

**Influenza  
Vaccine  
information  
for health  
professionals**



## Introduction

Around 20% of deaths each year in the over 65s are caused by respiratory diseases<sup>1</sup>. Serious respiratory problems can arise as a complication of the flu virus. The flu vaccine aims to reduce the number of people who become ill with flu and associated medical conditions. In UK studies the flu vaccine has been shown to reduce complications and reduce hospital admissions by as much as 60%, and mortality by around 40%, compared with matched controls.

Flu epidemics put a strain on resources such as hospital beds, and can overload GPs, district nurses and other health professionals. A high uptake of the flu vaccine should help alleviate pressure on health services in the winter.



## Encouraging uptake of the flu vaccine

Although accurate figures for uptake of the vaccine last year are not available, it has been estimated at 45% for the 75 plus age group. **The target for uptake of the vaccine this year is 65%.**

Research with the public in Northern Ireland has indicated that uptake of the vaccine would be higher if health professionals encouraged people to go for it. The best form of publicity is a personal recommendation or personalised letter from a GP. Notices and leaflets alone will not produce a high uptake of the vaccine. The role of health professionals in increasing uptake levels is therefore vital.

Research has also revealed that one of the main reasons that people do not get the flu vaccine is a mistaken belief that the vaccine can give you flu. It is essential that health professionals emphasise to the public that **the vaccine cannot give you flu because it does not contain a live virus.**

## Timing

Antibody levels may take up to 10-14 days to rise. Flu activity is not usually significant before the middle of November and therefore the ideal time for immunisation is October/early November. However, it is worthwhile continuing to offer the vaccine to unimmunised persons even after the flu season starts.

1 Figure calculated from information on deaths by age, sex and cause contained in the NISRA website. Figures are for the 1998 year.

**Introduction/Uptake/Timing**



## Who should be given the vaccine?

Every autumn the flu vaccine is offered to people who are at risk of serious illness should they catch flu. This year, for the first time, the vaccine is being offered to everyone aged 65 and over as well as those in at risk groups.

At risk groups include people of all ages who suffer from:

- chronic heart disease requiring regular medication and follow ups such as chronic ischaemic heart disease, hypertensive heart disease, chronic heart failure and congenital heart disease;
- chronic respiratory disease such as chronic obstructive pulmonary disease (COPD), cystic fibrosis, asthma requiring continuous or repeated use of systemic steroids or with previous exacerbation requiring hospital admission;
- chronic renal disease such as chronic renal failure, nephrotic syndrome, renal transplantation;
- diabetes mellitus - on treatment with insulin or oral hypoglycaemics;

- immunosuppression due to disease or treatment, including systemic steroids equivalent to 20mg prednisolone for more than two weeks.

People living in residential or nursing homes are also at risk because flu spreads quickly in these environments.

## **Who should not be given the vaccine?**

Anyone with a known anaphylactic hypersensitivity to egg products should not be given the vaccine.

Although there is no evidence that the flu vaccine causes damage to the fetus, it should not be given in pregnancy unless there is a specific indication.

Patients with a history of Guillain-Barré syndrome should not be given the vaccine.

## **Flu vaccine strains**

Flu vaccine strains are recommended by the World Health Organization following careful mapping of flu as it travels the world. The flu vaccine normally contains ingredients from

**Who should get the vaccine/Vaccine strains**

three different flu viruses: Influenza A (H3N2), Influenza A (H1N1) and Influenza B. This year's recommended vaccine strains are:

An A/Moscow/10/99 (H3N2)-like strain <sup>(a)</sup>

An A/New Caledonia/20/99 (H1N1)-like strain

A B/Beijing/184/93-like strain <sup>(b)</sup>

In recent years the strains in the vaccine have been a very good match with circulating strains and have offered good protection.

(a) A/Panama/2007/99 is an A/Moscow/10/99 (H3N2)-like virus

(b) The most widely used vaccine strain is B/Yamanashi/166/98

## Route of administration and dosage

- Adults and children aged 13 and over: a single injection of 0.5ml im or deep sc.
- Children aged 4-12 years: 0.5ml im or deep sc, repeated four to six weeks later if receiving flu vaccine for the first time.
- Children aged six months to three years: 0.25ml im or deep sc, repeated four to six weeks later if receiving flu vaccine for the first time.

