*Seasonal Influenza Vaccine

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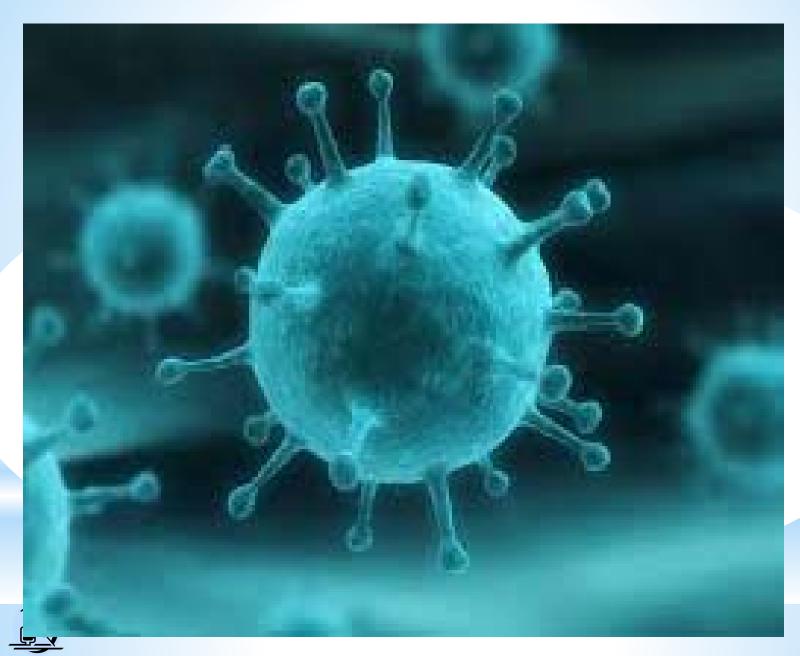
*By the end of this presentation you should....

- * Understand more about the influenza virus and it potential for illness
- * Review the science of the development of the seasonal vaccine and the principles of vaccination
- * Appreciate the barriers for increasing vaccination rates in HCW
- * Learn how peer vaccination can improve vaccine uptake











*Types of Influenza Virus

Influenza A - Subtypes based on the two proteins on the surface of the virus Haemagglutinin (18) Neuroaminidase (11)

Influenza B No subtypes...strains and lineages

Influenza C Cause a mild respiratory illness and are not thought to cause epidemics.



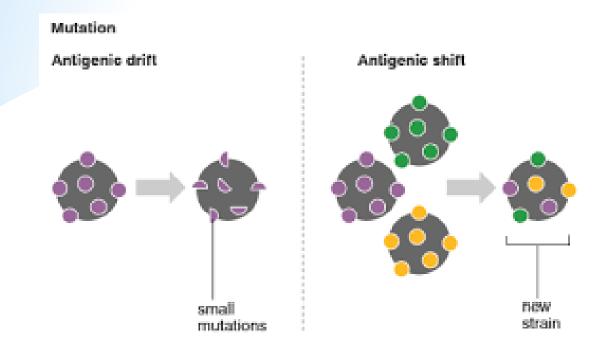


man flu (mæn flu): An illness that causes the male of the species to be helpless and sicker than any other family member. In females; a cold.





Antigenic Shift and Drift







* Conventional Nomenclature WHO 1979

Antigenic Type ABC

Host of origin - Swine, Chicken

Geographical origin Denver Taiwan

Strain number 15, 7

Year of isolation 2009

For Influenza A the antigen description in brackets (H1N1)





Components of 2016-2017 Flu Vaccine

an A/California/7/2009 (H1N1)pdm09-like virus; an A/Hong Kong/4801/2014 (H3N2)-like virus; a B/Brisbane/60/2008-like virus.



*Principles of Vaccination

Flu vaccines cause antibodies to develop in the body about two weeks after vaccination. These antibodies provide protection against infection with the viruses that are in the vaccine.





*Risks and Benefits

Risks

Common

- * Soreness, redness, and/or swelling from the shot.
- * Headache.
- * Fever.
- * Nausea.
- * Muscle aches.

Rare

* Guillain-Barré syndrome 'GBS is more common following flu illness than following flu vaccination' www.cdc.gov 2016

Benefits

Common

Reduce flu infection

Stats for 2015/16 Flu Season(HPSC)

Confirmed influenza cases hospitalised: 1842

Confirmed influenza cases admitted

to ICU: 156

Notified influenza cases that died: 75

73% of ICU admission since 2009 were aged < 65 years





* 'Healthcare workers are an important priority group for influenza vaccination. Vaccination of the health care worker not only protects the individual, but also maintains health care services during influenza epidemics and protects vulnerable patients'

*WHO Strategic Advisory Group of Experts 2012 recommendations







- * Healthcare workers have an additional exposure risk for influenza compared to the general population
- * HCW can transmit influenza virus to patients who are at increased risk of severe complications e. g. pneumonia
- * Vaccination of HCW is safe and effective in reducing their own risk of developing disease, may reduce absenteeism and may prevent transmission of virus to patients
- * Vaccination of HCW is likely to reduce morbidity and or mortality in patients

However

* Vaccination rates in HCW remain low in many places





- *Recommended by DOH since 2001
- *In 2012 uptake was as low as 18%
- *HSE Target (2013) 75%
- *HSE Target (2015 onwards) 40%







*Why are the rates still low?





