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# Adolescent Health programmes and its contribution to the success of vaccination in Germany

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# 1) Childhood vaccination schedule

(Standing Committee on Vaccination (STIKO). Robert Koch-Institute)

Age	DTaP	IPV	HIB	Hep B	MMR	Varicella	Meningococcal, serogroup C	Pneumococcal
2 months	1 <sup>st</sup>	1 <sup>st</sup>	1 <sup>st</sup>	1 <sup>st</sup>				1 <sup>st</sup>
3 months	2 <sup>nd</sup>	2 <sup>nd</sup>	2 <sup>nd</sup>	2 <sup>nd</sup>				2 <sup>nd</sup>
4 months	3 <sup>rd</sup>	3 <sup>rd</sup>	3 <sup>rd</sup>	3 <sup>rd</sup>				3 <sup>rd</sup>
11-14 months	4 <sup>th</sup>	4 <sup>th</sup>	4 <sup>th</sup>	4 <sup>th</sup>	1 <sup>st</sup>	1 <sup>st</sup>		4 <sup>th</sup>
12-24 months							1 <sup>st</sup>	
15-23 months					2 <sup>nd</sup>			
5-6 years	b							
9 – 17 years	b	b						

b = booster immunization

## 2.1) How are the children/adolescents reached ? School medicine system (1)

- Germany is composed of 16 federal states. An obligatory national system of school medicine does not exist in Germany.
- Vaccination is not mandatory for school entry
- According to the Protection against Infection Act (IfSG) the local health departments check the vaccination status at school entry.

## 2.1.) How are the children/adolescents reached ? School medicine system (2)

- In addition, many local health departments analyse vaccination cards of fourth or sixth or tenth grade schoolchildren.
- These campaigns often are combined with the provision of vaccinations.
- In 2006 almost 19 000 doses were vaccinated by health departments in the Federal State of Saxony Lower (about 80 000 new birth per year)
- Local health departments generally cooperate with pediatricians or family doctors for the vaccination of children with deficits.

## 2.2) How are the children/adolescents reached ?

### Other channels

- Children/ adolescents are mainly vaccinated by pediatricians and general practitioners according to the recommended immunization schedule of the Standing Committee on Vaccination (STIKO)
- Come-structure
- There is no mandatory system of actively searching children/ adolescents; vaccinations are administered on a voluntary basis according to the agreement of the parents.

### 3) Who are the vaccinators?

- Pediatricians
  - Family doctors
  - Gynecologists
  - Other disciplines (dermatologists, surgeons,..)
  - School doctors
- } • all vaccinations of the schedule  
• 95 to 99 % of the vaccinations for the children until 12 years
- } Hepatitis B, MMR
- } • MMR, Polio, Tetanus, Diphtheria, Pertussis, HBV  
• up to 5% of the vaccinations for the children/ adolescents
- In private practice vaccines are administered by doctors and medical assistants, whereas within the public health services vaccination is administered exclusively by doctors.

## 4) Training of the vaccinators?

- There are no special training programmes
- Vaccination courses are performed as part of the medical education
- Vaccinators are asked for voluntarily taking part in further education

## 5) Financing of child and adolescent vaccination

- In the past immunizations recommended by STIKO were payed by the health insurances as benefits due to their statutes (no obligatory benefits)
- This absorption of costs included the administration of vaccines.
- The public health services generally offer vaccinations free of charge
- In many federal states agreements between the health ministries and health insurances do exist. Thus the public health services are responsible for the administration of vaccines, whereas the health insurances accept the costs.



