

# Human Papillomavirus Vaccination Campaign 2010

## Clinical Issues

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National Immunisation Office

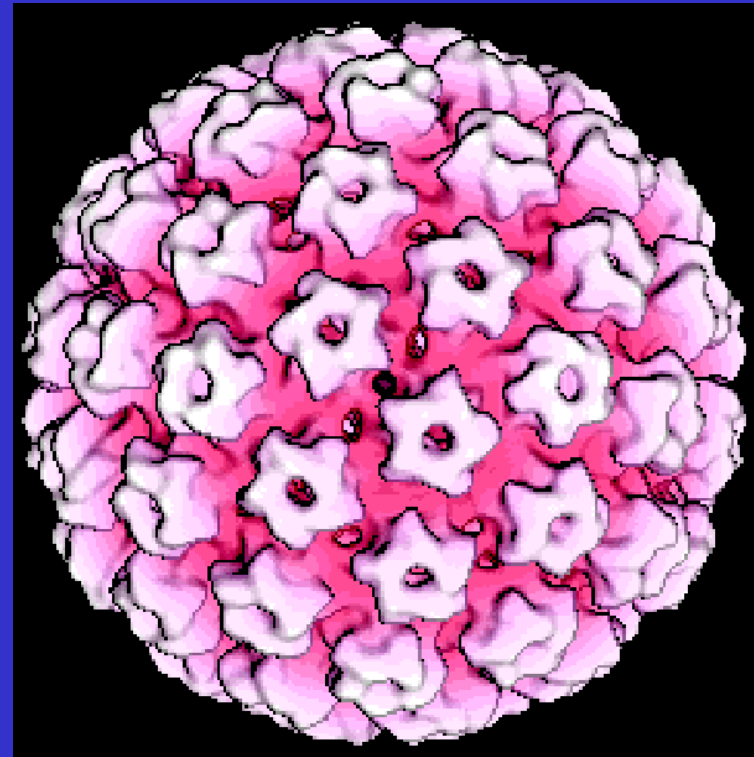


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# Overview

- Background
- School based programme
- HPV vaccines
- Vaccine schedule
- Implications
- Issues
- Next steps



Computerised image of the human papillomavirus  
Courtesy of Dept of Pathology, University of Cambridge



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## Background

Immunisation Guidelines for Ireland  
HPV Chapter 6a Recommendations

*“all girls 12 years of age should receive the vaccine”*

Minister of Health and Children

August 2008: *“to start September 2009”*

November 2008: *“deferred due to rapidly and seriously deteriorated economic situation”*

January 2010 *“The vaccine will be offered free of charge this year for girls who are now in first year of secondary school. This is the same group of girls who would have received the vaccine under previous plans for 2009.”*



