The HPV vaccination programme in Flanders
HPV-vaccination in Belgium

- From 2007 onwards vaccines available in pharmacies in Belgium
  - Quadrivalent vaccine Gardasil® (HPV types 6, 11, 16 en 18)
  - Later: bivalent vaccine Cervarix® (HPV types 16 en 18)
  - Partially reimbursed by health insurance

- Advice NITAG (Superior Health Council 2007 (nr. 8204)):
  - The Superior Health Council recommends yearly general prophylactic vaccination of one birth cohort of girls aged between 10 and 13 years with 3 doses of a HPV-vaccine
  - No systematic catch-up vaccination for older girls
  - No vaccination of boys

- So far no actualised advice of the NITAG (expected 2017)
The vaccination programme in Flanders

- Vaccines for the vaccination programme
  - Based upon recommendations of the Superior Health Council
  - As prevention in public health is a subnational responsibility and duty: decision making for implementation at the subnational levels (Flemish Community, French speaking Community/Walloon Region, Brussels)
  - For Flanders: advice by the Flemish Vaccination Board with representatives of all kinds of vaccinators
  - Vaccines contracted by public tenders including cold chain monitored transport and delivery directly to the consultation place of the vaccinators
  - All vaccinators can order the vaccines online in an ordering system linked to a vaccination registry (Vaccinnet)
  - All vaccines are delivered free of charge
HPV-vaccination programme in Flanders - organization

- School Health Services (SHS):
  - all schools with an officially recognised educational programme are linked to a SHS. In the schoolyear of recommended vaccinations an invitation letter and an informative leaflet are given to all girls and their parents. When authorized, SHS give the vaccinations to the children without any cost.

- Other vaccinators: GPs or paediatricians:
  - can get the vaccines frees of charge as well, ordered online;
  - only a consultation fee must be paid, as for other consultations.
HPV-vaccination programme in Flanders - history

- From September 2010 onwards:
  - yearly one cohort of girls in the 1st year of secondary school (11-12 years).
  - main birth cohort of the 1st schoolyear of the vaccination programme: girls born in 1998

- Vaccines used in the vaccination programme:
  - September 2010 – June 2014: Gardasil®, 3 dose schedule
  - July 2014 – June 2018: Cervarix®, 2 dose schedule
Vaccination coverage in Flanders

- EPI-based surveys (documented data)

- 2012: girls born in 1998 (1\textsuperscript{st} vaccinated cohort)
  - 1\textsuperscript{st} dose 87.5\% (85.0-90.0)
  - 2\textsuperscript{nd} dose 87.0\% (84.4-89.5)
  - 3\textsuperscript{rd} dose 83.5\% (80.6-86.4)

- 2016: girls born in 2000
  (main vaccination schoolyear 2012-2013)
  - 1\textsuperscript{st} dose 92.9\% (90.4-95.4)
  - 2\textsuperscript{nd} dose 92.8\% (90.2-95.3)
  - 3\textsuperscript{rd} dose 89.6\% (86.4-92.8)
  - Considering correct 2-dose schedule: 91\% fully vaccinated
Vaccines for the vaccination programme in Flanders

- Vaccines for the vaccination programme have changed in time (Gardasil®, Cervarix®)
- Follow-up of delivered vaccines in time to see eventual trends
- Number of doses of HPV-vaccines delivered per schoolyear

<table>
<thead>
<tr>
<th>schoolyear</th>
<th>July-December</th>
<th>January-June</th>
<th>total</th>
<th>main birth cohort</th>
<th>equivalent fully vaccinated</th>
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<tbody>
<tr>
<td>2010-2011</td>
<td>55,088</td>
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<td>2003</td>
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<tr>
<td>2016-2017</td>
<td>35,596</td>
<td>28,933</td>
<td>64,529</td>
<td>2004</td>
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</tr>
</tbody>
</table>
CAN HPV COVERAGE RATES OF OVER 90% BE REACHED WITH THE CURRENT VACCINES?
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BACKGROUND AND AIMS

Some types of human papillomavirus (HPV) cause cervical cancer, which is the 4th most prevalent cancer in women worldwide. Safe and effective vaccines have been developed and implemented in vaccination programs in most Western countries. Since 2010 HPV vaccines have been offered free-of-charge through a school-based system to all girls in the 1st year of secondary school in Flanders.

In 2016 the HPV vaccination coverage was measured in girls (born in 2000) who were vaccinated with a 3-dose scheme 4 years ago.

RESULTS

Data from 477 girls (born in 2000) of 488 interviewed (97.7%)

HPV vaccination coverage (proportion and 95%CI)
- Dose 1: 92.9 (80.4-95.4)
- Dose 2: 92.9 (90.2-95.3)
- Dose 3: 85.6 (85.4-92.8)

Sociodemographic profile similar to entire groups and similar to Flemish census data

DISCUSSION

In comparison to other industrialized countries in which HPV vaccination programs in girls have been established, the coverage rate is very high in Flanders and almost 90% of the girls in the survey received three doses of HPV vaccine as recommended.

