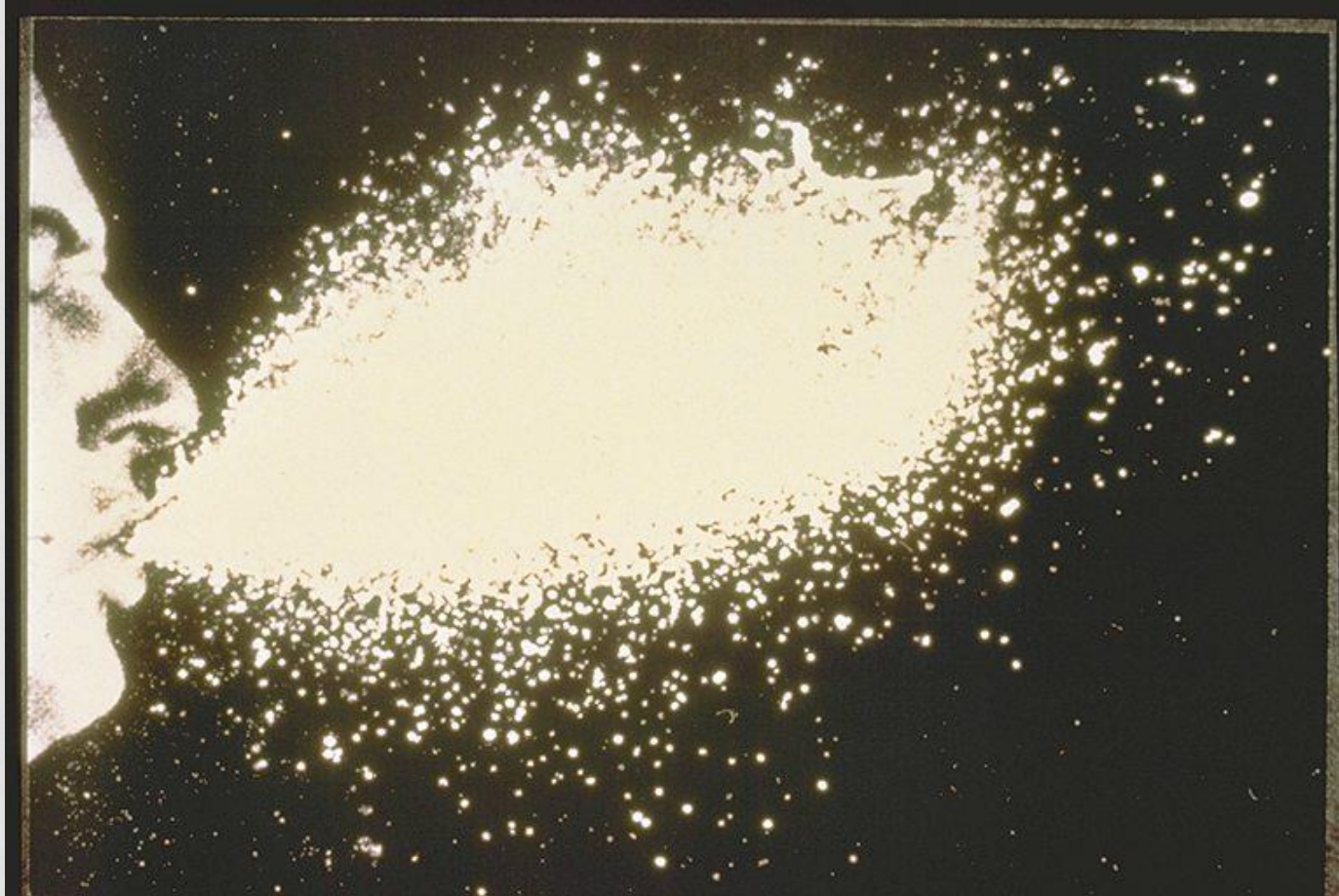


FLU AND PNEUMOCOCCAL PROGRAMME FOR 2013/14



Flu season is coming.

WHAT IS FLU?