I never get sick







The vaccine made me sick







I still got sick





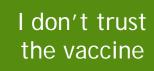


I hate pain

















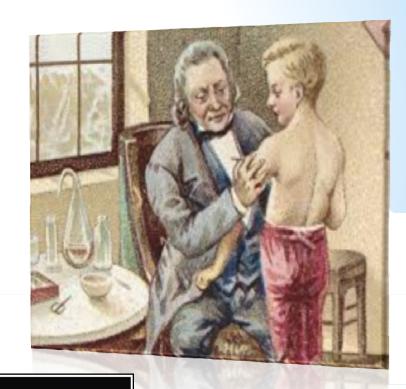
VACCINES = BAD



*Anti vaccinationists



* Edward Jenner





I hope that some day the practice of producing cowpox in human beings will spread over the world - when that day comes, there will be no more smallpox.

(Edward Jenner)

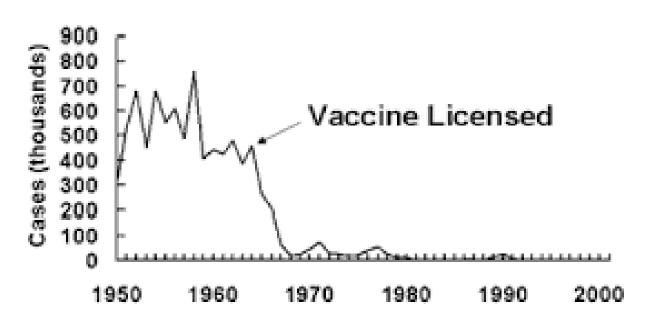
izquotes.com







Measles-United States, 1950-2001







- * 300 cases
- * 100 hospitalisations
- * 3 deaths

McBrien J and Murphy J Ped Infect Diseases 2003



*Measles Outbreak Dublin 2000

- *People would be more likely to accept if they:
 - *Think they are susceptible
 - *Think influenza is a serious disease
 - *Believe vaccine is effective (reduce susceptibility or reduce severity)
 - * Believe vaccine is safe
 - *Believe benefits outweigh costs

*Health Belief Model





* Recommendations

- *Leadership
- *Records and Data Collection
- *Accessible Clinics
- *Deal with staff resistance to Influenza Vaccination









CENTERS FOR DISEASE CONTROL AND PREVENTION











* Endorsement of seasonal influenza vaccination by influential bodies

















* Records and Data Collection

- *Confidential data collection
- *?Mandatory Vaccination
- *?Mandatory Declination
- *?Mandatory Disclosure of Vaccination Status







* ?Mandatory Vaccination





* Records and Data Collection

- ? Mandatory Disclosure
- *staff are not obliged to inform management if they were vaccinated or not....
- *'staff members thought that it may be an invasion of privacy to inform hospital management if they received the vaccine...





*Consider...

- *For an effective response to a flu outbreak in the hospital.....should the manager know the vaccination status of a member of staff in a given unit
- *Ethically.....should an unvaccinated HCW care for a patient with influenza?





New approach -Tackling Inaccessibility

- 1. Optimise existing programmes and strive for equal access for all HSE employees:
 - *Education
 - *Local delivery
 - *Timely information on uptake
- 2. Consider tailoring the message for different audiences
- 3. Arrange for local champions and set up peer to peer vaccination options





* National Peer Vaccination Programme

- *Team Members Public Health, Occ Health, ONMSD
- *Led by Dr Kevin Kelleher Ass Nat Dir, Health & Wellbeing (Public Health & Child Health) and Dr Lynda Sisson, National Clinical Lead for Occupational Heath





*Programme Development Plan

- *Programme Governance Dr Sisson/Dr Kelleher
- *Nationally developed programme/consent/PPs
- *Communication to Senior management of CHOs and Hospital Groups and nursing unions
- *Formation of Teams led by Public Health to include Management, OH, Inf Control
- *Development of implementation programme and consent form
- *Development of Medication Protocol
- *Development and rollout of training programmes nationally through Aug/Sep/Oct





*Peer Vaccination

- *Further Peer Vaccinators identified
- *Local availability/Local knowledge
- *Training by Office of Nursing and Midwifery Planning and Development
- *Local clinics run and promoted by Peer Vaccinators
- *Consents and stats by OH





*Responsibilities of HCWs

- *Many HCWs do not see the link between being immunised and protecting vulnerable patients
- * Professional Responsibility to explore and dismiss concerns about vaccine safety
- *Counter anti-vaccinationist false and injurious claims with scientific thinking
- *Enhance education of our patients and colleagues and persuade them to get vaccinated
- * Acknowledge that not participating in vaccine programs may do significant harm to the public health





*Thank you

*Questions??



