# Reporting of Childhood Diseases: Switzerland

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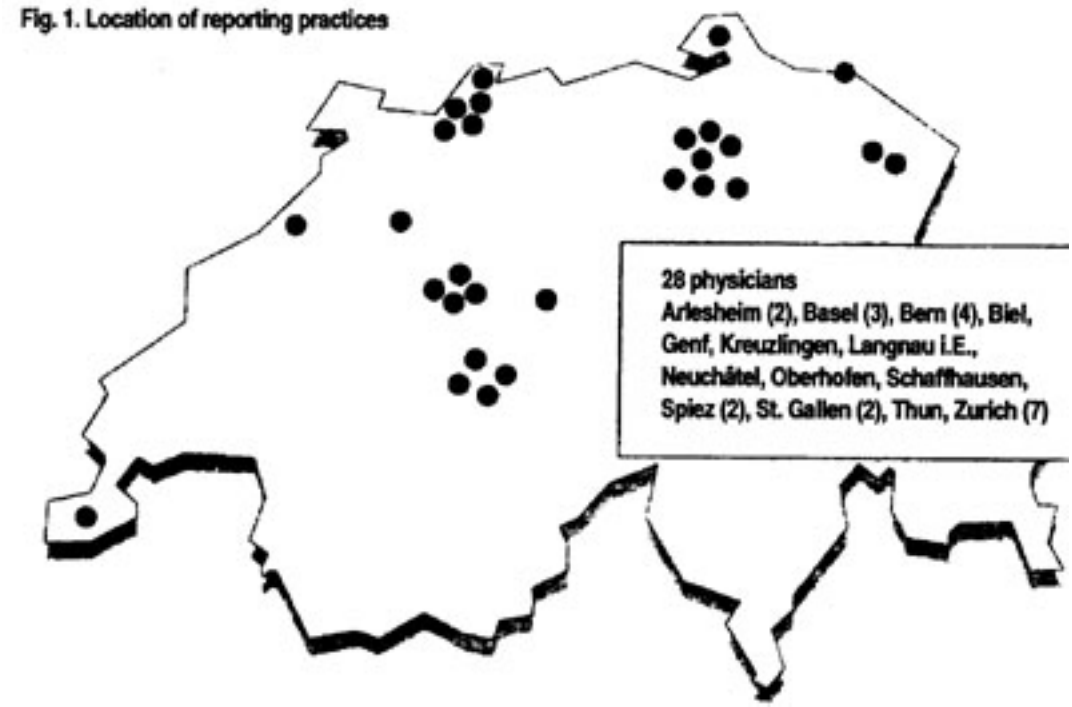
Reporting of Childhood Diseases in Anthroposophically-Oriented Medical Practices in Switzerland 1992 (Original title: Meldungen der Kinderkrankheiten in anthroposophisch orientierten Arzt-praxen der Schweiz 1992* Der Merkurstab 1996; 49:101-8. English by A. R. Meuss, FIL, MTA)

Internal Report

From February 1992 to January 1993, childhood diseases were recorded in the anthroposophically-oriented medical practices in Switzerland using a simple questionnaire. We included the childhood diseases against which children are currently immunized: measles, mumps, rubella and pertussis. Scarlet fever was excluded because diagnosis is problematical today and would have made the questionnaire too complex.

Sentinella physicians' reports are published weekly in the BAG (Federal Department of Health) Bulletin; the report for the year 1992 was published in January 1994.
Initially, 32 physicians took part, 28 of whom completed the full year. Assuming a working year of 46 weeks, this gives an average of 25 reports per week. Practice locations are shown in Fig. 1.

**Fig. 1. Location of reporting practices**




The weekly number of consultations and telephone consultations relating to the four diseases was recorded with age and sex, complications, treatment and immunization details where applicable.

**Background situation**
From the anthroposophical medical point of view, childhood diseases have special significance for childhood development. Anthroposophical physicians have therefore always taken an interest in them and preserved clinical knowledge that has been lost in other approaches to medicine.