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# Aims and Objectives

## Aim

- To protect girls from their future risk of developing cervical cancer

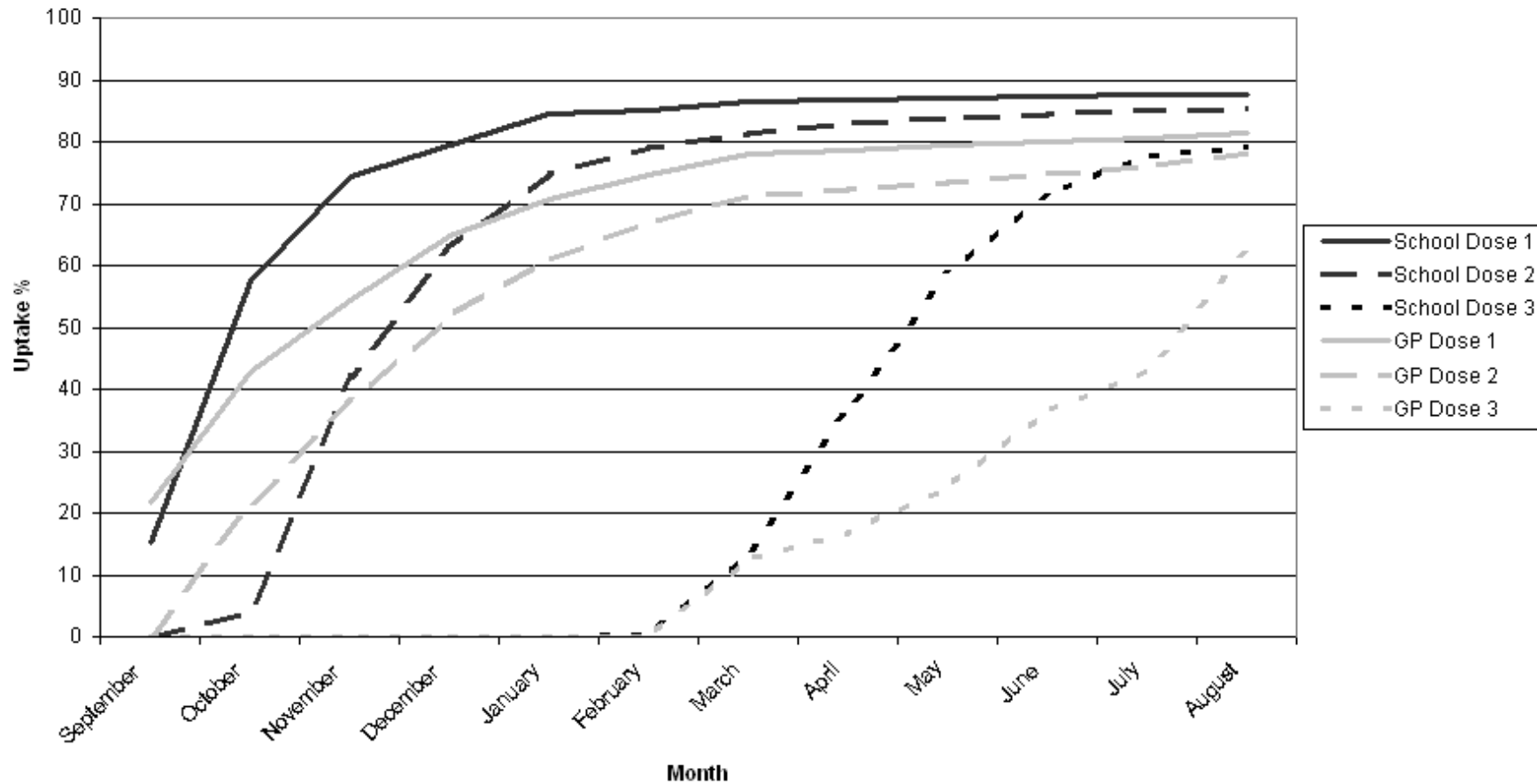
## Objectives

- To provide three doses of HPV vaccine to females before they reach an age when the risk of HPV infection increases and they are at subsequent risk of cervical cancer
- To obtain over 80% vaccine uptake for 3 dose schedule



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HPV Vaccine Uptake: Comparison of uptake between school and GP based programmes in England  
2008/2009



[http://www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/@dh/@en/@p/s/documents/digitalasset/dh\\_111676.pdf](http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@p/s/documents/digitalasset/dh_111676.pdf)



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# HSE HPV Vaccination Programme

- Provide 3 doses of HPV vaccine to all girls in 1<sup>st</sup> Year second level school starting with 2009/2010 cohort (~29,000)
- 575 second level schools

## May 2010

- Most schools 1<sup>st</sup> and 2<sup>nd</sup> years (~58,000) to be vaccinated together from September 2010
- 1<sup>st</sup> years in a small number of schools to be vaccinated in May 2010

