

# Adolescent Health programme and its contribution to the success of vaccination

Country: Switzerland

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# 1) Childhood vaccination schedule:

Age	DTaP	IPV	HIB	Hep B	MMR	dT (see DTap)	Varicella	TBE If endemi c	(Meningoco ccal Disease) 2
2 months(1)	x	X	x						
3 months									
4 months	x	X	x						
6 months	x	x	x						
12-15 months					x				X 3
15-24 months	x	x	x		X 1				
4-7years	x	x						Starting at age six (3 doses)	
11-15	dTp			2 doses			(2 doses if neg. history)		x

[1: catch-up vaccination recommended any time

2: Vaccination against Meningococci Type C: additionally recommended for those wishing it. 3: catch-up till age 5years.

Additionally recommended Pneumococci: 2,4,12 months

Vaccination plan:  
[www.ekif.ch](http://www.ekif.ch)

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

- No nationwide system. Each canton (state, n=26) has its own system.
- School Health Services are based on cantonal health and education law. Responsibility for organisation of services at level of community.
- 16/26 cantons (62%) offer Hep B vaccination in schools\*.
- Proof of better vaccination rates, where school health services are available and offering vaccinations\*.

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

- Childhood: Vaccination mainly based on private sector. Most children are reached by pediatricians and general practitioners.
- Adolescence: private sector offers vaccination, many adolescents do not visit doctors for preventive visits.

### 3) Who are the vaccinators?

- Vaccinator is defined by local practice: doctor/ nurse, physician assistant.



# 4) Training of the vaccinators?

- Physicians
  - Undergraduate Level: Knowledge and skills in vaccinations defined as objective for training
  - Postgraduate level: in depth training defined e.g. in pediatric curriculum, GP-curriculum
  - CME: national meeting on vaccination 1x/2 years
- Nurse/ Physician assistant:
  - part of training,
  - In service training e.g. in school health service

## 5) Financing of child and adolescent vaccination

- All vaccines mentioned are nationwide covered by the health insurances.
- Part of the fee (10%) for consultation necessary for the vaccination has to be paid by patient.
- School Health Services usually offer vaccinations for free and either get globally reimbursed by health insurance or have to bill insurance for every patient.

## 6) Decisions on introduction of new vaccines

- A federal commission ([www.ekif.ch](http://www.ekif.ch)) of experts decide on the vaccination schedule. Two levels of recommendations: “for all”, “additionally recommended”.
- Coverage by health insurances usually follow recommendations of commission. Sometimes no coverage for “additionally recommended” vaccines.
- School Health Services often need positive decision of Cantonal (State) Department of Health to put a vaccine on list of vaccines offered for School Health Care.

# Challenges to introduce new/additional vaccines for adolescents (1)

- Recommendation by federal commission
- Coverage by health insurance
- Decision of State Health Department to put vaccine on list for School Health Services
- Convincing/educating vaccinators about necessity of immunization
- Reaching adolescent population, identifying opportunities for vaccination (e.g. gynecological consultation)

# Challenges to introduce new/additional vaccines for adolescents (2)

- Parental acceptance of vaccination
- Fears regarding proven and unproven health effects of vaccines, supported by widely distributed publications of “anti-vaccination-experts”
- Lack of knowledge of providers about adolescent capacity to decide for vaccination

# Challenges (3):

## Minors right to decide for a vaccination:

- Request to the Federal Office of Health to clarify question of minor's right.
- Clear position: Minor with decisional capacity can request vaccination without parental consent.
- Decisional capacity for vaccination can be assumed by default at about age 15, before this age provider has to assess and document this capacity.

- Reality: Example City of Zürich: Based on state (cantonal) educational law, this right for minors is denied. Same in most School Health Services. Discussion ongoing.

## 7) Coverage data

- No nationwide population data regarding immunization rates
- Basis is established for a monitoring based on a national sample drawn all 3 years. Participation rate 2005: 80%.
- No published national data on vaccinators.

