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The Scottish Government

Dear Colleague

SEASONAL INFLUENZA VACCINATION PROGRAMME 2011-12

1. The purpose of this letter is to set out the arrangements for the 2011-12 seasonal influenza vaccination programme.

Seasonal Flu Programme 2010-11

2. The 2010-11 season presented significant challenges for all of the NHS across Scotland, particularly during the December to January period, but we believe that the NHS in Scotland performed well. It is important we maintain this high level of achievement over the coming season.

3. Initial data to the end of week 13 of 2011 indicates uptake rates of 75.4% in people aged 65 and over were achieved. This has exceeded the target of 75% for this group.

4. Initial data for the under 65 at-risk group indicates an uptake of 56.3%. This is the highest ever uptake rate in this group, and the second year that uptake has exceeded the 50% mark.

5. Vaccination uptake rates for pregnant women reached 64.9% for those without other risk factors, and 74.8% for those with other risk factors. This represents a significant achievement.

6. As ever, we are very appreciative of all the efforts of GPs, Community Pharmacies, practice staff, NHS Board staff and other colleagues in delivering the seasonal flu programme – particularly over the course of the last two seasons when there have been so many additional pressures and challenges to contend with.

From the Chief Medical Officer
Chief Nursing Officer
Chief Pharmaceutical Officer
Sir Harry Burns MPH FRCS(Glas) FRCP(Ed) FFPH
Ros Moore RGN, RNT, BSc (Hons) Nursing, MA
Professor Bill Scott BSc MSc FRPharmS

4 July 2011

SGHD/CMO(2011)8

For action
Chief Executives, NHS Boards
Medical Directors, NHS Boards
Directors of Nursing & Midwifery, NHS Boards
Directors of Pharmacy
Directors of Public Health
General Practitioners
Practice Nurses
Immunisation Co-ordinators
CPHMs
Scottish Prison Service
Scottish Ambulance Service

For information
Infectious Disease Consultants
Consultant Paediatricians
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Details of the Seasonal Flu Programme 2011-12

7. The seasonal flu programme for 2011-12 will commence on **3 October 2011**. Full details of the various elements of the programme for 2011-12 are outlined in the following Annexes:

Annex A: Vaccine issues
Annex B: Details of groups eligible for seasonal flu vaccination
Annex C: Details of vaccine dosages
Annex D: Vaccination of pregnant women
Annex E: Vaccination of health and social care staff
Annex F: Communications
Annex G: Contractual Issues

8. The **key points** of note, or where there are significant changes for the coming flu season, are as follows:

- Uptake targets for the over 65 group will remain at 75%. Uptake targets for the under 65 at-risk population will this year be **raised** to 75%.
- In line with advice from the Joint Committee on Vaccination and Immunisation, poultry workers no longer require to be vaccinated as part of the seasonal flu programme (see Annex B).
- As with last year, all pregnant women at any stage of pregnancy, remain eligible for vaccination (see Annex D).
- We expect that an egg-free vaccine will be available this season (see Annex A).
- NHS Boards and staff are asked to ensure that staff are offered the seasonal flu vaccine. We are looking to achieve a 50% uptake of vaccine in key clinical areas and will conduct a sample survey next year to monitor this. Boards are asked to make the vaccine as accessible as possible (see Annex E).

Vaccine Uptake Targets

9. The national uptake target for 2011/12 is **75%** for patients aged 65 years and over in line with World Health Organisation recommendations. With the exception of the 2009 pandemic flu season, the NHS in Scotland has achieved or exceeded an uptake rate of 75% for a number of years so we do not anticipate that this target will present any significant problems.

10. The national uptake target for the at-risk under 65 age group will this year be **raised to 75%**. Again this will bring our target in line with WHO recommendations. Other parts of the UK have already or are likely to adopt similar targets this year. We recognise that this is an ambitious target, but we are convinced it is necessary and that the NHS in Scotland can - over time - reach this level of vaccine uptake.

11. The table below illustrates the importance of vaccination of those in the clinical risk groups. It sets out the relative risk of death across Scotland from flu last winter in individuals in the various clinical risk groups, compared to those not in a clinical risk group. Although Scottish numbers are small, similar results have been obtained on analysis of similar death data in England. Increasing flu vaccine uptake in individuals in the clinical risk groups is important in reducing serious illness and death.