- An acute infection of the respiratory tract caused by type A, B or C influenza virus
- Influenza A usually causes more severe illness than B
- Transmitted by aerosol, droplets or direct contact with respiratory secretions of an infected person
- Highly infectious with an incubation period of 1-3 days
- There are seasonal and annual variations in incidence
- Most cases occur within 6-8 week winter period (peak Dec-March)

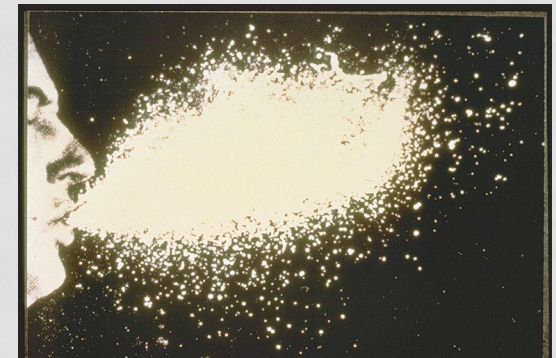


Photo courtesy of CDC

Flu vaccination programme

- Late 1960s: annual flu immunisation recommended in the UK for clinical risk groups
- 2000: flu vaccine policy extended to include all people aged 65 years or over
- 2010: pregnancy added as a clinical risk category for routine influenza immunisation
-
- 2013: phased introduction of an extension to offer annual flu vaccination to all children aged 2-17y begins with the inclusion of children aged 2 and 3 years in the routine programme

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WHO IS ELIGIBLE

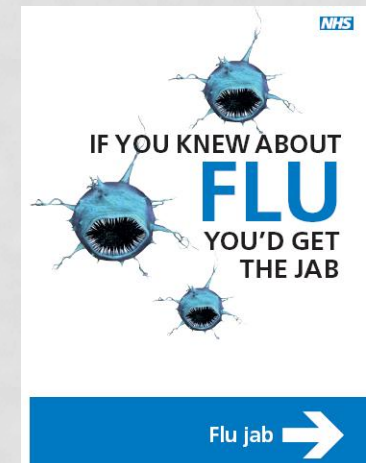
- Who is eligible for a free flu vaccines?
- Who is eligible within the L.E.S.

LES

- Clinical at risk groups included in the DOH PHE and NHS England flu letter June 2013
- 65 years by 31st March 2014

COMPLICATIONS OF FLU

- In more vulnerable individuals can lead to complications of:
 - -secondary bronchitis
 - -bacterial pneumonia
 - -otitis media (in children)
- In severe cases, may lead to:
 - -meningitis
 - -encephalitis
 - -meningoencephalitis
 - -death



FLU VACCINES

- Influenza antigen strains continually change as the virus is unstable
- New variants are constantly emerging
- Thus flu vaccines are developed annually to specifically target the strain (identified by WHO) circulating each year

AT RISK GROUPS



- Eligible from 6 months old
- Check S.P.C.

THE GREEN BOOK

- Asplenia or dysfunction of the spleen:

including homozygous sickle cell and coeliac syndrome that may lead to splenic function

JCVI CONSIDERATIONS

- Epilepsy
- If on medication no greater risk
- ME
- Clinical decision based on history of disease
- Severe neurological disease
- Post partum if missed in pregnancy

NEW TARGETS

- 2013/14
- 65 years and over 75% or exceed
- Under 65 years target of 75%
- Pregnant women New target of 75%

PREGNANT LADIES

- Given any trimester
- Evidence of passive immunity for the first few months of life



WHAT IS THE RISK TO MY BABY?

- Pre term babies
- Fever in the first trimester– increased risk of neural tube defects
- Other adverse neonatal or developmental outcomes, when occurring later in pregnancy

WHY VACCINATE PREGNANT WOMEN WITH FLU VACCINE

- Pregnant women are considered a high risk group
- Especially in the 3rd trimester and up to 2 weeks post partum
- Immune system is naturally suppressed
- Increase risk of complications

RISK TO WOMEN

- Pregnant women are at greater risk of hospitalisation and mortality rate is several times higher than that for non pregnant women in the same age group

FRONTLINE HEALTH AND SOCIAL STAFF

- Make vaccination more accessible for staff



VACCINE VIRUS STRAINS TRIVALENT

- A/California/7/2009/H1N1
- A/Victoria/361/2011 (H3N2)
- B/Massachusetts/2/2012
- Quadrivalent vaccine added B strain GSK licensed from 3 years

