

Summary report on immunization programs in Belgium

Reported by: Pierre Van Damme*, Tinne Lernout**, Beatrice Swennen^o, and Heidi Theeten*.
*University of Antwerp (UA), **National Scientific Institute of Public Health, and ^oFree University Brussels (ULB).

For prevention at large, Belgium is organized in sub-national areas: vaccination policy is a shared responsibility of the national Ministry of Health/Social Affairs as well as of the regional Ministries of Health of the Flemish speaking, the French speaking and the German speaking communities. These Regional authorities are responsible for the implementation and promotion of the recommended vaccination programmes, and are in charge of purchasing most of the traditional infant and adolescent vaccines. The differences at regional level can be for instance the organization of the tenders and purchase procedure for vaccines in universal programmes, brand name of the chosen vaccine for a universal programme, the target age and as such the extent of the public programme.

Since a few years, and in particular with the venue of more expensive vaccines, the budget for vaccine purchase is made available mainly by the National authorities (Ministry of Social Affairs) with co-payment by the Regional authorities.

Belgium has a National Vaccination Committee, which is called the vaccination section of the National Health Council. The members are public health specialists, paediatricians, school doctors, general practitioners, microbiologists, infectious disease specialists, representatives of the National Scientific Institute of Public Health and MOH staff from national MOH and regional MOH. This National Vaccination Committee provides at regular moments recommendations for vaccination as well as a yearly national schedule of recommended vaccines (see further). The recommendations of the vaccination section of the National Health Council are made public through the website of the National Health Council, and then re-printed in some local medical newspaper.

Decisions about which vaccines are offered for free are taken at the level of the Inter-Ministerial Committee, where regional and national authorities are represented. Decisions on reimbursement of vaccines are taken by the national Ministry of Social Affairs.

The public health setting for neonates and infants is incorporated in the public organisation “well baby clinics”, which is called “Child and Family” in Flanders and the “Birth and Children Office” in the French speaking community. Vaccines are offered during the preventive child consultations, to which all children between 0 and 3/6 years are invited and which are for free. At each consultation, the child is examined by a specifically trained physician who administers the vaccines according to the recommended schedule.

A lot of day care centres also organise vaccination for the children attending them, in cooperation with the well baby clinics or independently by means of vaccination sessions in the day care centre by a private physician.

In Flanders in 2005, 16% of infants were vaccinated by a paediatrician or a family physician, the others were vaccinated at well baby clinics (83%) or in day care centres (4%).

In the French speaking community (data from 2003), a higher percentage (37-40%) was vaccinated by a paediatrician; 3-5% by a family physician and 56-59% in “well baby clinics”.

Vaccines administered in “well baby clinics” as well as the administration of the vaccine are free of charge; vaccines administered by general practitioners and paediatricians are free of

charge, for the administration a fee for service has to be paid.

A set of recommended infant vaccines (polio, tetanus, diphtheria, pertussis, *H influenzae* type b, hepatitis B, measles, mumps, rubella and meningococcal C) is offered free of charge. Polio vaccination is the only mandatory vaccination in Belgium.

National recommendations for infant immunization include the administration of the hexavalent vaccine (see schedule here-under) at 2, 3, 4 and 15 months, pneumococcal vaccine at 2, 4 and 12 months (as of 1 January 2007), MMR at 12 months, and Men C at 15 months (instead of 12 months, as of 1 January 2007).

For school-age children, the public health setting consists of a school health system that organizes preventive consultations (through school doctors) and offers vaccination recommended for that age group free of charge. In Belgium 60-80% of the vaccines for school-age children are given through this school health system. General practitioners have a complementary role here.

After school age, there is no public health service anymore offering vaccinations, except for the active population through the occupational health physician. Some of these vaccines are offered free of charge or through the Fund for Occupational Diseases (e.g. hepatitis B and A vaccines for the HCW, hepatitis A vaccine for the sewage workers...) or through the employer (travel vaccines for the travelling employees, flu vaccine for the hospital employees).

There are yearly promotion campaigns for influenza and 23 valent-pneumococcal vaccine targeting adults at risk and elderly people. Only for the influenza vaccine a partial reimbursement is foreseen for some risk groups.

In Belgium a National Polio Eradication Committee and National Measles Elimination Committee has been installed to follow-up the respective eradication and elimination activities, which are reported to the WHO European region.