Table: Numbers, rates and relative risks with 95% lower and upper confidence intervals for seasonal influenza clinical risk factors amongst confirmed influenza related fatalities aged 6 months to 64 years, Scotland, 2010/2011. Provisional and preliminary data from HPS up to 23rd June 2011.

	Number of fatal cases with laboratory confirmed influenza	Mortality rate per 100,000 population	Age adjusted relative risk (RR)*	Lower 95% Confidence Interval	Upper 95% Confidence Interval
Any risk factor (6m-64y)	31	4.7	17.8	8.5	37.4
No risk factor (6m-64y)	9	0.3	Baseline		
Chronic renal disease	2	6.3	23.9	5.2	110.8
Chronic heart disease	9	7.2	27.3	10.8	68.7
Chronic respiratory disease	14	4.6	17.5	7.6	40.5
Chronic liver disease	7	21.9	83.5	31.1	224.1
Diabetes	1	0.7	2.8	0.4	21.8
Immunosuppression	7	14.1	53.6	20	143.9
Chronic neurological disease incl stroke	6	7.7	29.4	10.5	82.5
Total	40	1.0			

*Mantel-Haenszel age-adjusted rate ratio (RR), with corresponding exact 95% CI were calculated for each risk group using the two available age groups (from six months up to 15 years and from 16 to 64 years)

Source HPS & HPA

Monitoring Vaccine Uptake: Data Extraction

12. As in previous years, Health Protection Scotland (HPS) will take the lead in monitoring vaccine uptake on behalf of the Scottish Government. This will be primarily managed by extracting uptake information from GP systems. Uptake rates will be published on a weekly basis within the HPS weekly report. Additionally, for this year, NHS Boards will be able to access specific uptake data down to individual practice level from the HPS microsite.

13. We are aware that in 2010-11 there was some concern that uptake rates collected for those under the age of 65 in at-risk groups and reported by HPS may not have reflected uptake rates as determined locally by GP Practices. There are a number of reasons why uptake rates may differ in this way. In particular the national extracts are written by system suppliers to the rules defined by PRIMIS and are complex searches which take into account a combination of factors (age, prescribed medication, patient registration, recorded codes) against specified dates/points in time. It would be very difficult for an individual GP practice to re-create these searches and to achieve the same results. If staff need to query the outputs produced by practice system reports then normal local IT support processes should be used to raise a query.

14. The SCIMP website provides very good information and guidance on coding, recording exceptions as well as links to relevant documents. Colleagues in GP practice or within NHS Boards with general queries about data extraction and coding, should refer to the SCIMP website in the first instance. http://www.scimp.scot.nhs.uk/

15. In achieving the increased target for those under the age of 65 it is important to ensure that the size of the populations at risk – i.e. the denominators of the population who are to be offered vaccination – is accurately and consistently described and that

mechanisms are put in place to ensure their validity. To this end, at the end of the year **GP practices are requested to send to Practitioner Services Division a single figure for the total number of people under the age of 65 who are in at risk groups within their practice area. (The denominator figure for per centage uptake calculations.) This will be used for statistical purposes only.** This will allow validation of the HPS estimated uptake figures for those under the age of 65 in at risk groups.

16. For further information regarding the HPS vaccine monitoring programme please contact nss.hpsflu@nhs.net.

Call and Recall of Under 65 At-Risk

17. GP practices are reminded that they are required to develop a proactive and preventative approach to offering immunisations by adopting robust call and reminder systems to contact all at-risk patients. Recent experience has clearly indicated that call and recall by way of a letter from GP practices can have a very positive impact on vaccine uptake. We would encourage all GP practices to provide call and recall, particularly for the under 65 years at risk group, by way of a letter. Template letters will be available as part of the marketing campaign, if practices wish to make use of them.

18. As in previous years the Scottish Government will also arrange for a national call-up letter to be sent to all those over the age of 65 this year. The dates for such letters will be agreed with Immunisation Co-ordinators as normal.

Planning Activity

19. Colleagues are reminded of the importance of planning for vaccination early in the season, to ensure that as many of the at risk population as possible can be protected before viruses begin circulating. **Although uptake rates have improved in recent years, a significant proportion of individuals are not being vaccinated until late in the year and after flu viruses are circulating**. Our aim should be to get as many people as possible vaccinated in October and November.