Introduction of a national mass immunization campaign in 1987 caused uncertainty in the ranks of anthroposophical physicians. Questions such as the following arose. Do childhood diseases more often lead to complications now than they did before? Is the loss of natural immunity an indication to immunize even for anthroposophical physicians?

An inquiry among members of our Association in 1987 showed that of the 50 physicians who responded none recalled serious complications in a total of 521 years of practice. Occasional otitis and pneumonia were reported. Younger physicians nevertheless felt growing uneasiness because they had never seen measles and therefore had no personal experience with this disease. Mumps, rubella and whooping cough would occur in sporadic minor outbreaks, with mumps in particular quite frequently involving serious conditions such as pancreatitis, orchids, meningitis and vestibularids.

The official Sentinella reporting system in Switzerland offered no answers to these questions. Measles reports were almost constant in recent years, with 1 or 2 cases reported per week, the average number of reporting physicians being 130. The other childhood diseases showed minor fluctuations but were at about the same level of incidence.
The question is: what is the situation in our own practices? What is happening today where childhood diseases and especially measles are concerned?

**Measles**
Our questionnaire coincided with a measles wave that started in St. Gallen and spread through Spiez, Langnau, Zurich, Basel and Schaffhausen. Minor epidemics occurred at the Rudolf Steiner schools in those places. The 28 reporting physicians treated a total of 280 measles patients, with 145 consultations in their practices or as home visits, and 135 per telephone. Almost all cases were reported prior to week 30 (Summer holidays); there followed sporadic reports from Basel (14), Zurich (5) and Bern (1). The total number of measles complications in the year under observation were 19: 10 of otitis, 5 of pneumonia, 2 of severe stomatitis, 1 encephalitis, 1 bronchitis.

Five children had to be admitted to hospital, 2 for pneumonia, 1 for dehydration, one 3-months old infant with no complications, 1 encephalitis.

The mean age when measles developed was 7.5 years (3 m - 33 years). The children with otitis were 11 years old on average; those with pneumonia 12 years old.

**Clinical reports on measles**
The basic question is: what is a "normal" case of measles and where do we begin to speak of "complications"? Thus, a rural practitioner wrote the following report about a measles wave: "50% showed slight redness of the tympanic membrane, and I saw only one serious case." Mild otitis, and also bronchitis, enteritis, stomatitis and conjunctivitis may probably be said to be part of "normal" evolution, in terms of exanthema affecting all mucosa.

A pediatrician with a city practice reports the following concerning an especially long epidemic from March 1991 to May 1992, during which she saw more than 100 measles patients (21 still within our inquiry period): "The complications I saw were 2 cases of purulent otitis and 3 of pneumonia." One of the pneumonia cases was a child of 18 months who contracted influenza after the measles; another a girl aged 111/2 who had chickenpox

followed by scarlet fever and immediately afterwards measles. The third child (11 1/2 years) initially had pneumonia. The measles exanthema only appeared two weeks later. It is not clear, therefore, if this was measles pneumonia or another form of pneumonia. "I saw no other complications. Many evolutions were typical. Some mothers spoke positively about the period after the measles."

**Further clinical reports are given unabridged below.**
Report on measles epidemic at a Rudolf Steiner sclwol, November 1991-February 1992 "69 cases have so far been diagnosed. The lower classes were mainly affected, with the figures for the individual classes as follows: 14/24 in the kindergarten, 15/24 in class 1, 7/17 in class 2,10/25 in class 3,4/26 in class 4, 11/24 in class 5,6/17 in class 6,6/17 in class 7. No cases in classes 8-10.

Other cases: probably 10 or 20 siblings who were not at the school also contracted the disease.

Complications: one child had to be admitted to hospital with pneumonia; one had otitis media without complications. No other complications were reported.
Clinical experience: treatment was generally and fairly consistently based on the anthroposophical literature (A Guide to Child Health by Ors Gloeckler and Goebel, Kinderkrankheiten natuerlich behandein by Or H. M. Stellmann).
Main aim: manage rather than reduce febrile reactions."