There is no national institution officially in charge of measuring the vaccine coverage, as this is a responsibility of the local authorities. Coverage studies have been organized at different time points in Flanders, Brussels' capital region and Walloon. Only in 1999 a coverage study was organized at the same time in Flanders and Walloon. This study showed a slightly higher coverage in Flanders than in Walloon. There is no national website available presenting data on vaccinations. Recent coverage studies have been performed in Wallonia (2003) and in Flanders (2005) using the WHO cluster sampling technique. Two new coverage studies are in process in Wallonia and in Brussels in 2006. Results will be available at the end of the year. Since one year Flanders is using a computerized immunization registry, at "well baby clinics", and increasingly at the paediatrician offices and GP offices. This is now operational for all childhood vaccination. It is foreseen to expand this electronic database register to adolescent and adult vaccines as well in the near future. Once fully operational and validated it will be used for estimating vaccine coverage.

We have one national institute responsible for collecting adverse events after medication or following immunization; this is a passive reporting system.

At national level talks started to set up an active vaccinovigilance system. Pilot projects will be proposed this year, e.g. to extend the Flemish computerized immunization registry with these actively reported safety data as well.

Up to now there is no periodic feedback of the monitoring to vaccinators or public in place, nor is there a compensation system for vaccine-damage.

Data about the most recent coverage study in Flanders are presented at http://www.wvc.vlaanderen.be/vaccinatie/documentatie/rapport_couverturestudie.pdf
 Data on the French Community vaccination programmes can be found under:
<http://www.vaccination-info.be/vaccination/vaccination.html>
<http://www.sante.cfwb.be/pg001.htm>

The recommended schedule of the National Health Council is published at https://portal.health.fgov.be/pls/portal/docs/PAGE/INTERNET_PG/HOMEPAGE_MENU/A BOUTUS1_MENU/INSTITUTIONSAPPARENTEES1_MENU/HOGEGEZONDHEIDSRA AD1_MENU/ADVIEZENENAANBEVELINGEN1_MENU/ADVIEZENENAANBEVELIN GEN1_DOCS/NL_BASISSHEMA2005_23JUNI_.PDF.

| The Belgian Childhood Vaccination Schedule | | | | | | | | |
|--|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|------------------|
| | DTaP | Hib | IPV ¹ | HepB | MMR | MenC ² | Pn7v ³ | dT |
| 2 months | Yes ⁴ | Yes ⁴ | Yes ⁴ | Yes ⁴ | | | Yes | |
| 3 months | Yes ⁴ | Yes ⁴ | Yes ⁴ | Yes ⁴ | | | | |
| 4 months | Yes ⁴ | Yes ⁴ | Yes ⁴ | Yes ⁴ | | | Yes | |
| 12-13 months | | | | | Yes | | Yes | |
| 13-18 months | Yes ⁴ | Yes ⁴ | Yes ⁴ | Yes ⁴ | | Yes | | |
| 5-7 years | Yes ⁵ | | Yes ⁵ | | Yes ⁶ | | | |
| 10-13 years | | | | Yes ⁷ | Yes | | | |
| 14-16 years | | | | | Yes ⁶ | | | Yes ⁸ |

The Belgian Childhood Vaccination Schedule as foreseen as of January 1st, 2006

- ¹ IPV is the only mandatory vaccination. If IPV is given separately, only two doses are administered during the first year of life, with an interval of at least 8 weeks apart. A third dose is administered between 13-18 months of age.
- ² The MenC vaccine will be administered as of January 2007 simultaneously with the hexavalent vaccine at 13-18 months of age.
- ³ The pneumococcal conjugate vaccine with seven components (Pn7v) is recommended in Belgium, but not yet reimbursed (will be free of charge by 1 January 2007).
- ⁴ Recommended as the combined DTaP-Hib-IPV-HepB hexavalent vaccine
- ⁵ Recommended as the combined DTaP-IPV quadrivalent vaccine
- ⁶ Vaccination status of MMR is checked at school (first dose at 5-7 years and second dose at 14-16 years). If necessary one dose of MMR is given.
- ⁷ A primary course of three doses of HepB is given at 10-13 years of age if no routine vaccination was received in infancy.
- ⁸ dT vaccine is recommended. If vaccination against pertussis was incomplete in childhood (i.e. did not receive 3 or 4 doses of whole cell vaccine), a booster dose of the trivalent vaccine dTaP is recommended.

This summary chart is adapted from the national vaccination schedule for Belgium in accordance with recommendations made by the Belgian Health Council.