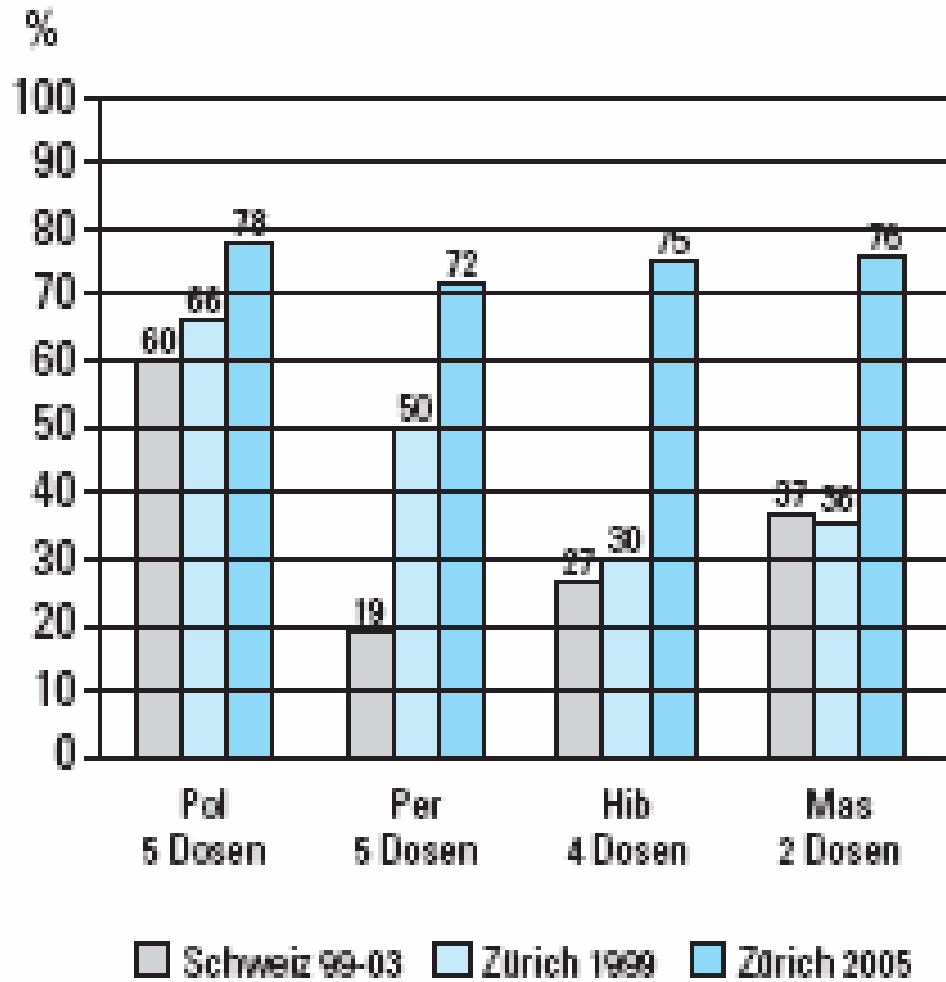
Tab. 1: Durchimpfung von Kleinkindern in Prozenten

		Schweiz			Zürich	
		1991	1998	99 - 03	1999	2005
Impfung	Dosen	n = 402	n = 403	n = 8729	n = 345	n = 454
Diphtherie (Di)	≥ 3	95	94	95	95	96
	≥ 4	71	72	84	83	83
Tetanus (Te)	≥ 3	93	93	96	96	96
	≥ 4	71	72	84	83	83
Poliomyelitis (Po)	≥ 3	93	93	96	96	96
	≥ 4	71	72	84	83	83
Pertussis (Per)	≥ 3	80	77	91	79	84
	≥ 4	—	47	79	79	82
Masern	≥ 1	83	81	82	81	87
Mumps	≥ 1	80	79	81	81	85
Röteln	≥ 1	80	79	81	81	85