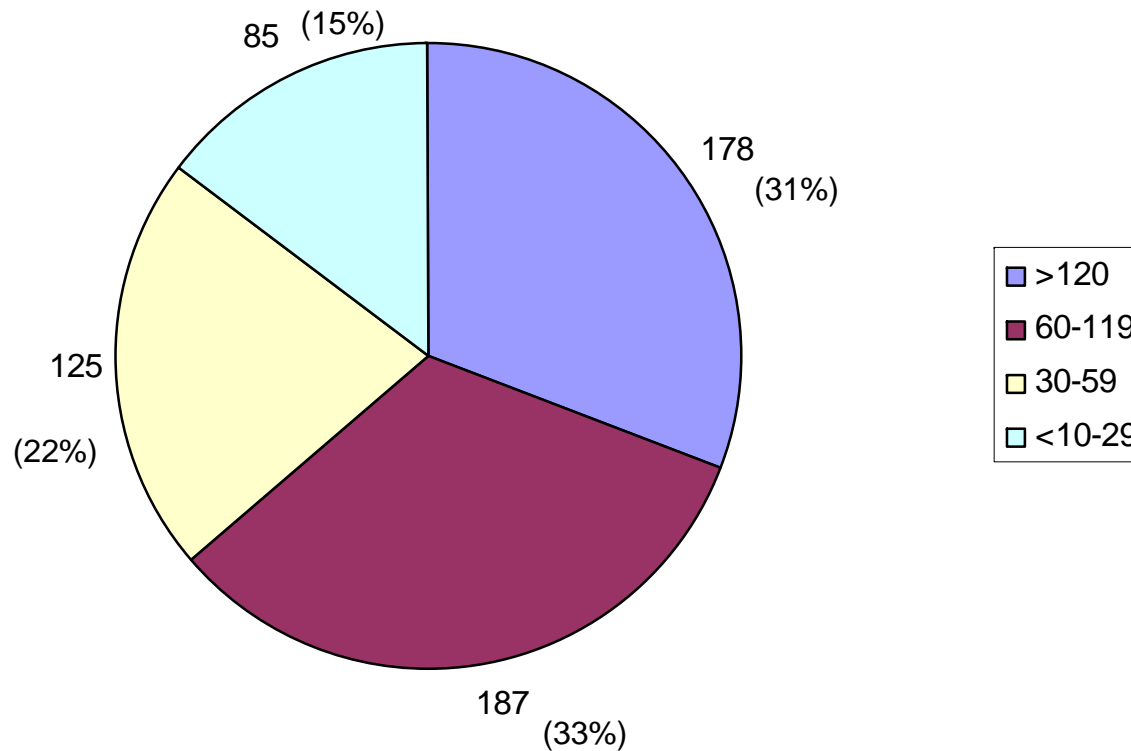


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# Number of schools by cohort size (refers to both 1<sup>st</sup> and 2<sup>nd</sup> Years)