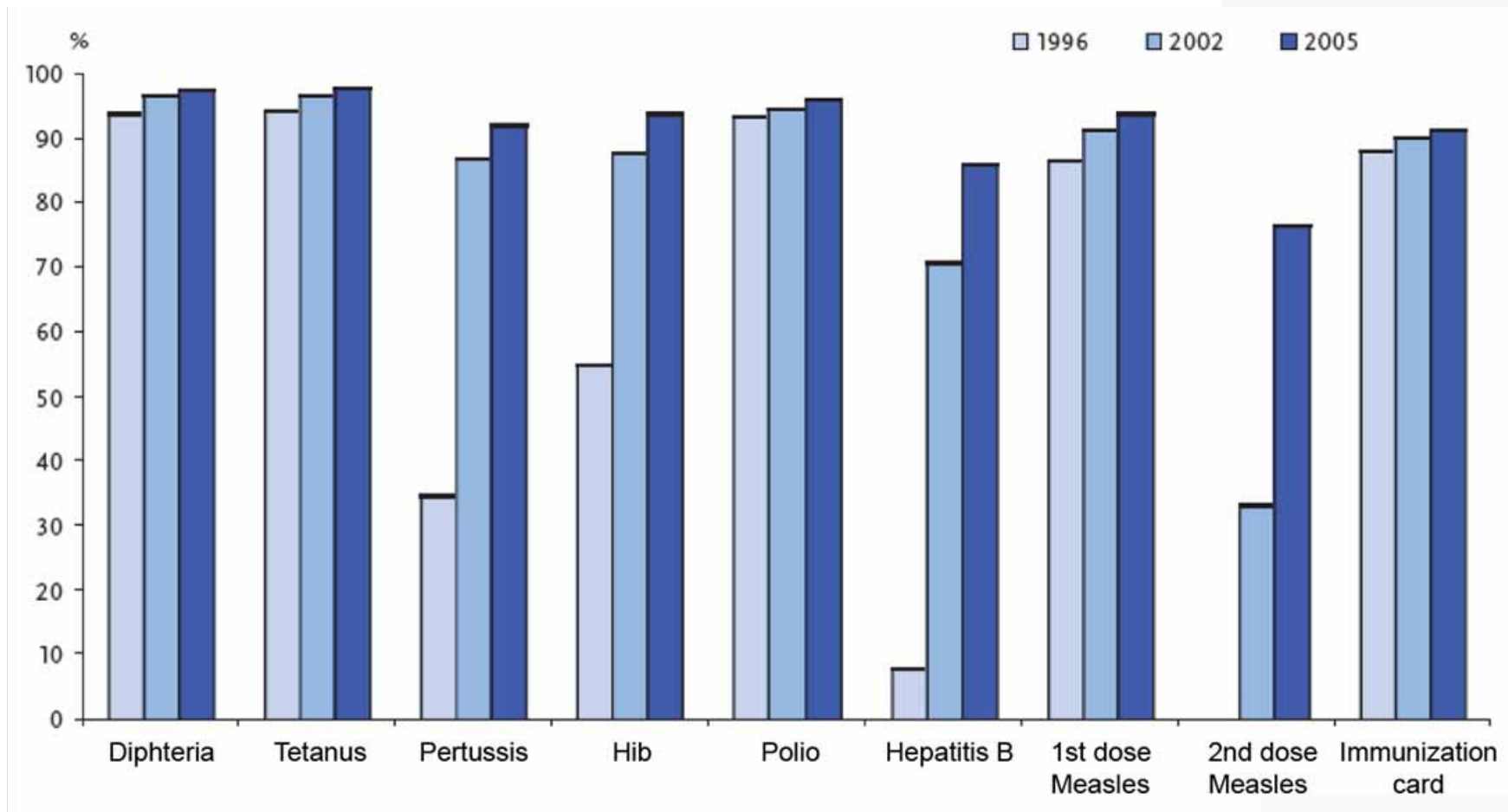
## 6) Decisions on introduction of new vaccines

- The national Paul Ehrlich Institute decides on the admission of new vaccines in Germany.
- The recommendations for the use of these vaccines are given by the STIKO and represent the technical state of the art.
- All federal states of Germany generally accept these recommendations and integrate them into the catalogue of their publically recommended immunizations. Thus in cases of vaccination injury compensation is guaranteed by the federal state.
- In the past, there were time gaps between new recommendations by STIKO and acceptance of costs by health insurances
- In future another committee will decide which of the technical recommendations given by the STIKO will be an obligatory benefit of the health insurances.

