

Seasonal Influenza Vaccination for Health Care Workers (HCWs)

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Overview



- **Flu facts**
- **Seasonal Influenza Vaccine**
- **Healthcare Worker vaccination**
- **Organisation of Seasonal Influenza Programme 2017-2018**
- **Debunking the myths**

Influenza (Flu)



- Influenza (flu) is an infection caused by a flu virus
- The flu affects the lungs, throat, nose and other parts of the body eg muscles
- Characterised by sudden onset, high fever, headache
- Requires bed rest, analgesia and fluids
- May lead to complications requiring hospitalisation especially in the high risk groups (pneumonia and death)

Flu is dangerous



When some people get the flu it may be mild, but for many others it could be fatal.

Approximately, 200-500 Irish people will die each year because of flu. In a bad year this can be up to 1000 people (2008-2009)*

- Most of these excess deaths are in the **elderly** or in those with underlying illness
- **BUT**
- Of the 276 people admitted to **ICU** in Ireland with lab confirmed flu since 2009, 85% of those admitted to ICU were under 65 years**

*(HPSC Euromomo study – awaiting publication) ** HPSC ICU influenza surveillance

How does flu spread?



- Flu is spread through tiny droplets sprayed into the air when a sick person coughs, sneezes, or even talks.
- You can get sick from the droplets if they land in your nose, eyes, or mouth.
- You can also get the flu by touching a surface like a table or a doorknob that has the virus on it, then touching your mouth or nose.

What can YOU do to stop the spread?



- Wash your hands or use hand sanitisers, sneeze in your sleeve or a tissue.

But this is not enough.....

- People can still spread the flu even when they DON'T feel sick.
 - ✦ Up to 50% of infected people don't have symptoms when they are infected.
 - ✦ People can spread flu germs before they feel sick.
- The best protection is **VACCINATION.**



Summary of influenza/ILI general outbreaks 2015/2016 flu season

- Total confirmed influenza cases hospitalised: 1856
- Total confirmed influenza cases admitted to ICU: 161
- Total notified influenza cases that died: 84
- Total number of respiratory infection & influenza outbreaks: 63

Influenza Vaccine



- **Introduced in Ireland 1998 now recommended for**
 - persons aged 65 and older
 - those with long term medical conditions
 - people whose immune system is impaired due to disease or treatment including all cancer patients
 - persons with a Body Mass Index (BMI) over 40
 - pregnant women (at any stage in pregnancy)
 - residents of nursing homes and other long stay institutions
 - people with regular close contact with poultry, water fowl or pigs
 - health care workers
 - carers

Vaccine uptake



- WHO recommendation = 75% uptake in at risk groups including HCWs
- HSE HCW uptake recommendation = 40%
- Last year uptake increased in
 - hospital staff 31.6% vs 22.5%
 - LTCF staff 29.8% vs 26.6%
- Highest uptake in medical and dental staff and the lowest uptake in nursing staff
- 15 hospitals and 32 LTCFs exceeded the 40% target
- **Dept of Public Health HSE East – 2016/2017- uptake = 93%**

Does the flu vaccine give you the flu?



- It cannot cause flu
 - ✦ influenza viruses in vaccine are inactivated (killed) during manufacturing process
 - ✦ cannot cause infection
 - ✦ batches of vaccine are tested to ensure safety



THE VACCINE

This year's seasonal flu vaccine contains 3 strains of flu viruses as recommended by the World Health Organization (WHO) as the strains most likely to be circulating this season. The three strains are

This vaccine is an inactivated split virion vaccine, does not contain any adjuvant.

It does not contain thiomerosal.

- **Is there anyone who cannot get flu vaccine?**
 - Most people can get flu vaccine.
 - It is not recommended for those who have:
 - a history of anaphylaxis following a previous dose of flu vaccine or any part of the vaccine.
-
- **What about people with egg allergy?**
 - People with egg allergy can get seasonal flu vaccine. This may be given by your occupational health unit or GP or you may need referral to a hospital specialist. See RCPI NIAC guidelines

Why should HCW be vaccinated?



