

**Continuous Professional Education Programme for Registered Nurses  
and Midwives to administer immunisations under the Medicines  
Protocols of the Schools Immunisation Programme (SIP)**

**Current issues and Communication**

**2020/2021**




## **Overview of Continuous Professional Education & Development Programme on Immunisations for Registered Nurses and Midwives**

1. Introduction
2. Current updates and Communication
3. Professional and Legal Aspects of Vaccinations
4. Immunisation Process
  1. Storage and Handling of Vaccine
  2. Correct Administration & Standard Precautions
  3. Documentation, record keeping, reporting and audit.
5. Medicine Protocols 1-8.
6. Questions & Evaluation



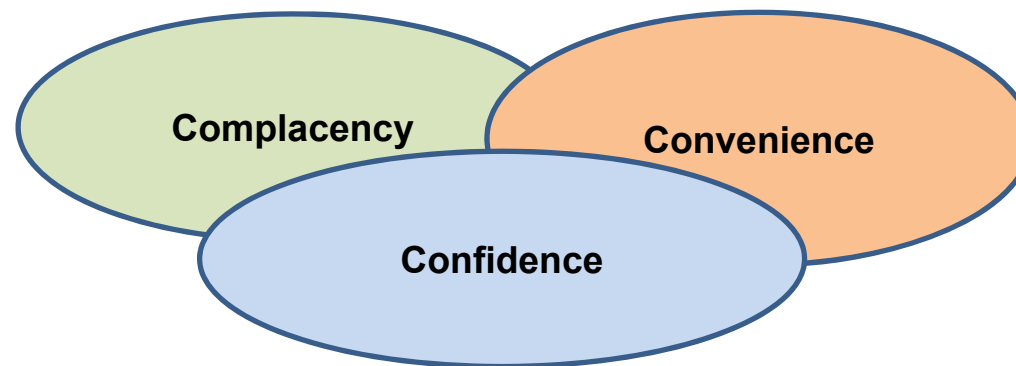
## **Aim & Learning Outcomes**

- **Aim:**  
To explore current updates in relation to immunisation.
  - **Learning outcomes:**  
To discuss current updates in relation to immunisation and the importance of effective communication.
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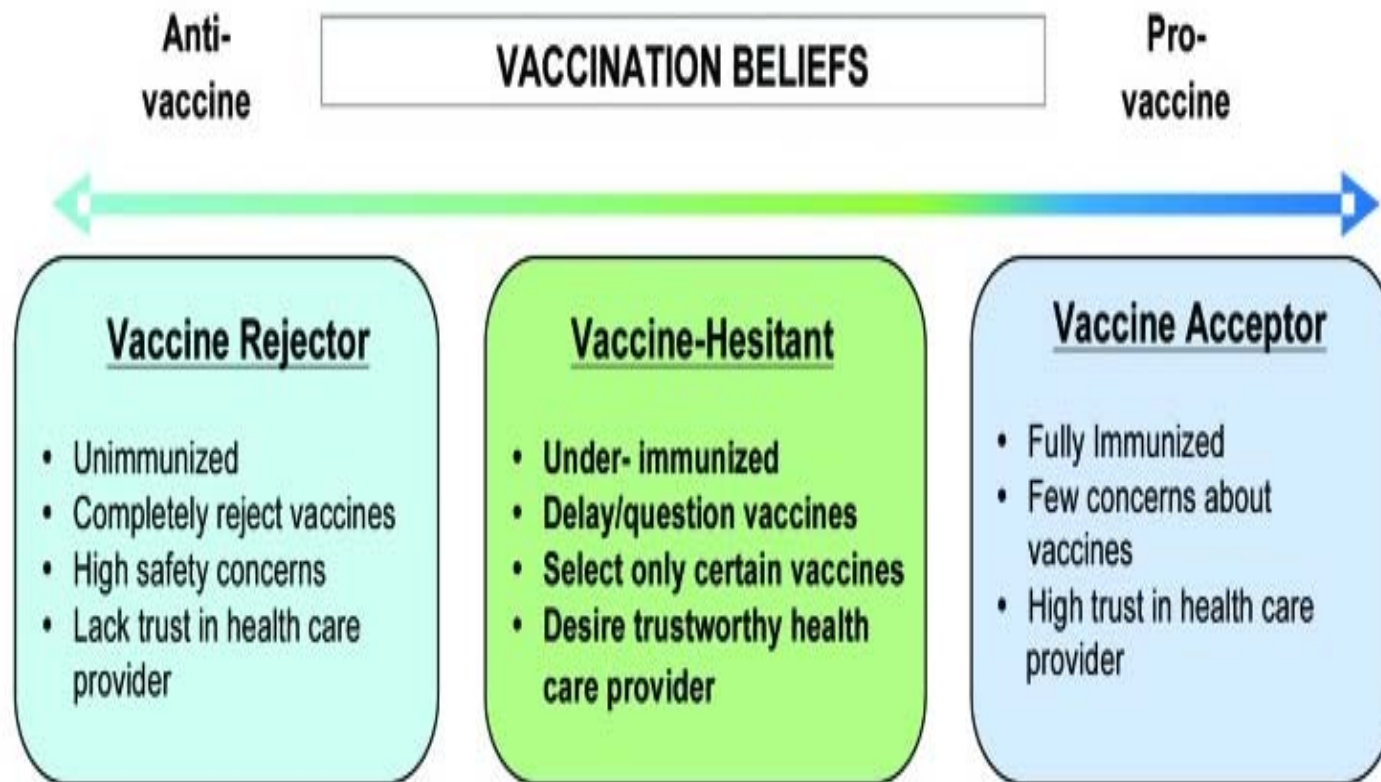
# Vaccine Hesitancy

World Health Organisation (WHO) defines vaccine hesitancy as

- delay in acceptance or refusal of vaccinations despite availability of vaccine services.
- is complex and context specific varying across time, place and vaccines.
- it is influenced by complacency, convenience and confidence (SAGE, 2014).