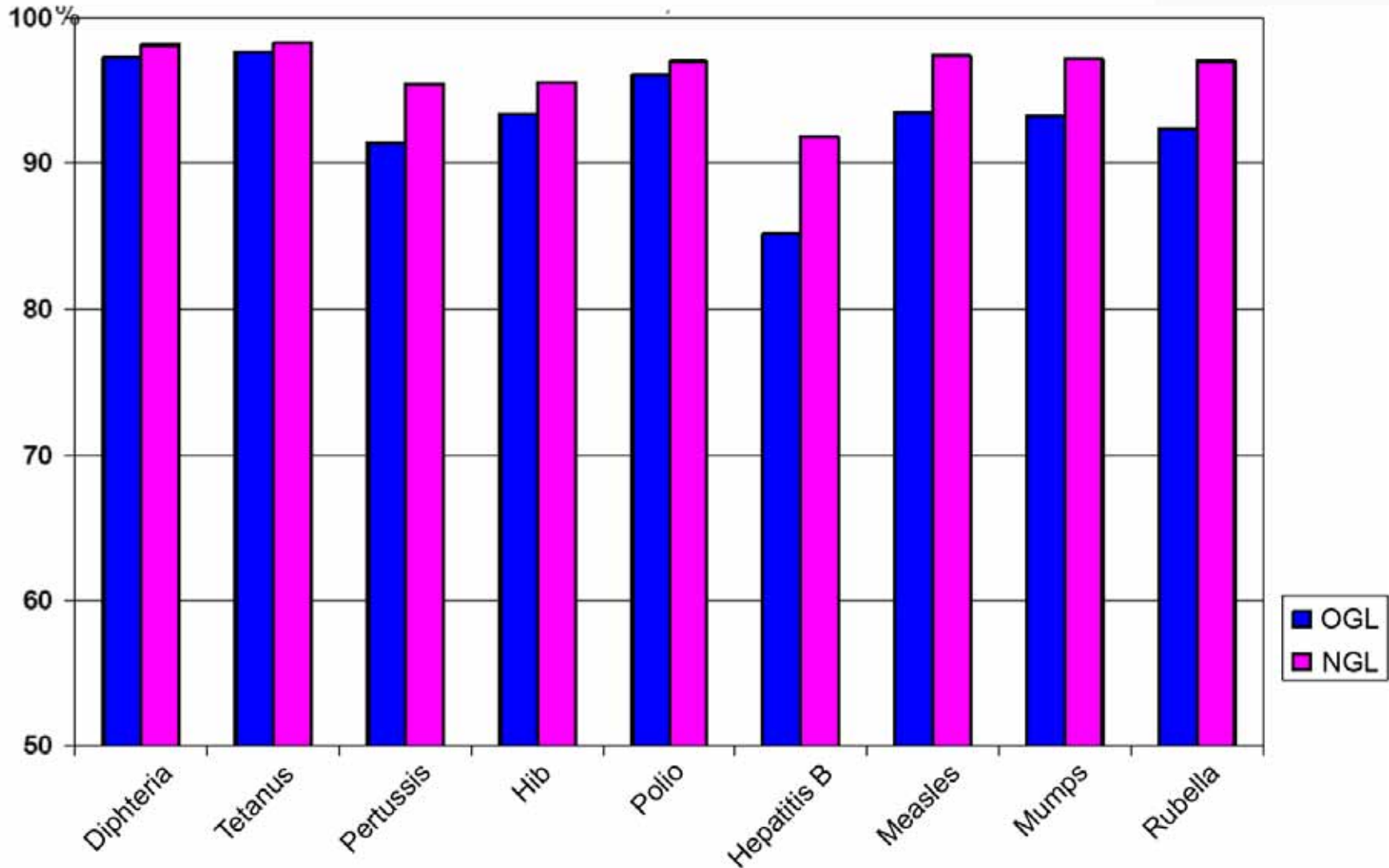
## 7) Coverage data

- According to the Protection against Infection Act (IfSG) the local health departments collect individual data about the vaccination status at school entry and transfer the anonymous, aggregated data via the state health departments to the national institute (RKI).
- Thus most complete data exist for children between 5 to 7 years. They are almost exclusively registered by the public health services.
- Similar data for older children or adolescents do not exist in Germany.
- Sentinel surveys reveal significantly lower immunization coverages for these groups.