- HCWs frequently implicated as the source of influenza transmission in health care settings
 - Employees continue to work while sick with influenza
 - Unvaccinated workers who are not sick can still spread the virus
- Benefits of influenza vaccination of HCWs:
 - Reduce risk of outbreaks in health care facilities and associated reputational damage
 - Decrease staff illness and absenteeism
 - Reduce costs resulting from loss of productivity

Influenza Vaccine Uptake in residents in LTCFs, 2015-2016 (n=98 LTCFs) (II)

- **Uptake since the beginning of season among:**
 - long stay residents: 87.5%
 - respite residents: 11.2%
 - respite residents vaccinated before admission: 26.8%

Uptake by Health Care Workers (HCWs) in Hospitals* by Season



Season	Total No. HCWs	Total No. Vaccinated HCWs	Avg. Uptake %	Avg. Uptake % 95% CIs	Median Uptake %	Range Uptake %	No. Hospitals
2011-2012	46329	8275	17.7	14.68-20.75	15.7	4.00-39.98	42
2012-2013	41995	7325	14.6	11.59-17.52	11.0	3.48-38.79	35
2013-2014	50202	12234	21.5	18.48-24.49	19.4	2.56-45.87	46
2014-2015	51324	12006	21.3	17.57-25.01	20.1	1.12-47.53	45
2015-2016	59204	14833	22.5	19.38-25.62	19.8	6.89-47.04	50

Uptake by Health Care Workers (HCWs) in LTCFs* by Season



Season	Total No. Eligible HCWs	Total No. Vaccinated HCWs	Avg. % Uptake	No. LTCFs
2011-2012	4705	849	16.0	70
2012-2013	14457.01	2082	16.6	137
2013-2014	14053.8	3268	26.0	117
2014-2015	10658	2739	28.1	91
2015-2016	9354.64	2420	26.6	98

HCW

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One serosurvey*
showed **23% of HCW**
had serologic evidence
of influenza virus
infection during a
single influenza
season

***...the majority had
mild illness
or subclinical
infection***



*Elder G, et al. *BMJ*. 1996;313:1241–2.

Kuster SP et al 2011. *PLoS ONE* 6(10):e26239. doi:10.1371/journal.pone.0026239

Does Vaccinating Health Care Workers (HCWs) Really Help?



YES

Many studies have shown that increasing the vaccination rates of HCWs decreases patient illness and death.

One study showed a **40% reduction** of influenza related deaths in hospitals with higher rates of HCP influenza vaccination.

Patient Outcomes



Most reported trials in nursing homes

- Studies of staff vaccination have shown decrease mortality of residents ^{1, 2}
 - One cluster randomised clinical trial³ with 44 nursing homes' residents
 - When staff offered vaccine (48% coverage) vs. not offered (6% coverage), impact on residents:
 - Decrease mortality
 - Decrease in ILI
 - Decrease in medical visits for ILI
1. Carman WF, et al. Lancet 2000;355:93--7.
 2. Potter J, et al. J Infect Dis 1997;175:1--6.
 3. Hayward AC, et al. BMJ 2006;333:1241.

Does the Flu Vaccine Work?

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YES!



Systematic reviews have shown that flu vaccine has reduced the flu incidence rate from **18.7 % in unvaccinated HCWs** to **6.5% in vaccinated HCWs**