# Vaccine Hesitancy Continuum





## **3 C's of Hesitancy**

### **Complacency, Convenience and Confidence.**

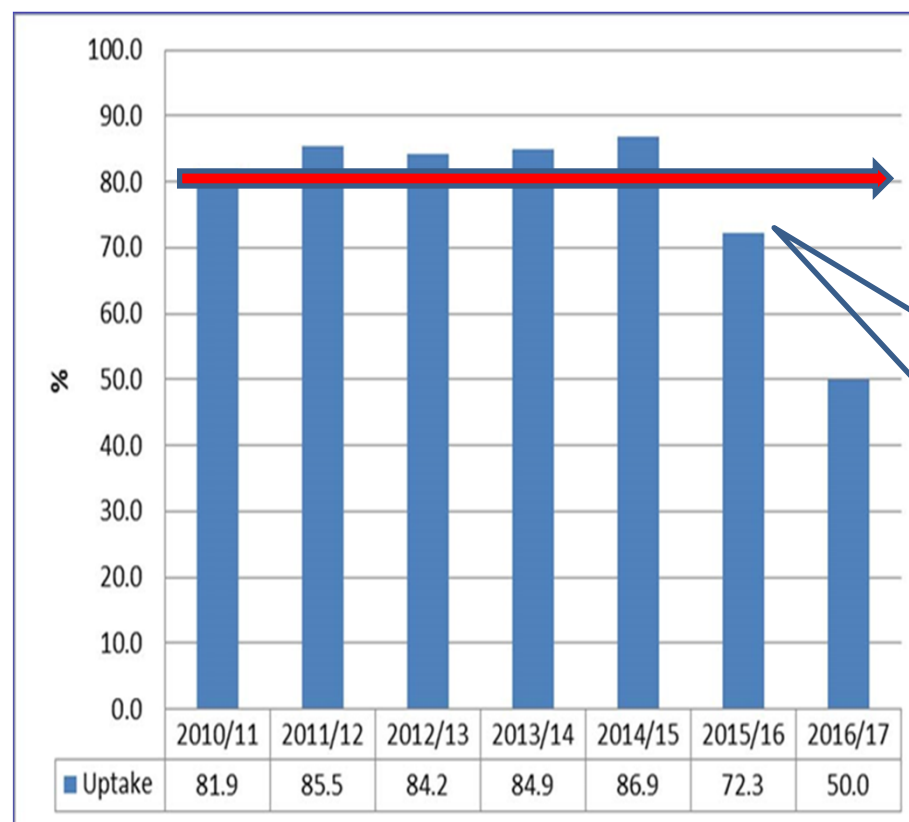
- Because vaccines have effectively controlled many of the once-common childhood infectious diseases, parents of young children are no longer familiar with these diseases.
- Fear has moved to alleged vaccine reactions that typically include child health problems that occur around the time that many vaccines are given. For example MMR time of administration and association of Autism.
- Increase number of vaccines available for an increasing number of diseases.
- Lack of trust in Government Agencies, HSE and Public Health.
- Barriers to accessing vaccinations: i.e. ease of access to services, social norms of non acceptance, environments (schools).



## **Vaccination has become a victim of its own success.**

Because vaccinations programmes have been successful, vaccine preventable diseases are becoming less visible and many individuals as well as Health Care Professionals, have no first hand knowledge of the risks of these diseases.

## HPV decline in uptake in Ireland reflects international decline

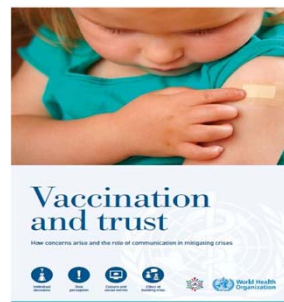
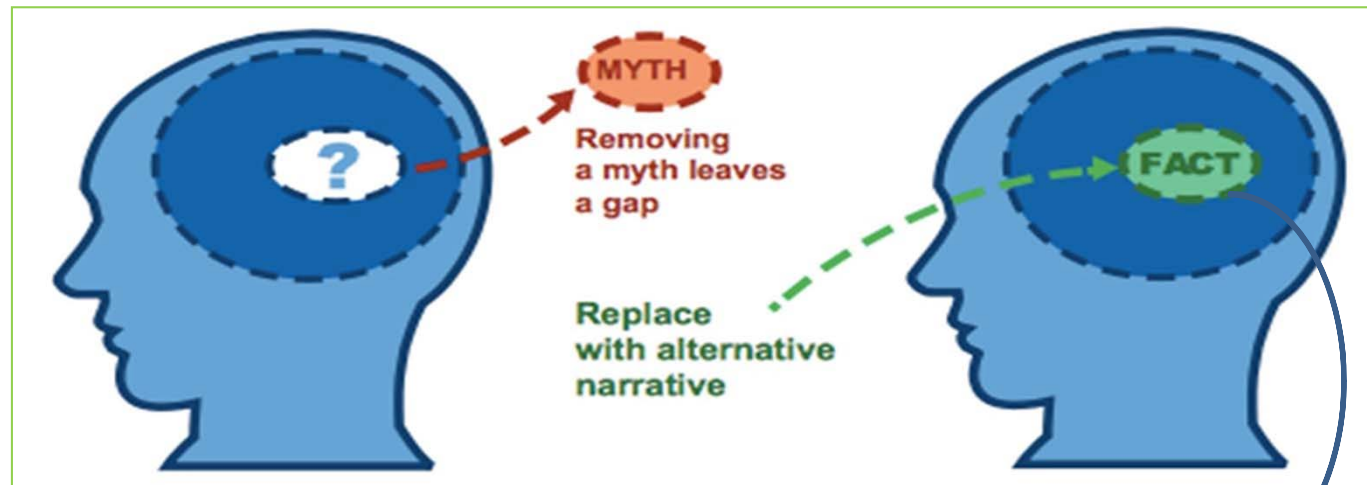


National media campaign by anti-vaccination groups (local/national /international)



