

# NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

## Guideline scope

### Flu vaccination: increasing uptake

#### *Topic*

The Department of Health in England has asked NICE to produce a guideline on flu. This guideline will also be used to develop the NICE quality standard for flu.

The guideline will be developed using the methods and processes outlined in [Developing NICE guidelines: the manual](#).

For more information about why this guideline is being developed, and how the guideline will fit into current practice, see the [context](#) section.

#### *Who the guideline is for*

- Primary and secondary healthcare services, including maternity providers and community pharmacies
- Occupational health services
- NHS and social care employers
- Independent providers of NHS (including maternity providers) and social-care-funded services (for example, care homes)
- Community or voluntary sector organisations that employ health and social care workers
- Local authorities
- NHS England teams
- Clinical commissioning groups

It may also be relevant for:

- People using services, families and carers and other members of the public, in particular those eligible for flu vaccination

- Public health policy makers
- Communicable disease specialists
- Health and social care regulatory bodies for workers for example, the General Medical Council, the Nursing and Midwifery Council and the Health and Care Professions Council
- Care Quality Commission
- General Pharmaceutical Council

NICE guidelines cover health and care in England. Decisions on how they apply in other UK countries are made by ministers in the [Welsh Government](#), [Scottish Government](#), and [Northern Ireland Executive](#).

### ***Equality considerations***

NICE has carried out [an equality impact assessment](#) during scoping. The assessment:

- lists equality issues identified, and how they have been addressed
- explains why any groups are excluded from the scope.

## **1 What the guideline is about**

### ***1.1 Who is the focus?***

#### **Groups that will be covered**

- People aged from 6 months to 64 years in a clinical risk group as set out in Public Health England's [Immunisations against infectious disease](#) (known as the 'Green book') because they are pregnant or have any of the following conditions:
  - chronic respiratory disease such as severe asthma, chronic obstructive pulmonary disease or bronchitis
  - chronic heart disease
  - chronic kidney disease
  - chronic liver disease
  - chronic neurological disease such as Parkinson's disease or motor neurone disease, or a learning disability

- diabetes
- a weakened immune system caused by disease (such as HIV/AIDS) or treatment (such as cancer treatment)
- asplenia or dysfunction of the spleen
- morbid obesity (adults with a body mass index over 40).
- Children aged 2–17 years.
- People who are in receipt of a carer’s allowance, as described in the flu plan ([Flu plan: winter 2015 to 2016](#) Public Health England).
- People who are the main carer of an older or disabled person whose welfare may be at risk if the carer falls ill, as described in the flu plan (‘Flu plan: winter 2015 to 2016’).
- Health and social care workers directly involved with people’s care.

### **Groups that will not be covered**

- Other groups that a medical practitioner may consider to be eligible based on their clinical judgement, as described in the ‘Green book’.

## **1.2 Settings**

### **Settings that will be covered**

- Primary healthcare, particularly GP practices and community pharmacies. It may also include other places where primary care staff offer vaccinations, for example, community venues, social care or residential settings or people’s own homes.
- Secondary care, specifically maternity services, long-stay wards or outpatient clinics where people in clinical risk groups are routinely treated.
- Occupational health services.

## **1.3 Activities, services or aspects of care**

### **Key areas that will be covered**

- 1 Information about, and acceptability of, flu vaccination for the target groups listed in section 1.1 (excluding health and social care workers):