**Good coverage for preschool infants**

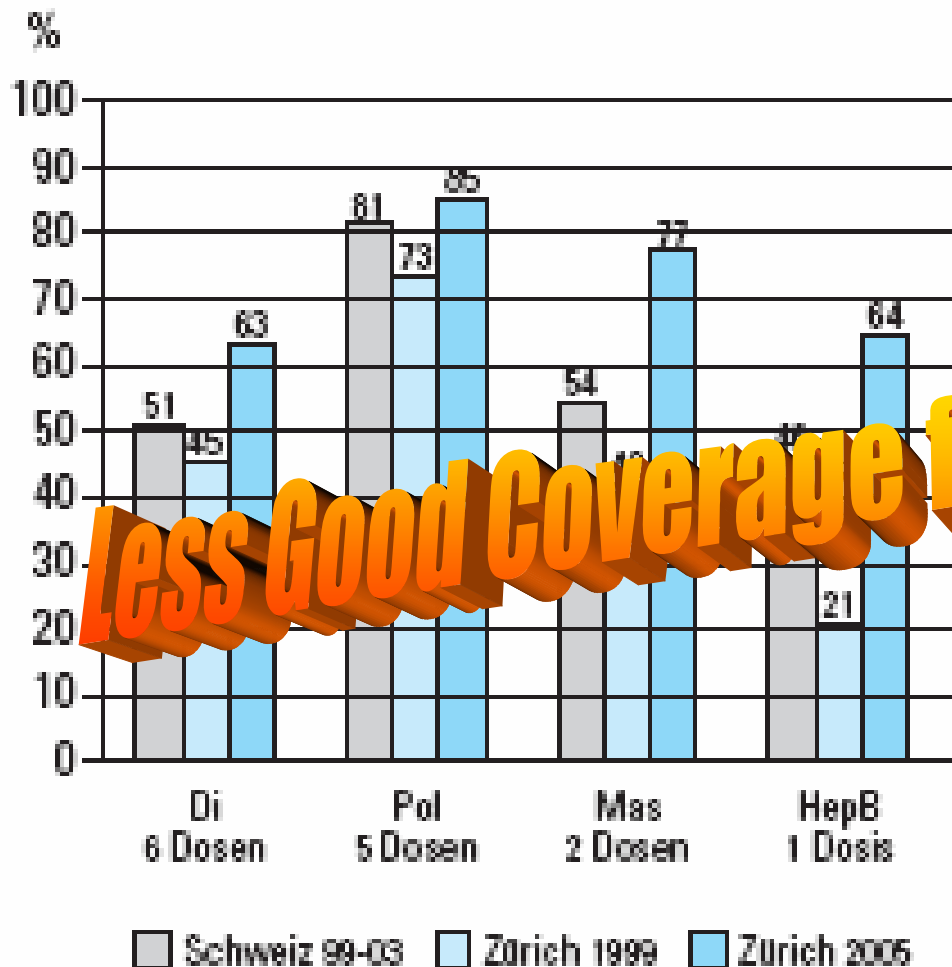
Vaccination Rate Children at age 3 years

Abb. 1: Durchimpfung von Schulkindern (Kindergarten, 1.-3. Klasse)



# Vaccination Rates School-age Children 7-9 years

Abb. 2: Durchimpfung von Jugendlichen  
(6.-9. Klasse)