AVAILABLE VACCINES

- 18 vaccines
- 15 intra muscular vaccines – egg free vaccine – Optaflu
- 2 intra dermal vaccines
- 1 Live intranasal vaccine – Fluenz – egg based

EGG ALLERGY

- Increased risk of reaction to flu vaccine
- Egg free vaccine - Optaflu licensed from 18 years
- Should be vaccinated in primary care using an inactivated vaccine with ovalbumin content less than 0.06mg for 0.5ml dose
- Fluenz should not be given to children with an egg allergy

REFERRAL

- Only patients who have either confirmed anaphylaxis to egg or egg allergy with severe uncontrolled asthma should be referred to specialists for immunisation in hospital

EGG ALLERGY

- Refer back to general practice

CONTRAINDICATIONS

- Anaphylaxis to egg
- Or
- Anaphylaxis to any component to the vaccine or any component

DEFER VACCINATION

- Acute illness – defer vaccination

ADDITIONAL GUIDANCE FROM THE GREEN BOOK

- Vaccine license
- Additional guidance in the Green Book

Why vaccinate children against flu?

- **Providing direct protection** thus preventing a large number of cases of influenza disease in children
- **Providing indirect protection** by lowering influenza transmission from:
 - Child to child
 - Child to adult
 - Child to those in the clinical risk groups of any age

NASAL FLU VACCINATION 2-17 YEARS

- Reduce rate of infection by 40%
- 11,000 fewer hospital admissions
- 2,000 fewer deaths
- Only 1 manufacturer = Fluenz live vaccine
- ?Full programme will be delivered in 2014/15

- Which Flu vaccine should be used?

TYPES OF FLU VACCINES

- **Two main types of vaccine available:**
 - Inactivated - by intramuscular injection
 - Live - by nasal application
- Most current flu vaccines are **trivalent**, containing two subtypes of Influenza A and one type B virus
- **Quadrivalent** vaccines with an additional type of B virus have been developed and will be available for use for the first time this year (2013)

INACTIVATED VACCINES

• Advantages

- Stable
- Unable to cause the infection

• Disadvantages

- Need several doses
- Local reactions common
- Adjuvant needed
- Shorter lasting immunity

LIVE VACCINES

• Advantages

- Single dose often sufficient to induce long-lasting immunity
- Strong immune response evoked

• Disadvantages

- Contraindicated in immunosuppressed patients
- Interference by viruses or vaccines and passive antibody
- Poor stability
- Potential for contamination

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LIVE ATTENUATED INFLUENZA VACCINE -FLUENZ

- **The live attenuated influenza vaccine (LAIV) has been shown to be more effective in children compared with inactivated influenza vaccines**
- It may offer some protection against strains not contained in the vaccine as well as to those that are
- It replicates natural infection which induces better immune memory (thereby offering better long-term protection to children than from the inactivated vaccines)

Who should be offered an the inactivated vaccine?

- **The following groups will be offered the inactivated vaccine:**
- Babies from 6 months up to 2 years in the clinical at risk groups.
- All adults 18 years and over
- All pregnant women
- Patients were it is contradicted to have the live fluenz vaccine.

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- Patients were it is contradicted to have the live fluenz vaccine.

Who should be offered the Fluenz vaccine?

- **The following group will be offered the live nasal Fluenz vaccine**
- Healthy children aged 2 and 3 years old and not 4 years old by 1st September 2013, unless contradicted. (Date of birth on or after 2nd September 2009 to on or before 1 September 2011.)
- All children in the clinical at risk groups from 2 years up to 17 years old, unless contradicted

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FLUENZ®

- Generic name: influenza vaccine (live attenuated, nasal)
- Brand name: Fluenz®
- Marketed by AstraZeneca
- Licensed from 24 months to less than 18 years of age
- Nasal spray (suspension) in a prefilled nasal applicator
- Supplied as pack containing 10 doses
- Container dimensions: 117.5 x 115.5 x 36mm



REFERENCES

http://www.hpa.org.uk/infections/topics_az/vaccination/training_menu.htm

www.immunisation.gov.uk/government/organisations/public-health-england/series/immunisation