- Targeted and community- or settings-based information campaigns, including online campaigns.
  - Education, for example, educational tools, peer or lay education.
  - Tailored information and advice delivered, for example, during home visits, during consultation with health and social care workers or at support group meetings for patients and other people who use services.
  - Flu vaccination ‘champions’ (practitioners or peers).
  - Recommendations from a respected person, for example, a health or social care worker.
- 2 Improving access to flu vaccination for the target groups listed in section 1.1 (excluding health and social care workers):
- Opportunities for vaccination in the community, including community pharmacies and antenatal clinics.
  - Dedicated flu vaccination clinics, or mass vaccination clinics in community or other settings.
  - Walk-in, open access immunisation clinics (at weekends and in the evenings).
  - Extended-hours clinics, for example, 24-hour access.
  - Outreach or mobile services, for example, home visits, visits to support group meetings, residential homes.
  - Parallel clinics, for example, for community midwives and practice nurses, so that pregnant women can take the opportunity to have the vaccination while visiting their midwife.
- 3 Provider-based systems and processes for identifying, contacting and inviting the target groups listed in section 1.1 (excluding health and social care workers) for flu vaccination:
- Local programme with an assigned lead for an annual flu programme.
  - Programmes to modify standard searches of patient databases to identify eligible patients.
  - Reminder and recall systems, clinical alerts and prompts.
  - Personal invitation (for example, from a GP, community pharmacist or health and social care worker, or from several professionals).

- Booking systems, for example, dedicated flu lines or online systems.
  - Reminders (such as text messages, emails, postcards and posters).
  - Approaches to follow-up, for example, phoning patients who miss their vaccination appointments to encourage them to re-book.
  - Shared health records for providers.
  - Audit and feedback on uptake rates, including weekly statistics.
  - Incentives for eligible risk groups.
  - Incentive schemes for providers of flu vaccination, including targets, for example, quality and outcomes framework targets.
- 4 Education and programme leadership for increasing uptake among health and social care workers:
- Assigned organisational lead to promote annual flu programme to peers.
  - Targeted and settings-based information campaigns.
  - Education, for example, multidisciplinary, peer education, educational outreach, educational DVDs, myth busting and e-learning packages.
  - Flu vaccination ‘champions’.
  - Recommendations from a respected person, for example, a peer.
  - Reminders and follow-up approaches (such as verbal reminders, text messages, emails, postcards and posters).
  - Feedback on uptake rates.
  - Incentive schemes, including targets for providers.
  - Policies on conditions of employment (including the use of surgical masks, where applicable) and opt-out for health and social care workers.
  - Signed statements from staff who decline a vaccine.
  - Shared health record for providers of flu vaccination.
- 5 Improving access to flu vaccination for health and social care workers:
- On-site vaccination.
  - Peer vaccination.
  - Mobile flu vaccination clinics.
  - Drop-in clinics for example, at staff events.

- Extended hours clinics for example, 24-hour access to reflect different working patterns.

### **Areas that will not be covered**

- 1 School-based flu vaccination programmes.
- 2 Availability of vaccines.
- 3 Type of vaccines.
- 4 Training of health and social care workers in information-giving, data recording and use of electronic records for vaccination programmes as well as delivery.

## **1.4 *Economic aspects***

We will take economic aspects into account when NICE makes recommendations. We will develop an economic plan that states for each review question (or key area in the scope) whether economic considerations are relevant and, if so, whether this is an area that should be prioritised for economic modelling and analysis. We will review the economic evidence and carry out economic analyses, using an NHS and personal social services (PSS), public sector, local authority or societal perspective, as appropriate.

We will consider several time horizons, ranging from 1 year (for return on investment analysis) to a lifetime (for cost-effectiveness analysis), and we will use cost–utility analysis.

## **1.5 *Key issues and questions***

While writing this scope, we have identified the following key issues, and key questions related to them:

- 1 Are the interventions in section 1.3 (part 1) effective and cost effective at increasing acceptability and uptake of flu vaccination among the target groups specified?
- 2 Are the interventions in section 1.3 (part 2) effective and cost effective in increasing uptake of flu vaccination among target groups specified?
- 3 Are the interventions in section 1.3 (part 3) effective and cost effective in increasing uptake among target groups specified?

- 4 Are the interventions in section 1.3 (part 4) effective and cost effective in increasing the acceptability and uptake of flu vaccination among health and social care workers?
- 5 Are the interventions in section 1.4 (part 5) effective and cost effective in increasing uptake among health and social care workers?