Report on measles epidemic at another RudolfSterner school "Since opening my practice in 1985,1 saw my first measles patient during the last week of January 1992. Even before the MMR immunization program was initiated, our region had high-density measles immunization and the disease had not occurred in 8 years. The child in question had caught the measles in St. Gallon. Within a short time, 58 children at the Steiner School developed the disease (50% of pupils). Many cases were serious, 4 had to be admitted to hospital: a boy of 17 with pneumonia (vaccinated in early childhood), a boy of 9 with dehydration and undernourishment, a girl of 5 with otitis (for social reasons), a girl of 101/2 with encephalitis (see family physician's report below). Four patients with purulent otitis and two with severe stomatitis needed home visits. All complications related to special situations such as puberty, difficult social situation, usually in a single-parent family, and one family with great fear of measles.

The teachers spoke of convalescence requiring up to a month but also of positive effects, especially in the kindergarten and lower classes ("has grown generally calmer and more formed-out'; 'greater power of concentration; more sensible'; 'now paints trees with enormous roots'). The teachers noted no special developmental progress in children from class 4 onwards.

Measles occurred in 3 families outside the school. The village pediatri-cian saw his first normal evolution of measles. A number of parents whose immunized children did not get the disease expressed regrets that they had had their children immunized. They had thought immunization was obligatory. Some immunized siblings also said they were sorry they could not have measles."

As already mentioned, one patient had cerebral complications during the period under observation. This was a girl aged 10-1/2 who developed measles meningo-encephalo-radiculitis. The family doctor reported that the child had been extremely "difficult" prior to this. She had had several psychiatric assessments for night terrors and mental problems and was having physiotherapy for postural weakness. The measles encephalitis required a month's admission to a pediatric hospital. The girl recovered quickly, however, with no

residual abnormalities. The family situation became more balanced because of the dramatic illness; she no longer has fearful dreams, and her posture is erect.

**Report from an older colleague**
"During the first 12 years, I have been in this practice there would be a minor measles epidemic every 1-3 years in the region, usually only affecting one person per family. Measles were thus endemic. The first major reduction from 1965 onwards followed the introduction of the pill. There were definitely fewer children about, and measles-susceptible children evidently went below a critical density. Measles became epidemic, i.e. there would be an epidemic every 2-3 years. I well remember from my time as a locum that the incidence of complications rose with the interval between epidemics. We had been taught this would be the case if epidemics were 7-11 years apart. You no longer have the regular, generally non-apparent 'refresher' infections, and some children and young people are now older when they have their first infection."

**Another physician's report**
This report is about two children with cerebral measles complications whom he saw just before our period of observation started. A boy developed flaccid paralysis of the left arm and, to a lesser degree, the left leg. Another child had more cerebellar symptoms. Neither had to be hospitalized, and both have recovered well.

Two physicians reported cases of children who had measles and chicken pox simultaneously (a phenomenon known from the literature).

Comments on the measles situation in Switzerhnd, published in the Sentinella report for 1990-91 and BAG Bulletin No. 36/92: Measles in Switzerland 1986-1991:

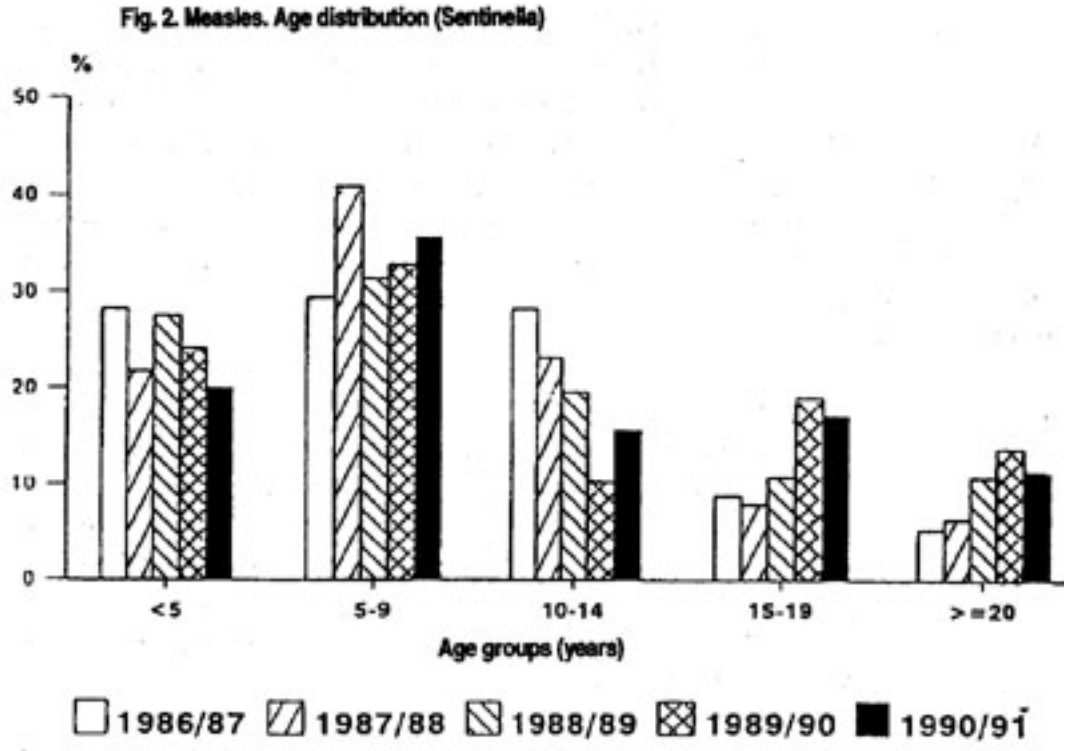
"The incidence of measles reports decreased by about 60% after 1986, from 1.3 to 0.1 cases per physician and year (pediatricians from 3.0 to 1.1; general practitioners 1.1 to 0.5; medical specialists 0.3 to 0.1). The decrease was noted to relate to age groups and to reflect the consistent introduction of immunization as recommended by the Expert Group on Immunization Issues. 57 patients (9.4% of recorded measles cases) had been previously immunized. The percentage increase of cases among the immunized population rose from 6% to 17% over the 5-year period.

Measles are monitored using a Sentinella system in 7 other European countries. Compared to Switzerland (0.4 cases/practice), fewer cases were reported in 1990 in Holland (0.02 cases/physician) and Portugal (0.2), more in Belgium (0.5), UK/Wales (0.7), Spain (1.9), and France (3.8).

Reports of complications for the 377 recorded measles cases in Europe were: 1 encephalitis, 5 pneumonias, 6 otitides. As far as the immunization status was known, all cases with complications had not been immunized.

The peak incidence was in the 5-9 year age group (29-40% of cases). The percentage of children less than 16 months of age had gone down from c. 20 (1968-87) to 3 (1990-91), while the proportion of patients aged above 15 had risen from 10% to 21%. In absolute figures (related to reporting physicians) a reduction is noted for all age groups. For those above the age of 14 the reduction is, however, very small." (Fig. 2)

**Fig. 2. Measles. Age distribution (Sentinella)**




**Summary for measles**
280 measles patients were cared for between week 5/92 and week 4/93 by the 28 anthroposophical physicians taking part in the study, most of them in the first half of the year. Complications were noted in 6.8% of cases, all leading to complete recovery; 1.8% required hospital admission. Many of the children who developed complications are known to have had a rather special history, which often explains why the disease could not take its normal course.

**Mumps**
Our reporting physicians treated 198 patients with mumps, 120 in personal consultations, 78 by telephone. A definite increase was noted in the second half of the year, above all in the Basel and Zurich regions.

The mean age of mumps patients was 9.6 years (0-43 years). Complications consisted in two cases of orchitis, one in a man aged 33, three of meningitis (one aged 11, with no age given for the others), one of meningitis and pancreatitis at the same time. All recovered with no residual problems. It is now considered doubtful that mumps orchitis may lead to infertility.