**ARE HPV  
VACCINES  
SAFE?**

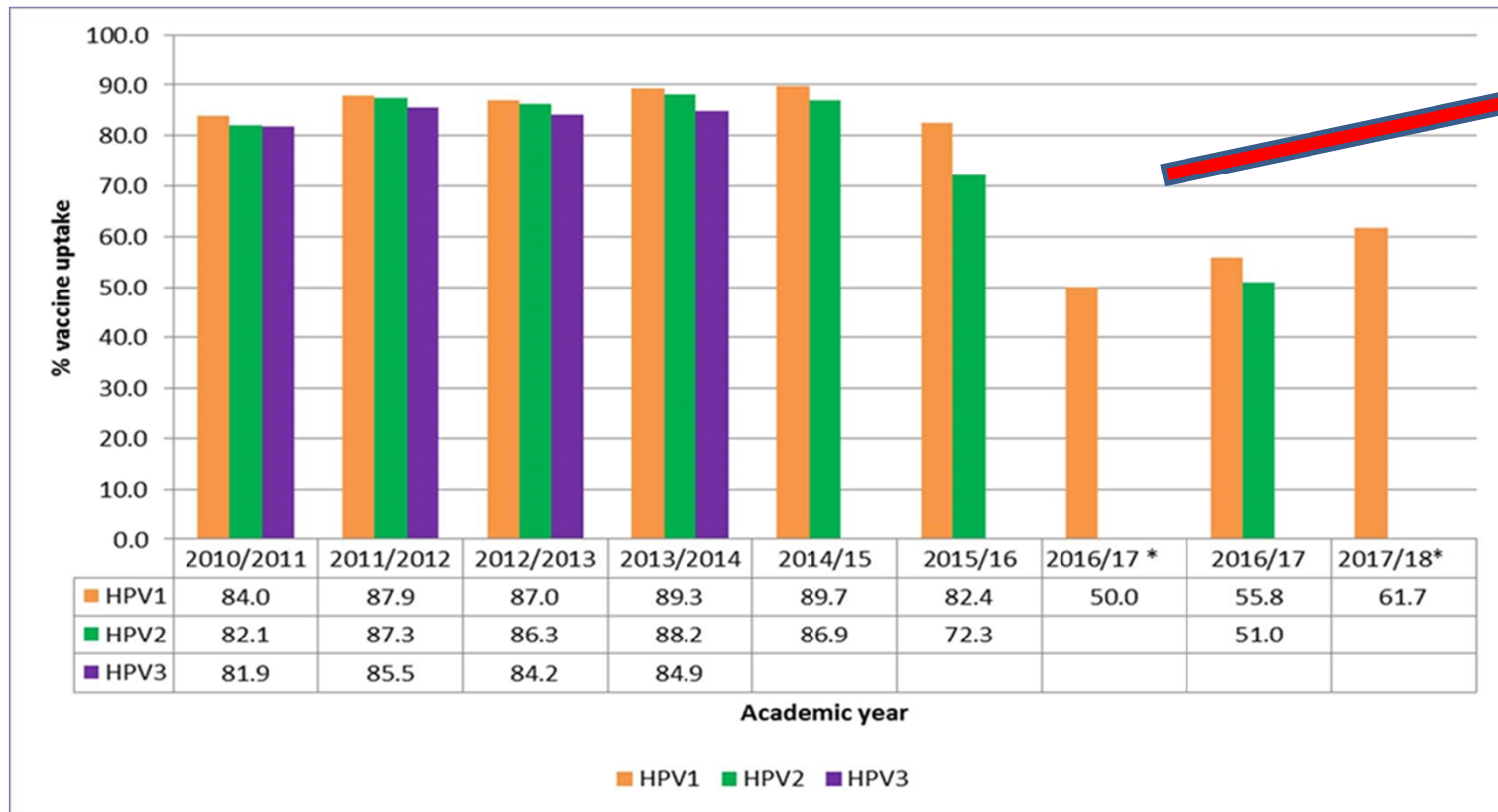
# How do we correct misperceptions?



# IMPACT

**Increase in uptake in 2016/2017**

**Increased in 1<sup>st</sup> dose uptake in 2017/2018**



## TERRY PRONE: If the HPV vaccination trend grows, Laura will have saved women's lives



Any doubts I had about the [#hvp](#) vaccine have now been answered ! What a brave and selfless woman to come on and share her story ! Amazing !  
[@RTELateLateShow](#) [#HSE](#)  
[#cervicalcancer](#) awareness!

10:03 PM - 13 Apr 2018



Donal Brennan  
[@donalb5](#)

Following

If you don't want to listen to medics about [#HPVvaccine](#), please listen to [@kimmykims31](#) and [@laurabrennan091](#) - heroes telling their personal stories - much more powerful than an RCT. [#vaccineswork](#) [#protectourfuture](#)

7:05 PM - 13 Apr 2018

19 Retweets 40 Likes




19 40





## **What influences decision making about vaccination?**

- Healthcare Professionals (HCPs) recommendations (positive and negative), HCPs confidence in vaccinations.
  - Personal and past experience, attitudes and beliefs
  - Knowledge and information of disease – risk perception and trust.
  - Subjective norms – to have or not have vaccine
  - Importance of vaccine
  - Moral convictions – natural methods
  - Family and friends
  - Media (newspapers, magazines, television, internet, social media)
  - Peer Pressure (parent/parent, children/children, HCP/HCP)
  - National Immunisation policies – public health
- 




## **Surveys Show That Parents Want:**

- Healthcare professionals who are:
  - Knowledgeable, confident, consistent and trustworthy

Supportive environment where parents receive:

- Balanced and factual information
- Clarity
- Consistency
- Confidence to ask and discuss
- Openness
- Time and the opportunity to discuss their concerns

(Salmon, et al 2015 & Dube, et al 2013)



# Effective Communication

1. Partnership approach to decision making about vaccination between the parent and health professional (informed consent).
2. Recognise factors affecting an individuals' decision making and explore any specific concerns, avoid down playing concerns regarding vaccinations.
3. Present risks and benefits accurately, consequences of not vaccinating.
4. Clear language and check understanding.
5. Be well-informed, confident, competent, empathetic, open and honest.
6. Provide written information leaflets and recommend other reliable sources of information [www.immunisation.ie](http://www.immunisation.ie)
7. Practice safely and maintain competence in accordance with best evidence in relation to the Schools Immunisation Programme (SIP).
8. Engage with current and up to date evidenced based information.



# Current Updates

1. Gender Neutral Vaccinations (GNV)  
for HPV
2. Men ACWY



# JABS FOR THE BOYS:

The case for gender-neutral HPV vaccination



Feidhmeannacht na Seirbhíse Sláinte  
Health Service Executive

# What about the boys?



Direct protection



Increase herd  
protection

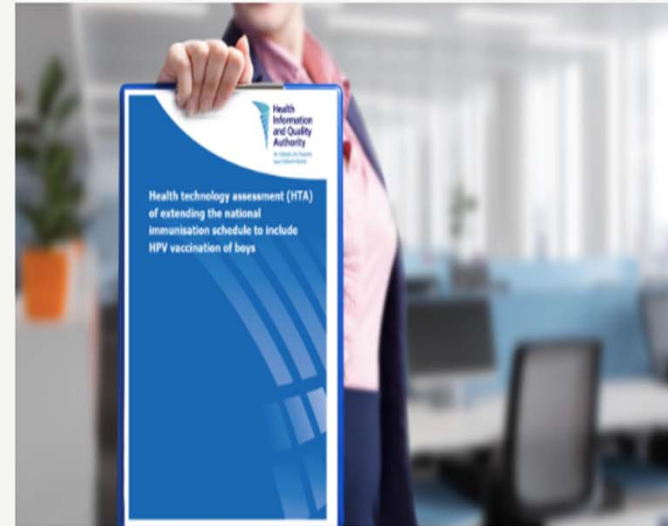


***“No man is an island”...***

**Equity of Access**



# HIQA ADVISES



The following would be an efficient use of resources:

- ▼
- ▼ • **Change** to the 9-valent vaccine.
- ▼ • **Extend** the vaccine to include boys to provide better protection for everyone.