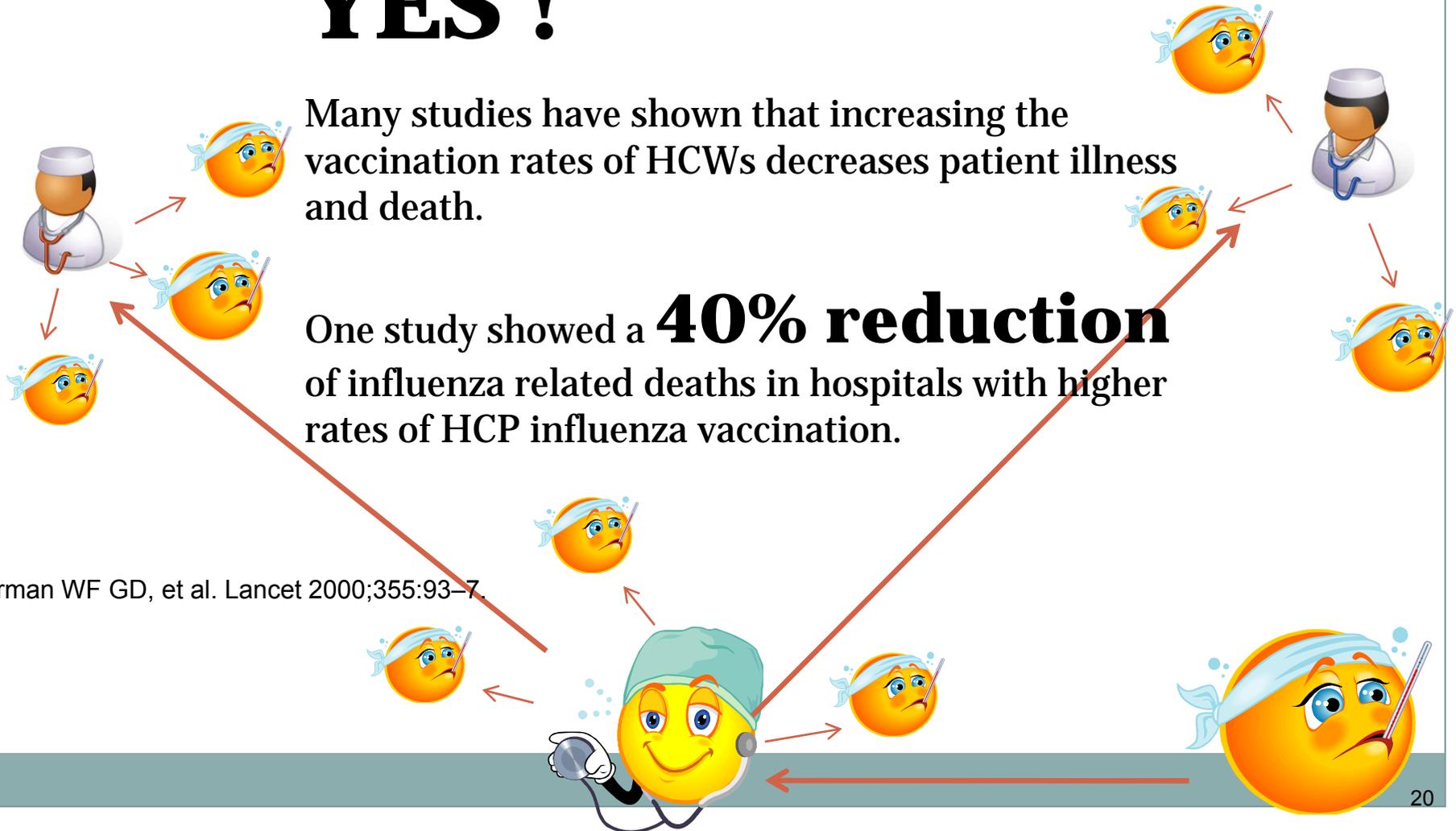
Kuster SP et al. Incidence of Influenza in Health adults and Health Care Workers: A systematic review and Meta –Analysis 2011 PLoS ONE 6(10):e26239. doi:10.1371/journal.pone.0026239

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Peer vaccination programme



- **Allows nurses to vaccinate under medication protocol**
- **Training on**
 - Medication Protocol
 - BLS
 - Anaphylaxis



- **VACCINATE, VACCINATE, VACCINATE** our HCWS
 - ✦ Protect their patients
 - ✦ Protect themselves
 - ✦ Protect their families



Progress to date



- All GP and occ health sites have vaccine and info materials
- Launch for HCWs took place Monday 2nd October , Dr Steevens
- Launch for at risk groups took place on Monday 9th October
- Information video is available on HSE land
- Flu plans have been received in NIO from all CHO areas and Hospital groups. Funding issued for after accepted plans
- Saoilte are adopting a strategy used in UK <https://bwc.nhs.uk/hospital-trust-wins-national-award-for-flu-campaign/> linking with Unicef to provide polio vaccine.

What do we need to address for 2017 2018



- **Leadership by Senior Management and Flu Champions**
- **Debunk Myths re influenza illness and influenza vaccine**
- **Encourage attendance at education meetings**
- **Support peer vaccinators**
- **Recognise and report outbreaks early**

What do we need to address for 2017 2018



- **Implement our flu plans**
- **Increase the awareness of the Guidelines for the management of outbreaks in residential setting**
- **Source equipment for outbreaks**
 - Swabs, masks, gowns
 - Access to Tamiflu
- **Challenge misinformation by health care professionals**

What do we need to address for 2017 2018



- Highlight influenza vaccination as an infection control measure, and as a marker of quality and professional care
- Communicate to HCWs that vaccination should be regarded as integral to duty of care, as equally important as hand hygiene
- Address HCWs concerns regarding vaccination in relation to their living with carriers of chronic diseases or the perception of a lack of good health

Why get vaccinated?



- Protect yourself.
- Protect your patients.
- Protect your family and friends.
- Flu vaccination:
 - is FREE.
 - is safe.
 - is quick and easy.
 - can save you time and money.

**Vaccination is the BEST protection
you have against the flu!**

Useful resources



- HSE National Immunisation website www.immunisation.ie – guidelines promotional materials, info for HCWs and for public
- Health Protection Surveillance Centre www.hpsc.ie – guidance for residential care settings, checklists etc