The key questions may be used to develop more detailed review questions, which guide the systematic review of the literature.

## **1.6 Main outcomes**

The main outcomes that will be considered when searching for and assessing the evidence are:

- 1 Changes in uptake rate among target groups.
- 2 Changes in knowledge, attitudes, beliefs, acceptance, intentions and behaviour about flu vaccination.
- 3 Cost effectiveness and economics:
  - cost per quality-adjusted life year
  - cost per unit of effect
  - net benefit.

In all cases, evidence on the context in which interventions are delivered and any adverse events associated with interventions will also be included.

## **2 Links with other NICE guidance, NICE quality standards, and NICE Pathways**

### **2.1 NICE guidance**

#### **NICE guidance about the experience of people using NHS services**

NICE has produced the following guidance on the experience of people using the NHS. This guideline will not include additional recommendations on these topics unless there are specific issues related to flu:

- [Patient experience in adult NHS services](#) (2012) NICE guideline CG138

- [Service user experience in adult mental health](#) (2011) NICE guideline CG136
- [Medicines adherence](#) (2009) NICE guideline CG76

## **2.2 NICE quality standards**

**NICE quality standards that may use this guideline as an evidence source when they are being developed**

- Influenza. Publication date to be confirmed

## **2.3 NICE Pathways**

When this guideline is published, the recommendations will be added to [NICE Pathways](#). NICE Pathways bring together all related NICE guidance and associated products on a topic in an interactive, topic-based flow chart.

A draft pathway outline on how to increase the uptake of flu vaccination among the target groups listed in section 1.1, based on the final scope, is included below (see figure 1). It will be adapted and more detail added as the recommendations are written during guideline development.

Other relevant NICE guidance will also be added to the NICE pathway, including:

- [Amantadine, oseltamivir and zanamivir for the treatment of influenza](#) (2009) NICE technology appraisal guidance 168.
- [Oseltamivir, amantadine \(review\) and zanamivir for the prophylaxis of influenza](#) (2008) NICE technology appraisal guidance 158.