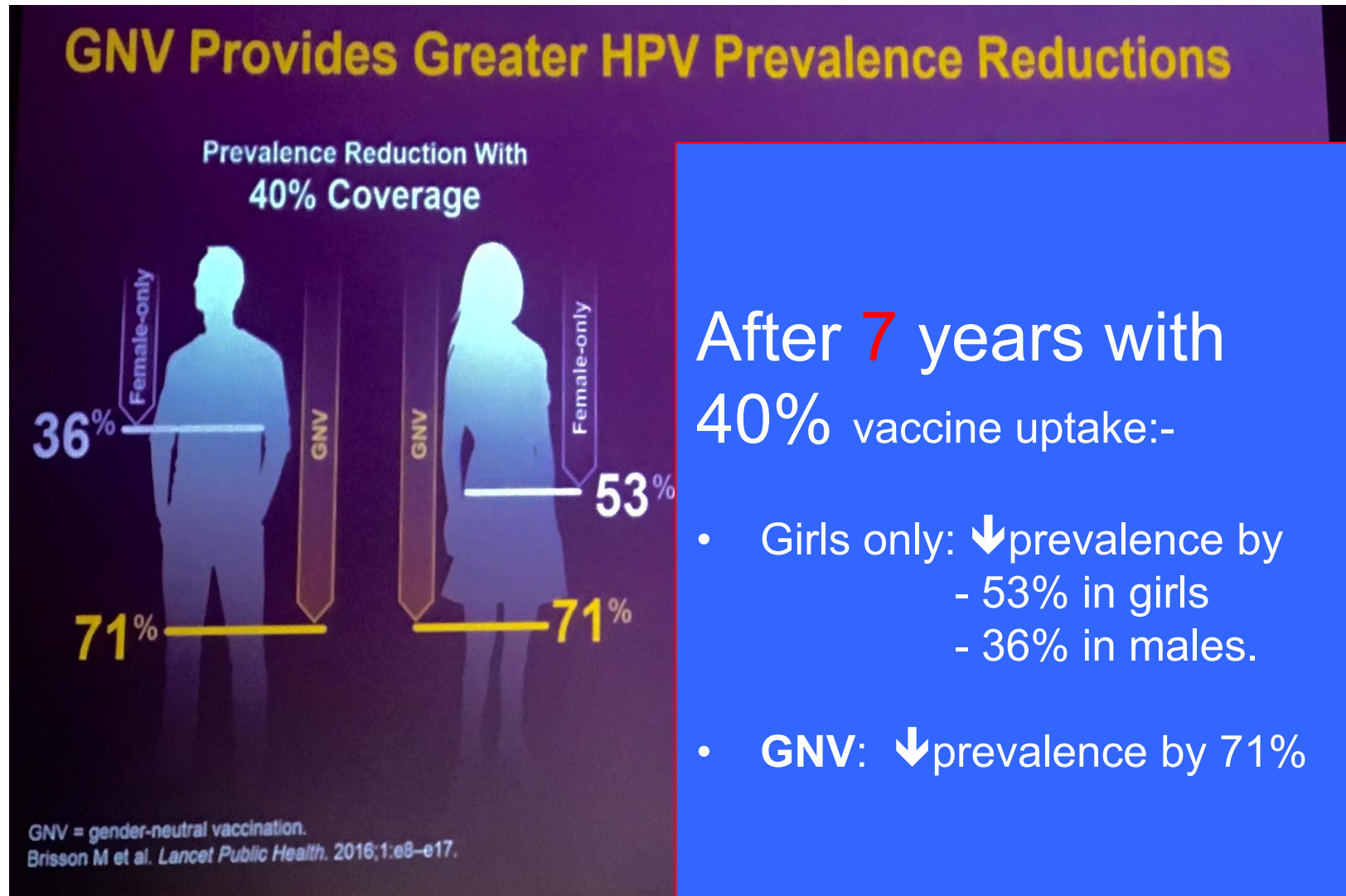
# Why Boys?



- ✓ High rates of infection across all age groups
- ✓ Impacted by certain diseases and cancers
- ✓ Remain susceptible throughout life – low rates of seroconversion after natural infection
- ✓ No recommended routine screening
- ✓ Gender Neutral Vaccines (GNV) programmes accelerates HPV cancer and disease elimination

1. Giuliano A et al. Cancer Epidemiol Biomarkers Prev 2008. 2 De Martel C. Int J Cancer 2017;141,664  
3. Giuliano A et al. Papilloma Res2015;1:109.4 Pamani JID 2018;1219. 5 Brotherton Papilloma Res  
2016;2:106  
6 Elstrom JID 2016;203:199

## Gender Neutral Vaccination (GNV)



After **7** years with 40% vaccine uptake:-

- Girls only: ↓prevalence by
  - 53% in girls
  - 36% in males.
- **GNV**: ↓prevalence by 71%