Action

20. NHS Boards, particularly primary care teams, are asked to note the arrangements outlined in this letter for the influenza vaccination programme.

21. We would ask that action is taken forward to ensure as many people as possible – including NHS staff – are vaccinated early in the season, and before flu viruses are circulating.

Yours sincerely

Harry Burns *Ros Moore* *Bill Scott*

Sir Harry Burns **Ros Moore** **Professor Bill Scott**
Chief Medical Officer **Chief Nursing Officer** **Chief Pharmaceutical Officer**

Annex A

SEASONAL INFLUENZA VACCINATION PROGRAMME: 2011/12

Vaccine Supply

1. NHS Circular PCA(P) (2011)1/PCA(M), which was issued on 5 January 2011 (available at: http://www.sehd.scot.nhs.uk/pca/PCA2011(P)01(M)01.pdf sets out arrangements for the ordering of vaccine for the 2011/12 seasonal flu programme. Other than an update to the drug tariff, and a recommendation that pharmacy contractors should ensure that at least a proportion of orders are for vaccine suitable for young children under the ages of 4 or 5, arrangements for 2011/12 are identical to 2010/11

2. Community Pharmacy contractors should have completed the processing of orders by 25 February 2011 at the latest**.** Any contractors who have not yet placed vaccine orders or who want to add to orders should contact the relevant community pharmacist as soon as possible. Once orders have been placed, suppliers will be able to confirm their delivery schedule.

Influenza vaccine composition for 2011/12

3. Each year the World Health Organisation (WHO) recommends flu vaccine strains based on careful mapping of flu viruses as they move around the world. This monitoring is continuous and allows experts to make predictions on which strains are most likely to cause influenza outbreaks in the northern hemisphere in the coming winter.

4. The WHO recommendation for composition of influenza vaccine (northern hemisphere) for the season 2011/12 remains the same as the 2010/11 season, and is:

- The pandemic A/California/7/2009 (H1N1)-like virus;
- A/Perth/16/2009 (H3N2)-like virus; and
- B/Brisbane/60/2008-like virus

Vaccine Suppliers

5. The table on the following page sets out the vaccine manufacturers that have indicated they will be supplying the UK market during the coming season. This updates the provisional list provided in NHS (P/M) Circular 2011(1).

6. Community Pharmacists are the main source of flu vaccine to GPs, and practices need to keep in regular contact with the Community Pharmacist that has placed orders on their behalf rather than contacting manufacturers directly. Throughout the flu season it is important that GPs and Community Pharmacists continue to liaise closely to manage supply and distribution of vaccine stock and to ensure vaccine availability and sufficient stock is guaranteed prior to the scheduling of clinics.

6. Baxter Healthcare Ltd has confirmed that it is their intention to market **an egg free, trivalent seasonal flu vaccine** called Preflucel for the 2011/12 season. The vaccine is a split virion, inactivated vaccine prepared in vero cell culture (a mammalian cell line) rather than in hen's eggs and therefore is not contraindicated in individuals with a confirmed egg allergy. The vaccine is licensed for those aged 18 years and over.

7. As this vaccine has emerged later than usual this year, the Scottish Government will procure a supply of the egg free vaccine on behalf of Boards, and will make this available through NHS Board vaccine holding centres. In future years vaccines should be ordered by Community Pharmacists in the usual way. The use of this vaccine should be only for those individuals with serious and confirmed egg allergies and Boards are asked to preserve stocks for this reason.

8. At present there is no advice to use the egg free vaccine off label in the under 18 age group. Advice from the Green Book on managing patients with egg allergies should be followed.(http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_127082.pdf)