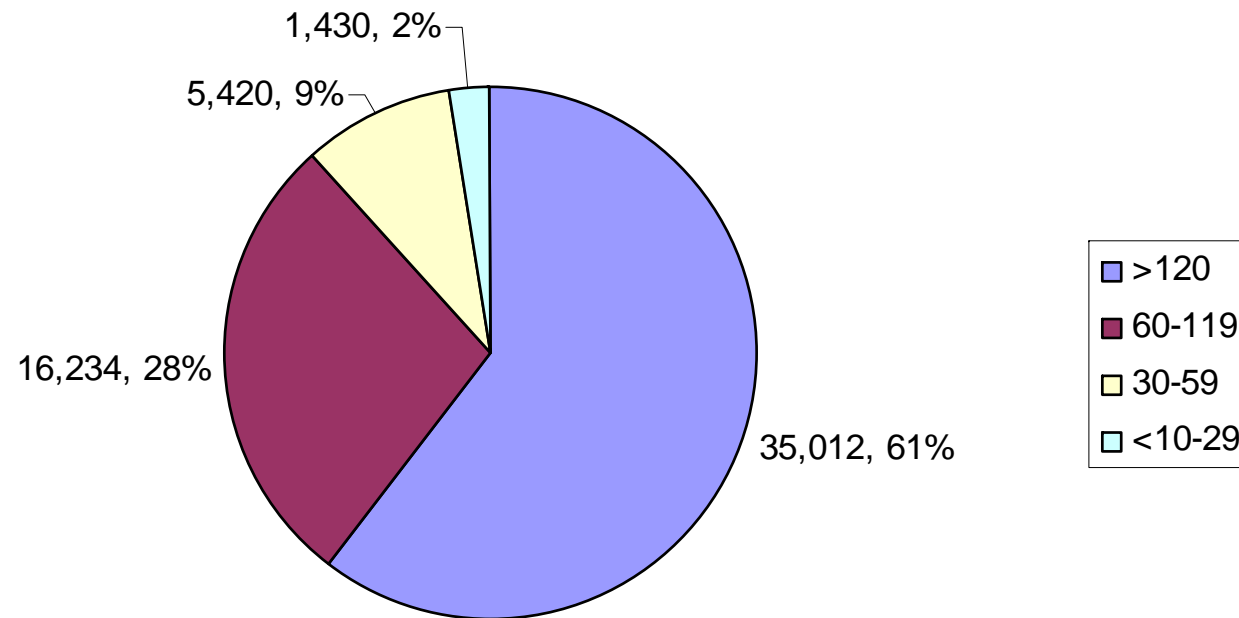


\*Cohort size ranges from less than 10 to over 400 pupils

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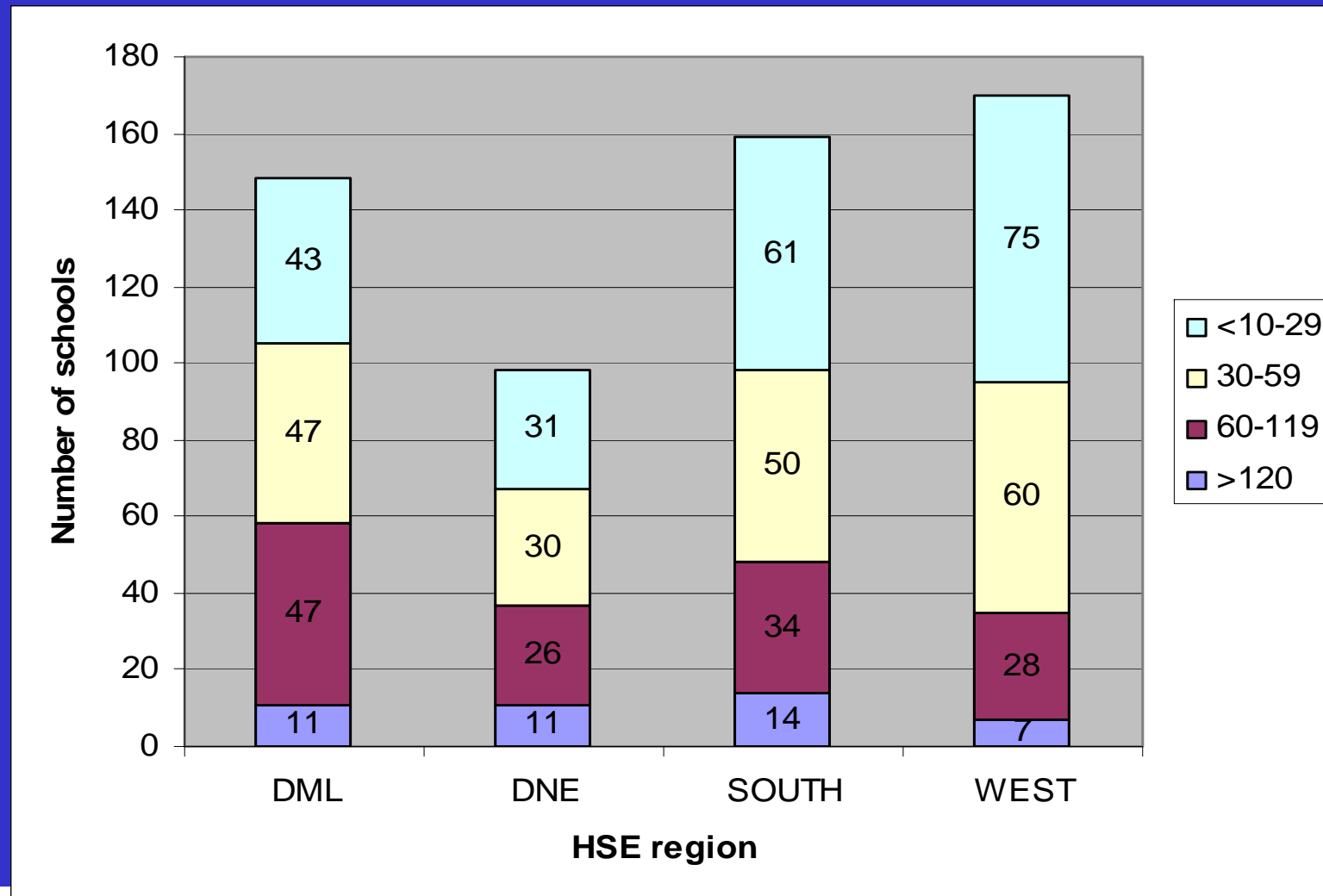