The deltoid muscle is the recommended site for adults and older children. For infants and young children the preferred site is the anterolateral aspect of the thigh.

## Adverse reactions

Flu vaccine is usually well tolerated apart from occasional soreness at the immunisation site. In rare instances it can, however, cause:

- fever, malaise, myalgia and/or arthralgia beginning 6-12 hours after immunisation and lasting up to 48 hours;
- immediate reactions such as urticaria, angio-oedema, bronchospasm and anaphylaxis, most likely due to hypersensitivity to residual egg protein.

Guillain-Barré syndrome has been reported very rarely after immunisation with flu vaccine (an estimated one case per million vaccinations given).

## Storing the vaccines

Flu vaccines must be stored at between 2 and 8°C and must not be frozen or they will lose potency. It is important to make sure that the cold chain can be secured including access to adequate refrigeration facilities. Supplies of the vaccine should not be stockpiled and there should be procedures in place to make sure that the power supply to the refrigerator cannot be interrupted and that vaccines are safely stored.

## **Should the pneumococcal vaccine be given at the same time as the flu vaccine?**

As long as the appropriate checks are made the pneumococcal vaccine can be given at the same time as the flu vaccine - but at a different site. Pneumococcal vaccine is usually given once only whereas the flu vaccine needs to be given each year.

## **Will GPs be required to immunise health and social care workers on their lists?**

No. This is a matter for the employer. A GP may be contracted to provide this service outside his/her General Medical Services.

## **Should primary care staff be immunised?**

Each practice should determine its own policy and arrangements.

## **Recording the uptake of the vaccine**

The vaccine given, batch number and vaccinator must be recorded in the GP-held patient's record. A system of reporting any adverse reactions should also be in place and a register of eligible patients should be maintained with details of dates immunised, risk group and other relevant information.



## Common questions and concerns

These questions address the issues that people may raise with you. Some of these concerns were highlighted during research with people aged 65 and over in Northern Ireland.

### **What is flu?**

Flu is a highly infectious disease caused by a virus. Symptoms include a high temperature (103°F or 39.4°C), cough, sore throat and muscle ache.

### **Why do I need the vaccine if I am fit and healthy?**

Flu is much more serious than a heavy cold. As you get older it can really knock you out and it could take you weeks to fully recover.

### **I had a flu vaccine before and still got flu.**

The flu vaccine will protect you against a particular strain of flu virus. It's possible that you got a different flu virus. However every winter there are many other respiratory infections around which are not as serious as flu. It's more likely that you got one of these.

### **Can the flu vaccine give you flu?**

The vaccine can't give you flu because it doesn't contain a live virus. Some side effects may be experienced such as a temperature or aching muscles but these will disappear in a couple of days.

### **I'm not over 65 but I'd like to get the vaccine. Is it available?**

Flu vaccine is not recommended for everyone as flu is not life threatening for healthy people and the occasional bout of flu gives better future protection against similar strains. Since stocks of the vaccine are limited, priority must be given to those in the target groups. (Note the final decision rests with the patient's GP.)

 **Specialist advice****Flu coordinators**

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**For further information**

Full details of flu and pneumococcal vaccines, including their administration, contraindications and adverse reactions, are contained in the UK Health Departments' memorandum, *Immunisation Against Infectious Disease*, 1996, Chapters 20 and 25.



## Resources

For additional copies of the public information leaflet and poster contact the Central Health Promotion Resource Service in your local Health and Social Services Board area:

### EHSSB

Eastern Area Health Promotion  
Communication, Resource and Information Service (CRIS)  
Tel: (028) 9032 1313

### NHSSB

Health Promotion Department  
Homefirst Community Trust  
Tel: (028) 2563 5575

### SHSSB

Contact the Health Promotion Department in the relevant Trust  
Armagh and Dungannon Health and Social Services Trust  
Tel: (028) 3752 2381  
Craigavon and Banbridge Community Health and Social Services  
Trust Tel: (028) 3834 9942  
Newry and Mourne Health and Social Services Trust  
Tel: (028) 3026 7030

### WHSSB

Westcare Business Services  
Tel: (028) 7186 5127



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