Supplier	Name of product	Vaccine Type	Age Indication	Ovalbumin content per 0.5ml dose
Abbott Healthcare (formerly Solvay Healthcare)	Influvac	Surface antigen, inactivated, sub-unit	From 6 months	No more than 0.1 µg
	Imuvac	Surface antigen, inactivated, sub-unit	From 6 months	No more than 1 µg
Baxter Healthcare	PREFLUCEL	Split virion, inactivated, prepared in vero cell cultures	From 18 years	No ovalbumin
Crucell UK	Viroflu	Surface antigen, inactivated, virosome	From 6 months	No more than 0.5 µg
GlaxoSmithKline	Fluarix	Split virion, inactivated	From 6 months	No more than 0.1 µg
MASTA	Imuvac	Surface antigen, inactivated, sub-unit	From 6 months	No more than 1 µg
Novartis Vaccines	Agrippal	Surface antigen, inactivated,	From 6 months	No more than 0.2 µg
	Fluvirin*	Surface antigen inactivated,	From 4 years	No more than 1 µg
Pfizer Vaccines	Enzira	Split virion, inactivated	From 5 years	No more than 0.02 µg
	Generic influenza vaccine	Split virion, inactivated	From 5 years	No more than 0.02 µg
Sanofi Pasteur MSD	Inactivated influenza vaccine	Split virion inactivated,	From 6 months	No more than 0.024 µg
	Intanza 9µg	Intradermal, split virion, inactivated,	From 18 years to 59 years	No more than 0.024 µg (0.1ml dose
	Intanza 15µg	Intradermal, split virion, inactivated,	From 60 years	No more than 0.024 µg (0.1ml dose

None of the influenza vaccines for the 2011/12 season contain thiomersal as an added preservative. *This vaccine states in its Summary of Product Characteristics (SPC) that it contains traces of thiomersal that are left over from the manufacturing process.

Vaccine Safety

8. The Medicines and Healthcare Products Regulatory Agency (MHRA) monitors the safety of influenza vaccine. If a doctor, nurse, pharmacist or patient suspects that an adverse reaction to a flu vaccine has occurred, it should be reported to the Commission on Human Medicines (CHM) using the Yellow Card spontaneous reporting scheme (www.yellowcard.gov.uk).

Contingency stock

9. As in previous years the Scottish Government will purchase a contingency supply of seasonal flu vaccine. A protocol is in place for the use of this contingency stock, and this was set out in last year's CMO letter SGHD/CMO/(2010)19. This can be viewed at http://www.sehd.scot.nhs.uk/cmo/CMO(2010)19.pdf

Annex B

SEASONAL INFLUENZA VACCINATION PROGRAMME: 2011/12

The seasonal flu vaccine should be offered to the eligible groups set out in the table below.

Eligible groups	Further detail
All patients aged 65 years and over	
Chronic respiratory disease aged six months or older	Asthma that requires continuous or repeated use of inhaled or systemic steroids or with previous exacerbations requiring hospital admission. Chronic obstructive pulmonary disease (COPD) including chronic bronchitis and emphysema; bronchiectasis, cystic fibrosis, interstitial lung fibrosis, pneumoconiosis and bronchopulmonary dysplasia (BPD). Children who have previously been admitted to hospital for lower respiratory tract disease.
Chronic heart disease aged six months or older	Congenital heart disease, hypertension with cardiac complications, chronic heart failure, individuals requiring regular medication and/or follow-up for ischaemic heart disease.
Chronic kidney disease aged six months or older	Chronic kidney disease at stage 3, 4 or 5, chronic kidney failure, nephrotic syndrome, kidney transplantation.
Chronic liver disease aged six months or older	Cirrhosis, biliary artesia, chronic hepatitis
Chronic neurological disease aged six months or older	Stroke, transient ischaemic attack (TIA). Conditions in which respiratory function may be compromised (e.g. polio syndrome sufferers). Clinicians should consider on an individual basis the clinical needs of patients including individuals with cerebral palsy, multiple sclerosis and related or similar conditions; or hereditary and degenerative disease of the nervous system or muscles; or severe neurological disability.
Diabetes aged six months or older	Type 1 diabetes, type 2 diabetes requiring insulin or oral hypoglycaemic drugs, diet controlled diabetes.
Immunosuppression aged six months or older	Immunosuppression due to disease or treatment. Patients undergoing chemotherapy leading to immunosuppression. Asplenia or splenic dysfunction, HIV infection at all stages. Individuals treated with or likely to be treated with systemic steroids for more than a month at a dose equivalent to prednisolone at 20mg or more per day (any age) or for children under 20kg a dose of 1mg or more per kg per day. It is difficult to define at what level of immuno suppression a patient could be considered to be at a greater risk of the serious consequences of flu and should be offered flu vaccination. This decision is best made on an individual basis and left to the patient's clinician. Some immunocompromised patients may have a suboptimal immunological response to the vaccine. Consideration should also be given to the vaccination of household contacts of immunocompromised individuals, i.e. individuals who expect to share living accommodation on most days over the winter and therefore for whom continuing close contact is unavoidable. This may include carers (see below).
Pregnant women	Pregnant women at any stage of pregnancy (first, second or third trimesters).
Those living in long-stay residential care homes or other long-stay care facilities where rapid spread is likely to follow introduction of infection and cause high morbidity and mortality	Does not include prisons, young offender institutions, university halls of residence etc.
Unpaid Carers and young carers	Someone who, without payment, provides help and support to a partner, child, relative, friend or neighbour, who could not manage without their help. This could be due to age, physical or mental illness, addiction or disability. A young carer is a child or young person under the age of 18 carrying out significant caring tasks and assuming a level of responsibility for another person, which would normally be taken by an adult;