# Flu prevention overview

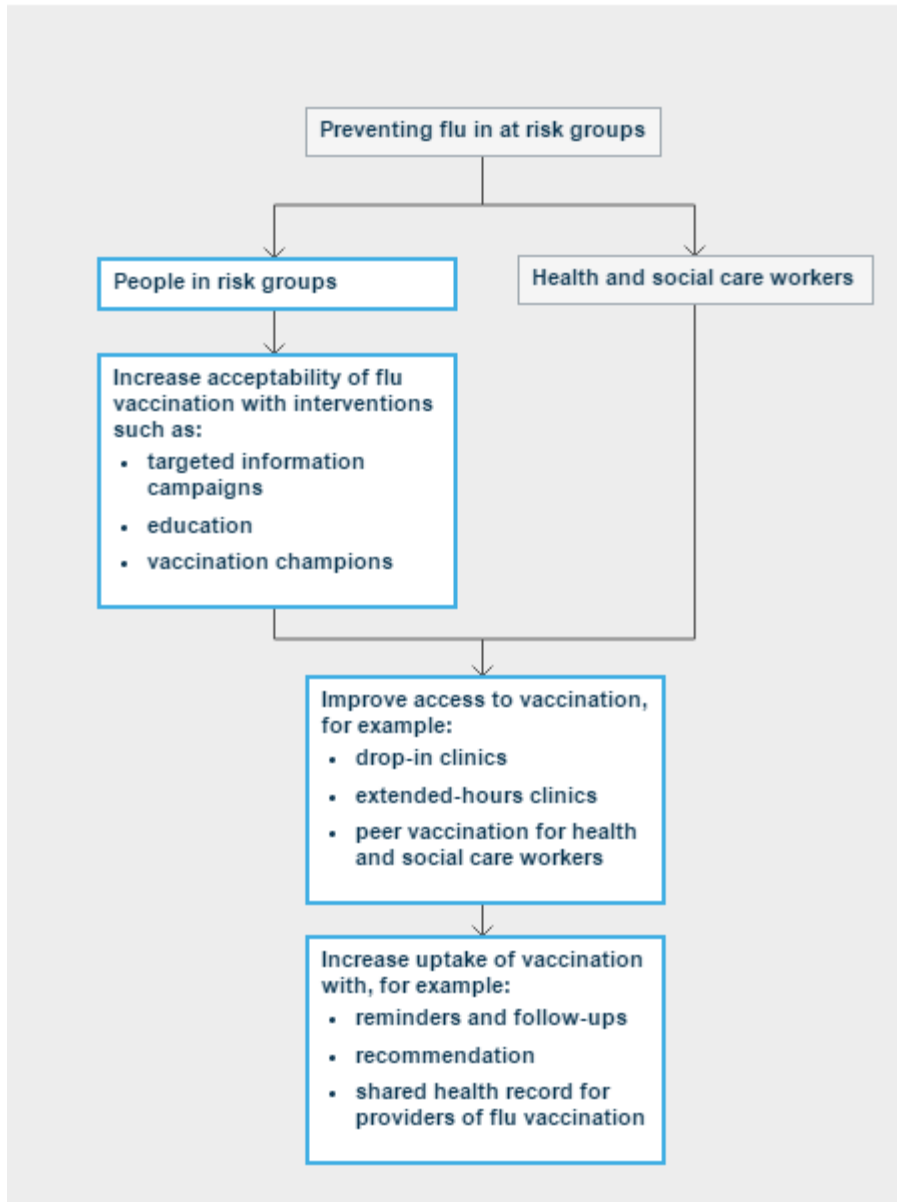


Figure 1 Influenza prevention overview

## 3 Context

### 3.1 Key facts and figures

Each winter hundreds of thousands of people see their GP and tens of thousands are hospitalised because of flu. For older people and those with certain underlying health conditions, it can result in serious complications and death. It may also be associated with perinatal mortality, prematurity and

babies born with a lower birth weight (see Public Health England's '[Green book](#)').

Deaths attributable to flu range from around 4,000 to 14,000 per year, with an average of around 8,000 per year ([Public Health England and the NHS prepare for unpredictable flu season](#) Public Health England). The 'Green book' estimated that in England during 2010/11, the mortality rate per 100,000 population for those aged 6 months to 64 years with 1 or more of the following conditions was:

- immunosuppression – 20 per 100,000
- chronic heart disease – 3.7 per 100,000
- chronic liver disease – 15.8 per 100,000
- chronic neurological disease (excluding stroke and transient ischaemic attacks) – 14.7 per 100,000
- chronic renal disease – 4.8 per 100,000
- chronic respiratory disease – 2.4 per 100,000
- diabetes – 2.2 per 100,000.

Flu and its complications have a number of direct costs (such as treatment and hospitalisation) and indirect costs (such as staff absences from work). Programmes that increase vaccination rates can reduce the risk of related healthcare costs<sup>1</sup>. An economic evaluation that included the costs of providing cover for staff off sick in the UK showed that vaccinating healthcare workers is cost saving<sup>2</sup>.

### **Uptake figures**

Vaccine uptake among clinical risk groups and children is generally low. In 2014/15 in England, it was 50% for all clinical risk groups (excluding pregnant women) and 44% for pregnant women. This compared with 73% for people aged 65 years or over.

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<sup>1</sup> Peasah et al (2013) Influenza cost and cost-effectiveness studies globally – a review. *Vaccine* 31: 5339–48

<sup>2</sup> Burls et al. (2006) Vaccinating healthcare workers against influenza to protect the vulnerable - is it a good use of healthcare resources? A systematic review of the evidence and an economic evaluation. *Vaccine* 24: 4212–21

Vaccine uptake for all children aged 2, 3 and 4 years was 39%, 41% and 33% respectively ([Surveillance of influenza and other respiratory viruses in the United Kingdom: winter 2014 to 2015](#) Public Health England).