# Estimated number of girls in 1<sup>st</sup> and 2<sup>nd</sup> years by Class size



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# Number of Schools by HSE Region and Cohort size (refers to both 1<sup>st</sup> and 2<sup>nd</sup> Years)



# HPV vaccines

Two licensed HPV vaccines:

- Gardasil™ Sanofi Pasteur
  - quadrivalent
  - protects against premalignant genital lesions (cervical, vulvar and vaginal), cervical cancer and external genital warts related to HPV types 16/18 and 6/11
- Cervarix™ GlaxoSmithKline
  - bivalent)
  - protects against premalignant cervical lesions and cervical cancer related to types 16/18 only



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# The nature of HPV vaccines

- Proteins, like those that coat the HPV virus, are made in either yeast or baculovirus (insect virus) cells using recombinant DNA technology.
- These purified antigenic proteins assemble into small spheres called virus-like particles (VLPs).
- VLPs cannot cause infection or cancer.
- HPV vaccination causes the body to mount an immune response against the antigens in the VLPs.
- Immunised individuals mount a rapid immune response when subsequently exposed to HPV.



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# Gardasil

Human Papillomavirus [Types 6, 11, 16, 18]

Recombinant, adsorbed vaccine<sup>1</sup>

HPV VLPs	HPV types 6, 11, 16, 18
Adjuvant	AAHS Amorphous Aluminium Hydroxyphosphate Sulphate
Production System	<i>Saccharomyces cerevisiae</i> CANADE 3C-5
Indication	Females aged 9 - 26 years

Reference: GARDASIL® Summary of Product Characteristics



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# Effectiveness of Gardasil vaccine

- Studies use CIN 2/3 (cervical intraepithelial neoplasia - pre-cancerous lesions) as a surrogate marker, as cervical cancer takes many years to develop.
- In uninfected women, vaccination is shown to be 99% effective in preventing
  - pre-cancerous lesions caused by types 16 and 18.
  - genital warts caused by types 6 and 11
- Evidence of cross-protective antibodies against other high-risk HPV types (31 and 45), although studies are in progress to confirm their clinical impact.



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# Duration of protective efficacy



- The exact duration of protective efficacy for any prophylactic HPV vaccine will only be determined after decades of follow up of vaccinees
- at least 4.5 years
- evidence of immune memory

# Gardasil



- Single dose presentation
- Pre filled syringe
- 2 separate needles
- Blue needle 23G x 25mm
- Orange needle 25G x16mm
- Shake well before use



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# Gardasil dosage schedule

Routine schedule as per licence, IMB and NIAC

- 3 doses (0.5 ml IM) at 0, 2 and 6 months

Alternative schedule (exceptional circumstances only)

- At least 1 month between Doses 1 and 2
- At least 3 months between Doses 2 and 3
- All 3 doses to be given within 12 months



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# Programme delivery

- Blitz approach (3 weeks)
- Mop up clinics (1 week)

Tentative dates		
	School based vaccinations	Mop up clinics
Dose 1	13 <sup>th</sup> September – 1 <sup>st</sup> October 2010	4 <sup>th</sup> – 8 <sup>th</sup> October 2010
Dose 2	15 <sup>th</sup> November – 3 <sup>rd</sup> December 2010	6 <sup>th</sup> – 10 <sup>th</sup> December 2010
Dose 3	14 <sup>th</sup> March – 1st April 2011 (possible co-administration of Td vaccine with the 3rd dose would extend this timeframe)	4 <sup>th</sup> – 8 <sup>th</sup> April 2011