# Vaccination coverage data at school entry, Germany, 1996 - 2005

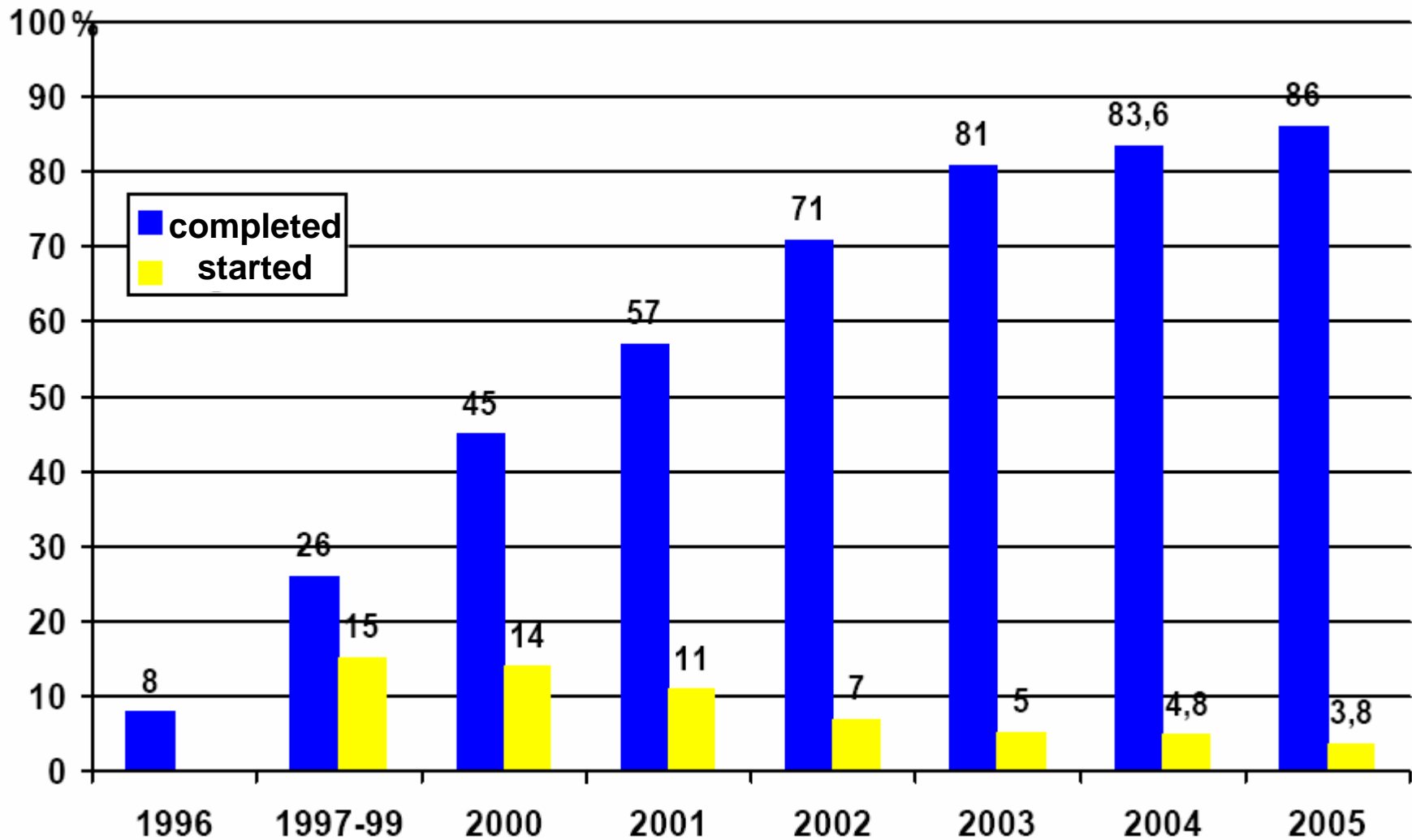


# Vaccination coverage data at school entry, Germany 2005



Data of 733 030 children with a vaccination card, RKI 2006

# Coverage data at school entry, Hepatitis B





## 8) Strengths of the immunization programmes

- In addition to the vaccinations administered by general practitioners within immunization programmes subsidiary vaccinations are provided.
- Immunization campaigns can help to enhance the motivation and the acceptance of vaccinations.
- The contribution of these programmes to the coverage of children and adolescents depends on the coverage and on the type of vaccine.

## Campaigns at schools to enhance the motivation for Hepatitis B vaccination in Lower Saxony

- Since 2000
- Participation: 24 of 44 local health departments in Lower Saxony
- In the course of the campaigns at school post cards are given to children at the age of 11 to 12 and they are sent to medical doctors.
- Vaccinating medical doctors send the completed cards to our institute.
- Almost 30 % of the cards are sent back.

## Coverage data of Hepatitis B vaccination before and after motivation campaigns (children at the age of 11 to 12 years)

year	Hepatitis B - coverage data (%)	
	<i>before</i>	<i>after</i>
motivation campaigns by local public health departments		
2000	20 %	39 %
2001	26 %	47 %
2002	51 %	70 %
2003	65 %	78 %
2004	72 %	79 %
2005	76 %	82 %



## 9) Challenges of the immunization programmes

- Initiation of activities with a particular aim in mind
  - Special vaccination offers to schools with low coverage data
  - Focus on children with risk factors for vaccination deficits. These are:
    - Father without job
    - Incomplete preventive medical check-up
    - Social status of the parents
- Older children and adolescents are not effectively reached by the current immunization programmes.

## 10) Conclusions (1)

- In Germany children/ adolescents are mainly vaccinated by pediatricians and general practitioners
- Provision of vaccinations by public health services is made additionally.
- Obligatory national system of school medicine does not exist.
- Many federal states of Germany have initiated vaccination campaigns, which are combined with additional provisions of vaccinations.
- Vaccination coverages are acceptable at school entry in general.
- Valid data for older children/ adolescents do not exist. Results of sentinel surveys obviously reveal lower immunization rates.

## 10) Conclusions (2)

- With respect to public health services the following measures are needed to increase the vaccination rates of older children/ adolescents:
  - Systematic checking of vaccination documents among sixth to tenth class schoolchildren combined with the provision of vaccinations
  - Increase of actively contacting children
  - Implementation of recall systems
  - Concentration to efforts with a particular aim in mind
  - Initiation of an effective local vaccination management