The list above is not exhaustive, and the medical practitioner should apply clinical judgement to take into account the risk of flu exacerbating any underlying disease that a patient may have, as well as

the risk of serious illness from flu itself. Trivalent seasonal flu vaccine should be offered in such cases even if the individual is not in the clinical risk groups specified above.

Further guidance on the list of eligible groups and guidance on administering the seasonal flu vaccine, can be found in the updated influenza chapter of the Green Book: Immunisation against infectious disease, available at the following link:

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_079917

Poultry Workers

The Joint Committee on Vaccination and Immunisation (JCVI) has advised that there is no longer any benefit in continuing the routine flu vaccination of poultry workers beyond the 2010/11 season. Based on the advice of the JCVI, the seasonal flu vaccination programme for poultry workers is being discontinued. NHS Boards therefore are no longer required to arrange vaccination of poultry workers in their areas.

SEASONAL INFLUENZA VACCINATION PROGRAMME: 2011/12

Dosage for trivalent seasonal flu vaccines

The dosages for flu vaccines are shown below and should be given according to the recommendations for use of the vaccines. Given that some flu vaccines are restricted for use in particular age groups, the Summary of Product Characteristics (SPC) for individual products should always be referred to when prescribing or administering vaccines for particular patients.

Age	Dose
Children aged from 6 months to under 13 years	Unless specified otherwise (see note below), a single injection of 0.5ml repeated 4 to 6 weeks later if receiving seasonal flu vaccine for the first time. Some seasonal flu vaccines are not licensed for young children.
Adults and children aged 13 years and over	A single injection of 0.5ml for intramuscular injected vaccines. For intradermal vaccine, Intanza ® - a single injection of 0.1ml of Intanza ® 15µg in those aged 60 years and older or 0.1ml of Intanza ® 9µg in those aged 18 to under 60 years. Neither Intanza ® formulation is licensed for use in those aged under 18 years.

***** Some seasonal flu vaccine SPCs indicate that young children can be given either a 0.25ml or 0.5 ml dose. The Joint Committee on Vaccination and Immunisation has advised that unless a specific dose is indicated on the SPC, a 0.5ml dose should be given to infants aged six months or older and young children because there is evidence that the dose is effective in young children (Heinonen *et al*., 2010)[1]

[1] Heinonen S, Silvennoinen H, Lehtinen P et al. (2011) Effectiveness of inactivated influenza vaccine in children aged 9 months to 3 years: an observational cohort study. Lancet Infect Dis. 11: 23-29.

SEASONAL INFLUENZA VACCINATION PROGRAMME: 2011/12

Vaccination of pregnant women

1. There is good evidence that pregnant women are at increased risk from complications if they contract flu, and particularly from the H1N1 strain.

2. **All pregnant women** are recommended to receive the seasonal flu vaccine irrespective of their stage of pregnancy in the 2011/12 flu season. NHS Boards should ensure local arrangements are in place for midwives to notify practices of all women attending for maternity care.

3. A review of studies on the safety of flu vaccine in pregnancy concluded that inactivated flu vaccine can be safely and effectively administered during any trimester of pregnancy and that no study to date has demonstrated an increased risk of either maternal complications or adverse foetal outcomes associated with inactivated influenza (Tamma *et al*., 2009)[1].