A report in BAG Bulletin No. 11/93 refers to a rising incidence of mumps among immunized children:

"Following a reduction in mumps cases reported in Sentinella during the early years of monitoring (1986-89), the incidence has shown a marked increase in the 1990-91 period. At least seven different explanations may be considered. The increase may be due to:

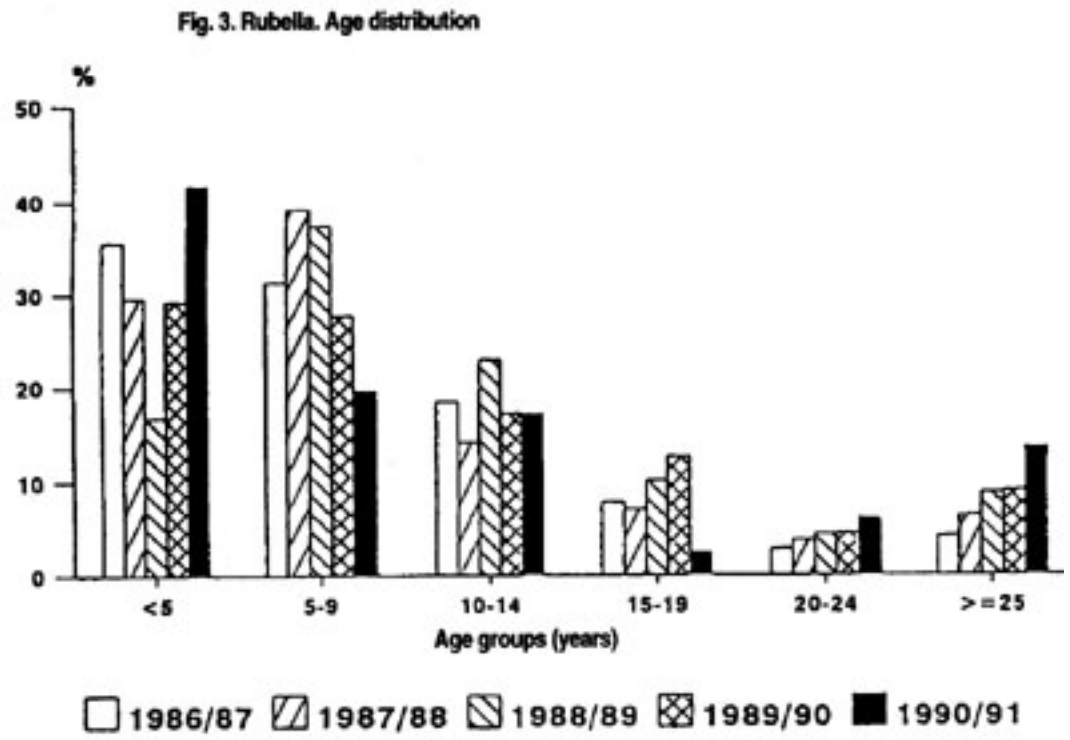
1 the periodicity of the disease, which covers several years;

2 inadequate immunization cover for the population;
3 distortion due to several consultations for children with mumps who have been immunized;
4 reduced efficacy of the vaccines used;
5 a change in the nature of the pathogen (e.g. virus mutation);
6 temperature sensitivity of the vaccine;
7 decreasing immunity with increasing age of the immunized individual."

**Rubella**
36 patients were treated for rubella, 25 in personal consultations, 11 by telephone. The mean age of rubella patients was 7 years, one patient was 21. There was no obvious seasonal distribution. An increase during the Summer months would be typical.

It is evident from the Sentinella report for 1991-92 that, remarkably, in 1992 the incidence among under 5's and over 25's increased, i.e. notably also in adulthood when the disease presents a risk. (Fig. 3).