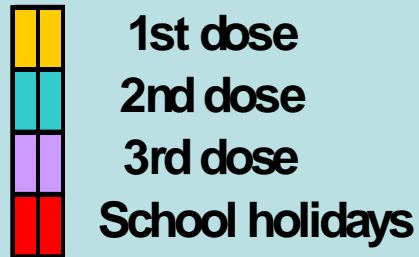
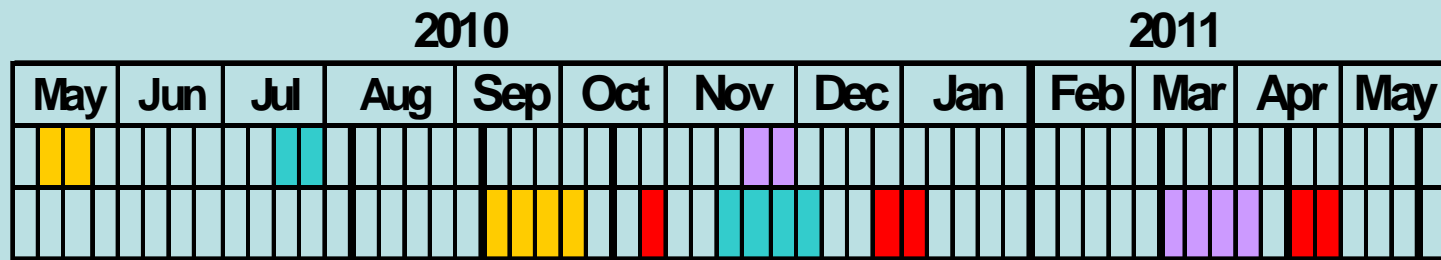
# May start

- 21 schools
- 1600 girls
- School (1<sup>st</sup> and 3<sup>rd</sup> doses)
- HSE clinic (2<sup>nd</sup> dose)- notification of date/SMS
- Absent for 2<sup>nd</sup> dose



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# HPV vaccination schedule 2010/2011



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# Issues

- Previous HPV vaccine
  - Require documentation
- Interchangeability
- Partial course
- Vaccine given too early or too late
- Out of school/Home schooled
- **Cervical cancer screening**



## Next steps

- Information resources
- Schedule May and July dates
- Vaccination teams for September start
- Plan school schedules for all 3 doses
- Medication protocols
- Monitor vaccine uptake
- Evaluation of programme



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# UK School-based HPV Vaccination Campaign

## 90 per cent of teen girls say yes to cervical cancer jab

By Laura Jones

[laura.jones@nwn.co.uk](mailto:laura.jones@nwn.co.uk)

NEW figures show 90 per cent of young teenagers across the region have said "yes" to a controversial new cervical cancer vaccine.

The human papilloma virus (HPV) vaccination has been offered recently

which has fully funded the campaign, has called it a progressive vaccine, which they hope will benefit women and their families for generations to come.

"The introduction of the cervical cancer vaccine for teenage girls in Wales is an exciting step in the fight against the disease," a spokesman said.

"However, it's vital to remember that the vaccine will not completely wipe

been distributed to schools and other establishments, to raise awareness about the vaccination.

For more information visit [www.beatingcervicalcancer.org.uk](http://www.beatingcervicalcancer.org.uk) or [www.curocancercegyroth.org.uk](http://www.curocancercegyroth.org.uk)

A mother of a 12-year-old, from Rhosesmor, signed a consent form to allow the girl to receive the vaccine and she had her first injection in

## Girls rush to take up cancer jabs

by LYNNE MILFORD

[lynne.milford@nqe.com](mailto:lynne.milford@nqe.com)

A PROGRAMME to immunise girls against cervical cancer in Essex has been hailed as a success.

Although exact figures are not yet available, it is believed the uptake of the vaccine by school girls in year eight has been about

85 to 90 per cent.

Debbie Saban, health improvement specialist in screening and immunisation at NHS North East Essex, said she was delighted with the uptake.

She said: "We began the programme on September 22 and have been targeting girls who are in year eight.

"Initial feedback has been very positive and the uptake has been fantastic.

"From speaking to mothers, we have found they are very keen to get their daughters vaccinated.

"Some of them have had bad experiences with cervical cancer tests and they want to do whatever they can to protect their daughters from having the same."

She said the vaccination programme would be expanded to include older girls who are still in education.

"Then we'll be getting GPs to vaccinate those girls who aren't still in education," she added.

"We'll be going out to Colchester Sixth Form College and Colchester Institute

and we're expecting to get the same kind of response there."

The vaccine, which is being funded by the Government, offers immunity against the human papilloma virus (HPV).

It is believed the virus is responsible for about 99 per cent of all cervical cancers.

It will be given in schools and involves three separate injections over the course of six months.



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