## GNV Provides Greater HPV Prevalence Reductions



# HPV and Cancer

- HPV cause other cancers:-

- 90% anal

- 70% vaginal

- 50% penile

- 50% vulvar

- And 60% head and neck cancers

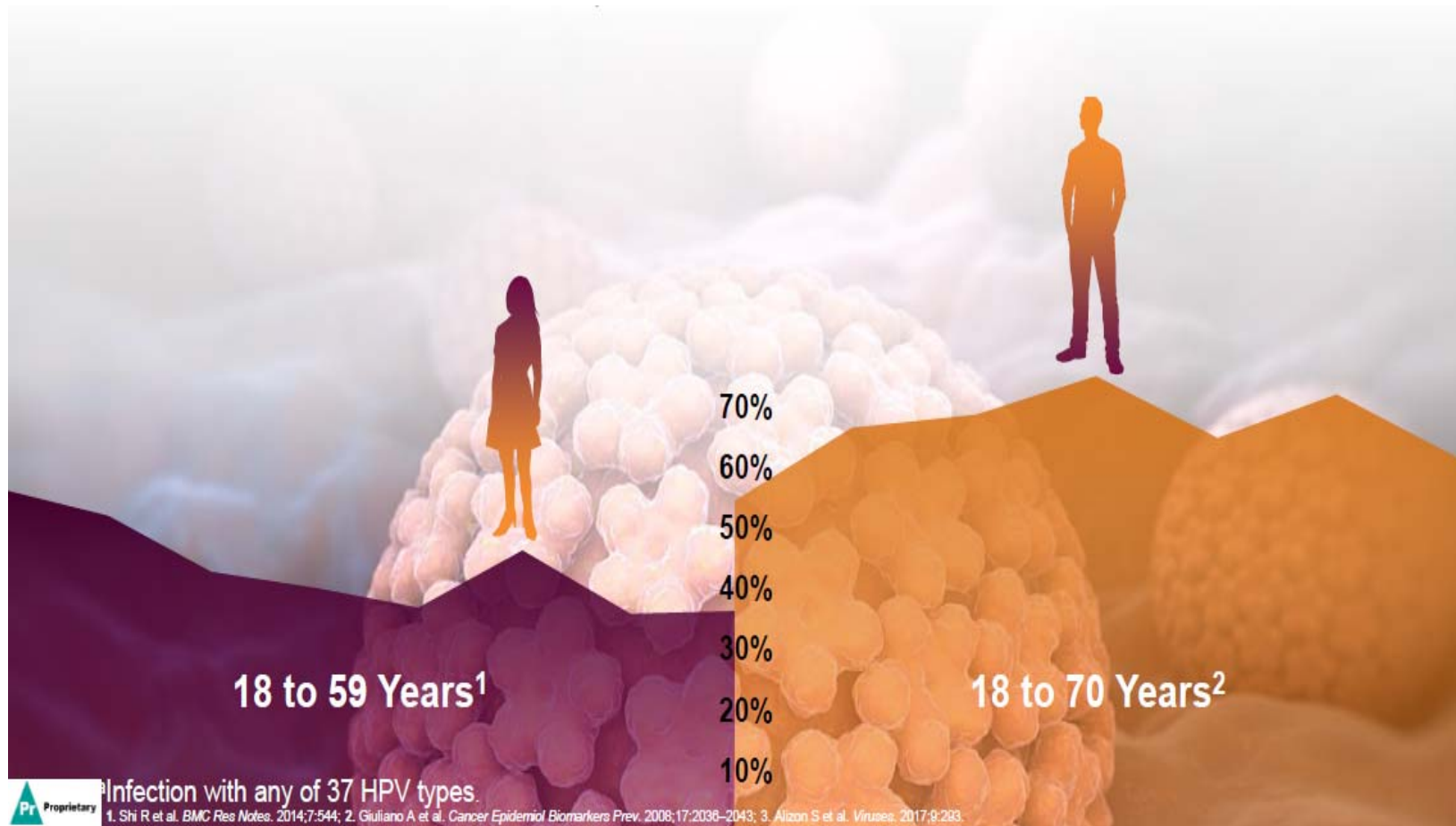


# HPV and Cancer

- HPV cause other cancers:-
  - 90% anal
  - 70% vaginal
  - 40% penile
  - 50% vulvar
  - And 60% head and neck cancers

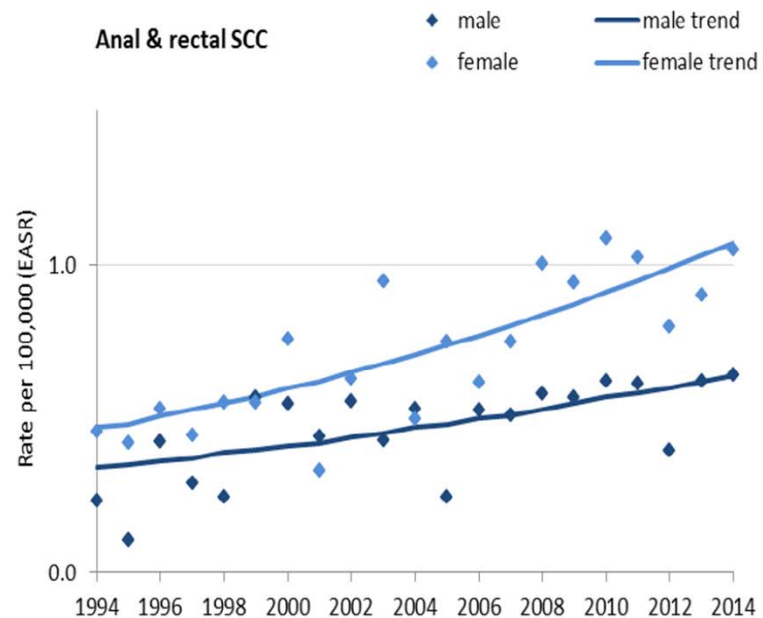


## Genital HPV prevalence higher in males than females and does not decrease with age



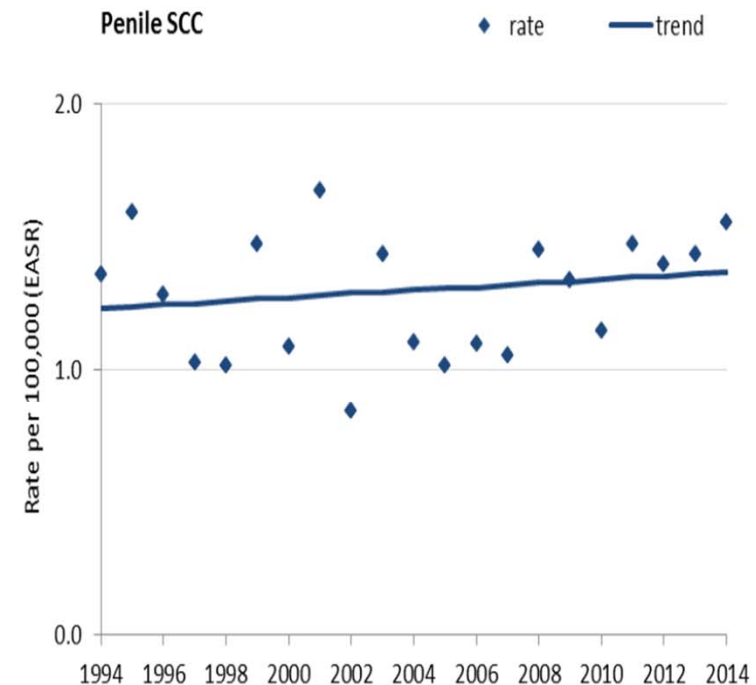
*Slide courtesy of MSD*

# Anal and Penile Cancers 2010-2014



Sex	Period	APC	95% CI	P
Male	1994-2014	<b>+3.2%</b>	(+1.1%, +5.5%)	0.005
Female	1994-2014	<b>+4.3%</b>	(+2.7%, +5.9%)	<0.001

