thumb and forefinger ensure mask fits snugly over nose



6. Fit mask snugly under chin



7. Take lower ties around and secure at back of head

**DO NOT
PROCEED
WITH
ACTIVITIES
UNTIL YOU
HAVE
CHECKED
YOUR MASK
POSITION,
COMFORT AND
FIT**

CHANGING/DISPOSAL - IF...

- breathing becomes difficult
- the mask becomes damaged or distorted
- the mask becomes contaminated by body fluids
- a proper face fit cannot be maintained

ACTIONS

- The wearer should go to a safe area
- Change the mask immediately
- Consider practicalities when wearing masks and be pragmatic with use

OTHER OPTIONS...

- Surgical mask without fluid shield only recommended for health care workers in contact with symptomatic patients in the absence of other options. Consider for use by those in an area with affected patients but not providing direct care. Last 20mins.
- FFP 3 masks can be considered for aerosol producing procedures but comfort and efficacy of FFP2 is greater, (ideally with no valve). Can last up to 8 hours.

ENVIRONMENTAL CLEANING

- Clinical areas should be cleaned daily as a minimum. Further consider terminal clean:
 - after inpatient discharge
 - for clinical rooms in-between influenza and non-influenza sessions if the same room is used
- Standard Cleaning Frequencies/Schedules
- Frequently touched surfaces at least twice daily and when known to be contaminated.
- Normal Cleaning procedures apply.
- Damp dusting rather than dry dusting.
- Remove non essential items of furniture.

PATIENT EQUIPMENT

- Standard practices should continue for all equipment in both influenza and non-influenza areas.
- Consider:
 - appropriate protective clothing
 - cleaning solutions - multi-surface detergent wipes, 70% alcohol hard surface wipes
 - cleaning heavily soiled equipment before moving it
 - frequency of decontamination
 - **avoid use of fans**





LINEN AND LAUNDRY

- Linen should be bagged at point of use.
- Bags must be tied and sealed before removal from the influenza care area.
- Gloves and aprons should be worn for handling all contaminated linen.
- Within terminal clean process, curtain changing is recommended.
- Hand hygiene should occur following removal of PPE.



WASTE

- No special procedures are required, normal practices should continue:
 - Healthcare Settings
 - Community Settings
- Bags must be tied and sealed before removal from area.
- Gloves and aprons should be worn for handling all waste.
- Hand hygiene should occur following removal of PPE.

(THE) DYING/DECEASED PATIENT

- Ministers of religion should be instructed to wear PPE as per HCW.
- When performing last offices, the same precautions as during life should be adopted.
- The body should be fully wrapped in a sheet. Transfer to mortuary facilities should occur as soon as possible after death.



CONCLUSION

- Infection control should always start at point of service user/patient contact.
 - Hand hygiene and containment of respiratory secretions are essential.
 - Consider where you access advice and how it is disseminated in your area/service.
 - Use of Personal Protective Equipment should be based on risk.
- Great variations in mortality, severity of illness and pattern of illness or age most severely affected.

REFERENCES

Local

- Trust Pandemic Influenza Contingency Plan.
- Infection Control Guidelines for Pandemic Influenza
- Briefing Notes and Central Communications



GENERAL

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- National Patient Safety Agency. (2009). *cleanyourhands*. www.npsa.nhs.uk



OTHER WEBSITES

- www.hpa.org.uk - Information, Actions, Update on UK perspective
- www.who.int - Global perspective