4. A number of studies show that seasonal flu vaccination during pregnancy provides passive immunity against flu to infants in the first few months of life (Benowitz *et al,* 2010; Eick *et al*, 2010; Zaman *et al*, 2008)[2,3,4].

5. Seasonal flu vaccination is usually carried out between October and March and it would be unusual to carry on vaccinating after that date. There is no expectation that pregnant women – or anyone in any other risk group – should be vaccinated beyond this date.

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[1] Tamma PD, Ault KA, del Rio C, Steinhoff MC et al. (2009) Safety of influenza vaccination during pregnancy. Am. J. Obstet. Gynecol. 201(6): 547-52.

[2] Benowitz I, Esposito DB, Gracey KD et al (2010) Influenza vaccine given to pregnant women reduces hospitalization due to influenza in their infants. Clin Infect Dis. 51: 1355-1361.

[3] Eick AA, Uyeki TM, Klimov A, et al (2010) Maternal Influenza Vaccination and Effect on Influenza Virus Infection in Young Infants. Arch Pediatr Adolesc Med. 165: 104-111.

[4] Zaman K, Roy E , Arifeen SE et al (2008) Effectiveness of maternal influenza immunisation in mothers and infants. N Engl J Med. 359: 1555-1564.

SEASONAL INFLUENZA VACCINATION PROGRAMME: 2011/12

Influenza immunisation for health and social care staff

1. As in previous years, free seasonal influenza immunisation should be offered by NHS organisations to all employees directly involved in delivering care. This is not an NHS service, but an occupational health responsibility being provided to NHS staff by employers. Social care providers should also consider vaccination of staff.

2. Chatper 12 of the Green Book provides information on what sort of staff can be considered as directly involved in delivering care, but examples might include:

- clinicians, midwives and nurses, paramedics and ambulance drivers;
- occupational therapists, physiotherapists and radiographers;
- primary care providers such as GPs, practice nurses, district nurses and health visitors;
- dentists, dental nurses, therapists or hygienists
- social care staff working in care settings;
- pharmacists, both those working in the community and in other clinical settings.

3. Students and trainees in these disciplines and volunteers who are working with patients should also be included. This is not an exhaustive list and decisions to provide immunisation should be based on local assessment of likely risk and exposure

Rationale for Vaccination

4. Low uptake of seasonal flu vaccination by health care workers continues to be an issue in Scotland and throughout the UK. While vaccination of NHS staff remains voluntary, we would encourage all NHS Boards to offer the vaccine in an accessible way, and all staff to seriously consider the benefits to themselves, their patients, and the NHS as a result accepting the offer of the vaccine.

5. Flu outbreaks can arise in health and social care settings with both staff and their patients/clients being affected when flu is circulating in the community. It is important that health professionals protect themselves by having the flu vaccine, and, in doing so, they reduce the risk of spreading flu to their family members.

6. Vaccination of healthcare workers against flu significantly lowers rates of flu-like illness, hospitalisation and mortality in the elderly in healthcare settings[1,2,3,4] Flu

[1] Potter, J., Stott, D.J., Roberts, M.A., Elder, A.G., O'Donnell, B., Knight, P.V. and Carman W.F. The Influenza Vaccination of Health Care Workers in Long-Term-Care Hospitals reduces the Mortality of Elderly Patients. *Journal of Infectious Diseases* 1997;175:1-6

[2] Carman, W.F., Elder, A.G., Wallace, L.A., McAulay, K., Walker, A., Murray, G.D., Stott, D.J. Effects of Influenza Vaccination of Healthcare Workers on Mortality of Elderly People in Long Term Care: a randomised control trial. *The Lancet* 2000; 355:93-97

[3] Hayward, A.C., Harling, R., Wetten, S., Johnson, A.M., Munro, S., Smedley, J., Murad, S. and Watson, J.M. Effectiveness of an influenza vaccine programme for care home staff to prevent death, morbidity, and health service use among residents: cluster randomised controlled trial. *British Medical Journal* 2006; doi:10.1136/bmj.39010.581354.55 (published 1 December 2006)

[4] Lemaitre, M., Meret, T., Rothan-Tondeur, M., Belmin, J., Lejonc, J., Luquel, L., Piette, F., Salom, M., Verny, M., Vetel, J., Veyssier, P. and Carrat, F. Effect of Influenza Vaccination of Nursing Home Staff on Mortality of Residents: a cluster randomised trial. *Journal of American Geriatric Society* 2009; 57:1580-1586

immunisation of frontline health and social care staff may reduce the transmission of infection to vulnerable patients, some of whom may have impaired immunity that may not respond well to immunisation.