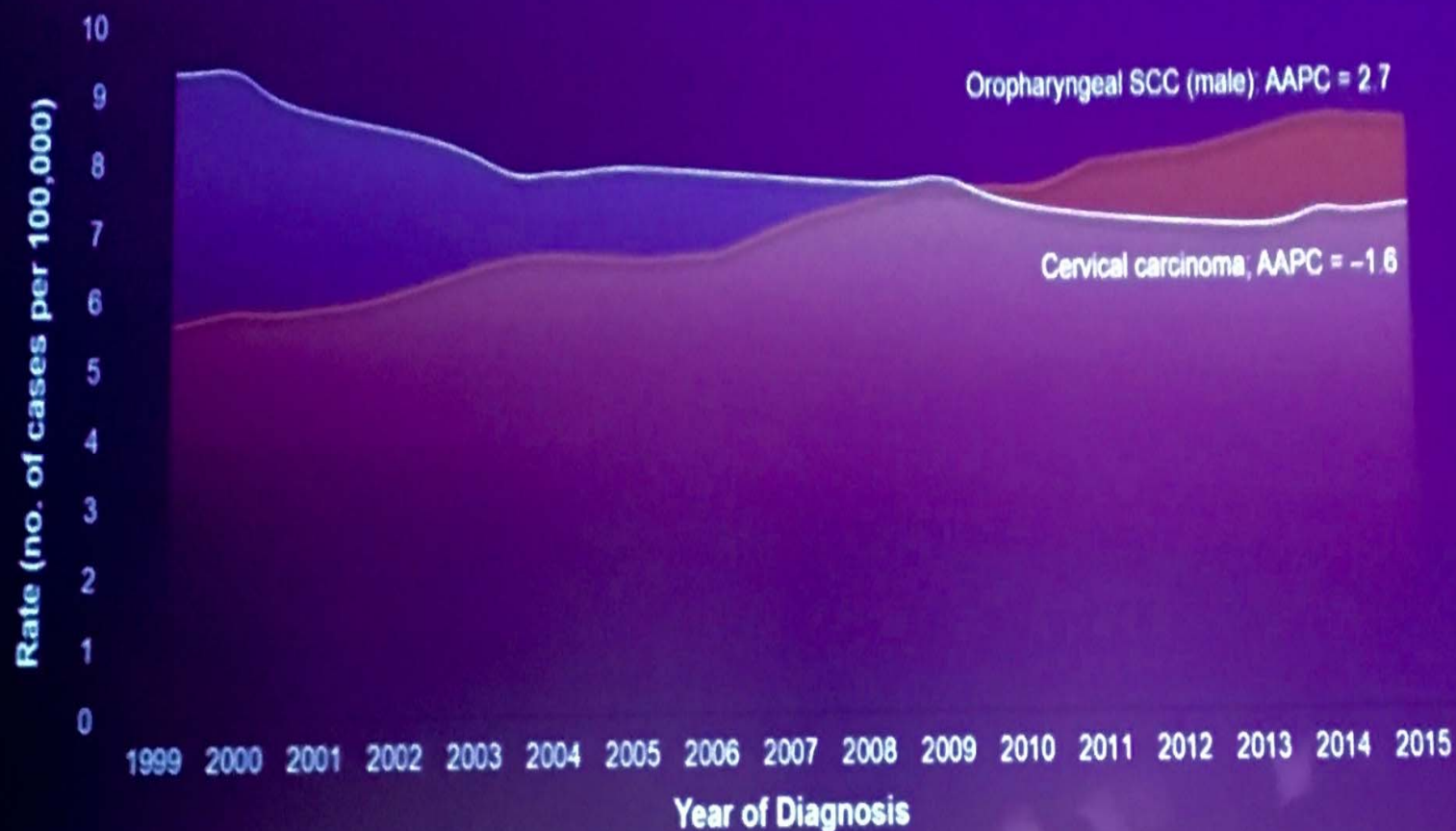
36 cases/year  
90% HPV related



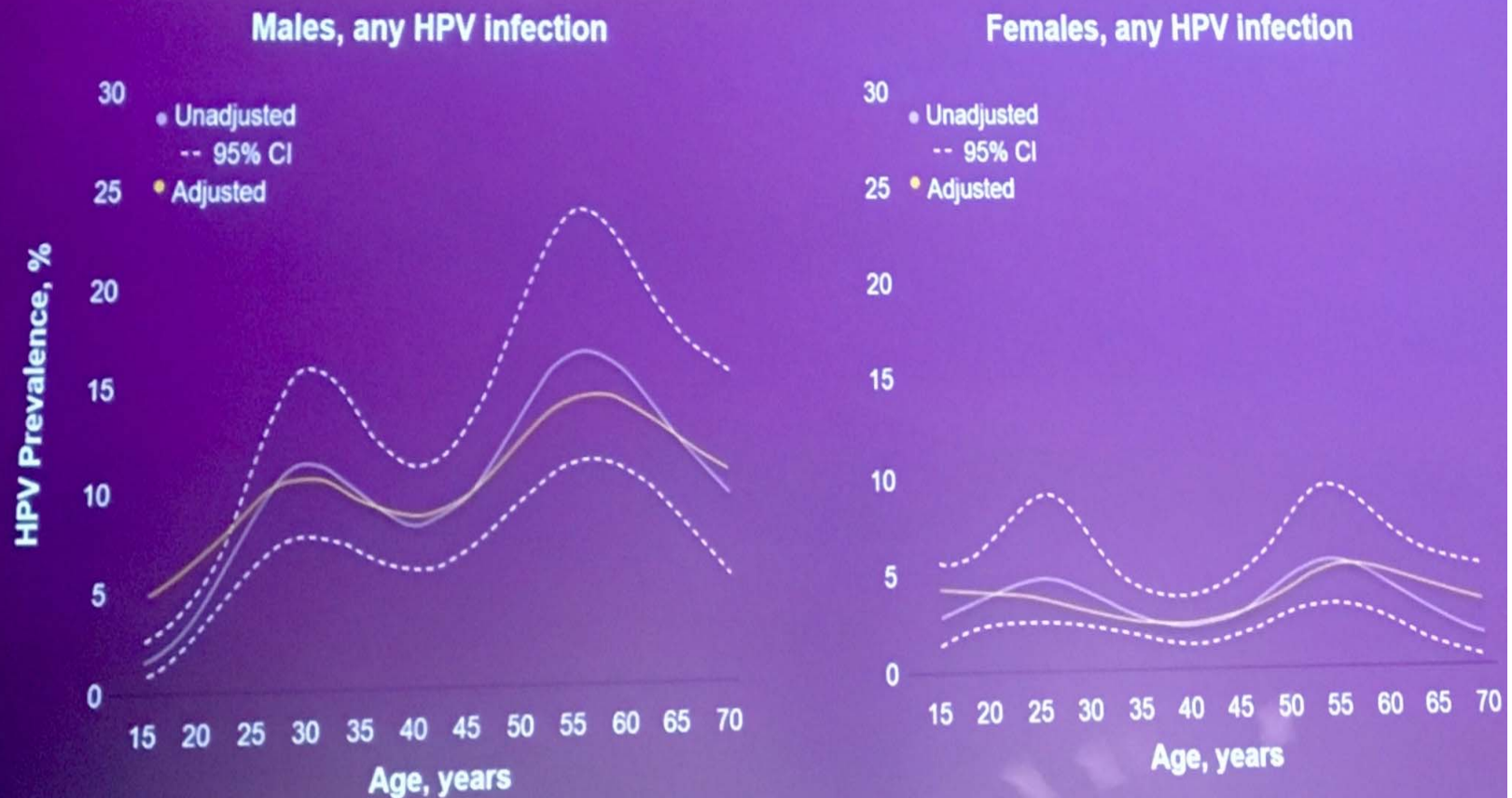
Sex	Period	APC	95% CI	P
Male	1994-2014	+0.5%	(-0.8%, +1.8%)	0.413