In the UK:
- 1st dose: 91.1%
- 2nd dose: 86.7%
- 3rd dose: 61%

In Canada:
- 1st dose: 84%
- 2nd dose: 65%
- 3rd dose: 72.3%

A lot of epidemiological studies have proven the positive effect of HPV vaccination on infection and pre-cancerous lesions in women of HPV-vaccine-related serotypes (Messieh et al. 2015; Drolet et al. 2015). Additionally it was shown that a vaccination coverage of >70% decreases circulation of vaccine types in vaccinees, but also in boys/men of the same age (Chow et al. 2014). This last observation implies the development of herd immunity. Nevertheless, men who have sex with men will not be able to profit from this herd immunity (Chow et al. 2014).

Regarding trust in general, it was shown that refusal of HPV vaccination was less common in parents who had high confidence in adolescent vaccination (Gilkey et al. 2016; Gilbert et al. 2016). This is confirmed by our data since general trust in vaccination in our population is high and parents of girls with incomplete vaccination have lower trust in general as well.

CONCLUSION

In Flanders the HPV vaccination program in girls seems consolidated as almost 90% of the girls born in 2003 received all recommended doses.

Parents of these girls seem to have high trust in vaccination in general. Nevertheless, parents of girls with an incomplete schedule more often had lower trust in vaccination in general.

Given the anti-HPV vaccine message which circulate on social media, it is important to consolidate the trust in this vaccine.

Study funded by the Flemish government
Vaccination data for Belgium

- For the Walloon Region: no recent vaccination coverage data. In the last EPI-based survey, only vaccination coverage in young children was examined.
- School based coverage study planned at the end of this schoolyear - estimated coverage based upon the number of delivered vaccines: ±50%
- Reasons for differences:
  - 1st year of the programme: ¼ of SHS didn’t participate
  - 2nd year: free choice for SHS to offer this vaccination - HPV-coverage after 2 years: ±30%
  - Less tradition of vaccination by SHS (↔ in Flanders SHS have to offer all vaccinations of the vaccination programme)
  - Influence of France and French press
Strengths and opportunities

- **Strengths**
  - Well organized vaccination programme with systematic offer of vaccination by SHS (same age cohort as HBV-vaccination before)
  - HPV-vaccines free of charge available at the consultation place of the different vaccinators (SHS, GP, paediatricians)
  - Information available on leaflets and website
  - When signs or rumours: contact between the Agency for Care and Health, Vaccination Board and academics (⇒ uniform and common communication, made available on websites and presented in vaccination symposium if possible)

- **Opportunities**
  - Political commitment of Flemish Government (public health goal on lifetime vaccination)
  - Homepage of Vaccinnet as an extra (fast) communication tool
Threats and weaknesses

- Threats
  - Circulation of rumours in (“social”) media

- Weaknesses – dangers
  - Undervaccinated groups (some resistance for HPV-vaccination in orthodox Jewish communities)
  - Registration of vaccinations can still improve
  - No follow-up of circulating rumours on the internet and “social” media
Conclusions

- HPV-vaccination of young girls is well accepted in Flanders. High vaccination coverage of about 90% could be reached.
- The systematic and well organised offering of HPV-vaccination by SHS and the availability of vaccines free of charge for all vaccinators contribute to reach and maintain this high HPV-vaccination coverage.
- As data are in the vaccination database of Vaccinnet, they don’t get lost and can be used for future studies, relating vaccination data and data from cancer screening and cancer registries, as long as everybody uses the same personal identifier (national number).
- But: circulating rumours are a threat as for all countries
HPV-vaccination programme information leaflet (2016)

Enkele veelgestelde vragen over de HPV-vaccinatie

Wie kan gratis ingeënt worden?
Het gratis vaccin tegen HPV wordt jaarlijks aangeboden aan alle meisjes in het eerste jaar secundair onderwijs in Vlaanderen. Meisjes vanaf het tweede jaar secundair onderwijs kunnen wel gevaccineerd worden door de huisarts, maar niet met de gratis vaccins en niet door het CLB. Voor hen is er een gedeeltelijke terugbetaling bij de aankoop van het vaccin in de apotheek.

Waarom zijn er twee inenting nodig?
Na één inenting maakt je lichaam nog niet voldoende afweerstoffen aan om goed en langdurig beschermd te zijn tegen een besmetting met de HPV-types. Bij de tweede inenting wordt de afweerreactie versterkt, waardoor je voldoende beschermd bent. Stoppen na één inenting is niet gevaarlijk, maar je bent dan niet voldoende beschermd tegen het virus.

Hoe groot is de kans dat je ooit een HPV-infectie oploopt?
De kans is groot. Meer dan 80% van de mensen loopt vroeg of laat een HPV-infectie op. Meestal merken ze daar niets van. Het virus wordt het meest verspreid op vrij jonge leeftijd.

“Ik heb de folder gelezen, maar ik zit nog met vragen.”

Extra informatie vind je op onze website www.zorg-en-gezondheid.be/HPV.

Voor meer informatie kun je ook altijd terecht bij de huisarts of het CLB.

Of stel je vraag aan de Vlaamse overheid. Bel gratis 1700.

www.zorg-en-gezondheid.be

TWEE PRIKJES NU KUNNEN JE LATER VEEL LEED BESPAREN

Gratuit inenting tegen baarmoederhalskanker voor alle meisjes van het eerste jaar secundair onderwijs in Vlaanderen.

AGENTSCHAP ZORG & GEZONDHEID