7. Vaccination of frontline workers also helps reduce the level of sickness absences and can help ensure that the NHS and care services are able to continue operating over the winter period. This is particularly important when responding to winter pressures, and winter planning should seek to take account of the important of staff vaccination across the NHS.

Setting Targets and Monitoring Uptake

8. For the coming 2011-12 flu season we are not proposing to set any formal targets for uptake of seasonal flu vaccination amongst staff. **We would however encourage NHS Boards to seek vaccinate around 50% of front line staff** – particular priority should be given to staff working in areas where patients might be at particularly high risk (paediatric, maternity; care of elderly; haematology; ITUs).

9. We are currently undertaking work at a national level to establish data systems that will allow us to monitor uptake of seasonal flu vaccine across the NHS workforce. This is a complex task and systems are not yet in place. Therefore at the end of this flu season, early in 2012, we will seek to establish what level of uptake has been achieved amongst staff by conducting a survey in one high risk clinical area in every NHS Board. This information will be used as a proxy measure to assess uptake in high risk areas across the NHS in Scotland.

10. For the **2012-13** flu season we will reconsider policy in light of experience from 2011-12 season, including whether or not to set a formal target. Such a decision will be informed by the outcomes of this year's vaccination programme, and the data captured from the sample survey detailed above.

Communication

11. Communication is vital to support and promote uptake of vaccine by staff. NHS Boards should consider sending personal letters to NHS staff inviting them to attend a specific clinic at/near to their place of work. The purpose of the invitations is not only to organise clinics but to encourage individuals to consider having the vaccine and to make a decision. In one NHS Board with particularly good levels of uptake invitations are sent out 2 weeks before commencement of the campaign to raise awareness within the organisation. Specific advertising is used to support letters.

12. It is important to communicate to all staff that the potential consequences of getting influenza are:

I. **Personal** - Influenza is not a minor illness even in normally fit people. It makes people feel extremely unwell for two to three days and full recovery normally takes a week. Even fit and healthy people can develop more serious consequences and can require hospitalisation.

II. **Patients –** Staff incubating or even suffering from flu can unintentionally pass this on to patients they are looking after. If the patients are ill, elderly or suffering from a variety of chronic conditions this can lead to serious illness and even death. We should be doing everything possible to prevent healthcare workers infecting patients.

III. **Service Continuity –** If large numbers of staff require a week off work with flu, the service's ability to keep looking after ill patients is severely curtailed with the likelihood of ward closures, cancelled operations and cancelled clinics.

13. National information and awareness raising materials will be available in September to support NHS Boards promoting vaccination to their staff (see Annex F).

Planning Delivery

14. Clinics should, as far as possible, be arranged at the place of work and should include clinics during early, late and night shifts, at areas throughout the Board area. Clinics should be run efficiently with admin support to deal with paperwork, to manage staff and data collection. This will result in staff having quick, easy access to the vaccine.

15. Drop-in clinics should also be considered for staff unable to make their designated appointment or who may have changed their mind.

Community Pharmacy Based Vaccination

16. In some parts of Scotland – notably NHS Tayside and NHS Grampian – some community pharmacists have been providing seasonal flu vaccination to NHS staff for a number of years. Individual Boards may consider that such a model could optimise accessibility of the vaccine to staff in their Board area – particularly for those working in rural or remote areas – but any arrangements they choose to adopt should be subject to local evaluation. When considering delivery of staff vaccination through community pharmacists, Boards would need to ensure that appropriate Patient Group Directives are in place and that staff delivering vaccination have the necessary skills and competencies (including anaphylaxis management) and that suitable facilities are in place in any vaccination venue.

Vaccination in non-NHS Organisations

17. For non-NHS organisations, responsibility for provision of occupational influenza immunisation rests with employers. Immunisation should be provided through occupational health services or other arrangements with private health care providers. It is vital that health and social care staff not only protect themselves against seasonal flu, but recognise the importance of protecting patients in their care and their professional responsibility.