32 cases/year  
50% HPV related

## Rates of Cervical Cancer Are Declining While HPV-Related Oropharyngeal SCC in Males Is Rising (USA)

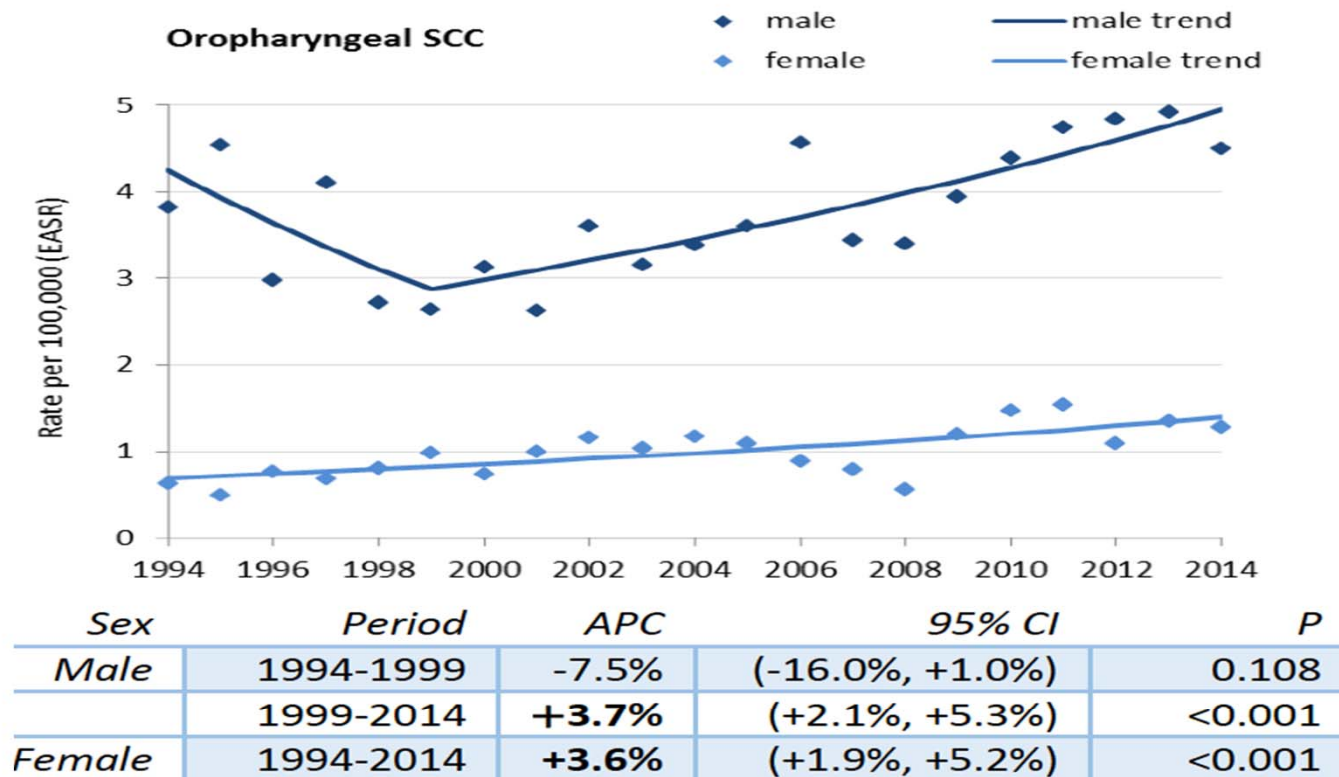


## Oral HPV Prevalence Is Significantly Higher in Males Than in Females



Slide courtesy of MSD

# Oropharyngeal Cancer: 2010-2014



National Cancer Registry: Cancer Trends No 33 4<sup>th</sup> May 2017

# Oropharyngeal cancer (OPC)

## Ireland

- 2009 - 2013: 123 cases /yr
- 2014 - 2018: 168 cases/yr
- 33-43%+ are p16<sup>INK4a</sup> pos (marker for HPV)



**37% Increase**

## US

- 1988-2004
- HPV ↑ OPC by 225% (0.8 to 2.6/100,00)  
Estimate 70% HPV related

## UK

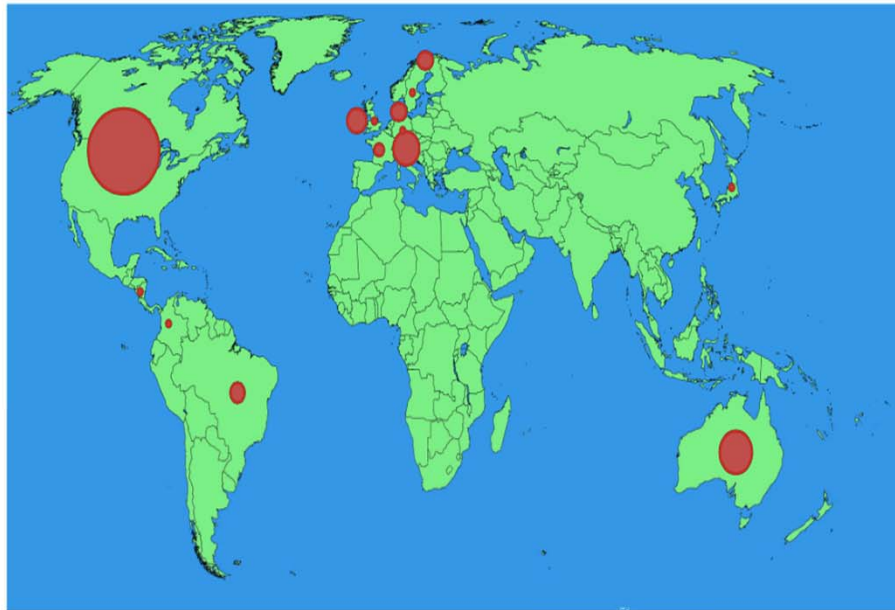
- Doubling of OPC cases 2002-2011, 50% HPV related

*(HIQA:HTA of HPV in boys, 4<sup>th</sup> Dec 2018)*



# Is HPV vaccine safe?

HPV Vaccine Safety & Effectiveness 2006 - 2018



- > 80 publications
  - RCT: 72, 835 subjects
  - Cohort studies
  - Post licensure studies
  - Systematic reviews
  - Safety reviews

[http://www.who.int/vaccine\\_safety/vaccrates/en/index.html](http://www.who.int/vaccine_safety/vaccrates/en/index.html)