**Fig. 3. Rubella. Age distribution**




**Whooping cough**
We saw 54 patients with whooping cough in the period under observation; another 12 were treated by telephone. 7 of the children had been immunized, 2 were under 6 months; both did not get complications, one was admitted to the Ita Wegman Clinic for observation. The mean age of pertussis patients was 6.2 years (0-38 years). Almost all cases were in the Basel and Zurich regions. The diagnosis of pertussis is getting increasingly more difficult to make because the disease often presents as atypical in immunized children and because pertussis-like bronchitis has been frequently seen in recent years. Protection conferred by the current pertussis vaccine is known to be uncertain.

**Conclusions**
All four childhood diseases - measles, mumps, rubella and whooping cough - have to be taken seriously, and there is the possibility of complications. Patients therefore need quality care and, especially in the case of measles and mumps, bed rest. Complications tended to develop in situations were optimum care was not available. None of our patients is known to have sustained permanent damage. On the other hand, we often saw positive effects on development and, because of the need for extra care, in the social family situation.

The mean age for measles was within the first 7-year period. Patients with measles complications were older on average. It is known from earlier times that complications are more common following onset of puberty. With mass immunization continuing, it is to be expected that the age of measles patients will increase, as both non-immunized children and those in whom immunization failed only rarely come in contact with "wild measles". It also is not possible to say how long the protection conferred by immunization will last without immunity being reactivated through contact with the wild measles virus.
It is also accepted by the authorities that measles cannot be completely eradicated. The question is therefore if it would not be better to handle immunization on an individual rather than a mass basis, at least in our circles, so that the wild measles virus may continue to circulate.

**Immunization issues**
The question is if there are special risk groups among children who would benefit from measles immunization. I am thinking, for instance, of children where the necessary care is not available, or who are undernourished, and of children from families where there is an atmosphere of fear.

With mumps, rubella and whooping cough there seems little point in immunizing in infancy. Complications are not serious at that age (in the case of whooping cough, infants are not protected at the age when at risk). These diseases are not as rare today as measles are. Mass immunization and immunization protection appear to be less high with them. Lesser epidemics thus still develop at all levels of the population.

Measles, mumps and rubella become more dangerous in older school-children. We need to consider if immunization should not be recommended in prepuberty, which has really been clearly established in the case of rubella immunization.

Others have also recommended individualized immunization practices. Nobel Prize winner, J. Dausset, who discovered the HLA system, which may be said to reflect the I organization at molecular level states: "La vaccination des enfants centre toute une serie de maladies pourrait bientot etre une pratique du passe... Les vaccins ne seront alors administres que pour des maladies a risque elevee. Nous sommes a la veille d'une nouvelle epoque ou chacun recevra un traitement personnalise." (Conference donnee a Montreal en Octobre 1980, propos cites par Sante et Liberte des Vaccinations No. 69/1981). (Immunization of children against a whole series of diseases will no doubt soon be a matter of the past.... Immunization will only be given against diseases that present a real risk. We are at the beginning of a new age, when every human being will be treated individually.)

**Appendix**
Definitions (based on Sentinella, WHO, ICHPPC-2)

**Measles**
Diagnosis probable
generalized maculo-papular exanthema for at least 3 days plus temperature above 30°C plus cough or rhinitis or conjunctivitis. diagnosis definite
if definite epidemiological connection with measles or Koplik's spots
or definite laboratory results: IgG or IgM Ab or Ag increased 4 times, using immunofluorescence or virus culture.

**Rubella**
Diagnosis probable
• acute, macular exanthema in face, on trunk and proximal extremities, enlarged lymph nodes,
esp. subocdpital and retroauricular, plus possible joint stiffness and arthritis. Diagnosis definite
• epidemiological connection with rubella
• if or serological signs of fresh infection (IgG titer raised, spec. IgM Ab).

**Mumps**
Diagnosis probable
• acute, nonpurulent, non-erythematous, diffuse soft swelling of one or more salivary glands
• or orchitis following exposure to mumps. Diagnosis definite
• if definite epidemiological connection with mumps
• or serological signs of fresh infection (IgG titer raised, spec. IgM Ab).
Whooping cough
Cough of more than 2 weeks' duration and either history of pertussis contact or, if sporadic, with classical whooping cough attacks.