18. It is recommended that NHS independent contractors (GPs, Dentists, Community Pharmacists and Optometrists) consider vaccination of their employed staff, and responsibility for this lies with employers as above. Contractors themselves should also be vaccinated.

19. Vaccine for staff should not be used at the expense of vaccine for risk groups. Staff should not be asked to go to their GP for their immunisation unless they fall within one of the recommended high-risk groups, or GPs have been contracted specifically by their NHS Board or by employers to provide this service.

20. Occupational health services are recommended to keep records of staff who have been immunised. The information should also be sent to GP practices, with the patient's permission, to update their patient records.

Annex F

SEASONAL INFLUENZA VACCINATION PROGRAMME: 2011-12

Publicity and information materials

1. As usual, the Scottish Government will deliver a national marketing and awareness raising campaign to at risk groups to promote uptake of the vaccine. It is anticipated that the programme will commence at the same time as the vaccination programme is launched in early October 2011.

2. All marketing material will be made available to support health professionals within NHS Boards running local flu campaigns. We are planning to provide these materials during September to ensure that colleagues have enough time to display information and to prepare for the programme.

3. Although all elements of the campaign are still to be finalised, at present we anticipate that the following materials will be available:

- a public information leaflet containing key messages for all risk groups
- a poster for all risk groups
- an information leaflet specifically for pregnant women
- a poster specifically targeted at pregnant women
- an information leaflet specifically for health and social care workers
- a poster specifically for health and social care workers

4. In addition to these materials the marketing campaign is also likely to include radio and television advertising, and PR activities with local and national media.

5. Further information and resources will also be available to view and download on the Immunisation Scotland website in due course: http://www.immunisationscotland.org.uk/

6. In addition to these promotional materials for those eligible for vaccination, we will also develop a **professional FAQ** document that will be available ahead of the start of the season on the HPS website. This document will seek to address the most common questions from professionals about vaccines, risk groups and seasonal flu. We will seek to update the document during the season to take account of any emerging issues.

7. A revised Influenza chapter of the *Immunisation against Infectious Disease* (the 'Green Book') is available. The updated chapter reflects the latest JCVI advice and also provides additional useful information on managing individuals with egg allergies. The updated chapter is available at the following link: http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_127082.pdf

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Contractual Arrangements

1. When community pharmacists and dispensing doctors place orders for the vaccine they estimate the amount they need directly with the manufacturers, negotiating prices themselves. NHS Circular PCA (P) (2011)1/PCA(M), which was issued on 5 January 2011, and is available at http://www.sehd.scot.nhs.uk/pca/PCA2011(P)01(M)01.pdf which set out the arrangements for ordering of vaccine for the 2011/12 season and details reimbursement and remuneration arrangements. Other users, such as NHS Boards (for occupational immunisation) are responsible for their own supplies.

2. As part of the arrangements for annual influenza immunisation scheme, each NHS Board must establish an influenza immunisation scheme and may enter into arrangements with a primary medical services contractor to provide immunisation to at-risk patients in line with national guidelines.

3. The current Directed Enhanced Service (DES) and associated Directions which require Boards to set up an Influenza and Pneumococcal Immunisation Scheme were issued on 30 September 2010 (Circular PCA(M)(2010)16) and 24 March 2011(PCA(M)(2011)05). These can be found online at: http://www.show.scot.nhs.uk/sehd/pca/PCA2010(M)16.pdf and http://www.sehd.scot.nhs.uk/pca/PCA2011(M)05.pdf The DES applies **to all groups recommended by the JCVI and accepted nationally** (i.e. flu and pneumococcal immunisation payment will be available for immunising those aged 65 and over and also flu immunisation for those aged under 65 and in an at risk group). The circular and Directions will be revised for this season's programme.

4. The Primary Medical Services (Directed Enhanced Services) (Scotland) Directions 2011 require Health Boards to ensure that contractors providing this service develop and maintain registers of all the at risk patients to whom the contractor is to offer immunisation. Payment arrangements under the scheme will apply to at risk patients who are immunised against flu, by 31 March in the relevant financial year. For payment purposes, the flu immunisation programme will operate from 1 October to 31 March in the relevant financial year. Pneumococcal payments will be made throughout the period 1 April to 31 March of the relevant financial year (as it is undertaken throughout the year, unlike flu immunisation).