# Men ACWY Vaccine

Conjugate MenACWY vaccination programme commenced in 2019-20

Provides protection from Meningococcus A,C,W and Y

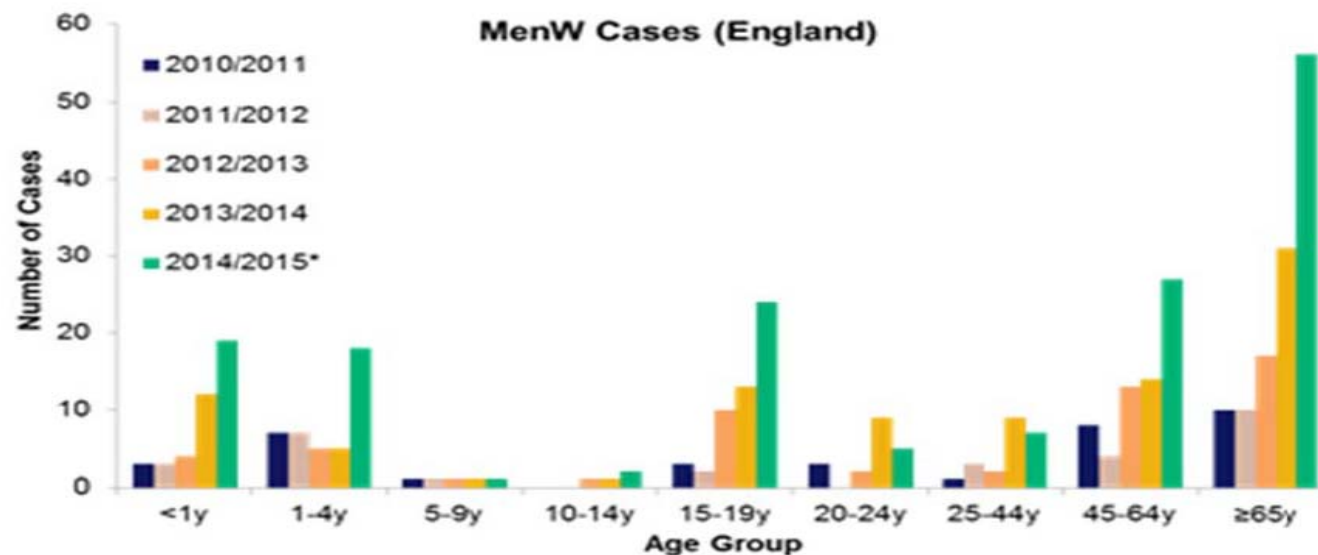
Only one dose needed for protection

Nimenrix – MenACWY vaccine needs reconstitution



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Health Service Executive

## MenW cases by age group England, 2010/11-2014/15\*



Conjugate Men ACWY vaccine in adolescents

1. Provide direct protection to risk group.
2. Prevent carriage of meningococci therefore help to prevent spread.

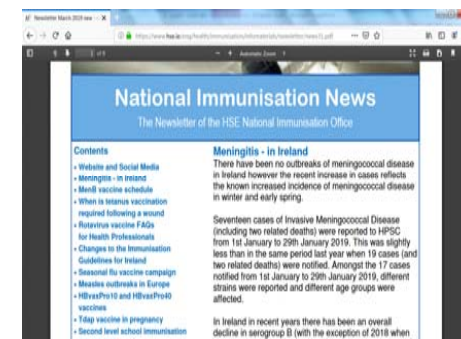
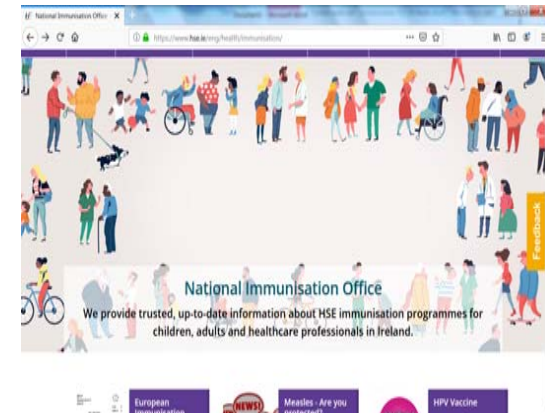
Men B vaccine (Primary Care Immunisation Schedule) as subunit vaccine may provide some cross protection against W

## Sources of Immunisation Information

<https://www.immunisation.ie>

The Immunisation team at the National Immunisation Office (NIO) produces this factual immunisation site for Healthcare Workers and health professionals

- It is accredited by WHO
- It is a comprehensive, up-to-date and an accurate source of information on vaccines, disease and immunisation
- It has a News section where current issues are rapidly responded to and clearly explained
- Fact sheets and information packs (multi-lingual) can be ordered and/or downloaded and translations are also available
- <https://www.hpsc.ie> Health Protection Surveillance Centre





# Acknowledgements

- Thank you to the National Immunisation Office and Prof Karina Butler for continued support and sharing of educational resources and materials.
- Thank you, Laura and other women who support the NIO for your courage and bravery to support the future of girls and women to live healthier lives.
- Thank you to all Schools Immunisations Teams across Ireland, who's continued hard work and dedication has been central to the success of this programme.



# Sources of Vaccine and Disease Information

- National Immunisation office [www.immunisation.ie](http://www.immunisation.ie)
- Health Protection Agency [www.hpa.org.uk](http://www.hpa.org.uk)
- Department of Health [www.dh.gov.uk](http://www.dh.gov.uk)
- World Health Organisation [www.who.int/en/](http://www.who.int/en/)
- Royal College of Paediatrics and Child Health [www.rcpch.ac.uk/](http://www.rcpch.ac.uk/)
- Barrett, P., Chaintarli, K., Ryan, F., Cotter, S., Cronin, A., Carlton, L., MacSweeney, M., McDonnell, M., Connell, J., Fitzgerald, R., Hamilton, D., Ward, M., Glynn, R., Migone, C. (2016) An on going measles outbreak linked to a suspected imported case, Ireland, April to June 2016. [www.eurosurveillance.org](http://www.eurosurveillance.org)
- SAGE (2014) Report of the Sage Working group on Vaccine Hesitancy. [www.who.int](http://www.who.int)
- Salmon, D.A., Dudley, M.Z., Glantz, J.M., Omer, S.B., (2015) Vaccine Hesitancy Causes, consequences and a call to action. American Journal of Preventative Medicine. [www.ajpmonline.org](http://www.ajpmonline.org).
- Dube, E. Laberge, C., Guay, M., Bramdat, P., Roy, P., Bettinger, J. (2013) Vaccine Hesitancy, An overview. Human Vaccine & Immunotherapeutics 9:8, pp.1763-1773.
- Health Prevention Surveillance Centre [www.hpsc.ie](http://www.hpsc.ie)
- Leask, J. Kinnensley, P. Jackson, C. Cheater, F. Bedford, H. Rowles, G. (2012) Communication with Parents about vaccination a framework for Professionals. BMC Paediatrics. 12: 154



**ANY QUESTIONS**