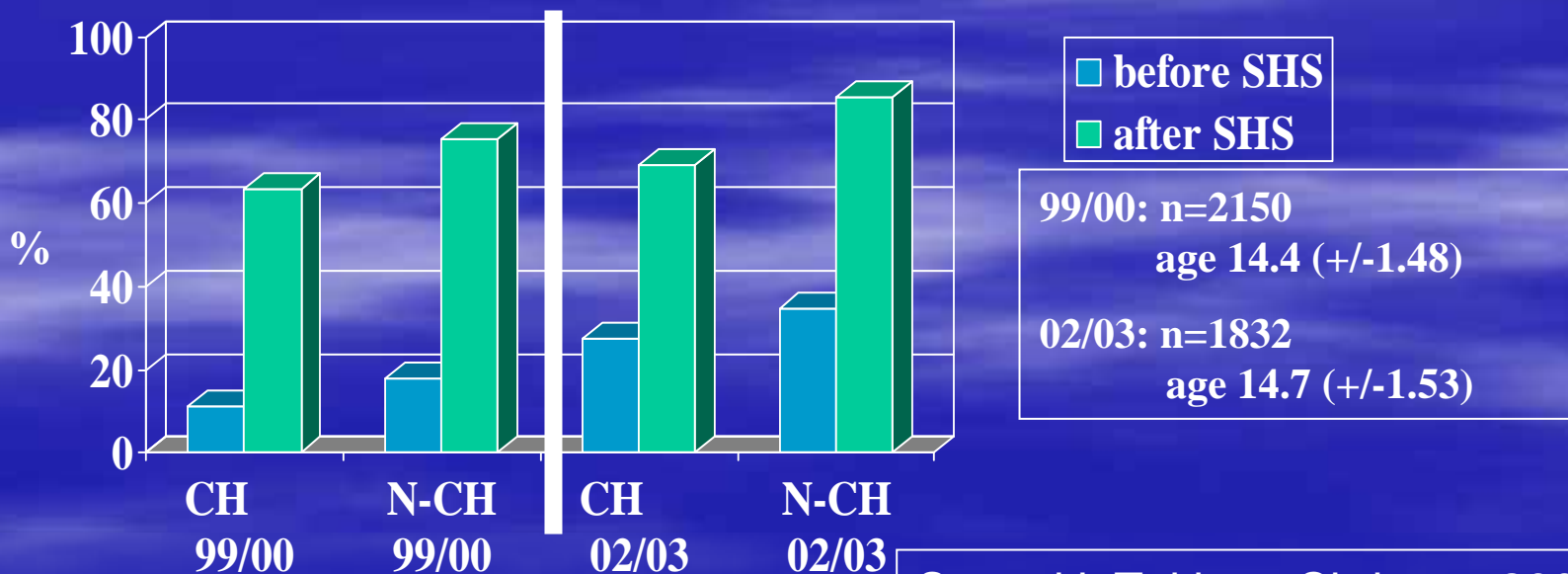
**Less Good Coverage for adolescents**

# Vaccination Rate Youth (13-16 years)

# Immunization Rates Hepatitis B, Zürich before and after intervention of School Health Service

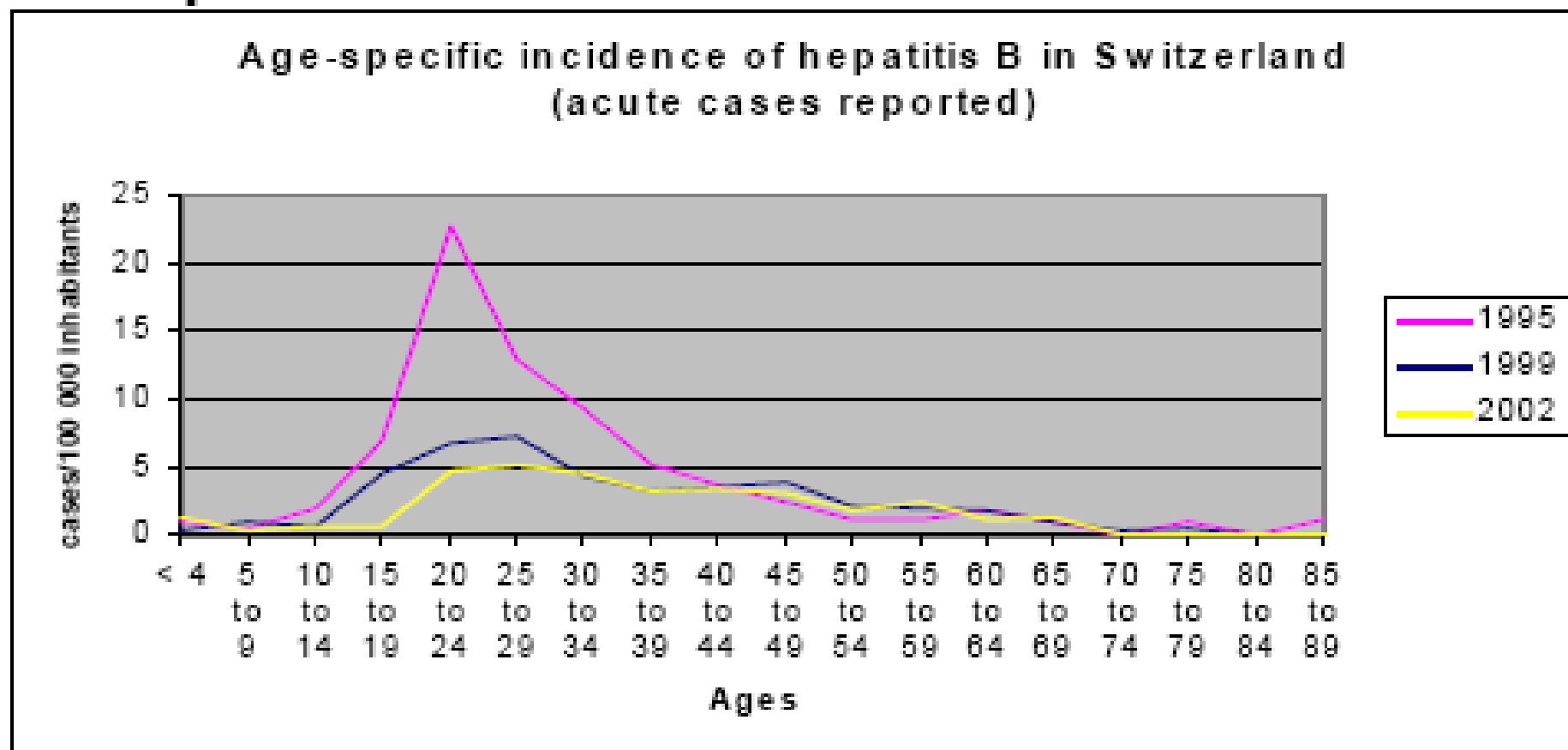
## Swiss Citizens (CH) versus Non-Swiss Citizens (N-CH)

Percentage of Students with one or more  
documented Hep.B. immunizations





### 3. Hepatitis B incidence



Incidence of reported HB declined 84% in the age group 15-19 years from 1999 to 2002 (from 4.6 to 0.7/100,000); overall decline in the population (all ages) was 20% (from 2.8 to 2.3/100,000)

# 8) Strengths of the immunization programmes

- Private sector:
  - Well established private sector offers recommended preventive visits, scheduled according to vaccination plan.
  - While compliance is good for preventive visits in younger children, parents of school children often do not actively seek preventive care.
  - Private sector does not outreach.

## 8) Strengths of the immunization programmes

- School Health system
  - reaches good immunization rates at lower cost as private sector.
  - Possibility to use school lessons for information on vaccines as well as peer effects add to increase vaccination rate.

# 9) Challenges of the immunization programmes

- Private sector does not reach adequately the population of school children and even less adolescents.
- School Health Services
  - are not well established in many parts of the country,
  - not all of them are involved in vaccination.
  - Future of School Health Services hampered by change of legal framework increasingly transferring vaccinations to private sector.
  - Sometimes extended time to realize new vaccination or to react to new evidence (e.g. better vaccine with less side effects) due to slow administrative procedures.
  - Private sector arguments: Lack of continuity of care.

# 10) Conclusions

- While coverage of the cost of vaccinations by the health insurances and a well established private sector achieve good immunization rates in preschool children, there are still no sufficient immunization rates for school-age children and adolescents.
- School Health Services significantly improve these vaccination rates, however school health services are not established nationwide.