Of all frontline healthcare workers involved in direct patient contact in England, 55% were vaccinated. Vaccine uptake for patients registered as a carer by their GP practice was 45% ([Influenza immunisation programme for England: GP patient groups data collection survey season 2014 to 2015](#) Public Health England).

A 2012 review ([Review: interventions to increase influenza vaccination among healthcare workers in hospitals](#) Hollmeyer et al.) suggests that vaccinating healthcare workers is key to preventing flu among clinical risk groups. Vaccinating staff in social care settings may provide similar benefits.

Increasing vaccine uptake among clinical risk groups, including pregnant women, is challenging ([Flu plan winter 2015 to 2016](#) Public Health England). But interventions targeting healthcare workers and clinical risk groups may help<sup>3</sup>.

### **3.2 Current practice**

All those who are at clinical risk are offered the flu vaccination as part of the national flu programme run by Public Health England and delivered by NHS England.

The flu plan states that health and social care staff should not routinely be referred to their GP for vaccination, unless they are in one of the clinical risk groups. Rather, their employers have a responsibility to offer flu vaccination as part of their occupational health duties, in accordance with the Health and Safety at Work Act (1974).

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<sup>3</sup> European Centre for Disease Prevention and Control (2012). Systematic literature review of the evidence for effective national immunisation schedule promotional communications. ECDC Technical Report.

Healthcare workers in clinical risk groups can be vaccinated by their GP, but are asked to report this at work to ensure it is included in uptake figures. These are recorded on ImmForm by Public Health England.

### **3.3 Policy, legislation, regulation and commissioning**

#### **Policy**

Flu vaccination has been recommended in the UK since the late 1960s. The aim is to protect people who are at a higher than average risk of flu-associated illnesses and death. The list of conditions that constitute a clinical risk is regularly reviewed by the Joint Committee on Vaccination and Immunisation. For details, see the 'Green book'.

In 2014, the committee advised that morbidly obese patients could benefit from a flu vaccination. This group is eligible for vaccination according to the 'Green book' but it is not currently funded by the NHS through the Flu Plan. However, many are likely to be part of another identified risk group that is covered by funding.

#### **Legislation and regulation**

The [Health and Social Care Act 2008: code of practice on the prevention and control of infections and related guidance](#) reminds both NHS and social care bodies of their responsibilities to prevent and manage communicable diseases among healthcare workers.

Occupational health services should regularly review the immunisation status of health and social care workers and provide vaccinations for their staff in line with the 'Green book' and other guidance from Public Health England.

The 'Green book' recommends that healthcare workers directly involved in patient care are vaccinated annually. The General Medical Council also encourages this as part of good medical practice ([Good medical practice: domain 2 safety and quality](#)).

The [Health and Social Care Act 2012](#) makes GP practices and other providers responsible for ensuring that everyone who is eligible is invited personally to

have their flu vaccine. They are also responsible for encouraging their own staff to be vaccinated and putting the procedures in place to do this.

NHS England, working with clinical commissioning groups, is responsible for quality assurance and improving flu vaccination services.

### **Commissioning**

NHS England is responsible for commissioning the seasonal flu vaccination programme for at-risk people in the community including children. It is also responsible for extending the programme to school age children. See Section 7A of the National Health Service Act 2006 ([NHS public health functions agreement 2016–17](#) Department of Health).

NHS England teams commission GPs and community pharmacies to deliver the flu vaccination programme locally. In 2015, a national pharmacy advance service was agreed so eligible people over 18 can also get it from their community pharmacy.

In some areas, NHS England teams also commission midwifery and other secondary care services to provide flu vaccination for clinical risk groups.

## **4 Further information**

This is the final scope, incorporating comments from registered stakeholders during consultation. The final scope takes Public Health England priorities into account to ensure that associated areas of work carried out by the 2 organisations complement each other.

The guideline is expected to be published in January 2018.

You can follow progress of the [guideline](#).

Our website has information about how [NICE guidelines](#) are developed.